



DME

INDUSTRIAL SUPPLIES



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Terms & Conditions of Sale

DME COMPANY LLC ("SELLER")

1. **ACCEPTANCE OF TERMS:** Seller's offer is expressly conditioned upon Buyer's acceptance of these Terms and Conditions, and Seller expressly objects to any additional or different terms proposed by Buyer. Any subsequent purchase order issued by Buyer shall constitute Buyer's agreement to these Terms and Conditions. Any contrary terms and conditions contained in any purchase order, facility entry form, or other instrument issued by the Buyer are expressly rejected and shall not apply to this transaction. Unless otherwise specified in the quotation, Seller's quotation shall expire 30 days from its date and may be modified or withdrawn by Seller before receipt of Buyer's conforming purchase order.

2. **PAYMENT TERMS:** Payment is due in accordance with any applicable progress, advance or other agreed upon payment schedule, or, if no such schedule has been agreed to, no later than 30 days from the date of invoice. Buyer shall pay a late payment charge computed at the lower of 1.5% per month on any overdue balance, or the maximum rate permitted by law. No cash discount is provided. If at any time Seller reasonably determines that Buyer's financial condition or payment history does not justify continuation of Seller's performance, Seller shall be entitled to require full or partial payment in advance or otherwise restructure payments, request additional forms of payment security, suspend its performance or terminate the order.

3. DELIVERY

3.1 In the United States, products are sold FCA Incoterms 2020 point of origin; for export sales, terms are FCA Incoterms port of export. Unless otherwise agreed in writing, title and risk of loss shall pass at the time of shipment. Buyer is responsible for all taxes, duties, fees, or other governmental charges related to its purchase of goods, with the sole exception of taxes on Seller's income. Unless otherwise agreed, Buyer shall pay all packing and delivery costs.

3.2 Seller's quoted lead times and targeted delivery dates are good faith estimates and are not binding on Seller. Buyer's acceptance of delivery of Seller's products from the carrier shall constitute a waiver of any claim for delay. If Seller notifies Buyer that the products are ready for shipment and Buyer delays delivery, then Seller may charge Buyer a storage fee equal to 1.5% of the contract price per month for each month of delay. Such storage fees are in addition to any other remedies Seller may have.

3.3 Buyer shall have a reasonable opportunity to inspect any products prior to shipment. Products shall be deemed to be accepted upon the earlier of: (i) inspection at Seller's plant (provided that no reasonable objection is then raised by Buyer), or (ii) if no inspection is requested, then at shipment. If an objection is made during inspection, then Products shall be deemed accepted upon resolution of the objection by Seller.

4. WARRANTY:

4.1 Seller's express product warranty be as stated in DME's order specification documentation and shall run from the date of shipment (the "Warranty Period"). During the Warranty Period, Seller warrants that the products and services sold hereunder will be free from material defects in material, workmanship and title (the "Warranty").

4.2 If, during the Warranty Period, Seller reasonably determines that the products do not meet the Warranty, then Seller shall, at its option, repair or replace the defective product or component thereof, reperform any defective services at Seller's expense, or refund or credit to Buyer its purchase price for the defective products or services.

4.3 The Warranty will be void and will not apply: (i) when Buyer fails to promptly notify Seller of any alleged defect, (ii) when Buyer fails to properly install, maintain, or operate the products, (iii) to any product or parts thereof with a useful life, under normal operating conditions, inherently shorter than 1 month, or (iv) to products which were not made by Seller or any of Seller's affiliates, provided that in such cases Seller shall use reasonable efforts to pass on to Buyer the manufacturer's warranty.

4.4 If Seller provides any parts or services to repair a product that is not under Warranty, then such parts and services will be billed to Buyer at Seller's prevailing rates for time and materials.

4.5 The Warranty set out above is the sole and exclusive warranty provided by Seller for its products and is in lieu of, and Seller expressly disclaims, all other warranties, express or implied, oral, written or statutory. **THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PURPOSE FOR SELLER'S PRODUCTS.**

5. LIMITATION OF LIABILITIES:

5.1 Seller's total liability to Buyer arising out of or resulting from this Contract or related in any way to Seller's products or parts thereof shall not exceed

the contract price for such products.

5.2 Seller shall not be liable for loss of profit or revenues, loss of use of products, interruption of business, downtime costs, increased operating costs, or any special, consequential, incidental indirect or punitive damages, whether incurred by Buyer or Buyer's customers.

5.3 Because the conditions of actual production in each end user's plant vary considerably, Buyer assumes all risk for the results obtained by use of Seller's products in the practice of any process, whether in terms of operating costs, general effectiveness, success or failure, and regardless of any oral or written statements made by Seller related to the use of its products.

6. **SECURITY INTEREST.** Buyer agrees that the Seller shall have and retain a purchase money security interest in the Products securing the payment of all sums becoming due hereunder. Such security interest shall attach, upon completion of manufacture, to the Products and to any parts or accessories attached to the Products and to the proceeds of any sale thereof. Buyer represents that the Products are being acquired for use in its business and that such Products will not, without prior written consent of the Seller, be sold or removed from the Buyer's place of business to which delivery is made. Buyer agrees upon Seller's request to execute any financing statements or other documents required to perfect, continue or renew Seller's security interest in the Products.

7. **CANCELLATION:** Unless otherwise agreed, Buyer may cancel all or any part of the order by written notice received by Seller before the completion of the order. On receipt of such cancellation notice, all work on the order or part thereof canceled will be stopped as promptly as is reasonably possible. Buyer will then be invoiced for and will pay to Seller as liquidated damages a cancellation charge. For completed items, the charge will be equal to their established prices. For items not completed, the charge will be equal to 135% of Seller's full cost as determined by Seller in accordance with Seller's standard accounting practices (which includes burden and overhead), plus a charge for any packing and storage, less a credit for the balance of the material as scrap.

8. **RETURNS:** All returned items require a Return Merchandise Authorization (RMA) number from DME. Returns are subject to a quality inspection to validate whether it can be returned to inventory. Mold bases, plates, special components, made-to-order products and other date-sensitive products are non-returnable items. Items returned to DME without prior authorization (RMA) may be returned to sender. Items returned for stated defect or non-conforming reason require detailed explanation. No products are returnable beyond 30 days after receipt.

9. **CONFIDENTIALITY.** Any nonpublic information, including without limitation, Seller's pricing information and the contents of Seller's quotation or proposal and Buyer's purchase order, exchanged between the parties is deemed confidential ("Confidential Information"). Each party agrees to maintain the other party's Confidential Information in confidence, to not disclose the same to any third parties, and to use it only in connection with this sale. These restrictions shall expire two (2) years after the date of disclosure. This provision does not modify or supersede any separate confidentiality or nondisclosure contract signed by the parties.

10. **FORCE MAJEURE:** Seller shall not be liable for any delay in performance or nonperformance which is due to war, fire, flood, pandemic, acts of God, acts of third parties, acts of governmental authority or any agency or commission thereof, accident, breakdown of products, differences with employees or similar or dissimilar causes beyond Seller's reasonable control, including but not limited to, those interfering with production, supply or transportation of products, raw materials or components or Seller's ability to obtain, on terms Seller deem reasonable, material, labor, products or transportation.

11. **MERGER CLAUSE:** This Contract entirely supersedes any prior oral or written representations, correspondence, proposals, or contracts between the parties regarding the products. This writing constitutes the final and total expression of such contract between the parties, and it is a complete and exclusive statement of the terms of that contract.

12. **ASSIGNMENT:** Neither party may assign this Contract without the written consent of the other party, except that Seller may assign this Contract to a third party that acquires substantially all of Seller's assets and Seller may assign the flow of funds arising out of this Contract.

13. **COMPLIANCE WITH LAWS.** Each party agrees to comply with all applicable laws in the performance of its obligations; Buyer shall not trans-ship, re-export, divert or redirect Products outside of the original country of delivery without Seller's prior written consent.

14. **GOVERNING LAW:** This Contract shall be governed by and construed in accordance with the laws of the State of Michigan, without regard to the Convention for the International Sale of Goods (CISG), which shall not apply.

U.S.A.

Terms and Conditions of Sale: See previous page.

Phone Orders – TOLL FREE: 800-626-6653. DME's Customer Service Dept. operates Monday through Friday from 7 a.m. to 7 p.m. E.S.T. Calls can be made from anywhere in the continental U.S. and Puerto Rico (Puerto Rico: use "137" prefix instead of "1"). Our Customer Service Representatives will be happy to answer your questions on DME products or services, provide on-the-spot feedback on product availability and shipping details, or take any messages you wish relayed to your local DME sales, manufacturing or technical service representatives.

Mail Orders: If you prefer to order by mail, please address your order to:

- DME Company, 29111 Stephenson Highway, Madison Heights, Michigan 48071-2330
ATTN: Customer Service Dept.

Fax: You may fax your order to:

- DME Customer Service
248-544-5113 • 888-808-4363

Checks or Money Orders: When paying invoices by check or money order, please make payable to: DME Company. Include remittance copy of invoice and mail to:

- DME Company, PO Box 854867 Minneapolis, MN 55485-4867

Walk-in Orders, Pick-ups and Returns: If desired, ordered products in stock at your nearest DME Service Center can be picked up rather than shipped. Walk-in orders at Service Center locations can also be processed while you wait. Products being returned for repair or exchange should be processed through Customer Service prior to being returned.

Canada

Terms and Conditions of Sale: See previous page.

Orders, Quotes, Pickups, Returns: Please contact 800-387-6600

Check or Money Orders: Make payable to DME Company. Include remittance copy of invoice and mail to: 3275 Deziel Drive, Windsor, ON N8W5



Credit Application

Fax completed form-both sides-to (248) 544-5488 or email credit_application@dme.net

Customer Number: _____

Legal Name: _____ Date: _____

Trade Name (D.B.A.): _____ Phone: (____) _____

Ship to Address: _____ City: _____ State: _____ Zip _____

Bill to Address: _____ City: _____ State: _____ Zip _____

Contact Person(s): _____ Phone: (____) _____

Estimated Annual Sales: _____ Estimated Weekly Credit Requirements: _____

Are Statements Required: (Yes): _____ (No): _____ Are P.O. Numbers Required: (Yes.): _____ (No): _____

Injection Molder: _____ Die Caster: _____ Mold Maker: _____ Other: _____

Date the Present Owners Assumed Control of the Business: _____

Federal Employer I.D. Number: _____ Social Security Number: _____

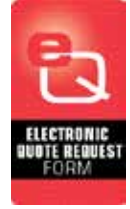
Building/Facilities: Owned: _____ Leased: _____

Mortgage Holder Name: _____ Lessor Name: _____

Is There Any Pending Litigation Against You or Your Business: (Yes): _____ (No): _____ If Yes, See Below:

Plaintiff: _____ Amount of Controversy: _____

Has the Applicant or any of the Business Owners Ever Filed for Bankruptcy? Business: (Yes): _____ (No): _____ Personal: (Yes): _____ (No): _____



Authorization for Release of Credit Information: The undersigned hereby authorizes all Bank and Trade References for the above named Credit Applicant to release any information to DME Company and/or affiliates for the purpose of obtaining credit.

Signed By Date

Bank Reference:

Bank: _____ Acct. No. _____ Phone: (____) _____

Officer: _____

Loan: _____ (No): _____ (Yes): _____ (No): _____

Trade References (To Speed Process - Fax Numbers of All References are Required):

Name	Address	Phone	Fax
_____	_____	(____) _____	(____) _____
_____	_____	(____) _____	(____) _____
_____	_____	(____) _____	(____) _____
_____	_____	(____) _____	(____) _____
_____	_____	(____) _____	(____) _____
_____	_____	(____) _____	(____) _____

Check One: Corporation: _____ L.L.C. _____ Partnership: _____ Sole Proprietorship: _____

If a Corporation or L.L.C, Year Incorporated: _____ State of Incorporation or Formation: _____

Credit Application



Corporation or L.L.C

Corporate
Name: _____

President: _____ (_____) _____
Name Home Address Home Phone S.S. No.

Vice President: _____ (_____) _____
Name Home Address Home Phone S.S. No.

Partnership or Sole Proprietor

Owner: _____ (_____) _____
Name Home Address Home Phone S.S. No.

Owner: _____ (_____) _____
Name Home Address Home Phone S.S. No.

List Percentage Ownership of Each Owner: _____

I/We understand that we are required if possible to furnish a copy of our most recent financial statement for your confidential use and credit purposes. All new accounts will be shipped on a C.O.D. basis until credit is approved by the DME Credit Department. (Unrated accounts requesting credit may require a personal guarantee of officers of the corporation and the principal stockholders.)

When credit accommodations are extended, payments are to be sent to remittance address stated on invoice, in accordance with the credit terms that are granted. I/We agree to pay a finance charge equal to the Lesser of 1½% per month or the maximum amount permitted under applicable law on any amount "past due sixty (60) days and over."

In the event payment to DME and/or affiliates is received in the form of check or draft, the undersigned account shall receive immediate credit for the amount included therein, provided, that if any check is returned or refused by the bank for any reason, the credit previously entered on the records shall be considered null and void and interest shall begin to accrue thereon. Any returned check shall result in a \$30.00 assessment which will be paid immediately. DME and/or affiliates shall have the right to demand payment of the returned check(s) in CASH or CERTIFIED funds immediately upon said notification.

Applicant hereby assigns, transfers and sets over to DME and/or affiliates in the event of fire, explosion, riot or other destruction caused by an insurable event, all of his/hers/its right, title and interest in any policy of fire or casualty insurance to the extent of his/her/its then outstanding balance to DME and/or affiliates and authorizes DME and/or affiliates to deal directly with his/her/its insurance carrier for the collection of the same. The name and address of applicant's insurance agent or company is:

Agency _____ City _____ State _____ Zip _____

For the purpose of obtaining Open Account Credit, I/we state the above information is true and correct, that I/we have authority to apply for credit on behalf of the herein named business and that I/we hereby attest to the Company's solvency.

Date: _____ Signed By: _____ Title: _____
Date: _____ Signed By: _____ Title: _____

Individual/Joint Personal Guaranty

To: DME Company and/or affiliates

I/We, _____ in order to induce DME and/or affiliates, creditor company, to grant present and/or future financial accommodations to _____, herein referred to as "COMPANY", do hereby irrevocably and unconditionally guarantee payment to DME and/or affiliates for all indebtedness of any sum due from the Company whenever the Company fails to pay same upon demand. I/We do hereby waive notice of default and non-payment (and consent to any modification or renewal of the credit arrangement.) If this is signed by one or more than one person authorized to act on behalf of the Company, it shall be the joint and several obligation of all officers and owners and principal stockholders of such Company. If any balance is turned over to a collection agency or any attorney for collection, I/we agree to pay attorney and/or collection fees.

Print Name _____ SS No. _____ Print Name _____ SS No. _____

Guarantor Signature _____ Guarantor Signature _____

Date _____ Date _____

Witness _____ Print Name _____ Witness _____ Print Name _____

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Resin Handling Bins

Ideal for Storage and Transfer of Material
From Grinders, Surge Bins, Bags, Drums or Gaylords

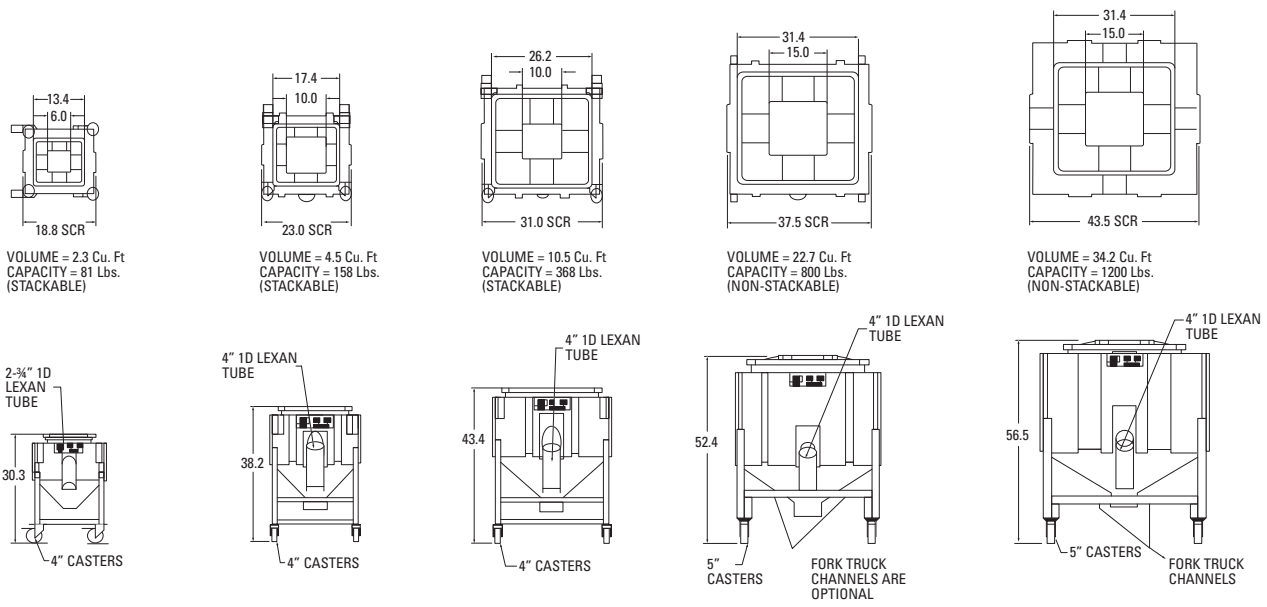
Resin Bins Features:

- Mobile
- Self-emptying
- Durable
 - One piece reinforced lid suitable for mounting equipment
- Lightweight
 - Easily view contents-polyethylene construction
- Stackable
 - RB90L, RB175L and RB400L only
- Stainless steel slidegate
- Vacuum wand access tube
 - 4" diameter opening (exception: RB90L has a 2.75" dia. opening)
- Heavy-duty welded steel frame
- Forklift channel
 - RB1200L and RB1200LC
- Locking casters
 - Standard and included with RB90L, RB175L and RB400L



[RESIN HANDLING BINS](#)

	Stackable			Non-Stackable			
Part Number	RB90L	RB175L	RB400L	RB800L	RB800LC	RB1200L	RB1200LC
Capacity	81lbs	158lbs	368lbs	800lbs	800lbs	1200lbs	1200lbs
Volume	2.3 CF	4.5 CF	10.5 CF	22.7 CF	22.7 CF	34.2 CF	34.2 CF
Size (L x W x H)	18.8" x 18.8" x 30.1"	23" x 23" x 37.6"	31" x 31" x 42.8"	37.5" x 37.5" x 47.4"	37.5" x 37.5" x 52.4"	43.5" x 43.5" x 51.7"	43.5" x 43.5" x 56.7"
Casters	(4) 4" toe-locking, full swivel casters INCLUDED!			NONE	(4)5" casters: (2) fixed + (2) swivel & toe locking	NONE	(4)5" casters: (2) fixed + (2) swivel & toe locking
Holds	1+ bags	3+ bags	1+ drum	2+ drums	2+ drums	1+ gaylord	1+ gaylord



Tilters, Dumpers, Mixers & Bins



On the following pages are listed the finest tilters, mixers, dumpers and storage bins in the industry today. Our equipment is constructed of high-grade steel and covered with a durable epoxy blue coating. The overall superior designs stem from many years in the manufacturing field, with frequent design refinements along the way to incorporate the changing needs of the industry.



We steadfastly stand behind all of our equipment with one of the most comprehensive guarantees in the industry - a **FULL TWO-YEAR WARRANTY**. We can also customize any of these items to suit whatever application you need.



Warranty

These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



Pneumatic Gaylord Tilter

Pneumatic Gaylord Tilter is designed to assist in the vacuum unloading of gaylord containers. The automatic tilting feature allows complete removal of material from the container with little or no assistance from your operator. The adjustable regulator permits setting initial lift at any desired weight. This unit will lift 1,400 lbs. with only 80 psi. air pressure! Normal operation is to begin tilting action when the box is around half empty. Tilt tables are durable and easy to maintain. We use heavy-duty pillow block bearings to ensure smooth controlled pivoting. Our 10 gauge top deck is reinforced with structural steel to make it durable enough to withstand years of abuse. These units will reduce labor costs by freeing your operator from tending his raw material flow. They also reduce material waste with the effortless, complete emptying of your container.

PNEUMATIC GAYLORD TILTER



Standard Features:

- 1" pillow block pivot bearings
- Double convoluted industrial air bag - set up so bag cannot get overstressed!
- Automatic or manual tilt action
- Hand level controlled
- Flow control to adjust operating speed
- 10 gauge steel deck
- Adjustable height vacuum wand holder
- 45° tilt angle
- Painted blue epoxy

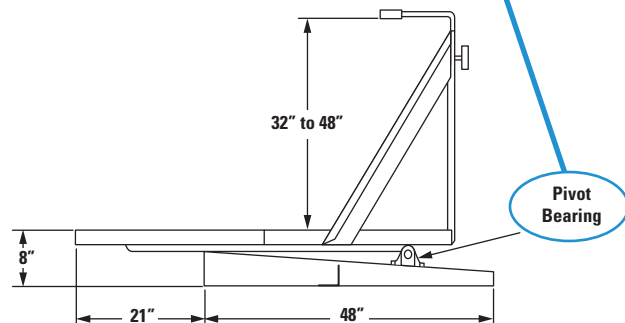
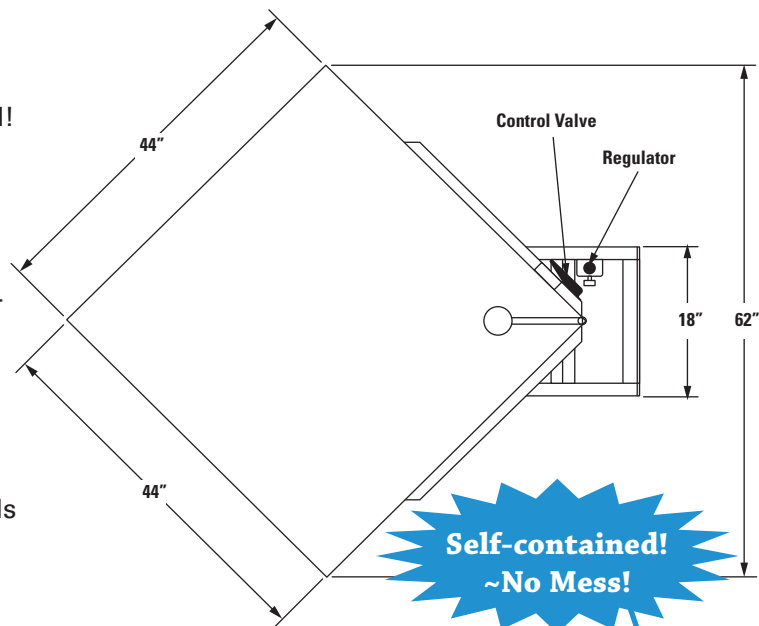
Optional Features:

- Foot pedal control valve
- Pneumatic turbine vibrator with controls
- 110 volt electric vibrator with controls
- Custom paints and matching colors

Part Number TT1
Low Price

Warranty

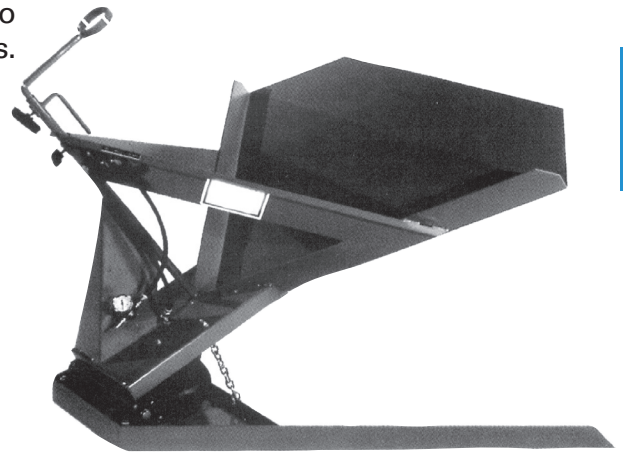
These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



Ground Entry Pneumatic Gaylord Tilter



Ground Entry Pneumatic Gaylord Tilter is designed to assist in the vacuum unloading of gaylord containers. The automatic tilting feature allows complete removal of material from the container with little or no assistance from your operator. The adjustable regulator permits setting initial lift at any desired weight; this unit will lift 800 lbs with only 80 psi. air pressure! Normal operation is to begin tilting action when the box is around half empty. Tilt tables are durable and easy to maintain. We use heavy-duty pillow block bearings to ensure smooth controlled pivoting. Our seven gauge top deck is reinforced with structural steel to make it durable enough to withstand years of abuse. These units will reduce labor costs by freeing your operator from tending to raw material flow. They also reduce material waste with the effortless, complete emptying of your container.



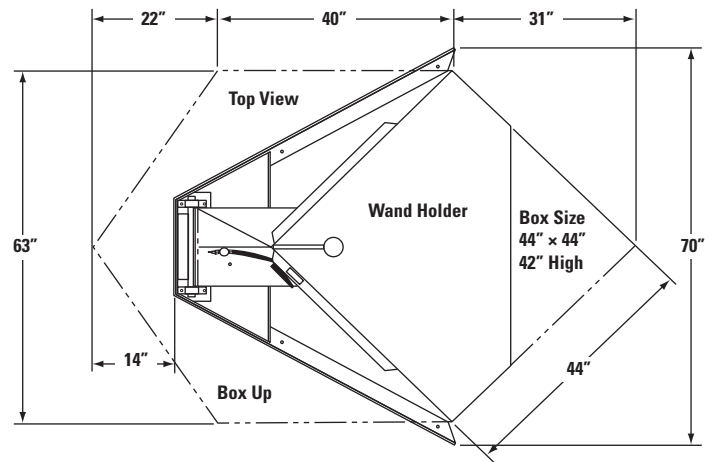
[GROUND ENTRY PNEUMATIC GAYLORD TILTER](#)

Standard Features:

- 1" pillow block pivot bearings
- Double convoluted industrial air bag - set up so bag cannot get overstressed!
- Automatic or manual tilt action
- Hand level controlled
- Flow control to adjust operating speed
- 7 gauge steel deck
- Adjustable height vacuum wand holder
- 45° tilt angle
- Painted blue epoxy

Optional Features:

- Foot pedal control valve
- Pneumatic turbine vibrator with controls
- 110 volt electric vibrator with controls
- Custom paints and matching colors

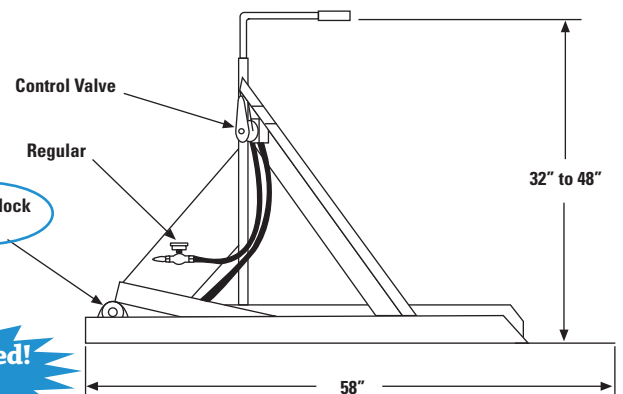


Part Number TT2

Warranty

These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!

Self-contained!
~No Mess!





Premier Gaylord Tilt Table

The Premier Ground Entry Gaylord Tilt Table is designed to assist in the vacuum unloading of gaylord containers. The automatic tilting feature allows complete removal of material from the container with little or no assistance from your operator. The adjustable regulator permits setting initial lift at any desired weight; this unit will lift 1000 lbs. with only 80 psi. air pressure! Normal operation is to begin tilting action when the box is around half empty. These tilt tables are durable and easy to maintain. We use heavy duty 1" flange bearings to ensure smooth controlled pivoting. Our seven gauge deck along with its sound structural design make it durable enough to withstand years of abuse. These units will reduce labor cost by freeing your operator from tending to raw material flow. They also reduce material waste with the effortless, complete emptying of your container!

Standard Features:

- Automatic or manual tilt action
- Hand level controlled
- Flow control to adjust down cycle speed
- 7 gauge steel deck
- Adjustable height vacuum wand holder
- 1" flanged pivot bearing
- Double convoluted industrial air bag
- 45° tilt angle
 - Painted blue epoxy

Optional Features:

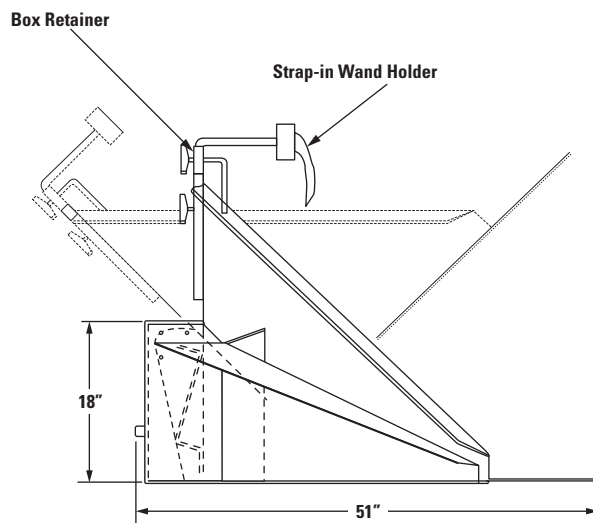
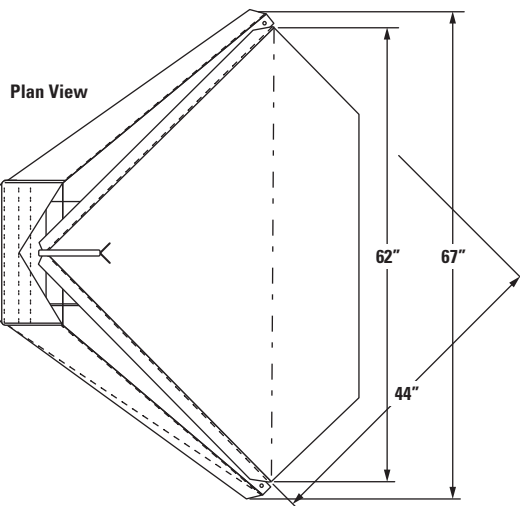
- Foot pedal control valve
- Pneumatic turbine vibrator w/controls
 - Special paint colors

Part Number TT3

Low Price

Industry-leading two-year warranty on all parts and workmanship!

[PREMIER GAYLORD TILT TABLE](#)



Premier Hydraulic Dumper

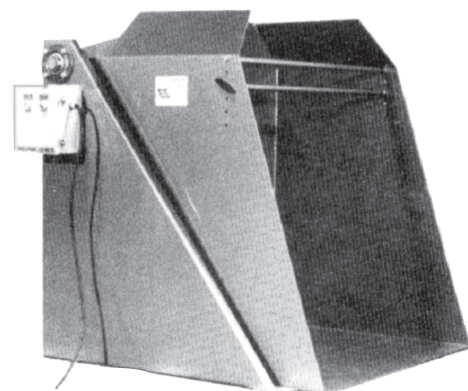


PREMIER HYDRAULIC DUMPER

The Premier Hydraulic Box Dumper is designed and built for continuous operation. It features 2" piloted roller bearings at the main pivot and bronze sleeve bearings at the top cylinder mounts. We use a proven 1.5 h.p. hydraulic package with easy to service components and a separate oil reservoir.

Designed for increased safety, this unit has solid side panels on the frame and a wider clearance between the frame and bucket to eliminate pinch points. The unit can be stopped anywhere in the up and down cycle simply by releasing the push button control.

Our standard units all have 2,500 lbs. lift capacity and a gravity return. Units are powered by a pair of 2" bore, 2" rod, ram-style cylinder. Special dust control and other hooded units use cylinders with a 3" bore and are powered on both the up and down cycles.



Premier Hydraulic Dumper		
Part Number	Phase	Bucket
35-2500	3	48" Wide
35-2550	1	48" Wide

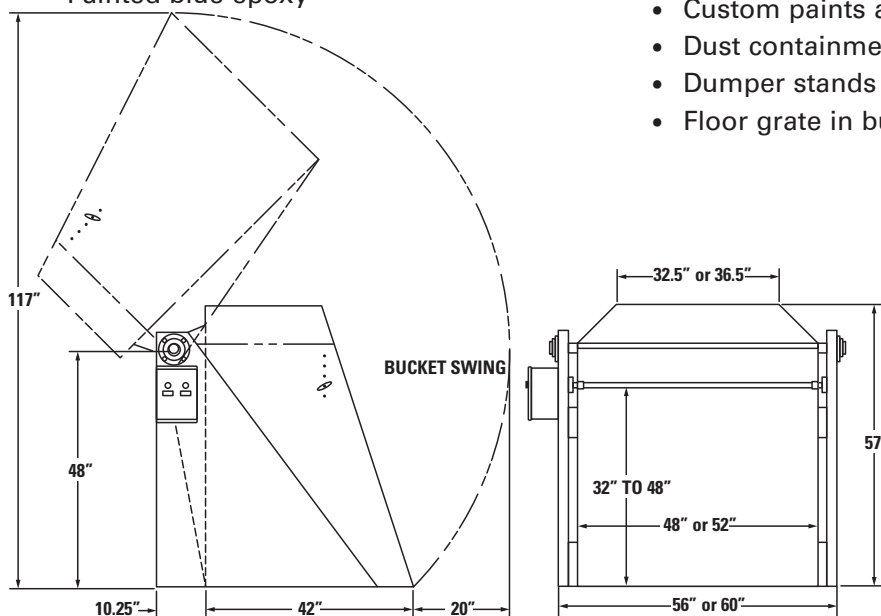
Premier Hydraulic Dumper

Standard Features:

- Bucket rotation 135°
- Motor 1.5 h.p.
- NEMA 12 electrical enclosure
- Hydraulic cylinders w/24" stroke, 2" bore, 2" rod
- Adjustable retaining bar 32" to 48"
- Up cycle completion, limit switch
- Down cycle flow control valve
- Cycle time - 30 sec. up, 15 sec. down
- Replaceable pivot bearings
 - Painted blue epoxy

Optional Features:

- 52" Wide bucket available!
- Velocity fuse, (catches bucket in case of hydraulic rupture)
- Double-acting hydraulics
- Explosion-proof electrical
- Gaylord entry guides
- Stainless steel chute liner
- Custom sized and shaped buckets
- Stainless steel construction
- Dust hood with discharge hatch
- Custom paints and matching colors
- Dust containment doors on bucket
- Dumper stands 12" to 72"
- Floor grate in bucket



Warranty

These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



Hydraulic Box Dumper

This Hydraulic Dumper is built to handle the tough unloading jobs! Standard unit capacity is 2,500 lbs.; larger capacities are available. This unit features a full 7 gauge body, a field-proven hydraulics system, and a microswitch controlled cycle completion to prevent premature cylinder packing failure. The 48" width body has room for most containers, but special widths are available as well. The box retainer is adjustable from 32" to 48"; plus there's also a permanent safety retainer bar! Abrasion-resistant epoxy painted blue. Push button controls permit stopping the unit at any point in the cycle for added control and safety. This Hydraulic Dumper turns a tough, time-consuming job into a 30 second breeze!

Hydraulic Box Dumper Specifications:

- Lift capacity: 2,500 lbs.
- Total rotation: 135°
- Standard motor size: 1½ HP
- Electrical enclosures: NEMA 12
- Control buttons: 110V
 - Hydraulic cylinders: 2" bore, 24" stroke

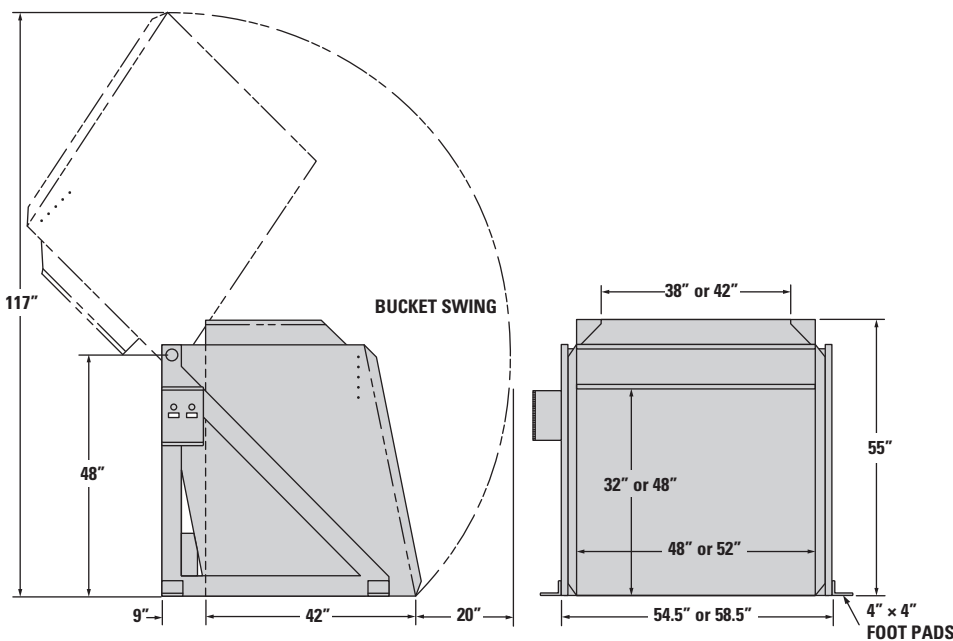
Major Options:

- 52" Wide Bucket available!
- Stands - to change dump height
- Custom width body - for large or awkward containers
- Increased lift capacity
- Custom discharge chutes
 - Enclosed units - for dusty materials

[HYDRAULIC BOX DUMPER](#)



Hydraulic Box Dumper		
Part Number	Phase	Bucket
31-2500	3	48" Wide
31-2550	1	48" Wide



Warranty
 These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!

Portable Batch Mixer



The Portable Batch Mixer is solidly built for years of trouble-free service. This direct-driven, timer controlled mixer features a 14 gauge body, sidewall construction, industrial weight vertical auger, and safety disconnect switches on both covers. Its 44-inch square leg pattern is designed to fit on portable storage bins, auger discharge bins, or just standalone! Several styles of discharge stands are available to aid unloading. Eight inch discharge gate at the base of the unit ensures rapid emptying! Tough, abrasion-resistant epoxy painted exterior blue. Standard capacities of 10 through 60 cubic feet available, or we can custom build to match your ideal batch size! Units can easily be adapted with special intake chutes, vacuum discharge boxes, or auger take-aways. This practical, durable unit can handle most of your mixing needs!



PORTABLE BATCH MIXER

Portable Batch Mixer Specifications:

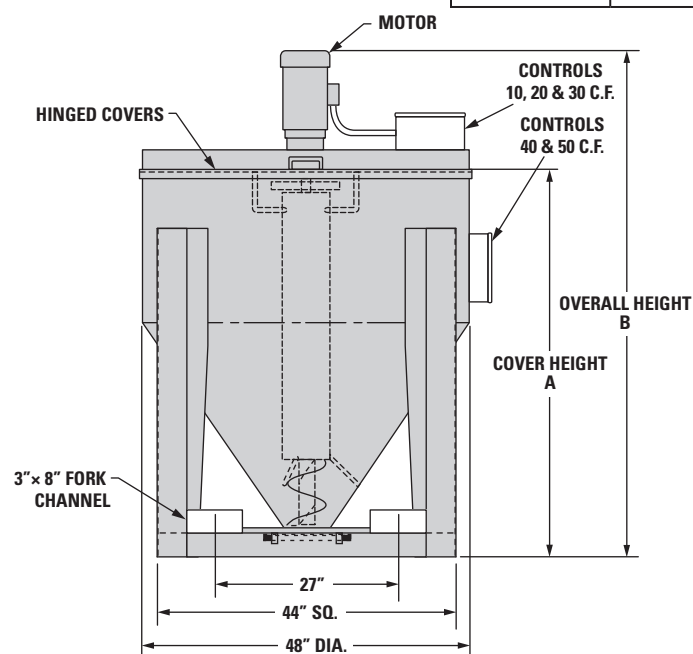
- Timer controlled, direct-drive vertical auger mixers
- 10 through 60 cubic foot capacities
- Eight-inch diameter discharge for fast unloading
- 14 gauge body and industrial weight auger for durability
 - steep-sided conical body handles most materials

Options:

- Gaylord discharge stand
- Powered auger take-away stands
- Vacuum box adapter stand
- Special intake chutes
- Epoxy painted interior
- Custom capacities

Portable Batch Mixer

Model No. 110V/1 PH	Model No. 240/480V/3PH	Capacity (cu. ft.)	"A" Dim. Height to Covers	"B" Dim. Overall Height	Drive MTR (hp)
60-1000	60-1200	10	40.5"	60"	.75
60-2000	60-2200	20	46.5"	66"	1
60-3000	60-3200	30	56.5"	76"	1.5
60-4000	60-4200	40	66.5"	86"	1.5
60-5000	60-5200	50	76.5"	96"	2
60-6000	60-6200	60	86.5"	106"	2



Warranty
 These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



Portable Storage Bins

The Portable Storage Bin is an inexpensive, versatile shop performer. Strongly built with full 14 gauge sidewalls and 1/4" thick legs, these bins are constructed to withstand the abuse of a busy shop! Special flared pads help make stacking (up to three high!) simpler and safer. Durable abrasion-resistant epoxy painted blue inside and out. Units may be ordered with or without covers or vacuum entry ports for maximum economy tailored to your needs. The 4" discharge features an adjustable tension slide gate. Four-way fork channels, pallet jack rails, casters, and product view windows are some of the available options. Standard 44-inch square design in capacities of 20, 30, 40, 50, or 60 cubic feet, or can be custom designed to fit your particular requirements! Watch these bins save your operation both time and space!



PORTABLE STORAGE BINS

Options

- Pallet jack channels
- 4" casters (2 rigid, 2 swivel)
- 4-way fork entry
- Foot pads
- 3" x 5" card holders
- Vacuum port covers (set)

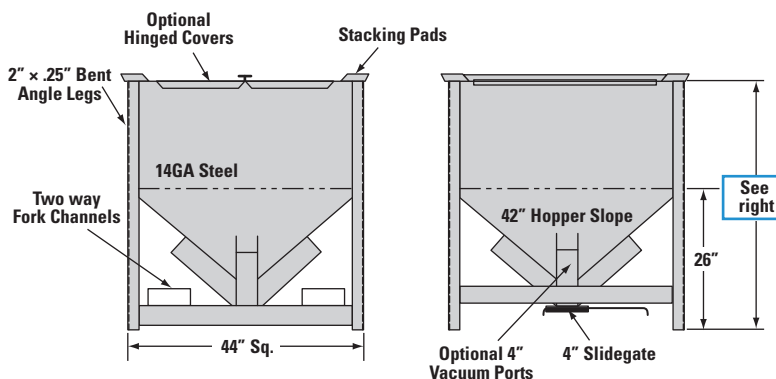
Other options available - or will custom design to fit your needs!

Portable Storage Bins

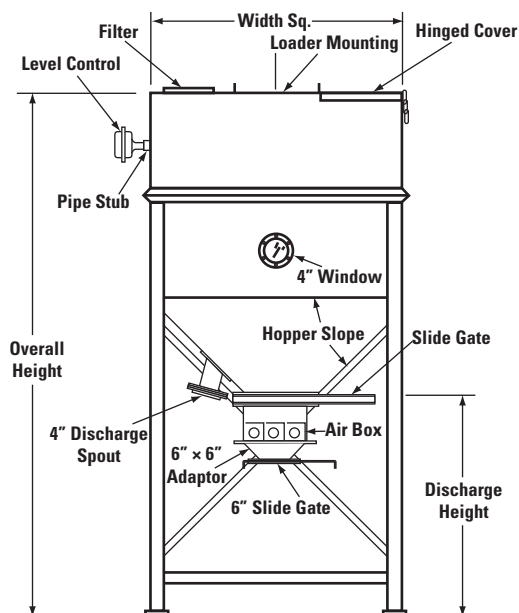
Part Number	Description
40-2000	PSB-20 cu. ft. base unit
40-2100	PSB-20 cu. ft. with 4-way vacuum ports
40-2010	PSB-20 cu. ft. with 2-piece cont. hinged covers
40-2110	PSB-20 cu. ft. with vacuum ports AND covers
40-3000	PSB-30 cu. ft. base unit
40-3100	PSB-30 cu. ft. with 4-way vacuum ports
40-3010	PSB-30 cu. ft. with 2-piece cont. hinged covers
40-3110	PSB-30 cu. ft. with vacuum ports AND covers
40-4000	PSB-40 cu. ft. base unit
40-4100	PSB-40 cu. ft. with 4-way vacuum ports
40-4010	PSB-40 cu. ft. with 2-piece cont. hinged covers
40-4110	PSB-40 cu. ft. with vacuum ports AND covers
40-5000	PSB-50 cu. ft. base unit
40-5100	PSB-50 cu. ft. with 4-way vacuum ports
40-5010	PSB-50 cu. ft. with 2-piece cont. hinged covers
40-5110	PSB-50 cu. ft. with vacuum ports AND covers
40-6000	PSB-60 cu. ft. base unit
40-6100	PSB-60 cu. ft. with 4-way vacuum Ports
40-6010	PSB-60 cu. ft. with 2-piece cont. hinged covers
40-6110	PSB-60 cu. ft. with vacuum ports AND covers

Warranty

These products carry a full two year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



Overall Height (w/vacuum ports)	Overall Height (w/OUT vacuum ports)	Capacity (cu.ft.)
36"	32"	20
46"	42"	30
56"	52"	40
66"	62"	50
76"	72"	60



Economical in plant bulk storage, surge bins are available in sizes ranging from 38 cu. ft. to 234 cu. ft. Large quantities of material can be stored using very little floor space. They can be filled or discharged using pneumatic or screw-conveying equipment. There are many options available to adapt these bins to almost any material handling system. Check with us to see just how affordable bulk storage can be!

SURGE BINS



Surge Bin Standard Features:

- 2 x 2 x 1/4 angle legs (48" sq. bins)
- 3 x 3 x 1/4 angle legs (60" x 72" sq. bins)
- 14 ga. hopper (48" sq. bins)
- 12 ga. hopper (60" x 72" sq. bins)
- Bolt-down foot pads
- Loader-mounting cutout (250 lbs max)
- 1/3 hinged cover
- Air box discharge flange (16 1/4 x 16 1/4)
- Blue epoxy (outside only)

Warranty

These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial

Optional Features:

- 12" x 12" slide gate
- 6" x 6" discharge adapter
- 6" slide gate
- 4" discharge spout w/slide gate
- Filter in cover
- 1 1/4" pipe stub in hopper
- Level control
- 4" window
- Platform w/ladder
- Epoxy paint inside

Standard Surge Bins

w/Discharge for Screw Conveyor or Air Box

Part Number	Description	Capacity (LBS) 35 LBS/CF	Discharge Height	Overall Height
44-4500	48" x 48", 45° Hopper, 21" Sidewall	1330	18"	4'-9"
44-4600	48" x 48", 45° Hopper, 33" Sidewall	1890	18"	5'-9"
44-4800	48" x 48", 45° Hopper, 45" Sidewall	2450	18"	6'-9"
45-4500	60" x 60", 45° Hopper, 24" Sidewall	2450	18"	5'-6"
45-4600	60" x 60", 45° Hopper, 36" Sidewall	3325	18"	6'-6"
45-4800	60" x 60", 45° Hopper, 60" Sidewall	5075	18"	8'-6"
45-4900	60" x 60", 45° Hopper, 84" Sidewall	6825	18"	10'-6"
46-4800	72" x 72", 45° Hopper, 52" Sidewall	6720	18"	8'-4"
46-4900	72" x 72", 45° Hopper, 76" Sidewall	9240	18"	10'-4"
44-6500	48" x 48", 60° Hopper, 22" Sidewall	1645	18"	5'-11"
44-6600	48" x 48", 60° Hopper, 34" Sidewall	2205	18"	6'-11"
45-6600	60" x 60", 60° Hopper, 22" Sidewall	2625	18"	6'-10"
45-6800	60" x 60", 60° Hopper, 46" Sidewall	4375	18"	8'-10"
45-6900	60" x 60", 60° Hopper, 70" Sidewall	6125	18"	10'-10"
46-6800	72" x 72", 60° Hopper, 34" Sidewall	5670	18"	8'-9"
46-6900	72" x 72", 60° Hopper, 58" Sidewall	8190	18"	10'-9"

Standard Surge Bins

w/Extended Legs for Gravity Discharge

Part Number	Discharge Height	Overall Height
44-8500	60"	8'-3"
44-8600	60"	9'-3"
44-8800	60"	10'-3"
45-5500	60"	9'-0"
45-5600	60"	10'-0"
45-5800	60"	12'-0"
45-5900	60"	14'-0"
46-5800	60"	11'-10"
46-5900	60"	13'-10"
44-9500	60"	9'-5"
44-9600	60"	10'-5"
45-7600	60"	10'-4"
45-7800	60"	12'-4"
45-7900	60"	14'-4"
46-7800	60"	12'-3"
46-7900	60"	14'-3"



Power Hopper



POWER HOPPER

The Power Hopper is designed to feed pellets, granules, and free-flowing powders into an overhead hopper or storage vessel. It often works in conjunction with our Hydraulic Dumper to deliver material fast and efficiently from gaylord to point of use. Power Hoppers are built with a variety of auger sizes and types and can deliver from 10 to 500 cu. ft. of material per hour.

Standard Features:

- Direct gear drive for lower maintenance
- Motor controls with start-stop
- 20 cu. ft. hopper capacity
- Hopper dimension 44" x 44" x 46" high
- Quick-disconnect auger for easy cleaning

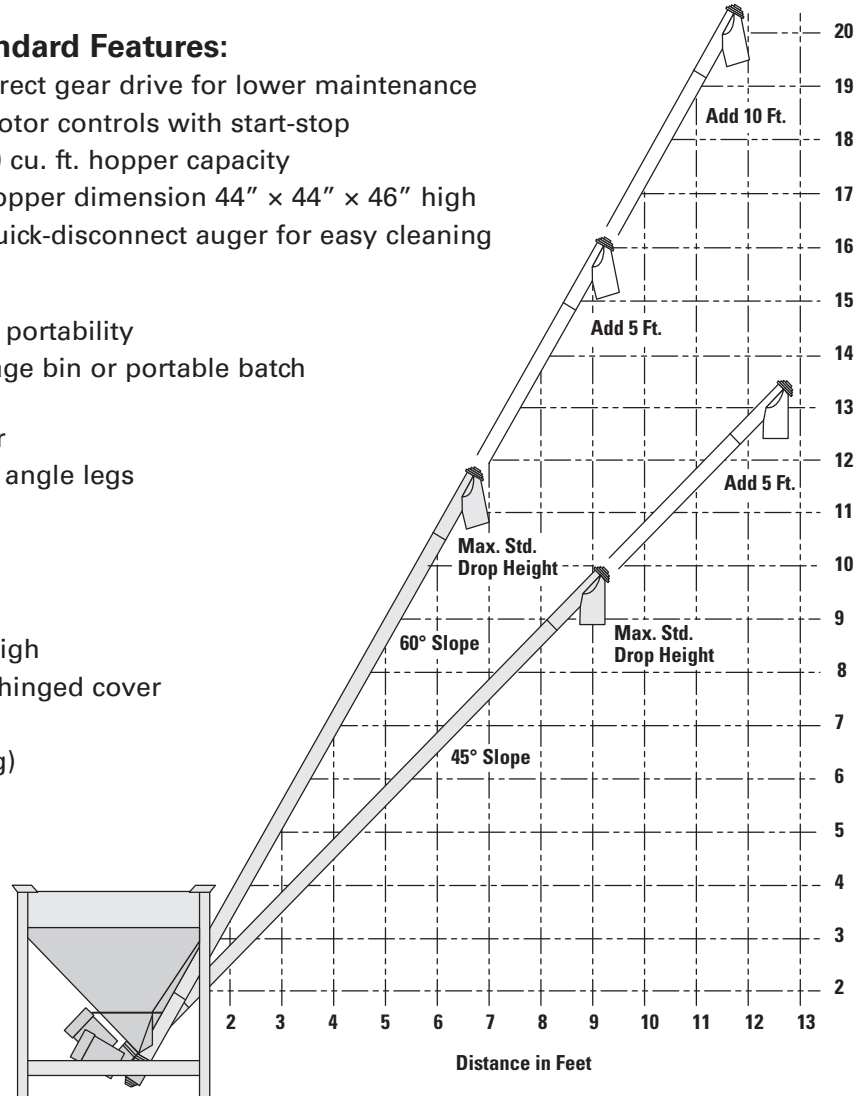
- Compressible dust seal
- Two-way fork channels for easy portability
- Stacking pads for portable storage bin or portable batch mixer
- Foot pads to secure unit to floor
- 12 gauge hopper with 1/4" bent angle legs
- 45° or 60° auger slope
- Epoxy painted, blue

Options:

- 30 cu. ft. capacity hopper, 56" high
- Bag breaker grate *continuous hinged cover
- Vibrator
- Casters (2 swivel, 2 rigid locking)
- Variable speed drive

Warranty

These products carry a full two-year warranty. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



Power Hopper

Part Number	Screw Dia.	Tube Dia.	RPM	STD. Dschg. Height	HP	Max. Length	Slope	Delivery Per Hr.
20-1100	2.7*	3.5"	345.00	11'	1.5 or 3.0	50'	60°	50 c.f.
20-2100	2.7*	3.5"	345.00	9'	1.5 or 3.0	50'	45°	60 c.f.
20-5100	4"	5"	232.00	11'	2.0 or 3.0	20'	60°	150 c.f.
20-6100	4"	5"	232.00	9'	2.0 or 3.0	20'	45°	180 c.f.

* Coreless Augers - need no hanger bearings and can incorporate a 60° radius elbow.

NOTE: Delivery rates on this table are approximations based on average materials under average conditions.

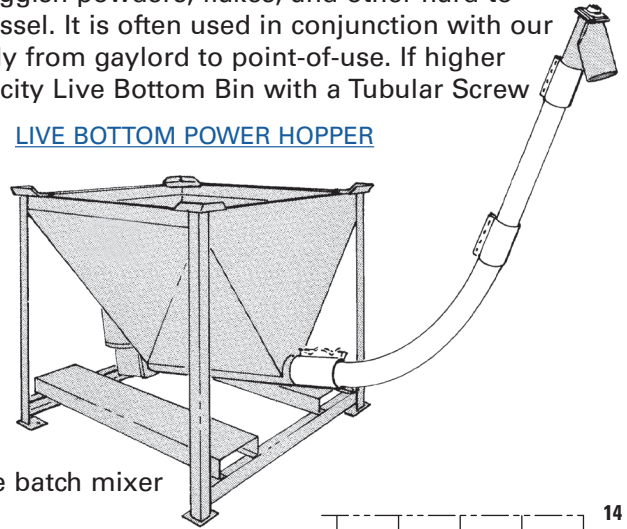
Check with us before ordering to make sure the model you have selected will meet your requirements.

Live Bottom Power Hopper



The Live Bottom Power Hopper is designed to feed sluggish powders, flakes, and other hard-to-move materials into an overhead hopper or storage vessel. It is often used in conjunction with our Hydraulic Dumper to deliver material fast and efficiently from gaylord to point-of-use. If higher delivery rates are required, you may need a High Capacity Live Bottom Bin with a Tubular Screw Conveyor.

LIVE BOTTOM POWER HOPPER



Standard Features:

- Direct gear drive for low maintenance
- Motor controls with start-stop
- 12 cu. ft. Hopper, 44" x 44" x 46" high
- Quick-disconnect auger for easy cleaning
- Compressible dust seal
- Two-way fork channels for easy portability
- Foot pads to secure unit to floor
- Stacking pads for portable storage bins or a portable batch mixer
- 12 gauge hopper with 1/4" bent-angle legs
- 15, 30, 45 or 60° auger slope
- Epoxy painted blue

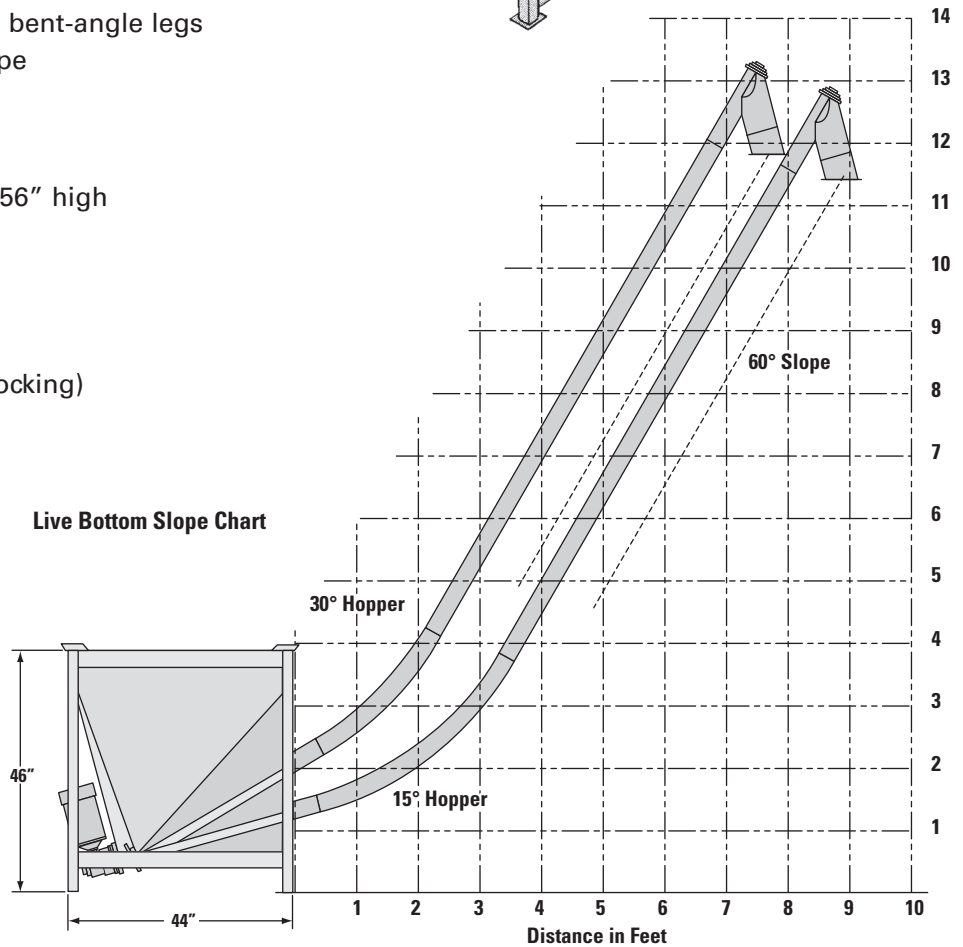
Options:

- 22 cu. ft. capacity hopper, 56" high
- Bag breaker grate
- Continuous hinged cover
- Vibrator
- Agitator
- Casters (2 swivel, 2 rigid locking)
- Variable speed drive
- Level control switch

Warranty

These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!

Live Bottom Slope Chart



Live Bottom Power Hopper

Part Number	Screw Dia.	Tube Dia.	RPM	HP	Max. Length	Slope	Delivery Per Hr.
20-1200	2.70	3.5"	345.00	1.5 or 2.0	30'	to 60°	50 c.f.



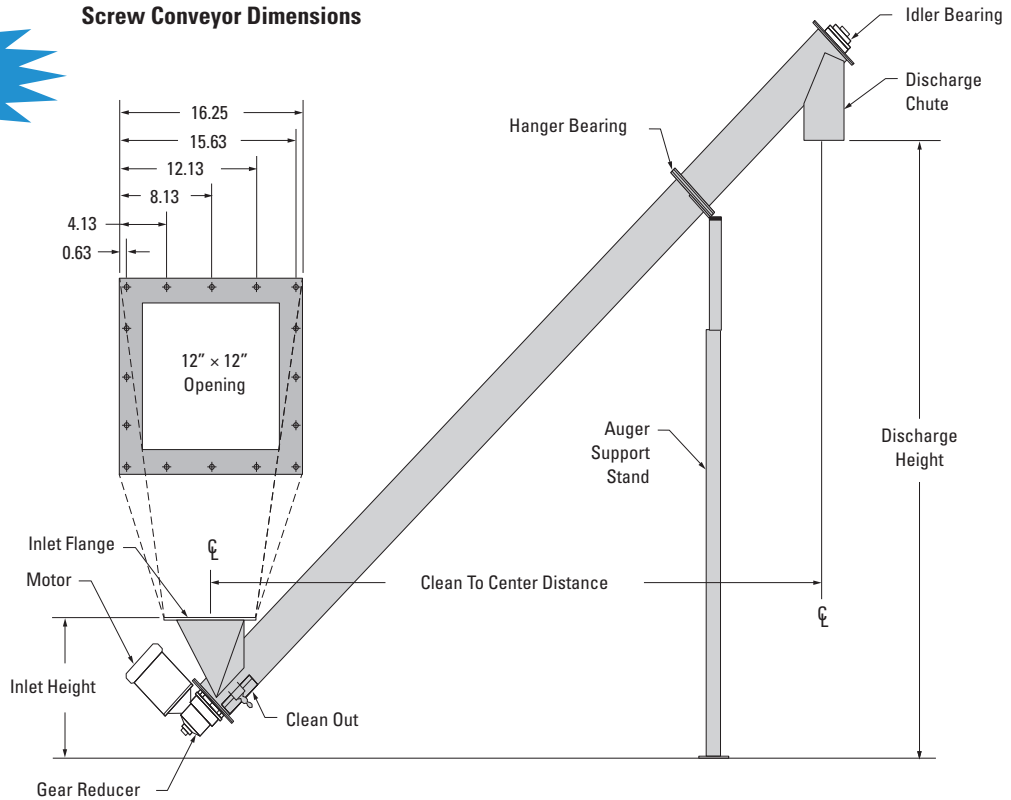


Screw Conveyor

Send us a material sample for evaluation.

SCREW CONVEYOR

Screw Conveyor Dimensions



Screw Conveyors

are most effective when moving large amounts of material over short distances. We have developed a standard line of tubular screw conveyors that range in capacity from 50 cu. ft. to 700 cu. ft. per hour. These Screw Conveyors are particularly good for moving dusty material because they can be completely sealed. Our direct-drive system is more compact and easier to maintain than other commonly used drives.

We offer a complete line of screw-conveying equipment including: discharge adapters, support stands, suspension brackets, level control switches, and control packages. We can also custom design screw conveyors to fit your particular material handling needs!

Warranty

These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!

Screw Conveyors

Part Number	Screw Dia.	Tube Dia.	RPM	HP	Auger Length	Slope	Delivery Per Hr.	Discharge Height
20-1000	2.7*	3.5"	345	1.5	10'8"	60°	50 c.f.	11'
20-2000	2.7*	3.5"	345	1.5	8'9"	45°	60 c.f.	9'
20-2200	4"	5"	232	2.0	10'8"	60°	150 c.f.	11'
20-2300	4"	5"	232	2.0	8'9"	45°	180 c.f.	9'

*Coreless Augers - need no hanger bearings and can incorporate a 60° radius elbow.

NOTE: Delivery rates on this table are approximations based on average materials under average conditions.

Check with us before ordering to make sure the model you have selected will meet your requirements.

Live Bottom Bins

High Capacity



The High Capacity Live Bottom Bin is designed to deliver sluggish powders flakes and other hard-to-move materials in high volume to your processing equipment. It can be used as a dump station or as a surge hopper. The High Capacity Live Bottom is available with a 6" screw capable of delivering up to 200 cu. ft. of material per hour or a 9" screw that can deliver up to 600 cu. ft. per hour. Let us help you design a custom system to suit your needs.

Standard Features:

- Bin size: 48" wide x 86" high, 48" or 60" long
- Bin capacity: 50 or 62 cu. ft.
- Bolt-down foot pads
- Shaft seal: PTFE packing
- Safety shut-off switch
- Motor controls with start-stop
- Conveyor screw: 6" or 9"
- Direct gear drive: 20:1
- Delivery: 6" Screw – 200 cf./hr.
9" Screw – 600 cf./hr.
- Painted blue epoxy
- 2 HP 230/460/3 PH

Options:

- Variable-speed control
- Explosion-proof electrical
- 2/3 bolt down, 1/3 hinged cover
- View windows
- Level switches
- Vibrator
- Agitator
- Stainless steel construction
- Custom paint and matching colors
- 2 HP. 110V/1PH



LIVE BOTTOM BINS

Warranty These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!

Part Number	Description	Flow Rate
21-1200	H.C. Live Bottom Bin, 48" x 60" x 86" high, 6" screw	200 cu. ft./hr
21-1300	H.C. Live Bottom Bin, 48" x 48" x 86" high, 6" screw	200 cu. ft./hr
21-2200	H.C. Live Bottom Bin, 48" x 60" x 86" high, 9" screw	600 cu. ft./hr
21-2300	H.C. Live Bottom Bin, 48" x 48" x 86" high, 9" screw	600 cu. ft./hr

Packaging Clips

Streamline Your Packaging with Quality Clips™



- Completely Removable and Reusable. Better than tape, it won't mark your boxes or leave residue.
- Prevents tipped or spilled boxes due to loose box flaps.
- Great for bulk packaging. Parts will not hang up on the smooth, flat surfaces or the tapered end.
- Maximize your workspace. Workers can stand closer to the box creating space in assembly line and manufacturing areas. No more leaning or reaching.

Quality Clips®
Part Number
OCLIPS

[PACKAGING CLIPS](#)



Floor-Mounted Dryers

Dri-Air®-4 Bed Series

HP4-X FM Series 4-Bed Floor-Mounted Dryers

Patented, high-performance, floor-mounted dryers used with press-mounted hoppers eliminate the weight of dryers on the press.

DRI-AIR's exclusive 4-bed drying systems are the best solution for faster drying of difficult materials and in difficult environmental conditions (high relative humidities). Minimum, constant dewpoints of -40°, with dewpoints down to -100°F.

- Perfect for tough materials and applications
 - ISOPLAST® dries effectively in any ambient condition
 - Excellent for medical and automotive molding and for critical molding such as: CDs, optical clarity, sensitive electronic components and thin-wall parts
 - Polycarbonate blends dry perfectly
 - Recommended for most non-air conditioned facilities

- Performs perfectly even at relative humidities over 80%
 - Minimum, constant dewpoints of -40° monitored and maintained throughout the drying operation

HP4-X FM Features

- Faster, more efficient regeneration
 - Exclusive temperature-based regeneration
 - No temperature or moisture spikes
 - Low-energy consumption
- Space-saving, compact design
 - Same size as ARID-X dual bed series
 - No moving components; easy desiccant change
- Advanced microprocessor control is standard (USA and Canada only)
 - Built-in dewpoint monitor
 - 7-day timer for auto start/stop operation



HP4x50/75/100

Options for HP4-X:

- Alarm light
 - UDC control
 - Clogged filter indicator
 - Temp setback
- High-temp hose
- After-cooler
- Plasticizer trap

FLOOR MOUNTED DRYERS



HP4x150/200/300

Dri Air Model	Process Rate		Flow Rate		Dimensions	
	(lbs)	(kg)	(CFM)	(m ³ /hr)	l/w/h (inches)	l/w/h (cm)
HP4 x 25	30	14	25	42	23.5/17/38	60/43/97
HP4 x 35	40	18	46	78	23.5/17/38	60/43/97
HP4 x 50	50	25	57	97	32/25/50/76	76/61/127
HP4 x 75	80	36	75	127	32/24/50/76	76/61/127
HP4 x 100	110	50	110	187	32/24/50/76	76/61/127
HP4 x 150	160	73	150	255	36/42/64/91	91/107/163
HP4 x 200	220	100	200	340	36/42/64/91	91/107/163
HP4 x 300	330	150	300	510	36/42/64/91	91/107/163

Standard power: 208, 230, 400, 480, 600 VAC; 50/60 Hz

**Call for
A Quote!**

Floor-Mounted Dryers

Dri-Air®-2 Bed Series



ARID-X® FM Series 2-Bed

Floor-Mounted Dryers

Industry standard dryers used with press-mounted hoppers.

Compact, dual-bed design saves valuable floor space; comes complete with casters and hoses.

- Continuous air flow at constant dewpoints, -40° or lower
- Easy-to-operate UDC controller is standard
 - Temperature alarm included
 - Advanced microprocessor control available
- Space-saving, compact design
 - Fast, easy servicing of desiccant and heaters
 - Durable, sturdy construction
 - Easy access, quick-clamp enclosures
- Electric dryer valve eliminates the need for compressed air



Easy, quick-clamp access to desiccant

Dri Air Model	Process Rate		Flow Rate		Dimensions	
	(lbs)	(kg)	(CFM)	(m ³ /hr)	l/w/h (in.)	l/w/h (cm)
ARID x 25	25	12	25	42	23.5/17/38	60/43/97
ARID x 35	35	16	46	78	23.5/17/38	60/43/97
ARID x 50	60	25	57	97	32/24/50	76/61/127
ARID x 75	75	35	75	127	32/24/50	76/61/127
ARID x 100	100	45	110	187	32/24/50	76/61/127
ARID x 150	150	68	150	255	36/42/64	91/107/163
ARID x 200	200	91	200	340	36/42/64	91/107/163

Standard Power: 208, 230, 400, 480, 600 VAC; 50/60 Hz

Options for HP4-X:

- Alarm light
- UDC control
- Micro options:
 - Clogged filter indicator
 - Temp setback
- High-temp hose
- After-cooler
- Plasticizer trap

**Call for
A Quote!**

Mini Dryer



ARID-X®-10 Mini-Dryer

Ideal for lab, insert and micro-part molding

- ELC control - no compressed air required
- Space-saving, compact design, only 21 inches (54 cm) high and weighs only 20 lbs (23 kg)

Mini Dryer
Part Number
ARIDX10

**Call for
A Quote!**

Dri-Air®

- Fast drying with the industry's smallest 2-bed dryer
- Processing rates up to 10 lbs/hr (5 kg/hr)
- PID microprocessor control for accurate temperatures
- Process temperatures of 150° to 300°F (65° to 149°C)
- Dimensions 11 x 18 x 21 inches (23 x 36 x 41 cm)



Drying Hoppers

Dri-Air®

RH Series Hoppers

Fully insulated, modular, stainless steel construction DRI-AIR's Modular Hoppers ensure uniform material flow with:

- NO channeling
- NO feedout problems
- NO mixing problems
- NO thru-put problems
- Standard capacity hoppers range from 5 to 1500 lbs (2 to 680 kg). Larger hoppers available, consult factory
- Dries less than a full hopper of material so there is no scrap or feedout
- Dries material to the bottom of the slide gate

- Easy-to-clean diffuser cone directs and optimizes air/material flow (no slugs of undried resin)
- Hoppers include:
 - Slide gate
 - Blank-mounting adapter
 - Access door (RH60 and over)
 - Insulation
- Laser-cut access doors provide a smooth, tight fit and eliminate troublesome gaskets
- Latch-held covers provide complete sealing; internal ring controls fill height and prevents possible damage to loader
- RH400 & RH600 hoppers include full-length sight glass and Bunting™ no-spill slide gate



RH30

RH60

Options for RH

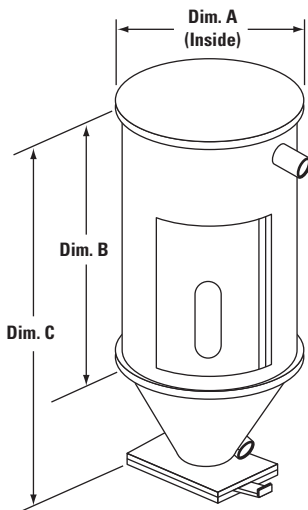
- Floor Stand
- Take Off Box (NA on 5)
- Adjustable Fill Sensor

Call for
A Quote!

[DRYING HOPPERS](#)



Adjustable Fill Sensor



Dri-Air Hopper Model	Capacity		Dimensions					
			A		B		C	
	(lbs)	(kg)	in	(cm)	in	(cm)	in	(cm)
RH5	5	2	8	(20)	6	(15)	12	(31)
RH15	15	7	10	(25)	9	(23)	18	(41)
RH30	30	14	14	(36)	16	(41)	28	(71)
RH60	60	27	14	(36)	28	(71)	40	(102)
RH100	100	45	19	(46)	25	(64)	37	(94)
RH150	150	68	18	(46)	38	(97)	50	(127)
RH200	200	91	23	(58)	44	(76)	47	(119)
RH300	300	136	23	(58)	30	(112)	61	(155)
RH400	400	181	27	(69)	40	(102)	60	(152)
RH600	600	272	27	(69)	60	(152)	80	(203)
RH1000	1000	453	36	(91)	58.5	(149)	84.5	(-)
RH1500	1500	680	39	(99)	70.5	(179)	97	(-)

Hopper-Mounted Dryers

Dri-Air®



HM SERIES HOPPER MOUNTED DRYERS

HM dryers save valuable floor space by combining the dryer with the hopper. Available with high-performance, 4-bed or with industry-standard, 2-bed dryers.

- Easy-to-operate, standard ELC (for AHM1) or UDC (for AHM2 - AHM4)-based control with high-temperature alarm standard
- Unique design distributes weight throughout the hopper base
- Electric dryer valve eliminates the need for compressed air

Options for HM Series

Portable Stand
After Cooler
Plasticizer Trap
Magnet Drawer MD7500



Model Number:	Two Bed	AHM1	AHM2	AHM3	AHM4
	Four Bed	N/A	HPHM2	HPHM3	HPHM4
Process Rate (lbs/hr):	Two Bed	10	15	25	35
	Four Bed	n/a	20	30	40
Process Rate (kg/hr):	Two Bed	10	7	12	16
	Four Bed	n/a	10	14	18
Hopper Capacity:	lbs	30	60	100	150
	kg	14	27	45	70
Power:		110, 1phase	208, 230, 400, 460, single or three phase		
Dimensions:	inch (l/w/h)	22/21/28	30/29/42	30/29/38	30/29/51
	cm (l/w/h)	56/53/71	76/74/107	76/74/96.5	76/76/130

Mini Hopper-Mounted Dryer

AHM1 MINI-DRYER

Complete with 30 lb (14 kg) insulated stainless steel hopper and 18 CFM blower, the AHM1 is an ideal match for small presses processing under 10 lbs/hr (4.5 kg/hr).

- Available in 110 and 220 volts
- Weighs only 98 lbs (45 kg)
- Compact 22 x 21 x 28 inches (56 x 53 x 71 cm)
- Electric dryer valve eliminates the need for compressed air
- Affordable





Mobile Drying Systems

Dri-Air®

Eliminate press-mounted drying equipment for faster, easier and safer material changeovers. A compact package using our hopper-mount dryer; simply add our DAC compressed air loader and take-off box for a complete off-the-press drying system.

- Fast material changes by drying offline, wheel into position where needed
- Sturdy stand with swivel and locking casters
- Available with industry-standard, two-bed or high-performance, four-bed dryer

A great desiccant-type hopper dryer for use throughout the plant! This compact and portable unit has all the features you need and expect from a high-quality dryer:

- Single blower design will save up to 50% in energy costs
- Stainless steel, fully insulated hopper
- Two desiccant beds which automatically regenerate
- PLC-based control for 2-bed dryers and ADC-based control for 4-bed dryers
- Sturdy stand with locking swivel casters



MOBILE DRYING SYSTEMS

Model Number:	Two Bed	APD1	APD2	APD3	APD4
	Four Bed	HPD1	HPD2	HPD3	HPD4
Process Rate (lbs/hr):	Two Bed	7.5	15	25	35
	Four Bed	10	20	30	40
Process Rate (kg/hr):	Two Bed	5	7	12	16
	Four Bed	6	10	14	18
Hopper Capacity:	lbs	30	60	100	150
	kg	14	27	45	68
Stand:		Included	Included	Included	Included
Power:		208, 230, 400, 480, 600 VAC; 50/60 Hz			
Dimensions:	inch (l/w/h)	25/39/57	25/39/62	25/39/60	25/39/73
	cm (l/w/h)	64/99/145	64/99/169	64/99/152	64/99/185

DAC Loader

Dri-Air®

DAC LOADER

Eliminates press-mounted hoppers;
Improves operator safety;
Replaces noisy vacuum motors;
Ideal for quick material changes.

- A simple, effective material loader powered by normal shop air.
- Ideal for use with drying hoppers and injection molding machines.
- Excellent for material transfer applications such as:
 - Loading 5- to 150- ton presses
 - As a standalone unit to load undried resins from bags, etc.
 - Material loading from DRI-AIR PD Systems
- Supplied as a complete unit with:
 - Transvector pickup tube
 - Compressed air regulator
 - Stainless steel receiver with filter
 - Electric controls



DRI-AIR Model	Loading Applications
DAC1	DRI-AIR PD Systems & Molding Machines
DAC2	Hoppers

Portable Hopper Banks

Dri-Air®



Portable Hopper Banks

One dryer connects to multiple hoppers for a centralized drying system. Dry different materials, each at different temperatures, simultaneously!

DRI-AIR Hopper Banks are built on a compact, castered floor frame connected to one DRI-AIR dryer (not shown).

- Each hopper has its own separate temperature controller and heater
- Air manifolds with shutoff valves isolate hoppers not in use or while being cleaned
- No contamination problems, and far lower operating costs than drying ovens
- Ideal for pre-drying resins for fast changeovers
- Downtime reduced significantly because of faster, cleaner changeovers with pre-dried material
- Partial hopper loads dried as thoroughly as full loads
- Perfect for research & development applications
- Processors making one or two material changes daily can justify the cost of a hopper bank within six months

Pricing includes:
hoppers, frame, booster heaters, temperature controllers, casters, supply and return air manifolds with shut-off valves.

3 Bank HOPPER Model
RH5-3
RH15-3
RH30-3
RH60-3
RH100-3
RH150-3

4 Bank HOPPER Model
RH5-4
RH15-4
RH30-4
RH60-4
RH100-4
RH150-4

5 Bank HOPPER Model
RH5-5
RH15-5
RH30-5
RH60-5

PORTABLE HOPPER BANKS





Compressed Air Dryers

Hopper Mounted

CAHM series are compact, lightweight dryers that easily fit on most presses freeing up valuable floor space. The CAHM series operates on your plant's compressed air with our

Dri-Pack for drying down to -40°F dewpoints.

- Simple, straightforward operation - simply set the drying temperature
- Compact enough to fit on most machines without special bracing or adapters
- Perfect for R & D applications
 - Standard -for drying down to 0° dewpoint
 - Standard w/Dri-Pack -for drying down to -40°F dewpoints

The CAHM is a self-contained drying system that easily mounts on most machines. Using a steady supply of clean, compressed air @ 100 psi. the CAHM unit will provide dewpoints down to -40°F dewpoint.

The easy-to-use controls include process and actual temperatures and a high-temperature alarm. The CAHM has a wide temperature range of 70°F to 360°F without the need of after-coolers.

Drying hoppers on the CAHM series are stainless steel and include insulation, blank feed throat adapter, drain port, slide gate and manual fill lid. On the CAHM2's 60 lb hopper, a laser-cut access door and full length sight glass are also included.

The CAHM's Dri-Pack provides the dryer with -40°F dewpoint air, enabling the drying of all types of resin. Included with the Dri-Pack is a super-fine filter that filters your compressed air prior to the membrane.

Designed for trouble-free, reliable operation, the membrane comes standard with a three-year warranty. Scheduled maintenance is reduced as moving parts have been eliminated.

Dryer Model	Hopper Size	Heater (Kw)	Dimensions
CAHM30	30 lbs	1.25	20" (w) x 28" (h)
CAHM60	60 lbs	2.00	20" (w) x 40" (h)

[COMPRESSED AIR DRYERS](#)

*Available power: 110 or 220 volts, 1 phase, for CAHM30, 220 volts 1 phase only for CAHM60 series.
Compressed air requirement 100 psi of clean, 40°F dewpoint air @ 1.5-2.5 SCFM.
Specifications subject to change without notice.*

Compressed Air Dryers

Hopper Banks



CAHB series are complete with a built-in compressed air Dri-Pack dryer that provides the hoppers with dry -40°F air!

- Dry different materials at different temperatures, simultaneously
- Ideal for pre-drying resins for fast changeovers
- Automatic air control to hoppers for easy, trouble-free operation
- Perfect for small tonnage machines
- Eliminate downtime waiting for material to dry

This self-contained drying system is all you need for pre-drying materials for fast changeovers. Each hopper has its own booster heater and temperature controller so you can dry different materials at different temperatures simultaneously. The CAHB has a wide temperature range of 70°F to 350°F without the need of after-coolers.

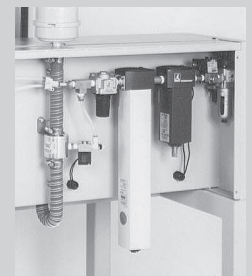
To simplify operation, air flow to the hoppers is controlled automatically when the temperature controllers are turned on/off, eliminating the guesswork associated with manual air valves. The CAHB's central control panel contains the temperature controllers, control switches and high-temperature alarm status panel. Installation is also simplified with one power and air connection.

The stainless steel, insulated drying hoppers are designed for easy cleaning and include a slide gate for draining. Quick clamps secure the hopper lid for access and cleaning.



The CAHB's built-in compressed air Dri-Pack dryer saves space by eliminating the need for an external desiccant dryer power pack. Membrane technology provides -40°F dewpoints from your plant's compressed air, making it capable of drying all kinds of materials.

Designed for trouble-free, reliable operation, the membrane comes standard with a three-year warranty. Scheduled maintenance is a simple matter of cleaning the hopper filters, as most moving parts have been eliminated.



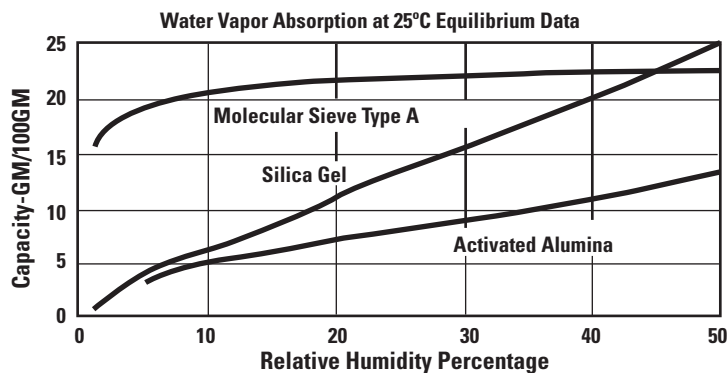
Dryer Model	Hopper Capacity	Number of hoppers	Dimensions
CAHB5-3	5 lbs/hr	3	48" (l) x 28" (w) x 43" (h)
CAHB15-3	15 lbs/hr	3	48" (l) x 28" (w) x 50" (h)

Available power: 110 or 220 volts, 1 phase. Compressed air requirement 100 psi of clean, 1.5-2.5 SCFM. Other sizes available - please call. Specifications subject to change without notice.

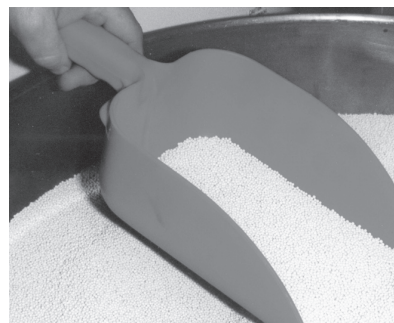
We carry both 13X and 4A Molecular Sieve Desiccants in stock. Due to the particular designs of the resin dryers used in the industry, it is important that the correct sieve is used with the dryer that it was designed for. Unfortunately, we cannot recommend a desiccant based on either the type of materials you are processing or the type of equipment you have. You may have two different machines from the same manufacturer that will require different desiccants. We can say with certainty that equipment manufacturers will recommend one of two types; 13X or 4A. Each have advantages when used in the drying process.

Molecular sieve-type 13X has a 12% higher water capacity and a larger pore size. This larger pore allows the water to absorb faster than the 4A and will absorb larger molecules as well. Depending on the quantity and type of molecules present, these could react on the surface of the 13X during regeneration and not come off, thus reducing the sieve capacity over time. 13X is subject to contamination which renders it ineffective.

Because of 4A's smaller pore size, it is less subject to contamination. However, because of its lower capacity and smaller pore opening, the rate at which it absorbs water will be lower than with the 13X. Another factor to consider is the bead size. Small beads (8 x 12 mesh) have a faster rate of water absorption, but they also have a higher pressure drop than the larger (4 x 8) beads. If you don't know which type of sieve your dryer was designed to use, we urge you to contact the manufacturer of your equipment for their recommendation. In either case we carry what you need at a fraction the price charged by the OEM. Our desiccant is only the most fresh and pure to ensure optimum performance.



[DESSICANT](#)



Part Number	Bead Size	Mesh Size
13 x 542	1/8"	4 x 8
13 x 544	1/16"	8 x 12
4A513	1/8"	4 x 8
4A514	1/16"	8 x 12

Digital DewPoint Monitor

Vaisala® Hand-Held Dewpoint Meter

[DIGITAL DEWPOINT MONITOR](#)

Kit A Includes: Part Number [DM70D1B3A3B1](#)

- DM70 Meter - rechargeable with U.S. AC adapter
- M170 Link (software with USB cable)
- Probe type DMP74B [-60 to +20°C Td]
- Sample cell DMT242SC (no fittings)
- Weatherproof light gray, hard plastic carrying case (M170CASE3)
- Instruction manual

Digital DewPoint Monitor

Vaisala® Hand-Held Dewpoint Meter



The Vaisala DRYCAP® Hand-Held Dewpoint Meter DM70 measures dewpoint temperature accurately over a wide measurement range. The probe may be inserted directly into pressurized processes, and it responds rapidly from ambient to process conditions. The sensor withstands condensation and fully recovers from getting wet.

The monitor also has a Sensor Purge feature. This Sensor Purge heats and dries the sensor, making the response from ambient to dry conditions exceptionally fast. This facilitates rapid shot-checking measurements in low dewpoints.

Low maintenance due to innovative autocalibration

The DM70 is fitted with the Vaisala DRYCAP® Sensor. The sensor provides reliable and high-performance dewpoint measurement with revolutionary long-term stability. The patented autocalibration procedure detects online possible measurement inaccuracies and automatically corrects dry-end drift in the calibration curve. These advanced features provide a long calibration interval and low maintenance cost.

The meter is calibrated in the factory against internationally traceable standards and delivered with a calibration certificate. The DM70 can also be sent to a Vaisala Service Center for a traceable recalibration.

Easy-to-use user interface

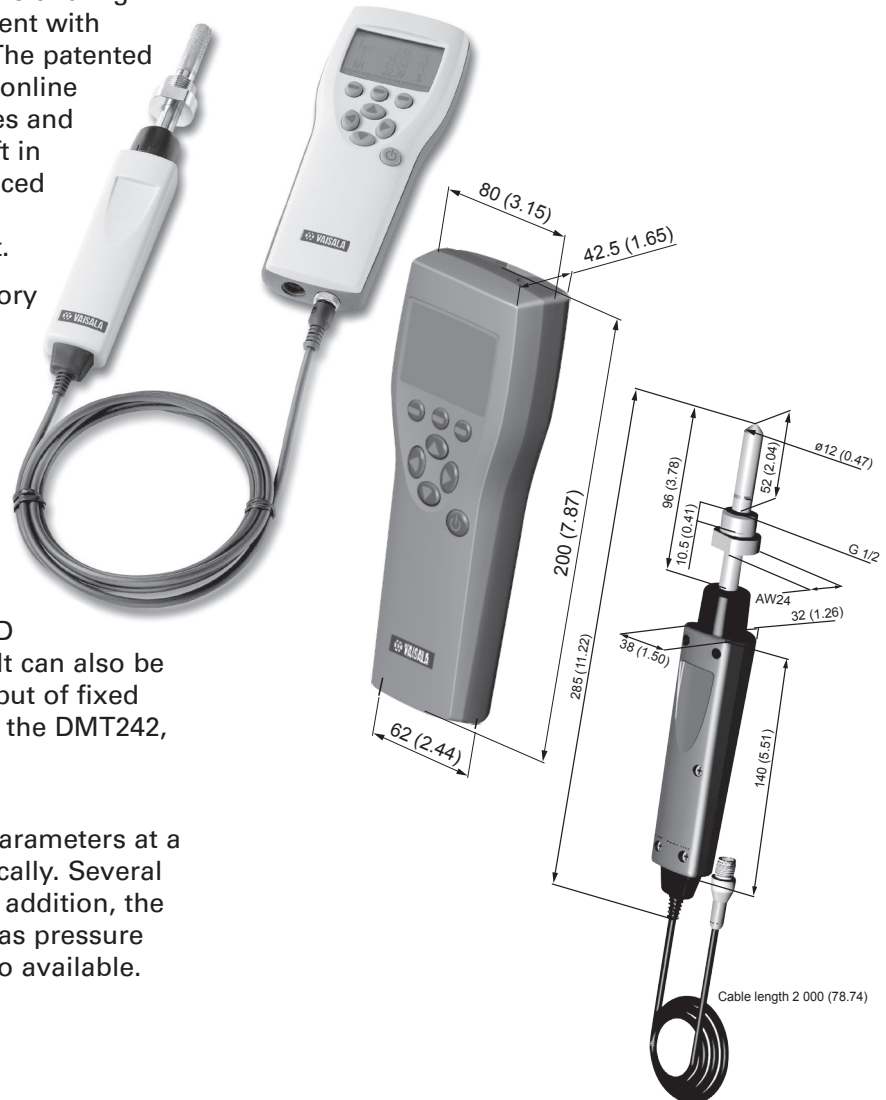
The DM70 has a versatile and easy-to-use, menu-based user interface and a clear graphical LCD display with datalogger function. It can also be used as a tool for reading the output of fixed Vaisala dewpoint transmitters like the DMT242, DMT142 and DMP248.

Various display variables

The DM70 displays one to three parameters at a time, either numerically or graphically. Several humidity units can be selected. In addition, the DM70 includes conversion from gas pressure dewpoint. An analog output is also available.

Features/Benefits:

- Designed for industrial spot checking and field calibration
- Vaisala DRYCAP® Sensor with patented autocalibration function
- Low maintenance need due to superior long-term stability
- Sensor withstands condensation
- Fast response, enhanced by Sensor Purge option
- Easy-to-use user interface
- Data can be logged and transferred to a PC via M170 Link software
- Compact, small and light
- NIST traceable (certificate included)





Digital DewPoint Monitor

Vaisala® Hand-Held Dewpoint Meter

M170 Link PC Connection

The DM70 has a M170Link Windows® software program for transferring logged and real-time measurement data from the DM70 to a PC.

Lightweight Construction

The DM70 is small and rugged, and therefore an ideal choice for demanding applications. The long battery life provides convenient use in the field.

DM70 Accessories

The DM70 meter is suitable for direct dewpoint measurements in a wide temperature and pressure range. For more demanding applications, the DM70 can be used with the Vaisala sampling cell adapters, or with the Vaisala DRYCAP® Sampling System (DSS70A).

DSS70A Portable Sampling System

The DSS70A is designed to provide dewpoint sampling flexibility. For processes at atmospheric pressure, a battery-powered pump is used to extract a gas sample. For pressurized processes up to 20 bar, the sample is measured at process pressure and then reduced to atmospheric pressure for venting or re-direction, bypassing the pump. In all cases, the sample gas passes through a filter to remove particulate contamination before measurement. Flow through the system is controlled and monitored with a needle valve and flow meter.

The DSS70A is easily connected to an appropriate sample point with tubing (typically 1/4" or 6mm). The measured dewpoint must be below ambient temperature to avoid condensation in the system. Gas temperatures higher than +40°C (+104°F) should be cooled with a short PTFE or stainless steel tube prior to entering the DSS70A.

Sampling Cells for Pressurized Process

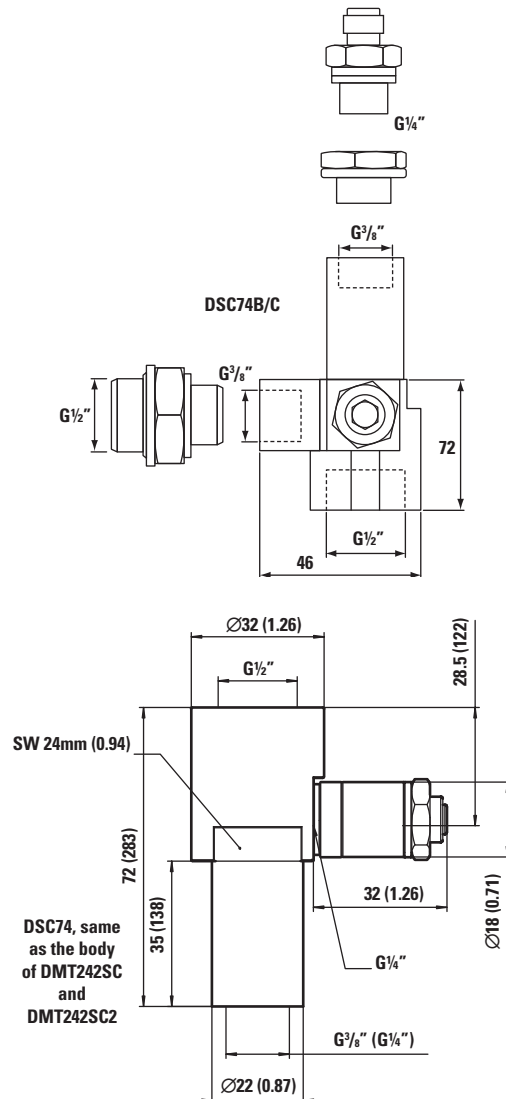
The DM70 can easily be connected to pressurized processes. In addition to direct pipeline installation, a variety of sampling cell options are available for gas sampling.

The DMT242SC is a basic sampling cell. The DMT242SC2 is a sampling cell supplied with welded Swagelok connectors for sampling in a 1/4" pipeline.

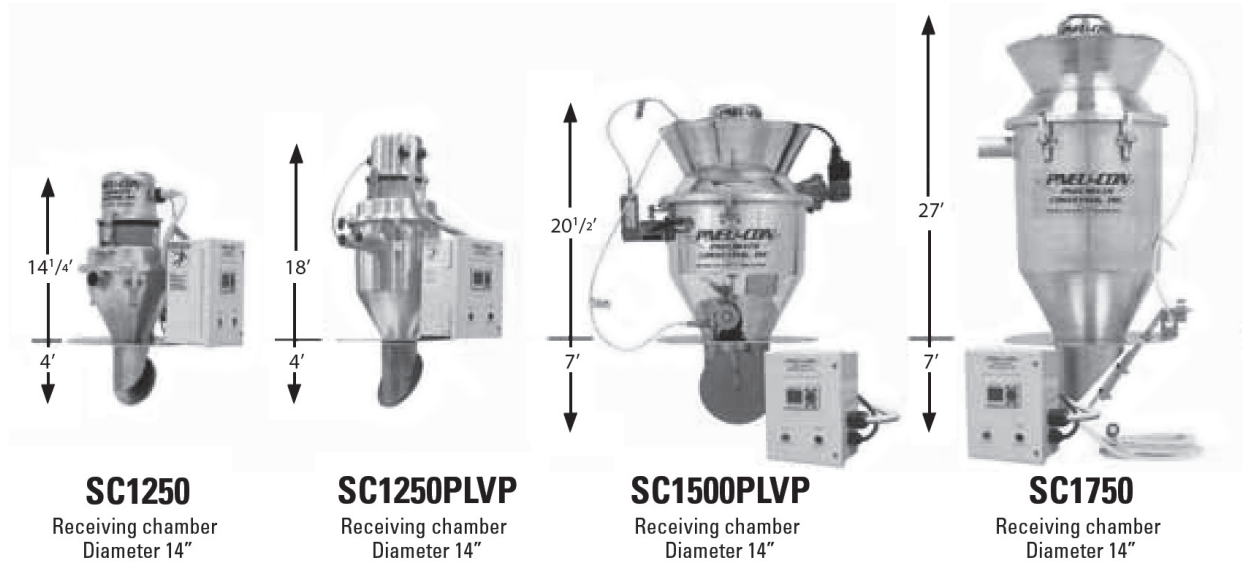
The DSC74 sampling cell has a variety of connection adapters that allow several different ways of installation. The quick connector with a leak screw allows a very fast connection for compressed air lines. Additionally, two thread adapters are available for the inlet port.



The DSS70A provides a compact solution for field checking dewpoint where direct measurement is difficult.



Whisper® Loader Specifications



Model	Motor VAC Code	"BL" Motor Avail.	Pick-Up Lance Qty.	Flex Hose (X) x 10' Lg	Filter Code	Filter Qty.	Filter Area	Control Cord Length	Power Cord Length	Loader Weight (lb)	Shipping Weight (lb)
Standard & VP											
SC1250	1	No	1	1	2	1	64-in ²	1.5'	10'	14	26
SC1500	1	Yes	1	1	2	1	153-in ²	1.5'	10'	24	45
SC1500-VP	1	Yes	1	1	1	1	153-in ²	1.5'	10'	24	45
SC1750	1 or 2	Yes	1	1	2	1	153-in ²	1.5'	10'	28	48
SC1750-VP	1 or 2	Yes	1	1	1	1	153-in ²	1.5'	10'	28	48
Proportioning											
SC1250-PLVP	1	No	2	2	1	1	64-in ²	1.5'	10'	23	35
SC1500-PLVP	1 or 2	Yes	2	2	1	1	153-in ²	12'	10'	27	47
SC1750-PLVP	1 or 2	Yes	2	2	1	1	153-in ²	12'	10'	32	52
Powder & Proportion-Powder											
SC1250-PR1C	1	No	1	1	3	1	11-ft ²	12'	10'	26	38
SC1500-PR3C	1 or 2	Yes	1	1	3	3	33-ft ²	12'	10'	32	52
SC1750-PR3C	1 or 2	Yes	1	1	3	3	33-ft ²	12'	10'	38	58

Motor Code 1 2 (All units with 2-Stage Blower Fan)

Voltage 120VAC 240VAC

Filter Code 1 2 3

Filter type Di-Ac Nylon Di-Ac Polyfelt Pleated Cartridge

Notes: 1) Diaphragming-Action (Di-Ac) Flat Filters available in either Nylon or Polyfelt as options.

2) Pleated Filters are 12" standard with Loader body straight-side dimension of 12" minimum; other lengths (6" & 18") available as special-order options (longer Filters require taller bodies).

3) Shipping weights shown include Pick-Up Lance(s), Hose(s), Control Panels & Packaging.

4) Series 1500 and larger Loaders available with the Brushless "BL" type motor - adds 5 pounds.



Whisper Loaders™

SC1250 -Conveys approx. 500 lbs/hr

This basic model is available in many variations.
See options on page 32.
Please don't hesitate to ask

WHISPER LOADERS

Material Intake Tube accepts 1 1/4" I.D. Hose

Patented Quiet-By-Pass Air-Cooled Motor

Quick-Release Latches

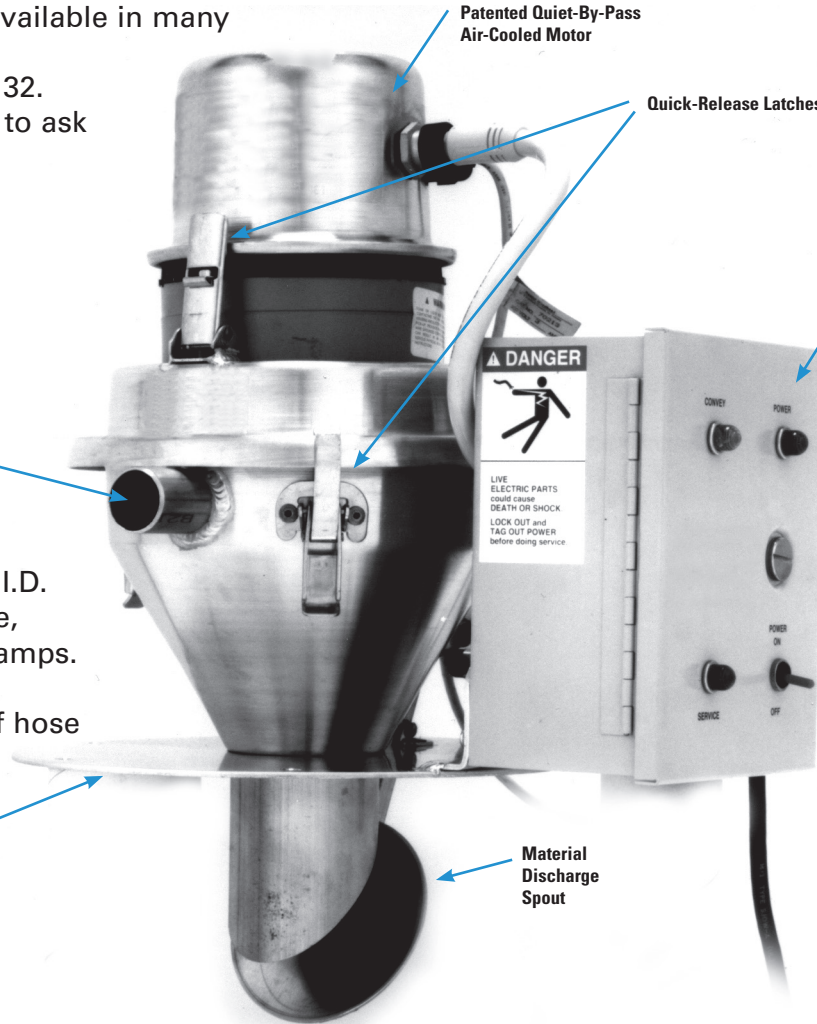
Microprocessor-based, solid state electrical control box w/12ft. power cord contains - circuit breaker, on/off, indicator lights, cycle timer (and Vibra-Pulse™ Air Blast Timer on VP Models only)

Includes 10 ft. of 1 1/4" I.D. flexible material hose, pick-up probe and clamps. Proportional options include (2) lengths of hose 10' long.

Pre-Drilled base for easy installation on hopper lid.

Material Discharge Spout

Remote panel available; call for quote



Base Model SC1250 Features

- Spun & welded aluminum
- Di-Ac filter (pellet or granual service)
- Electrical control box with power cord (12 ft.)
- Flexible hose with pick-up lance
- High-level control of receiving hopper
- Motor and turbine (vacuum producer)

Self-Cleaning Model SC1250VP

- Same features as SC1250
- Vibra-Pulse filter cleaning system

Stainless Steel Model SC1250SS

- Same features as SC1250
- Spun and welded stainless steel receiver

Extra Tall Model SC1250XT

- Same features as SC1250
- Extra tall receiver - 4" taller than standard

Integral Proportioning Model SC1250PLVP

- Same features as SC1250
- Vibra-Pulse filter cleaning system
- Integral proportioning
- Proportional control timer

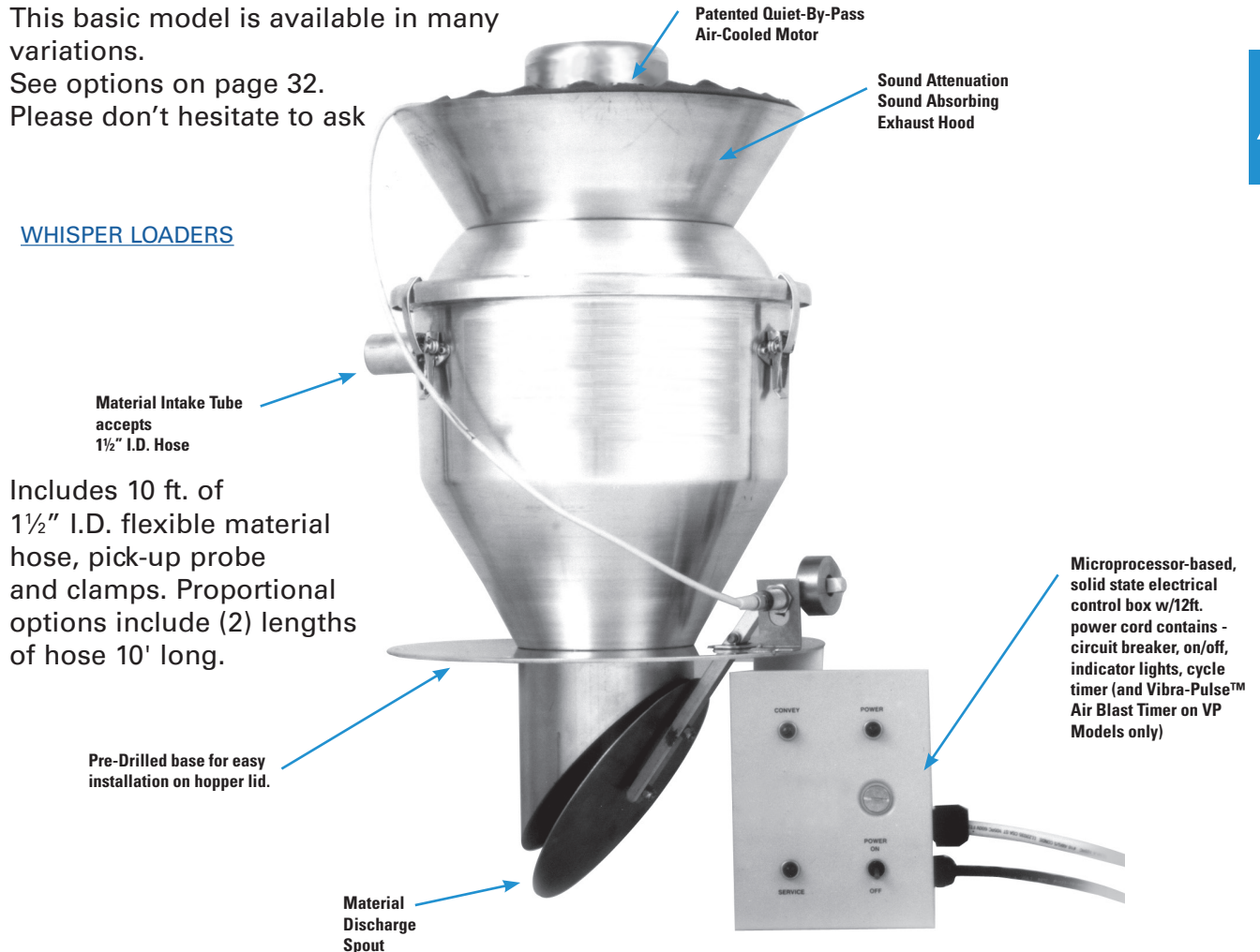
Whisper Loaders™

SC1500 -Conveys approx. 1400 lbs/hr



This basic model is available in many variations.
See options on page 32.
Please don't hesitate to ask

WHISPER LOADERS



Base Model SC1500 Features

- Spun & welded aluminum
- Sound attenuation
- Di-Ac filter (pellet or granual service)
- Electrical control box with power cord (12 ft.)
- Flexible hose with pick-up lance
- High-level control of receiving hopper
- Motor and turbine (vacuum producer)

Stainless Steel Model SC1500SS

- Same features as SC1250
- Welded stainless steel receiver

Self-Cleaning Model SC1500VP

- Same features as SC1500
- Felt filter
- Vibra-Pulse filter cleaning system

Integral Proportioning Model SC1500PLVP

- Same features as SC1500
- Vibra-Pulse filter cleaning system
- Integral proportioning
- Proportional control timer

Optional: 240 Volt/1 Phase 50 or 60 Hz on Model SC150VP; call for quote

Note: All panels remote; Pulse clean system requires .5 SCFM at 80 PSI



Whisper Loaders™

SC1750 - Conveys approx. 1700 lbs/hr

This basic model is available in many variations. See options on page 32. Please don't hesitate to ask our salespeople for help!

WHISPER LOADERS

Material Intake Tube accepts 1 3/4" I.D. Hose

Includes 10 ft. of 1 3/4" I.D. flexible material hose, pick-up probe and clamps. Proportional options include (2) lengths of hose 10' long.

Pre-Drilled base for easy installation on hopper lid

Material Discharge Spout

Patented Quiet-By-Pass Air-Cooled Motor

Sound Attenuation Sound Absorbing Exhaust Hood

Microprocessor-based, solid state electrical control box w/12ft. power cord contains - circuit breaker, on/off, indicator lights, cycle timer (and Vibra-Pulse™ Air Blast Timer on VP Models only)

Base Model SC1750 Features:

- Spun & welded aluminum
- Sound attenuation
- Di-Ac filter (pellet or granual service)
- Electrical control box with power cord (12 ft.)
- Flexible hose with pick-up lance
- High-level control of receiving hopper
- Motor and turbine (vacuum producer)

Stainless Steel Model SC1750SS

- Same features as SC1750
- Welded stainless steel receiver

Self Cleaning Model SC1750VP

- Same features as SC1750
- Vibra-Pulse filter cleaning system

Integral Proportioning Model SC1750PLVP

- Same features as SC1750
- Vibra-Pulse filter cleaning system
- Integral proportioning
- Proportional control timer

Optional: 240 Volt/1 Phase 50 or 60 Hz on Model SC150VP; call for quote

Note: All panels remote; Pulse clean system requires .5 SCFM at 80 PSI

Whisper Loaders™

Options and Accessories



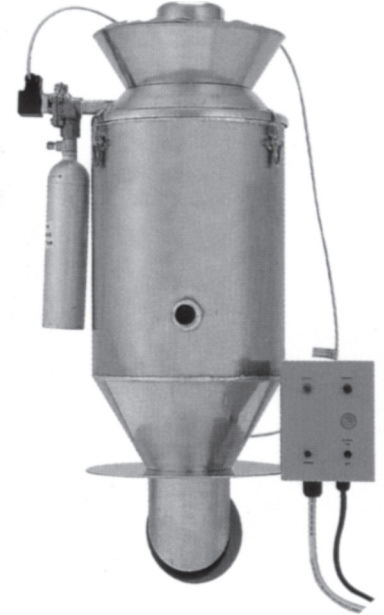
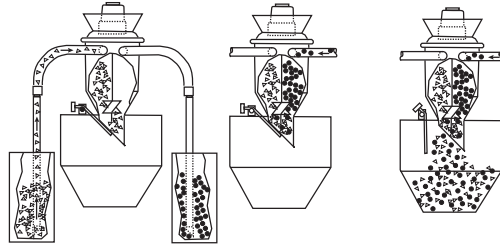
WHISPER LOADERS



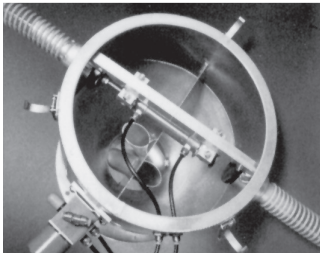
Proportional Control Timer

Microprocessor-based, solid state control timer with easy access proportion adjustable knob on outside of control enclosure (not pictured).

Interblend is a static internal blender used to mix two products without layering.



Vibra-Pulse filter cleaning system is used for conveying regrind or dusty materials. Filter is automatically cleaned with a "pulse" of compressed air, which "shakes"



Integral Proportioning

Allows for the alternate conveying of two different materials. Using the optional Interblend element, a static internal blender will mix two products without layering.

Replacement Parts

9" felt filter for SC1250VP and PLVP models.....	PN#100280
9" DI-AC filter.....	PN# 100216
Gasket for SC1250.....	PN# 101261
14" felt filter for SC1500/1750VP and PLVP models.....	PN#100293
14" DI-AC filter.....	PN# 100086
Gasket for SC1500, SC1750.....	PN# 101262

Replacement Part Kits

Model SC1250 Parts Kit PN# 100264 includes: (2) 9" DI-AC filters
(1) 9" dia. filter gasket
(2) sets-motor brushes

Model SC1500 Parts Kit PN# 100328 includes: (2) 14" DI-AC filters
(1) 14" dia. filter gasket
(2) sets-motor brushes

Model SC1750 Parts Kit PN# 100804 includes: (2) 14" DI-AC filters
(1) 14" dia. filter gasket
(2) sets-motor brushes



Powder Receivers

Models SC150PR3C and SC150PR3CSS incorporate pleated filters and pulse cleaning, resulting in efficient conveying of fine powders.





Motorless EZ Loaders

Motorless Venturi Loader



Single Entry EZ Loader Model NSO-1S
Virgin material model with sight glass

- Operates on compressed air
- Perfect for transporting material from drying hopper granulators or boxes
- Easy-to-use & install the EZ Loader is fully automatic; starting and stopping is controlled by the proximity sensor. Unit requires compressed air and 120/1/60 power, hook up hoses and it's ready to go
- Economical, no moving parts, no brushes to replace
- Fast conveys 1000 lbs. per hour from the press to 10' height
- Stainless Steel Construction, rust contamination is eliminated.

Specifications		MOTORLESS EZ LOADER		
Model	NSO1S	NSO2S	NSO3S	
Air Pressure required	80 P.S.I.	80 P.S.I.	80 P.S.I.	
Voltage required	120/60/1	120/60/1	120/60/1	
Hopper Ht. & Diameter	18.5H x 8.25 Dia	18.5H x 8.25 Dia	18.5H x 8.25 Dia	
Flange Diameter	5"	5"	5"	
Material Line Size	1¼", 10' (supplied)	1¼", 10' (2 supplied)	1¼", 10' (supplied)	

3 Base Models Available

Single Entry EZ Loader

For use with virgin material
1000 lbs per hour max throughput

Model NSO1S includes:

- Filter receiver assembly
- Air control assembly
- Ten feet of 1¼" material hose and two hose clamps
- Ten feet of 3/8" compressed air hose
- Proximity switch
- One 20' suction wand with venturi
- Operating and installation manual

Model NSO1S includes sight glass assembly

Dual Entry EZ Loader

For use with virgin/regrind
2000 lbs per hour max throughput

Model NSO2S includes:

- Filter receiver assembly
- Master air control assembly
- Slave air control assembly
- Two 10-foot lengths of 1¼" material hose and four hose clamps
- Two 10-foot lengths of 3/8" compressed air hose
- One proximity switch
- Two 20" suction wands with venturis
- Operating and installation manual

Model NSO2S includes sight glass assembly

Granulator Unloading EZ Loader

For use with virgin/regrind
1000 lbs per hour max throughput

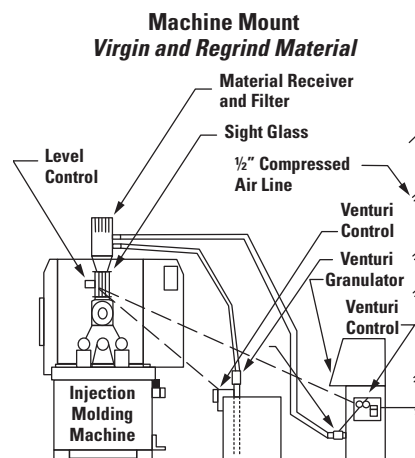
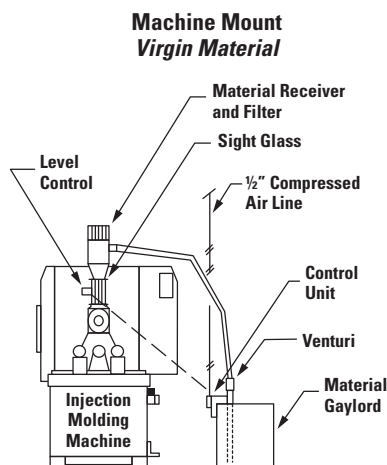
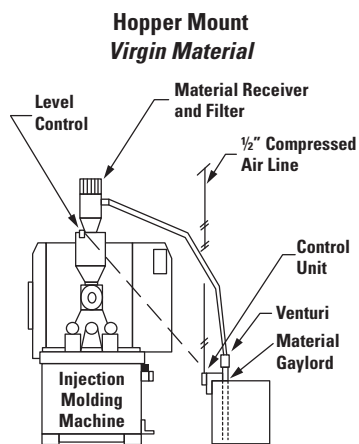
Model NSO3S includes:

- Filter receiver assembly with mounting flange
- Air control assembly
- Ten feet of 1¼" material hose and two hose clamps and 20" wand
- Ten feet of 3/8" compressed air hose
- Venturi with coupler (or suction wand) to couple to granulator tube (tube OD must be specified)
- Operating and installation manual

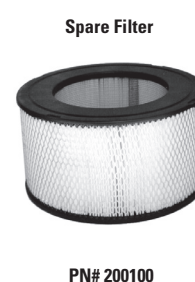
Model NSO3S includes granulator exhaust assembly

Motorless EZ Loaders

Typical Installation Arrangements



Options Available:



Options Not Pictured



"Micro" EZ Loader

This small venturi loader is designed to convey CLEAN Virgin Material to small injection molding machines using a maximum of 25 pounds per hour of pelletized plastic material.

This small, lightweight, quiet unit is ideal for use on small machines running pelletized virgin material, or to convey color concentrate to color feeders. The receiving tube is of stainless steel so that material contamination will not take place, and it can be used with the EZ Loader sight glass and all of the other EZ Loader options. Just supply compressed air and 120/60/1 electric power to the unit and you are ready to load. The sensor starts and stops the unit so that conveying is fully automatic.

Specifications	
Model	NSOM
Air pressure required	80 P.S.I
Voltage required	120/60/1
Receiving Tube Ht.	10"
Flange Diameter	5"
Material Line Size	1 1/4"

INCLUDES:
10' of 1-1/4 material hose with 20" band
10' of 3/8 air hose proximity switch

MICRO EZ LOADER





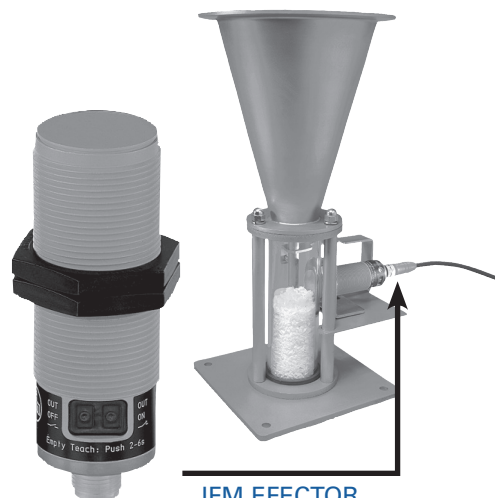
ifm efector[®] Level Sensors

Optimized to Sense Lower Density, Lower Moisture Plastics Regrind and Pellets!

ifm efector[®] raises the bar in sensing plastic materials. For years, ifm capacitive level sensors have been a proven solution for applications on loaders, blenders and grinders in the plastics processing industry.

Traditional capacitive sensors can detect high-density materials with high-moisture content. However, plastic materials are now being dried at higher temperatures producing very low moisture content. The resulting materials can cause sensing problems for traditional capacitive sensors.

ifm efector's new KI level sensor incorporates improved capacitive sensing electrodes and patented circuitry to detect low-moisture, low-density materials. Combined, these innovations enable the KI sensor to perform in today's plastics processing applications.



IFM EFECTOR



Pushbutton adjustment simplifies setup
The KI Series point-level sensors feature an intuitive two-pushbutton function that calibrates the proper setpoint value and simplifies the setup process. The sensor is quickly and easily adjusted for a specific application.



High temperature sensing durability
Because plastic materials are dried at extremely high temperatures, the KI sensor has a high temperature range of 230°F (110°C).



ESD tolerant and noise immune circuitry
The KI's robust design resists high levels of electrostatic discharge that can arc back to the sensor. Patented noise immune circuitry ignores interference from motor drives and switching



Ring LED allows visibility from long distance
A 360° ring LED display provides output status indication that is visible from long distance.



Plug-and-play installation
Quick-disconnect Micro DC and Micro AC units are available.

Output	Part Number
Micro DC, PNP, NO/NC	KI5083
Micro DC, NPN, NO/NC	KI5082
Micro AC, NO/NC	KI0054

Specifications

Electrical Design	DC	AC
Wiring	3-wire	2-wire
Connection	Micro DC	Micro AC
Operating Voltage [V]	10...36	30...250
Current Rating [mA]	200	150 at 40C
Voltage Drop	<2.5	<10
Current Consumption [mA]	<20	-
Leakage current [A]	-	<1.7
Operating Temperatures [°F]	-13...176° (230° sensing capability)	
Protection	IP65/IP67	
Housing Material	Plastic (PET, PC and TPE)	

Mounting Accessories

Type	Description	Part Number
	30mm stainless steel mounting bracket	U20303
	30mm mounting cap	E10077

Cable Assemblies

Length	Type	Part Number
2 meter	DC	EVC001
5 meter	DC	EVC002
2 meter	AC/DC	E18212
5 meter	AC/DC	E18213

Sight Glass Magnets



Hopper Loader Sight Glass Magnet



SIGHT GLASS MAGNETS

Our Sight Glass Magnet is designed to capture tramp metal in Just-In-Time (JIT) hopper loaders. These powerful, compact 50 MGOe Rare Earth magnets are ideal for applications where a Clean-Flow™ magnet won't fit in the JIT system. The Sight Glass Magnet's cartridge hangs in the center of the hopper loader's glass tube from a stainless steel ring and handle. From this position, it prevents tramp metal from entering the molding machine, without interfering with the flow of material from the hopper.

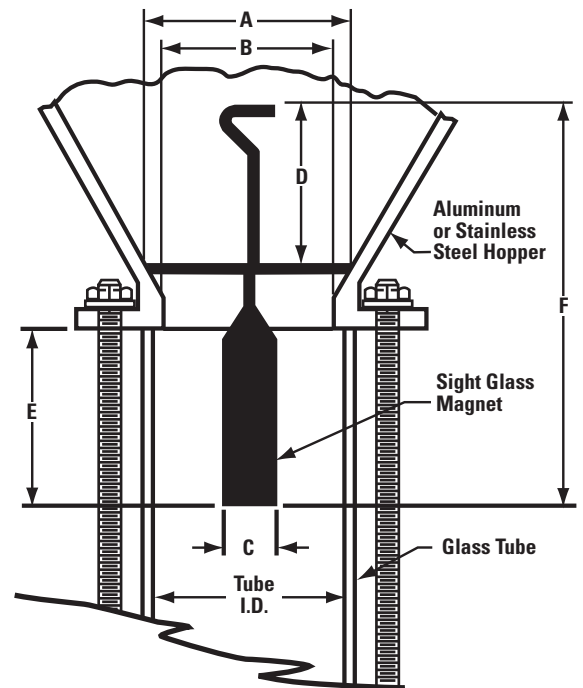
The Sight Glass Magnet is visible through the JIT's glass tube for easy inspection of tramp metal build-up. The magnetic pole located on the bottom of the cartridge allows tramp metal to collect in a protected area, preventing wash-off of the collected metal back into the product flow. Tramp metal should be cleaned from the magnet on a regular basis to ensure that build-up on the magnet doesn't affect its performance.

Features:

- Won't affect material level sensors that are mounted on the outside of the JIT's glass tube
- Bottom pole is magnetized to prevent wash-off of collected metal
- Four standard sizes available to fit your application
- Powerful rare earth magnetic cartridge
- Stainless steel, all-welded construction.

Specifications:

- 5/8" diameter Sight Glass Magnets are recommended for hopper loaders with glass tubes under 2-1/4" in diameter
- 1" diameter Sight Glass Magnets are recommended for hopper loaders with glass tubes over 2-1/4" in diameter
- Always select a Sight Glass Magnet with a ring diameter that is slightly larger than your hopper opening to ensure proper magnet location.



Part Number	Ring O.D. (A)	Magnet Dia. (C)	Handle Length (D)	Magnet Length (E)	Overall Length (F)
SGM1	1 3/4"	5/8"	1 7/8"	2 3/8"	4 3/4"
SGM2	2 1/2"	5/8"	1 7/8"	2 3/8"	4 3/4"
SGM3	1 3/4"	1"	1 7/8"	3 1/16"	6 1/4"
SGM4	2 1/2"	1"	1 7/8"	3 1/16"	6 1/4"



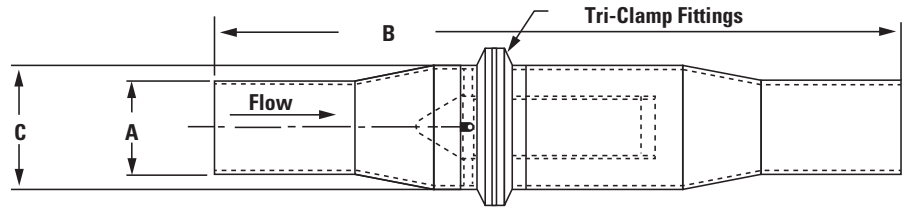
Torpedo In-Line Magnet

Vacuum Line Magnet



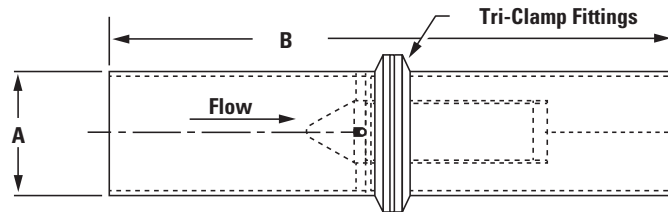
Part Number	Line Size A (O.D.)	Overall Length B
ITM112	1-1/2"	11 13/16"
ITM200	2"	9 1/16"
ITM212	2-1/2"	9 1/16"

TORPEDO INLINE MAGNET



Features:

- Welded stainless steel construction
- Powerful rare earth magnetic circuit
- Connecting ends are constructed of .065" wall thickness tubing



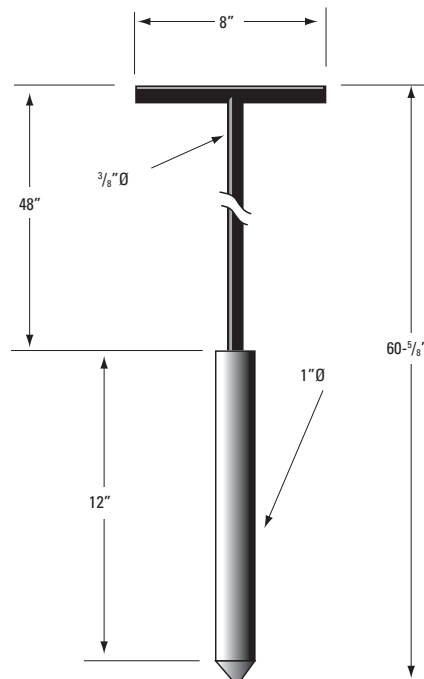
"T" Handle Magnetic Wands

"T" Handle Magnetic Wands

The DME Industrial Supplies "T" handle magnetic wand is an easy and effective way to safely sweep gaylords, regrind materials or other small batch additives. This prevents costly damage to screws and barrels and eliminates clogged nozzles due to tramp metal entering the process. This "T" handle wand is lightweight with clout where it counts coming from a full 12-inch long, 1-inch diameter bullet tip magnet made of power-balanced neodymium, permanent magnetic material. Optional handle and cartridge lengths are available. This high-quality tool is designed to save the molder production time and need for costly repairs.

'T' HANDLE MAGNETIC WANDS

Part Number TMW1



Permanent Magnetic Lifters



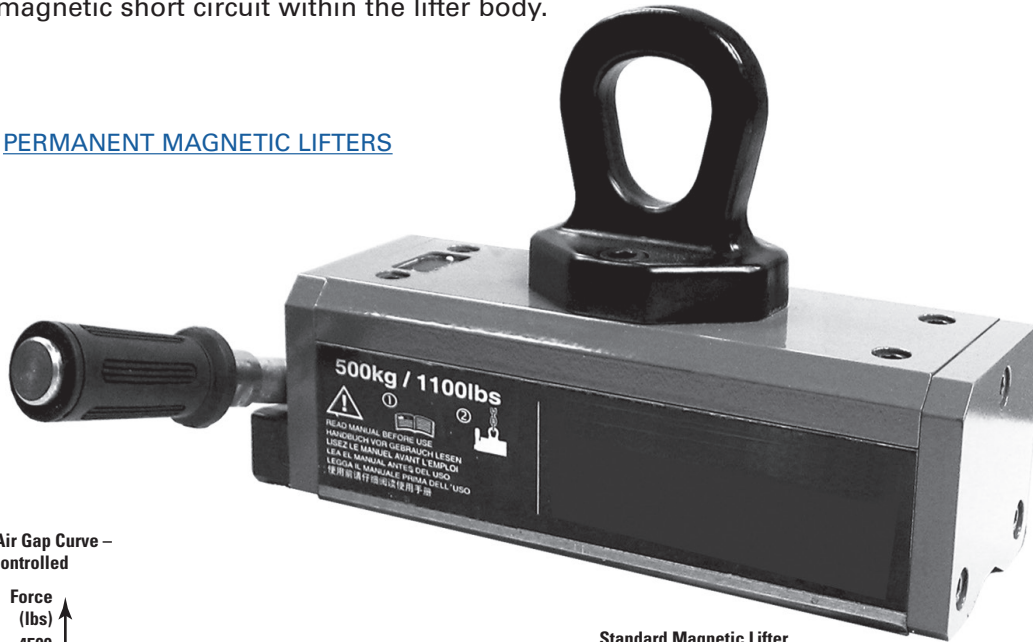
Save Time and Labor

Bunting® MagLift™ Hand-Controlled Permanent Magnetic Lifters

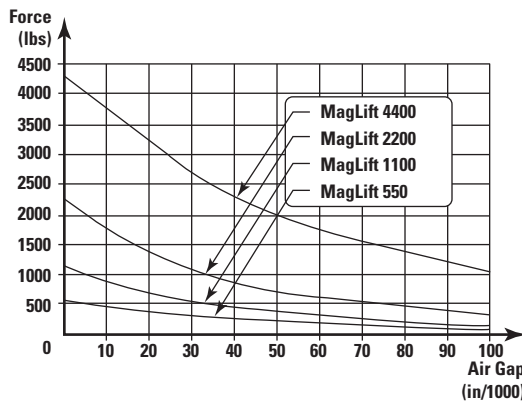
Bunting® MagLift Permanent Magnetic Lifters are powered by blocks of high-energy neodymium magnetic material. Switching is achieved by making one of these blocks reversible. In the “on” position, the reversible block is in parallel with the static blocks so that a concentrated magnetic field is produced at the pole feet for lifting. In the “off” position, the reversible block is rotated through 180° to provide a total magnetic short circuit within the lifter body.



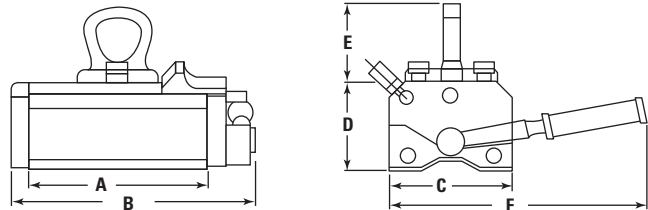
PERMANENT MAGNETIC LIFTERS



Force/Air Gap Curve – Hand Controlled



Standard Magnetic Lifter



Model	Lifter Weight (lbs)	Dimensions						Flat Section			Round Section		
		A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	Safe Work Load (lbs)	Min. Thickness (in)	Max Length (inches)	Safe Work Load (lbs)	Max Diameter (in)	Max Length (in)
MAGLIFT275	9.9	4.3	5.9	3.0	2.4	2.1	5.9	275	0.6	60	110	10	60
MAGLIFT550	18.7	6.5	8.3	3.5	2.8	3.0	7.9	550	0.8	60	220	12	60
MAGLIFT1100	38.5	8.9	11.1	4.2	3.5	4.1	9.6	1100	1.0	80	440	16	80
MAGLIFT2200	80.3	12.8	15.4	5.4	4.1	4.4	14.4	2200	1.4	120	880	18	120
MAGLIFT4400	173.8	15.7	19.0	7.3	5.2	6.7	20.7	4400	2.8	120	1760	24	120

The maximum stated length is not the maximum diameter. (Always work within the stated Safe Work Load)
Above values are based on cold-rolled mild steel.



Bunting® Drawer Magnets

Trap Tramp Metal

Protect Product Purity and Equipment with Bunting Permanent Magnetic Drawer Filters and In-line Separators. You can buy a bewildering variety of metal separation products from dozens of suppliers these days. As you might expect, cost and performance vary widely. So it pays to choose with care.

You may be surprised to discover how reasonably priced our separation equipment is especially given its reputation for being the best. All Bunting products featured in this catalog use powerful permanent magnets and provide dependable protection year after year with little or no maintenance. Bunting Permanent Magnetic protection won't "wear out," either. In fact, products featured in this catalog will still be working reliably long after your present molding machines and conveying equipment have been replaced.

So count on Bunting for effective, economical permanent magnetic separation. We're leaders in the field, first with significant innovations- like the original No-Spill™ Slide Gate, and now with redesigned magnetic drawer filters with Temperature Compensated Rare Earth Cartridges™ engineered for increased holding force and collection area.

You'll find Bunting products widely used to reduce tramp iron contamination not only in plastics processing and manufacturing but in the food, chemical and bulk solids industries as well. For

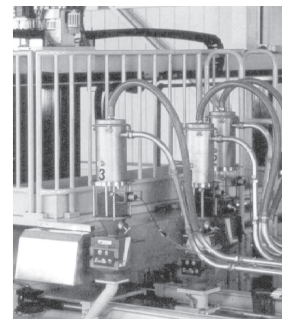
The Industry Standard for Extruders, Injection and Blow Molding Equipment



Model FF4600-PLS
(Shown with optional rear dump tube & liquid port)



Model FF4400-PL

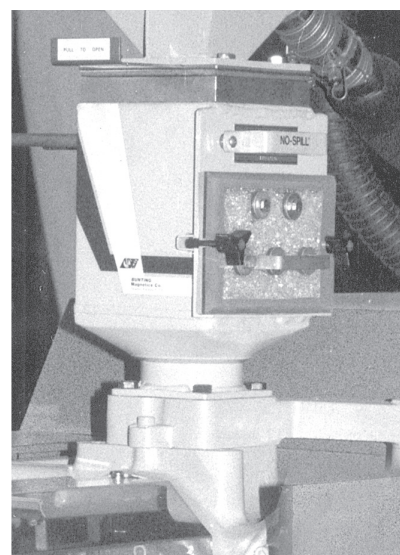


over 40 years, American industry has relied on Bunting as a single-source supplier for the best in magnetic separation equipment.

Versatile Design

Bunting Magnets are the industry standard for molding machines, extruders and many other applications. Process material makes direct contact with a double row of magnetic cartridges which provide dependable, constant magnetic protection that will not wear out. FF Series Magnetic Drawer Filters offer proven protection at key points... between bag dumps and conveying lines, at weigh station cyclone receivers, hoppers, mixers, and other locations where contaminants jeopardize production runs and equipment.

All Bunting Drawer Magnets now have greater surface holding force to capture tramp metal better than ever before. That means more complete removal of contaminants and less chance of "wipe-off."



LIFETIME GUARANTEE

We guarantee the durability and performance of Bunting Drawer Magnets for as long as you own them against defects in materials and workmanship.

For years Bunting Drawer Magnets have been the first and most popular choice worldwide. Now they're even better, thanks to our powerful magnetic cartridges and heavy-duty drawer design. Both are included in our lifetime guarantee.

Drawer Magnets - Not Drilled

Bunting®



(Shown with optional rear dump tube & liquid port)



No Waiting For Saving!!

These units have standard flange sizes so you can drill them to fit your machine and put them to work right away! Bunting is far and away the most popular drawer magnets in plastics! Don't settle for a look-alike brand; get the real thing, at real savings, right now!!

BUNTING DRAWER MAGNETS

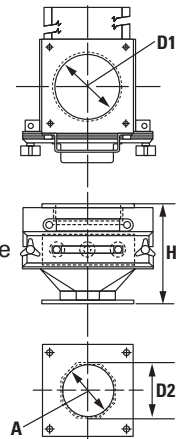
Part Number	Drawer Model	Features	Top/Bottom Flange Size	Top Opening	Bottom Opening
DR1600D	LP1600PL	Low Profile	6" x 6" sq.	4¼" dia.	2⅞" dia.
DR2100D	FF4600PLS	w/Slide Gate	6" x 6" sq.	4¼" dia.	2⅞" dia.
DR2200D	FF4800PLS	w/Slide Gate	8" x 8" sq.	4¼" dia.	2⅞" dia.
DR3500D	FF4800PLS	w/Slide Gate	8" x 8" sq.	6" dia.	5½" dia.

Drawer Magnets - Low Profile

Bunting®

When headroom is critical, you need Bunting's Low Profile Drawer Magnet. No other drawer magnet can compare to Bunting's proven design in a space-saving 5-11/16" overall height. You get a single row of the exclusive Power-Balanced Permanent Magnetic Cartridges, clear polycarbonate drawer front, and rigid 10-gauge steel construction—the same features that make Bunting standard drawer

magnets the most popular in the industry. Where you have additional clearance, you can even install these units with our original No Spill™ Slide Gate option. Rare earth magnetic cartridges are also available to trap and hold extremely fine or marginally magnetic ferrous material. We'll pre-drill the unit's rugged 1/4" thick flanges to your specifications at no extra charge.



- S Interior size
- H Height
- D1 Diameter of top flange opening
- D2 Maximum transition diameter
- A1-A5 Standard throat diameters

BUNTING DRAWER MAGNETS

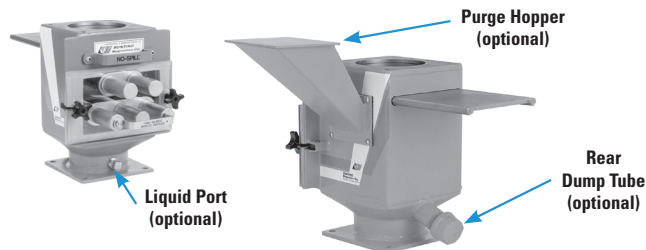
Model	S	H	D1	D2	A1	A2	A3	A4	A5
LP1600PL▼	6 x 6	5 ¹¹ / ₁₆	4	4 ³ / ₈	2	2 ³ / ₈	2 ⁷ / ₈	3 ³ / ₈	3 ⁷ / ₈
LP1600PLS ❖ ▼	6 x 6	7¼	4	4 ³ / ₈	2	2 ³ / ₈	2 ⁷ / ₈	3 ³ / ₈	3 ⁷ / ₈
LP1800PL	8 x 8	5 ¹⁵ / ₁₆	6	6 ³ / ₈	4	4	5	5	6
LP1800PLS ❖	8 x 8	7½	6	6 ³ / ₈	4	4	5	5	6

❖ Slide-Gate ▼ In stock with standard flange sizes - not drilled



Drawer Magnets - Standard

Bunting®



Stainless Steel, Alnico and Rare Earth Drawer Magnets

The Bunting Stainless Steel Drawer Magnet housing is the right choice for corrosion resistance or when "clean room" standards must be met. If your process line handles resins heated to exceptionally high temperatures, order your magnetic drawer filter equipped with Bunting Alnico Magnets. Their magnetic strength will not diminish in temperatures as high as 1000°F.

If your application involves extremely small metal fines or contaminants that are only marginally magnetic, you may need the extra magnetic energy of rare earth magnets. Rare earth drawer filters are supplied with stainless steel housings to prevent the entire assembly from becoming magnetized by these extremely powerful magnets. Both stainless steel and stainless steel/rare earth models are available in several standard sizes and can also be custom made for your application.

Purge Hopper

Our magnetically protected Purge Hopper speeds clean-out of your equipment when changing color or compound. It also lets you quickly purge the machine and hand feed new material for a test or a short run without sacrificing magnetic protection or taking the time to empty your hopper.

Rear Dump Tube

This option lets you divert and collect material remaining in the hopper when a run has been completed, without running it through your molding equipment.

Liquid Port

The Liquid Port allows you to inject color additive into the resin. It's especially convenient for trial runs, short runs, or prototyping. The port can also be used to hold a temperature probe.

Custom Drawer Magnets

Model Number	Throat Size*
FF4400PL	1¼" or smaller
FF4600PL	1⅞" or 3⅞"
FF4800PL	4" to 6"
FF4100PL	6⅞" to 8"

[BUNTING DRAWER MAGNETS](#)

* Side to Side (Square) or Diameter (Round)

Custom Drawer Magnets w/Slide-Gate

Model Number	Throat Size*
FF4400PLS	1¼" or smaller
FF4600PLS**	1⅞" or 3⅞"
FF4800PLS**	4" to 6"
FF4100PLS	6⅞" to 8"

*Side to Side (Square) or Diameter (Round)

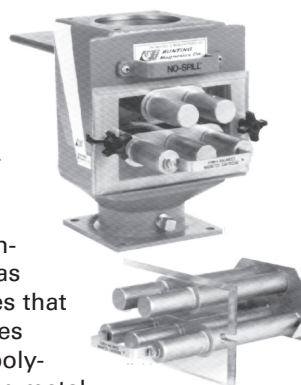
**In stock with standard flange sizes - not drilled

Accessories For Drawer Magnets

Item
Purge Spout
Dump Tube
Liquid Port

All Types Are Also Available in SELF-CLEANING MODELS

Save time two ways as you protect product purity and equipment. You can clean in place with one quick pull or remove the whole drawer assembly for safe off-the-machine maintenance. Bunting Drawer Magnets are the first to offer such convenient cleaning. Each self-cleaning unit has extra-long magnetic cartridges that fit inside stainless steel sleeves attached to the see-through polycarbonate drawer front. Tramp metal collects on sleeve surfaces and falls from the sleeves as they are pulled clear of the magnetic cartridges and the drawer housing. No wiping or brushing required.



Now you can upgrade Bunting Standard Drawer Magnets by replacing the drawer module. Self Cleaning Drawer Modules are available to retrofit all new FF Series Models 4400, 4600, 4800 and 4100 (with or without Slide Gate option) manufactured after August 1, 1989. Just specify your Drawer Magnet model number when ordering.

Ask our knowledgeable salespeople for more information.

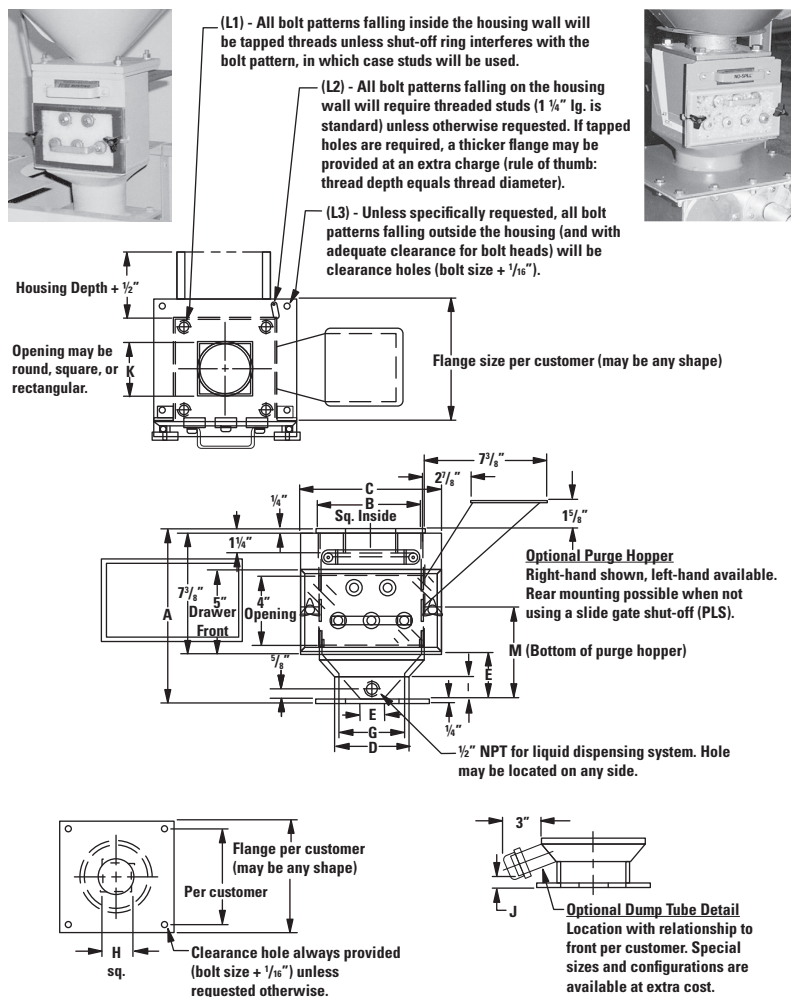
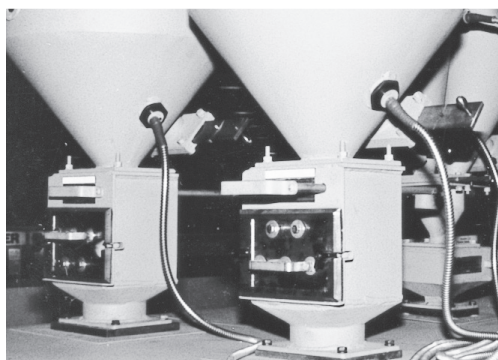
Drawer Magnets

Bunting®



Easy Installation

Each of the four standard FF Series units is available with the original No-Spill™ Slide Gate - Bunting designed and patented - to provide safer and more convenient cleaning. All models are also available with self-cleaning drawer modules. Flanges are pre-drilled to OEM or customer specifications. Be sure to request the options, flange specifications and hole locations you want when ordering. Standard and self-cleaning models now have identical housings. Standard units built after August 1, 1989 can be retrofit for self-cleaning operation simply by ordering a corresponding self-cleaning drawer module.



Dimensions

Model	FF4400PL/PLS	FF4600PL/PLS	FF4800PL/PLS	FF4100PL/PLS
A	10-1/2"	10-5/8"	10-7/8"	Varies
B	4 x 4"	6 x 6"	8 x 8"	10 x 10"
C	6-1/2"	8-1/2"	10-1/2"	12-1/2"
D	2-5/8"	4-3/8"	6-3/8"	Varies
E	2-5/8"	2-3/4"	3"	Varies
F	7/8"	1-3/4"	3-1/8"	Varies
G	2-1/8"	3-7/8"	6"	Varies
H	1-1/2"	2-3/4"	4-1/4"	Varies
I	1-11/32"	1-5/16"	1-11/32"	Varies
J	3/8"	7/16"	3/4"	Varies
K	3"	5"	6-3/4"	8 3/4"
L1 L2 L3	Per	Customer	Specifications	
M	6-3/8"	6-1/2"	6-3/4"	Varies



FF Series Drawer Filter Order/Quote Request

ONLINE ORDER FORM

Company: _____	Customer Account Number: _____	PO# _____
Address: _____	Quote #: _____	Due Date: _____
_____	Date: _____	_____
_____	Salesperson: _____	_____
Contact: _____	Email: _____	_____
Phone: _____	Fax: _____	_____

Project Reference: _____

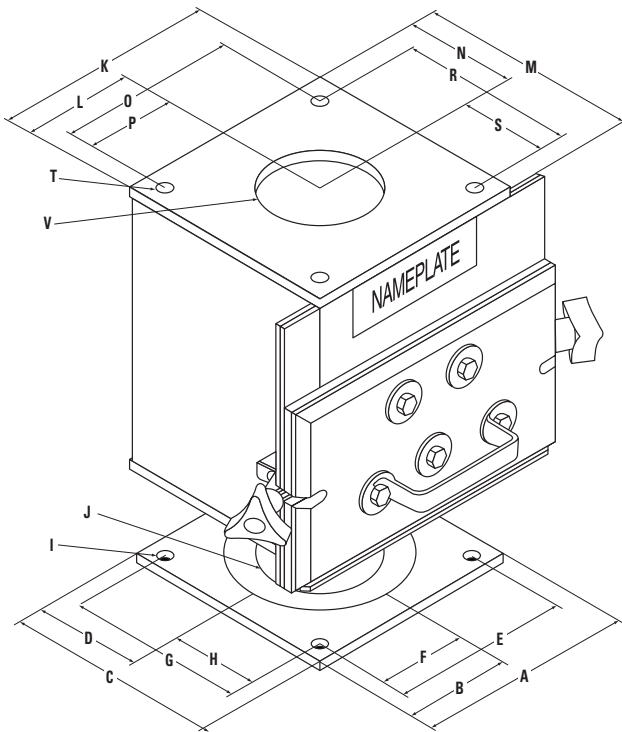
THIS IS AN ORDER THIS IS A QUOTATION REQUEST

Quantity	Bunting Model No.	Description	Unit Price	Amount

Optional Equipment

- Slide gate Shut-off
- With Discharge Dump Tube
- Rear
- Other _____
- With Purge Hopper
- Tapped Hole for
- R.H. Side L.H. Side
- Liquid Dispensing System
- Other

INFORMATION REQUIRED FOR ORDERING OR QUOTATION REQUEST



or visit www.dme.net/rfq

Top Flange – Operator Side (Front)

K	S
L	*T Thread Size Used
M	<input type="checkbox"/> Threaded Holes <input type="checkbox"/> Studs
N	V
O	<input type="checkbox"/> Round
P	<input type="checkbox"/> Square
R	Front to back
	Side to side

Bottom Flange – Operator Side (Front)

A	H
B	I
C	J
D	<input type="checkbox"/> Round
E	<input type="checkbox"/> Square
F	<input type="checkbox"/> Rectangle
G	Front to back
	Side to side

Make of Press: _____ Serial No. _____

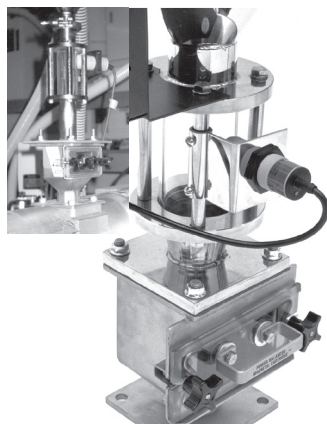
Model: _____ Screw Size: _____ Ounce: _____

Make of Hopper: _____ Hopper Capacity: _____ Lbs.

Please fax this completed form to: 248-544-5113 or toll free US 888-808-4363
or
Email to: DME@dme.net

Mini-Loader Magnet

Bunting®



Just-In-Time Magnetic Separation

- High quality
- Easy mounting
- Styles available

Many plastics processors are turning to smaller volume, closed-loop systems. These “Just-in-Time” systems dry resin at a central point and then convey small amounts to the molding machine. Seeing a special need for magnetic protection against ferrous contaminants in such

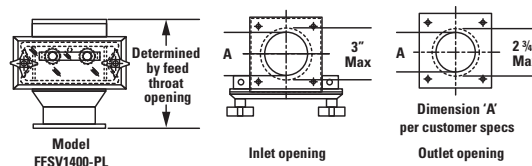
operations, Bunting Magnetics now manufactures two drawer magnets specifically designed for these systems.

Mounted on the throat of the processing machine, both of these drawer magnets come with Bunting’s exclusive

Part Number	Description
FFV1400PL	Mild Steel Unit
FFSV1400PL	Stainless Steel Unit

Power Balanced Magnetic Cartridges® and an O-ring seal to prevent air leaks. The FFV Series of drawer magnets are designed to withstand pressures up to 15 in-hg without leakage. A clear polycarbonate drawer front allows easy monitoring of resin flow and tramp metal collection. The cartridge drawer pulls out of the housing for easy cleaning.

The FFV-1400-PL has a housing manufactured from 12-gauge mild steel. It captures ferrous contaminants with two ceramic magnetic cartridge and has a rod baffle to direct the flow of resin over the cartridges. In applications where extremely small fines or weakly magnetic contaminants are a problem, this drawer magnet can be ordered with two high-energy rare earth magnetic cartridges. The housing is then manufactured from 302/304 stainless steel and is designated by part number FFSV-1400-PL-npb. This unit has a 20 oz. capacity, a maximum inlet diameter of 3 inches, and a maximum outlet diameter of 2 3/4”.



MINI LOADER MAGNET

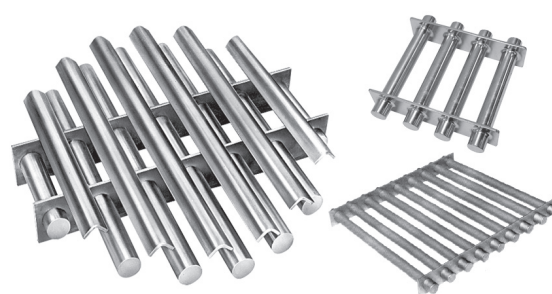
Hopper Magnets-Grate Style

Bunting®

Bunting Grate-Style Hopper Magnets come in a variety of shapes and sizes for use in round, square, or rectangular hoppers, chutes, housings, and bins. They are ideal for trapping tramp iron and ferrous objects such as nuts and bolts in free-flowing materials conveyed by gravity. Selection tip: Grates should have at least twice the cross-sectional area of the hopper outlet opening.

Standard units feature 1” diameter Bunting Power-Balanced Magnetic Cartridges™ encased in 304 stainless steel and mounted on 2” centers - with angle baffles to help direct product flow over the cartridges. Standard grate diameters range from 4” to 12”.

HOPPER MAGNETS GRATE STYLE



Round Hopper Magnets

Size	Part Number
4”	GR4ACR
6”	GR6ACR
8”	GR8ACR
10”	GR10ACR
12”	GR12ACR

Square Hopper Magnets

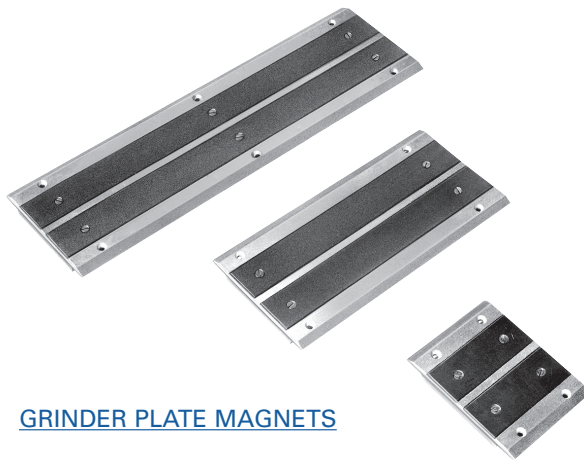
Size	Part Number
4” x 4”	GS4ACR
6” x 6”	GS6ACR
8” x 8”	GS8ACR
10” x 10”	GS10ACR
12” x 12”	GS12ACR

Other sizes and rare earth models are available on request. Square-tube cartridges with ceramic magnets are available in square or rectangular stainless steel frames. Because they have an especially strong magnetic field that allows mounting on 4” centers, they’re ideal for use where bridging may be a problem. Rare earth models are also available.

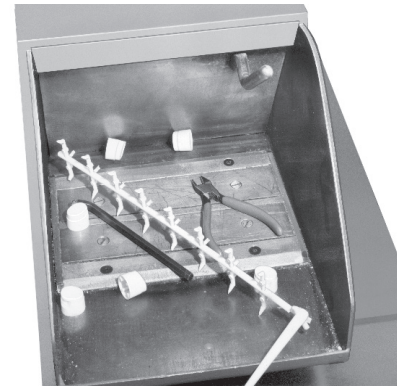
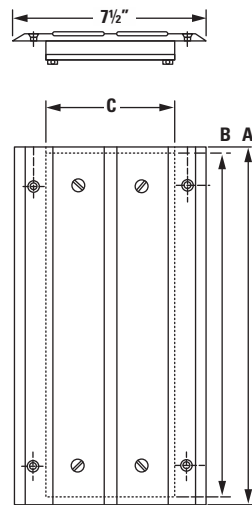


Grinder Plate Magnets

Bunting®



GRINDER PLATE MAGNETS



Simple, Rugged Design & Construction for A Lifetime of Use

Your regrind operation runs an extra risk of tramp metal contamination. Now you can protect it easily and economically with Bunting Grinder Plate Magnets. They install easily in your granulator's feed tray to attract and hold ferrous metal before it can reach internal parts. Grinder vibration won't shake even misplaced hand tools or large ferrous trash from this powerful Ceramic V permanent magnet.

Each Grinder Plate Magnet is manufactured with a rugged cast aluminum frame. Back plate and magnetic pole face are made of mild steel. Specify grinder feed tray dimensions when ordering. To install, just cut an opening in the feed tray and bolt the pre-drilled flange of the magnet to the tray, using the holes and hardware provided.

Bunting Granulator/Grinder Plate Magnets

Size	Part Number	Dimensions		
		A	B	C
5½" × 7½"	GPM555	5½"	5"	5"
7½" × 7½"	GPM757	7½"	7"	5"
9½" × 7½"	GPM959	9½"	9"	5"
11½" × 7½"	GPM11511	11½"	11"	5"
13" × 7½"	GPM13125	13"	12½"	5"
15" × 7½"	GPM15145	15"	14½"	5"
17" × 7½"	GPM17165	17"	16½"	5"
19" × 7½"	GPM19185	19"	18½"	5"
21" × 7½"	GPM21205	21"	20½"	5"
23" × 7½"	GPM23225	23"	22½"	5"

Gravity-Fed Metal Detection System

Bunting®



Reliable Automatic Detection and Rejection of Metal Contaminants. The Bunting HS Series Metal Detector is an electronic metal detection and separation system designed to automatically detect and reject all metals in free-flowing, gravity-fed bulk materials, such as plastic granules, flakes, pellets, feeds, grains, cereals and more.

Precise Control and Operation. Equipped with a single-coil, high-frequency detection system and a rapid air-powered rejection flap, Bunting's HS units detect and remove ferrous and nonferrous metallic contaminants from free-flowing bulk materials. What's more, features like adjustable sensitivity provide complete control over product quality and ensure precise detection with minimal loss of good product.

Compact and Durable. Bunting HS Detectors are compact and durable. They have a single electronics board and are completely enclosed in dust-tight, painted steel housings, with four mounting brackets included.

Virtually Maintenance Free. Install Bunting's HS Detector into your free-fall processing system. It is self-monitoring and virtually maintenance free, so you can literally set it and forget it. The HS continuously monitors the sensor, the air pressure (with a compressed air filter/regulator to maintain air quality to the air-actuated solenoid), the power supply (self-adjusting to any voltage from 110V to 230V), and the detector's mechanical functions.

These Units Are Also Self-diagnosing and Require No Lubrication!

Specifications:

Housing: Unit is completely enclosed in a steel cabinet with four mounting brackets. Painted surface color: RAL 1013 Pearl White. Withstands loads up to 250 lbs. allowing for direct mounting of mixers, batch feeders, etc. Undrilled mounting flange included. Detection: Single coil, high frequency

Electronics: Single electronics board. 110-230V single phase.
Reject: Air-operated, lifetime-lubricated reject flap.
Monitoring: Sensor, air pressure, and reject flap position continuously monitored.
Air: 70 psi minimum. Air pressure regulator with automatic water drain.
Operating Temperature: 154°F maximum



[GRAVITY FED METAL DETECTION](#)

Metal Detector/Separator

Part Number	Description
MDHS9050	Metal Detector w/1.96" Inlet diameter
MDHS9100	Metal Detector w/3.94" Inlet diameter
MDHS9150	Metal Detector w/5.91" Inlet diameter
MDHS9200	Metal Detector w/7.87" Inlet diameter

Options for Metal Detector/Separator

MDHSF050	Funnel for MDHS9050
MDHSF100	Funnel for MDHS9100
MDHSF150	Funnel for MDHS9150
MDHSF200	Funnel for MDHS9200
FF4600PL	6" Square double row drawer magnet for MDHS9050 & MDHS9100
LP1600PL	Low Profile series 6" Square single row drawer magnet for MDHS9050 & MDHS9100
FF54600PLNH7	6" Square double row drawer magnet for MDHS9050 & MDHS9100 (for "Hi-Intensity" loads)
GCS	Gaylord Cleaning Station



MMS Metal Separators

Bunting®

Machine-Mounted All-Metal Separators for Extruders, Injection and Blow Molders For Choke-Feed Applications

Bunting® Machine-Mounted All-Metal (MMS) Separators provide efficient rejection of both ferrous and non-ferrous metal contaminants and fit where headroom is limited. Designed especially for choke-feed applications, they can bolt directly to the infeed of processing equipment and support the weight of hoppers and bins. A fast pneumatic rejection mechanism aided by precise timing results in accurate cycling and conservation of good material.

Features include:

- Separators install directly above infeed
- Rugged housings allow mounting other equipment
- Precise timing results in accurate cycling
- Fast pneumatic reject mechanism reduces good product waste
- Slide gate rejection design eliminates contamination “leaks”



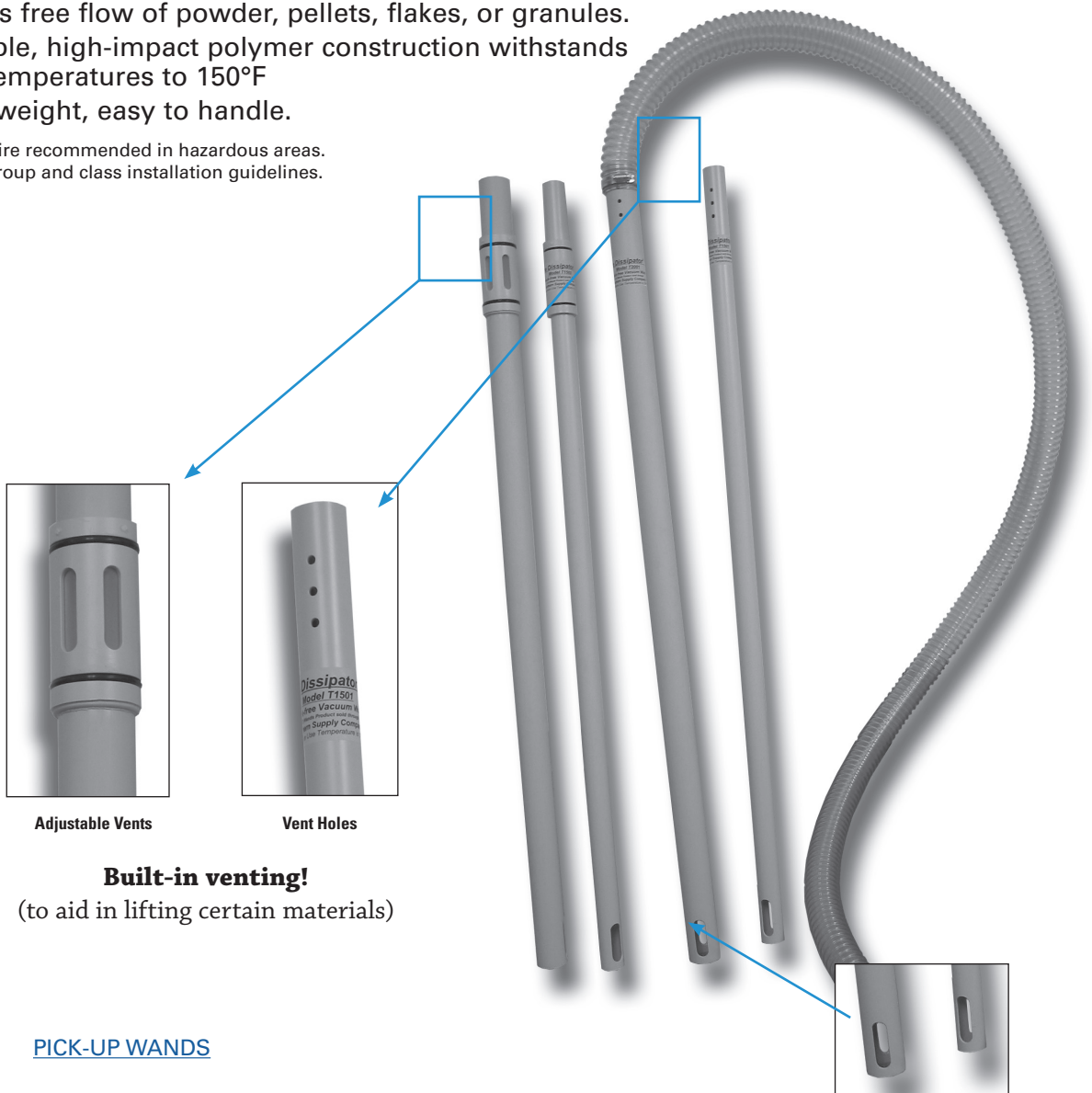
[MMS METAL SEPARATORS](#)



The Dissipator® Series Shock-Free Vacuum Wands

- Eliminates static electric shocks; improves employee welfare and safety.
- Eliminates need for ground wire in hose*; speeds installation; reduces maintenance cost.
- Slick and smooth inner surface; increase throughput; allows free flow of powder, pellets, flakes, or granules.
- Durable, high-impact polymer construction withstands use temperatures to 150°F
- Lightweight, easy to handle.

*Ground wire recommended in hazardous areas. Refer to group and class installation guidelines.



Adjustable Vents

Vent Holes

Built-in venting!
(to aid in lifting certain materials)

PICK-UP WANDS

Model Number	Description
T1501	48" OAL, 1½" dia. w/vent holes
T2001	48" OAL, 2" dia. w/vent holes
T1502	48" OAL, 1½" dia. w/adj. vents
T2002	48" OAL, 2" dia. w/ adj. vents

Patented Linear Standoff Design!

Prevents intake blockage from the bottom of the box or bag.



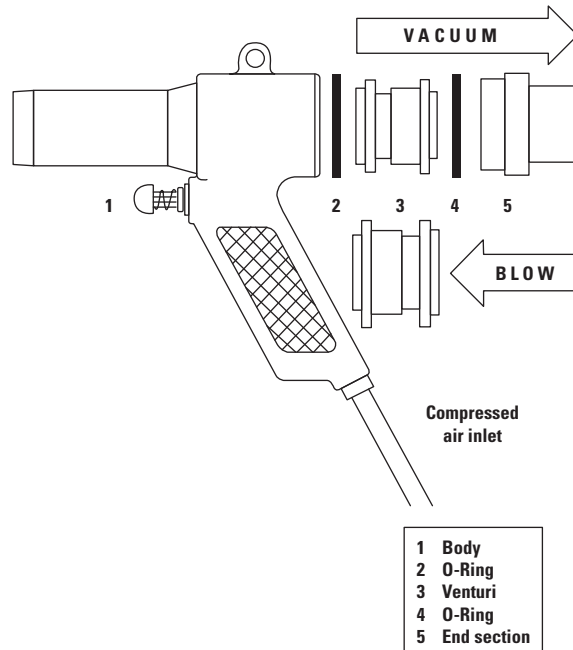
Wonder Gun

The Wonder Gun will convey material to hoppers on molding machines. The swirling vortex action enables it to convey many granular or powdered materials to heights of 25 ft. or horizontal distances up to 50 ft. Average conveying rates are approximately 7 lbs/minute.

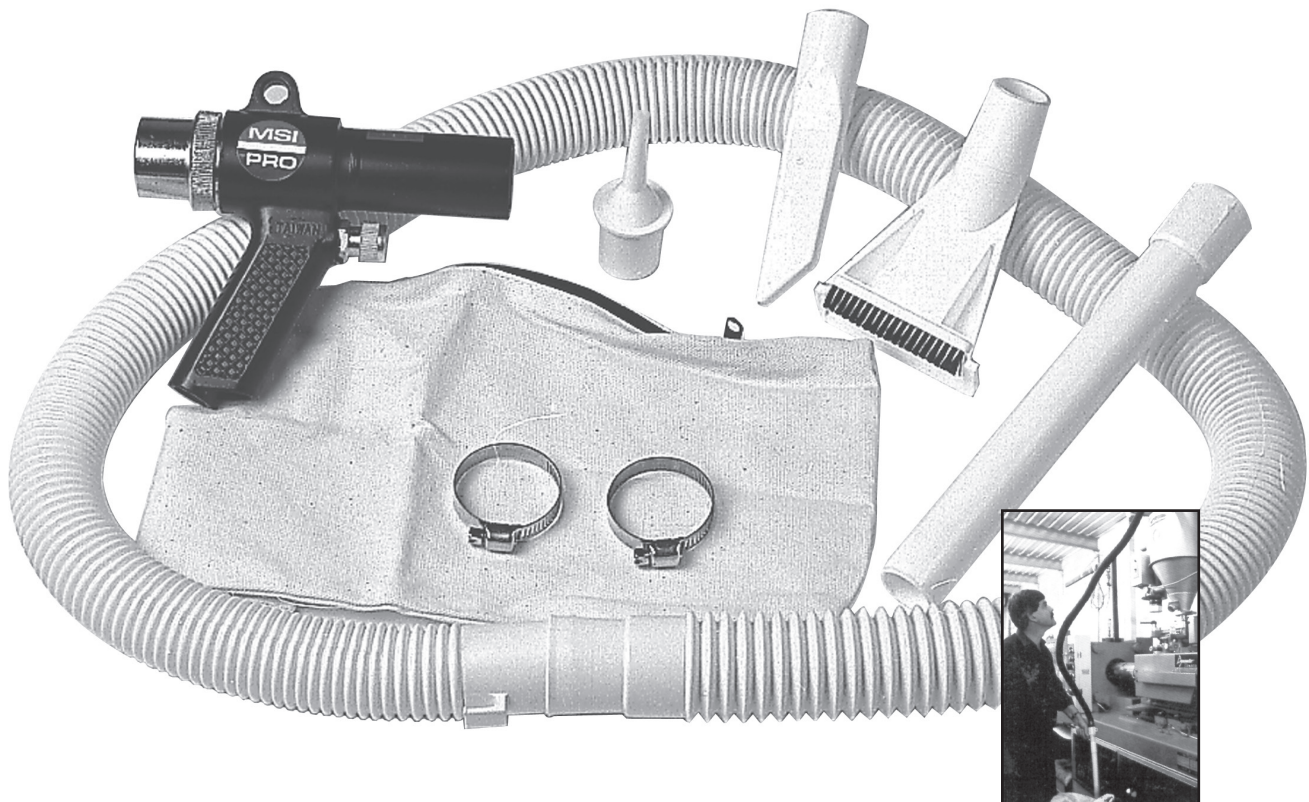
Attached to filtered shop air the Wonder Gun will act as a large area blow gun or with a simple reversal of the venturi a vacuum cleaner or material transfer pump. The venturi effect will boost incoming air flow by more than 12 times! This means, for example, that a 10 CFM supply will result in an output flow of approximately 120 CFM!

Wonder Gun Includes: Two-Way Gun, Vacuum Bag and 7½" Bench Nozzle.

10' Hose: Crush-Proof Hose with Cuffs.



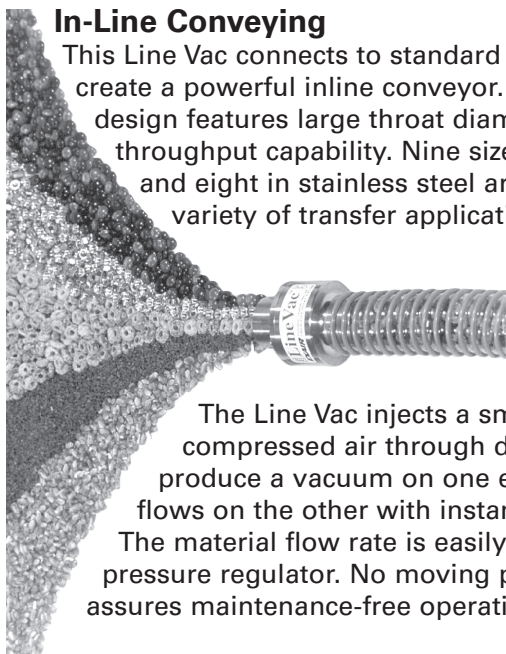
WONDER GUN



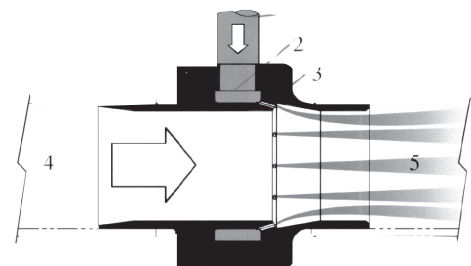
Conveys Parts, Materials & Waste - with No Moving Parts!

In-Line Conveying

This Line Vac connects to standard hose or pipe to create a powerful inline conveyor. The compact design features large throat diameters for maximum throughput capability. Nine sizes in aluminum and eight in stainless steel are suited to a wide variety of transfer applications.



The Line Vac injects a small amount of compressed air through directed nozzles to produce a vacuum on one end and high output flows on the other with instantaneous response. The material flow rate is easily controlled with a pressure regulator. No moving parts or electricity assures maintenance-free operation.



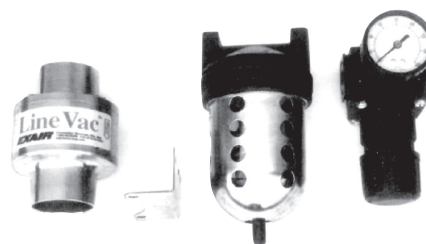
How Line Vac Works

- (1) Compressed air flows through the inlet into an annular plenum chamber
- (2) It is then injected into the throat through directed nozzles
- (3) These jets of air create a vacuum at the intake
- (4) The vacuum draws material in and accelerates it through the unit at long vertical or horizontal distances.

LINE VAC



Line Vacs are available in many sizes in both aluminum and stainless steel



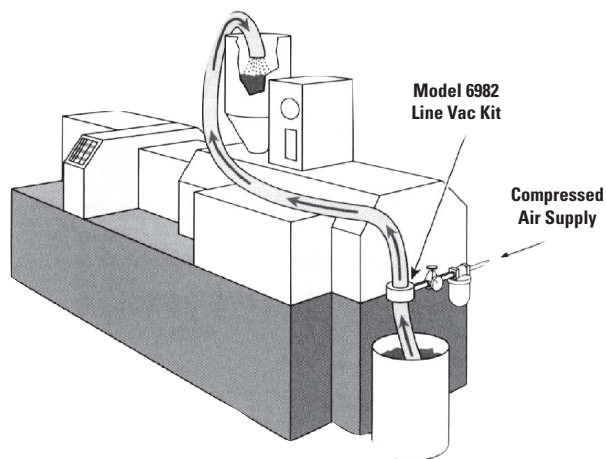
Line Vac Kit includes a Line Vac, mounting bracket, filter separator and a pressure regulator

Note: For air consumption specifications or for CAD data, please contact DME.

The Problem: Injection molding machines transform plastic pellets into various plastic products. The pellets are gravity fed from a hopper on top of the machine. The "bucket and ladder" method of replenishing the hopper was inefficient and expensive.

The Solution: A Model 6982 1-1/4" Line Vac Kit is used to convey the pellets up to the hopper. The mounting bracket included with the kit is used to secure the Line Vac to the machine. A filter ensures no contamination of the plastic material and a regulator controls the plastic flow rate.

Unlike mechanical transfer systems that break down or wear out, the Line Vac has no moving parts. This low-cost method of conveying gives precise control of material flow into the hopper.



LINE VAC

Aluminum Line Vac Only	
Model #	Description
6080	¾" Aluminum Line Vac Only
6081	1" Aluminum Line Vac Only
6082	1-¼" Aluminum Line Vac Only
6083	1-½" Aluminum Line Vac Only
6084	2" Aluminum Line Vac Only
6085	2-½" Aluminum Line Vac Only
6086	3" Aluminum Line Vac Only
6087	4" Aluminum Line Vac Only
6088	5" Aluminum Line Vac Only

Aluminum Line Vac KIT	
Model #	Description
6980	¾" Aluminum Line Vac Kit
6981	1" Aluminum Line Vac Kit
6982	1-¼" Aluminum Line Vac Kit
6983	1-½" Aluminum Line Vac Kit
6984	2" Aluminum Line Vac Kit
6985	2-½" Aluminum Line Vac Kit
6986	3" Aluminum Line Vac Kit
6987	4" Aluminum Line Vac Kit
6988	5" Aluminum Line Vac Kit

Kit includes Line Vac, mounting bracket, filter separator and pressure regulator

Accessories	
Model #	Description
6995	Mounting Bracket for ¾" & 1"
6996	Mounting Br. for 1-¼" & 1-½"
6997	Mounting Br. For 2" & 2-½"
6998	Mounting Br. For 3" & 4"
6999	Mounting Br. For 5"
9001	Auto Drain Filter Sep. ⅜" NPT
9002	Auto Drain Filter Sep. ¾" NPT
9005	Oil Removal Filter ⅜" NPT
9006	Oil Removal Filter ¾" NPT
9008	Pressure Reg. w/gauge ¼" NPT
9009	Pressure Reg. w/gauge ¾" NPT

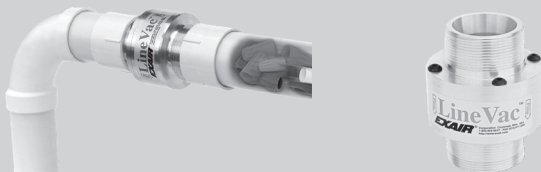
Stainless Steel Line Vac Only	
Model #	Description
6060	¾" SS Line Vac Only
6061	1" SS Line Vac Only
6062	1-¼" SS Line Vac Only
6063	1-½" SS Line Vac Only
6064	2" SS Line Vac Only
6065	2-½" SS Line Vac Only
6066	3" SS Line Vac Only
6067	4" SS Line Vac Only

Stainless Steel Line Vac KIT	
Model #	Description
6960	¾" SS Line Vac Kit
6961	1" SS Line Vac Kit
6962	1-¼" SS Line Vac Kit
6963	1-½" SS Line Vac Kit
6964	2" SS Line Vac Kit
6965	2-½" SS Line Vac Kit
6966	3" SS Line Vac Kit
6967	4" SS Line Vac Kit

Kit includes Line Vac, mounting bracket, filter separator and pressure regulator

Threaded Line Vac

Low-cost conveyor uses ordinary pipe! Convey parts, materials, waste - with no moving parts! A fast, low-cost way to convey plastic pellets, scrap trim, textiles, bulk solids, chips, paper, small parts, shavings, sawdust and granules. Our new Threaded Line Vac Air Operated Conveyors convert ordinary pipe into a powerful conveying system for parts, scrap, trim and other bulk materials. Threaded Line Vac attaches easily to plumbing pipe couplers, making it easy to build a complete system using ordinary pipe and fittings available from any home center, hardware store or plumbing supply. Performance is the same as our standard Line Vac.



Aluminum Threaded Line Vac Only	
Model #	Description
140075	¾" Aluminum Line Vac Only
140100	1" Aluminum Line Vac Only
140125	1¼" Aluminum Line Vac Only
140150	1½" Aluminum Line Vac Only
140200	2" Aluminum Line Vac Only

Aluminum Threaded Line Vac KIT	
Model #	Description
142075	¾" Aluminum Line Vac Kit
142100	1" Aluminum Line Vac Kit
142125	1¼" Aluminum Line Vac Kit
142150	1½" Aluminum Line Vac Kit
142200	2" Aluminum Line Vac Kit

Reversible Drum Vac



Pump 55 Gallons in 90 seconds!! Two-way Pumping Action!

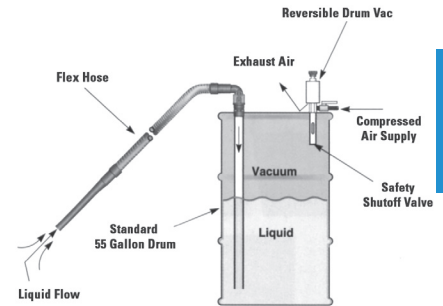
What is the Drum Vac?

A safe, maintenance-free way to recover:

- Coolant
- Hydraulic oils
- Liquid spills
- Sludge and chips
- Tramp oil
- Waste water



REVERSIBLE DRUM VAC



Why the Reversible Drum Vac?

EXAIR's compressed air operated **Reversible Drum Vac System** attaches quickly to any closed head 30 or 55 gallon drum. Its high powered vacuum fills the drum in less than two minutes. With the simple turn of a knob, the same stainless steel pump quickly empties the drum. Coolant sumps can be easily refilled, floor spills vacuumed, or contaminated liquids transferred to filtration tanks in minutes. The flow rate in and out of the drum can be controlled with the knob, making it ideal for dispensing liquids.

Electrically operated "all purpose" vacuums aren't designed for use in industrial environments. As a result, motors wear out quickly and impellers clog. The Reversible Drum Vac does not use electricity and has no moving parts, assuring maintenance-free operation. An automatic safety shut-off valve prevents spills or overfilling.



The Model 6196 and 6196-30 Reversible Drum Vac System includes a vacuum hose and an aluminum wand

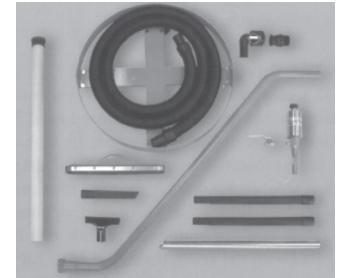
Applications

- Coolant sumps
- Food processing
- Lathes
- Floor cleanup
- EDM machines
- Pits
- Screw machines
- Machining centers
- Tanks

Advantages

- No moving parts
- Maintenance free
- Stainless steel construction
- Safe - no electricity
- Built-in pressure/vacuum relief
- Compact and portable
- Installs quickly
- Spill free - auto safety shutoff
- Fits standard closed head drum

5 Year Warranty!

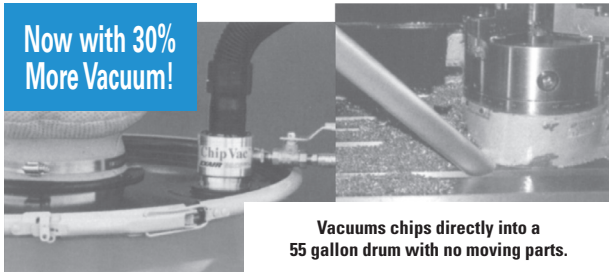


The Model 6296 Deluxe Reversible Drum Vac System includes a 55 gallon drum dolly, spill recovery kit, vacuum hose and all tools.

Warning:

Do not use with any material with a low flash point or with flammable liquids such as fuel oil, alcohol, mineral spirits,

Model #	Description
6196	55 gallon Reversible Drum Vac System - includes: two-way pump assembly (1/4 NPT), shutoff valve, 10' (3m) flexible vacuum hose (1 1/2"/38mm I.D.) with 90° quick-release elbow connection, (1) aluminum wand (drum not included).
6296	55 gallon Deluxe Reversible Drum Vac System - same as above and adds drum dolly, spill recovery kit, (2) extension wands, crevice tool, and skimmer tool (drum not included).
6196-30	30 gallon Reversible Drum Vac System - includes: two-way pump assembly (1/4 NPT), shutoff valve, 10' (3m) flexible vacuum hose (1 1/2"/38mm I.D.) with 90° quick-release elbow connection, (1) aluminum wand (drum not included).
9001	Auto Drain Filter Separator - 3/8 NPT, 65 SCFM (1841 SLPM)
9005	Oil Removal Filter - 3/8 NPT, 15-37 SCFM (425-1048 SLPM)
9041	55 gallon drum dolly
6901	Spill Recovery Kit - Includes a one-piece 54" (1372mm) ABS wand and a 14" (356mm) double blade squeegee tool.



Now with 30% More Vacuum!

Vacuums chips directly into a 55 gallon drum with no moving parts.



The Chip Vac removes abrasive stainless steel chips from a CNC.

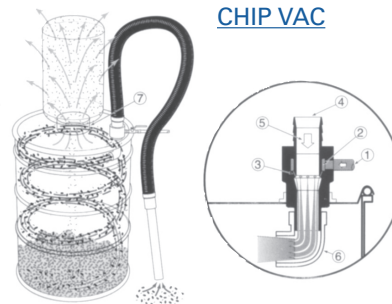


Room air remains dust-free as the Chip Vac removes dusty absorbent.

What is the Chip Vac? EXAIR's Chip Vac picks up dry or wet chips and delivers them directly to an ordinary 55 gallon drum. Chip Vac is used to clean chips from fixtures, floors and work surfaces of machining centers, lathes, saws, mills and other industrial equipment. **Why the Chip Vac?** The compressed air operated Chip Vac is an industrial duty vacuum designed specifically for vacuuming chips. It creates a powerful cyclonic action that vacuums metal, wood or plastic chips into a 55 gallon drum. Dusty materials such as absorbents are trapped by the 0.1 micron filter bag to keep the surrounding air clean. Electrically operated "all purpose" vacuums aren't designed for use in industrial environments. As a result, motors wear out quickly and impellers clog. Chip Vac has no moving parts to wear out or break which ensures long life. Sound level is half that of electric vacuums. Chip Vac's lever lock drum lid fits an ordinary open head 55 gallon drum. In less than a minute, the Chip Vac can be removed and easily placed onto another drum to keep different materials separate for recycling. Constant heavy lifting and dumping of vacuum cleaner tanks is eliminated since all chips are vacuumed directly to the 55 gallon drum.

Compressed air, normally 80–100 PSIG (5.5–6.9 BAR), flows through the inlet (1) into an annular plenum chamber (2). It is then injected into the throat through directed nozzles (3).

These jets of air create a vacuum at the intake (4) which draws material in and accelerates it through the unit (5). An elbow at the exhaust (6) directs the air in a cyclonic motion against the inside wall of the drum. Chips and other particulate drop to the bottom of the drum. The airflow exhausts through the port in the drum lid (7). Airborne particulates are trapped by the 0.1 micron filter bag.



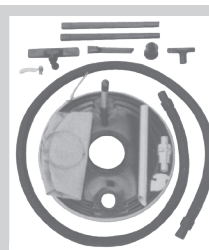
CHIP VAC

Applications

- CNC's
- Lathes
- Saws
- Mills
- Drills
- Grinders
- Routers
- Molding machines
- Absorbent pick-up

Advantages

- No moving parts
- Low cost
- No motors to clog or wear out
- No electricity
- Dust-free operation
- Chips go directly into a drum
- Powerful cyclonic action
- Includes accessories
- 50% quieter than electric vacs



The Chip Vac System can be used with an open-head steel, fiber or plastic drum that is in good condition (ANSI Standard #MH2-1997). To prevent material contamination, a poly drum liner can be inserted into the drum.

Easy cleaning - A dirty filter bag can put back pressure on the Chip Vac, resulting in reduced suction. The reusable bag should be removed and shaken over a waste container to remove bulk particulate. The filter bag can be washed in a manner suitable for delicate fabrics.

Pressure Supply		Air Consumption		
PSIG	BAR	SCFM	SLPM	INLET
80	5.5	40	1132	3/8" NPT

Air consumption has been minimized by using the appropriate amount of air required for vacuuming chips.

Part Number	Description
6193	Chip Vac System- includes Chip Vac, lever lock drum lid, shutoff valve, 10' chemical resistant hose (1.5"/38mm I.D.), chip wand, extensions, crevice tool, brush, skimmer tool and floor tool (drum not included)
9001	Auto Drain Filter Separator - 3/8" NPT, 73 SCFM (2067 SLPM)
9005	Oil Removal Filter - 3/8" NPT, 37 SCFM (1048 SLPM)
6804	Filter Bag

Improve the quality of molded parts by preventing contamination of in-process material. Provide easy access and the ability to make quick visual level checks. Reduce mess and housekeeping labor associated with transferring of material from central loaders and grinders.



DN22

Drum Filter Cover - 1 port

Fits 22" diameter drum. The access port accepts a 2" to 2.75" diameter vacuum wand. The port features an elastic band for a tight seal and a zipper to close the opening when not in use. Includes tie cord to ensure snug fit and clear vinyl window for quick visual level check.

DP22

Drum Filter Cover - 2 port

Same as above except two ports are

Gaylord Filter Cover - 2 port

Fits 34" x 42" Gaylord. The cover features two access ports sized to accept a 2" to 2.75" diameter vacuum wand. They are located in opposite corners of the cover so that operators can reposition the vacuum wand as material shifts in the gaylord. The ports include an elastic band for a tight seal and a zipper to close one or both openings when not in use. An elastic band around the skirt holds the cover in place.

GN3442

Gaylord Filter Cover - 1 port with belt & buckle

Same as above except comes standard with a single port located in the center of the cover and a belt with buckle to more securely hold the cover in place. Port size is specified by the customer within a range of 2" to 20" diameter. Designed to reduce the mess associated with pneumatic loading of material into gaylords. Specify length and diameter of port when ordering.

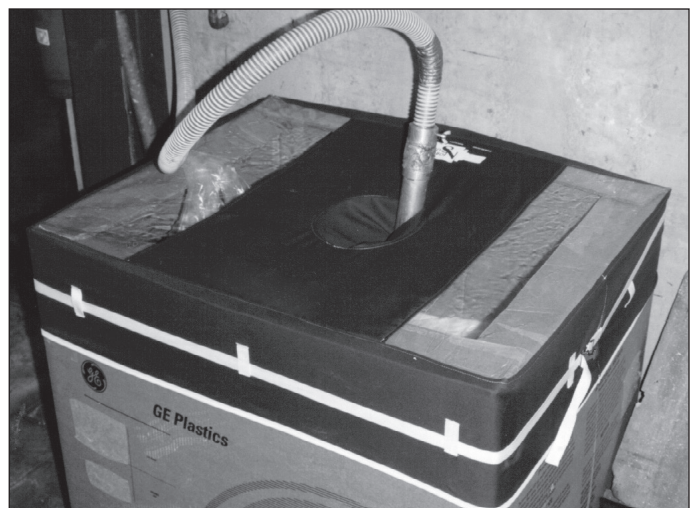
GP3442

Special order - allow one week.

DRUM COVERS

Optional Features Include:

- Custom shapes and sizes available (send DME a drawing with sizes needed for quote)
- Additional zipper openings
- Fabric color selections
- Custom silk screen names or logos
- Call for quote





Mold Curtains

Mold side curtains provide an effective means of confining molded parts on multi-cavity molds that have a tendency to fly out, thus reducing the risk of contamination, loss or damage.

- Sizes not shown custom made to your dimensions.
- Velcro fitting permits easy access to mold cavities.
- Clear vinyl aids visibility to mold.



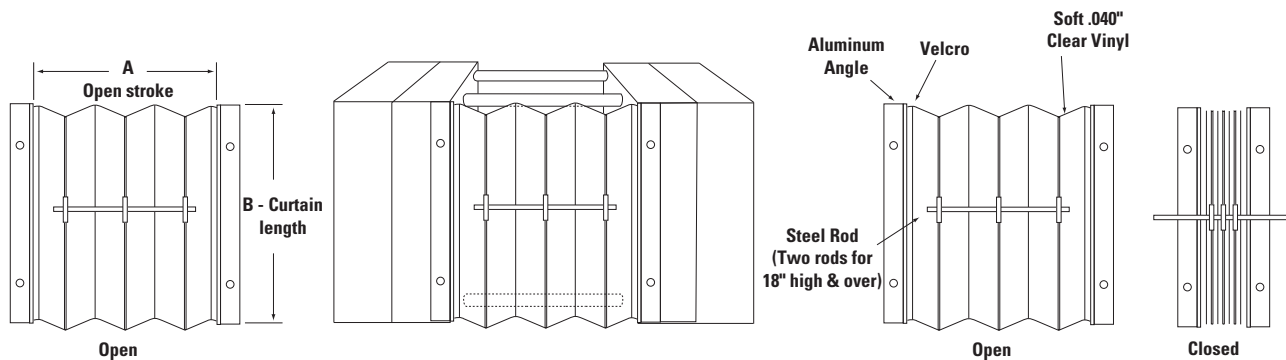
or visit

www.dme.net/rfq

Complete unit includes:

- (2) 1 1/2" x 1 1/2" aluminum angle mounting brackets attached with bolts to mold and velcro to curtain.
- (1) 1/4" steel alignment rod to prevent curtain from collapsing into mold.

MOLD CURTAINS



Width A	Length B	Part No.
4"	12"	SC01
6"	15"	SC02
8"	18"	SC03
10"	21"	SC04
12"	24"	SC05
14"	27"	SC06
16"	30"	SC07
18"	33"	SC08
20"	36"	SC09

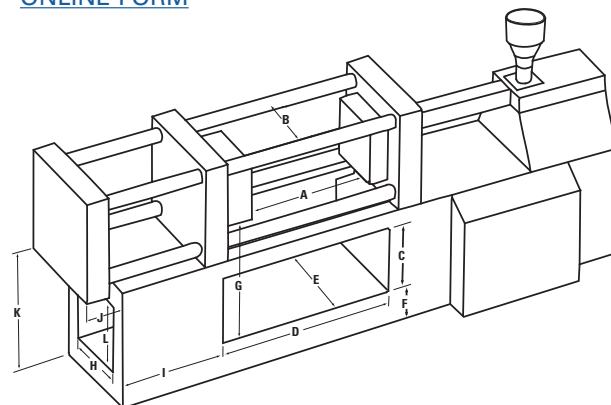
Note: Side curtains require 3" gap between mold and tie bar. The curtain can only be as long as the tie bar spacing if adequate space does not exist.

Alternate vertical panels are clear vinyl to provide visibility to the mold. Aluminum angle mounting brackets are designed to attach directly to the mold, not to the platen.

Ensure adequate clearance between waterline fittings on the parting line, to allow the curtain to collapse in between when the mold is closed. Curtain open stroke and curtain length

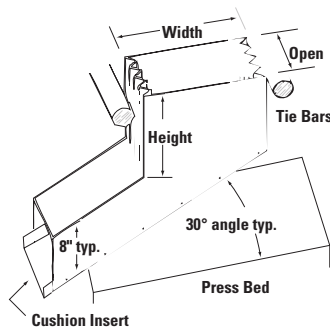
ONLINE FORM

- A: Mold open..... _____
- E: Width of opening..... _____
- C: Height of opening..... _____
- D: Length of opening..... _____
- F: Floor to opening..... _____
- I: End to opening..... _____
- L: Height of end opening..... _____
- H: Width of opening..... _____



Prevents Contamination & Lost or Damaged Parts

Attach to mold on side or bottom

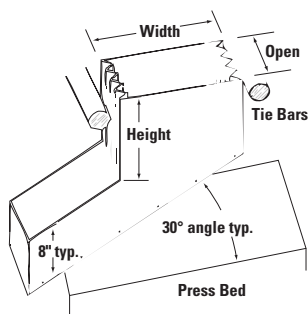


Complete with mounting brackets, bars, grub & screws

Detachable chute guideskirt with cushion insert

Specifically designed to transfer molded parts by gravity from under the machine to a conveyor or container. Soft insert included to minimize part damage and bounce

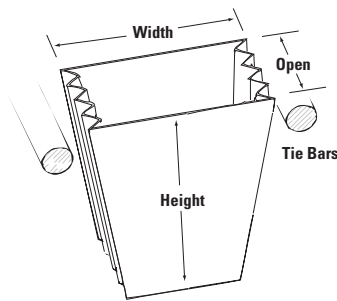
Open	Width	Height	Chute Length	Chute Width	Part No.
6"	12"	8"	24"	8"	MD06
12"	18"	10"	30"	8"	MD16
18"	22"	12"	34"	8"	MD26
18"	26"	14"	38"	8"	MD36
18"	30"	16"	42"	8"	MD46



Soft chute guideskirt

Made of soft, pliable abrasion-resistant material to protect delicate parts from surface damage. Typical applications are conical- or spherical-shaped small parts below 200°F.

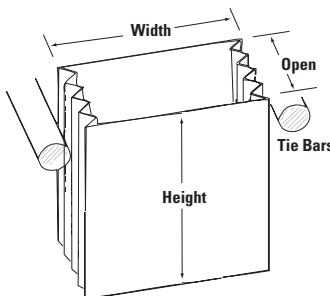
Open	Width	Height	Part No.
6"	12"	8"	SCG07
12"	18"	10"	SCG17
18"	22"	12"	SCG27
18"	26"	14"	SCG37
18"	30"	16"	SCG47



Standard tapered guideskirt

Design allows parts to funnel or align below mold for ease of packaging or secondary processing. Fabric can be easily cut to permit front, rear, side or bottom release in conjunction with a conveyor.

Open	Width	Height	Part No.
6"	12"	18"	MTP01
12"	18"	18"	MTP11
18"	22"	26"	MTP21
18"	26"	26"	MTP31
18"	30"	26"	MTP41



Standard straight guideskirt

Ideal for guiding large parts or runners from the mold to a receiving source directly below the mold. Multiple units can be used to guide parts and runners to desired location.

Open	Width	Height	Part No.
6"	12"	18"	MST02
12"	18"	18"	MST12
18"	22"	26"	MST22
18"	26"	26"	MST32
18"	30"	26"	MST42

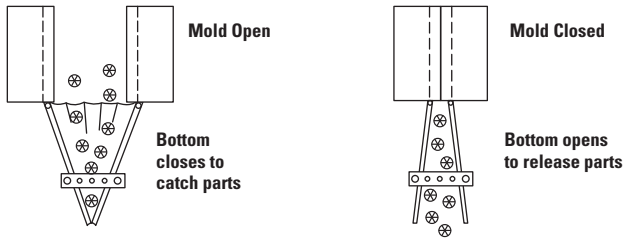
Options:

- Hi-temp materials for thermoset parts.
Neoprene material is used for hot parts up to 300°F. Note that thermoplastic parts that are cooled before ejection from mold do not normally require hi-temp material.
- Metal sideplates provide rigidity and extended life to guideskirts.
- Magnets - set of 4 (part no. MAG01).



Mold Skirts

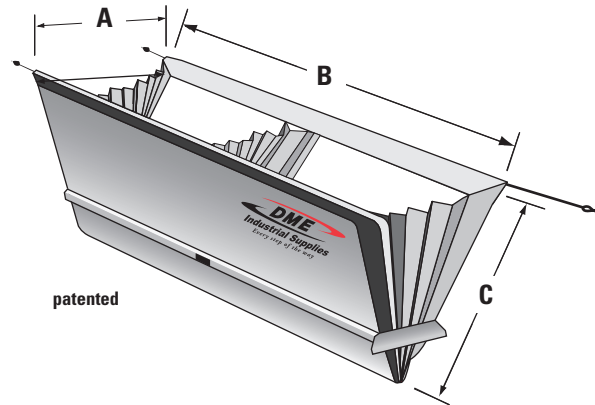
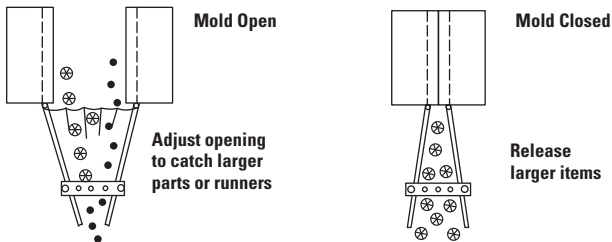
Soft Drop Application



Protects delicate molded parts

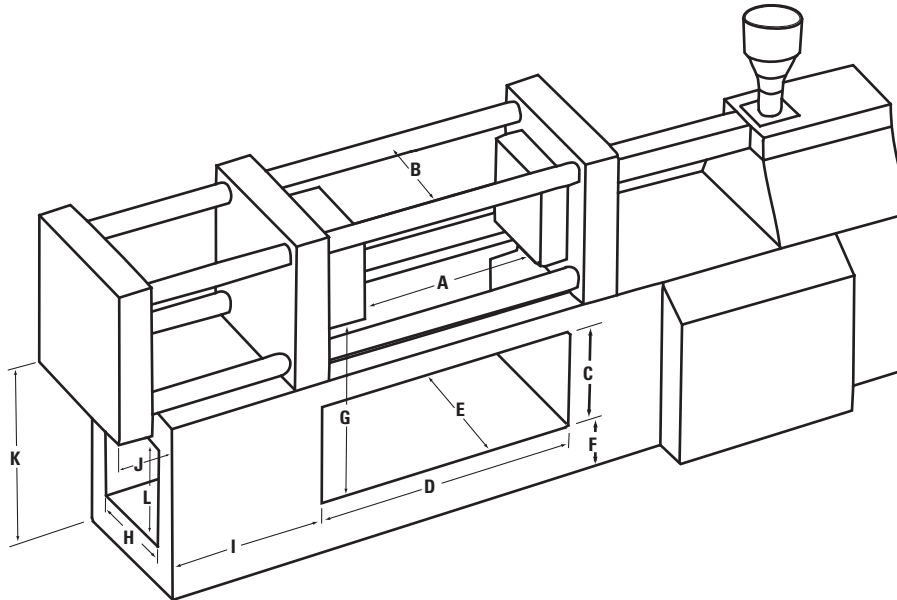
Delayed drop guideskirts provide a soft, delayed, controlled drop of molded parts - prevents damage and increases output of delicate molded parts.

Part/Runner Separation



Call For Pricing!

Please provide all required dimensional details for a rapid quotation for your machine.



or visit
www.dme.net/rfq

- | | | | |
|---------------------------|-------|-------------------------------|-------|
| A: Mold open..... | _____ | F: Floor to opening..... | _____ |
| E: Width of opening..... | _____ | I: End to opening..... | _____ |
| C: Height of opening..... | _____ | L: Height of end opening..... | _____ |
| D: Length of opening..... | _____ | H: Width of opening..... | _____ |

See the following pages for quote request forms.

Detachable Guideskirt Quote Request Form

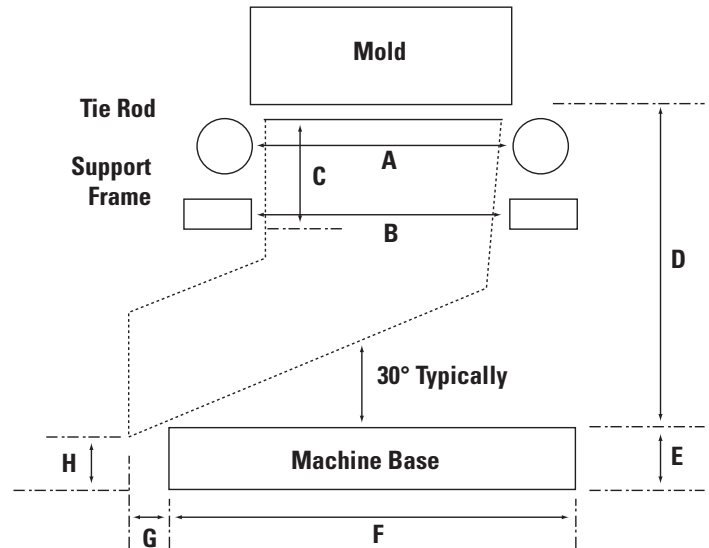


Company Name:
Account Number:
Contact Person:
Address:
City, State, Zip:
Phone, Fax:
Email:

Please fax this completed form to:
248-544-5113 or 888-808-4363
or email
sales@dme.net



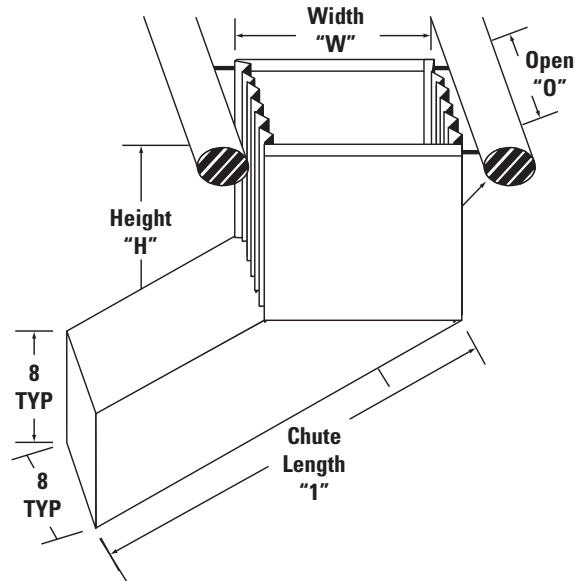
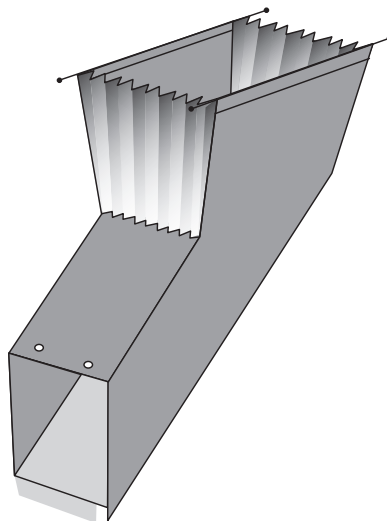
1. Mold Opening (daylight): **(MAX is 24")**
2. (A) Width between Tie Rods:
3. (B) Width between Frame:
4. (C) Clearance Height:
5. (D) Machine Clearance mold to base:
6. (E) Base to floor:
7. (F) Width of base:
8. (G) Desired extension past base:
9. (H) Desired discharge height:
10. Size of Parts: L x W x H
11. Runner system No Yes
12. Size:
13. Do you require high-temp material?
(for parts over 180°) No Yes
14. Quantity



ALL dimension must be completed in order to receive a quotation



or visit
www.dme.net/rfq



Detachable Guideskirt has a Stainless Steel tray on the bottom of the chute with a cushion insert

All guideskirts come with mounting hardware. Hardware includes straight brackets (for attaching to the mold) and right angle brackets (for mounting below the mold)



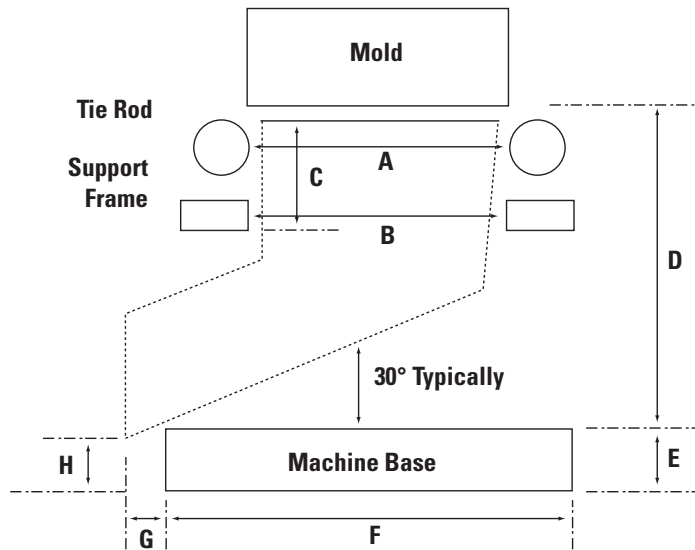
Soft Chute Guideskirt

Quote Request Form

[ONLINE FORM](#)

Company Name:	Please fax this completed form to: 248-544-5113 or 888-808-4363 or email sales@dme.net
Account Number:	
Contact Person:	
Address:	
City, State, Zip:	
Phone, Fax:	
Email:	

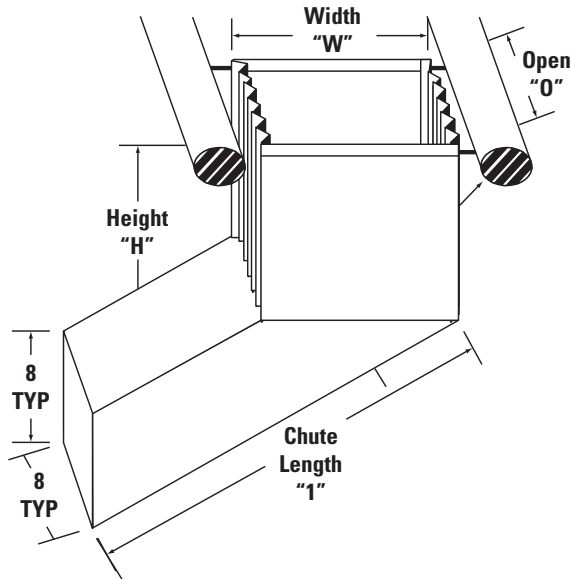
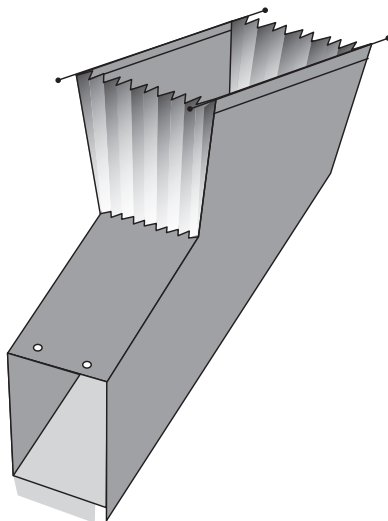
- Mold Opening (daylight): (MAX is 24")
- (A) Width between Tie Rods:
- (B) Width between Frame:
- (C) Clearance Height:
- (D) Machine Clearance mold to base:
- (E) Base to floor:
- (F) Width of base:
- (G) Desired extension past base:
- (H) Desired discharge height:
- Size of Parts: L x W x H
- Runner system No Yes
- Size:
- Do you require high-temp material? (for parts over 180°) No Yes
- Quantity



ALL dimension must be completed in order to receive a quotation



or visit
www.dme.net/rfq



Detachable Guideskirt has a Stainless Steel tray on the bottom of the chute with a cushion insert

All guideskirts come with mounting hardware. Hardware includes straight brackets (for attaching to the mold) and right angle brackets (for mounting below the mold)

MAC-controlled environment

enclosures maximize efficiency of cleanroom molding for a fraction of the cost of a cleanroom facility. They can enable a molder to quickly and inexpensively enter the growing medical molding market, add to existing cleanroom capacity, or further enhance contamination control by isolating parts within an existing cleanroom.

MAC offers three types of cleanroom enclosures including: Under the Press, Beside the Press and Over the Press designs.



[CLEANROOMS](#)

Framework for portable enclosures are fabricated of 2" square 12-gauge structural steel unless otherwise specified. Aluminum and stainless steel are available as options. Smaller enclosures are welded together as a complete unit while larger enclosures may be fabricated as modular units. Choice of sidewall materials include vinyl strip curtains or polycarbonate panels.

Options

- Antistatic material for sidewalls
- Air conditioning control
- Humidity control
- Built-in conveyors or worktables
- Automatic bag or tote fill systems

Features

- HEPA fan module with pre-filter
- Low Profile 2' x 4' self-contained blower/filter
- ¼" H.P. motor, 115 volts
- Nominal air flow 800 CFM
- Minimum efficiency of 99.99% at 0.3 microns
- Low-energy consumption
- 2.4 amps full load
- Sound level to 58 dba
- Red neon light to verify unit is operating
- Heavy-duty locking casters

Framework

The framework is fabricated of proprietary aluminum extrusions finished with white epoxy enamel. The cross tees for separating components are 1-1/2" anodized aluminum T-grid with tabs for attachment. The horizontal members are 2" x 4", and the vertical support legs are 3" x 3". All fasteners may be easily removed to allow disassembly of the unit for relocation. Leveling mounts are installed at the base of each leg and are adjustable. The pads have a stainless steel housing with rubber base where it contacts the floor. A ½ - 13 stud on the pad fits inside the base of the leg and a hex nut is used for adjustment. A jamb nut is included to fix the height once set. Closed cell gasketing is included for field installation to seal the components from the room.

CLEANROOMS

Hard Panel Walls

Blank panels are ½" gypsum, vinyl covered on both sides with white textured covering. All edges are sealed. If required, special sizes will be cut and edges resealed at our factory. No field cuts are necessary.

Casters

There are 2 types of Casters offered. Stem Casters are available in 4" and the Plate Casters are available in 5" and 6". The size of your casters will be determined by the size and weight of your softwall cleanroom. All casters feature a molded polyurethane wheel and a Tech-Lock brake.

Filter Modules

Filtration is provided by our Model 421-SP motorized HEPA filter modules. Standard efficiency is 99.99% at 0.3 microns by DOP test. The modules are provided with an 8' power cord and variable-speed controller mounted on each unit. If a pre-wiring package is purchased, the speed controllers are located in a control panel attached to the leg. Standard voltage is 120/1/60.

Light Fixtures

Light is provided by our 2' x 4' TAP fixture with F40-T12 medium bi-pin lamps. Lamp tubes ARE included and are shipped installed in the fixtures. The lens is standard clear prismatic housed in an extruded aluminum frame. Wiring connection is made through an access cover in the top of the fixture. Standard voltage is 120/1/60.

Pre-wiring Package Option

The pre-wiring package includes a control panel housing, the fusing for each filter module and each light fixture circuit, and speed controllers for the HEPA filter modules. Filter modules are wired to speed controllers in multiples of (3); i.e. one speed controller operates (3) filter units. Power distribution block for single-point connection to field power. Wiring harnesses are provided for components to connect them to the control panel. Harnesses are marked for re-assembly.

Warranty

MAC automation warrants its products for a period of one year from the date of shipment. The warranty covers materials and workmanship of all components of our soft-wall cleanrooms. If an item proves defective during the warranty period it will be repaired or replaced at our option. Under no circumstances will we be responsible for any labor costs for removal or repair unless approved in writing prior to the work being performed. These costs will be approved solely at our option depending on the circumstances. We will also not be responsible for any costs related to the failure of one of our products.

Cleanrooms - Worksheet



[ONLINE FORM](#)

Please fill out this contact information page and select your cleanroom specifications on the following three pages. Fax to DME at 888-808-4363 for a quote. Or call us at 800-626-6653 with your specs.



Company Name	
Account Number	
Company Address	
Contact Name	
Phone #	
Fax #	
E-mail Address	

SOFTWALL CLEANROOM OPTIONS



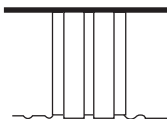
Anti-static Curtains

Replaces standard clear vinyl with static dissipative vinyl.



Strip Curtains

Replaces all, or a portion, of standard solid panels with 8" wide strips with 2" overlap.



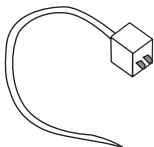
Strip Entries

Replaces standard 12" overlap opening with strip curtains. These are generally 3' - 4' wide, but any width is available.



Casters

Replaces standard stainless steel leveling mounts with polyurethane swivel casters with wheel locks. Wheel diameter varies with size of room and load.



Pre-Wiring Package

Adds leg-mounted control panel with on/off switches for lights and filters, and moves the filter speed controls down from the ceiling for easier access. All components are pre-wired to connect to the control panel, which provides a single-point connection to field power.



or visit
www.dme.net/rfq



Cleanrooms - Worksheet

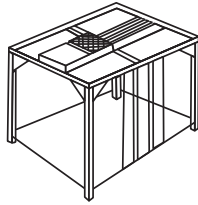
[ONLINE FORM](#)

CLEANROOM SIZE

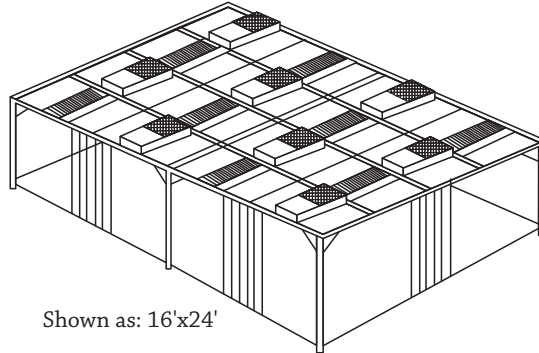
Length: _____

Width: _____

Height: _____



Shown as: 6'x8'



Shown as: 16'x24'

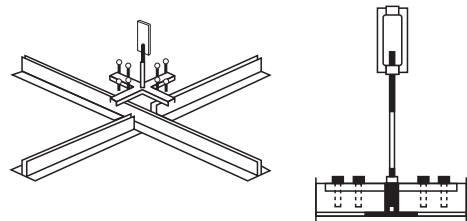
CLEANROOM CLASS

Class = Number of air changes per hour.

- 100
 100 (At Rest)
 1,000
 10,000
 100,000 (Standard)

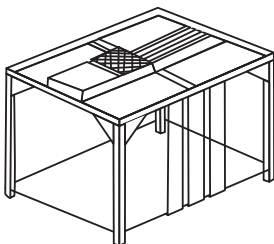
CLEANROOM FRAMEWORK

The framework is fabricated of proprietary aluminum extrusions finished with white epoxy enamel. The cross tees for separating components are 1-1/2" anodized aluminum T-grid with tabs for attachment. The horizontal members are 2" x 4", and the vertical support legs are 3" x 3". All fasteners may be easily removed to allow disassembly of the unit for relocation. Leveling mounts are installed at the base of each leg and are adjustable. The pads have a stainless steel housing with rubber base where it contacts the floor. A 1/2-13 stud on the pad fits inside the base of the leg and a hex nut is used for adjustment. A jamb nut is included to fix the height once set. Closed cell gasketing is included for field installation to seal the components from the room.

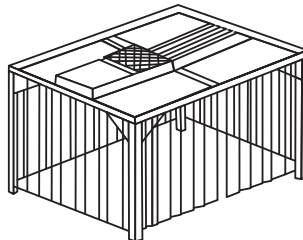


CLEANROOM CURTAINS

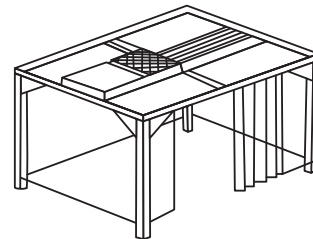
Curtains are 40 mil clear standard. (2) 12" overlap openings are included with the base package. Strip entries are available as are sliding track entries. For additional curtain material, call for pricing.



"A" Solid curtains with strip entry



"B" 8" Strip curtains with 2" overlap



"C" 8" Solid curtains with bi-fold curtains entry

- "A"
 "B"
 "C"
 "D" - Please have the factory suggest best curtain method

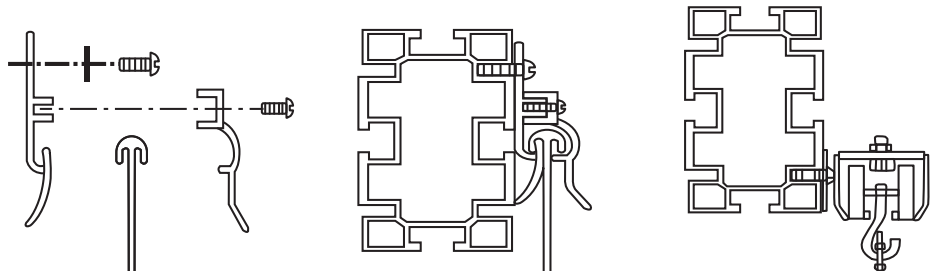
Please make the above curtains: 40 mil clear vinyl 40 mil clear anti-static Length: _____

Fax to DME at 888-808-4363 for a quote. Or call us at 800-626-6653 with your specs.

CLEANROOM CURTAIN ASSEMBLIES

HookBead Curtains: Used for strip curtains or strip entry.

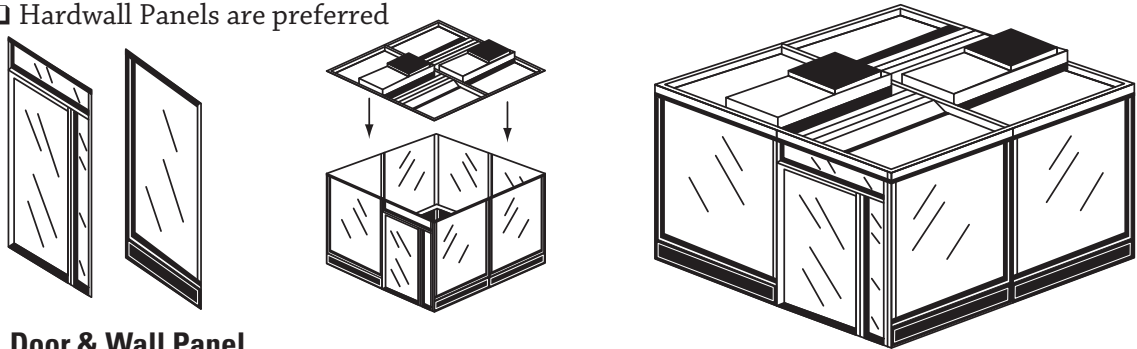
Nylon Roller: Used for bi-fold curtains



CLEANROOM HARDWALL PANELS

Blank panels are 1/2" gypsum, vinyl covered on both sides with white textured covering. All edges are sealed. If required, special sizes will be cut and edges resealed at our factory. No field cuts are necessary.

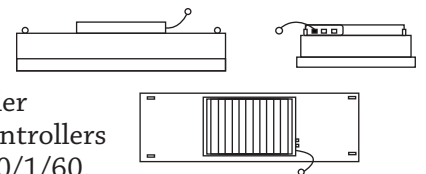
- Hardwall Panels are preferred



Door & Wall Panel

CLEANROOM FILTER MODULES

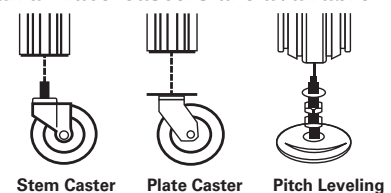
Filtration is provided by our Model 421-SP motorized HEPA filter modules. Standard efficiency is 99.99% at 0.3 microns by DOP test. The modules are provided with an 8' power cord and variable-speed controller mounted on each unit. If a prewiring package is purchased, the speed controllers are located in a control panel attached to the leg. Standard voltage is 120/1/60.



CLEAN ROOM CASTERS

There are 2 types of casters offered. Stem Casters are available in 4" and Plate Casters are available in 5" and 6". The size of your casters will be determined by the size and weight of your softwall cleanroom. All casters feature a molded polyurethane wheel and a Tech-Lock brake.

- Stem/Plate Casters
- Leveling Pad



Fax to DME at 888-808-4363 for a quote. Or call us at 800-626-6653 with your specs.



Cleanrooms - Worksheet

[ONLINE FORM](#)

CLEAN ROOM LIGHT FIXTURES

Light is provided by our 2" by 4" TAP fixture with F40-T12 medium bi-pin lamps. Lamp tubes ARE included and are shipped installed in the fixtures. The lens is standard clear prismatic housed in an extruded aluminum frame. Wiring connections are made through an access cover in the top of the fixture. Standard voltage is 120/1/60.

CLEANROOM PRE-WIRING PACKAGE OPTION

The pre-wiring package option includes a control panel that houses the following:

1. Fusing for each filter module, and for each light fixture circuit.
2. Speed controllers for the HEPA filter modules.
3. Filter modules wired to speed controllers in multiples of (3). i.e one speed controller operates (3) filter units.
4. power distribution block for single-point connection to field power.

Wiring harnesses are provided for components to connect them to the control panel.

Harnesses are marked for reassembly.

- Please include the pre-Wiring Package

CLEANROOM WARRENTY

MAC automation products have a one-year warrenty from date of shipment. The warrenty covers materials and workmanship of all softwall cleanroom components. If an item proves defective during the warrenty period we will either repair or replace it at our option.

Under no circumstances will we be responsible for any labor costs for removal or repair unless approved in writing prior to the work being performed. These costs will be approved soelt at our option depending on the circumstance. We also will not be responsible for any costs related to the failure of one of our products.



Flat Belt Conveyors

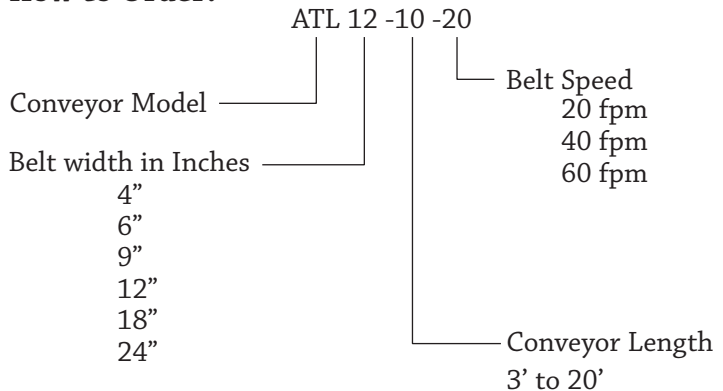


FLAT BELT CONVEYORS

Unique Features:

- Three-year, limited warranty
- Direct drive, 1/4 HP, 90V DC variable-speed drive package
- Standard speeds 20, 40, 60 FPM (specify)
- NO ROLLER CHAIN OR SPROCKETS
- SEALED GEAR REDUCER
- 8 different motor locations (specify)
- 1/8" anodized aluminum sheet
- Double V-guided, 3'-30' length, FDA approved, white PVC belt
- Standard leg sets and swivel castors (shown)
- Units up to 10' length are shipped fully assembled
- Control wiring contained in liquid-tight conduit and connectors

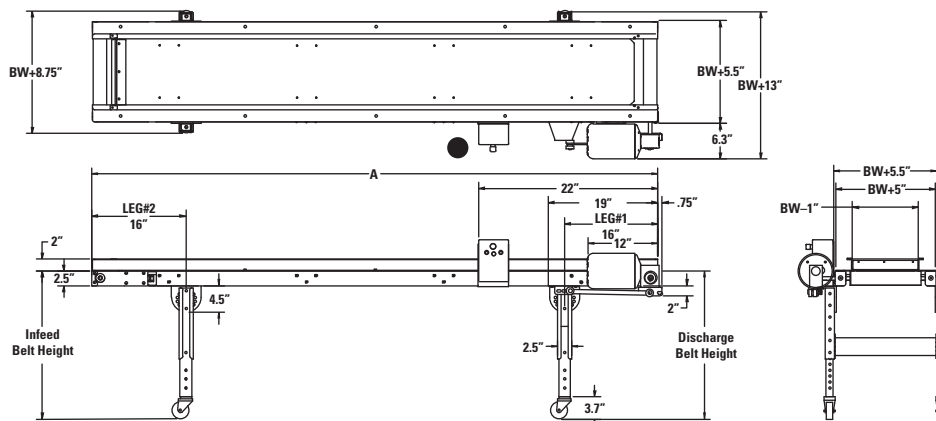
How to Order:



Specify the conveyor infeed belt height and the discharge belt height.

- Standard Starter Position (specify if other location)
- * Starter Position for Shorter Conveyors

* BW = Belt Width



How to Order:

1. Determine the **belt width** needed.
 2. Determine the **conveyor length** needed (in feet); this is the **"A" dimension**.
* "A" is available in 3' thru 20' lengths.
 3. Select the conveyor **infeed belt height** and the **discharge belt height** needed.
- Please complete special order form on page 71.

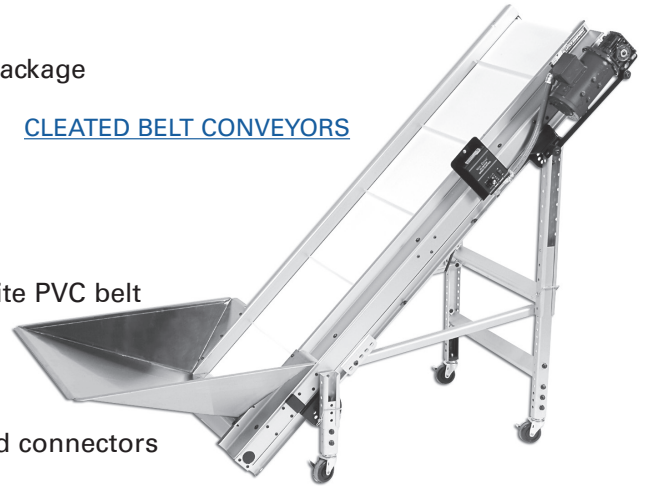
Cleated Belt Conveyors



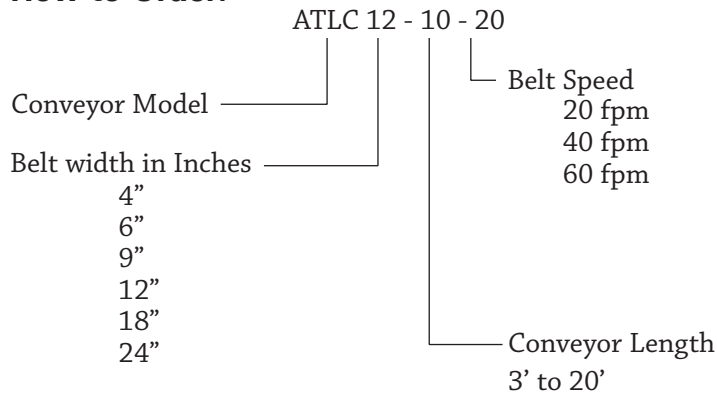
Unique Features:

- Three-year, limited warranty
- Direct drive, 1/4 HP, 90V DC, variable-speed drive package
- Standard speeds 20, 40, 60 FPM (specify)
- NO ROLLER CHAIN OR SPROCKETS
- SEALED GEAR REDUCER
- 8 different motor locations (specify)
- 1/8" anodized aluminum sheet
- Double V-guided, 3'-30' length, FDA approved, white PVC belt
- 1-1/2" high cleats on 18" centers
- Standard leg sets and swivel castors (shown)
- Units up to 10' length are shipped fully assembled
- Control wiring contained in liquid-tight conduit and connectors

CLEATED BELT CONVEYORS



How to Order:

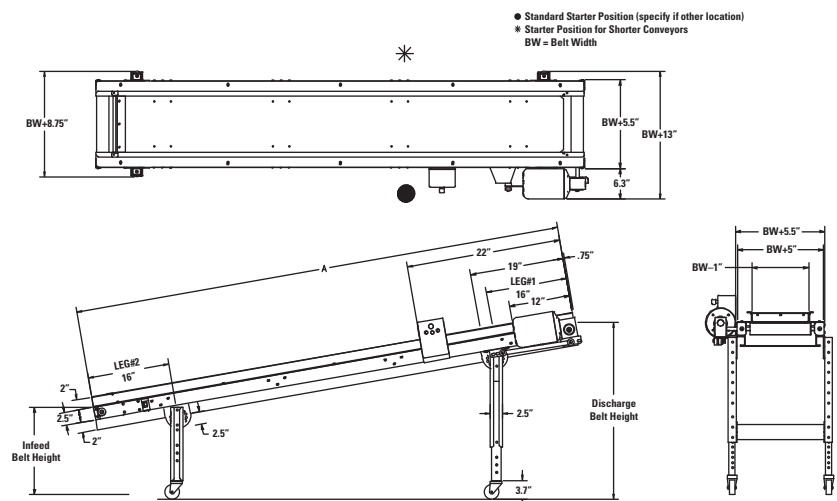


How to Order:

1. Determine the **belt width** needed.
2. Determine the **conveyor length** needed (in feet); this is the **"A" dimension**.
* "A" is available in 3' thru 14' lengths.
3. Select the conveyor **infeed belt height** and the **discharge belt height** you need.

Please complete special order form on page 71.

Specify the conveyor infeed belt height and the discharge belt height.





Adjustable Belt Conveyors

Unique Features:

- Three-year, limited warranty
- Direct drive, 1/4 HP, 90V DC, variable-speed drive package
- Standard speeds 20, 40, 60 FPM (specify)
- NO ROLLER CHAIN OR SPROCKETS
- SEALED GEAR REDUCER
- 8 different motor locations (specify)
- 1/8" anodized aluminum sheet
- Double V-guided, 3'-30' length, FDA approved, white PVC belt
- 1-1/2" high cleats on 18" centers
- Standard leg sets and swivel castors (shown)
- Units up to 10' length are shipped fully assembled
- Control wiring contained in liquid-tight conduit and connectors
- Adjustable angle incline 20-45 degree (specify)
- 2' minimum infeed length, 2' minimum discharge length
- Drive located on infeed for 24" wide models



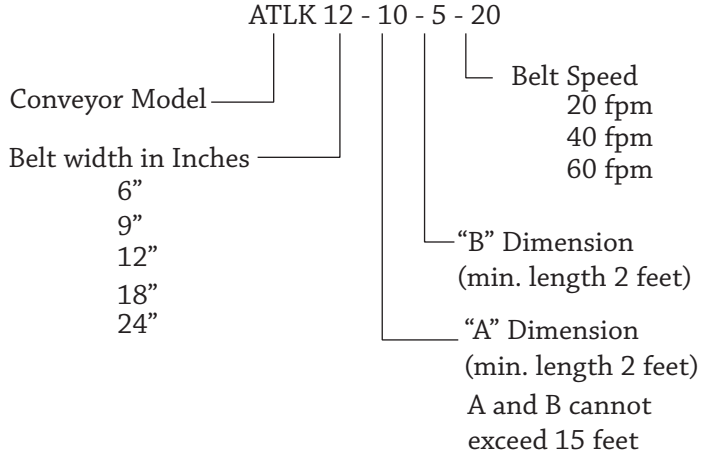
ADJUSTABLE BELT CONVEYORS

How to Order:

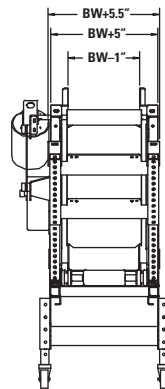
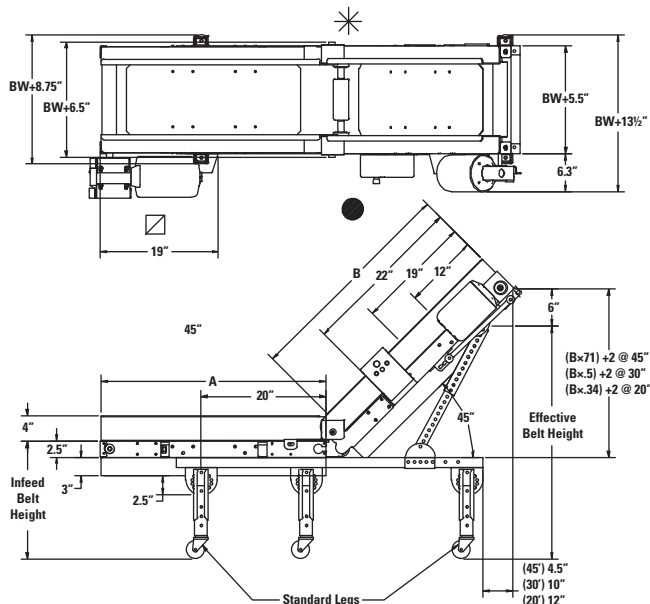
1. Determine the **belt width** you need
2. Select either the 3' x 4' or 4' x 5' Model
3. Select the conveyor infeed belt height you want
4. The correct leg sets will be supplied with locking casters

Please complete special order form on page 71.

How to Order:



Specify the conveyor infeed belt height and the discharge belt height.



- Note: A & B dimensions are in 1' Increments
 Drive location for 24" models is on Infeed End
 Drive location for 6", 9", 12", & 18" models is on Discharge
 9" min. Infeed Belt height with standard Legs & Castors
 ● Standard Starter position (specify if other location)
 * Starter position for Shorter Conveyors
 BW = Belt Width
 ☒ Drive will be mounted on the Infeed for 24" and 30" wide models

Conveyor Specifications Form



ONLINE FORM

Company:	_____	Name:	_____
Address:	_____	Phone:	_____
City:	_____	Fax:	_____
State:	_____	Email:	_____
Zip:	_____	Account Number:	_____



A. Describe Basic Application:

What are you conveying: _____

Dimensions: _____ L x W x H

Cavitation: _____

Cycle time: _____

Runner/Sprue: _____ subgated? _____ or visit
 _____ dimensions www.dme.net/rfq



D. Conveyor Height:

Infeed Belt Height: _____

Discharge Belt Height: _____

Castors: _____

What are you conveying from: _____ (and what is its height)

What are you conveying to: _____ (and what is its height)

E. Side Rails:

Rail Height: _____ 2", 4", 8", 12"; other

Construction: _____ painted, stainless

Angle: _____ 90°, 60°, 45° ; other

Extension Rails? _____ height, angle, length, location clamp-on, bolt-on

Belt Lining: _____

Belt Wipe/Brushes: _____

Other: _____

B. Specialty Applications:

(Cooling Conveyors, air/water; Parts Diverters; Box Filling, Cycle Count, Weight Scale; Robotic Conveyors; Part/Runner Separation; etc.)

C. Basic Conveyor Information:

Model: _____

Belt Width: _____

Length/Length "A": _____

Length "B": _____ (for 2 plane conveyors)

Angle: _____ (for fixed angle conveyors)

Max. Belt Speed _____ (20, 40, 80 FPM; other)

F. Parts Containment & Handling:

Infeed Hopper: _____ (size/stainless, carbon)
 _____ max ht., floor to top of hopper

Soft Drop Zone: _____ start pt. from infeed & length

Discharge Chute: _____ stainless, carbon/mylar, PTFE

Parts Diverters _____ specify type

Other: _____



Specifying and Designing EOAT for Robots

A

The success of any robotics parts movement depends on how consistently the End-of-Arm Tooling (EOAT) grips, holds, moves and releases parts. Proper EOAT design and fabrication is very important to future cost savings and efficiencies. The following DME Industrial Supplies catalog pages of SAS Automation components will satisfy your EOAT requirements.

Here are some key questions to ask to determine what type of EOAT is best for your application. The answers to these questions will determine which types of components you'll need: gripper fingers, gripper plates, vacuum cups, actuated vacuum cups, pliers and/or sprue cutters to assemble your EOAT.

Part information: What is the size, weight and shape of your part? Does it have restricted surfaces that may not be contacted or touched before a clear or colored top coat is applied in a secondary operation, e.g. a Class A finish?

For injection molders: How big is your mold? How much space is there between the mold halves when it opens? Will the EOAT fit between the tie bars? Where is the center of the mold? What is the location of ejector pins and plates? How many cavities in the mold? What is the cycle time? What is the temperature of the ejected plastic part? Where are the sprues?

The EOAT should fit within the space limitation of the mold and/or the robot's drop-off location. It should line up with the centerline of the mold and the EOAT frame should be as large as the part for maximum adjustability of the gripper components.

Robot: What is the load capacity and arm size of your robot? Does it have connections for pneumatics and part sensing or controls? What are the mechanical interface requirements, such as mounting hole sizes and locations? Do you need EOAT/robot quick-change? Will the robot move the part or will the EOAT need to move or turn the part? Where will the part be placed?

What to Look For in an EOAT

Frame/Modular components: The EOAT frame should accommodate various types of grippers and clamps and be adjustable itself. The frame must be rigid, yet strong for repeatability.

Durability: The EOAT should be long-lasting and strong, yet lightweight. Make sure the vacuum cup material (e.g., polyurethane) is durable and able to withstand the high temperatures of just-molded parts (>200F) and the grippers are a good quality to ensure long life.

Lightweight: The weight of the EOAT, combined with the part, should not exceed your robot's weight capacity. Choose an EOAT that is as light as possible, yet with the necessary rigidity. Remember that less weight also reduces robot wear and maintenance.

Low profile, compact design: The modular parts and components, when assembled, need to fit into or around tight areas in the mold or work cell area.

Flexibility: Look for tooling components that are fully adjustable for 'onsite' fine-tuning and possible modifications. This helps reduce future tooling modification costs.

Quick changeability: This feature is built-in to easily adjust the tool and make quick EOAT changes. A quick-change chuck permanently attached to the robot allows the EOAT to be affixed to a dovetail that slides in and out of the chuck. All air connections are made to the chuck via quick-touch connectors (no hand tools are required). This also enables precision repeatability when installing tools and provides standardization with the plant.

Five Steps to Design and Build an EOAT

An EOAT is designed and built based on the available part surfaces and the available working area.

Step 1 — First a frame is constructed on a dovetail mounting plate (to slide into quick-change chucks, if required) to the size of the part. Slotted profiles which are grooved along the entire profile length provide the best solution for lightweight rigidity and flexibility.

Step 2 — Next, an EOAT is built with the necessary clamps, arms and gripping devices. Vacuum cups can be used as suction devices on a part surface. Pliers usually grab the part or sprue, and fingers are used to secure a part. These components should be adjustable within the profile framework. Vacuum cups are the most cost-effective and common method to grab parts. They are available in a wide selection of diameters, materials and styles to accommodate different temperatures, durability and gripping requirements. Air-actuated grippers are a more positive method to grab parts. They also are available in a wide range of sizes and shapes to fit onto various parts. Grippers may be angled or parallel depending on the application requirements. Various cutting tools, or nippers, are available to cut sprues.

Step 3 — Sensors are used to indicate a positive grip with a part and to control location through the use of contact switches and photo eyes. In many cases, switches are built into gripper fingers.

Step 4 — The pneumatic system is then added to provide the vacuum for the vacuum cups and air supply for activation of grippers and cylinders used to flex or shift the part. The electrical system is also added to operate the part sensors and controls.

Step 5 — The last steps are assembly, testing and documentation. Testing should consist of proper alignment of all gripper components, on a jig or fixture, along with actual vacuum and air testing of the tool with the part to adequately simulate the part being moved (or ejected) from the mold and secured by the EOAT. Adjusting is easy and inexpensive when using modular components. Finally, documentation includes drawings, test results and specifications and will be used for replacement and spare parts.

The major components and fittings are listed in this catalog. Additional components and services are available by contacting your DME Industrial Supplies representative.

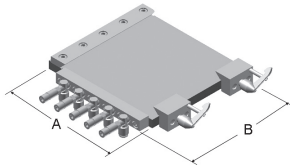


EOAT (End-Of-Arm Tooling)



Quick-Change System

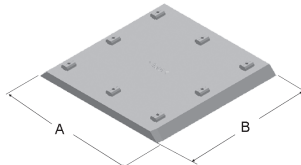
SWM... Quick-Change Mounting Chuck



Part Number				
Type	GPM	Style	A	B
SWM	1		123	100
SWM	2		231	160
SWM	3		330	250
SWM	1	E	123	100
SWM	2	E	231	160
SWM	3	E	330	250

Part Number Example: SWM 2 E
Note: E = Less Pneumatic Coupler & Fittings

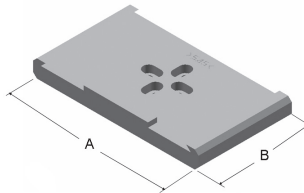
GPM... Quick-Change Mounting Plates



Part Number				
Type	Size	Profile	A	B
GPM	1		100	100
GPM	2		160	160
GPM	3		250	250
GPM	1X	L/X	100	100
GPM	2X	L/X	160	160
GPM	3X	L/X	250	250

Part Number Example: GPM 2 X
Note: L/X = With L/X Channel Nuts & Fasteners

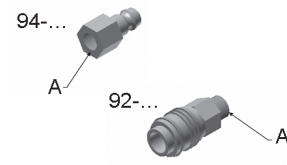
GHV... Wall Mount



Part Number			
Type	GPM	A	B
GHV	1	120	76.2
GHV	2	180	101.6
GHV	3	270	152.4

Part Number Example: GHV 2

Fittings

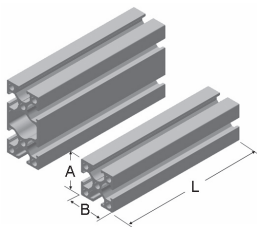


Part Number	Compatible	
	A	Fitting
94-4902	M5	92-5002
94-0104	G $\frac{1}{8}$	92-0204
94-0306	G $\frac{1}{4}$	92-0406
92-5002	M5	94-4902
92-0204	G $\frac{1}{8}$	94-0104
92-0406	G $\frac{1}{4}$	94-0306

Part Number Example: 94-0104

Frame Profiles

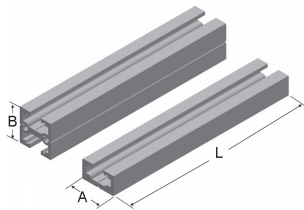
X Aluminium Profile



Part Number			
Type	A/	B	L
X	25/	25	2m
X	50/	25	2m

Part Number Example: X25/25

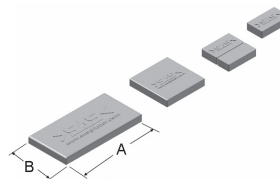
C Light... Aluminum Profile



Part Number			
Type	A/	B	L
C	18/	10L	2m
C	18/	18L	2m

Part Number Example: C18/18L

ADK... Profile End Caps

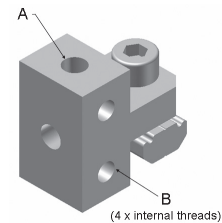


Part Number				
Type	A	B	Profile	Colour
ADK	18/	10Y	L	Yellow
ADK	18/	18Y	L	Yellow
ADK	25/	25Y	X	Yellow
ADK	50/	25Y	X	Yellow

Part Number Example: ADK 18/18Y

Pneumatic Connectors

VTB... Manifold Block

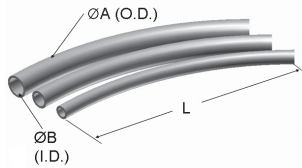


Part Number			
Type	A	Profile	B
VTB	M5	L	M5
VTB	1/4	X	G $\frac{1}{8}$

Part Number Example: VTB 1/4X

Pneumatic Tubing Connectors

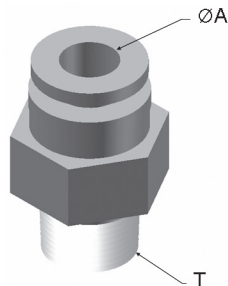
Tubing



Part Number				
Type	ØA-	ØB	L	Colour
03-	04-	03B	20	Blue
03-	04-	03Y	20	Yellow
03-	04-	03B	100	Blue
03-	04-	03Y	100	Yellow
03-	06-	04B	20	Blue
03-	06-	04Y	20	Yellow
03-	06-	04B	100	Blue
03-	06-	04Y	100	Yellow
03-	08-	06B	20	Blue
03-	08-	06Y	20	Yellow
03-	08-	06B	100	Blue
03-	08-	06Y	100	Yellow

Part Number Example: 03-06-04Y20
Yellow - Vacuum/Blue - Compressed Air
L = Meters per roll

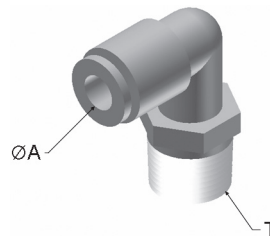
H... Male Connector One-Touch Fitting



Part Number			
Type	ØA-	T	Thread
H	04	M5	M5
H	04-	01S	G $\frac{1}{8}$
H	06	M5	M5
H	06-	01S	G $\frac{1}{8}$
H	06-	02S	G $\frac{1}{4}$
H	08-	01S	G $\frac{1}{8}$
H	08-	02S	G $\frac{1}{4}$

Part Number Example: H06-01S

L... Male Elbow One-Touch Fitting

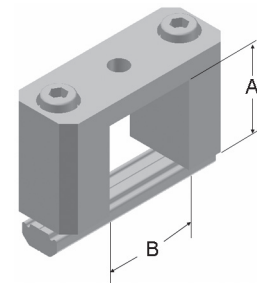


Part Number			
Type	ØA-	T	Thread
L	04	M5	M5
L	04-	01S	G $\frac{1}{8}$
L	06	M5	M5
L	06-	01S	G $\frac{1}{8}$
L	06-	02S	G $\frac{1}{4}$
L	08-	01S	G $\frac{1}{8}$
L	08-	02S	G $\frac{1}{4}$

Part Number Example: L06-01S

Frame Connectors

KBV... Cross Joint Connector



Part Number			
Type	A-	B	Profile
KBV	10-	18	L
KBV	18-	18	L
KBV	25-	25	X
KBV	25-	50	X
KBV	50-	25	X

Part Number Example: KBV25-25X

EOAT (End-Of-Arm Tooling)



A

Frame Connectors				Mounting Clamps																																																																			
KPL... Cross Joint Connector 				WIV... Angle Joint Connector 				EVB... Corner Joint Plate 				KVB... Cross Clamp 																																																											
Part Number <table border="1"> <thead> <tr> <th>Type</th> <th>A</th> <th>B</th> <th>Profile</th> </tr> </thead> <tbody> <tr> <td>KPL</td> <td>18-</td> <td>18</td> <td>L</td> </tr> <tr> <td>KPL</td> <td>25-</td> <td>25</td> <td>X</td> </tr> <tr> <td>KPL</td> <td>25-</td> <td>50</td> <td>X</td> </tr> <tr> <td>KPL</td> <td>50-</td> <td>50</td> <td>X</td> </tr> </tbody> </table>				Type	A	B	Profile	KPL	18-	18	L	KPL	25-	25	X	KPL	25-	50	X	KPL	50-	50	X	Part Number <table border="1"> <thead> <tr> <th>Type</th> <th>A</th> <th>Profile</th> </tr> </thead> <tbody> <tr> <td>WIV</td> <td>25</td> <td>X</td> </tr> <tr> <td>WIV</td> <td>50</td> <td>X</td> </tr> </tbody> </table>				Type	A	Profile	WIV	25	X	WIV	50	X	Part Number <table border="1"> <thead> <tr> <th>Type</th> <th>Profile</th> <th>A</th> <th>B</th> </tr> </thead> <tbody> <tr> <td>EVB</td> <td>25X</td> <td>101.6</td> <td>75</td> </tr> <tr> <td>EVB</td> <td>50X</td> <td>101.6</td> <td>100</td> </tr> </tbody> </table>				Type	Profile	A	B	EVB	25X	101.6	75	EVB	50X	101.6	100	Part Number <table border="1"> <thead> <tr> <th>Type</th> <th>ØA</th> <th>Profile</th> </tr> </thead> <tbody> <tr> <td>KVB</td> <td>10</td> <td>L/X</td> </tr> <tr> <td>KVB</td> <td>14</td> <td>L/X</td> </tr> <tr> <td>KVB</td> <td>20</td> <td>X</td> </tr> <tr> <td>KVB</td> <td>30</td> <td>X</td> </tr> </tbody> </table>				Type	ØA	Profile	KVB	10	L/X	KVB	14	L/X	KVB	20	X	KVB	30	X
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Part Number Example: KPL25-25X				Part Number Example: EVB25X				Part Number Example: KVB20X																																																															

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Part Number Example: GAZ20-20-50				Part Number Example: VS0-20x60N Material: N = Nitrile Rubber				Part Number Example: VS1-25N8 Note for T: 5 = M5 8=G1/4 4=G1/4 Material: N = Nitrile Rubber				Part Number Example: VS2-30N8 Note for T: 8 = G1/4 Material: N = Nitrile Rubber																																																																																																																																																	

Vacuum Cups

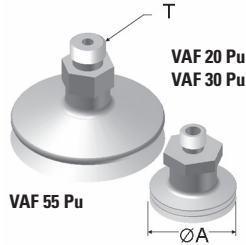
VS3... 2.5 Bellows Vacuum Cup



Part Number			
Type	ØA-	Mat.	T
VS3-	10	N	5
VS3-	15	N	5
VS3-	15	N	8
VS3-	20	N	5
VS3-	20	N	8
VS3-	30	N	8
VS3-	40	N	8
VS3-	60	N	8

Part Number Example: VS3-20-N8
 Note for T: 5 = M5 8 = G½"
 Material: N = Nitril Rubber

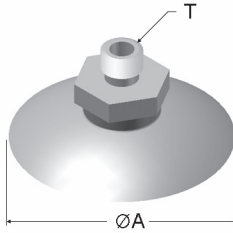
VAF... Telescopic Vacuum Cup/Adapter



Part Number			
Type	ØA-	Mat.	T
VAF	20	Pu	G½"
VAF	30	Pu	G½"
VAF	55	Pu	G½"

Part Number Example: VAF20PU
 Material: Pu = Polyurethane

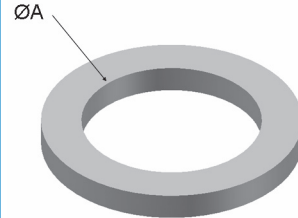
VAS... Flat Vacuum Cup/Adapter



Part Number			
Type	ØA-	Mat.	T
VAS	20	Pu	G½"
VAS	30	Pu	G½"
VAS	50	Pu	G½"
VAS	80	Pu	G¼"

Part Number Example: VAS30PU
 Material: Pu = Polyurethane

Sealing Rings for Vacuum Cups

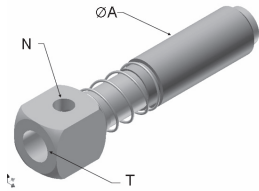


Part Number	ØA
14-49	M5
15-01	G½"
15-03	G¼"

Part Number Example: 14-49

Gripper/Mounting Arms

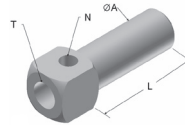
GAF... Spring Loaded Gripper Arm



Part Number					
Type	ØA	Shaft	Stroke	T	N
GAF	10	C	10	M5	M5
GAF	10	M	10	M5	M5
GAF	14	C	15	G½"	G½"
GAF	14	M	15	G½"	G½"
GAF	20	C	20	G¼"	G½"
GAF	20	M	20	G¼"	G½"

Note: M = Threaded Shaft w/Jam Nuts
 C = Regular Shaft
 Part Number Example: GAF14C15

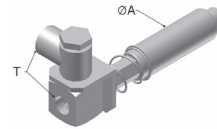
GSE... Gripper Arm



Part Number				
Type	ØA	L	T	N
GSE	10-	30	M5	M5
GSE	10-	60	M5	M5
GSE	10-	90	M5	M5
GSE	10-½-	30	G½"	M5
GSE	10-½-	60	G½"	M5
GSE	10-½-	90	G½"	M5
GSE	14-	40	G½"	G½"
GSE	14-	80	G½"	G½"
GSE	14-	120	G½"	G½"
GSE	20-	50	G¼"	G½"
GSE	20-	100	G¼"	G½"
GSE	20-	150	G¼"	G½"

Part Number Example: GSE20-50

GGG... Spring Loaded Non-Rotational Arm

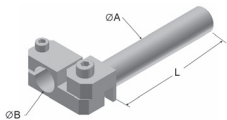


Part Number				
Type	ØA	Shaft	Stroke	T
GGG	10	C	10	M5
GGG	10	M	10	M5
GGG	14	C	15	G½"
GGG	14	M	15	G½"
GGG	14	C	40	G½"
GGG	14	M	40	G½"
GGG	20	C	20	G¼"
GGG	20	M	20	G¼"
GGG	20	C	50	G¼"
GGG	20	M	50	G¼"

Note: M = Threaded Shaft w/Jam Nuts
 C = Regular Shaft
 Part Number Example: GGS14C15

Gripper/Mounting Arms

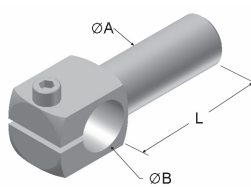
GLA... Elbow Arm



Part Number			
Type	ØA-	L	ØB
GLA	10-	30	10
GLA	10-	60	10
GLA	10-	90	10
GLA	14-	40	14
GLA	14-	80	14
GLA	14-	120	14
GLA	20-	50	20
GLA	20-	100	20
GLA	20-	150	20
GLA	20/30-	50	30
GLA	20/30-	100	30
GLA	20/30-	150	30

Part Number Example: GLA20-50

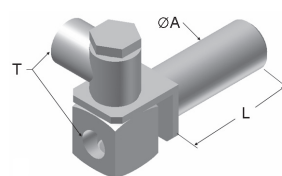
WKA... Angle Arm



Part Number			
Type	ØA-	L	ØB
WKA	10-	30	10
WKA	10-	60	10
WKA	10-	90	10
WKA	14-	40	14
WKA	14-	80	14
WKA	14-	120	14
WKA	20-	50	20
WKA	20-	100	20
WKA	20-	150	20

Part Number Example: WKA20-50

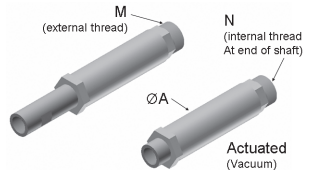
GGE... Elbow Gripper Arm



Part Number			
Type	ØA-	L	ØB
GGE	10-	30	M5
GGE	10-	60	M5
GGE	10-	90	M5
GGE	14-	40	G½"
GGE	14-	80	G½"
GGE	14-	120	G½"
GGE	20-	50	G¼"
GGE	20-	100	G¼"
GGE	20-	150	G¼"

Part Number Example: GGE20-50

RVA... Retracting Vacuum Arm



Part Number				
Type	ØA	Stroke	N	M
RVA	20-	30	G½"	M17x1

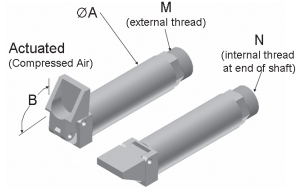
EOAT (End-Of-Arm Tooling)



A

Gripper Fingers

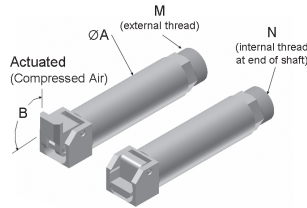
GRF... Gripper Finger (Spring Return)



Part Number				
Type	ØA	B	N	M
GRF	20-	95	G $\frac{1}{2}$	M17x1
GRF	30-	95	G $\frac{1}{2}$	M27x1

Part Number Example: GRF20-95

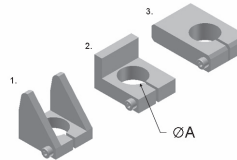
GRF... Gripper Finger (Spring Return)



Part Number				
Type	ØA	B	N	M
GRF	20-	90	G $\frac{1}{2}$	M17x1
GRF	30-	90	G $\frac{1}{2}$	M27x1

Part Number Example: GRF20-95

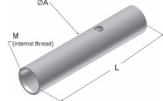
ZTS/ANS/ANF... Delrin Finger Accessories



Part Number			
Number	Type	ØA	GRF
1	ZTS	20	20-95
	ZTS	30	30-95
2	ANS	20	20-90
	ANS	30	30-90
3	ANF	20	20-95
	ANF	30	30-95

Part Number Example: ANS20

VLR... Finger Extension

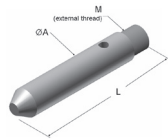


Part Number			
Type	ØA	L	M
VLR	10-	30	M8 x 1
VLR	10-	60	M8 x 1
VLR	10-	90	M8 x 1
VLR	14-	40	M12 x 1
VLR	14-	80	M12 x 1
VLR	14-	120	M12 x 1
VLR	20-	50	M17 x 1
VLR	20-	100	M17 x 1
VLR	20-	150	M17 x 1
VLR	30-	80	M27 x 1
VLR	30-	120	M27 x 1
VLR	30-	200	M27 x 12

Part Number Example: VLR30-200

Gripper Fingers

ZTB... Delrin Locator Pin

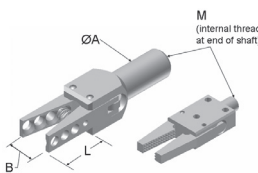


Part Number			
Type	ØA	M	L
ZTB	10	M8 x 1	50
ZTB	14	M12 x 1	110
ZTB	20	M17 x 1	110
ZTB	30	M27 x 1	100

Part Number Example: ZTB20

Part/Sprue Pliers & Grippers

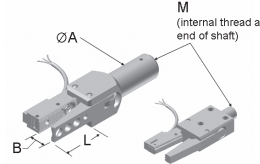
GRZ... Sprue/Parts Pliers



Part Number					
Type	ØA	Bore	L	B	M
GRZ	10-	10	29	14	M5
GRZ	20-	16	37	18	G $\frac{1}{2}$

Part Number Example: GRZ10-10

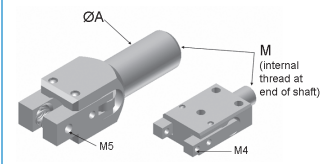
GRZ... Sprue/Parts Pliers w/PNP Sensor



Part Number						
Type	ØA	Bore	Jaw	L	B	M
GRZ	10-	10	C	29	15	M5
GRZ	20-	16	C	37	18	G $\frac{1}{2}$

Part Number Example: GRZ20-16C

GRZ... Sprue/Parts Pliers w/Mounting Holes

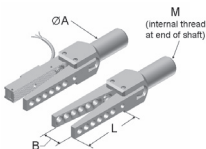


Part Number				
Type	ØA	Bore	Jaw	M
GRZ	10-	10	A	M5
GRZ	20-	16	A	G $\frac{1}{2}$

Part Number Example: GRZ20-16A

Part/Sprue Pliers & Grippers

GRZ... Sprue/Parts Pliers w/Long Jaws

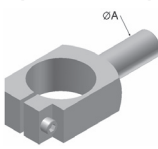


Part Number						
Type	ØA	Bore	Jaw	L	B	M
GRZ	20-	16	LC	69	34	G $\frac{1}{2}$
GRZ	20-	16	LC	69	34	G $\frac{1}{2}$

Part Number Example: GRZ20-16LC

Sprue Cutters

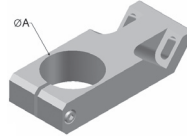
ASZ-KS... Standard Sprue Cutter Clamp



Part Number		
Type	Cutter	ØA
ASZKS20	MR20M	20
ASZKS30	MR30AM	20

Part Number Example: ASZKS20

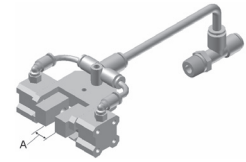
ASZ-HS... Sprue Cutter Holder



Part Number	
Type	Cutter
ASZHS20	MR20M
ASZHS30	MR30AM

Part Number Example: ASZHS20

ASZ-AH... Sprue Holder

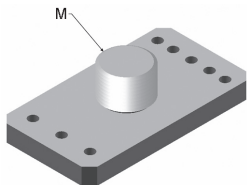


Part Number		
Type	Cutter	A
ASZAH20	MR20M	11
ASZAH30	MR30AM	16

Part Number Example: ASZAH20

Sprue Cutters

ASZ-HP... Adapter for ME Cutters

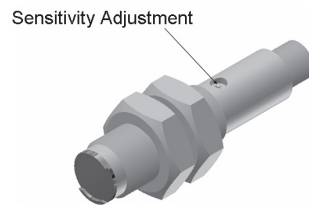


Part Number			
Type	Type	ME Size	ØA
ASZ	HP	3/5/10	M17 x 1
ASZ	HP	20/30	M17 x 1

Part Number Example: ASZHP20/30

Part Sensors

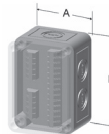
LRS... Part Sensor



Part Number			
Type	Thread	Output	Range mm
LRS14	M14	PNP	20-600
LRS18	M18	PNP	20-600

Part Number Example: LRS18

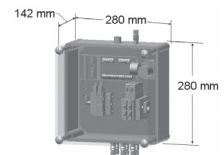
RPL & KK1... Junction Boxes



Part Number			
Type	#Output	A	B
RPL	2	65	94
RPL	4	65	94
RPL	6	94	130
RPL	8	94	130
KK	1	65	94
KK	2	94	130

Part Number Example: RPL4
RPL = Sensor "and" Logic
KK1 = Sensor Pass-through J Box

RVB... Robotic Valve Box



Part Number			
Type	Air	Vac	Upgrade
RVB	1-	1	U22
RVB	1-	2	U22
RVB	2-	1	U22
RVB	2-	2	U22

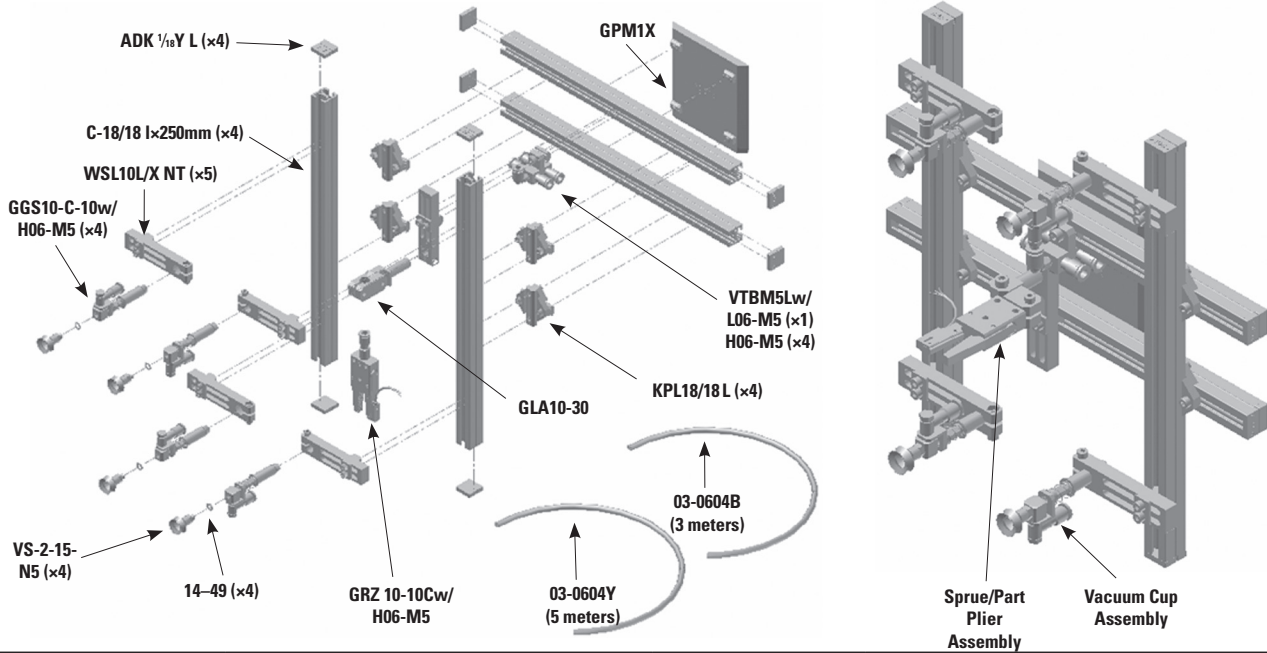
Part Number Example: RVB1-2U22
Includes solenoid valves for EOAT and pressure circuits, robotics interference boards (RPL+KK1) and air regulator



EOAT (End-Of-Arm Tooling)

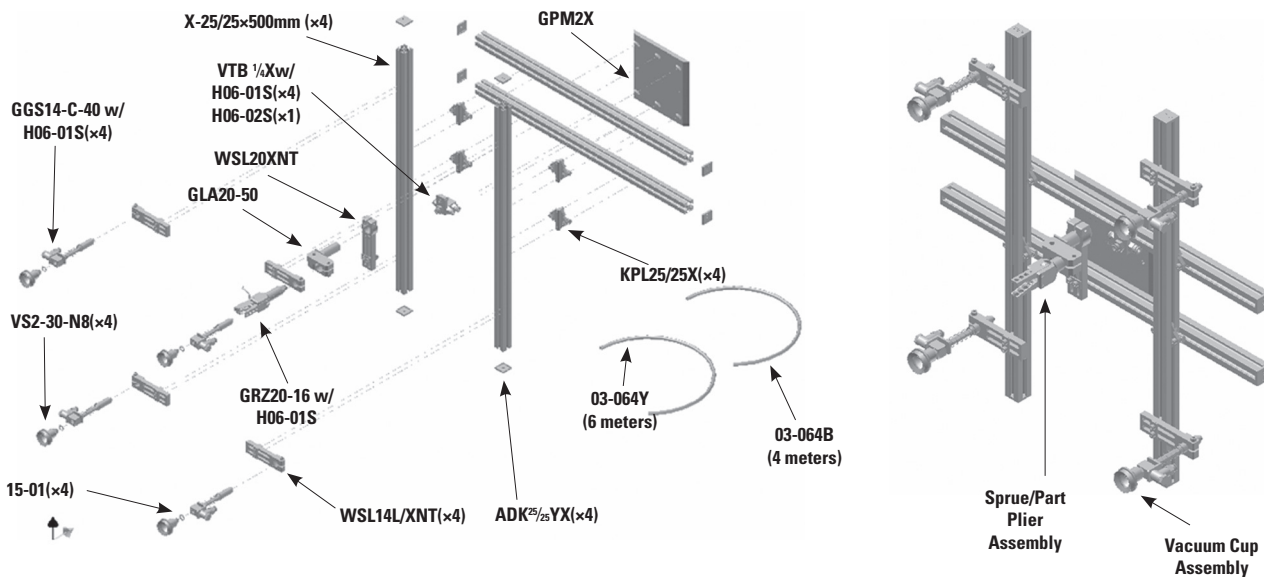


Gripper EOAT Kit C-18/18 for Robots



Part Number	# of Vacuum Cup Assemblies	# of Sprue/Part Plier Assemblies	Est. Part Weight	Max. Horizontal Cup Spacing	Max. Vertical Cup Spacing
EOATKITC18/18	4	0	1kg	325	225
EOATKITC18/18 W/PLIER	4	1	1kg	325	225

Gripper EOAT Kit X-25/25 for Robots



Part Number	# of Vacuum Cup Assemblies	# of Sprue/Part Plier Assemblies	Est. Part Weight	Max. Horizontal Cup Spacing	Max. Vertical Cup Spacing
EOATKITX25/25	4	0	5kg	650	525
EOATKITX25/25 W/PLIER	4	1	5kg	650	252

EOAT (End-Of-Arm Tooling)



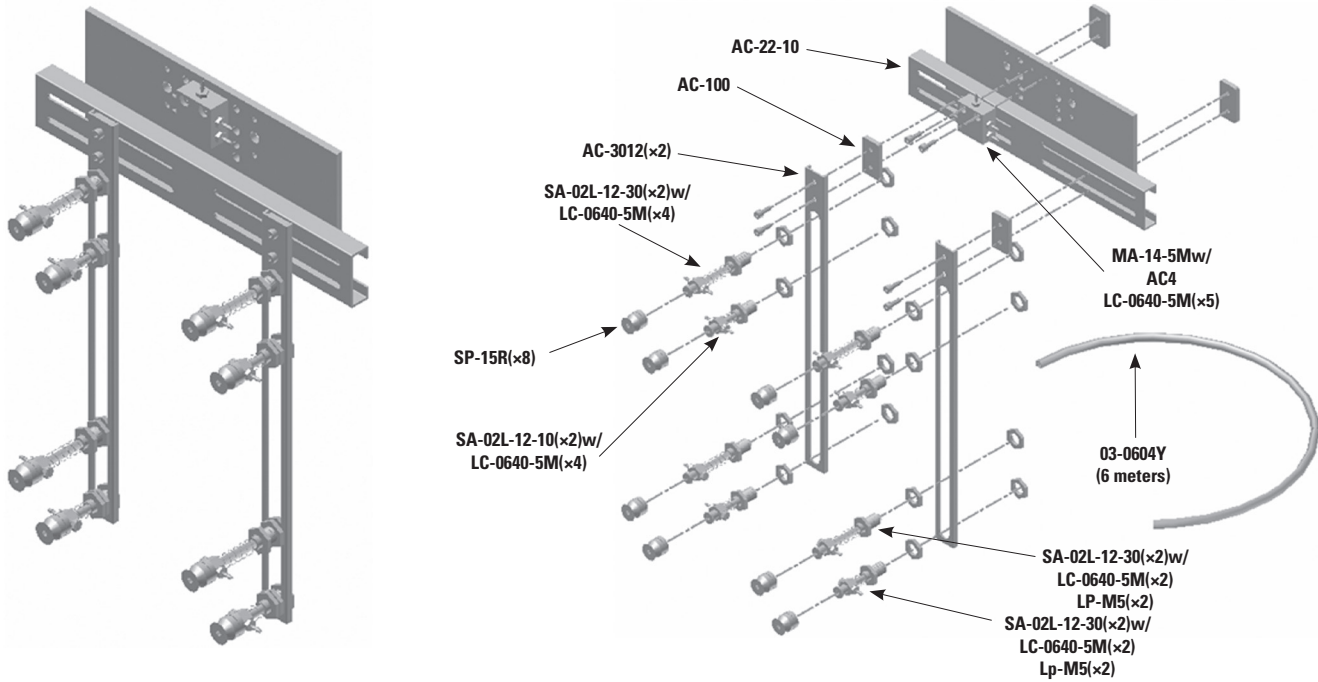
<p>Quick-Change System Assembly</p>	<p>Part/Sprue Plier & Gripper Assembly</p>	<p>Special Cylinder Assembly</p>
<p>Pneumatic Connector/Accessories Assembly</p>	<p>Mounting Clips Assembly</p>	<p>Special Cylinder & Gripper/Mounting Arm Assembly</p>
<p>Gripper/Mounting Arm Assembly</p>	<p>Gripper Finger Assembly</p>	<p>Gripper Finger Assembly</p>
<p>Part/Sprue Plier & Gripper Assembly</p>	<p>Sprue Cutter Assembly</p>	<p>Sprue Cutter Assembly</p>
<p>Part Sensor Assembly</p>	<ul style="list-style-type: none"> • Modular, Adjustable Gripper Components • Dependable Technical Service • Other Items and Sizes Available Upon Request 	



EOAT (End-Of-Arm Tooling)

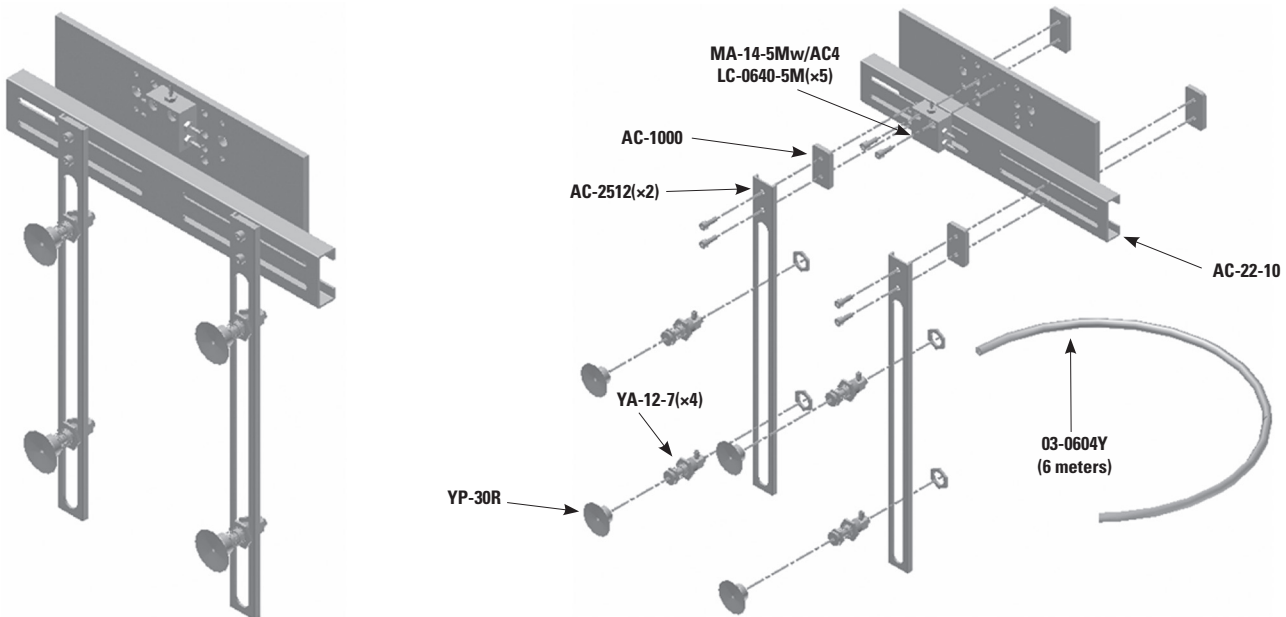


Gripper Kit 8-Cup for EOAT/Sprue Pickers



Part Number	# of Vacuum Cup Assemblies	Est. Part Weight	Max. Horizontal Cup Spacing	Max. Vertical Cup Spacing
Gripper Kit 8 Cup For Sprue Pickers	8	500 grams	225	240

Gripper Kit 4-Cup for EOAT/Sprue Pickers



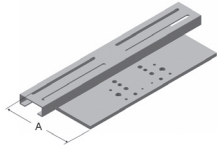
Part Number	# of Vacuum Cup Assemblies	Est. Part Weight	Max. Horizontal Cup Spacing	Max. Vertical Cup Spacing
Gripper Kit 8 Cup For Sprue Pickers	4	500 grams	225	195

EOAT (End-Of-Arm Tooling)



Chuck Mounting Plate & Profiles for EOAT/Sprue Pickers

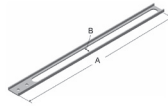
Chuck Mounting Plate



Part Number	A
AC2210	100
AC2240	140

Part Number Example: AC2210

Slide Rail



Part Number	A	B
AC2510	250	10
AC2512	250	12
AC3010	300	10
AC3012	300	12
AC3510	350	10
AC3512	350	12

Part Number Example: AC3012

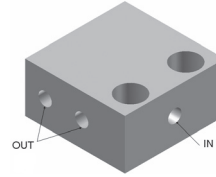
Mounting Fasteners for Rails



Part Number
AC1000
Includes
Plane Nut (Large)
Screw
Spacer

Part Number Example: AC1000

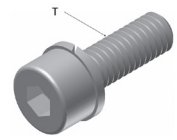
Manifold



Part No.	In Flow	Out Flow
MA14-5M	M5 (x1)	M5 (x4)

Part Number Example: MA14-5M

Manifold Mounting Screws



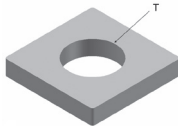
Part Number	T
AC4	M4

Note: Comes in quantities of 2
Part Number Example: AC4



Vacuum/Suction Cups

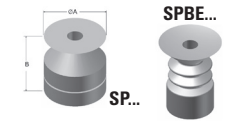
Suction Cup Holder Mounting Nut



Part Number	T
AC	010
AC	012

Part Number Example: AC010

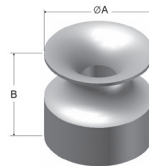
SP... S-Series Suction Cup



Part Number	A	B	Arm
SP	06M	12	SA-01L
SP	08M	12	SA-01L
SP	09M	12	SA-01L
SP	13M	12	SA-01L
SP	15M	16	SA-02L
SP	20M	16	SA-02L
SP	30M	16	SA-02L
SP	40M	16	SA-02L
SP	13S	12	SA-02L
SP	20S	12	SA-02L
SP	30S	12	SA-02L
SPBE	12	17	SA-01L
SPBE	20	25	SA-02L

Part Number Example: S P20

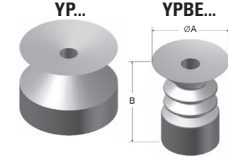
HP... H-Series Suction Cup



Part Number	A	B	Arm
HP	06	12	HA-
HP	08	12.5	HA-
HP	10	14	HA-
HP	15	14.5	HA-

Part Number Example: HP06

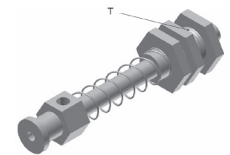
YP... Y-Series Suction Cup



Part Number	A	B	Arm
YP	06R	12	YA-
YP	08R	12	YA-
YP	10R	12	YA-
YP	13R	12	YA-
YP	16R	12	YA-
YP	22R	12	YA-
YP	30R	12	YA-
YP	40R	12	YA-
YPBE	10R	21	YA-
YPBE	16R	21	YA-
YPBE	20R	21	YA-

Part Number Example: YP30R

SA... Suction Cup Holder for S Series

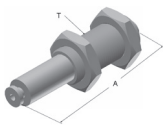


Part Number	T	Stroke
SA01L	10-	5
SA01L	12-	10
SA02L	10-	5
SA02L	12-	5
SA02L	12-	10
SA02L	12-	30

Note: T = Threaded shaft
Part Number Example: SA02L12-5

Holder/Mounting Arm

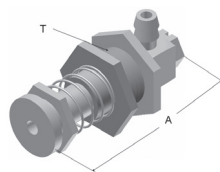
HA... Suction Cup Holder for H-Series



Part Number	Stroke	T	A
HA01J-	10	16	30
HA01J-	15	16	41
HA01J-	20	16	51
HA01J-	25	16	61
HA01J-	30	16	71

Note: T = Threaded shaft
Part Number Example: HA01J20

YA... Suction Cup Holder for Y-Series

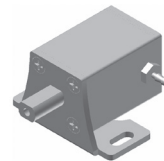


Part Number	T	Stroke	A
YA	8-	4	29
YA	12-	7	37

Note: T = Threaded shaft
Part Number Example: YA8-4

Cylinder, Grippers & Accessories

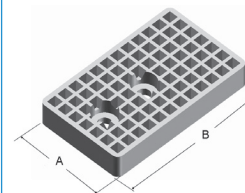
AMC... Mini Cylinder



Part Number	Stroke
AMC	10
AMC	15
AMC	20
AMC	20S

Note: S = Sensor
Part Number Example: AMC20

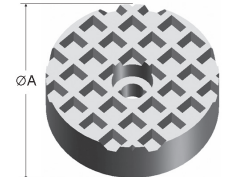
MA... Rectangular Pad



Part Number	A	B
MA01	30	50
MA01S	30	50

Note: S = Silicon
Part Number Example: MA01

MA... Round Pad w/Rubber

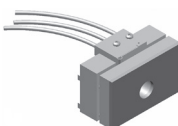


Part Number	A
MA03	25
MA04	50

Part Number Example: MA04

Cylinder, Grippers & Accessories

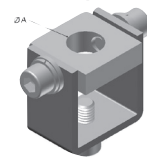
MA... Rectangular Pad w/Rubber & Sensor



Part Number
MA05

Part Number Example: MA-05

AB... Suction Cup Angle Bracket

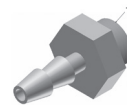


Part Number	A
AB	10
AB	12

Part Number Example: AB12

Pneumatic Connectors

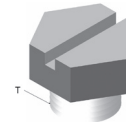
LC... Barb Fittings



Part Number	Tubing	T
LC	0425	M5
LC	0640	M5

Note: 0425 = 4mm Tubing
Note: 0T = Threaded stud
Part Number Example: LC0425M5

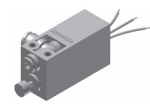
LP... Plug



Part Number	T
LP	M5

Note: Comes in quantities of 10
Note: T = Threaded stud
Part Number Example: LPM5

VBH... Vacuum Generator



Part Number
VBH10-66P
VBH10-66S

P = no switch S = with switch
Part Number Example: VB10-66S (shown)







Vacuum Suction Cups

Recommended materials for the plastics industry

In view of the high temperature encountered in the removal of molding from the injection molds, the use of silicone cups is recommended. If plastic parts are to be printed after removal from the mold without surface finishing, we recommend the use of Viton (FKM). Should the suction cups required for your particular application not be listed in this catalog, please inquire.

VACUUM SUCTION CUPS

	Flat Suction Cups	Page 84–89
	Oval Suction Cups	Page 90–91
	Bellows Suction Cups	Page 92–97
	Fittings	Page 98–102

Material Number	Code	Commercial Name	Trade Name	Temp.°C Min./Max.	Wear Resistance	Resistance to:			Specifications
						Oil/Grease	Weather/Ozone	Gasoline	
1	NBR (50 Shore A)	Nitrile Rubber	Perbunan	-40°/+90°	⊙	●	X	●	Cold-flexible, water-resistant to 70°C
2	Si (50 Shore A)	Silicone Rubber	Silicone	-70°/+200°	X	⊙	●	X	Anti-marking on colorless, white, beige surfaces
2-AS	Si-AS antistatic (50 Shore A)	Silicone Rubber	Silicone	-20°/+130°	X	⊙	●	X	
3	NR (50 Shore A)	Natural Rubber	SMR	-40°/+80°	●	X	X	X	
4	NR-E (40 Shore A)	Natural Rubber	SMR	-40°/+80°	●	X	⊙	X	Long service life
5	PUR	Polyurethane	Vulkollan	-25°/+80°	●	●	●	●	Long service life Vulkollan brown (anti-marking)
7	FKM	Fluorocautchouc	Viton	-20°/+200°	⊙	●	●	●	High resistance to chemicals
9	CR (50 Shore A)	Chloroprene	Neoprene	-40°/+90°	●	⊙	⊙	⊙	Highly weatherproof
V	Vinyl	Polyvinylchloride	PVC	-20°/+85°	●	X	X	X	Long service life
14	HNBR	Hydrogenated Nitrile Rubber		-40°/+170°	●	●	⊙	●	Long service life, highly anti-marking
15	EPDM	Ethylene-propylene-diene rubber	Buna AP	-40°/+130°	X	X	●	X	Highly resistant to hot water, vapor and chemicals

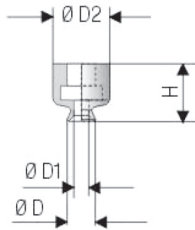
● **Recommended**

⊙ **Good**

X Not Recommended

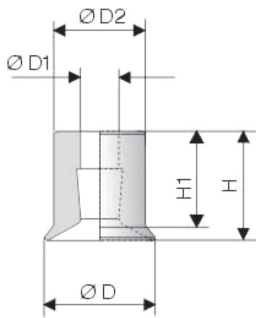
Vacuum Suction Cups

Flat Suction Cups



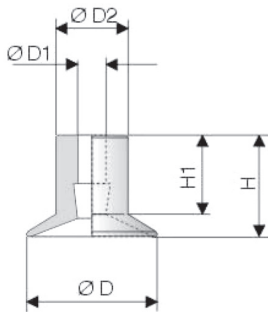
Art. No.*	Material Material Matériel			ØD	ØD1	ØD2	H
102.002.004	NBR (sw), Si (tr), si-AS (sw), PUR (bl), PUR (ge)	0,4 mm	0,2 g	2,0	1,0	4,0	4,0
102.003.005		0,5 mm	0,2 g	3,5	1,0	4,0	4,0

Art. No.*	Art.No.	Fittings
102.002.004	270.300	M5 AG
102.003.005		



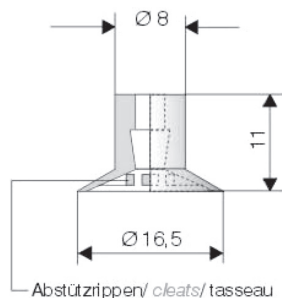
Art. No.*	Material Material Matériel			ØD	ØD1	ØD2	H	H1
102.005.090	NBR (sw),	0,5 mm	0,2 g	5,0	2,0	4,5	6,0	5,5
102.011.093	Si (tr),	1,0 mm	0,3 g	11,0	3,8	9,0	10,5	9,2

Art. No.*	Art.No.	Fittings
102.005.090	270.153	M5 AG
102.011.093	270.104	M6 AG
	270.134	M5 AG



Art. No.*	Material Material Matériel			ØD	ØD1	ØD2	H	H1
102.007.091	NBR (sw), Si (tr),	1,0 mm	0,1 g	7,0	2,0	5,0	6,5	5,5
102.009.092		1,5 mm	0,1 g	9,0	2,0	5,0	7,0	5,5
102.016.098		2,0 mm	0,8 g	16,0	3,8	9,0	11,5	8,5

Art. No.*	Art.No.	Fittings
102.007.091	270.153	M 5 AG
102.009.092		
102.016.098	270.003	G 1/8" AG
	270.104	M 6 AG
	270.134	M 5 AG
	270.109	G 1/8" IG



Art. No.*	Material Material Matériel		
104.016.003	NBR (sw), Si (tr),	0,5 mm	0,8 g

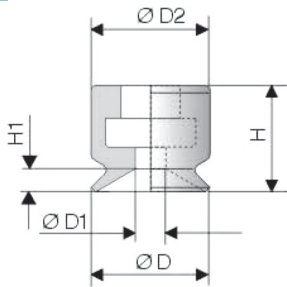
Art. No.*	Art.No.	Fittings
104.016.003	270.003	G 1/8" AG
	270.104	M 6 AG
	270.134	M 5 AG
	270.109	G 1/8" IG



Vacuum Suction Cups

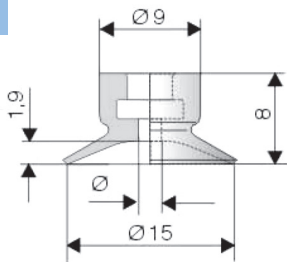
Flat Suction Cups

A



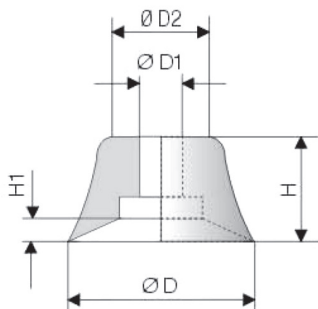
From	Art. No.*	Material Material Matériel			Ø D	Ø D1	Ø D2	H	H1
A	102.005.009	NBR (sw),	0,9 mm	0,4 g	5,0	1,5	7,5	6,5	0,9
	102.006.013	Si (tr),	1,0 mm	0,7 g	6,0	2,0	7,5	6,5	1,0
	102.008.017	Si-AS (sw),	1,4 mm	0,4 g	8,0	2,0	8,0	7,0	1,4
	102.010.024	PUR (bl)	1,2 mm	0,2 g	10,0	2,0	8,5	7,5	1,3
B	102.015.309	NBR (sw), Si (tr), PUR (bl)	1,9 mm	0,5 g	15,0		9,0	8,0	1,9

B



Art. No.*		Art.No.	Fittings
102.005.009		270.005	M 5 IG
102.006.013		270.010	M 5 AG
102.008.017		270.007	G 1/8" IG
102.010.024		270.009	G 1/8" AG
102.015.309			

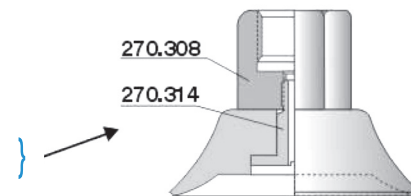
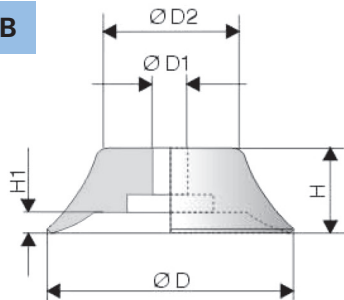
A



From	Art. No.*	Material Material Matériel			Ø D	Ø D1	Ø D2	H	H1
A	102.015.030	NBR (sw), Si (tr), PUR (bl)	2,0 mm	0,6 g	15	4,5	10	8	1,9
	102.020.041		2,0 mm	1,5 g	20	4,5	12	10	2,3
	102.025.047		2,5 mm	2,7 g	25	6,0	13	14	3,0
	102.030.053		2,0 mm	3,3 g	30	6,0	11	12	2,0
B	102.035.056		3,0 mm	6,0 g	35	6,0	18	14	3,0
	102.040.061		3,0 mm	7,6 g	40	6,0	21	14	3,5
	102.050.065		3,5 mm	11,2 g	50	6,0	23	15	4,0

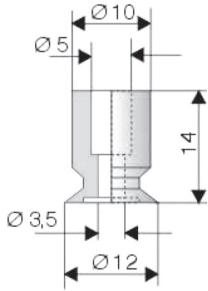
Art. No.*		Art.No.	Fittings
102.015.030		270.005	M 5 IG
		270.010	M 5 AG
		270.017	G 1/8" IG
		270.021	G 1/8" AG
102.020.041		270.006	G 1/8" AG
		270.018	G 1/8" IG
102.025.047		270.019	G 1/8" IG
		270.030	G 1/8" AG
102.030.053		270.274	G 1/4" AG
		270.275	G 1/4" IG
102.035.056		270.312	M 6 AG
102.050.065		270.012	G 1/8" AG
		270.020	G 1/8" IG
		270.034	G 1/4" AG
		270.308	G 1/4" IG
		270.314	
		270.314	M 6 AG

B



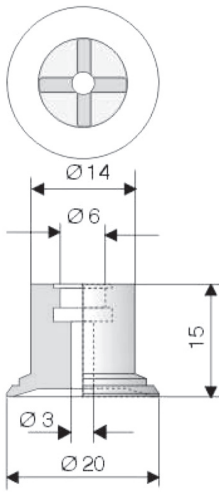
Vacuum Suction Cups

Flat Suction Cups



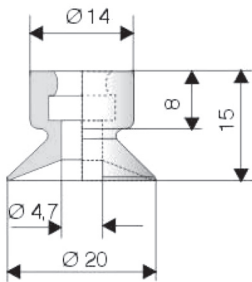
Art. No. 107.012.002_*	NBR (sw), Si (tr), NR-E (b)		
		0,4 mm	0,5 g

Art. No.*	Art.No.	Fittings
107.012.002	270.013	M5 AG



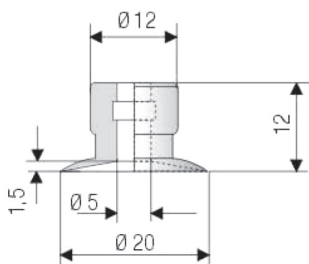
Art. No.	Material Material Matériel		
102.020.083.2	Si (tr) 30 Shore		
102.020.080.1	NBR (sw) 40 Shore		
102.020.082.1	NBR (sw) 60 Shore		
102.020.084.2	Si (r) 60 Shore		

Art. No.*	Art.No.	Fittings
102.020.083.2	270.037	M 5 AG
102.020.080.1	270.085	G 1/8" AG
102.020.082.1	270.086	G 1/8" IG
102.020.084.2	270.373	M 6 AG
	270.374	M 8 AG



Art. No. 126.020.020_*	NR (or) Si (tr) FKM (sw)		
		3,5 mm	2,2 g

Art. No.*	Art.No.	Fittings
126.020.020	270.006	G 1/8" AG
	270.018	G 1/8" IG



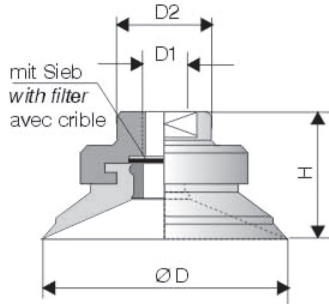
Art. No. 126.020.005_*	NBR (sw). Si (tr), NR (sw)		
		1,5 mm	1,0g

Art. No.*	Art.No.	Fittings
126.020.005	270.015	G 1/8" IG
	270.194	G 1/4" AG

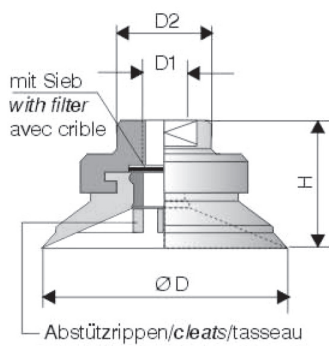


Vacuum Suction Cups

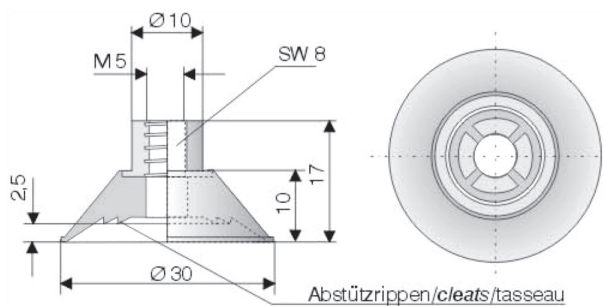
Flat Suction Cups



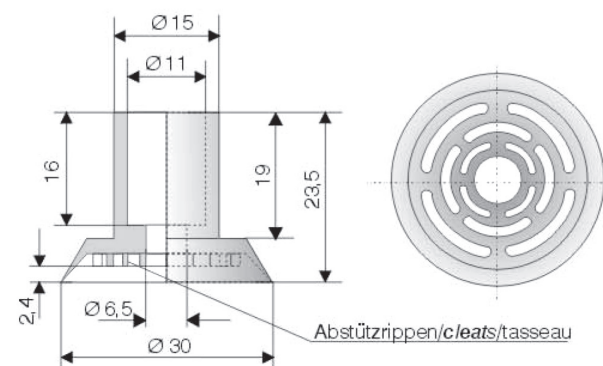
Art. No.*	Material Material/ Matériau			ØD	D1	D2	H	Ersatzsauger Spare Cup/Vent. de rechange
120.020.006	NBP (sw), Si (tr)		3,5 g	22	M5	G $\frac{1}{8}$ "*	16	102.020.095
120.030.013			4,4 g	32	M5	G $\frac{1}{8}$ "	18	102.030.096
120.040.076			10,6 g	42	G $\frac{1}{8}$ "*	-	21	102.040.094
120.050.078			23,8 g	52	G $\frac{1}{8}$ "	-	26	102.050.097



Art. No.*	Material Material/ Matériau			ØD	D1	D2	H	Ersatzsauger Spare Cup/Vent. de rechange
123.020.003	NBR (sw), Si (tr)		3,5 g	22	M5	GW	16	125.020.004
123.025.010			4,5 g	28	M5	GW	17	125.025.007
123.030.019			5,0 g	32	M5	GW	18	125.030.010
123.040.028			11,0 g	42	G $\frac{1}{8}$ "	-	21	125.040.013
123.050.034			24,0 g	52	G $\frac{1}{8}$ "	-	26	125.050.017



Art. No. 150.030.031.*	Si (r), PUR (bg), CR (sw)		2,5 mm		3,5 g
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Art. No. 104.030.009.*	NBR (sw), Si (w), Si (tr), NR (sw)		2,4 mm		3,0 g
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Saugerträger

Support for suction cup

Porteur pour ventouse

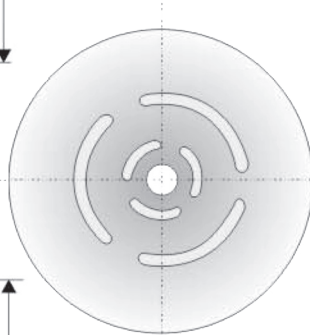
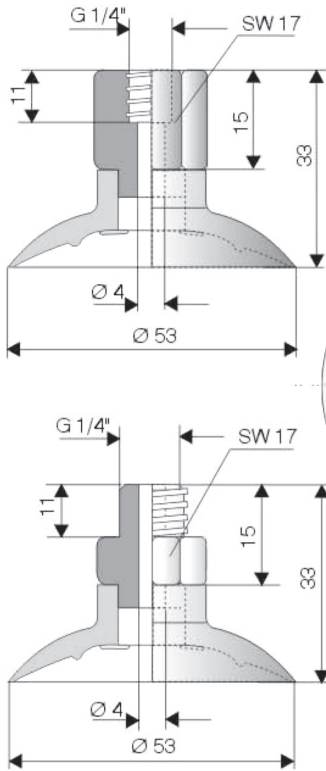
Art. No. 50.043

Art. No.*	Art.No.	Fittings
104.030.009	270.044	G $\frac{1}{4}$ " AG
	270.046	G $\frac{1}{4}$ " IG

*When ordering please indicate desired material.

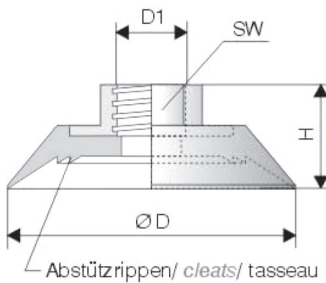
Vacuum Suction Cups

Flat Suction Cups

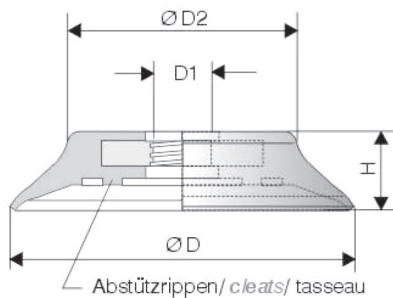


Art. No. 110.053.082.*	NBR (sw), Si (r)		
		3,0 mm	23,0 g

Art. No. 110.053.083.*	NBR (sw), Si (r)		
		3,0 mm	19,6 g



Art. No.*	Material Material Matériel			Ø D	D1	H	SW
150.050.032	Si (r), FKM (sw), CR (sw)	4,0 mm	13,6 g	50	G1/8"	18	14
150.075.033		6,0 mm	38,0 g	75	G1/4"	24	17



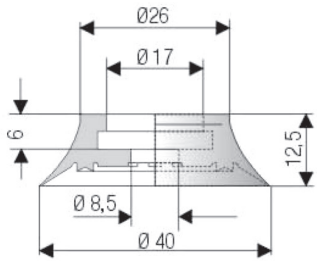
Art. No.*	Material Material Matériel			Ø D	D1	D2	H
102.060.303	FKM (g)	5,0 mm	15,2 g	60	G1/4"	38,5	16
102.080.304	NBR (sw) Si (tr), PUR (or)	6,0 mm	52,8 g	80	G1/4"	53,0	18
102.095.305		6,0 mm	92,0 g	95	G1/4"	68,0	19

Art. No.*		Fittings
102.060.303	Art.No. 270.078	G1/4" 1G
102.080.304	270.090	M10 x 1,25
102.095.305	270.191	G1/4" AG



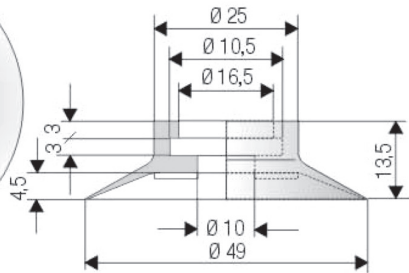
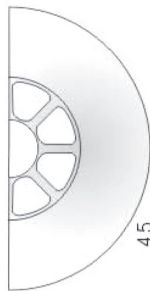
Vacuum Suction Cups

Flat Suction Cups



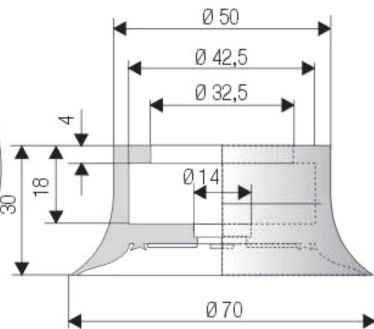
Art. No.*	Material Material Matériel			Art.No.	Fittings
102.040.357.*	Si (tr)	3,0 mm	20 g	270.234	G $\frac{1}{4}$ " IG
	NR-E (b) 40° Sh				

für raue und genarbte Oberflächen
for rough and grainy surfaces
pour surfaces grainées et rugueux



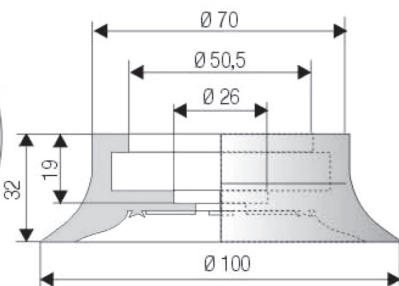
Art. No.*	Material Material Matériel			Art.No.	Fittings
154.049.068.1	NBR (gr)	3,5 mm	22 g	270.234	G $\frac{1}{4}$ " IG

für raue und genarbte Oberflächen
for rough and grainy surfaces
pour surfaces grainées et rugueux



Art. No.*	Material Material Matériel			Art.No.	Fittings
102.070.234.*	NR (bg), SBR (rb), Si (tr),	6,0 mm	32 g	270.179	G $\frac{1}{4}$ " IG
	NR-E (b) 40° sh				

für raue und genarbte Oberflächen
for rough and grainy surfaces
pour surfaces grainées et rugueux



Art. No.*	Material Material Matériel			Art.No.	Fittings
102.100.269.*	NR (bg), SBR (rb), Si (tr),	5,0 mm	68 g	270.180 270.180- $\frac{1}{2}$	G $\frac{1}{4}$ " IG G $\frac{1}{2}$ " IG
	NR-E (b) 40° sh				

für raue und genarbte Oberflächen
for rough and grainy surfaces
pour surfaces grainées et rugueux

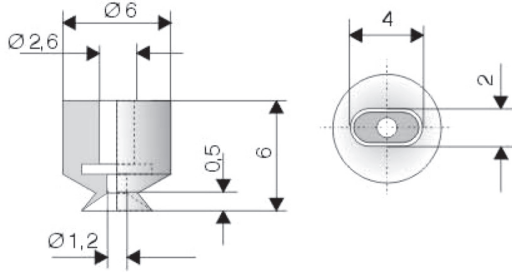
*When ordering please indicate desired material (see page 84).

Vacuum Suction Cups

Oval Suction Cups

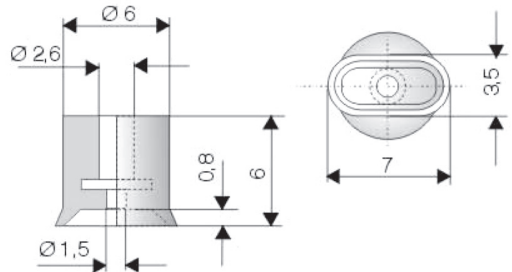


A



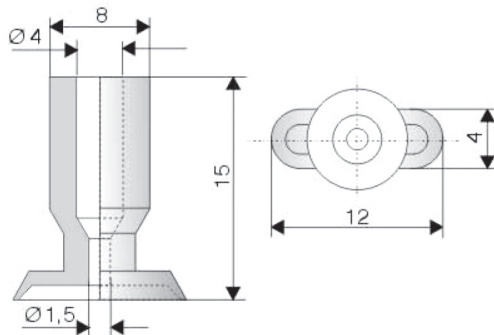
Art. No. 132.4 x 2.031_*	NBR (sw), Si (tr), Si-AS (sw) PUR (bl)		1,5 mm		0,05 g

Art. No.*	Art.No.	Fittings
132.4 x 2.031	270.300	M5 AG



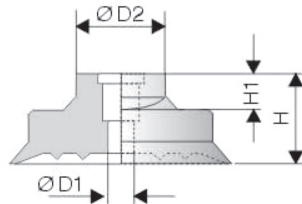
Art. No. 132.7 x 4.034_*	NBR (sw), Si (tr), Si-AS (sw) FUR (bl)		0,6 mm		0,1 g

Art. No.*	Art.No.	Fittings
132.7 x 4.034	270.300	M5 AG



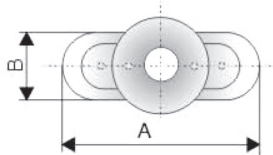
Art. No. 132.12 x 4.004_*			

Art. No.*	Art.No.	Fittings
132.12 x 4.004	270.104 270.134	M6 AG M5 AG



Art. No.*	Material Material Matériel			A	B	D1 Ø	D2 Ø	H
132.15 x 5.008	NBR (sw), Si (r), FKM (sw)	1,0 mm	0,5 g	15	5	1,5	9	11,5
132.18 x 6.012	NBR (sw), Si (r), PUR (bg)	1,0 mm	0,5 g	18	6	2,0	9	12,0
132.24 x 8.016	NBR (sw), Si (r), NR-E (b)	1,0 mm	1,0 g	24	8	3,0	12	12,0
132.30 x 10.018	NBR (sw), Si (r), PUR (bg)	2,0 mm	1,4 g	30	10	3,5	12	12,0
132.36 x 12.019	NBR (sw), Si (r), PUR (bg)	2,0 mm	1,8 g	36	12	4,5	12	12,0

Silikon (tr) auf Anfrage/Silicone (tr) on request/Silicone (tr) sur demande



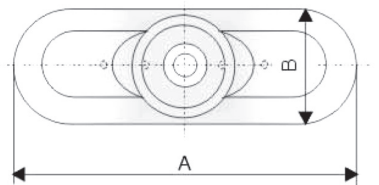
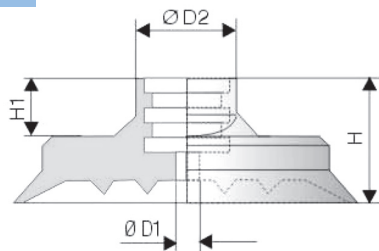
Art. No.*	Art.No.	Fittings
132.15 x 5.008	270.094	M5 AG
132.18 x 6.012		G 1/8" AG
132.24 x 8.016		G 1/8" IG
132.30 x 10.018		
132.36 x 12.019		



Vacuum Suction Cups

Oval Suction Cups

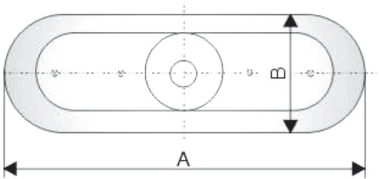
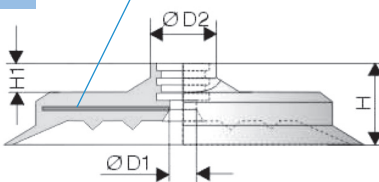
A



Form	Art. No.*	Material Material Matériel			A	B	D1 Ø	D2 Ø	H	H1
A	132.45 x 15.020	NBR (sw), Si (r), PUR (bg)	3,0 mm	4,2 g	45	15	4,0	17	21	14
	132.60 x 20.022	NBR (sw), Si (r), PUR (bg)	4,0 mm	9,0 g	60	20	4,0	17	21	10
	132.75 x 25.023	NBR (sw), Si (r)	4,0 mm	15,0 g	75	25	4,0	18	22	8
B	132.85 x 28.024	NBR (sw), Si (r)	4,0 mm	20,0 g	85	28	7,5	18	22	8
	132.100 x 35.26	NBR (sw), Si (r)	4,0 mm	32,0 g	100	35	7,5	18	22	8

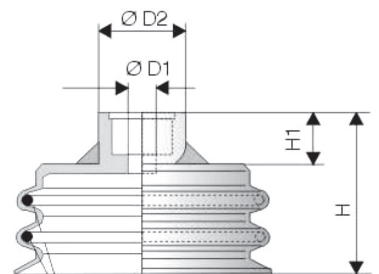
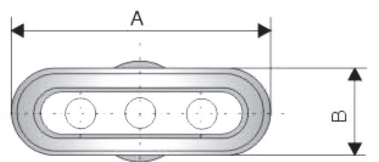
Silikon (tr) auf Anfrage/Silicone (tr) on request/Silicone (tr) sur demande

B



vulcanized aluminum
reinforcement

Art. No.*	 Art.No.	Fittings
132.45 x 15.020	270.097	G $\frac{1}{4}$ " AG G $\frac{1}{4}$ " IG
132.60 x 20.022		
132.75 x 25.023		
132.85 x 28.024		
132.100 x 35.26		



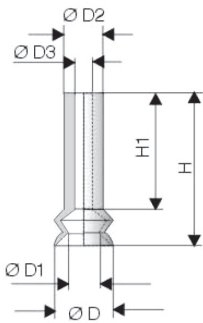
Drahtbügel
Stiffener (wire)
Fil de renforcement

Art. No.*	Material Material Matériel			A	B	D1 Ø	D2 Ø	H	H1
138.25 x 8.002	NBR (sw) SI (r)	7,0 mm	2,0 g	25	8	2,5	10,0	18,5	6,0
138.45 x 15.003		8,5 mm	7,0 g	45	15	5,0	17,5	28,5	9,5
138.75 x 25.004		10,5 mm		75	25	6,0	17,7	34,5	9,5

Art. No.*	 Art.No.	Fittings
138.25 x 8.002	270.094	M5 AG
	270.095	G $\frac{1}{8}$ " AG
	270.096	G $\frac{1}{8}$ " IG
138.45 x 15.003 138.75 x 25.004	270.097	G $\frac{1}{4}$ " AG
	270.098	G $\frac{1}{4}$ " IG

Vacuum Suction Cups

Bellows Suction Cups w/ 1½ folds



Art. No. 23.005.095.V					
Vinyl (bl)			2,0 mm		0,8 g
ØD	ØD1	ØD2	ØD3	H	HI
4,5	2,5	3	1,5	1,3	9
	Art.No.	270.001 M5 AG		Seite/page 1	

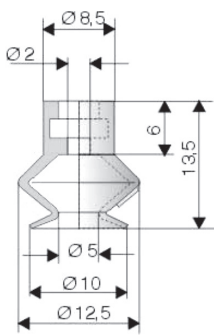
Art. No. 23.005.181.*					
NBR (sw), Si (tr), PUR (ge), FKM (g)			2,0 mm		0,8 g
ØD	ØD1	ØD2	ØD3	H	HI
5	2	3	1,5	13	9,5
	Art.No.	270.001 M5 AG		Seite/page 16	

Art. No. 21.007.096.*		
NBR (sw) Si (tr)		2,0 mm
		0,4 g

Art.No.	Fittings
270.104	M6 AG
270.317	M5 AG

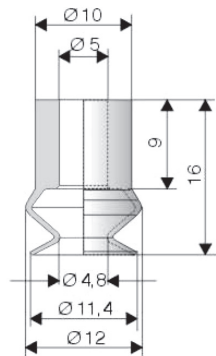
Art. No. 23.008.057.2		
Si (tr) Si-AS (sw)		3,5 mm
		0,4 g

Art.No.	Fittings
270.104	M6 AG
270.134	M5 AG



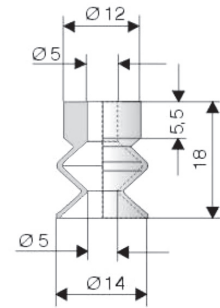
Art. No. 23.010.123.*		
NBR (sw), Si (tr), Si-AS (sw), PUR (bl), CR (sw)		4,0 mm
		0,6 g

Art.No.	Fittings
270.009	G½" AG
270.301	M5 AG



Art. No. 23.011.008.*		
NBR (sw) Si (tr)		4,5 mm
		0,8 g

Art.No.	Fittings
270.003	G½" AG
270.013	M5 AG
270.103	M6 AG



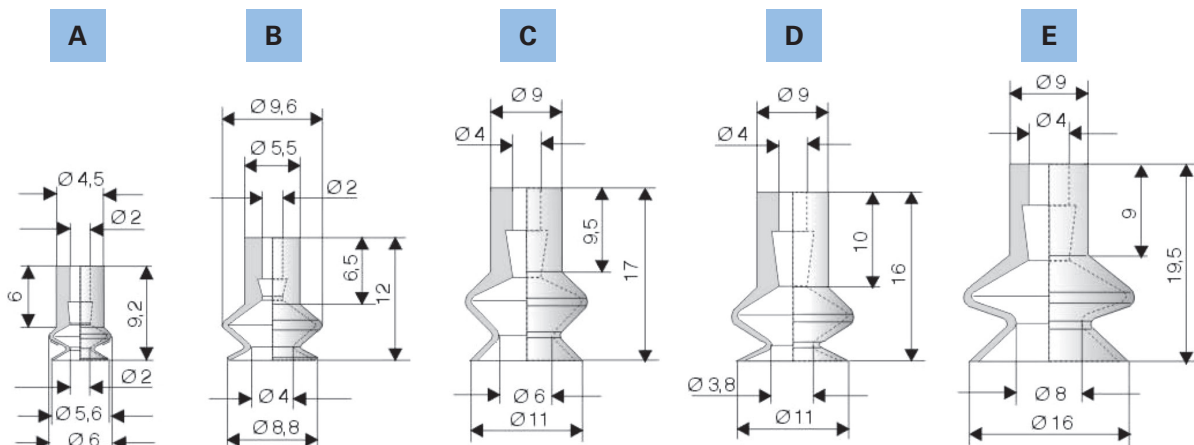
Art. No. 23.014.010.*		
NBR (sw), Si (r), NR-E (b), PUR (b), FKM (g)		8,0 mm
		1,2 g

Art.No.	Fittings
270.003	G½" AG
270.013	M5 AG
270.103	M6 AG
270.110	G½" IG

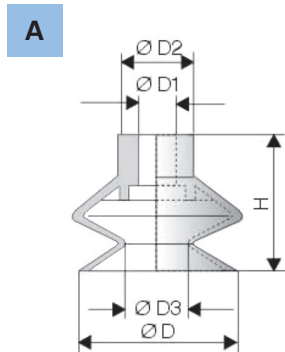
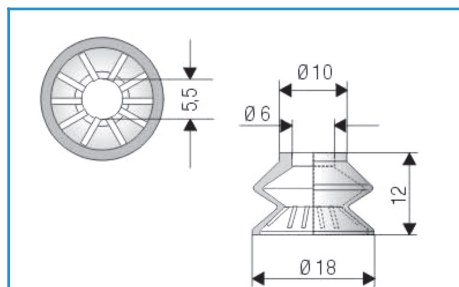


Vacuum Suction Cups

Bellows Suction Cups w/ 1½ folds

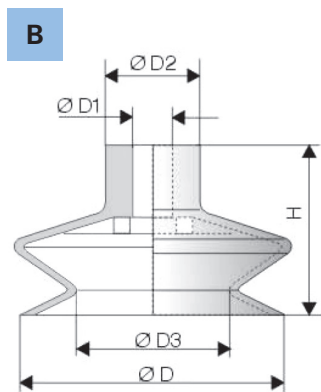


Form	Art. No.*	Material Material Matériel			Art.No.	Fittings
A	23.005.178	NBR (sw), Si (r)	2,0 mm	0,2 g	270.153	M 5 AG
B	23.008.166	NBR (sw), Si (tr)	3,5 mm	0,2 g	270.153	M 5 AG
C	23.011.007	NBR (sw), Si (tr), PUR (or)	5,0 mm	0,6 g	270.003	G½" AG
D	23.011.138.2r	Si (r)	4,0 mm	1,0 g	270.015	G½" IG
E	23.016.015	Si (tr), PUR (or), OR (sw)	7,0 mm	1,4 g	270.104	M 6 AG
					270.134	M 5 AG



Form	Art. No.*	Material Material Matériel		
A	23.016.016	NBR (sw),	6 mm	1,2 g
	23.022.028	Si (tr)	5 mm	2,0 g
	23.033.039	HNBR (wr)	12 mm	7,0 g
B	23.043.096	NBR (sw), Si (tr)	12 mm	10,0 g
	23.053.033	HNBR (wr)	11 mm	19,0 g

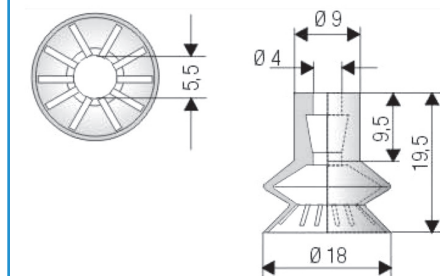
Form	Abmessungen Dimensions Dimensions	D Ø	D1 Ø	D2 Ø	D3 Ø	H
A	23.016.016	16	5	10	7,0	19
	23.022.028	22	5	10	10,6	19
	23.033.039	33	8	18	17,0	27
B	23.043.096	43	8	18	21,0	28
	23.053.033	53	8	18	33,0	34



Art. No.	Art.No.	Fittings
23.016.016 23.022.028	270.003	G½" AG
	270.013	M 5 AG
	270.015	G½" IG
	270.103	M 6 AG
23.033.039 23.043.096 23.053.033	270.190	G¼" AG
	270.192	G¼" IG

Art. No.*	Material Material Matériel		
23.018.082._*	Si (tr), Si-E (tr) NR-E (bl), CR (sw)	5,5	0,6

Art. No.	Art.No.	Fittings
23.018.082.*	270.077	G½" AG
	270.105	M 6 AG



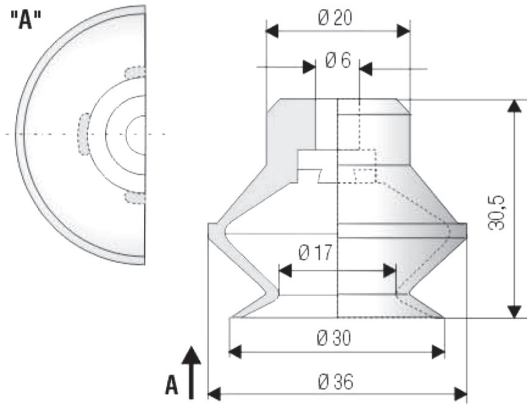
Art. No. *	Material Material Matériel		
23.018.175._*	Si (tr), NR-E (bl)	5,5	2,0

Art. No.	Art.No.	Fittings
23.018.175._*	270.003	G ¼" AG
	270.015	G ½" IG
	270.134	M 5 AG
	270.104	M 6 AG

*When ordering please indicate desired material (see page 83).

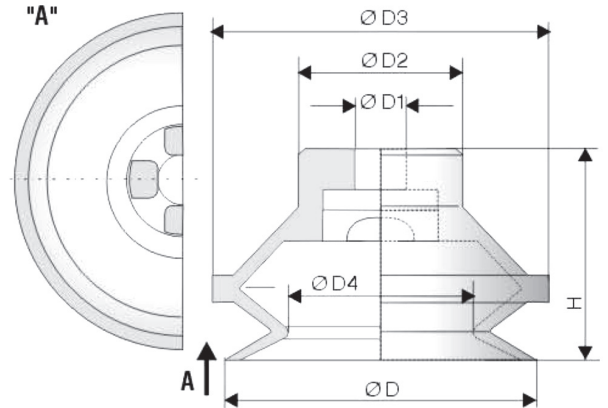
Vacuum Suction Cups

Bellows Suction Cups w/ 1½ folds



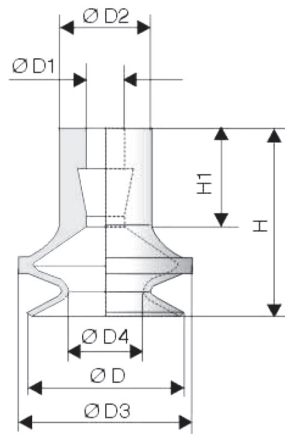
Art. No. 23.030.125_*			
NBK (sw), Si (tr), PUR (bl)			
	9 mm	9,0 g	Art.No. 270.019

Art.No.	Fittings
270.019	G½" IG
270.030	G½" AG
270.274	G¼" AG
270.275	G¼" IG
270.312	M6 AG



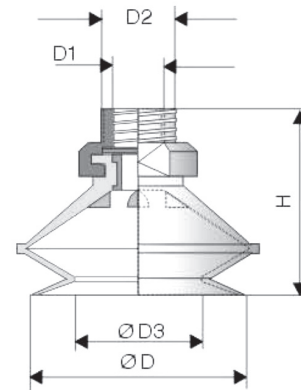
Art. No.*			D Ø	D1 Ø	D2 Ø	D3 Ø	D4 Ø	H	
23.040.126		10 mm	15 g	40	6	25,0	46,0	23,0	30,5
23.050.127		10 mm	23 g	50	8	28,5	59,5	32,4	36,5

Art. NO.*	Art.No.	Fittings	Material Material Matériel
23.040.126	270.019	G½" IG	NBR (sw), Si (tr), PUR (bl)
	270.030	G½" AG	
	270.274	G¼" AG	
	270.275	G¼" IG	
	270.312	M 6 AG	
23.050.127	270.303+270.314	G½" AG	
	270.304+270.314	G¼" AG	
	270.307+270.314	G½" IG	
	270.308+270.314	G¼" IG	



Art. No.	Material Material Matériel			Art.No.	Fittings
23.011.173.2	Si (tr)	3,5 mm	1,0 g	270.003	G½" AG
23.016.174.2	Si (tr)	5,0 mm	1,2 g	270.134	M5 AG

Art. No.	D Ø	D1 Ø	D2 Ø	D3 Ø	D4 Ø	H	H1
23.011.173.2	11	4	9	12,0	3,5	16	10
23.016.174.2	16	4	9	17,5	8,0	19	10



Art. No.*	Material Material Matériel			D Ø	D1	D2	D3 Ø	H
22.020.020	NBR (sw), Si (tr), CR (sw), PUR (or)	9 mm	6 g	20	M5	G½"	11	26,5
22.030.033		13 mm	8 g	30	M5	G½"	17	34,5
22.040.045		9 mm	18 g	40	G½"	-	23	35,0

*When ordering please indicate desired material (see page 83).



Vacuum Suction Cups

Bellows Suction Cups w/ 1½ + 2½ folds

Art. No. 230.25.137_* NBR (sw) Si (tr) NR (gr)	Art. No. 23.040.042_* NBR (sw) Si (r), PUR (b) EPDM (g) NR-E (bg)	Art. No. 23.056.150.2 Si (tr)	Art. No. 230.75.151.2 Si (tr)																												
9,0 mm 2,4 g	13,0 mm 13,5 g	16 mm 16 g	20 mm 35 g																												
<table border="1"> <thead> <tr> <th>Art.No.</th> <th>Fittings</th> </tr> </thead> <tbody> <tr> <td>270.003</td> <td>G 1/8" IG</td> </tr> <tr> <td>270.013</td> <td>G 1/8" AG</td> </tr> <tr> <td>270.103</td> <td>G 1/4" IG</td> </tr> <tr> <td>270.109</td> <td>G 1/8" AG</td> </tr> </tbody> </table>	Art.No.	Fittings	270.003	G 1/8" IG	270.013	G 1/8" AG	270.103	G 1/4" IG	270.109	G 1/8" AG	<table border="1"> <thead> <tr> <th>Art.No.</th> <th>Fittings</th> </tr> </thead> <tbody> <tr> <td>270.092</td> <td>G 1/8" IG</td> </tr> <tr> <td>270.093</td> <td>G 1/8" AG</td> </tr> <tr> <td>270.248</td> <td>G 1/4" IG</td> </tr> <tr> <td>270.249</td> <td>G 1/8" AG</td> </tr> </tbody> </table>	Art.No.	Fittings	270.092	G 1/8" IG	270.093	G 1/8" AG	270.248	G 1/4" IG	270.249	G 1/8" AG	<table border="1"> <thead> <tr> <th>Art.No.</th> <th>Fittings</th> </tr> </thead> <tbody> <tr> <td>270.049-1</td> <td>G 1/4" AG</td> </tr> </tbody> </table>	Art.No.	Fittings	270.049-1	G 1/4" AG	<table border="1"> <thead> <tr> <th>Art.No.</th> <th>Fittings</th> </tr> </thead> <tbody> <tr> <td>270.049-1</td> <td>G 1/4" AG</td> </tr> </tbody> </table>	Art.No.	Fittings	270.049-1	G 1/4" AG
Art.No.	Fittings																														
270.003	G 1/8" IG																														
270.013	G 1/8" AG																														
270.103	G 1/4" IG																														
270.109	G 1/8" AG																														
Art.No.	Fittings																														
270.092	G 1/8" IG																														
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Art.No.	Fittings																														
270.049-1	G 1/4" AG																														
Art.No.	Fittings																														
270.049-1	G 1/4" AG																														

Bellows suction cups with 2½ folds

Art. No. 21.005.088_* NBR (sw) Si (tr)	Art. No. 21.007.089_* NBR (sw) Si (tr), PUR (bl)	Art. No. 21.006.001_* NBR (sw), Si (tr), Vinyl (bl), FKM (g) EPDM (gr)	Art. No. 21.010.078_* Si (r), Si (tr) PUR (bg) FKM (g)												
3,0 mm 0,4 g	3,0 mm 0,6 g	3,5 mm 0,3 g	4,0 mm 0,8 g												
<table border="1"> <thead> <tr> <th>Art.No.</th> <th>Fittings</th> </tr> </thead> <tbody> <tr> <td>270.010</td> <td>M 5 AG</td> </tr> </tbody> </table>	Art.No.	Fittings	270.010	M 5 AG	<table border="1"> <thead> <tr> <th>Art.No.</th> <th>Fittings</th> </tr> </thead> <tbody> <tr> <td>270.013</td> <td>M 5 AG</td> </tr> <tr> <td>270.103</td> <td>M 6 AG</td> </tr> <tr> <td>270.134</td> <td>M 5 AG</td> </tr> </tbody> </table>			Art.No.	Fittings	270.013	M 5 AG	270.103	M 6 AG	270.134	M 5 AG
Art.No.	Fittings														
270.010	M 5 AG														
Art.No.	Fittings														
270.013	M 5 AG														
270.103	M 6 AG														
270.134	M 5 AG														

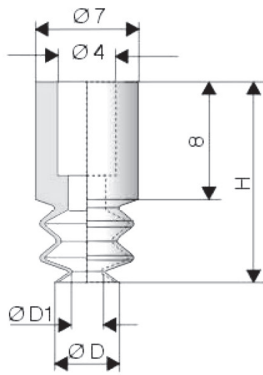
*When ordering please indicate desired material (see page 83).

Vacuum Suction Cups

Bellows Suction Cups w/ 2½ folds

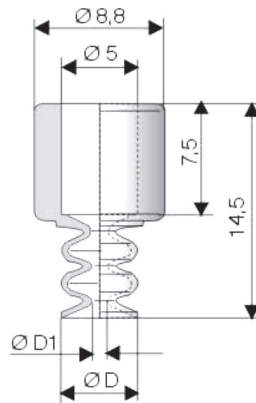


A



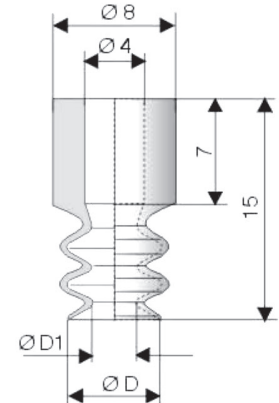
Art. No.*	Material Material Matériel	D Ø	D1	H
21.004.083	Si (tr)	4,2	2,2	14,0
21.005.058	NBR (sw), Si (tr)	5,0	1,3	13,5

Art. No.*			Art.No.	Fittings
21.004.083	3,0	0,4	270.104	M 6 AG
21.005.058	3,0	0,4	270.134	M 5 AG



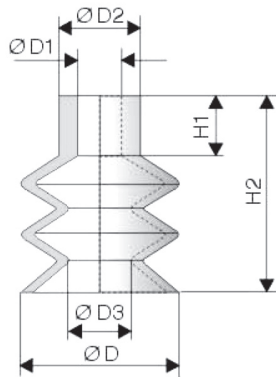
Art. No.	D Ø	D1		
21.005.086.2	5,0	1,0	3,5 mm	0,4 g
21.006.087.*	6,5	2,6	3,5 mm	0,4 g
Material/Material/Matériel				
21.005.086.2	Si (tr)			
21.006.087.*	Si (tr).NBR (\$w) 65°Sri			

Art.No.	Fittings
270.024	M 5 AG
270.103	M 6 AG



Art. No.*	D Ø	D1		
21.006.093	6	3	3,5 mm	0,4 g
21.008094	8	4	4,0 mm	0,4 g
21.011.095	11	A	5,0 mm	1.0g
Material/Material/Matériel NBR (sw). Si (tr).NR (sw)				

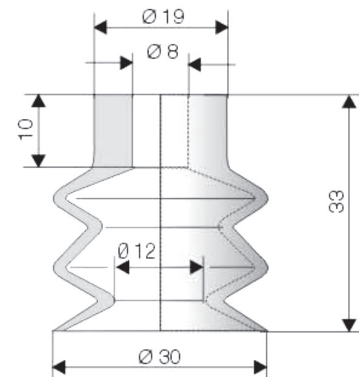
Art.No.	Fittings
270.003	G 1/8" AG
270.015	G 1/8" IG
270.104	M 6 AG
270.134	M 5 AG



Art. No.*	Material Material Matériel	D Ø	D1 Ø	D2 Ø	D3 Ø	H	H1
21.014.053	Si (tr), CR (sw)	14	3,9	8,0	5,0	18	5,0
21.018.013	NBR (sw), Si (tr) NR (sw)	18	5,0	9,5	7,5	23	7,5
21.020.015	NBR (sw), Si (tr) Si-E (tr), NR (sw)	20	5,0	10,0	9,0	22	5,5

Art. No.			Art.No.	Fittings
21.014.053	9 mm	1,0 g	270.005	M 5 IG
21.018.013	9 mm	2,3 g	270.013	M 5 AG
21.020.015	11 mm	2,2 g	270.134	M 5 AG

*When ordering please indicate desired material (see page 83).



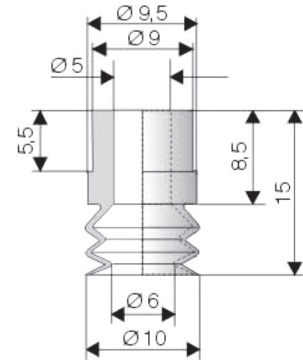
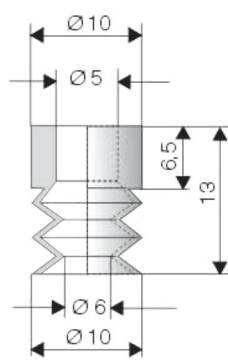
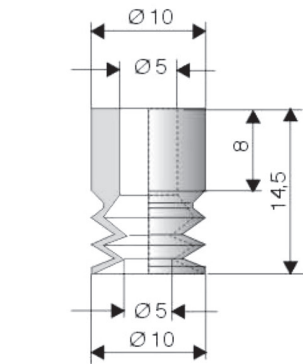
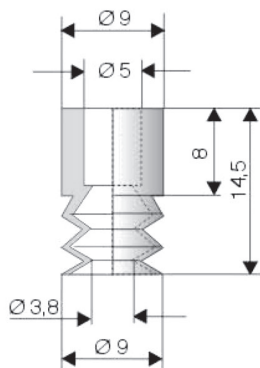
Art. No.*	Material Material Matériel		
21.030.019	NBR (sw), Si (r) NR-E (bg), PUR (bl) EPDM (g)	13,0	8,0

Art.No.	Fittings
270.092	G 1/8" IG
270.093	G 1/8" AG
270.248	G 1/4" IG
270.249	G 1/4" AG



Vacuum Suction Cups

Bellows Suction Cups w/ 2½ folds



Art. No. 21.009.002_*	
NBR (sw), Si (tr), Si-E (tr), NR (gr), PUR (bl), FKM (g), HNBR (wr)	2,0 mm 0,6 g

Art. No. 21.010.004_*	
NBR (sw), Si (r), PUR (bg), NR (bg)	3,0 mm 1,0 g

Art. No. 21.010.005_*	
NBR (sw) Si (bl)	4,0 mm 0,4 g

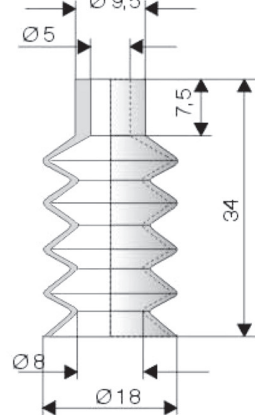
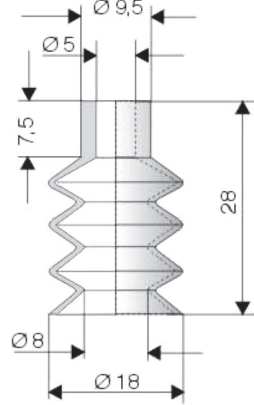
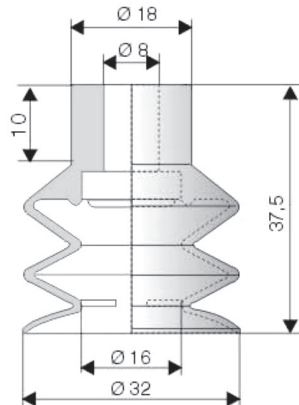
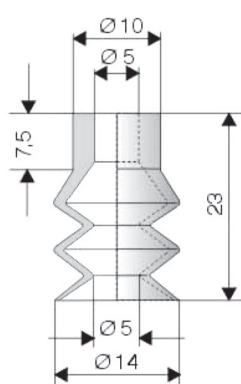
Art. No. 21.010.056_*	
Si (bl), Si (r), FKM (g) 70° Sh	4,0 mm 0,6 g

Art.No.	Fittings
270.003	G½" AG
270.013	M 5 AG
270.015	G½" IG
270.103	M 6 AG

Art.No.	Fittings
270.013	M 5 AG
270.103	M 6 AG
270.109	G½" IG
270.238	G½" AG

Art.No.	Fittings
270.094	M 5 AG
270.095	G½" AG
270.096	G½" IG
270.103	M 6 AG

Art.No.	Fittings
270.013	M 5 AG
270.103	M 6 AG
270.109	G½" IG
270.238	G½" AG



Art. No. 21.014.007_*	
NBR (sw) Si (tr), PUR (ge) FKM (g)	1,2 mm 1,2 g

Art. No. 21.032.075_*	
NBR (sw) Si (tr), Si-E (tr) PUR (bl), HNBR (wr)	1,3 mm 1,0 g

Art. No. 25.018.031_*	
NBR (sw) Si (tr)	1,4 mm 2,0 g

Art. No. 25.018.032_*	
Si (tr)	1,7 mm 2,4 g

Art.No.	Fittings
270.003	G½" AG
270.013	M5 AG
270.015	G½" IG
270.103	M6 AG

Art.No.	Fittings
270.114	G½" IG
270.132	G½" AG
270.190	G¼" AG
270.192	G¼" IG

Art.No.	Fittings
270.109	G½" IG
270.205	G½" AG
270.013	M 5 AG

Art.No.	Fittings
270.109	G½" IG
270.205	G½" AG
270.013	M 5 AG

*When ordering please indicate desired material (see page 83).

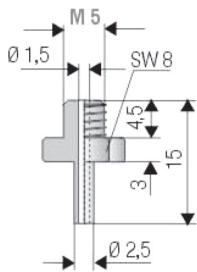
Vacuum Suction Cups

Fittings

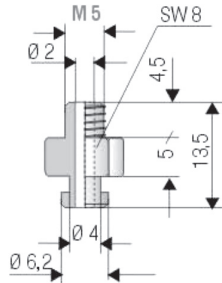


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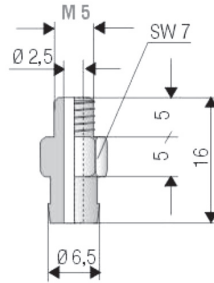
M 5 AG



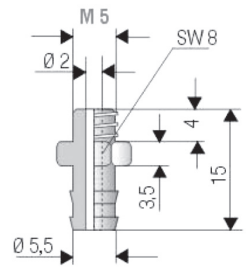
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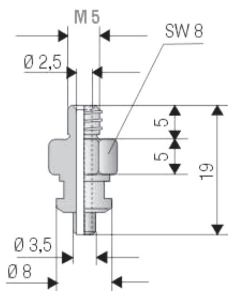
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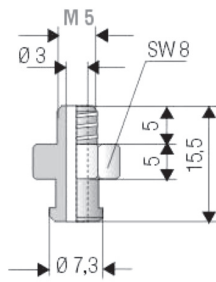
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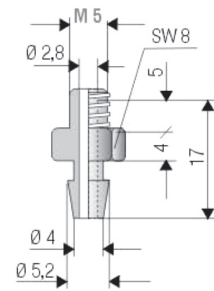
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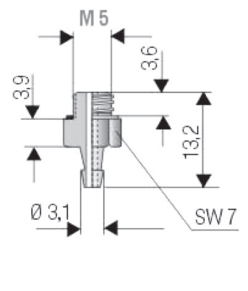
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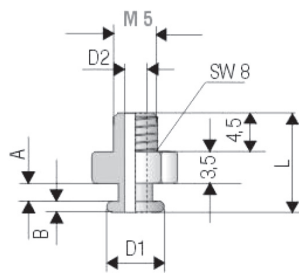
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Art. No. 270.134

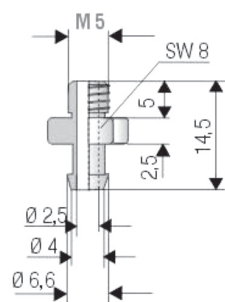


Art. No. 270.153



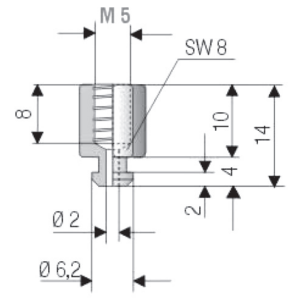
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270.300	Ø 3	Ø 1,2	10,5	1,5	1,0
270.301	Ø 6	Ø 2,5	12,0	2,0	2,0

Art. No. 270.300/301



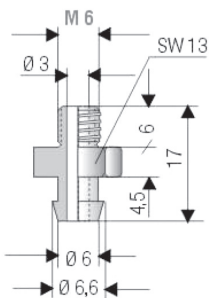
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M 5 IG

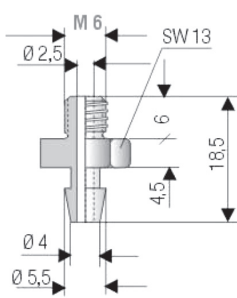


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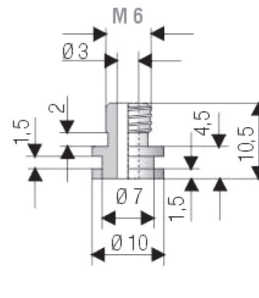
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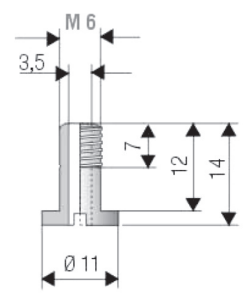
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Art. No. 270.104

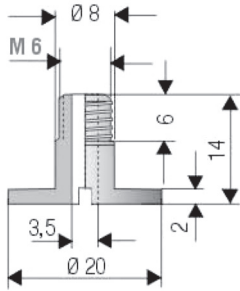


Art. No. 270.105

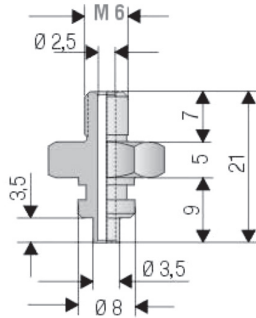


Art. No. 270.312

M 6 AG

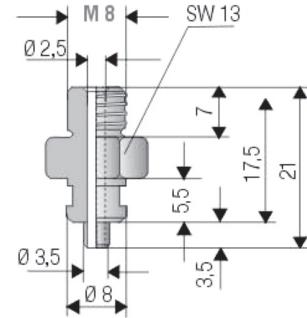


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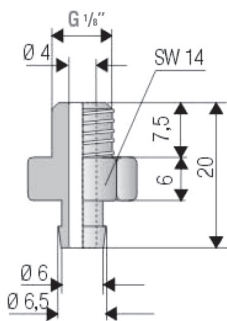
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M 8 AG

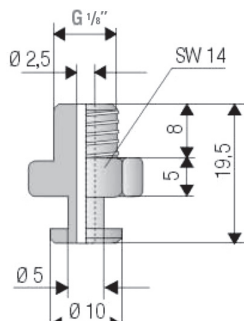


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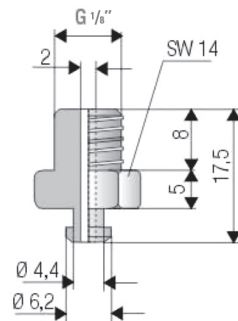
G 1/8" AG



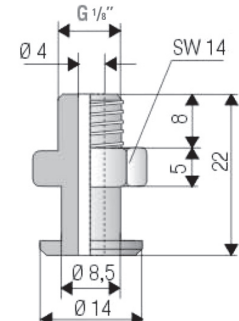
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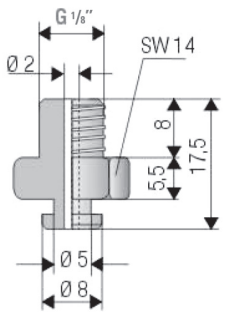
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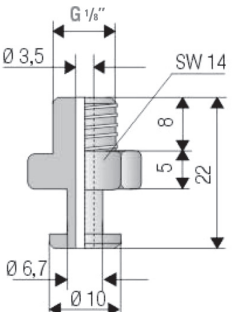
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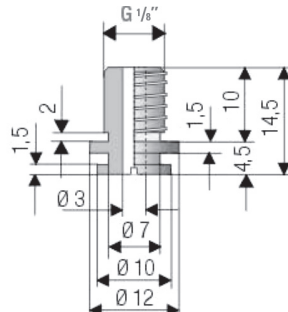
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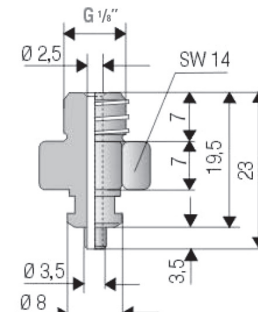
Art. No. 270.021



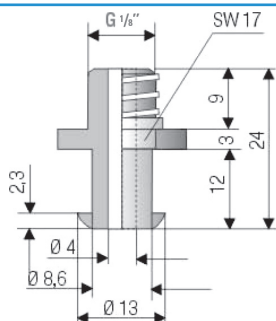
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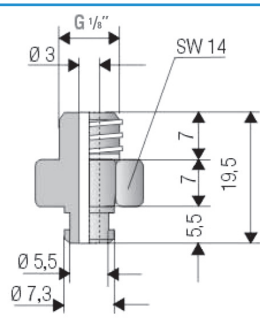
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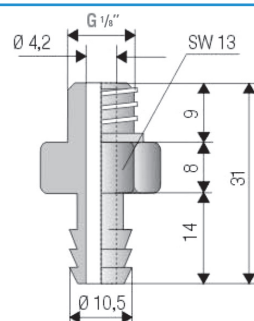
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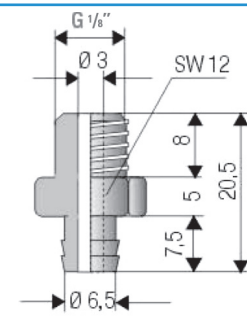
Art. No. 270.093



Art. No. 270.095



Art. No. 270.132



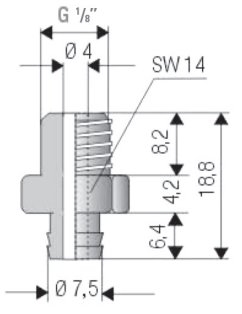
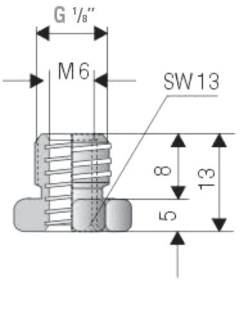
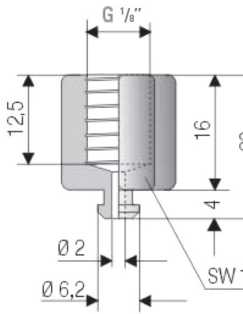
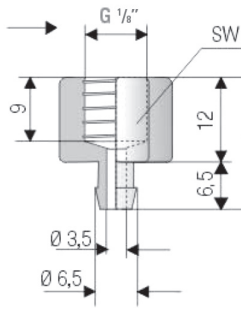
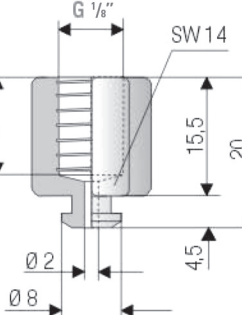
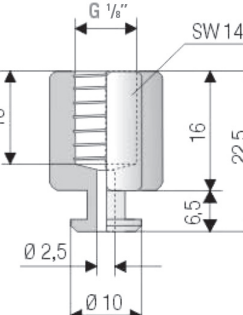
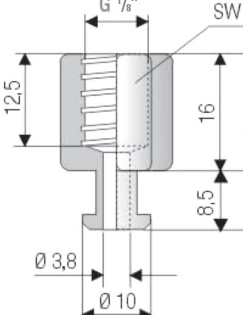
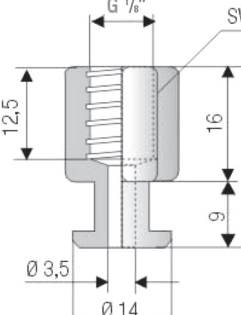
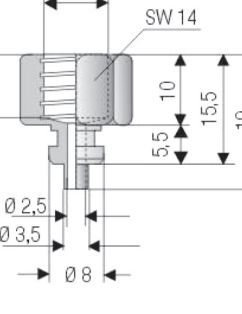
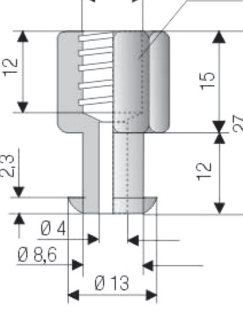
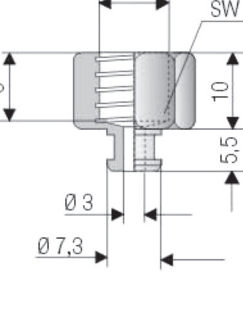
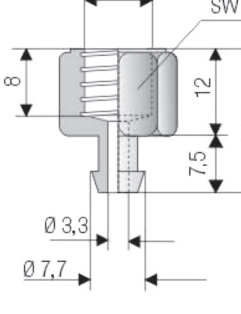
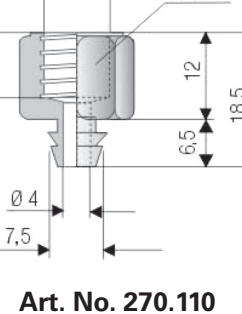
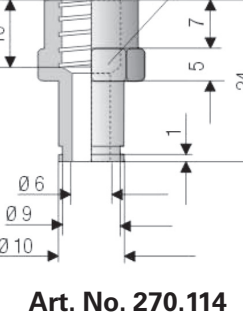
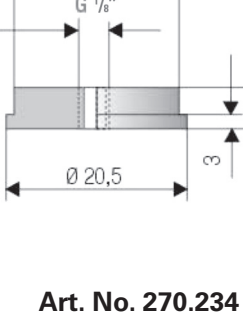
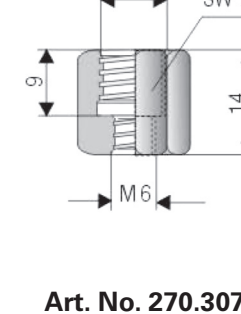
Art. No. 270.205

Vacuum Suction Cups

Fittings



A

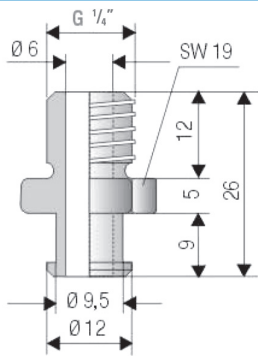
G 1/8" AG		G 1/8" IG	
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G 1/8" IG			
 <p>Art. No. 270.017</p>	 <p>Art. No. 270.018</p>	 <p>Art. No. 270.019</p>	 <p>Art. No. 270.020</p>
 <p>Art. No. 270.021</p>	 <p>Art. No. 270.092</p>	 <p>Art. No. 270.096</p>	 <p>Art. No. 270.109</p>
 <p>Art. No. 270.110</p>	 <p>Art. No. 270.114</p>	 <p>Art. No. 270.234</p>	 <p>Art. No. 270.307</p>



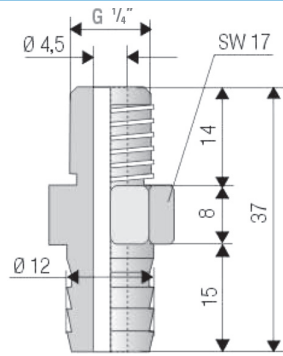
Vacuum Suction Cups

Fittings

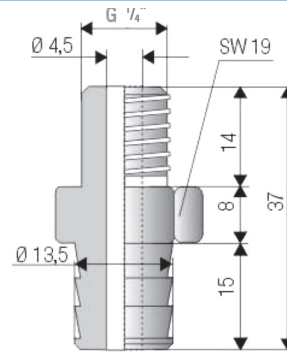
G 1/4" AG



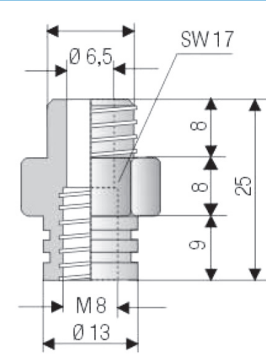
Art. No. 270.034



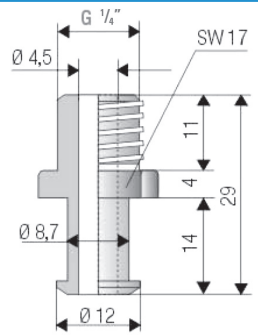
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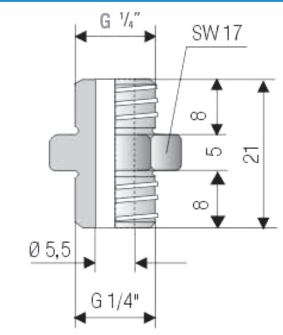
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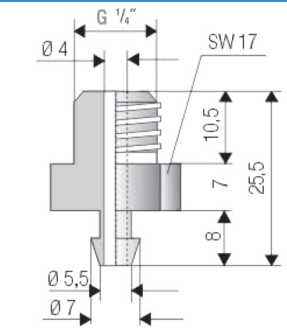
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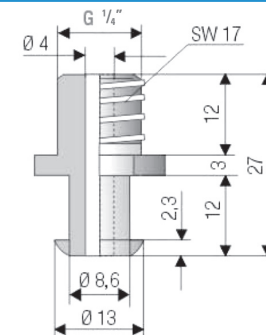
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Art. No. 270.191

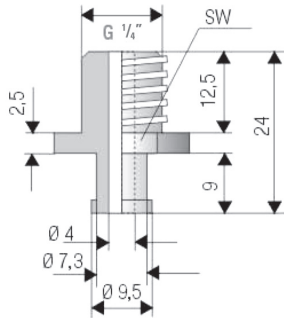


Art. No. 270.194

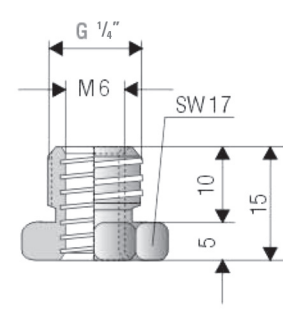


Art. No. 270.249

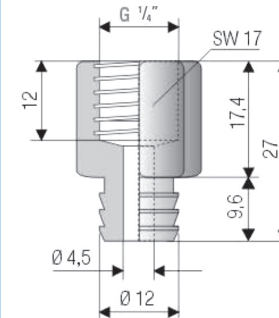
G 1/4" IG



Art. No. 270.274

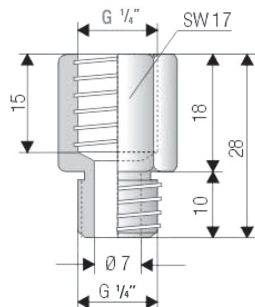


Art. No. 270.304

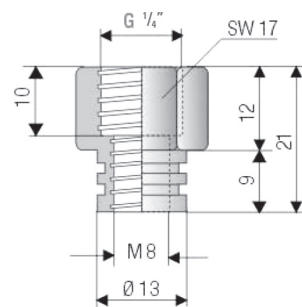


Art. No. 270.046

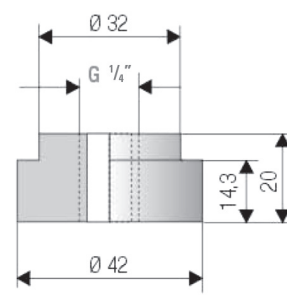
G 1/4" IG



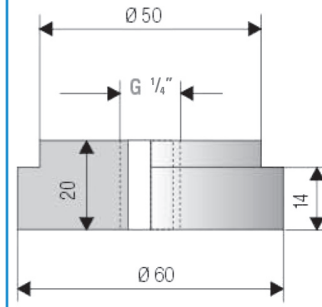
Art. No. 270.078



Art. No. 270.098



Art. No. 270.179



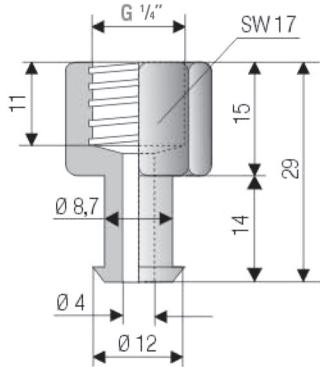
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Vacuum Suction Cups

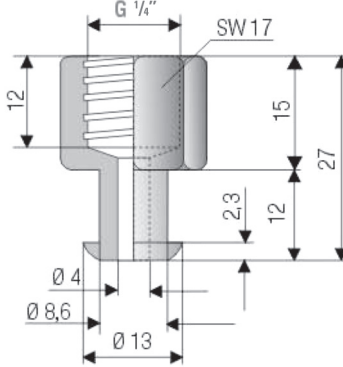
Fittings



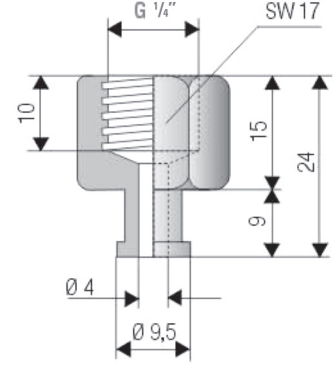
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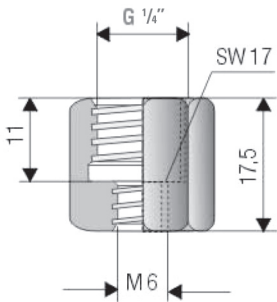
Art. No. 270.192



Art. No. 270.248

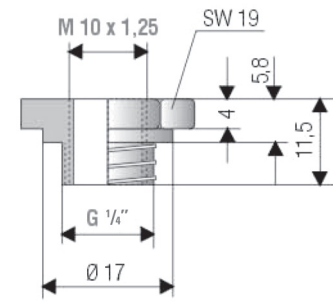


Art. No. 270.275



Art. No. 270.308

M 10 x 1,25 IG



Art. No. 270.090

A



Circulating Water Temperature Control System

Hydrotherm II-Temperatures to 250°F

Mokon's Hydrotherm Circulating Water Temperature Control System

is engineered to improve accuracy, reliability of operation and increase output. The Hydrotherm has the highest quality components and construction materials in the industry. The system's non-ferrous and stainless steel piping and connections do not rust or contaminate water.

The Hydrotherm surpasses all competitive systems by providing stainless steel as the main component for wetted surfaces. The Hydrotherm's stainless steel components include a stainless steel pump, housing, impeller, heater canister and pump suction manifold.

All Hydrotherm systems meet NFPA 79 (National Fire Protection Association) electrical safety standards and come standard with a UL 508A-labeled electrical sub-panel. All of these features and more, combined with our extended warranty, make the Hydrotherm the best choice for delivering precise and accurate temperature control.



[CIRCULATING WATER TEMP. CONTROL SYSTEM](#)

Features and Benefits

- Stainless steel construction (wetted surfaces)
- Compact and portable
- Microprocessor-based controller
- Control panel with indicating lights for mode of operation
- Suction and discharge pressure gauges
- Improved energy efficiency, small hold-up volume and energy-efficient heater design
- Easy access cabinet
- UL 508A labeled electrical sub-panel
- Meets NFPA 79 electrical safety standards

Specifications

Model	Pump	Flow Rate & Pressure	Cabinet Dimensions (LxWxH)*9kW	Process Connection	Supply/Drain
HT2HY9KW	¾ hp	25 gpm @ 26 PSI	27" x 11" x 24"	1.25" NPT	½" NPT
HT2HX9KW	1 hp	30 gpm @ 32 PSI	27" x 11" x 24"	1.25" NPT	½" NPT
HT2HR9KW	1-½ hp	40 gpm @ 32 PSI	27" x 11" x 24"	1.25" NPT	½" NPT
HT2HW9KW	2 hp	50 gpm @ 32 PSI	27" x 11" x 24"	1.25" NPT	½" NPT
HT2HN9KW	3 hp	60 gpm @ 34 PSI	27" x 11" x 24"	1.25" NPT	½" NPT

*Hydrotherm Systems are available in a variety of voltages and capacities. Please contact DME for more information.

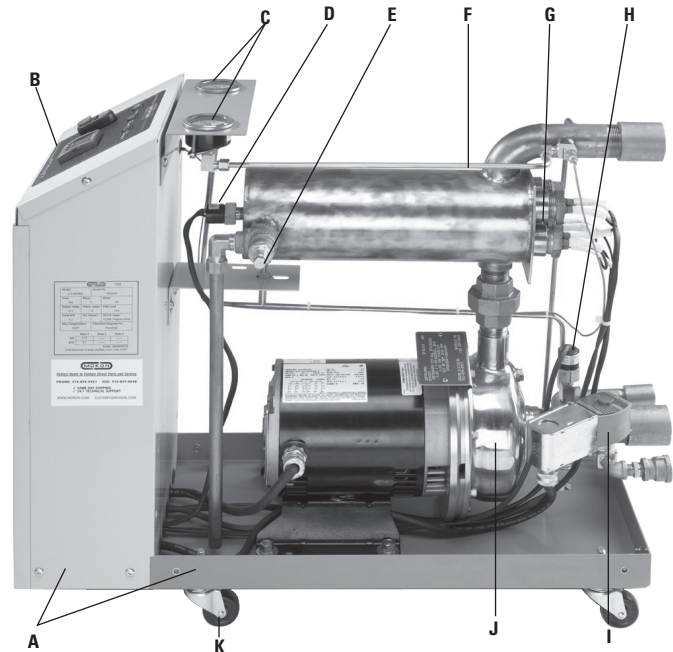
Circulating Water Temperature Control System

Hydrotherm II-Temperatures to 250°F



Standard Features

- A Hybrid-epoxy, powder-coated cabinetry (14ga. base/16 ga. electrical enclosure)
- B Microprocessor-based controller in easily accessible control panel
- C Suction and discharge pressure gauges
- D High-temperature safety shut-off switch
- E Pressure-relief valve
- F Horizontal stainless steel heater canister
- G Copper heating elements mounted in back of canister for easy access
- H Low pressure, safety shut-off switch
- I Solenoid cooling valve
- J Stainless steel pump
- K Casters for easy portability
- L Automatic air purge (not shown)
- M NFPA 79-and UL 508A-labeled electrical sub-panel (not shown)



E+ Energy Savings Package

Options

Mokon offers a variety of options and accessories to meet specific customer needs. Typical requests include audible and visual alarms, solid-state heater relay, emergency stop, process fluid purge, high/low heat switching, thermometers, power cord, 7-day/24-hour timer, valved process bypass, remote set point and retransmission, and other voltages and wattages. Please contact us for more information.

E+ Energy Savings Package

- Insulated heater canister reduces heat loss by 60%
- 4–20mA PID control matches output to process demand
- SCR switching for faster response and extended heater life
- Forced ventilated cabinet extends electrical component life

Our engineers will also custom design systems to meet specific process requirements. For more information on Mokon's Hydrotherm or other products call DME today.

Product Testing & Warranty

All Mokon Temperature Control Systems are qualified for service by rigid, simulated field tests, and are 100% factory calibrated and run tested. Mokon offers these extended warranties as standard on the Hydrotherm system:

- 3 years on system
- 5 years on microprocessor controller and safeties
- Lifetime seals on piping and canister



Circulating Water Temperature Control System

Duratherm HTP-Temperatures to 300°F

Mokon's Duratherm HTP Circulating Water Temperature Control System maximizes performance with temperatures up to 300°F (149°C) and pressures up to 70 PSI. The Duratherm design features an advanced heating canister and stainless steel diverter, which create a forced flow path for higher heat transfer rates.

Designed for the most restrictive of processes or those requiring higher fluid temperature or pressure, the HTP System adds a cast iron pump to the Duratherm design, resulting in the highest temperature and pressure capabilities available.

All Duratherm Systems meet NFPA 79 (National Fire Protection Association) electrical safety standards and come standard with a UL 508A-labeled electrical sub-panel. All of these features and more, combined with an extended warranty, make the Duratherm an easy choice for delivering precise and accurate temperature control.



Features and Benefits

- Single and dual zone configurations
- Compact and portable
- Ideal for restrictive process and high temperature water applications
- Cast iron pump with brass impeller and carbon ni-resist seal
- Horizontal stainless steel canister
- Small hold-up volume and energy-efficient heater design
- Microprocessor-based controller
- UL labeled electrical sub-panel
- Meets NFPA 79 electrical safety standards

Specifications

Model	Pump	Flow Rate & Pressure	Process Connection	Drain/Supply Connection	Dimensions (LxWxH) *9KW	Shipping Weight
HTPDB9KW	1½ hp	25 GPM up to 60 PSI	1"	1"	28" x 16" x 25"	150 lbs.
HTPDC9KW	2 hp	40 GPM up to 60 PSI	1½"	1"	32" x 17" x 27"	160 lbs.
HTPDF9KW	3 hp	60 GPM up to 60 PSI	1½"	1"	32" x 17" x 27"	170 lbs.
HTPDE9KW	5 hp	80 GPM up to 70 PSI	1½"	1"	32" x 17" x 27"	185 lbs.
HTPDD9KW	7½ hp	100 GPM up to 70 PSI	2"	1"	32" x 17" x 27"	250 lbs.
HTPDA9KW	10 hp	120 GPM up to 70 PSI	2"	1"	38" x 17" x 28"	300 lbs.

*Duratherm Systems are available in a variety of voltages and capacities. Please contact DME for more information.

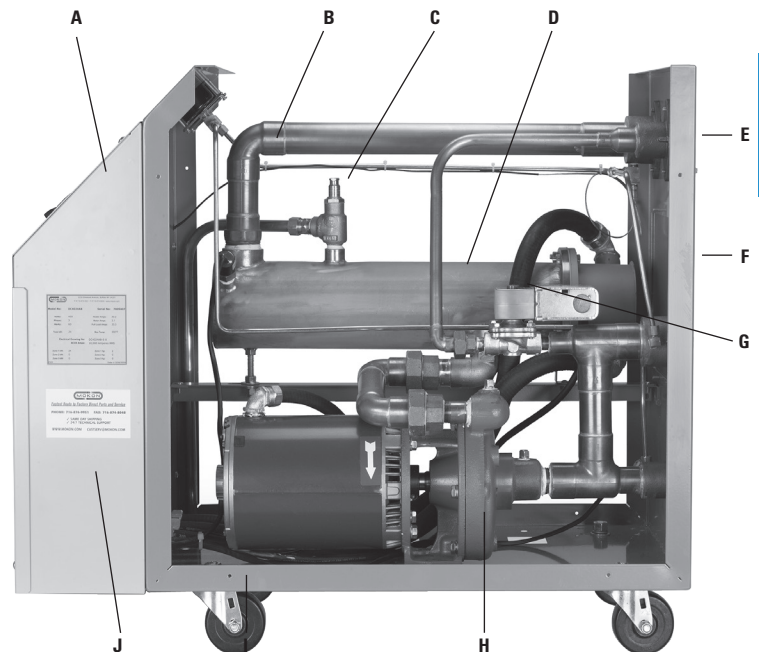
Circulating Water Temperature Control System

Duratherm HTP-Temperatures to 300°F



Standard Features

- A Microprocessor-based controller in easily accessible panel
- B Fluid high-temperature safety shut-off switch
- C Pressure-relief valve
- D Horizontal stainless steel heater canister with unique turbulent flow diverter
- E Cast brass fluid connections securely mounted to cabinet
- F Removable panel for easy access to heater (not shown)
- G Solenoid cooling valve
- H Cast iron pump for temperatures up to 300°F (149°C)
- I Heavy-duty removable casters for fixed location or portability
- J Powder-coated finish
- K Low pressure, safety shut-off switch (not shown)
- L NFPA 79-and UL-labeled electrical sub-panel (not shown)



Product Testing & Warranty

All Mokon Temperature Control Systems are qualified for service by rigid, simulated field tests, and are 100% factory calibrated and run tested. Mokon offers these extended warranties as standard on the Duratherm System:

- 3 years on system
- 5 years on microprocessor controller and safeties
- Lifetime on seals, piping and canister



Hydratherm/Duratherm Molding Conditions Sheet

Plastics Injection, Compression, Vacuum Forming, Rim Applications

[ONLINE FORM](#)

Date: _____ Account Number: _____ Contact: _____

Company: _____ Phone#: _____

Address: _____ Fax#: _____

_____ E-mail: _____

End User Location: City/St _____ Country _____ Elevation _____

Equipment Ambient Conditions : _____

Type of Molding Machine: _____ Size (Tons): _____

Dimensions of Mold (L x W x H): _____ (inches)

Mold Weight: _____ Mold Material: _____

Process (Control) Temperature Required: _____ Preheat Time Required: _____

Insulation (if any): _____

Hydraulic Cooling Required? Yes _____ No _____ If yes, how much _____?

Temperature Control Medium (Water, Oil, Water/Glycol Mix): _____

Number of Zones Heating/Cooling: _____

Coring or Cooling/Heating Lines: Zone 1 Zone 2 Zone 3 Zone 4

Inlet: Quantity of Lines _____

 Sizes of Lines _____

Outlet: Quantity of Lines _____

 Sizes of Lines _____



or visit
www.dme.net/rfq

Material Molded: _____ End Product: _____

Shot Weight: _____ Shot Cycle Time: _____

Power: _____ Volts _____ Phase _____ Hertz

Control Requirements: Standard Microprocessor _____ Other (Brand) _____

Control Capabilities: Remote Set Point/Retransmission Type _____ RS-485 _____

 Programmable _____ Other _____

Prior Equipment/Comments: _____

**Thank You For Providing This Information. Please Return The Completed Sheet To DME By
Fax (248-544-5113) or E-mail (DME@dme.net)**

Portable Water Chillers



Superior Features:

- Closed Tank Design. This unique feature improves operating costs, eliminates downtime due to contaminants entering the system and eliminates problems associated with low or uncertain city water pressure, evaporation and overflow.
- Stainless Steel Evaporating Tank. This corrosion-resistant tank allows for years of quality operation.
- Sturdy Cabinet Construction. Each unit is constructed on a rugged, heavy-duty steel base frame. The cabinet and access panels are manufactured from Phos Coat galvanized steel and finished with a tough chemical and weather-resistant polyester powder coat. Custom color finish available upon request.
- Quality Assurance. Each unit goes through a series of tests to pass rigid standards before they leave the plant.
- Warranty. One year parts and components and Five years warranty on the compressor.



PORTABLE WATER CHILLERS



Refrigeration System

The refrigeration system is the finest in performance, capacity and design. This system is manufactured completely in the plant using the industry-respected Copeland compressor. All condenser coils are formed and assembled in-house for better quality assurance and design flexibility. The control panel has been engineered for simplicity using only the finest U.L. approved components. All 8-ton and larger units are equipped with multi-compressor systems that will operate independently as the load requires, resulting in energy savings.

Electrical System

The systems are wired 208/230 single phase and 208/230 or 440 three phase. Any electrical system can be engineered on request, including 50Hz systems. The control panel can be wired for a 24 or 110 volt system.

Coil-in-Tank Design

Every chiller features an exclusive stainless steel coil-in-tank design that eliminates problems associated with tube-in-tube heat exchangers, such as coil rupture due to freeze-up. Head pressure on the refrigeration system is not affected by "pressure shock" due to the high temperature return water. The tough, 40 gallon, 16-gauge, 304 stainless steel construction ensures years of quality operation.

Part Number	Portable System					Vertical Stationary System						
	RTP201	RTP303	RTP403	RTP503	RTP603	RTS803	RTS1003	RTS1203	RTS1603	RTS2003	RTS2403	
Nominal Capacity	2 Ton	3 Ton	4 Ton	5 Ton	6 Ton	8 Ton	10 Ton	12 Ton	16 Ton	20 Ton	24 Ton	
BTU's Per Hour	24,000	36,000	48,000	60,000	72,000	96,000	120,000	144,000	192,000	240,000	288,000	
Reservoir Capacity	40 gal.	40 gal.	40 gal.	40 gal.	40 gal.	40 gal.	40 gal.	40 gal.	80 gal.	80 gal.	80 gal.	
Cabinet Size	28 x 60 x 53	28 x 60 x 53	28 x 60 x 53	28 x 60 x 53	39 x 60 x 55	30 x 54 x 72	30 x 56 x 72	39 x 56 x 74	74 x 74 x 72	74 x 74 x 72	74 x 94 x 74	
Weight	330#	350#	400#	425#	525#	570#	625#	650#	1500#	1600#	1800#	
Voltage	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	208/230	
460 optional	1 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	3 phase	
RL AMPS	22	18	23	24	24	43	52	52	82	90	74	
Compressor	2 HP	3 HP	4 HP	5 HP	6 HP	8 HP	10 HP	12 HP	16 HP	20 HP	24 HP	
Water Discharge	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1" NPT	1½" NPT	1½" NPT	1½" NPT	
Water Return	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1¼"	1½"	1½"	1½"	
Water Cooled	Please Call for Quote											



Chiller/Heater Combo

The "Cheater" – Chiller/Heater Combination Mold Temperature Controller

- One machine replaces the need for both a chiller and a heater
- Single unit allows 30°F–190°F with less than a $\pm 0.2^\circ$ F variance
- No external water source needed
- Instantaneous changeover for heating and cooling

[CHILLER-HEATER COMBO](#)



Models OTC 14 to OTC 1

Part Number	OTC 14	OTC 13	OTC 12	OTC 34	OTC 1
Lbs./Hr. Polyethylene ¹	5	7	11	20	24
Lbs./Hr. Polystyrene ^{2,3}	8	12	1	33	40
Heater (Kw)	1.5	1.5	1.5	3	3

Models OTC 112 to OTC 712

Part Number	OTC 112	OTC 2	OTC 3	OTC 5	OTC 712
Lbs./Hr. Polyethylene ¹	42	52	87	136	200
Lbs./Hr. Polystyrene ^{2,3}	70	86	144	225	325
Heater (Kw)	3	4	4	4	4

1 Polyethylene as a plastic material has a high "heat of fusion" (heat required for change of state from a liquid to a solid) and thus requires more cooling. Capacities are at 55°F leaving water temperature to mold and at 100°F ambient.

2 Polystyrene has no heat of fusion and thus requires less cooling. Capacities are at 55°F leaving water temperature to mold and at 100°F ambient.

3 For leaving water temperature to mold less than 55°F deduct 20% of capacity for each 10°F below 55°F. For example at 45°F the capacity would be .8 times the above capacities in chart.

More Chiller/Heater Combo specifications on next page

Chiller/Heater Combo



Specifications for Models OTC 14 to OTC 1

Model	OTC	14	13	12	34	1
Compressor	Cap. ² (kW)	.6	.8	1.3	2.3	2.8
	Cap. ² (BTU/HR)	2000	2890	4570	7940	9550
	Cap. ² (Tons)	.2	.25	.4	.7	.8
	HP	.25	.33	.5	.75	1
Process Pump⁴	Type ³	H	H	H	H	H
	HP	1/3	1/3	1/3	1/3	1/3
	GPM	2	2	2	4	4
	PSI	65	65	65	65	65
Connection Size	(inches)	1/2"	1/2"	1/2"	1/2"	1/2"
Std. Heater Size⁵		1.5	1.5	1.5	3	3
Full Load Amps.⁶ (without heat/with heat)	115/160	12.9/25.4	15.9/28.4	20.6/33.1	27/60.3	N/A
	208-230/1/60	N/A	7.9/14.2	10.2/16.5	15.4/28.2	17.8/30.3
	208-230/3/60	N/A	N/A	N/A	N/A	13.5/26
	460/3/60	N/A	N/A	N/A	N/A	6.6/12.9
Condensing Refrigerant	Medium	Air	Air	Air	Air	Air
	Type	134A	134A	134A	134A	134A
Pat. Refrig. Circuit⁷	OPTITEMP	YES	YES	YES	YES	YES
Reservoir Cap.	Gallons	2	2	2	2	2
Temp. Range⁸	°F	30-190	30-190	30-190	30-190	30-190
Temp. Stability⁹	°F	+/- 0.2	+/- 0.2	+/- 0.2	+/- 0.2	+/- 0.2
Dimensions¹⁰ (inches)	Height	22.5	22.5	22.5	22.5	22.5
	Width	15	15	15	25	29
	Depth	20	20	20	25	32
Weight	(pounds)	175	175	200	250	250
Capacity¹¹ P.E.	(lbs./hr.)	5	7	11	20	24
Capacity¹¹ P.S.	(lbs./hr.)	8	12	19	33	40

Specifications for Models OTC 12 to OTC 712

Model	OTC	112	2	3	5	712
Compressor	Cap. ² (kW)	5.0	6.0	10.1	16.0	25
	Cap. ² (BTU/HR)	17000	20700	34600	54400	89600
	Cap. ² (Tons)	1.4	1.7	2.9	4.5	6.7
	HP	1.5	2	3	5	7.5
Process Pump⁴	Type ³	H	H	H	H	H
	HP	1/3	1	1-1/2	1-1/2	2
	GPM	4	5	7	12	18
	PSI	65	45	55	53	62
Connection Size	(inches)	1/2"	1"	1"	1"	1-1/4"
Std. Heater Size⁵		3	4	4	4	4
Full Load AMPS.⁶ (without heat/with heat)	115/160	N/A	N/A	N/A	N/A	N/A
	208-230/1/60	21.5/34	28.5/45	45.4/62	47.2/64	N/A
	208-230/3/60	15.7/28.2	16.9/33.5	30.7/47.5	30.5/47	56.5/73
	460/3/60	7.4/13.6	9.5/17.8	15.1/23.4	14.1/22.4	22.8/31
Condensing Refrigerant	Medium	Air	Air	Air	Air	Air
	Type	134A	134A	134A	R-22	R-22
Pat. Refrig. Circuit⁷	OPTITEMP	YES	YES	YES	YES	YES
Reservoir Cap.	Gallons	2	3	2	2	4.5
Temp. Range⁸	°F	30-190	30-190	30-190	30-110	30-110
Temp. Stability⁹	°F	+/- 0.2	+/- 0.2	+/- 0.2	+/- 0.2	+/- 0.2
Dimensions¹⁰ (inches)	Height	22.5	26.5	26.5	33	42.5
	Width	29	36	36	31	34
	Depth	32	36	36	46	46
Weight	(pounds)	260	395	500	550	750
Capacity¹¹ P.E.	(lbs./hr.)	41	52	87	136	200

- (1) As a result of continuous improvement efforts, specifications are subject to change without notice or liability. (2) Capacity is based on 55°F LWT and 100°F ambient temperature. Capacities may be +/- 5% as reserved by compressor manufacturer. (3) Hermetic compressor used on this model. (4) Pump pressure is at pump outlet. Contact factory for optional pumps. (5) Contact factory for optional heater sizes. (6) Full load AMPS must be used for sizing disconnects and supply wiring. Contact factory for 50 Hz operation. (7) Features OPTITEMP INC. patented refrigeration circuit. No load to full load control! (8) Standard operating temperature range 30-110°F. 30-190°F with optional high-temp package and special materials of construction. Contact factory for availability of hi-temp package for OTC-5A and OTC-7.5A. Minimum recommended operating temperature of 48°F unless glycol is used. (9) Control is microprocessor-based digital P.I.D. control. (10) Dimensions are approximate and include casters. (11) LBS./HR of cooling capacity based on polystyrene/polyethylene material at 55°F LWT.



Cooling Towers

Design Features:

The non-rusting FRP casing and basin, circular in shape, eliminates special installation requirements. Prevailing wind directions will not affect tower performance.

Casing:

Easy access through casing simplifies cleaning. Individual fiberglass panels are stainless steel bolted together for periodic washdown and general clean-up. The CTS FRP cooling tower is designed for durability and long life even under the most severe environmental weather conditions.

Fan Blades:

Aerodynamically designed propeller-type fan blades are used to conserve power and ensure quiet operations. CTS models T-25 through T-230 feature a factory-balanced ABS plastic blade. CTS models T-240 and above feature an all-aluminum alloy adjustable fan.

Fan Drive:

CTS models T-25 through T-2200 have direct-drive fan motors. CTS models T-2225 and larger feature a unique belt drive, designed to reduce noise levels, with optional gear drives.

The fan motor is weatherproofed and totally enclosed, allowing for less noisy and more efficient long-term performance.

The sprinkler pipes are sturdy PVC material pierced with closely-spaced holes allowing thorough distribution of water in a rotating spray covering the entire surface of the filler.

The round design permits maximum air intake regardless of wind direction.

Efficient operation results from the smooth pumping of recirculated water through the stand pipe and up into the sprinkler pipes.

Water Distribution System:

CTS models T-25 through T-260 use an ABS plastic sprinkler with stainless steel shaft. CTS models T-270 and above use an aluminum alloy sprinkler head. Both types of sprinkler heads require little or no head pressure loss and minimum maintenance.

Inlet Louvers:

Non-rusting PVC plastic mesh provides easy access to sump while preventing foreign objects from entering water basin.

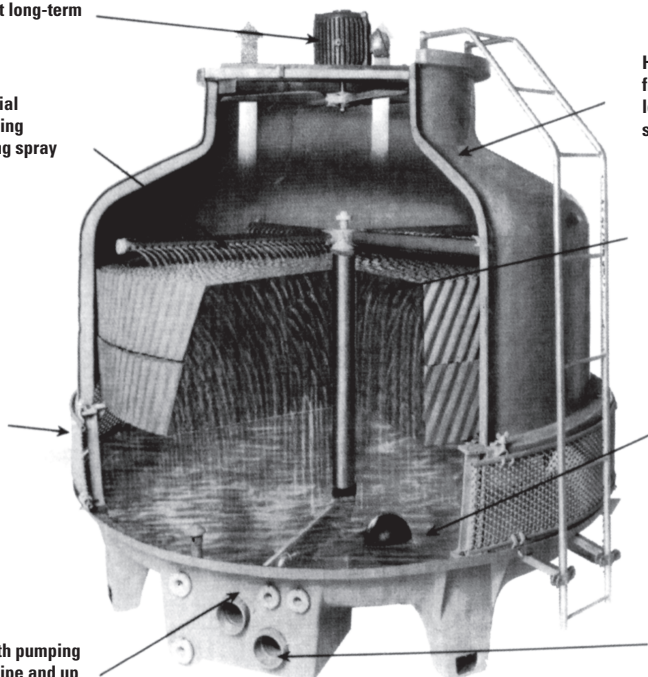
Ladder:

Provided for maintenance and inspection accessibility to fan and sprinkler systems. (Models T-240 and above.)

Fill Material:

Honeycomb heat-embossed PVC is formed to permit high heat transfer efficiency. The CTS fill is suitable for operation with inlet water temperatures of 125° F. For higher temperatures, contact DME for quote.

COOLING TOWERS



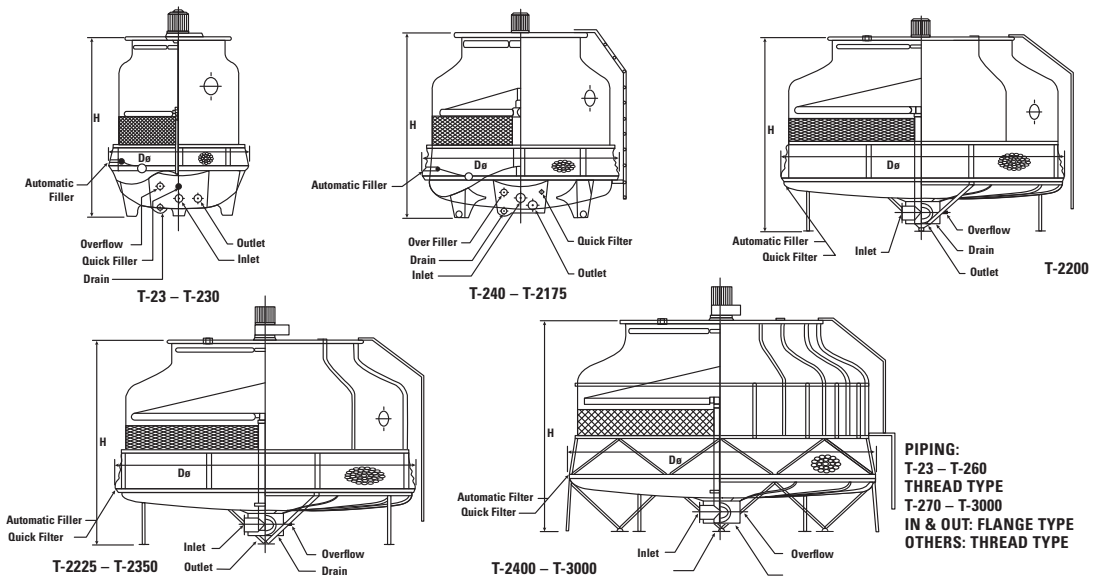
Housing panels and water basin are built of fiberglass-reinforced plastic ensuring rust-free, long-term performance even under the most severe environmental conditions.

The efficiently-designed PVC filler creates a surface area that allows for maximum dispersion of water and creates a superior cooling effect.

A large-capacity, durable water basin constructed from rustproof, fiberglass-reinforced plastic guarantees low maintenance and long-term operation.

A large diameter outlet pipe draws a constant supply of cooled water from the basin to serve the facility.

Cooling Towers

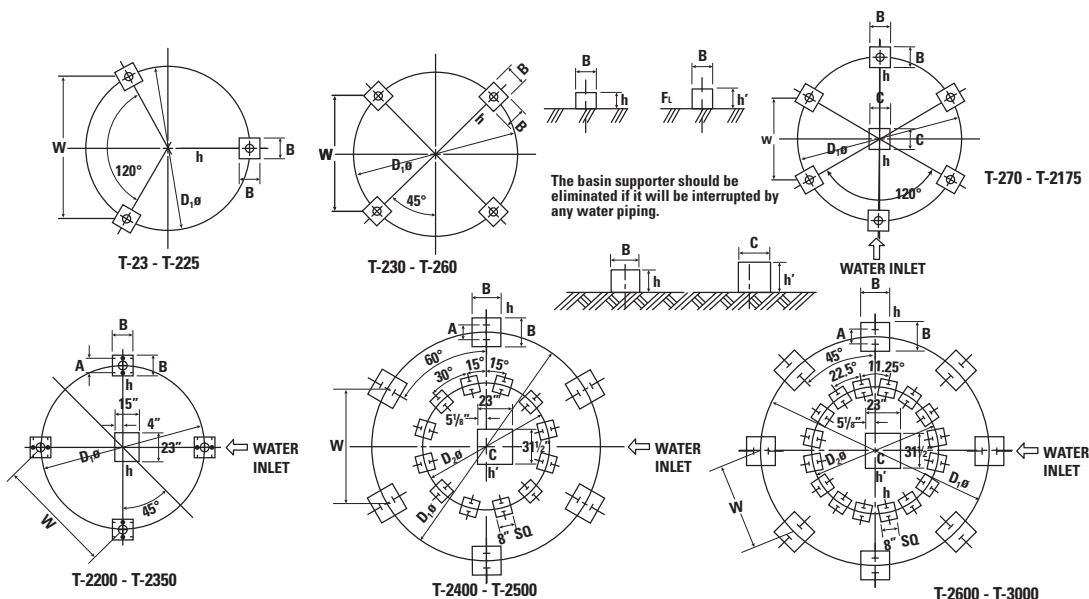


T Model	Dimensions (In.)		Pipe Connections (In.)						Fan Motor (HP)	Fan Diameter (Inch)	Air Volume (CFM)	Nominal Water Flow (GPM)
	Height	Dia.	In	Out	O	Dr	Float	Q				
T-25	52	33½	1½	1½	1	¾	½	–	⅙*	19½	2118	15
T-28	56	33½	1½	1½	1	¾	½	–	⅙*	19½	2648	23
T-210	54	41¾	1½	1½	1	¾	½	–	¼*	26⅜	3531	30
T-215	59	46	2	2	1	1	½	–	¼*	26⅜	4767	44
T-220	63	54⅜	2	2	1	1	½	–	½**	30¼	6356	58
T-225	70 ¹⁵ / ₁₆	54⅜	2½	2½	1	1	½	–	¾***	30¼	7000	73
T-230	68⅜	62¼	2½	2½	1	1	½	–	1***	30¼	8100	88
T-240	74½	71⅝	2½	2½	1	1	¾	–	1½***	38¼	9800	118
T-250	74½	78¾	3	3	1	1	¾	–	1½***	38¼	11500	148
T-260	74 ¹¹ / ₁₆	78¾	3	3	1	1	¾	–	1½***	46	14700	177
T-270	79⅜	85⅝	4	4	1	1	¾	–	1½***	46	17500	207
T-280	79⅜	85⅝	4	4	1	1	¾	–	2***	46	18900	237
T-2100	85 ¹ / ₁₆	104⅜	4	4	1	1	1	–	3***	57⅞	24500	295
T-2125	87	120⅜	6	6	2	1	1	–	3***	57⅞	29060	369
T-2150	90	130	6	6	2	2	1	–	5***	68⅞	33260	446
T-2175	97⅞	130	5	5	2	2	1	–	5***	68⅞	40250	518
T-2200	117¾	148⅜	6	6	2	2	1¼	1¼	5***	68⅞	43760	592
T-2225	125⅝	148⅜	6	6	2	2	1¼	1¼	7½***	93	61270	656
T-2250	125⅝	148⅜	8	8	2	2	1¼	1¼	7½***	93	61270	737
T-2300	131⅞	174¾	8	8	2	2	1¼	1¼	10***	93	77020	883
T-2350	133½	188⅝	8	8	2	2	1¼	1¼	10***	93	77020	1036
T-2400	153⅞	203⅞	8	8	4	2	2	2	15***	117	91030	1190
T-2500	154 ¹¹ / ₁₆	219⅝	10	10	4	2	2	2	15***	117	91030	1505
T-2600	171⅝	259⅞	10	10	4	2	2	2	20***	133⅞	125000	1777
T-2700	181 ⁵ / ₁₆	259⅞	10	10	4	2	2	2	20***	133⅞	125000	2101
T-2800	194 ¹¹ / ₁₆	299¼	12	12	4	3	3	2	30***	141	175000	2370
T-3000	202½	299¼	12	12	4	3	3	2	30***	141	175000	3011

Electrical specifications: *110/220/1/60, 220/3/60, **110/220/1/60, 220/440/3/60, ***220/440/3/60 Tri-voltage fan motors (208-230-460-3-60) are available for ¾ HP and larger. Special order 50-cycle fan motors also available. Nominal flow is defined as rate of water cooled from 95° to 85°, with 75° wet bulb temperature.



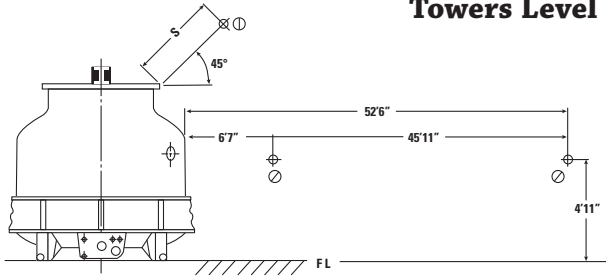
Cooling Towers



T Model	Weight (Lbs.)		Dimensions (In.)								Anchor Bolt		Qty (Pcs.)	Pump Head (Ft.)	
	Dry	Operating	D1	W	B	A	h	h'	C	D2	Size (Inch)	Length (Inch)			
T-25	86	251	21 ⁵ / ₈	18 ³ / ₄	8		6					1/2	4 ³ / ₄	3	5.0
T-28	93	262	21 ⁵ / ₈	18 ³ / ₄	8		6					1/2	4 ³ / ₄	3	5.0
T-210	123	443	29 ¹ / ₂	25 ⁵ / ₈	8		6					1/2	4 ³ / ₄	3	5.0
T-215	139	536	34 ⁵ / ₈	30	8		6					1/2	4 ³ / ₄	3	5.3
T-220	190	719	44	38 ¹ / ₄	8		6					1/2	4 ³ / ₄	3	5.6
T-225	227	887	44	38 ¹ / ₄	8		6					1/2	4 ³ / ₄	3	5.6
T-230	253	1074	52 ¹ / ₂	37	8		6					1/2	4 ³ / ₄	4	6.0
T-240	369	1133	57 ⁷ / ₈	40 ⁷ / ₈	10		8					1/2	4 ³ / ₄	4	6.6
T-250	435	1313	66 ¹ / ₈	46 ³ / ₄	10		8					1/2	4 ³ / ₄	4	6.6
T-260	504	1472	66 ¹ / ₈	46 ³ / ₄	10		8					1/2	4 ³ / ₄	4	6.6
T-270	610	1555	69 ³ / ₈	34 ¹ / ₂	10		8	9 ¹ / ₂	10			1/2	4 ³ / ₄	5	6.6
T-280	642	1588	69 ³ / ₈	34 ¹ / ₂	10		8	9 ¹ / ₂	10			1/2	4 ³ / ₄	5	6.6
T-2100	887	2361	92 ¹ / ₂	46 ¹ / ₄	12		12	14	12			5/8	8	5	8.2
T-2125	1025	2983	103 ¹ / ₈	51 ¹ / ₂	12		12	14	12			5/8	8	5	10.0
T-2150	1375	5731	112 ¹ / ₂	56 ¹ / ₄	12		12	13 ¹ / ₂	16			5/8	8	5	10.0
T-2175	1569	5887	112 ¹ / ₂	56 ¹ / ₄	12		12	13 ¹ / ₂	16			5/8	8	5	11.0
T-2200	1914	7612	132	93 ³ / ₈	12	5 ¹ / ₈	12	16	23			5/8	8	8	11.0
T-2225	2112	7744	132	93 ³ / ₈	12	5 ¹ / ₈	12	16	23			5/8	8	8	11.0
T-2250	2266	7854	132	93 ³ / ₈	12	5 ¹ / ₈	12	16	23			5/8	8	8	12.0
T-2300	2823	9995	156 ¹ / ₈	110 ³ / ₈	12	5 ¹ / ₂	12	16	23			5/8	8	8	12.0
T-2350	2996	10164	169 ¹ / ₈	119 ⁵ / ₈	12	5 ¹ / ₂	12	16	23			5/8	8	8	13.2
T-2400	4776	14984	200 ³ / ₄	100 ³ / ₈	20	5 ¹ / ₂	12	16	31 ¹ / ₂	114 ¹ / ₄		3/4	8	12	13.2
T-2500	5342	15550	216 ¹ / ₂	108 ¹ / ₄	20	5 ¹ / ₂	12	16	31 ¹ / ₂	122		3/4	8	12	13.2
T-2600	7401	23637	255 ¹ / ₈	97 ⁵ / ₈	20	5 ¹ / ₂	12	16	31 ¹ / ₂	141 ¹ / ₄		3/4	8	16	16.4
T-2700	7848	24127	255 ¹ / ₈	97 ⁵ / ₈	20	5 ¹ / ₂	12	16	31 ¹ / ₂	141 ¹ / ₄		3/4	8	16	18.2
T-2800	9636	26356	295 ¹ / ₄	113	20	5 ¹ / ₂	12	16	31 ¹ / ₂	163 ¹ / ₂		3/4	8	16	20.0
T-3000	10199	27359	295 ¹ / ₄	113	20	5 ¹ / ₂	12	16	31 ¹ / ₂	163 ¹ / ₂		3/4	8	16	20.0

Specifications subject to change without notice.

Sound Pressure Levels Of Cooling Tower Systems Towers Level Of Measurement: dB



Note: The accuracy of measuring value is ± 3 decibels

Remarks:

1. Point 1 is 45° extension of fan discharge.
2. Distance "S":
(1) T Models 2125 & lower - 4'11"
(2) T Models 2150 & above - fan diameter



Tower Model	T-25			T-28			T-210			T-215			T-220			T-225			T-230		
Measuring Pt.	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Scale A	62	59	48	63	58	47.5	64	59	48.5	69	66	53	69	66	53	70	67	57	73	67	59
Tower Model	T-240			T-250			T-260			T-270			T-280			T-2100			T-2125		
Measuring Pt.	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Scale A	77	70	59	77	70	59	79	73	64	81	75	66	82	76	67	79	71	60	84	74	64
Tower Model	T-2150			T-2175			T-2200			T-2225			T-2250			T-2300			T-2350		
Measuring Pt.	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Scale A	77	71	62	80	75	65	79	73	63	76	71	62	76	71	62	77	72	63	77	72	63
Tower Model	T-2400			T-2500			T-2600			T-2700			T-2800			T-3000					
Measuring Pt.	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3			
Scale A	79.5	74.5	65.5	79.5	74.5	65.5	77.5	72.5	63.5	77.5	72.5	63.5	78.5	74	65	80	75	66			

Tower Capacities													
Hot Water	90°F	90°F	95°F	92°F	95°F	97°F	95°F	95°F	96°F	98°F	90°F	94°F	T Model
Cold Water	80°F	80°F	85°F	82°F	85°F	87°F	85°F	85°F	86°F	88°F	83°F	85°F	
Wet Bulb	65°F	70°F	70°F	72°F	75°F	75°F	77°F	78°F	80°F	82°F	75°F	75°F	
GPM	17	12	20	13	15	18	12	11	10	11	15	16	T-25
	27	20	32	21	23	29	20	18	16	17	25	26	T-28
	34	25	39	27	30	35	25	23	20	23	31	32	T-210
	51	37	60	40	44	54	37	33	31	33	46	48	T-215
	68	49	80	53	58	72	49	45	41	44	62	64	T-220
	85	62	97	66	73	90	62	56	52	56	77	79	T-225
	101	75	119	80	88	108	75	68	63	68	93	96	T-230
	134	100	156	106	118	142	101	92	85	91	124	128	T-240
	168	127	195	134	148	178	127	116	108	115	155	159	T-250
	201	150	224	160	177	211	151	138	128	137	185	191	T-260
	236	176	262	188	207	251	176	160	150	160	218	224	T-270
	268	203	308	215	237	253	203	185	173	184	248	256	T-280
	335	250	382	266	295	356	252	230	213	228	309	319	T-2100
	420	316	480	235	369	446	316	289	270	289	388	400	T-2125
	504	383	574	405	446	534	383	353	328	350	466	479	T-2150
	588	441	676	471	518	611	444	407	377	404	541	558	T-2175
	669	509	774	542	592	712	512	469	440	469	621	640	T-2200
	757	559	885	595	656	803	559	503	468	503	696	717	T-2225
	838	625	970	666	737	889	630	574	533	569	772	798	T-2250
	1011	775	1175	800	883	1075	755	685	634	678	934	960	T-2300
1176	889	1340	946	1036	1240	895	818	767	818	1087	1119	T-2350	
1349	1023	1540	1084	1190	1420	1023	930	871	932	1240	1278	T-2400	
1657	1301	1885	1377	1505	1763	1324	1226	1157	1233	1551	1604	T-2500	
2006	1526	2322	1625	1777	2137	1537	1406	1319	1406	1864	1919	T-2600	
2317	1819	2640	1928	2101	2469	1841	1700	1641	1711	2177	2242	T-2700	
2675	2035	3096	2166	2370	2849	2050	1875	1759	1875	2486	2559	T-2800	
3303	2616	3760	2762	3011	3300	2660	2484	2353	2499	3098	3201	T-3000	



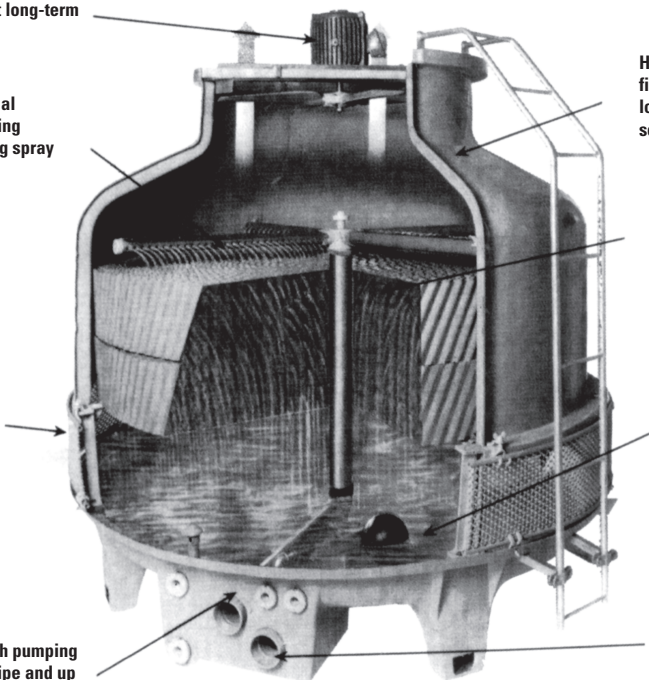
Cooling Towers

The fan motor is weatherproofed and totally enclosed, allowing for less noisy and more efficient long-term performance.

The sprinkler pipes are sturdy PVC material pierced with closely-spaced holes allowing thorough distribution of water in a rotating spray covering the entire surface of the filler.

The round design permits maximum air intake regardless of wind direction.

Efficient operation results from the smooth pumping of recirculated water through the stand pipe and up into the sprinkler pipes.



Housing panels and water basin are built of fiberglass-reinforced plastic ensuring rust-free, long-term performance even under the most severe environmental conditions.

The efficiently-designed PVC filler creates a surface area that allows for maximum dispersion of water and creates a superior cooling effect.

A large-capacity, durable water basin constructed from rustproof, fiberglass-reinforced plastic guarantees low maintenance and long-term operation.

A large diameter outlet pipe draws a constant supply of cooled water from the basin to serve the facility.

Cooling Tower Models and Key Specifications

Model #	H.P.	Motor Voltage/Phase	Ship Weight
T-25	1/6	110/220-1	165 lbs
T-28	1/6	110/220-1	175 lbs
T-210	1/4	110/220-1	200 lbs
T-215	1/4	110/220-1	225 lbs
T-220	1/2	110/220-1 or 220/440-3	260 lbs
T-225	3/4	220/440-3	295 lbs
T-230	1	220/440-3	340 lbs
T-240	1 1/2	220/440-3	425 lbs
T-250	1 1/2	220/440-3	490 lbs
T-260	1 1/2	220/440-3	570 lbs
T-270	1 1/2	220/440-3	660 lbs
T-280	2	220/440-3	710 lbs
T-2100	3	220/440-3	1000/200 lbs
T-2125	3	220/440-3	1095/220 lbs
T-2150	5	220/440-3	1350/260 lbs
T-2175	5	220/440-3	1580/290 lbs
T-2200	5	220/440-3	1900/320 lbs
T-2225	7 1/2	208/230/460/360	Call
T-2250	7 1/2	208/230/460/360	Call
T-2300	10	208/230/460/360	Call
T-2350	10	208/230/460/360	Call
T-2400	15	208/230/460/360	Call
T-2500	15	208/230/460/360	Call
T-2600	20	208/230/460/360	Call
T-2700	20	208/230/460/360	Call
T-2800	30	208/230/460/360	Call
T-3000	30	208/230/460/360	Call

Ethylene Glycol

Inhibited Ethylene Glycol



Inhibited Ethylene Glycol

Ethylene Glycols are used in applications involving secondary cooling and heat transfer, providing freeze and burst protection. Plain water and antifreeze-type products do not have the proper inhibitor package for these heavy industrial uses.

Compared with inhibited glycols, uninhibited glycols oxidize in the presence of air and heat, forming acids. These acids can be corrosive to the metal in a system. Inhibited glycols neutralize the acids formed and thus protect against corrosion.

Applications:

Ethylene Glycol Inhibited is almost odorless, easily mixes with water, and is moderately toxic.

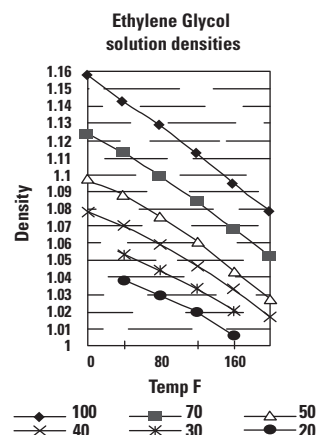
Ethylene Glycol Inhibited is effective from -60° to 250°F.

Proper concentration is a function of the lowest anticipated temperature. It is recommended to provide protection about 5° lower than the lowest anticipated temperature. However, for best corrosion protection do not go below 30% by volume.

ETHYLENE GLYCOL



Ethylene Glycol Inhibited	
Part Number	Container Size
ELG2-5	5 Gal.
ELG2-55	55 Gal.



Uninhibited Ethylene Glycol

UNINHIBITED ETHYLENE GLYCOL

- Pure ethylene glycol circulator fluid, no additives
- Guaranteed analysis by Shell
- For use from -40° to +250°F (dilute)
- Good rust preventative properties
- Non-corrosive, will not build-up
- High flashpoint, +240°F
- Shipped from stock
- Compare our quality, compare our price!

Shell® Brand Uninhibited Ethylene Glycol	
Part Number	Container Size
ELG5	5 Gal.
ELG55	55 Gal.



Heat Transfer Fluid

Therminol XP heat transfer fluid is an extremely pure white mineral oil which provides reliable heat transfer from 0° to 600°F. Performance features of Therminol XP include:

- Low Fouling – The purity of Therminol XP minimizes fouling as a result of oxidation and degradation of the fluid, provided proper attention is given to system design and operation within the maximum bulk and film temperatures specified.
- Practically Non-Toxic – As an indicator of purity, Therminol XP meets FDA specifications defined in 21 CFR 172.878 and requirements of United States Pharmacopeia (USP) and National Formulary (NF).
- Thermal Stability – Therminol XP is stable to 600°F. Users can expect many years of reliable, trouble free operation, even when operating continuously at the recommended maximum temperature of 600°F.
- Environmentally Friendly – Therminol XP has outstanding regulatory status for those seeking heat transfer fluids which have minimum environmental reporting requirements.

Therminol XP is used in a wide variety of industries, such as:

- Plastics molding equipment
- Pharmaceuticals
- Specialty chemicals
- Laundries

Appearance	Colorless, odorless liquid	
Composition	White mineral oil, USP/NF	
Flashpoint (ASTM D-92)	182°C (360°F)	
Fire Point (ASTM D-92)	196°C (385°F)	
Autoignition Temperature (ASTM D-2155)	324°C (615°F)	
Kinematic Viscosity at 40°C	23.7 mm ² /s (cSt)	
at 100°C	4.06 mm ² /s (cSt)	
Density at 25°C	875 kg/m ³ (7.30 lb/gal)	
Specific Gravity (60°F/60°F)	0.882	
Coefficient of Thermal Expansion at 200°C	0.000892/°C (0.000495/°F)	
Average Molecular Weight	350	
Pour Point	-29° C (-20°F)	
Pumpability at 2000 mm ² /s (cSt)	-20°C (-4°F)	
at 300 mm ² /s (cSt)	-1°C (30°F)	
Minimum Temperatures for		
Fully Developed Turbulent Flow (Re = 10000)		
10 ft/sec, 1-in tube	72°C (162°F)	
20 ft/sec, 1-in tube	51°C (123°F)	
Transition Region Flow (Re = 2000)		
10 ft/sec, 1-in tube	30°C (85°F)	
20 ft/sec, 1-in tube	17°C (63°F)	
Boiling Range	10%	332°C (630°F)
	90%	416°C (780°F)
Normal Boiling Point	358°C (676°F)	
Heat of Vaporization at Maximum		
Use Temperature 315°C	214 kJ/kg (91.9 Btu/lb)	
Optimum Use Range	-20°C to 315°C (0°F to 600°F)	
Maximum Film Temperature	330°C (625°F)	
Pseudocritical Temperature	542°C (1007°F)	
Pseudocritical Pressure	15.2 bar (220 psia)	
Pseudocritical Density	280 kg/m ³ (17.5 lb/ft ³)	
Vapor Pressure, psia @		
200°F	0.0005	
300°F	0.003	
400°F	0.147	
500°F	0.967	
600°F	4.72	

HEAT TRANSFER FLUID



55 Gallon Drum

Therminol® XP	
Part Number	Container Size
HTFXP5	5 Gallon
HTFXP55	55 Gallon

Shipping Weight: 5 Gallon/41 Lbs, 55 Gallon/465 Lbs

Strainer for Water Applications

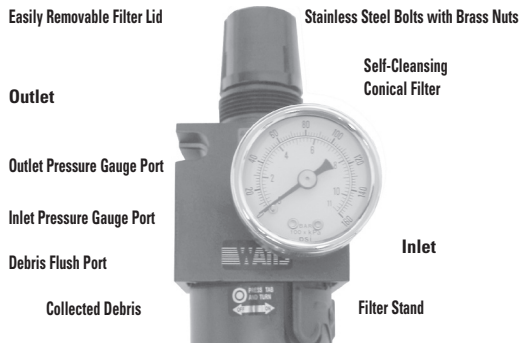
The Thompson Strainer



- Easily Removable Filter Lid
- Stainless Steel Bolts with Brass Nuts
- Self-Cleaning Conical Filter
- Outlet Pressure Gauge Port
- Inlet Pressure Gauge Port
- Debris Flush Port

- High-capacity, high-efficiency stainless steel strainer
- For Cooling Tower and Chiller Water applications (full flow and sidestream)

The Thomson Strainer has a unique design: as water enters the bottom of the strainer housing and flows upward, heavier debris and particulate is accelerated downward, away from the conical screen, into the large debris reservoir at the base of the strainer. The particulate is then flushed from the reservoir via the debris flush port. Due to the large amount of screen surface area, all models operate with less than a 1-PSI pressure loss at maximum flow when clean. The strainers are available with a wide variety of screen mesh options, ranging from large perforated hole-openings down to approximately 50-micron.



THOMPSON WATER STRAINER

Please specify mesh size! (16–200)

Model Number	Inlet/Outlet Size	Recommended Maximum GPM	Maximum PSI Pressure	Unit Weight (lbs.)
MLS2	2"	100	125	13
MLS3	3"	200	125	27
MLS4C	4"	350	125	60
MLS4B	4"	350	150	60
MLS6	6"	750	150	125
MLS8	8"	1300	150	230
MLS10	10"	2000	150	400

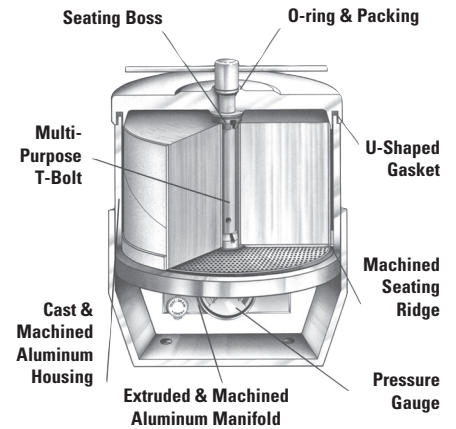
Filtration System



The Filtroil Filtration System:

- Extends the life of your hydraulic fluids
- Drastically reduces waste oil disposal costs
- Reduces machine hydraulic repairs 25 to 35%
- Cools and cleans oil system giving smooth machine operation
- Increases equipment availability and uptime
- Provides significant economic payback
- Helps comply with waste oil laws, regulations and guidelines
- Improves repeatability

FILTROI SYSTEM



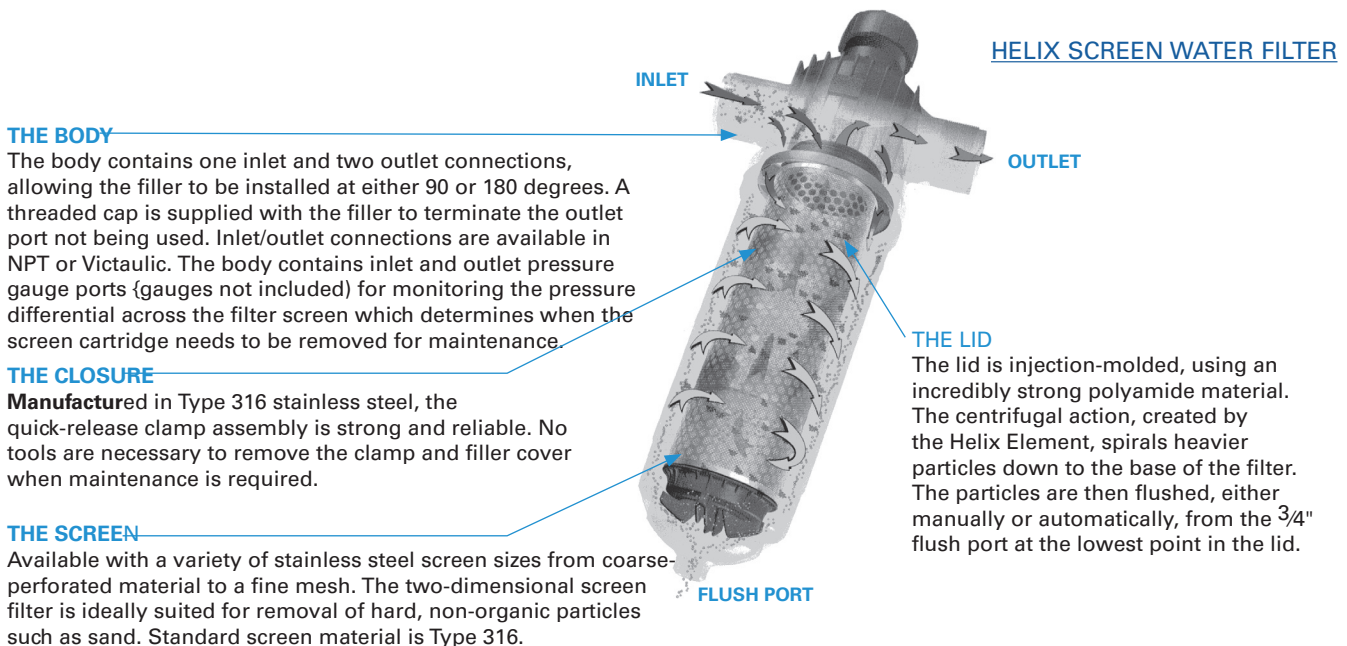
	BU50	BU100	BU200	BU400	BU1600
Quantity of oil in machine	up to 150 gal.	up to 325 gal.	up to 450 gal.	up to 100 gal.	over 1000 gal.
Oil (ISO) cleanliness	16/14/11 or better	16/14/11 or better	16/14/11 or better	16/14/11 or better	16/14/11 or better
Replacement element (change every 2,000 hours or 3 months of operation)	50E	100E	200E	(2) 200E	(8) 200E
Replacement gasket set (change once a year)	50PS	100PS	200PS	(2) 200PS	(8) 200PS
Special element (water removal)	50ME	100ME	200ME	(2) 200ME	(8) 200ME



Helix Screen Water Filter



Miller Leaman Helix Screen Water Filters are available in three different sized models: 2", 2" Super and 3". The filters can be installed in any orientation; however, it is preferable to install them in the inverted position ($\frac{3}{4}$ " flush port at bottom). This helps the filtration system work at its best. As water enters the filter housing, a high-velocity centrifugal action occurs, spiraling heavier particles (sediment, scale, etc.) away from the screen cartridge, down to the base of the filter. These accumulated particles are then flushed from the filter via the $\frac{3}{4}$ " flush port connection at the base of the filter (valve not included).



How It Works

1. Dirty water enters the filter housing through the inlet connection.
2. As dirty water passes through the Helix Element, the water starts to spin at high velocity. This centrifugal action spins the particles away from the screen, minimizing manual cleaning frequency.
3. As particles are spun down to the base of the filter, they are flushed via the $\frac{3}{4}$ " female threaded flush port connection.
4. The dirty water passes from the outside to the inside of the stainless steel screen. The screen captures the remaining light and fibrous contaminants in the water.
5. After passing through the screen, the filtered water flows upward and exits the filter through one of the outlets. The outlet not being used is terminated with a threaded cap.

Unique Features

- Centrifugal cleaning action minimizes maintenance
- Large screen surface area with maximum open area
- Particles can be flushed while filter is in operation
- Several Type 316 stainless steel mesh (and perforated) options available
- Durable, corrosion-resistant, injection-molded housing
- Easily removable, quick-clamp lid assembly
- Pressure gauge ports molded into

See next page for technical specs!

Helix Screen Water Filter



Technical Data

Flow Rates for a Single Filter Housing

2"/100 GPM max.*

2" Super/100 GPM max.*

3"/200 GPM max.*

Multiple pods are manifolded for higher flow rates

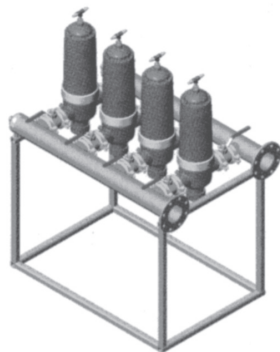
* Maximum flow rates should be derated for high solids loading, particularly for finer mesh sizes.

Pressure Rating

All units rated to 125 PSI

Temperature Rating

All units rated to 140° F



Please contact your DME about modular capabilities.

Inlet/Outlet Configurations

2" and 3" models available with NPT and/or Victaulic inlet/outlet connections

In-line and 90-degree configurations standard (filter is supplied with a cap for outlet port not being used)

Construction Materials

Housing: Polyamide

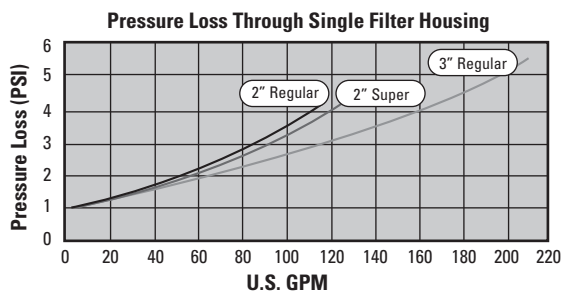
Screen: Stainless Steel (Type 316)

Gaskets: EPDM

Filter Pod Clamp: Stainless Steel (Type 316)

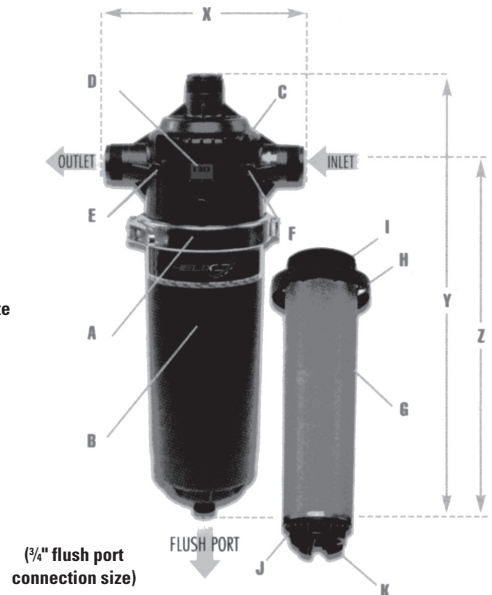
Screen Sizes Available

16, 30, 40, 50, 60, 80, 100, 120, 150, 200^{1/4}" perforated, 1/8" perforated, 5/64" perforated, 1/16" perforated (Other sizes available by special order)



Filter Components

- A. Band-Clamp Assembly
- B. Removable Filter Lid
- C. Filter Body
- D. Mesh/Micron Data Plate
- E. Outlet Gauge Port (Gauge not Included)
- F. Inlet Gauge Port (Gauge not Included)
- G. Filter Screen Cartridge
- H. Helix Element
- I. O-Ring Seal
- J. Cartridge Cover Plate
- K. Threaded Wing Bolt
- X. See table below
- Y. See table below
- Z. See table below

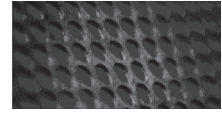


Part Number	Model Type	Inlet/Outlet Size & Type	Filter Surface Area (Sq. In.)	Max. Flow (GPM)	(Refer to Diagram Above)		
					X	Y	Z
HS2NA*	Regular	2"/NPT	186	100	12-1/8"	24-1/8"	18"
HS2SA*	Super	2"/NPT	263	100	12-1/8"	28-3/4"	22-15/16"
HS3NA*	Regular	2"/NPT	263	200	13-1/4"	30"	22-15/16"
HS2NW*	Regular	2"/Victaulic	186	100	12-1/8"	24-1/8"	18"
HS2SW*	Super	2"/Victaulic	263	100	12-1/8"	28-3/4"	22-15/16"
HS3NW*	Regular	2"/Victaulic	263	200	13-1/4"	30"	22-15/16"

* Please specify screen size when ordering. (e.g: HS2NA100 is a 2" NPT filter with a 100 mesh screen)

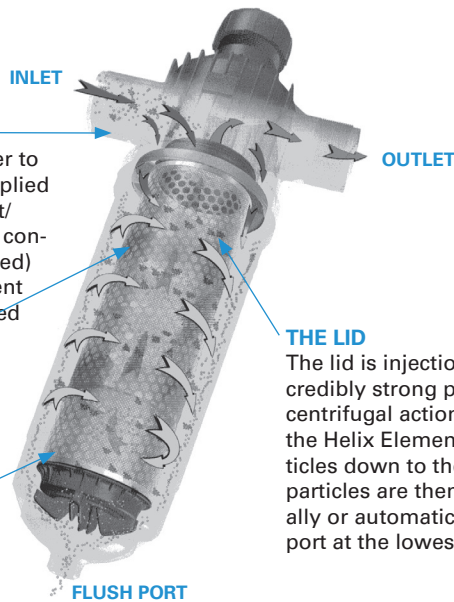


Helix Disc Water Filter



Miller Leaman Helix Disc Filters are available in three different sized models: 2", 2" Super and 3". The filters can be installed in any orientation; however, it is preferable to install them in the inverted position ($\frac{3}{4}$ " flush port at bottom). This helps the filtration system work at its best. As water enters the filter housing, a high-velocity centrifugal action occurs, spiraling heavier particles (sediment, scale, etc.) away from the disc cartridge, down to the base of the filter. These accumulated particles are then flushed from the filter via the $\frac{3}{4}$ " flush port connection at the base of the filter (valve not included).

HELIX DISC WATER FILTER



THE BODY

The body contains one inlet and two outlets, enabling the filter to be installed at either 90 or 180 degrees. A threaded cap is supplied with the filter to terminate the outlet port not being used. Inlet/outlet connections are available in NPT or Victaulic. The body contains inlet and outlet pressure gauge ports (gauges not included) for monitoring the pressure differential across the filter element which determines when the disc cartridge needs to be removed for maintenance.

THE CLOSURE

Manufactured in Type 316 stainless steel, the quick-release clamp assembly is strong and reliable. No tools are necessary to remove the clamp and filter cover when maintenance is required.

THE DISC

The three-dimensional disc is ideal for filtering hard particles (such as sediment and scale) and soft fibrous material (such as algae, bugs, cottonwood seed, etc.). The color-coded discs are available in a variety of micron sizes.

THE LID

The lid is injection molded, using an incredibly strong polyamide material. The centrifugal action, created by the Helix Element, spirals heavier particles down to the base of the filter. The particles are then flushed, either manually or automatically, from the $\frac{3}{4}$ " flush port at the lowest point in the lid.

How It Works

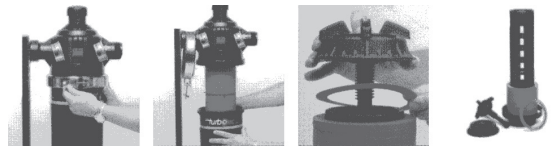
1. Dirty water enters the filter housing through the inlet connection.
2. As dirty water passes through the Helix Element, the water starts to spin at high velocity. This centrifugal action spins the particles away from the disc media, minimizing manual cleaning frequency.
3. As particles are spun down to the base of the filter, they are flushed via the $\frac{3}{4}$ " female threaded flush port connection.
4. The dirty water passes from the outside to the inside of the discs. The grooves, molded into the surface of the three-dimensional discs, trap the remaining contaminants in the water.
5. After passing through the discs, the filtered water flows upward and exits the filter through one of the outlets. The outlet not being used is terminated with a threaded cap.

Unique Features

- Centrifugal cleaning action minimizes maintenance
- Large disc surface area with three-dimensional depth
- Particles can be flushed while filter is in operation
- Several color-coded disc options available
- Durable, corrosion-resistant, injection-molded housing
- Easily removable, quick-clamp lid assembly
- Pressure gauge ports molded into housing

See next page for Helix Disc Filter technical specs!

Helix Disc Water Filter



Technical Data

Flow Rates for a Single Filter Housing
 2"/100 GPM max.*
 2" Super/100 GPM max.*
 3"/200 GPM max.*

Multiple pods are manifolded for higher flow rates
 * Maximum flow rates should be derated for high solids loading, particularly for finer disc media.

Pressure Rating

All units rated to 125 PSI

Temperature Rating

All units rated to 140°F

Inlet/Outlet Configurations

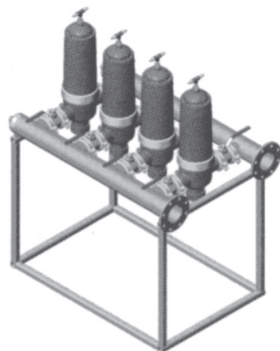
2" and 3" models available with NPT and/or Victaulic inlet/outlet connections
 In-line and 90-degree configurations standard
 (Filter is supplied with a cap for outlet port not being used)

Construction Materials

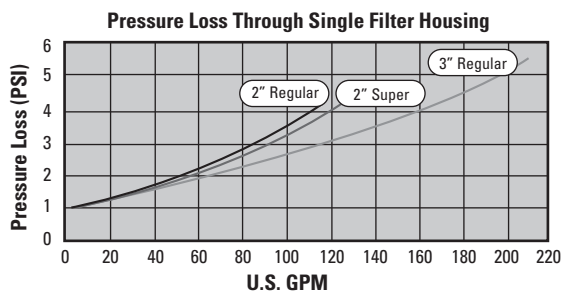
Housing: Polyamide
 Discs: Polypropylene
 Gaskets: EPDM
 Filter Pod Clamp: Stainless Steel (Type 316)

Micron Options Available

■ 200 Micron (80 Mesh) ■ 100 Micron (150 Mesh)
 ■ 130 Micron (120 Mesh) ■ 50 Micron (250 Mesh)

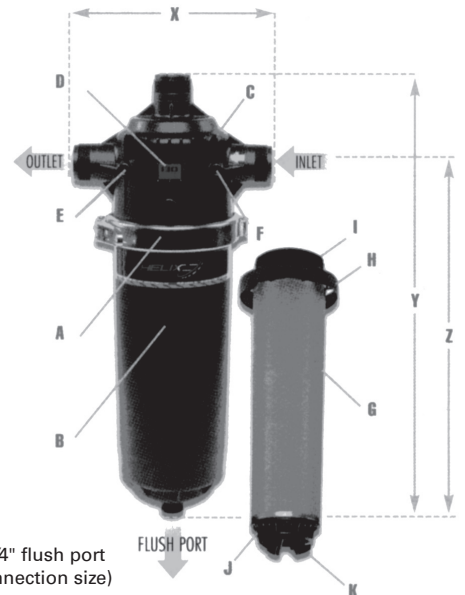


Please contact DME about modular capabilities.



Filter Components

- A. Band Clamp Assembly
- B. Removable Filter Lid
- C. Filter Body
- D. Micron/ Mesh Data Plate
- E. Outlet gauge Port (Gauge not Included)
- F. Inlet gauge Port (Gauge not Included)
- G. Filter Disc Cartridge
- H. Helix Element
- I. O-Ring Seal
- J. Cartridge Cover Plate
- K. Threaded Wing Bolt
- X. See table below
- Y. See table below



Part Number	Model Type	Inlet/Outlet Size & Type	Filter Surface Area (Sq. In.)	Max. Flow (GPM)	(Refer to Diagram Above)		
					X	Y	Z
HD2NA*	Regular	2"/NPT	186	100	12-1/8"	24-1/8"	18"
HD2SA*	Super	2"/NPT	263	100	12-1/8"	28-3/4"	22-15/16"
HD3NA*	Regular	2"/NPT	263	200	13-1/4"	30"	22-15/16"
HD2NW*	Regular	2"/Victaulic	186	100	12-1/8"	24-1/8"	18"
HD2SW*	Super	2"/Victaulic	263	100	12-1/8"	28-3/4"	22-15/16"
HD3NW*	Regular	2"/Victaulic	263	200	13-1/4"	30"	22-15/16"

* Please specify disc size when ordering. (e.g: HD2NA130 is a 2" NPT Super filter with 130 micron discs)



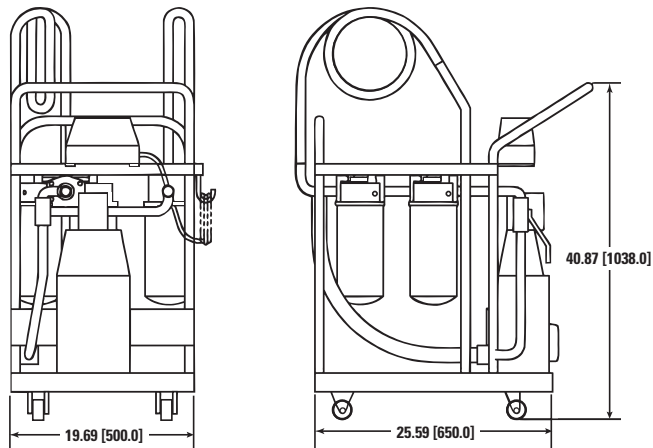
Portable Filter Carts

Stauff® Dual-Stage Filtration

The **Stauff® Portable Filter Cart (SPFC)** is a complete and practical unit fully capable of off-line filtration, filling or emptying reservoirs, or any application requiring the transfer or filtration of hydraulic oils. Multi-stage filtration can be applied to extend element lifetime. The SPFC is available with a variety of spin-on elements for quick and easy element replacement, as well with various pump/motor options. All components are mounted together on a sturdy frame guaranteeing long lifetime.

- 38 1/min (10 US GPM) gear pump
- Electric motor, single phase
- On/off button with 10' power cord
- Heavy-duty welded frame with drip pan and tool tray
- Suction strainer –100 mesh, spin-on
- 10' spiral reinforced PVC hoses w/wands
- 3-way ball valve to bypass filters
- Weight-190 lbs

PORTABLE FILTER CARTS



Stauff® Portable Filter Cart: Two-stage filter with spin-on suction filter and bypass valve. Buna seal, visual indicator, 110 VAC 60 Hz motor, gear pump 10 GPM

Part Number SPFC10-2-0000-0000BVC.....

*Note: please enter part# of desired filters from list below.

Part Number	Filter Description	Part Number	Filter Description
0000	Without filter element	SF6721W	10 micron paper water absorbing
SF6721	10 micron, paper	SF6704MG	3 micron, synthetic
SF6721-6	10 micron, paper (6 pack)	SF6707MG	6 micron, synthetic
SF6711	25 micron, paper	SF6731MG	12 micron, synthetic
SF6711-6	25 micron, paper (6 pack)	SF6726MG	25 micron, synthetic

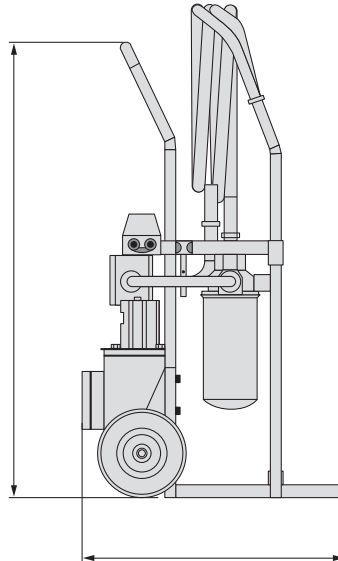
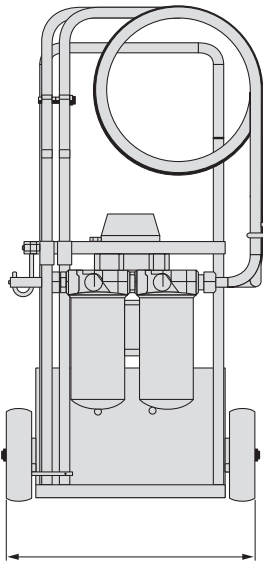
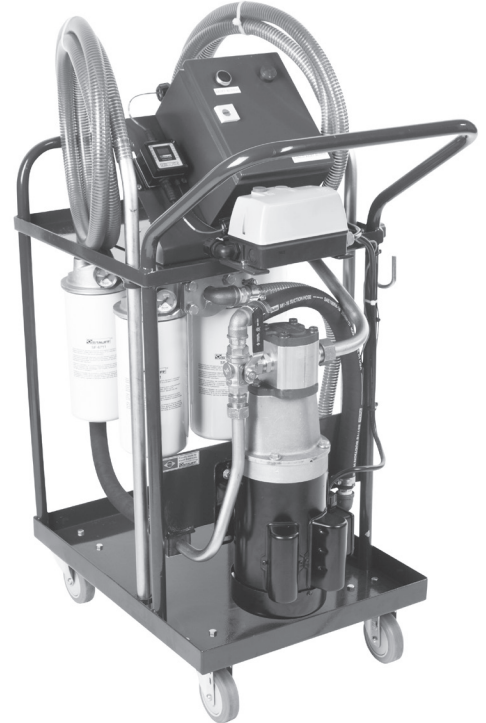
Portable Filter Carts

Stauff® Dual-Stage Filtration



The Stauff® Compact Filter Cart (SCFC) is a compact and handy filter cart, offering excellent service for maintenance departments. The carts can be used for offline filtration or as a transfer unit. The SCFC comes standard with upstream and downstream sample points that can either be used for online particle monitoring or fluid sampling.

- 38 l/min (10 US GPM) gear pump
- Electric motor, single phase
- Thermal overload relays
- Heavy-duty welded frame with coated tool tray epoxy
- Compact suction strainer
- 10' special hoses reinforced with internal spiral
- Filter head with bypass valve integrated
- Visual clogging indicator
- Weight-117 lbs



We still offer filters for obsolete Norman filter carts.

603
610
610AQ
625

Stauff® Compact Filter Cart: Single-stage filter with spin-on suction filter and bypass valve. Buna seal, visual indicator, 110 VAC 60 Hz motor, gear pump-10 GPM

Part Number Example: SCFC210GD0000BVC.

*Note: please enter part number of desired filter from table below.

Part Number	Filter Description	Part Number	Filter Description
0000	Without filter element	SF6721W	10 micron paper, water absorbing
SF6721	10 micron, paper	SF6704MG	3 micron, synthetic
SF6721-6	10 micron, paper (6 pack)	SF6707MG	6 micron, synthetic
SF6711	25 micron, paper	SF6731MG	12 micron, synthetic
SF6711-6	25 micron, paper (6 pack)	SF6726MG	25 micron, synthetic

Note: Additional options, such as the Stauff Smart Cart, are available. Contact DME for more information.



D-Scaler System

Removes rust, scale, and/or lime from your system

- Compact & portable
- All non-corrosive materials
- Prolongs the life of your equipment
- Non-toxic, non-corrosive, & non-flammable fluid
- Easy to operate
- Easy to install
- Fluid is USDA authorized

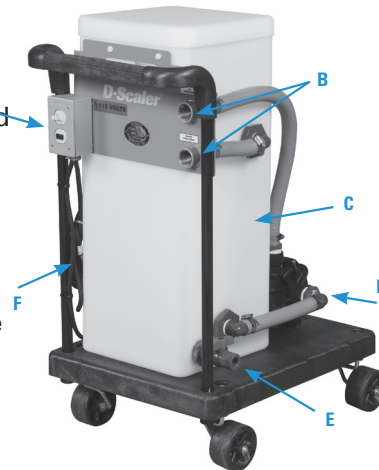
If hard water or mineral deposits are decreasing the efficiency of your process heating and/or cooling, then you need a Mokon D-Scaler. This system is proven to remove rust, scale and/or lime deposits from your process, as well as Mokon systems, or any other circulating temperature control system. This unit will increase the efficiency of your process while prolonging the life of your equipment.

The D-Scaler is portable and lightweight, making it easy to install and easy to operate. It is designed to circulate Mokon D-Scaler Fluid, a non-toxic, non-flammable liquid that quickly dissolves any deposit build-up. This USDA authorized fluid will circulate through your process safely with no harm to your equipment or to the environment.

Standard Features

The Mokon D-Scaler offers many standard features to provide an effective way to remove rust, scale, and/or lime deposits from your process or circulating temperature control system.

- A Illuminated on/off toggle switch
- B Easily accessible fluid connections
- C Reservoir
- D Pump and motor
- E 1/2" NPT drain on side of tank
- F Power cord



D-SCALER SYSTEM

Part Number	Unit Size	Operating Pump	Temp.	Motor	Load Volt.	AMP	L x W x H	Ship Wt.
DScaleSM	Small	25 GPM @15 PSI	ambient	1/2	115	8.4	26 x 18 x 35	60 lbs.
DScaleLG	Large	25 GPM @32 PSI	ambient	3/4	115	11.6	28 x 21 x 35	100 lbs.

D-Scaler Fluid Mokon's D-Scaler Fluid is a non-toxic, non-flammable liquid that quickly dissolves any deposit build-up. This USDA-authorized, non-corrosive fluid will not harm your equipment or the environment. It is available in 5- and 55- gallon containers. Both the fluid and hoses are sold separately from Mokon's D-Scaler unit.

D-Scaler Fluid, 5 gallon - Part No. 5DS

Hose Kit This kit consists of two 1" diameter x 10 ft. hoses with a snap-tight coupling on one end to connect to D-Scaler and threaded connection on the other.

Hose Kit - Part No. 600-044

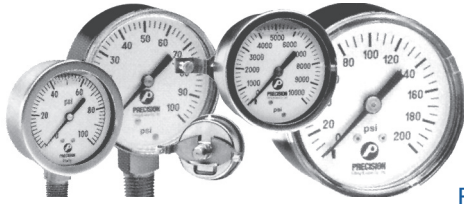
Warranty and Delivery Mokon offers a one-year warranty as standard. The D-Scaler is designed for long trouble-free service and is constructed with reliable parts and durable materials. Both sizes of the D-Scaler are in stock for immediate shipment. Call DME for more information on availability and pricing.



NOTE: Empty tank after every use – fluid left in tank will destroy unit!

Pressure Gauges

Hydraulic & Pneumatic



Rugged, low-cost pressure gauges for hydraulic & pneumatic applications. Liquid fill helps dampen pulsations and acts as a natural lubricant. DME offers low prices and quick shipment.



PRESSURE GAUGES

Hydraulic:

- 2 1/2" dia.
- Liquid-filled gauge
- 304 stainless steel case & ring (except for WGGSS series of which all parts are stainless steel)

Pneumatic:

- 2" dia.
- Black enameled steel case

Part Number	Mount Location	Graduation			P.S.I. Range
		Number	Major	Minor	
GG2000	Bottom Stem	250	250	50	0-2000
GG3000	Bottom Stem	500	500	100	0-3000
GG5000	Bottom Stem	1000	500	100	0-5000
GG10000	Bottom Stem	2000	1000	200	0-10,000
WGGSS3000	Bottom Stem	250	250	50	0-3000
WGGSS5000	Bottom Stem	500	500	100	0-5000
SG1602C*	Back Mount	20	10	5	0-160
WGG2000C	Center Back w/clamp	-	250	50	0-2000
WGG5000C	Center Back w/clamp	-	1000	100	0-5000
SG1002*	Bottom Stem	-	10	15	0-100
SG1602*	Bottom Stem	-	10	15	0-160

*Denotes Pneumatic Gauges – all others are Hydraulic

Note: Generally, gauges should be selected so the maximum working pressure is not in excess of 75% of full-scale range.



Heat Exchangers

HEAT EXCHANGERS

American Industrial
Heat Transfer Inc.

Manufacturer of Quality Heat Exchangers

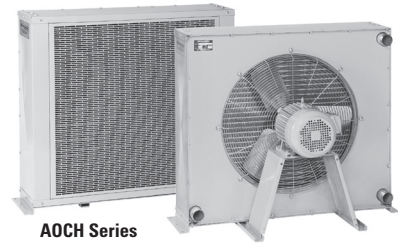
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AB2000 Series



URCS Series

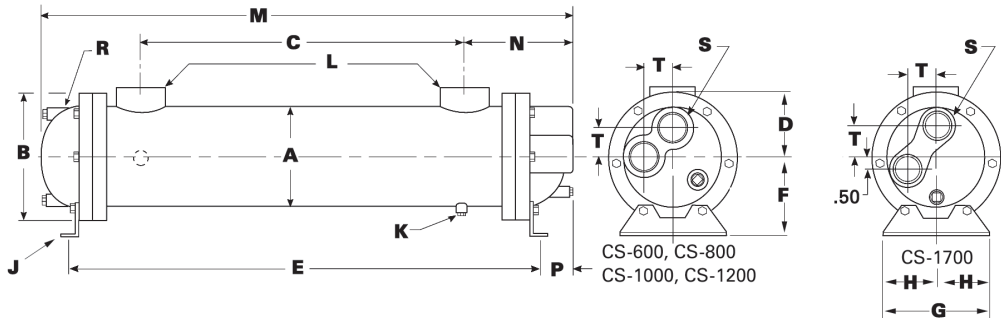


AOCH Series

CS Series

Rugged steel offers durable performance at low cost. Constructed of carbon steel & tube sheets with copper tubing and cast-iron bonnets. Unit offers a wide range of cooling at a low cost. Models are rated 300PSI shell, 150PSI tubes at 300°F, shipped complete with mounting brackets.

These are some of the many high-quality cooling products available... call DME for additional information on other products not shown here!



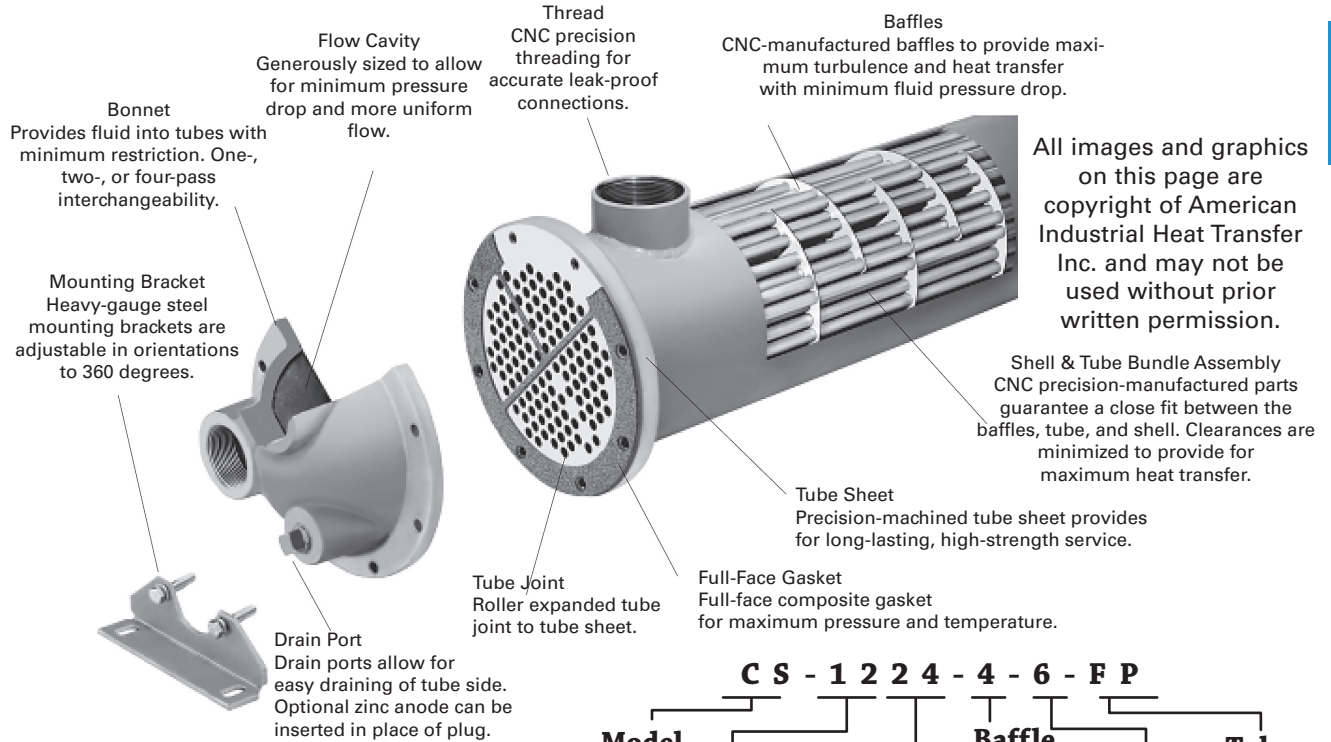
Dimensions

Model	A	B	C	D	E	F	G	H	J	K-NPT	L		Wt.	M	N	P	R-NPT	S-NPT	T
											NPT	SAE							
614	3.25	4.50	10.00	2.31	16.38	2.75	4.18	1.62	.38Ø	(2)	1.00	#16	17	17.12	3.56	0.38	(2)	0.75	1.00
624			20.00		26.38				x 0.88	0.25		1½-12	24	27.12			0.38		
814			9.00		16.62								32	17.88					
824	4.25	6.00	19.00	3.12	26.62	3.50	4.25	1.75	.44Ø	(2)	1.50	#24	41	27.88	4.44	0.63	(3)	0.75	1.25
836			31.00		38.62				x 1.00	0.25		1½-12	53	39.88			0.38		
1014			9.00		17.12								43	18.81					
1024	5.25	6.75	19.00	3.62	27.12	4.00	5.25	2.00	.44Ø	(2)	1.50	#24	57	28.81	4.81	0.75	(3)	1.00	1.69
1036			31.00		39.12				x 1.00	0.25		1½-12	72	40.81			0.38		
1224			18.25		27.13								85	29.13					
1236			30.25		39.13								110	41.13					
1248	6.25	7.75	42.25	4.16	51.13	4.50	6.25	2.50	.44Ø	(2)	2.00	#32	135	53.13	5.44	1.00	(3)	1.50	2.00
1260			54.25		63.13				x 1.00	0.38		2½-12	160	65.13			0.38		
1272			66.25		75.13								185	77.13					
1724			17.00		27.50								140	29.86					
1736			29.00		39.50								180	41.86					
1748			41.00		51.50							3.0"	220	53.86					
1760	8.25	10.12	53.00	5.62	63.50	5.75	8.25	3.50	.44Ø	(2)	3.00	Four-bolt	260	65.86	7.06	1.81	(3)	2.00	2.50
1772			65.00		75.50				x 1.00	0.38			300	77.86			0.50		
1784			77.00		87.50							flange	340	89.86					

Heat Exchangers



American Industrial
Heat Transfer Inc.
Manufacturer of Quality Heat Exchangers



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CS - 1 2 2 4 - 4 - 6 - FP

Model	Shell Diameter	Effective Tube Length	Baffle Spacing Code	Cooling Tube Diameter	Tube Side Passes
CS	600 = 3.25"	800 = 4.25"	1.5"	4 = 1/4"	FP = 4-pass
	1000 = 5.25"	1200 = 6.25"	2.0"	6 = 3/8"	
	1700 = 8.25"		3.0"	10 = 5/8"	
			4.0"		
			6.0"		
			8.0"		

CS Series	Constr. Materials
Shell	Steel
Tubes	Copper
Baffle	Steel
Tube Sheet	Steel
End Bonnets	Cast Iron
Mounting Brackets	Steel
Gasket	Hypalon Composite

Part Number	Shell Diameter	Effective Tube Length	Baffle Spacing Code*	Cooling Tube Diameter	Tube Side Passes
CS614-212-4FP	3.25"	14"	2.5"	-	Four Pass
CS624-4-4FP	3.25"	24"	4.0"	1/4"	Four Pass
CS824-4-4FP	4.25"	24"	4.0"	1/4"	Four Pass
CS836-212-4FP	4.25"	36"	2.5"	1/4"	Four Pass
CS1014-4-6FP	5.25"	14"	4.0"	3/8"	Four Pass
CS1024-4-6FP	5.25"	24"	4.0"	3/8"	Four Pass
CS1036-4-6FP	5.25"	36"	4.0"	3/8"	Four Pass
CS1224-4-6FP	6.25"	24"	4.0"	3/8"	Four Pass
CS1236-4-6FP	6.25"	36"	4.0"	3/8"	Four Pass
CS1248-4-6FP	6.25"	48"	4.0"	3/8"	Four Pass
CS1260-4-6FP	6.25"	60"	4.0"	3/8"	Four Pass
CS1724-8-6FP	8.25"	24"	8.0"	3/8"	Four Pass
CS1736-4-6FP	8.25"	36"	4.0"	3/8"	Four Pass
CS1748-4-6FP	8.25"	48"	4.0"	3/8"	Four Pass
CS1760-6-6FP	8.25"	60"	6.0"	3/8"	Four Pass
CS1772-6-6FP	8.25"	72"	6.0"	3/8"	Four Pass



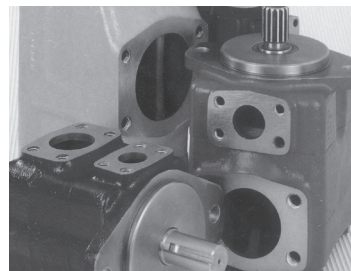
Hydraulic Pumps

Vickers®

Be sure to reset pressure relief valve to proper setting before startup of a new pump or kit. No warranty for damage to parts due to excessive pressure.

- Two year in-service warranty
- Buna seals
- Pressures to 2500 PSI
- Compatible with petroleum oil, synthetics, water glycols and invert emulsions
- Foot- or flange-mounted design
- Improves machine operational performance

Complete Pump	Shafts**	Bearings	Shaft Seals
Part No.*	Part No.	Part No.	Part No.
25V-	25V-S	25V-B	25V-RS
35V-	35V-S	35V-B	35V-RS
45V-	45V-S	45V-B	45V-RS
2520V-	2520V-S	2520V-B	2520V-RS
3520V-	3520V-S	3520V-B	3520V-RS
3525V-	3525V-S	3525V-B	3525V-RS
4520V-	4520V-S	4520V-B	4520V-RS
4525V-	4525V-S	4525V-B	4525V-RS
4535V-	4535V-S	4535V-B	4535V-RS



HYDRAULIC PUMPS

* Please provide complete part number for pump

** #1 Shafts, heavy-duty

#86 Shafts and other options are also available

Cartridge Kits

Vickers®

- Two year in-service warranty
- Volumetric efficiency, flow & pressure are tested and checked to ensure maximum performance
- Big savings, big performance
- Improves machine operational performance

Part Number	GPM
20 Series VHO Cartridge Kits	
585471	5
585473	8
585475	11
585476	12
585477	14
25 Series VHO Cartridge Kits	
591002	12
591003	14
591004	17
591005	21

Part Number	GPM
35 Series VHO Cartridge Kits	
578311	25
578312	30
578313	35
578314	38
45 Series VHO Cartridge Kits	
581663	42
581664	50
580919	60

CARTRIDGE KITS



Mold Service Tables



This new generation of Mold Service Table is specifically designed to:

- Quickly and safely open molds
- Providing access to all parts of the mold for assembly and fitting of components, repair, maintenance, cleaning and production preparation
- Allows the mold to be opened and rotated without the use of cranes
- Rotates 360° for easy access to each mold half with indexing every 90°



3 Ton Table



Features:

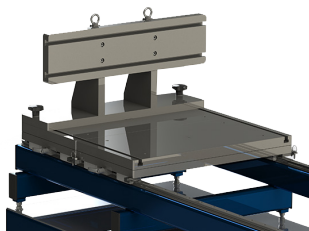
- 1.5, 2, 3 and 6 ton weight capacity
- Provides a working height of 850mm (33.46")
- Tables include: Pivot Plates, Platform & Tool Plate
- Optional accessories- Mechanical Brackets, Magnetic Brackets and Drawer Units



6 Ton Table

MOLD SERVICE TABLES

PART NUMBER	DESCRIPTION
OPTIM2515	MOLD MAINTENANCE TABLE ONLY 1500KG MAX LOAD
OPTIM2520	MOLD MAINTENANCE TABLE ONLY 2000KG MAX LOAD
OPTIM2530	MOLD MAINTENANCE TABLE ONLY 3000KG MAX LOAD
OPTIM2560	MOLD MAINTENANCE TABLE ONLY 6000KG MAX LOAD
OPTIM2515-850AL	OPTIMA 2515 + BASE PLATFORM + AL TOOLPLATE
OPTIM2520-850AL	OPTIMA 2520 + BASE PLATFORM + AL TOOLPLATE
OPTIM2530-850AL	OPTIMA 2530 + BASE PLATFORM + AL TOOLPLATE
OPTIM2560-850AL	OPTIMA 2560 + BASE PLATFORM + AL TOOLPLATE
OPTIM2515-850ALMB	OPTIMA 2515 + BASE PLATFORM + AL TOOLPLATE + MECHANICAL BRACKET
OPTIM2520-850ALMB	OPTIMA 2520 + BASE PLATFORM + AL TOOLPLATE + MECHANICAL BRACKET
OPTIM2530-850ALMB	OPTIMA 2530 + BASE PLATFORM + AL TOOLPLATE + MECHANICAL BRACKET
OPTIM2560-850ALMB	OPTIMA 2560 + BASE PLATFORM + AL TOOLPLATE + MECHANICAL BRACKET
OPTIMEQMAG120090	MAGNETIC BRACKET 135LX125WX38H
OPTIMEQMAG150090	MAGNETIC BRACKET 165LX165WX45H
OPTIMEQMAG180090	MAGNETIC BRACKET 195LX195WX45H
OPTIMEQMAG260090	MAGNETIC BRACKET 285LX195WX45H
OPTIMEQMAG130225	MAGNETIC BRACKET 150LX150WX38H
OPTIMEQMAG180225	MAGNETIC BRACKET 205LX205WX45H



Mechanical Bracket



Drawer Unit- Special Order



Magnetic Brackets- Special Order



MoldVac

Vacuum & Blowback Controller

Custom microprocessor allows for precise control of vacuum and blowback.



Vacuum Circuit -Eliminates flash, part burns, voids, and short shots. Adjustable control to 1/10th of a second.

Limit Switches - 1st energized at mold closed (vacuum), 2nd energized at mold full open (blowback).

Vacuum Reservoir - All units are designed with a vacuum reservoir & provides an instant vacuum within the mold

Blowback Circuit - Two-phase blowback assists in part ejection and purges vented pins



MOLD VAC

	MV10KDME*	MV20KDME**	MV40KDME**
Performance Characteristics			
Vacuum Rating (in3/s)	36	900	1,665
Vacuum Reservoir (in3)	74	2,700	5,000
Vacuum Level (in of hg) ¹	20-24	20-24	20-24
¹ Vacuum rating and levels are approximate based on mold design & construction			
Physical Dimensions (US)			
Height	42"	42"	50"
Width	18"	18"	20"
Depth	24"	28"	34"
Weight	150 lbs.	180 lbs.	200 lbs.
Utility Requirements			
Voltage	110V/1/60	240/460/3/60	240/460/3/60
Amp Draw	2 Amps	4 Amps/2 Amps	4 Amps/2 Amps
Compressed Air	33 cfm @65 psi	65 psi	65 psi
Air Inlet Size	3/8" NPT	3/8" NPT	3/8" NPT
Pipe Connection (connect to mold)	3/4" NPT	3/4" NPT	3/4" NPT

* Add 110 to the end of the part number when ordering voltage.

** Add 220 or 480 to the end of the part number when ordering voltage.

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Screw Tips

SCREW TIPS

Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Arburg (Stepped Seat) Earlier Models			
Stub Nose			
18mm	10/1.5mm	CAA18	CAA18FC
22mm	12/1.75mm	CAA22	CAA22FC
25mm	12/1.75mm	CAA25	CAA25FC
30mm	14/1.5mm	CAA30	CAA30FC
35mm	18/1.5mm	CAA35	CAA35FC
40mm	18/1.5mm	CAA40	CAA40FC
45mm	22/1.5mm	CAA45	CAA45FC
Spear Nose			
18mm	10/1.5mm	CAA18C	CAA18CFC
22mm	12/1.75mm	CAA22C	CAA22CFC
25mm	12/1.75mm	CAA25C	CAA25CFC
30mm	14/1.5mm	CAA30C	CAA30CFC
35mm	18/1.5mm	CAA35C	CAA35CFC
40mm	18/1.5mm	CAA40C	CAA40CFC
45mm	22/1.5mm	CAA45C	CAA45CFC
Arburg (Flat Seat) Later Models			
Stub Nose			
18mm	10/1.5mm	CAA18B	CAA18BFC
22mm	12/1.75mm	CAA22B	CAA22BFC
25mm	12/1.75mm	CAA25B	CAA25BFC
30mm	14/1.5mm	CAA30B	CAA30BFC
35mm	18/1.5mm	CAA35B	CAA35BFC
40mm	18/1.5mm	CAA40B	CAA40BFC
45mm	22/1.5mm	CAA45B	CAA45BFC
Spear Nose			
18mm	10/1.5mm	CAA18A	CAA18AFC
20mm	10/1.5mm	CAA20A	CAA20AFC
22mm	12/1.75mm	CAA22A	CAA22AFC
25mm	12/1.75mm	CAA25A	CAA25AFC
30mm	14/1.5mm	CAA30A	CAA30AFC
35mm	18/1.5mm	CAA35A	CAA35AFC
40mm	18/1.5mm	CAA40A	CAA40AFC
45mm	22/1.5mm	CAA45A	CAA45AFC
Autojectors			
3/4"	7/16"-14	CAJ19	CAJ19FC
1"	1/2"-13	CAJ25	CAJ25FC
1 1/4"	5/8"-11	CAJ31	CAJ31FC
1 1/2"	3/4"-10	CAJ38	CAJ38FC
1 3/4"	7/8"-9	CAJ44	CAJ44FC
2 3/4"	1 1/4"-7	CAJ70	CAJ70FC

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Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Battenfeld			
22mm	12/1.75mm		CAB22FC
25mm	12/1.75mm	CAB25	CAB25FC
30mm	14/1.5mm	CAB30	CAB30FC
35mm	16/1.5mm	CAB35	CAB35FC
40mm	20/2mm	CAB40	CAB40FC
40mm	20/2mm	CAB40A	CAB40AFC
45mm	20/2mm	CAB45A	CAB45AFC
60mm	24/2mm	CAB60	CAB60FC
70mm	40/2mm	CAB70	CAB70FC
110mm	60/2.5mm	CAB110	CAB110FC
Beloit			
1 ¼"	⅝"-18	CABL32	CABL32FC
1 ½"	¾"-16	CABL38	CABL38FC
1 ¾"	⅞"-14	CABL44	CABL44FC
2 ⅛"	⅞"-9	CABL54	CABL54FC
2 ½"	1"-8	CABL64	CABL64FC
3"	1 ¼"-7	CABL76	CABL76FC
3 ½"	1 ¾"-5	CABL89	CABL89FC
*IN STOCK Boy			
14mm	8/1.25mm	CAAB14	CAAB14FC
16mm	8/1.25mm	CAAB16	CAAB16FC
18mm	10/1.5mm	CAAB18	CAAB18FC
*22mm	12/1.75mm	CAAB22	CAAB22FC
*24mm	12/1.75mm	CAAB24	CAAB24FC
*28mm	12/1.75mm	CAAB28	CAAB28FC
*32mm	14/2mm	CAAB32	CAAB32FC
*36mm	16/2mm	CAAB36	CAAB36FC
*38mm	16/2mm	CAAB38	CAAB38FC
*42mm	16/2mm	CAAB42	CAAB42FC
*48mm	18/2.5mm	CAAB48	CAAB48FC
Cincinnati Milacron (earlier models)			
1 ⅝"	⅝"-11	CAC41	CAC41FC
2"	¾"-16	CAC51	CAC51FC
2 ½"	1 ¼"-12		CAC64FC
2 ¾"	1 ¼"-12	CAC70	CAC70FC
3 ¼"	1 ½"-12	CAC83	CAC83FC
3 ½"	1 ½"-12	CAC88	CAC88FC

[SCREW TIPS](#)



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Screw Tips

SCREW TIPS

Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Cincinnati Milacron (earlier models) cont.			
4½"	2"-12	CAC114	CAC114FC
5¼"	2¼"-12		CAC133FC
6"	2½"-12	CAC152	CAC152FC
Cincinnati Milacron (newer models)			
1⅝"	¾"-10	CAC41	CAC41FC
1¾"	⅝"-11	CAC44A	CAC44AFC
1¾"	¾"-10	CAC44	CAC44FC
2"	1"-8	CAD51	CAD51FC
2¼"	1"-8	CAD57	CAD57FC
2½"	1¼"-7	CAD64	CAD64FC
2¾"	1¼"-7	CAD70	CAD70FC
3¼"	1½"-6	CAD83A	CAD83AFC
3½"	1½"-6	CAD88	CAD88FC
4½"	2"-6	CAD114	CAD114FC
5¼"	2¼"-6	CAD133	CAD133FC
6"	2½"-6	CAD152	CAD152FC
Cincinnati Milacron (other models)			
28mm	16/2mm	CAC28	CAC28FC
32mm	18/2.5mm	CAC32	CAC32FC
1⅝"	⅝"-11	CAC33	CAC33FC
35mm	18/2.5mm		CAC35FC
36mm	20/2.5mm	CAC36	CAC36FC
40mm	20/2.5mm	CAC40	CAC40FC
42mm	22/2.5mm	CAC42	CAC42FC
44mm	24/3mm	CAC44D	CAC44DFC
50mm	24/3mm	CAC50	CAC50FC
55mm	27/3mm	CAC55	CAC55FC
56mm	30/3.5mm	CAC56	CAC56FC
65mm	30/3.5mm	CAC65	CAC65FC
70mm	36/4mm	CAC70A	CAC70AFC
110mm	56/5.5mm	CAC110	CAC110FC
*IN STOCK Demag			
18mm	8/1.25mm	CADM18	CADM18FC
*22mm	10/1.5mm	CADM22	CADM22FC
*25mm	10/1.5mm	CADM25	CADM25FC
*30mm	12/1.75mm	CADM30	CADM30FC
*35mm	14/2mm	CADM35	CADM35FC
40mm	16/2mm	CADM40	CADM40FC
*45mm	TR20/3mm	CADM45	CADM45FC
*50mm	TR22/3mm	CADM50	CADM50FC
*60mm	TR27/3mm	CADM60	CADM60FC
*70mm	TR30/3mm	CADM70	CADM70FC
*80mm	TR35/3mm	CADM80	CADM80FC
95mm	TR40/3mm	CADM95	CADM95FC
110mm	TR50/3mm	CADM110	CADM110FC

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Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Egan			
1¾"	¾"-10	CAE44	CAE44FC
2"	7/8"-9	CAE51	CAE51FC
2½"	1⅛"-7	CAE64	CAE64FC
3"	1⅝"-6	CAE76	CAE76FC
3½"	1¾"-6	CAE89	CAE89FC
4"	2"-6	CAE102	CAE102FC
4½"	2¼"-6	CAE114	CAE114FC
5¼"	2¾"-6	CAE133	CAE133FC
6"	3"-6	CAE152	CAE152FC
*IN STOCK Engel			
18mm 10°	10/1.5mm	CAEN18	CAEN18FC
*22mm 30°	12/1.75mm	CAEN22	CAEN22FC
*25mm	12/1.75mm	CAEN25	CAEN25FC
*30mm	12/1.75mm	CAEN30	CAEN30FC
*35mm	12/1.75mm	CAEN35	CAEN35FC
*40mm	16/2mm	CAEN40	CAEN40FC
*45mm	20/2.5mm	CAEN45	CAEN45FC
*50mm	24/3mm	CAEN50	CAEN50FC
*55mm	24/3mm	CAEN55	CAEN55FC
*60mm	30/3.5mm	CAEN60	CAEN60FC
*70mm	36/4mm	CAEN70	CAEN70FC
*80mm	36/4mm	CAEN80	CAEN80FC
*90mm	42/4.5mm	CAEN90	CAEN90FC
*105mm	42/4.5mm	CAEN105	CAEN65FC
Fahr Bucher			
50mm	18/1.5mm	CAFB50	CAFB50FC
60mm	20/1.5mm	CAFB60A	CAFB60AFC
Farrel			
1¼"	½"-13	CAL32	CAL32FC
1⅝"	¾"-10	CAL41	CAL41FC
2.1"	1"-8	CAU53	CAU53FC
2½"	1"-8	CAU64	CAU64FC
2.80"	1⅜"-8	CAU70	CAU70FC
3¼"	1½"-8	CAU83	CAU83FC
3.60"	1⅝"-8	CAU91	CAU91FC
4¼"	2"-8	CAU108	CAU108FC
4¾"	2¼"-8	CAU121	CAU121FC
Fellows/Egan			
1¾"	¾"-10	CAE44	CAE44FC
2"	7/8"-9	CAE51	CAE51FC
2½"	1⅛"-7	CAE64	CAE64FC
3"	1⅝"-6	CAE76	CAE76FC

[SCREW TIPS](#)



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Screw Tips

SCREW TIPS

Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Ferromatik Milacron			
25mm	12/1mm	CAF25	CAF25FC
30mm	16/1.5mm	CAF30	CAF30FC
40mm	—	CAF40	CAF40FC
*IN STOCK HPM (new style)			
1- ³ / ₈ "	⁵ / ₈ "-11	CAH35	CAH35FC
*1- ¹ / ₂ "	⁵ / ₈ "-11	CAH38	CAH38FC
*1- ³ / ₄ "	³ / ₄ "-10	CAH44	CAH44FC
*2"	⁷ / ₈ "-9	CAH51	CAH51FC
*2- ¹ / ₂ "	1- ¹ / ₈ "-7	CAH64	CAH64FC
*3"	1- ⁵ / ₈ "-6	CAH76	CAH76FC
3- ¹ / ₂ "	1- ³ / ₄ "-6	CAH89	CAH89FC
4- ¹ / ₂ "	2- ¹ / ₄ "-6	CAHH114	CAHH114FC
Impco			
2 ³ / ₈ "	1 ³ / ₈ "-6	CAI60	CAI60FC
2 ¹ / ₂ "	1 ¹ / ₂ "-6	CAI64A	CAI64AFC
2 ¹³ / ₁₆ "	1 ¹ / ₂ "-8	CAI71A	CAI71AFC
3 ¹ / ₄ "	2"-8	CAI83A	CAI83AFC
4 ¹ / ₄ "	2 ¹ / ₄ "-4.5	CAI108	CAI108FC
4 ³ / ₄ "	2 ³ / ₄ "-4	CAI121	CAI121FC
Jaco			
1 ¹ / ₄ "	⁵ / ₈ "-11	CAJ32	CAJ32FC
*IN STOCK JSW			
25mm	12/1.75mm	CAJS25	CAJS25FC
*28mm	16/2mm	CAJS28	CAJS28FC
*32mm	16/2mm	CAJS32	CAJS32FC
32mm	18/2.5mm	CAJS32A	CAJS32AFC
*35mm	TR20/3mm	CAJS35	CAJS35FC
*40mm	TR22/2mm	CAJS40	CAJS40FC
*40mm	20/2.5mm	CAJS40A	CAJS40AFC
45mm	TR24/3mm	CAJS45	CAJS45FC
45mm	TR27/3mm	CAJS45A	CAJS45AFC
46mm	TR24/3mm	CAJS46	CAJS46FC
51mm	TR27/3mm	CAJS51	CAJS51FC
53mm	TR28/3mm	CAJS53	CAJS53FC
58mm	TR36/3mm	CAJS58	CAJS58FC
66mm	TR36/3mm	CAJS66	CAJS66FC
72mm	TR40/3mm	CAJS72	CAJS72FC
84mm	TR47/3mm	CAJS84	CAJS84FC
99mm	TR60/3mm	CAJS99	CAJS99FC

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Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
*IN STOCK JSW			
*25mm	12/1.75mm	CAJS25	CAJS25FC
*28mm	16/2mm	CAJS28	CAJS28FC
*32mm	16/2mm	CAJS32	CAJS32FC
32mm	18/2.5mm	CAJS32A	CAJS32AFC
*35mm	TR20/3mm	CAJS35	CAJS35FC
*40mm	TR22/2mm	CAJS40	CAJS40FC
*40mm	20/2.5mm	CAJS40A	CAJS40AFC
45mm	TR24/3mm	CAJS45	CAJS45FC
45mm	TR27/3mm	CAJS45A	CAJS45AFC
46mm	TR24/3mm	CAJS46	CAJS46FC
51mm	TR27/3mm	CAJS51	CAJS51FC
53mm	TR28/3mm	CAJS53	CAJS53FC
58mm	TR36/3mm	CAJS58	CAJS58FC
66mm	TR36/3mm	CAJS66	CAJS66FC
72mm	TR40/3mm	CAJS72	CAJS72FC
84mm	TR47/3mm	CAJS84	CAJS84FC
99mm	TR60/3mm	CAJS99	CAJS99FC
Kawaguchi			
27mm	TR13/2mm	CAK27	CAK27FC
28mm	TR15/1.5mm	CAK28B	CAK28BFC
30mm	TR15/2mm	CAK30	CAK30FC
32mm	18/2mm	CAK32	CAK32FC
34mm	20/2mm	CAK34	CAK34FC
36mm	TR20/2mm	CAK36	CAK36FC
37mm	TR20/2mm	CAK37	CAK37FC
40mm	TR20/2mm	CAK40	CAK40FC
42mm	TR24/3mm	CAK42	CAK42FCS
50mm	TR26/3mm	CAK50A	CAK50AFC
55mm	TR26/2mm	CAK55	CAK55FC
58mm	TR30/3mm	CAK58	CAK58FC
60mm	TR34/4mm	CAK60	CAK60FC
70mm	TR34/4mm	CAK70A	CAK70AFC
72mm	TR40/4mm	CAK72	CAK72FC

SCREW TIPS

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Screw Tips

SCREW TIPS

Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Klockner Ferromatik			
30mm	16/1.5mm	CAKF30	CAKF30FC
40mm	20/1.5mm	CAKF40	CAKF40FC
45mm	20/1.5mm	CAKF45	CAKF45FC
60mm	30/2mm	CAKF60	CAKF60FC
Krauss-Maffei			
40mm	20/2.5mm	CAKM40	CAKM40FC
Lester			
2 1/2"	1 3/8"-8	CALS64	CALS64FC
Lombard			
1 5/8"	3/4"-10	CAL41	CAL41FC
2"	1"-8	CAL51	CAL51FC
2 1/2"	1 1/4"-7	CAL64	CAL64FC
2 3/4"	1 3/8"-6	CAL70	CAL70FC
3"	1 1/2"-6	CAL76	CAL76FC
3 1/2"	1 5/8"-8	CAL89	CAL89FC
*IN STOCK Mitsubishi			
36mm	22/2.5mm	CAMI36	CAMI36FC
45mm	27/3mm	CAMI45	CAMI45FC
*50mm	27/3mm	CAMI50	CAMI50FC
*57mm	33/3.5mm	CAMI57	CAMI57FC
70mm	39/4mm	CAMI70	CAMI70FC
80mm	44/4.5mm	CAMI80	CAMI80FC
120mm	60/5.5mm	CAMI120	CAMI120FC
Natco			
1 7/8"	1 1/8"-6	CAN48	CAN48FC
2 1/4"	1 1/8"-6	CAN57	CAN57FC
70mm	1 1/8"-6	CAN70	CAN70FC
90mm	1 1/2"-6	CAN91	CAN91FC
105mm	1 3/4"-6	CAN105	CAN105FC
Negri Bossi (many other sizes not listed)			
25mm	10/1.5mm	CANG25	CANG25FC
35mm	16/1.5mm	CANG35	CANG35FC
38mm	16/1.5mm	CANG38	CANG38FC
45mm	22/2mm	CANG45	CANG45FC
50mm	22/2mm	CANG50	CANG50FC
60mm	26/2mm	CANG60	CANG60FC
Netstal			
32mm	16/2mm	CANE32	CANE32FC
40mm long	18/2.5mm	CANE40	CANE40FC
45mm	20/2.5mm	CANE45	CANE45FC
50mm	20/2mm	CANE50	CANE50FC
New Britain (HPM)			
30mm	TR18/3mm	CANB30	CANB30FC
1 3/8"	9/16"-18	CANB35	CANB35FC
36mm	TR20/3mm	CANB36	CANB36FC
1 5/8"	3/4"-16	CANB41	CANB41FC

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Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
New Britain (HPM) cont.			
42mm	TR27/3mm	CANB42	CANB42FC
1 3/4"	3/4"-16	CANB44	CANB44FC
2"	1"-8	CANB51	CANB51FC
55mm	TR35/3mm	CANB55	CANB55FC
65mm	TR40/3mm	CANB65	CANB65FC
2 3/4"	1 3/8"-8	CANB71	CANB71FC
70mm	TR40/3mm	CANB70	CANB70FC
82mm	TR47/3mm	CANB82	CANB82FC
3 1/4"	1 1/2"-8	CANB83	CANB83FC
3 1/2"	1 3/4"-8	CANB89	CANB89FC
*IN STOCK Newbury (specify Blunt or Pointed)			
*1"	1/2"-13	CANY25	CANY25FC
*1 1/4"	5/8"-11	CANY32	CANY32FC
*1 3/8"	5/8"-11	CANY35	CANY35FC
*1 1/2"	3/4"-10	CANY38	CANY38FC
*1 3/4"	7/8"-9	CANY44	CANY44FC
*2"	1"-8	CANY51	CANY51FC
2 1/4"	1"-8	CANY57	CANY57FC
*IN STOCK Niigata			
18mm	8/0.75mm	CANA18	CANA18FC
25mm	12/1mm	CANA25	CANA25FC
*35mm	18/2.5mm	CANA35	CANA35FC
*40mm	20/2.5mm	CANA40	CANA40FC
*52mm	27/3mm	CANA52	CANA52FC
*60mm	30/3.5mm	CANA60	CANA60FC
*68mm	30/3mm	CANA68	CANA68FC
*76mm	42/3mm	CANA76	CANA76FC
90mm	48/3mm	CANA90	CANA90FC

SCREW TIPS





Screw Tips

Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
*IN STOCK		Nissei	
*14mm	7/0.75mm	CANI14	CANI14FC
*16mm	9/1mm	CANI16	CANI16FC
*19mm	10/1.5mm	CANI19	CANI19FC
*22mm	TR14/2mm	CANI22	CANI22FC
*26mm	TR14/2mm	CANI26	CANI26FC
*28mm	TR14/2mm	CANI28	CANI28FC
*30mm	TR16/2mm	CANI30	CANI30FC
*32mm	TR18/2mm	CANI32	CANI32FC
*36mm	TR20/2mm	CANI36	CANI36FC
*38mm	TR22/3mm	CANI38A	CANI38AFC
*40mm	TR24/3mm	CANI40	CANI40FC
*45mm	TR26/3mm	CANI45	CANI45FC
*50mm	TR28/3mm	CANI50	CANI50FC
*56mm	TR32/3mm	CANI56	CANI56FC
*63mm	TR36/3mm	CANI63	CANI63FC
*71mm	TR44/3mm	CANI71	CANI71FC
*72mm	TR44/3mm	CANI72	CANI72FC
*75mm	TR44/3mm	CANI75	CANI75FC
*80mm	TR48/3mm	CANI80	CANI80FC
84mm	TR52/3mm	CANI84	CANI84FC
*90mm	TR55/3mm	CANI90	CANI90FC
*100mm	TR65/3mm	CANI100	CANI100FC
112mm	TR65/3mm	CANI112	CANI112FC
125mm	TR75/3mm	CANI125	CANI125FC

SCREW TIPS

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Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Reed Prentice			
1 5/8"	7/8"-9	CAR41	CAR41FC
1 3/4" TC	3/4"-10	CAR44	CAR44FC
2" TD	1"-8	CAR51	CAR51FC
2 1/8" TC	1"-8	CAR54	CAR54FC
2 1/2" TD	1 1/4"-8	CAR64	CAR64FC
3" TD	1 3/8"-8	CAR76	CAR76FC
3 5/16" TC	1 3/4"-5	CAR84	CAR84FC
3 3/4" TD	1 7/8"-8	CAR95	CAR95FC
STM (see Krauss-Maffei) Stokes			
1 1/4"	9/16"-18	CAS32	CAS32FC
1 3/8"	5/8"-18	CAS35	CAS35FC
1 5/8"	3/4"-16	CAS41	CAS41FC
1 7/8"	7/8"-14	CAS48	CAS48FC
2"	1"-12	CAS51	CAS51FC
2 1/2"	1 1/8"-12	CAS64	CAS64FC
2 3/4"	1 1/4"-12	CAS70	CAS70FC
3"	1 3/8"-12	CAS76	CAS76FC
4"	1 3/4"-12	CAS102	CAS102FC
Sumitomo			
*IN STOCK			
18mm	9/1mm	CASM18	CASM18FC
*20mm	10/1.25mm	CASM20	CASM20FC
*22mm	10/1.25mm	CASM22	CASM22FC
25mm	12/1.5mm	CASM25	CASM25FC
28mm	12/1.5mm	CASM28	CASM28FC
*32mm	16/1.5mm	CASM32	CASM32FC
*36mm	16/1.5mm	CASM36	CASM36FC
40mm	22/2mm	CASM40	CASM40FC
45mm	24/2mm	CASM45	CASM45FC
50mm	24/2mm	CASM50	CASM50FC
63mm	33/3mm	CASM63	CASM63FC
71mm	633/3mm	CASM71	CASM71FC
80mm	40/3mm	CASM80	CASM80FC
100mm	52/4mm	CASM100	CASM100FC
Toshiba			
25mm	12/1.5mm	CAT25	CAT25FC
28mm	15/1.5mm	CAT28	CAT28FC
32mm	18/2mm	CAT32	CAT32FC
36mm	22/2mm	CAT36	CAT36FC
40mm	22/2mm	CAT40	CAT40FC
45mm	26/1.5mm	CAT45	CAT45FC
50mm	28/2mm	CAT50	CAT50FC
55mm	28/2mm	CAT55	CAT55FC

SCREW TIPS



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Screw Tips

SCREW TIPS

Screw Diameter	Thread	H13	CPM9V
		Part Number	Part Number
Toshiba cont.			
60mm	28/2mm	CAT60	CAT60FC
70mm	32/2mm	CAT70	CAT70FC
80mm		CAT80	CAT80FC
85mm	42/3mm	CAT85	CAT85FC
100mm	45/4mm	CAT100A	CAT100AFC
115mm	60/4mm	CAT115	CAT115FC
Toyo			
*IN STOCK 24mm	12/1.5mm	CATY24	CATY24FC
*28mm	16/2mm	CATY28	CATY28FC
*32mm	18/2.5mm	CATY32	CATY32FC
*36mm	18/2.5mm	CATY36	CATY36FC
*40mm	22/2.5mm	CATY40	CATY40FC
*46mm	24/3mm	CATY46	CATY46FC
*50mm	27/3mm	CATY50	CATY50FC
*55mm	27/3mm	CATY55	CATY55FC
*60mm	30/3mm	CATY60	CATY60FC
*68mm	33/3.5mm	CATY68	CATY68FC
*75mm	36/4mm	CATY75	CATY75FC
*83mm	38/4mm	CATY83	CATY83FC
Trueblood			
1"	1/2"-13	CATR25	CATR25FC
1 1/4"	5/8"-11	CATR32	CATR32FC
1 3/8"	5/8"-11	CATR35	CATR35FC
1 1/2"	5/8"-11	CATR38	CATR38FC
1 3/4"	3/4"-10	CATR44	CATR44FC
2"	7/8"-9	CATR51	CATR51FC
Trubor			
*IN STOCK 25mm	1/2"-13	CATB25	CATB25FC
*28mm	1/2"-13	CATB28	CATB28FC
*31mm	5/8"-11	CATB31	CATB31FC
*35mm	5/8"-11	CATB35	CATB35FC
Van Dorn			
*IN STOCK 30mm	5/8"-11	CAV30	CAV30FC
*35mm	3/4"-10	CAV35	CAV35FC
*38mm	3/4"-10	CAV38	CAV38FC
*40mm	3/4"-10	CAV40	CAV40FC
*50mm	1"-8	CAV50	CAV50FC
*57mm	1 1/4"-7	CAV57	CAV57FC
*65mm	1 3/8"-6	CAV65	CAV65FC
*69mm	1 3/8"-6	CAV69	CAV69FC
*75mm	1 3/8"-6	CAV75	CAV75FC
*80mm	1 3/8"-6	CAV80	CAV80FC
*90mm	1 3/4"-8	CAV90	CAV90FC
*105mm	1 3/4"-8	CAV105	CAV105FC
115mm	2"-8	CAV115	CAV115FC

NOTE: This is just a short list of Screw Tips that we have. If you don't see the brand/type or size of the screw tip you need, give us a call! We have PVC smear tips and ball checks, as well!

BARREL REPAIR SERVICES

DME Repairs Worn Injection or Extrusion Barrel Re-sleeves with New Tool Steel or Bimetallic Liners for Less than New!

The worn area of your barrel is bored out and honed to accept a sleeve machined from a wear-resistant alloy. The sleeve is machined slightly larger than the bore of the barrel. After the sleeve is shrunk by freezing and the barrel is expanded by heating, the sleeve is inserted into the barrel. As the temperatures equalize, the sleeve becomes tightly locked in the barrel. The dimensions of the sleeve are carefully chosen and precisely machined to produce an even and tightly interferenced fit over the full length of the sleeve. The result is a permanent sleeve that will not move or crack and, conducts heat well through the barrel-sleeve boundary.

B

Sleeving Material

D-2 Tool Steel

- One of the most wear-resistant of the conventional tool steels
- Deep hardened to maximize wear life
- Alloyed with 12% Chromium and 1% Vanadium
- Chromium gives it mild corrosion-resistance

CPM10V

- Wear-resistant particle metallurgy tool steel
- Laboratory wear tests show it can outlast D-2 by 20:1
- Alloyed with a high percentage (9.74%) of vanadium-the hardest of the tool steel carbides

CPM15V

- Extremely wear-resistant particle metallurgy tool steel
- Highest abrasion resistance of any barrel material
- Best for glass-filled resins
- Vanadium (14.5%) carbides provide extreme abrasion resistance

CPM420V

- Martensitic stainless tool steel
- Combination 13% chromium and highly wear resistant vanadium (9%) carbides provide superior wear resistance in moderately corrosive conditions

Standard Bimetallic

- Centrifugally cast by high speed rotation in a furnace
- Contains nickel, carbon, manganese, boron and silicone
- Service life will exceed that of nitrided low-alloy steel by 4 to 5 times

Carbide Bimetallic

- Centrifugally cast inlay composed of 80% tungsten carbide and chromium boride in a chromium-boron-nickel matrix
- Excellent for continuous processing of glass-filled resins
- Chromium and nickel provide a moderate corrosion resistance
- 60-64 Rc matrix hardness with a micro-hardness of tungsten carbide and chromium boride equivalent to more than 70 Rc

Corrosion-Resistant Bimetallic

- Ideal for extreme corrosion resistance
- In highly corrosive atmospheres, can demonstrate a service life over 10 times that of nitrided low-alloy barrels
- Borides provide excellent wear resistance
- Composed of cobalt-nickel base alloy with a high chromium and boron content

Send your barrel for a free inspection and quote.

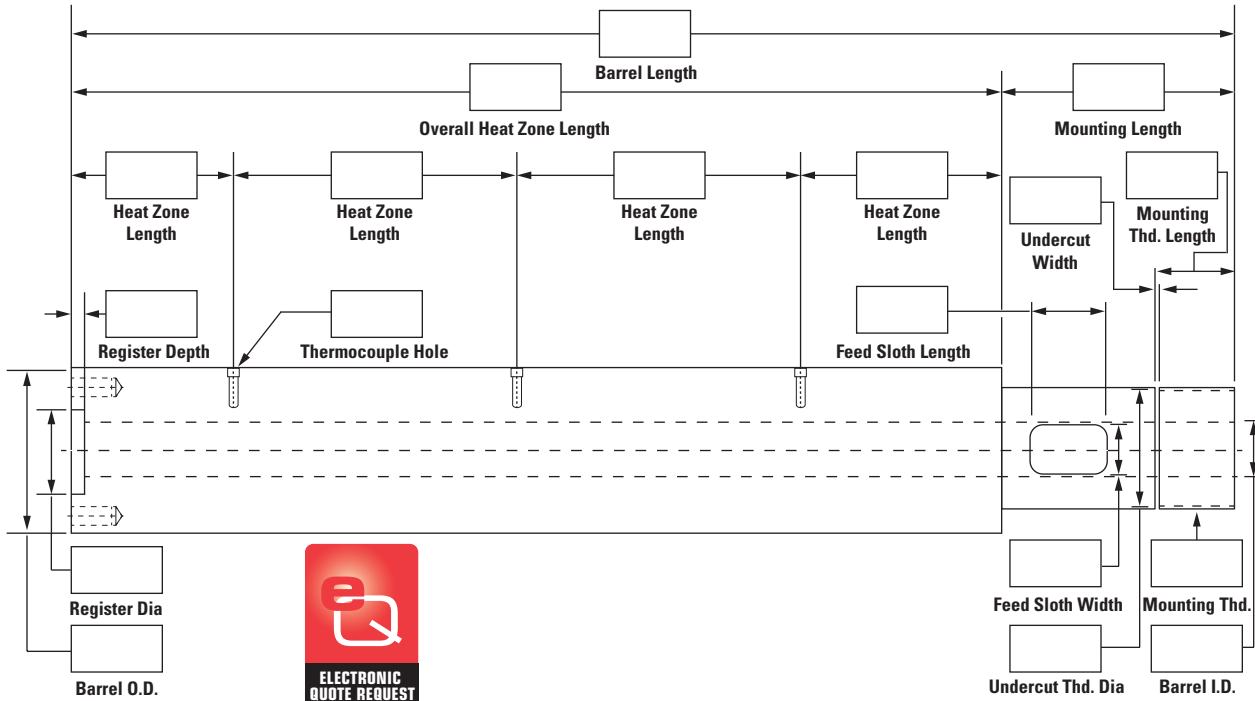
DME Barrel Repair - 9841 York Alpha Dr., North Royalton, OH. 44133



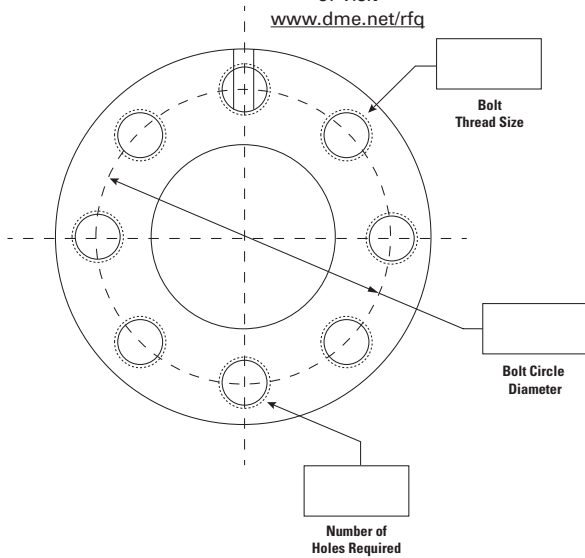
Non-Stock or Custom Barrel Form

Please thoroughly complete this form and fax (888-808-4363) or email (DME@dme.net) to receive a quote.

[ONLINE FORM](#)



or visit www.dme.net/rfq



Other Information Required:

Liner (Partial or Full): _____

Liner Material Type: _____

Machine Make: _____

Machine Model: _____

Size (Ton and Ounce): _____

Stroke Length: _____

Base Material: _____

Optional Barrel Straightening: YES NO

Optional Pressure Ports: YES NO

Optional Vents: YES NO

Optional Feed Slot: YES NO

Date: _____ Quantity: _____ Phone: (____) _____ Fax: (____) _____

Name: _____ Account Number: _____

Company: _____ Email: _____

Address: _____

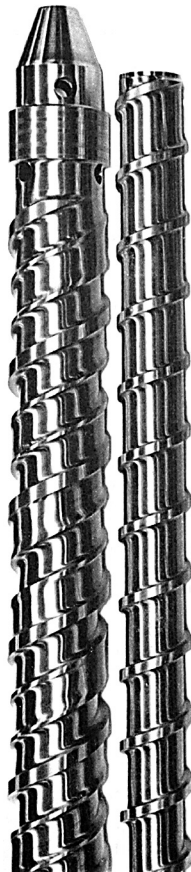
City: _____ State: _____ Zip: _____

Most screws can be rebuilt for a fraction of the cost of a new screw. The DME screw rebuilding service includes:

- Welded hardfacing on flight lands, grinding, polishing and straightening
- Hardfacing alloys include Stellite # 12, Colmonoy #56 and Colmonoy #88
- Surface treatment includes nitride and chrome
- Screw sizes from ½" to 8" diameter and up to 140" in length
- Drive end, root or tip end threads can be repaired

Call DME for a quote or send us your feedscrew for a free inspection.
Or complete the form on the next page and send it to DME.

B





Injection Screw Design Quote Request Form

Please thoroughly complete this form and fax (888-808-4363) or email (DME@dme.net) to receive a quote.

[ONLINE FORM](#)

Company: _____ Account Number: _____
 Contact: _____ PO #: _____ Job #: _____
 Address: _____ Phone: _____
 City: _____ State: _____ Fax #: _____
 Zip: _____ E-mail: _____
 Country: _____

Specify: Improvement Process New Project Screw Repair

1. Machine Information

OEM: _____ Type: _____ Machine Age: _____
 Nominal Screw O.D.: _____ in/mm L/D: _____ :1
 Max. Screw Stroke: _____ in/mm Drive: Electric Hydraulic
 Max. Screw RPM / KPM: _____ in/mm Max. Torque: _____ ft. lb. nm.



or visit www.dme.net/rfq

2. Resin Information

Type: _____ Material No.: _____ Manufacturer: _____
 MFI: _____ Filler: _____ % Additives: _____
 Color Master Batch Powder Liquid

3. Existing Problems:

Recovery Quality Temperature Corrosion
 Wear Of - Screw Flights Screw Root Screw Tip
 Please be specific: _____

4. Expectation:

Recovery: _____ Oz. per Sec. / Grams per Sec.
 Dispersion: _____ (Mixing Devices Mandatory)
 Change of Max. Shot Size Required Yes No

5. Existing Equipment Information:

Mixing Device: Yes No (Located) Transition Metering
 Describe Mixing Device: _____

6. Process Information

Shot Size: _____ oz. / grams Existing Recovery Time: _____
 Existing RPM: _____ Backpressure: _____
 Screw Stroke: _____ in/mm Recovery Time Target: _____
 Nozzle Shut-Off Available: Yes No
 What Products are Molded: _____

State other information that may help clarify the request: _____

New Barrels

Van Dorn



Size	Length (in.)	Nitraloy/ Nitrided	CPM-10V
		Part Number	Part Number
30mm	27.55	VDB30N	VDB30
35mm	32.90	VDB35N	VDB35
38mm	34.78	VDB38N	VDB38
40mm	36.37	VDB40N	VDB40
50mm	47.69	VDB50N	VDB50
57mm	52.74	VDB57N	VDB57
65mm ST	58.39	VDB65N	VDB65
65mm BL	58.39	VDB65NB	VDB65B
80mm ST	73.23		VDB80
80mm BL	73.23		VDB80B
90mm ST	81.48		VDB90
90mm BL	81.48		VDB90B
105mm	92.09		VDB105



[NEW BARRELS](#)

Size	Length (in.)	Standard Bimetallic	Carbide Bimetallic
		Part Number	Part Number
30mm	27.55	VDB30B	VDB30CB
35mm	32.90	VDB35B	VDB35CB
38mm	34.78	VDB38B	VDB38CB
40mm	36.37	VDB40B	VDB40CB
50mm	47.69	VDB50B	VDB50CB
57mm	52.74°	VDB57B	VDB57CB
65mm ST	58.39°	VDB65B	VDB65CB
65mm BL	58.39	VDB65BB	VDB65CBB
80mm ST	73.23	VDB80B	VDB80CB
80mm BL	73.23	VDB80BB	VDB80CBB
90mm ST	81.48°	VDB90B	VDB90CB
90mm BL	81.48°	VDB90BB	VDB90CBB
105mm	92.09	VDB105B	VDB105CB

NOTES:

ST= Straight

BL= Bell

° = Straight length



New Feedscrews

Van Dorn

Other Makes and Sizes of Screws Available – Call for Pricing and Availability!!

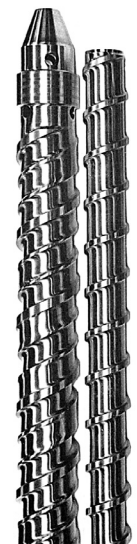
High quality

Great value

Made to OEM specs

[NEW FEEDSCREWS](#)

Van Dorn Feed Screws					
Size	Length (in)	Nitraloy/Nitrided	D-2- Heat Treated	Welded	CPM-9V Heat Treated
		Part Number	Part Number	Part Number	Part Number
30mm	31.48"	VDS30N	VDS30D	VDS30W	VDS30V
35mm	35.34"	VDS35N	VDS35D	VDS35W	VDS35V
38mm	36.81"	VDS38N	VDS38D	VDS38W	VDS38V
40mm	38.18"	VDS40N	VDS40D	VDS40W	VDS40V
50mm	49.40"	VDS50N	VDS50D	VDS50W	VDS50V
57mm	54.33"	VDS57N	VDS57D	VDS57W	VDS57V
65mm	59.69"	VDS65N	VDS65D	VDS65W	VDS65V
80mm	75.81"	VDS80N		VDS80W	VDS80V
90mm	85.62"	VDS90N		VDS90W	
105mm	95.87"	VDS105N		VDS105W	





Barrel Blankets

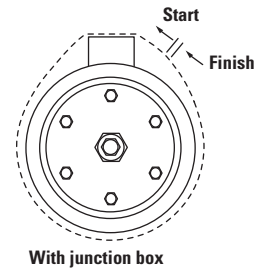
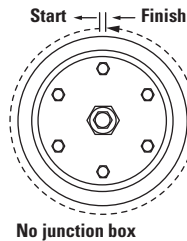
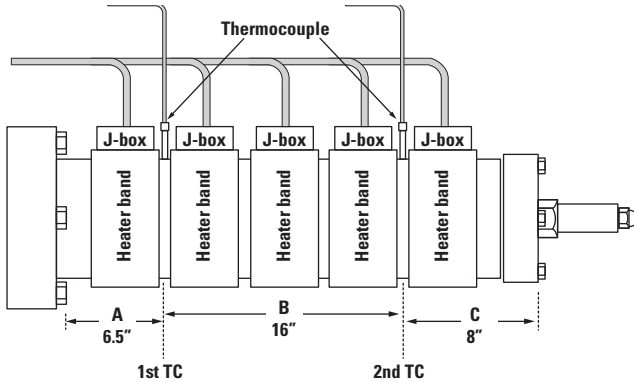
These high-quality insulation jackets provide a simple method of insulating barrels of injection molding machines. Resultant reduction of heat loss dramatically reduces the amount of power required to provide a consistent barrel temperature and improves startup time and part consistency. Typical payback is six months.

Heat loss cut by a factor of 10 to 15!

Heat loss for a barrel operating in ambient temperature of 70°F with a barrel temperature of 600°F:

- With no insulation 660 Watts/Sq. Ft.
- With 1" thick insulating jacket 54 Watts/Sq. Ft.

BARREL BLANKETS



To determine width of jackets required:

1. Start from rear of barrel
2. Measure from rear to 1st thermocouple
3. Measure to next TC, etc.

In the example above, a 6¹/₂" jacket, plus one 16" and one 8" wide jackets, are required. Note that 4 jackets 4" wide can be used to substitute the 16" wide jacket.

To determine diameter of jackets required:

1. Measure the circumference of the O.D. of the heater bands, including junction box.
2. Divide by 3.14 to determine diameter.
3. Round up to nearest inch.

For example, an outside diameter of 27", divided by 3.14, gives a diameter of 8.5"; use 9" dia. jackets.

Specifications:

Hot face (inside fabric): Silica Fabric, 1/16" thick; 2000°F continuous. Thermal characteristics exceed asbestos materials and provide excellent working capacity beyond that of fiberglass.

Cold face (outside fabric): Fiberglass cloth, 1/64"; 500°F.

Outer coating is strong, flexible and will repel melt and drool. Can be easily cleaned.

Insulation: Ceramic Fibre, 1" thick; 2300°F. Non-asbestos, withstands extreme heat for prolonged periods and has excellent insulation characteristics.

Straps: Same tough impregnated material as outer fabric.

Closure: High-temp Velcro with Nomex loop. High shear strength, temperature-resistant and designed for use in repeated cycle applications.

Buckles: Nickel-plated steel wire with loose roller.

Outer diameter of barrel and bands	Length	Part Number	Reference Number
4	2"	BB4 x 2	BIJ105
	4"	BB4 x 4	BIJ1010
	6"	BB4 x 6	BIJ1015
5	2"	BB5 x 2	BIJ125
	4"	BB5 x 4	BIJ1210
	6"	BB5 x 6	BIJ1215
6	2"	BB6 x 2	BIJ155
	4"	BB6 x 4	BIJ1510
	6"	BB6 x 6	BIJ1515
7	2"	BB7 x 2	BIJ175
	4"	BB7 x 4	BIJ1710
	6"	BB7 x 6	BIJ1715
8	2"	BB8 x 2	BIJ205
	4"	BB8 x 4	BIJ2010
	6"	BB8 x 6	BIJ2015
9	2"	BB9 x 2	BIJ225
	4"	BB9 x 4	BIJ2210
	6"	BB9 x 6	BIJ2215
10	2"	BB10 x 2	BIJ255
	4"	BB10 x 4	BIJ2510
	6"	BB10 x 6	BIJ2515
11	2"	BB11 x 2	BIJ275
	4"	BB11 x 4	BIJ2710
	6"	BB11 x 6	BIJ2715
12	2"	BB12 x 2	BIJ305
	4"	BB12 x 4	BIJ3010
	6"	BB12 x 6	BIJ3015



End Caps

END CAPS

Make	Bore Size	O.D. Diameter
Boy	24M	2.952
Boy	28M	2.952
Boy	32M	2.952
Boy	38M	3.740
Cincinnati	1.312"	5.000
Cincinnati	1.312"	6.500
Cincinnati	1.625	5.500
Cincinnati	2"	6.500
Cincinnati	2"	7.000
Cincinnati	2.5"	8.000
Cincinnati	2.75"	8.000
Cincinnati	3.25"	9.000
Cincinnati	3.5"	9.500
Cincinnati	4.5"	13.000
Cincinnati	5.25"	13.000
Cincinnati	6"	14.500
HPM	2"	6.000
Newbury	1"	3.500
Newbury	1.25"	4.000
Newbury	1.375	4.000
Newbury	1.75"	4.000
Newbury	2"	5.000
Newbury	2.25"	5.000
Nissei	32M	4.565
Nissei	36M	4.725
Nissei	45M	4.725
Nissei	56M	5.512
Nissei	63M	5.901
Nissei	71M	6.299
Reed	2"	4.750
Reed	3"	6.492
Toshiba	50M	2.951
Toshiba	100M	10.250
Toyo	28M	1.960
Toyo	36M	2.835
Toyo	40M	2.835
Toyo	50M	3.425
Toyo	55M	3.425
Toyo	68M	7.285
Toyo	75M	7.285
Van Dorn	30M	3.000
Van Dorn	35M	3.630
Van Dorn	38M	3.630
Van Dorn	40M	3.990
Van Dorn	50M	5.250
Van Dorn	57M	5.250
Van Dorn S	65M	5.250
Van Dorn B	65M	5.750
Van Dorn S	80M	6.750
Van Dorn B	80M	7.500
Van Dorn S	90M	8.260
Van Dorn B	90M	9.500



Our end caps are made of the finest, long-wearing steels. DME will consult with you on your special design requirements.

The following is a partial listing of more common makes and sizes.

Available in 4150 and H13.

For corrosive environments, DME offers stainless; please call for quote.

Don't see your make or size? Call DME or use the worksheet on the following page!

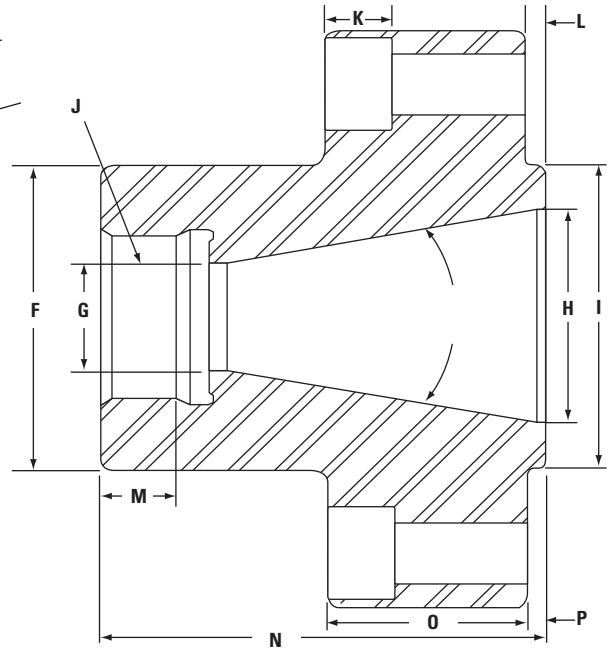
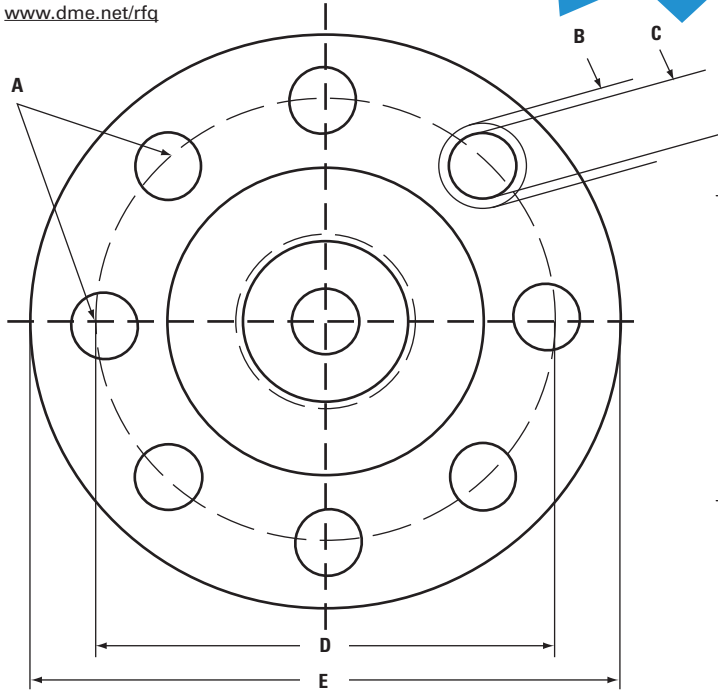
S – Straight, B – Bell



[ONLINE FORM](#)

or visit
www.dme.net/rfq

Use this handy worksheet for a quick quote from one of our knowledgeable salespeople.



B

- A. Number of bolt holes _____
- B. Counter bore dia. (if any) _____
- C. Bolt hole diameter _____
- D. Bolt circle diameter _____
- E. Flange diameter _____
- F. Nozzle support diameter _____
- G. Bore diameter _____
- H. Rear opening _____
- I. Pilot diameter _____
- J. Thread type _____
- K. Counterbore depth (if any) _____
- L. Depth of straight bore _____
- M. Depth of female thread _____
- N. Overall length _____
- O. Flange width _____
- P. Length of pilot _____
- Q. Cone angle _____
- R. Surface treatment _____

For a quick quote, please fill out the worksheet and fax to 888-808-4363.

Company:	_____	Contact Name:	_____
Account Number:	_____	Phone:	_____
Address:	_____	Fax:	_____
City:	_____	E-mail:	_____
State/Zip:	_____		

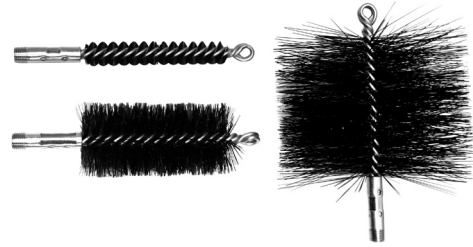


Barrel Brushes

Barrel Cleaning Brushes

Barrel Cleaning Brushes

- Double-spiral carbon steel
- Brush length: 4 1/2"
- Overall length: 8"
- 1/4" NPT nipple



Inch Sizes			Metric Sizes		
Part Number	Diameter	Wire Size	Part Number	Diameter	Wire Size
BCB075	3/4"	.012	BCB18M	18 MM	.012
BCB100	1"	.012	BCB22M	22 MM	.012
BCB125	1 1/4"	.012	BCB24M	24 MM	.012
BCB150	1 1/2"	.012	BCB27M	27 MM	.012
BCB175	1 3/4"	.012	BCB30M	30 MM	.012
BCB200	2"	.012	BCB32M	32 MM	.012
BCB225	2 1/4"	.012	BCB35M	35 MM	.012
BCB250	2 1/2"	.012	BCB38M	38 MM	.012
BCB275	2 3/4"	.012	BCB40M	40 MM	.012
BCB300	3"	.012	BCB45M	45 MM	.012
BCB325	3 1/4"	.012	BCB50M	50 MM	.012
BCB350	3 1/2"	.012	BCB55M	55 MM	.012
BCB375	3 3/4"	.012	BCB57M	57 MM	.012
BCB400	4"	.012	BCB60M	60 MM	.012
BCB450	4 1/2"	.012	BCB65M	65 MM	.012
BCB600	6"	.012	BCB67M	67 MM	.012
			BCB70M	70 MM	.012
			BCB80M	80 MM	.012
			BCB90M	90 MM	.012
			BCB105M	105 MM	.012
			BCB115M	115 MM	.012

[INCH BARREL BRUSHES](#)

[METRIC BARREL BRUSHES](#)



Extension Rods

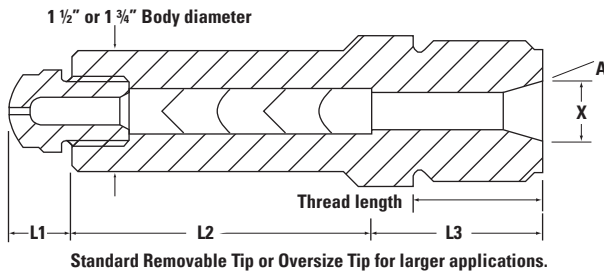
Part Number	Description
FER3*	3' Fiberglass Extension
TER3*	3' Twisted Wire Extension
HER3	Handle For Ext. Rods

[EXTENSION RODS](#)

* Rods can be connected end to end for longer reach.

Mixing Nozzles

Iso-Mix



MIXING NOZZLES

What It Does

The Motionless Mix Nozzle incorporates the Motionless Inline Mixing elements- 5 or 6 stainless steel elements are inserted in a special nozzle recess. These elements offer mathematically predictable layer generation resulting in superior melt mixing. Less dry coloring or color concentrate is required to obtain uniform dispersion. In addition, a more homogenous melt results. Quick payback is realized in savings of color concentrate and/or dry coloring and faster cycling due to lower average melt temperature.

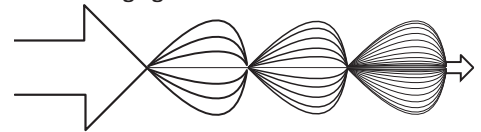
Mixing Principle

The Motionless Mix consists of a series of mixing elements enclosed in a specially machine Nozzle Body. There are no moving parts and elements can easily be removed for cleaning. Element ends are shaped such that adjacent elements form a tetrahedral chamber. Four (4) holes bored in each element are at oblique angles so that material near the periphery on the inlet side of the element emerges near the center on the outlet side. Because of this unique concept, the average 5-element assembly will provide 1,024 (6 elements = 4,096)

generated layers in the mixing process at point of ejection. This concept is considerably advanced over the older style nozzle mixers incorporating a series of blending devices (more appropriate for low-pressure applications).

Advantages

Advantages are numerous; however, those most pertinent to the average injection molder include considerable savings on cost of dry coloring and/or color concentrate and faster cycle times. Savings in dry coloring and color concentrates average 10% to 20% in screw-type machine applications. Faster cycling results from thermally more homogenous melt stream and faster screw recovery time (much of the mixing requirements is attended to by the nozzle, requiring less mixing by the screw). Due to smooth flow path and no mixing parts, the nozzle is entirely reliable and provides negligible restriction to material flow.



Configuration	Dia. of Elements	X-Section of Flow	Equivalent Orifice	Application
Style A - 5 elements 1 1/2" Body	5/8"	.038 sq in	.22"	For small machines or medium-sized machines working at less than capacity on common materials. Best with color concentrate or color compound.
Style B - 6 elements 1 1/2" Body	5/8"	.038 sq in	.22"	For small and medium-sized machines molding dry color, or where there is ample injection pressure reserve and maximum dispersion required.
Style C - 5 elements 1 1/2" Body	13/16"	.062 sq in	.28"	For medium and large machines molding color concentrate or color compound. There is relatively little pressure drop with this style.
Style D - 6 elements 1 1/2" Body	13/16"	.062 sq in	.28"	For medium and large machines molding dry color or where absolute maximum dispersion is required.
Style E [Ⓜ] - 5 elements 1 3/4" Body	1"	.093 sq in	.34"	For the most demanding applications, such as large shots being injected rapidly, high hourly throughput, or where minimum pressure drop can be tolerated.
Style F [Ⓜ] - 6 elements 1 3/4" Body	1"	.093 sq in	.34"	For the most demanding applications, maximum mixing action and minimum pressure drop.

[Ⓜ] Requires 1 3/4" nozzle body diameter and "KN" Series tip





Mixing Nozzles

Iso-Mix

Forced radial mixing is one of the fundamental reasons for the superior performance of the Motionless Mix Nozzle. The drawing below right shows that outer streams 1 & 4 emerge on the inside, whereas inner streams 2 & 3 migrate to the outside. The process is repeated as material flows into a tetrahedral cross section between elements resulting in positive cross blending of any temperature and color gradients in the polymer melt stream.

Elements	1	2	3	4	5	6
Layers generated	4	16	64	256	1024	4095

Dimensions & Ordering Data

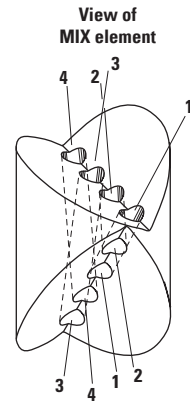
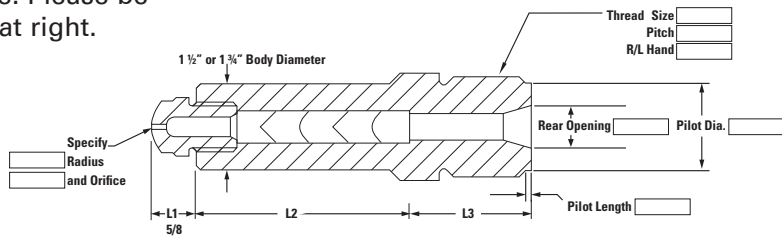
The minimum length of a motionless mix nozzle is dependent on:

1. The length of mixing elements
2. The rear opening diameter and entry angle
3. Nozzle tip length

The following information will help with product selection; however please call our technical sales line. Please be prepared with information in the drawing at right.

$$L1 = \text{Tip Length } .625'' \text{ standard} \\ (.94'' \text{ for style E F and KN tips})$$

$$L3 = \frac{X - 0.5'' \times \cotangent A + .5''}{2}$$



For an indication of minimum overall length, simply calculate L3, select and add element length L2 and add tip length L1.

For example:

A nozzle with a rear opening of .75" (X)

Entry angle of 10 degrees (A)

Element type "C"

Tip length .625"

$$L1 = 0.625''$$

$$L2 = 4.06''$$

$$L3 = \frac{(.75 - .5 \times 5.671) + .5''}{2} = 1.293''$$

$$\text{Nozzle length} = 0.625 + 4.06 + 1.293'' = 5.978''$$

The required minimum length of nozzle assembly is

6"

(the next length longer than 6.103")

Typical rear opening angles and respective cotangents are:

Degrees	=	Cotangent
10	=	5.671
15	=	3.732
30	=	1.732

Nozzle Style	Length of Elements	L2
A	2.63	3.44
B	3.25	4.06
C	3.31	4.12
D	4.06	4.87
E	4.22	5.03
F	5.22	6.03

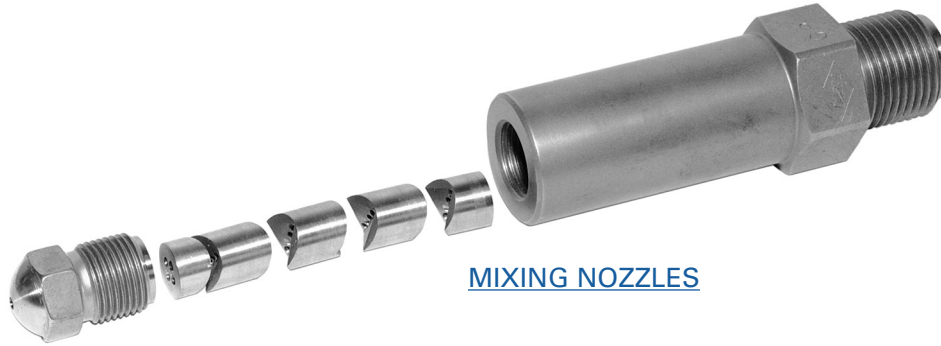
Radius sizes:



Mixing Nozzles



Iso-Mix



MIXING NOZZLES

B

Package Includes – Nozzle Body, Tip (gen. purpose) & Full Set of Elements

Element Diameter		5/8"		13/16"		1"	
Number of Elements		5	6	5	6	5	6
Thread	OAL						
1-3/4" x 8 (44mm) dia. with 1/2" or larger rear opening; for threads smaller than 1-3/4" x 8, contact DME	6"	MN50A6	MN50B6	MN50C6	–	–	–
	8"	MN50A8	MN50B8	MN50C8	MN50D8	MN50E8	MN50F8
	10"	MN50A10	MN50B10	MN50C10	MN50D10	MN50E10	MN50F10
	12"	MN50A12	MN50B12	MN50C12	MN50D12	MN50E12	MN50F12
1-7/8" to 2-61/64 (48mm to 75mm) dia. with 1/2" or larger rear opening	6"	MN51A6	MN51B6	MN51C6	–	–	–
	8"	MN51A8	MN51B8	MN51C8	MN51D8	MN51E8	MN51F8
	10"	MN51A10	MN51B10	MN51C10	MN51D10	MN51E10	MN51F10
	12"	MN51A12	MN51B12	MN51C12	MN51D12	MN51E12	MN51F12
3" to 3-1/8" (76mm to 80mm) dia. with 1/2" or larger rear opening	6"	MN70A6	MN70B6	MN70C6	–	–	–
	8"	MN70A8	MN70B8	MN70C8	MN70D8	MN70E8	MN70F8
	10"	MN70A10	MN70B10	MN70C10	MN70D10	MN70E10	MN70F10
	12"	MN70A12	MN70B12	MN70C12	MN70D12	MN70E12	MN70F12

Specify the following when placing your order:

1. Make and model of machine
2. Nozzle thread detail and length
3. Nozzle rear opening
4. Tip radius and orifice

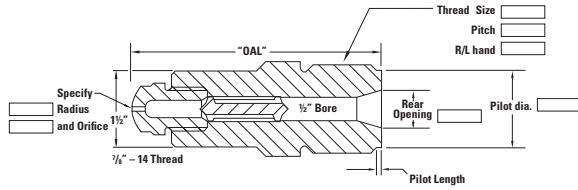


Options and Spares:

1. Thermocouple hole on hex flat
2. Replacement Motionless Mix Elements (full set)

	Part Number
Style A (5 elements 5/8" dia.)	ISOMXA
Style B (6 elements 5/8" dia.)	ISOMXB
Style C (5 elements 13/16" dia.)	ISOMXC
Style D (6 elements 13/16" dia.)	ISOMXD
Style E (5 elements 1" dia.)	ISOMXE
Style F (6 elements 1" dia.)	ISOMXF

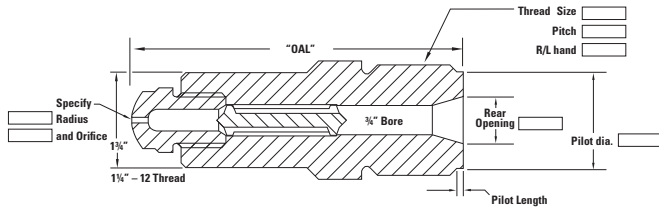
Style A



For Small Shots

For shot size under 16 oz. when molding low viscosity, unfilled materials; 9/16" diameter filter plug with .015" clearance for filtering out contaminants as well as mixing. Do not use with nozzle orifice larger than 3/16".

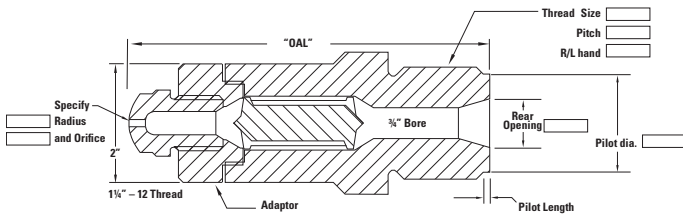
Style B



For Medium Shots

Recommended for most molding applications. Suitable for shot sizes up to 32 oz. (generally used with 10 oz. to 32 oz. shots) of medium- to low- viscosity unfilled materials; 7/8" diameter filter plug and 3/4" dia. nozzle flow path. Uses standard KN series tips with 1 1/4"-12 thread. Available with .015" filter gap clearance.

Style C

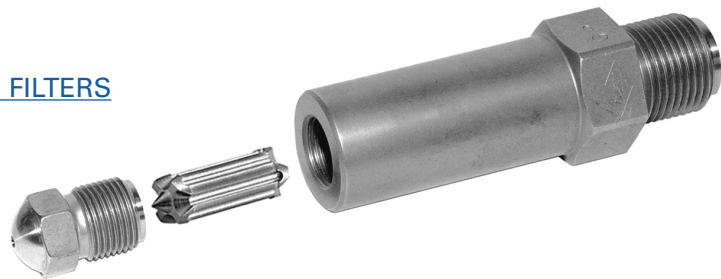


For Large Shots

Recommended only for shot sizes in excess of 30 oz. of medium- to low- viscosity unfilled materials; 28.6mm diameter filter plug and 19mm diameter flow path. Adapter permits use of standard KN series tips with 1 1/4"-12 thread. Available with .015" filter gap clearance as standard. No restrictions to nozzle orifice size.



TRU FILTERS

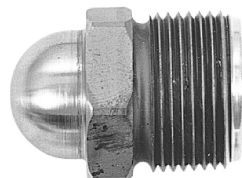


Length of filter element:

Style A: 1 1/2"

Style B: 3 1/2"

Style C: 6"



Styles B & C require oversize KN series tip with 1 1/4"-12

TRU Filter plugs consist of blind holes with melt entering from screw end and additional blind holes with melt exiting to mold (or nozzle orifice). A 0.015" clearance space- between nozzle I.D. and plug O.D.-,provide filtering action to prevent contaminants from reaching the molded part.

- Easily removed (and replaced) for cleaning
- Provides excellent filtering for particles greater than 0.0–15"
- Extended filter area provides long operation cycles before removal and cleaning are required
- Provides additional benefit of significant mixing of melt stream with minimum back pressure

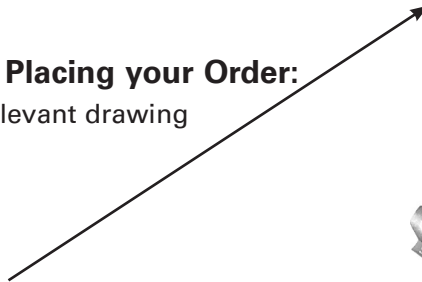


1-3/4" (44mm) with 1/2" or Larger Rear Opening	
OAL	Part Number
5"	TN125
6"	TN126
7"	TN127
8"	TN128
9"	TN129
10"	TN1210
12"	TN1212

1-7/8" to 2-61/64" (48mm to 75mm) with 1/2" or Larger Rear Opening	
OAL	Part Number
5"	TN225
6"	TN226
7"	TN227
8"	TN228
9"	TN229
10"	TN2210
12"	TN2212

Specify the Following when Placing your Order:

1. Complete information within relevant drawing on previous page
2. Make and model of machine
3. Nozzle thread detail and length
4. Nozzle rear opening
5. Tip radius and orifice
6. Replace in table with filter style (A, B or C) to complete part number



Options:

1. TC hole on hex flat
2. Extended tips available
3. Heater bands available for all nozzles
Contact DME for proper size and

Replacement Filter Plugs	
Style	Part Number
A	TFP1
B	TFP2
C	TFP3



Shut-Off Nozzle

Improved design uses wear-resistant particle metallurgy materials in critical areas.

1. Completely mechanical, automatic operation
2. No internal springs
3. Eliminates cold slugs
4. Controllable back flow during injection
5. Reduces flashing
6. Precise pressure control during cure
7. Positive shut-off prevents drooling
8. Increases production up to 34%

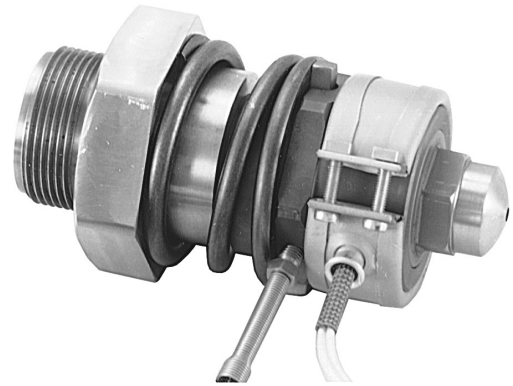
Note: Pressures are in lbs. per sq. inch of plastic melt. In most cases the hydraulic pressure of the machine will be $\frac{1}{10}$ of the above values. It should be noted however, that the hydraulic oil to plastic ratio is not always $\frac{1}{10}$.

External Spring—External spring-activated shut-off pin. During injection, material flow caused by injecting force overcomes spring tension, thereby pushing shut-off pin away from seat. During screw recovery and idle, the spring tension forces the pin forward restricting material flow.

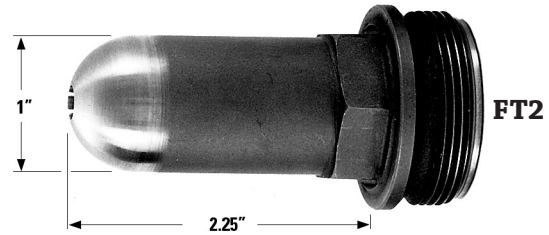
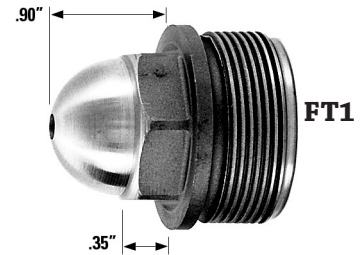
Shut-Off Pin—Externally activated shut-off pin permits unrestricted material flow during injection. Completely seals off flow at point of removable tip seat during screw recovery and idle. Eliminates drool and stringing.

Replaceable Tip—Special hardened tool steel tip can be changed in seconds. Reverse taper nylon design. Available with choice of radius and orifice- $\frac{1}{8}$ " $\frac{5}{32}$ " and $\frac{3}{16}$ ". Be sure to specify when ordering.

Automatic Operation—Operation is fully automatic and mechanical, with activating force derived from natural machine action. During injection, the material flow and pressure force the shut-off pin backward, thereby overcoming spring tension through pin extension. Material flows unrestricted into mold. As soon as injection pressure is released, the tension of the spring forces pin extension and also the shut-off pin forward, restricting material flow. Tip has reverse taper design; hence, residue material is ejected with the finished article, eliminating the possibility of cold slugs and strings.



Cracking Pressure
(Maximum screw back pressure) 1800 psi



Tip Thread = 36/1.5mm

Warranty

The Shut-Off Nozzle uses wear-resistant particle metallurgy materials in the critical wear areas of the pin and insert and will provide long life when molding regular polyamides, acrylics and similar relatively normal non-abrasive materials. For molding extremely abrasive materials such as glass-filled Ryton, DME recommends a Shut-Off Nozzle of similar design made of wear-resistant CPM9V. Contact DME for price and delivery!

Shut-Off Nozzle

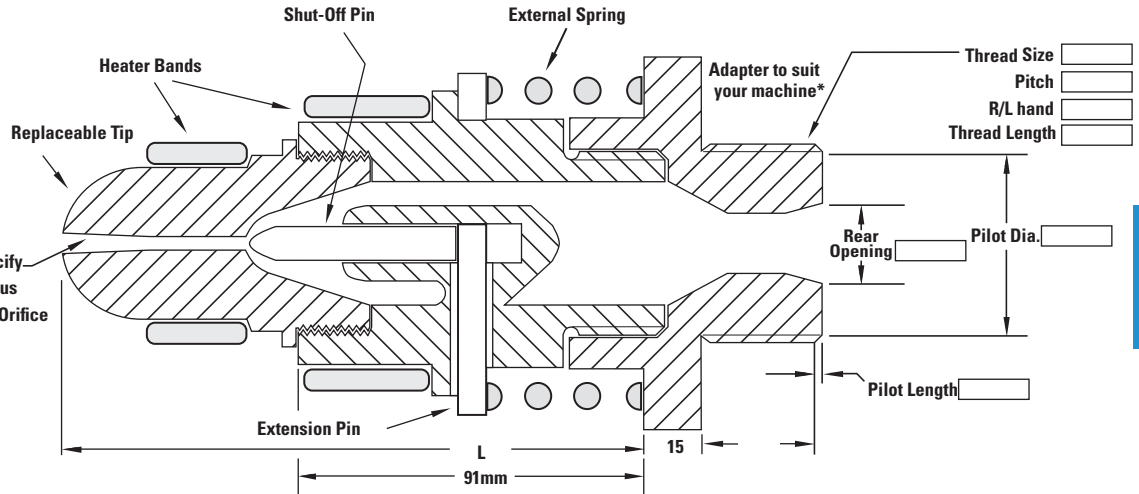


[ONLINE FORM](#)



or visit
www.dme.net/rfq

Specify
Radius
and Orifice



B

Shut-Off Nozzles

Includes complete assembly (Body, Tip, External Spring, Shut-Off Pin, Pin Extension and Adapter to suit your machine)

Item Description
Threads up to 2" (50mm) diameter
Threads over 2", to 2 3/4" (50mm to 70mm) dia.

Shut-Off Nozzle Replacement Parts	
Item Description	Part Number
External Spring	SPG2A
Shut-Off Pin	
1" length	OPSOPA
2" length	OPSOP2
3" length	OPSOP3
Adapter up to 50mm to suit your machine	SOADA*
Nozzle Tips	
Style A	FT1
Style B	FT2
Style C	FT3

How to Order

1. Complete requested information in drawing above
2. Specify tip length or style (FT1, FT2 or FT3)
3. Specify radius and orifice of tip

*Identify thread detail, thread length and rear opening.

Company:	_____	Contact Name:	_____
Account	_____	Phone:	_____
Number:	_____	Fax :	_____
Address:	_____	E-mail:	_____
City:	_____		

U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000 **157**

dme.net • store.dme.net



Mini-Shut™ Automatic Shutoff Nozzle Tip

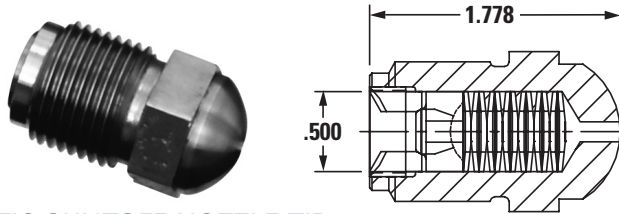
Control of the melting process depends on a number of factors including the proper screw and NRV design, and setting variables such as back pressure, barrel temperatures, screw speed and melt decompression. The process becomes more stable and many surface imperfections obsolete by eliminating melt decompression.

Introducing the Mini-Shut™ Automatic Shutoff Nozzle Tip

The tip, seat and poppet are made from 4140 tool steel and the springs are made from high-temperature alloy.

- Eliminates need for melt decompression
- Eliminates drooling
- Eliminates stringing
- Easy to install and remove
- Inexpensive
- Fits on virtually all nozzle bodies
- Designs for all machine sizes and applications
- Operate the clamp and screw simultaneously
- On-the-shelf stock item
- Low pressure drop

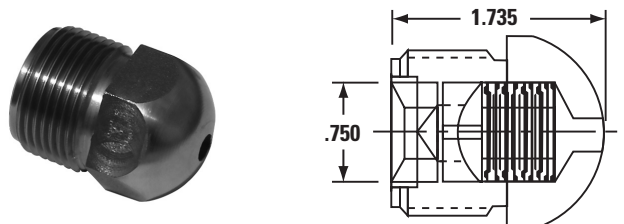
Small Bore Mini-Shut™ Automatic Shutoff Nozzle Tip



MINI AUTOMATIC SHUTOFF NOZZLE TIP

Part Number	Length	Radius	Orifice	Thread
MS50-50-125	1.778"	1/2"	1/8"	7/8-14
MS50-50-156	1.778"	1/2"	5/32"	7/8-14
MS50-50-187	1.778"	1/2"	3/16"	7/8-14
MS50-50-250	1.778"	1/2"	1/4"	7/8-14
MS50-50-375	1.778"	1/2"	3/8"	7/8-14
MS50-75-125	1.778"	3/4"	1/8"	7/8-14
MS50-75-156	1.778"	3/4"	5/32"	7/8-14
MS50-75-187	1.778"	3/4"	3/16"	7/8-14
MS50-75-250	1.778"	3/4"	1/4"	7/8-14
MS50-75-375	1.778"	3/4"	3/8"	7/8-14

Large Bore Mini-Shut™ Automatic Shutoff Nozzle Tip



Part Number	Length	Radius	Orifice	Thread
MS75-75-250	1.735"	3/4"	1/4"	1-1/4-12
MS75-75-375	1.735"	3/4"	3/8"	1-1/4-12

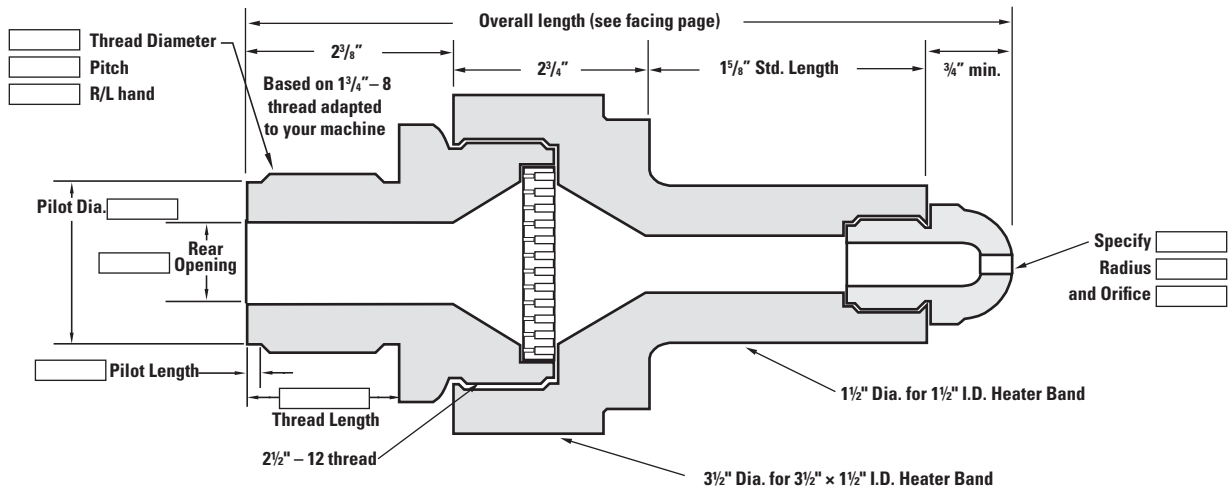
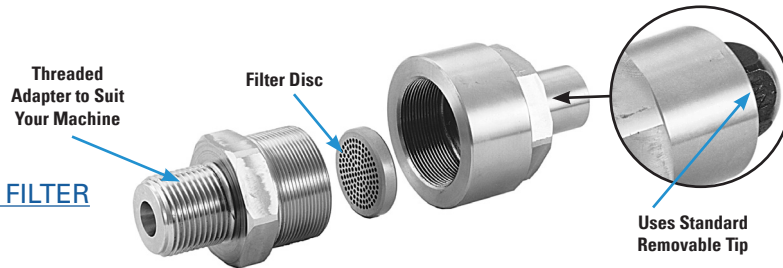
Screen Pack Metal Filter



Tramp Metal Filter for all makes and models of injection molding machines

- Screens out harmful material that may clog orifice of hot runner molds
- 2" diameter filter disc has 135 holes for maximum removal of contaminants and minimum pressure drop

SCREEN PACK METAL FILTER



Complete assembly includes threaded end mount, 2" dia x 3/8" filter disc, removable nozzle and hardened tool steel removable nozzle tip to suit your application.

Assembly MTN1Z or MTN2 consists of:
 MTN1A.....Adapter to suit machine
 MTN1Nozzle
 RTG, RTN or RTTTip
 SPFD1Filter

Filter Descriptors
 2"diameter
 5/8"thick
 135holes
 Major dia093"
 Minor dia035"

Machines with Thread Size of 50mm (2") or Less		Machines with Thread Size Over 50mm (2")	
Type	Part Number	Type	Part Number
General Purpose or Nylon	MTN1Z	General Purpose or Nylon	MTN2
ABS Full Taper	MTN1C	ABS Full Taper	MTN2C

Ordering: Specify radius, orifice and complete information above. For thermocouple hole; specify thread.



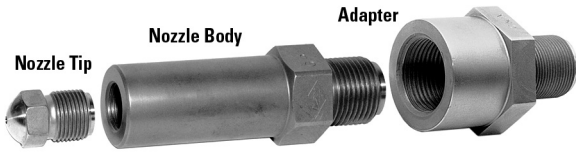


Metal Filter

For all makes and models of injection molding machines

[ONLINE FORM](#)

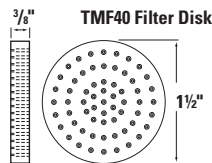
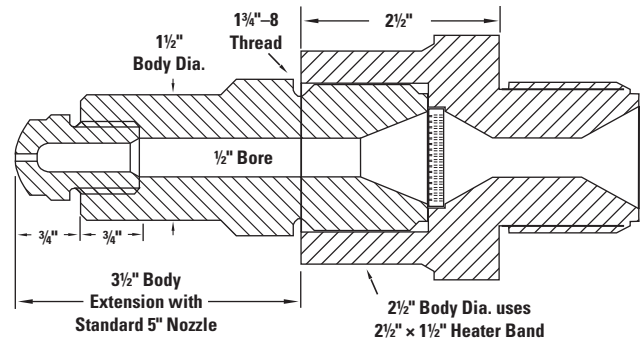
Ordering information for Screen Pack Filters & Adapters:



New design nozzle filter for tramp metal provides all the benefits of huge filtering capacity; from stock shipment gets you running without delay. Uses standard Adapters with thread to suit your machine; standard "VR" nozzles, with 1 3/4" thread and regular replacement tips.



TMF40 Filter Disk

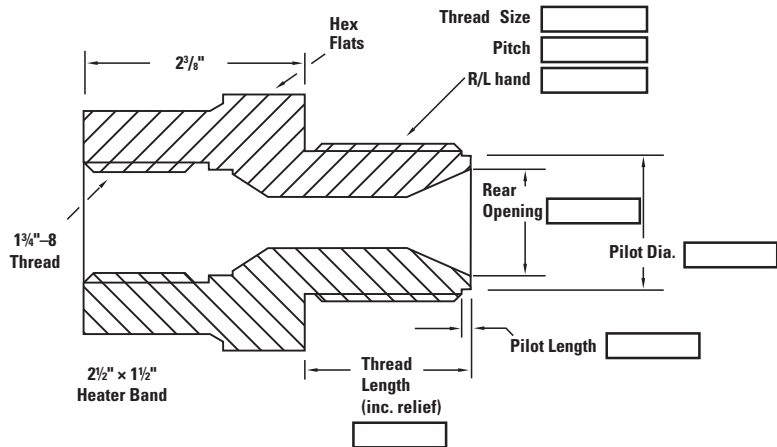


63 holes
Major diameter .093"
Minor diameter .035"

Item	Part Number
Adapter	TMPA
Filter	TMF40
5" Nozzle (including Tip)	VR5AT

General purpose

If your nozzle thread specification is not shown on the following pages, please complete the dimensional data shown above and send to DME [888-808-4363 (fax) or DME@dme.net.]



Send the information requested in the seven boxes above and tip details below to DME.

- (a) Radius (flat, 1/2", 3/4", etc.) _____
- (b) Orifice (from table) _____
- (c) Internal Design
(general purpose, nylon reverse taper or ABS full taper) _____



or visit www.dme.net/rfq

Machine Make _____ Model _____ Year _____

Company: _____ Contact Name: _____
 Account Number: _____ Phone: _____
 Address: _____ Fax: _____
 City: _____ E-mail: _____
 State/Zip: _____

Simple behind-the-tip filter that installs in minutes

Low-cost, effective device to aid in color dispersion with minimum pressure drop. Disk is located in front portion of nozzle, directly behind nozzle tip or in front portion of nozzle (requires recess in tip or nozzle). Removes fish eyes and unplasticized particles. Also provides general dispersion.

Dispersion Disk Filter Nozzle Recess



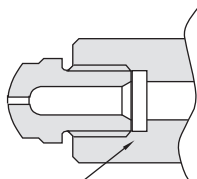
FD001 49 × 0.025" holes
FD002 37 × 0.031" holes
FD003 7 × 0.093" holes



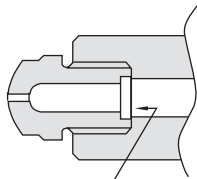
DD1 9 × .045" holes



METAL FILTERS-DISPERSION DISK



Filter Disk DD1 recessed into nozzle

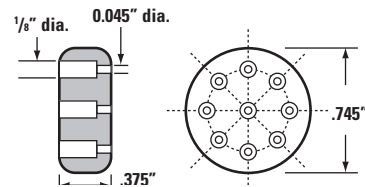


Filter Disk FD001-3 recessed into tip

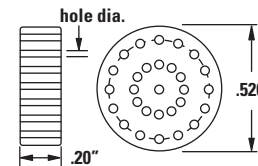
Recess Tips:

Part Number	Description
RTR1	General Purpose
NTR1	Nylon Taper
ABR1	ABS

DD1 Nozzle Recess Filter

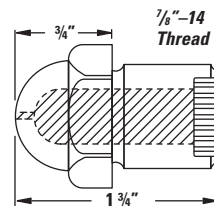


FD001, FD002 & FD003 Nozzle Tip Recess Filter



Filter Type:	Hole Qty.	Dia.
FD001	49	.025"
FD002	37	.031"
FD003	7	.093"

Software Compatibility



FD-type filter disk in machined recess (rear of regular tip)

Type	No. of Holes	Diameter of Each Hole	Total Area of Holes	Equiv. Orifice	Part Number
Nozzle Recess	9	.045"	.0143 sq. in.	0.135"	DD1
Tip Recess	49	.025"	.024 sq. in.	0.175"	FD001
Tip Recess	37	.031"	.028 sq. in.	0.189"	FD002
Tip Recess	7	.093"	.048 sq. in.	0.250"	FD003

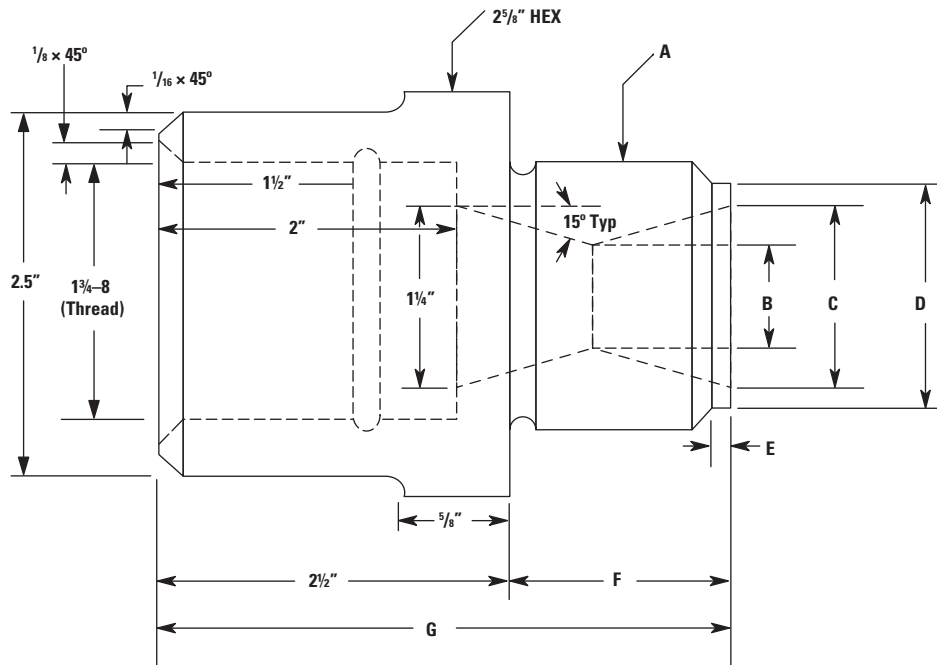


Metal Filter Adapter

[ONLINE FORM](#)



- Use standard 1³/₄-8 Van Dorn-style nozzle
- Filter Pack made from 507 steel and hardened to 60 HRC
- Filters foreign matter & mixes color
- Split design for easy cleaning
- Large filter capacity
- Specify thread size & make of press

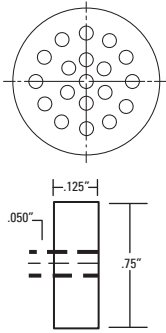


or visit www.dme.net/rfq

Complete your specifications below and fax (888-808-4363) or email (DME@dme.net).

A = Thread detail _____ E = Pilot length _____
 B = Through hole _____ F = Thread length _____
 C = Rear opening _____ G = Over all length _____
 D = Pilot dia _____

Company: _____ Contact Name: _____
 Account _____ Phone: _____
 Number: _____
 Address: _____ Fax: _____
 City: _____ E-mail: _____
 State/Zip: _____



Dispersion Disc to fit behind a STANDARD NOZZLE TIP

You asked for it, we have it! Now you can purchase a dispersion disc to fit behind your standard $\frac{7}{8}$ -14 Replaceable Nozzle Tips!

- No leakage; seals tight
- More convenient
- Improves color mixing
- More effective for removing impurities
- Made in the U.S.A.

Part Number	Dia. Hole
D34-050	0.050"
D34-025	0.025"

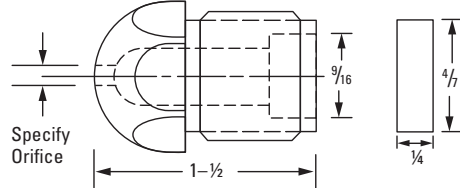
DISPERSION DISCS

$\frac{9}{16}$ Diameter Dispersion Discs

General Purpose Tip:
Part No. RTGD

Nozzle counter bored for dispersion disc.

$\frac{1}{2}$ or $\frac{3}{4}$ Radius



Orifice options: 1/16, 1/4, 1/8, 5/32, 3/8, 3/16, 7/32, 5/16

Order discs installed in a general purpose tip or separately. Available with either .025, .050 or .085 diameter holes. These tips provide quick access, improved color mixing and prevent foreign material passage.

.085 Dispersion Disc
Part No. D085

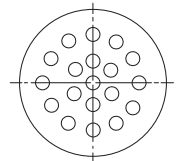
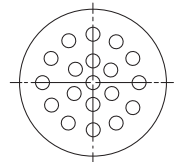
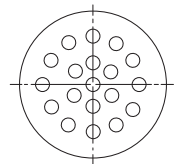
Complete assembly
(Nozzle & Disc) RTGD85

.050 Dispersion Disc
Part No. D050

Complete assembly
(Nozzle & Disc) RTGD50

.025 Dispersion Disc
Part No. D025

Complete assembly
(Nozzle & Disc) RTGD25



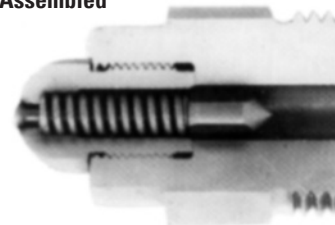
Shutoff Nozzle Tip

- Minimizes nozzle drool and sink patterns
- Installs instantly in all $\frac{7}{8}$ -14 nozzle bodies (body not included)
- The spring-loaded valve in the nozzle tip restricts material until activated by pressure
- Opens in the direction of the sprue bushing and closes until recycled

SHUTOFF NOZZLE TIP

Part Number	Radius	Orifice	Min. Sprue Bushing
SHUTOFF12-116	$\frac{1}{2}$ "	$\frac{1}{16}$ "	$\frac{7}{32}$ "
SHUTOFF12-18		$\frac{1}{8}$ "	$\frac{9}{32}$ "
SHUTOFF12-316		$\frac{3}{16}$ "	$\frac{5}{16}$ "
SHUTOFF34-116	$\frac{3}{4}$ "	$\frac{1}{16}$ "	$\frac{7}{32}$ "
SHUTOFF34-18		$\frac{1}{8}$ "	$\frac{9}{32}$ "
SHUTOFF34-316		$\frac{3}{16}$ "	$\frac{5}{16}$ "

Assembled

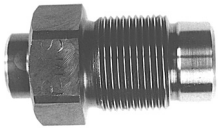


Radius: $\frac{1}{2}$ or $\frac{3}{4}$ Orifice $\frac{1}{16}$, $\frac{1}{8}$, $\frac{3}{16}$



OEM Replacement Tips

ARBURG Regular Tips



Extended Tips



Replacement Arburg nozzle tips - 24/1.5mm thread, 8mm rear opening. Solid one-piece nozzles and tips. Made from hardened tool steel, use as replacement for original tips supplied by machine manufacturer. Solid, hardened tool steel. When ordering, specify radius and orifice from table below.

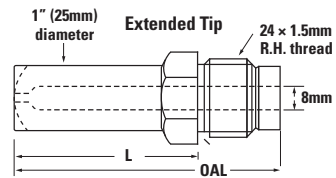
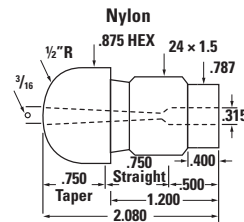
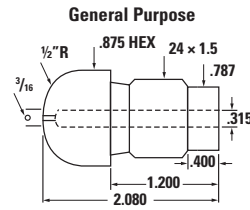
OEM REPLACEMENT TIPS

Tips shown above fit regular Arburg nozzles and barrel end caps.

Type	OAL	L	Heater Band	Part Number
General Purpose	2 ³ / ₄ "	1 ¹ / ₂ "	1" x 5/8"	AR2**
	3 ³ / ₄ "	2 ¹ / ₂ "	1" x 1 ¹ / ₂ "	AR3**
Nylon	2 ³ / ₄ "	1 ¹ / ₂ "	1" x 5/8"	ARN2**
	3 ³ / ₄ "	2 ¹ / ₂ "	1" x 1 ¹ / ₂ "	ARN3**

Internal Design	Part Number
General Purpose	AR1
Nylon	ARN1

* add corresponding Orifice letter to part number
 † add corresponding Radius number to part number
 see key to the right for O & R data



Orifice and Radius Key

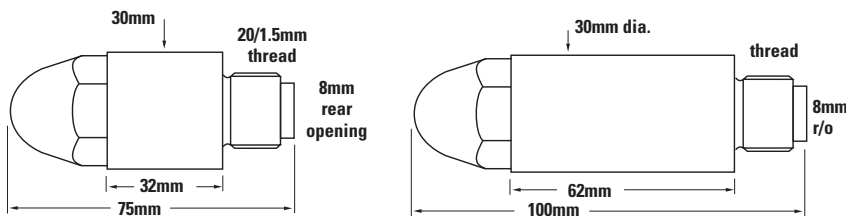
O =			R =
1/8 = A	7/32 = D	3/8 = G	Flat = 0
5/32 = B	1/4 = E	**1/16 = H	1/2 = 5
3/16 = C	5/16 = F		3/4 = 7

** only available on General Purpose

Part Number	Length
NIS1	75mm
NIS2	100mm

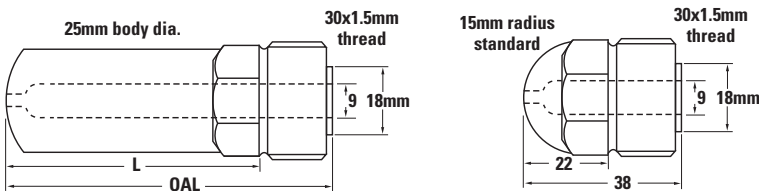
NISSEI

Replacement Nissei nozzle tips. Solid hardened tool steel. When ordering, specify thread, length, radius and orifice. Standard tip used on 2A and 5A machines.



KLOCKNER

Replacement Klockner nozzle tips. 30/1.5mm thread, 9mm and 1/2" rear opening. Solid, hardened tool steel. When ordering specify length, radius and orifice.



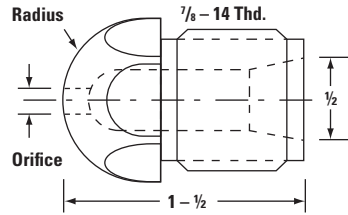
Rear Opening	OAL	Part Number
9mm	38mm	KLCS1
9mm	66mm	KLCS2
9mm	86mm	KLCS3
1/2"	38mm	KLBS1
1/2"	66mm	KLBS2
1/2"	86mm	KLBS3

Replacement Hard Tips

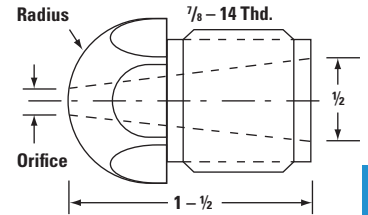


46-48 HRC

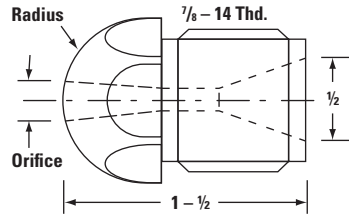
General Purpose



Full Taper



Nylon



Chromium Vanadium Tungsten tool steel replacement tips - high-quality and economically priced! Precision crafted and hardened to 46-48 HRC to offer optimum performance under the most demanding applications. Please see pages 166 and 168 for extension tips.

Sizes		Gen. Purpose	Nylon	Full Taper
Radius	Orifice	Part Number	Part Number	Part Number
1/2"	1/16"	RT15H		
	1/8"	RT15A	NT15A	AB15A
	5/32"	RT15B	NT15B	AB15B
	3/16"	RT15C	NT15C	AB15C
	1/4"	RT15E	NT15E	AB15E
	5/16"	RT15F	NT15F	AB15F
	3/8"	RT15G	NT15G	AB15G
3/4"	1/16"	RT17H		
	1/8"	RT17A	NT17A	AB17A
	5/32"	RT17B	NT17B	AB17B
	3/16"	RT17C	NT17C	AB17C
	1/4"	RT17E	NT17E	AB17E
	5/16"	RT17F	NT17F	AB17P
	3/8"	RT17G	NT17G	AB17G

REPLACEMENT HARD TIPS



Extension Hard Tips

46-48 HRC

General Purpose

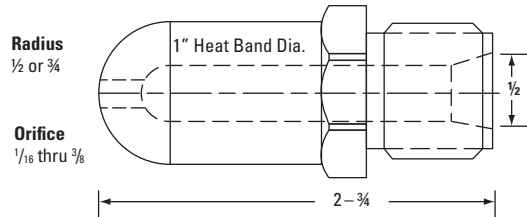
Chromium Vanadium Tungsten tool steel replacement tips - high-quality and economically priced! Precision crafted to offer optimum performance under the most demanding applications.

Nickel Copper Tips				
OAL	Nozzle Radius			Heater Width
	Flat	1/2"	3/4"	
2 3/4"	BRT20*	BRT25*	BRT27*	1"
3 3/4"	BRT30*	BRT35*	BRT37*	2 1/4"

*Specify orifice based on table above

Hardened Chrom./Van./Tungsten Tool Steel				
OAL	Nozzle Radius			Heater Width
	Flat	1/2"	3/4"	
2 3/4"	RT20*	RT25*	RT27*	1"
3 3/4"	RT30*	RT35*	RT37*	2 1/4"
5"	RT50*	RT55*	RT57*	3 1/4"
6"	RT60*	RT65*	RT67*	4 1/4"

*Specify orifice based on table to the right



EXTENSION HARD TIPS

Orifice

O =		
1/8 = A	7/32 = D	3/8 = G
5/32 = B	1/4 = E	**1/16 = H
3/16 = C	5/16 = F	

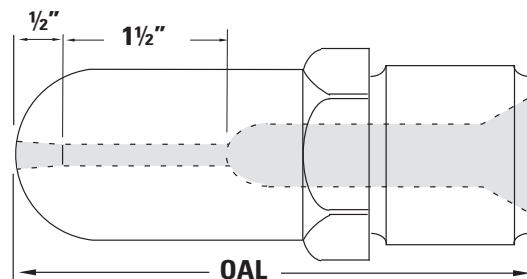
** only available on General Purpose

46-48 HRC

Nylon

Nylon Reverse Taper Tool Steel				
OAL	Nozzle Radius			Heater Width
	Flat	1/2"	3/4"	
2 3/4"	NT20*	NT25*	NT27*	1"
3 3/4"	NT30*	NT35*	NT37*	2 1/4"
5"	NT50*	NT55*	NT57*	3 1/4"

*Specify orifice based on table above right



Nylon Reverse Taper Nickel Copper Tips				
OAL	Nozzle Radius			Heater Width
	Flat	1/2"	3/4"	
2 3/4"	BNT20*	BNT25*	BNT27*	1"
3 3/4"	BNT30*	BNT35*	BNT37*	2 1/4"

*Specify orifice based on table above right

Orifice

O =		
1/8 = A	7/32 = D	3/8 = G
5/32 = B	1/4 = E	**1/16 = H
3/16 = C	5/16 = F	

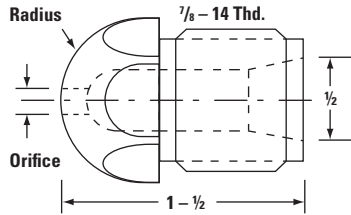
** only available on General Purpose

Replacement Soft Tips

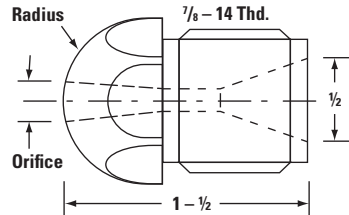
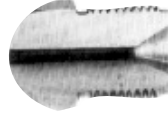
34-36 HRC



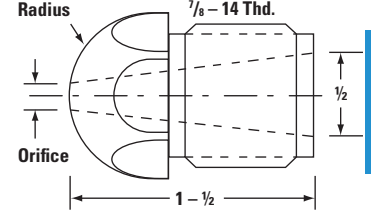
General Purpose



Nylon



Full Taper



Hardened to 34-36 HRC and precision manufactured to offer quality at an affordable price. Please see pages 166 and 168 for extension tips.

Sizes		G. Purpose	Nylon	Full Taper
Radius	Orifice	Part Number	Part Number	Part Number
1/2"	1/16"	RTG12-116		
	3/32"	RTG12-332		
	1/8"	RTG12-18	RTN12-18	RTT12-18
	5/32"	RTG12-532	RTN12-532	RTT12-532
	3/16"	RTG12-316	RTN12-316	RTT12-316
	1/4"	RTG12-14	RTN12-14	RTT12-14
	5/16"	RTG12-516		
	3/8"	RTG12-38	RTN12-38	RTT12-38
	1/2"	RTG12-12		
3/4"	1/16"	RTG34-116		
	3/32"	RTG34-332		
	1/8"	RTG34-18	RTN34-18	RTT34-18
	5/32"	RTG34-532	RTN34-532	RTT34-532
	3/16"	RTG34-316	RTN34-316	RTT34-316
	1/4"	RTG34-14	RTN34-14	RTT34-14
	5/16"	RTG34-516		
	3/8"	RTG34-38	RTN34-38	RTT34-38
	1/2"	RTG34-12		

REPLACEMENT SOFT TIPS

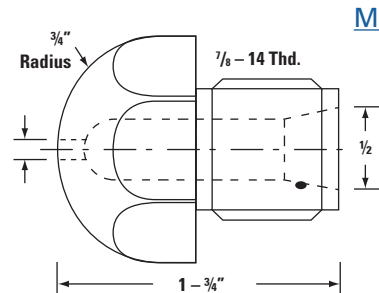
This product is not compatible with the FD001

Large Radius "Mushroom" Tip

Extra surface area for a better seal. Fits all standard 7/8-14 thread nozzles.

General Purpose		
Sizes		Part Number
Radius	Orifice	
3/4"	1/8"	RTGM34-18
	3/16"	RTGM34-316
	1/4"	RTGM34-14
	3/8"	RTGM34-38
	1/2"	RTGM34-12

Nylon & Full Taper available by request



MUSHROOM TIPS

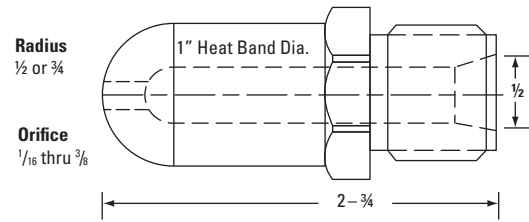


Extension Soft Tips

37 HRC

General Purpose		
Part Number	Length	Heater Width
RTXGR*	2¾"	1"
RTXGR4*	4"	2¼"
RTXGR5*	5"	3¼"
RTXGR6*	6"	4¼"
RTXGR8*	6"	4¼"

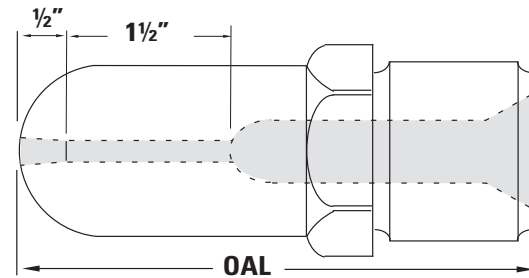
*Specify radius (flat, ½" or ¾") and orifice (1/16", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8")



EXTENSION SOFT TIPS

Standard Nylon		
Part Number	Length	Heater Width
RTXNR*	2¾"	1"
RTXNR4*	4"	2¼"
RTXNR5*	5"	3¼"
RTXNR6*	6"	4¼"

*Specify radius (flat, ½" or ¾") and orifice (1/16", 1/8", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8")



Beryllium Replacement Tips

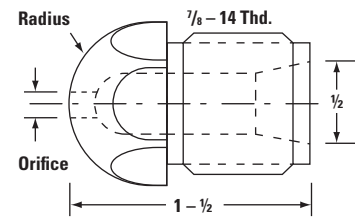
31 HRC

Beryllium - 31 Rockwell "C" Scale Tool Steel

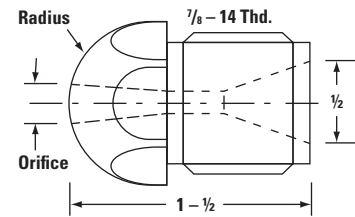
Beryllium provides maximum heat transfer and is perfectly suited to mate with your sprue bushing without causing damage. Reduces tip "freeze-up" and allows molding at lower nozzle temperatures.

BERYLLIUM REPLACEMENT TIPS

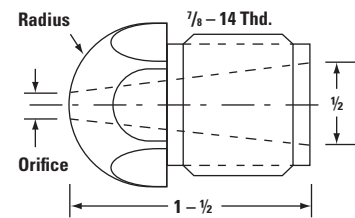
Sizes		G. Purpose	Nylon	Full Taper
Radius	Orifice	Part Number	Part Number	Part Number
½"	1/8"	BRT15A	BNT15A	BAB15A
	5/32"	BRT15B	BNT15B	BAB15B
	3/16"	BRT15C	BNT15C	BAB15C
	1/4"	BRT15E	BNT15E	BAB15E
¾"	1/8"	BRT17A	BNT17A	BAB17A
	5/32"	BRT17B	BNT17B	BAB17B
	3/16"	BRT17C	BNT17C	BAB17C
	1/4"	BRT17E	BNT17E	BAB17E



General Purpose



Nylon



Full Taper

Oversize Nozzle Bodies

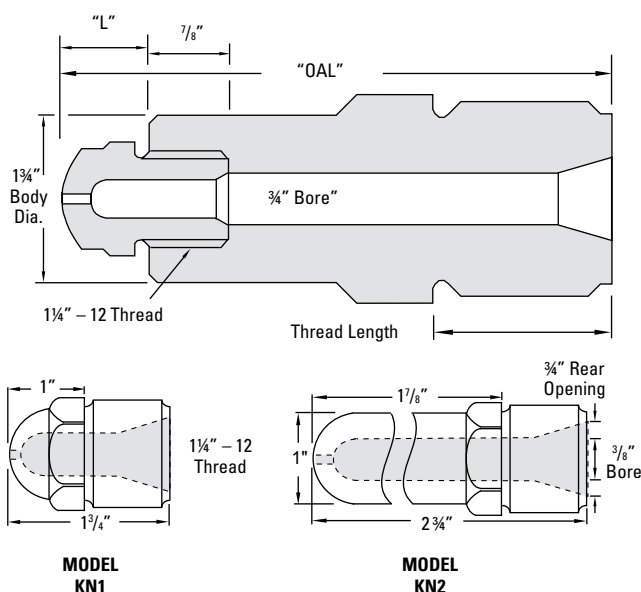


For Extra Large Shots

A $\frac{3}{4}$ " bore provides over double the flow area compared with standard nozzles. Standard nozzles have a $\frac{1}{2}$ " bore diameter which provides a cross-section flow area of .196 in². These large bore nozzles have a $\frac{3}{4}$ " bore diameter which provides a full .44 in² flow area, allowing throughput of $2\frac{1}{4}$ times that possible with regular nozzles.

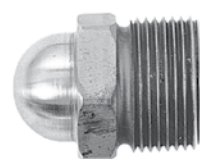
Recommended in place of industry standard $\frac{1}{2}$ " thru-hole nozzles when molding very large shots. Gradual reduction in cross-sectional area of flow path causes less material turbulence and results in less back pressure. There is also less chance of overheating material due to sudden pressure increase. Available for any make and model machine in lengths from 5" to 20"

B

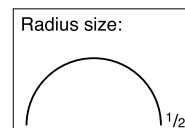


Replacement Tips

$\frac{3}{4}$ " bore provides $2\frac{1}{4}$ times the throughput of regular nozzles



1/4" - 12 Thread



Hardened tool steel 48-52 HRC

Orifice	1/16"	1/8"	5/32"	3/16"	7/32"	1/4"	5/16"	3/8"
Part No. Suffix	H	A	B	C	D	E	F	G

1/16" orifice only available in General Purpose Style

Part Number	Radius	OAL	Description
KN15*	1/2"	1.75"	STANDARD TIP L 1"
KN17*	3/4"	1.75"	STANDARD TIP L 1"
KN25*	1/2"	2.75"	O/S EXTENDED TIP L 1.875"

*Add Orifice letter designation from Orifice chart

How to Order:

1. Specify make and model of machine plus style of nozzle
2. Specify radius and orifice options—TC hole on hex flat



Solid Nozzles – Tool Steel

[ONLINE FORM](#)

Internal Design

General Purpose

Standard, free-flow internal design General Purpose Nozzle, provides minimum flow resistance and back pressure buildup; 1/2" diameter flow path unless otherwise stated.

Nylon Reverse Taper

For use with polyamides, acrylics and similar expansive and heat-sensitive materials. Material flows 1/2" through 1/8" diameter-restricted throat into 1" long reverse taper. Sprue breaks inside nozzle providing expansion area and reducing drool.

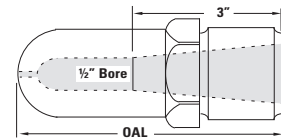
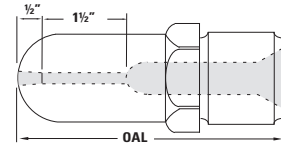
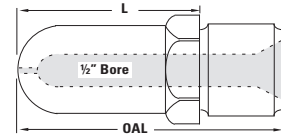
Full Taper - ABS

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and areas of hangup. Recommended large orifices for minimum flow resistance.

Taper 3" longitudinal distance from rear opening to 1/2" internal bore.



Hardened Chrome Vanadium tool steel for long life



Description	Total Length
Thread Dia. up to 2" (50mm)	5"
	6"
	7"
	8"
	9"
	10"
	12"
	14"
	16"
	18"
20"	

Description	Total Length
Thread Dia. 2 1/8" to 2 3/4" (51mm to 69mm)	5"
	6"
	7"
	8"
	9"
	10"
	12"
	14"
	16"
	18"
20"	

Hardened Chrome Vanadium tool steel polished to mirror finish to provide smooth material flow path. These nozzles will provide far greater life and superior flow characteristics than relatively soft, "T" - condition nozzles.

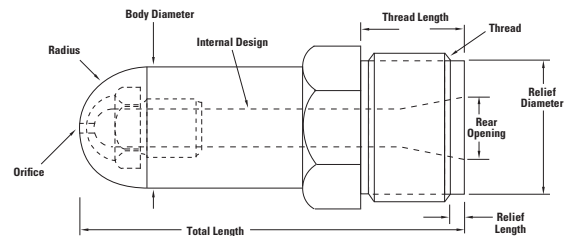
How to Order:

1. Specify make and model of machine plus style of nozzle.
 2. Specify radius and orifice.
- Options—TC hole on hex flat



or visit

www.dme.net/rfq



Complete the information below and fax to DME at (248-544-5113) or email to DME@dme.net.

- | | | | |
|-----------------------------------|-------|---|-------|
| 1. Total Length | _____ | 6. Radius (Flat, 1/2", 3/4", 35mm) | _____ |
| 2. Thread Length | _____ | 7. Orifice | _____ |
| 3. Thread Type (1 1/2" – 12 etc.) | _____ | 8. Internal Design (general purpose, nylon reverse taper or ABS full taper) | _____ |
| 4. Rear Opening | _____ | 9. Relief Diameter | _____ |
| 5. Body Diameter (1", 1 1/2", 2") | _____ | 10. Relief Length | _____ |

MACHINE MAKE: _____ MODEL _____ YEAR _____

Company: _____ Contact Name: _____
 Account: _____ Phone: _____
 Number: _____ Fax: _____
 Address: _____ E-mail: _____
 City: _____

Nozzle Band Selection



To determine the proper heater band size to fit your nozzle, simply refer to the "H.B. Code" (A, B, C or D) listed beside the nozzle you are purchasing (pages 175–191), then refer to the table below. For example, a NM6 nozzle body and tip is shown as "N.B. Code B" and would require a 1½" x 2½" heater band. For complete listing of nozzle heater bands, see pages 496–497 of this catalog.



NOZZLE BANDS

B

**Table shows heater band required for each nozzle length.
(Find code for your nozzle in listings on following pages.)**

Nozzle OAL	N.B. Code				
	A	B	C	D	E
3¾"	1½" x 1"	–	–	–	–
5"	1½" x 2"	1½" x 1½"	1½" x 1"	1½" x ⅝"	–
6"	1½" x 3"	1½" x 2½"	1½" x 2"	1½" x 1½"	1½" x 1"
7"	1½" x 4"	1½" x 3"	1½" x 3"	1½" x 2½"	1½" x 2"
8"	1½" x 5"	1½" x 4"	1½" x 4"	1½" x 3"	1½" x 3"
9"	1½" x 6"	1½" x 5"	1½" x 5"	1½" x 4"	1½" x 4"
10"	1½" x 4"	1½" x 4"	1½" x 6"	1½" x 5"	1½" x 5"
	1½" x 3"	1½" x 2½"	–	–	–
12"	1½" x 5"	1½" x 4"	1½" x 4"	1½" x 5"	1½" x 5"
	1½" x 4"	(2 pcs.)	(2 pcs.)	1½" x 2½"	1½" x 2"
14"	1½" x 6"	1½" x 5"	1½" x 5"	1½" x 4"	1½" x 4"
	1½" x 5"	(2 pcs.)	(2 pcs.)	1½" x 5"	1½" x 5"
16"	1½" x 6"	1½" x 6"	1½" x 6"	1½" x 5"	1½" x 5"
	(2 pcs.)	(2 pcs.)	(2 pcs.)	1½" x 6"	1½" x 6"
18"	1½" x 5"	1½" x 5"	1½" x 5"	1½" x 5"	1½" x 5"
	(3 pcs.)	(2 pcs.)	(2 pcs.)	1½" x 4"	1½" x 4"
	1½" x 4"	1½" x 4"	(2 pcs.)	(2 pcs.)	–
20"	1½" x 6"	1½" x 6"	1½" x 6"	1½" x 5"	1½" x 5"
	(2 pcs.)	(2 pcs.)	(2 pcs.)	(3 pcs.)	(3 pcs.)
	1½" x 5"	1½" x 4"	1½" x 4"	–	–



Removable Tip Nozzles



Below is a partial list of machine makes for which we make nozzles.
If you don't see your model, call DME;
we often make nozzles to meet custom specifications!

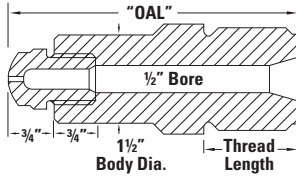
Advanced	Goldstar	Oima
Ankerwerke	HPM	Peco
Aoki	Herbert	Plastjet
Arburg	Hull/Meiki	Reed Prentice
Autojectors	Husky	Reifenhauser
Battenfeld	Idra	Sandretto
Beloit	IMI	Shinwa Seiki
Billion	Impco	Stokes
Bipel	JSW	Stork Reed
Bone Craven	Kawaguchi	Stubbe
Boy	Klockner	Sumitomo
Buhler	Krauss Maffei	Sungchuan
Butler Smith	Krupps	TMC
Chaun Lih Fa	Kuasy	Toshiba
Chen Hsong	Lombard	Toyo
Cincinnati Milacron	Metalmec	Trubor
Demag	Meteor	Turner
Demattia	Mir	Unitek
Desma	Mitsubishi	USM/Farrel
Edgewick	Natco	Van Dorn
Engel	Negri Bossi	Windsor
Esaco	Netstal	
Fahr Bucher	New Britain	
Fellows	Newbury	
Fortune	Niigata	
Fu Chen Shine	Nissei	

**The following pages
list some of our more
common nozzles**

Removable Tip Nozzle Bodies

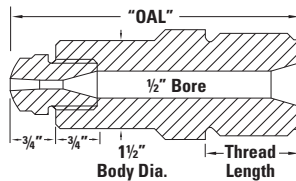


ARBURG



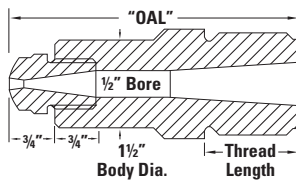
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Arburg					
(A)	24/1.5 RH	10mm	3 3/4"	AW3	
			5"	AW5	
			6"	AW6	
(A)	30/1.5	24mm	3 3/4"	AL3	AL3C
			5"	AL5	AL5C
			6"	AL6	AL6C
(A)	35/1.5 (LH/RH)	18mm	3 3/4"	AR3	AR3C
			5"	AR5	AR5C
			6"	AR6	AR6C
(A)	35/2LH	18mm	3 3/4"	ABA3	ABA3C
			5"	ABA5	ABA5C
			6"	ABA6	ABA6C
(B)	36/2LH	22mm	3 3/4"	ABB3	ABB3C
			5"	ABB5	ABB5C
			6"	ABB6	ABB6C
(B)	45/1.5 (LH/RH)	22mm	3 3/4"	AB3	AB3C
			5"	AB5	AB5C
			6"	AB6	AB6C
(B)	45/1.5 LH	25mm	3 3/4"	AG3	AG3C
			5"	AG5	AG5C
			6"	AG6	AG6C
(A)	45/1.5	30mm	3 3/4"	ABF3	ABF3C
			5"	ABF5	ABF5C
			6"	ABF6	ABF6C
(B)	45/2	18mm	3 3/4"	ABE3	ABE3C
			5"	ABE5	ABE5C
			6"	ABE6	ABE6C
(B)	45/2LH	22mm	3 3/4"	AA3	AA3C
			5"	AA5	AA5C
			6"	AA6	AA6C
(B)	45/2LH	25mm	3 3/4"	AC3	AC3C
			5"	AC5	AC5C
			6"	AC6	AC6C
			8"	AC8	AC8C
(B)	45/2LH	30mm	3 3/4"	AD3	AD3C
			5"	AD5	AD5C
			6"	AD6	AD6C
(B)	50/2 LH or RH	30mm	3 3/4"	AU3	AU3C
			5"	AU5	AU5C
			6"	AU6	AU6C
			8"	AU8	AU8C



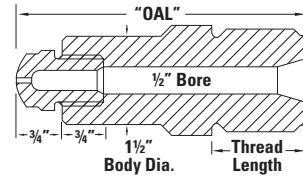


Removable Tip Nozzle Bodies

ARBURG

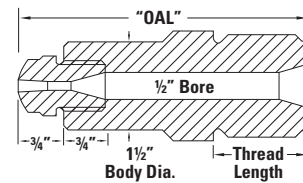
BATTENFELD

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Arburg (cont.)					
(B)	50/2LH	35mm	3 3/4"	AF3	AF3C
			5"	AF5	AF5C
			6"	AF6	AF6C
			7"	AF7	AF7C
(A)	52/2LH	15mm	3 3/4"	AZ3	AZ3C
			5"	AZ5	AZ5C
			6"	AZ6	AZ6C
			7"	AZ7	AZ7C
(A)	52/2	30mm	3 3/4"	AP3	AP3C
			5"	AP5	AP5C
			6"	AP6	AP6C
(B)	52/2	35mm	5"	ABD5	ABD5C
			6"	ABD6	ABD6C
(B)	55/2LH	30mm	3 3/4"	AM3	AM3C
			5"	AM5	AM5C
			6"	AM6	AM6C
(B)	55/2LH	40mm	5"	AH5	AH5C
			6"	AH6	AH6C
			8"	AH8	AH8C
(B)	60/2LH	45mm	3 3/4"	AK3	AK3C
			5"	AK5	AK5C
			6"	AK6	AK6C
Battenfeld					
(A)	32/2	21mm	3 3/4"	GN3	GN3C
			5"	GN5	GN5C
			6"	GN6	GN6C
			7"	GN7	GN7C
			8"	GN8	GN8C
(A)	35/2	12mm	3 3/4"	BSF3	
			5"	BSF5	
			6"	BSF6	
			7"	BSF7	
(B)	35/2	1/2"	3 3/4"	BS3	
			5"	BS5	
			6"	BS6	
			7"	BS7	
			8"	BS8	
(A)	35/2	18mm	3 3/4"	BSD3	BSD3C
			5"	BSD5	BSD5C
			6"	BSD6	BSD6C
			7"	BSD7	BSD7C
			8"	BSD8	BSD8C



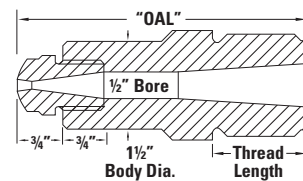
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

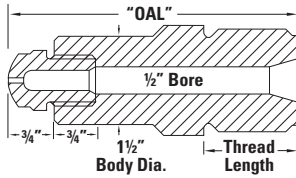
Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies

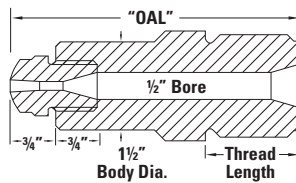


BATTENFELD



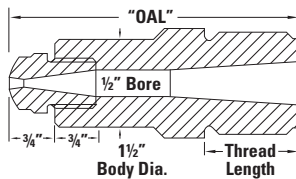
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587–598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Battenfeld (cont.)					
(A)	35/2	3/4"	3 3/4"	BL3	BL3C
			5"	BL5	BL5C
			6"	BL6	BL6C
			7"	BL7	BL7C
			8"	BL8	BL8C
(A)	35/2 T/L 1"	21mm	3 3/4"	GO3	GO3C
			5"	GO5	GO5C
			6"	GO6	GO6C
			7"	GO7	GO7C
			8"	GO8	GO8C
			10"	GO10	GO10C
			12"	GO12	GO12C
(A)	35/2 T/L 1.12"	21mm	3 3/4"	BF3	BF3C
			5"	BF5	BF5C
			6"	BF6	BF6C
			7"	BF7	BF7C
(A)	35/2 T/L 30mm	22mm	3 3/4"	BD3	BD3C
			5"	BD5	BD5C
			6"	BD6	BD6C
			7"	BD7	BD7C
(A)	35/2 T/L 26mm	25mm	3 3/4"	GL3	GL3C
			5"	GL5	GL5C
			6"	GL6	GL6C
			7"	GL7	GL7C
			8"	GL8	GL8C
			9"	GL9	GL9C
			10"	GL10	GL10C
(C)	40/2	1/2"	5"	BO5	
			6"	BO6	
			7"	BO7	
			8"	BO8	
(A)	40/2	21mm	3 3/4"	BZ3	BZ3C
			5"	BZ5	BZ5C
			6"	BZ6	BZ6C
			7"	BZ7	BZ7C
			8"	BZ8	BZ8C

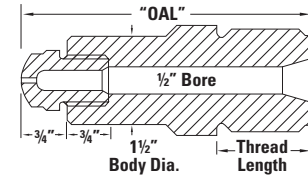




Removable Tip Nozzle Bodies

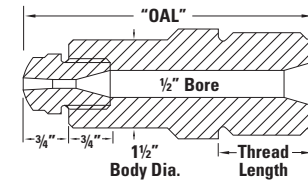
BATTENFELD

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Battenfeld (cont.)					
(A)	40/2	25mm	5"	BA5	BA5C
			6"	BA6	BA6C
			7"	BA7	BA7C
			8"	BA8	BA8C
			10"	BA10	BA10C
(A)	40/2	30mm, T/L 24mm	3 3/4"	BT3	BT3C
			5"	BT5	BT5C
			6"	BT6	BT6C
			7"	BT7	BT7C
(A)	40/2	30mm, T/L 29mm	3 3/4"	BSI3	BSI3C
			5"	BSI5	BSI5C
			6"	BSI6	BSI6C
			7"	BSI7	BSI7C
(B)	44/3	23mm	5"	BSH5	BSH5C
			6"	BSH6	BSH6C
			7"	BSH7	BSH7C
			8"	BSH8	BSH8C
(A)	45/2	34mm	5"	BW5	BW5C
			6"	BW6	BW6C
			7"	BW7	BW7C
			8"	BW8	BW8C
(A)	45/2	35mm	5"	BM5	BM5C
			6"	BM6	BM6C
			7"	BM7	BM7C
			8"	BM8	BM8C
(B)	48/3TR	30mm	5"	BSG5	BSG5C
			6"	BSG6	BSG6C
			7"	BSG7	BSG7C
			8"	BSG8	BSG8C
(B)	50/2	1/2"	3 3/4"	BSC3	
			5"	BSC5	
			6"	BSC6	
			7"	BSC7	
(B)	50/2	26mm	3 3/4"	BSB3	BSB3C
			5"	BSB5	BSB5C
			6"	BSB6	BSB6C
			7"	BSB7	BSB7C
			8"	BSB8	BSB8C



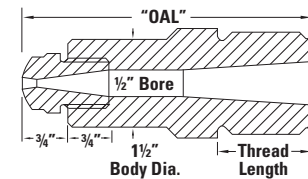
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

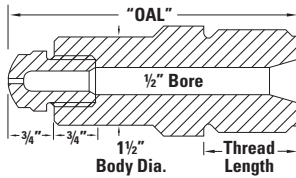
1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies



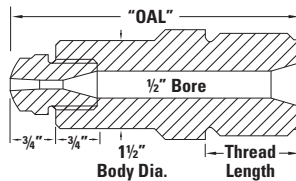
BATTENFELD

CININNATI



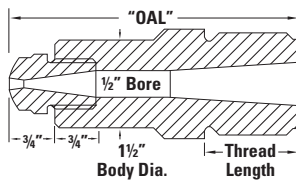
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Battenfeld (cont.)					
(C)	65/3	2"	6"	BK6	BK6C
			7"	BK7	BK7C
			8"	BK8	BK8C
			9"	BK9	BK9C
			10"	BK10	BK10C
Cincinnati Milacron					
(A)	1 1/4"-12	3/4"	3 3/4"	CC3	CC3C
			5"	CC5	CC5C
			6"	CC6	CC6C
			7"	CC7	CC7C
(C)	1 1/2"-12	1/2"	8"	CC8	CC8C
			3 3/4"	CN3	
			5"	CN5	
			6"	CN6	
			7"	CN7	
			8"	CN8	
			9"	CN9	
			10"	CN10	
(B)	1 1/2"-12	5/8"	12"	CN12	
			14"	CN14	
			16"	CN16	
			18"	CN18	
			20"	CN20	
			3 3/4"	CA3	CA3C
			5"	CA5	CA5C
			6"	CA6	CA6C
(C)	42/2mm	18mm	7"	CA7	CA7C
			8"	CA8	CA8C
			9"	CA9	CA9C
			10"	CA10	CA10C
(C)	42/2mm	18mm	12"	CA12	CA12C
			3 3/4"	CB3	CB3C
			5"	CB5	CB5C
			6"	CB6	CB6C
(C)	42/2mm	18mm	7"	CB7	CB7C
			8"	CB8	CB8C



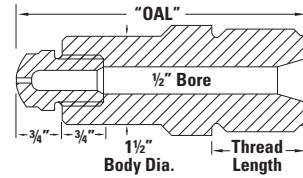


Removable Tip Nozzle Bodies

CINCINNATI

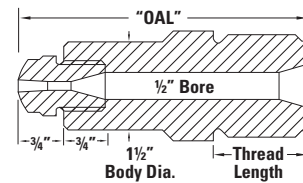
ENGEL

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Cincinnati Milacron (cont.)					
(B)	1 3/4"-8	3/4"	3 3/4"	NM3	NM3C
			5"	NM5	NM5C
			6"	NM6	NM6C
			7"	NM7	NM7C
			8"	NM8	NM8C
			9"	NM9	NM9C
			10"	NM10	NM10C
			12"	NM12	NM12C
			14"	NM14	NM14C
			16"	NM16	NM16C
			18"	NM18	NM18C
			20"	NM20	NM20C
(B)	45/2	3/4"	5"	CI5	CI5C
			6"	CI6	CI6C
			7"	CI7	CI7C
			8"	CI8	CI8C
(C)	2"-8	1"	6"	CS6	CS6C
			7"	CS7	CS7C
			8"	CS8	CS8C
			9"	CS9	CS9C
			10"	CS10	CS10C
(B)	36/4	16mm	6"	CS12	CS12C
			3 3/4"	CT3	CT3C
			5"	CT5	CT5C
			6"	CT6	CT6C
(B)	36/4	16mm	7"	CT7	CT7C
			8"	CT8	CT8C
			7"	CT7	CT7C
			8"	CT8	CT8C
Engel					
(A)	7/8"-14	11mm	3 3/4"	ENC3	
			5"	ENC5	
			6"	ENC6	
90	25/3	20mm	3 3/4"	EXD3	EXD3C
			5"	EXD5	EXD5C
			6"	EXD6	EXD6C
			7"	EXD7	EXD7C
(A)	28/1.5	12mm	8"	EXD8	EXD8C
			3 3/4"	ET3	
			5"	ET5	
			6"	ET6	
(A)	28/1.5	12mm	7"	ET7	
			8"	ET8	



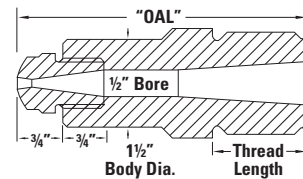
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

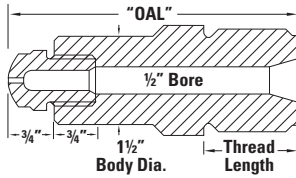
Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies

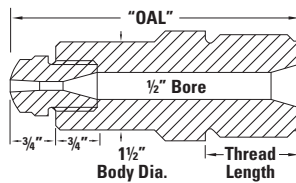


ENGEL



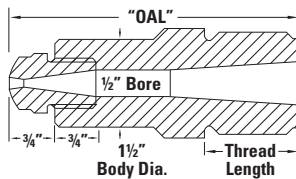
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Engel (cont.)					
(A)	30/2	10mm (uses 1/2")	3 3/4"	ENN3	
			5"	ENN5	
			6"	ENN6	
			7"	ENN7	
(A)	1 1/4"-9 BSF	7/8"	8"	ENN8	
			3 3/4"	EV3	EV3C
			5"	EV5	EV5C
			6"	EV6	EV6C
(A)	1 1/4"-10	1/2"	7"	EV7	EV7C
			8"	EV8	EV8C
			3 3/4"	ENK3	
			5"	ENK5	
(A)	1 1/4"-10	3/4"	6"	ENK6	
			7"	ENK7	
			8"	ENK8	
			9"	ENK9	
(A)	1 1/4"-10	3/4"	3 3/4"	END3	END3C
			5"	END5	END5C
			6"	END6	END6C
			7"	END7	END7C
(A)	1 1/4"-10	21.2mm	8"	END8	END8C
			9"	END9	END9C
			3 3/4"	ENJ3	ENJ3C
			5"	ENJ5	ENJ5C
(A)	1 1/4"-10	21.2mm	6"	ENJ6	ENJ6C
			7"	ENJ7	ENJ7C
			8"	ENJ8	ENJ8C
			9"	ENJ9	ENJ9C
(B)	1 1/4" BSF	26.5	3 3/4"	EE3	EE3C
			5"	EE5	EE5C
			6"	EE6	EE6C
			7"	EE7	EE7C
(A)	32/2.5	20mm	8"	EE8	EE8C
			3 3/4"	ES3	ES3C
			5"	ES5	ES5C
			6"	ES6	ES6C
(A)	32/1.5	20mm	7"	ES7	ES7C
			8"	ES8	ES8C
			3 3/4"	EX3	EX3C
			5"	EX5	EX5C
(A)	32/1.5	20mm	6"	EX6	EX6C
			7"	EX7	EX7C
			8"	EX8	EX8C

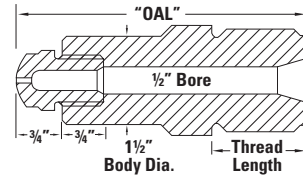




Removable Tip Nozzle Bodies

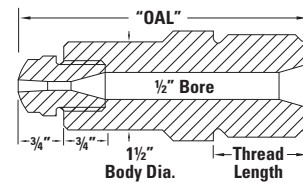
ENGEL

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Engel (cont.)					
(A)	35/2	16mm	3 3/4"	EA3	EA3C
			5"	EA5	EA5C
			6"	EA6	EA6C
			7"	EA7	EA7C
			8"	EA8	EA8C
(A)	35/2	22mm	3 3/4"	ENG3	ENG3C
			5"	ENG5	ENG5C
			6"	ENG6	ENG6C
			7"	ENG7	ENG7C
			8"	ENG8	ENG8C
(A)	36/1.5	22mm	3 3/4"	EM3	EM3C
			5"	EM5	EM5C
			6"	EM6	EM6C
			7"	EM7	EM7C
			8"	EM8	EM8C
(A)	40/2	24mm	3 3/4"	EI3	EI3C
			5"	EI5	EI5C
			6"	EI6	EI6C
			7"	EI7	EI7C
			8"	EI8	EI8C
(A)	40/2	26mm	3 3/4"	EH3	EH3C
			5"	EH5	EH5C
			6"	EH6	EH6C
			7"	EH7	EH7C
			8"	EH8	EH8C
(A)	40/2	25mm	3 3/4"	EJ3	EJ3C
			5"	EJ5	EJ5C
			6"	EJ6	EJ6C
			7"	EJ7	EJ7C
			8"	EJ8	EJ8C
(A)	40/2	27.5	3 3/4"	ENB3	ENB3C
			5"	ENB5	ENB5C
			6"	ENB6	ENB6C
			7"	ENB7	ENB7C
			8"	ENB8	ENB8C
(A)	40/3	1"	3 3/4"	ENA3	ENA3C
			5"	ENA5	ENA5C
			6"	ENA6	ENA6C
			7"	ENA7	ENA7C
			8"	ENA8	ENA8C
(B)	40/3	30mm	3 3/4"	EU3	EU3C
			5"	EU5	EU5C
			6"	EU6	EU6C
			7"	EU7	EU7C
			8"	EU8	EU8C



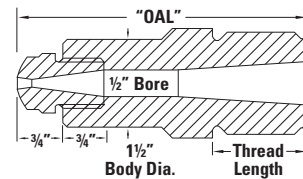
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

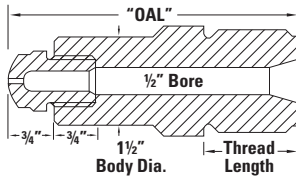
Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587–598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies

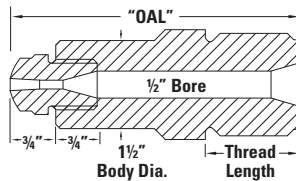


ENGEL



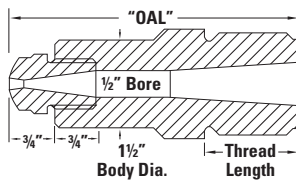
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Engel (cont.)					
(B)	45/2	16mm	3 3/4"	EL3	EL3C
			5"	EL5	EL5C
			6"	EL6	EL6C
			7"	EL7	EL7C
(A)	45/2	25mm	8"	EL8	EL8C
			3 3/4"	ENE3	ENE3C
			5"	ENE5	ENE5C
			6"	ENE6	ENE6C
(A)	45/2	27.5	7"	ENE7	ENE7C
			8"	ENE8	ENE8C
			3 3/4"	EO3	EO3C
			5"	EO5	EO5C
(A)	45/3	1/2"	6"	EO6	EO6C
			7"	EO7	EO7C
			8"	EO8	EO8C
			3 3/4"	ENH3	
(A)	45/3	1/2"	5"	ENH5	
			6"	ENH6	
			7"	ENH7	
			8"	ENH8	
(B)	45/3	3/4"	3 3/4"	ED3	ED3C
			5"	ED5	ED5C
			6"	ED6	ED6C
			7"	ED7	ED7C
(A)	45/3	20mm	8"	ED8	ED8C
			3 3/4"	EC3	EC3C
			5"	EC5	EC5C
			6"	EC6	EC6C
(A)	45/3	32mm	7"	EC7	EC7C
			8"	EC8	EC8C
			3 3/4"	EN3	EN3C
			5"	EN5	EN5C
(B)	45/3	34mm	6"	EN6	EN6C
			7"	EN7	EN7C
			8"	EN8	EN8C
			3 3/4"	ENF3	ENF3C
(B)	45/3	34mm	5"	ENF5	ENF5C
			6"	ENF6	ENF6C
			7"	ENF7	ENF7C
			8"	ENF8	ENF8C

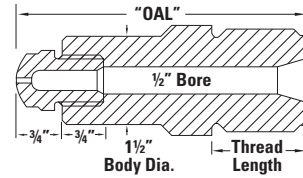




Removable Tip Nozzle Bodies

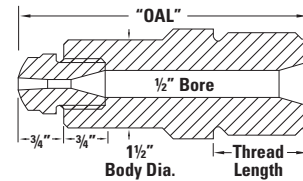
ENGEL

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Engel (cont.)					
(B)	1 3/4"-8	3/4"	3 3/4"	NM3	NM3C
			5"	NM5	NM5C
			6"	NM6	NM6C
			7"	NM7	NM7C
			8"	NM8	NM8C
			9"	NM9	NM9C
			10"	NM10	NM10C
			12"	NM12	NM12C
			14"	NM14	NM14C
			16"	NM16	NM16C
(E)	52/3	16mm	5"	ENL5	ENL5C
			6"	ENL6	ENL6C
			7"	ENL7	ENL7C
			8"	ENL8	ENL8C
			9"	ENL9	ENL9C
(A)	55/3	30mm	5"	EK5	EK5C
			6"	EK6	EK6C
			7"	EK7	EK7C
			8"	EK8	EK8C
			9"	EK9	EK9C
(A)	55/3	32mm	5"	EB5	EB5C
			6"	EB6	EB6C
			7"	EB7	EB7C
			8"	EB8	EB8C
			9"	EB9	EB9C
(B)	55/3	35mm	5"	EW5	EW5C
			6"	EW6	EW6C
			7"	EW7	EW7C
			8"	EW8	EW8C
			9"	EW9	EW9C
(B)	60/2	35mm	5"	EG5	EG5C
			6"	EG6	EG6C
			7"	EG7	EG7C
			8"	EG8	EG8C
			9"	EG9	EG9C
(B)	64/2	42mm	5"	EY5	EY5C
			6"	EY6	EY6C
			7"	EY7	EY7C
			8"	EY8	EY8C
			9"	EY9	EY9C
			10"	EY10	EY10C



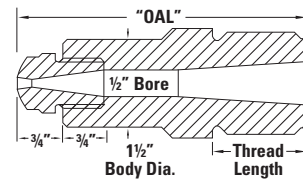
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

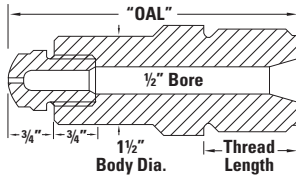
Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies

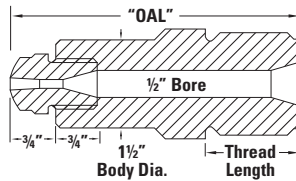


JSW



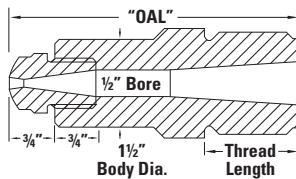
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
JSW					
(B)	44/3	20mm	3 3/4"	JE3	JE3C
			5"	JE5	JE5C
			6"	JE6	JE6C
			7"	JE7	JE7C
			8"	JE8	JE8C
(B)	45/3	26mm	3 3/4"	JB3	JB3C
			5"	JB5	JB5C
			6"	JB6	JB6C
			7"	JB7	JB7C
			8"	JB8	JB8C
(C)	50/3	12.5mm	3 3/4"	JA3	
			5"	JA5	
			6"	JA6	
			7"	JA7	
			8"	JA8	
(A)	50/3 T/L 30mm	15mm	3 3/4"	JC3	JC3C
			5"	JC5	JC5C
			6"	JC6	JC6C
			7"	JC7	JC7C
			8"	JC8	JC8C
(D)	50/3 T/L 58mm	15mm	3 3/4"	JW3	JW3C
			5"	JW5	JW5C
			6"	JW6	JW6C
			7"	JW7	JW7C
			8"	JW8	JW8C
(B)	55/3	8mm	10"	JW10	JW10C
			5"	JF5	
			6"	JF6	
			7"	JF7	
			8"	JF8	
(B)	55/3	12.5mm	10"	JF10	
			5"	JG5	
			6"	JG6	
			7"	JG7	
			8"	JG8	
(B)	55/3	20mm	10"	JG10	
			5"	JD5	JD5C
			6"	JD6	JD6C
			7"	JD7	JD7C
			8"	JD8	JD8C
			10"	JD10	JD10C

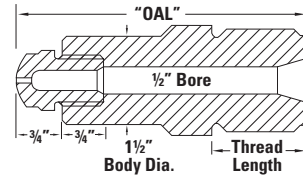




Removable Tip Nozzle Bodies

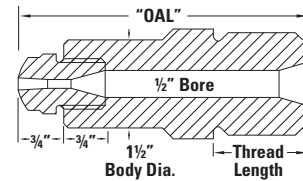
NISSEI

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Nissei					
(A)	20/1.5	8mm	3 3/4"	NIS3	
			5"	NIS5	
			6"	NIS6	
			7"	NIS7	
			8"	NIS8	
(A)	35/2 T/L 24mm	20mm	3 3/4"	NS3	NS3C
			5"	NS5	NS5C
			6"	NS6	NS6C
			7"	NS7	NS7C
			8"	NS8	NS8C
(A)	35/2 T/L 30mm	20mm	3 3/4"	NIA3	NIA3C
			5"	NIA5	NIA5C
			6"	NIA6	NIA6C
			7"	NIA7	NIA7C
			8"	NIA8	NIA8C
(C)	35/2 T/L 49mm	20mm	3 3/4"	NIC3	NIC3C
			5"	NIC5	NIC5C
			6"	NIC6	NIC6C
			7"	NIC7	NIC7C
			8"	NIC8	NIC8C
(B)	40/2	20mm	3 3/4"	NF3	NF3C
			5"	NF5	NF5C
			6"	NF6	NF6C
			7"	NF7	NF7C
			8"	NF8	NF8C
(B)	40/2	30mm	3 3/4"	IB3	IB3C
			5"	IB5	IB5C
			6"	IB6	IB6C
			7"	IB7	IB7C
			8"	IB8	IB8C
(B)	50/2 T/L 41mm	25mm	5"	NIB5	NIB5C
			6"	NIB6	NIB6C
			7"	NIB7	NIB7C
			8"	NIB8	NIB8C
			10"	NIB10	NIB10C
(B)	50/2 T/L 42mm	26mm	5"	NI5	NI5C
			6"	NI6	NI6C
			7"	NI7	NI7C
			8"	NI8	NI8C
			10"	NI10	NI10C
(C)	60/2	30mm	5"	NC5	NC5C
			6"	NC6	NC6C
			7"	NC7	NC7C
			8"	NC8	NC8C
			10"	NC10	NC10C



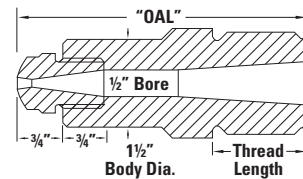
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

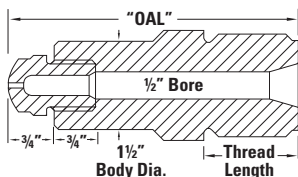
Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies

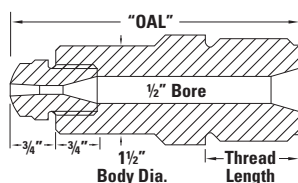


TOSHIBA



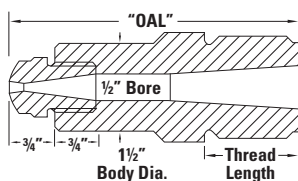
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Nissei (cont.)					
(D)	80/2	40mm	5"	IS5	IS5C
			6"	IS6	IS6C
			7"	IS7	IS7C
			8"	IS8	IS8C
			10"	IS10	IS10C
Toshiba					
(A)	36/1.5 (22mm T/L)	13mm	3 3/4"	TZ3	
			5"	TZ5	
			6"	TZ6	
			7"	TZ7	
			8"	TZ8	
(A)	36/1.5 (22mm T/L)	10mm	3 3/4"	TOG3	
			5"	TOG5	
			6"	TOG6	
			7"	TOG7	
			8"	TOG8	
(A)	36/1.5	21mm	3 3/4"	TOE3	TOE3C
			5"	TOE5	TOE5C
			6"	TOE6	TOE6C
			7"	TOE7	TOE7C
			8"	TOE8	TOE8C
(A)	38/1.5	15mm	3 3/4"	TH3	TH3C
			5"	TH5	TH5C
			6"	TH6	TH6C
			7"	TH7	TH7C
			8"	TH8	TH8C
			10"	TH10	TH10C
(A)	1 1/2"-12	15mm	3 3/4"	TO3	TO3C
			5"	TO5	TO5C
			6"	TO6	TO6C
			7"	TO7	TO7C
			8"	TO8	TO8C
			10"	TO10	TO10C
			12"	TO12	TO12C
			14"	TO14	TO14C

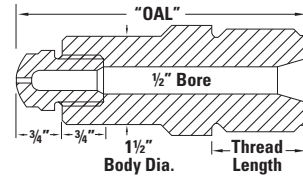




Removable Tip Nozzle Bodies

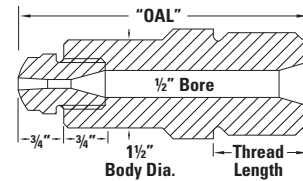
TOSHIBA

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Toshiba (cont.)					
(B)	1 $\frac{3}{4}$ "-8	$\frac{3}{4}$ "	3 $\frac{3}{4}$ "	NM3	NM3C
			5"	NM5	NM5C
			6"	NM6	NM6C
			7"	NM7	NM7C
			8"	NM8	NM8C
			9"	NM9	NM9C
			10"	NM10	NM10C
			12"	NM12	NM12C
(B)	48/1.5	$\frac{3}{4}$ "	3 $\frac{3}{4}$ "	TD3	TD3C
			5"	TD5	TD5C
			6"	TD6	TD6C
			7"	TD7	TD7C
			8"	TD8	TD8C
(A)	55/3	32mm	5"	TOH5	TOH5C
			6"	TOH6	TOH6C
			7"	TOH7	TOH7C
			8"	TOH8	TOH8C
(B)	60/4	25mm	5"	TOF5	TOF5C
			6"	TOF6	TOF6C
			7"	TOF7	TOF7C
			8"	TOF8	TOF8C
(B)	60/4	28mm	5"	TE5	TE5C
			6"	TE6	TE6C
			7"	TE7	TE7C
			8"	TE8	TE8C
(B)	60/4 T/L 41mm	32mm	5"	TG5	TG5C
			6"	TG6	TG6C
			7"	TG7	TG7C
			8"	TG8	TG8C
(B)	60/4 T/L 41mm	32mm	9"	TG9	TG9C
			10"	TG10	TG10C
			11"	TG11	TG11C
			12"	TG12	TG12C



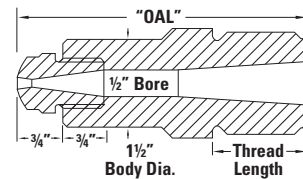
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

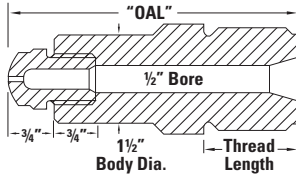
1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies



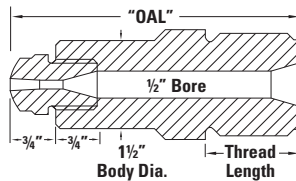
TOSHIBA

TOYO



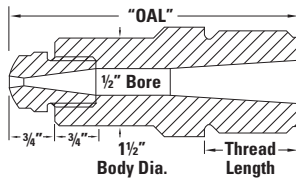
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)			
				Part Number	Part Number			
Toshiba (cont.)								
(B)	60/4	36mm	5"	TOA5	TOA5C			
			6"	TOA6	TOA6C			
			7"	TOA7	TOA7C			
			8"	TOA8	TOA8C			
			9"	TOA9	TOA9C			
			10"	TOA10	TOA10C			
(C)	60/4 T/L 50mm	32mm	7"	TS7	TS7C			
			8"	TS8	TS8C			
			9"	TS9	TS9C			
			10"	TS10	TS10C			
(E)	3/4"-8	55mm	12"	TS12	TS12C			
			7"	TJ7	TJ7C			
			8"	TJ8	TJ8C			
			9"	TJ9	TJ9C			
(C)	80/4	25mm	10"	TJ10	TJ10C			
			12"	TJ12	TJ12C			
			7"	TOC7	TOC7C			
			8"	TOC8	TOC8C			
(C)	80/4	25mm	9"	TOC9	TOC9C			
			10"	TOC10	TOC10C			
			12"	TOC12	TOC12C			
			(E)	80/4	50mm	7"	TOD7	TOD7C
8"	TOD8	TOD8C						
9"	TOD9	TOD9C						
10"	TOD10	TOD10C						
(C)	80/4	52mm	12"	TOD12	TOD12C			
			7"	TOB7	TOB7C			
			8"	TOB8	TOB8C			
			9"	TOB9	TOB9C			
(C)	80/4	52mm	10"	TOB10	TOB10C			
			12"	TOB12	TOB12C			
			Toyo					
			(A)	36/2	10mm (uses 1/2")	3 3/4"	TYA3	
5"	TYA5							
6"	TYA6							
7"	TYA7							
(A)	36/2	23mm	8"	TYA8				
			3 3/4"	TK3	TK3C			
			5"	TK5	TK5C			
			6"	TK6	TK6C			
(A)	36/2	23mm	7"	TK7	TK7C			
			8"	TK8	TK8C			



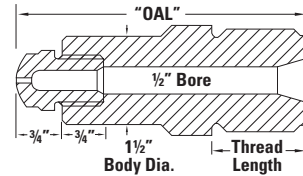


Removable Tip Nozzle Bodies

TOYO

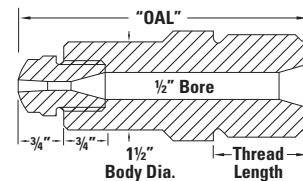
VAN DORN

Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Toyo (cont.)					
(B)	42/3	24mm	5"	TL5	TL5C
			6"	TL6	TL6C
			7"	TL7	TL7C
			8"	TL8	TL8C
			10"	TL10	TL10C
(C)	50/3	26mm	5"	TW5	TW5C
			6"	TW6	TW6C
			7"	TW7	TW7C
			8"	TW8	TW8C
			10"	TW10	TW10C
(B)	65/4	32mm	5"	TM5	TM5C
			6"	TM6	TM6C
			7"	TM7	TM7C
			8"	TM8	TM8C
			10"	TM10	TM10C
(B)	65/4	40mm	5"	TV5	TV5C
			6"	TV6	TV6C
			7"	TV7	TV7C
			8"	TV8	TV8C
			10"	TV10	TV10C
Van Dorn					
(B)	1 1/4"-12	3/4"	3 3/4"	BR3	BR3C
			5"	BR5	BR5C
			6"	BR6	BR6C
			7"	BR7	BR7C
			8"	BR8	BR8C
			9"	BR9	BR9C
			10"	BR10	BR10C
			12"	BR12	BR12C
			14"	BR14	BR14C
			16"	BR16	BR16C
(B)	1 3/4"-8	1 1/4"	3 3/4"	VR3	VR3C
			5"	VR5	VR5C
			6"	VR6	VR6C
			7"	VR7	VR7C
			8"	VR8	VR8C
			9"	VR9	VR9C
			10"	VR10	VR10C
			12"	VR12	VR12C
			14"	VR14	VR14C
			16"	VR16	VR16C



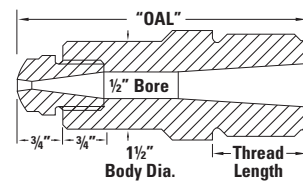
General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.



Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.



Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.

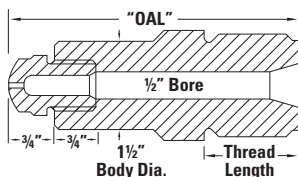
Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

Removable Tip Nozzle Bodies

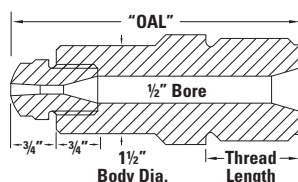


VAN DORN



General Purpose Style A

General purpose internal design provides minimum flow resistance and back-pressure build-up; 1/2" flow path.

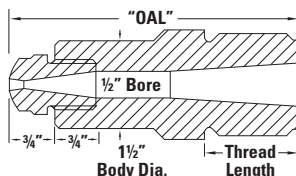


Nylon Reverse Taper Style B

For use with polyamides, acrylics and similar expansive materials. Uses standard body with nylon reverse taper tip.

Full Taper ABS Style C

For use with ABS, PVC and other viscous hard-flow materials. Reduces frictional heat and hang-up. Large tip orifice recommended for minimal flow resistance.



Heater Band Code	Thread	Rear Opening	Overall Length	G.P. or Nylon (Style A & B)	Full Taper (Style C)
				Part Number	Part Number
Van Dorn (cont.)					
(B)	2"-8	1 1/2"	5"	VD5	VD5C
			6"	VD6	VD6C
			7"	VD7	VD7C
			8"	VD8	VD8C
			9"	VD9	VD9C
			10"	VD10	VD10C
(B)	2 1/4"-8	41mm	12"	VD12	VD12C
			5"	VN5	VN5C
			6"	VN6	VN6C
			7"	VN7	VN7C
			8"	VN8	VN8C
			9"	VN9	VN9C
(B)	2 1/2"-8	1"	10"	VN10	VN10C
			12"	VN12	VN12C
			5"	VA5	VA5C
			6"	VA6	VA6C
			7"	VA7	VA7C
			8"	VA8	VA8C
(B)	2 1/2"-8	1"	9"	VA9	VA9C
			10"	VA10	VA10C
			12"	VA12	VA12C

Options and Spares:

1. Add thermocouple hole on hex flat.
2. For thermocouples, see pages 587-598.
3. Use heater band code to select correct band and internal cartridge heater size from tables on page 173.

NOZZLE WRENCHES



Six point box to help eliminate possible damage to nut. Extra clearance in head diameter to facilitate use with flange connections. Heavy duty for use with hammer for extra tightness or where impact is needed to loosen frozen nozzles.

Nozzle Wrenches

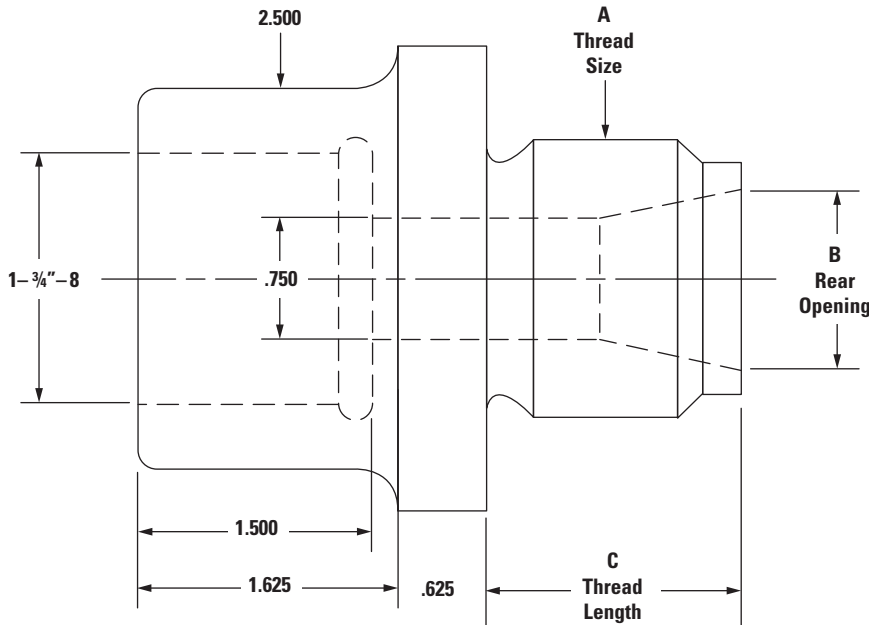
Opening	Head O.D.	OAL	Weight (lbs.)	Use with	Part Number
7/8"	1 3/8"	7 1/2"	0.6	Regular tips	SFBW1*
1 1/16"	1 25/32"	9 7/8"	1.9	Extended tips	SFBW2
1 1/4"	2"	10 1/4"	2.1		SFBW3
1 7/16"	2 17/64"	10 9/16"	2.6		SFBW4
1 5/8"	2 31/64"	11"	2.9	Bodies	SFBW5
1 13/16"	2 21/32"	11 5/16"	3.5		SFBW6
2"	3 1/32"	11 11/16"	4.0		SFBW7
2 3/16"	3 9/32"	12"	5.2		SFBW8
2 3/8"	3 13/32"	12 3/8"	6.0		SFBW9
2 9/16"	3 3/4"	12 11/16"	6.6	Adaptors	SFBW10
2 3/4"	4 11/64"	13 1/16"	7.5		SFBW11
2 15/16"	4 23/64"	13 7/16"	7.9		SFBW12
3 1/8"	4 31/64"	13 13/16"	9.4		SFBW13
3 1/2"	4 31/32"	14 7/8"	10.5		SFBW14
3 7/8"	5 35/64"	14 1/2"	13.3		SFBW15

B



Custom Adapters & Nozzles

[ONLINE FORM](#)



Adapter

Indicate specifications below and send form to DME via fax (888-808-4363) or DME@dme.net.

A = _____
 B = _____
 C = _____

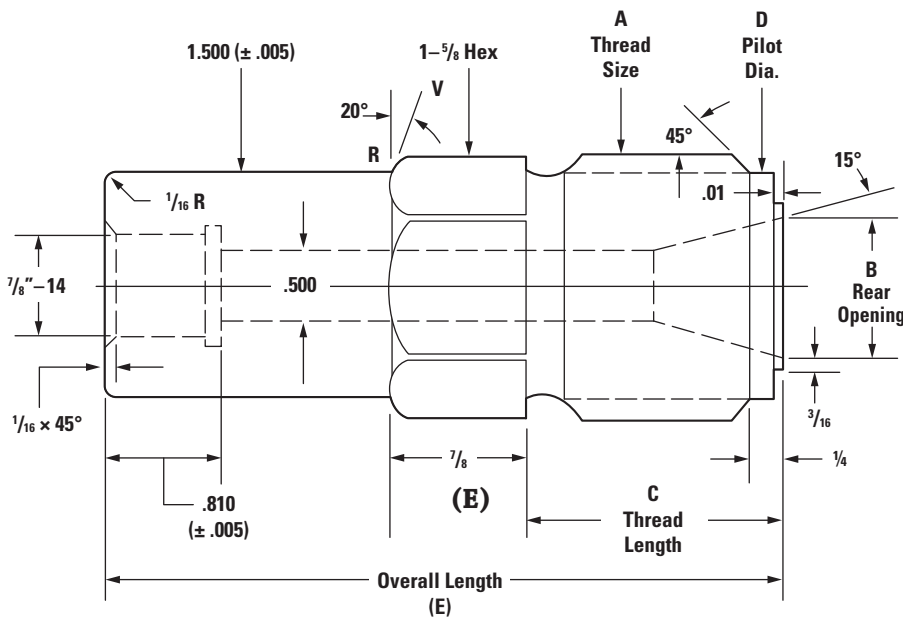


or visit
www.dme.net/rfq

Nozzle:

Indicate specifications below and send form to DME via fax (888-808-4363) or DME@dme.net.

A = _____
 B = _____
 C = _____
 D = _____
 E = _____



Fill Out Information Completely – Thanks!

Company:	_____	Contact Name:	_____
Account	_____	Phone:	_____
Number:	_____		_____
Address:	_____	Fax :	_____
City:	_____	E-mail:	_____
State/Zip:	_____		_____

If You Don't See What You Need - Please Call For Assistance!



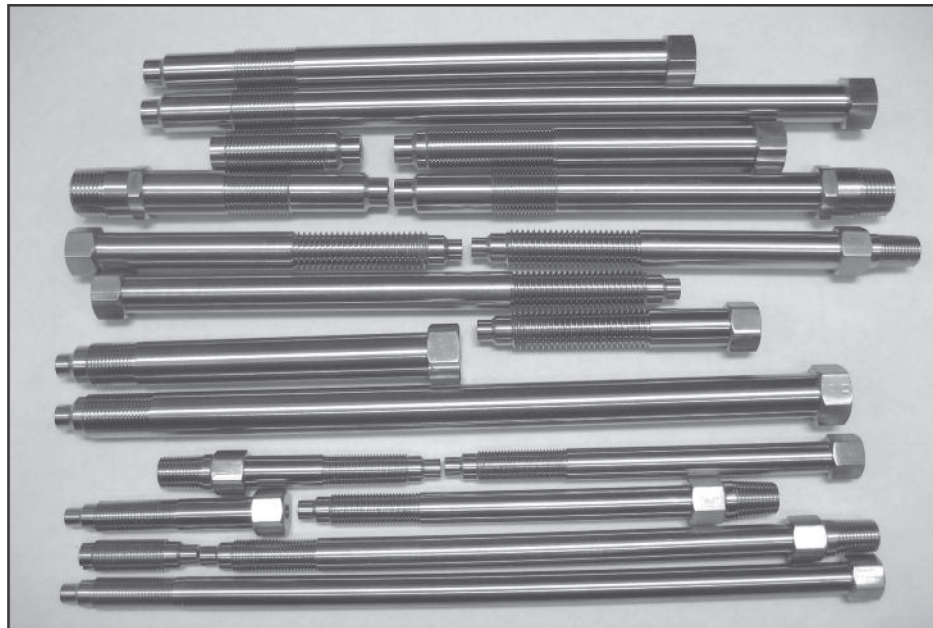
**GLOBAL
PLASTIC
MOULDING
SUPPLIES**



DME Industrial Supplies Line of GPMS Extruder Rupture Disks (Burst Plugs) are primarily used on Plastics Extrusion Machinery to provide emergency pressure relief. Extruder Rupture Disks from DME Industrial Supplies are designed to instantaneously rupture at a pre-determined pressure. Extruder Rupture Disks are leak tight and intrinsically safe devices that require no maintenance.

The GPMS Line of Extruder Rupture Disk assemblies are manufactured from 304 SS and incorporate either an Inconel or Stainless Steel Disk which minimize the affects of varying processing temperatures. The ERD Series of Extruder Rupture Disks from DME Industrial Supplies are offered in a wide variety of lengths and configurations. Standard stock assemblies are available in burst pressures ranging from 1,500 up to 15,000 psi, and lengths from 1.82" up to 12".

Several different mounting threads are offered on the GPMS line of ERD Series Extruder Rupture Disks that are commonly found on plastics extrusion machinery.



B



GPMS Rupture Disks

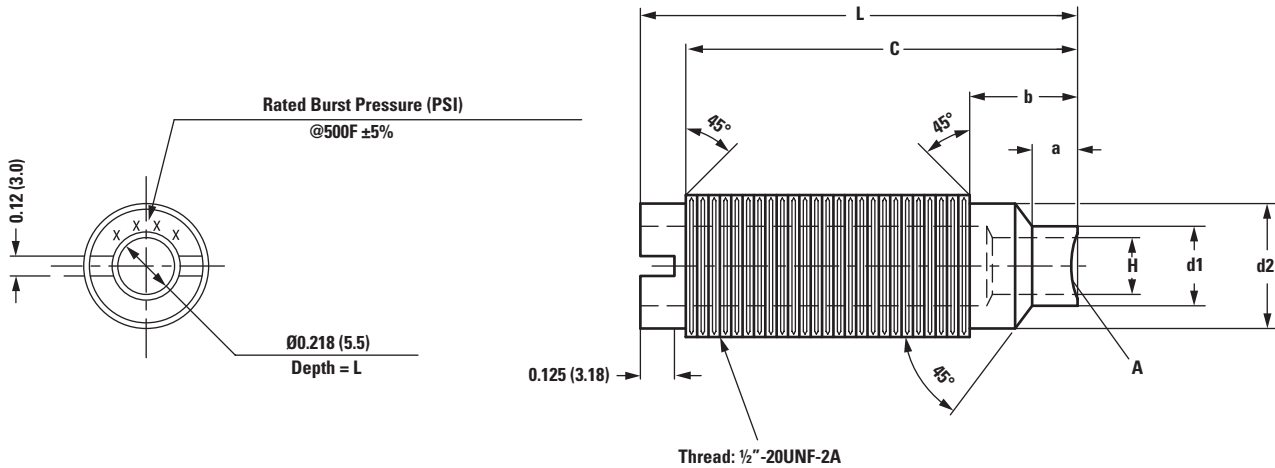
1/2" – 20 Mounting Thread



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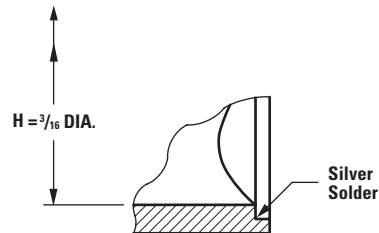
GPMS RUPTURE DISKS

1.8" Length



Thread: 1/2"-20UNF-2A

a	b	C	L
0.250 (6.35)	0.50 (12.7)	1.63 (41.40)	1.82 (46.2)
0.234 (5.94)			
H	d1	d2	
3/16" (4.76)	ø0.310 (7.87)	ø0.420 (10.67)	
	ø0.305 (7.75)	ø0.410 (10.41)	



DETAIL A

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD2-1.5M	1/2" 20 UNF	1.82"	Slotted	None	1,500
ERD2-2.5M	1/2" 20 UNF	1.82"	Slotted	None	2,500
ERD2-3.5M	1/2" 20 UNF	1.82"	Slotted	None	3,500
ERD2-4.5M	1/2" 20 UNF	1.82"	Slotted	None	4,500
ERD2-5.5M	1/2" 20 UNF	1.82"	Slotted	None	5,500
ERD2-6.5M	1/2" 20 UNF	1.82"	Slotted	None	6,500
ERD2-7.5M	1/2" 20 UNF	1.82"	Slotted	None	7,500
ERD2-8.5M	1/2" 20 UNF	1.82"	Slotted	None	8,500
ERD2-9.5M	1/2" 20 UNF	1.82"	Slotted	None	9,500
ERD2-10.5M	1/2" 20 UNF	1.82"	Slotted	None	10,500
ERD2-12.5M	1/2" 20 UNF	1.82"	Slotted	None	12,500
ERD2-15M	1/2" 20 UNF	1.82"	Slotted	None	15,000

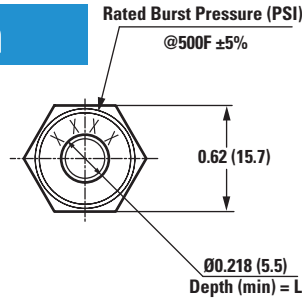
GPMS Rupture Disks

1/2" – 20 Mounting Thread

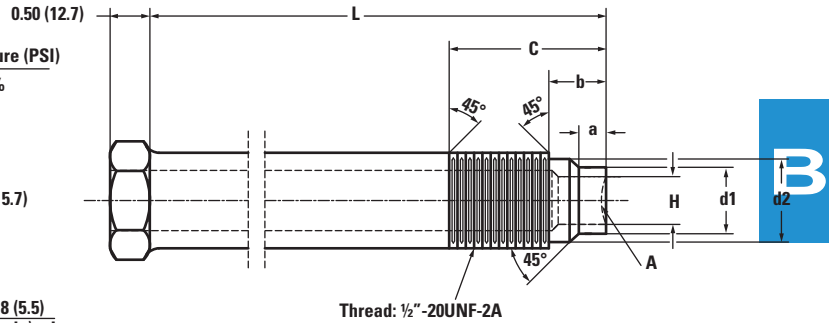


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3" Length

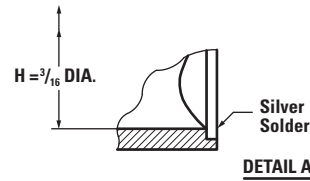


GPMS RUPTURE DISKS



a	b	C	L
0.250 (6.35)	0.50 (12.7)	1.81 (45.97)	3.00 (76.2)
0.234 (5.94)			

H	d1	d2
3/16" (4.76)	Ø0.310 (7.87)	Ø0.420 (10.67)
	Ø0.305 (7.75)	Ø0.410 (10.41)



Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD3H1.5M	1/2" 20 UNF	3"	Hex	None	1,500
ERD3H2.5M	1/2" 20 UNF	3"	Hex	None	2,500
ERD3H3.5M	1/2" 20 UNF	3"	Hex	None	3,500
ERD3H4.5M	1/2" 20 UNF	3"	Hex	None	4,500
ERD3H5.5M	1/2" 20 UNF	3"	Hex	None	5,500
ERD3H6.5M	1/2" 20 UNF	3"	Hex	None	6,500
ERD3H7.5M	1/2" 20 UNF	3"	Hex	None	7,500
ERD3H8.5M	1/2" 20 UNF	3"	Hex	None	8,500
ERD3H9.5M	1/2" 20 UNF	3"	Hex	None	9,500
ERD3H10.5M	1/2" 20 UNF	3"	Hex	None	10,500
ERD3H12.5M	1/2" 20 UNF	3"	Hex	None	12,500
ERD3H15M	1/2" 20 UNF	3"	Hex	None	15,000
ERD3H1.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	1,500
ERD3H2.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	2,500
ERD3H3.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	3,500
ERD3H4.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	4,500
ERD3H5.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	5,500
ERD3H6.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	6,500
ERD3H7.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	7,500
ERD3H8.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	8,500
ERD3H9.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	9,500
ERD3H10.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	10,500
ERD3H12.5M14	1/2" 20 UNF	3"	Hex	1/4" NPT	12,500
ERD3H15M14	1/2" 20 UNF	3"	Hex	1/4" NPT	15,000

U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000 **193**

dme.net • store.dme.net



GPMS Rupture Disks

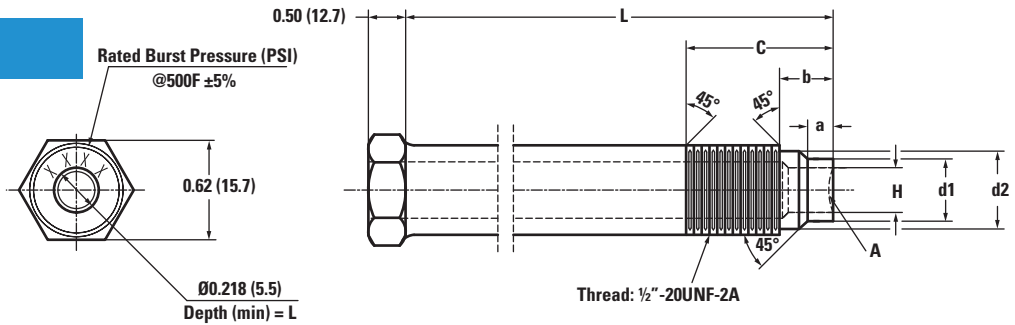
1/2" – 20 Mounting Thread



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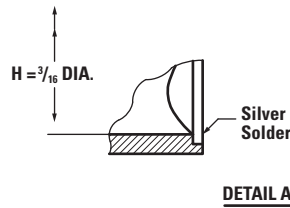
GPMS RUPTURE DISKS

6" Length



a	b	C	L
0.250 (6.35)	0.50 (12.7)	1.81 (45.97)	6.00 (152.4)
0.234 (5.94)			

H	d1	d2
3/16" (4.76)	ø0.310 (7.87)	ø0.420 (10.67)
	ø0.305 (7.75)	ø0.410 (10.41)



Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD6H1.5M	1/2" 20 UNF	6"	Hex	None	1,500
ERD6H2.5M	1/2" 20 UNF	6"	Hex	None	2,500
ERD6H3.5M	1/2" 20 UNF	6"	Hex	None	3,500
ERD6H4.5M	1/2" 20 UNF	6"	Hex	None	4,500
ERD6H5.5M	1/2" 20 UNF	6"	Hex	None	5,500
ERD6H6.5M	1/2" 20 UNF	6"	Hex	None	6,500
ERD6H7.5M	1/2" 20 UNF	6"	Hex	None	7,500
ERD6H8.5M	1/2" 20 UNF	6"	Hex	None	8,500
ERD6H9.5M	1/2" 20 UNF	6"	Hex	None	9,500
ERD6H10.5M	1/2" 20 UNF	6"	Hex	None	10,500
ERD6H12.5M	1/2" 20 UNF	6"	Hex	None	12,500
ERD6H15M	1/2" 20 UNF	6"	Hex	None	15,000
ERD6H1.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	1,500
ERD6H2.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	2,500
ERD6H3.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	3,500
ERD6H4.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	4,500
ERD6H5.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	5,500
ERD6H6.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	6,500
ERD6H7.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	7,500
ERD6H8.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	8,500
ERD6H9.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	9,500
ERD6H10.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	10,500
ERD6H12.5M14	1/2" 20 UNF	6"	Hex	1/4" NPT	12,500
ERD6H15M14	1/2" 20 UNF	6"	Hex	1/4" NPT	15,000

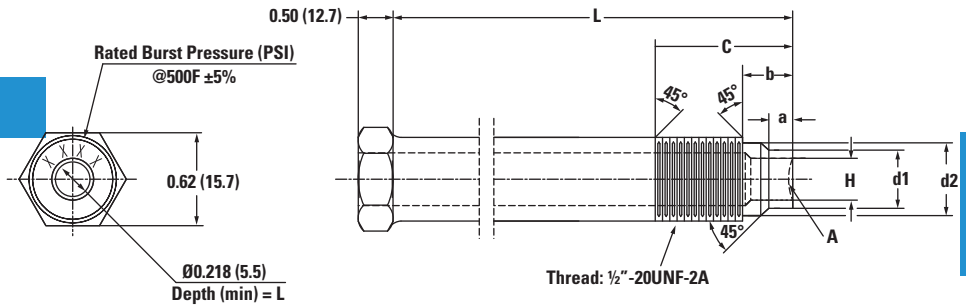
GPMS Rupture Disks

1/2" – 20 Mounting Thread



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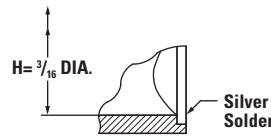
9" Length



B

a	b	C	L
0.250 (6.35)	0.50 (12.7)	1.81 (45.97)	9.0 (228.6)
0.234 (5.94)			

H	d1	d2
3/16" (4.76)	Ø0.310 (7.87)	Ø0.420 (10.67)
	Ø0.305 (7.75)	Ø0.410 (10.41)



GPMS RUPTURE DISKS

DETAIL A

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD9H1.5M	1/2" 20 UNF	9"	Hex	None	1,500
ERD9H2.5M	1/2" 20 UNF	9"	Hex	None	2,500
ERD9H3.5M	1/2" 20 UNF	9"	Hex	None	3,500
ERD9H4.5M	1/2" 20 UNF	9"	Hex	None	4,500
ERD9H5.5M	1/2" 20 UNF	9"	Hex	None	5,500
ERD9H6.5M	1/2" 20 UNF	9"	Hex	None	6,500
ERD9H7.5M	1/2" 20 UNF	9"	Hex	None	7,500
ERD9H8.5M	1/2" 20 UNF	9"	Hex	None	8,500
ERD9H9.5M	1/2" 20 UNF	9"	Hex	None	9,500
ERD9H10.5M	1/2" 20 UNF	9"	Hex	None	10,500
ERD9H12.5M	1/2" 20 UNF	9"	Hex	None	12,500
ERD9H15M	1/2" 20 UNF	9"	Hex	None	15,000
ERD9H1.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	1,500
ERD9H2.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	2,500
ERD9H3.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	3,500
ERD9H4.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	4,500
ERD9H5.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	5,500
ERD9H6.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	6,500
ERD9H7.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	7,500
ERD9H8.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	8,500
ERD9H9.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	9,500
ERD9H10.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	10,500
ERD9H12.5M14	1/2" 20 UNF	9"	Hex	1/4" NPT	12,500
ERD9H15M14	1/2" 20 UNF	9"	Hex	1/4" NPT	15,000



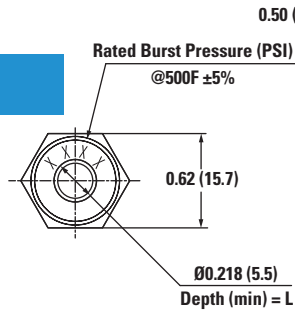
GPMS Rupture Disks

1/2" – 20 Mounting Thread

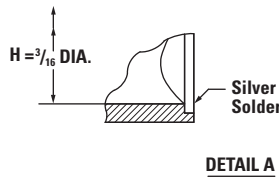
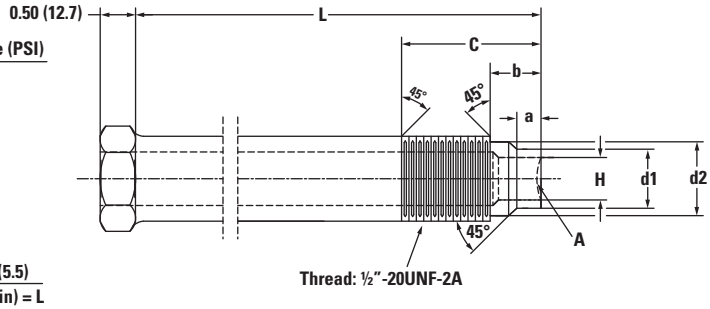


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12" Length



GPMS RUPTURE DISKS



a	b	C	L
0.250 (6.35)	0.50 (12.7)	1.81 (45.97)	12.0 (304.8)
0.234 (5.94)			

H	d1	d2
3/16" (4.76)	ø0.310 (7.87)	ø0.420 (10.67)
	ø0.305 (7.75)	ø0.410 (10.41)

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD12H1.5M	1/2" 20 UNF	12"	Hex	None	1,500
ERD12H2.5M	1/2" 20 UNF	12"	Hex	None	2,500
ERD12H3.5M	1/2" 20 UNF	12"	Hex	None	3,500
ERD12H4.5M	1/2" 20 UNF	12"	Hex	None	4,500
ERD12H5.5M	1/2" 20 UNF	12"	Hex	None	5,500
ERD12H6.5M	1/2" 20 UNF	12"	Hex	None	6,500
ERD12H7.5M	1/2" 20 UNF	12"	Hex	None	7,500
ERD12H8.5M	1/2" 20 UNF	12"	Hex	None	8,500
ERD12H9.5M	1/2" 20 UNF	12"	Hex	None	9,500
ERD12H10.5M	1/2" 20 UNF	12"	Hex	None	10,500
ERD12H12.5M	1/2" 20 UNF	12"	Hex	None	12,500
ERD12H15M	1/2" 20 UNF	12"	Hex	None	15,000
ERD12H1.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	1,500
ERD12H2.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	2,500
ERD12H3.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	3,500
ERD12H4.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	4,500
ERD12H5.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	5,500
ERD12H6.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	6,500
ERD12H7.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	7,500
ERD12H8.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	8,500
ERD12H9.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	9,500
ERD12H10.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	10,500
ERD12H12.5M14	1/2" 20 UNF	12"	Hex	1/4" NPT	12,500
ERD12H15M14	1/2" 20 UNF	12"	Hex	1/4" NPT	15,000

GPMS Rupture Disks

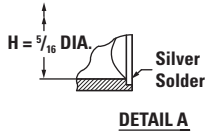
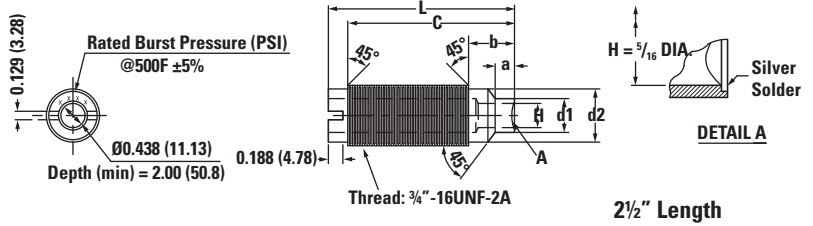


3/4" – 16 Mounting Thread

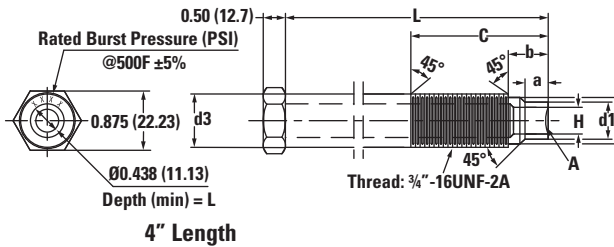


**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

2 1/2" & 4" Length



GPMS RUPTURE DISKS



2 1/2" Length Specifications

a	b	C	L
0.312 (7.93) 0.300 (7.62)	0.545 (13.84)	2.25 (57.15)	2.50 (63.5)
H	d1	d2	
5/16" (7.95)	ø0.500 (12.70) ø0.495 (12.57)	ø0.665 (16.89) ø0.655 (16.64)	

4" Length Specifications

a	b	C	L
0.300 (7.62) 0.312 (7.93)	0.545 (13.84)	2.70 (68.58)	4.00 (101.6)
H	d1	d2	d3
5/16" (7.95)	ø0.500 (12.70) ø0.495 (12.57)	ø0.665 (16.89) ø0.655 (16.64)	ø0.66 (16.76)

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD2-34-3.5M	3/4" 16 UNF	2-1/2"	Slotted	None	3,500
ERD2-34-4.5M	3/4" 16 UNF	2-1/2"	Slotted	None	4,500
ERD2-34-5M	3/4" 16 UNF	2-1/2"	Slotted	None	5,000
ERD2-34-7.5M	3/4" 16 UNF	2-1/2"	Slotted	None	7,500
ERD2-34-8.5M	3/4" 16 UNF	2-1/2"	Slotted	None	8,500
ERD2-34-9M	3/4" 16 UNF	2-1/2"	Slotted	None	9,000
ERD2-34-9.5M	3/4" 16 UNF	2-1/2"	Slotted	None	9,500
ERD4H34-3.5M	3/4" 16 UNF	4"	Hex	None	3,500
ERD4H34-4.5M	3/4" 16 UNF	4"	Hex	None	4,500
ERD4H34-5M	3/4" 16 UNF	4"	Hex	None	5,000
ERD4H34-7.5M	3/4" 16 UNF	4"	Hex	None	7,500
ERD4H34-8.5M	3/4" 16 UNF	4"	Hex	None	8,500
ERD4H34-9M	3/4" 16 UNF	4"	Hex	None	9,000
ERD4H34-9.5M	3/4" 16 UNF	4"	Hex	None	9,500
ERD4H34-3.5M12	3/4" 16 UNF	4"	Hex	1/2" NPT	3,500
ERD4H34-4.5M12	3/4" 16 UNF	4"	Hex	1/2" NPT	4,500
ERD4H34-5M12	3/4" 16 UNF	4"	Hex	1/2" NPT	5,000
ERD4H34-7.5M12	3/4" 16 UNF	4"	Hex	1/2" NPT	7,500
ERD4H34-8.5M12	3/4" 16 UNF	4"	Hex	1/2" NPT	8,500
ERD4H34-9M12	3/4" 16 UNF	4"	Hex	1/2" NPT	9,000
ERD4H34-9.5M12	3/4" 16 UNF	4"	Hex	1/2" NPT	9,500
ERD4H34S3.5M12	3/4" 16 UNF Short Thread	4"	Hex	1/2" NPT	3,500
ERD4H34S4.5M12		4"	Hex	1/2" NPT	4,500
ERD4H34S5M12		4"	Hex	1/2" NPT	5,000
ERD4H34S7.5M12		4"	Hex	1/2" NPT	7,500
ERD4H34S8.5M12		4"	Hex	1/2" NPT	8,500
ERD4H34S9M12		4"	Hex	1/2" NPT	9,000
ERD4H34S9.5M12		4"	Hex	1/2" NPT	9,500





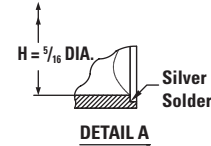
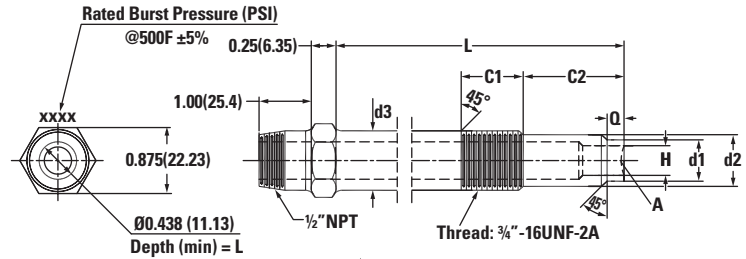
GPMS Rupture Disks

3/4" - 16 Mounting Thread

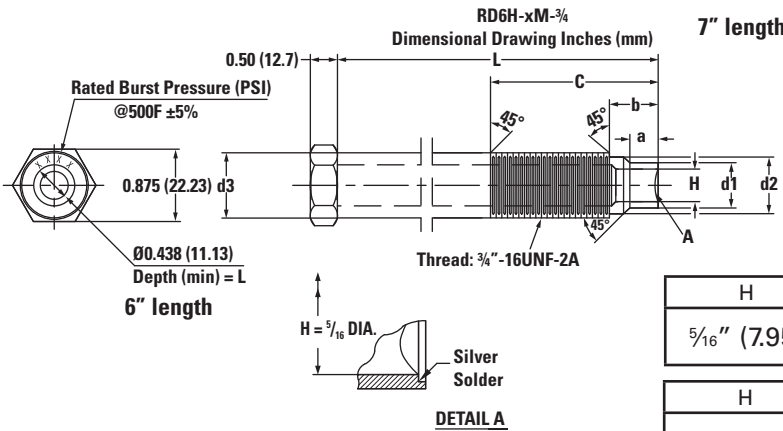


**GLOBAL
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SUPPLIES**

6" & 7" Length



GPMS RUPTURE DISKS



H	d1	d2	d3
5/16" (7.95)	Ø0.500 (12.70) Ø0.495 (12.57)	Ø0.665 (16.89) Ø0.655 (16.64)	Ø0.66 (16.76)

H	d1	d2	d3
5/16" (7.95)	Ø0.500 (12.70) Ø0.495 (12.57)	Ø0.665 (16.89) Ø0.655 (16.64)	Ø0.75 (19.05)

6" Length Specifications

a	b	C	L
0.300 (7.62) 0.312 (7.93)	0.545 (13.84)	2.70 (68.58)	6.00 (152.4)

7" Length Specifications

Q	C1	C2	L
0.312 (7.93) 0.300 (7.62)	1.10 (27.94)	1.60 (40.64)	7.00 (177.8)

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD6H34-3.5M	3/4" 16 UNF	6"	Hex	None	3,500
ERD6H34-4.5M	3/4" 16 UNF	6"	Hex	None	4,500
ERD6H34-5M	3/4" 16 UNF	6"	Hex	None	5,000
ERD6H34-7.5M	3/4" 16 UNF	6"	Hex	None	7,500
ERD6H34-8.5M	3/4" 16 UNF	6"	Hex	None	8,500
ERD6H34-9M	3/4" 16 UNF	6"	Hex	None	9,000
ERD6H34-9.5M	3/4" 16 UNF	6"	Hex	None	9,500
ERD7H34-3.5M12	3/4" 16 UNF	7"	Hex	1/2" NPT	3,500
ERD7H34-4.5M12	3/4" 16 UNF	7"	Hex	1/2" NPT	4,500
ERD7H34-5M12	3/4" 16 UNF	7"	Hex	1/2" NPT	5,000
ERD7H34-7.5M12	3/4" 16 UNF	7"	Hex	1/2" NPT	7,500
ERD7H34-8.5M12	3/4" 16 UNF	7"	Hex	1/2" NPT	8,500
ERD7H34-9M12	3/4" 16 UNF	7"	Hex	1/2" NPT	9,000
ERD7H34-9.5M12	3/4" 16 UNF	7"	Hex	1/2" NPT	9,500
ERD7H34S3.5M12	3/4" 16 UNF Short Thread	7"	Hex	1/2" NPT	3,500
ERD7H34S4.5M12		7"	Hex	1/2" NPT	4,500
ERD7H34S5M12		7"	Hex	1/2" NPT	5,000
ERD7H34S7.5M12		7"	Hex	1/2" NPT	7,500
ERD7H34S8.5M12		7"	Hex	1/2" NPT	8,500
ERD7H34S9M12		7"	Hex	1/2" NPT	9,000
ERD7H34S9.5M12		7"	Hex	1/2" NPT	9,500

GPMS Rupture Disks

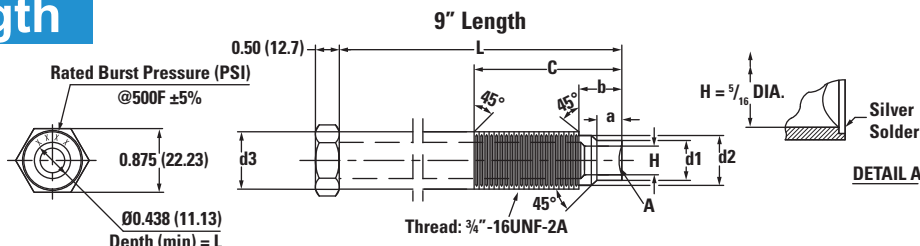


3/4" – 16 Mounting Thread

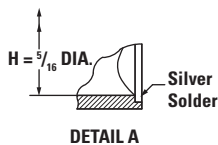


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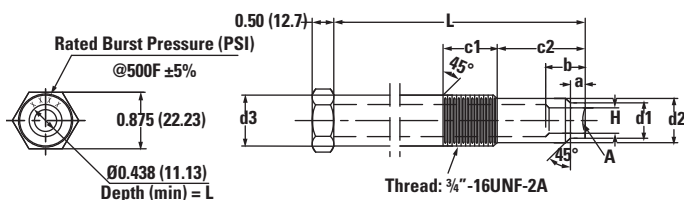
9" & 12" Length



GPMS RUPTURE DISKS



12" Length



9" Length Specifications

a	b	C	L
0.300 (7.62)	0.545 (13.84)	2.70 (68.58)	9.00 (228.6)
0.312 (7.93)			

H	d1	d2	d3
5/16" (7.95)	Ø0.500 (12.70) Ø0.495 (12.57)	Ø0.665 (16.89) Ø0.655 (16.64)	Ø0.66 (16.76)

12" Length Specifications

a	b	c1	c2	L
0.300 (7.62)	0.545 (13.84)	1.10 (27.94)	1.60 (40.64)	12.00 (304.8)
0.312 (7.93)				

H	d1	d2	d3
5/16" (7.95)	Ø0.50 (12.70) Ø0.495 (12.57)	Ø0.665 (16.89) Ø0.655 (16.64)	Ø0.66 (16.76)

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD9H34S3.5M	3/4" 16 UNF Short Thread	9"	Hex	None	3,500
ERD9H34S4.5M		9"	Hex	None	4,500
ERD9H34S5M		9"	Hex	None	5,000
ERD9H34S7.5M		9"	Hex	None	7,500
ERD9H34S8.5M		9"	Hex	None	8,500
ERD9H34S9M		9"	Hex	None	9,000
ERD9H34S9.5M		9"	Hex	None	9,500
ERD12H34S3.5M	3/4" 16 UNF Short Thread	12"	Hex	None	3,500
ERD12H34S4.5M		12"	Hex	None	4,500
ERD12H34S5M		12"	Hex	None	5,000
ERD12H34S7.5M		12"	Hex	None	7,500
ERD12H34S8.5M		12"	Hex	None	8,500
ERD12H34S9M		12"	Hex	None	9,000
ERD12H34S9.5M		12"	Hex	None	9,500

B



GPMS Rupture Disks

5/8" – 11 Mounting Thread



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SUPPLIES**

GPMS RUPTURE DISKS

4" & 6" Length

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD4H58-1.5M	5/8" 11 NC	4"	Hex	None	1,500
ERD4H58-2.5M	5/8" 11 NC	4"	Hex	None	2,500
ERD4H58-3.5M	5/8" 11 NC	4"	Hex	None	3,500
ERD4H58-4.5M	5/8" 11 NC	4"	Hex	None	4,500
ERD4H58-5.5M	5/8" 11 NC	4"	Hex	None	5,500
ERD4H58-6.5M	5/8" 11 NC	4"	Hex	None	6,500
ERD4H58-7.5M	5/8" 11 NC	4"	Hex	None	7,600
ERD4H58-8.5M	5/8" 11 NC	4"	Hex	None	8,500
ERD4H58-9.5M	5/8" 11 NC	4"	Hex	None	9,500
ERD4H58-10.5M	5/8" 11 NC	4"	Hex	None	10,500
ERD4H58-12.5M	5/8" 11 NC	4"	Hex	None	12,500
ERD4H58-15M	5/8" 11 NC	4"	Hex	None	15,000
ERD6H58-1.5M	5/8" 11 NC	6"	Hex	None	1,500
ERD6H58-2.5M	5/8" 11 NC	6"	Hex	None	2,500
ERD6H58-3.5M	5/8" 11 NC	6"	Hex	None	3,500
ERD6H58-4.5M	5/8" 11 NC	6"	Hex	None	4,500
ERD6H58-5.5M	5/8" 11 NC	6"	Hex	None	5,500
ERD6H58-6.5M	5/8" 11 NC	6"	Hex	None	6,500
ERD6H58-7.5M	5/8" 11 NC	6"	Hex	None	7,600
ERD6H58-8.5M	5/8" 11 NC	6"	Hex	None	8,500
ERD6H58-9.5M	5/8" 11 NC	6"	Hex	None	9,500
ERD6H58-10.5M	5/8" 11 NC	6"	Hex	None	10,500
ERD6H58-12.5M	5/8" 11 NC	6"	Hex	None	12,500
ERD6H58-15M	5/8" 11 NC	6"	Hex	None	15,000
ERD6H58-1.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	1,500
ERD6H58-2.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	2,500
ERD6H58-3.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	3,500
ERD6H58-4.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	4,500
ERD6H58-5.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	5,500
ERD6H58-6.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	6,500
ERD6H58-7.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	7,600
ERD6H58-8.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	8,500
ERD6H58-9.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	9,500
ERD6H58-10.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	10,500
ERD6H58-12.5M14	5/8" 11 NC	6"	Hex	1/4" NPT	12,500
ERD6H58-15M14	5/8" 11 NC	6"	Hex	1/4" NPT	15,000

*Note: 4" length drawing currently unavailable.
See following page for 6" length drawing.

GPMS Rupture Disks



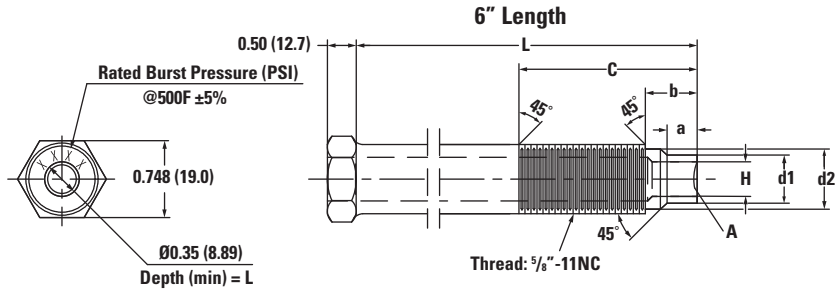
5/8" – 11 Mounting Thread



**GLOBAL
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6" Length

GPMS RUPTURE DISKS



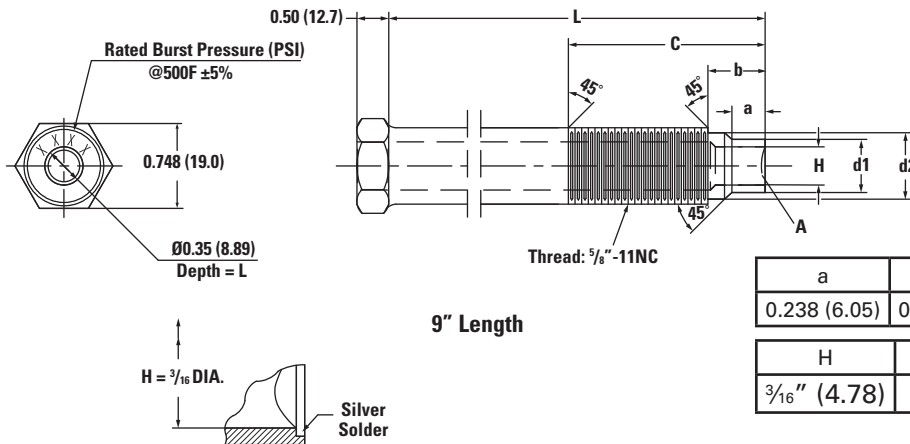
a	b	C	L
0.238 (6.05)	0.554 (14.07)	2.75 (69.85)	6.00 (152.4)

H	d1	d2
3/16" (4.78)	0.354 (8.99)	0.488 (12.40)



DETAIL A

9" Length



a	b	C	L
0.238 (6.05)	0.554 (14.07)	2.75 (69.85)	9.00 (228.6)

H	d1	d2
3/16" (4.78)	0.354 (8.99)	0.488 (12.40)

Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD9H58-1.5M	5/8" 11 NC	9"	Hex	None	1,500
ERD9H58-2.5M	5/8" 11 NC	9"	Hex	None	2,500
ERD9H58-3.5M	5/8" 11 NC	9"	Hex	None	3,500
ERD9H58-4.5M	5/8" 11 NC	9"	Hex	None	4,500
ERD9H58-5.5M	5/8" 11 NC	9"	Hex	None	5,500
ERD9H58-6.5M	5/8" 11 NC	9"	Hex	None	6,500
ERD9H58-7.5M	5/8" 11 NC	9"	Hex	None	7,600
ERD9H58-8.5M	5/8" 11 NC	9"	Hex	None	8,500
ERD9H58-9.5M	5/8" 11 NC	9"	Hex	None	9,500
ERD9H58-10.5M	5/8" 11 NC	9"	Hex	None	10,500
ERD9H58-12.5M	5/8" 11 NC	9"	Hex	None	12,500
ERD9H58-15M	5/8" 11 NC	9"	Hex	None	15,000

U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000 **201**

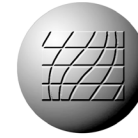
dme.net • store.dme.net

B



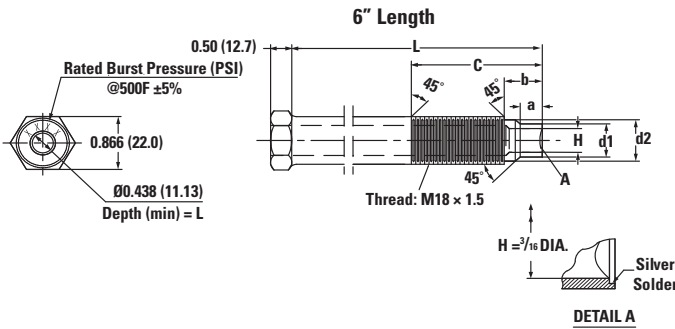
GPMS Rupture Disks

M18 x 1.5 Mounting Thread



**GLOBAL
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MOULDING
SUPPLIES**

6" & 12" Length



GPMS RUPTURE DISKS

a	b	C	L
0.250 (6.35) 0.234 (5.94)	0.50 (12.7)	1.63 (41.40)	6.00 (152.4)

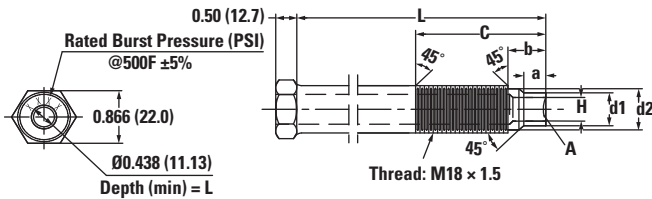
H	d1	d2
3/16" (4.78)	ø0.397 (10.08) ø0.392 (9.96)	ø0.632 (16.05) ø0.627 (15.93)



DETAIL A

a	b	C	L
0.250 (6.35) 0.234 (5.94)	0.50 (12.7)	1.63 (41.40)	12.00 (304.8)

H	d1	d2
3/16" (4.78)	ø0.397 (10.08) ø0.392 (9.96)	ø0.632 (16.05) ø0.627 (15.93)



Part Number	Mounting Thread	Length	Head Styles	Discharge Connection	Burst Pressure
ERD6HM18-1.5M	M18 x 1.5	6"	Hex	None	1,500
ERD6HM18-2.5M	M18 x 1.5	6"	Hex	None	2,500
ERD6HM18-3.5M	M18 x 1.5	6"	Hex	None	3,500
ERD6HM18-4.5M	M18 x 1.5	6"	Hex	None	4,500
ERD6HM18-5.5M	M18 x 1.5	6"	Hex	None	5,500
ERD6HM18-6.5M	M18 x 1.5	6"	Hex	None	6,500
ERD6HM18-7.5M	M18 x 1.5	6"	Hex	None	7,600
ERD6HM18-8.5M	M18 x 1.5	6"	Hex	None	8,500
ERD6HM18-9.5M	M18 x 1.5	6"	Hex	None	9,500
ERD6HM18-10.5M	M18 x 1.5	6"	Hex	None	10,500
ERD6HM18-12.5M	M18 x 1.5	6"	Hex	None	12,500
ERD6HM18-15M	M18 x 1.5	6"	Hex	None	15,000
ERD12HM18-1.5M	M18 x 1.5	12"	Hex	None	1,500
ERD12HM18-2.5M	M18 x 1.5	12"	Hex	None	2,500
ERD12HM18-3.5M	M18 x 1.5	12"	Hex	None	3,500
ERD12HM18-4.5M	M18 x 1.5	12"	Hex	None	4,500
ERD12HM18-5.5M	M18 x 1.5	12"	Hex	None	5,500
ERD12HM18-6.5M	M18 x 1.5	12"	Hex	None	6,500
ERD12HM18-7.5M	M18 x 1.5	12"	Hex	None	7,600
ERD12HM18-8.5M	M18 x 1.5	12"	Hex	None	8,500
ERD12HM18-9.5M	M18 x 1.5	12"	Hex	None	9,500
ERD12HM18-10.5M	M18 x 1.5	12"	Hex	None	10,500
ERD12HM18-12.5M	M18 x 1.5	12"	Hex	None	12,500
ERD12HM18-15M	M18 x 1.5	12"	Hex	None	15,000

Unisorb Machine Mounts

Quantum IM Mounts



UNISORB Quantum IM Mounts

provide optimum leveling and alignment in minutes, without anchoring either the machine or mounts to the floor. Designed especially for injection molding and die casting machines, UNISORB Quantum IM Mounts dampen both vertical and horizontal impacts found in reciprocating machines. UNISORB Quantum IM Mounts meet applicable OSHA requirements.

The Maximum Adjustment Range

These mounts are truly a quantum leap in machine mount technology. Every model in the Quantum IM line provides an overall adjustment range of 1³/₈ inches. This range goes well beyond all of UNISORB's competitors worldwide. In addition, UNISORB's line of Quantum IM Mounts is available in a wide variety of sizes and configurations, and all share these time-tested durability features:

- Rugged ductile housing
- Heavy-duty impact plate
- Resilient anti-walk isolation pad
- High-strength steel adjustment bolt
- Constant horizontal natural frequency

The Housing

The housing and impact plate of the Quantum IM Mounts are made of ductile iron, meeting Foundry Spec. 65-45-12. This tested and proven design is virtually indestructible even in the toughest high-speed injection molding applications.

The Isolation Pad

All Quantum IM Mount isolation pads consist of proprietary formulated elastomers. The unique internal design of UNISORB's Quantum IM Mounts eliminates the interdependence between vertical adjustment and horizontal stiffness found in other mount designs. This design ensures that each mounting point presents identical horizontal and vertical load deflection characteristics to the machine regardless of adjustment height.

The Adjusting Bolt

The true hex head adjusting bolt is made with high-strength Grade 5 steel to withstand punishment that would shear off most other bolts. In addition, the finer thread pitch on the adjusting bolt provides greater mechanical advantage and offers a higher degree of accuracy in adjustment, making installation convenient and foolproof. Standard bolts are provided with metric threads and special bolt lengths are available upon request.

For Injection Molding Machines and Die Casting



B





Quantum IM Mounts

Quantum IM Mounts

Precision Engineering for Horizontal Impact

The isolation pad is engineered to provide optimum performance. This design yields smoother, quieter operation and longer mount life. The sure fit of the isolation pad enhances the mount's ability to absorb the horizontal impact forces caused by machine operation.

Weight and Force are Distributed Evenly

The unique patented design of the isolation pad to mount housing interface results in the uniform distribution of applied forces. The Quantum IM Mounts are unmatched in controlling extreme machine induced dynamic loads. This eliminates "walking," excessive machine motion and mount failures typical of general purpose mounts in these applications.

Prevents Machine Walking

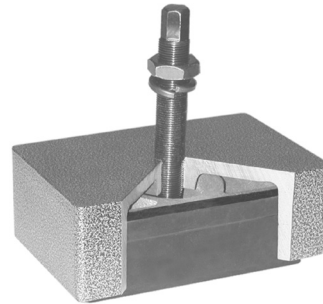
The rectangular shape of the Quantum IM Mount is yet another advantage. While providing greater resistance to machine "walking" than circular mounts, the straight leading edge surface on the rectangular mount has proven to be more geometrically stable. This helps eliminate pad roll and entrapment of coolants and oils beneath the pad. In addition, each isolation pad is engineered to possess an exceptionally high coefficient of friction that also prevents machine "walking."

The Industry's Most Extensive Range of Size and Configuration

A wide variety of different mount sizes and configurations are available to meet the requirement of any injection molding or die casting machine application. Many of the Quantum IM Mounts are height compatible, so it is possible to mix and match different sized mounts to accommodate differing load configurations. Custom-sized Quantum IM Mounts are also available upon request.

UNISORB Quantum IM Mount Benefits:

- Increased equipment life
- Simplified machine installation
- Fast, accurate alignment
- Reduced shock and vibration
- Elimination of anchor bolts
- Uneven floors accommodated
- Machine "walking" prevented
- Controls horizontal dynamics



Quantum IM Injection Molding Machine Mounts

QUANTUM IM MOUNTS

Part Number	L x W x H (min./max.) Inches	Std. Bolt Size	Max. Load (lbs)
IM51M12N90	5.5 x 3.5 x 2.50/3.88	M12 x 1.75 x 150	3,000
IM51M16N90	5.5 x 3.5 x 2.50/3.88	M16 x 2 x 150	3,000
IM61M16N90	7.00 x 4.50 x 2.50/3.88	M16 x 2 x 150	6,000
IM61M20N90	7.00 x 4.50 x 2.50/3.88	M20 x 1.5 x 150	6,000
IM61M24N90	7.00 x 4.50 x 2.50/3.88	M24 x 2 x 150	6,000
IM71M20N90	8.00 x 5.00 x 2.50/3.88	M20 x 1.5 x 150	9,000
IM71M24N90	8.00 x 5.00 x 2.50/3.88	M24 x 2 x 150	9,000
IM81M20N90	8.00 x 5.88 x 2.50/3.88	M20 x 1.5 x 150	9,000
IM81M24N90	8.00 x 5.88 x 2.50/3.88	M24 x 2 x 150	12,000
IM81M24NTS	8.00 x 5.88 x 2.50/3.88	M24 x 2 x 150	16,000
IM81M30NTS	8.00 x 5.88 x 2.50/3.88	M30 x 2 x 150	16,000
IM101M24NTS	10.00 x 7.88 x 3.25/4.63	M24 x 2 x 150	16,000
IM101M30NTS	10.00 x 7.88 x 3.25/4.63	M30 x 2 x 150	25,000

Unisorb Machine Mounts



Machine Mount Worksheet

[ONLINE FORM](#)

Please complete this worksheet and send via fax (888-808-4363) or DME@dme.net.

Company:	_____	Contact Name:	_____
Account	_____	Phone:	_____
Number:	_____		_____
Address:	_____	Fax :	_____
City:	_____	E-mail:	_____



or visit
www.dme.net/rfq

MACHINE MANUFACTURER: _____

TYPE OF MACHINE: _____

MODEL NO: _____ SERIAL NO: _____

MACHINE WEIGHT: _____ MOLD WEIGHT (IF APPLICABLE): _____

OF MOUNTING POINTS: _____ FOOT L x W x THICKNESS: x x

MOUNTING HOLE DIA: _____ MAX. TOP WASHER DIA: _____

MAX STUD LENGTH: _____

WHAT PROBLEM ARE WE SOLVING?: _____

NEW USED (PREVIOUS INSTALLATION APPROACH)

COMMENTS: _____

OPTIONAL MACHINE LAYOUT
(YOU MAY USE THIS SPACE TO PROVIDE A SKETCH WITH ADDITIONAL DETAIL AND/OR WEIGHT DISTRIBUTION IF NEEDED.)



Unisorb Machine Mounts

Tri-Wedge Mounts

The UNISORB Tri-Wedges Mount series is available in two sizes. The TW8000 and TW35000 are load rated at 8,000 and 35,000 lbs. respectively. These similarly designed Tri-Wedge Mounts both utilize two stationary and one sliding wedge to provide mechanical lift for the mounts. An adjustment bolt moves the center wedge fore & aft between the stationary wedges to provide lift to the top wedge. Each model has height ranges based on the position of a retainer within the mounts. The retainer (shaded in the illustration at right) can be placed in one of two retaining sockets. Placing the retainer in the socket nearest to the adjusting bolt head moves the mount through the lower height range. Positioning the retainer in the rear socket moves the mount through the upper height range.

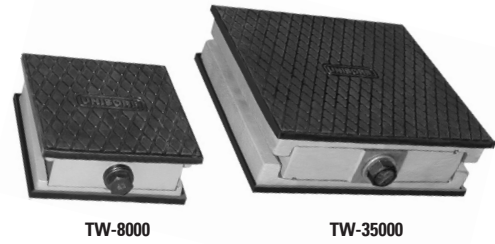
Both models may be used either with or without pads. The pads provide excellent isolation from vibrations between the machine base, the mounts and the floor. Each pad is recessed approximately $\frac{1}{8}$ of an inch to allow for a secure fit over the edges of the top and bottom of the mounts. The thickness of the pads is approximately $\frac{1}{4}$ inch. The TW35000 is available with an optional vertical stud (see tables below). In addition to providing precision leveling capability, these mounts also will prevent machines from walking.

- Heavy-duty machinery mount system
- Two height ranges in one mount
- Easily accessible side adjustment
- Use for all in-place alignment and leveling
- Pads provide vibration isolation
- Patented designs on mounts and pads

Specifications						
Unisorb Machine Mount	A	B	C	D	E	F
TW-8000	5.31	5.31	2.00	2.30	2.20	2.50
TW-35000	9.40	8.40	2.46	2.91	2.75	3.20
TW-35000 with STUD	9.40	8.40	2.52	2.91	2.75	3.08

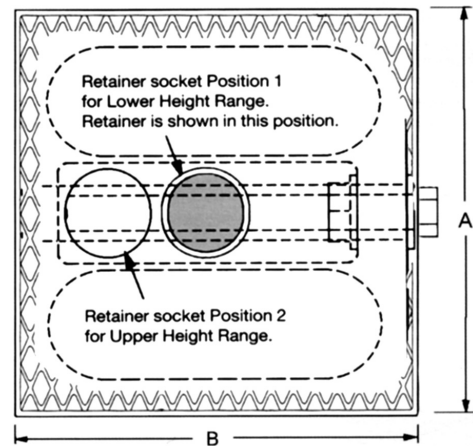
All dimensions in inches, includes pads, and may vary slightly between runs. Height dimensions shown are with no load.

Part Number	Includes	L x W x H (min./max.) inches	Max. Load (lbs)
TW8000NP	No Pads	5.31 x 5.31 x 2.00/2.50	8000
TW8000TP	Two Pads	5.31 x 5.31 x 2.00/2.50	8000
TW35000NP	No Pads	9.40 x 8.40 x 2.46/3.20	35000
TW35000TP	Two Pads	9.40 x 8.40 x 2.46/3.20	35000
TW35000TPS	Two Pads and Stud [®]	9.40 x 8.40 x 2.52/3.08	35000

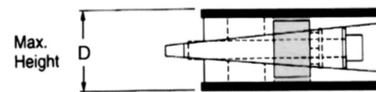
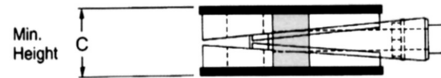


TW-8000 TW-35000

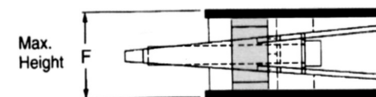
Unisorb Tri-Wedge Mounts for Injection Molding Machines



LOWER HEIGHT RANGE



UPPER HEIGHT RANGE



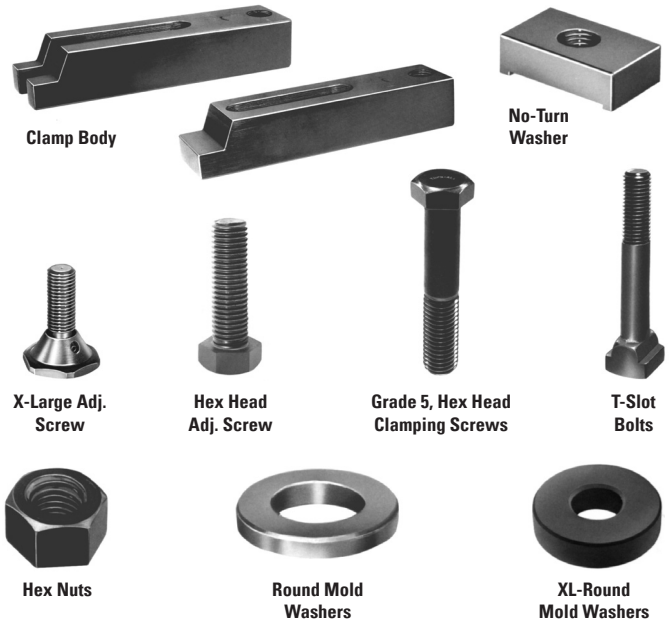
Machined Mold Clamps



TopsAll® Line

TOPS-ALL

- A fast-adjusting, easy-to-handle design that reduces setup time
- Each clamp built to strict standards of premium quality steel, hardened for long-lasting life with black penetrate finish to prevent rust
- Available as complete assemblies or as individual parts

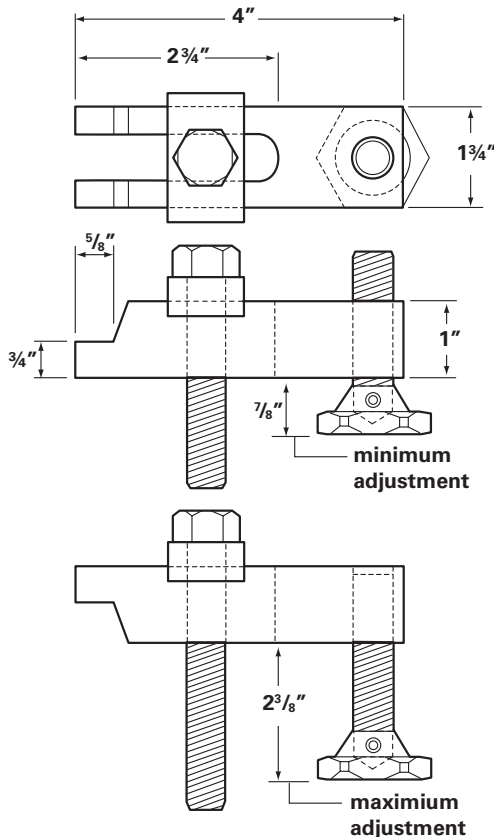


MACHINED MOLD CLAMPS

TopsAll® Machined Mold Clamps

4" Machined Open Toe Clamp - 5/8" – 11 Thread

* Items are included in kit



Part Number	Description
HD584*	4" Heavy-Duty Open Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835*	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587*	No-Turn Washer for 5/8"-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" Overall Length
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC584A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

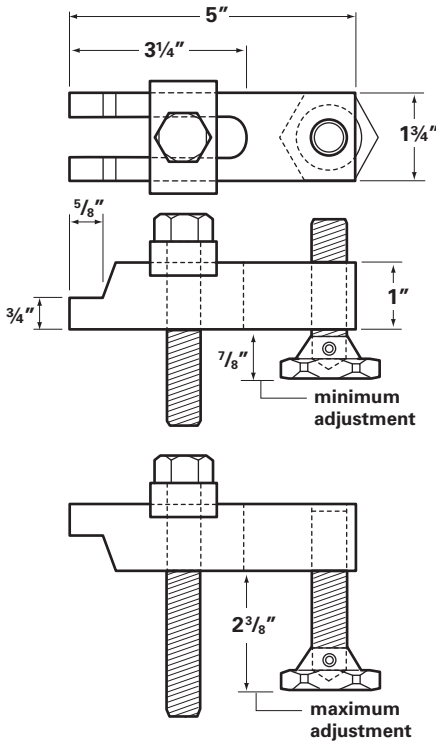


Machined Mold Clamps

5" Machined Open Toe Clamp - 5/8 -11 Thread

MACHINED MOLD CLAMPS

* Items are included in kit

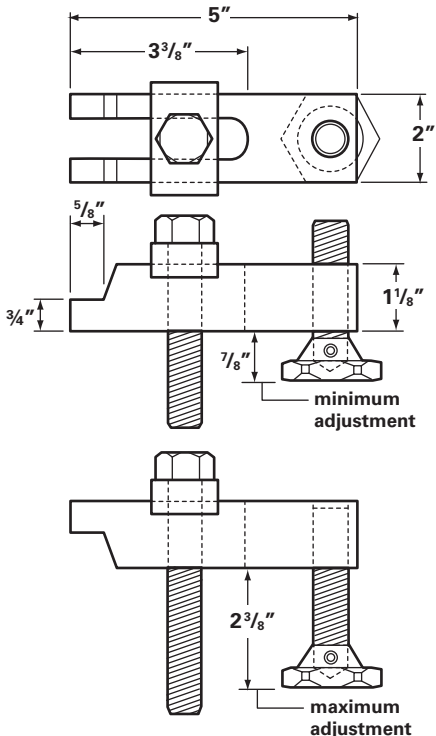


Part Number	Description
HD585*	5" Heavy-Duty Open Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835*	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587*	No-Turn Washer for 5/8-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC585A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

5" Machined Open Toe Clamp - 3/4 -10 Thread

* Items are included in kit



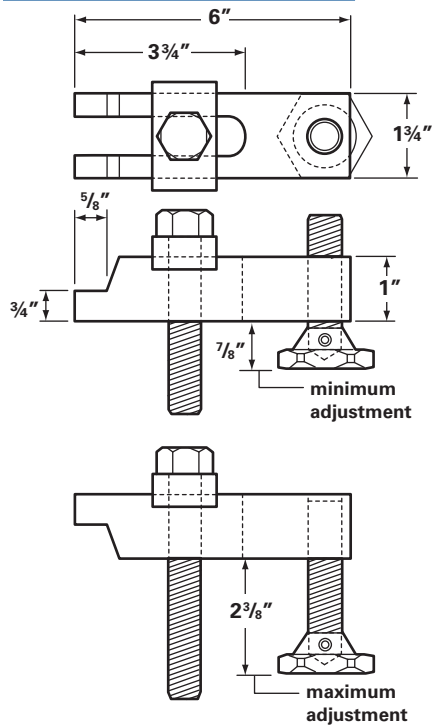
Part Number	Description
HD755*	5" Heavy-Duty Open Toe Clamp Body
S7540*	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757*	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
TAC755A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

Machined Mold Clamps



6" Machined Open Toe Clamp - 5/8" – 11 Thread

MACHINED MOLD CLAMPS



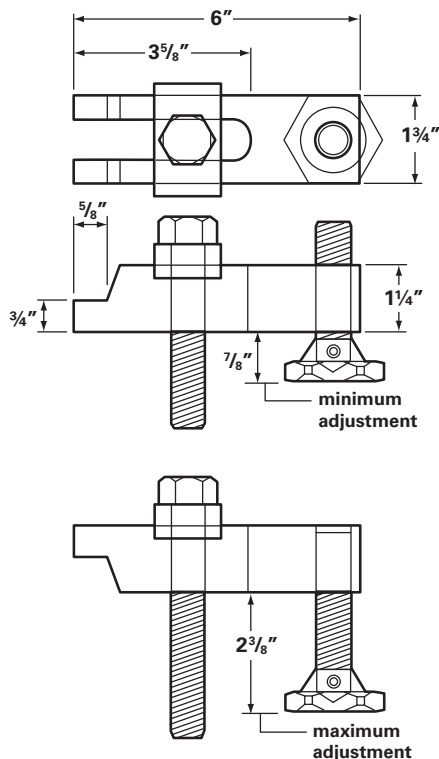
* Items are included in kit

Part Number	Description
HD586*	6" Heavy-Duty Open Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835*	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587*	No-Turn Washer for 5/8"-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC586A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

B

TopsAll® Machined Mold Clamps

6" Extra Heavy-Duty Open Toe Clamp - 5/8" – 11 Thread



Extra Heavy Duty * Items are included in kit

Part Number	Description
XHD5860*	6" EXTRA Heavy-Duty Open Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837*	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra-Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587*	No-Turn Washer for 5/8"-11 Thread, 2 1/4" Length
H585*	Extra-Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC5860A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

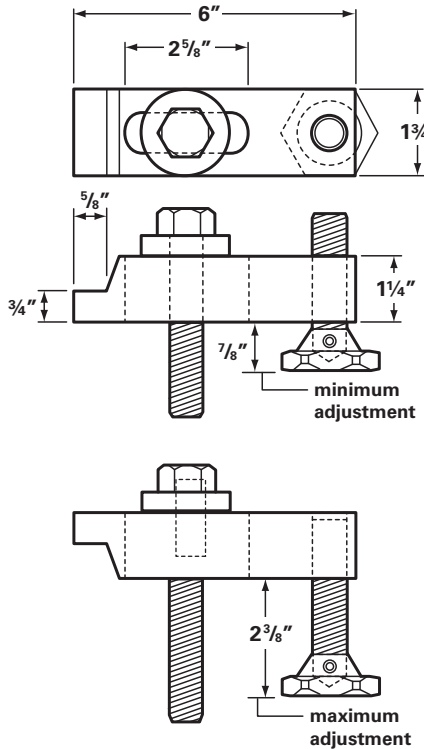


Machined Mold Clamps

6" Machined Closed Toe Clamp - 5/8 - 11 Thread

MACHINED MOLD CLAMPS

* Items are included in kit

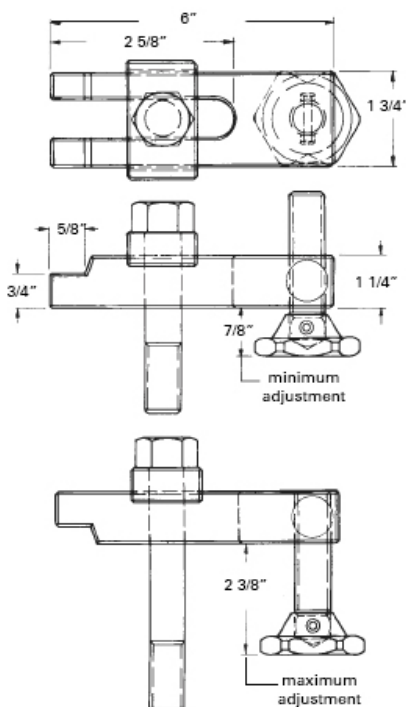


Extra Heavy Duty	
Part Number	Description
XHD5861*	6" Extra Heavy-Duty Closed Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837*	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586*	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587	No-Turn Washer for 5/8-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC5861A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

6" Machined Open Toe Clamp - 3/4 - 10 Thread

* Items are included in kit



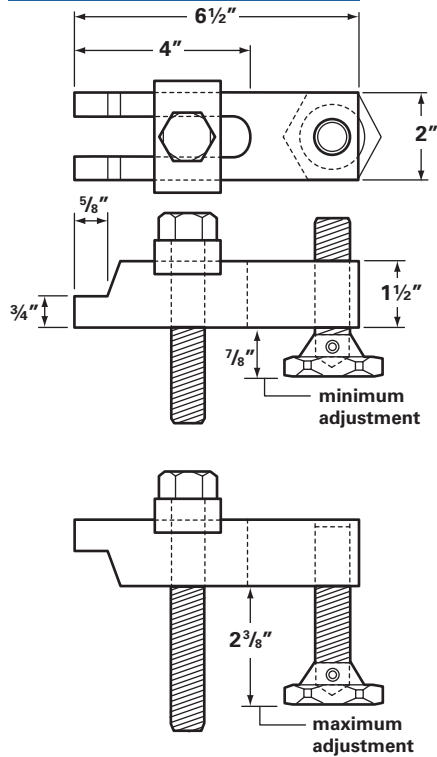
Part Number	Description
HD756*	6" Heavy-Duty Open Toe Clamp Body
S7540*	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757*	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
TAC756A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

Machined Mold Clamps



6½" Machined Open Toe Clamp - ¾ – 10 Thread

MACHINED MOLD CLAMPS



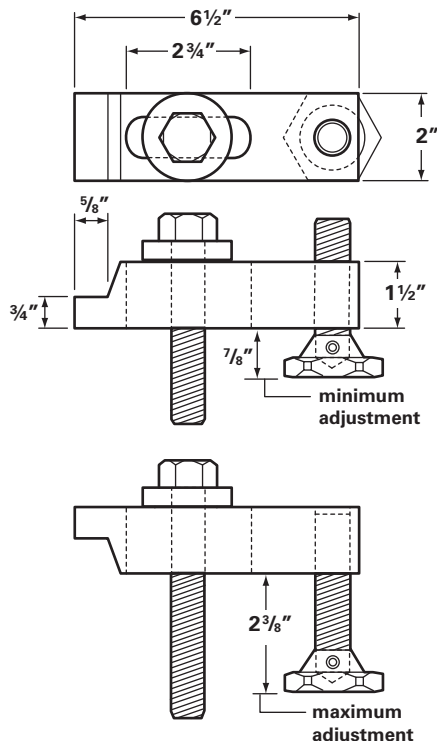
* Items are included in kit

Extra Heavy Duty	
Part Number	Description
XHD7565*	6½" Extra Heavy-Duty Open Toe Clamp Body
S7540	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545*	Grade 5, Hex Head Clamping Screw, 4½" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, ¾" I.D., 1½" O.D., ¼" Thickness
RW756	Extra Large Round Mold Washer, ¾" I.D., 2" O.D., ½" Thickness
SW757*	No-Turn Washer for ¾-10 Thread, 2½" Length
H755*	Extra Large Adjusting Screw - 3½" O.A.L
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
TAC7565A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw



TopsAll® Machined Mold Clamps

6½" Machined Closed Toe Clamp - ¾ – 10 Thread



Extra Heavy Duty * Items are included in kit	
Part Number	Description
XHD7566*	6½" Extra Heavy-Duty Closed Toe Clamp Body
S7540	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545*	Grade 5, Hex Head Clamping Screw, 4½" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, ¾" I.D., 1½" O.D., ¼" Thickness
RW756*	Extra Large Round Mold Washer, ¾" I.D., 2" O.D., ½" Thickness
SW757	No-Turn Washer for ¾-10 Thread, 2½" Length
H755*	Extra Large Adjusting Screw - 3½" O.A.L
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
TAC7566A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

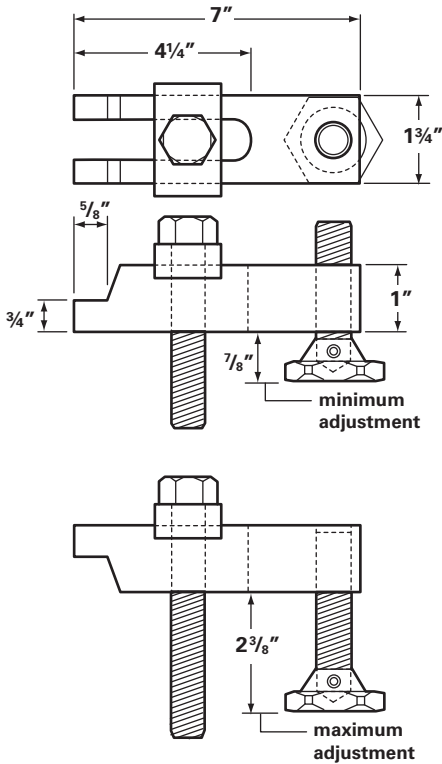


Machined Mold Clamps

7" Machined Open Toe Clamp - 5/8 - 11 Thread

MACHINED MOLD CLAMPS

* Items are included in kit

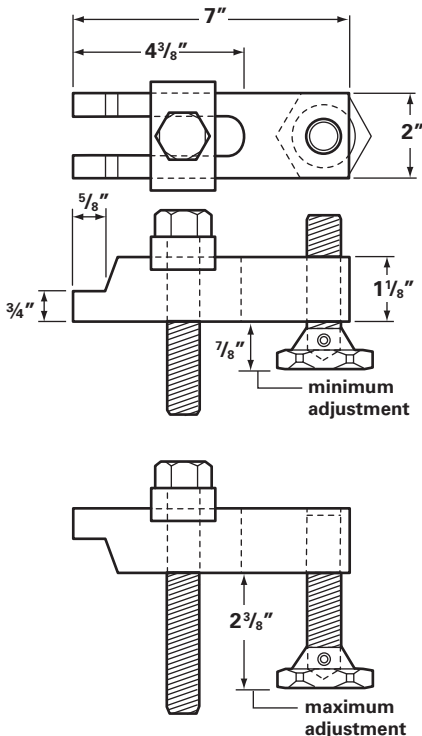


Part Number	Description
HD587*	7" Heavy-Duty Open Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835*	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587*	No-Turn Washer for 5/8-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC587A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

7" Machined Open Toe Clamp - 3/4 - 10 Thread

* Items are included in kit



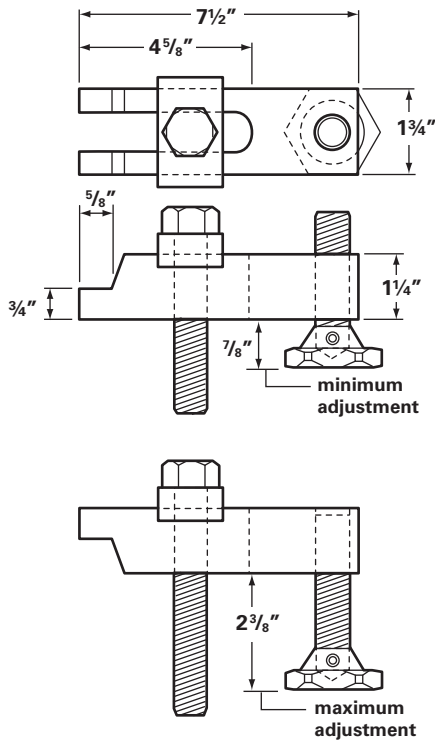
Part Number	Description
HD757*	7" Heavy-Duty Open Toe Clamp Body
S7540*	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757*	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
TAC757A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

Machined Mold Clamps



7 1/2" Machined Open Toe Clamp - 5/8 - 11 Thread

MACHINED MOLD CLAMPS

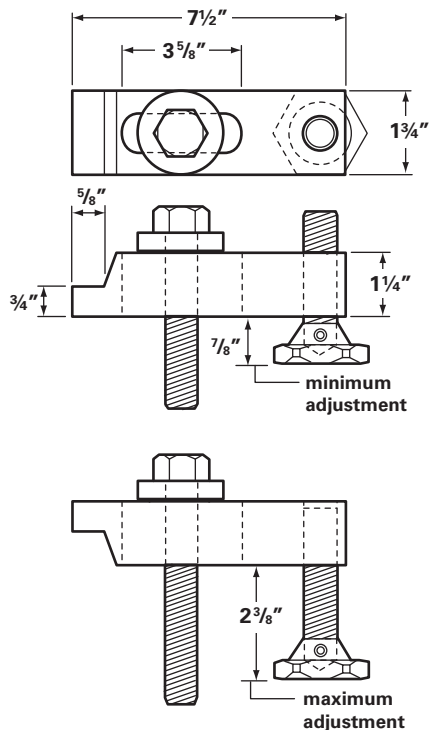


* Items are included in kit

Extra Heavy Duty	
Part Number	Description
XHD5875*	7 1/2" Extra Heavy-Duty Open Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837*	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587*	No-Turn Washer for 5/8-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC5875A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

7 1/2" Machined Closed Toe Clamp - 5/8 - 11 Thread



Extra Heavy Duty	
Part Number	Description
XHD5876*	7 1/2" Extra Heavy-Duty Closed Toe Clamp Body
S5832	Grade 5, Hex Head Clamping Screw, 3 1/4" Under Hex
S5835	Grade 5, Hex Head Clamping Screw, 3 1/2" Under Hex
S5837*	Grade 5, Hex Head Clamping Screw, 3 3/4" Under Hex
H58	Hex Head Adjusting Screw
RW58*	Round Mold Washer, 5/8" I.D., 1 1/4" O.D., 1/4" Thickness
RW586	Extra Large Round Mold Washer, 5/8" I.D., 1 3/4" O.D., 1/2" Thickness
SW587	No-Turn Washer for 5/8-11 Thread, 2 1/4" Length
H585*	Extra Large Adjusting Screw - 3" O.A.L.
TB5845	High-Strength T-Slot Bolt, 4 1/2" Length
N58	Heavy-Duty Hex Nut for T-Slot Bolt
TAC5876A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

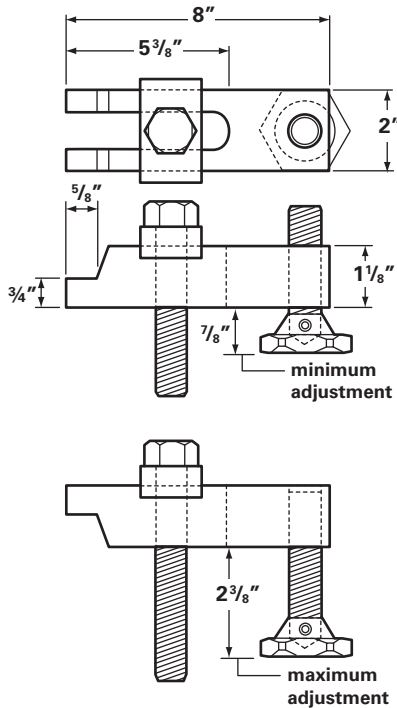


Machined Mold Clamps

8" Machined Open Toe Clamp - 3/4 - 10 Thread

MACHINED MOLD CLAMPS

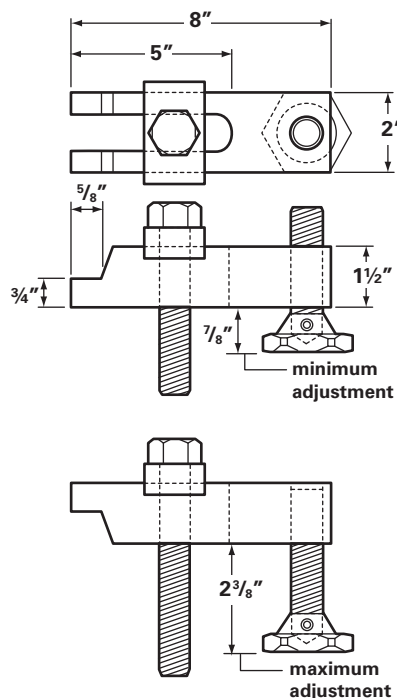
* Items are included in kit



Part Number	Description
HD758*	8" Heavy-Duty Open Toe Clamp Body
S7540*	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757*	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
HX6	Case Hardened Hex Nut for T-Slot Bolts -1 1/4" across flats
TAC758A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

8" Machined Open Toe Clamp - 3/4 - 10 Thread



Extra Heavy Duty * Items are included in kit

Part Number	Description
XHD7580*	8" Extra Heavy-Duty Open Toe Clamp Body
S7540	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545*	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757*	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
HX6	Case Hardened Hex Nut for T-Slot Bolts -1 1/4" across flats
TAC7580A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

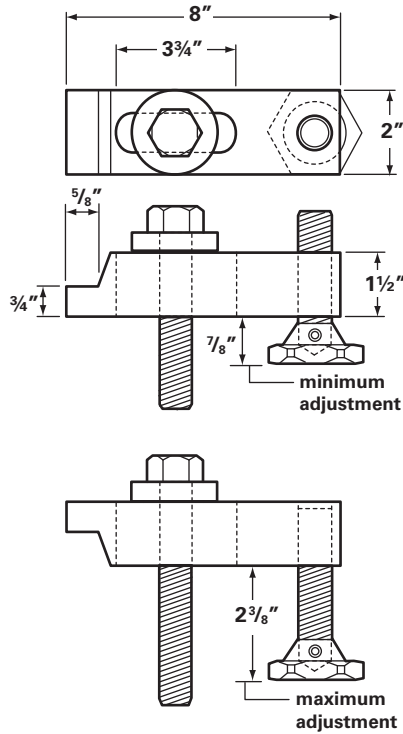
Machined Mold Clamps



8" Machined Closed Toe Clamp - 3/4 - 10 Thread

MACHINED MOLD CLAMPS

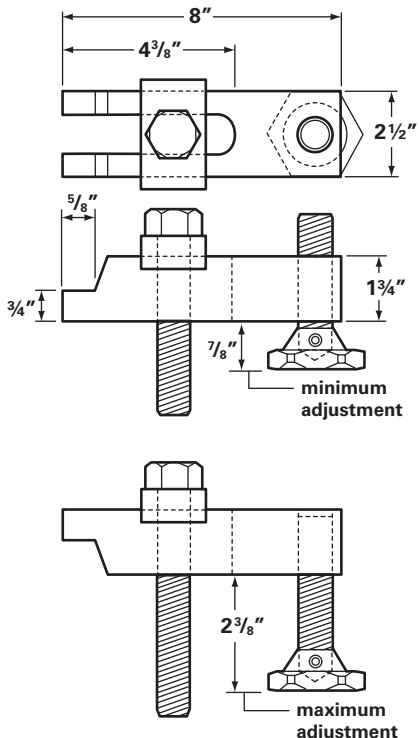
* Items are included in kit



Extra Heavy Duty	
Part Number	Description
XHD7581*	8" Extra Heavy-Duty Closed Toe Clamp Body
S7540	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545*	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756*	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
HX6	Case Hardened Hex Nut for T-Slot Bolts - 1 1/4" across flats
TAC7581A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

8" Machined Open Toe Clamp - 1 - 8 Thread



Extra Heavy Duty	
Part Number	Description
XHD1008*	8" Extra Heavy-Duty Open Toe Clamp Body
S1045	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
S1050	Grade 5, Hex Head Clamping Screw, 5" Under Hex
S1055*	Grade 5, Hex Head Clamping Screw, 5 1/2" Under Hex
H100	Hex Head Adjusting Screw 1-8 thread size
RW100	Round Mold Washer, 1" I.D., 2" O.D., 5/16" Thickness
RW1006	Extra Large Round Mold Washer, 1" I.D., 2 1/2" O.D., 5/8" Thickness
SW1007*	No-Turn Washer for 1-8 Thread, 3" Length
H1005*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB1060	High-Strength T-Slot Bolt, 6" Length
N100	Heavy-Duty Hex Nut for T-Slot Bolt
TAC1008A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

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B

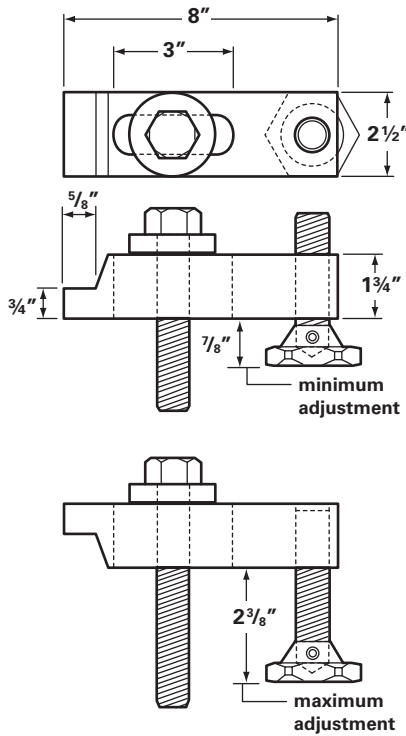


Machined Mold Clamps

8" Machined Closed Toe Clamp - 1 - 8 Thread

MACHINED MOLD CLAMPS

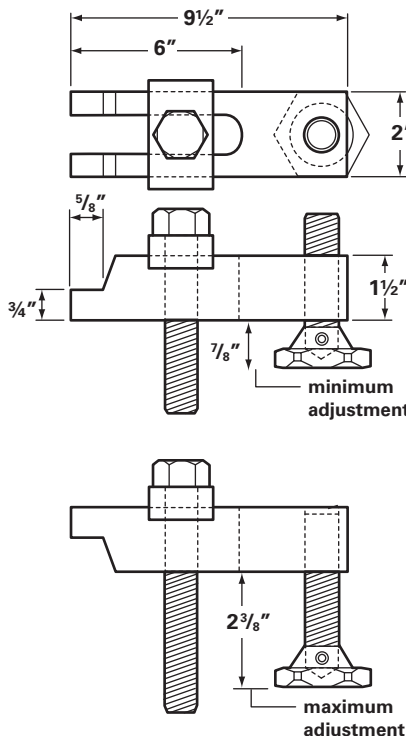
* Items are included in kit



Extra Heavy Duty	
Part Number	Description
XHD1009*	8" Extra Heavy-Duty Closed Toe Clamp Body
S1045	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
S1050	Grade 5, Hex Head Clamping Screw, 5" Under Hex
S1055*	Grade 5, Hex Head Clamping Screw, 5 1/2" Under Hex
H100	Hex Head Adjusting Screw 1-8 thread size
RW100	Round Mold Washer, 1" I.D., 2" O.D., 5/16" Thickness
RW1006*	Extra Large Round Mold Washer, 1" I.D., 2 1/2" O.D., 5/8" Thickness
SW1007	No-Turn Washer for 1-8 Thread, 3" Length
H1005*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB1060	High-Strength T-Slot Bolt, 6" Length
N100	Heavy-Duty Hex Nut for T-Slot Bolt
TAC1009A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

9 1/2" Machined Open Toe Clamp - 3/4 - 10 Thread



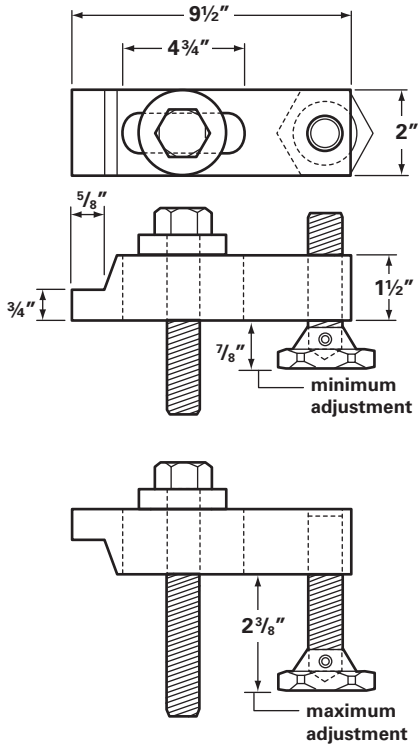
Extra Heavy Duty	
Part Number	Description
XHD7595*	9 1/2" Extra Heavy-Duty Open Toe Clamp Body
S7540	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545*	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757*	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
HX6	Case Hardened Hex Nut for T-Slot Bolts - 1 1/4" across flats
TAC7595A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

Machined Mold Clamps



9 1/2" Machined Closed Toe Clamp - 3/4 - 10 Thread

MACHINED MOLD CLAMPS



* Items are included in kit

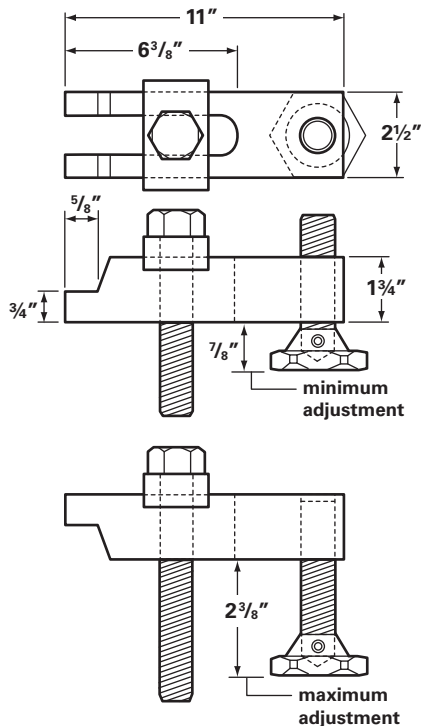
Extra Heavy Duty	
Part Number	Description
XHD7596*	9 1/2" Extra Heavy-Duty Closed Toe Clamp Body
S7540	Grade 5, Hex Head Clamping Screw, 4" Under Hex
S7545*	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
H75	Hex Head Adjusting Screw
RW75	Round Mold Washer, 3/4" I.D., 1 1/2" O.D., 1/4" Thickness
RW756*	Extra Large Round Mold Washer, 3/4" I.D., 2" O.D., 1/2" Thickness
SW757	No-Turn Washer for 3/4-10 Thread, 2 1/2" Length
H755*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB7550	High-Strength T-Slot Bolt, 5" Length
N75	Heavy-Duty Hex Nut for T-Slot Bolt
HX6	Case Hardened Hex Nut for T-Slot Bolts -1 1/4" across flats
TAC7596A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

B

TopsAll® Machined Mold Clamps

10" Machined Open Toe Clamp - 1 - 8 Thread

* Items are included in kit



Part Number	Description
HD110*	10" Heavy-Duty Open Toe Clamp Body
S1045	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
S1050*	Grade 5, Hex Head Clamping Screw, 5" Under Hex
S1055	Grade 5, Hex Head Clamping Screw, 5 1/2" Under Hex
H100	Hex Head Adjusting Screw 1-8 thread size
RW100	Round Mold Washer, 1" I.D., 2" O.D., 5/16" Thickness
RW1006	Extra Large Round Mold Washer, 1" I.D., 2 1/2" O.D., 5/8" Thickness
SW1007*	No-Turn Washer for 1-8 Thread, 3" Length
H1005*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB1060	High-Strength T-Slot Bolt, 6" Length
N100	Heavy-Duty Hex Nut for T-Slot Bolt
TAC110A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

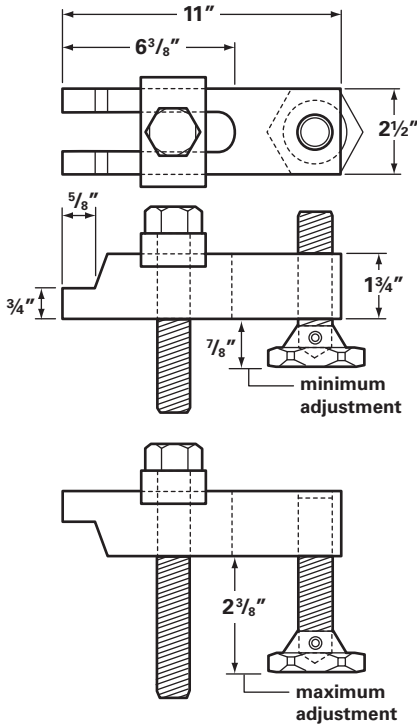


Machined Mold Clamps

11" Machined Open Toe Clamp -1 – 8 Thread

MACHINED MOLD CLAMPS

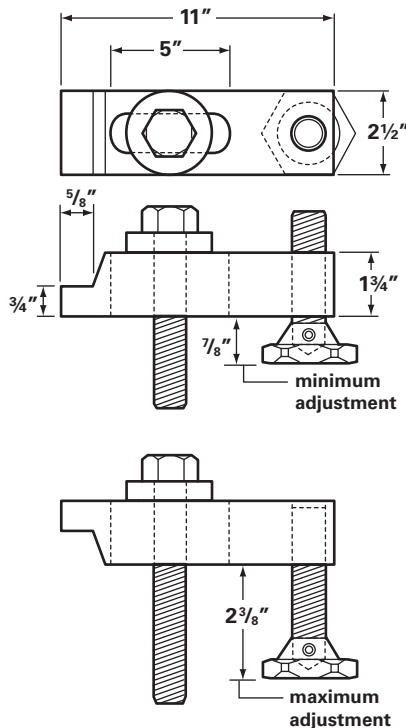
* Items are included in kit



Extra Heavy Duty	
Part Number	Description
XHD1011*	11" Extra Heavy-Duty Open Toe Clamp Body
S1045	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex
S1050	Grade 5, Hex Head Clamping Screw, 5" Under Hex
S1055*	Grade 5, Hex Head Clamping Screw, 5 1/2" Under Hex
H100	Hex Head Adjusting Screw 1-8 thread size
RW100	Round Mold Washer, 1" I.D., 2" O.D., 5/16" Thickness
RW1006	Extra Large Round Mold Washer, 1" I.D., 2 1/2" O.D., 5/8" Thickness
SW1007*	No-Turn Washer for 1-8 Thread, 3" Length
H1005*	Extra Large Adjusting Screw - 3 1/2" O.A.L.
TB1060	High-Strength T-Slot Bolt, 6" Length
N100	Heavy-Duty Hex Nut for T-Slot Bolt
TAC1011A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

TopsAll® Machined Mold Clamps

11" Machined Closed Toe Clamp -1 – 8 Thread



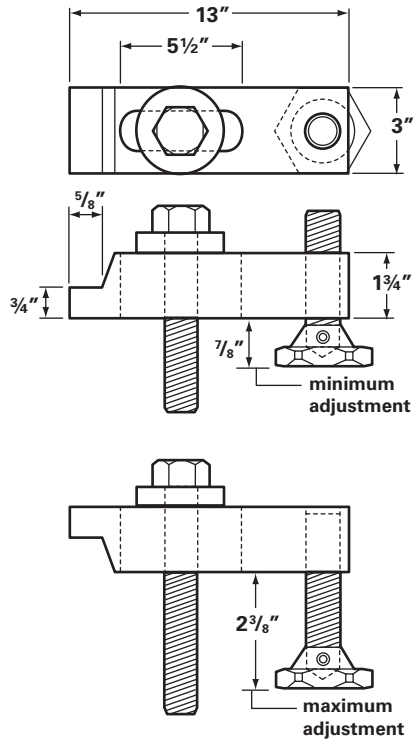
Extra Heavy Duty		* Items are included in kit
Part Number	Description	
XHD1012*	11" Extra Heavy-Duty Closed Toe Clamp Body	
S1045	Grade 5, Hex Head Clamping Screw, 4 1/2" Under Hex	
S1050	Grade 5, Hex Head Clamping Screw, 5" Under Hex	
S1055*	Grade 5, Hex Head Clamping Screw, 5 1/2" Under Hex	
H100	Hex Head Adjusting Screw 1-8 thread size	
RW100	Round Mold Washer, 1" I.D., 2" O.D., 5/16" Thickness	
RW1006*	Extra Large Round Mold Washer, 1" I.D., 2 1/2" O.D., 5/8" Thickness	
SW1007	No-Turn Washer for 1-8 Thread, 3" Length	
H1005*	Extra Large Adjusting Screw - 3 1/2" O.A.L.	
TB1060	High-Strength T-Slot Bolt, 6" Length	
N100	Heavy-Duty Hex Nut for T-Slot Bolt	
TAC1012A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw	

Machined Mold Clamps



13" Machined Closed Toe Clamp - 1 1/4 - 7 Thread

MACHINED MOLD CLAMPS

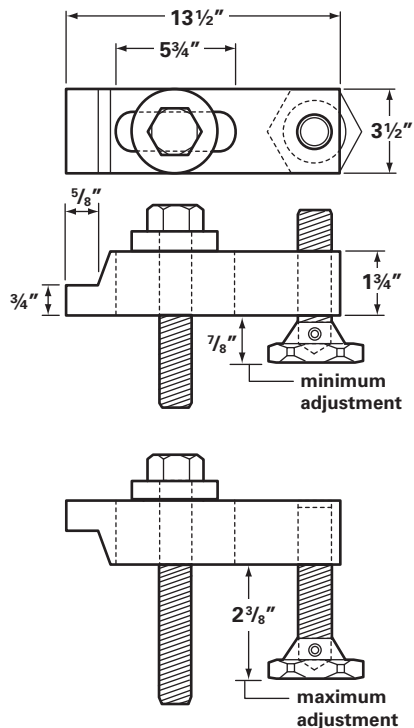


Extra Heavy Duty	
Part Number	Description
XHD1250	13" Extra Heavy-Duty Closed Toe Clamp Body
S1256	Grade 5, Hex Head Clamping Screw, 6" Under Hex
RW1256	Extra Large Round Mold Washer, 1 1/4" I.D., 3" O.D., 5/8" Thickness
H1505	Extra Large Adjusting Screw - 5 5/8" O.A.L.
TAC1250A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw

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TopsAll® Machined Mold Clamps

13 1/2" Machined Closed Toe Clamp - 1 1/2 - 6 Thread



Extra Heavy Duty	
Part Number	Description
XHD1500	13 1/2" Extra Heavy-Duty Closed Toe Clamp Body
S1506	Grade 5, Hex Head Clamping Screw, 6" Under Hex
RW1506	Extra Large Round Mold Washer, 1 1/2" I.D., 3 1/2" O.D., 5/8" Thickness
H1505	Extra Large Adjusting Screw - 5 5/8" O.A.L.
TAC1500A	Complete Assembly - Mold Clamp, Adjusting Screw, Mold Washer & Clamping Screw



Socket Head Cap Screws- Inch

Up to 12" Long

High-grade alloy steel, heat treated to 38-45 HRC. Tensile strength: 180,000 psi minimum.



SOCKET HEAD CAP SCREWS

D = DIAMETER OF SCREWS												
	NO. 6	NO. 8	NO. 10	1/4	5/16	3/8	1/2	5/8	3/4	1		
DECIMAL EQUIVALENT	.138	.164	.190	.250	.3125	.375	.500	.625	.750	1.000	DECIMAL EQUIVALENT	
THREADS PER INCH NATIONAL COARSE	32	32	24	20	18	16	13	11	10	8	THREADS PER INCH NATIONAL COARSE	
L = LENGTH UNDER THE HEAD	1/4	●	●								1/4	L = LENGTH UNDER THE HEAD
	3/8	●	●	●	●	●					3/8	
	1/2	●	●	●	●	●	●				1/2	
	5/8	●	●	●	●	●	●	●			5/8	
	3/4	●	●	●	●	●	●	●			3/4	
	7/8	●	●	●	●	●	●	●			7/8	
	1	●	●	●	●	●	●	●	●		1	
	1 1/4		●	●	●	●	●	●	●		1 1/4	
	1 1/2		●	●	●	●	●	●	●		1 1/2	
	1 3/4			●	●	●	●	●	●		1 3/4	
	2			●	●	●	●	●	●	●	2	
	2 1/4				●	●	●	●	●	●	2 1/4	
	2 1/2				●	●	●	●	●	●	2 1/2	
	2 3/4				●	●	●	●	●	●	2 3/4	
	3				●	●	●	●	●	●	3	
	3 1/4					●	●	●	●	●	3 1/4	
	3 1/2					●	●	●	●	●	3 1/2	
	4						●	●	●	●	4	
4 1/2						●	●	●	●	4 1/2		
5						●	●	●	●	5		
5 1/4							●			5 1/4		
5 1/2							●	●	●	5 1/2		
5 3/4							●			5 3/4		
6						●	●	●	●	6		
6 1/2							●	●	●	6 1/2		
7							●	●	●	7		
7 1/2							●	●		7 1/2		
8							●	●	●	8		
9							●			9		
10							●	●	●	10		
12							●	●	●	12		
MAX HEAD DIAMETER	.226	.270	5/16	3/8	15/32	9/16	3/4	15/16	1 1/8	1 1/2	MAX HEAD DIAMETER	
MAX HEAD HEIGHT	.138	.164	.190	1/4	5/16	3/8	1/2	5/8	3/4	1	MAX HEAD HEIGHT	
SIZE OF HEX HOLE	7/64	9/64	5/32	3/16	1/4	5/16	3/8	1/2	5/8	3/4	SIZE OF HEX HOLE	

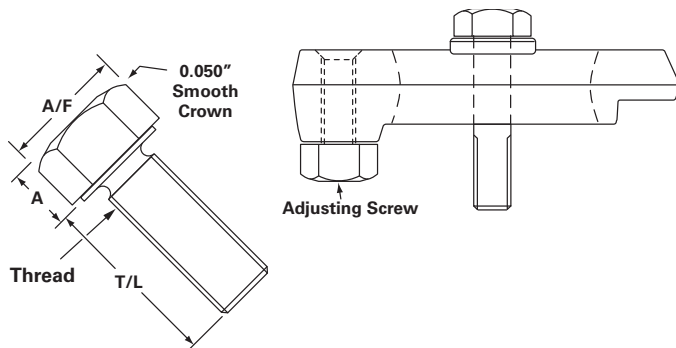
● = in stock

HOW to BUILD AN ITEM NUMBER: Diameter + Length + CS (Cap Screw)

Examples:

» 1/4" diameter x 2-3/4" long Cap Screw = 14234CS » 1" diameter x 2" long Cap Screw = 12CS » 1/2" diameter x 10" long Cap Screw = 1210CS

Adjusting Screws



ADJUSTING SCREWS

For Use with Adjustable Mold Clamps

Use adjusting screw, if required, to ensure that the clamp is parallel to the platen for maximum strength.

For use with all mold clamps except model AC0. Smooth-crowned head permits easy adjustment of clamp to meet any mold flange height between $1\frac{5}{32}$ " and 2". Hardened with black oxide finish.

	MCAS0	MCAS1	MCAS2	MCAS3
A/F	1"	1 $\frac{1}{4}$ "	1 $\frac{1}{4}$ "	1 $\frac{5}{8}$ "
A	$\frac{3}{8}$ "	$\frac{1}{2}$ "	$\frac{1}{2}$ "	$\frac{5}{8}$ "
Thread	$\frac{1}{2}$ "-13	$\frac{3}{4}$ "-10	$\frac{3}{4}$ "-10	1"-8
T/L	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	2"	2"

Adjusting Screws

Thread Size	Length under Head	Across Flats	Use with Clamp	Part Number
$\frac{1}{2}$ "-13	1 $\frac{1}{2}$ "	1"	AC0FC	MCAS0
$\frac{3}{4}$ "-10	1 $\frac{1}{2}$ "	1 $\frac{1}{4}$ "	AC1, 2, 3, 4, 5	MCAS1
$\frac{3}{4}$ "-10	2"	1 $\frac{1}{4}$ "	AC9	MCAS2
1"-8	2"	1 $\frac{5}{8}$ "	AC10, 12, 13	MCAS3



EXTRA LARGE Adjusting Screw Assemblies

Thread Size	Hex Size	Swivel Base Height	Overall Height	Part Number
$\frac{5}{8}$ "-11	1 $\frac{3}{4}$ "	$\frac{7}{8}$ "	3"	H585
$\frac{3}{4}$ "-10	2"	$\frac{7}{8}$ "	3 $\frac{1}{2}$ "	H755
1"-8	2 $\frac{1}{2}$ "	1 $\frac{5}{16}$ "	3 $\frac{1}{2}$ "	H1005
1 $\frac{1}{2}$ "-6	3"	1 $\frac{5}{8}$ "	5 $\frac{5}{8}$ "	H1505



Hex Head Adjusting Screw

Thread Size	Clamp Screw Dia.	Head Thickness	Height Above Head	Part Number
$\frac{5}{8}$ "-11	$\frac{5}{8}$ "	$\frac{7}{16}$ "	2 $\frac{1}{2}$ "	H58
$\frac{3}{4}$ "-10	$\frac{3}{4}$ "	$\frac{1}{2}$ "	2 $\frac{1}{2}$ "	H75
1"-8	1"	$\frac{5}{8}$ "	2 $\frac{1}{2}$ "	H100

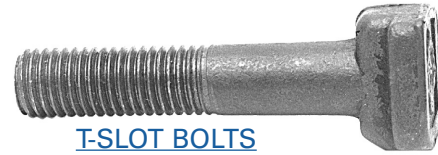




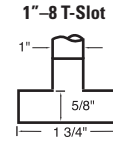
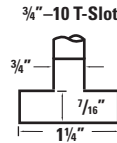
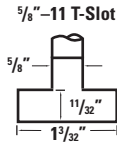
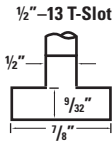
T-Slot Bolts

Cannot twist or jam in slots. Full smooth cut threads.

**Standard Hot Forged T-Slot Bolts;
C-1045 Steel, Class 3 N.C.**



T-SLOT BOLTS



OAL Length	1/2-13 Thd. Part No.	5/8-11 Thd. Part No.	3/4-10 Thd. Part No.	1"-8 Thd. Part No.
2"	TS42	TS52	TS62	
2 1/2"	TS42 1/2	TS52 1/2	TS62 1/2	
3"	TS43	TS53	TS63	TS83
3 1/2"	TS43 1/2	TS53 1/2	TS63 1/2	
4"	TS44	TS54	TS64	TS84
4 1/2"	TS44 1/2	TS54 1/2	TS64 1/2	
5"	TS45	TS55	TS65	TS85
5 1/2"	TS45 1/2	TS55 1/2	TS65 1/2	
6"	TS46	TS56	TS66	TS86
7"	TS47	TS57	TS67	TS87
8"	TS48	TS58	TS68	TS88
9"	TS49	TS59	TS69	TS89
10"	TS410	TS510	TS610	TS810
12"	TS412	TS512	TS612	TS812
14"	TS414	TS514	TS614	TS814
Head Thickness	5/16"	13/32"	17/32"	11/16"
Head Size	7/8" square	1 1/8" square	1 5/16" square	1 11/16" square

Case Hardened Hex Nuts

For T-Slot Bolts

CASE HARDENED HEX NUTS

Extra thick, machined from 12L14 bar stock, case hardened washer bearing surface.



Thread	Across Flats	Thickness	Part Number
1/2"-13	7/8"	5/8"	H x 4
5/8"-11	1 1/16"	3/4"	H x 5
3/4"-10	1 1/4"	7/8"	H x 6
7/8"-9	1 7/16"	1 1/8"	H x 7
1"-8	1 5/8"	1 1/4"	H x 8

U.S. Threads

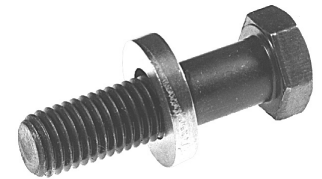
Part Number	Thread Size	Length Under Head
HHB5025	1/2-13	2 1/2"
HHB5030	1/2-13	3"
HHB5035	1/2-13	3 1/2"
HHB6225	5/8-11	2 1/2"
HHB6230	5/8-11	3"
HHB6235	5/8-11	3 1/2"
HHB6240	5/8-11	4"
HHB6245	5/8-11	4 1/2"
HHB6250	5/8-11	5"
HHB7530	3/4-10	3"
HHB7535	3/4-10	3 1/2"
HHB7540	3/4-10	4"
HHB7545	3/4-10	4 1/2"
HHB7550	3/4-10	5"
HHB1030	1-8	3"
HHB1035	1-8	3 1/2"
HHB1040	1-8	4"
HHB1045	1-8	4 1/2"
HHB1050	1-8	5"
HHB1060	1-8	6"
HHB1240	1 1/4-7	4"
HHB1250	1 1/4-7	5"
HHB1260	1 1/4-7	6"
HHB1270	1 1/4-7	7"

Metric Threads

Part Number	Thread Size	Length (Under Head)
MHB1265	12 x 1.75	65
MHB1275	12 x 1.75	75
MHB1290	12 x 1.75	90
MHB1675	16 x 2	75
MHB1690	16 x 2	90
MHB16100	16 x 2	100
MHB16110	16 x 2	110
MHB16120	16 x 2	120
MHB16130	16 x 2	130
MHB2080	20 x 2.5	80
MHB2090	20 x 2.5	90
MHB20100	20 x 2.5	100
MHB20110	20 x 2.5	110
MHB20120	20 x 2.5	120
MHB20130	20 x 2.5	130
MHB24100	24 x 3	100
MHB24110	24 x 3	110
MHB24120	24 x 3	120
MHB24130	24 x 3	130
MHB24140	24 x 3	140
MHB24150	24 x 3	150
MHB24160	24 x 3	160

B

GRADE 5 BOLTS



Mold Clamp Washers

MOLD CLAMP WASHERS

Economy



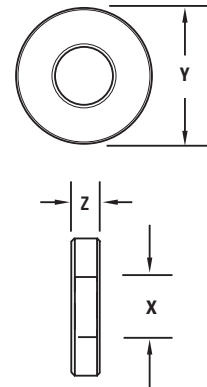
Part Number	I.D.	O.D.	Thickness
MCW1M	9/16"	1 1/16"	1/4"
MCW2M	2 1/32"	1 5/16"	1/4"
MCW3M	2 5/32"	1 1/2"	1/4"
MCW4M	1 1/32"	1 3/4"	1/4"



Thick-Stamped Washers

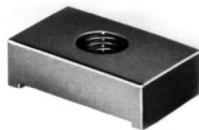
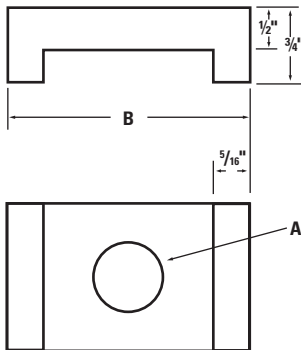
Thick-Stamped, Steel Washers with soft core won't crack. Large O.D. provides excellent bearing surface. An excellent washer for mold clamps and other shop uses.

Bolt Size	Dimensions			Use with Clamps	Part Number
	X	Y	Z		
1/2"-13 (12mm)	9/16"	1 1/8"	1/4"	AC0	W1
5/8"-11 (16mm)	2 1/32"	1 1/4"	1/4"	AC1 & 3	W2
3/4"-10 (20mm)	2 5/32"	1-3/4"	1/4"	AC2 & 4	W3
	2 9/32"	1 3/4"	1/4"		W6
1"-8 (24mm)	1-1/32"	2"	5/16"	AC5 & 9	W4
1 1/4"-7 (30mm)	1 1/4"	3"	5/8"	AC12	RW1256



THICK STAMPED WASHERS

Machined No-Turn Washers



MACHINED NO-TURN WASHERS

Part Number	"A" Screw Dia.	Length	Thickness Above Clamp	Clamp Width
SW127	1/2"	2 1/4"	1/2"	1 3/4"
SW587	5/8"	2 1/4"	1/2"	1 3/4"
SW757	3/4"	2 1/2"	1/2"	2"
SW1007	1"	3"	5/8"	2 1/2"

Granulator Knives



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GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Allsteel							
6x6	6.000	1.375	0.687	F	Hook Fly 3 Holes	2-3	A6HF3
6x6	6.000	1.937	0.500	B	Bed 2 Tapped Dowels	2	A6B3
6x8	8.000	2.000	0.425	F	Fly 4 Holes	3	A8F3
6x8	8.000	1.500	0.430	B	Bed 4 Open Slots	1-2	A8B3
6x8	8.000	1.312	0.468	F	Hook Fly 4 Holes	3	A8HF3
6x8	8.000	1.815	0.500	B	Bed 2 Tapped Dowels	2	A8BA3
10x22 (can use with A13F)	8.490	2.840	0.625	F	Reverse Bevel 4 Holes	1	A9FB3
10x17, 10x22, 12x17, 14x22, 10x9, 14x17, C124 (can use with A13FC)	8.500	2.850	0.625	F	Keen Edge 4 Holes	2	A9F3
10x17, 10x22, 14x22, 10x9, 14x17, 12x17 (can use with A13C)	8.500	2.593	0.625	B	No Holes Double Cutting Edge With Groove	2	A8BD3
8x10, 9x11	10.000	2.875	0.625	F	Reverse Bevel 5 Holes	2	A10F3
8x10, 9x11	10.000	1.875	0.500	B	5 Slots	2	A10B3
8x10, 9x11	9.990	1.875	0.500	B	5 Open Slots	1	A10BB3
12x13, 1236, 1337 (can use with A24F)	11.500	3.312	0.562	F	Reverse Bevel 5 Holes Counterbored	1	A12FC3
1236, 1337 (can use with A24BB)	11.500	2.375	0.562	B	5 Slots	1	A11BA3
	12.000	4.187	0.580	F	4 Holes Counterbored	1	A12FD3
11x13, 10x12 (new style)	11.740	3.312	0.625	F	Reverse Bevel 5 Holes Counterbored	2	A12F3
10x12, 11x13 (new style)	11.750	2.375	0.625	B	5 Open Slots	2	A11B3
10x12	11.500	3.312	0.625	F		2	A11F3
10x12 (old)	11.535	2.375	0.591	B	5 Slots	2	A12B3
10x13	11.500	2.500	0.562	F	Radial Rotor 4 Holes	1	A12FE3
2449, 2436	12.000	3.445	0.875	B	4 Slots	1	A11BB3
16x39, 14x22, 14x26, 14x51, 10x13, 1225 (can use with A9FB)	12.750	2.843	0.625	F	Reverse Bevel 6 Holes	9	A13F3
16x39, 14x26, 14x22, 14x51	12.750	2.593	0.625	B	No Holes Double Cutting Edge	6	A13B3
14x26, 14x22, 14x26, 14x51, 10x13 (can use with A9F)	12.750	2.781	0.625	F	Keen Edge 6 Holes	1	A13FC3
14x26, 14x22, 10x13 (can use with A8BD)	12.750	2.562	0.625	B	No Holes Double Cutting Edge	6	A13C3
14x22	10.733	2.812	0.625	F	Reverse Bevel 2 Counterbored Holes	3	A11FB3



Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Allsteel (cont.)							
12x14, 1337, 1236 (can use with A11BA)	23.875	2.375	0.562	B	9 Slots	2	A24BB3
16x39, 10x13	12.750	2.875	0.625	B	6 Slots	1	A13BA3
10x18, 11x19, 12x18	18.000	3.312	0.580	F	Reverse Bevel 7 Holes Counterbored	2	A18F3
10x18, 11x19, 12x18	18.000	2.375	0.625	B	7 Slots	2	A18B3
7x18, 9x36	18.000	1.875	0.500	F	Radial Rotor 6 Holes	5	A19F3
7x18	18.000	1.875	0.937	F	Hook Fly 6 Holes Recessed To 1/2	5	A19HF3
7x18, 9x36	18.000	2.812	0.750	B		2	A36B3
12x36	18.000	2.875	0.875	F	Radial Rotor 9 Slots	10	A17F3
12x36	18.000	2.875	1.250	F	Hook Fly 9 Holes	10	A18HF3
12x36	18.000	3.875	1.125	B	6 Slots	4	A18BA3
9x36	17.990	2.875	0.500	F	Radial Rotor 6 Holes	5	A36F3
	18.000	3.500	0.875	B	6 Slots	1	A18BB3
9x36	18.000	2.361	1.125	F	Hook Fly 6 Holes	1	A36HF3
24x36	18.000	3.312	0.875	B	6 Slots	1	A17BA3
24x36	18.000	3.875	0.687	F	Keen Edge 6 Holes Countersunk	1	A17FA3
24x36	17.970	3.875	0.687	F	Keen Edge 6 Holes Counterbored	1	A18FA3
8x20	20.000	2.375	1.125	F	Hook Fly 7 Holes (recessed to 5/8")	5	A20F3
8x20	20.000	3.375	0.875	B	7 Slots	2	A20B3
15x21	20.562	3.215	0.562	F	7 Holes	3	A20FA3
15x21	21.208	2.750	0.531	B	7 Slots	2	A21B3
1224, HOG	24.000	2.875	1.375	F	Hook Fly 9 Holes	1	A24HFA3
12x24, 1236, 1337, 12x48, 13x49 (can use with A12FC)	23.812	3.312	0.562	F	Reverse Bevel Counterbored same as A23F except angle location	1	A24F3
12x24	23.985	2.750	1.250	F	Hook Fly 9 Holes	5	A24HFB3
12x24	24.000	3.875	1.125	B	Open Slots	2	A24BA3
12x24	23.990	2.875	1.370	F	Hog Hook Fly 9 Holes	1	A24HFC3
9x24	24.000	2.375	0.625	F	Radial Rotor 9 Holes	5	A25F3
9x24, 13x25	24.000	2.375	1.125	F	Hook Fly 9 Holes (Recessed to 5/8")	5	A25HF3
9x24, 13x25	24.000	3.375	0.875	B	9 Slots	2	A23B3
13x25	24.500	2.735	0.625	F	High Shear 12 Holes	1	A24FB3
13x49, 13x25, 12x48	23.812	3.312	0.562	F	9 Holes same as A24F except angle location	8	A23F3
13x49, 12x48	23.875	2.375	0.562	B	9 Slots	4	A23BC3
	23.960	3.875	1.125	B	9 Slots	1	A23BD3
1422	10.750	2.500	1.125	B	3 Slots Single Bevel	2	A11BC3

Granulator Knives



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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Allsteel (cont.)							
1422	10.733	2.865	0.625	F	2 Counterbored Holes Keen Edge	1	A11FC3
30x49	23.990	2.875	0.875	F	Radial Rotor 9 Holes	5	A24FA3
30x49	11.990	3.440	0.875	B	4 Slots	8	A12BE3
	23.875	2.750	0.562	B	9 Slots	1	A24BC3
30x49	23.990	2.875	0.875	F	9 Holes Keen Edge	1	A24FC3
14x26	12.250	2.850	0.625	F	Right Hand 6 Holes Keen Edge	1	A13FR3
14x26	12.250	2.850	0.625	F	Left Hand 6 Holes Keen Edge	1	A13FL3
6P6	6.000	1.750	0.313	B	5 Open Slots Single Bevel	1	A6BA3
Amacoil							
8x8, GUO808, GU88	7.625	2.375	0.375	F	Keen Edge 5 Holes	2-3	AM7F3
8x8, GUO808, GU88, POLYMER A88	7.875	1.750	0.375	B	3 Slots	2	AM8B3
AG-88, GU808, GUO808	7.785	2.375	0.375	F	High Shear 5 Holes	3	AM8F3
AG-1010	9.625	2.625	0.500	F	Reverse Bevel 6 slots	1	AM10FA3
	9.973	2.750	0.500	F	6 Holes High Shear	1	AM10FB3
AG-1010	9.610	2.750	0.500	F	Reverse Bevel 6 Holes	2	AM9F3
AG-1010	9.610	2.750	0.500	F	6 Holes Keen edge	1	AM10F3
HMG1010, 1010-A	9.625	3.500	0.500	F	Keen Edge 2 Slots	3	AM9FA3
AG/HMG1010, 1010-A	9.875	2.000	0.500	B	4 Slots	2	AM10B3
	9.984	2.750	0.500	F	High Shear 6 Slots	1	AM9FC3
GU1421	11.750	3.880	0.625	F	High Shear 4 Holes	8	AM12FB3
GU1421	20.500	3.875	0.625	F	High Shear 5 Holes	5	AM20F3
GU421	10.437	2.505	0.625	B	4 Slots	4	AM10BA3
GU1427, 1627	13.312	3.875	0.625	F	High Shear 3 Holes	10	AM13F3
GU1427, 1627	14.625	3.875	0.625	F	High Shear 5 Holes	8	AM14F3
GU1427, 1627	13.437	2.500	0.625	B	5 Slots	2-4	AM14B3
GU1415	14.865	2.505	0.625	B	5 Slots	2	AM15B3
GU1415	14.062	4.500	0.593	F	High Shear 4 Holes	1	AM14FB3
GK1000	20.625	3.750	0.937	F	Keen Edge 4 Slots	10	AM21F3
	20.615	3.750	0.937	F	4 Slots 5 Tapped Holes Keen Edge	1	AM21FA3
	14.625	3.875	0.625	F	5 Open Slots	1	AM15F3
HMG2652	25.250	5.077	1.000	F		10	AM25F3
HMG2652, 2652	25.938	2.995	1.000	B	9 Slots Single Bevel 2 Tapped Dowels	4	AM26B3

B



Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Ball & Jewel							
	11.500	5.375	0.875	F	Keen Edge 2 Holes Counterbored	1	B11F3
M68, M88, M75, HAF685SC, DK88, M100, 4219M	7.990	2.750	0.500	F	Keen Edge 2 Holes Countersunk	3	B8FCS3
M68, M88, M75, HAF685SC, DK88, M100, 4219M	8.000	2.750	0.500	F	Keen Edge 2 Holes Counterbored	3	B8FCB3
HAF685C, M68, M75, M88, DK88, M100, 4219M	8.000	2.000	0.500	B	3 Slots	2	B8B3
301-3 STD. IDEAL	9.125	2.125	0.500	F	2 Holes Counterbored	3	B9F3
301-3 STD. IDEAL	9.562	1.625	0.375	B	4 slots	4	B9B3
MD810, M810, M110	10.000	2.750	0.500	F	Keen Edge 2 Holes Counterbored	3	B10F3
MD810	10.000	2.000	0.500	B	3 Slots	2	B10B3
	9.990	2.750	0.500	F	Reverse Bevel	3	B10FCS3
MB150	11.990	3.480	0.750	F	4 Holes Counterbored	1	B12FF3
MB150	12.000	2.750	0.750	B	4 Slots Counterbored	1	B12BB3
MD812, IAF812P, HAF812SC, HAF812P, DK812, M200	12.000	2.750	0.625	F	Keen Edge 2 Holes Countersunk	3	B12FCS3
MD812, IAF812P, HAF812SC, HAF812P, M200, DK812	12.000	2.750	0.625	F	Keen Edge 2 Holes Counterbored	3	B12FCB3
MD812, M200, IAF812D, M812, HAF812SC, LB1212, DK812, DK1212	12.000	2.000	0.625	B	4 Slots	2	B12B3
MD1212, BP1212S, MA1212X, 1212SX	12.000	2.875	0.750	F	Keen Edge 2 Holes Counterbored	3	B12FA3
MD1212, BP1212S, 1212SX, MB1212X	12.000	2.062	0.750	B	4 Slots	2	B12BA3
12", HAF812SCSX, CG812SCX	11.956	2.125	0.500	F	Keen Edge 3 Holes Counterbored Slanted Right	3	B12FD3
12", HAF812SCSX, CG812SCX	11.875	2.250	0.500	B	3 Slots Double Edge	2	B12BC3
	12.031	2.500	0.625	F	Keen Edge 2 Holes Counterbored	1	B12FE3
1014	14.000	2.875	0.750	F	Keen Edge 3 Holes Counterbored	3	B14F3
1014	14.000	2.875	0.750	B	4 Slots 2 Tapped Dowels	2	B14B3
MD1216, CG1216SCSX, HAF1216C	16.000	2.880	0.750	F	Keen Edge 3 Holes Counterbored	3	B16FCB3
M300, DK1216, M816, LB1216	16.000	2.875	0.750	F	Keen Edge 3 Holes Countersunk	3	B16FCS3
M816, M300, LB1216, CG1216SCX, HAF1216C, MD1216	16.000	2.062	0.750	B	5 Slots 2 Tapped Dowels	2	B16B3

Granulator Knives



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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Ball & Jewel (cont.)							
1216, SPL	16.062	2.750	0.625	B	No Holes 2 Tapped Dowels	2	B16BB3
MB520	17.125	3.312	0.750	B	8 Tapped Holes Holder	1	B17BB3
MB250	17.000	3.687	0.750	F		2	B17F3
MB250	17.000	2.750	0.750	B	4 Holes 2 Tapped Dowels	2	B17B3
451	19.990	3.125	0.500	F	Reverse Bevel 3 Holes	1	B20FB3
CG1620SX, CG1620SCSX	20.000	2.750	0.750	B	6 Slots 2 Tapped Dowels Double Cutting Edge	2	B20BH3
CG1620SX, CG1620SCSX	19.890	2.875	0.750	F	Keen Edge 4 Holes Counter-bored Slanted Left	1	B20FL3
CG1620SX, CG1620SCSX	19.890	2.875	0.750	F	Same as B20FL But Slanted Right	1	B20FR3
CG1620SX, CG1620SCSX, (Can Use B20BH)	19.935	2.750	0.750	B	6 Slots 4 Tapped Dowels Double Cutting Edge	2	B19B3
MD1640	20.000	4.000	0.875	B	2 Tapped Dowels	4	B20BJ3
M400, M820, MD1620, MD1640	20.000	2.625	0.750	F	Keen Edge 3 Holes Countersunk	3	B20FE3
M400, M820, MD1620	20.062	1.875	0.750	B	6 Slots	2	B20BD3
	21.000	3.625	0.875	B	8 Slots 2 Tapped Dowels	1	B21BC3
NO. ½	20.062	3.250	0.500	F	Keen Edge 3 Holes	4	B21F3
NO. ½	20.375	2.375	0.437	B	2 Tapped Dowels	6	B21BD3
	19.990	3.500	0.875	B	Keen Edge 6 Slots	1	B19BA3
MD1220, MD1620	20.000	2.875	0.750	F	Keen Edge 3 Holes Counterbored	3	B20F3
MD1620, MD1220	20.052	2.125	0.750	B	6 Slots 2 Tapped Dowels	2	B20BA3
20", 1040, GK10022	20.062	2.875	0.750	F	Keen Edge 4 Holes Counterbored	3	B20FA3
	21.000	4.250	0.875	B	8 Slots 2 Tapped Dowels	4	B21BE3
NO.1	23.500	3.375	0.560	F	Reversed Bevel 3 Holes Counterbored	1	B23F3
NO.1	23.875	2.507	0.531	B	2 Tapped Dowels	6	B23B3
AS-24 STEEL	23.990	3.500	0.750	F	Keen Edge 9 Holes	5	B24F3
STEELMSTR 24	24.000	4.000	0.875	B	9 Slots 2 Tapped Dowels	2	B24B3
M500	23.990	2.875	0.750	F	Keen Edge 3 Holes Countersunk	3	B24FD3
	24.052	2.875	0.750	F	Keen Edge 3 Holes Countersunk	1	B24FF3
M500	24.062	2.000	0.750	B	6 Slots 3 Tapped Dowels	2	B24BB3
M500, LT-1248-X	23.990	2.875	0.750	F	3 Holes Counterbored	1	B24FG3

B



Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Ball & Jewel (cont.)							
NO.1.500, 5/SET	25.250	3.750	0.562	F	Reverse Bevel 3 Holes Counterbored	5	B25F3
NO.1.500	25.375	3.250	0.500	B	No Holes 2 Tapped Dowels	6	B25BA3
HD1652, HD1626	25.875	2.875	0.750	F	Keen Edge 7 Holes Counterbored	1	B26FE3
HD1626	25.875	3.500	0.750	F	10 Holes	3-10	B26FC3
HD1626	26.000	4.000	0.875	B	10 Slots 2 Tapped Dowels	4	B26BD3
MD1626, 2026, MD1260, 5KN ROTOR	25.870	2.875	0.718	F	4 Holes (Alternate B26FF)	3	B26FA3
MD1626, 2026, MD1260, CG2026SX	26.000	4.000	0.843	B	7 Slots 2 Tapped Dowels	2	B26B3
HD1626	25.875	3.500	0.750	F	10 Holes	1	B26FB3
HD1626	26.000	4.000	0.875	B	10 Slots 2 Tapped Dowels	1	B26BE3
CG2026SX, HD1626	25.865	2.875	0.750	F	4 Holes Counterbored (see B26FB)	1	B26FF3
	25.865	2.875	0.750	F	4 Holes Countersunk Keen Edge	1	B26FG3
2-28	26.740	5.250	0.875	F	3 Holes Counterbored Reverse Bevel	1	B26FD3
2-28	26.750	5.250	0.875	F	3 Holes Keen Edge	5	B26F3
2-28	26.875	4.750	0.875	B	2 Tapped Dowels	6	B26BA3
1632	31.875	2.875	0.750	F	Keen Edge 5 Holes Counterbored	3	B32F3
1632	32.000	4.000	0.875	B	5 Slots 2 Tapped Dowels	1	B32B3
HDB 303SX	30.000	4.000	0.875	B	8 Slots	2	B30B3
MD1640	19.990	2.625	0.750	F	Keen Edge 3 Holes Counterbored	3	B20FF3
MD1640	24.000	2.750	0.750	B	6 Slots Single Bevel	1	B24BC3
	23.563	3.625	0.750	F	6 Counterbored Holes Keen Edge	1	B24FH3
Conair							
MGK400	6.650	2.580	0.470	F	Keen Edge 2 Slots	1	CR7F3
MC-32	8.000	4.313	1.094	F	Reverse Bevel 2 Holes Counterbored	12	CR8F3
MGK400.175	8.885	2.500	0.470	F	2 Slots High Shear	1	CR9F3
MGK400.175	8.875	2.400	0.500	B	2 Slots	1	CR9BA3
9x10, H6910, W450, (9723-15901)	9.000	2.500	0.875	F	Keen Edge 2 Holes Counterbored	1	CR9FA3
9x10, H6910, W450	9.250	2.000	0.437	B	3 Slots	1	CR9B3
8x10	9.500	2.000	0.500	F	Keen Edge 3 Holes Counterbored	1	CR10F3
8x10	9.937	2.000	0.500	B	3 Slots	1	CR10B3
12x14, 12x24, 712978	12.000	2.875	1.000	F	Keen Edge 2 Holes Counterbored	3	CR12F3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Conair (cont.)							
12x14, 12x24, 712978	12.250	1.937	0.500	B	5 Holes	2	CR12BB3
12x14	12.250	1.937	0.500	B	5 Slots	1	CR12BE3
1412	12.250	2.938	0.500	B	5 Slots	1	CR12B3
14x20	20.000	2.875	1.000	F	Keen Edge 3 Holes Counterbored	3	CR20F3
14x20	20.187	1.938	0.500	B	8 Slots	2	CR20B3
16x24	12.052	1.937	0.500	B	2 Tapped Dowels	1	CR12BC3
16x24	24.021	3.500	1.125	F	4 Holes Counterbored	1	CR24F3
	24.021	3.500	1.125	F	Keen Edge 4 Holes Counterbored	1	CR24FB3
G1630	29.500	3.445	1.102	F	4 Holes Counterbored	1	CR29F3
G1630	30.187	3.000	0.500	B	12 Slots	1	CR30B3
G1630	30.187	3.000	0.500	B	12 Slots Single Bevel	1	CR30BA3
Cumberland							
Chopper	4.156	1.250	0.375	B	2 Holes Tapped	1	CE4BA3
#0	4.500	1.500	0.375	F	Radial Rotor 3 Holes	3	CE4F3
#0	4.500	2.125	0.500	B	3 Slots	2	CE4B3
24M	7.250	2.320	0.500	B	4 Slots	1	CE7BA3
24M	7.000	2.750	0.500	F	3 Holes Counterbored	1	CR7FA3
1524	24.365	3.312	0.625	B	7 Slots 2 Tapped Dowels	1	CB24BC3
#.500	7.500	1.500	0.375	F	Radial Rotor 4 Holes	2-3	CE7F3
#.500	7.500	2.750	0.625	B	4 Slots	2	CE7B3
184 SPL, 1010 Auger	9.938	2.750	0.500	F	Keen Edge 3 Holes Counterbored 2 Degree Angle Right Side	1	C10FA3
184 SPL, 1010 Auger	10.250	2.375	0.500	B	3 Slots 2 Open Slots	1	C10BA3
184 SPL, 1010 Auger	9.895	2.750	0.500	F	Reverse Bevel	1	C10FB3
184 SPL, 1010 Auger	9.895	2.750	0.500	F	(C10FA with both ends angled)	1	C10FC3
10	9.750	2.750	0.625	B	4 Slots	2	C10B3
10	9.937	2.000	0.375	F	Keen Edge 4 Holes	1	C10F3
185, 710, 810, 1, 190, 184	10.000	2.839	0.500	F	Keen Edge 3 Holes Counterbored	2	CA10FB3
810, 184, 710	9.990	2.739	0.500	F	Keen Edge 3 Holes Counterbored	1	C10FD3
185, 710, 810, 1, 190, 184	10.250	2.062	0.500	B	3 Slots 2 Open Holes	2	CA10B3
185, 710, 810, 1, 190, 184	10.000	2.750	0.500	F	Reverse Bevel 3 Counterbored Holes	2	CA10FA3
185, 710, 810, 1, 190, 184	10.250	2.250	0.500	B	3 Slots 2 Open Holes	2	C11B3

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Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
185, 710, 810, 1, 190, 184	9.740	2.839	0.500	F	Keen Edge 3 Holes Counterbored	1	CA10FC3
185, 710, 810, 1, 190, 184	10.250	2.063	0.500	B	3 Slots 2 Open Holes	1	CA10BA3
#1.500, Chevron	10.500	2.125	0.500	F	Radial Rotor 5 Holes	5	CE10F3
#1.500, Chevron	10.500	2.531	0.625	B	5 Slots	2	CE10B3
812	11.875	2.375	0.437	F	Reverse Bevel 3 Holes 3 Degree Angle Right Side	1	C12FF3
812	11.875	2.375	0.438	F	Keen Edge 3 Holes	1	C12FG3
812	12.062	1.938	0.500	B	3 Slots Double Cutting Edge	1	CA12C3
284, 285	12.000	2.750	0.500	F	Keen Edge 4 Holes Counterbored (same as C11FA except for angle)	1	C11F3
284, 285	12.000	2.839	0.500	F	Keen Edge 4 Holes Counterbored (same as C11F Except 4 Degree Angle Right Shear)	1	C11FA3
284, 285	12.000	2.839	0.500	F	Keen Edge 4 Holes Counterbored (same as CA12FC Except Hole Size .625)	3	C12F3
284	12.000	2.839	0.500	F	Reverse Bevel 4 Holes Counterbored 4 Degree Right Side	1	C12FH3
284	12.240	2.750	0.500	B	4 Slots 2 Open Slots No Bevel	1	C12BA3
284	11.943	2.750	0.500	F	4 Counterbored Holes Reverse Bevel	1	C11FB3
284, 285, 2UC	11.943	2.750	0.500	F	Reverse Bevel 4 Holes Counterbored (same as CA12FC Except 4° Angle Right Side)	3	C12FK3
284, 285, 1012, use for 2KN Rotor (See C12B for 3KN Rotor)	12.240	2.750	0.500	B	4 Slots 2 Open Holes Notches Centered	2	C12BF3
284, 285, 1212, Gran 2KN use with 3KN Rotor	12.240	2.570	0.500	B	4 Slots 2 Open Holes	1	C12B3
284, 285, 1212	11.935	2.741	0.375	F	Reverse Bevel 4 holes 4 degrees right side	1	C12FM3
	11.937	2.750	0.375	F	Reverse Bevel 4 Holes 4 Degree Right Side	1	C12FJ3
812, 1012, 2, 290, 780	12.000	2.750	0.500	F	Reverse Bevel 5 Holes Counterbored	2	CA12FA3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
812, 1012, 2, 290, 780, 285	12.000	2.843	0.500	F	Keen Edge 5 Holes Counterbored	2	CA12FB3
812, 1012, 2, 290, 780	12.000	2.750	0.500	F	Reverse Bevel 4 Holes Counterbored (same as C12FI Except No Angle)	3	CA12FC3
1212, PI	12.188	2.750	0.511	F	Double Cutting Edge 4 Slots	1	C13FA3
812, 1012, 2, 290, 780, 6B	11.965	2.000	0.500	B	4 Slots	1	CA12BA3
812, 1012, 2, 290, 780	12.000	2.828	0.500	F	Keen Edge 4 Holes Counterbored (same as C12F except hole size .593)	3	CA12FD3
	12.240	2.125	0.500	B	4 Slots 2 Open Slots notches not centered	1	CA12BB3
812, 1012, 2, 290, 780	12.000	2.062	0.500	F	Radial Rotor 5 Holes	3	C12FB3
812, 1012, 2, 285, 290, 780, (3KN), 2UC	12.250	2.125	0.500	B	4 Slots	2	CA12B3
78, 780	12.450	2.375	0.500	B	5 Slots	1	C12BC3
384, 1215	15.250	2.750	0.437	F	Keen Edge 4 Holes	1	C16FD3
384, 1215	15.500	2.562	0.500	B	5 Slots 2 Notches	1	C16BD3
484, SPL	7.968	3.281	0.500	F	Right Hand Keen Edge 2 Holes Counterbored (Hole to Back 1.406)	1	C7FR3
484, SPL	7.969	3.281	0.500	F	Left Hand Keen Edge 2 Holes Counterbored (Hole to Back 1.406)	1	C7FL3
484, SPL	7.969	3.281	0.500	F	Left Hand Keen Edge 2 Holes Counterbored (Hole to Back 1.308)	1	C7FLA3
484 SPL, Chevron	8.093	2.750	0.500	B	2 Slots	1	C8BA3
484	15.927	3.218	0.500	F	Reverse Bevel 4 Holes Counterbored Slant Right .562 H	1	C16FE3
484, See C15F Fly	16.250	2.750	0.500	B	5 Slots No Bevel	2	CA16BA3
484	15.927	3.375	0.500	F	Keen Edge 4 Holes Counterbored Slant Right .656 H	1	C15F3
484-3KN	15.937	3.268	0.500	F	Knife Reverse Bevel 4 Holes Counterbored	1	C16FF3

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GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
484 Twinshear	7.947	3.250	0.500	F	Rt. Hand Reverse Bevel 2 Holes Counterbored (Angle Right)	1	C8FR3
484 Twinshear	7.947	3.250	0.500	F	Left Hand Reverse Bevel 2 Holes Counterbored (Angle Left)	1	C8FL3
816, 1016, 3	16.000	2.750	0.500	F	Reverse Bevel 6 Holes Counterbored C-C 2.750, C-B 1.125	2	C16FA3
816, 1016, 3	16.000	2.839	0.500	F	Keen Edge 6 Holes Counterbored C-C 2.687 C-B 1.312	2	C16F3
816, 1016, 3	16.250	2.125	0.500	B	5 Slots	2	C16B3
1216	16.052	3.171	0.500	F	Keen Edge 4 Holes Counterbored	3	C16FB3
1216, see CA16B	16.177	2.500	0.500	B	5 Slots 2 Open Holes	2	C16BA3
1216	16.250	2.500	0.500	B	5 Slots 2 Open Holes	2	C16BB3
1416, 4, 490, 485	16.000	3.250	0.500	F	Reverse Bevel 4 Holes Counterbored	3	CA16FC3
1416, 4, 490, 485, 1216	16.000	3.312	0.500	F	Keen Edge 6 Holes Counterbored C-C 2.687, C-B 1.312	2	CA16FB3
1416, 4, 490, 485	16.000	3.250	0.500	F	Reverse Bevel 6 Holes Counterbored C-C 2.687, C-B 1.312	2	CA16FA3
1416, 4, 490, 485	16.000	3.312	0.500	F	Keen Edge 4 Holes Counterbored	3	CA16FD3
4, 6	2.000	3.313	0.500	F	2 Holes Counterbored	32	C2F3
1416, 4, 490, 485, 1216	16.250	2.812	0.500	B	5 Slots 2 Open Holes Longer Slots (2.750 C-C) use C16BA	2	CA16B3
	16.250	2.812	0.500	B	5 Slots 2 Open Holes	2	CA16BB3
18	17.750	1.875	0.500	F	Radial Rotor 6 Holes	5	CC17F3
18	18.000	2.875	0.625	B	6 Slots 2 Tapped Dowels	2	CC17B3
584, Chevron, Twinshear	9.897	3.312	0.500	F	Keen Edge Right Hand 3 Holes Counterbored	3	C10FR3
584, Chevron, Twinshear	9.897	3.312	0.500	F	Keen Edge Left Hand 3 Holes Counterbored	3	C10FL3
584, Chevron	10.062	2.750	0.500	B	3 Slots	3	CA10BB3
584, 585	20.000	3.125	0.500	F	Reverse Bevel 7 Holes Counterbored	1	CA20FD3
584, 585 (R/B is CA20FH)	19.990	3.220	0.500	F	Keen Edge 5 Holes Counterbored (Angle Right)	3	CA20FE3
584, 585	20.250	2.750	0.500	B	With 7 Slots 3 Notches	1	CA20BB3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
584	20.250	2.750	0.500	B	7 Slots No Bevel	1	CA20BA3
584	20.000	3.220	0.375	F	5 Holes Reverse Bevel Short on Right Side	1	CA20FF3
584, 585	20.240	2.750	0.500	B	7 Slots No Bevel	2-3	CA20BE3
584, 585	20.000	3.187	0.500	F	Keen Edge 7 Holes Counterbored	1	CA20FG3
584, 585	20.240	2.750	0.500	B	Keen Edge 7 Slots	1	CA20BC3
584, 585	20.000	3.220	0.500	F	Reverse Bevel 5 Holes Counterbored Angle Rt. (same as CA20FE Keen Edge)	1	CA20FH3
X1000	20.000	4.291	0.750	F	Left Hand Reverse Bevel 4 Holes	3	CA20AL3
X1000	20.000	4.291	0.750	F	Rt. Hand Reverse Bevel 4 Holes	3	CA20AR3
1220, 1420, 5, 14x12	20.000	2.967	0.620	F	Reverse Bevel 7 Holes Counterbored	1	CA20FK3
1220, 1420, 5, 14x12	20.000	3.050	0.870	B	7 Slots 2 Tapped Holes	1	CA20BD3
1220, 1420, 5, 14x12	20.000	3.000	0.500	F	Reverse Bevel 7 Holes Counterbored	2	CA20FA3
1220, 1420, 5, 14x12, 585	19.990	3.220	0.500	F	Reverse Bevel 5 Holes Counterbored	2	CA20FB3
1220, 1420, 5, 14x12	20.250	2.812	0.500	B	7 Slots 3 Open Holes	2	CA20B3
1420, 585, 5, 1220, 14x12	20.000	3.250	0.500	F	Keen Edge 5 Holes Counterbored	1	CA20FC3
1220, 1420, 5, 14x12	20.000	3.312	0.500	F	Keen Edge 5 Holes Counterbored	6-10 -14	CA20FJ3
20	20.000	2.312	0.625	F	Keen Edge	1	C20A3
20	20.000	2.320	0.625	F	Radial Rotor 7 Holes	3-5-7	CC20F3
20	19.970	3.375	0.875	B	7 Slots 2 Tapped Holes (15 Bevel)	1	CC20B3
	19.970	3.375	0.875	B	7 Slots 2 Tapped Holes (8 Bevel)	1	CC20BA3
20, 1837	20.000	2.031	1.250	F	Hook Fly 7 Holes	1	C20FE3
20, (Old)	20.000	3.250	0.625	F	7 Holes	1	CC20FA3
18, 37, 20	28.750	3.312	0.656	F	Reverse Bevel 4 Holes	1	C29F3
1524-24	24.000	2.812	0.625	F	Radial Rotor 8 Holes (15 Degree)	3-5	CB24FA3
1524-24	24.375	3.312	0.625	B	7 Slots 2 Tapped Dowels 3/4" Slot	2	CB24BC3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
	24.000	3.344	0.625	F	Radial Rotor 5 Holes Counterbored	1	CB24FC3
1524-24 #80, 24B-MED	24.000	3.250	0.625	F	Reverse Bevel 5 Holes Counterbored	3-5	C23FE3
1524-24, #80	24.000	3.343	0.625	F	Keen Edge 5 Holes Counterbored	3-5	CB24F3
1524	23.990	2.812	0.625	F	Radial Rotor 8 Holes (8 Degree)	3-5	CB24FD3
1524	24.365	3.312	0.625	B	7 Slots 2 Tapped Dowels $\frac{3}{4}$ Slot 8 Degree	1	CB24B3
1524	24.365	3.312	0.625	B	7 Slots 2 Tapped Dowels $\frac{7}{8}$ " Slot	2	CB24BA3
#80, #80-85	25.000	2.875	0.500	B	7 Slots	1	C24B3
1524, #80, #80-85	24.000	3.250	0.625	F	Reverse Bevel 5 Holes	1	CB24FB3
24B	24.000	3.625	0.875	F	Reverse Bevel 5 Holes Counterbored	1	C24FC3
24B	24.375	3.000	0.625	B	7 Slots 2 Tapped Dowels	1	C25B3
24 HS Rotor	24.000	3.625	0.875	F	Reverse Bevel 5 Holes Counterbored	1	C24FF3
2415, HOG	24.365	3.812	0.625	B	7 Slots 2 Tapped Dowels	1	C24BA3
2415, HOG	12.000	2.785	0.500	F	4 Holes Counterbored Reverse Bevel	1	C12FC3
24RR, 1524	24.000	2.750	1.125	F	Hook Fly 8 Holes Radial Rotor	1	C24FE3
1426-I	13.160	3.437	0.625	F	Reverse Bevel Left Hand 3 Holes Counterbored	3	C13FL3
1426-I, 1-5 CUT/BLWR	13.170	3.437	0.625	F	Reverse Bevel Rt. Hand 3 Holes Counterbored	3	C13FR3
1426-I	13.170	3.437	0.625	F	Keen Edge Left Hand 3 Holes Counterbored	1	C13FLA3
1426-I	13.170	3.437	0.625	F	(Same as C13FLA) Keen Edge Right Hand 3 Holes Counterbored	1	C13FRA3
1426-I	13.177	2.531	0.500	B	3 Slots	4	CA13BA3
1426-I	13.063	2.750	0.510	B	3 Slots No Bevel	1	CA13BB3
684, 1426	13.093	3.250	0.500	F	Rt. Hand Reverse Bevel 3 Holes Counterbored	2	C13FAR3
684, 1426	13.093	3.250	0.500	F	Left Hand Reverse Bevel 3 Holes Counterbored	2	C13FAL3
684, 1426, 284	13.187	3.250	0.500	F	Right Hand Keen Edge 3 Holes Counterbored	3	CA13FR3
684, 1426, 284	13.175	3.250	0.500	F	Left Hand Keen Edge 3 Holes Counterbored	3	CA13FL3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
684 Special	13.175	3.250	0.500	F	Keen Edge 35 Counterbored Left Hand Slots	1	CA13LA3
684 Special	13.175	3.250	0.500	F	Keen Edge 35 Counterbored Right Hand Slots	1	CA13RA3
684, 1426	13.175	2.781	0.500	B	3 Slots No Bevel	4	CA13B3
1426, HOG, 3250	25.125	3.812	0.875	B	6 Slots 2 Tapped Dowels 2 Holes	1	C26B3
3250	11.250	4.312	1.250	F	Keen Edge 4 Holes Counterbored	25	C12BB3
2815H, 28H	5.365	4.023	1.187	F	Reverse Bevel 2 Holes Counterbored	1	C6F3
1836, 1836 I	11.990	3.793	0.500	F	Reverse Bevel 3 Holes	9	C12FL3
1836, 1836 I	12.130	3.870	0.500	B	Double 4 Slots Cutting Edge	6	C12BD3
1836	31.500	4.000	1.125	F	Low Shear 10 Holes	9	C32F3
1836	32.000	4.500	1.125	B	10 Open Slots	6	C32B3
1828-28	13.990	2.703	1.100	F	Hook Fly 5 Holes	1	C14F3
1828-28	13.937	3.312	0.500	F	Radial Rotor 5 Slots	6	CB28FA3
	27.990	4.291	0.750	F	Reverse Bevel 5 Holes Counterbored	3-5	C28FB3
1828-28	28.000	4.339	0.750	F	Keen Edge 5 Holes (Most Popular)	3-5	CB28F3
1828-28	18.500	4.219	0.750	F	Reverse Bevel 6 Holes	1	C19FA3
1828-28, 28B	28.312	3.812	0.875	B	8 Slots 3 Tapped Dowels (Most Popular)	2	CB28B3
	18.522	4.125	1.125	F	Reverse Bevel 4 Holes Counterbored	1	C19FB3
1828-28, 28B	28.000	4.338	1.125	F	Reverse Bevel 5 Holes Counterbored	1	C28FC3
1828-28	13.990	3.312	1.100	F	Hook Fly 5 Holes	1	C14HF3
24H	20.875	3.312	1.187	F	5 Holes Counterbored Reverse Bevel	1	C20FG3
24H	20.875	3.312	1.187	F	Reverse Bevel 5 Holes Counterbored Notched	1	C20FJ3
24T	6.250	2.875	0.500	F	Keen Edge 2 Holes Right Hand	1	C6FR3
24T	6.250	2.875	0.500	F	Keen Edge 2 Holes Left Hand	1	C6FL3
24T	25.000	2.834	0.500	F	Keen Edge 6 Holes	1	C25F3
24T	26.413	2.795	0.500	B	6 Slots 2 Tapped Dowels	1	C27B3

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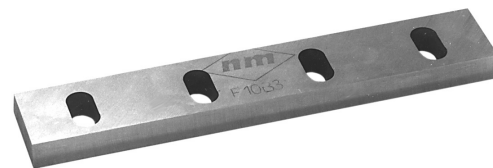
Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
24x28	14.133	3.307	0.593	B	Right Hand 4 Slots 2 Tapped Holes	1	C14BR3
24x28	14.133	3.307	0.593	B	Left Hand 4 Slots 2 Tapped Holes	1	C14BL3
24x28 CHEVRON	14.082	4.238	0.750	F	Reverse Bevel 3 Holes LH Counterbored	1	C14FAL3
24x28	14.156	4.238	0.750	F	High Shear Left Hand 3 Holes Counterbored Slants Left	3	C15FAL3
24x28 (See C14FAR)	14.156	4.238	0.750	F	High Shear Right Hand 3 Holes Counterbored Slants Left	3	C15FAR3
24x28 CHEVRON	14.082	4.238	0.750	F	Reverse Bevel Rt. Hand 3 Holes Counterbored Slants Right	1	C14FAR3
24x28	14.000	4.238	0.750	F	Reverse Bevel 3 Holes Counterbored Rt. Hand	1	C14FBR3
24x28	14.000	4.238	0.750	F	Reverse Bevel 3 Holes Counterbored Left Hand	1	C14FBL3
#30	15.000	2.875	0.625	F	Radial Rotor 5 Holes	6-10	CC15FB3
#30	15.032	2.781	1.125	F	Hook Fly 5 Holes	1	C16HF3
#30	15.062	4.250	0.750	F	Keen Edge 5 Holes Counterbored	6-10	CC15F3
#30	15.062	2.875	0.750	F	Keen Edge 5 Holes Countersunk	4	CC15FA3
#30	15.187	3.812	0.875	B	5 Slots 2 Tapped Dowels	4	CC15B3
#30	15.187	3.812	0.875	B	5 Slots 2 Tapped Holes	1	CC15BA3
30	15.748	3.268	0.669	F	Keen Edge 4 Holes Counterbored	1	CC15BB3
30T	15.313	3.303	0.671	F	Keen Edge 4 Holes Counterbored	1	CC15BC3
	16.000	2.763	0.617	B	4 Slots	1	CC15BD3
30T	16.250	2.812	0.500	B	5 Slots	1	CA17B3
30T, 56T	28.500	3.312	0.688	F	Reverse Bevel Left Hand 6 Holes Counterbored	1	C28FBL3
30T, 56T	28.500	3.312	0.688	F	Reverse Bevel Rt. Hand 6 Holes Counterbored	1	C28FBR3
4284	15.927	3.218	0.375	F	4 Holes Slant on Rt. Side Reverse Bevel	1	C16FG3
30T, 56T	28.490	3.307	0.687	F	Keen Edge Right Hand 6 Holes Counterbored	1	C28FAR3
30T, 56T	28.500	3.307	0.687	F	Keen Edge Left Hand 6 Holes Counterbored	1	C28FAL3
30T, 56T	29.000	2.750	0.625	B	6 Slots 2 Tapped Dowels	1	C29B3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
56T	28.937	2.720	0.625	B	Right Hand 6 Slots 2 Tapped Dowels	1	C29BR3
56T	28.937	2.765	0.625	B	Left Hand 6 Slots 2 Tapped Dowels	1	C29BL3
56T	19.312	2.765	0.619	B	4 Slots 2 Tapped Holes No Bevel	1	C20B3
1837	18.500	3.312	0.500	F	(No Bevel) 6 Slots	6-10 -14	C19FC3
	18.500	3.750	0.750	F	Radial Rotor 6 Holes	1	C19RR3
1837	18.490	3.312	0.500	F	6 Slots 8 Bevel	6-10 -14	C19FD3
	18.552	4.312	1.125	F	Right Hand 4 Holes Counter- bored Reverse Bevel	1	C18RB3
1837-37, 8185, (3KN ROTOR), 37H, 37B	18.562	4.239	0.750	F	Right Hand Keen Edge 4 Holes Counterbored	5-6 -10	C18FAR3
1837-37, 8185, (3KN ROTOR), 37H, 37B	18.562	4.239	0.750	F	Left Hand Keen Edge 4 Holes Counterbored	5-6 -10	C18FAL3
1837-37, 37H, 8185	18.562	4.234	0.750	F	Reverse Bevel 4 Holes Counterbored Rt. Hand (Bigger CB)	1	C18FBR3
1837-37	17.625	4.239	0.750	F	Reverse Bevel 4 Holes Counterbored	1	C18FA3
1837-37, 37H, 8185	18.562	4.234	0.750	F	Reverse Bevel 4 Holes Counterbored Left Hand (Bigger CB)	1	C18FBL3
37	18.562	4.340	0.750	F	Low Shear 4 Holes Counterbored	1	CB18FD3
1837	18.500	2.547	1.016	F	Hook Fly 6 Holes	1	CB18HF3
1737-37, 37H, 37B	18.750	3.812	0.875	B	5 Slots 2 Tapped Dowels (33 Degree Downstroke)	4-5 -6-10	CB18BA3
	12.140	2.240	0.500	B	4 Slots Open 50 Degree Bevel	1	C12BE3
1837-37	18.740	3.812	0.875	B	Reverse Bevel 5 Slots 2 Tapped Dowels Downstroke	1	CB18B3
37B, 37, HOG	18.552	4.312	1.125	F	Left Hand 4 Holes Counter- bored Reverse Bevel	6	CB18FL3

B



Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
	18.562	4.320	1.125	F	Left Hand, 4 Counterbored Holes, Reverse Bevel	1	CB19FL3
	18.562	4.320	1.125	F	Right Hand, 4 Holes Counterbored Reverse Bevel	1	CB19FR3
37B	18.552	4.312	1.125	F	Reverse Bevel Rt. Hand 4 Holes Counterbored	1	CB18FR3
37, HOG	7.250	3.687	1.187	F	3 Holes Counterbored	1	C7FA3
37, HOG	18.740	4.253	0.875	B	5 Slots 2 Tapped Dowels (8 Degree Upstroke)	1	C18BD3
1462, 37H	7.250	3.700	1.186	F	Reverse Bevel 3 Holes Counterbored	1	C7FB3
1462, 37H	18.688	3.750	0.875	B	Reverse Bevel 5 Slots Tapped Dowels Downstroke	1	CB18BF3
1462, 37H	18.688	4.250	0.875	B	5 Slots Tapped Dowels Downstroke	1	CB18BB3
37F	33.865	3.615	1.375	F	Hook Fly 8 Holes Counterbored	8	C34HF3
37	18.562	4.340	0.750	F	4 Holes Counterbored Reverse Bevel	1	CB18FC3
3715	7.240	3.953	1.187	F	3 Holes Counterbored	1	C7FC3
	18.740	4.250	0.875	B	5 Slots 2 Tapped Dowels	1	CB18BC3
3715H	18.750	3.468	0.875	B	6 Slots 2 Tapped Dowels	1	CB18BD3
1462	30.630	4.250	1.093	F	Reverse Bevel Rt. Hand 6 Holes Counterbored	1	CB31F3
1462	15.968	4.250	0.787	B	5 Slots 2 Tapped Dowels	1	C15B3
43	21.500	3.000	0.813	F	Radial Rotor 6 Holes	6	CC21FA3
43	21.687	3.812	0.875	B	6 Slots 2 Tapped Holes	1	CC21B3
5018	8.110	3.687	1.187	F	3 Holes	36	C8F3
	25.000	3.165	0.500	F	No Bevel 8 Slots (RC 59-61)	1	C25FA3
50H	8.125	3.687	1.187	F	Reverse Bevel 3 Holes Counterbored	1	C8FA3
50F	25.187	3.812	1.375	B	6 Slots 2 Tapped Holes	1	C25BC3
50F	23.000	3.312	1.187	F	Left Hand Reverse Bevel 5 Holes Counterbored	1	C23FAL3
50F	23.000	3.312	1.187	F	Rt. Hand Reverse Bevel 5 Holes Counterbored	1	C23FAR3
12x24	23.000	2.812	0.625	F	Keen Edge 9 Holes	1	C23FB3
12x24	23.937	3.125	0.875	B	8 Slots 2 Tapped Dowels	1	C23BB3
50F	23.000	3.312	1.187	F	C23FAL notched	1	C23FNL3
50F	23.000	3.312	1.187	F	C23FAR notched	1	C23FNR3

Granulator Knives



GRANULATOR KNIVES

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B

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Cumberland (cont.)							
2050-50	25.000	4.250	0.750	F	Reverse Bevel 5 Holes Counterbored	6-10 -14	CB25F3
2050-50, 50T	25.000	3.312	0.500	F	8 Slots Radial Rotor No Bevel	6-10 -14	CB25FA3
2050-50	25.000	4.312	0.750	F	Keen Edge 5 Holes Counterbored	6-10 -14	CB25FD3
2050-50, 50B, 50H, 50T	25.187	3.812	0.875	F	6 Slots (Upstroke) 2 Tapped Dowels (use with K26500) Keen Edge Style	4	CB25B3
	25.000	4.588	1.125	F	5 Holes Counterbored Reverse Bevel	1	CB25RBA3
2050	25.125	3.810	0.880	B	6 Slots 2 Tapped Dowels	4	CB25BA3
50	25.000	4.465	0.625	F	Keen Edge 5 Holes Counterboard Rt. Hand	1	C25FAR3
50	25.000	4.465	0.625	F	Keen Edge 5 Holes Counterboard	1	C25FAL3
2050B, 50B	25.000	4.375	1.125	F	Reverse Bevel 5 Holes Counterbored High Shear Rotor	1	C24FD3
2050-50, 50H	25.146	3.815	0.875	B	(Downstroke) 6 Slots 2 Tapped Dowels (use with CB25B) Reverse Bevel Style	1	C24BB3
50B	25.000	4.320	1.125	F	5 Counterbored Holes Reverse Bevel	1	C24FG3
	27.990	4.291	0.750	F	5 Counterbored Holes Keen Edge	1	C28FD3
1456	28.713	4.335	0.787	F	Keen Edge Right Hand 6 Holes Counterbored	3	C28FR3
1456	28.713	4.335	0.787	F	Keen Edge Left Hand 6 Holes Counterbored	3	C28FL3
1456	28.927	4.125	0.750	B	6 Slots 2 Tapped Dowels	4	C29BA3
66T	34.048	2.772	0.625	B	6 Slots 2 Tapped Dowels	1	CA34B3
66T	33.559	3.290	0.687	F	7 Holes Counterbored	1	CA34F3
	9.937	1.625	0.375	F	4 Holes Keen Edge	1	CA10F3



Granulator Knives

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Flinchbaugh							
57	6.500	2.375	0.437	F	3 Holes Keen Edge	2	L7F3
79	9.000	2.375	0.437	F	High Shear 5 Holes	2	L9F3
79	9.000	1.437	0.375	B	5 Open Slots	2	L9B3
911	11.000	2.875	0.562	F	High Shear 6 Holes	1	L11F3
911	11.000	2.875	0.562	F	Reverse Bevel 6 Holes	2	L11FA3
911	11.000	1.875	0.500	B	5 Open Slots	2	L11B3
1425 HOG	12.000	3.875	0.937	F	Keen Edge 4 Holes	6	L24F3
1425 HOG	12.490	3.875	0.937	B	4 Open Slots	4	L24B3
1437, 1425, 1850	12.250	3.875	0.687	F	Keen Edge 3 Holes	6	L25F3
1437, 1425, 1856	12.490	2.750	0.687	B	4 Open Slots	4	L25B3
1437, 1425, 1850	12.490	2.750	0.687	B	Same as L25B w/ Closed Slots	4	L12B3
1214	13.500	3.312	0.562	F	High Shear 5 Holes	2	L14F3
1214	13.500	1.937	0.562	B	5 Open Slots	2	L14B3
1219	18.500	3.375	0.562	F	High Shear 7 Holes	2	L19F3
1219	18.500	1.937	0.562	B		1	L19B3
1022	21.000	2.875	0.687	F		1	L22F3
Foremost							
SG-80, SG300	8.000	1.937	1.187	F	Hook Fly Reverse Bevel 3 Holes	1	F8HF3
56-80, SG300	8.000	1.937	0.625	B	4 Slots	1	F8BA3
2A-1, 2A-3, 2A-4, 5C-1, 2A-2	8.000	2.218	0.500		Fly/Bed 3 Holes Countersunk	2-4	F8FB3
Y8301-63C, 1008MS	9.500	2.625	0.500	F	Reverse Bevel 2 Holes	1	F10FA3
	11.000	1.937	1.187	F	Hook Fly 5 Holes	1	F11HF3
	11.000	2.500	0.625	B	5 Slots	1	F11B3
HD1, HD3, HD5, QG1010, MS10, MS20, 10x11, X7301-15, 56100, 56400	9.990	1.937	1.187	F	Hook Fly 4 Holes	2	F10H3
HD1, HD3, HD5, MS10, QG1010, MS20, 10X11, SRG810, X7301-14, 56100, 56400	10.000	1.937	0.625	B	4 Slots	2	F10B3
	14.000	1.937	0.625	B	5 Slots Single Bevel	1	F14BB3
SHD-5	11.000	3.875	0.875	F	Keen Edge 2 Holes	1	F11F3
HD5, QG1010, SG400	20.000	2.250	0.625	B	8 Slots	1	F20B3
HD5B	20.000	3.688	1.000	F	Reverse Bevel 4 Holes Counterbored	1	F20F3
HD1, MS20	20.000	1.937	1.187	F	Hook Fly 8 Holes	1	F20HF3
SK810, SRG810	10.000	2.250	0.500	F	2 Slots	1	F10F3
	9.990	1.937	0.625	B	4 Slots	1	F10BA3
6A, 6B, HD8	12.000	2.187	1.187	F	Hook Fly 4 Holes	4	F12H3
6B, HD8	23.968	2.250	0.625	B	8 Slots	2	F24B3
HD8	36.000	3.000	1.000	B	9 Slots (Fly is F12HFA)	1	F36B3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Foremost (cont.)							
HD6, HS18, MS18, SCMS18, SMS18, SG300, QG1814, 6A	18.000	1.937	1.187	F	Hook Fly with 6 holes (Recessed to 3/16")	2	F18H3
HD6, HS18, 6A, MS18, SCMS18, SMS18, QG1814	18.000	2.250	0.625	B	6 Slots	2	F18B3
SHD8	12.865	3.763	0.875	F	3 Holes Keen Edge	1	F13FB3
HD7	13.000	3.875	0.875	F	3 Holes Keen Edge	1	F13F3
HD7	24.000	3.000	1.000	B	6 Slots Single Bevel	1	F24BA3
6-B, 6-A	23.968	3.250	0.625	B	8 Slots Single Bevel	1	F24BB3
6-B	11.990	2.187	1.187	F	Hook Fly 4 Holes	1	F12HF3
6A, 6B, 1624	12.000	2.250	0.625	B	4 Slots 2 Tapped Dowels	4	F12B3
3C-2, 3E-1, MS12, X7202-30	12.000	2.218	0.500		Fly/Bed 4 Holes Countersunk	2	F12FB3
S3E-1A, 3C-2, MS12, 11 1/2" HS	11.500	2.625	0.500	B	Reverse Bevel 4 Holes	1	F12BA3
	11.990	2.250	1.250	F	Hook Fly 4 Holes	1	F12HF3
Pipe cutter PL5431	12.000	2.125	1.125	F	Hook Fly 4 Holes	1	F12HFA3
13 1/2" HS	13.500	2.625	0.500		Fly/Bed	1	F14FBA3
	13.500	2.625	0.500	F	Reverse Bevel 4 Holes	1	F14RB3
DSC-14, S45	14.000	2.250	0.500	F	Keen Edge 5 Tapped Holes	1	F14FB3
DSC-14	14.000	1.937	0.500	B	Keen Edge 5 Tapped Holes	1	F14BA3
S30, S45, HD4	15.000	4.000	1.000	B	5 Tapped Holes	6	F15B3
S45, S30, PG2415, HD4	14.985	4.000	1.000	B	5 Tapped Holes	6	F15FA3
545, 230, PL2415, H04	14.985	5.594	1.000	B	5 Tapped Holes Double Cutting Edge	1	F15BA3
3030	15.000	3.750	0.875	B	4 Slots No Bevel Slants Left	1	F15BB3
S45, S30, 3030	15.000	3.875	0.875	B	4 Slots No Bevel	1	F15BC3
3030/3048	14.802	3.875	0.875	F	Keen Edge Left Hand 3 Holes	1	F15FB3
HD2, HD4, 2H, SG500, SG400, QG1410, MS14, MS28, SG200, HD44, DSC-14, X7302-20	14.000	1.937	1.187	F	Hook Fly 5 Holes	2-4	F14H3
SG200, MS14, QG1410, HD2, SG400, HD4, MS28, 2H, X7302-19, HD44, DSC-14	14.000	1.937	0.625	B	5 Slots (Possible F14BB)	2	F14B3



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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Foremost (cont.)							
HD4	14.000	1.750	0.625	F	5 Holes 10 Degree Bevel Radial Rotor	1	F14FC3
HD2	13.990	1.937	0.625	B	5 Slots 1 End Tapered (Possible F14B)	9	F14BB3
15½" HS, 5CL	15.500	2.625	0.500	F	Reverse Bevel 5 Holes	8	F15RB3
5CI, 16" SHEAR	16.000	2.187	0.500		Fly/Bed 6 Holes Countersunk	2	F16FB3
	16.000	2.750	0.500	F	Reverse Bevel 5 Slots	1	F16RB3
17" HS	17.500	2.625	0.500		Fly/Bed	1	F17FB3
	17.500	2.625	0.500	F	Keen Edge 5 Holes	1	F17F3
	17.990	2.250	0.625	B	6 Slots (Larger Slots)	1	F17B3
Gloucester							
68, 68BPS	7.500	2.937	0.468	F	Reverse Bevel 4 Holes	2	G7F3
68, 68BPS	7.875	2.437	0.468	B	Reverse Bevel 4 Slots	1	G7B3
68	7.535	2.910	0.500	F	Reverse Bevel 3 Holes	1	G7FA3
1012	11.875	3.937	0.562	F	Reverse Bevel 6 Holes	2-3	G10FA3
1012BL10	11.500	3.937	0.562	F	Reverse Bevel 6 Holes	1	G10F3
1012BL10	11.875	3.375	0.562	B	6 Slots	1	G10B3
BP10	11.750	3.937	0.562	F	Reverse Bevel 6 Holes	1	G12F3
1416BP20	15.875	2.906	0.562	B	6 Slots	1	G15B3
1416BP20	15.750	3.715	0.562	F	Reverse Bevel 5 Holes	1	G15FA3
1218	17.312	3.950	0.562	F	7 Holes Reverse Bevel	1	G17F3
1218	17.500	3.937	0.562	F	Reverse Bevel 5 Holes	3	G17FA3
1218	17.875	3.000	0.562	B	7 Slots	1	G17B3
1420BP	19.740	3.937	0.555	F	Reverse Bevel 5 Holes	1	G19F3
1420BP	19.312	3.812	0.562	F	Reverse Bevel 5 Holes 3 Degrees Low Shear	1	G19FB3
1420, BP30	19.677	3.750	0.562	F	Reverse Bevel 6 Holes	1	G19FA3
1420, BP30	19.875	3.000	0.562	B	8 Slots	1	G19BA3
1225	24.875	3.875	0.562	F	Reverse Bevel 5 Holes	1	G25F3
1225	24.875	3.000	0.562	B	9 Slots 2 Tapped Dowels	2	G25B3
250, 50TP10	24.750	2.937	0.468	F	Reverse Bevel 9 Holes	6	G24F3
250, 50TP10	24.927	2.437	0.468	B	9 Slots 2 Tapped Dowels	2	G24B3
1428, HD60, B21005023	27.625	3.875	0.687	F	Keen Edge 5 Holes	1	G28F3
1428, HD60 B21005024	27.985	3.875	0.687	B	8 Slots	1	G28BA3
1428	28.000	3.906	0.687	B	8 Slots 2 Tapped Dowels	2-4	G28B3
1416BP15	15.800	3.937	0.562	F	4 Holes	1	G15F3
30TD10	29.865	2.880	0.437	F	Reverse Bevel 10 Holes	1	G29F3
30TD10	29.927	2.375	0.437	B	10 Slots 2 Tapped Holes Single Bevel	1	G29B3
1416BP15	15.800	3.937	0.562	F	4 Holes	1	G15FB3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Granutec							
66 (A66-0015-2)	5.865	1.500	0.250	B	3 Slots	1	GR6B3
66 (A66-0010-3)	5.865	2.375	0.375	F	2 Holes	1	GR6F3
810-AM A810-002-3	9.906	2.375	0.500	F	High Shear 2 Holes Counterbored	1	GR10F3
810	9.906	2.375	0.500	F	Reverse Bevel 2 Holes Counterbored	1	GR10FA3
810-AM A810-0003-2	9.875	1.750	0.375	B	4 Slots	1	GR10B3
1012TFG, 1012HN15	11.875	2.125	0.375	B	5 Slots	1	GR12B3
1012TFG, 1012HN15	11.875	2.312	0.500	F	2 Holes Counterbored	1	GR12F3
A1216	15.875	3.500	0.625	F		1	GR16F3
TSG1624, 1616/1612	15.875	3.625	0.625	F	High Shear 4 Holes	1	GR16FA3
	15.688	3.625	0.625	F	High Shear 4 Holes	1	GR16FB3
A1216	15.813	2.375	0.500	B	5 Slots Double Cutting Edge	1	GR16B3
PE.I.	16.000	3.000	0.719	F	High Shear 4 Holes	1	GR16FC3
TSG1424-50, TSG1624	23.890	3.630	0.625	F	High Shear 6 Holes	1	GR24F3
TSG1424-50, TSG1624	23.890	3.630	0.625	F	Reverse Bevel 6 Holes	1	GR24RB3
TSG1424-50, TSG1624	23.890	2.375	0.500	B	7 Slots Double Cutting Edge	1	GR24B3
Herbold							
	10.625	3.937	0.866	F	2 Slots 3 Tapped Dowels	1	H11F3
	11.654	3.937	0.866	B	3 Slots 4 Tapped Dowels	1	H11B3
	11.654	3.858	0.866	B	Double Cutting Edge 3 Slots 4 Tapped Dowels	1	H12B3
	18.500	2.760	0.630	F	3 Slots 6 Tapped Holes	1	H19F3
	15.150	3.989	0.862	B	3 Slots 4 Tapped Holes	1	H15B3
45/100, SMS 80/120	19.236	3.937	0.875	B	3 Slots 4 Tapped Dowels	1	H20B3
45/100, SMS 80/120	19.093	3.937	0.875	F	Keen Edge 3 Slots 4 Tapped Dowels	14	H20F3
45/100	39.173	3.937	0.866	B	Double Cutting Edge 4 Tapped Dowels	1	H40B3
	19.093	3.937	0.875	F	3 Slots 4 Tapped Dowels 4 Degree Angled Ends	1	H20FA3
	18.585	3.937	0.866	F	Reverse Bevel 3 Holes Counterbored	1	H19RB3
45/100 SMS 80/120	19.330	3.346	0.630	B	4 Slots 4 Tapped Dowels	4	H19B3
SMS 80/60	23.425	3.937	0.866	B	6 Slots 4 Tapped Dowels Double Cutting Edge	1	H24B3



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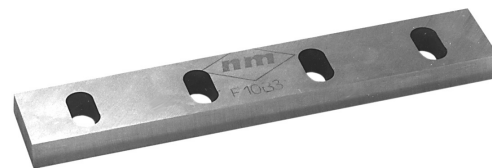
Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Herbold (cont.)							
	22.362	3.937	0.866	F	3 Slots 4 Tapped Holes Angled Ends	1	H24F3
	22.362	3.937	0.866	F	3 Slots 4 Tapped Holes Reverse Bevel Slant on Right and Left side	1	H24RB3
80/60	15.748	3.937	0.866	B	4 Slots 4 Tapped Holes Double Cutting Edge	1	H16B3
	15.157	3.937	0.866	F	3 Slots High Shear 4 Tapped Dowels	1	H16F3
IMS							
A120SC, A144SC, A288SC, AGA120SC, AGU120SC, LP120SC, LP144SC, LP288SC	1.937	1.750	0.562	F	1 Hole Countersunk (use M8BA Bed)	1	M2F3
	1.406	1.437	0.468	F	1 Hole Countersunk	1	M2FA3
A86C, A187SC, LP86SC, LP187SC, AG86KHSC, AG866SC, AG868SC	2.125	1.750	0.562	F	1 Hole Countersunk (.687 Hole)	1	M3F3
Same as M3F Except Hole Size	2.125	1.750	0.562	F	1 Hole Countersunk (.375 Hole)	1	M3FA3
	2.125	2.500	0.813	F	Keen Edge 1 Hole Countersunk (.687 Hole)	1	M3FB3
LP288SC	2.125	2.500	0.562	F	1 Hole Countersunk Double Cutting Edge	1	M3FC3
LP86, A86, AG86	8.365	2.375	0.468	F	Reverse Bevel 4 Slots 2 Tapped Dowels	1	M8FD3
2031P	4.865	1.687	0.468	F	Reverse Bevel 2 Holes Countersunk	1	M4F3
2031P	4.968	1.531	0.468	B	2 Slots 2 Tapped Dowels	1	M4B3
2049	7.000	1.750	0.468	F	Reverse Bevel 2 Holes Countersunk	1	M7FA3
2049 SERIES M1, M2, M3, G1, G2, G3, K3	7.000	1.312	0.468	F	Radial Rotor 2 Holes	2	M7F3
2049 SERIES M1, M2, M3, G1, G2, G3, K3	7.250	1.343	0.500	B	2 Open Slots 2 Tapped Dowels	1	M7B3
2049 SERIES	6.990	1.312	0.468	F	Reverse Bevel 2 Holes Radial Rotor	1	M7FB3
Same as M7B Except Smaller Slots	7.250	1.343	0.500	B	2 Open Slots 2 Tapped Dowels	1	M7BA3
G466	8.375	2.250	0.500	F	Reverse Bevel 3 Holes Countersunk 2 Tapped Dowels	1	M8FE3

Granulator Knives



GRANULATOR KNIVES

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
IMS (cont.)							
2069	8.422	2.250	0.500	F	Reverse Bevel 3 Holes 2 Tapped Dowels Countersunk	1	M8FA3
2046 SERIES, 3040SP, LP86, 3046, K4, G4, XD1, M4 SERIES, GL2086 use M8FB	8.500	2.250	0.468	F	Reverse Bevel 3 Holes Countersunk	2-3	M8FCC3
2086, GLP2086, GLH2086, GAU26, GAA16CF, GAU46, 1030LB-SPH, 1030LB, 1030CP, 1030CP-SPH, CPGAU26, 2173, K1710K9, CPGAA16CF, K1085, K6, GLU-4173, GLS-4173, GHU4173, GHS4173	8.500	2.250	0.468	B	Bed/Fly Reverse Bevel 3 Holes Countersunk 2 Tapped Dowels (use M8B Bed)	2-3 -4	M8FB3
K6, 2086	8.500	2.250	0.468	F	Keen Edge 3 Holes Countersunk	2	M8FF3
K6, 2086, A86, 2086SP, 2173SP, A120SC, A144SC, A288SC, AGA120SC, AGU120SC, LP120SC, LP144SC, LP288SC	8.593	2.875	0.515	B	3 Slots 2 Tapped Dowels (15 Degree Angle)	2	M8B3
A187-SP, A187	8.250	3.375	0.625	F	Reverse Bevel 4 Slots 2 Tapped Dowels	4	M9F3
A187-SP, A187	8.500	3.375	0.625	B	Keen Edge 3 Slots 2 Tapped Dowels	4	M9B3
A86SPO	8.375	2.250	0.500	F	Reverse Bevel 4 Slots 2 Tapped Dowels	1	M8FC3
A86SPO	8.568	2.875	0.500	B	3 Slots 2 Tapped Dowels (55 Degree angle)	1	M8BA3
	8.450	2.250	0.468	F	Reverse Bevel 3 Holes Counterbored 2 Tapped Holes	1	M9FA3
285, AGU120	11.610	2.438	0.470	F	High Shear Reverse Bevel 4 Holes Counterbored	1	M11FB3
285-2120, AGU120	11.968	2.500	0.500	B	3 Slots 2 Tapped Dowels	1	M11B3
G566R	11.750	3.375	0.625	F	Keen Edge 4 Holes Countersunk	1	M11FE3



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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
IMS (cont.)							
2028, 2056	27.990	4.338	0.875	F	High Shear 5 Holes Counterbored	6	M28F3
	11.937	3.500	0.625	B	3 Slots 2 Tapped Dowels	1	M12B3
LP120, A120-3, AGU120	11.750	2.750	0.562	F	Reverse Bevel 4 Slots 2 Tapped Dowels	1	M12FA3
LP-120, A120-3, AGU120	11.943	2.875	0.500	B	3 Slots 2 Tapped Dowels	1	M12BD3
M5, XD2, G5, M10, 2144SPO, K5, 2120, 3144, G566R, 12" AUGER	11.875	3.500	0.625	F	Reverse Bevel 4 Holes Countersunk	2-3	M12FB3
M5, XD2, G5, M10, 2144SPO, K5, 2120, 3144, G566R, 12" AUGER, CP300	11.990	3.500	0.625	B	Radial Rotor 3 Slots 2 Tapped Dowels	2	M11D3
A144-3, 25P, A-288SP, G566R, LP144-3, A144, LP144-MH	11.740	3.437	0.625	F	Reverse Bevel 4 Slots 2 Tapped Dowels	2-3	M12F3
A144-3, 35P, A-288SP, A144, LP144-3, LP144-MH	11.937	3.437	0.625	B	3 Slots 2 Tapped Dowels	1	M12BA3
	11.937	3.500	0.625	F	4 Holes Countersunk 2 Tapped Dowels	1	M12FD3
CP300, 2288SPBV	11.875	3.500	0.625	F	Reverse Bevel 4 Holes Countersunk 2 Tapped Dowels	1	M12FC3
2120	11.625	2.375	0.500	F	Reverse Bevel 4 Holes Counterbored	1	M11F3
2120, G866R	11.625	2.437	0.500	F	Keen Edge 4 Holes	1	M11FA3
14x17	16.500	4.313	3.712	F	Reverse Bevel 6 Slots Counterbored Beveled Cutting Edge 2 Tapped Dowels	1	M16F3
A-144-3-SP	11.937	3.437	0.625	B	3 Slots 2 Tapped Holes	1	M12BE3
A-144-3-SP	11.937	3.437	0.625	B	3 Slots 2 Tapped Dowels Single Bevel	1	M12BF3
	16.500	4.313	0.688	F	Reverse Bevel 6 Slots 2 Tapped Dowels Beveled Cutting Edge	1	M16FA3
Mitts & Merrill							
13CSD, 14CSF, 15CSH, no bed knife	4.750	9.000	0.625	F	Keen Edge 1 Open Slot	1	MM4F3
13CSD, 14CSF, 15CSH, no bed knife	4.750	9.000	0.625	F	(Same as MM4F with Serrated Back)	1	MM4FA3
	8.000	3.250	0.625	F	Keen Edge 1 Open Slot Serrated Back	1	MM8F3
8x10	10.250	2.250	0.375	F	Keen Edge 2 Holes Double Cutting Edge	2	MM10F3

Granulator Knives



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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Mitts & Merrill (cont.)							
8x10	10.500	2.062	0.562	B	2 Holes	2	MM10B3
10x12	12.250	2.812	0.437	F	Keen Edge 2 Holes Double Cutting Edge	3	MM12F3
10x12	12.468	2.062	0.562	B	3 Holes	2	MM12B3
14	14.875	1.750	0.652	F	Hook Fly 4 Slots	1	MM14F3
1635	17.750	3.000	0.437	F	4 Holes	1	MM18F3
1635	17.750	2.060	0.562	B	3 Holes	1	MM18B3
	17.750	2.060	0.562	B	3 Slots	1	MM18BA3
13CSD	21.069	3.950	1.000	B	Keen Edge 2 Holes Countersunk	2	MM21B3
	17.750	2.820	0.437	F	4 Holes	1	MM18FA3
14x20	20.500	3.187	0.687	B	4 Holes	1	MM20BA3
14x20	20.240	2.875	0.437	F	Keen Edge 4 Holes	3	MM20F3
14x20	20.500	2.062	0.562	B	3 Holes	2	MM20B3
	24.000	3.250	0.750	F	5 Holes Counterbored	1	MM24F3
	24.365	3.375	0.625	B	7 Slots	1	MM24B3
	21.069	3.950	1.000	B	2 Countersunk Holes	1	MM21BA3
Nelmor							
AN67	5.820	2.375	0.319	F	Keen Edge 3 Holes	1	N5F3
AN67	5.936	1.883	0.379	B	2 Slots	1	N5B3
G66M1	5.625	2.125	0.312	F	High Shear 3 Holes Counterbored	1	N6F3
G66M1	5.953	1.687	0.375	B	3 Slots	1	N6B3
AN88M, AN88MS, L888M	7.740	2.375	0.312	F	High Shear 3 Holes	3	N8F3
AN88M, AN88MS, L888M	7.937	1.875	0.375	B	2 Slots	2	N8B3
G2436M2	8.900	3.937	1.000	F	Reverse Bevel 4 Holes Counterbored	20	N8FA3
AN1010M, 810VL, RG810M1, AN1010MS, GA1010M2, LB1010M, 810RG11, G810MI	9.500	2.375	0.437	F	Keen Edge 6 Holes Counterbored	2-3	N10F3
G810M1, G6310, RG810M1, AN1010M, AN1010MS, LB1010M, 810RG11, 810VL	9.500	2.375	0.437	F	Reverse Bevel 6 Holes Counterbored	2-3	N10FA3
G810M1, G6310, RG810M1, AN1010M, AN1010MS, LB1010M, 810RG11, 810VL	9.968	1.875	0.375	B	5 Slots	2	N10B3



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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Nelmor (cont.)							
	9.490	2.375	0.437	F	6 Holes Counterbored High Shear	1	N9F3
G1012M1, RG1012M1, 1012RG11, G61012M1	11.500	2.750	0.500	F	Reverse Bevel 7 Holes Counterbored	2-3	N12FA3
G1012M1, G1012LS, RG1012M1, 1012RG11, G61012M1	11.500	2.750	0.500	F	High Shear 7 Holes Counterbored	2-3	N12F3
G1012M1, G1012LS, RG1012M1, 1012RG11, G61012M1, G1224	11.968	2.484	0.500	B	7 Slots	2	N12B3
G6012M1	11.958	3.524	0.500	B	7 Slots	1	N12BA3
G1214M1	13.490	3.375	0.562	F	High Shear 5 Holes Counterbored	2	N14F3
G1214M1	13.500	1.937	0.562	B	5 Open Slots	2	N14B3
	14.500	2.625	0.500	F	High Shear 6 Holes Counterbored	1	N15F3
1830 (see also N15BA)	14.750	3.187	0.625	B	5 Slots Double Cutting Edge	1	N15BC3
G1845 (see also N13FC)	14.490	3.625	0.625	F	Reverse Bevel 5 Holes Counterbored	3-4	N13FA3
G1215M1, RG1215M1, 1215RG11, G1213M1, 12295M1, RG12295M1, 1229RG11, G1226M1, G1830M1, G12295M1, G16296M1, 2030, 2045	14.500	3.625	0.625	F	Reverse Bevel 5 Holes Counterbored (Standard Rotor)	3-4	N13FC3
G1215 (old machines)	14.500	3.450	0.625	F	Reverse Bevel 5 Holes Counterbored	1	N13FB3
G1215M1, F512, RG1215M1, 1215RG11, G1213M1, RG12295M1, 12295RG11, 1830, G1226M1, G16295M1	15.000	2.750	0.625	B	5 Slots (check length, see N15B)	2	N13B3
G1215M1, RG1215M1, 1215RG11, G1213M1, RG12295M1, 12295RG11, G1226M1, G1830M, G12295M1, G16295M1	14.500	3.610	0.625	F	High Shear 5 Holes Counterbored	3-4	N13F3
G1215M1, RG1215M1, 1215RG11, G1213M1, RG12295M1, 12295RG11, G1226M1, G12295M1, G16295M1	14.718	2.750	0.625	B	5 Slots (check length, see N13B)	1	N15B3

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Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Nelmor (cont.)							
	14.718	3.625	0.625	B	Double Cutting Edge 5 Slots	1	N15BB3
G12295M1, G16295, F512,1830, G1215M1	14.500	3.625	0.625	F	High Shear 5 Holes Counterbored	1	N13FD3
1830 (short version of N15BC)	14.718	3.187	0.625	B		1	N15BA3
G1436M1	17.875	3.750	1.000	F	6 Holes Reverse Bevel Counterbored	1	N17FC3
G1436M,G2436M1	17.865	3.875	0.750	F	High Shear 6 Holes Counterbored	3-6	N36F3
G3036MR, BED N17BA	17.875	4.750	1.000	F	High Shear 6 Holes	1	N17FB3
G3036MR, FLY N17FB	17.935	3.625	0.750	B	6 Slots	1	N17BA3
G3036MZ	17.875	4.500	1.000	F	High Shear 6 Holes	1	N17FD3
G3036MZ (OEM)	17.875	4.530	1.000	F	High Shear 6 Holes	1	N17FE3
G3036M2	17.865	4.500	1.000	F	High Shear 6 Holes	1	N17FF3
	16.062	3.750	0.500	B	4 Slots Double Cutting Edge	1	N16BA3
G1416M1	15.865	3.312	0.500	F	Keen Edge 4 Holes Coun- terbored	1	N16F3
G1416M1	16.177	3.937	0.500	B	4 Slots Double Cutting Edge	1	N16B3
G1416M1	15.865	3.250	0.500	F	High Shear 4 Holes Counterbored	1	N16FA3
G1416M1	16.250	2.750	0.625	B	6 Slots	1	N16BB3
	17.875	4.500	1.000	F	High Shear 6 Holes	1	N18FA3
3030HD	14.500	4.000	1.000	F	5 Counterbored Holes Reverse Bevel	1	N15FA3
G1454MB, G2436MB, G1436MB, G1436M1, G2036MB, G2054MB, G2436M1, G3036M1, G2435	17.875	3.875	1.000	F	High Shear 6 Holes Counterbored; check slot length	3-6	N35F3
G1454MB, G2435, G1436MB, G1436M1, G2036MB, G2054MB, G2436MB, G3036M1, G2436M2, G1436MB, G1126M1	17.937	3.500	0.750	B	6 Slots 2 Tapped Dowels; check slot length 2.125"	4	N35B3

B



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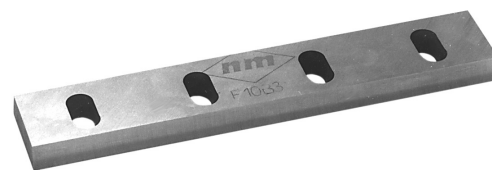
Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Nelmor (cont.)							
G1436M	17.865	3.750	0.750	F	High Shear 6 Holes Counterbored	1	N18FB3
G2436M2 (MOD)	17.927	3.625	0.750	B	6 Slots	1	N18BA3
G3036M2, 2436M1	17.927	3.500	0.750	B	6 Slots Slot Length 1.625"	1	N18BB3
G3036M2, G2436M2	17.865	4.750	1.375	F	Keen Edge 6 Holes Counterbored	6-10	N18FC3
G3036M2 (MOD)	17.865	4.750	1.375	F	High Shear 6 Holes Counterbored	1	N18FD3
3036	17.875	3.500	0.750	B	6 Slots	1	N18BC3
	17.905	5.000	1.000	B	Keen Edge 8 Slots	1	N18BD3
1220RG11, G1620M1, G1820M1	17.250	5.655	1.000	F	6 Holes High Shear Counterbored	1	N17FG3
	17.875	4.000	1.000	F	High Shear 6 Holes Counterbored	1	N17FH3
2536M1	17.875	3.938	1.000	F	High Shear 6 Holes Counterbored	1	N17FJ3
1220 (SEM)	19.938	2.750	0.625	B	7 Slots	1	N19BA3
2056	18.563	3.875	1.000	F	Keen Edge 6 Holes Counterbored	1	N18FE3
2056, 2456MB	18.625	3.473	0.750	B	6 Slots	1	N18BE3
2456MB	18.562	3.938	1.000	F	Reverse Bevel 6 Holes Counterbored	1	N18F3
2456MB	18.562	3.938	1.000	F	Keen Edge 6 Holes Counterbored (same as N18F)	1	N18FF3
G1220M1, RG1220M1, 1220RG11, G1620M1, G1820M1, SEM 22 DIS, G1830M1	19.490	3.625	0.625	F	High Shear 7 Holes Counterbored	2-3	N20F3
G1620	19.958	3.250	0.625	B	7 Slots	1	N19BB3
G1220M1	19.950	3.188	0.625	B	8 Slots Double Cutting Edge	1	N19BC3
G1220M1, RG1220M1, 1220RG11, G1820, G1220MH, G1220M1, G1620M1, G1830M1	19.958	2.750	0.625	B	7 Slots	2	N20B3
Mini Hog	19.750	2.750	0.625	F	Hook Fly 7 Slots	1	N19F3
G1220M1, RG1220M1, 1220RG11, G1620M1, G1820M1, G1830M1	19.500	3.562	0.625	F	Reverse Bevel 7 Holes Counterbored	2-3	N20FA3
G1820M	19.958	2.750	0.500	B	7 Slots	2	N20BB3
G1820M	19.958	3.250	0.625	B	7 Slots Double Cutting Edge	1	N20BA3
G1220MH1	19.750	2.625	0.625	F	Keen Edge Open Holes	1	N20FB3

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B

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Nelmor (cont.)							
G1022M1	20.990	2.937	0.750	F	Low Shear 9 Holes	3	N21F3
G1022M1	21.937	2.875	0.750	B	9 Slots	2	N22B3
1634	16.750	3.634	0.625	F	7 Holes Counterbored High Shear	1	N16FB3
1634	16.937	3.169	0.635	B	6 Slots 2 Tapped Holes	1	N16BC3
WG6000	19.620	2.850	0.550	F	Keen Edge 4 Holes	1	N19FA3
3048MB, G3072M	23.875	5.000	1.000	B	10 Slots	1	N23B3
G3072M	23.240	6.000	1.000	F	8 Holes Counterbored High Shear	15	N23FB3
93072M	23.240	6.000	1.000	F	Reverse Bevel 8 Holes Counterbored	1	N23FA3
	23.875	5.000	1.000	B	10 Slots	1	N23BA3
	23.490	3.937	1.000	F	High Shear 8 Holes	1	N24FB3
G2024MB, G1424MB, G1448M1, G1224P	23.500	3.750	0.750	F	High Shear 8 Holes Counterbored (use on 100 H.P. or less)	3	N24F3
G1448	23.875	3.750	0.750	F	High Shear 4 Holes Counterbored	1	N24FD3
G2024MB, 6202, 1424, G1424MB, G1448M1	23.937	3.500	0.750	B	7 Slots	2	N24B3
G1424MB, 6202	23.500	3.750	0.750	F	Reverse Bevel 8 Holes Counterbored (.687 Holes)	1	N24FC3
14x24	22.490	3.937	1.000	F	High Shear 6 Holes Counterbored	5	N22F3
14x24, G1448M1	23.861	3.500	0.750	B	8 Slots	2	N22BB3
G1448M1	23.938	3.500	0.750	B	8 Slots 2 Tapped Holes	1	N22BA3
G1424MND	23.490	3.750	1.000	F	8 Holes Counterbored Reverse Bevel (.812 Holes)	1	N22FA3
14x24, G2024MB	23.490	3.750	0.750	F	High Shear 8 Holes (.812 Holes)	3	N22FB3
G1424MB	23.490	3.937	1.000	F	8 Holes High Shear Counterbored .812" Holes (1.750 Counterbored)	1	N24FA3
3030HD	14.500	4.000	1.000	F	5 Counterbored Holes High Shear	1	N14FA3



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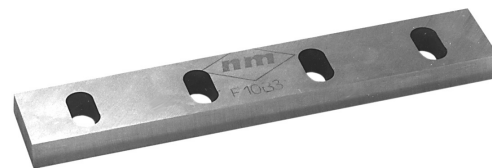
Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Nelmor (cont.)							
1424MB	23.490	3.750	1.000	F	High Shear 8 Holes Counterbored (1.375 CB)	1	N22FC3
G2024MB, G1424M, G1448M1, 1424MB	23.500	3.750	1.000	F	High Shear 8 Holes Counterbored (1.750" CB)	1	N22FD3
1424	23.937	3.500	1.000	B	7 Slots	1	N22BC3
RL450	7.086	3.937	0.394	F	Low Shear 3 Holes Double Cutting Edge	1	N7F3
Polymer							
68 SILENCER	7.740	2.550	0.562	F	Reverse Bevel 3 Holes Counterbored	1	P7FD3
68	7.555	2.550	0.562	F	Reverse Bevel 3 Holes Counterbored	1	P7FC3
68	7.490	1.937	0.437	F	Keen Edge 3 Holes	2	P7F3
68, 88	7.875	1.937	0.437	B	3 Open Slots	1	P7B3
68	7.500	2.550	0.562	F	Reverse Bevel 3 Holes Counterbored	3	P7FH3
68	7.865	1.875	0.437	B	3 Open Slots	1	P7BA3
68	7.750	1.937	0.437	F	Keen Edge 3 Holes	2	P7FK3
68	7.865	2.427	0.437	B	3 Open Slots	1	P7BC3
68, 88	7.875	2.375	0.375	F	Keen Edge 2 Holes	1	P7FG3
88	7.875	1.937	0.375	B	3 Slots	1	P7FJ3
1010A	9.760	2.650	0.500	F	High Shear 6 Slots	1	P9FG3
6438SC	11.562	2.875	0.562	F	Reverse Bevel 4 Holes Counterbored	1	P12FA3
	11.937	2.850	0.500	B	4 Open Slots	1	P12BA3
912	11.500	2.437	0.562	F	Keen Edge 4 Holes	2	P11F3
912, 912SP	11.802	2.455	0.590	B	4 Open Slots	1	P11B3
912SP	11.625	2.937	0.562	F	Keen Edge 4 Holes Counterbored	1	P11FD3
1225	12.000	3.937	0.938	F	Keen Edge 4 Holes	6	P12F3
1225	12.500	3.937	0.937	B	4 Open Slots	4	P12B3
1116	15.262	2.937	0.562	F	Right Hand Keen Edge 6 Holes	2	P15FR3
1116	15.262	2.937	0.562	F	Left Hand Keen Edge 6 Holes Counterbored	2	P15FL3
1116 (old)	15.490	2.930	0.562	F	6 Holes	2	P15F3
1116 (new)	15.703	2.937	0.562	F	6 Holes Counterbored Slant Left	1	P15FA3
1120	19.593	2.937	0.562	F	Keen Edge 7 Holes Counterbored Slant Left	2	P19FE3
1120	19.500	2.906	0.562	F	Reverse Bevel 7 Holes Counterbored	2	P19FD3
1120	19.865	2.937	0.562	B	7 Open Slots	1	P19B3

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GRANULATOR KNIVES

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B

Make & Model	Length	Width	Thickness	Fly/ Bed	Description	Qty/ Set	Part Number
Polymer (cont.)							
1120 (OLD)	19.500	2.906	0.562	F	High Shear 7 Holes	2	P19FA3
1020 SIL	19.500	2.918	0.562	F	Keen Edge 5 Holes Counterbored	3	P20F3
	19.500	2.918	0.562	F	Reverse Bevel 5 Holes Counterbored	3	P20FA3
2040, 1620	20.000	3.875	0.937	F	High Shear 4 Holes	6	P40F3
2040	20.453	3.875	0.937	B	6 Open Slots	4	P40B3
1526, 1426 LOBOY	25.250	3.875	0.687	F	Keen Edge 5 Holes	3	P26FA3
1526, 1426 LOBOY	25.250	3.875	0.687	F	Keen Edge 5 Holes	3	P26F3
1526, 1426 LOBOY	25.750	3.437	0.687	B	7 Open Slots	2	P26B3
1526, 1426 LOBOY	25.927	3.437	0.687	B	7 Open Slots	1	P26BA3
32x74, 32x56	20.250	4.312	1.125	F	Reverse Bevel 4 Holes Counterbored	1	P20FB3
32x74	18.562	3.750	0.875	B	5 Slots 2 Tapped Holes w/ 2 Face Holes Single Bevel	1	P18BA3
	31.875	2.537	0.562	B	9 Open Slots	1	P31B3
	31.500	3.523	0.562	F	Reverse Bevel 9 Holes Counterbored	1	P31FA3
1632 SIL	31.500	3.500	0.562	F	Keen Edge 7 Holes Counterbored	1	P31F3
Rainville							
1011	11.000	2.000	1.250	F	Hook Fly 4 Holes Recessed .562"	2-3	R11H3
1011	11.000	2.000	0.625	B	5 Slots	1	R11B3
1011	11.000	2.000	0.625	B	4 Slots	2	R11BA3
1015, 1415	15.000	2.000	1.250	F	Hook Fly 6 Holes (Recessed .562")	2-3	R15H3
1015, 1415	15.000	2.312	0.562	F	Fly 5 Holes	2-3	R15F3
1015, 1415	15.000	2.000	0.625	B	6 Slots	2	R15B3
1419	19.000	2.000	1.250	F	Hook Fly 8 Holes (Recessed .562")	2-3	R19H3
1419	19.000	2.000	0.625	B	8 Slots	2	R19B3
	11.000	1.750	0.625	B	5 Slots	1	R11BB3
28SLS	11.000	2.000	1.135	F	Hook Fly 4 Holes	1	R11HA3
Ramco							
1030	5.150	1.577	0.625	F	2 Tapped Holes Double Cutting Edge	1	RM6A3
1030	5.109	1.812	0.500	B	4 Tapped Holes Double Cutting Edge	1	RM6B3



Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Ramco (cont.)							
C1030	6.168	1.410	0.625	F	4 Tapped Holes Double Cutting Edge	1	RM7F3
1418H	9.062	2.359	0.875	F	2 Tapped Holes	1	RM9F3
1418H	8.937	2.641	0.625	B	2 Slots	1	RM9B3
	9.122	2.750	0.625	B	2 Slots Double Cutting Edge	1	RM9BA3
8x10	10.125	1.487	0.625	F	Keen Edge 3 Tapped Dowels Double Cutting Edge	2	RM10F3
8x10	10.115	1.750	0.500	B	6 Tapped Holes Double Cutting Edge	2	RM10B3
1424W	10.000	2.750	0.500	F	Radial Rotor 3 Slots	2	RM10FA3
	10.100	1.500	0.625	F	3 Holes Tapped and Counterbored	1	RM10FB3
8x10	10.125	1.503	0.625	F	3 Holes Tapped and Counterbored	1	RM10FC3
8x10	10.125	1.812	0.500	B	6 Tapped Holes Double Cutting Edge	1	RM10BA3
1012, B1012-R6	12.052	1.483	0.687	F	Keen Edge 3 Holes Counterbored Double Cutting Edge	2	RM12F3
1012, B1012-M17	11.984	2.125	0.500	F	3 Slots Double Cutting Edge	2	RM12B3
1012	12.052	2.875	0.750	F	Keen Edge 4 Holes Counterbored Single Cutting Edge	1	RM12FA3
14x18, (LT duty)	18.062	1.812	0.500	F	Reverse Bevel 4 Tapped Dowels	2	RM18FA3
14x18	18.000	2.750	0.612	B	4 Holes	2	RM18B3
14x18, 1436, (heavy duty)	18.062	2.312	0.875	F	Keen Edge 4 Holes Tapped and Counterbored Double Cutting Edge	2	RM18F3
1418I	18.043	2.874	0.875	F	Keen Edge 5 Holes Counterbored	6	RM18FC3
14x18, 1436, (use RM18BB)	18.000	3.000	0.625	B	4 Slots Double Cutting Edge	2	RM18BA3
2436, 1418	18.000	2.625	0.625	B	4 Slots Double Cutting Edge	1	RM18BB3
1527	26.927	3.875	2.000	F	Hook Fly 5 Holes Counterbored	1	RM26F3
1527	26.937	3.875	0.875	B	7 Open Slots	2	RM27B3
1527	26.937	3.875	2.000	F	Hook Fly 5 Holes (Recessed 1")	3	RM26FA3

Granulator Knives



GRANULATOR KNIVES

Replacement granulator knives manufactured to precise tolerance to replace original equipment. Super Alloy: Premium grade D2 tool steel formulation provides much longer life and is better suited to high-usage cycles and tough materials. Greatly increases the time between sharpening. Ideal for heavy usage central grinding.



Make & Model	Length	Width	Thickness	Fly/ Bed	Description	Qty/ Set	Part Number
Ramco (cont.)							
1527 SPECIAL	13.490	4.250	1.375	F	3 Counterbored Holes Reverse Bevel	1	RM13F3
2436	17.927	2.687	0.625	B	4 Slots	1	RM17B3
2436	36.000	3.875	1.000	F	Reverse Bevel 8 Holes Counterbored	1	RM35F3
2436	17.927	2.687	0.875	B	4 Slots	1	RM17BA3
2436	36.000	3.875	1.000	F	Keen Edge 8 Holes Counterbored	1	RM35FA3
2436	18.000	2.755	0.625	B	4 Slots	1	RM18BC3
2436	18.019	2.375	0.625	F	4 Tapped Dowels	1	RM18FB3
2436	36.026	3.867	1.625	F	Hook Fly 8 Holes Counterbored	3	RM36F3
Rapid							
GK20,158	3.838	1.693	0.276	B	2 Slots	1	RP4B3
GK20,158	3.838	1.693	0.312	F	Keen Edge 2 Slots	1	RP4F3
GK205, 79C, K, GK2218A, 79MS	8.875	2.515	0.500	F	Low Shear 2 Slots	1	RP8F3
79MS	8.897	2.559	0.475	B	2 Slots	1	RP9B3
GK205, 79C, K, GK2218A	9.843	1.500	0.375	B	3 Tapped Dowels	1	RP10BA3
1012K	11.802	2.875	0.500	F	2 Slots	1	RP12F3
1012, GK3026	11.875	2.875	0.531	F	High Shear 2 Slots	3	RP12FD3
1012, GK3026	12.812	2.875	0.531	B	2 Slots Double Cutting Edge	2	RP13FA3
GK1000, 2442HOG, (HD ROTOR)	10.290	3.750	1.000	F	High Shear 3 Slots 2 Tapped Dowels 1" Slots	20	RP10FA3
GK1000, 2442, (RS ROTOR)	0.296	3.750	1.000	F	Low Shear 3 Slots 2 Tapped Dowels 7/8" Slots	20	RP10F3
GK1000, 2442	41.710	2.120	1.340	B	1 Upper 9 Slots Counterbored 8 Holes	1	RP41B3
GK1000, 2442	44.093	1.812	1.187	B	2 Lower 7 Tapped Holes 2 Tapped Dowels	2	RP44B3
GK1000R	13.740	2.437	0.710	F	No Holes	1	RP13F3
600 "V"	11.750	2.875	0.531	F	Left Hand Low Shear 3 Slots	4	RP12FA3
600 "V"	11.750	2.875	0.531	F	Right Hand 3 Slots	4	RP12FVR3
600C	11.740	1.885	0.580	F	No Holes	1	RP12FB3



Granulator Knives

GRANULATOR KNIVES

Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Rapid (cont.)							
GK640	11.990	2.810	0.562	F	Left Hand Low Shear 3 Slots	4	RP12FVL3
GK640	11.990	2.810	0.562	F	Right Hand Low Shear 3 Slots	4	RP12FAR3
GK640 (MOD)	11.990	3.310	0.562	F	High Shear 3 Slots Left Hand	1	RP12FAL3
	17.750	3.312	0.950	F	4 Slots Right Hand 2 Tapped Dowels High Shear	1	RP18FR3
	17.750	3.312	0.950	F	4 Slots Left Hand 2 Tapped Dowels High Shear	1	RP18FL3
	18.063	2.755	0.792	B	4 Slots 2 Tapped and Drilled Holes	1	RP18B3
GK600, GK625,1224C, GK650, GK640, GK600SK	12.000	2.875	0.562	F	Left Hand Low Shear 3 Slots	4	RP12FSL3
GK640 (MOD)	11.990	3.310	0.562	F	High Shear 3 Slots Right Hand	1	RP12FS3
GK600, GK625,1224C, GK650, GK640, GK600SK	12.000	2.875	0.562	F	Right Hand Low Shear 3 Slots	4	RP12FSR3
GK600,1224C, GK640, GK650, 600 "U", GK600SK	24.802	1.890	0.562	B	7 Tapped Dowels	2	RP25BV3
GK600	23.500	1.937	0.750	B	4 Slots Counterbored 3rd Bed	1	RP24B3
GK100C, 912C, 75C, 50C, 150C, 250E, 3023KU	11.654	2.625	0.562	F	Low Shear 2 Slots	1	RP11F3
	13.875	2.700	0.531	F	Radial Rotor 3 Slots Right Hand	1	RP14FR3
	13.875	2.700	0.531	F	Radial Rotor 3 Slots Left Hand	1	RP14FL3
GK600	28.740	1.889	0.550	B	3 Tapped Holes	1	RP25BA3
GK100C, 912C, 75C, 50C, 150C, 250E, 3023KU	12.625	1.875	0.562	B	Keen Edge 2 Tapped Holes 1 Tapped Dowel	1	RP12B3
GK100C, 912C, 75C	11.654	2.625	0.562	F	High Shear 2 Slots	1	RP11FA3
75E	15.150	1.815	0.560	B	2 Holes	1	RP15BA3
75E	15.150	1.815	0.560	B	Same as RP15BA but with end holes	1	RP15BB3
1831, GK8045	15.375	3.150	0.750	F	High Shear 3 Slots (slot .125 from back edge)	1	RP16F3
1831	15.375	3.740	0.790	F	Reverse Bevel 3 Slots Left Hand	1	RP16FL3
1831	15.375	3.740	0.790	F	Reverse Bevel 3 Slots Right Hand	1	RP16FR3

Granulator Knives



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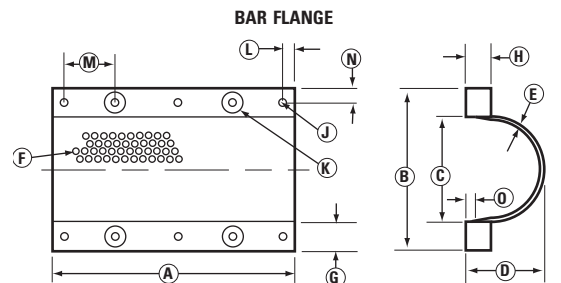
Make & Model	Length	Width	Thickness	Fly/Bed	Description	Qty/Set	Part Number
Rapid (cont.)							
1831, GK8045	31.625	2.778	0.781	B	4 Slots	1	RP32B3
1831	30.938	2.778	0.790	B	3rd Bed No Bevel (Square)	1	RP30B3
1831K, 1830KU	15.375	3.125	0.781	F	Keen Edge 3 Slots (Slot .436 from back edge)	1	RP16FA3
1418	17.500	3.820	0.750	F	3 Slots	3	RP18FA3
1418, GK4535KU	18.656	3.250	0.750	B	3 Slots	2	RP19B3
GK4535KU	17.500	3.824	0.687	F	Keen Edge 3 Slots	1	RP18F3
GK300, GK4535KU	15.000	1.880	0.551	B	2 Tapped Holes	1	RP15B3

B

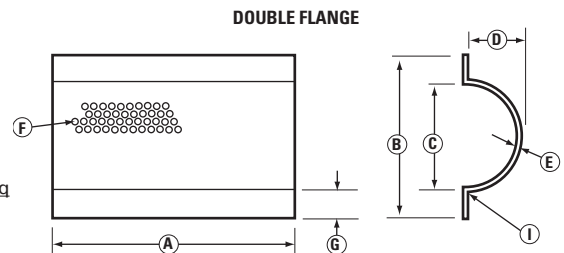
Granulator Screens

These screens are manufactured for your specific application from a standard ASTM A36 material or an AR235 steel for processing high-abrasive materials. Please complete the worksheet below and either fax or email a copy of this page to DME Fax: 888-808-4363; DME@dme.net.

- (A) Length _____
- (B) Overall width of screen _____
- (C) Inside width of screen _____
- (D) Depth of radius (inside) _____
- (E) Thickness _____
- (F) Hole size _____
- (G) Width of flange _____
- (H) Thickness of flange _____
- (I) Bend radius _____
- (J) Hole size on bar flange _____
- (K) Counterbore hole size _____
- (L) Edge to first hole _____
- (M) Center to center of holes _____
- (N) Side to first hole (if applies) _____
- (O) Screen location _____
(Relative to top of bar)



or visit www.dme.net/rfq



Machine name: _____

Machine model: _____

O.E.M. # (if available): _____

Select one: Bar flange
 Double flange



Injection Machine Shots per Hour

Based on seconds per cycle											
Seconds per cycle	Shots per hour	Seconds per cycle	Shots per hour	Seconds per cycle	Shots per hour	Seconds per cycle	Shots per hour	Seconds per cycle	Shots per hour	Seconds per cycle	Shots per hour
1	3600.0	31	116.1	61	59.0	91	39.6	121	29.8	151	23.8
2	1800.0	32	112.5	62	58.1	92	39.1	122	29.5	152	23.7
3	1200.0	33	109.1	63	57.1	93	38.7	123	29.3	153	23.5
4	900.0	34	105.9	64	56.3	94	38.3	124	29.0	154	23.4
5	720.0	35	102.9	65	55.4	95	37.9	125	28.8	155	23.2
6	600.0	36	100.0	66	54.5	96	37.5	126	28.6	156	23.1
7	514.3	37	97.3	67	53.7	97	37.1	127	28.3	157	22.9
8	450.0	38	94.7	68	52.9	98	36.7	128	28.1	158	22.8
9	400.0	39	92.3	69	52.2	99	36.4	129	27.9	159	22.6
10	360.0	40	90.0	70	51.4	100	36.0	130	27.7	160	22.5
11	327.3	41	87.8	71	50.7	101	35.6	131	27.5	161	22.4
12	300.0	42	85.7	72	50.0	102	35.3	132	27.3	162	22.2
13	276.9	43	83.7	73	49.3	103	35.0	133	27.1	163	22.1
14	257.1	44	81.8	74	48.6	104	34.6	134	26.9	164	22.0
15	240.0	45	80.0	75	48.0	105	34.3	135	26.7	165	21.8
16	225.0	46	78.3	76	47.4	106	34.0	136	26.5	166	21.7
17	211.8	47	76.6	77	46.8	107	33.6	137	26.3	167	21.6
18	200.0	48	75.0	78	46.2	108	33.3	138	26.1	168	21.4
19	189.5	49	73.5	79	45.6	109	33.0	139	25.9	169	21.3
20	180.0	50	72.0	80	45.0	110	32.7	140	25.7	170	21.2
21	171.4	51	70.6	81	44.4	111	32.4	141	25.5	171	21.1
22	163.6	52	69.2	82	43.9	112	32.1	142	25.4	172	20.9
23	156.5	53	67.9	83	43.4	113	31.9	143	25.2	173	20.8
24	150.0	54	66.7	84	42.9	114	31.6	144	25.0	174	20.7
25	144.0	55	65.5	85	42.4	115	31.3	145	24.8	175	20.6
26	138.5	56	64.3	86	41.9	116	31.0	146	24.7	176	20.5
27	133.3	57	63.2	87	41.4	117	30.8	147	24.5	177	20.3
28	128.6	58	62.1	88	40.9	118	30.5	148	24.3	178	20.2
29	124.1	59	61.0	89	40.4	119	30.3	149	24.2	179	20.1

Grams to Ounces Conversion

Grams	Ounces	Grams	Ounces	Grams	Ounces	Grams	Ounces	Grams	Ounces	Grams	Ounces
1	0.0353	21	0.7408	41	1.4462	81	2.8572	101	3.5627	121	4.2681
2	0.0705	22	0.7760	42	1.4815	82	2.8925	102	3.5979	122	4.3034
3	0.1058	23	0.8113	43	1.5168	83	2.9277	103	3.6332	123	4.3387
4	0.1411	24	0.8466	44	1.5521	84	2.9630	104	3.6685	124	4.3740
5	0.1764	25	0.8818	45	1.5873	85	2.9983	105	3.7038	125	4.4092
6	0.2116	26	0.9171	46	1.6226	86	3.0336	106	3.7390	126	4.4445
7	0.2469	27	0.9524	47	1.6579	87	3.0688	107	3.7743	127	4.4798
8	0.2822	28	0.9877	48	1.6932	88	3.1041	108	3.8096	128	4.5151
9	0.3175	29	1.0229	49	1.7284	89	3.1394	109	3.8449	129	4.5503
10	0.3527	30	1.0582	50	1.7637	90	3.1747	110	3.8801	130	4.5856
11	0.3880	31	1.0935	51	1.7990	91	3.2099	111	3.9154	131	4.6209
12	0.4233	32	1.1288	52	1.8342	92	3.2452	112	3.9507	132	4.6562
13	0.4586	33	1.1640	53	1.8695	93	3.2805	113	3.9860	133	4.6914
14	0.4938	34	1.1993	54	1.9048	94	3.3158	114	4.0212	134	4.7267
15	0.5291	35	1.2346	55	1.9401	95	3.3510	115	4.0565	135	4.7620
16	0.5644	36	1.2699	56	1.9753	96	3.3863	116	4.0918	136	4.7973
17	0.5997	37	1.3051	57	2.0106	97	3.4216	117	4.1271	137	4.8325
18	0.6349	38	1.3404	58	2.0459	98	3.4568	118	4.1623	138	4.8678
19	0.6702	39	1.3757	59	2.0812	99	3.4921	119	4.1976	139	4.9031
20	0.7055	40	1.4110	60	2.1164	100	3.5274	120	4.2329	140	4.9384

28.34952 grams = 1 ounce 453.5924 grams = 1 pound

260 U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000

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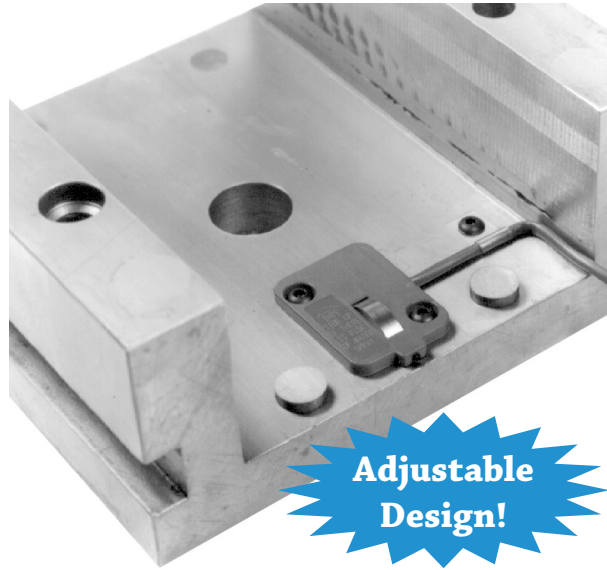
Limit Switch - Thinswitch®

THINSWITCH



Switch contact adjustment

LIMIT SWITCH



Adjustable Design!

Verifies ejector plate return before closing mold. Mount inside ejector housing and wire to machine controls. Use for core slides or any place where space is limited.

- Prevents costly mold damage
- 3/16" thick
- Fits behind ejector plate
- Requires only 2 screw holes
- Very economical to install
- Over 10 million cycle life
- Adjustable operating point
- Electrical capacity at 240V
4 AMP inductive 5 AMP resistive
- SPDT switching
- 6' wire included- leads stripped & tinned

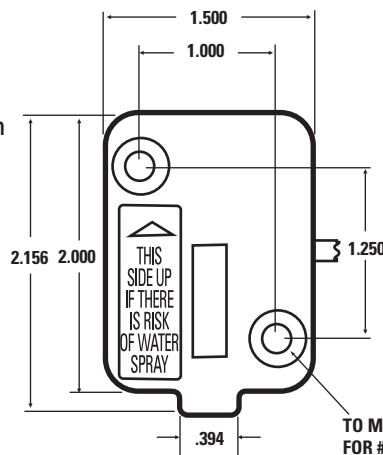
- .187" thick, same height as rest buttons
- Wire to machine controls to prevent mold closing before ejector plate has completely returned
- Use two in series in opposite corners of ejector housing of larger molds to ensure return of ejector plate
- Mounts inside ejector housing where it cannot be damaged
- Operating height adjustment between .187" and .250"

T222- for use up to 175°F (79.4°C)
HT291- for use up to 250°F (121°C)

Standard Temperature Thinswitch T222	
SP222A	Replacement Spring
CT222A	Replacement Cable Tab
High Temperature Thinswitch HT291	

Materials

- Body – Fiberglass reinforced nylon
- Spring – Stainless steel
- Wire – 22 GA stranded,
3-conductor w/jacket
- Screws – Hardened steel, black oxide finish
- Back Cover – Polyester film
- Max. Ambient Temperature – 175°F
- Max. Voltage – 250
- Electrical Specifications –
- 250 VAC 5 AMPS resistive
 4 AMPS inductive
- 28 VDC (sea level) 5 AMPS resistive
 4 AMPS inductive



Limit Switch - Thinswitch®



Liquid Resistant

General Description

Smartflow® Thinswitch® Liquid-Resistant Limit Switch is designed to verify ejector plate return in areas where occasional water or oil spray is present. The Thinswitch helps prevent accidental mold close in injection molding applications by providing a position switch that is tied to the injection molding machine control. The liquid resistant switch uses the same mounting hole locations as the original Thinswitch. The Thinswitch has been tested for reliability over 10 million cycles without failure. Two switches can be used in series for larger molds to ensure the ejector plate return, preventing costly mold damage.



US Patent 5,446,252
EU Patent 6,982,392

Features and Benefits

- Over 10 million cycle life
- 175°F (79.4°C) standard temperature rating
- 250°F (121°C) high temperature unit for higher temperature needs
- Adjustable actuation between .187" and .250" from the mold base
- 3/16" thick design fits snugly behind the ejector plate between the rest buttons
- Stripped and tinned 6 ft. wire leads
- Mounting screws and wire clips included

Specifications

Part Number/Operating Temperature

T222LR
Standard Model 175°F max.
(79.4°C max.)

HT291LR
High Temp Model 250°F max.
(121°C max.)

Switching SPDT

Electrical

250VAC 5 AMPS resistive
4 AMPS inductive

28VDC (sea level) 5 AMPS resistive
4 AMPS inductive

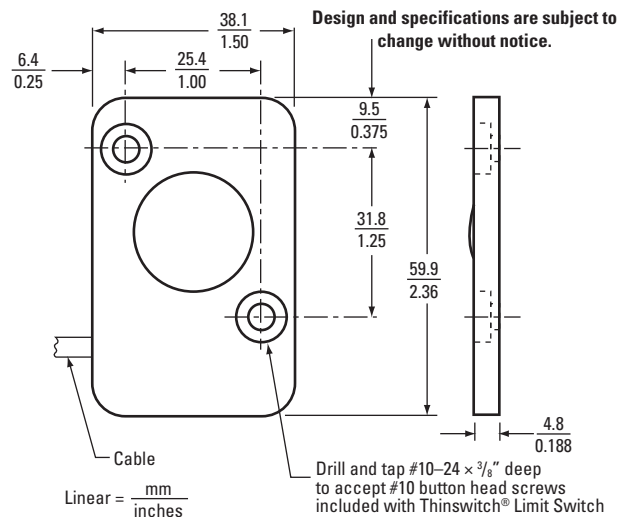
Materials

- Body Fiberglass-reinforced nylon
- Dome Polyurethane
- Back Cover Polyester film
- Wire Leads 22ga stranded, 3-conductor, shielded cable, 6 ft. (1.8m) long, ends stripped and tinned

LIMIT SWITCH

Rated Current vs. Steel Temperature					
T222LR			HT291LR		
AMPS	°F	°C	AMPS	°F	°C
5.0	85	29.4	5.0	100	37.7
4.0	120	49.0	4.5	155	68.3
3.0	155	68.3	4.0	210	98.8
2.0	175	79.4	3.5	250	121.1

The Thinswitch® Limit Switch is designed for use in very low power mold protection control circuits. It is not intended to switch heavy loads in power applications.





Limit Switch - Versaswitch®

- Fits behind core
- Simply screw into mounting hole
- Very economical to install
- One million cycle mechanical life
- Adjustable operating point
- Electrical capacity at 240V, 3 AMP inductive, 5 AMP resistive
- SPDT switching
- 6' wire included - leads stripped & tinned



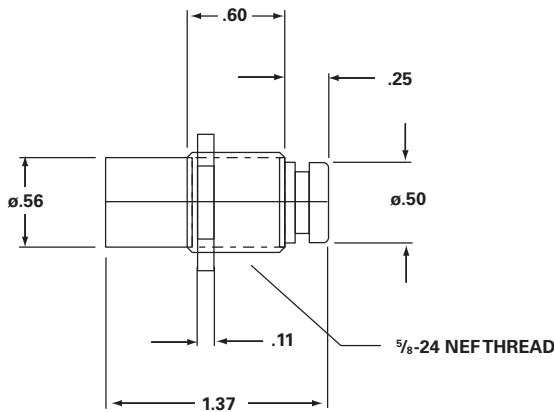
VERSASWITCH™



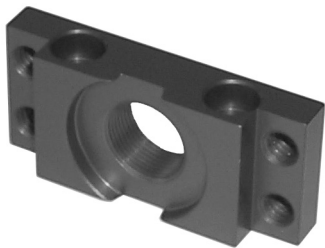
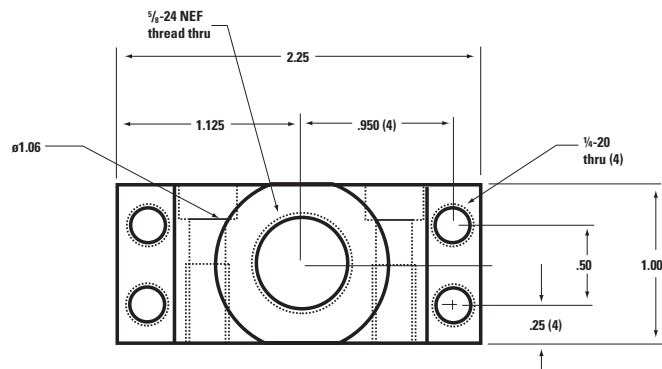
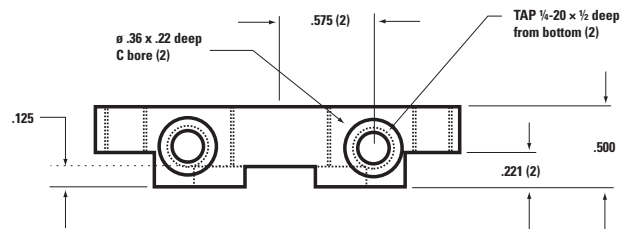
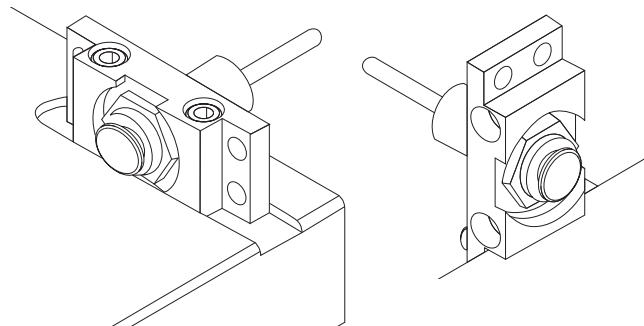
MODEL V222 MATERIALS

- Body – Anodized aluminum
- Plunger – Stainless steel
- Locknut – Stainless steel
- Wire – 22 ga stranded, 3 conductor with jacket

- Maximum ambient temperature – 180°F
- Maximum voltage – 240 VAC
- Operating force – 1.6 kg./3.5 lb.
- Pretravel to operating point – .060"
- Over travel – .010"



All dimensions in inches.



ACCESSORIES

P222	Twist lock electrical plug
BCR222	Electrical box, cover plate, and receptacle
VB222	Mounting bracket (red anodized aluminum)

SMARTLOCK

Operation

Installed in a slide, the plunger moves into a recess in the locking plate of the switch assembly, which is installed in the mold plate. The switch actuator, located in the bottom of the recess, closes the normally open switch contacts when the plunger is seated in the locking plate recess. When the breakaway force is applied to the slide, the lock is released, and the switch returns to its normal state.

Mode of



Slide Retainer & Limit Switch

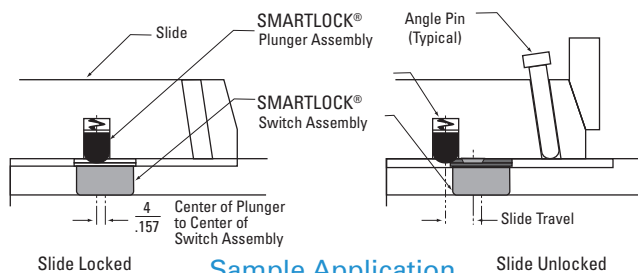
A revolutionary detent and safety switch. Slide position verification and prevention of mold damage result when the Smartlock slide retainer and limit switch is installed in a mold.

The Smartflow SMARTLOCK® slide retainer and limit switch is designed for injection molders to provide switching and slide retention in one unique package. The SMARTLOCK® locking function prevents premature slide movement during molded part ejection while the SPDT switch is simultaneously actuated.

The SMARTLOCK® slide retainer and limit switch has been tested for reliability over 10 million cycles without failure. Two or more switches may be used for larger molds, or molds with multiple slides. Slide position verification and prevention of mold damage results when the Smartlock slide retainer and limit switch is installed in a mold.

Features & Benefits

- Over 10 million cycle life provides long dependable service.
- 17–27 pounds holding force; adjustable for optimum operation
- 175°F (79.4°C) standard temperature rating allows installation into most molding applications
- 250°F (121°C) high temperature unit provides additional application flexibility
- Superior flush mount switch shielded from damage by mounting inside a protective milled pocket
- Stripped and tinned 6 ft. wire leads make the switch ready to install without modification
- Included mounting screws and wire clips help install



Sample Application

the SMARTLOCK® switch neatly and easily

The SMARTLOCK® slide lock and limit switch provides a slide lock and SPDT switch in one unique package for use in molding applications to verify slide position and prevent mold damage. Install the plunger and switch assemblies into corresponding milled pockets in the slide and mold plate. In operation, the plunger moves into a recess in the locking plate, providing a lock with 25 lbs maximum breakaway force. (The breakaway force is adjustable by changing the plunger bore depth.) The switch actuator is located in the bottom of locking plate recess. When the plunger is seated in the locking plate, the normally open contacts are closed. Specifications

Maximum Breakaway Force:

17–27 lbs. (8–12 kg)-user adjustable

Electrical:

250VAC, 28VDC (4 AMPS Inductive, 5 AMPS Resistive)

Operating Temperature:

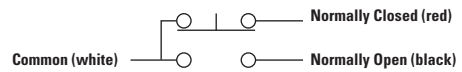
SL222: 175°F max. (79.4°C)

SL291: 250°F max. (121°C)

Switching: SPDT

Materials

Schematic Diagram



Body: Fiberglass-reinforced nylon

Locking Plate: Hardened steel

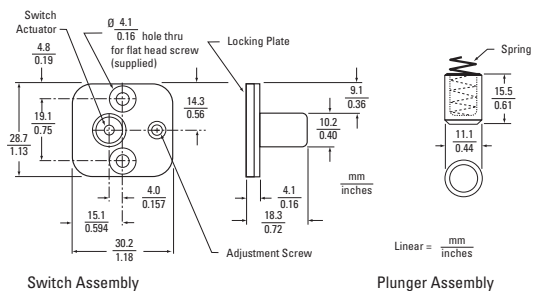
Plunger and Spring: Hardened steel

Wire Leads: 22ga stranded, 3-conductor, shielded cable, 6ft (1.8m) long, ends stripped and tinned

Parts Included

- (1) Switch Assembly
- (1) Plunger Assembly - Plunger - SLP222A
- Spring SLPS222
- (2) 6–32 flat head switch mounting screws - SLFH222A
- (2) 10–24 wire clamp mounting screws - 1024BHCSA
- (2) Wire clamps
- (1) Instruction sheet

SL222 Standard Smartlock® SL291 Hi-Temp Smartlock®



Dimensions





FasTie®

Quick Ejector Tie-In System

Description & Use

In an injection molding press, the FasTie® system quickly “ties-in” the mold ejector plate to the press ejection system, dramatically reducing mold change time. The greatest time savings are realized in presses where space is limited and the ejector system is difficult to tie in using solid knockout bars.

The FasTie® coupler may be permanently mounted to the press ejector plate. The quick-connect locking mechanism in the coupler snaps mechanically onto the mold-mounted pull stud during mold installation.

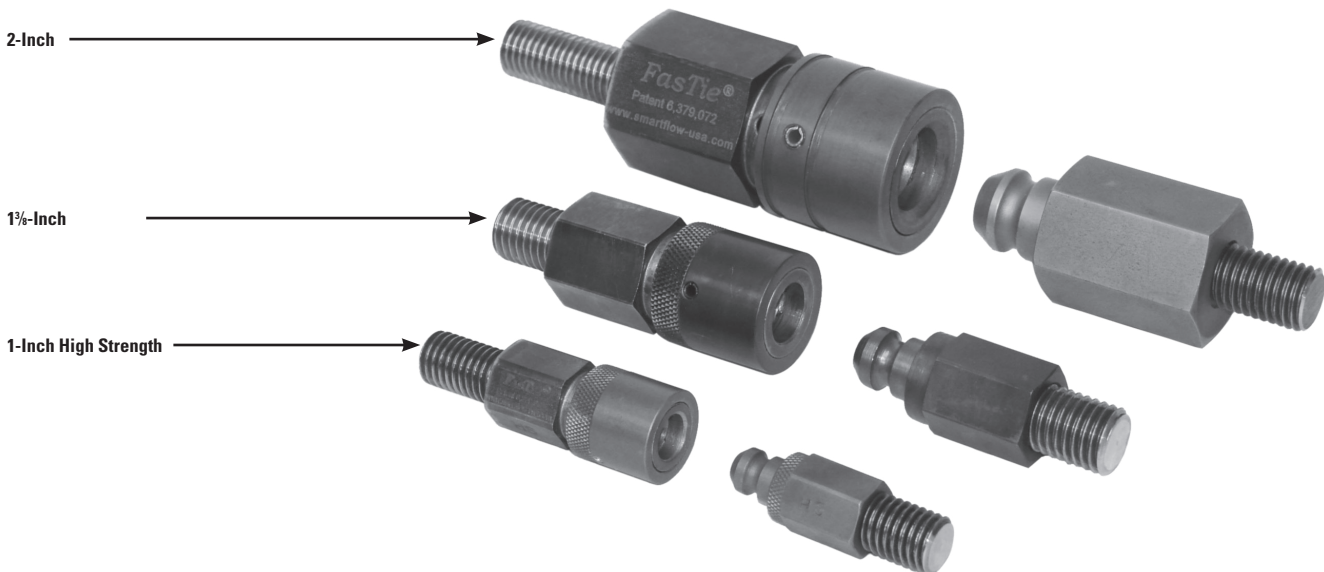
To release the ejectors, apply shop air to the coupler. The coupler opens to release the pull stud, disconnecting the press and tooling ejector plates. The coupler remains in the open position, ready for a new mold to be set.

For multiple ejector locations, an air manifold is recommended to release all couplers simultaneously. See the following catalog pages for installation examples.

The FasTie® couplers and pull studs are available in 3 sizes to suit various applications: 1”, 1-3/8” and 2”.

Features & Benefits

- FasTie® installs easily into existing tapped holes; no additional machining is required
- FasTie® reduces mold setting time by quickly uncoupling, plus there are no loose parts to stow
- FasTie® remains coupled during mold cycling for increased “tie-in” reliability and reduced wear
- SpeedBar® adjusts quickly without tools to the exact length required [$\pm 1/2$ ” (12.7 mm) from nominal in .006” (.15 mm) increments]*
- SpeedBar® relieves molders from the time and trouble of machining ejector bars to fit different molds*



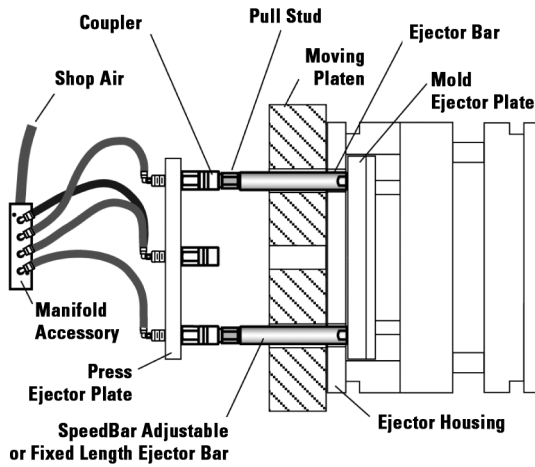
FasTie® Couplers U.S. Patent No. 6,379,072

FasTie® Pull Studs

Ideal for Center
Knock-Out

* 1-inch only

Quick Ejector Tie-In System Installation Examples



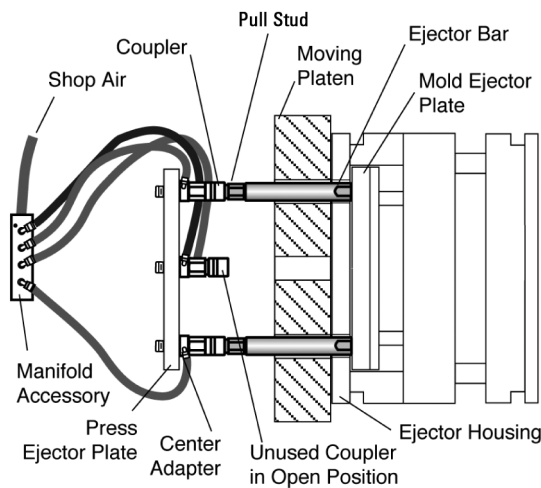
This setup is designed for custom molders who use a variety of injection molds with different ejector patterns and ejector housing thicknesses.

Typical Application - Couplers on Press Ejector Plate

Couplers are installed next to the press ejector plate. Pull studs are placed at the end of the mold-mounted ejector bars for easy removal. Molds are changed quickly without accessing the back of the press ejector plate. For example, a press with 4 ejector positions may be running molds using only the horizontal positions, but the next mold may need the 2 vertical ejector positions. Ejector housing shown is 1.062" thick. Air manifold supplies air to the end of each ejector bar for simultaneous coupler release.

Parts List

Qty	Part
2 or 4	FasTie Pull Stud
2 or 4	FasTie Coupler
2 or 4	Fixed Length Ejector Bars or SpeedBar® Adjustable Length Bars
1	Air Manifold with tubing



This setup is used where there is limited access to the back of the Press Ejector Plate. Custom molders using smaller presses will benefit from this application.

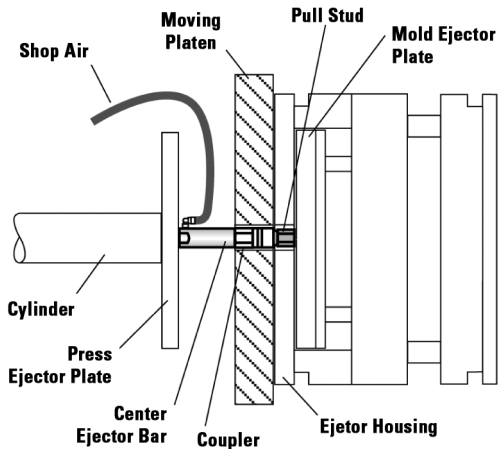
Couplers and Center Adapters on Press Ejector Plate

Couplers are installed next to the press ejector plate. Pull studs are placed at the end of the mold-mounted ejector bars for easy removal. Molds are changed quickly without accessing the back of the press ejector plate.

For example, a press with 4 ejector positions may be running molds using only the horizontal positions, but the next mold may need the 2 vertical ejector positions. Ejector housing shown is 1.062" thick. Air manifold supplies air to the mold side of the press ejector plate with the use of adapters.

Parts List

Qty	Part
2 or 4	FasTie Pull Stud
2 or 4	FasTie Coupler
2 or 4	Center Adapters
2 or 4	Fixed Length Ejector Bars or SpeedBar® Adjustable Length Bars
1	Air Manifold with tubing



For small presses with a center ejector, replace the cylinder bolt with a Center Ejector Bar and FasTie coupler.

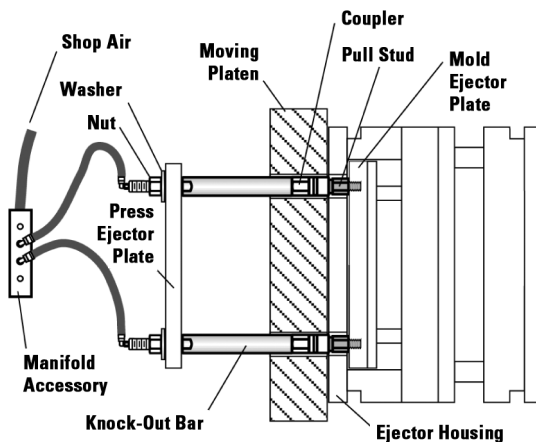
Coupler in Center Ejector Position

Center Ejector Bar and Coupler are installed into the press ejector plate, with the Coupler attached to the end. The pull stud is installed in the mold ejector plate. Molds are changed quickly without accessing the back of the press ejector plate. Ejector housing shown is 1.062" thick. Shop air is supplied to the side of the center adapter. No air manifold is needed. Fully-threaded Center Ejector Bar may be shortened to proper length on-site. In many small machines, there may not be room for an ejector bar.

Parts List

Qty	Part
1	FasTie Pull Stud
1	FasTie Coupler
1	Center Adapters

High Strength Couplers and Studs are recommended for 1" applications.



This setup is designed for captive molders, or shops with tools using a standard thickness ejector housing.

Couplers at the End of Ejector Bars

Couplers are located at the end of the ejector bars mounted to the press ejector plate. Pull studs are mounted to each mold in storage. Ejector connection is made without changing ejector bars. Ejector housing shown is 1.062" thick. Air manifold supplies compressed air to the end of each ejector bar for simultaneous coupler release. Fixed length bars are finished on-site, cut to length and tapped with 1/2-13 female thread.

Parts List

Qty	Part
2 or 4	FasTie Pull Stud
2 or 4	FasTie Coupler
2 or 4	Fixed Length Ejector Bars or SpeedBar®
1	Adjustable Length Bars
1	Air Manifold with tubing

Specifications and Accessories

Specifications

Maximum operating temp.....300°F (149°C)
 Air pressure range.....80–100 psi
 Pull stud material.....Hardened Steel (58–62 Rc)
 Ejector bar and coupler material.....High Strength Steel
 Threaded studs.....B7 Alloy or Comparable
 Air manifold material.....Aluminum
 Air tubing material.....1/8" OD Nylon

Press Requirements

	Coupler Size		
	1-inch	1-3/8-inch	2-inch
Platen thru hole min.	ø1.063" ø27 mm	ø1.45" ø36.8 mm	ø2.063" ø52.4 mm
Ejector plate thru hole min.	ø0.512" ø14 mm	ø0.641" ø16.5 mm	ø0.765" ø19.4 mm
Ejector force per coupler max.	2.5 tons	5.5 tons	7.5 tons

Recommended FasTie Size Per Press Size & Knockout Qty

Press Tonnage	Knockout Quantity		
	1 (Center)	2	4
0–250	1"HS	1"HS	1"HS
250–500	1-3/8"	1"HS or 1-3/8"	1"HS or 1-3/8"
500–750	2"	1-3/8" or 2"	1-3/8" or 2"
750–1000	2"	1-3/8" or 2"	1-3/8" or 2"
1000+	Do not use	2"	2"

For best results, use the largest FasTie that will fit into the press.

Accessories

Additional parts to aid installation and use:

- **SPEEDBAR Adjustable Length Ejector Bar***
Changes length without tools ±1/2" in increments of .006". Air passes through the bar for air hook-up at the back of the press ejector plate.
- **Fixed Length Ejector Bar**
Provides an air passage to the back of the press ejector plate. Several lengths are stocked with one blank end for on-site finishing.
- **Center Ejector Bar and Center Adapter**
Provides an air passage in front of the press ejector plate for center knockout. Also for use with multiple knockouts.
- **Air Manifold**
Splits single air supply into four circuits to aid air connection. Comes with 1/8" diameter tubing and pneumatic connectors.

SpeedBar

U.S. Patent No. 6,315,544



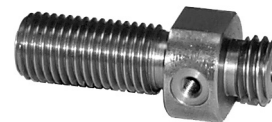
Fixed Length Ejector Bar



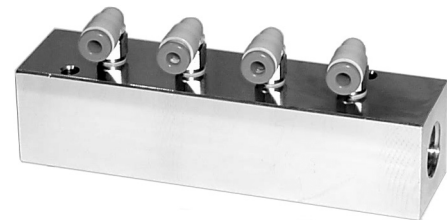
Center Ejector Bar



Center Adapter



Air Manifold



Contact DME for special thread sizes for Ejector Bars and Center Adapters

*1-inch, 1/2-13 threaded

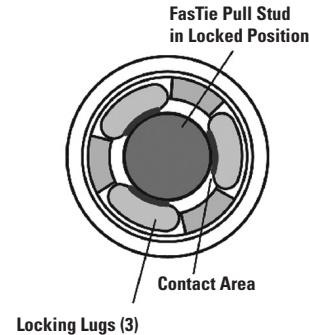


FasTie® - Quick Ejector Tie-In System

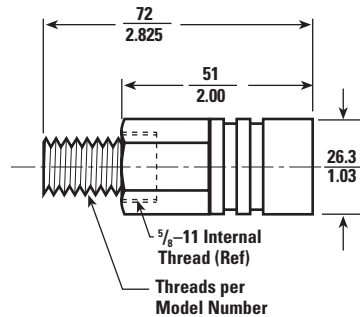
1-Inch Couplers and Pull Studs

FasTie Coupler Design employs three locking lugs, to dramatically increase the load-bearing surface area of the components.

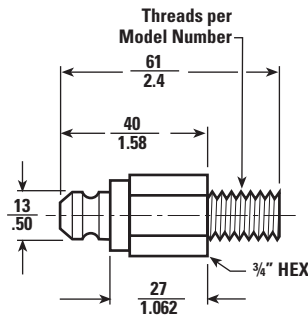
FasTies Coupler Bearing Surface Cross-Section



Standard FasTie Couplers and Pull Studs



FasTie Coupler



FasTie Pull Stud

High Strength 1" FasTie

Model Number	Thread Size
FTF50	1/2-13
FTF63	5/8-11
FTFM12	M12 x 1.75
FTFM16	M16 x 2

[FASTIE](#)

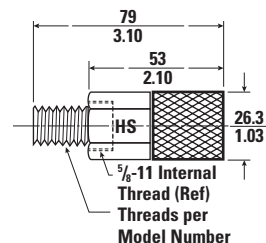
Model Number	Thread Size
FTM38	3/8-16
FTM50	1/2-13
FTM63	5/8-11
FTMM12	M12 x 1.75
FTMM16	M16 x 2
FTMM20	M20 x 2.5

High Strength FasTie Couplers and Pull Studs

Center knockout, multiple and high-speed ejection indicate the need for High Strength FasTie Couplers and Pull Studs. High Strength Couplers and Pull Studs are longer than the original parts (see above), and are not to be used in combination with Original Couplers and Pull Studs. All accessories are compatible with both styles of Couplers and Pull Studs.

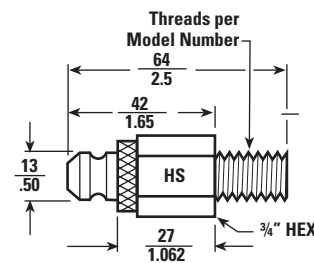
NOTE: Do not use HS FasTie Couplers in combination with standard version (above). Damage to couplers will result. Maximum installed center line misalignment of coupler and pull stud is +/- 3.5mm/0.138"

Model Number	Thread Size
FTMHS38	3/8-16
FTMHS50	1/2-13
FTMHS63	5/8-11
FTMHSM12	M12 x 1.75
FTMHSM16	M16 x 2
FTMHSM20	M20 x 2.5



FASTIE High Strength Coupler

Model Number	Thread Size
FTFHHS50	1/2-13
FTFHHS63	5/8-11
FTFHSM12	M12 x 1.75
FTFHSM16	M16 x 2



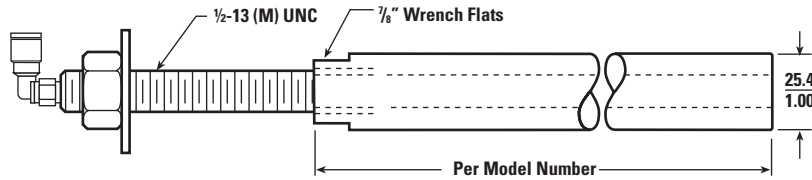
FASTIE High Strength Pull Stud

FasTie® - Quick Ejector Tie-In System



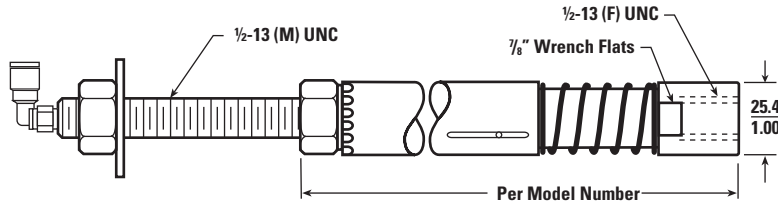
FasTie 1-Inch Accessories

Fixed Length Ejector Bar 1/2-13 threads



Model Number	Length
FTBB50-8	8"
FTBB50-10	10"
FTBB50-12	12"
FTBB50-14	14"

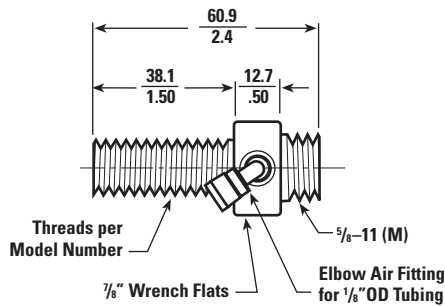
SPEEDBAR Adjustable Ejector Bar 1/2-13 threads Adjusts +/- 1/2" from base height



Model Number	Length
SBAB50-6	6"
SBAB50-7	7"
SBAB50-8	8"
SBAB50-9	9"
SBAB50-10	10"
SBAB50-11	11"
SBAB50-12	12"
SBAB50-13	13"
SBAB50-14	14"

Center Adapter

FASTIE

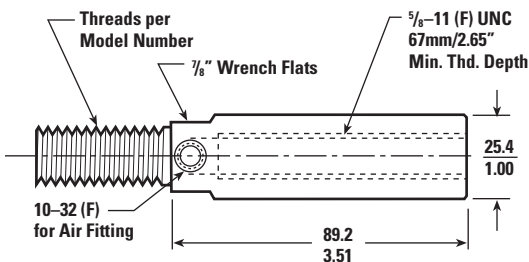


Model Number	Thread Size
FTCA63	5/8-11"
FTCAM16	M16 x 2
FTCAM20	M20 x 2.5

Air Handling Parts

FTAM100	Air Manifold Assembly
FTFP2	Pneumatic Fitting 90° Elbow, 10-32 x 1/8" OD tube
FTT125	Tubing 1/8" OD, nylon

Center Bar (use with FTFHS-63 only)



Model Number	Thread Size
FTCA63-63	5/8-11
FTCAM16-63	M16 x 2

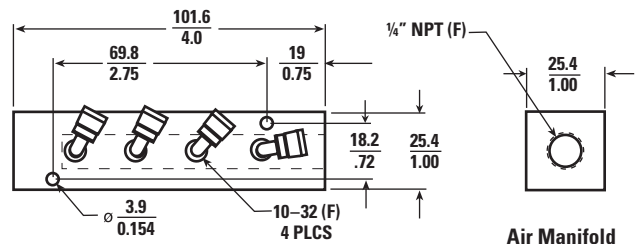
Call DME for a quote on thread sizes not shown

FTAM100

Includes:

- Manifold
- (4) 1/8" elbow pneumatic fittings
- (4) ø1/8" x 4ft tubing

$$\text{Linear} = \frac{\text{mm}}{\text{inch}} \text{ (TYP)}$$



Air Manifold

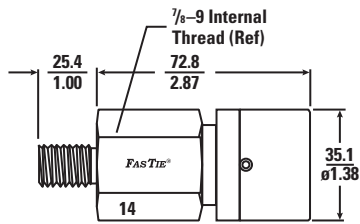


FasTie® - Quick Ejector Tie-In System

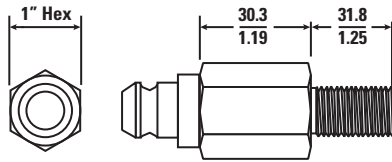
FASTIE

FasTie® 1-3/8-Inch Components

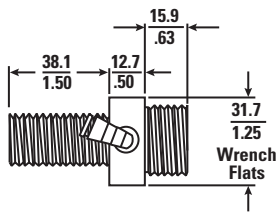
1-3/8" FasTie Coupler



1-3/8" FasTie Pull Stud



1-3/8" Center Adapter



Model Number	Thread Size
FTF1.4-63	5/8-11
FTF1.4-75	3/4-10
FTF1.4-M16	M16 x 2
FTF1.4-M20	M20 x 2.5

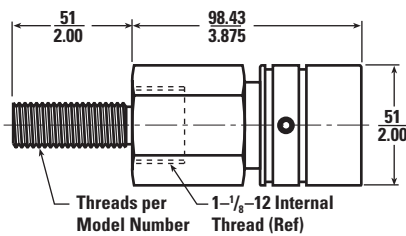
Model Number	Thread Size
FTM1.4-63	5/8-11
FTM1.4-75	3/4-10
FTM1.4-M16	M16 x 2
FTM1.4-M20	M20 x 2.5

Model Number	Thread Size
FTCA1.4-75	3/4-10
FTCA1.4-M16	M16 x 2
FTCA1.4-M20	M20 x 2.5

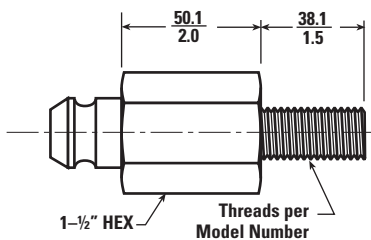
Maximum installed center line misalignment of coupler and pull stud is +/- 5mm/0.197"

FasTie 2-Inch Components

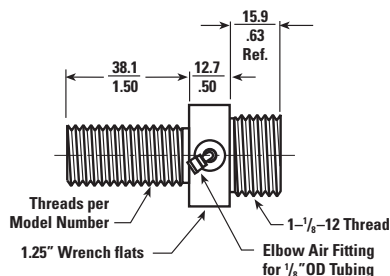
FasTie Coupler



2" FasTie Pull Stud



2" Center Adapter



Model Number	Thread Size
FTF2-63	5/8-11
FTF2-75	3/4-10

Model Number	Thread Size
FTM2-63	5/8-11
FTM2-75	3/4-10
FTM2M16	M16 x 2
FTM2M24	M24 x 2.5

Model Number	Thread Size
FTCA2-75	3/4-10
FTCA2M16	M16 x 2
FTCA2M20	M20 x 2.5

Maximum installed center line misalignment of coupler and pull stud is +/- 6mm/0.236"

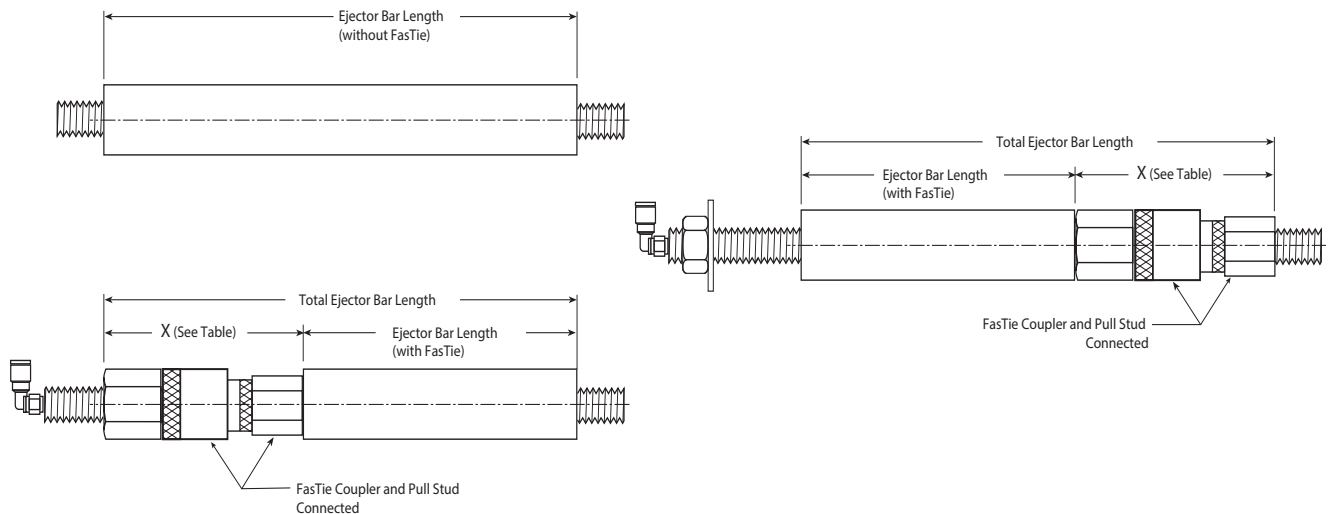
$$\text{Linear} = \frac{\text{mm}}{\text{Inch}} \text{ (TYP)}$$

Ejector Bars for 1-3/8-inch and 2-inch FasTie's are special orders.
Contact DME Industrial Supplies for information.

Determine Ejector Bar Length

- Determine length of Solid Ejector Bar
- Select Connected FasTie length from table
- Subtract Connected FasTie length from Solid Ejector Bar length
- Subtract Center Adapter length if necessary
- Result is FasTie Ejector Bar length

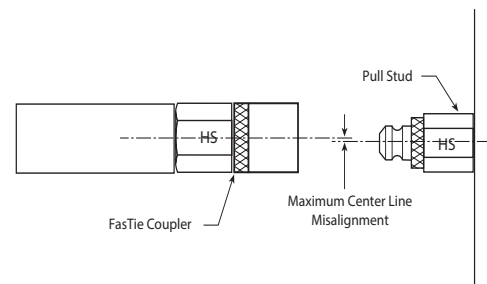
Connected FasTie Lengths		
Description	Part Numbers	"X" Length
Standard 1" FasTie	FTF-xx and FTM-xx	3.062"/77.8mm
High Strength 1" FasTie	FTFHS-xx and FTMHS-xx	3.162"/80.3mm
1 3/8" FasTie	FTF14-xx and FTM 14-xx	4.300"/109.2mm
2" FasTie	FTF2-xx and FTM2-xx	5.875"/149.2mm



Maximum Installed Misalignment (reference)

Maximum center line misalignment per coupler size:

1" HS	+/- 3.5mm (+/- .138")
1-3/8"	+/- 5mm (+/- .197")
2"	+/- 6mm (+/- .236")



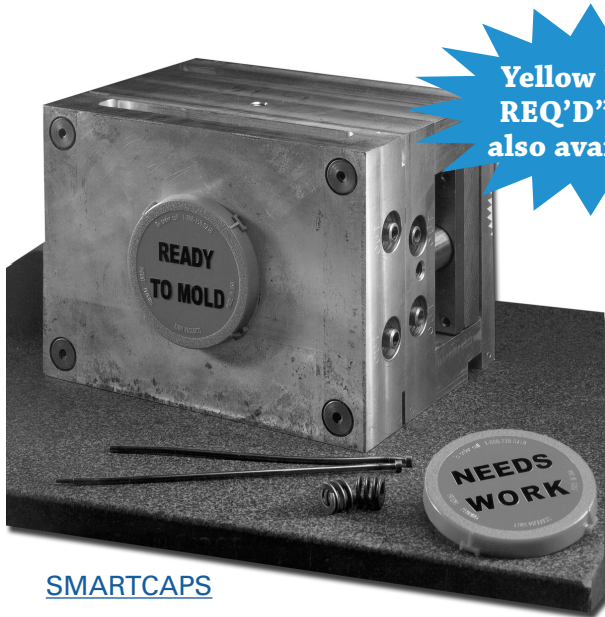


SmartCaps™

Mold Status Identification Markers

"Now our molds tell us what needs to happen. The mold doesn't sit, waiting for someone to find out if it needs work. And we never hang a mold until it's ready. It's so simple."

– Excelerated Mold Group



SMARTCAPS

Yellow "P.M. REQ'D" caps also available!

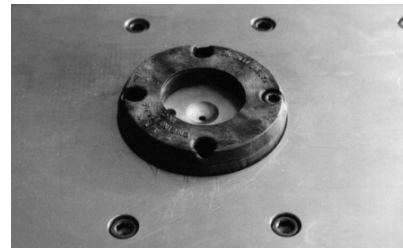
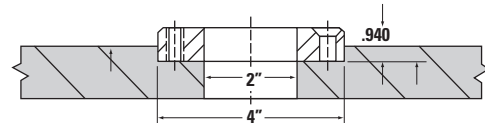
- Smart Caps snap on or off your mold locating rings quickly
- Indicates at a glance – even 50 feet away – the status of your molds
- Holds a condition note or work order safely under the Smart Cap.
- Three color – coded status caps available:

GREEN – Ready to mold
 RED – Mold needs work
 YELLOW – Mold needs preventive maintenance before storage

Part Number	Description
SCG	Green "Ready to Mold"
SCR	Red "Needs Work"
SCY	Yellow "P.M. Required"

Polycarbonate Locating Rings

- Made of engineering grade materials; 30% fiber-filled, flame-retardant Polycarbonate
 - Tensile strength – 16,500 PSI @ 73°
 - Flex strength – 23,000 PSI
 - Compressive strength – 21,000 PSI
 - Shear strength – 9,500 PSI
- 2 Aluminum inserts for 5/16" cap screws
- Reduces platen damage and nozzle band contact
- Form fits to worn platens
- Speeds setup, easy to clean
- Materials do not stick, "PEEL RIGHT OFF"!
- Prevents electrical shorts
- Replaces standard 6501 & 6501 LN locators
- Withstands 428°F continuous temperatures
- Mounting hole pattern fits DME or National
- Low prices!
- High quality!



LOCATING RINGS

Part Number	Description
P-6501	Polycarbonate Locating Ring

Plate Puller for 3 Plate Molds



Plate Puller

Part Number	Description	Wt. of Plate
PP100K	Male and Female Plate Puller with Spring	50 lbs.
PP200K	Male and Female Plate Puller with Spring	100 lbs.
PP300K	Male and Female Plate Puller with Spring	150 lbs.

Part Number	Description	Wt. of Plate
PPS100	Replacement Spring	50 lbs.
PPS200	Replacement Spring	100 lbs.
PPS300	Replacement Spring	150 lbs.



OBSOLETE

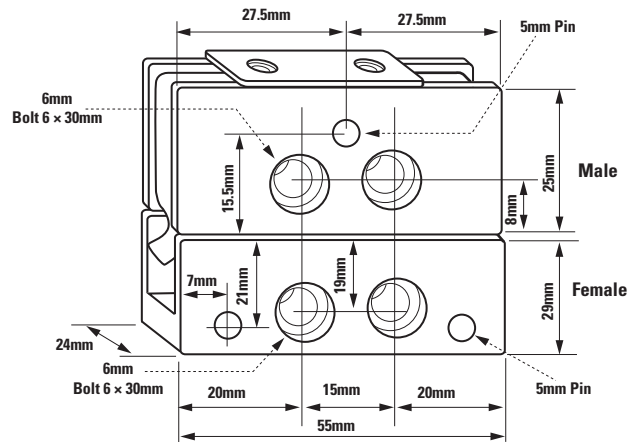
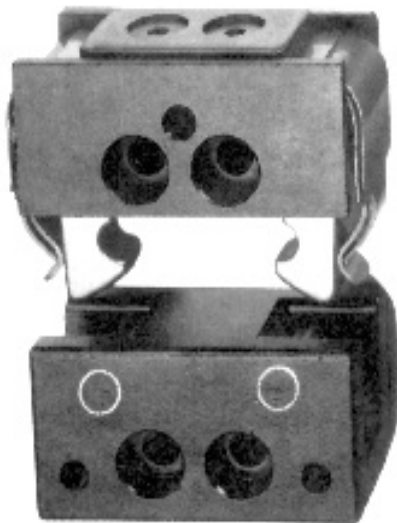
PPS300

Needed for
PP300K

PPS200

Needed for PP200K

- * Plate Puller is 55mm wide
- with 1 set of springs it is 60mm wide
- with 2 sets of springs it is 63mm wide
- with 3 sets of springs it is 66mm wide

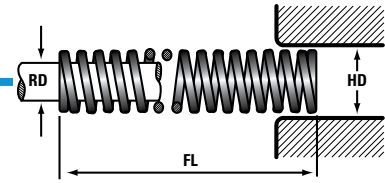




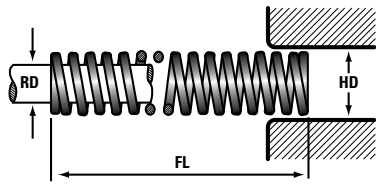
Danly Springs

Light Duty - Green

DANLY SPRINGS GREEN



Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/8	3/16	3/4	9-0603-11	9.0	17	0.19	20	0.23	27	0.30	34	0.38
		1	9-0604-11	6.3	16	0.25	19	0.30	25	0.40	32	0.50
		1 1/4	9-0605-11	5.0	16	0.31	19	0.38	25	0.50	32	0.63
		1 1/2	9-0606-11	4.2	16	0.37	19	0.45	25	0.60	32	0.77
		1 3/4	9-0607-11	3.6	16	0.43	19	0.52	25	0.69	32	0.89
		2	9-0608-11	3.1	15	0.50	18	0.60	25	0.80	32	1.02
		2 1/2	9-0610-11	2.6	16	0.63	19	0.76	26	1.01	34	1.30
		3	9-0612-11	2.1	16	0.75	19	0.90	25	1.20	33	1.56
1/2	9/32	12	9-0648-11	0.5	15	3.00	18	3.60	24	4.80	31	6.24
		3/4	9-0803-11	15.0	28	0.19	34	0.23	45	0.30	59	0.39
		1	9-0804-11	10.9	27	0.25	32	0.30	43	0.40	55	0.50
		1 1/4	9-0805-11	9.4	30	0.31	36	0.38	47	0.50	65	0.69
		1 1/2	9-0806-11	7.8	29	0.37	35	0.45	47	0.60	68	0.87
		1 3/4	9-0807-11	6.6	29	0.43	34	0.52	46	0.69	67	1.02
		2	9-0808-11	5.8	29	0.50	35	0.60	47	0.80	67	1.15
		2 1/2	9-0810-11	4.7	29	0.63	35	0.76	47	1.01	69	1.46
		3	9-0812-11	3.6	27	0.75	32	0.90	43	1.20	61	1.70
5/8	11/32	3 1/2	9-0814-11	3.1	27	0.88	32	1.05	43	1.40	62	2.00
		12	9-0848-11	0.8	25	3.00	30	3.60	40	4.80	50	6.30
		3/4	9-1003-11	24.0	46	0.19	55	0.23	72	0.30	86	0.36
		1	9-1004-11	18.0	44	0.25	53	0.30	71	0.40	90	0.50
		1 1/4	9-1005-11	14.0	43	0.31	53	0.38	70	0.50	91	0.65
		1 1/2	9-1006-11	12.0	45	0.37	54	0.45	72	0.60	97	0.81
		1 3/4	9-1007-11	10.0	43	0.43	52	0.52	69	0.69	97	0.97
		2	9-1008-11	9.3	47	0.50	56	0.60	75	0.80	107	1.16
		2 1/2	9-1010-11	7.2	45	0.63	54	0.76	73	1.01	104	1.44
		3	9-1012-11	5.9	44	0.75	53	0.90	71	1.20	103	1.74
		3 1/2	9-1014-11	5.3	46	0.88	56	1.05	74	1.40	111	2.10
3/4	3/8	4	9-1016-11	4.7	47	1.00	57	1.20	75	1.61	114	2.42
		12	9-1048-11	1.5	45	3.00	54	3.60	72	4.80	109	7.26
		3/4	9-1203-11	42.5	80	0.19	96	0.23	128	0.30	153	0.36
		1	9-1204-11	32.0	79	0.25	94	0.30	126	0.40	158	0.49
		1 1/4	9-1205-11	24.4	77	0.31	92	0.38	123	0.50	152	0.63
		1 1/2	9-1206-11	19.3	72	0.37	87	0.45	115	0.60	144	0.74
		1 3/4	9-1207-11	16.2	70	0.43	84	0.52	112	0.69	142	0.87
		2	9-1208-11	14.2	71	0.50	86	0.60	114	0.80	144	1.02
		2 1/2	9-1210-11	11.0	69	0.63	83	0.76	111	1.01	139	1.27
		3	9-1212-11	9.2	69	0.75	83	0.90	110	1.20	142	1.55
3/4	3/8	3 1/2	9-1214-11	7.7	67	0.88	81	1.05	108	1.40	137	1.79
		4	9-1216-11	6.8	68	1.00	82	1.20	109	1.61	140	2.07



Danly Springs



Light Duty - Green

DANLY SPRINGS GREEN

Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Reqd. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in.		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/4	3/8	4 1/2	9-1218-11	6.0	67	1.12	81	1.35	108	1.80	140	2.34
		5	9-1220-11	5.3	66	1.25	80	1.50	106	2.00	137	2.58
		5 1/2	9-1222-11	4.9	67	1.38	80	1.65	107	2.20	139	2.86
		6	9-1224-11	4.5	67	1.50	81	1.80	108	2.39	143	3.17
		12	9-1248-11	2.2	65	3.00	78	3.60	104	4.80	135	6.24
1	1/2	1	9-1604-11	61.2	151	0.25	181	0.30	241	0.40	296	0.48
		1 1/4	9-1605-11	46.2	146	0.31	175	0.38	233	0.50	284	0.62
		1 1/2	9-1606-11	37.0	138	0.37	166	0.45	221	0.60	277	0.75
		1 3/4	9-1607-11	30.6	133	0.43	159	0.52	212	0.69	268	0.87
		2	9-1608-11	26.5	133	0.50	160	0.60	213	0.80	269	1.01
		2 1/2	9-1610-11	20.4	129	0.63	154	0.76	206	1.01	258	1.25
		3	9-1612-11	16.8	126	0.75	151	0.90	201	1.20	256	1.50
		3 1/2	9-1614-11	14.1	124	0.88	148	1.05	198	1.40	251	1.75
		4	9-1616-11	12.1	121	1.00	146	1.20	194	1.61	247	2.01
		4 1/2	9-1618-11	10.7	120	1.12	144	1.35	192	1.80	244	2.25
		5	9-1620-11	9.6	120	1.25	144	1.50	192	2.00	244	2.52
		5 1/2	9-1622-11	8.7	120	1.38	144	1.65	192	2.20	247	2.80
		6	9-1624-11	8.0	120	1.50	144	1.80	191	2.39	250	3.10
		7	9-1628-11	6.9	121	1.75	145	2.10	193	2.80	252	3.63
8	9-1632-11	6.0	120	2.00	144	2.40	192	3.20	253	4.17		
12	9-1648-11	4.0	120	3.00	144	3.60	192	4.80	254	6.22		
1 1/4	5/8	1 1/2	9-2006-11	57.9	217	0.37	260	0.45	346	0.60	413	0.71
		1 3/4	9-2007-11	47.5	206	0.43	247	0.52	329	0.69	397	0.84
		2	9-2008-11	40.7	204	0.50	245	0.60	327	0.80	393	0.96
		2 1/2	9-2010-11	31.4	198	0.63	237	0.76	316	1.01	382	1.22
		3	9-2012-11	26.3	197	0.75	236	0.90	315	1.20	395	1.50
		3 1/2	9-2014-11	22.2	194	0.88	233	1.05	311	1.40	391	1.76
		4	9-2016-11	19.2	193	1.00	231	1.20	308	1.61	388	2.02
		4 1/2	9-2018-11	16.9	190	1.12	228	1.35	303	1.80	386	2.28
		5	9-2020-11	15.0	188	1.25	225	1.50	300	2.00	379	2.53
		5 1/2	9-2022-11	13.5	186	1.38	223	1.65	298	2.20	374	2.77
		6	9-2024-11	12.3	184	1.50	221	1.80	294	2.39	373	3.03
		7	9-2028-11	10.4	182	1.75	219	2.10	292	2.80	369	3.53
		8	9-2032-11	9.1	182	2.00	218	2.40	291	3.20	366	4.04
10	9-2040-11	7.2	180	2.50	216	3.00	288	4.00	360	5.03		
12	9-2048-11	5.9	177	3.00	213	3.60	283	4.80	357	6.03		

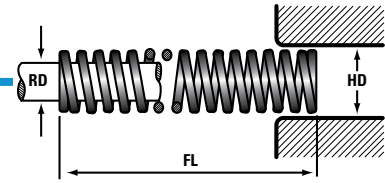




Danly Springs

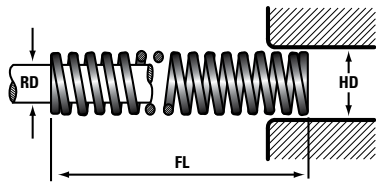
Light Duty - Green

DANLY SPRINGS GREEN



Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
1½	¾	2	9-2408-11	60.3	303	0.50	363	0.60	484	0.80	584	0.97
		2½	9-2410-11	45.8	289	0.63	346	0.76	462	1.01	558	1.22
		3	9-2412-11	37.5	281	0.75	337	0.90	449	1.20	558	1.49
		3½	9-2414-11	31.8	279	0.88	334	1.05	446	1.40	559	1.76
		4	9-2416-11	27.3	274	1.00	329	1.20	439	1.61	547	2.01
		4½	9-2418-11	24.1	270	1.12	324	1.35	433	1.80	549	2.28
		5	9-2420-11	21.6	270	1.25	324	1.50	432	2.00	551	2.55
		5½	9-2422-11	19.4	267	1.38	321	1.65	428	2.20	543	2.80
		6	9-2424-11	17.6	263	1.50	316	1.80	421	2.39	537	3.05
		7	9-2428-11	15.0	263	1.75	315	2.10	420	2.80	534	3.57
		8	9-2432-11	12.9	258	2.00	309	2.40	412	3.20	526	4.07
		10	9-2440-11	10.3	258	2.50	309	3.00	412	4.00	524	5.11
12	9-2448-11	8.4	252	3.00	303	3.60	403	4.80	516	6.10		
2	1	2½	9-3210-11	89.9	566	0.63	680	0.76	906	1.01	1096	1.22
		3	9-3212-11	72.0	539	0.75	646	0.90	862	1.20	1066	1.48
		3½	9-3214-11	60.2	527	0.88	633	1.05	844	1.40	1046	1.74
		4	9-3216-11	51.2	514	1.00	617	1.20	822	1.61	1014	1.98
		4½	9-3218-11	44.9	504	1.12	605	1.35	806	1.80	1006	2.24
		5	9-3220-11	40.0	500	1.25	600	1.50	800	2.00	1000	2.50
		5½	9-3222-11	36.0	496	1.38	595	1.65	794	2.20	994	2.76
		6	9-3224-11	32.8	491	1.50	589	1.80	785	2.39	990	3.02
		7	9-3228-11	27.8	487	1.75	584	2.10	779	2.80	983	3.54
		8	9-3232-11	23.8	476	2.00	571	2.40	761	3.20	951	4.00
		10	9-3240-11	18.8	470	2.50	564	3.00	752	4.00	950	5.04
		12	9-3248-11	15.5	465	3.00	558	3.60	744	4.80	940	6.05
2½	1½	3	9-4012-11	110.0	823	0.75	987	0.90	1317	1.20	1569	1.43
		3½	9-4014-11	89.9	788	0.88	945	1.05	1260	1.40	1512	1.68
		4	9-4016-11	76.2	765	1.00	918	1.20	1224	1.61	1473	1.93
		4½	9-4018-11	66.0	741	1.12	889	1.35	1185	1.80	1440	2.18
		5	9-4020-11	58.8	735	1.25	882	1.50	1176	2.00	1442	2.45
		6	9-4024-11	47.6	712	1.50	855	1.80	1139	2.39	1406	2.95
		7	9-4028-11	40.0	701	1.75	841	2.10	1121	2.80	1380	3.45
		8	9-4032-11	34.4	687	2.00	825	2.40	1100	3.20	1362	3.96
		10	9-4040-11	26.7	668	2.50	801	3.00	1068	4.00	1316	4.92
		12	9-4048-11	22.0	660	3.00	793	3.60	1057	4.80	1304	5.92





Danly Springs



Medium Duty - Blue

DANLY SPRINGS BLUE

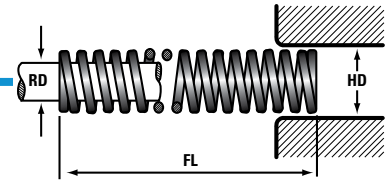
Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/8	3/16	3/4	9-0603-21	13.0	25	0.19	30	0.23	36	0.28	39	0.30
		1	9-0604-21	9.6	24	0.25	29	0.30	36	0.37	41	0.43
		1 1/4	9-0605-21	8.0	25	0.31	30	0.38	38	0.47	44	0.55
		1 1/2	9-0606-21	6.7	25	0.37	30	0.45	38	0.56	44	0.66
		1 3/4	9-0607-21	5.6	24	0.43	29	0.52	36	0.65	43	0.77
		2	9-0608-21	4.9	25	0.50	30	0.60	37	0.75	43	0.88
		2 1/2	9-0610-21	3.9	24	0.63	29	0.76	37	0.94	43	1.11
		3	9-0612-21	3.3	24	0.75	29	0.90	36	1.12	46	1.38
1/2	9/32	12	9-0648-21	0.8	23	3.00	27	3.60	34	4.50	43	5.40
		3/4	9-0803-21	21.0	39	0.19	47	0.23	59	0.28	63	0.30
		1	9-0804-21	16.5	41	0.25	49	0.30	61	0.37	82	0.50
		1 1/4	9-0805-21	12.9	41	0.31	49	0.38	61	0.47	82	0.63
		1 1/2	9-0806-21	10.9	41	0.37	49	0.45	61	0.56	86	0.78
		1 3/4	9-0807-21	9.2	40	0.43	48	0.52	60	0.65	84	0.91
		2	9-0808-21	8.0	40	0.50	48	0.60	60	0.75	84	1.05
		2 1/2	9-0810-21	6.3	40	0.63	48	0.76	60	0.94	82	1.32
5/8	11/32	3	9-0812-21	5.0	37	0.75	45	0.90	56	1.12	77	1.54
		3 1/2	9-0814-21	4.3	37	0.88	45	1.05	56	1.31	77	1.81
		12	9-0848-21	3.7	37	1.00	44	1.20	56	1.50	78	2.11
		3/4	9-1003-21	44.0	84	0.19	101	0.23	123	0.28	141	0.32
		1	9-1004-21	31.8	78	0.25	94	0.30	117	0.37	134	0.42
		1 1/4	9-1005-21	24.0	74	0.31	91	0.38	113	0.47	127	0.53
		1 1/2	9-1006-21	20.1	75	0.37	90	0.45	113	0.56	131	0.65
		1 3/4	9-1007-21	17.4	75	0.43	90	0.52	113	0.65	141	0.81
		2	9-1008-21	15.4	77	0.50	93	0.60	116	0.75	142	0.92
		2 1/2	9-1010-21	12.0	76	0.63	91	0.76	113	0.94	143	1.19
3/4	3/8	3	9-1012-21	10.1	76	0.75	91	0.90	113	1.12	144	1.43
		3 1/2	9-1014-21	8.7	76	0.88	91	1.05	114	1.31	151	1.73
		4	9-1016-21	7.6	76	1.00	92	1.20	114	1.51	154	2.02
		12	9-1048-21	2.4	71	3.00	85	3.60	106	4.50	144	6.00
		3/4	9-1203-21	68.5	128	0.19	154	0.23	193	0.28	199	0.29
		1	9-1204-21	51.5	127	0.25	152	0.30	190	0.37	208	0.40
		1 1/4	9-1205-21	38.9	123	0.31	147	0.38	184	0.47	198	0.51
		1 1/2	9-1206-21	31.3	117	0.37	140	0.45	176	0.56	192	0.61
		1 3/4	9-1207-21	25.8	112	0.43	134	0.52	168	0.65	182	0.71
		2	9-1208-21	22.2	111	0.50	134	0.60	167	0.75	180	0.81
3/4	3/8	2 1/2	9-1210-21	17.3	109	0.63	131	0.76	163	0.94	177	1.02
		3	9-1212-21	14.1	105	0.75	127	0.90	158	1.12	173	1.22
		3 1/2	9-1214-21	12.2	107	0.88	128	1.05	160	1.31	178	1.46
		4	9-1216-21	10.6	106	1.00	128	1.20	160	1.51	179	1.68

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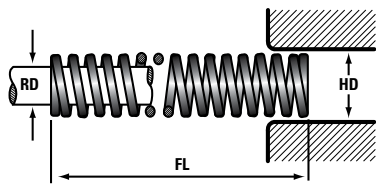
Danly Springs

Medium Duty - Blue



DANLY SPRINGS BLUE

Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in.		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/4	3/8	4 1/2	9-1218-21	9.3	105	1.13	126	1.36	158	1.70	175	1.88
		5	9-1220-21	8.3	104	1.25	125	1.50	156	1.88	175	2.09
		5 1/2	9-1222-21	7.5	103	1.37	123	1.64	154	2.05	174	2.30
		6	9-1224-21	6.9	103	1.50	124	1.80	155	2.24	173	2.52
		12	9-1248-21	3.5	104	3.00	125	3.60	156	4.50	180	5.21
1	1/2	1	9-1604-21	94.9	234	0.25	280	0.30	350	0.37	371	0.39
		1 1/4	9-1605-21	71.2	224	0.31	269	0.38	336	0.47	357	0.50
		1 1/2	9-1606-21	56.3	211	0.37	253	0.45	316	0.56	338	0.60
		1 3/4	9-1607-21	47.5	206	0.43	247	0.52	309	0.65	341	0.72
		2	9-1608-21	41.0	206	0.50	247	0.60	309	0.75	344	0.84
		2 1/2	9-1610-21	31.4	198	0.63	237	0.76	297	0.94	327	1.04
		3	9-1612-21	25.8	193	0.75	232	0.90	289	1.12	325	1.26
		3 1/2	9-1614-21	21.6	189	0.88	227	1.05	284	1.31	317	1.46
		4	9-1616-21	18.8	189	1.00	226	1.20	283	1.51	316	1.68
		4 1/2	9-1618-21	16.7	189	1.13	227	1.36	284	1.70	320	1.92
		5	9-1620-21	15.0	188	1.25	225	1.50	281	1.88	320	2.14
		5 1/2	9-1622-21	13.5	185	1.37	222	1.64	277	2.05	319	2.36
		6	9-1624-21	12.4	186	1.50	223	1.80	278	2.24	319	2.58
		7	9-1628-21	10.5	184	1.75	221	2.10	276	2.63	314	3.00
8	9-1632-21	9.1	182	2.00	218	2.40	273	3.00	312	3.42		
12	9-1648-21	6.0	180	3.00	216	3.60	270	4.50	305	5.11		
1 1/4	5/8	1 1/2	9-2006-21	94.8	355	0.37	425	0.45	532	0.56	569	0.60
		1 3/4	9-2007-21	77.9	337	0.43	405	0.52	506	0.65	550	0.71
		2	9-2008-21	66.3	333	0.50	399	0.60	499	0.75	539	0.81
		2 1/2	9-2010-21	50.1	316	0.63	379	0.76	473	0.94	503	1.00
		3	9-2012-21	40.5	303	0.75	364	0.90	454	1.12	490	1.21
		3 1/2	9-2014-21	34.2	300	0.88	360	1.05	449	1.31	486	1.42
		4	9-2016-21	29.6	297	1.00	357	1.20	446	1.51	484	1.63
		4 1/2	9-2018-21	26.3	298	1.13	357	1.36	447	1.70	491	1.87
		5	9-2020-21	23.7	296	1.25	356	1.50	444	1.88	498	2.10
		5 1/2	9-2022-21	21.4	293	1.37	351	1.64	439	2.05	495	2.31
		6	9-2024-21	19.5	292	1.50	350	1.80	438	2.24	493	2.53
		7	9-2028-21	16.6	291	1.75	349	2.10	436	2.63	489	2.95
		8	9-2032-21	14.4	288	2.00	345	2.40	432	3.00	486	3.38
10	9-2040-21	11.4	285	2.50	342	3.00	428	3.75	483	4.23		
12	9-2048-21	9.5	285	3.00	342	3.60	428	4.50	484	5.10		



Danly Springs

Medium Duty - Blue



DANLY SPRINGS BLUE

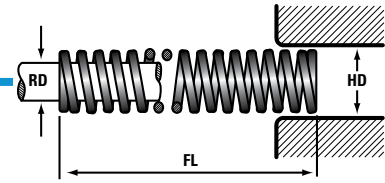
Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
1½	¾	2	9-2408-21	97.4	489	0.50	587	0.60	733	0.75	762	0.78
		2½	9-2410-21	73.5	463	0.63	556	0.76	694	0.94	722	0.98
		3	9-2412-21	60.1	450	0.75	539	0.90	674	1.12	725	1.21
		3½	9-2414-21	50.1	439	0.88	527	1.05	658	1.31	704	1.40
		4	9-2416-21	43.4	436	1.00	523	1.20	654	1.51	707	1.63
		4½	9-2418-21	37.9	429	1.13	515	1.36	643	1.70	693	1.83
		5	9-2420-21	34.0	425	1.25	510	1.50	638	1.88	698	2.05
		5½	9-2422-21	30.6	419	1.37	502	1.64	628	2.05	687	2.25
		6	9-2424-21	27.9	417	1.50	501	1.80	626	2.24	691	2.47
		7	9-2428-21	23.7	415	1.75	498	2.10	623	2.63	687	2.89
		8	9-2432-21	20.6	412	2.00	494	2.40	617	3.00	683	3.32
		10	9-2440-21	16.5	413	2.50	495	3.00	619	3.75	693	4.21
12	9-2448-21	13.6	408	3.00	490	3.60	612	4.50	682	5.03		
2	1	2½	9-3210-21	121.0	762	0.63	915	0.76	1143	0.94	1193	0.99
		3	9-3212-21	95.6	715	0.75	858	0.90	1073	1.12	1130	1.18
		3½	9-3214-21	79.8	699	0.88	839	1.05	1049	1.31	1109	1.39
		4	9-3216-21	69.6	699	1.00	838	1.20	1048	1.51	1131	1.63
		4½	9-3218-21	61.2	693	1.13	831	1.36	1039	1.70	1134	1.85
		5	9-3220-21	54.0	675	1.25	810	1.50	1013	1.88	1105	2.05
		5½	9-3222-21	48.8	668	1.37	801	1.64	1001	2.05	1110	2.27
		6	9-3224-21	44.5	666	1.50	799	1.80	999	2.24	1112	2.50
		7	9-3228-21	37.9	664	1.75	797	2.10	996	2.63	1117	2.94
		8	9-3232-21	32.8	655	2.00	786	2.40	983	3.00	1103	3.36
		10	9-3236-21	29.1	656	2.25	787	2.70	984	3.38	1108	3.81
		12	9-3240-21	26.1	653	2.50	783	3.00	979	3.75	1111	4.26
2½	1½	3	9-4012-21	174.0	1304	0.75	1565	0.90	1956	1.12	2113	1.22
		3½	9-4014-21	143.0	1249	0.88	1499	1.05	1874	1.31	2056	1.44
		4	9-4016-21	121.0	1211	1.00	1453	1.20	1816	1.51	2016	1.66
		4½	9-4018-21	106.0	1195	1.13	1434	1.36	1793	1.70	2031	1.91
		5	9-4020-21	93.7	1172	1.25	1406	1.50	1758	1.88	2003	2.14
		5½	9-4024-21	75.9	1139	1.50	1366	1.80	1708	2.24	1963	2.59
		6	9-4028-21	63.8	1116	1.75	1339	2.10	1674	2.63	1935	3.04
		7	9-4032-21	55.0	1099	2.00	1319	2.40	1649	3.00	1916	3.48
		8	9-4036-21	48.8	1099	2.25	1318	2.70	1648	3.38	1944	3.98
		10	9-4040-21	43.9	1097	2.50	1316	3.00	1646	3.75	1964	4.48
12	9-4048-21	36.2	1087	3.00	1305	3.60	1631	4.50	1966	5.42		





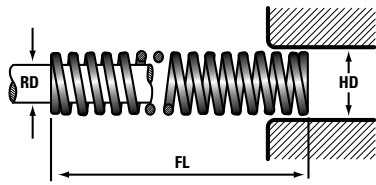
Danly Springs

Heavy Duty - Red



DANLY SPRINGS RED

Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in.		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/8	3/16	3/4	9-0603-26	16.5	25	0.15	31	0.19	37	0.23	41	0.25
		1	9-0604-26	12.6	25	0.20	31	0.25	37	0.30	46	0.37
		1 1/4	9-0605-26	10.0	25	0.25	31	0.31	38	0.38	47	0.47
		1 1/2	9-0606-26	9.3	28	0.30	35	0.37	42	0.45	61	0.66
		1 3/4	9-0607-26	8.0	28	0.35	35	0.43	42	0.52	62	0.78
		2	9-0608-26	6.8	27	0.40	34	0.50	41	0.60	60	0.88
		2 1/2	9-0610-26	5.5	28	0.50	35	0.63	42	0.76	62	1.13
		3	9-0612-26	4.3	26	0.60	32	0.75	39	0.90	56	1.29
1/2	9/32	12	9-0648-26	1.1	26	2.40	32	3.00	39	3.60	56	5.27
		3/4	9-0803-26	31.0	47	0.15	58	0.19	70	0.23	96	0.31
		1	9-0804-26	23.6	46	0.20	58	0.25	70	0.30	103	0.44
		1 1/4	9-0805-26	18.8	47	0.25	59	0.31	71	0.38	106	0.56
		1 1/2	9-0806-26	15.5	46	0.30	58	0.37	70	0.45	107	0.69
		1 3/4	9-0807-26	13.3	46	0.35	58	0.43	69	0.52	109	0.82
		2	9-0808-26	11.4	46	0.40	57	0.50	69	0.60	107	0.94
		2 1/2	9-0810-26	8.7	44	0.50	55	0.63	66	0.76	99	1.14
		3	9-0812-26	7.7	46	0.60	58	0.75	69	0.90	114	1.47
		3 1/2	9-0814-26	6.2	43	0.70	54	0.88	65	1.05	102	1.64
5/8	11/32	12	9-0848-26	1.8	43	2.40	53	3.00	64	3.60	101	5.71
		3/4	9-1003-26	58.0	87	0.15	110	0.19	133	0.23	157	0.27
		1	9-1004-26	43.1	85	0.20	106	0.25	127	0.30	160	0.37
		1 1/4	9-1005-26	34.8	88	0.25	110	0.31	132	0.38	174	0.50
		1 1/2	9-1006-26	27.8	83	0.30	104	0.37	125	0.45	167	0.60
		1 3/4	9-1007-26	24.7	86	0.35	107	0.43	128	0.52	185	0.75
		2	9-1008-26	20.5	82	0.40	103	0.50	123	0.60	170	0.83
		2 1/2	9-1010-26	16.5	83	0.50	104	0.63	125	0.76	177	1.07
		3	9-1012-26	14.0	84	0.60	105	0.75	126	0.90	187	1.33
		3 1/2	9-1014-26	11.9	83	0.70	104	0.88	125	1.05	187	1.57
		4	9-1016-26	10.4	84	0.80	104	1.00	125	1.20	187	1.80
3/4	3/8	12	9-1048-26	3.3	80	2.40	100	3.00	120	3.60	181	5.44
		1	9-1204-26	137.0	270	0.20	337	0.25	405	0.30	422	0.31
		1 1/4	9-1205-26	103.0	260	0.25	324	0.31	389	0.38	407	0.40
		1 1/2	9-1206-26	82.2	246	0.30	307	0.37	369	0.45	398	0.48
		1 3/4	9-1207-26	68.5	237	0.35	297	0.43	356	0.52	392	0.57
		2	9-1208-26	57.8	232	0.40	290	0.50	348	0.60	371	0.64
		2 1/2	9-1210-26	44.0	222	0.50	277	0.63	333	0.76	344	0.78
		3	9-1212-26	36.2	217	0.60	271	0.75	325	0.90	347	0.96
		3 1/2	9-1214-26	30.8	216	0.70	270	0.88	324	1.05	350	1.13
4	9-1216-26	26.8	215	0.80	269	1.00	323	1.20	351	1.31		



Danly Springs

Heavy Duty - Red



DANLY SPRINGS RED

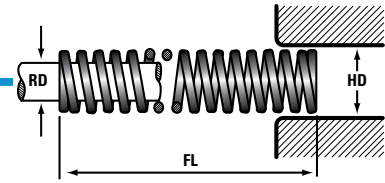
Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in.		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/4	3/8	4 1/2	9-1218-26	23.7	213	0.90	266	1.12	319	1.35	352	1.49
		5	9-1220-26	21.2	212	1.00	265	1.25	318	1.50	353	1.66
		5 1/2	9-1222-26	19.3	213	1.10	266	1.38	319	1.65	354	1.84
		6	9-1224-26	17.6	211	1.20	263	1.50	316	1.80	355	2.01
		12	9-1248-26	8.6	207	2.40	258	3.00	310	3.60	351	4.07
1	1/2	1	9-1604-26	215.0	423	0.20	529	0.25	-	-	622	0.29
		1 1/4	9-1605-26	163.0	411	0.25	513	0.31	616	0.38	648	0.40
		1 1/2	9-1606-26	127.0	380	0.30	475	0.37	570	0.45	602	0.47
		1 3/4	9-1607-26	109.0	378	0.35	472	0.43	566	0.52	646	0.60
		2	9-1608-26	89.4	359	0.40	449	0.50	539	0.60	581	0.65
		2 1/2	9-1610-26	69.1	348	0.50	435	0.63	522	0.76	571	0.83
		3	9-1612-26	57.0	341	0.60	426	0.75	512	0.90	584	1.02
		3 1/2	9-1614-26	48.0	336	0.70	420	0.88	505	1.05	575	1.20
		4	9-1616-26	41.8	336	0.80	420	1.00	504	1.20	584	1.40
		4 1/2	9-1618-26	37.1	333	0.90	416	1.12	500	1.35	591	1.59
		5	9-1620-26	33.1	331	1.00	414	1.25	497	1.50	585	1.77
		5 1/2	9-1622-26	30.0	331	1.10	413	1.38	496	1.65	590	1.97
		6	9-1624-26	27.5	329	1.20	411	1.50	494	1.80	595	2.16
		7	9-1628-26	23.5	329	1.40	412	1.75	494	2.10	602	2.56
8	9-1632-26	20.5	328	1.60	410	2.00	492	2.40	599	2.93		
12	9-1648-26	13.8	331	2.40	414	3.00	497	3.60	638	4.62		
1 1/4	5/8	1 1/2	9-2006-26	223.0	667	0.30	834	0.37	1001	0.45	1021	0.46
		1 3/4	9-2007-26	182.0	631	0.35	788	0.43	946	0.52	995	0.55
		2	9-2008-26	154.0	618	0.40	773	0.50	928	0.60	976	0.63
		2 1/2	9-2010-26	117.0	590	0.50	737	0.63	884	0.76	926	0.79
		3	9-2012-26	94.7	567	0.60	708	0.75	850	0.90	916	0.97
		3 1/2	9-2014-26	80.1	561	0.70	702	0.88	842	1.05	926	1.16
		4	9-2016-26	69.1	555	0.80	694	1.00	832	1.20	919	1.33
		4 1/2	9-2018-26	60.7	545	0.90	681	1.12	817	1.35	914	1.50
		5	9-2020-26	54.7	547	1.00	684	1.25	821	1.50	933	1.71
		5 1/2	9-2022-26	49.3	543	1.10	679	1.38	815	1.65	928	1.88
		6	9-2024-26	44.9	537	1.20	672	1.50	806	1.80	923	2.06
		7	9-2028-26	38.1	534	1.40	668	1.75	801	2.10	916	2.41
		8	9-2032-26	33.0	527	1.60	659	2.00	791	2.40	910	2.75
10	9-2040-26	26.4	528	2.00	660	2.50	792	3.00	925	3.51		
12	9-2048-26	21.8	524	2.40	654	3.00	785	3.60	916	4.20		





Danly Springs

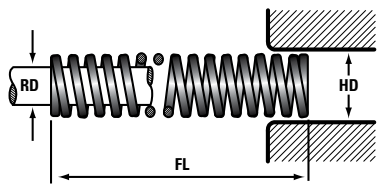
Heavy Duty - Red



DANLY SPRINGS RED

Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Req'd. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
1½	¾	2	9-2408-26	208.0	835	0.40	1044	0.50	1253	0.60	1357	0.65
		2½	9-2410-26	153.0	771	0.50	964	0.63	1157	0.76	1233	0.80
		3	9-2412-26	125.0	748	0.60	935	0.75	1122	0.90	1252	1.00
		3½	9-2414-26	105.0	736	0.70	920	0.88	1104	1.05	1265	1.20
		4	9-2416-26	90.6	728	0.80	910	1.00	1091	1.20	1252	1.38
		4½	9-2418-26	80.4	722	0.90	902	1.12	1083	1.35	1285	1.60
		5	9-2420-26	71.5	715	1.00	894	1.25	1073	1.50	1273	1.78
		5½	9-2422-26	64.3	709	1.10	886	1.38	1063	1.65	1263	1.96
		6	9-2424-26	59.0	706	1.20	883	1.50	1059	1.80	1284	2.18
		7	9-2428-26	50.3	705	1.40	881	1.75	1057	2.10	1294	2.57
		8	9-2432-26	43.8	700	1.60	875	2.00	1050	2.40	1299	2.97
		10	9-2440-26	34.6	692	2.00	865	2.50	1038	3.00	1291	3.73
12	9-2448-26	28.7	689	2.40	862	3.00	1034	3.60	1300	4.53		
2	1	2½	9-3210-26	242.0	1220	0.50	1524	0.63	1829	0.76	1904	0.79
		3	9-3212-26	193.0	1155	0.60	1444	0.75	1732	0.90	1860	0.96
		3½	9-3214-26	160.0	1121	0.70	1402	0.88	1682	1.05	1831	1.14
		4	9-3216-26	140.0	1124	0.80	1406	1.00	1687	1.20	1891	1.35
		4½	9-3218-26	123.0	1104	0.90	1380	1.12	1656	1.35	1901	1.55
		5	9-3220-26	108.0	1080	1.00	1350	1.25	1620	1.50	1840	1.71
		5½	9-3222-26	96.4	1063	1.10	1328	1.38	1594	1.65	1797	1.86
		6	9-3224-26	88.0	1053	1.20	1317	1.50	1580	1.80	1812	2.06
		7	9-3228-26	75.0	1051	1.40	1314	1.75	1577	2.10	1836	2.45
		8	9-3232-26	65.3	1044	1.60	1305	2.00	1566	2.40	1854	2.84
		10	9-3240-26	51.3	1026	2.00	1283	2.50	1539	3.00	1816	3.54
		12	9-3248-26	42.6	1023	2.40	1279	3.00	1535	3.60	1842	4.32
2½	1½	3	9-4012-26	295.0	1770	0.60	2213	0.75	2655	0.90	2980	1.01
		3½	9-4014-26	241.0	1687	0.70	2109	0.88	2531	1.05	2952	1.23
		4	9-4016-26	205.0	1640	0.80	2050	1.00	2460	1.20	2952	1.44
		4½	9-4018-26	178.0	1602	0.90	2003	1.13	2403	1.35	2964	1.67
		5	9-4020-26	157.0	1570	1.00	1963	1.25	2355	1.50	2944	1.88
		5½	9-4024-26	128.0	1536	1.20	1920	1.50	2304	1.80	2880	2.25
		6	9-4028-26	108.0	1512	1.40	1890	1.75	2268	2.10	2835	2.63
		7	9-4032-26	93.0	1488	1.60	1860	2.00	2232	2.40	2790	3.00
		8	9-4036-26	82.0	1476	1.80	1845	2.25	2214	2.70	2768	3.38
		10	9-4040-26	73.5	1470	2.00	1838	2.50	2205	3.00	2756	3.75
12	9-4048-26	61.0	1464	2.40	1830	3.00	2196	3.60	2745	4.50		





Danly Springs

Extra Heavy Duty - Yellow



DANLY SPRINGS YELLOW

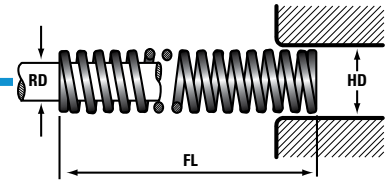
Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in.		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/8	3/16	3/4	9-0603-36	25.2	32	0.13	38	0.15	47	0.19	53	0.21
		1	9-0604-36	18.7	31	0.17	37	0.20	46	0.25	54	0.29
		1 1/4	9-0605-36	14.6	31	0.21	37	0.25	46	0.31	53	0.37
		1 1/2	9-0606-36	12.1	31	0.25	36	0.30	45	0.37	55	0.45
		1 3/4	9-0607-36	10.1	30	0.29	35	0.35	44	0.43	52	0.51
		2	9-0608-36	8.8	30	0.34	35	0.40	44	0.50	52	0.59
		2 1/2	9-0610-36	7.0	30	0.43	35	0.50	44	0.63	52	0.75
		3	9-0612-36	5.8	30	0.51	35	0.60	43	0.75	53	0.92
1/2	9/32	12	9-0648-36	1.4	29	2.04	34	2.40	42	3.00	50	3.60
		3/4	9-0803-36	44.5	57	0.13	67	0.15	83	0.19	102	0.23
		1	9-0804-36	33.5	56	0.17	66	0.20	82	0.25	105	0.31
		1 1/4	9-0805-36	25.2	54	0.21	63	0.25	79	0.31	97	0.38
		1 1/2	9-0806-36	20.7	53	0.25	62	0.30	77	0.37	97	0.47
		1 3/4	9-0807-36	17.5	52	0.29	61	0.35	76	0.43	98	0.56
		2	9-0808-36	15.4	53	0.34	62	0.40	77	0.50	103	0.67
		2 1/2	9-0810-36	12.4	53	0.43	62	0.50	78	0.63	102	0.82
		3	9-0812-36	10.1	51	0.51	60	0.60	76	0.75	100	0.99
		3 1/2	9-0814-36	8.6	51	0.60	60	0.70	75	0.88	100	1.16
5/8	11/32	12	9-0848-36	2.4	49	2.04	58	2.40	72	3.00	96	4.02
		3/4	9-1003-36	97.0	124	0.13	146	0.15	182	0.19	213	0.22
		1	9-1004-36	72.7	122	0.17	143	0.20	179	0.25	227	0.31
		1 1/4	9-1005-36	53.7	115	0.21	135	0.25	169	0.31	205	0.38
		1 1/2	9-1006-36	43.3	110	0.25	130	0.30	162	0.37	201	0.46
		1 3/4	9-1007-36	36.3	107	0.29	126	0.35	157	0.43	199	0.55
		2	9-1008-36	31.7	108	0.34	127	0.40	159	0.50	205	0.65
		2 1/2	9-1010-36	24.7	106	0.43	124	0.50	156	0.63	201	0.81
		3	9-1012-36	20.3	103	0.51	121	0.60	152	0.75	199	0.98
		3 1/2	9-1014-36	17.3	103	0.60	121	0.70	152	0.88	201	1.16
		4	9-1016-36	15.1	103	0.68	121	0.80	152	1.00	203	1.35
3/4	3/8	12	9-1048-36	4.9	100	2.04	117	2.40	146	3.00	204	4.17
		1	9-1204-36	183.0	306	0.17	360	0.20	450	0.25	469	0.26
		1 1/4	9-1205-36	137.0	293	0.21	345	0.25	431	0.31	461	0.34
		1 1/2	9-1206-36	111.0	282	0.25	332	0.30	415	0.37	472	0.43
		1 3/4	9-1207-36	92.4	272	0.29	320	0.35	400	0.43	466	0.50
		2	9-1208-36	79.7	272	0.34	320	0.40	400	0.50	473	0.59
		2 1/2	9-1210-36	62.1	266	0.43	313	0.50	391	0.63	472	0.76
		3	9-1212-36	51.2	260	0.51	306	0.60	383	0.75	481	0.94
3 1/2	9-1214-36	43.2	257	0.60	303	0.70	378	0.88	474	1.10		
		4	9-1216-36	37.3	255	0.68	300	0.80	374	1.00	468	1.25





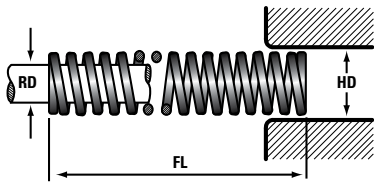
Danly Springs

Extra Heavy Duty - Yellow



DANLY SPRINGS YELLOW

Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in.		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
3/4	3/8	4 1/2	9-1218-36	32.8	250	0.76	294	0.90	368	1.12	464	1.41
		5	9-1220-36	29.5	251	0.85	295	1.00	369	1.25	469	1.59
		5 1/2	9-1222-36	26.6	249	0.94	293	1.10	367	1.38	466	1.75
		6	9-1224-36	24.3	247	1.02	291	1.20	364	1.50	463	1.91
		12	9-1248-36	12.0	245	2.04	288	2.40	360	3.00	469	3.92
1	1/2	1 1/4	9-1605-36	202.0	433	0.21	509	0.25	636	0.31	709	0.35
		1 1/2	9-1606-36	160.0	407	0.25	479	0.30	598	0.37	692	0.43
		1 3/4	9-1607-36	132.0	389	0.29	457	0.35	572	0.43	686	0.52
		2	9-1608-36	113.0	386	0.34	454	0.40	567	0.50	681	0.60
		2 1/2	9-1610-36	87.8	376	0.43	442	0.50	553	0.63	684	0.78
		3	9-1612-36	71.4	363	0.51	427	0.60	534	0.75	676	0.95
		3 1/2	9-1614-36	60.2	359	0.60	422	0.70	527	0.88	671	1.11
		4	9-1616-36	52.0	355	0.68	418	0.80	522	1.00	667	1.28
		4 1/2	9-1618-36	46.2	353	0.76	415	0.90	518	1.12	681	1.47
		5	9-1620-36	41.2	350	0.85	412	1.00	515	1.25	677	1.64
		5 1/2	9-1622-36	37.5	351	0.94	413	1.10	516	1.38	686	1.83
		6	9-1624-36	34.4	351	1.02	413	1.20	516	1.50	695	2.02
		7	9-1628-36	29.3	349	1.19	410	1.40	513	1.75	697	2.38
		8	9-1632-36	25.5	347	1.36	408	1.60	510	2.00	700	2.74
12	9-1648-36	16.9	345	2.04	406	2.40	507	3.00	676	4.00		
1 1/4	5/8	1 1/2	9-2006-36	279.0	710	0.25	835	0.30	1044	0.37	1093	0.39
		1 3/4	9-2007-36	231.0	680	0.29	800	0.35	1000	0.43	1108	0.48
		2	9-2008-36	197.0	672	0.34	791	0.40	989	0.50	1119	0.57
		2 1/2	9-2010-36	152.0	651	0.43	766	0.50	957	0.63	1139	0.75
		3	9-2012-36	123.0	626	0.51	736	0.60	920	0.75	1121	0.91
		3 1/2	9-2014-36	104.0	619	0.60	729	0.70	911	0.88	1131	1.09
		4	9-2016-36	88.9	607	0.68	714	0.80	893	1.00	1100	1.24
		4 1/2	9-2018-36	77.5	591	0.76	696	0.90	870	1.12	1071	1.38
		5	9-2020-36	69.6	592	0.85	696	1.00	870	1.25	1090	1.57
		5 1/2	9-2022-36	63.6	596	0.94	701	1.10	876	1.38	1128	1.77
		6	9-2024-36	57.6	586	1.02	689	1.20	862	1.50	1108	1.92
		7	9-2028-36	48.9	583	1.19	685	1.40	857	1.75	1099	2.25
		8	9-2032-36	42.6	579	1.36	681	1.60	851	2.00	1111	2.61
		10	9-2040-36	34.0	578	1.70	680	2.00	850	2.50	1128	3.32
12	9-2048-36	28.3	578	2.04	680	2.40	850	3.00	1139	4.03		



Danly Springs

Extra Heavy Duty - Yellow



DANLY SPRINGS YELLOW

Hole Dia. (in) HD	Rod Dia. (in) RD	Free Length FL	Part Number	RATE Pounds Redq. to Deflect 1/10 in.	Total Defl Recom for				Max. Oper. Defl. 30% of FL		Total Travel to Solid	
					Long Life (20% of FL)		Avg. Life (25% of FL)		Load lbs.	Defl. in		
					Load lbs.	Defl. in.	Load lbs.	Defl. in.				
1 1/2	3/4	2	9-2408-36	319.0	1089	0.34	1281	0.40	1601	0.50	1757	0.55
		2 1/2	9-2410-36	241.0	1032	0.43	1214	0.50	1518	0.63	1726	0.72
		3	9-2412-36	193.0	982	0.51	1155	0.60	1444	0.75	1698	0.88
		3 1/2	9-2414-36	160.0	953	0.60	1121	0.70	1402	0.88	1636	1.03
		4	9-2416-36	139.0	949	0.68	1116	0.80	1395	1.00	1710	1.23
		4 1/2	9-2418-36	122.0	931	0.76	1095	0.90	1369	1.12	1700	1.39
		5	9-2420-36	108.0	918	0.85	1080	1.00	1350	1.25	1687	1.56
		5 1/2	9-2422-36	97.6	915	0.94	1076	1.10	1345	1.38	1681	1.72
		6	9-2424-36	88.7	902	1.02	1062	1.20	1327	1.50	1672	1.89
		7	9-2428-36	75.0	894	1.19	1051	1.40	1314	1.75	1662	2.22
		8	9-2432-36	65.0	883	1.36	1039	1.60	1299	2.00	1655	2.55
		10	9-2440-36	51.6	877	1.70	1032	2.00	1290	2.50	1675	3.24
12	9-2448-36	42.8	874	2.04	1028	2.40	1285	3.00	1686	3.94		
2	1	2 1/2	9-3210-36	414.0	1773	0.43	2086	0.50	2608	0.63	2818	0.68
		3	9-3212-36	327.0	1663	0.51	1957	0.60	2446	0.75	2743	0.84
		3 1/2	9-3214-36	271.0	1614	0.60	1899	0.70	2374	0.88	2694	1.00
		4	9-3216-36	231.0	1577	0.68	1855	0.80	2319	1.00	2659	1.15
		4 1/2	9-3218-36	201.0	1534	0.76	1804	0.90	2255	1.12	2644	1.31
		5	9-3220-36	179.0	1522	0.85	1790	1.00	2238	1.25	2623	1.47
		5 1/2	9-3222-36	161.0	1509	0.94	1775	1.10	2219	1.38	2659	1.65
		6	9-3224-36	145.0	1475	1.02	1735	1.20	2169	1.50	2593	1.78
		7	9-3228-36	123.0	1465	1.19	1724	1.40	2155	1.75	2578	2.10
		8	9-3232-36	106.0	1440	1.36	1694	1.60	2118	2.00	2562	2.41
		10	9-3240-36	83.5	1420	1.70	1670	2.00	2088	2.50	2544	3.05
		12	9-3248-36	68.9	1406	2.04	1655	2.40	2068	3.00	2533	3.68





Latch System/Mold Handling

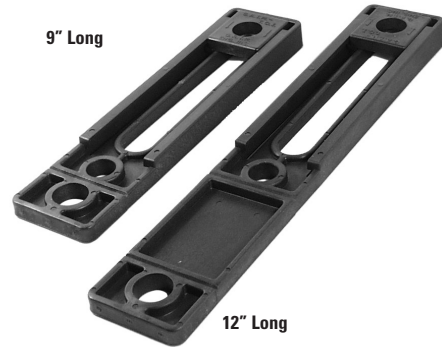
~ How it works ~

The T.O.I.[™] (Tool Opening Interrupter) holds the mold closed for transporting, setup, teardown or storage.

The T.O.I.[™] is two pieces: a fixed piece that bolts to the stationary mold half, and a slide that moves within a track on the fixed piece. The slide bolts to the movable mold half. As the mold is lifted, the slide wedges tightly to the fixed piece, preventing the mold from opening.

To prevent damage to the tooling and machine, if the installer forgets to remove the T.O.I.[™] after installing the mold on the machine, the latch is designed to safely break apart when the machine opens the mold, thus not damaging eye bolts on handling hole.

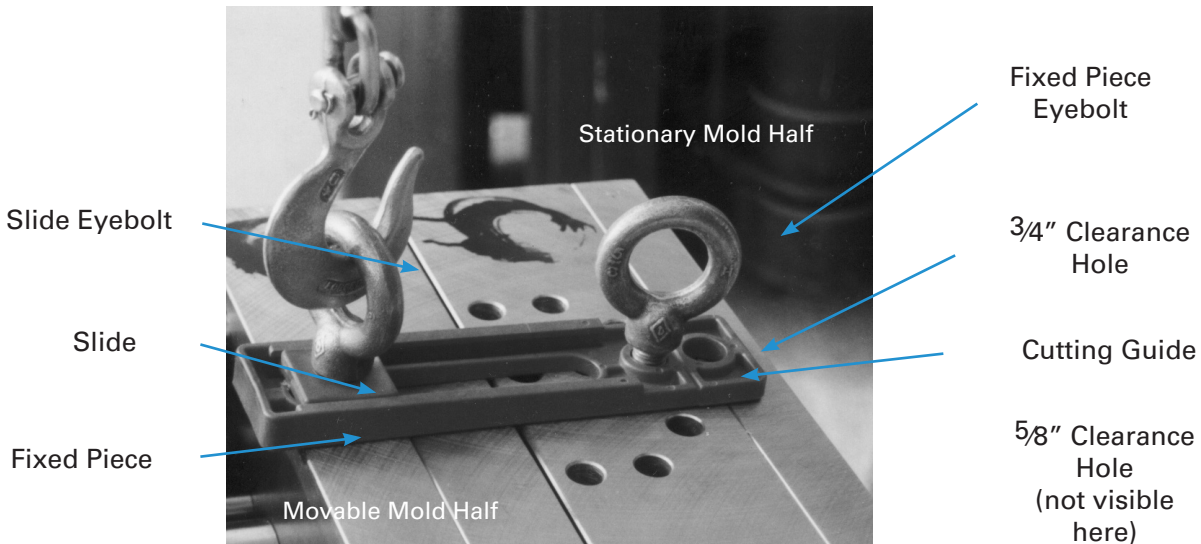
Caution: Close Mold Parting Line then install T.O.I.



9" Long
Part Number TOI9
(Ref# MAI0266)

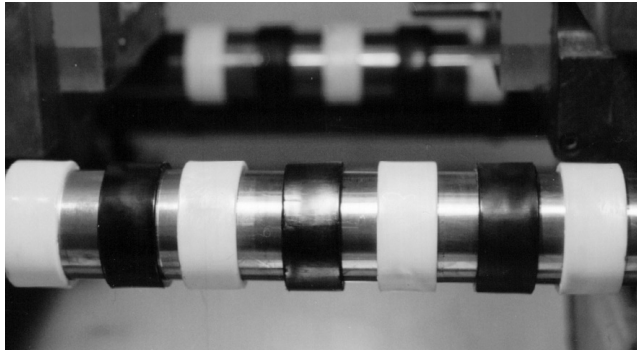
12" Long
Part Number TOI12
(Ref# MAI0264)

LATCH SYSTEM



Note: Hoist rings or shoulder-type eye bolts MUST be used with T.O.I. - not included.

B.A.R. Barrier Against Repairs



[TIE BAR COVERS](#)

Prevent damage to those expensive tie bars!!

... cover each tie bar with expandable nylon rings in alternating yellow and black colors. Molds may then be installed or removed without gouging, scraping or scratching tie bars. When machine is operating, the rings remain in the forward position. When installing or removing a mold, simply spread out the rings along the tie bars (see photo). Rings have $\frac{5}{32}$ " wall thickness and are tough and resilient nylon. Easily spread open (by hand) to install or remove. Suggest installing permanently... no need to remove. Rings should be installed in proper quantities to accommodate minimum shut mold-height, and are shipped in packages of 32 (16 yellow, 16 black).

Part Number	For Tie Bar Dia.	Ring I.D.	Ring Width
TBR125	1½" – 1⅞"	1½"	1"
TBR200	2" – 2⅜"	2"	1"
TBR250	2½" – 2⅞"	2½"	1⅛"
TBR300	3" – 3⅜"	3"	1⅛"
TBR350	3½" – 3⅞"	3½"	1¼"
TBR400	4" – 4⅞"	4"	1¼"
TBR500	5" – 5⅞"	5"	1½"
TBR600	6" – 6⅞"	6"	1½"

**All Sizes One Price:
Kit of 32 total
(16 black, 16 yellow)**



Forged Eye Bolts

- High-quality U.S. forged eye bolts
- Shoulder design
- Shows full engagement
- Huge savings, always in stock!

Material: C1030 steel, forged, heat-treated, quenched and drawn

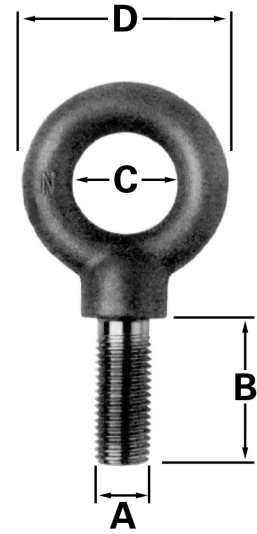
Tensile strength: 65,000 PSI min.

Yield strength: 50,000 PSI min.

Elongation: 30% min.

Reduction of area: 60% min.

Warning: Rated capacity is substantially reduced when loading at any angle greater than 45° from bolt centerline. At an angle of 45°, rated capacity is reduced to 1/4 of shown rating.



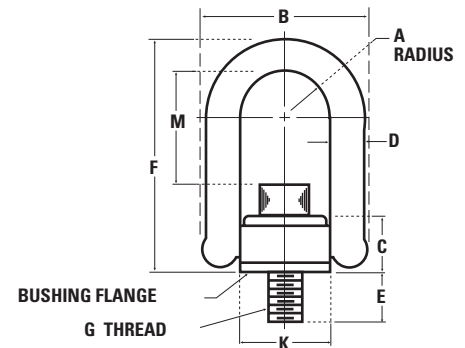
U.S. Thread (UNC-2A)			A-B-C-D (refer to photo)			
Part Number	Reference #	Safe Working Load [lbs]	Thread Size "A"	Shank Lgth "B"	Eye I.D. "C"	Eye O.D. "D"
EB250	EB21	500	1/4-20	1"	3/4"	1 3/16"
EB312	EB22	900	5/16-18	1 1/8"	7/8"	1 7/8"
EB375	EB23	1300	3/8-16	1 1/4"	1"	1 11/16"
EB437	EB24	1800	7/16-14	1 3/8"	1 1/16"	1 13/16"
EB500	EB25	2400	1/2-13	1 1/2"	1 3/16"	2 1/8"
EB625	EB27	4000	5/8-11	1 3/4"	1 3/8"	2 9/16"
EB750	EB28	5000	3/4-10	2"	1 1/2"	2 13/16"
EB875	EB29	7000	7/8-9	2 1/4"	1 5/8"	3 3/16"
EB1000	EB30	9000	1-8	2 1/2"	1 13/16"	3 9/16"
EB1125	EB31	12000	1 1/8-7	2 3/4"	2"	4 1/16"
EB1250	EB32	15000	1 1/4-7	3"	2 3/16"	4 7/16"
EB1500	EB34	21000	1 1/2-6	3 1/2"	2 1/2"	5 3/16"
EB1750	-	28000	1 3/4-5	3 3/4"	2 7/8"	6"
EB2000	-	38000	2-4 1/2	4"	3 1/4"	6 7/8"

HOIST RINGS INCH

Metric Sizes						
Part Number	Reference #	Safe Working Load [lbs]	Thread Size "A"	Shank Lgth "B"	Eye I.D. "C"	Eye O.D. "D"
EBM6	EBM6					
EBM8	EBM8	500	M8 x 1.25	16 mm	25 mm	43 mm
EBM10	EBM10	740	M10 x 1.5	20 mm	27 mm	46.0 mm
EBM12	EBM12	1030	M12 x 1.75	24 mm	30 mm	54.0 mm
EBM16	EBM16	1600	M16 x 2.0	32 mm	35 mm	65.0 mm
EBM20	EBM20	2860	M20 x 2.5	40 mm	41 mm	81.0 mm
EBM24	EBM24	3850	M24 x 3.0	48 mm	46 mm	90.4 mm
EBM30	EBM30	6400	M30 x 3.5	60 mm	55 mm	112.7 mm
EBM36	EBM36	8970	M36 x 4.0	72 mm	63 mm	131.8 mm
EBM42	-	11960	M42 x 4.5	84 mm	73 mm	152.4 mm
EBM48	-	16400	M48 x 5.0	96 mm	82 mm	174.6 mm

FORGED EYE BOLTS METRIC

- 100% magnetic particle inspected
- OSHA approved
- Minimum 5 to 1 safety factor in ratings
- Range of movement: swivel 360°, pivot 180°
- Meets Military Specification No. MIL-STD 1365 (11) or MIL-STD 209C.
- Independent laboratory tested
- Manufactured for over 25 years
- Mil. Spec. – Mil.-Std. 1365 (11) or –209C
- Don't accept "look alike" imitations



Hoist Rings vs. Eyebolts

Side or angle pulling forces can cause eyebolts to twist, bend or break when heavy, angular unbalanced loads are involved.

The quality you need at a price you can afford. Made to OSHA specs, these hoist rings are often specifically required by many companies and marked by number on many blueprints. We've added many larger sizes and longer bolt lengths for your convenience. If you are looking for something we don't list, please contact DME Industrial Supplies to request a special order.

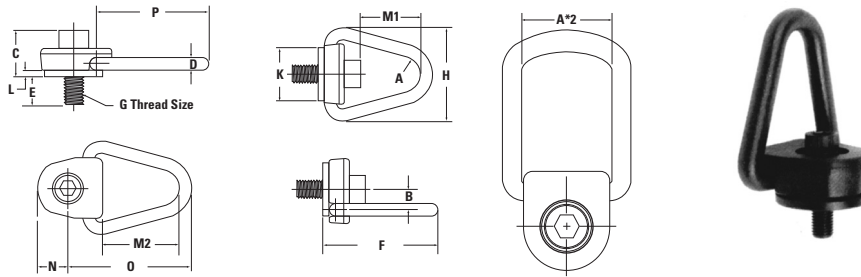
FORGED EYEBOLTS INCH

METRIC

Part Number	"G" Thread	Lbs. Cap.	Dimensions						Foot Lbs.	Wt.	Spare Bolt w/Ring Part Number
			A	B	C	E	F	K			
33212	5/16-18	800	0.65	2.29	0.96	0.56	3.23	1.25	7	0.52	33252
33214	5/16-18	800	0.65	2.29	0.96	1.06	3.23	1.25	7	0.54	33254
33312	3/8-16	1000	0.65	2.29	0.96	.56	3.23	1.25	12	0.56	33352
33314	3/8-16	1000	0.65	2.29	0.96	1.06	3.23	1.25	12	0.58	33354
33515	1/2-13	2500	1.00	3.50	1.50	1.00	5.31	1.89	28	1.72	33555
33516	1/2-13	2500	1.00	3.50	1.50	1.25	5.31	1.89	28	1.82	33556
33614	5/8-11	4000	1.00	3.50	1.50	1.00	5.31	1.89	60	1.78	33654
33615	5/8-11	4000	1.00	3.50	1.50	1.25	5.31	1.89	60	1.88	33655
33714	3/4-10	5000	1.00	3.50	1.50	1.00	5.31	1.89	100	1.89	33754
33716	3/4-10	5000	1.00	3.50	1.50	1.50	5.31	1.89	100	2.02	33756
33102	3/4-10	7000	1.50	5.10	2.05	1.20	7.37	2.81	100	7.23	33122
33103	3/4-10	7000	1.50	5.10	2.05	1.45	7.37	2.81	100	7.25	33123
33101	7/8-9	8000	1.50	5.10	2.05	1.20	7.37	2.81	160	7.33	33121
33105	1-8	10000	1.50	5.10	2.05	1.45	7.37	2.81	230	7.57	33125
33106	1-8	10000	1.50	5.10	2.05	1.20	7.37	2.81	230	7.63	33126
33107	1-8	10000	1.50	5.10	2.05	2.20	7.37	2.81	230	7.81	33127
33401	1 1/4-7	15000	2	6.75	2.87	2.63	9.22	3.88	470	16	33421
33420	1 3/8-6	20000	2	6.75	2.87	2.63	9.22	3.88	670	17.2	33429
33424	1 1/2-6	24000	2	6.75	2.87	2.63	9.22	3.88	800	18.1	33422
33427	2-4 1/2	30000	2	6.75	2.87	2.96	9.22	3.88	1100	22.9	NA
Metric sizes											
		KG Cap.	A	B	C	E	F	K	Nm	Kg	
34212	M8 x 1.25	400	16.50	58.20	24.40	16	82	31.80	9.5	.24	34252
34312	M10 x 1.5	450	16.50	58.20	24.40	16	82	31.80	16.0	.25	34352
34515	M12 x 1.75	1050	25.40	88.90	38.10	25	134.9	48.00	37.0	.78	34555
34614	M16 x 2.0	1900	25.40	88.90	38.10	25	134.9	48.00	80.0	.81	34654
34714	M20 x 2.5	2200	25.40	88.90	38.10	25	134.9	48.00	135.0	.86	34130
34102	M24 x 3.0	4200	35.60	129.50	52.10	28	177.8	71.40	311.0	3.29	34121
34105	M30 x 3.5	4500	35.60	129.50	52.10	38	177.8	71.40	311.0	3.44	34126
34401	M30 x 3.5	7000	50.80	171.50	72.90	67	234.2	98.50	637.2	7.26	34421
34402	M36 x 4.0	11000	50.80	171.50	72.90	67	234.2	98.50	1085.5	8.21	34422
34403	M42 x 4.5	12500	50.80	171.5	72.90	80	234.2	98.50	1085.5	10.14	NA
34404	M48 x 5.0	13500	50.80	171.5	72.90	80	234.2	98.50	1085.5	10.59	NA



Side Pull Hoist Rings



STANDARD

Part Number	Rated Load (KG)	G	A	B	C	D	E	F	H	K	L	M1	M2	N	O	P	TL ft/lbs
36305	800	5/16 - 18	3/4	7/8	1 ²¹ / ₆₄	1/2	.479	4 ²³ / ₃₂	3/8	2 ³ / ₁₆	7/32	2 ⁵⁷ / ₆₄	3 ³ / ₁₆	1 1/4	5 1/8	4 1/4	7
36310	1000	3/8 - 16	3/4	7/8	1 ²⁵ / ₆₄	1/2	.479	4 ²³ / ₃₂	3/8	2 ³ / ₁₆	7/32	2 ²⁷ / ₃₂	3 ³ / ₁₆	1 1/4	5 1/8	4 1/4	12
36315	2500	1/2 - 13	3/4	7/8	1 ¹⁷ / ₃₂	1/2	.979	4 ²³ / ₃₂	3/8	2 ³ / ₁₆	7/32	2 ⁴⁵ / ₆₄	3 ³ / ₁₆	1 1/4	5 1/8	4 1/4	28
36320	4000	5/8 - 11	3/4	7/8	1 ⁴¹ / ₆₄	1/2	.979	4 ²³ / ₃₂	3/8	2 ³ / ₁₆	7/32	2 ⁵⁹ / ₆₄	3 ³ / ₁₆	1 1/4	5 1/8	4 1/4	60
36325	5000	3/4 - 10	3/4	7/8	1 ²⁵ / ₃₂	1/2	1.229	4 ²³ / ₃₂	3/8	2 ³ / ₁₆	7/32	2 ¹⁵ / ₁₆	3 ³ / ₁₆	1 1/4	5 1/8	4 1/4	100
36330	7000	3/4 - 10	7/8	1 1/4	2 1/4	3/4	1 1/4	6 1/4	5 1/4	3 3/8	5/16	4	4 ³ / ₁₆	1 5/8	6 3/4	5 5/8	100
36335	8000	7/8 - 9	7/8	1 1/4	2 3/8	3/4	1 1/4	6 1/4	5 1/4	3 3/8	5/16	3 3/8	4 ³ / ₁₆	1 5/8	6 3/4	5 5/8	160
36340	10000	1 - 8	7/8	1 1/4	2 1/2	3/4	1 1/2	6 1/4	5 1/4	3 3/8	5/16	3 3/4	4 ³ / ₁₆	1 5/8	6 3/4	5 5/8	230

Part Number	Description
36305	HDSP .8K LB 5/16-18 x .479TP
36310	HDSP 1K LB 3/8-16 x .479TP
36315	HDSP 2.5K LB 1/2-13 x .979TP
36320	HDSP 4K LB 5/8-11 x .979TP
36325	HDSP 5K LB 3/4-10 x 1.229TP
36330	HDSP 7K LB 3/4-10 x 1 1/4TP
36335	HDSP 8K LB 7/8-9 x 1 1/4TP
36340	HDSP 10K LB 1-8 x 1 1/2TP

- Self-aligning in the direction of the load
- Rotates 360°
- Alloy steel, black oxide finish
- 100% magnetic particle inspected

METRIC

Part Number	Rated Load (KG)	G	A	B	C	D	E	F	H	K	L	M1	M2	N	O	P	TL N.M.
36805	400	M8 x 1.25	19	22	34	13	14	120	99	56	5	73	81	32	130	108	9.5
36810	450	M10 x 1.5	19	22	36	13	24	120	99	56	5	71	81	32	130	108	16.0
36815	1050	M12 x 1.75	19	22	38	13	37	120	99	56	5	69	81	32	130	108	37.0
36820	1900	M16 x 2.0	19	22	42	13	37	120	99	56	5	65	81	32	130	108	80.0
36825	2200	M20 x 2.5	19	22	46	13	37	120	99	56	5	61	81	32	130	108	135.0
36830	3000	M20 x 2.5	22	32	57	19	39	159	133	79	8	83	106	41	171	143	135.0
36835	4200	M24 x 3.0	22	32	61	19	43	159	133	79	8	79	106	41	171	143	311.0

Part Number	Description
36805	400KG M8X1.25 x 14MMTP
36810	450KG M10X1.5 x 24MMTP
36815	1050KG M12X1.75 x 37MMTP
36820	1900KG M16X2.0 x 37MMTP
36825	2200KG M20X2.5 x 37MMTP
36830	3000KG M20X2.5 x 39MMTP
36835	4200KG M24X3.0 x 43MMTP

EZ-Torque Hoist Ring eliminate the need for locating and using expensive hydraulic tensioners or torque multipliers for heavy load (WLL) capacity hoist rings.

A 75,000 lb. WLL Hoist Ring requires the mounting bolt to be torqued to 4,300 lbs-ft. EZ-Torque requires only a standard torque wrench and 92 lbs-ft of torque per screw.

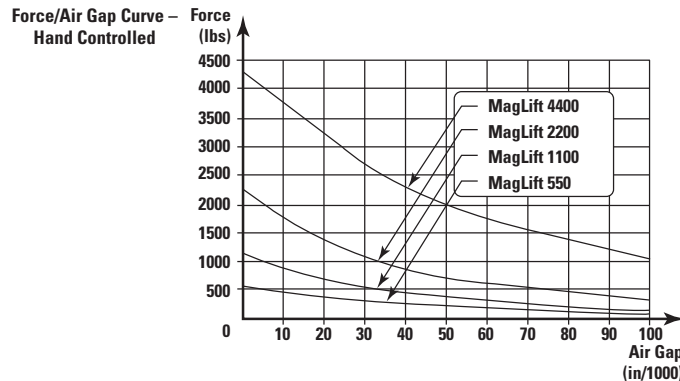
Part Number	WLL	Normal Torque (lbs.-ft.)	EZ-Torque (lbs.-ft.)	Thread
23490	15,000#	470	10	1 1/4"-7
23494	24,000#	800	18	1 1/2"-6
23290	30,000#	800	23	2"-4 1/2
23590	50,000#	2,100	49	2 1/2"-8
23592	50,000#	2,100	49	2 1/2"-4
23690	75,000#	4,300	92	3"-4
23790	100,000#	6,600	98	3 1/2"-4
23792	150,000#	12,000	123	4 1/4"-4
23794	200,000#	19,800	193	5"-4
23798	250,000#	29,000	207	6"-4



Bunting Maglift[™]

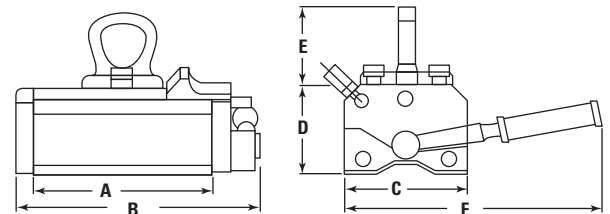
Bunting[®] MagLift[™] Hand-Controlled Permanent Magnetic Lifters

Bunting[®] MagLift Permanent Magnetic Lifters are powered by blocks of high-energy neodymium magnetic material. Switching is achieved by making one of these blocks reversible. In the "on" position, the reversible block is in parallel with the static blocks so that a concentrated magnetic field is produced at the pole feet for lifting. In the "off" position, the reversible block is rotated through 180 degrees to provide a total magnetic short circuit within the lifter body.



BUNTING MAGLIFT

Standard Magnetic Lifter



Model	Lifter Weight (lbs)	Dimensions						Safe Work Load (lbs)	Flat Section		Round Section		
		A (in)	B (in)	C (in)	D (in)	E (in)	F (in)		Min. Thickness (in)	Max Length (inches)	Safe Work Load (lbs)	Max Diameter (in)	Max Length (in)
MAGLIFT275	9.9	4.3	5.9	3.0	2.4	2.1	5.9	275	0.6	60	110	10	60
MAGLIFT550	18.7	6.5	8.3	3.5	2.8	3.0	7.9	550	0.8	60	220	12	60
MAGLIFT1100	38.5	8.9	11.1	4.2	3.5	4.1	9.6	1100	1.0	80	440	16	80
MAGLIFT2200	80.3	12.8	15.4	5.4	4.1	4.4	14.4	2200	1.4	120	880	18	120
MAGLIFT4400	173.8	15.7	19.0	7.3	5.2	6.7	20.7	4400	2.8	120	1760	24	120

The maximum stated length is not the maximum diameter (always work within the stated Safe Work Load). Above values are based on cold-rolled mild steel.



Heavy Duty Lifting Slings



- Red "Safety Alert" threads sewn into plies - red shows when sling should be replaced. Protects employees and employer!
- Meets OSHA requirements
- 3/16" thick - 2 ply nylon web
- Coated for abrasion resistance
- Use to 200°F
- Do not overload!
Follow all manufacturers recommendations.
- Eye lengths:
1" wide sling = 5 1/2"
2" wide sling = 6 1/2"
- 3 foot overall length
- Use for: Barrels, Screws, End Caps, Molds and other lifting requirements within their lifting range
- Slings are impervious to most chemicals

Don't Take A
Chance On
Worn Slings!



**Meets OSHA
Requirements**

Part Number	Size	Rated Capacity-Lbs.		
		Vertical	Choker	Basket
EE2-801	1" x 3 FT.	3,100	2,480	6,200
EE2-801-4	1" x 4 FT.			
EE2-801-6	1" x 6 FT.			
EE2-801-8	1" x 8 FT.			
EE2-802	2" x 3 FT.	6,200	4,960	12,400
EE2-802-4	2" x 4 FT.			
EE2-802-6	2" x 6 FT.			
EE2-802-8	2" x 8 FT.			

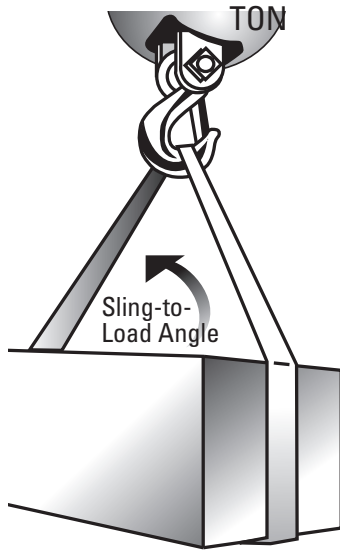


HEAVY DUTY LIFTING SLINGS

Sling Load Chart

As the sling-to-load angle decreases, so does the rated capacity of a sling.

Use this chart for
all type slings: rope, chain or synthetic web.



Sling-To-Load Angle is always the angle between the sling leg and the horizontal surface.

	RATED SLING CAPACITY (one leg)		
	SLING LIFTING EFFICIENCY	SLING CAPACITY AT 90°	ACTUAL SLING CAPACITY
90°	100%	1000#	1000#
75°	96.6%	1000	966
60°	86.6%	1000	866
45°	70.7%	1000	707
30°	50.0%	1000	500
15°	25.8%	1000	258
5°	8.7%	1000	87





Polishing Wands

Polishing Wands

These disposable wands make it possible to use diamond compound or carborundum grit with the air filer. Apply diamond compound directly to the side of the wand with radiused edges. It may also be used as a sander by gluing a small piece of carborundum cloth to the flat side of the wand. Instruction sheet included.

Part Number AFW includes set of 12 wands; 2 each of 6 different sizes



[POLISHING WANDS](#)

**Check out Section D for
a complete listing of Mill Files
and other abrasives!**

PNEUMATIC MINI GRINDER



Part Number DG390

- 1/8" collet size, includes wrenches and coupler
- 54,000 RPM/8 CFM
- Ideal for access to confined areas, comfortable to use
- Finger operated speed control; convenient and precise
- 5' braided hose & 13" protector, ensures long-term use
- Smooth running
- Low cost!

Die Grinders

C

SM512M 1/4" High Speed Die Grinder

- Heavy duty, lightweight construction for general high-speed polishing & grinding
- Rear exhaust
- Ball bearing construction for longer tool life
- Grooved handle design for firm grip
- Variable speed throttle for positive speed control
- Cylinder constructed of high-quality steel
- 1 year warranty against defects
- 22,000 RPM/4 CFM

DIE GRINDERS



SM522 Pneumatic 1/4" Angle Die Grinder

- Heavy duty, lightweight construction for general high-speed polishing & grinding
- Chrome-plated "paddle" safety trigger
- Ball bearing construction for longer tool life
- Grooved handle design for firm grip
- Variable speed throttle for positive speed control
- Cylinder constructed of high-quality steel
- 1 year warranty against defects
- 20,000 RPM/4 CFM



Kit SM512K

includes:

- | | |
|---------------------------|-----------------------|
| 1 - SM512M die grinder | 10 - mounted wheels |
| 1 - 1/4" collet installed | 1 - blow molded case, |
| 1 - 1/8" extra collet | coupler, wrenches |

Model Number	Speed RPM	Collet Size	Inlet Size NPT	Hose Size	Air Press. PSI	Air Cons. CFM	Length	Weight Lbs.	
SM512M	22,000	1/4"	1/4"	3/8"	90	4	6 3/4"	1 1/8	
SM512C		1/8"	1/8" Collet for Grinders						
SM512K	22,000	1/4"	1/4"	3/8"	90	4	6 3/4"	1 1/8	
SM522	20,000	1/4"	1/4"	3/8"	90	4	5-1/2"	3/4	



Solid Carbide Burrs

SOLID CARBIDE BURRS

Highest quality carbide burrs in a wide selection of sizes and styles at very attractive prices!
Burrs of any size, shape and cut can be manufactured to your specifications.

Cylindrical



Part Number	Dia.	Face Length
SA1	1/4	5/8
SA3	3/8	3/4

Cylindrical End Cut



Part Number	Dia.	Face Length
SB12M	1/8	5/8
SB1M	1/4	5/8
SB2M	5/16	3/4
SB2AM	5/16	1"
SB3M	3/8	3/4
SB4M	7/16	1"

Cylindrical Radius Cut



Part Number	Dia.	Face Length
SC12	1/8	5/8
SC14	3/16	5/8
SC1	1/4	5/8
SC1A	1/4	1"
SC2	5/16	3/4
SC2A	5/16	1"
SC3	3/8	3/4
SC3A	3/8	1"
SC5	1/2	1"

Round Tree Shape



Part Number	Dia.	Face Length
SF1	1/4	5/8
SF1A	1/4	3/4

Pointed Tree Shape



Part Number	Dia.	Face Length
SG3	3/8	3/4

Oval Shape



Part Number	Dia.	Face Length
SE3	3/8	5/8
SE5	1/2	7/8

Ball Shape



Part Number	Dia.	Face Length
SD12	1/8	1/8
SD2	5/16	5/16
SD4	7/16	7/16
SD5	1/2	1/2
SD6	5/8	5/8

Cone Shape



Part Number	Dia.	Face Length
SM1	1/4	1/2
SM3	1/4	1"
SM3B	5/16	3/4
SM4	3/8	5/8
SM6	5/8	1"

14° Taper-Radius End



Part Number	Dia.	Face Length
SL2	5/16	7/8
SL4	1/2	1 1/8

90° Included



Part Number	Dia.	Face Length
SK1	1/4	1/8
SK2	3/8	3/16
SK7	3/4	3/8

60° Included



Part Number	Dia.	Face Length
SJ1	1/4	3/16
SJ3	3/8	1/4

Flame Shape



Part Number	Dia.	Face Length
SH1	1/4	1/2
SH2	5/16	3/4
SH5	1/2	1 1/4

Inverted Cone (E = End Cut)



Part Number	Dia.	Face Length
SN1	1/4	5/16

Carbide Thin Disk (Flat)



Part Number	Dia.	Face Length
X261F	1/4	3/32
X264F	1/2	1/8

Carbide Thin Disk (Radius)



Part Number	Dia.	Face Length
X262R	5/16	3/32
X263R	3/8	1/8
X264R	1/2	1/8

Solid Carbide Burrs



SOLID CARBIDE BURRS

Series 40 - Solid Carbide

Set #1 - 8 Rotary Files indicated by * - in a plastic case.

Part Number SA9999

SA43*

$1/8 \times 9/16$



SB41 ECO

$1/8$



SD42*

$1/8$



SH41

$1/8 \times 1/4$



SG41

$1/8 \times 1/4$



SM43

$1/8 \times 5/8$ -7° Incl.Taper



SL42

$1/8 \times 1/2$ -8° Incl.Taper



SK42

$1/8$ -90° Incl.Taper



SA42

$3/32 \times 7/16$



SC42*

$1/8 \times 9/16$



SD41

$3/32$



SG44*

$1/8 \times 1/2$



SF42*

$1/8 \times 1/2$



SM42

$1/8 \times 7/16$
-14° Incl.Taper



SL41*

$1/8 \times 7/16$
-8° Incl.Taper



SN42*

$1/8 \times 3/6$
-10° Incl.Taper



SA41

$1/16 \times 1/4$



SC41

$3/32 \times 7/16$



SE41*

$1/8 \times 1/4$



SG43

$1/8 \times 3/8$



SE41

$1/8 \times 1/4$



SM41

$1/8 \times 11/32$
-12° Incl.Taper



SJ42

$1/8$
-60° Incl.Taper



SN41

$3/32 \times 1/8$
-10° Incl.Taper



Series 51 Set #4

- All files in this group

Part Number 51-9999

Note: Does not include case

$1/4$ " Diameter Carbide Head
 $1/8$ " Dia. Shank (heat-treated steel)

$1 1/4$ " Shank Length - $1 3/4$ " max. overall



SA51 $1/2$ "



SB51 $3/16$ "



SD51 $1/4$ "



SC51 $1/2$ "



SF51 $1/2$ "



SG51 $1/2$ "



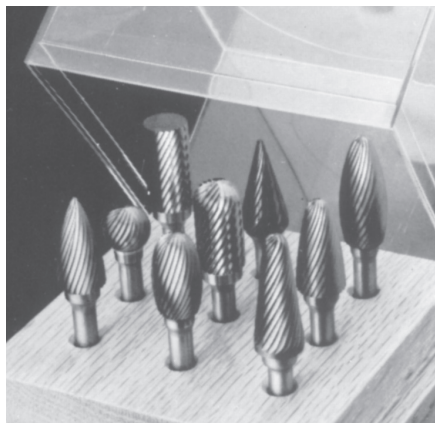
SM51 $1/2$ "-22°



SE51 $3/8$ "



SM51 $1/4$ "-10°



Carbide Burr Sets

Burr Set A			Burr Set B		
Part Number C250-9			Part Number C500-9		
SA1	SC1	SD1	SA5	SC5	SD5
SE1	S1	SG1	SE5	SF5	SG5
SH1	SL1	SM1	SH5	SL4	SM5
Burr Set C			Burr Set D		
Part Number C375-9			Part Number C927-9		
SA3	SC3	SD3	SA5	SC1	SD3
SE3	SF3	SG3	SE5	SF1	SG3
SH2	SL3	SM4	SH5	SL3	SM1



High-Quality Needle Files

Mascot Needle Files

Number	Shape
NF33860	Equalling
NF33861	Flat
NF33862	Half-Round
NF33863	Round
NF33864	Square
NF33865	Three-Square
6 Shapes Above In A Plastic Pouch	
NF33867	Assortment

Economical, Swiss single-cut files do not clog as easily as double-cut. Overall length 5¹/₂"; smooth cut only.



HIGH QUALITY NEEDLE FILES



Tell Needle Files

Shape	Medium Cut Number	Fine Cut Number
Barrette	NF33880	NF33881
Crossing	NF33882	NF33883
Equalling	NF33884	NF33885
Half-Round	NF33886	NF33887
Knife	NF33890	NF33891
Round	NF33894	NF33895
Square	NF33898	
Three-Square	NF33900	NF33901
Warding	NF33902	NF33903

Tell Needle Files in Sets of 6 or 12

NF33906	6 Pcs/Med Cut
NF33907	6 Pcs/Fine Cut
NF33908	12 Pcs/Med Cut
NF33909	12 Pcs/Fine Cut

6-Piece Sets include one of each Barrette, Equalling, Half-Round, Round, Square and Three-Square Files

12-Piece Med. Cut Set includes one of each style plus 1 extra of the following: Equalling, Round, Three-Square

12-Piece Fine Cut Set includes one of each style except Square, plus one extra of the following: Barrette, Half-Round, Round and Three-Square

DIAMOND NEEDLE FILES

Diamond Needle Files



Excellent quality, economically priced files; available in the five most popular shapes. Deliver excellent performance deburring, smoothing and finishing ultrahard materials, such as hardened steel, carbide, ceramics, glass. All files are 5¹/₂" (14cm) long, with 2¹/₂" diamond surface bonded to file faces by special process. Available in just one surface fineness.

Diamond Needle Files

Number	Shape
NF33961	Equalling
NF33962	Half-Round
NF33963	Round
NF33964	Square
NF33965	Three-Square
5 Shapes Above in a Plastic Pouch	
NF33960	Assortment

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Air Circulators

COMMERCIAL AIR CIRCULATORS

- 115V, ¼ HP, 3-speed, totally enclosed single-phase motor
- Four mounting options
- Steel propeller
- CFM range from 2520 to 6100
- Sized from 18" to 30"

Part Number	Description
CA30APE	Commercial 30" fan with adjustable pedestal
CA30WC	Commercial 30" fan with wall mount bracket



PIVOT STAND & WORK STATION FANS

- 115V, 3 speed, ODP motors
- 18" fans blades
- CFM range from 953 to 3390
- Chrome-plated tubular steel frame
- Aluminum propellers

Part Number	Description
I-18LS	Low stand 18"
I-18YM	Yoke mount 18"
I-18HS	High stand 18"



Fan types (High Stand, Low Stand, Yoke Mount)

18" High Velocity Low Stand

- Totally enclosed, ⅛ HP motor
- CFM range 4550 to 3346

Part Number	Description
I-18TELS	Enclosed low stand/yoke mount 18"



PORTABLE UTILITY BLOWER WITH HEATER OPTION

- Ready to use
- Up to 300 CFM airflow
- 120V, 60Hz, 1.77 AMPs, 3-speed motor
- Adjustable air direction
- Optional heater converts blower to lightweight portable heater

Part Number	Description
UB180	Red utility blower
HFUB11	Heater attachment for UB180



DME offers a full line of industrial and ventilation fans for roofs and walls, as well as dozens of other fans for commercial and industrial settings.

Note: Items below have a 1-2 week lead time.

MISTING BARREL

- 115V, 1/3 HP, indoor/outdoor motor
- 3-nozzle misting head
- Variable water output
- Dual point filtering system
- Misting pattern of 60' x 20'
- CFM range from 4100 to 8800

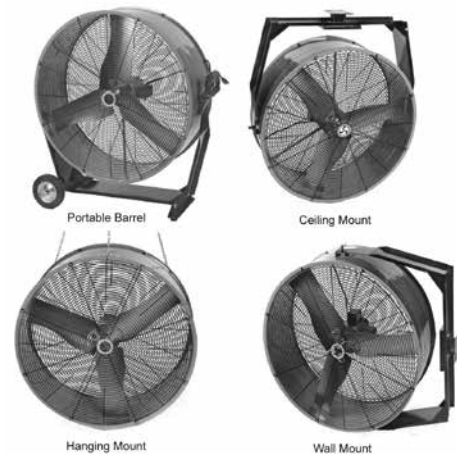
Part Number	Description
AMF-30-B	Misting Barrel



DIRECT DRIVE 4-in-1® MANCOOLER®

- One fan – four mounting options - ceiling, wall, hanging & portable barrel mounts
- 115V, 1 phase, direct drive, totally enclosed air over (TEAO) motor
- Epoxy-coated guards, barrel, & mounts
- 36" fan
- CFM range from 3410 to 11,200

Part Number	Description
DD3641	4-in-1 Mancooler



BELT DRIVE PORTABLE MANCOOLERS

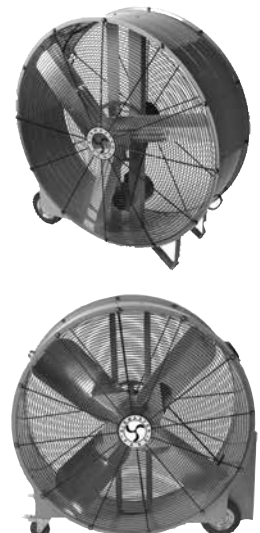
EMC42D

- 115V, belt drive, ODP motor
- Deep-spun venturi & deep-pitched blades
- Pull handles
- Epoxy-coated barrel, propellers & guards

MC420S

- Motor out of airstream
- Locking casters
- Epoxy-coated steel spiral, vibration isolation guards
- Quiet – dB: high 75, low 67

Part Number	Description
EMC42D	42"
MC420S	42"





Plastic Scoops



Part Number	Description
PS1	2½ Cup Scoop
PS2	9 Cup Scoop

PLASTIC SCOOPS

Packaging Clips

Streamline your packaging with Quality Clips™



- Completely removable and reusable. Better than tape, it won't mark your boxes or leave residue.
- Prevents tipped or spilled boxes due to loose box flaps.
- Great for bulk packaging. Parts will not hang up on the smooth, flat surfaces or the tapered end.
- Maximize your workspace. Workers can stand closer to the box creating space in assembly line and manufacturing areas. No more leaning or reaching.

Quality Clips®
Part Number
OCLIPS

PACKAGING CLIPS

PRO SURVIVOR™ SERIES STOPWATCH



- Large display - easy to read
- 24 hour stopwatch
- Range in 6 digits
- Water & shock resistant
- Alarm, chime and calendar
- Bright yellow color - easy to see!
- Resolution of 1/100 second
- Time cumulative splits
- Lanyard included

Part No. A601XY

D

Tally Counters



HAND TALLY COUNTER FOUR DIGIT

- Chrome-plated metal construction
- Finger lever and reset knob for easy hand use

Part No. TC600A



DESKTOP TALLY COUNTER FOUR DIGIT

- Chrome-plated metal construction
- With flange 2" dia. for desktop mounting
- Recording lever and reset knob

Part No. TC600B



Mill Files

MILL FILES-SQUARE EDGES

Shape: Tapered slightly in width. Sides and edges are single cut.

Use: This is the most commonly used file in the U.S. It is suitable for quick removal of stock from plain surfaces. Works on all metals and plastics.



Overall Length	Size (Width x Thickness)	Bastard Part Number	2nd Cut Part Number	Smooth Part Number
4"	$\frac{7}{16}'' \times \frac{5}{64}''$	MBF4		MSF4
6"	$\frac{20}{32}'' \times \frac{7}{64}''$	MBF6	M2F6	
8"	$\frac{12}{16}'' \times \frac{5}{32}''$	MBF8	M2F8	MSF8
10"	$1'' \times \frac{3}{16}''$	MBF10	M2F10	MSF10
12"	$1\frac{3}{16}'' \times \frac{7}{32}''$	MBF12	M2F12	MSF12
14"	$1\frac{11}{32}'' \times \frac{1}{4}''$	MBF14		MSF14

Flat files, half round files, knife files, round files, square files, warding files, three-square files and special requests; please call DME for pricing.

Nylon Hand Pads

- Made from three dimensional, non-woven nylon webs impregnated with abrasive materials
- Very durable; resist tearing splintering, loading and shredding
- Can be rinsed for reuse
- Provides a clean, contaminate-free surface that will improve adhesion of all types of coatings
- Also available in rolls
- Satisfaction guaranteed with this fine product and our low prices!



Pads are 6" x 9"

NYLON HAND PADS

Pads/ Number	Equal	Color	Cut	Pack
NS7448	7448	Gray	Ultra-Fine	20
NS7447	7447	Maroon	General Purpose - Fine	20
NS7446	7446	Green	General Purpose - Regular	20
NS7440	7440	Tan	Extra Heavy Duty	10

Insta-Lok® Extra Heavy Duty Hand Block

A hand pad holder specially designed for speed cleaning, finishing and blending. Fabricated of rugged, long-lasting plastic, the Insta-Lok Hand Block securely grips and holds all ScotchBrite Industrial Hand Pads for maximum surface conditioning results. Accepts pads 6444, 6448, 7440, 7445, 7446, 7447 and 7448 after they have been cut in half.

Part #952



INDUSTRIAL HAND PAD HOLDER

3M





Abrasive Cloth Rolls

Abrasive Cloth Rolls from DME Industrial Supplies are aluminum oxide on a flexible cloth backing for all sorts of cleaning and deburring. Rolls are easy to dispense as needed and will work hard so you can work easy.



All Abrasive Cloth Rolls are 50 yards long!

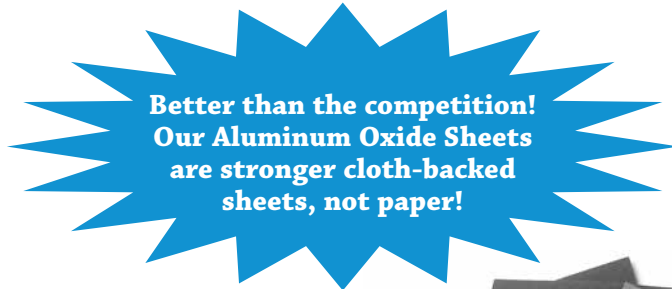
1" WIDE		1½" WIDE		2" WIDE	
Part Number	Grit	Part Number	Grit	Part Number	Grit
10UR060	60	15UR060	60	20UR060	60
10UR080	80	15UR080	80	20UR080	80
10UR100	100	15UR100	100	20UR100	100
10UR120	120	15UR120	120	20UR120	120
10UR150	150	15UR150	150	20UR150	150
10UR180	180	15UR180	180	20UR180	180
10UR240	240	15UR240	240	20UR240	240
10UR320	320	15UR320	320	20UR320	320

ABRASIVE CLOTH ROLLS

Abrasive Cloth Sheets

Aluminum Oxide

- Waterproof
- 9" x 11" sheets
- Finest quality
- Lowest prices!



Part Number	Grit
CS35251003	80
CS35251004	100
CS35251005	120
CS35251006	150
CS35251007	180
CS35251008	220
CS35251009	240
CS35251010	320
CS35251011	400

ABRASIVE CLOTH SHEETS



- Reversible for heavy-duty cleaning
- Choose copper for safe non-scratch cleaning or stainless for more aggressive heavy-duty cleaning.
- 5" wide in 100 or 400 foot rolls
- Tough interlocking loops - won't pull apart!

- Two weights to choose from -
 - Economy grade & stainless - .002" x .010 wire
 - Regular grade copper - .002" x .019" wire

Part Number	Reference Number	Width	Length
Economy Copper Gauze			
LCG100	–	5"	100'
Regular Copper Gauze			
MCG100	CG1	5"	100'
MCG400	CG4	5"	400'
Stainless Steel Gauze Type 304			
SSG100	–	5"	100'

COPPER GAUZE



Efficient Cleaning of Screws and Barrels Using Copper Gauze and Grease in Eight

Step 1

Clean the extruder with a purging compound. Then, clean the die face with small ball of copper gauze that has some silicone grease on it. Also, clean valve while still hot.

Step 2

Remove the die from the extruder head. This is best cleaned by forcing silicone-coated copper gauze through it, using a wooden dowel.

Step 3

Once the gauze has been passed through the die, it can be pulled back and forth to complete the cleanup.

Step 4

Ensure that the die is thoroughly cleaned, with no residual trace of adhered plastic, nor a scratch on the metal surfaces.

Step 5

Partially remove the hot screw, wrap silicone grease coated gauze 2 or 3 times around screw and use "shoe shine" motion. Intermittently relax tension so gauze can be "walked down" the screw.

Step 6

Remove screw almost out of barrel. Copper gauze should be "walked down" as the screw is being pulled out. Screw is now clean. (Note that operations 5 & 6 take only 5 minutes).

Step 7

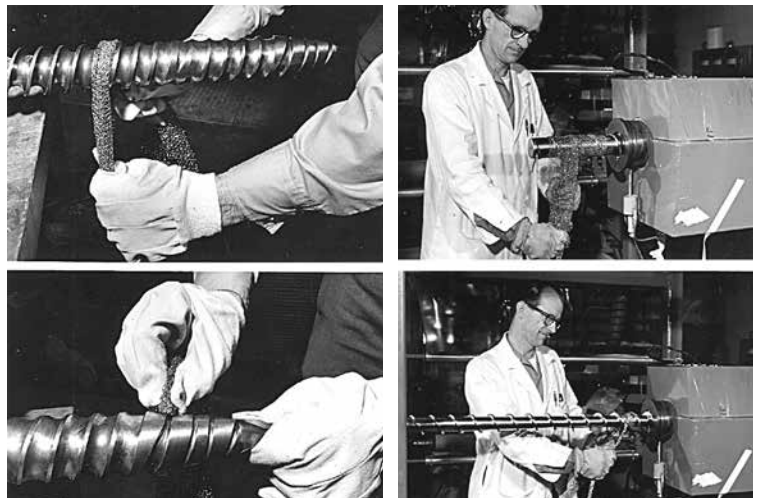
To clean barrel, wrap copper gauze around a round wire brush at end of long rod and pass through barrel. Then, chuck rod into power drill, insert fresh gauze and pass back and forth through barrel until clean.

Step 8

You're now ready to reassemble and get back into production. Be sure to lightly coat copper gauze with silicone grease for all operations.



**Refer to Section H
Page 681 for info
on Silicone Grease!**



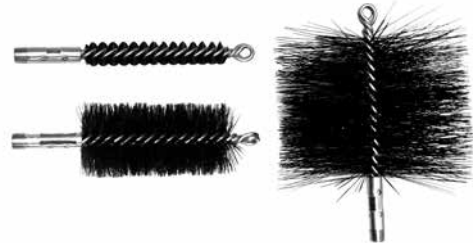
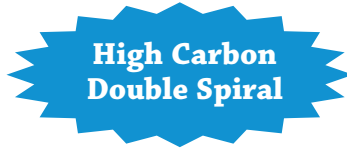


Barrel Brushes

Barrel Cleaning Brushes

Barrel Cleaning Brushes

- Double spiral carbon steel
- Brush length: 4½"
- Overall length: 8"
- ¼" NPT nipple



Part Number	Inch Sizes		Metric Sizes		
	Diameter	Wire Size	Part Number	Diameter	Wire Size
BCB075	¾"	.012	BCB18M	18 MM	.012
BCB100	1"	.012	BCB22M	22 MM	.012
BCB125	1¼"	.012	BCB24M	24 MM	.012
BCB150	1½"	.012	BCB27M	27 MM	.012
BCB175	1¾"	.012	BCB30M	30 MM	.012
BCB200	2"	.012	BCB32M	32 MM	.012
BCB225	2¼"	.012	BCB35M	35 MM	.012
BCB250	2½"	.012	BCB38M	38 MM	.012
BCB275	2¾"	.012	BCB40M	40 MM	.012
BCB300	3"	.012	BCB45M	45 MM	.012
BCB325	3¼"	.012	BCB50M	50 MM	.012
BCB350	3½"	.012	BCB55M	55 MM	.012
BCB375	3¾"	.012	BCB57M	57 MM	.012
BCB400	4"	.012	BCB60M	60 MM	.012
BCB450	4½"	.012	BCB65M	65 MM	.012
BCB600	6"	.012	BCB67M	67 MM	.012
			BCB70M	70 MM	.012
			BCB80M	80 MM	.012
			BCB90M	90 MM	.012
			BCB105M	105 MM	.012
			BCB115M	115 MM	.012

BARREL BRUSHES-INCH

BARREL BRUSHES-METRIC



Extension Rods

Part Number	Description
FER3*	3' Fiberglass Extension
TER3*	3' Twisted Wire Extension
HER3	Handle For Ext. Rods

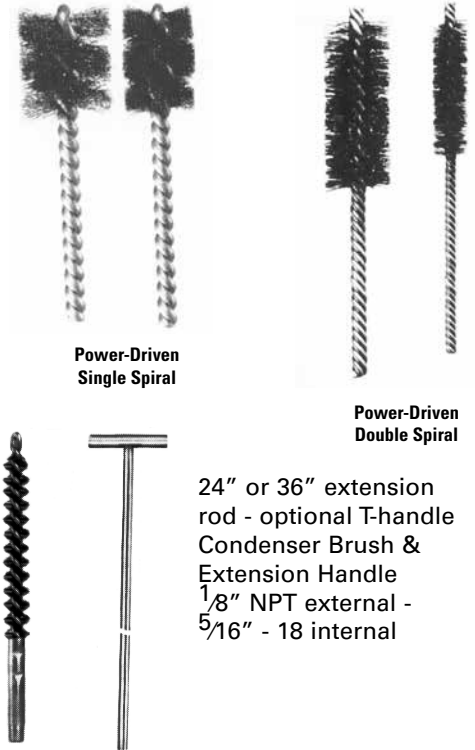
EXTENSION RODS

* Rods can be connected end to end for longer reach

Barrel Brushes



Part Number	Brush Dia.	Overall Length	Wire Size
Power-Driven Single Spiral - Brass			
BCB250PD	1/4"	12"	.005
BCB375PD	3/8"	12"	.005
BCB500PD	1/2"	12"	.006
BCB750PD	3/4"	12"	.010
Power-Driven Double Spiral - Brass			
BCB250PDD	1/4"	12"	.003
BCB375PDD	3/8"	12"	.003
BCB500PDD	1/2"	12"	.004
BCB750PDD	3/4"	12"	.060
Condenser Cleaning Brush - Brass			
CCB0375	3/8"	4 1/2"	7 1/2"
CCB0500	1/2"	4 1/2"	7 1/2"
CCB0625	5/8"	4 1/2"	7 1/2"
CCB0750	3/4"	4 1/2"	7 1/2"
CCB1000	1"	4 1/2"	7 1/2"
Rods			
CCB24	EXTENSION ROD - 24"		
CCB36	EXTENSION ROD - 36"		
CCBH	HANDLE FOR RODS		



Thread Cleaning Brushes

The perfect brushes for cleaning and polishing threads, inner walls of tubes and cylinders. Solid concentration of bristles provides a high degree of bristle stiffness with little flexing of bristles during operation. For use in power tools. Use holder to run at a higher RPM. Choose high-carbon steel or brass.

Thread Cleaning Brushes

THREAD CLEANING BRUSH

Brush Dia.	Overall Length	Wire Size	Brass Part Number	High Carbon Steel Part Number	Fits Holder Number
1/4"	2-1/8"	.005	TCB250	TCS250	TCH1
3/8"	2-1/8"	.008	TCB375	TCS375	TCH1
1/2"	2-1/8"	.008	TCB500	TCS500	TCH2
5/8"	2-1/4"	.008	TCB625	TCS625	TCH2
3/4"	2-1/4"	.008	TCB750	TCS750	TCH2
7/8"	2-1/4"	.008	TCB875	TCS875	TCH2
1"	2-1/4"	.008	TCB1000	TCS1000	TCH2
1-1/8"	2-1/4"	.008	TCB1125	TCS1125	TCH2
1-1/4"	2-1/4"	.008	TCB1250	TCS1250	TCH2



Interchangeable with competitors' models

Brush Holders

BRUSH HOLDERS

Part Number	Shank Dia.	Dia. Brush End	Stem Size
TCH1	1/4"	1/4"	.099
TCH2	1/4"	3/8"	.150





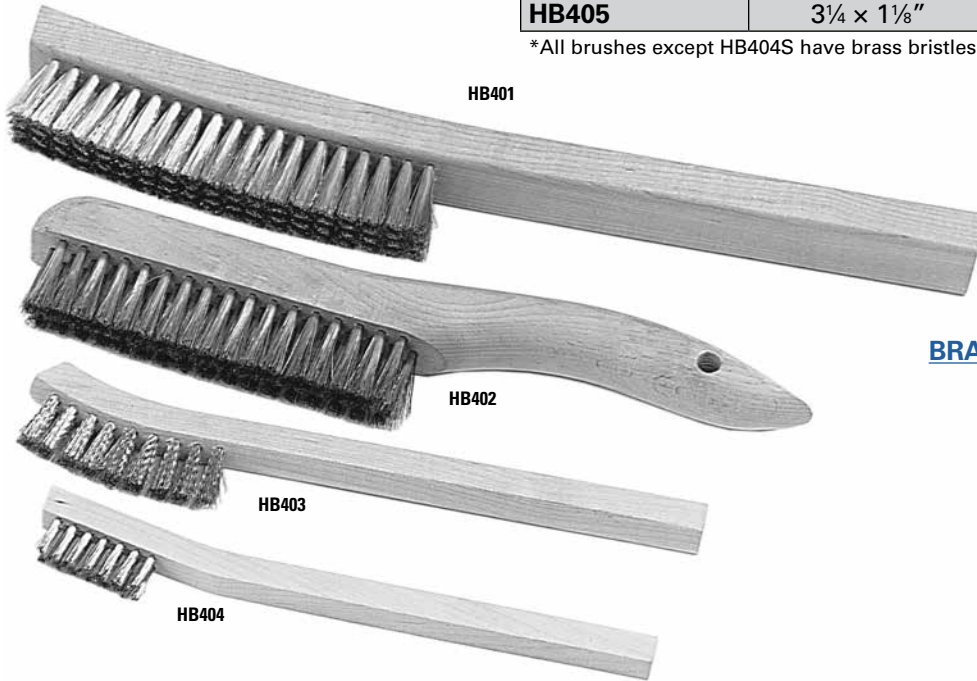
Brass Brushes

High-Quality Brass Hand Brushes

- For light cleaning and polishing for metal finishing, plating and general industrial applications
- Carved wood handles

Part Number	Block Size	Number of Rows
HB401	13 x 1 1/8"	4
HB402	10 x 1 1/8"	4
HB403	8 5/8 x 5/8"	2 x 9
HB404	7 3/4 x 1/2"	3 x 7
HB404S*	7 3/4 x 1/2"	3 x 7
HB405	3 1/4 x 1 1/8"	4 x 11

*All brushes except HB404S have brass bristles. HB404S has steel bristles!



BRASS HAND BRUSHES

BRASS END BRUSHES

Brass Solid End Brushes

Part Number	Brush Diameter	Wire Size
SEB0500	1/2"	.010
SEB0750	3/4"	.010
SEB1000	1"	.010



COPPER END BRUSHES

Copper Center Brass Brushes

Part Number	Brush Diameter	Wire Size
CCB200	2"	.006
CCB300	3"	.006
CCB400	4"	.006



CCB3K	3 Brush Kit - 2", 3" 4"
CCBD	1/4" Shank Driver

Highly-efficient brushes for cleaning:

- Condenser tubes
- Cartridge heater holes
- Ejector pin holes
- Mold cavity holes



Brass Tube Brushes

BRASS TUBE BRUSHES

Part Number	Brush Diameter	Overall Length	Wire Size
BTB0062	1/16"	4"	.003
BTB0125	1/8"	6"	.003
BTB1875	3/16"	7"	.003
BTB2500	1/4"	7"	.003
BTB3125	5/16"	7"	.004
BTB3750	3/8"	8"	.006
BTB4375	7/16"	8"	.006
BTB5000	1/2"	8"	.006
BTB5625	9/16"	9"	.005
BTB6250	5/8"	9"	.005
BTB6875	11/16"	9"	.005
BTB7500	3/4"	9"	.005
BTB8125	13/16"	10"	.005
BTB8750	7/8"	10"	.005
BTB9375	15/16"	10"	.005
BTB1000	1"	10"	.005

Nylon Tube Brushes

NYLON TUBE BRUSHES

Part Number	Diameter	Brush Part	Overall Length	Filament Diameter
NTB187	3/16"	2 1/4"	6 3/4"	.006
NTB250	1/4"	2 1/2"	10"	.008
NTB312	5/16"	2 1/2"	12"	.008
NTB500	1/2"	3"	8 1/2"	.010
NTB625	5/8"	4"	12"	.008
NTB750	3/4"	4"	12"	.008
NTB875	7/8"	4"	16"	.020
NTB1000	1"	4"	24"	.016
NTB1250	1 1/4"	4"	12"	.020
NTB1500	1 1/2"	4"	24"	.020
NTB2000	2"	4"	24"	.020



Anti-Static Copper Tinsel



- 100% copper
- No power needed
- Pennies per foot

ANTI-STATIC COPPERTINSEL

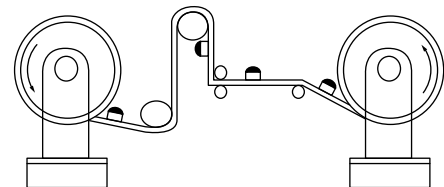
Proven through over 50 years of success to be the most effective low-cost, low-maintenance passive static electricity eliminator available, Anti-Static Tinsel is one of the most widely used methods of static control. Anti-Static Tinsel from DME Industrial Supplies is 100% ultra conductive copper strands, and eliminates static through the “self-energizing” or inductive principle. The core is made of multiple copper wires (not string) to ensure positive grounding and strength. The fine, sharply pointed copper strands provide greater static elimination. The conductive strands are interspersed to maximize effectiveness, but are not so dense as to make it easy to collect dust and dirt particles. Anti-Static Tinsel resists breakage, matting and shedding.

Multiple Applications

Anti-Static Tinsel is effective in the elimination of static electricity generated by moving webs and conveyors used in many industries, including printing, converting, paper, plastics, textiles and office equipment. It works most effectively when placed close but not in contact with the surface to be neutralized.

Anti-Static Tinsel works great when used in winding, extruding, sheeting, slitting, coating, carding, slashing, wrapping and folding operations.

The higher the troubling static charges, the more efficiently the tinsel works.



Tinsel Specifications

100% copper strands and core wires in 1.25" dia. x 36 ft. coils

Part Number: [5020UN](#)

Each box contains 72 ft. of tinsel consisting of two 36 ft. coils

Steinel Heat Guns



With color-coded temperature range keys

Steinel Heat Guns are powerful heat blowers with lightweight ergonomic design, a soft grip handle and quiet operation for convenient long-term use.

Interchangeable temperature keys lock in specific output ranges. Available with choice of 1 to 5 color-coded keys for the right temperature every time. Maintenance-free, factory-sealed motor and high-output turbine for consistent performance up to 23 CFM.

Adjustable quick-lock stand stores keys. Tool removes easily for handheld operation. Long-life reinforced element with plug-in feature takes only seconds to change.

This Product Is No Longer Available

High Output

- Powerful turbine blower with air delivery rate up to 23 CFM
- Color-coded keys for the right temperature every time
- Maintenance-free, factory-sealed motor

Superior Ergonomics

- Lightweight, well balanced design
- Soft grip handle with convenient slide switch (Off/Cool/Hot)
- Ultra-quiet operation

Convenient Operation

- Plug-in heating element takes only seconds to change
- Quick-lock stand is fully adjustable and stores keys
- Available accessories enhance versatility



STEINEL®



Self-cooling aluminum output tube with mesh guard for safety

Long-life heating element with plug-in feature is quick and easy to change

Baffle adjusts air and temperature within range

Color-coded keys each lock in a specific temperature range

Superior ergonomics and soft-grip handle for fatigue-free operation

Double insulated for safe use with all outlets

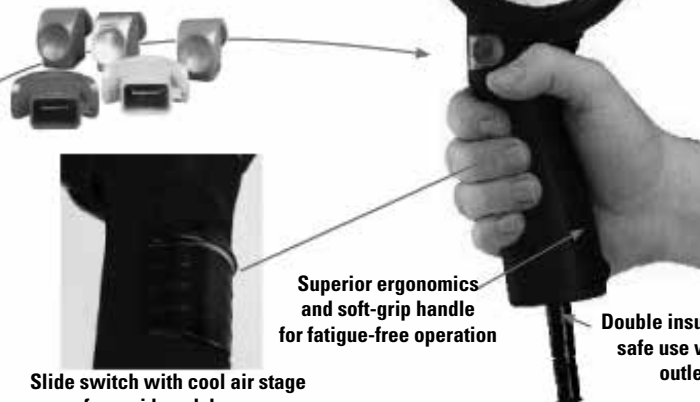
STEINEL HEAT GUNS



Plug-in keys are easily interchangeable



Slide switch with cool air stage for rapid cool down





Steinel Heat Guns

With color-coded temperature range keys

STEINEL HEAT GUNS

Key Color	Temperature Range
Blue	200°F – 300°F
Gray	300°F – 500°F
Yellow	500°F – 750°F
Orange	750°F – 1000°F
Red	1000°F – 1200°F

**This Product
Is No Longer**



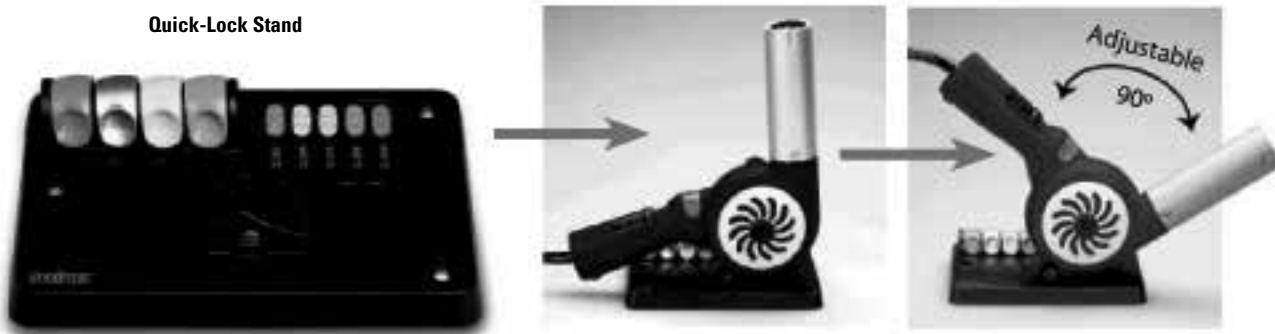
Available

STEINEL®

General Specifications

- Dimensions (h x w x d).....9½" x 5" x 9½"
- Weight.....2.4 lbs
- Voltage.....120 VAC/60 Hz
- Output.....1750 W
- Temperature range.....200°F – 1200°F (all five keys)
- Airflow rateUp to 23 CFM, adjustable baffle
- Power cordIndustrial grade rubber, 6 ft. length





Quick-Lock Stand



Fully adjustable quick-lock stand conveniently stores temperature keys. Tool removes easily for handheld operation.

HG1750 Professional Heat Gun Kit

Includes:
Heat gun, all five temperature range color keys, and adjustable quick-

Blower Accessories				
Item	¼" (7mm) Reducer	8" (200mm) Spreader	Large Reflector	Small Reflector
Usage	For pinpoint heat	For films and packaging	For shrink tubing up to 50mm dia.	For shrink tubing up to 20mm dia.
Part Number	7695	7725	7705	7715

STEINEL HEAT GUNS

HL1910E

Variable Temperature Electronic Heat Gun

Powerful heat gun with variable temperature and electronic thermocouple control for flexible use and maximum reliability. STEINEL's exclusive DuraTherm™ heating element ensures long life and even heat.

For plastic welding, packaging, automotive, maintenance and other applications requiring variable temperature or pinpoint reduction of heat output.

Temperature: 120–1100°F

Stage 1: Cool Air Stage, 120°F/3.6 CFM

2: Variable Temp./10.6 CFM

3: Variable Temp./17.6 CFM

Output: 1500 Watts

Element: DuraTherm™ Ceramic

Part Number HL1910E

Voltage: 120 VAC/60 Hz

Weight: 30 oz.

Warranty: One Year



HG2310LCD

Programmable Intellitemp™ Heat Gun with LCD Display

Programmable heat gun with LOC (Lockable Override Control™) of temperature and airflow output settings. LCD display enables temperature selection in 10°F increments.

For use in electronics, aerospace, medical manufacturing and other applications requiring precision control.

Temperature: 20–1200°F

Airflow: Continuously variable 3.6–17.6 CFM

Switch: Cool Air Stage, Variable Temp. and Airflow

Programs: Four Customizable Pre-Set Temp./Airflow Programs

Output: 1600 Watts

Element: DuraTherm™ Ceramic

Part Number HG2310LCD



Two-Stage Switch



Temp. and Airflow Control



Non-slip Soft Stand



Lockable Override Control

Voltage: 120 VAC/60 Hz

Weight: 30 oz.

Warranty: One Year



Steinel Heat Guns

UltraHEAT™

STEINEL HEAT GUNS

UltraHEAT™

SV 800 Dual Temperature Heat Gun

This model features a dual temperature switch and is designed for general intermittent use.

- Dual Temperature: Low: 600°F; High: 950°F
- Cool Air Stage: Enables rapid cooldown
- Power Cord: Double insulated for safe operation

Part Number SV803



Output: 1300 Watts
Voltage: 120 VAC/60Hz
Certifications: UL/C-UL
Warranty: One Year

UltraHEAT™ II

SV 803 Variable Temperature Heat Gun

Ultra Heat II is a variable temperature heat gun featuring

2 airflow settings with heat and a selectable cool air stage for maximum user control. This model also has a soft grip for comfortable operation.

- Variable: Up to 1050°F
- Temperature: Cool air, 140°F
- 3 Stage Airflow: Low & High Speed
- Power Cord: Double insulated for safe operation

Part Number SV803



Output: 1400 Watts
Voltage: 120 VAC/60Hz
Certifications: UL/C-UL
Warranty: One Year

UltraHEAT™ Kit

SV 803K Variable Temperature Heat Gun Kit

Kit includes:

- SV 803 Heat Gun
- Heavy-duty carrying case
- 75mm spreader nozzle
- 39mm reflector nozzle

Part Number SV803K



STEINEL ACCESSORIES

Reflector Nozzles

Reflector Nozzles direct hot air around pipes and tubing for even heating. Use 14mm on ELECTRONIC heat guns only.



Reduction Nozzle

Provides a concentrated stream of hot air for precision welding or soldering. May be used as a base for specialized attachments. Use on ELECTRONIC heat guns only.



Wire Protection Tube

Offers added safety by preventing accidental contact with hot nozzles.

Wire Protection Tube Part Number 7402



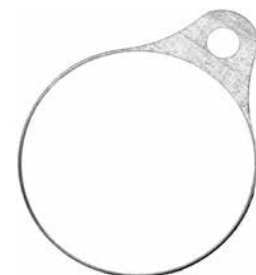
Metal Stand

Gun stands offer the flexibility of hands-free operation, optimum efficiency and maximum safety for most STEINEL heat guns.



Hanger

Overhead hangers offer the flexibility of hands-free operation, optimum efficiency and maximum safety for most STEINEL heat guns.





Hyde[®] Brass Scrapers



Six Models to Choose From!

Solid brass spring steel scrapers have knife-sharp front edges that will not nick or damage expensive machine components.

Polished and lacquered full-strength brass scrapers are non-sparking, non-corrosive & non-magnetic.

Tough nylon handles are secured to full length brass blade (except models 12040 & 12055 which

are not full length but extend well into the handle portion) with large brass grommets.

Keep plenty of these time-savers on hand!

DIG-IT TOOL

Scrape, dig, chip, chop, slice & dice! The all brass Dig-It Tool can take it! Takes the place of several other tools used for cleaning screws, barrels, tips, nozzles, etc. Once you get one, you'll never want

HYDE BRASS SCRAPERS

Brass Scrapers		
Part Number	Blade Size (W x L)	Overall Length
2080	1¼" x 3⅝"	7⅝"
2320	2" x 3⅝"	7⅝"
2420	3" x 4⅝"	8"
2975	3" x 4⅝"	8"
12040	1¼" x 3⅝"	11½"
12055	3⅛" x 4¼"	12½"

Brass Rod with Replaceable Tips

Brass Rod with Replaceable Tips


Replacement brass tips... $\frac{5}{16}$ " dia. with fine point... when the old one wears out, simply unscrew it and insert the new one... takes only a few seconds

Tough, permanent $\frac{1}{2}$ " dia. steel rod... anti-rust finish... never wears out.

$\frac{5}{16}$ " dia. replaceable brass rod... machined to fine point... hand threaded onto permanent steel rod.

- Remove frozen sprues
... clean out runners
... a hundred uses!
- Handle never mushrooms or wears out!
- Get one for each machine



Part Number	
BR1	Complete Set Includes 1 Steel Rod plus 3 Replaceable Brass Tips
BR2	Replaceable Brass Tips 

BRASS MOLD TOOLS

D

Brass Rods and Scrapers

Part Number	Diameter	End Length (Including Handle)
HMT0B	$\frac{1}{8}$ "	Straight-Pointed End, 12"
HMT1C	$\frac{1}{4}$ "	90° Bend-Pointed End, 14"
HMT1A	$\frac{1}{4}$ "	Straight-Blunt End, 14"
HMT1B	$\frac{1}{4}$ "	Straight-Pointed End, 14"
HMT2A	$\frac{3}{8}$ "	Straight-Blunt End, 14"
HMT2B	$\frac{3}{8}$ "	Straight-Pointed End, 14"
HMT3B	$\frac{3}{8}$ "	Straight-Pointed End, 17"
HMT3A	$\frac{3}{8}$ "	Straight-Blunt End, 17"
HMT5	–	$\frac{1}{8}$ " x 1" Flat Scraper - Sharp Edge, 12"
HMTZ	–	Brass Mold Tool Set B (1 each of items above)





Bronze Sprue Puller Tools

Features:

- Strongest forged bronze alloy - Ampco 45, Alloy 630, AMS 4640
- Non scratch - ideal for removing sprues and parts without damaging mold surfaces
- Non spark - for work around fuels, solvents and other flammable chemicals.
- Non magnetic - for work around MRIs and magnets
- Corrosion resistant for work outdoors, marine use and corrosive environments
- Thermal insulating, soft touch foam grip to reduce fatigue and CTDs
- Longer double ergonomic handles for high leverage, less operator force
- Easily re-sharpened



BRC9



BRCR9



BRD8



BRDS8



BRG8



BRL8



BRL9



BRS9



BRSL8



BRT8

BRONZE SPRUE PULLER TOOLS

Part Number	Description
BRC9	Bronze 9" Curved Nose Pliers
BRCR9	Bronze 9" Pocketed Pliers
BRD8	Bronze 8" Oval Cutters
BRDS8	Bronze 8" Diagonal Oval Cutters
BRG8	Bronze 8" Oval Curved Pliers
BRL8	Bronze 8" Short Nose Pliers
BRL9	Bronze 9" Long Nose Pliers
BRS9	Bronze 9" Shear, Long Grip Combo
BRSL8	Bronze 8" Shear, Cut, Grip Combo
BRT8	Bronze 8" Oval Pliers

U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000

dme.net • store.dme.net

Mold Pry Bars



MOLD PRY BARS

- Heat-treated to Rc 52–54
- Heavy-duty forged steel
- Rust-resistant black oxide
- Preferred by many molders for their toughness and balance
- Smooth finish tapers
- In-stock at low prices
- Same brand as sold by others... only we charge less!
- Made in U.S.A.



Complete Kit contains one of each tool - Model Number PBK999

For Pry Bars sold separately reference items below

Angle Head Bar

20" Long • $\frac{5}{8}$ " Hex
Stock Wt. 1 lb. 6 oz.
Part Number 7025

Rolling Head Bar

18" Long • $\frac{5}{8}$ " Hex
Stock Wt. 1 lb. 9 oz.
Part Number 7032

Radius Head Bar

18" Long • $\frac{5}{8}$ " Hex
Stock Wt. 1 lb. 4 oz.
Part Number 7035

D

Economy Mold Pry Bar w/ Handles

- Heavy duty set, high-alloy steel
- Fully heat-treated
- Lightweight design
- Powerful leverage
- Comfortable grip
- Includes sizes: 8", 14", 18", 24"*
- Lifetime warranty

**Part Number
PBK400H**



Rolling Head Pry Bar Set

- Heat-treated chrome-vanadium steel
- Rolling head/pointed head
- Anti-rust black oxide finish
- Align, lift, pry

PBK400 Kit Contains:

- 1 – 6" OAL, $\frac{5}{16}$ " dia., 2.3 oz.
- 1 – 12" OAL, $\frac{1}{2}$ " dia., 7.9 oz.
- 1 – 16" OAL, $\frac{5}{8}$ " dia., 13.7oz.
- 1 – 20" OAL, $\frac{3}{4}$ " dia., 1.5 lb.

Not Sold Separately



U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000 **323**

dme.net • store.dme.net



Mold Hammer

Mold Hammer with Interchangeable Tips

- Tips are removable and interchangeable
- Will not mar metal or plated finish
- Tips available in medium or hard vinyl, tough nylon, brass & steel
- Non-sparking
- Non-magnetic

Custom Mold Hammers - Easy to order - first choose a handle size, then choose the tips which will work best for your specific application.

Handles	
Part Number	Size
HH16	1"
HH18	1 1/8"
HH20	1 1/4"
HH24	1 1/2"

Replacable Tips

Part Number	Head Dia.	R - Red Vinyl Med	G - Green Vinyl Hard	N - Green Vinyl Hard	B - Brass
RT16*	1"	*	*	*	*
RT18*	1 1/8"	*	*	*	*
RT20	1 1/4"	NA	*	*	
RT24	1 1/2"	NA	*	*	

*Add R, G, N, B or S to complete part number and indicate tip material

Special price on the most popular combination:

1" Hammer with 1 Nylon Head & 1 Brass Head
Part Number SWH16



MOLD HAMMERS

Dead Blow Hammers

Dead Blow Hammers provide the perfect solution to non-marring, non-striking force.

Features:

- Extra-durable polypropylene casing
- Shot-filled interior for more driving force
- Non-marring, non-sparking polypropylene casing
- Textured safety grip with flanged butt

As the head strikes the work, the shot moves forward for dead blow impact.



DEAD BLOW HAMMERS

Part Number	Size
DBH10	1 lb.
DBH15	1.5 lbs.
DBH20	2 lbs.
DBH30	3 lbs.
DBH40	4 lbs.

Ball Pein Hammer



- 16 oz. size
 - Forged and tempered
 - Polished
 - 11" wood handle
- Part Number BH16**



BALL PEIN HAMMERS

Economy Rubber Mallets

- Non-marking
- Large grip, hardwood handles

RMA32 32 oz. 14" OAL, 2¾" dia.

RMA16 16 oz. 12" OAL, 2½" dia.

RMA8 8 oz. 10¾" OAL, 1⅝" dia.



ECONOMY RUBBER MALLETS

Nozzle Wrenches

NOZZLE WRENCHES



Six-point box to help eliminate possible damage to nut. Extra clearance in head diameter to facilitate use with flange connections. Heavy duty for use with hammer for extra tightness or where impact is needed to loosen frozen nozzles.

*SFBW1 is a 12-point wrench.

Opening (A/F)	Head O.D.	OAL	Wgt. (lbs.)	Use with	Part Number
7/8"	1 3/8"	7 1/2"	0.6	regular tips	SFBW1*
1 1/16"	1 25/32"	9 7/8"	1.9	extended tips	SFBW2
1 1/4"	2"	10 1/4"	2.1		SFBW3
1 7/16"	2 17/64"	10 9/16"	2.6		SFBW4
1 5/8"	2 31/64"	11"	2.9	bodies	SFBW5
1 13/16"	2 21/32"	11 5/16"	3.5		SFBW6
2"	3 1/32"	11 11/16"	4.0		SFBW7
2 3/16"	3 9/32"	12"	5.2		SFBW8
2 3/8"	3 13/32"	12 3/8"	6.0		SFBW9
2 9/16"	3 3/4"	12 11/16"	6.6	adaptors	SFBW10
2 3/4"	4 11/64"	13 1/16"	7.5		SFBW11
2 15/16"	4 23/64"	13 3/16"	7.9		SFBW12
3 1/8"	4 31/64"	13 13/16"	9.4		SFBW13
3 1/2"	4 31/32"	14 1/8"	10.5		SFBW14
3 7/8"	5 35/64"	14 1/2"	13.3		SFBW15



Eight Piece Screw Driver Set

- Chrome-vanadium steel
- Vinyl handle - resistant to moisture, grease, oil and most solvents
- Specially heat treated for safety and strength
- Comfortable grip



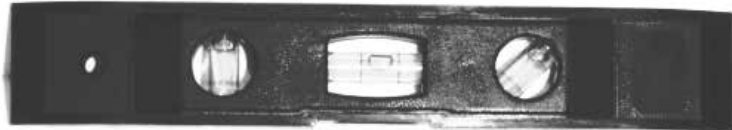
Set Includes:
 Flat $\frac{3}{8}$ " \times 8", $\frac{5}{16}$ " \times 6", $\frac{1}{4}$ " \times 4"
 $\frac{3}{16}$ " \times 3 $\frac{1}{4}$ " \times 1 $\frac{1}{2}$ "
 Phillips #2 \times 4", #1 \times 3",
 #2 \times 1 $\frac{1}{2}$ "

Part Number SD8

SCREW DRIVER SET

Torpedo Level

- 3 vials
- Shatter resistant
- Part Number TL9



TORPEDO LEVEL

25 pc. $\frac{1}{2}$ " Drive Socket

Chrome Vanadium Steel

Set Contains:

- $\frac{1}{2}$ " drive S.A.E.
 18-piece standard 6-point sockets
 including: $\frac{3}{8}$ ", $\frac{7}{16}$ ", $\frac{1}{2}$ ", $\frac{9}{16}$ ", $\frac{19}{32}$ ", $\frac{5}{8}$ ", $\frac{11}{16}$ ", $\frac{3}{4}$ ", $\frac{25}{32}$ ", $\frac{13}{16}$ ", $\frac{7}{8}$ ",
 $\frac{15}{16}$ ", $\frac{31}{32}$ ", 1", 1- $\frac{1}{16}$ ", 1- $\frac{1}{8}$ ", 1- $\frac{3}{16}$ " and 1- $\frac{1}{4}$ "
- 6-piece accessories
 including - 10" Ratchet Handle, 10" Sliding T-bar,
 Speeder Handle, Universal Joint, 5" & 10" Extension
 Bars
- Plastic case

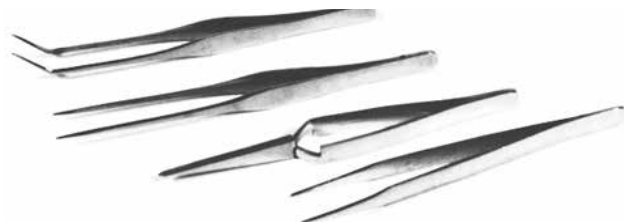


DRIVE SOCKET SET

Tweezers

TWEEZERS

- 4-piece set
- Stainless steel
- Perfect for getting parts out of tight spaces!
- Part Number TS4



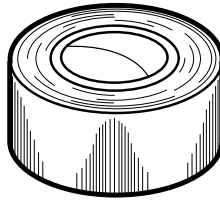
Silver PVC Duct Tape



“The Handyman’s Secret Weapon!”

- 2" x 180' (60 yards)
- Strong adhesion
- Cloth-backed
- High-tensile strength
- Great for use with dryer and loader hose
- Great value

Part Number RDT180



SILVER PVC DUCTTAPE

4 Pc. "C" Clamp Set

- Large steel clamps: 3", 4", 5" & 6"
- Bronze-plated alloy steel screw shafts
- Sliding T-handles

Sold separately:

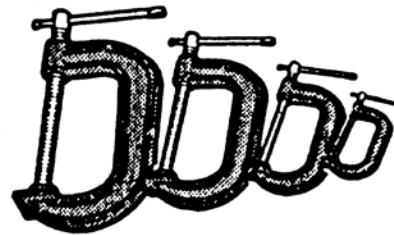
3" - CCP3

4" - CCP4

5" - CCP5

6" - CCP6

Set of all four sizes Part Number CCS400



4 PEICE "C" CLAMP SET

D

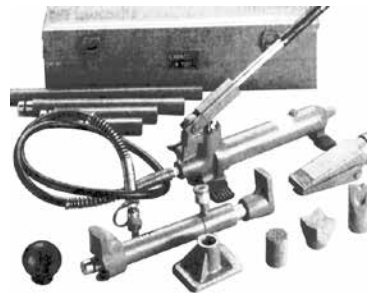
4 & 10 Ton Porta-Powers

4&10 TON PORTA-POWERS

- 4 & 10 ton
- Excellent for raising and positioning machinery & parts. Attachments push, pull & lift.

Part Number HRS4K (4 Ton)

Part Number HRS10K (10 Ton)



Telescoping Mirror

- Stainless steel shaft with pocket clip
- Length 19-1/2" extended; 4-7/8" closed
- Mirror is 1-1/4" diameter

Part Number TM100

TELESCOPING MIRROE

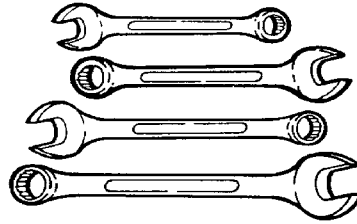




4 Pc. Xtra Large Wrench Set

- For the big jobs - heavy cast chrome
- Sizes 2-1/8", 2-1/4", 2-3/8", 2-1/2"

Part Number SJW400



[4 PIECE XTRA LARGE WRENCH SET](#)

3/8" Micrometer Torque Drive Ratchet/Wrench

- Chrome-plated alloy steel
- No pointer or dial to monitor
- Inch pound range 120 to 960
- Right-hand direction click only

Part Number MATW1



[TORQUE DRIVE RATCHET/WRENCH](#)

1/2" Micrometer Torque Drive Ratchet/Wrench

- Chrome-plated alloy steel
- No pointer or dial to monitor
- Foot pound range 30 to 150
- Right-hand direction click only

Part Number MATW3



[TORQUE DRIVE RATCHET/WRENCH](#)

21 Pc. 3/4" Driver Set



- Sixteen sockets: 7/8" to 2"
- Chrome-plated
- Heat-treated polished steel
- Includes: 20" ratchet, 20" breaker bar and 3" & 6" extensions

Part Number BSS210

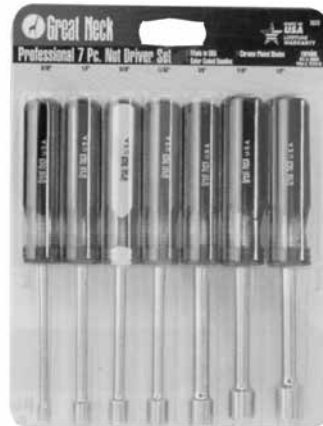


[21 PIECE DRIVER SET](#)

7 Pc. SAE Nut Driver Set

- Color-coded handles
- 3/16", 1/4", 5/16", 11/32", 3/8", 7/16", 1/2"

Part Number ND70



[7 PIECE DRIVER SET](#)



6 Pc. Nut Driver Set

- Plated-finish
- Heavy-duty, shock-resistant plastic handles
- 3/16", 1/4", 5/16", 3/8", 11/32", 7/16"

Part Number CN60



[6 PIECE DRIVER SET](#)



9 pc. Metric Hex Key Wrench Set

Long Arm

HEX KEY SETS (ALL)

- Chrome molybdenum steel
- Hardened and tempered for strength
- Clamshell
- Sizes: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm

Part Number HK9ML



9 pc. Metric Hex Key Wrench Set

Short Arm

- Chrome molybdenum steel
- Hardened and tempered for strength
- Clamshell
- Sizes: 1.5, 2, 2.5, 3, 4, 5, 6, 8, 10mm

Part Number HK9MS



13 pc. SAE Hex Key Wrench Set

Long Arm

- Chrome vanadium steel
- Hardened and tempered for strength
- Plated handle
- Black oxide finish
- Clamshell
- Sizes: 0.050", 1/16", 5/64", 3/32", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"

Part Number HK13L



13 pc. SAE Hex Key Wrench Set

Short Arm

- Chrome vanadium steel
- Hardened and tempered for strength
- Plated handle
- Black oxide finish
- Clamshell
- Sizes: 0.050", 1/16", 5/64", 3/32", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8"

Part Number HK13S

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9 Pc. Folding Hex Key Set



- Chrome vanadium steel
- Hardened and tempered for strength
- Plated handle
- Black oxide finish
- Sizes: 0.050", 5/64", 7/64", 9/64", 3/16", 1/16", 3/32", 1/8", 5/32"

Part Number HEK9C



Telescoping Magnet

- Stainless steel shaft with pocket clip
- Length 18-1/2" extended; 4-7/8" closed
- Magnet is 1/4" diameter

Part Number TM200

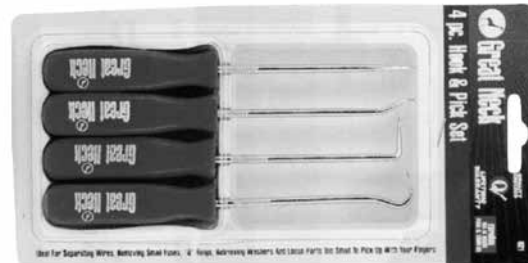


TELESCOPING MAGNET

D

4 Pc. Pick & Hook Set

Part Number 621



PICK & HOOK SET

25ft. Economy Tape Measure

- Steel
- S.A.E./metric
- Notched end hook
- Thumb lock

Part Number TP25L



TAPE MEASURE



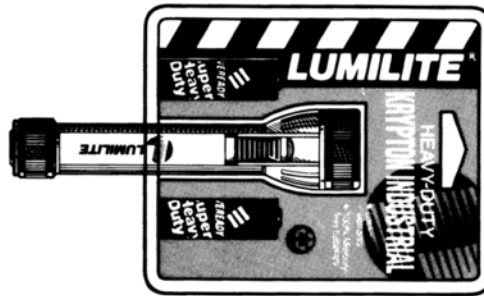
Industrial Mini Flashlight

[FLASHLIGHTS \(ALL\)](#)

Krypton® Industrial Mini Flashlight

- Water-resistant, non-corrosive
- Lifetime warranty
- 2 AA -100% mercury-free batteries included

Part Number MFL5422



Penlight Flashlight

Stylus 3 Series® Flashlights

- For those hard-to-reach areas!
- Aluminum cases are waterproof
- Available in black, silver or gold
- Batteries included!



Part Number	Description
65012	Stylus 3 Silver/White LED
65018	Stylus 3 Black/White LED
65024	Stylus 3 Gold/White LED
65030	6-Pack AAAA Batteries

Battery	Bulb	Casing
3 AAAA alkaline batteries	100,000 hour lifetime, hi-intensity light emitting diode (LED) solid-state bulb	6000 series tempered aircraft aluminum with anodized finish. Non-slip knurled grip

Bend-A-Light Flashlight



High Intensity Flexible Light

The flexible shaft bends so it will go around corners into small areas where most lights will not fit.

Both models feature a high intensity $\frac{3}{16}$ " diameter lamp.

- 2 models to choose from 16" - 5000 candle power & 24" - 10,000 candle power
- Thin flexible shaft
- Amazing brightness from a tiny $\frac{3}{16}$ " diameter high-intensity bulb
- Goes where ordinary light won't!
- Great value!

Part Number	Candle Pwr.	Description	Overall Length	Shaft Length
BAL10150A	5000	Standard Model	16"	10"
BAL12100		Replacement Lamp		
BAL15150A	10000	Krypton Long Reach	24"	15"
BAL12110		Replacement Lamp		





Industrial Blowguns

Lever Blow Gun Series

BG Series Blowguns combine durability, excellent performance and safety to meet your specific cleaning or drying applications.








Features:

- Lever activation styles
- 10 different nozzle choices
- Blow gun kit provides versatility
- Patented quick-disconnect nozzle adapter
- ¼" NPT inlet
- OSHA compliant @ maximum 150 PSI inlet pressure
- Includes: BGL116482 - Gun only
- BGLCPLR - Quick-change nozzle
- BGL25 - High-flow nozzle



[INDUSTRIAL BLOWGUNS](#)

ACCESSORIES

Accessories					
	Part Number Nozzle	Description/Nozzle only	Flow CFM	Outlet Blocked	Noise Level dBA
	BGN1	Standard Nozzle for general blowing & drying applications	17.5	20	89.5
	BGNB5	Air Screen Nozzle reduces chip flyback	5	18	85
	BGN5	High Flow Safety Nozzle for general dusting & chip removal	20	20	89
	BGX3	3" Extension Nozzle for extending reach	15	21	85.5
	BGX6	6" Extension Nozzle for extending reach	14.1	22	84
	BGX12	12" Extension Nozzle for extending reach	13.3	24	85.5
	BGADP	Quick-Change Nozzle Adapter	–	–	–



Industrial Blowgun Kit

The BGLKIT contains five of the most popular nozzles for industrial and automotive uses. This kit includes a high-quality, lever-operated heavy-duty blow gun featuring a patented quick disconnect nozzle adapter which allows users to switch nozzles quickly and easily. This multi-use kit contains a high-flow safety nozzle, six-inch extension safety nozzle, rubber tip nozzle, needle tip nozzle, and air-screen safety nozzle. For handy storage, a clear vinyl compartmentalized snap pouch is included. Ideally suited as a counter sale product.

To order the complete kit, use **Part Number BGLKIT**

INDUSTRIAL BLOWGUN KIT



BGN6



BGX3



BGN5



BGN7



BGNB5



BGADP

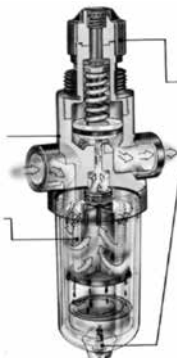


Piggyback Filter Regulator

FILTER REGULATOR

Combined filter and regulator for limited space applications. Its panel mounting dimensions are interchangeable with most competitive models.

Body Material:
Body is constructed of 30% glass reinforced thermoplastic and zinc-plated steel inserts.



Adjustment Knob:
The non-rising, self-locking adjustment knob cannot be vibrated loose.

Drain:
A tire valve is employed to drain the contaminants from the bowl while it is pressurized.

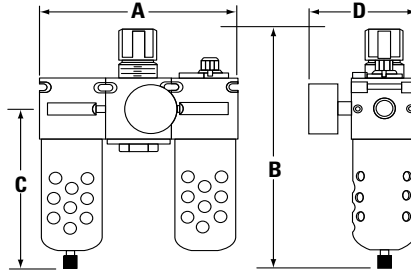
Filter Element:
Standard 20 micron porous plastic filter element removes dirt, grime, pipe scale and most solid material.

- 1/4" NPT in/out
- Polycarbonate bowl, standard; chemical resistant bowl, optional
- Optional pulse drain dumps excess water automatically
Includes 1/8" adapter for drain line.



Part Number	Description
129121-400G	Filter Regulator w/Gauge
29668	Mounting Bracket
104094	Nut For Bracket

Premium Filter Regulator



	A	B	C	D
FRL	6 9/16	7 7/8	5 9/64	3 7/32
BL	6 9/16	8 1/8	5 9/64	3 7/32

PREMIUM FILTER REGULATOR



Filter/Regulator	
Part Number	Port Sizes
BL04	1/4" Female
BL06	3/8" Female
BL08	1/2" Female

- Filter, regulate, lubricate
- Filter rating: 40 micron
- For pressures to 150 PSIG
- Temp, range 40° to 120°F

Filter/Reg./Lubricator	
Part Number	Port Sizes
FRL04	1/4" Female
FRL06	3/8" Female
FRL08	1/2" Female

The QUBE Lifetime Guarantee by WATTS FluidAir guarantees your QUBE product for life at no extra cost. If your Watts FluidAir QUBE product ever falls or breaks in proper installations and in proper use, Watts will, at its option, repair or replace the product at no charge or refund your full purchase price of the item. As a condition of this lifetime warranty, you must complete and return a warranty registration card to Watts FluidAir. In the event of failure or breakage return the unit to:

Watts FluidAir, Inc. Customer Service Department
Cutts Road Kitley, Maine 03904-0902

This shall constitute the exclusive remedy for breach of warranty, and the company shall not be responsible for incidental or consequential damages, including without limitation damages of other costs resulting from labor charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse air conditions, chemicals, and any other circumstances over which the company has no control. This warranty shall be invalidated by any abuse, misuse, misapplication or improper installation of this product. The company makes no other warranty. All other warranties, oral or written, expressed or implied, including warranties of merchantability or fitness for a specific purpose are hereby excluded and disclaimed. In no event shall the company be liable for incidental or consequential damages.



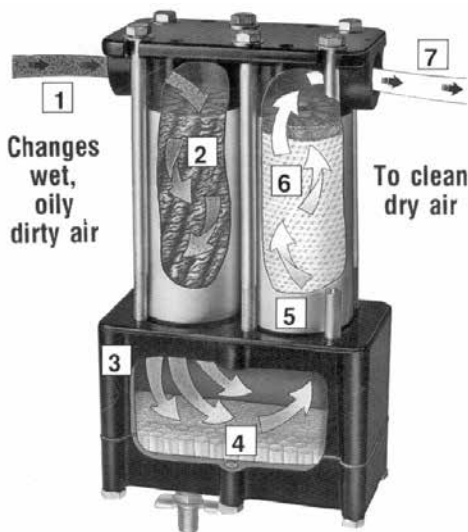
Ultra Pneumatic Filtration

The UPF Extractor®/Dryer is a two-stage air quality filtration system which removes harmful moisture, oil and contaminants from compressed air lines. In addition to reducing downtime and extending service life in pneumatic tools and air-operated equipment, Extractor/Dryers can virtually eliminate “fish-eye”, pinholes, blisters, and water problems in spray painting applications.

NOTE: Extractor/Dryers are for point-of-use end use installation, not for installation at the compressor.

How It Works:

1. Compressed air containing tiny particles of dirt, dust, oil, rust and moisture enters the first stage.
2. A coalescing effect occurs as air passes through a cartridge mesh which captures larger particles and causes moisture to form larger droplets.
3. Air velocity lessens as it enters the extraction chamber allowing particles to collect and moisture to condense on the honeycomb.
4. Particle-laden water flows along the bottom & out the drain.
5. Air passes through the second stage which captures the remaining moisture and dirt down to five micron. Air is filtered & dried.
6. Clean, dry air is ready to use.



**Service Kits include:

1 first and 1 second stage filter,
all gaskets and honeycomb insert.

[CONTACT US](#)

Part Number	NPTF Size	SCFM Rating	Max. PSI	Add E1 or E2 To Part Number For Filter Only			Service Kit** Part No.
				H	W	D	
UPF305	1/4"	50	250	8 1/4"	4"	1 3/4"	
UPF306	3/8"	50	250	8 1/2"	4"	1 3/4"	
UPF307	1/2"	50	250	11 1/2"	5"	1 3/4"	
UPF310	1/2"	80	250	11 1/2"	5 7/8"	3"	080SK
UPF311	3/4"	80	250	14 1/2"	5 7/8"	3"	080SK
UPF320	1"	150	250	19"	7 7/8"	4 1/8"	150SK

Contact DME for sizes to 4" & 2000 CFM.

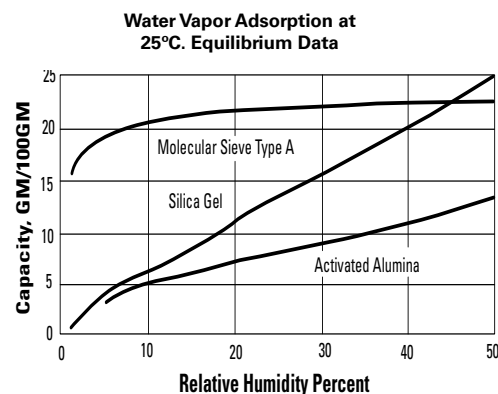
DME Industrial Supplies offers both 13X and 4A Molecular Sieve Desiccants in stock. Due to the particular designs of the resin dryers used in the industry, it is important that the correct sieve is used with the dryer that it was designed for. Unfortunately, DME cannot recommend a desiccant based on either the type of materials you are processing or the type of equipment you have. You may have two different machines from the same manufacturer that will require different desiccants. Equipment manufacturers will typically recommend one of two types: 13X or 4A. Each have advantages when used in the drying process.

Molecular sieve type 13X has a 12% higher water capacity and a larger pore size. This larger pore allows the water to adsorb faster than the 4A and will adsorb larger molecules as well. Depending on the quantity and type of molecules present, these could react on the surface of the 13X during regeneration and not come off, thus reducing the sieve capacity over time. 13X is subject to contamination which renders it ineffective.

Because of 4A's smaller pore size, it is less subject to contamination. However, because of its lower capacity and smaller pore opening, the rate at which it absorbs water will be lower than with the 13X. Another factor to consider is the bead size. Small beads (8X12 mesh) have a faster rate of water absorption, but they also have a higher pressure drop than the larger (4x8) beads. If you don't know which type of sieve your dryer was designed to use, contact the manufacturer of your equipment for their recommendation. In either case we carry what you need at a fraction the price charged by the OEM. Our desiccant is only the most fresh and pure to assure optimum performance.

Part Number	Bead Size	Mesh Size
13X542	1/8"	4 x 8
13X544	1/16"	8 x 12
4A513	1/8"	4 x 8
4A514	1/16"	8 x 12

DESSICANT





Cooling Products



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E



Ethylene Glycol

Inhibited Ethylene Glycol

Ethylene Glycols are used in applications involving secondary cooling and heat transfer, providing freeze and burst protection. Plain water and “antifreeze” type products do not have the proper inhibitor package for these heavy industrial uses.

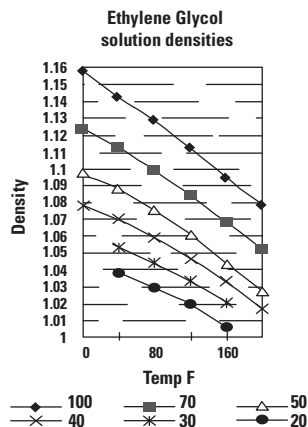
Compared with inhibited glycols, uninhibited glycols oxidize in the presence of air and heat, forming acids. These acids can be corrosive to the metal in a system. Inhibited glycols neutralize the acids formed and thus protect against corrosion.

Applications:

Ethylene Glycol Inhibited is almost odorless, easily mixes with water, and is moderately toxic.

Ethylene Glycol Inhibited is effective from -60° to 250°F.

The proper concentration to use is a function of the lowest anticipated temperature. Try to provide protection about 5° lower than this. However, for best corrosion protection do not go below 30% by volume.



INHIBITED

Inhibited Ethylene Glycol	
Part Number	Container Size
ELG2-5	5 Gal.
ELG2-55	55 Gal.
ELG2-55	55 Gal.
ELG2-55	55 Gal.

UNINHIBITED

Uninhibited	
Part Number	Container Size
ELG5	5 Gal.
ELG55	55 Gal.

- Pure ethylene glycol circulator fluid, no additives
- For use from -40° to +250°F (Dilute)
- Good rust preventative properties
- Non-corrosive, will not build-up
- High flash point, +240°F
- Shipped from stock
- Compare our quality, compare our price!

Heat Transfer Fluid



Therminol XP heat transfer fluid is an extremely pure white mineral oil which provides reliable heat transfer 0° to 600°F. Performance features of Therminol XP include:

- Low fouling - The purity of Therminol XP minimizes fouling as a result of oxidation and degradation of the fluid, provided proper attention is given to system design and operation within the maximum bulk and film temperatures specified.
- Practically non-toxic: As an indicator of purity, Therminol XP meets FDA specifications defined in 21 CFR 172.878 and requirements of United States Pharmacopeia (USP) and National Formulary (NF).
- Thermal stability - Therminol XP is stable to 600°F. Users can expect many years of reliable, trouble-free operation, even when operating continuously at the recommended maximum temperature of 600°F.
- Environmentally friendly - Therminol XP has outstanding regulatory status for those seeking heat transfer fluids which have minimum environmental reporting requirements.
- Therminol XP is used in a wide variety of industries, such as:
 - Plastics processing
 - Pharmaceuticals
 - Specialty chemicals
 - Laundries



55 Gallon Drum



5 Gallon Pail

Appearance	Colorless, odorless liquid
Composition	White mineral oil, USP/NF
Flash Point (ASTM D-92)	182°C (360°F)
Fire Point (ASTM D-92)	196°C (385°F)
Autoignition Temperature (ASTM D-2155)	324°C (615°F)
Kinematic Viscosity, at 40°C	23.7 mm ² /s (cSt)
at 100°C	4.06 mm ² /s (cSt)
Density at 25°C	875 kg/m ³ (7.30 lb/gal)
Specific Gravity (60°F/60°F)	0.882
Coefficient of Thermal Expansion at 200°C	0.000892/°C (0.000495/°F)
Average Molecular Weight	350
Pour Point	-29°C (-20°F)
Pumpability, at 2000 mm²/s (cSt)	-20°C (-4°F)
at 300 mm²/s (cSt)	-1°C (30°F)
Minimum Temperatures for	
Fully Developed Turbulent Flow (Re = 10000)	
10 ft/sec, 1-in tube	72°C (162°F)
20 ft/sec, 1-in tube	51°C (123°F)
Transition Region Flow (Re = 2000)	
10 ft/sec, 1-in tube	30°C (85°F)
20 ft/sec, 1-in tube	17°C (63°F)
Boiling Range, 10%	332° C (630°F)
90%	416°C (780°F)
Normal Boiling Point	358°C (676°F)
Heat of Vaporization at Maximum	
Use Temperature 315°C	214 kJ/kg (91.9 Btu/lb)
Optimum Use Range	-20°C to 315°C (0°F to 600°F)
Maximum Film Temperature	330°C (625°F)
Pseudocritical Temperature	542°C (1007°F)
Pseudocritical Pressure	15.2 bar (220 psia)
Pseudocritical Density	280 kg/m ³ (17.5 lb/ft ³)
Vapor Pressure, psia @	
200°F	0.0005
300°F	0.003
400°F	0.147
500°F	0.967

Therminol XP™

HEAT TRANSFER FLUID

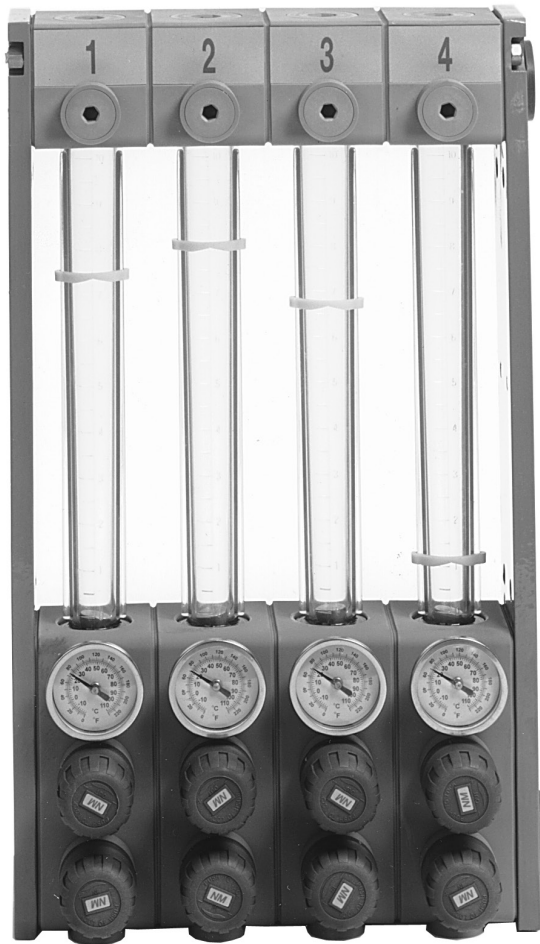
Part Number	Container Size
HTFXP5	5 Gallon
HTFXP55	55 Gallon

Shipping weight: 5 gallon/41 Lbs, 55 gallon/465 Lbs



Flow Regulator

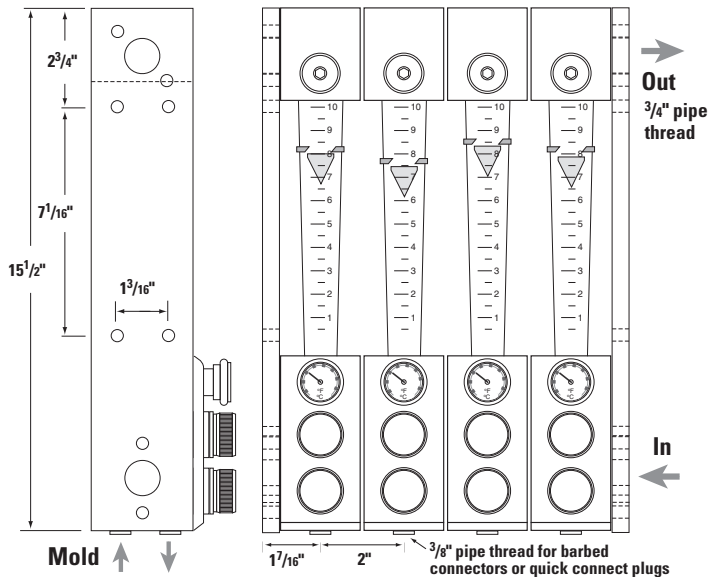
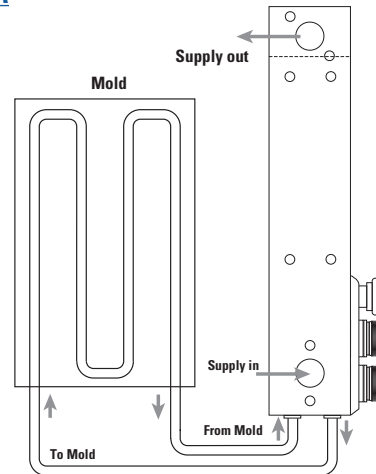
Flow meters for monitoring and regulating flow through mold.



Larger model 2.65 or 5.3 gpm flow rates

- Up to 210°F/100°C
- 180 PSI
- Manifold blocks made from tough glass-filled nylon construction. Aluminum side plates.
- May be used with ethylene glycol
- From glass-filled nylon
- Cleaning brush included
- Brass valves (push-lock)
- Temp gauge in each tube 0 to 220°F
- Flow rate: 0 to 2.65 G.P.M. (10 liter/min.)
0 to 5.3 G.P.M. (20 liter/min.)

FLOW REGULATOR

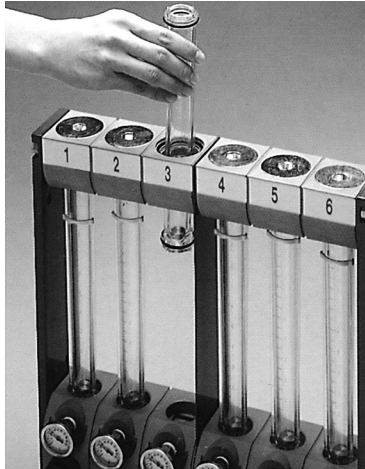


Easy cleaning capability without dismantling (access to tubethrough removable top plug.)

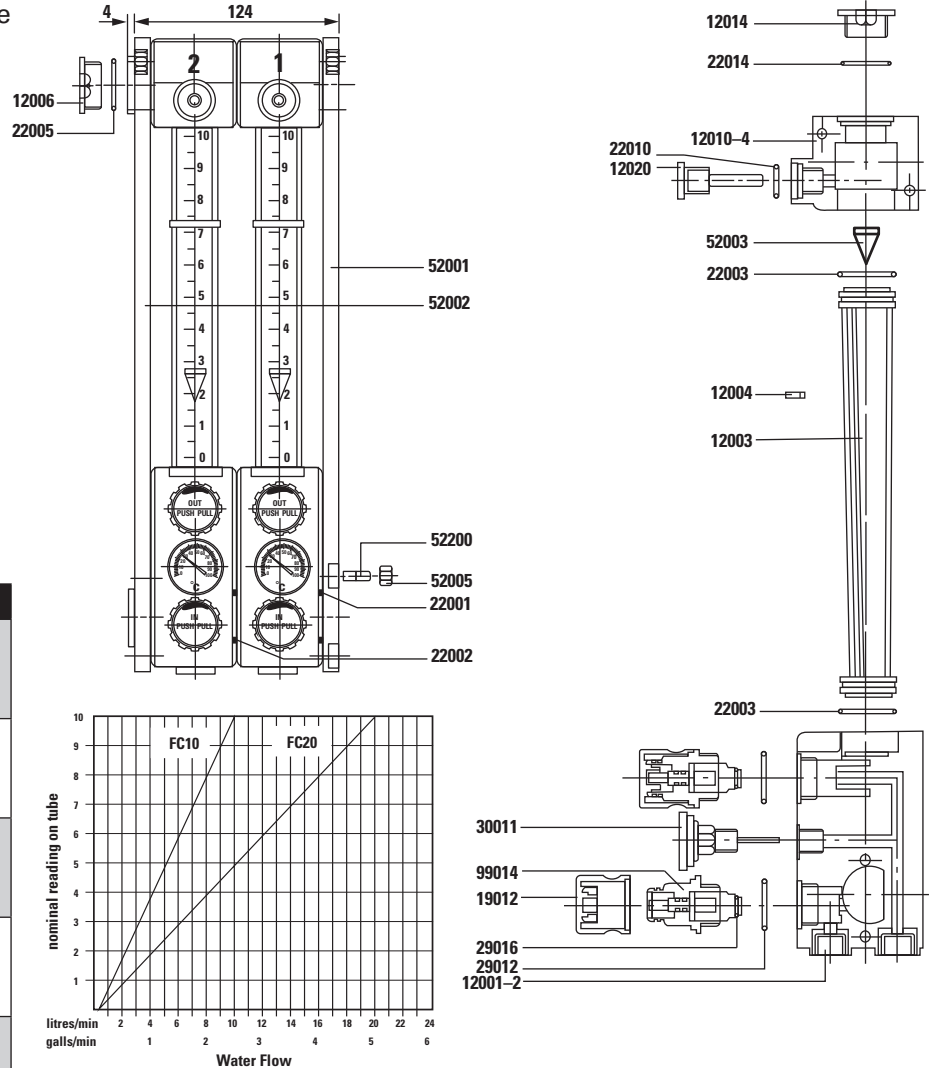
Flow Regulator



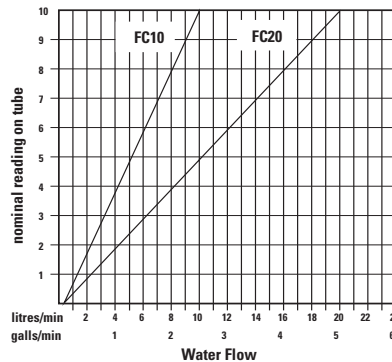
Easy cleaning capability without dismantling (access to tube through removable top plug.)



Flow System Matic Water Flow Regulators



Part Number	Description
12001-2	Lower Housing
12010-4	Upper Housing
12003	Sight Glass
12004	Reference Ring
12020	Fixed Plug
12006	Plug 3/4" NPT
19012	Hand Wheel
99014	Control Valve
22001	O-Ring
22002	O-Ring
22003	O-Ring
22014	O-Ring
22005	O-Ring
29012	O-Ring
29016	O-Ring
30011	Thermometer
52001	R. Side Plate
52002	L. Side Plate
52200	Screw
52005	Nut
52003	Cone
12014	Plug
22010	O-Ring



Larger Model 2.65 or 5.3 GPM Flow Rates

Description	W (in)	Part Number
Two Zone Assembly	4.88"	FR2
Three Zone Assembly	6.93"	FR3
Four Zone Assembly	8.98"	FR4
Five Zone Assembly	11.06"	FR5
Six Zone Assembly	13.15"	FR6
Eight Zone Assembly	17.24"	FR8
Ten Zone Assembly	21.46"	FR10
Twelve Zone Assembly	25.55"	FR12

Flow Cones available

Max Gallons/Min.	Part Number
2.64 (10 L/min)	FC10M
5.3 (20 L/min)	FC20M

Spare Flow

Max Gallons/Min.	Part Number
2.64 or 5.28 GPM	12003
Flow tube seals (10)	22003





Mold Temperature Regulator

The Mold Temperature Regulator is a compact, simple-to-operate device for heating and maintaining constant mold temperature. It can be difficult to settle a mold into a steady-state condition. Now with the innovative Mold Temperature Regulator, your work is done by your new best friend. You can heat your mold using otherwise wasted energy, and the Mold Temperature Regulator holds your temperature on point regardless of variables thrown its way.



MOLD TEMP. REGULATOR

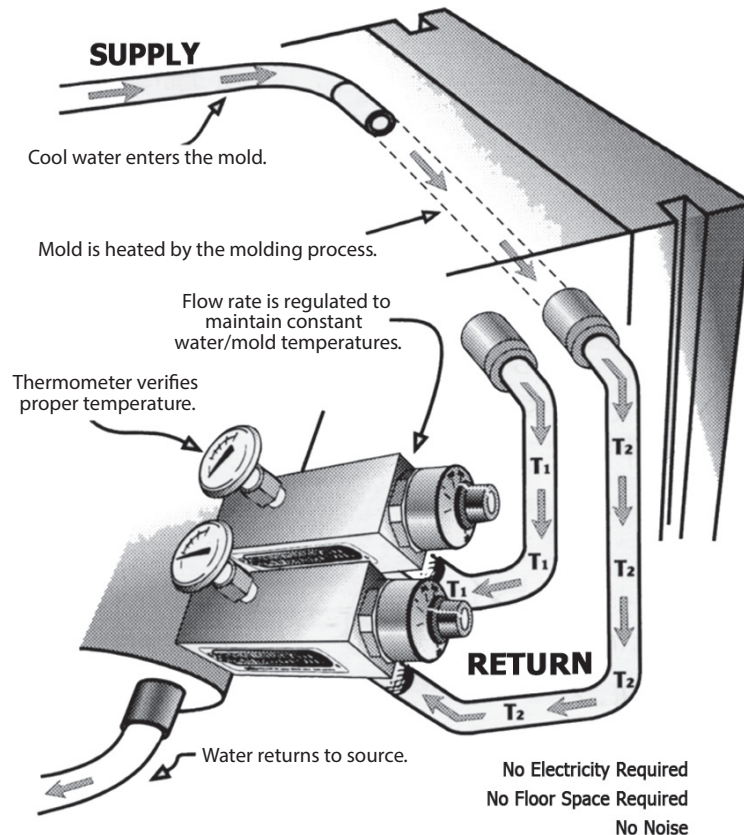
Part Number	Inlet/Outlet	Width	Length	Height	PSI	Weight
WDT2N2N4	1/4" NPT inlet and 1/2" NPT outlet	2.95"	6.02"	1.72"	150	3 lbs.
WDT2S2P2	1/4" quick-connect coupler and plug	2.95"	6.02"	1.72"	150	3 lbs.
WDT2S3P3	3/8" quick-connect coupler and plug	2.95"	6.02"	1.72"	150	3 lbs.

- It's unaffected by pressure changes
- It's unaffected by supply water temperature changes
- It reduces the headaches of maintaining different temperature zones
- It's nearly maintenance free
- It saves money up front and conserves energy year-round

Unlike conventional mold temperature controllers, this unit requires no power to operate, relying instead on the tried and true laws of physics to modulate the temperature of molds. The Mold Temperature Regulator indirectly controls mold temperature by modulating the rate of flow of coolant through the mold. It installs, power-free, right on the coolant line exiting the mold. On a basic level, it's really just a fancy thermostat - faster flow removes more heat, cooling the mold; slow flow removes less heat, heating the mold.

On a more technical level, the Mold Temperature Regulator uses thermal expansion with a proprietary heat exchange fluid. The user picks a setpoint with a dial on the Mold Temperature Regulator; a conical valve moves toward or away from the seat to modulate flow, depending upon the setpoint. The device is designed with controlled flow, so that some fluid is always flowing through the Mold Temperature Regulator - that is, you can't shut off coolant flow with the Mold Temperature Regulator. The temperature dial on the Mold Temperature Regulator allows water temperature setpoints from 80°F to 120°F.

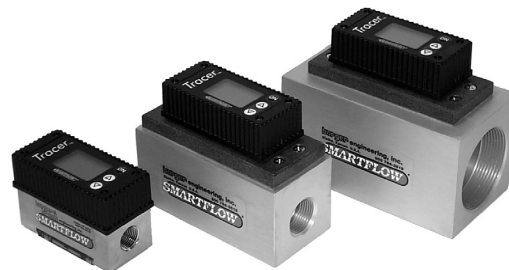
Automatically adjusts for variations in jet water temperature and pressure.



Tracer with Fluid Characteristic Indication (FCI) Technology

With the new Tracer Electronic Flowmeter, it is easier than ever to know exactly how much water is flowing through your water lines. In addition to flow rate, the Tracer™ provides a precise temperature reading of the water. It will calculate BTU's and display "TFLOW" message when Turbulent Flow is present. With the new information the Tracer™ will provide, you can manage your processes more completely and accurately.

ELECTRONIC FLOWMETER



Part No.	Inlet/Outlet	Temp. Range	Temp. Accuracy	Flow	Flow Accuracy	Weight		
DD3B	3/8" NPT inlet and outlet	32°-180°F	+/- 2%	.5 – 8.0 GPM	+/- 5%	1.5 lbs.		
DD3E	3/8" quick-connect coupler and plug							
DD6B	3/4" NPT inlet and outlet			2-20 GPM		2.5 lbs.		
DD6E	3/4" quick-connect coupler and plug							
DD8B	1" NPT inlet and outlet			3-30 GPM		3.9 lbs.		
DD8E	1" quick-connect coupler and plug							
DD12B	1 1/2" NPT inlet and outlet			6.5-60 GPM				
DD12E	1 1/2" quick-connect coupler and plug			10-110 GPM				
DD16B	2" NPT inlet and outlet							
DD16E	2" quick-connect coupler and plug							

Know Your Flow

There is no need to guess if water is flowing through each line or zone of a mold. Now you can know exactly how much is flowing. Your flow rate is displayed in 100ths of a gallon per minute. If you prefer, flow is displayed in liters per minute.

Know Your Water Temperature

In addition to providing current flow rate data, the Tracer™ also provides the current water temperature at the flowmeter. Used on the supply side, this can verify precise water temperature as it enters the mold. Put the Tracer™ in the out or return side and measure water temperature exiting the mold. Temperature can be displayed in either Fahrenheit or Celsius units, user selectable.

Know Your BTU's

The setup mode of the Tracer™ allows you to enter the incoming or supply water temperature. Then with the Tracer™ attached to the return water line, it will calculate BTU per minute.

Know Your FCI's

Tracer flowmeter displays a special message ("TFLOW") when Turbulent Flow is present in your cooling water. Turbulent flow is the condition of optimum cooling efficiency. Tracer flowmeter calculates this condition based on the cooling water line size, water temperature and percentage of glycol (0, 10% 20% or 30%) as input in the setup mode.

Versatile

The Tracer™ can be mounted in any position. It can accept flow in either direction. 3/8" units include a sight glass on the back for visual verification of flow. Select the optional quick-connect fittings and use the Tracer™ as a test kit to diagnose your water line problems.

Digital LCD Display

The digital display Tracer™ is battery powered and has an easy-to-read LCD which displays flow rate, temperature or BTU's at the touch of a button. A programmable auto shutoff feature extends battery life.





Electronic Flowmeter

Tracer Switching Flowmeter

ELECTRONIC FLOWMETER

Features and Benefits

- Programmable SPDT switch tied to high or low flow, or high or low temperature conditions to help protect equipment and processes. See Know Your BTUs and FCI on previous page.
- Remotely powered for low maintenance operation
- Bi-directional flow reading makes installation simple and convenient
- Metric or English units for flow and temperature are user-selectable
- Corrosion-resistant wetted parts assure long-lasting durability
- 3/8" through 2" NPT(F) inlet/outlet installs easily into existing plumbing



Tracer® Electronic Switching Flowmeter measures liquid flow rate and temperature while providing one programmable switching set point for high or low flow or temperature. 8 to 28VDC power source operates the flowmeter to provide continuous monitoring of the process. Sealed push-buttons configure the flowmeter and switching operations through user-friendly menus. BTU's per minute and incorporates FCI (Flow Characteristics Indicator) in support of Scientific CoolingSM principles.

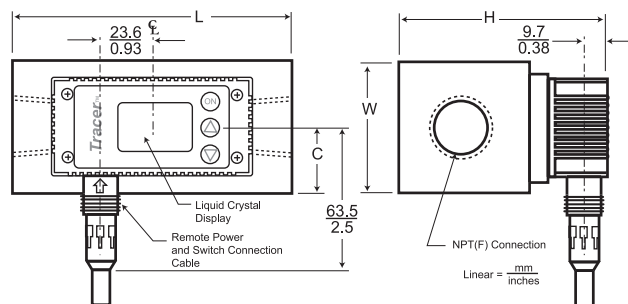
The Tracer Electronic Switching Flowmeter is designed to be permanently mounted to closely monitor water flow and temperature conditions. The SPDT switch in the Tracer flowmeter can be wired directly to an alarm circuit in a process controller or other peripheral equipment. The NPT(F) threaded openings provide versatile, leak-free connections to match existing plumbing without adapters.

Tracer Flowmeters are suitable for use in injection molding machine cooling water loops, lube oil systems, blending systems, filter condition indicators, and varied applications requiring flow measurement of clean, non-viscous, chemically-compatible process liquids.

Annual calibration is recommended for best results. 3/8" unit not recommended for use with liquids containing metallic particles.

Specifications

- Flow accuracy±5%*
 - Flow repeatability±3%*
 - Wetted Parts Body.....Clear-anodized aluminum or nickel-plated brass
 - Impeller.....nylon 6/12
 - Impeller Shaft18-8 stainless steel
 - Magnet.....neodymium
 - Power.....8 to 28VDC
 - SwitchingSPDT, 1A, 30VAC, 42VDC
 - Temperature Range.....32°F to 180°F (0°C to 82°C)
 - Accuracy.....±2% of display value
 - Repeatability.....±1% of display value
 - Environmental Pressure.....100 psi max.
- *Accuracy and repeatability figures are based on the full scale of the range.



Part Number	Connection Size	Flow Range		Max Dimensions (mm/in)			
		GPM	LPM	L	H	W	C
DDS3B	3/8" NPT(F)	0.5-8	2-30	87/3.42	58/2.27	42/1.67	21/0.83
DDS6B	3/4" NPT(F)	2-20	8-76	121/4.75	94/3.70	57/2.25	29/1.13
DDS8B	1" NPT(F)	3-30	11-114	140/5.50	118/4.65	76/3.00	38/1.50
DDS12B	1-1/2" NPT(F)	6.5-60	25-228				
DDS16B	2" NPT(F)	10-110	38-418				

Flowmeters



3/4" and 1" NPT

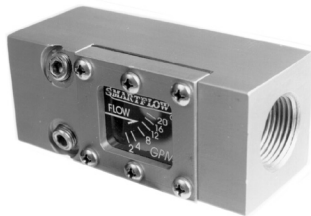
Features

- Compact, rugged design
- 210°F rating
- 100 PSI
- 20 GPM
- Aluminum body
- Polysulfone sight glass
- Can be mounted in any position
- Optional thermometer & pressure gauge

Materials & Options

Body.....	Anodized aluminum
Sight glass.....	Polysulfone
Gasket.....	Neoprene
Vane	Stainless steel
Spring	Stainless steel
Pin & screws	Stainless steel
Thermometer (opt.)	0° 250°F/-20° -120°C
Pressure gauge (opt.)	0 to 100 PSI

Flow



3/4" NPT, 2 to 20 GPM
Part Number F6A20
 1" NPT, 2 to 20 GPM
Part Number F8A20

Flow & Temp.

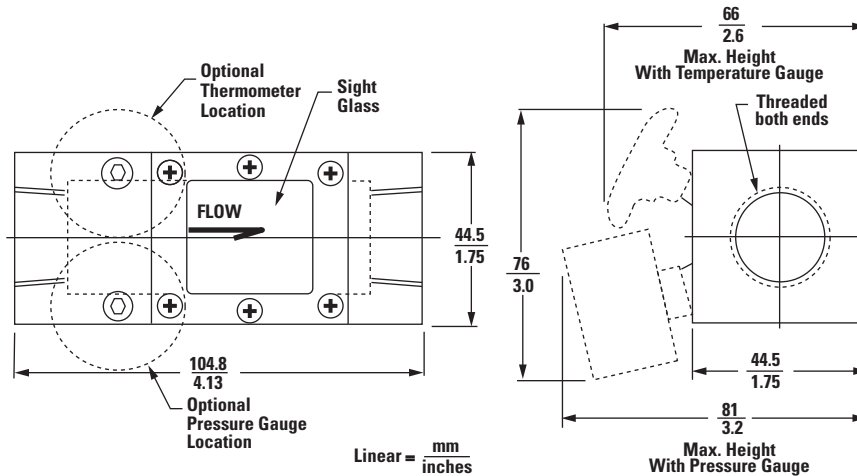


3/4" NPT, 2 to 20 GPM
Part Number F6B20
 1" NPT, 2 to 20 GPM
Part Number F8B20

Flow, Temp. & Pressure



3/4" NPT, 2 to 20 GPM
Part Number F6C20
 1" NPT, 2 to 20 GPM
Part Number F8C20





Large Flowmeters

1" to 2" NPT

Features and materials same as above except that the capacity is up to 100 GPM and rated for 210°F

Flow indicating vane, visible through sight glass, provides continuous flow rate and positive visual verification of flow.

Flow



- 1" NPT, 2.5–40 GPM
Part Number F8A
- 1 1/4" NPT, 2.5–40 GPM
Part Number F10A
- 1 1/2" NPT, 2.5–40 GPM
Part Number F12A40
- 1 1/2" NPT, 10–100 GPM
Part Number F12A
- 2" NPT, 2.5–40 GPM
Part Number F16A40
- 2" NPT, 10–100 GPM
Part Number F16A

Flow & Temp.



- 1" NPT, 2.5–40 GPM
Part Number F8B
- 1 1/4" NPT, 2.5–40 GPM
Part Number F10B
- 1 1/2" NPT, 2.5–40 GPM
Part Number F12B40
- 1 1/2" NPT, 10–100 GPM
Part Number F12B
- 2" NPT, 2.5–40 GPM
Part Number F16B40
- 2" NPT, 10–100 GPM
Part Number F16B

Flow, Temp. & Pressure

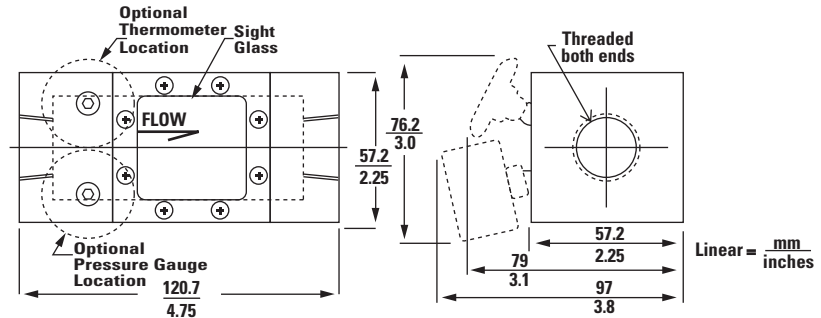


- 1" NPT, 2.5–40 GPM
Part Number F8C
- 1 1/4" NPT, 2.5–40 GPM
Part Number F10C
- 1 1/2" NPT, 2.5–40 GPM
Part Number F12C40
- 1 1/2" NPT, 10–100 GPM
Part Number F12C
- 2" NPT, 2.5–40 GPM
Part Number F16C40
- 2" NPT, 10–100 GPM
Part Number F16C

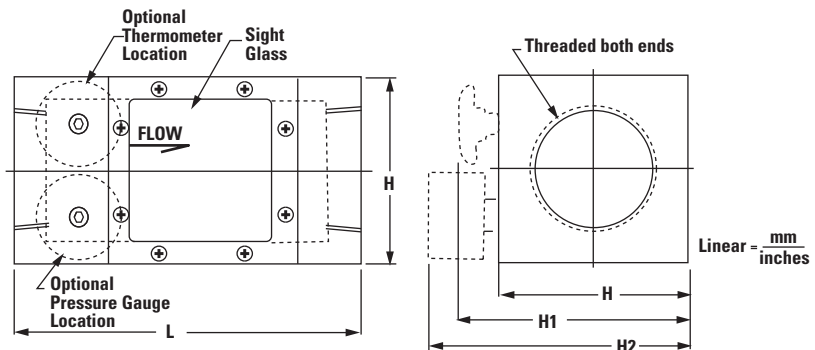
LARGE FLOWMETERS

Dimension Chart	
Dim.	Body Size 1-1/2" or 2"
L	139.7/5.5
H	76.2/3.0
H ₁	99/3.9
H ₂	114/4.5

1" and 1-1/4" Flowmeters 40 gpm



1-1/2", 2" Flowmeters 40, 100



IceCube™ Flowmeters



ICECUBE FLOWMETERS

Finally, a product that recognizes that leaks and broken tubes are common problems of other water regulators.

This Smartflow Flowmeter offers a practical and inexpensive solution to a far too common problem.

- Portable
- Compact
- Rugged
- 210°F rating
- 100 PSI
- 1 to 8 GPM – or .5 to 2.5 GPM
- 1/4", 3/8" or 1/2" brass quick connect couplings

- on quick-check models.
- Solid brass end caps
- High temperature polymer body
- Can be mounted in any position
- In-stock for same-day shipping
- Material:
 - Endcaps..... Brass
 - Body Polysulfone
 - Vane Nylon
 - Spring..... S/S
 - O-Rings..... EDP
 - Cap Screws S/S

Flowmeter



Smartflow Flowmeter 1 – 8 GPM

- 1/4" NPT **F2A**
- 3/8" NPT **F3A**
- 1/2" NPT **F4A**
- 3/4" NPT **F6A**

Smartflow Flowmeter .5 – 2.5 GPM

- 1/4" NPT **SF2A**
- 3/8" NPT **SF3A**
- 1/2" NPT **SF4A**
- 3/4" NPT **SF6A**

Flow & Temp. & Pressure



Smartflow Flow, Temp. & Pressure 1 – 8 GPM

- 1/4" NPT **F2C**
- 3/8" NPT **F3C**
- 1/2" NPT **F4C**
- 3/4" NPT **F6C**

Smartflow Flow, Temp. & Pressure .5 – 2.5 GPM

- 1/4" NPT **SF2C**
- 3/8" NPT **SF3C**
- 1/2" NPT **SF4C**
- 3/4" NPT **SF6C**

Flow & Temp.



Flow & Temp. 1 – 8 GPM

- 1/4" NPT **F2B**
- 3/8" NPT **F3B**
- 1/2" NPT **F4B**
- 3/4" NPT **F6B**

Flow & Temp. .5 – 2.5 GPM

- 1/4" NPT **SF2B**
- 3/8" NPT **SF3B**
- 1/2" NPT **SF4B**
- 3/4" NPT **SF6B**

Flow & Pressure

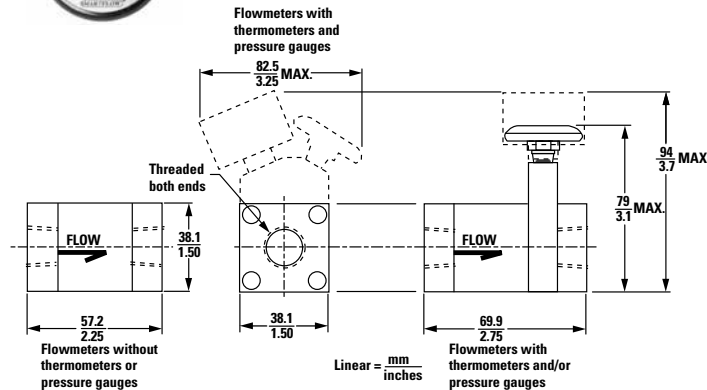


Flow & Pressure 1 – 8 GPM

- 1/4" NPT **F2F**
- 3/8" NPT **F3F**
- 1/2" NPT **F4F**
- 3/4" NPT **F6F**

Flow & Pressure .5 – 2.5 GPM

- 1/4" NPT **SF2F**
- 3/8" NPT **SF3F**
- 1/2" NPT **SF4F**
- 3/4" NPT **SF6F**





Ice Cube™ Flowmeters

With Nylon End Caps

Reinforced Nylon End Caps reduce weight and cost of proven mechanical flowmeter design.

Stainless steel stabilizer ring holds threads stable, preventing distortion. Nylon material provides dielectric insulator to help prevent galvanic action due to dissimilar metals.

Stainless Steel Stabilizer Ring!



General Description

Smartflow® Mechanical Flowmeters are durable, vane-operated devices that provide visual indication of flow rate in many different styles and sizes. Rugged wetted parts are compatible with many process liquids.

Optional temperature and pressure gauges add functionality and flexibility to Smartflow® Flowmeters. Brass quick-connect fittings are available to create an excellent, portable tool for determining flow and locating clogged lines.

Features and Benefits

- Compact size works well in restricted-space locations
- Rugged construction gives years of dependable service
- Variety of inlet sizes provides exactly the right connection
- 210°F (99°C) temperature rating allows installation into a wide range of applications
- Optional temperature and pressure gauges display pressure and temperature information in addition to flow in one unit
- Common flowmeter configurations stocked to provide same-day delivery in most cases
- No mounting restrictions ease installation in any position without extra brackets or hardware

Wetted Parts and Materials

End Caps	Glass-filled nylon
Flow Body	Polysulfone
Vane	Glass-filled nylon
Spring	Stainless steel
O-Rings.....	EPDM
Cap Screws.....	Stainless steel
Optional Quick-Connect Fittings.....	Brass



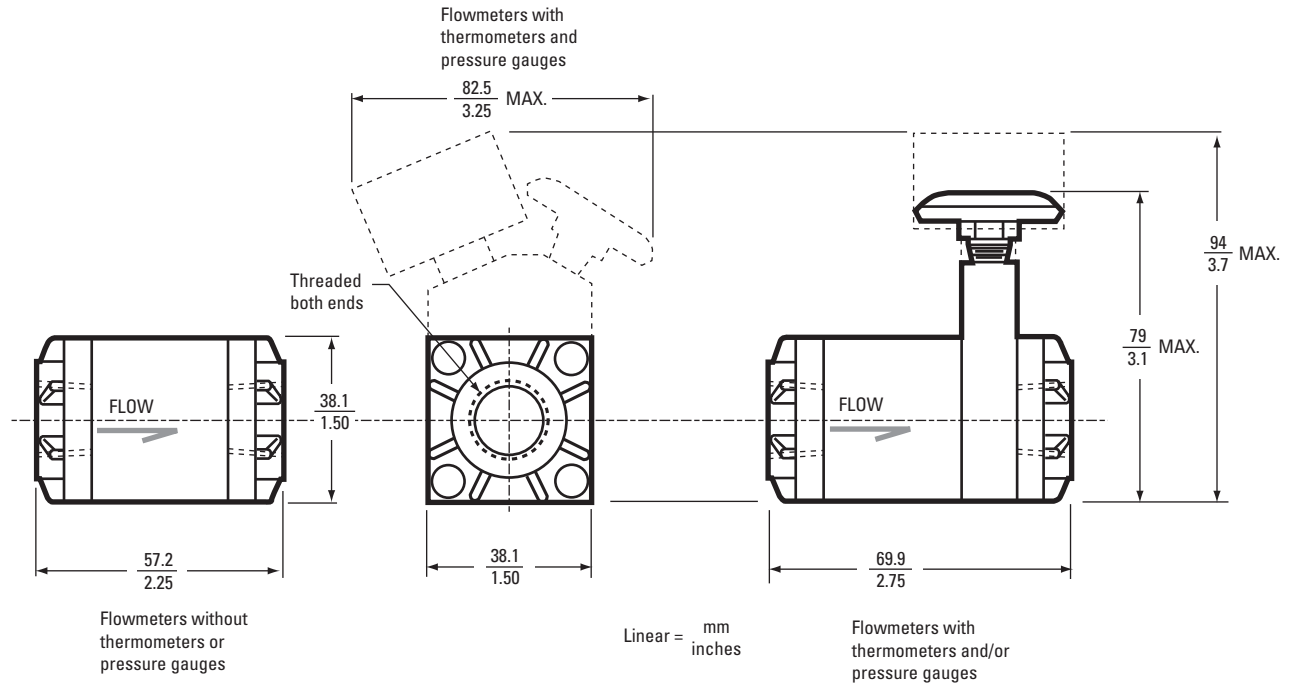
Specifications

Flow Accuracy	±10% full scale
Operating Temperature	210°F max. (99°C max.)
Operating Pressure.....	100 PSI max. (6.9 bar max.)
Dial Thermometer.....	0° to 250°F (-20° to 120°C) ±2% accuracy (full scale)
Pressure Gauge.....	0 to 100 psi (0 to 700 Kpa) ±3% accuracy (full scale)

IceCube™ Flowmeters



With Nylon End Caps



ICECUBE FLOWMETERS/END CAPS

Part Number	Inlet Size	Accessories
FP2A80	1/4" NPT Female	Flowmeter only
FP2B80		Flowmeter and thermometer
FP2C80		Flowmeter, thermometer and pressure gauge
FP2D80		Flowmeter, thermometer, pressure gauge and quick-change socket and plug
FP2E80		Flowmeter, thermometer and quick-change socket and plug
FP3A80	3/8" NPT Female	Flowmeter only
FP3B80		Flowmeter and thermometer
FP3C80		Flowmeter, thermometer and pressure gauge
FP3D80		Flowmeter, thermometer, pressure gauge and quick-change socket and plug
FP3E80		Flowmeter, thermometer and quick-change socket and plug
FP4A80	1/2" NPT Female	Flowmeter only
FP4B80		Flowmeter and thermometer
FP4C80		Flowmeter, thermometer and pressure gauge
FP4D80		Flowmeter, thermometer, pressure gauge and quick-change socket and plug
FP4E80		Flowmeter, thermometer and quick-change socket and plug

E



Precision Flow Regulator



Your Platform for Scientific CoolingSM

DELTA-Q
Precision Flow Regulator



General Description

Delta-Q™ is a low-cost precision flow regulator module that can be used in conjunction with other SMARTFLOW components such as threaded end caps, IceCube™ flowmeters, temperature and pressure gauges, Dr. Eddy® Flowmeter/Turbulent Flow Indicator, Tracer® Electronic Flowmeters, and cooling water manifolds. The Delta-Q Regulator allows full adjustability of flow volume from unrestricted flow to complete shutoff using the manual flow control knob.

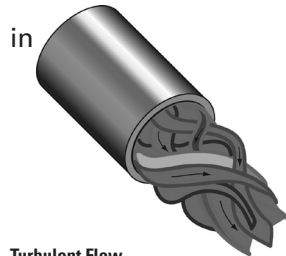
The modular design allows users to customize models meeting scientific cooling requirements for each application. The glass-filled nylon body is lightweight and durable. Internal stainless steel components are resistant to corrosion.

Features and Benefits

- Economical solution for leak-free flow regulation of single or multiple circuits
- Compact size works well in restricted-space locations
- Rugged construction gives years of dependable service
- Variety of inlet sizes provides exactly the right connection
- Optional temperature and pressure gauges give instant access to pressure and temperature information in addition to flow in one unit
- No mounting restrictions ease installation in any position without extra brackets or hardware
- 210°F (99°C) temperature rating allows installation into a wide range of applications



Scientific Molding seeks to optimize molding efficiency by measuring and recording process parameters to the greatest extent possible, providing an effective means of easily repeating a successful molding setup, any molding machine. Mold cooling, estimated to be about 80% of the molding cycle, is a key element.



Turbulent Flow

Scientific CoolingSM is a training regimen developed for Smartflow[®] products. Scientific

Cooling applies techniques from Scientific Molding: measure, record, adjust and repeat. The teaching of Scientific Cooling requires the right tools to control and quantify cooling parameters. Smartflow's (patent pending) Delta-QTM flow regulator is the foundation of the modular system for Scientific Cooling because it controls and changes flow rate. Delta-Q is designed to mate with IcecubeTM, Dr. Eddy[®] or Tracer[®] flow meters to provide a range of options for Scientific Cooling measurement and adjustment.

Measurement options using Delta-Q as your platform for Scientific Cooling:

With an IcecubeTM Flowmeter Attach Delta-Q to a basic mechanical Icecube Flowmeter for economical flexibility of application.



The modular design allows the addition of individual measurement components: temperature gauge, pressure gauge, or liquid-filled pressure gauge. Quick disconnect fittings can also be added to create a portable troubleshooting tool to be kept in a toolbox or mold tryout station. In addition to the parameter

measurements, Delta-Q allows technical molders to experiment with different flow rates while the meter is connected, making Scientific Cooling easier. See next page.

With a Dr. Eddy[®] Flowmeter/Turbulent Flow Indicator Attach Delta-Q to a Dr. Eddy meter to detect turbulent flow using FCI (Flow Characteristic Indication) Technology. The presence of turbulent flow indicates that the most efficient cooling is present. The swirling and mixing of the water inside cooling passages creates the greatest heat transfer from the mold to the cooling medium. When attached to a Dr. Eddy, the Delta-Q becomes a valuable capacity conservation tool. Conserving cooling water at each cooling supply line preserves water capacity in other locations in the shop. Downstream presses can have greater cooling water volume available when upstream cooling line efficiency is maximized. See page 378.

With a Tracer[®] Electronic Flowmeter

Attach Delta-Q to a Tracer Electronic Flowmeter for greater accuracy and access to FCI TechnologyTM. Tracer flowmeters have $\pm 5\%$ accuracy and optional NIST traceable calibration. Turbulent flow indication is standard on all Tracer Flowmeters.

A Switching Tracer flowmeter facilitates record-keeping when attached to a PLC or other data collection system. Record keeping is an important step in Scientific Cooling. A Switching Tracer attached to a Delta-Q is the ultimate tool for Scientific Cooling. See page 379.

On a Smartflow Manifold

Attach an array of Delta-Q modular flow regulators and meters to a Smartflow Manifold for economical fingertip control of an entire mold half without moving individual flowmeters from circuit to circuit. Smartflow manifolds save time in mold setups and help molders start making accurate parts quickly. See page 380.





Precision Flow Regulator



Use when flow indication is not required.

Model Number

	F3
Brass End Caps	
1/4" NPT(F)	F2
1/4" BSPP(F)	F2B
3/8" NPT(F)	F3
3/8" BSPP(F)	F3B
1/2" NPT(F)	F4
1/2" BSPP(F)	F4B
Nylon End Caps	
gauge	
1/4" NPT(F)	FP2
1/4" BSPP(F)	FP2B
3/8" NPT(F)	FP3
3/8" BSPP(F)	FP3B
1/2" NPT(F)	FP4
1/2" BSPP(F)	FP4B

A
A
B
C
CL
F
FL

Q
Options
Regulator only
Thermometer
Thermometer and pressure gauge
Thermometer and liquid-filled pressure gauge
Pressure gauge
Liquid-filled pressure



FP3-F-Q

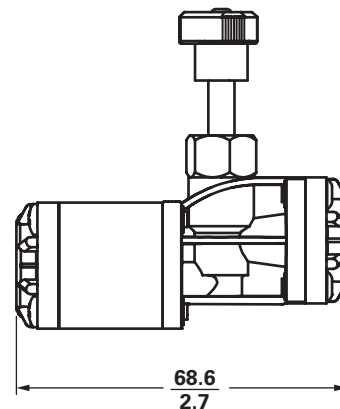
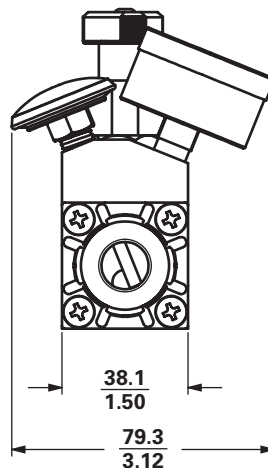
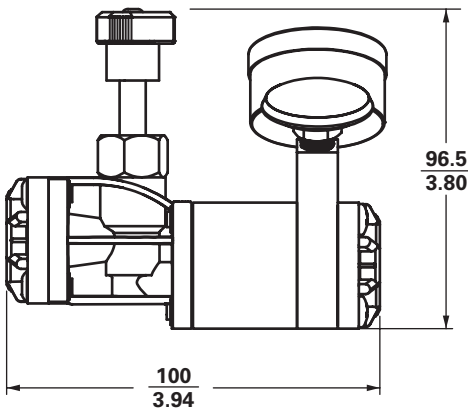
PRECISION FLOW REGULATOR

Wetted Parts and Materials

End Caps	Brass or glass-filled nylon
Body	Glass-filled nylon
O-Rings	EPDM
Regulator Stem	Stainless steel
Cap Screws	Stainless steel
Optional Gauge Block	Brass
Optional Quick-Connect Fittings	Brass

Specifications

Operating Temperature	210°F max. (99°C max.)
Operating Pressure	100 PSI max. (6.9 bar max.)
Dial Thermometer	0° to 250°F (-20° to 120°C)
.....	±2% accuracy (full scale)
Pressure Gauge	0 to 100 PSI (0 to 700 KPA)
.....	±3% accuracy (full scale)



Precision Flow Regulator



With IceCube™ Flowmeter

Model Number

	F3	A	25	QR	
Brass End Caps					Flow Direction
1/4" NPT(F)	F2			QR	Return
1/4" BSPP(F)	F2B				(standard flow in)
3/8" NPT(F)	F3			QS	Supply (flow out)
3/8" BSPP(F)	F3B				
1/2" NPT(F)	F4				Flow Rate (max.)
1/2" BSPP(F)	F4B		15	1.5 GPM	(gallons per minute)
Nylon End Caps					
1/4" NPT(F)	FP2		25	2.5 GPM	
1/4" BSPP(F)	FP2B		80	8.0 GPM	
3/8" NPT(F)	FP3		100	10 LPM	(liters per minute)
3/8" BSPP(F)	FP3B				
1/2" NPT(F)	FP4		200	20 LPM	
1/2" BSPP(F)	FP4B		300	30 LPM	



Use when flow indication is required.

Options

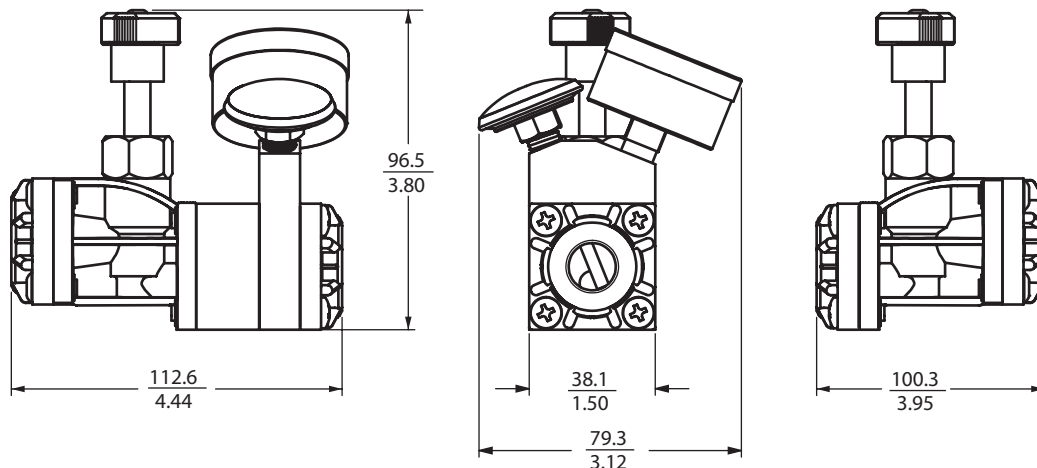
Flow body only	A
Thermometer	B
Thermometer & press. ga.	C
Thermometer and liquid-filled press. ga.	CL
Thermometer and quick-change socket and plug	E
Pressure gauge	F

Wetted Parts and Materials

End Caps..... Brass or glass-filled nylon
 Flow Body Polysulfone
 Regulator Body Glass-filled nylon
 Vane Glass-filled nylon
 Spring Stainless steel
 O-Rings..... EPDM
 Cap Screws..... Stainless steel
 Optional Gauge Block..... Brass
 Optional Quick-Connect Fittings..... Brass

Specifications

Flow Accuracy±10% full scale
 Operating Temperature 210°F max. (99°C max.)
 Operating Pressure 100 psi max. (6.9 bar max.)
 Dial Thermometer.... 0° to 250°F (-20° to 120°C)
 Accuracy ±2% accuracy (full scale)
 Pressure Gauge..... 0 to 100 PSI (0 to 700 KPA)
 Accuracy ±3% accuracy (full scale)





Precision Flow Regulator

With Dr. Eddy™ Flowmeter



Use when turbulent flow indication is required.

Model Number

	FC3	B	E	QR	
Brass End Caps					Flow Direction
Inlet Size					Return
1/4" NPT(F)	FC2			QR	(standard flow in)
1/4" BSPP(F)	FC2B				Supply (flow out)
3/8" NPT(F)	FC3				
3/8" BSPP(F)	FC3B			QS	
Nylon End Caps					Scale Units
Inlet Size					E English (temp in °F and flow in GPM)
1/4" NPT(F)	FCP2				M Metric (temp in °C and flow in LPM)
1/4" BSPP(F)	FCP2B				
3/8" NPT(F)	FCP3				
3/8" BSPP(F)	FCP3B				
Accessories					
Thermometer (standard)		B			
Thermometer with quick-connect socket and plug		E			



PRECISION FLOW/DR. EDDY

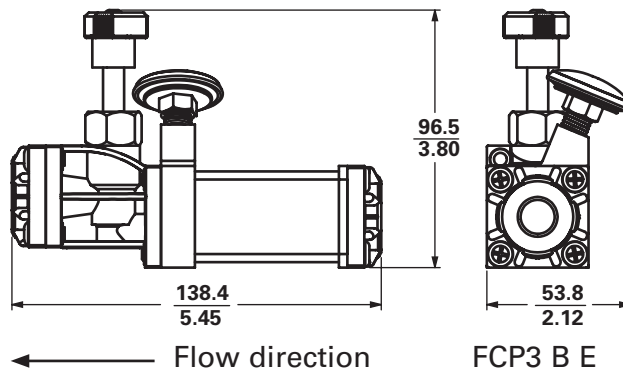
Wetted Parts and Materials

End Caps	Brass or glass-filled nylon
Regulator Body	Glass-filled nylon
Flow Body	Polysulfone
Indicator Ring.....	Silicone rubber
Piston.....	Acetal
Spring	Stainless steel
O-Rings.....	EPDM
Gauge Block	Brass
Optional Quick-Connect Fittings.....	Brass

Specifications

Accuracy.....	±10% full scale
Operating Temperature	210°F max. (99°C max.)
Operating Pressure.....	100 PSI max. (6.9 bar max.)
Dial Thermometer.....	0° to 250°F (-20° to 120°C)
.....	±2% accuracy (full scale)

10% Glycol Scales are available; contact DME Industrial Supplies for information.



Precision Flow Regulator



with 3/8" Tracer® Flowmeter

Use when electronic flowmeters are required.

Model Number

	DD	3BB	Q	
Meter Style	DD			Delta-Q
Digital display	DD			End Cap
Digital display plus switching	DDS			Material
			Q	Brass
			QP	Nylon
Thread Size				
	3/8" NPT(F)	3B		
	3/8" BSPP(F)	3BB		

Delta-Q Flow Regulator can be used with 3/8" Tracer electronic flowmeters.

DD - 3.6V Battery-Powered

- Flow rate display
- Temperature display
- BTU's/Minute display
- Turbulent flow condition (with optional glycol % input)

DDS - 8-28VDC Powered

- Flow rate display
- Temperature display
- BTU's/minute display
- Turbulent flow condition (with optional glycol % input)
- Programmable switch for low and high flow, low and high temperature or turbulent flow condition
- Analog outputs: 0-5VDC or 0-10VDC for flow rate and temperature for connection to a data collection system



TRACER FLOWMETER

Wetted Parts and Materials

Body.....	Nickel-plated brass
Impeller.....	Nylon
Impeller Shaft.....	Stainless steel
Magnet.....	Neodymium
Back Cover.....	Polysulfone
O-Ring.....	EPDM
End Cap.....	Brass or glass-filled nylon

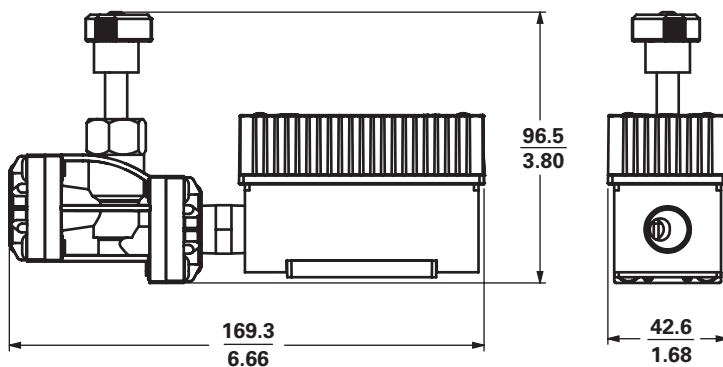


Specifications

Flow Accuracy.....	±5% of full scale
Flow Repeatability.....	±3% of full scale
Temperature Accuracy.....	±2% of display
Temperature Repeatability.....	±1% of display
Operating Temperature.....	180°F max. (82°C max.)
Operating Pressure.....	150 PSI max. (10.3 bar max.)

Power

DD - Model.....	3.6VDC Battery (included)
DDS - Model.....	8 to 28VDC
Switching (DDS - Model only).....	SPDT, 1A 30VAC, 42VDC



← Flow direction



Precision Flow Regulator

In Manifold Assemblies



Use when an array of flow regulations is required.

Model Number

8SA - 16 - 3 - 2 - AQ B Y - 80

Base
Manifold
Supply size
and material

3/4" NPT AL	6SA
1" NPT AL	8SA
1-1/2" NPT AL	12SA
2" NPT AL	16SA
1" NPT 304SS	8SS
1-1/2" NPT 304SS	12SS
3/4" BSPP AL	6BSA
1" BSPP AL	8BSA
1-1/2" BSPP AL	12BSA
2" BSPP AL	16BSA
1" BSPP 304SS	8BSS
1-1/2" BSPP 304SS	12BSS

AL= Aluminum
SS = Stainless steel

Number
of Ports 4
to
16

Port Sizes	
1/4" NPT(F)	2
1/4" BSPP(F)	2B
3/8" NPT(F)	3
3/8" BSPP(F)	3B
1/2" NPT(F)	4
1/2" BSPP(F)	4B

Aluminum		Flow Rates
Manifold Color	15	0.2–1.5 GPM
Y Red (flow direction in)	25	0.5–2.5 GPM
80		1–8 GPM
Z Blue (flow direction out); does not apply to stainless steel manifolds	100	2–10 LPM
	200	3–20 LPM
	300	4–30 LPM

Flow Regulator
End Cap Material
B Brass
N Nylon

AQ Temperature Gauge Option without temp. gauge
TQ with temp. gauge

[CONTACT US](#)



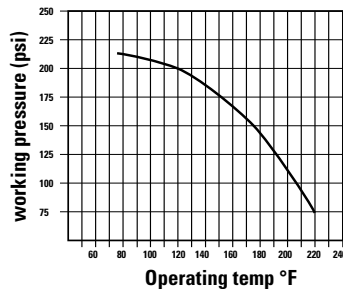
For paired installation, slide aluminum manifolds together using dovetail lock along the side of each manifold. Dovetail feature is not available on 2" aluminum or stainless steel manifolds. Contact DME for options not shown.

Contact DME Industrial Supplies for options not shown.

- Available with 1/2", 3/4" & 1" NPT threads
- Easy to install in any position
- No special piping or flow straighteners needed
- No electrical connections
- Direct reading indication

For Oil, Water & Other Fluids

- Accuracy within ±7% F.S.
- Relatively insensitive to shock and vibration
- Minimal pressure drop



Featuring unique variable-area metering design, with a spring-retained movable piston. The direct-reading EZ-View Flow Meter can be installed quickly, operating within ±7% accuracy. Operates in any position from vertical to horizontal, without costly flow straighteners or other special plumbing requirements. Standard cylindrical walled piston for maximum visibility with opaque liquids. Constructed of polysulfone and stainless steel for greater tolerance to pressure and temperature as well as chemical compatibility, this rugged flow meter is ideal for a wide range of liquid flow monitoring applications, including process control, water cooling systems, hydraulics and many more.



Specifications

- Material: Polysulfone or brass body and piston with stainless steel spring and stainless steel retaining rings
- Pressure Rating: 220 PSI max. - 3:1 safety factor
- Pressure Drop: Minimal
- Temperature Rating: See "temperature vs pressure" chart above
- Connections: Standard 1" NPT threaded port is recommended; swivel-type brass fittings, with Buna-N

O-rings, are available with 1/2" NPT female and 3/4" NPT male threads; allow easy flow meter removal for routine maintenance.

- Standard scales: Calibrated in graduated GPM and LPM @ .876 specific gravity (oil) and @ 1.0 specific gravity (water) at 70°F.

EZ VIEW FLOWMETER

Media	Flow Range	Part Number		
		1" Male NPT Polysulfone	3/4" Male NPTF Brass	1/2" Female NPTF Brass
Water 1.0 Sp. Gr.	1.0 – 16 GPM	621-016	625-016	624-016
	3.0 – 18 GPM	621-018	625-018	–
Hex	–	1.125"	1.5"	1.5"
Length	–	5.3" (135 mm)	8.3" (211 mm)	7.8" (198 mm)
Weight	–	3 oz.	1 lb.	1 lb.

*Do not use pipe dope. Use PTFE tape only.

Flow Indicators

Visual Flow Indicators provide simple, effective confirmation of coolant flow in mold systems. Prevent dangerous and costly blocked pipe situations.

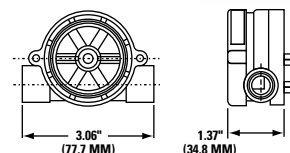
Visually bright orange spinning rotor
 Operating temperature 212°F (100°C) max.
 Pressure 100 PSI max.
 1/4" or 1/2" ports

Includes low-flow adapter for measuring lower flow rates.

FLOW INDICATORS



Port Size NPT	Flow range (GPM)		Part Number
	Standard	Low Range	
1/4"	0.5 to 5.0	0.1 to 1.0	VF155420
1/2"	4 to 20	1.5 to 12	VF155480



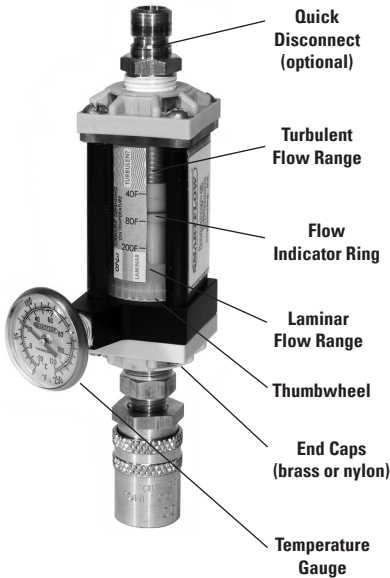


Dr. Eddy™ Flowmeters

DR. EDDY FLOWMETER

Dr. Eddy Diagnoses Flow Condition

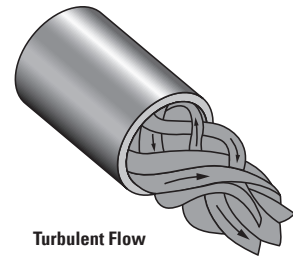
Using Fluid Characteristic Indication (FCI) technology, Dr. Eddy displays the condition of the water as it relates to flow efficiency: laminar flow, transitional flow or turbulent flow. Dr. Eddy has four scales built into the meter: three scales for FCI and one scale for flow rate. FCI Scales are selectable and correspond to cooling line inside diameter: 1/4", 3/8", or 1/2". Flow rate scale can be referenced quickly for additional functionality. The flow scale displays flow rate in gallons or liters per minute depending on the model. A dual scale temperature gauge is standard on all models for process comparison to the FCI Scales. Dr. Eddy applies the science of heat transfer, diagnosing the condition of cooling water lines at a glance. Cooling water capacity can be conserved plant-wide by using the minimum amount of flow that will produce turbulence on all presses. It may be possible to delay costly water system upgrades by maximizing the flow effectivity.



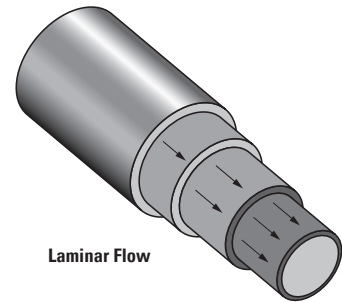
U.S. Patent No. 7,549,348

Turbulent Flow Basics

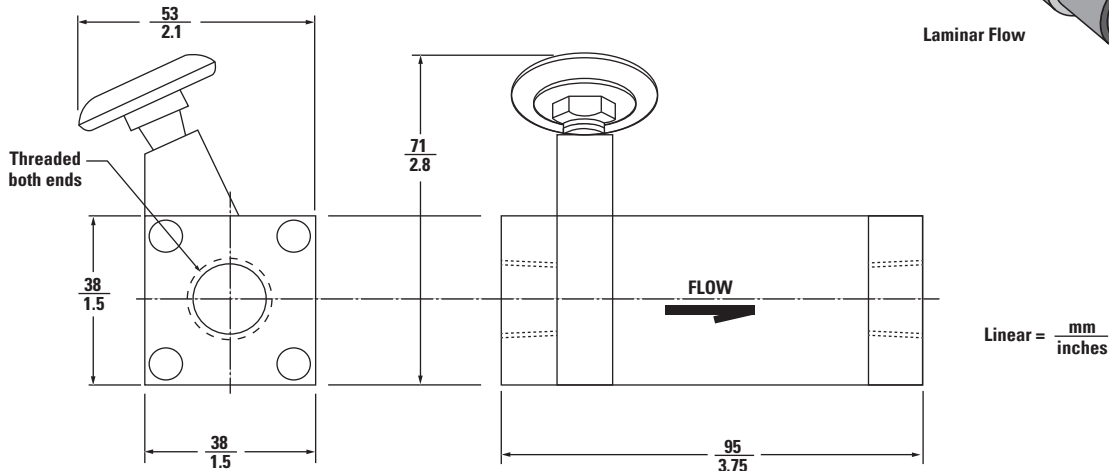
Turbulent water flow is much more efficient at removing heat in a cooling system than water flowing under laminar conditions. Once turbulent flow is achieved, increasing the flow rate does not significantly improve the cooling rate of the system. In molding applications, many mold operators try to maximize the flow of water through their cooling systems to ensure turbulent flow. Doing so increases energy costs for pumping more water than necessary through the system. This practice may also limit the amount of cooling water available for cooling additional molds on the same cooling system circuit. By ensuring turbulent flow using FCI Technology, less water can be used in the molding process, saving precious resources.



Turbulent Flow



Laminar Flow



NPT Thread					
Type	Size (of inlet)	Material (of End Caps)	Scale Units	Quick Disconnects?	Part Number
FCI Flowmeter w/temp. and flow gauges	1/4"	Nylon	English (°F)	-	FCP2BE
		Brass		Yes	FCP2EE
				-	FC2BE
		Yes		FC2EE	
	3/8"			Nylon	-	FCP3BE
		Brass		Yes	FCP3EE
				-	FC3BE
		Yes		FC3EE	
	1/4"		Nylon	Metric (°C)	-	FCP2BM
		Brass	Yes		FCP2EM
			-		FC2BM
		Yes	FC2EM		
3/8"	Nylon		-		FCP3BM
	Brass	Yes	FCP3EM		
		-	FC3BM		
	Yes	FC3EM			
BSP Thread					
Type	Size (of inlet)	Material (of End Caps)	Scale Units	Quick Disconnects?	Part Number
FCI Flowmeter w/temp. and flow gauges	1/4"	Nylon	English (°F)	-	FCP2BBE
		Brass		-	FC2BBE
	3/8"	Nylon		-	FCP3BBE
		Brass		-	FC3BBE
	1/4"	Nylon	Metric (°C)	-	FCP2BBM
		Brass		-	FC2BBM
	3/8"	Nylon		-	FCP3BBM
		Brass		-	FC3BBM



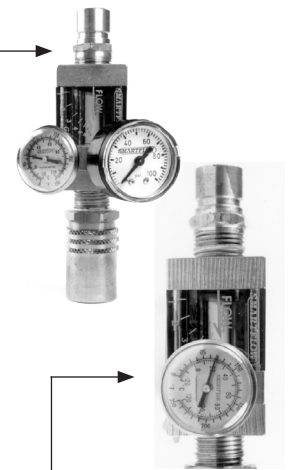
Flowmeters

Designed to diagnose and/or monitor water line conditions. Provides continuous readings of flow rate, temperature and pressure. Easy to install with quick-connect couplings, one socket and one plug. Choose from a variety of products that help you monitor and adjust your flow, temperature and pressure. End the guesswork, begin the smartwork!

FLOWMETERS

1 – 8 GPM	
1/4" NPT	F2E
3/8" NPT	F3E
1/2" NPT	F4E
.5 – 2.5 GPM	
1/4" NPT	SF2E
3/8" NPT	SF3E
1/2" NPT	SF4E

1 – 8 GPM	
1/4" NPT	F2D
3/8" NPT	F3D
1/2" NPT	F4D
.5 – 2.5 GPM	
1/4" NPT	SF2D
3/8" NPT	SF3D
1/2" NPT	SF4D

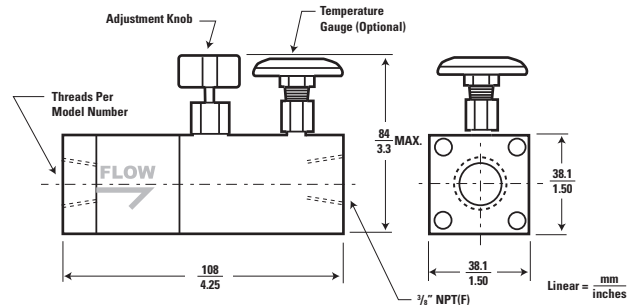




Flow Regulators

General Description

Smartflow® Flow Regulators provide a unique, leak-free, single-point manual flow control. This regulator incorporates the proven mechanical flowmeter and integral needle valve in a compact design. Very few moving parts improve reliability and leak-free operation. Used alone or in combination with a water manifold, the flow regulator allows manual control of individual cooling water lines. Brass valve, EPDM o-rings, and polysulfone viewing window are compatible with most process liquids. Optional temperature gauge may be added for additional process control information. Brass quick-connect fittings are available.



Features and Benefits

- Compact size works well in restricted-space locations
- Rugged construction gives years of dependable service
- 210°F (99°C) temperature rating allows installation into a wide range of applications
- Optional temperature gauge displays additional process information
- No mounting restrictions ease installation in any position without extra brackets or hardware



Wetted Parts and Materials

End Caps & Regulator Body.....Brass
 Flow Body.....Polysulfone
 Vane.....Glass-filled nylon
 Spring.....Stainless steel
 O-Rings.....EPDM
 Cap Screws.....Stainless steel
 Optional Quick-Connect Fittings.....Brass

Specifications

Flow Accuracy.....±10% full scale
 Operating Temperature.....210°F max.(99°C max.)
 Operating Pressure.....100 PSI max.(6.9 bar max.)
 Dial Thermometer.....0° to 250°F(-20° to 120°C) ±2% accuracy (full scale)

FLOW REGULATORS

Part Number	Description
FR2B15	Flow Regulators -1/4 NPT, 1.5 GPM, includes thermometer
FR3B15	Flow Regulators -3/8 NPT, 1.5 GPM, includes thermometer
FR4B15	Flow Regulators -1/2 NPT, 1.5 GPM, includes thermometer
FR2B25	Flow Regulators -1/4 NPT, 2.5 GPM, includes thermometer
FR3B25	Flow Regulators -3/8 NPT, 2.5 GPM, includes thermometer
FR4B25	Flow Regulators -1/2 NPT, 2.5 GPM, includes thermometer
FR2B100	Flow Regulators -1/4 NPT, 10 LPM, includes thermometer
FR3B100	Flow Regulators -3/8 NPT, 10 LPM, includes thermometer
FR4B100	Flow Regulators -1/2 NPT, 10 LPM, includes thermometer

Aluminum Water Manifolds



Cooling with ease, DME's one piece aluminum extrusion manifolds allow for outlet ports on 5 flats for maximum water distribution. Painted Blue or Red coloring makes for easy visual identification of in or out of the mold, pre-drilled mounting holes.

Features & Benefits:

Resistant to corrosion, 5 flats for out let ports allows for shorter OAL of the manifold, Combination Red/ Blue in one manifold.)

Specifications :

- One Piece Extruded Aluminum
- Max Temp up to 180°C/356°F
- Max Pressure 16Bar/230Psi
- End Plugs Sold Separately

ALUMINUM WATER MANIFOLDS

Part Number	Description
BWMBS150	BRACKET FOR 2 BRASS MANIFOLDS WITH 8-16 PORTS
BWMBS70	BRACKET FOR 2 BRASS MANIFOLDS WITH 4 OR 6 PORTS
BWMCC16	ASSEMBLY CLAMP FOR 2 1" BRASS MANIFOLDS
BWMIP12	3/4" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP16	1" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP20	1 1/4" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP24	1 1/2" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP32	2" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP8	1/2" INLET PLUG FOR BRASS WATER MANIFOLD

Part Number	Description
ALM4ABC-N2N12-120B	12 PORT ALUM 3/4 INLET 1/8 OUT ABC BLUE 350F 230PSI MAX
ALM4ABC-N2N12-120R	12 PORT ALUM 3/4 INLET 1/8 OUT ABC RED 350F 230PSI MAX
ALM4ABC-N2N12-120RB	6-6 PORT ALUM 3/4 INLET 1/8OUT ABC DIVIDED 350F 230PSI MAX
ALM4ABC-N4N12-120B	12 PORT ALUM 3/4 INLET 1/4 OUT ABC BLUE 350F 230PSI MAX
ALM4ABC-N4N12-120R	12 PORT ALUM 3/4 INLET 1/4 OUT ABC RED 350F 230PSI MAX
ALM4ABC-N4N12-120RB	6-6 PORT ALUM 3/4 INLET 1/4OUT ABC DIVIDED 350F 230PSI MAX
ALM4ABC-N4N16-159B	12 PORT ALUM 1" INLET 1/4 OUT ABC BLUE 350F 230PSI MAX
ALM4ABC-N4N16-159R	12 PORT ALUM 1" INLET 1/4 OUT ABC RED 350F 230PSI MAX
ALM4ABC-N4N16-159RB	6-6 PORT 1" INLET 1/4 OUT ABC DIVIDED 350F 230PSI MAX
ALM4ABC-N6N16-159B	12 PORT ALUM 1" INLET 3/8 OUT ABC BLUE 350F 230PSI MAX
ALM4ABC-N6N16-159R	12 PORT ALUM 1" INLET 3/8 OUT ABC RED 350F 230PSI MAX
ALM4ABC-N6N16-159RB	6-6 PORT 1" INLET 3/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM4ABC-N6N24-254RB	6-6 PORT 1 1/2 INLET 3/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM4ABC-N8N24-254RB	6-6 PORT 1 1/2 INLET 1/2 OUT ABC DIVIDED 350F 230PSI MAX
ALM4BCD-N2N12-120B	12 PORT ALUM 3/4 INLET 1/8 OUT BCD BLUE 350F 230PSI MAX
ALM4BCD-N2N12-120R	12 PORT ALUM 3/4 INLET 1/8 OUT BCD RED 350F 230PSI MAX
ALM4BCD-N4N12-120B	12 PORT ALUM 3/4 INLET 1/4 OUT BCD BLUE 350F 230PSI MAX
ALM4BCD-N4N12-120R	12 PORT ALUM 3/4 INLET 1/4 OUT BCD RED 350F 230PSI MAX
ALM4BCD-N4N16-159B	12 PORT ALUM 1" INLET 1/4 OUT BCD BLUE 350F 230PSI MAX
ALM4BCD-N4N16-159R	12 PORT ALUM 1" INLET 1/4 OUT BCD RED 350F 230PSI MAX
ALM4BCD-N6N16-159B	12 PORT ALUM 1" INLET 3/8 OUT BCD BLUE 350F 230PSI MAX
ALM4BCD-N6N16-159R	12 PORT ALUM 1" INLET 3/8 OUT BCD RED 350F 230PSI MAX
ALM4BCD-N6N24-254B	12 PORT ALUM 1 1/2 INLET 3/8OUT BCD BLUE 350F 230PSI MAX
ALM4BCD-N6N24-254R	12 PORT ALUM 1 1/2 INLET 3/8OUT BCD RED 350F 230PSI MAX
ALM4BCD-N8N24-254B	12 PORT ALUM 1 1/2 INLET 1/2OUT BCD BLUE 350F 230PSI MAX
ALM4BCD-N8N24-254R	12 PORT ALUM 1 1/2 INLET 1/2OUT BCD RED 350F 230PSI MAX
ALM4BD-N2N12-120B	8 PORT ALUM 3/4 INLET 1/8 OUT BD BLUE 350F 230PSI MAX
ALM4BD-N2N12-120R	8 PORT ALUM 3/4 INLET 1/8 OUT BD RED 350F 230PSI MAX
ALM4BD-N2N12-120RB	4-4 PORT ALUM 3/4 INLET 1/8OUT BD DIVIDED 350F 230PSI MAX
ALM4BD-N4N12-120B	8 PORT ALUM 3/4 INLET 1/4 OUT BD BLUE 350F 230PSI MAX
ALM4BD-N4N12-120R	8 PORT ALUM 3/4 INLET 1/4 OUT BD RED 350F 230PSI MAX
ALM4BD-N4N12-120RB	4-4 PORT ALUM 3/4 INLET 1/4OUT BD DIVIDED 350F 230PSI MAX
ALM4BD-N4N16-159B	8 PORT ALUM 1" INLET 1/4 OUT BD BLUE 350F 230PSI MAX
ALM4BD-N4N16-159R	8 PORT ALUM 1" INLET 1/4 OUT BD RED 350F 230PSI MAX
ALM4BD-N4N16-159RB	4-4 PORT 1" INLET 1/4 OUT BD DIVIDED 350F 230PSI MAX
ALM4BD-N6N16-159B	8 PORT ALUM 1" INLET 3/8 OUT BD BLUE 350F 230PSI MAX
ALM4BD-N6N16-159R	8 PORT ALUM 1" INLET 3/8 OUT BD RED 350F 230PSI MAX
ALM4BD-N6N16-159RB	4-4 PORT 1" INLET 3/8 OUT BD DIVIDED 350F 230PSI MAX
ALM4BD-N6N24-254B	8 PORT ALUM 1 1/2 INLET 3/8OUT BD BLUE 350F 230PSI MAX
ALM4BD-N6N24-254R	8 PORT ALUM 1 1/2 INLET 3/8OUT BD RED 350F 230PSI MAX
ALM4BD-N6N24-254RB	4-4 PORT 1 1/2 INLET 3/8 OUT BD DIVIDED 350F 230PSI MAX
ALM4BD-N8N24-254B	8 PORT ALUM 1 1/2 INLET 1/2OUT BD BLUE 350F 230PSI MAX
ALM4BD-N8N24-254R	8 PORT ALUM 1 1/2 INLET 1/2OUT BD RED 350F 230PSI MAX
ALM4BD-N8N24-254RB	4-4 PORT 1 1/2 INLET 1/2 OUT BD DIVIDED 350F 230PSI MAX
ALM4C-N2N12-120B	4 PORT ALUM 3/4 INLET 1/8 OUT C BLUE 350F 230PSI MAX
ALM4C-N2N12-120R	4 PORT ALUM 3/4 INLET 1/8 OUT C RED 350F 230PSI MAX
ALM4C-N4N12-120B	4 PORT ALUM 3/4 INLET 1/4 OUT C BLUE 350F 230PSI MAX
ALM4C-N4N12-120R	4 PORT ALUM 3/4 INLET 1/4 OUT C RED 350F 230PSI MAX
ALM4C-N4N16-159B	4 PORT ALUM 1" INLET 1/4 OUT C BLUE 350F 230PSI MAX
ALM4C-N4N16-159R	4 PORT ALUM 1" INLET 1/4 OUT C RED 350F 230PSI MAX
ALM4C-N6N16-159B	4 PORT ALUM 1" INLET 3/8 OUT C BLUE 350F 230PSI MAX
ALM4C-N6N16-159R	4 PORT ALUM 1" INLET 3/8 OUT C RED 350F 230PSI MAX
ALM4C-N6N24-254B	4 PORT ALUM 1 1/2 INLET 3/8OUT C BLUE 350F 230PSI MAX





Aluminum Water Manifolds

Part Number	Description
ALM4C-N6N24-254R	4 PORT ALUM 1 1/2 INLET 3/8OUT C RED 350F 230PSI MAX
ALM4C-N8N24-254B	4 PORT ALUM 1 1/2 INLET 1/2OUT C BLUE 350F 230PSI MAX
ALM4C-N8N24-254R	4 PORT ALUM 1 1/2 INLET 1/2OUT C RED 350F 230PSI MAX
ALM6ABC-N2N12-171B	18 PORT ALUM 3/4 INLET 1/8 OUT ABC BLUE 350F 230PSI MAX
ALM6ABC-N2N12-171R	18 PORT ALUM 3/4 INLET 1/8 OUT ABC RED 350F 230PSI MAX
ALM6ABC-N2N12-171RB	9-9 PORT ALUM 3/4 INLET 1/8OUT ABC DIVIDED 350F 230PSI MAX
ALM6ABC-N4N12-171B	18 PORT ALUM 3/4 INLET 1/4 OUT ABC BLUE 350F 230PSI MAX
ALM6ABC-N4N12-171R	18 PORT ALUM 3/4 INLET 1/4 OUT ABC RED 350F 230PSI MAX
ALM6ABC-N4N12-171RB	9-9 PORT ALUM 1 1/4OUT ABC DIVIDED 350F 230PSI MAX
ALM6ABC-N4N16-222B	18 PORT ALUM 1" INLET 1/4 OUT ABC BLUE 350F 230PSI MAX
ALM6ABC-N4N16-222R	18 PORT ALUM 1" INLET 1/4 OUT ABC RED 350F 230PSI MAX
ALM6ABC-N4N16-222RB	9-9 PORT ALUM 1" INLET 1/4 OUT ABC DIVIDED 350F 230PSI MAX
ALM6ABC-N6N16-222B	18 PORT ALUM 1" INLET 3/8 OUT ABC BLUE 350F 230PSI MAX
ALM6ABC-N6N16-222R	18 PORT ALUM 1" INLET 3/8 OUT ABC RED 350F 230PSI MAX
ALM6ABC-N6N16-222RB	9-9 PORT ALUM 1" INLET 3/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM6ABC-N6N24-355B	18 PORT ALUM 1 1/2INLET 3/8OUT ABC BLUE 350F 230PSI MAX
ALM6ABC-N6N24-355R	18 PORT ALUM 1 1/2INLET 3/8OUT ABC RED 350F 230PSI MAX
ALM6ABC-N6N24-355RB	9-9 PORT 1 1/2 INLET 3/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM6ABC-N8N24-355B	18 PORT ALUM 1 1/2INLET 1/2OUT ABC BLUE 350F 230PSI MAX
ALM6ABC-N8N24-355R	18 PORT ALUM 1 1/2INLET 1/2OUT ABC RED 350F 230PSI MAX
ALM6ABC-N8N24-355RB	9-9 PORT 1 1/2 INLET 1/2 OUT ABC DIVIDED 350F 230PSI MAX
ALM6BCD-N2N12-171B	18 PORT ALUM 3/4 INLET 1/8 OUT BCD BLUE 350F 230PSI MAX
ALM6BCD-N2N12-171R	18 PORT ALUM 3/4 INLET 1/8 OUT BCD RED 350F 230PSI MAX
ALM6BCD-N4N12-171B	18 PORT ALUM 3/4 INLET 1/4 OUT BCD BLUE 350F 230PSI MAX
ALM6BCD-N4N12-171R	18 PORT ALUM 3/4 INLET 1/4 OUT BCD RED 350F 230PSI MAX
ALM6BCD-N4N16-222B	18 PORT ALUM 1" INLET 1/4 OUT BCD BLUE 350F 230PSI MAX
ALM6BCD-N4N16-222R	18 PORT ALUM 1" INLET 1/4 OUT BCD RED 350F 230PSI MAX
ALM6BCD-N6N16-222B	18 PORT ALUM 1" INLET 3/8 OUT BCD BLUE 350F 230PSI MAX
ALM6BCD-N6N16-222R	18 PORT ALUM 1" INLET 3/8 OUT BCD RED 350F 230PSI MAX
ALM6BCD-N6N24-355B	18 PORT ALUM 1 1/2INLET 3/8OUT BCD BLUE 350F 230PSI MAX
ALM6BCD-N6N24-355R	18 PORT ALUM 1 1/2INLET 3/8OUT BCD RED 350F 230PSI MAX
ALM6BCD-N8N24-355B	18 PORT ALUM 1 1/2INLET 1/2OUT BCD BLUE 350F 230PSI MAX
ALM6BCD-N8N24-355R	18 PORT ALUM 1 1/2INLET 1/2OUT BCD RED 350F 230PSI MAX
ALM6BD-N2N12-171B	12 PORT ALUM 3/4 INLET 1/8 OUT BD BLUE 350F 230PSI MAX
ALM6BD-N2N12-171R	12 PORT ALUM 3/4 INLET 1/8 OUT BD RED 350F 230PSI MAX
ALM6BD-N2N12-171RB	6-6 PORT ALUM 3/4 INLET 1/8OUT BD DIVIDED 350F 230PSI MAX
ALM6BD-N4N12-171B	12 PORT ALUM 3/4 INLET 1/4 OUT BD BLUE 350F 230PSI MAX
ALM6BD-N4N12-171R	12 PORT ALUM 3/4 INLET 1/4 OUT BD RED 350F 230PSI MAX
ALM6BD-N4N12-171RB	6-6 PORT ALUM 3/4 INLET 1/4OUT BD DIVIDED 350F 230PSI MAX
ALM6BD-N4N16-222B	12 PORT ALUM 1" INLET 1/4 OUT BD BLUE 350F 230PSI MAX
ALM6BD-N4N16-222R	12 PORT ALUM 1" INLET 1/4 OUT BD RED 350F 230PSI MAX
ALM6BD-N4N16-222RB	6-6 PORT ALUM 1" INLET 1/4 OUT BD DIVIDED 350F 230PSI MAX
ALM6BD-N6N16-222B	12 PORT ALUM 1" INLET 3/8 OUT BD BLUE 350F 230PSI MAX
ALM6BD-N6N16-222R	12 PORT ALUM 1" INLET 3/8 OUT BD RED 350F 230PSI MAX
ALM6BD-N6N16-222RB	6-6 PORT ALUM 1" INLET 3/8 OUT BD DIVIDED 350F 230PSI MAX
ALM6BD-N6N24-355B	12 PORT ALUM 1 1/2INLET 3/8OUT BD BLUE 350F 230PSI MAX
ALM6BD-N6N24-355R	12 PORT ALUM 1 1/2INLET 3/8OUT BD RED 350F 230PSI MAX
ALM6BD-N6N24-355RB	6-6 PORT 1 1/2 INLET 3/8 OUT BD DIVIDED 350F 230PSI MAX
ALM6BD-N8N24-355B	12 PORT ALUM 1 1/2INLET 1/2OUT BD BLUE 350F 230PSI MAX
ALM6BD-N8N24-355R	12 PORT ALUM 1 1/2INLET 1/2OUT BD RED 350F 230PSI MAX
ALM6BD-N8N24-355RB	6-6 PORT 1 1/2 INLET 1/2 OUT BD DIVIDED 350F 230PSI MAX

Part Number	Description
ALM6C-N2N12-171B	6 PORT ALUM 3/4 INLET 1/8 OUT C BLUE 350F 230PSI MAX
ALM6C-N2N12-171R	6 PORT ALUM 3/4 INLET 1/8 OUT C RED 350F 230PSI MAX
ALM6C-N4N12-171B	6 PORT ALUM 3/4 INLET 1/4 OUT C BLUE 350F 230PSI MAX
ALM6C-N4N12-171R	6 PORT ALUM 3/4 INLET 1/4 OUT C RED 350F 230PSI MAX
ALM6C-N4N16-222B	6 PORT ALUM 1" INLET 1/4 OUT C BLUE 350F 230PSI MAX
ALM6C-N4N16-222R	6 PORT ALUM 1" INLET 1/4 OUT C RED 350F 230PSI MAX
ALM6C-N6N16-222B	6 PORT ALUM 1" INLET 3/8 OUT C BLUE 350F 230PSI MAX
ALM6C-N6N16-222R	6 PORT ALUM 1" INLET 3/8 OUT C RED 350F 230PSI MAX
ALM6C-N6N24-355B	6 PORT ALUM 1 1/2 INLET 3/8OUT C BLUE 350F 230PSI MAX
ALM6C-N6N24-355R	6 PORT ALUM 1 1/2 INLET 3/8OUT C RED 350F 230PSI MAX
ALM6C-N8N24-355B	6 PORT ALUM 1 1/2 INLET 1/2OUT C BLUE 350F 230PSI MAX
ALM6C-N8N24-355R	6 PORT ALUM 1 1/2 INLET 1/2OUT C RED 350F 230PSI MAX
ALM8ABC-N2N12-222RB	12-12 PORT 3/4 INLET 1/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM8ABC-N4N12-222RB	12-12 PORT 3/4 INLET 1/4 OUT ABC DIVIDED 350F 230PSI MAX
ALM8ABC-N4N16-286RB	12-12 PORT 1" INLET 1/4 OUT ABC DIVIDED 350F 230PSI MAX
ALM8ABC-N6N16-286RB	12-12 PORT 1" INLET 3/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM8ABC-N6N24-457RB	12-12 PORT 1 1/2 INLET 3/8 OUT ABC DIVIDED 350F 230PSI MAX
ALM8ABC-N8N24-457RB	12-12 PORT 1 1/2 INLET 1/2 OUT ABC DIVIDED 350F 230PSI MAX
ALM8BD-N2N12-222B	16 PORT ALUM 3/4 INLET 1/8 OUT BD BLUE 350F 230PSI MAX
ALM8BD-N2N12-222R	16 PORT ALUM 3/4 INLET 1/8 OUT BD RED 350F 230PSI MAX
ALM8BD-N2N12-222RB	8-8 PORT ALUM 3/4 INLET 1/8OUT BD DIVIDED 350F 230PSI MAX
ALM8BD-N4N12-222B	16 PORT ALUM 3/4 INLET 1/4 OUT BD BLUE 350F 230PSI MAX
ALM8BD-N4N12-222R	16 PORT ALUM 3/4 INLET 1/4 OUT BD RED 350F 230PSI MAX
ALM8BD-N4N12-222RB	8-8 PORT ALUM 3/4 INLET 1/4OUT BD DIVIDED 350F 230PSI MAX
ALM8BD-N4N16-286B	16 PORT ALUM 1" INLET 1/4 OUT BD BLUE 350F 230PSI MAX
ALM8BD-N4N16-286R	16 PORT ALUM 1" INLET 1/4 OUT BD RED 350F 230PSI MAX
ALM8BD-N4N16-286RB	8-8 PORT ALUM 1" INLET 1/4 OUT BD DIVIDED 350F 230PSI MAX
ALM8BD-N6N16-286B	16 PORT ALUM 1" INLET 3/8 OUT BD BLUE 350F 230PSI MAX
ALM8BD-N6N16-286R	16 PORT ALUM 1" INLET 3/8 OUT BD RED 350F 230PSI MAX
ALM8BD-N6N16-286RB	8-8 PORT ALUM 1" INLET 3/8 OUT BD DIVIDED 350F 230PSI MAX
ALM8BD-N6N24-457B	16 PORT ALUM 1 1/2INLET 3/8OUT BD BLUE 350F 230PSI MAX
ALM8BD-N6N24-457R	16 PORT ALUM 1 1/2INLET 3/8OUT BD RED 350F 230PSI MAX
ALM8BD-N6N24-457RB	8-8 PORT 1 1/2 INLET 3/8 OUT BD DIVIDED 350F 230PSI MAX
ALM8BD-N8N24-457B	16 PORT ALUM 1 1/2INLET 1/2OUT BD BLUE 350F 230PSI MAX
ALM8BD-N8N24-457R	16 PORT ALUM 1 1/2INLET 1/2OUT BD RED 350F 230PSI MAX
ALM8BD-N8N24-457RB	8-8 PORT 1 1/2 INLET 1/2 OUT BD DIVIDED 350F 230PSI MAX
ALM8C-N2N12-222B	8 PORT ALUM 3/4 INLET 1/8 OUT C BLUE 350F 230PSI MAX
ALM8C-N2N12-222R	8 PORT ALUM 3/4 INLET 1/8 OUT C RED 350F 230PSI MAX
ALM8C-N4N12-222B	8 PORT ALUM 3/4 INLET 1/4 OUT C BLUE 350F 230PSI MAX
ALM8C-N4N12-222R	8 PORT ALUM 3/4 INLET 1/4 OUT C RED 350F 230PSI MAX
ALM8C-N4N16-286B	8 PORT ALUM 1" INLET 1/4 OUT C BLUE 350F 230PSI MAX
ALM8C-N4N16-286R	8 PORT ALUM 1" INLET 1/4 OUT C RED 350F 230PSI MAX
ALM8C-N6N16-286B	8 PORT ALUM 1" INLET 3/8 OUT C BLUE 350F 230PSI MAX
ALM8C-N6N16-286R	8 PORT ALUM 1" INLET 3/8 OUT C RED 350F 230PSI MAX
ALM8C-N6N24-457B	8 PORT ALUM 1 1/2 INLET 3/8OUT C BLUE 350F 230PSI MAX
ALM8C-N6N24-457R	8 PORT ALUM 1 1/2 INLET 3/8OUT C RED 350F 230PSI MAX
ALM8C-N8N24-457B	8 PORT ALUM 1 1/2 INLET 1/2OUT C BLUE 350F 230PSI MAX
ALM8C-N8N24-457R	8 PORT ALUM 1 1/2 INLET 1/2OUT C RED 350F 230PSI MAX

Brass Water Manifolds



Part Number	Description
BWM10412B	BRASS 10 1/4 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM10412R	BRASS 10 1/4 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM10612B	BRASS 10 3/8 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM10612R	BRASS 10 3/8 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM10616B	BRASS 10 3/8 PORTS 1INCH INLET BLUE 350F 230PSI MAX
BWM10616R	BRASS 10 3/8 PORTS 1INCH INLET RED 350F 230PSI MAX
BWM10620B	BRASS 10 3/8 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM10620R	BRASS 10 3/8 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM10816B	BRASS 10 1/2 PORTS 1INCH INLET BLUE 350F 230PSI MAX
BWM10816R	BRASS 10 1/2 PORTS 1INCH INLET RED 350F 230PSI MAX
BWM10820B	BRASS 10 1/2 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM10820R	BRASS 10 1/2 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM12412B	BRASS 12 1/4 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM12412R	BRASS 12 1/4 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM12612B	BRASS 12 3/8 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM12612R	BRASS 12 3/8 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM12616B	BRASS 12 3/8 PORTS 1INCH INLET BLUE 350F 230PSI MAX
BWM12616R	BRASS 12 3/8 PORTS 1INCH INLET RED 350F 230PSI MAX
BWM12620B	BRASS 12 3/8 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM12620R	BRASS 12 3/8 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM12816B	BRASS 12 1/2 PORTS 1INCH INLET BLUE 350F 230PSI MAX
BWM12816R	BRASS 12 1/2 PORTS 1INCH INLET RED 350F 230PSI MAX
BWM12820B	BRASS 12 1/2 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM12820R	BRASS 12 1/2 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM16620B	BRASS 16 3/8 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM16620R	BRASS 16 3/8 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM16820B	BRASS 16 1/2 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM16820R	BRASS 16 1/2 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM4412B	BRASS 4 1/4 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM4412R	BRASS 4 1/4 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM4612B	BRASS 4 3/8 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM4612R	BRASS 4 3/8 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM4616B	BRASS 4 3/8 PORTS 1 INCH INLET BLUE 350F 230PSI MAX
BWM4616R	BRASS 4 3/8 PORTS 1 INCH INLET RED 350F 230PSI MAX
BWM4620B	BRASS 4 3/8 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM4620R	BRASS 4 3/8 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM4816B	BRASS 4 1/2 PORTS 1 INCH INLET BLUE 350F 230PSI MAX
BWM4816R	BRASS 4 1/2 PORTS 1 INCH INLET RED 350F 230PSI MAX
BWM4820B	BRASS 4 1/2 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM4820R	BRASS 4 1/2 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM6412B	BRASS 6 1/4 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM6412R	BRASS 6 1/4 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM6612B	BRASS 6 3/8 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM6612R	BRASS 6 3/8 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM6616B	BRASS 6 3/8 PORTS 1 INCH INLET BLUE 350F 230PSI MAX
BWM6616R	BRASS 6 3/8 PORTS 1 INCH INLET RED 350F 230PSI MAX
BWM6620B	BRASS 6 3/8 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM6620R	BRASS 6 3/8 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM6816B	BRASS 6 1/2 PORTS 1 INCH INLET BLUE 350F 230PSI MAX
BWM6816R	BRASS 6 1/2 PORTS 1 INCH INLET RED 350F 230PSI MAX
BWM6820B	BRASS 6 1/2 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM6820R	BRASS 6 1/2 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM8412B	BRASS 8 1/4 PORTS 3/4 INLET BLUE 350F 230PSI MAX



Brass is a great alternative to aluminum manifolds. Aluminum is known to erode when introduced to acidic water and harsh water. Brass manifolds are also unaffected by galvanic corrosion caused by aluminum manifolds combined with brass fittings. Overtime this erosion can lead to leaks of the threaded in/outlets.

Features & Benefits:

Resistant to corrosion, Painted color coded to quickly identify in and out of mold. Many options for inlet and outlet threads and number of ports to easily connect to your mold.

Specifications:

- High Quality Brass Alloy
- Max Temp up to 180°C/356°F
- Max Pressure 16Bar/230Psi
- End Plugs Sold Separately

BRASS WATER MANIFOLDS

Part Number	Description
BWM8412R	BRASS 8 1/4 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM8612B	BRASS 8 3/8 PORTS 3/4 INLET BLUE 350F 230PSI MAX
BWM8612R	BRASS 8 3/8 PORTS 3/4 INLET RED 350F 230PSI MAX
BWM8616B	BRASS 8 3/8 PORTS 1 INCH INLET BLUE 350F 230PSI MAX
BWM8616R	BRASS 8 3/8 PORTS 1 INCH INLET RED 350F 230PSI MAX
BWM8620B	BRASS 8 3/8 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM8620R	BRASS 8 3/8 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWM8816B	BRASS 8 1/2 PORTS 1 INCH INLET BLUE 350F 230PSI MAX
BWM8816R	BRASS 8 1/2 PORTS 1 INCH INLET RED 350F 230PSI MAX
BWM8820B	BRASS 8 1/2 PORTS 1 1/4 INLET BLUE 350F 230PSI MAX
BWM8820R	BRASS 8 1/2 PORTS 1 1/4 INLET RED 350F 230PSI MAX
BWMBS150	BRACKET FOR 2 BRASS MANIFOLDS WITH 8-16 PORTS
BWMBS70	BRACKET FOR 2 BRASS MANIFOLDS WITH 4 OR 6 PORTS
BWMCC16	ASSEMBLY CLAMP FOR 2 1" BRASS MANIFOLDS
BWMIP12	3/4" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP16	1" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP20	1 1/4" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP24	1 1/2" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP32	2" INLET PLUG FOR BRASS WATER MANIFOLD
BWMIP8	1/2" INLET PLUG FOR BRASS WATER MANIFOLD

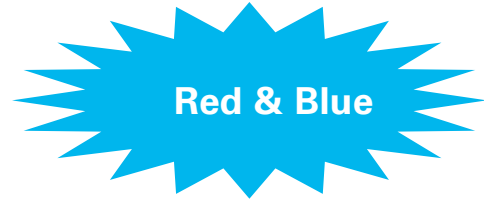


Aluminum Manifolds

INTERLOCKING ALUMINUM MANIFOLDS

Features & Benefits:

- One-piece aluminum extrusion
- Anodized red and blue for corrosion protection
- No welds
- No rust
- 3/4", 1" or 1 1/2" NPT supply
- 1/4", 3/8" or 1/2" ports
- Brass end plug included
- Pre-drilled mounting holes and screws
- Interlocking units



Made in the USA!

Part Number	No. Ports	NPT Port Size	Length	Inlet NPT	Between Ports
3/4" NPT Inlet/Outlet with 1/4" NPT Ports					
6SA4-2	4	1/4"	7.5"	3/4"	1 1/2"
6SA6-2	6	1/4"	10.5"	3/4"	1 1/2"
6SA8-2	8	1/4"	13.5"	3/4"	1 1/2"
*6SA10-2	10	1/4"	16.5"	3/4"	1 1/2"
*6SA12-2	12	1/4"	19.5"	3/4"	1 1/2"
*6SA16-2	16	1/4"	25.5"	3/4"	1 1/2"
3/4" NPT Inlet/Outlet with 3/8" NPT Ports					
6SA4-3	4	3/8"	9"	3/4"	2"
6SA6-3	6	3/8"	13"	3/4"	2"
6SA8-3	8	3/8"	17"	3/4"	2"
*6SA10-3	10	3/8"	21"	3/4"	2"
*6SA12-3	12	3/8"	25"	3/4"	2"
*6SA16-3	16	3/8"	33"	3/4"	2"
1" NPT Inlet/Outlet with 1/4" NPT Ports					
SA4-2	4	1/4"	7.5"	1"	1 1/2"
SA6-2	6	1/4"	10.5"	1"	1 1/2"
SA8-2	8	1/4"	13.5"	1"	1 1/2"
SA10-2	10	1/4"	16.5"	1"	1 1/2"
SA12-2	12	1/4"	19.5"	1"	1 1/2"
SA16-2	16	1/4"	25.5"	1"	1 1/2"
1" NPT Inlet/Outlet with 3/8" NPT Ports					
SA4-3	4	3/8"	9"	1"	2"
SA6-3	6	3/8"	13"	1"	2"
SA8-3	8	3/8"	17"	1"	2"
SA10-3	10	3/8"	21"	1"	2"
SA12-3	12	3/8"	25"	1"	2"
SA16-3	16	3/8"	33"	1"	2"
1-1/2" NPT Inlet/Outlet with 1/2" NPT Ports					
12SA4-4	4	1/2"	10"	1-1/2"	2"
12SA6-4	6	1/2"	14"	1-1/2"	2"
12SA8-4	8	1/2"	18"	1-1/2"	2"
12SA10-4	10	1/2"	22"	1-1/2"	2"
12SA12-4	12	1/2"	26"	1-1/2"	2"
12SA16-4	16	1/2"	34"	1-1/2"	2"

Available Options:

- 1/2" ball valves
- 1/2" quick change plugs
- 1/2" hose barbs
- Flowmeters
- Flow Regulators
- 1 1/2" or 2" supply/hose barb fittings
- Custom modifications

☐ Add "R" for red or "B" for blue.

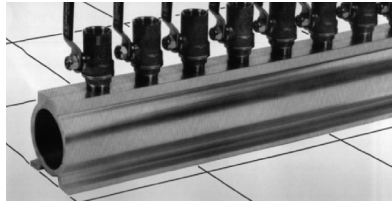
368 U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000

Aluminum Manifolds



2" female NPT manifold allows tremendous flow. This large manifold supplies up to 16-1/2" ports uniformly without restricting flow.

Specify Red or Blue by adding -R or -B to Part Number!

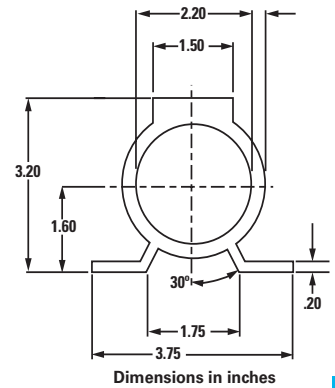


- One piece aluminum extrusion
- Anodized for corrosion protection
- No welds
- No rust
- 2" NPT supply for maximum flow
- 1/2" ports - up to 1" available
- Brass end plug included
- Integral mounting flange
- With or without flow
- Money back guarantee

Available Options:

- 1/2" ball valves
- 1/2" quick change plugs
- 1/2" hose barsbs
- Flowmeters
- Flow Regulators
- Custom modifications

Made in the USA!

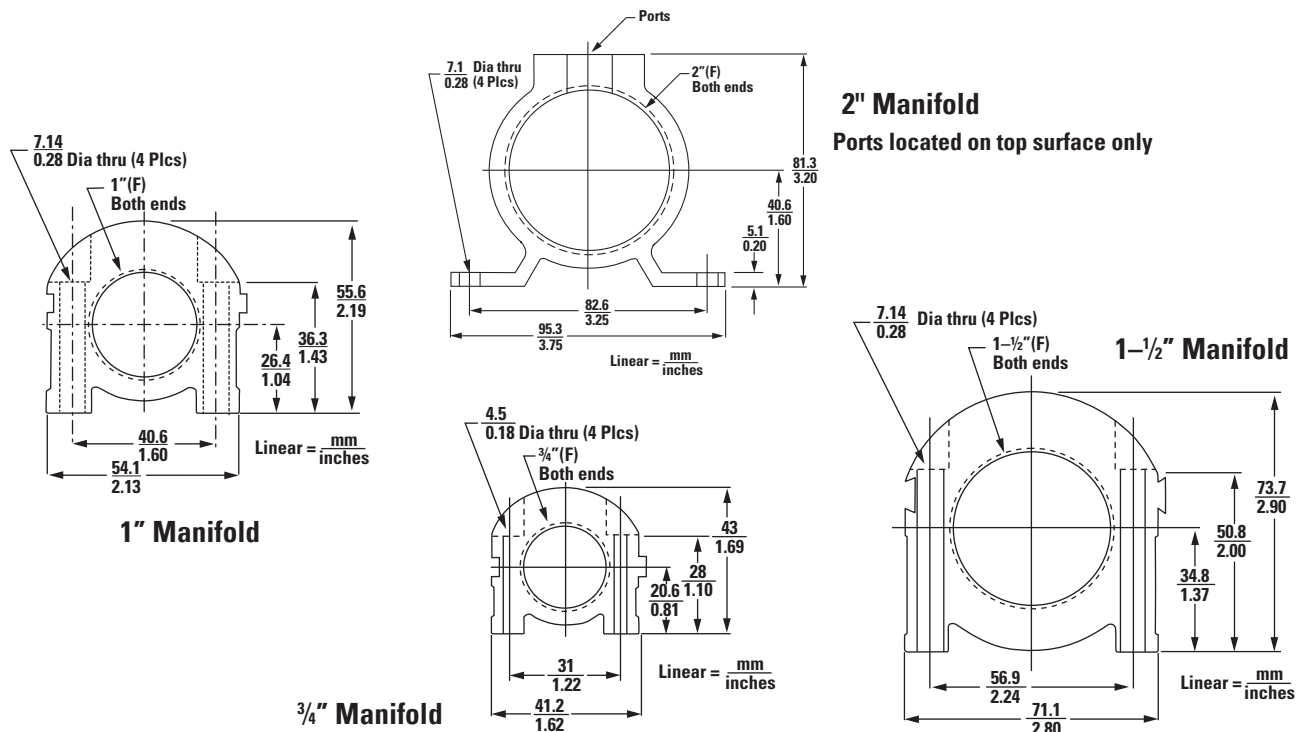


INTERLOCKING ALUMINUM MANIFOLDS

Part Number*	No. of Ports	2" Manifolds With 1/2" Ports Length
A4A [?]	4	10"
A6A [?]	6	14"
A8A [?]	8	18"
A12A [?]	12	26"
A16A [?]	16	34"

Manifolds include a brass end plug. Add "R" for red or "B" for blue.

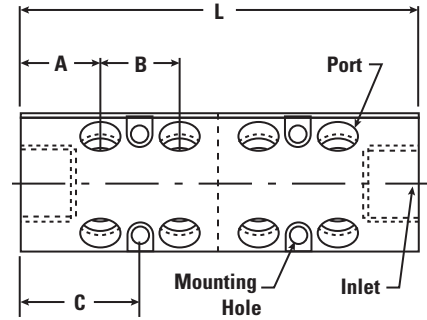
SMARTFLOW[®] Standard Aluminum Manifold Dimensions





SMARTFLOW®

DUOFLOW™ Aluminum Manifolds



See table below for dimensions.

SMARTFLOW-DUOFLOW ALUMINUM MANIFOLDS

General Description

SMARTFLOW® DUOFLOW™ Manifolds are robust extruded aluminum manifolds similar to the original Smartflow one-piece design. The manifolds are divided internally and anodized with one red end and one blue end to denote supply and return on a single manifold.

The Duoflow design provides a shorter footprint specifically for mounting a manifold directly to an injection mold, or where space is limited. Port spacing is narrow for installation of hose barbs or quick disconnect fittings only. Ball valves are not recommended.

Tool change time is significantly decreased by mounting manifolds directly to molds in storage. Water hookup is simplified to “Supply” and “Return” lines versus individual water lines for every circuit.

Features and Benefits

- Versatile mounting due to smaller size
- Mold-Mount to speed mold change times
- Economical, proven design for reliability

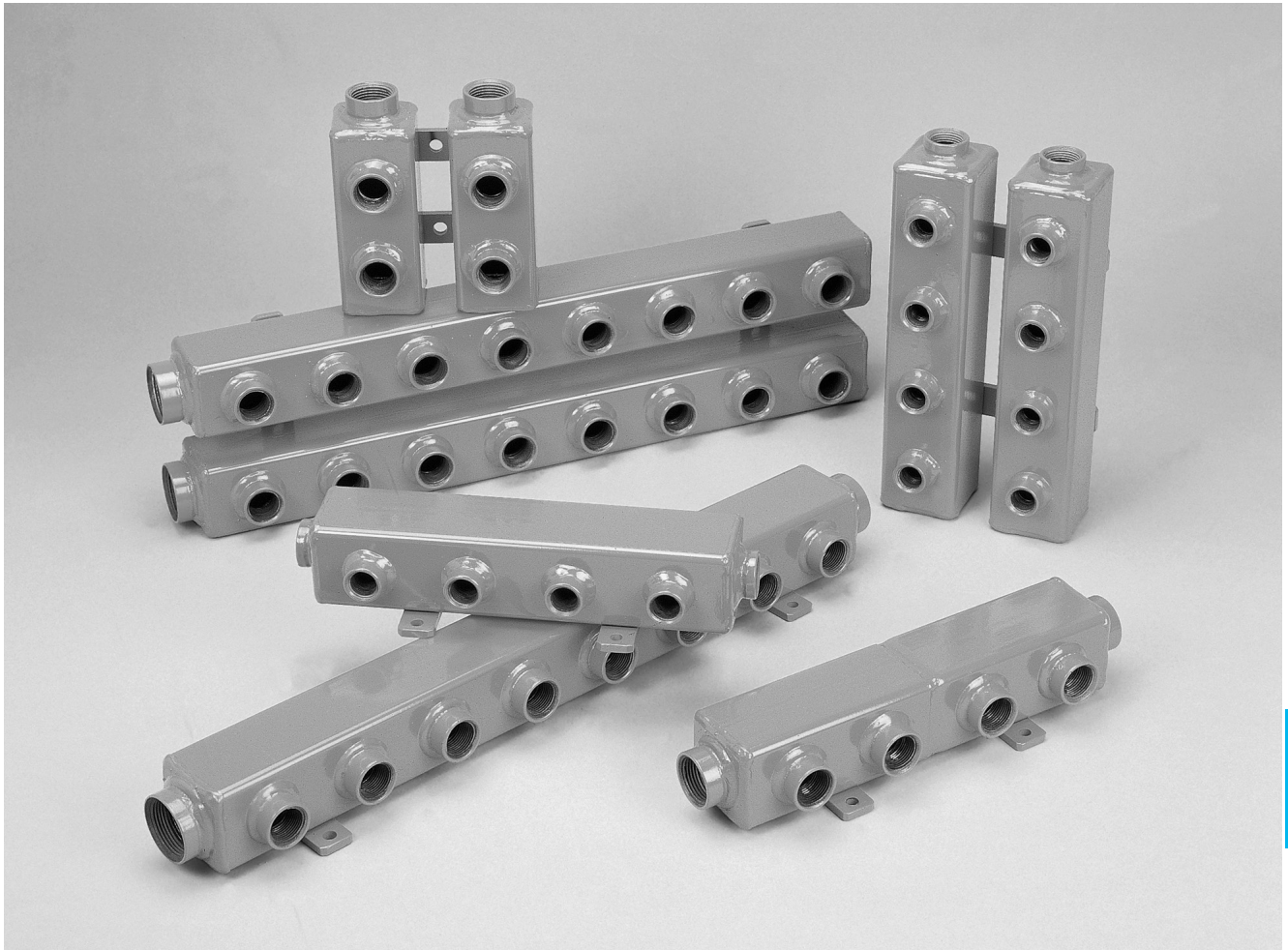
Specifications

Max. Pressure150 PSI (10 bar)
 Max. Temperature 210°F (99°C)
 MaterialAluminum
 Divider Material Stainless Steel w EPD

Custom manifolds are available on request!

Stocked Manifolds

Model Number	Inlet Size	Port Size	Total Ports	Ports Per End	A	B	C	Overall Length L
6SDA8-2-13AYZ	¾" NPT	¼" NPT	8	4	1" 25.4mm	1" 25.4mm	1.5" 38mm	6.0"/152mm
6SDA12-2-13AYZ			12	6				8.0"/203mm
6SDA16-2-13AYZ			16	8				10.0"/254mm
8SDA8-3-13AYZ	1" NPT	⅜" NPT	8	4	1.25" 32mm	1.25" 32mm	1.88" 47.6mm	7.25"/184mm
8SDA12-3-13AYZ			12	6				9.75"/248mm
8SDA16-3-13AYZ			16	8				12.25"/311mm
12SDA8-4-13AYZ	1-½" NPT	½" NPT	8	4	1.75" 44.5mm	1.5" 38mm	2.5" 63.5mm	9.0"/229mm
12SDA12-4-13AYZ			12	6				12.0"/305mm
12SDA16-4-13AYZ			16	8				15.0"/381mm



Painted Steel Manifolds

Painted steel water manifolds help increase cycles through more efficient water distribution. They help tidy your hoses while reducing the number of hoses to mold. Mount the manifolds close to your mold for maximum flow volumes. Platen-mounted manifolds reduce hose lengths (if you plan to keep platen-mounted manifolds in storage with your mold, we recommend that you select our anodized aluminum or stainless steel manifolds).

Manufactured from heavy gauge mild steel with threaded couplings welded in place. Pre-drilled mounting brackets for easy mounting to your mold platens or temperature controller are included.

Stainless Steel Manifolds

All the benefits of our painted steel manifolds – better water distribution for increased cycles, reduced number of hoses, tidier hose arrangements – and a big plus: **NO RUST OR CORROSION**. If your plant has poor water quality, the extra investment in stainless steel pays off fast in lower maintenance and maximum flow volumes at all times. With platen-mounted manifolds, you can put them into storage with no concern about rust.

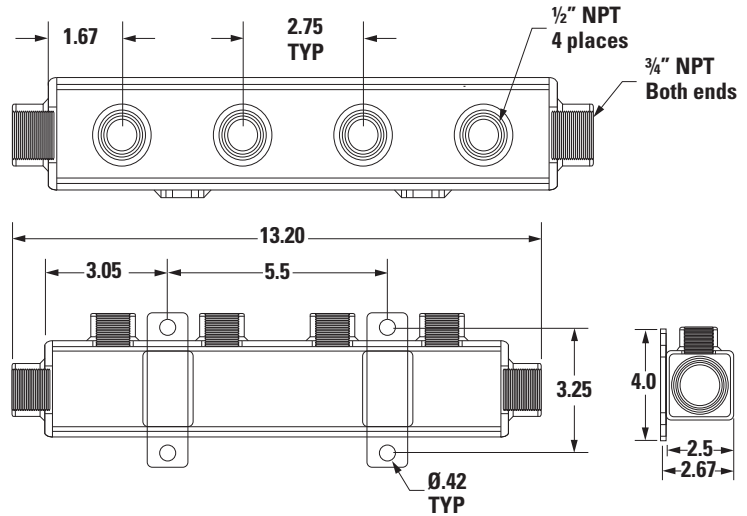
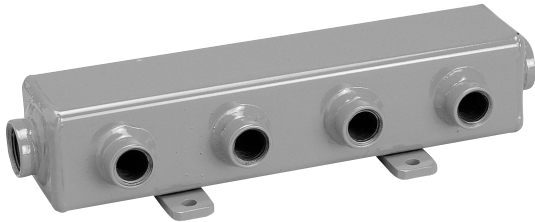


Steel Manifolds

Painted and Stainless-SINGLE

Features

- Painted manifolds are manufactured from heavy-gauge mild steel
- Threaded couplings are welded in place
- Pre-drilled mounting brackets for easy mounting
- Pressure rated to 120 PSI
- Temperature rated to 3000 F

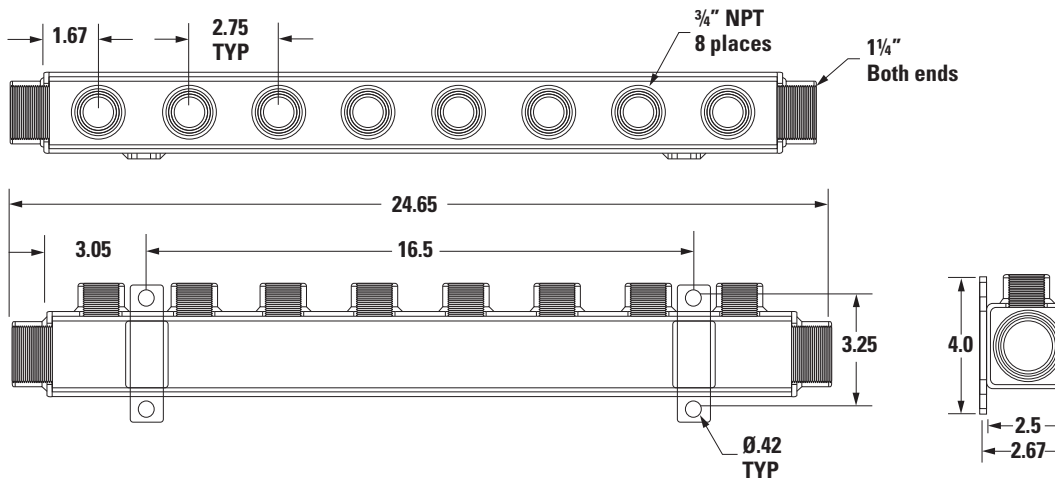


Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	3/4"	2	1/2"	4	12 3/4"	2 1/2"	2 1/2"	CWM4
Stainless	3/4"	2	1/2"	4	12 3/4"	2 1/2"	2 1/2"	CWM4CR



PAINTED & STAINLESS STEEL MANIFOLDS

Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	1 1/4"	2	3/4"	8	24 1/4"	2 1/2"	2 1/2"	CWM8A
Stainless	1 1/4"	2	3/4"	8	24 1/4"	2 1/2"	2 1/2"	CWM8ACR



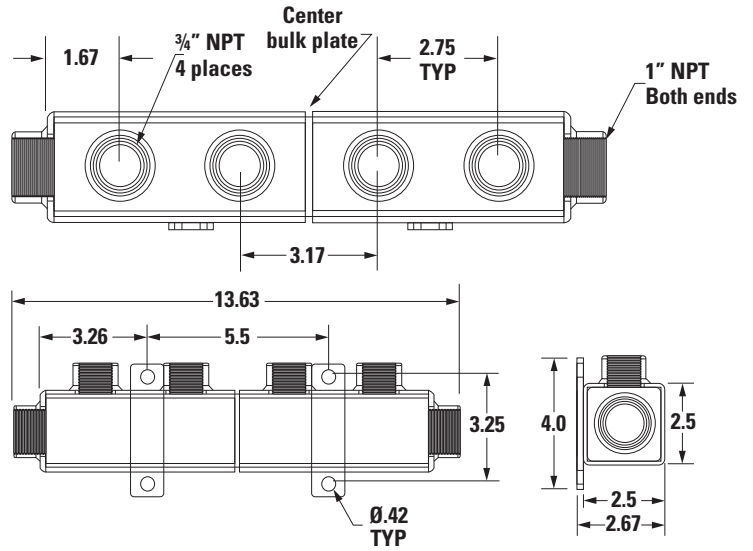
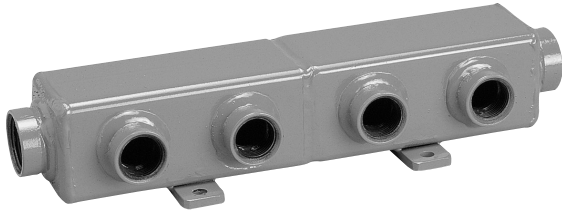
Steel Manifolds



Painted and Stainless-SINGLE

Features

- Painted manifolds are manufactured from heavy-gauge mild steel
- Threaded couplings are welded in place
- Pre-drilled mounting brackets for easy mounting
- Pressure rated to 120 PSI
- Temperature rated to 3000 F

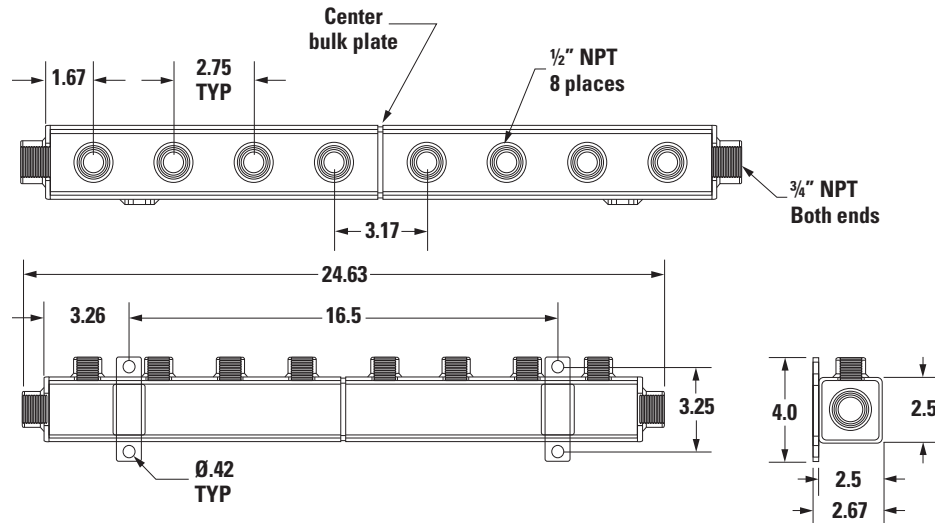


Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	1"	2	3/4"	4	13 1/2"	2 1/2"	2 1/2"	CWML22
Stainless	1"	2	3/4"	4	13 1/2"	2 1/2"	2 1/2"	CWML22CR



PAINTED & STAINLESS STEEL MANIFOLDS

Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	3/4"	2	1/2"	8	24"	2 1/2"	2 1/2"	CWM44
Stainless	3/4"	2	1/2"	8	24"	2 1/2"	2 1/2"	CWM44CR



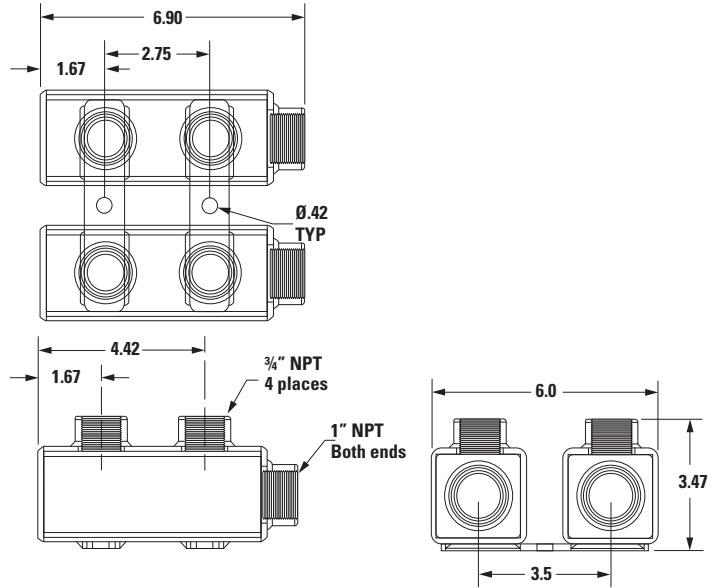


Steel Manifolds

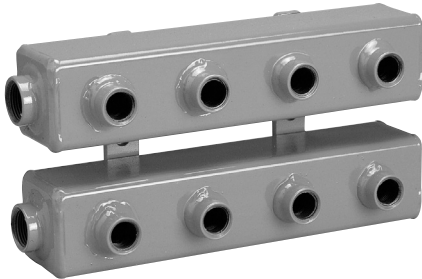
Painted and Stainless-STACKED

Features

- Painted manifolds are manufactured from heavy-gauge mild steel
- Threaded couplings are welded in place
- Pre-drilled mounting brackets for easy mounting
- Pressure rated to 120 PSI
- Temperature rated to 3000 F

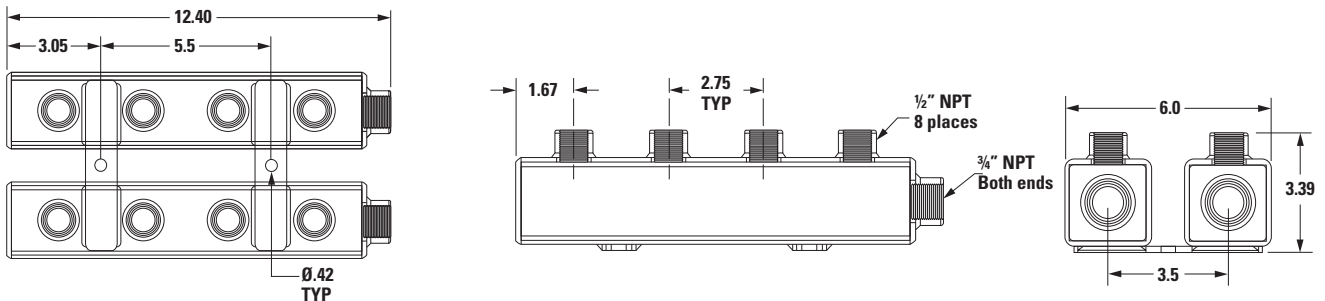


Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	1"	2	3/4"	4	7"	6"	2 1/2"	CWML2S2
Stainless	1"	2	3/4"	4	7"	6"	2 1/2"	CWML2S2CR



PAINTED & STAINLESS STEEL MANIFOLDS

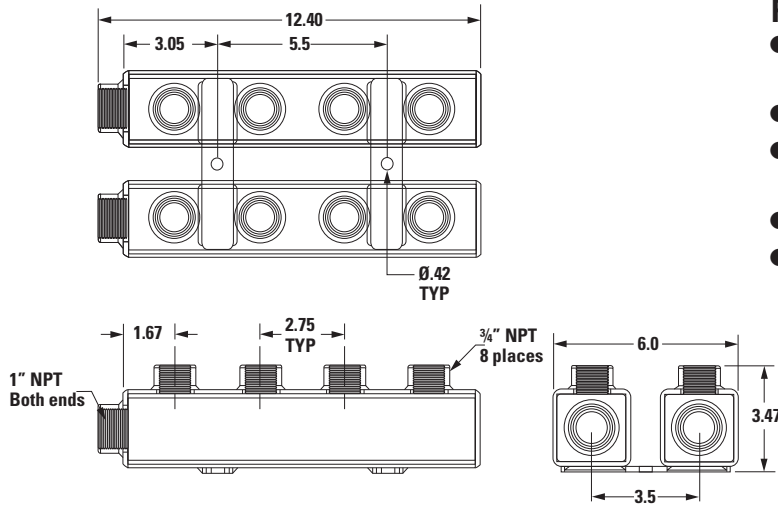
Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	3/4"	2	1/2"	8	12 1/4"	6"	2 1/2"	CWM4S4
Stainless	3/4"	2	1/2"	8	12 1/4"	6"	2 1/2"	CWM4S4CR



Steel Manifolds



Painted and Stainless-STACKED



Features

- Painted manifolds are manufactured from heavy-gauge mild steel
- Threaded couplings are welded in place
- Pre-drilled mounting brackets for easy mounting
- Pressure rated to 120 PSI
- Temperature rated to 300°F

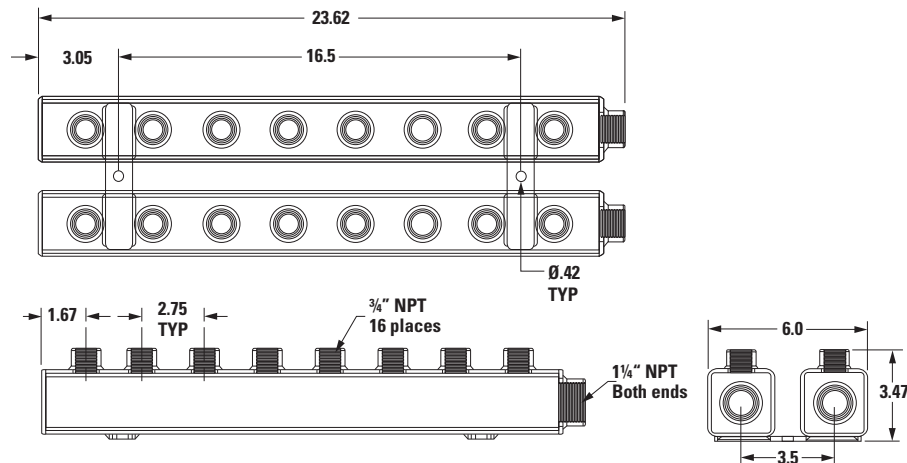


Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	1"	2	3/4"	8	12 1/2"	6"	2 1/2"	CWML4S4
Stainless	1"	2	3/4"	8	12 1/2"	6"	2 1/2"	CWML4S4CR



PAINTED & STAINLESS STEEL MANIFOLDS

Steel Type	Inlets		Outlets		Dimensions			Part Number
	NPT	Qty.	NPT	Qty.	L	W	H	
Painted	1 1/4"	2	3/4"	16	23 1/2"	6"	2 1/2"	CWM8S8A
Stainless	1 1/4"	2	3/4"	16	23 1/2"	6"	2 1/2"	CWM8S8ACR





Bronze Valved Manifolds

Repair Kit

Repair Kit

Includes ball, handle, nut,
packing nut, stem, packing
gland, thrust washer,
2 ball seats and adaptor.

Part Number B6000Z76



[BRONZE VALVED MANIFOLD REPAIR KIT](#)

PTFE Thread Sealing Tape



PTFE Tape Thread Sealants

- Permanent non-flammable seal
- Remains plastic permanently
- Operation temps -450°F to +500°F
- For water connections, hydraulics, air, gas, & petroleum
- The finest quality tape available
- NEVER use thinner, cheaper substitutes

PTFE THREAD SEALING TAPE



Part Number	Length	Thickness	Width
TT100	260" (21.6')	0.0035	1/2"
TT200	520" (43.3')	0.0035	1/2"
TT300	520" (43.3')	0.0035	3/4"

Thread Sealant

- Resists corrosion, leakage and loosening from vibration and moisture
- Anaerobic sealant chemically cures in the absence of air
- Use from -65°F To +350°F
- Allows final adjustments up to 24 hours after application
- Use for hydraulics, pneumatics, process piping or steam
- Locks and seals threaded fittings
- Easy disassembly without damage to threads
- Won't shrink away from fitting



Part Number	Container Size
49485	6 ml Tube
49486	50 ml Tube
49495	16 Oz Brush-Top

THREAD SEALANT

RTV Silicone

RTV Silicone Adhesive Sealant

- Bonds most plastics many assembly uses
- Cures at room temperature to a tough, flexible rubber
- Resists shrinkage
- Perfect for caulking, sealing, waterproofing & bonding
- Bonds & seals terminals, connectors, mounting fixtures, mechanical gaskets, glass, metal, masonry, plastic, tile, rubber, wood & fabric
- Very attractive prices!



Operational Temp.(RTV Silicone): -60°F to +450°F Max Temp.(Silicone Gasket Makers): 650°F

Part Number	Container Size**	Color
49204	3 Oz Tube	Clear
49294	11 Oz Cartridge	Clear*
Silicone Gasket Makers		
49202	3 Oz Tube	Red
49292	11 Oz Cartridge	Red

RTV SILICONE

*Available in Marine Grade & Mildew Resistant ** Available in Larger Sizes!





T-Handle Ball Valves

- ¼ turn on/off
- Fits close for tight installations
- Bottom loaded stem, blowout proof design
- Large port design/rated to 400 PSI W.O.G.
- PTFE stem packing & seats, viton seals
- Excellent flow compared to other valves in this class
- Forged brass body, chrome-plated ball



ISO 9002
Registered Manufacturer

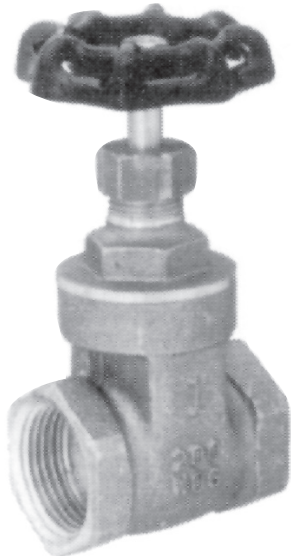
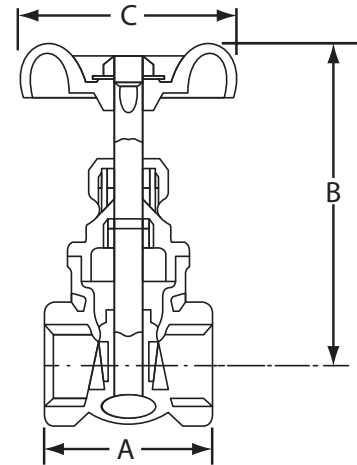
T-HANDLE BALL VALVE

Part Number	NPT Thread
BBV2MFT	1/8"
BBV4MFT	1/4"
BBV6MFT	3/8"
BBV8MFT	1/2"

T-Handle is 1 5/8" wide for 1/8" & 1/4"; 2 1/2" for 3/8" & 1/2".

Brass Gate Valves

- Heavy-duty die cast brass
- Screwed bonnet, non-rising stem, solid wedge disc and integral seats
- Recommended for non-stem use
- Asbestos-free graphite packing
- Pressure rating: 200 W.O.G. non-shock
- Very economical



CONTACT US

Part Number	Valve Size	A	B	C
BGV8	1/2"	1.54	2.72	2.13
BGV12	3/4"	1.73	2.92	2.13
BGV16	1"	1.85	3.31	2.13
BGV20	1 1/4"	2.09	3.86	2.40
BGV24	1 1/2"	2.25	4.57	2.96
BGV32	2"	2.4	4.93	2.96
	Available to 4"			

Forged Brass Ball Valves



Female x Female

- Extra heavy-duty bottom-loaded stem with a PTFE thrust washer and Viton O-ring
- PTFE seats, thrust washer and stem packing
- Self-cleaning, chromium-plated brass ball for maximum durability

Pressure Rating	
400 W.O.G. NON-SHOCK 125 W.S.P.	

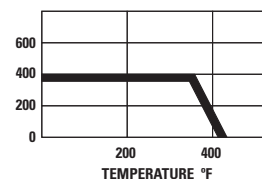
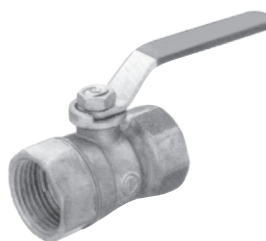
Part Number	Ref. No.	Thd. Size	Rating	A	B	C	D
BBV2	-	1/8"	5.0	1.58	1.38	.31	1.71
BBV4*	BBV25	1/4"	10.8	1.58	1.96	.36	3.77
BBV6*	BBV37	3/8"	10.8	1.66	1.96	.48	3.77
BBV8*	BBV50	1/2"	21.6	2.08	2.41	.59	3.77
BBV12	BBV75	3/4"	14.2	2.05	2	.59	3.07
BBV16	BBV100	1"	28.6	2.62	2.58	.79	3.78
BBV20	BBV125	1 1/4"	56.4	2.9	2.93	.98	3.78
BBV24	BBV150	1 1/2"	114.0	3.28	3.25	1.26	3.78
BBV32	-	2"	162.9	3.81	4.13	1.58	3.78
BBV40	-	2 1/2"	200.0	4.48	5.1	2	7.88
BBV48	-	3"	380.0	5.33	6	2.5	7.88
BBV64	-	4"	550.0	6.86	7	2.96	7.88

*BBV4, BBV6 and BBV8 full port; all others regular port.
 Other sizes available in full port; call for stock status and pricing.
 CV Rating is the gallons of water per minute passed thru the valve with a 1 PSI pressure drop.

MATERIAL SPECIFICATIONS

Handle Nut .. Coated steel
 Handle..... Coated steel
 Stem Packing.... Carbolon
 Thrust Washer..... PTFE
 Stem.....Brass
 Ball Chrome-plated brass
 Seats PTFE
 Body.....Forged brass
 End AdapterForged brass

FORGED BRASS BALL VALVES FXF



Forged Brass Ball Valves

E

- Super-port BBV-MF is a full port, 2-piece ball valve with features only found on more expensive valves
- Extra heavy-duty, bottom-loaded stem with a PTFE thrust washer and Viton O-ring
- PTFE seats, thrust washer and stem packing
- Self cleaning, chromium-plated brass ball for maximum durability

FORGED BRASS BALL VALVES MXF

Pressure Rating	
1/8" - 1/4"	400 lbs. W.O.G. Non-shock
3/8" - 3/4"	600 lbs. W.O.G. Non-shock
1"	500 lbs. W.O.G. Non-shock

All sizes rated at 150 W.S.P.

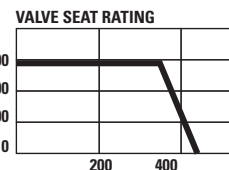
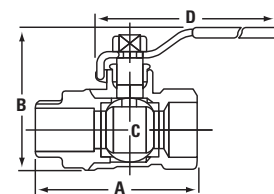
Part Number	Ref. No.	Thd. Size	(Mix-N-Match) Rating	A	B	C	D
BBV2MF	-	1/8"	7.2	1.8	1.41	.29	1.72
BBV4MF	BBV25M	1/4"	7.7	1.8	1.41	.32	1.65
BBV6MF	BBV37M	3/8"	10.8	2.15	1.7	.39	3.06
BBV8MF	BBV50M	1/2"	16.7	2.5	1.86	.50	3.06
BBV12MF	BBV75M	3/4"	30.3	2.9	2.5	.69	3.81
BBV16MF	BBV100M	1"	59.5	3.33	2.78	.89	3.81

CV Rating is the gallons of water per minute passed thru the valve with a 1 PSI pressure drop.

Male x Female

MATERIAL SPECIFICATIONS

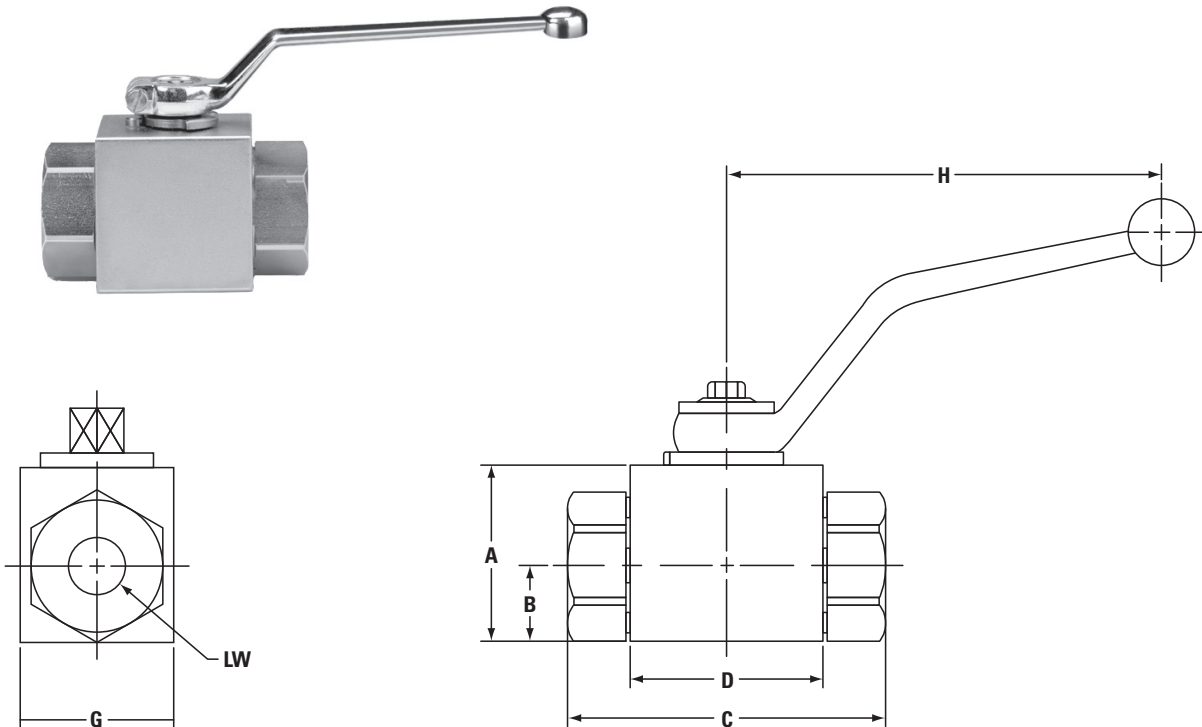
Handle Nut .. Coated steel
 Handle..... Coated steel
 Packing NutBrass
 Stem Packing.... Carbolon
 Thrust Washer..... PTFE
 Stem.....Brass
 Ball Chrome-plated brass
 Seats PTFE
 Body.....Forged brass
 End AdapterForged brass





Hi-Pressure Ball Valve

- Carbon steel construction with zinc dichromate plating
- Unrestricted bore up to 1" size
- Maximum working pressure of up to 7250 PSI
- POM ball seats & Buna seal standard
- Optional seal materials available for extreme temperature applications & fluid compatibility



CONTACT US

	Series		PSI (max)	Bore	A			G			H	Weight [lbs.]	
	NPT	SAE			Carbon	Stainless	B	C	D	Carbon			Stainless
Full Bore	AE2N18	N/A	7250	.16	1.38	C/F	0.55	2.80	1.65	1.18	C/F	4.33	1.1
	AE2N14	AE2S4	7250	.24	1.38	1.38	0.55	2.80	1.65	1.18	1.38	4.33	1.1
	AE2N38	AE2S6	7250	.39	1.57	1.57	0.67	2.87	1.73	1.38	1.57	4.33	1.4
	AE2N12	AE2S8	7250	.51	1.69	1.77	0.71	3.27	1.89	1.46	1.77	4.33	1.7
	AE2N34	AE2S12	5800	.79	2.17	2.17	0.91	3.74	2.44	1.77	2.17	7.09	3.1
	AE2N1	AE2S16	5075	.98	2.56	2.56	1.14	4.45	2.60	2.17	2.56	7.09	4.7
Reduced Bore	AE2N1-14R	AE2S20R	5075	.98	2.56	2.56	1.14	4.76	2.60	2.17	2.56	7.09	5.0
	AE2N1-12R	AE2S24R	5075	.98	2.56	2.56	1.14	4.88	2.60	2.17	2.56	7.09	5.2

Hi-Pressure Ball Valve



Model Code Breakdown

AE2 N½ _ 1 1 D B

Valve Series . _____

Connection Type/Size . _____

N	NPTE Pipe Thread
S	SAE Straight Thread

Bore Restriction . _____

blank	Unrestricted Bore
R	Restricted Bore

Body & Adapter Material . _____

1	Carbon Steel
2	316 Stainless Steel

. Adapter & Stem Seals

B	Buna-Standard
V	Viton

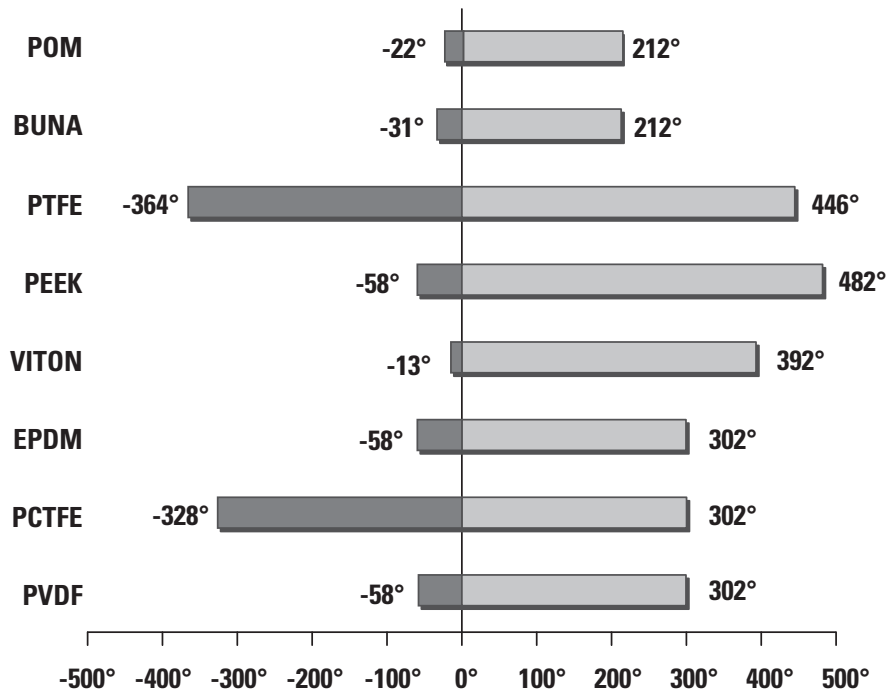
. Ball Seats

D	POM-Standard
T	PTFE

. Ball & Stem Material

1	Carbon Steel
2	316 Stainless Steel

MAXIMUM & MINIMUM WORKING TEMPERATURES FOR SEAL MATERIALS





High Flow Couplers

ST SERIES

HIGH FLOW COUPLERS/NIPPLES

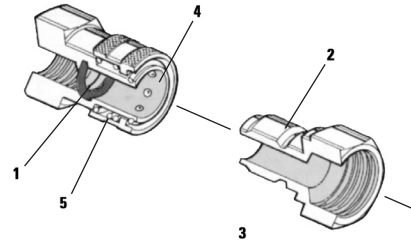
1. The smooth, open bore with no valving in either half offers minimal pressure drop, allowing easy cleaning in applications where the same lines are used for more than one media.

2. ST couplers and nipples are machined from solid bar stock, providing a quality coupling that is durable. ST couplers are available in brass as standard product materials.

3. ST nipples are available in brass. The ball locking grooves of the brass

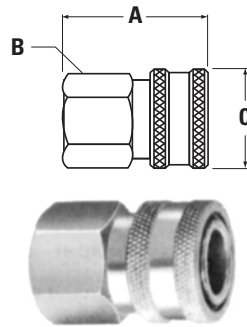
ST nipples are case hardened for resistance to brinelling where high cycle rates and pressure surges are encountered.

4. The ST is an "industrial interchange" coupling since it is dimensionally and functionally interchangeable with similar couplings manufactured by other major manufacturers.



Female Pipe Coupler

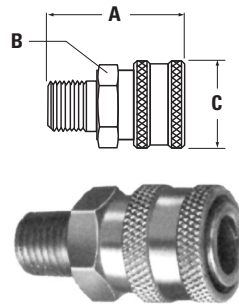
Body Size	Thd Size Fem. NPT	Material	
		Brass Part Number	Stainless Steel Part Number
1/8"	1/8-27	BST1	SST1
1/4"	1/4-18	BST2	SST2
3/8"	3/8-18	BST3	SST3
1/2"	1/2-14	BST4	SST4
3/4"	3/4-14	BST6	SST6
1"	1-1 1/2	BST8	SST8
1 1/4"	1 1/4-11	BST10	
1 1/2"	1 1/2-11	BST12	



See table below for dimensions.

Male Pipe Coupler

Body Size	Thd Size Fem. NPT	Material	
		Brass Part Number	Stainless Steel Part Number
1/8"	1/8-27	BST1M	SST1M
1/4"	1/4-18	BST2M	SST2M
3/8"	3/8-18	BST3M	SST3M
1/2"	1/2-14	BST4M	SST4M
3/4"	3/4-14	BST6M	SST6M
1"	1-11	BST8M	SST8M



See table below for dimensions.

Dimensions

	Female Pipe			Male Pipe		
	A	B	C	A	B	C
1/8"	1.00	.56	.69	1.06	.56	.69
1/4"	1.47	.81	.94	1.69	.81	.81
3/8"	1.59	1.00	1.16	1.75	1.00	1.16
1/2"	1.91	1.13	1.30	1.94	1.13	1.30
3/4"	2.05	1.44	1.66	2.17	1.44	1.66
1"	2.31	1.75	2.02	2.53	1.75	2.02
1 1/4"	2.44	2.00	2.51			
1 1/2"	2.88	2.50	3.00			

O-Rings for ST Couplers

Part Number	Coupler Size
ST10R	1/8"
ST20R	1/4"
ST30R	3/8"
ST40R	1/2"
ST60R	3/4"
ST80R	1"
ST100R	1 1/4"
ST120R	1 1/2"

High Flow Nipples



ST SERIES

HIGH FLOW COUPLERS/NIPPLES

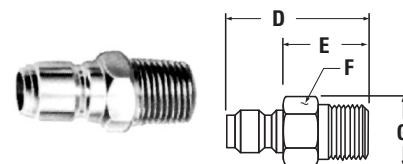
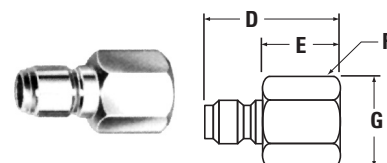
Pressure/Temp Ratings			
Size	Brass	Steel	Stainless
1/8"	2500	2600	4200
1/4"	5200	5500	6700
3/8"	2700	3500	5500
1/2"	2200	2700	3000
3/4"	1700	2700	3000
1"	1200	2000	1700
1 1/4"	1700	Ratings Are	
1 1/2"	1400	In PSI	

-40° to +250° F - Temp Range

- Non-valved for high flow
- Very low pressure drop
- Standard seal material is Buna-N
 - Other material available upon request
- Nipples & couplers interchangeable with similar types from other manufacturers
- Couplers and nipples are available in brass
- High quality, low prices!

Female Pipe Nipples		Brass	Steel	Stainless Steel
Body Size	Thd Size Fem. NPT	Part Number	Part Number	Part Number
1/8"	1/8-27	BSTN1	STN1	SSTN1
1/4"	1/4-18	BSTN2	STN2	SSTN2
3/8"	3/8-18	BSTN3	STN3	SSTN3
1/2"	1/2-14	BSTN4	STN4	SSTN4
3/4"	3/4-14	BSTN6	STN6	SSTN6
1"	1-11	BSTN8	STN8	SSTN8
1 1/4"	1 1/4-11 1/2	BSTN10		
1 1/2"	1 1/2-11 1/2	BSTN12		

See table below for dimensions.



Male Pipe Nipples		Brass	Steel	Stainless Steel
Body Size	Thd Size Fem. NPT	Part Number	Part Number	Part Number
1/8"	1/8-27	BSTN1M	STN1M	SSTN1M
1/4"	1/4-18	BSTN2M	STN2M	SSTN2M
3/8"	3/8-18	BSTN3M	STN3M	SSTN3M
1/2"	1/2-14	BSTN4M	STN4M	SSTN4M
3/4"	3/4-14	BSTN6M	STN6M	SSTN6M
1"	1-11	BSTN8M	STN8M	SSTN8M

See table below for dimensions.

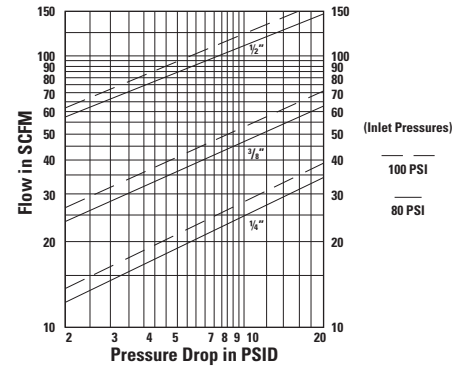
Dimensions

	Female Pipe				Male Pipe			
	D	E	F	G	D	E	F	G
1/8"	.98	.57	.56	.65	1.04	.63	.44	.51
1/4"	1.39	.67	.75	.87	1.53	.81	.56	.65
3/8"	2.04	.96	1.38	1.59	1.69	.86	.69	.79
1/2"	1.85	.95	1.13	1.30	1.94	1.01	.88	1.01
3/4"	2.04	.96	1.38	1.59	2.19	1.11	1.06	1.23
1"	2.16	1.00	1.63	1.88	2.51	1.34	1.38	1.59
1 1/4"	2.38	1.11	2.00	2.31				
1 1/2"	2.81	1.17	2.38	2.74				



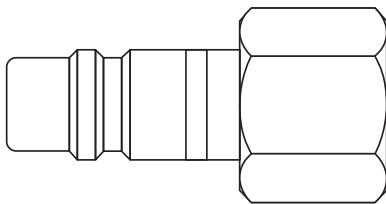
Air Couplers

For Male Fittings
Refer to Next Page!!

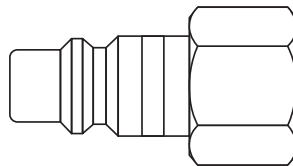


- Solid barstock construction
- High flow/low pressure drop
- 20 series
- Low, low price!
- Off-the-shelf delivery!

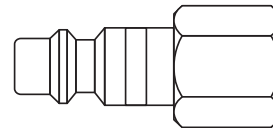
AIR COUPLERS



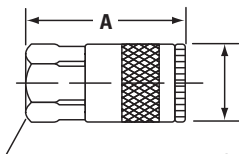
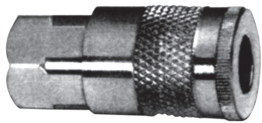
1/2" BODY SIZE



3/8" BODY SIZE



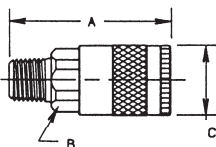
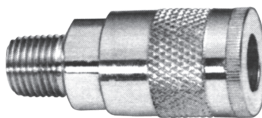
1/4" BODY SIZE



Valved Air Coupler

Female Coupler

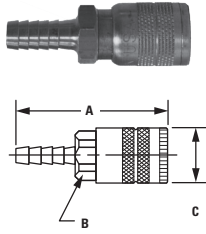
Part Number	Body Size	Body Material	Thread Size	Overall A	Hex B	Dia. C
B204F2	1/4	Brass	1/8	1.83	.75	.88
B204F4	1/4	Brass	1/4	1.83	.75	.88
B204F6	1/4	Brass	3/8	1.95	.81	.94
206F4	3/8	Steel	1/4	2.22	.88	1.06
206F6	3/8	Steel	3/8	2.28	.88	1.06
206F8	3/8	Steel	1/2	2.55	1.00	1.16
0208F6	1/2	Steel	3/8	2.74	1.00	1.19
208F8	1/2	Steel	1/2	2.96	1.00	1.19
208F12	1/2	Steel	3/4	3.19	.25	1.44



Valved Air Coupler

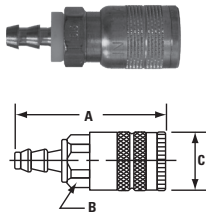
Male Coupler

Part Number	Body Size	Body Material	Thread Size	Overall A	Hex B	Dia. C
B204M2	1/4	Brass	1/8	1.89	.75	.88
B204M4	1/4	Brass	1/4	2.05	.75	.88
B204M6	1/4	Brass	3/8	2.08	.75	.88
206M4	3/8	Steel	1/4	2.36	.88	1.06
206M6	3/8	Steel	3/8	2.39	.88	1.06
206M8	3/8	Steel	1/2	2.55	.88	1.06
208M6	1/2	Steel	3/8	2.93	1.00	1.19
208M8	1/2	Steel	1/2	3.08	1.00	1.19
208M12	1/2	Steel	3/4	3.21	1.13	1.19



Hose Barb Coupler

Part Number	Body Size	Body Material	Hose I. D.	Overall A	Hex B	Dia. C
B204HB4	1/4	Brass	1/4	2.49	.75	.88
B204HB5	1/4	Brass	5/16	2.49	.75	.88
B204HB6	1/4	Brass	3/8	2.49	.75	.88
206HB6	3/8	Steel	3/8	2.86	.88	1.06
206HB8	3/8	Steel	1/2	3.08	.88	1.06
208HB6	1/2	Steel	3/8	3.37	1.00	1.19
208HB8	1/2	Steel	1/2	3.62	1.00	1.19
208HB12	1/2	Steel	3/4	3.96	1.00	1.19



Push-Lok® Coupler

Part Number	Body Size	Body Material	Hose I. D.	Overall A	Hex. B	Dia. C
B204PL4	1/4	Brass	1/4	2.49	.75	.88
B204PL6	1/4	Brass	3/8	2.49	.75	.88
206PL6	3/8	Steel	3/8	2.49	.75	.88
208PL6	1/2	Steel	3/8	2.86	.88	1.06
208PL8	1/2	Steel	1/2	3.08	.88	1.06

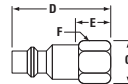
Industrial Interchange Nipples

These fit all the couplers pictured above and on previous page. They also will work with any MIL-C4109 Couplers. We provide high-quality parts at everyday low prices! Same day shipping on most orders.

INDUSTRIAL INTERCHANGE NIPPLES

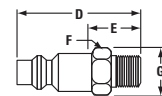
Female Pipe

Part Number	Coupler Size	Female NPT
N204F2	1/4	1/8
N204F4	1/4	1/4
N204F6	1/4	3/8
N206F4	3/8	1/4
N206F6	3/8	3/8
N206F8	3/8	1/2
N208F6	1/2	3/8
N208F8	1/2	1/2
N208F12	1/2	3/4



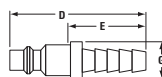
Male Pipe

Part Number	Coupler Size	Male NPT
N204M2	1/4	1/8
N204M4	1/4	1/4
N204M6	1/4	3/8
N206M4	3/8	1/4
N206M6	3/8	3/8
N206M8	3/8	1/2
N208M6	1/2	3/8
N208M8	1/2	1/2
N208M12	1/2	3/4



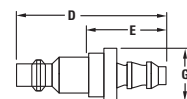
Hose Barb Nipple

Part Number	Coupler Size	Hose I. D.
N204HB4	1/4	1/4
N204HB5	1/4	5/16
N204HB6	1/4	3/8
N206HB6	3/8	3/8
N206HB8	3/8	1/2
N208HB6	1/2	3/8
N208HB8	1/2	1/2
N208HB12	1/2	3/4



Push-Lok® Nipple

Part Number	Coupler Size	Hose I. D.
N204PL4	1/4	1/4
N204PL6	1/4	3/8
N206PL4	3/8	1/4
N206PL6	3/8	3/8
N206PL8	3/8	1/2
N208PL6	1/2	3/8
N208PL8	1/2	1/2





Hydraulic Couplers

HYDRAULIC COUPLERS

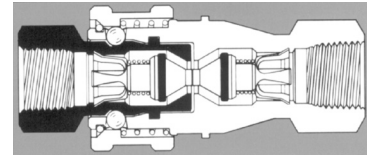
Materials

Steel Body - Body, sleeve & valve are zinc-plated steel. Retaining rings, springs and locking balls are stainless. Buna-N or Viton o-rings are standard.

Female Body - 990

Hydraulic Couplers are double-side, shutoff poppet type in steel, stainless steel and brass. Available with Buna-N or Viton seals. This series is directly interchangeable with Parker 60 Series, Hansen HK Series, Aeroquip FD-45 Series and others.

Hardened nipples & sleeves and solid barstock construction assure a long service life by providing maximum resistance to hydraulic shock and abuse common in industrial applications.

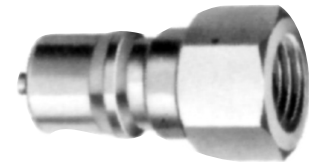


Male Tip - 991

303 Stainless Steel - Body, sleeves, valves, retaining rings, springs and locking balls

are stainless. Buna-N or Viton o-rings are standard.

Brass Body - Body, sleeve and valves are brass. Retaining rings, springs and locking balls are stainless. Buna-N or Viton o-rings are standard.



Female Body Half - Steel

Male Body Half - Steel

Part Number		Body Material	Thd Size NPT	Part Number		Tip Material	Thd Size NPT
Buna Seals	Viton Seals			Buna Seals	Viton Seals		
990-2	990-2V	Steel	1/4"	991-2	991-2V	Steel	1/4"
990-3	990-3V	Steel	3/8"	991-3	991-3V	Steel	3/8"
990-4	990-4V	Steel	1/2"	991-4	991-4V	Steel	1/2"
990-6	990-6V	Steel	3/4"	991-6	991-6V	Steel	3/4"
990-8	990-8V	Steel	1"	991-8	991-8V	Steel	1"

Female Body Half - Brass

Male Body Half - Brass

Part Number		Body Material	Thd Size NPT	Part Number		Tip Material	Thd Size NPT
Buna Seals	Viton Seals			Buna Seals	Viton Seals		
990-2B	990-2BV	Brass	1/4"	991-2B	991-2BV	Brass	1/4"
990-3B	990-3BV	Brass	3/8"	991-3B	991-3BV	Brass	3/8"
990-4B	990-4BV	Brass	1/2"	991-4B	991-4BV	Brass	1/2"
990-6B	990-6BV	Brass	3/4"	991-6B	991-6BV	Brass	3/4"
990-8B	990-8BV	Brass	1"	991-8B	991-8BV	Brass	1"

Female Body Half - Stainless Steel

Male Body Half - Stainless Steel

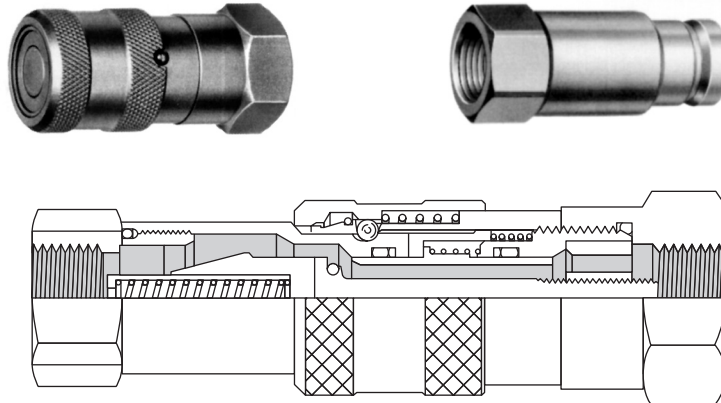
Part Number		Body Material	Thd Size NPT	Part Number		Tip Material	Thd Size NPT
Buna Seals	Viton Seals			Buna Seals	Viton Seals		
990-2S	990-2SV	Stainless	1/4"	991-2S	991-2SV	Stainless	1/4"
990-3S	990-3SV	Stainless	3/8"	991-3S	991-3SV	Stainless	3/8"
990-4S	990-4SV	Stainless	1/2"	991-4S	991-4SV	Stainless	1/2"
990-6S	990-6SV	Stainless	3/4"	991-6S	991-6SV	Stainless	3/4"
990-8S	990-8SV	Stainless	1"	991-8S	991-8SV	Stainless	1"

Flat Face Couplers



- No-spill coupling design, low air inclusion; 2,500 PSI operating pressure
- Sleeve lock prevents accidental disconnection
- Dust seal is designed into coupling to prevent dirt inclusion into hydraulic system
- Low cost, high pressure

FLAT FACE COUPLERS



Female Couplers

Part Number			
Buna Seals	Viton Seals	Metal	Thread Size NPT
FF990-3	FF990-3V	Steel	3/8"
FF990-4	FF990-4V	Steel	1/2"

Male Couplers

Part Number			
Buna Seals	Viton Seals	Metal	Thread Size NPT
FF991-3	FF991-3V	Steel	3/8"
FF991-4	FF991-4V	Steel	1/2"

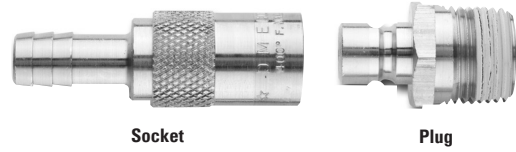
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Water Couplers

Flow-Thru

DME plugs used with DME Flow-Thru Type Sockets and DME Automatic Shut-off Type Sockets are designed for water, air or oil lines in plastics molds and die cast dies. They feature a combination brass and stainless steel leakproof construction; have a maximum rated capacity of 200 PSI; and withstand temperatures up to 400°F, with supplied Viton seals. DME Sockets can be used interchangeably with the same plugs already in your mold or die. Comparable sizes of both socket types have the same O.D., permitting interchangeability even when the plugs are flush mounted.



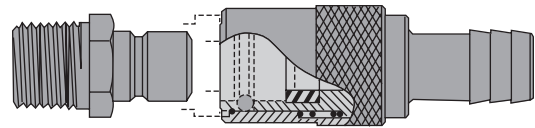
FLOW THRU WATER COUPLERS


Sockets(Flow-Thru Type)


DME Flow-Thru Type Sockets have a large thru hole to provide unrestricted flow. These quick-connection couplers are available with either straight, 45° or 90° hose stems, or standard female or male NPT threads.


DME Flow-Thru and Automatic Shut-Off Type Sockets have the same O.D., permitting complete interchangeability with plugs installed in your mold or die.


DME Sockets can be used with either male, female or extension plugs.



Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 Straight Stem	NS204	1/4	1/4	NS251-252-253 (F) (FB)
	NS205	1/4	5/16	NS251-252-253 (F) (FB)
	NS206	1/4	3/8	NS251-252-253 (F) (FB)
	NS306	3/8	3/8	NS352-353-354 (F) (FB)
	NS308	3/8	1/2	NS352-353-354 (F) (FB)
	NS308HF*	7/16	1/2	NS352-353-354 (F) (FB)
	NS504	1/2	1/2	NS554 (F)
NS506	1/2	3/4	NS554 (F)	

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 45° Stem	NS224	1/4	1/4	NS251-252-253 (F) (FB)
	NS225	1/4	5/16	NS251-252-253 (F) (FB)
	NS226	1/4	3/8	NS251-252-253 (F) (FB)
	NS326	3/8	3/8	NS352-353-354 (F) (FB)
	NS328	3/8	1/2	NS352-353-354 (F) (FB)
	NS328HF*	7/16	1/2	NS352-353-354 (F) (FB)
	NS524	1/2	1/2	NS554 (F)
NS526	1/2	3/4	NS554 (F)	

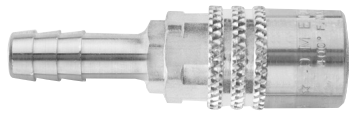
Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 90° Stem	NS214	1/4	1/4	NS251-252-253 (F) (FB)
	NS215	1/4	5/16	NS251-252-253 (F) (FB)
	NS216	1/4	3/8	NS251-252-253 (F) (FB)
	NS316	3/8	3/8	NS352-353-354 (F) (FB)
	NS318	3/8	1/2	NS352-353-354 (F) (FB)
	NS318HF*	7/16	1/2	NS352-353-354 (F) (FB)
	NS514	1/2	1/2	NS554 (F)
NS516	1/2	3/4	NS554 (F)	

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 Socket Only	NS200	1/4	1/8 NPT	NS251-252-253 (F) (FB)
	NS300	3/8	1/4 NPT	NS352-353-354 (F) (FB)
	NS300HF*	7/16	3/8 NPT	NS352-353-354 (F) (FB)
	NS500	1/2	1/2 NPT	NS554 (F)

* Indicates High Flow

Water Couplers

SV Series



Socket



Plug

SV-Series Connectors – NS

Two-Way Automatic Shut-Off Type

The DME line of SV-Series Connectors features a male plug and socket, each with an automatic shut-off stemmed valve. These connectors are designed for use with plastics molds and die cast dies in water, air or heat transfer oil lines. They feature a combination of brass and stainless steel in a leak-proof construction, have a maximum rated capacity of 200 PSI and will withstand temperatures up to 400°F with supplied Viton seals.

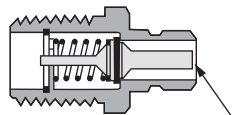
The SV-Series Male Plugs add the capability of automatic shut-off at the mold, thereby minimizing coolant loss.

DME SV-Series Sockets can be used interchangeably with the plugs already in your mold or die. However, the SV-Series Male Plugs can ONLY be used with the SV-Series Sockets. Comparable sizes of both types of sockets and plugs have the same O.D., permitting interchangeability even when the plugs are flush-mounted.

The SV-Series Male Plugs are now supplied with thread sealant. Eliminating the initial need for joint tape or compound, the sealant will withstand temperatures up to 400°F and pressures up to 200 PSI.

SV-Series Male Plugs

(Automatic Shut-Off Type with Stemmed Valve)

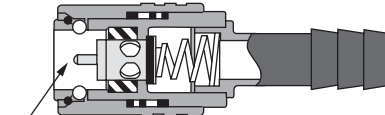


Stemmed Valve (SV)

The DME SV-Series Male Plugs feature an automatic shut-off stemmed valve. This plug design adds the capability of automatic shut-off at the mold. The plug's shut-off stemmed valve minimizes mold coolant loss, thereby decreasing cleanup time and the possibility of rust occurring on the mold surface. The SV-Series Male Plug can ONLY be used with the SV-Series Socket.

SV-Series Sockets

(Automatic Shut-Off Type with Stemmed Valve)



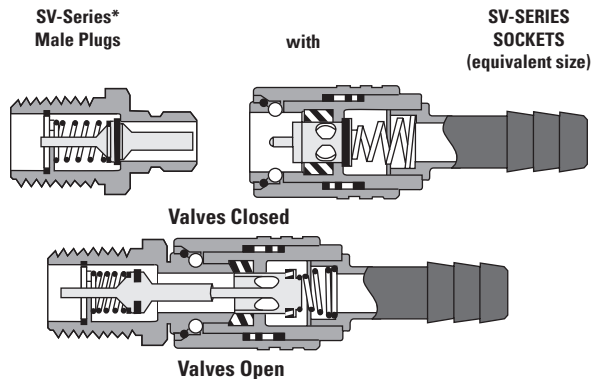
Stemmed Valve (SV)

The DME SV-Series Sockets feature an automatic shut-off stemmed valve that is designed to work with the SV-Series Male Plugs, as well as the standard male, female and extension plugs. The sockets open automatically when connected and shut off automatically when disconnected. The SV-Series Sockets are designed to keep flow restriction to a minimum and are available with either straight, 45° or 90° hose stems.

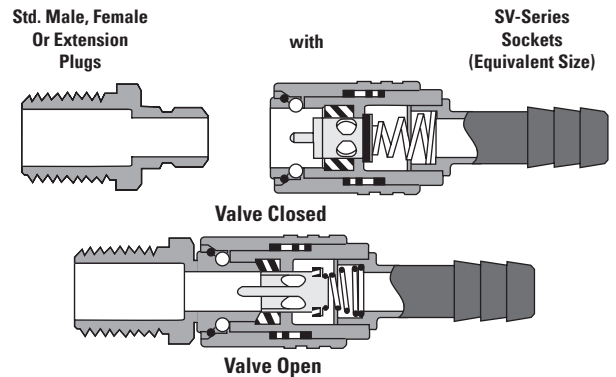


Operating Combinations

Two-Way Shut-Off*



One-Way Shut-Off



*The SV-Series Male Plugs can only be used for two-way shut-offs and must be used with the SV-Series Sockets.



Water Couplers

Quick Release, Automatic One-Way Shutoff

DME plugs used with DME Flow-Thru Type Sockets and DME **Automatic**

Shutoff Type Sockets are designed for plastics molds and die cast dies in water, air or oil lines. They feature a combination brass and stainless steel leakproof construction; have a maximum rated capacity of 200 PSI; and withstand temperatures up to 400°F, with supplied Viton seals. DME Sockets can be used interchangeably with the same plugs already in your mold or die. Comparable sizes of both socket types have the same O.D., permitting interchangeability even when the plugs are flush mounted.

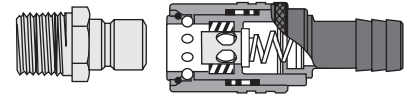


Socket

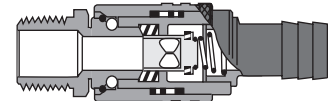
Plug

Sockets(Automatic Shut-Off Type)


DME Automatic Shut-off Type Sockets open automatically when connected and shut off automatically when disconnected. Unlike most valve-type connectors, DME Sockets are designed to keep flow restriction to a minimum.





Value Closed




Value Open

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 Straight Stem	NS204V	1/4	1/4	NS251-252-253 (F) (FB)
	NS205V	1/4	5/16	NS251-252-253 (F) (FB)
	NS206V	1/4	3/8	NS251-252-253 (F) (FB)
	NS306V	3/8	3/8	NS352-353-354 (F) (FB)
	NS308V	3/8	1/2	NS352-353-354 (F) (FB)
	NS504V	1/2	1/2	NS554 (F)
	NS506V	1/2	3/4	NS554 (F)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 45° Stem	NS224V	1/4	1/4	NS251-252-253 (F) (FB)
	NS225V	1/4	5/16	NS251-252-253 (F) (FB)
	NS226V	1/4	3/8	NS251-252-253 (F) (FB)
	NS326V	3/8	3/8	NS352-353-354 (F) (FB)
	NS328V	3/8	1/2	NS352-353-354 (F) (FB)
	NS524V	1/2	1/2	NS554 (F)
	NS526V	1/2	3/4	NS554 (F)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 90° Stem	NS214V	1/4	1/4	NS251-252-253 (F) (FB)
	NS215V	1/4	5/16	NS251-252-253 (F) (FB)
	NS216V	1/4	3/8	NS251-252-253 (F) (FB)
	NS316V	3/8	3/8	NS352-353-354 (F) (FB)
	NS318V	3/8	1/2	NS352-353-354 (F) (FB)
	NS514V	1/2	1/2	NS554 (F)
	NS516V	1/2	3/4	NS554 (F)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 Socket Only	NS200SV	1/4	1/8 NPT	NS251-252-253 (F) (FB)
	NS300SV	3/8	1/4 NPT	NS252-353-354 (F) (FB)
	NS500SV	1/2	1/2 NPT	NS554 (F)

[QUICK RELEASE WATER](#)


[COUPLERS](#)


Water Couplers





Quick Release, Automatic Two-Way Shutoff

[CONTACT US](#)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS204SV	1/4	1/4	NS252SV
	NS205SV	1/4	5/16	NS253SV
	NS206SV	1/4	3/8	NS352SV
	NS306SV	3/8	3/8	NS353SV
	NS308SV	3/8	1/2	NS354SV

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS224SV	1/4	1/4	NS252SV
	NS225SV	1/4	5/16	NS253SV
	NS226SV	1/4	3/8	NS352SV
	NS326SV	3/8	3/8	NS353SV
	NS328SV	3/8	1/2	NS354SV

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS214SV	1/4	1/4	NS252SV
	NS215SV	1/4	5/16	NS253SV
	NS216SV	1/4	3/8	NS352SV
	NS316SV	3/8	3/8	NS353SV
	NS318SV	3/8	1/2	NS354SV

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS200SV	1/4	1/8 NPT	NS252SV
	NS300SV	3/8	1/4 NPT	NS253SV






Water Couplers


Push To Connect/Push To Lock, Flow-Thru Type


With Clampless Hose Stems for use with Push-To-Connect/ Push-To-Lock Type Hose

- For use with push-to-connect/push-to-lock type hose only
- Saves setup time by eliminating the need for hose clamps
- Hose stem barbs mate with "Push-to-Lock" style rubber hose
- Popular sizes for interchangeability with existing and SV Sockets
- More compact and consistently sized than competitive sockets
- Leakproof brass and stainless steel construction
- Replaceable seals and valves for long service life
- Socket connector seals are Viton

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS204PL	1/4	1/4	NS252PL
	NS206PL	1/4	5/16	NS253PL
	NS306PL	1/4	3/8	NS352PL
	NS308PL	3/8	1/2	NS353PL NS354PL
	NS504PL	3/8	1/2	NS554 (F)
	NS506PL	7/16	1/2	NS554 (F)

[PUSH TO CONNECT WATER
COUPLERS](#)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS224PL	1/4	1/4	NS252PL
	NS226PL	1/4	3/8	NS253PL
	NS326PL	3/8	3/8	NS352PL
	NS328PL	3/8	1/2	NS353PL NS354PL
	NS524PL	1/2	1/2	NS554 (F)
	NS526PL	1/2	3/4	NS554 (F)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
	NS214PL	1/4	1/4	NS252PL
	NS216PL	1/4	3/8	NS253PL
	NS316PL	3/8	3/8	NS352PL
	NS318PL	3/8	1/2	NS353PL NS354PL
	NS514PL	1/2	1/2	NS554 (F)
	NS516PL	1/2	3/4	NS554 (F)

Note: Use "Push-to-Lock" type hose only. Connector Sockets are for use with water and water-based coolants only. Although Connector Sockets are suitable for temperatures to 400°F, observe the temperature ratings of your "push-to-lock" hose. Most "push-to-lock" hoses have a temperature rating of 175°F or less. Never exceed 200 PSI.

Water Couplers



Push To Connect/Push To Lock, Auto One-Way Shutoff

With Clampless Hose Stems for use with Push-To-Connect/Push-To-Lock Type Hose

- For use with push-to-connect/push-to-lock type hose only
- Saves setup time by eliminating the need for hose clamps
- Hose stem barbs mate with "Push-to-Lock" style rubber hose
- Popular sizes for interchangeability with existing and SV sockets
- More compact and consistently sized than competitive sockets
- Leakproof brass and stainless steel construction
- Replaceable seals and valves for long service life
- Socket connector seals are Viton

PUSH TO CONNECT WATER COUPLERS



Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
Straight Stem	NS204VPL	1/4	1/4	NS252
	NS206VPL	1/4	3/8	NS253
	NS306VPL	3/8	3/8	NS352
	NS308VPL	3/8	1/2	NS353 NS354
	NS504VPL	1/2	1/2	NS554 (F) (FB) 556 (FB)
	NS506VPL	1/2	3/4	NS554 (F) (FB) 556 (FB)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
45° Stem	NS224VPL	1/4	1/4	NS252
	NS226VPL	1/4	3/8	NS253
	NS326VPL	3/8	3/8	NS352
	NS328VPL	3/8	1/2	NS353 NS354
	NS524VPL	1/2	1/2	NS554 (F) (FB) 556 (FB)
	NS526VPL	1/2	3/4	NS554 (F) (FB) 556 (FB)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
90° Stem	NS214VPL	1/4	1/4	NS252
	NS216VPL	1/4	3/8	NS253
	NS316VPL	3/8	3/8	NS352
	NS318VPL	3/8	1/2	NS353 NS354

Note: Use "Push-to-Lock" type hose only. Connector Sockets are for use with water and water-based coolants only. Although Connector Sockets are suitable for temperatures to 400°F, observe the temperature ratings of your "push-to-lock" hose. Most "push-to-lock" hoses have a temperature rating of 175°F or less. Never exceed 200 PSI.



Water Couplers


Push To Connect/Push To Lock, Auto Two-Way Shutoff


With Clampless Hose Stems for use with Push-To-Connect/Push-To-Lock Type Hose


- For use with push-to-connect/push-to-lock type hose only
- Saves setup time by eliminating the need for hose clamps
- Hose stem barbs mate with "Push-to-Lock" style rubber hose
- Popular sizes for interchangeability with existing and SV sockets
- More compact and consistently sized than competitive sockets
- Leakproof brass and stainless steel construction
- Replaceable seals and valves for long service life
- Socket connector seals are Viton



[PUSH TO CONNECT WATER COUPLERS](#)

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 Straight Stem	NS204SVPL	1/4	1/4	NS252SV
	NS206SVPL	1/4	3/8	NS253SV
	NS306SVPL	3/8	3/8	NS352SV
	NS308SVPL	3/8	1/2	NS353SV NS354SV

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 45° Stem	NS224SVPL	1/4	1/4	NS252SV
	NS226SVPL	1/4	3/8	NS253SV
	NS326SVPL	3/8	3/8	NS352SV
	NS328SVPL	3/8	1/2	NS353SV NS354SV

Description	Part Number	Nominal Passage	Hose I. D.	Fit Any Plug Number
 90° Stem	NS214SVPL	1/4	1/4	NS252SV
	NS216SVPL	1/4	3/8	NS253SV
	NS316SVPL	3/8	3/8	NS352SV
	NS318SVPL	3/8	1/2	NS353SV NS354SV

Note: Use "Push-to-Lock" type hose only. Connector Sockets are for use with water and water-based coolants only. Although Connector Sockets are suitable for temperatures to 400°F, observe the temperature ratings of your "push-to-lock" hose. Most "push-to-lock" hoses have a temperature rating of 175°F or less. Never exceed 200 PSI.

Water Couplers



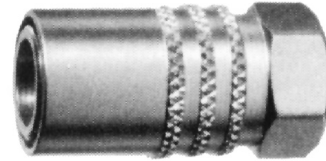
Valved/Non-Valved

Coupler - Valved & Non-valved body only

Part Number	Description	Thread Size
NS200	1/4" Passage - 200 Series	1/8"
NS200SV*	1/4" Passage - 200 Series Valved*	1/8"
NS300	3/8" Passage - 300 Series	1/4"
NS300HF	7/16" Passage - 300 Series High Flow	3/8"
NS300SV*	3/8" Passage - 300 Series Valved*	1/4"
NS500	1/2" Passage - 500 Series	1/2"

*Valved couplers include: Coupler, Valve & Spring - Complete

VALVED-NON VALVED



Positive Sleeve Lock Sockets - Non-valved

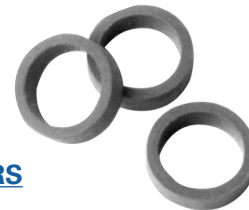
Part Number	Description
NS200SL	1/8" Thread - Use with 200 Series Plug
NS300SL	1/4" Thread - Use with 300 Series Plug
NS300HFSL	3/8" Thread - Use with 300 Series Plug
NS500SL	1/2" Thread - Use with 500 Series Plug



Washers

Part Number	Description
SW200*	Silicone Washers for 200 Series
VW200*	Viton® Washers for 200 Series
SW300*	Silicone Washers for 300 Series
VW300*	Viton® Washers for 300 Series
SW500*	Silicone Washers for 500 Series
VW500*	Viton® Washers for 500 Series

*Add -12 (for bag of 12) or -100 (for bag of 100) to the part number.



WASHERS

Temperature Range	Silicone	Viton
	-90F to 400F	-15F to 400F

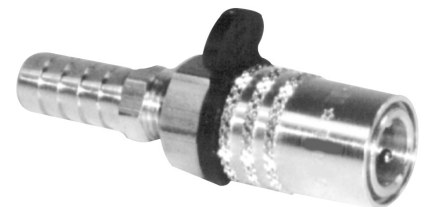
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Retaining Clips (for water couplers)

Helps prevent accidental release of water couplers

- Avoids unnecessary spills
- Available in 200,300 and 500 series
- 2 colors: red for hot, blue for cold
- Made of nylon
- Universal, fits most water couplers
- Max rating is 400 degrees F

Fits securely to help prevent release of water coupler



RETAINING CLIPS

Part Number	Series	Inside Diameter	Thickness
C200*	200	.59	.11
C300*	300	.79	.14
C500*	500	1.16	.15

*Add -R for red or -B for blue



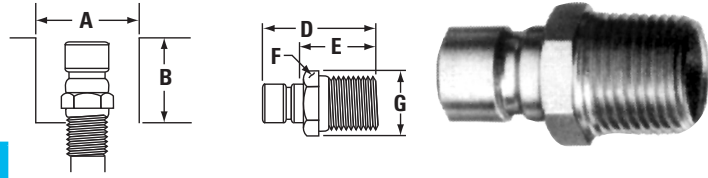


Water Plugs

For Mold Connections

MALE PLUGS

Brass & Steel Male Water Plugs



Series	Part Number	Material	Passage Size	NPT Size	Dia. A	Depth B	O.A.L. D	EXP. E	HEX F	LGST. G
200	NS250	Brass	3/16	1/16	.69	.69	.94	.54	.38	.43
	NS251	Brass	1/4	1/8	.69	.69	.94	.54	.56	.51
	NS252	Brass	1/4	1/4	.84	.94	1.13	.74	.56	.67
	NS252S	Steel	1/4	1/4	.84	.94	1.13	.74	.56	.67
	NS253	Brass	1/4	3/8	1.00	.97	1.19	.79	.69	.79
300	NS351	Brass	3/8	1/8	1.00	.94	1.19	.58	.56	.65
	NS352	Brass	3/8	1/4	1.00	.94	1.34	.74	.56	.65
	NS352S	Steel	3/8	1/4	1.00	.94	1.34	.74	.56	.65
	NS353	Brass	3/8	3/8	1.00	1.13	1.38	.78	.69	.79
	NS354	Brass	3/8	1/2	1.18	1.25	1.59	.99	.88	1.01
500	NS554	Brass	1/2	1/2	1.25	1.50	1.69	.92	.88	1.01
	NS556	Brass	1/2	3/4	1.50	1.56	1.75	.99	1.13	1.30

Valved Water Plugs

VALVED PLUGS

Part Number	Material	Passage Size	NPT Size	Dia. A	Depth B	O.A.L. D	EXP. E	HEX F	LGST. G
NS252SV	Brass	1/4	1/4	.84	.94	1.13	.74	.56	.67
NS253SV	Brass	1/4	1/4	.84	.94	1.13	.74	.56	.67
NS352SV	Brass	3/8	1/4	1.00	.94	1.34	.74	.56	.65
NS353SV	Brass	3/8	3/8	1.00	.94	1.34	.74	.56	.65
NS354SV	Brass	3/8	1/2	1.00	.94	1.34	.74	.56	.65

Steel Female (plated to prevent rust)

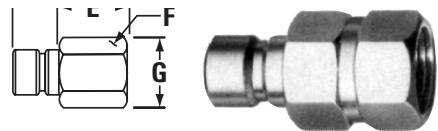
STEEL FEMALE

Series	Part Number	Material	Passage Size	NPT Size	O.A.L. D	EXP. E	HEX F	LGST. G
200	NS251F	Steel	1/4	1/8	.97	.58	.50	.58
	NS252F	Steel	1/4	1/4	1.28	.89	.63	.72
	NS253F	Steel	1/4	3/8	1.41	1.03	.75	.87
300	NS352F	Steel	3/8	1/4	1.48	.88	.63	.72
	NS353F	Steel	3/8	3/8	1.58	.98	.75	.87
	NS354F	Steel	3/8	1/2	1.66	1.45	.94	1.09
500	NS554F	Steel	1/2	1/2	1.75	.98	.94	1.07

Brass Female

BRASS FEMALE

Series	Part Number	Material	Passage Size	NPT Size	O.A.L. D	EXP. E	HEX F	LGST. G
200	NS250FB	Brass	1/4	1/16	.75	.39	.38	.43
	NS251FB	Brass	1/4	1/8	.97	.58	.50	.58
	NS252FB	Brass	1/4	1/4	1.28	.89	.63	.72
	NS253FB	Brass	1/4	3/8	1.41	1.03	.75	.87
300	NS351FB	Brass	11/32	1/8	1.00	.42	.56	.64
	NS352FB	Brass	3/8	1/4	1.48	.88	.63	.72
	NS353FB	Brass	3/8	3/8	1.58	.98	.75	.87



Pipe Check is an easy way to check a pipe thread. This handy tool can check pipe sizes from $\frac{1}{16}$ " thru $\frac{1}{2}$ " for a number of applications.

PC-100

PC-100 simply determines the size of pipes from $\frac{1}{16}$ " to $\frac{1}{2}$ " NPT. Made entirely of heavy gauge aluminum, this model is perfect for the office, warehouse, or factory floor. Just turn the thread into the hole that fits to determine pipe size.

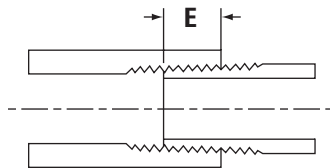


[PIPE CHECK](#)

Pipe Thread Data

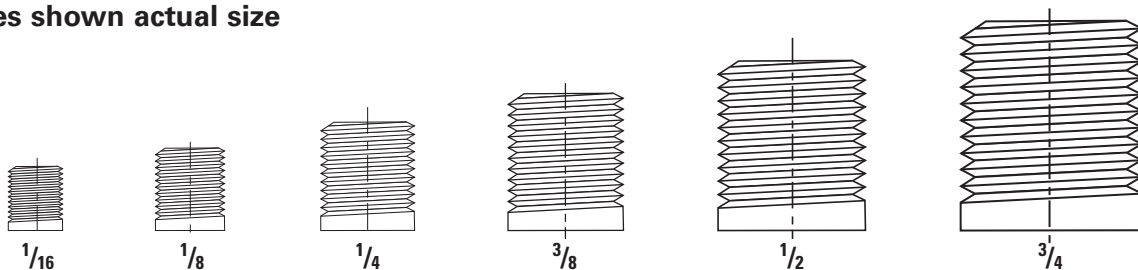
Most ordering mistakes are caused by measuring the pipe size of the fitting or component incorrectly. The nominal size of any pipe does not in fact refer to either the outside diameter (O.D.) or the inside diameter (I.D.) of the pipe. The table lists standard pipe sizes along with the actual O.D. and I.D. for each size. Keep in mind that manufacturers may slightly modify these dimensions to strengthen or enhance the performance of a product.

Pipe Size	Threads Per Inch	Outside Dia. of Pipe	Inside Diameter of Pipe	Tap Drill Size Without Ream	Tap Drill Size With Ream	E
$\frac{1}{16}$	27	.312	.209	$\frac{1}{4}$	$\frac{15}{64}$	.261
$\frac{1}{8}$	27	.405	.269	$\frac{11}{32}$	$\frac{21}{64}$	.263
$\frac{1}{4}$	18	.540	.364	$\frac{7}{16}$	$\frac{27}{64}$	.395
$\frac{3}{8}$	18	.675	.493	$\frac{9}{16}$	$\frac{9}{16}$	.407
$\frac{1}{2}$	14	.840	.622	$\frac{45}{64}$	$\frac{11}{16}$	.534
$\frac{3}{4}$	14	1.050	.824	$\frac{29}{32}$	$\frac{57}{64}$	.545
1	11 $\frac{1}{2}$	1.315	1.049	$\frac{19}{64}$	$\frac{1}{8}$	.661
1 $\frac{1}{4}$	11 $\frac{1}{2}$	1.660	1.380	$1\frac{31}{64}$	$1\frac{15}{32}$	.681
1 $\frac{1}{2}$	11 $\frac{1}{2}$	1.900	1.610	$1\frac{23}{32}$	$1\frac{45}{64}$	.681
2	11 $\frac{1}{2}$	2.375	2.067	$2\frac{3}{16}$	$2\frac{11}{64}$	.697



Once the correct pipe size has been determined, the "E" dimension may be used to determine the length of the component required to assemble properly when fully tightened.

Pipes shown actual size





Extension Plugs

Solid Brass



British Standard Thread also available!

- Positive removal
- No rust; brass
- In stock!!
- Flush mount for easy mold handling
- Cut to any length
- Low, low prices
- Leak-free extensions

1/16" Pipe Extensions

Part Number	Length	Pipe Size	Hex Size	A	Part Number	Length	Pipe Size	Hex Size	A
250X212	2.5"	1/16	3/8	11/16	350X212	2.5"	1/16	9/16	7/8
250X4	4	1/16	3/8	13/16	350X4	4	1/16	9/16	1
250X7	7	1/16	3/8	13/16	350X7	7	1/16	9/16	1

1/8" Pipe Extensions

251X212	2.5"	1/8	7/16	11/16	351X212	2.5	1/8	9/16	7/8
251X4	4	1/8	7/16	1	351X4	4	1/8	9/16	1
251X512	5.5	1/8	7/16	1	351X512	5.5	1/8	9/16	1
251X7	7	1/8	7/16	1	351X7	7	1/8	9/16	1
251X812	8.5	1/8	7/16	1	351X812	8.5	1/8	9/16	1
251X10	10	1/8	7/16	1	351X10	10	1/8	9/16	1
251X1112	11.5	1/8	7/16	1	351X1112	11.5	1/8	9/16	1
251X13	13	1/8	7/16	1	351X13	13	1/8	9/16	1

1/4" Pipe Extensions

252X212	2.5"	1/4	9/16	7/8	352X212	2.5"	1/4	9/16	7/8
252X4	4	1/4	9/16	1 1/4	352X4	4	1/4	9/16	1 1/4
252X512	5.5	1/4	9/16	1 1/4	352X512	5.5	1/4	9/16	1 1/4
252X7	7	1/4	9/16	1 1/4	352X7	7	1/4	9/16	1 1/4
252X812	8.5	1/4	9/16	1 1/4	352X812	8.5	1/4	9/16	1 1/4
252X10	10	1/4	9/16	1 1/4	352X10	10	1/4	9/16	1 1/4
252X1112	11.5	1/4	9/16	1 1/4	352X1112	11.5	1/4	9/16	1 1/4
252X13	13	1/4	9/16	1 1/4	352X13	13	1/4	9/16	1 1/4

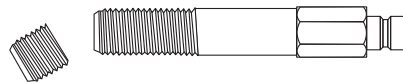
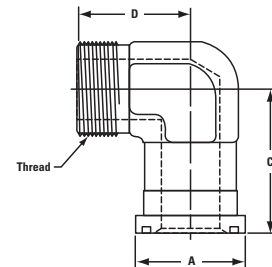
EXTENSION PLUGS

3/8" Pipe Extensions

253X212	2.5"	3/8	11/16	1
253X4	4	3/8	11/16	1 1/4
253X512	5.5	3/8	11/16	1 1/4
253X7	7	3/8	11/16	1 1/4
253X812	8.5	3/8	11/16	1 1/4
253X10	10	3/8	11/16	1 1/4
253X1112	11.5	3/8	11/16	1 1/4
253X13	13	3/8	11/16	1 1/4
353X212	2.5"	3/8	11/16	1
353X4	4	3/8	11/16	1 1/4
353X512	5.5	3/8	11/16	1 1/4
353X7	7	3/8	11/16	1 1/4
353X812	8.5	3/8	11/16	1 1/4
353X10	10	3/8	11/16	1 1/4
353X1112	11.5	3/8	11/16	1 1/4
353X13	13	3/8	11/16	1 1/4
553X212	2.5"	3/8	13/16	1 1/8
553X4	4	3/8	13/16	1 3/8
553X512	5.5	3/8	13/16	1 3/8
553X7	7	3/8	13/16	1 3/8
553X812	8.5	3/8	13/16	1 3/8
553X10	10	3/8	13/16	1 3/8
553X1112	11.5	3/8	13/16	1 3/8
553X13	13	3/8	13/16	1 3/8

1/2" Pipe Extensions

354X212	2.5"	1/2	7/8	1 1/8
354X4	4	1/2	7/8	1 1/2
354X512	5.5	1/2	7/8	1 1/2
354X7	7	1/2	7/8	1 1/2
354X812	8.5	1/2	7/8	1 1/2
354X10	10	1/2	7/8	1 1/2
354X1112	11.5	1/2	7/8	1 1/2
354X13	13	1/2	7/8	1 1/2
554X212	2.5"	1/2	7/8	1 1/8
554X4	4	1/2	7/8	1 1/2
554X512	5.5	1/2	7/8	1 1/2
554X7	7	1/2	7/8	1 1/2
554X812	8.5	1/2	7/8	1 1/2
554X10	10	1/2	7/8	1 1/2
554X1112	11.5	1/2	7/8	1 1/2
554X13	13	1/2	7/8	1 1/2



Simply cut piece to length and chamfer end. Turn into standard pipe threading die to retaper end threads. Pre-cut threads allow die to turn easily, and guide the die for smooth threads that are always straight and square.

Extension Plugs

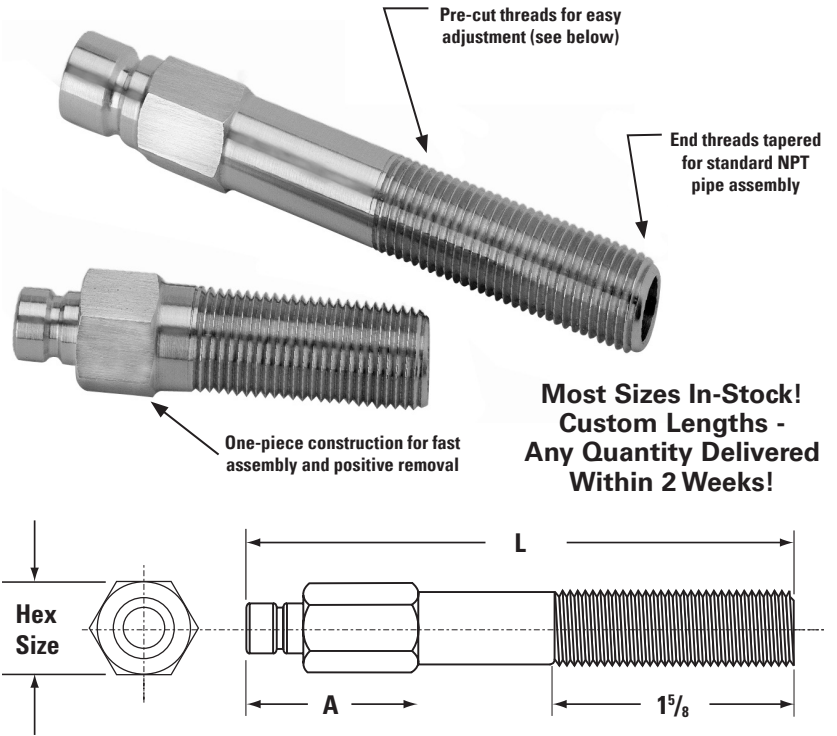
Solid Brass



Brass Extension Plugs are designed to eliminate the installation problems of soldering, welding, etc. of connector plugs to steel pipe nipples. Length adjustments (when required) are easy and accurate with pre-cut pipe thread system.

Once installed, the advantages of flush-mounted mold connector plugs are many. Sealing surfaces of plugs are protected, while handling and storage of the mold are made easier.

Brass Extension Plugs offer ease of installation, leak-free performance, and complete removability. In stock in all standard lengths and thread sizes, these extensions may also be ordered cut to any exact length required, and in any quantity.

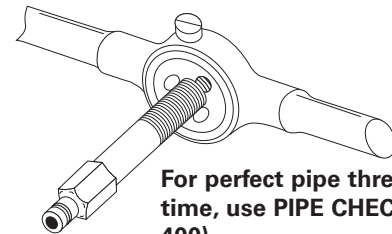
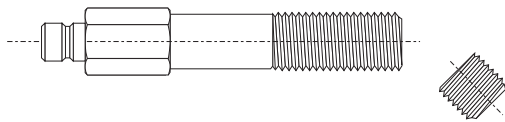


**Most Sizes In-Stock!
Custom Lengths -
Any Quantity Delivered
Within 2 Weeks!**

Custom Lengths Are Easy to Make!

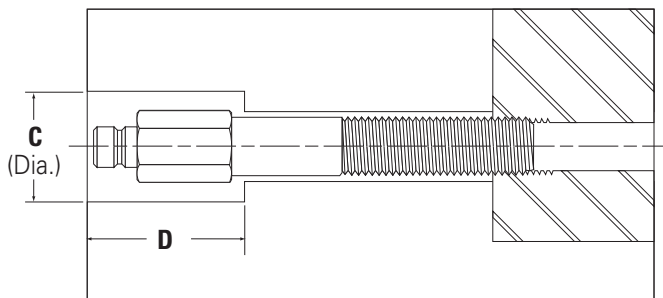
Length Adjustments & Installation

1. When special length adjustments are required, simply cut piece to length and chamfer end.
2. Turn into standard pipe threading die to re-taper threads.



For perfect pipe threads every time, use PIPE CHECK (see Page 400).

3. At assembly, the tapered brass threads provide a dependable, leak-proof seal. With one-piece construction, removability is always guaranteed.

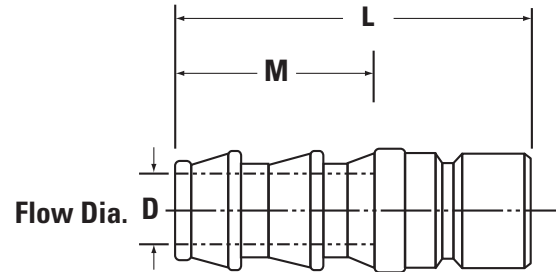


Extension Series	C (Dia.)	D
250	3/4	1
251	7/8	1 1/4
252	1	1 1/2
253	1 1/8	1 1/2
350	1	1 1/4
351	1	1 1/4
352	1	1 1/2
353	1 1/8	1 1/2
554	1 1/2	1 3/4
553	1 3/8	1 5/8
554	1 1/2	1 3/4

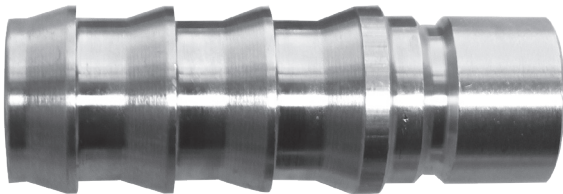
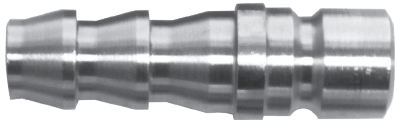
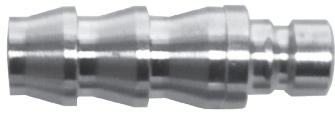


Combination Hose Insert

Our Combination Hose Inserts offer compact, versatile connections without the use of multiple fittings and assemblies. When machine cooling manifolds are equipped with socket connector bodies, hoses should have a combination hose insert on one end, and a socket connector on the other. In this way, hoses may be connected from manifold to mold, or snapped together in series for longer-reach situations.



COMBINATION HOSE BARBS



200 SERIES 1/4" Hole	Part Number	Hose I.D.	Dimensions		
			D	M	L
	200-4	1/4	3/16	7/8	1 3/8
	200-5	5/16	1/4	7/8	1 3/8
	200-6	3/8	1/4	1 1/16	1 9/16
	200-8	1/2	1/4	1 1/16	1 9/16

300 SERIES 3/8" Hole	Part Number	Hose I.D.	Dimensions		
			D	M	L
	300-4	1/4	3/16	7/8	1 13/16
	300-6	3/8	9/32	1 1/16	1 13/16
	300-8	1/2	1 1/32	1 1/16	1 13/16

500 SERIES 1/2" Hole	Part Number	Hose I.D.	Dimensions		
			D	M	L
	500-8	1/2	13/32	1 1/16	2
	500-12	3/4	9/16	1 1/2	2 1/2

Cover Plugs

Mold Cover Plugs conveniently snap into socket connectors to stop coolant flow. Uses include plugging extra ports on machine cooling manifolds, and to stop hose drainage during mold changes.

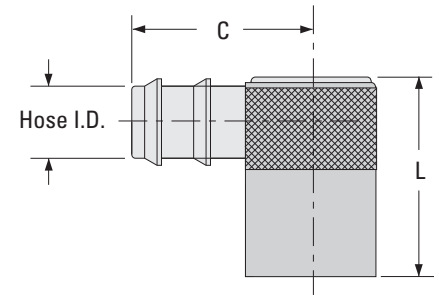
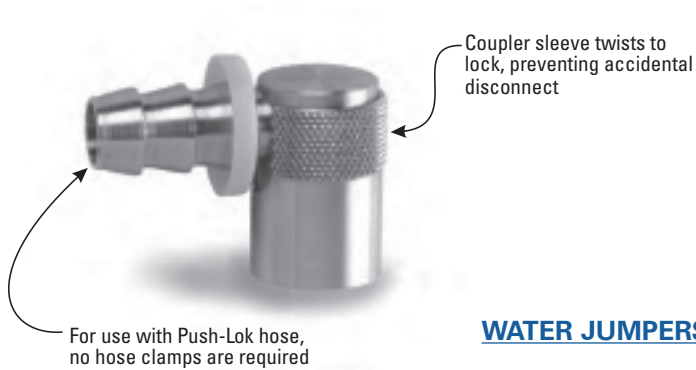
Part Number	Fits Socket Number
CP200	200 (1/4" nominal)
CP300	300 (3/8" nominal)
CP500	500 (1/2" nominal)



Quick-Coupler Water Jumpers



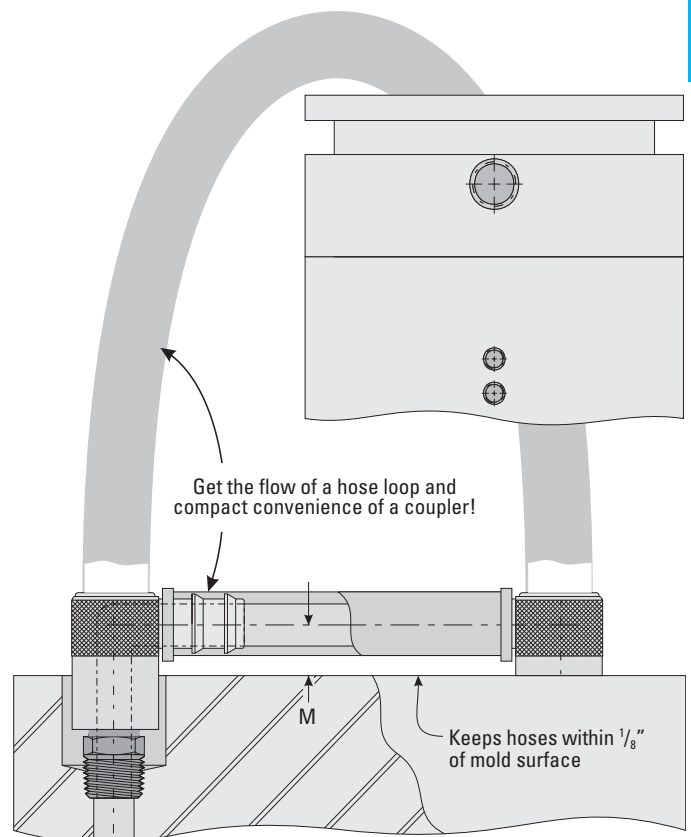
Standard



WATER JUMPERS

Part Number	Hose I.D.	Fits Plug Series No.	Measurements (refer to drawings)		
			L	C	M
WJ200-4	1/4	200	1	1 1/4	3/8
WJ200-5	5/16	200	1	1 1/4	3/8
WJ200-6	3/8	200	1	1 1/4	3/8
WJ300-6	3/8	300	1 7/16	1 9/16	1/2
WJ300-8	1/2	300	1 7/16	1 9/16	1/2
WJ500-8	1/2	500	2 1/8	2	7/8
WJ500-12	3/4	500	2 1/8	2	7/8

- Oversized and unrestricted flow path maintains full flow rate of hose used
- Compact design neatly and safely holds cooling lines close to the mold surface
- Exclusive Locking Sleeve prevents accidental disconnect and ensures proper installation
- Unlimited installation options; fits around obstacles, and installs in compact spaces
- All brass and stainless steel construction
- Viton seals withstand temps up to 400°F
- Compatible with all major mold connection systems

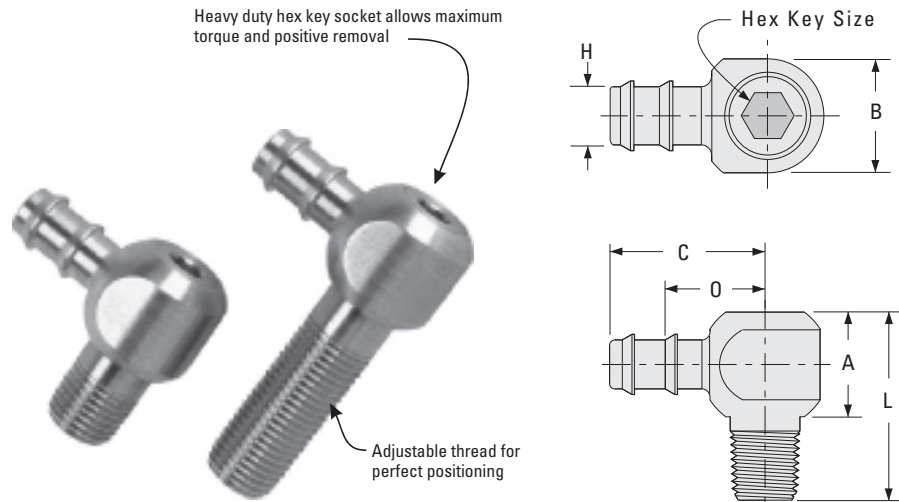




Quick Coupler Water Jumpers

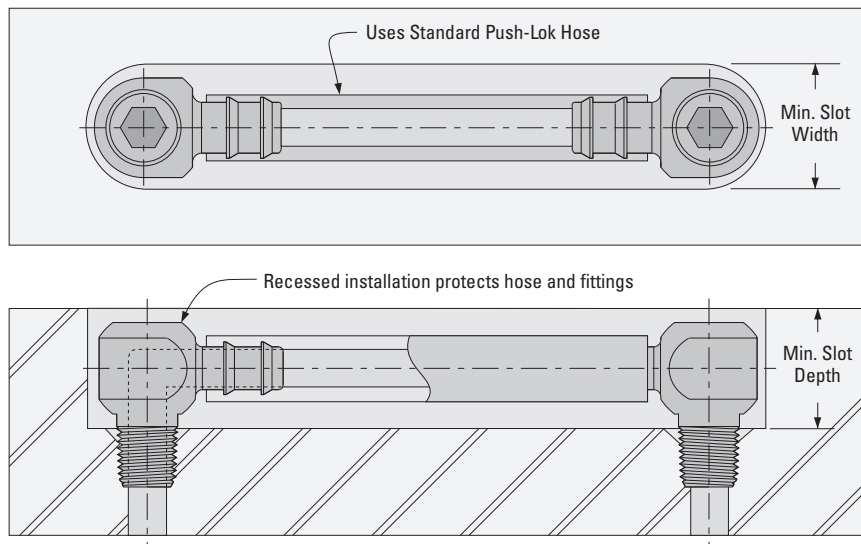
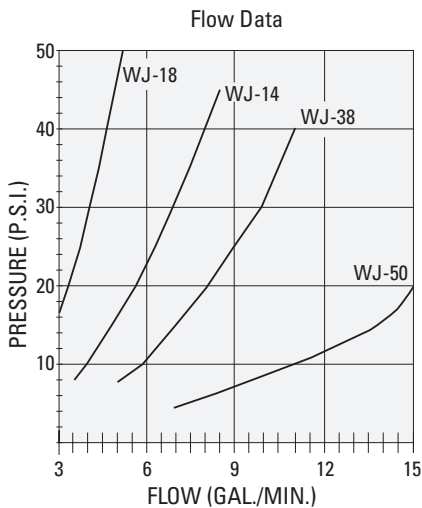
Swivel Head

- Can be fully recessed to prevent accidental disconnect or damage
- Swivel body allows for installation in tight spaces
- Eliminate crimped hoses and setup errors
- Viton O-ring seals
- All brass construction
- Easy hex key installation
- Custom length water jumpers available

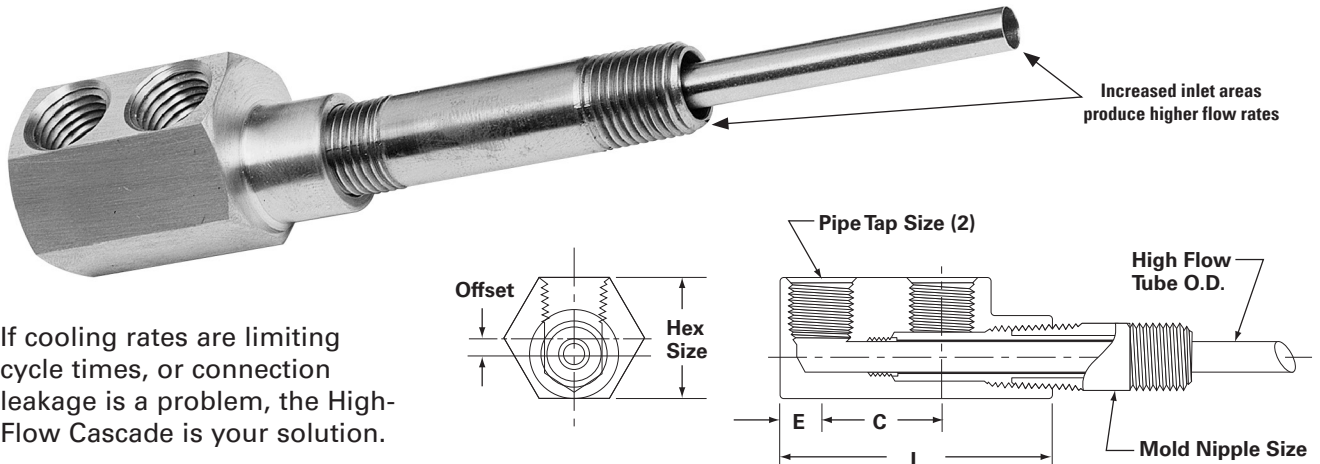


WATER JUMPERS

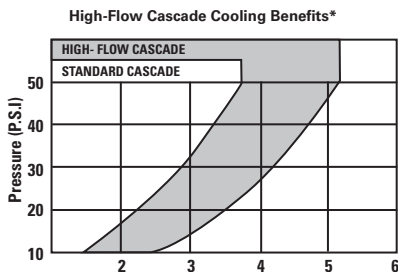
Part Number	Pipe Size (NPT)	Hose I.D.	Hex Key Size	Measurements (refer to drawing above)					For Recessed Installation	
				L	A	C	O	B	Min. Slot Width	Min. Slot Depth
WJ18S	1/8	5/16	3/16	1 3/16	1 1/16	1	5/8	.660	1 1/16	1
WJ18M	1/8	5/16	3/16	2	1 1/16	1	5/8	.660	1 1/16	1
WJ18L	1/8	5/16	3/16	3 1/2	1 1/16	1	5/8	.660	1 1/16	1
WJ14S	1/4	3/8	1/4	1 7/16	1 3/16	1 3/16	25/32	.840	7/8	1 3/16
WJ14M	1/4	3/8	1/4	2 3/8	1 3/16	1 3/16	25/32	.840	7/8	1 3/16
WJ14L	1/4	3/8	1/4	3 7/8	1 3/16	1 3/16	25/32	.840	7/8	1 3/16
WJ38S	3/8	1/2	5/16	1 5/8	1	1 3/8	15/16	.980	1	1 3/8
WJ38M	3/8	1/2	5/16	2 5/8	1	1 3/8	15/16	.980	1	1 3/8
WJ38L	3/8	1/2	5/16	4 1/8	1	1 3/8	15/16	.980	1	1 3/8
WJ50S	1/2	3/4	3/8	2	1 1/8	1 1/2	1 1/8	1.235	1 1/4	1 9/16
WJ50M	1/2	3/4	3/8	3	1 1/8	1 1/2	1 1/8	1.235	1 1/4	1 9/16
WJ50L	1/2	3/4	3/8	4 1/2	1 1/8	1 1/2	1 1/8	1.235	1 1/4	1 9/16



To Increase Production up to 65% Just Add Water



If cooling rates are limiting cycle times, or connection leakage is a problem, the High-Flow Cascade is your solution.



*The performance of the High-Flow Cascade Series was recently tested and compared to existing nipple-type cascades through experimentation conducted at the University of Wisconsin-Milwaukee.

A computerized heat transfer analysis was conducted and an overall energy balance was performed. It was found that the heat transfer rate was dependent largely on the mass flow rate of the coolant. The greater the mass flow rate of the coolant, the greater the overall heat transfer rate of the cascade. The test results are summarized in graphical form and shown above.

This data shows the new design creates a 35%–65% increase in overall cooling rates.

The High-Flow Cascade Series has been engineered to provide the mold user with a leak-free cooling system capable of maintaining faster cycle time settings.

Tests have proven that the High-Flow Cascade Water Junction cools between 35%–65% faster, and eliminates leaks caused by pipe nipple interference.*

The High-Flow Cascade increases flow rates by using a thin-walled stainless steel tube and a new offset design. By eliminating the pipe plug and offsetting the mold nipple in the brass head, all connecting pipes can be completely tightened without interference or choking off flow. The High-Flow stainless tubes can be adjusted to any length and are threaded into the solid brass head for firm support.

Basic sizes and center distances are interchangeable with existing units. Brass heads can be ordered separately along with tubes in any length.

If water junction cooling rates are limiting your cycle times, or connection leakage is a problem, the High-Flow Cascade Water Junction is your solution.



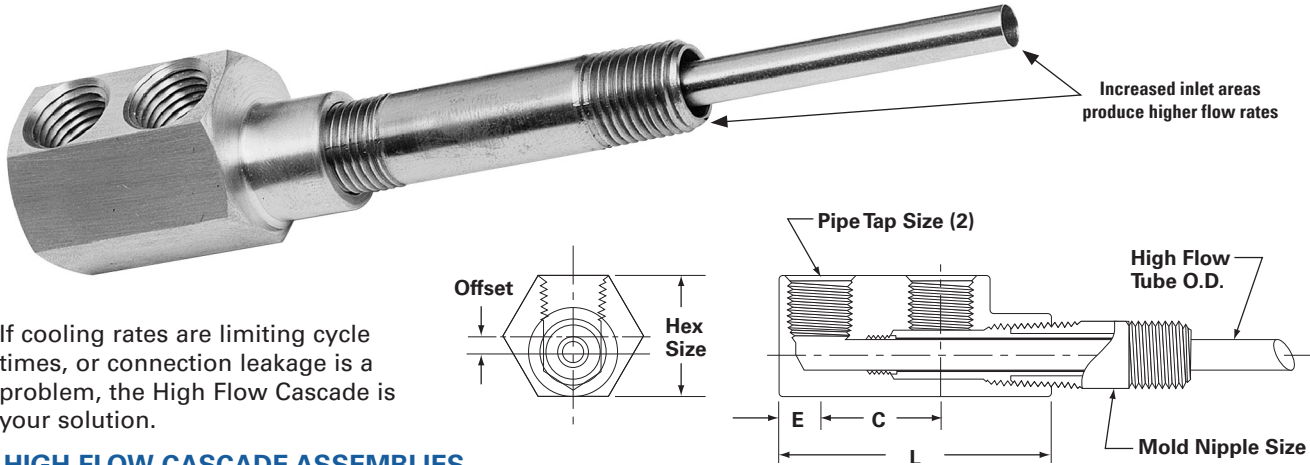


Cascade Assemblies

High-Flow

See the table below for complete dimensional design data. The table also shows the actual percent increase in cooling that a particular cascade will produce compared to a corresponding standard flow model.

Please note tube thread size (when using tubes only), and offset dimension (for swing clearance on internal installations).



If cooling rates are limiting cycle times, or connection leakage is a problem, the High Flow Cascade is your solution.

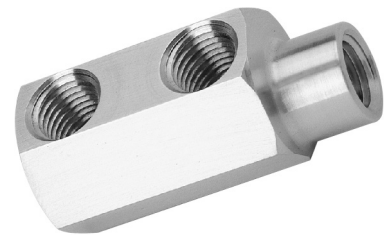
HIGH FLOW CASCADE ASSEMBLIES

Mold Part Number	In/Out Nipple (NPT)	Tube Pipe Sz. (NPT)	O.D. (12" lg)	Hex Size	Offset	E	C	L	% Actual Flow Increase
HF16N	1/16	1/16	1/8	5/8	3/32	1/4	1/2	1 1/4	—
HF186N	1/8	1/8	3/16	3/4	3/32	5/16	1 1/16	1 5/8	64%
HF181N	1/8	1/8	3/16	3/4	3/32	5/16	1	1 15/16	64%
HF146N4	1/4	1/4	1/4	1	5/32	1 1/32	1 1/16	1 7/8	48%
HF141N4	1/4	1/4	1/4	1	5/32	1 1/32	1	2 3/16	48%
HF381N4	3/8	1/4	3/8	1	1/8	1 1/32	1	2 1/4	38%

High-Flow Cascade Heads

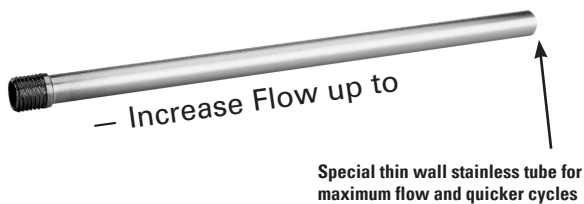
All dimensions same as above for corresponding part number. Use High-Flow Tubes only.

Part Number	High Flow Tube No.
HF16H	HF125T
HF186H	HF187T
HF181H	HF187T
HF146H4	HF250T
HF141H4	HF250T
HF381H4	HF375T



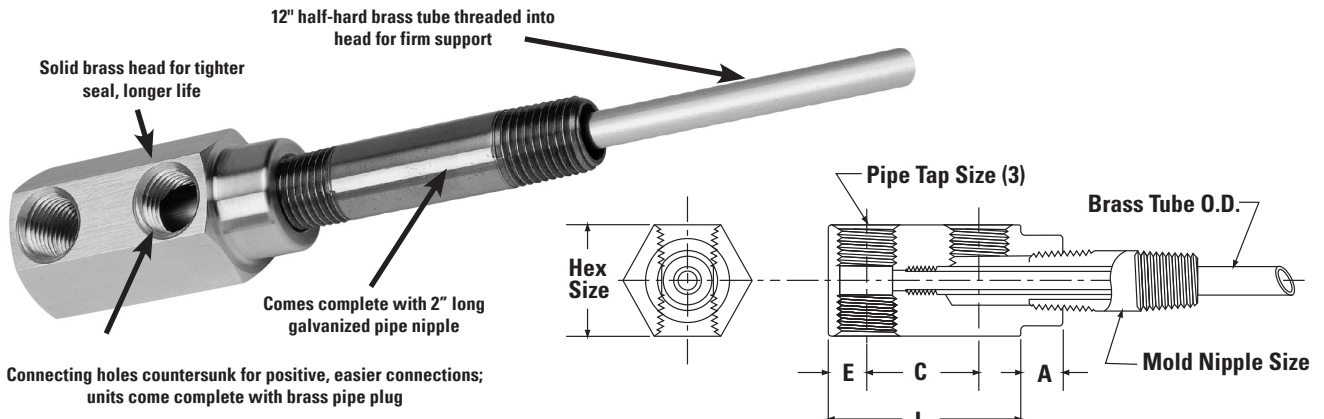
High-Flow Cascade Tubes

Thin-walled stainless steel tubes have precision threaded end. Please note thread size when using tubes only.



Part Number	Tube O.D.	Tube I.D.	Tube Length	Std. Thread Size	Thread Length
HF125T	.125	.105	12"	10-32	3/16
HF187T	.187	.167	12"	1/4-28	1/4
HF250T	.250	.230	12"	5/16-24	5/16
HF312T	.312	.280	12"	3/8-24	3/8
HF375T	.375	.335	12"	7/16-20	7/16

Nipple Type Cascade



Connecting holes countersunk for positive, easier connections; units come complete with brass pipe plug

Nipple Type Cascades

Part Number	Nipple Size	Tap Size (NPT)	Tube O.D.*	Hex Size	E	C	A	L
16N	1/8	1/16	3/16	3/4	7/32	1/2	9/32	15/16
186N	1/8	1/8	3/16	7/8	21/64	11/16	9/32	1 1/32
181N	1/8	1/8	3/16	7/8	21/64	1	9/32	1 21/32
146N	1/4	1/8	1/4	1	21/64	11/16	7/32	1 11/32
146N4	1/4	1/4	1/4	1	21/64	11/16	7/32	1 11/32
141N	1/4	1/8	1/4	1	21/64	1	7/16	1 21/32
141N4	1/4	1/4	1/4	1	21/64	1	7/16	1 21/32
381N	3/8	1/8	5/16	1	11/32	1	13/32	1 11/16
381N4	3/8	1/4	5/16	1	11/32	1	13/32	1 11/16
121N4	1/2	1/4	7/16	1 1/4	13/32	1	9/16	1 13/16
341N4	3/4	3/8	5/8	1 1/2	1/2	1 1/4	3/4	2 1/4

*Extra length Tubes available from stock.

NIPPLE TYPE CASCADE

Extension Tubes & Cascade Heads

Half-hard brass extension tubes - one end threaded for easy assembly. Tubes are also available with both ends threaded, and in custom lengths.



EXTENSION TUBES

Extension Tubes

Part Number	Tube O. D.	Tube I. D.	Tube Length*	Thread	Thread Length
125T	.125	.062	12	5-44	3/16
187T	.187	.123	12	10-32	3/16
250T	.250	.170	12	1/4-28	1/4
312T	.312	.210	12	5/16-24	5/16
375T	.375	.273	12	3/8-24	3/8
437T	.437	.307	12	7/16-20	7/16
625T	.625	.495	12	5/8-18	5/8

*Extra length Tubes available

SOLID BRASS CASCADE HEADS

Cascade Heads	
Part Number	Tube Number
16H	187 T
186H	
181H	
146H	250 T
146H4	
141H	
141H4	312 T
381H	
381H4	437 T
121H4	625 T
341H4	

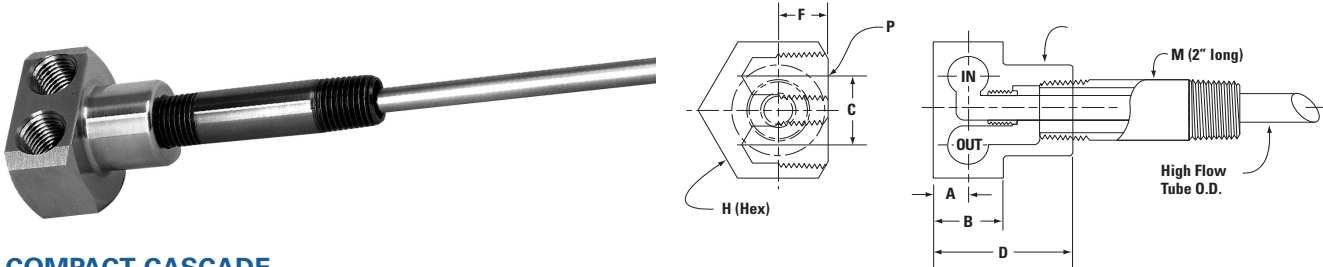


Solid Brass Cascade Heads
All holes threaded. All dimensions same as above for corresponding part number. Complete with brass pipe plug.



Compact Cascades

Compact Cascades are designed for use where a standard Nipple-Type or One-Piece Cascade may not fit. Ports are positioned sideways for mounting into thin mold plates, or where other cooling lines limit clearances for pipe connections. Tube and mold nipple length adjustments are made exactly as with a Nipple-Type Cascade. Flow rates are equivalent, and no pipe plugs are required. These units are available in four sizes, and are in stock for immediate delivery.



COMPACT CASCADE

Mold Part Number	Pipe Nipple M	Hex Tap P	Tube Size H	O.D. T	A	B	C	D	E
ET1816	1/8	1/16	15/16	3/16	7/32	7/16	1/2	1	5/8
ET1418	1/4	1/8	1 1/4	1/4	5/16	5/8	11/16	1 1/4	3/4
ET1414	1/4	1/4	1 1/2	1/4	3/8	3/4	3/4	1 1/2	7/8
ET3814	3/8	1/4	1 1/2	5/16	3/8	3/4	3/4	1 1/2	1

Hex Cascade Assemblies

- High-flow design provides maximum cooling ratings
- Easy to install and remove
- Assemblies include brass head, 12" high-flow stainless tube, and 2" long galvanized pipe nipple



HEX CASCADE

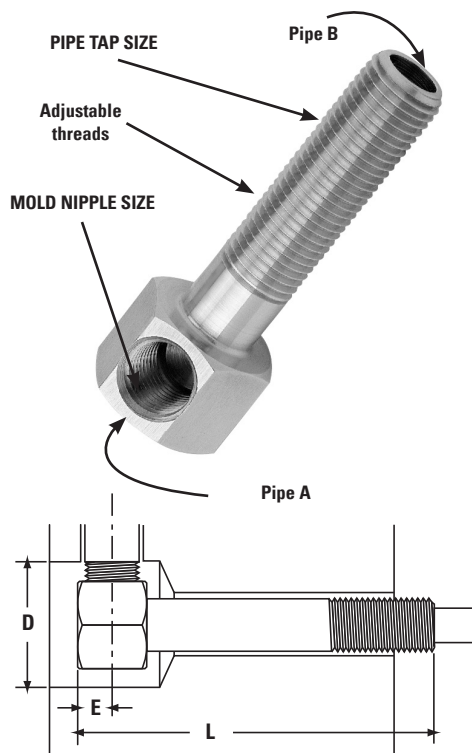
Hex Key Cascades are round and install with an Allen wrench. They may be installed with minimal clearance or very close together where space is limited.

Mold Part Number	Pipe Nipple M	High Flow Tap Size	Tube O.D. (12" LG)	L	C	A	Hex Key Size	Nominal Clearance Drill	Actual O.D.
E16N	1/16	1/16	1/8	1.625	9/16	1/2	5/16	5/8	.610
E16N2	1/8	1/16	3/16	1.687	9/16	9/16	3/8	3/4	.735
E186N	1/8	1/8	3/16	1.875	11/16	9/16	3/8	7/8	.860
E181N	1/8	1/8	3/16	2.187	1	9/16	3/8	7/8	.860
E146N	1/4	1/8	1/4	2.187	11/16	13/16	1/2	1	.985
E146N4	1/4	1/4	1/4	2.312	11/16	7/8	1/2	1	.985
E141N	1/4	1/8	1/4	2.500	1	13/16	1/2	1	.985
E141N4	1/4	1/4	1/4	2.625	1	7/8	1/2	1	.985
E381N4	3/8	1/4	5/16	2.625	1	7/8	1/2	1	.985
E121N4	1/2	1/4	3/8	2.812	1	1	1/2	1 1/4	1.235

Brass Extension Elbows



BRASS EXTENSION ELBOWS



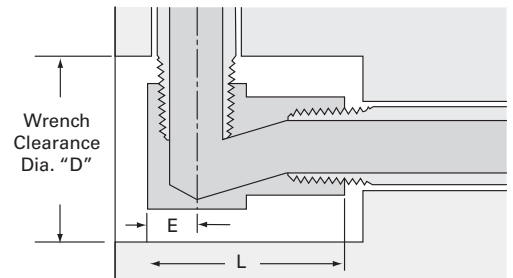
Solid Brass Hex Extension Elbows feature one-piece re-direction of mold cooling lines and adjustable threads for easy alignment in the mold. Socket wrench installation requires minimum turning clearance, while one-piece construction ensures complete removal...every time!

Part Number	Nipple Size	Tap Size	Hex Size	D	E	L*
18BX212	1/8	1/8	3/4	1 1/4	9/32	2 1/2
18BX4	1/8	1/8	3/4	1 1/4	9/32	4
1814BX212	1/4	1/8	3/4	1 1/4	9/32	2 1/2
1814BX4	1/4	1/8	3/4	1 1/4	9/32	4
14BX212	1/4	1/4	7/8	1 3/8	11/32	2 1/2
14BX4	1/4	1/4	7/8	1 3/8	11/32	4
1438BX212	3/8	1/4	7/8	1 3/8	11/32	2 1/2
1438BX4	3/8	1/4	7/8	1 3/8	11/32	4
38BX212	3/8	3/8	1	1 1/2	1/2	2 1/2
38BX4	3/8	3/8	1	1 1/2	1/2	4
50BX212	1/2	1/2	1 1/4	1 3/4	5/8	2 1/2
50BX4	1/2	1/2	1 1/4	1 3/4	5/8	4

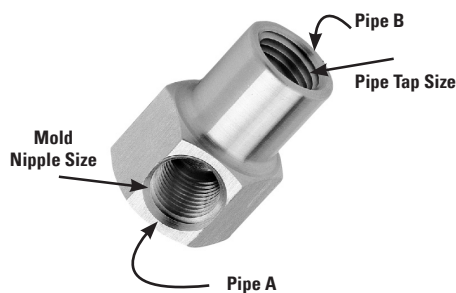
* Longer length Extension Elbows are available

Steel Hex Elbows

Steel Hex Elbows are used in longer reach applications or where a steel pipe nipple assembly is required. Outside, these elbows offer easy socket wrench installation, and minimum turning clearance "D". Inside, is an exclusive angular connecting hole (see diagram), which allows pipes to be torqued tight without choking off flow. These elbows are available in pipe sizes from 1/16" to 3/4" NPT, and are zinc plated to resist rust and corrosion.



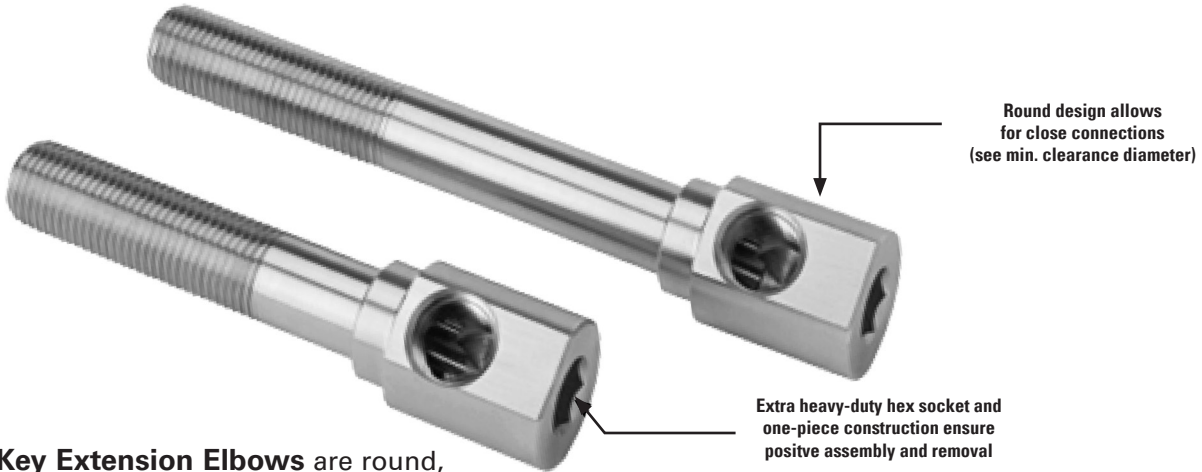
STEEL HEX ELBOWS



Part Number	Nipple Size	Tap Size (NPT)	Hex Size	L	E	Wrench Clearance "D"
16S	1/16	1/16	9/16	13/16	7/32	1
18S	1/8	1/8	3/4	1	9/32	1 1/4
1814S	1/8	1/4	3/4	1 1/4	9/32	1 1/4
14S	1/4	1/4	7/8	1 3/8	11/32	1 3/8
1438S	1/4	3/8	7/8	1 3/8	11/32	1 3/8
38S	3/8	3/8	1	1 5/8	1/2	1 1/2
50S	1/2	1/2	1 1/4	1 7/8	9/16	1 7/8
75S	3/4	3/4	1 1/2	2 1/4	5/8	2 1/4

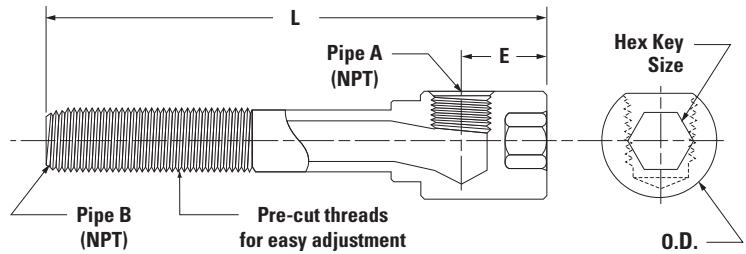


HexKey Extension Elbows



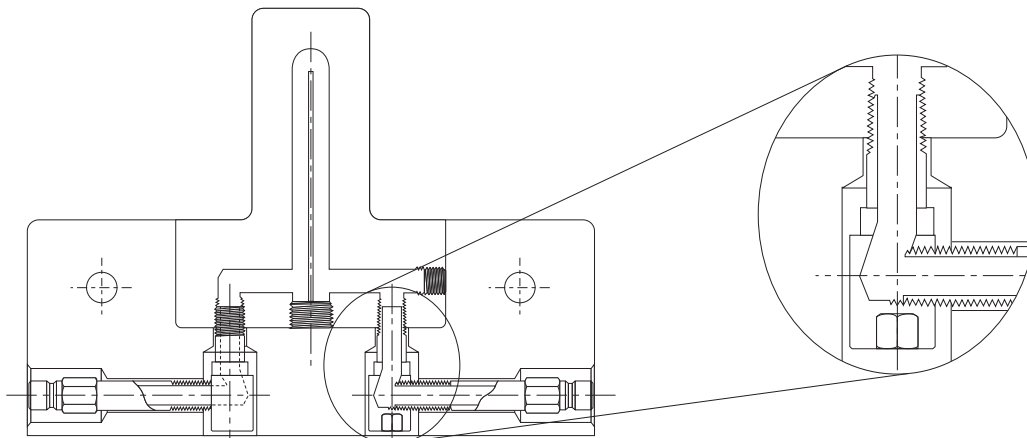
HexKey Extension Elbows are round, and install with an Allen wrench. Wrench clearance ideal for use inside the mold, or anywhere space is limited.

- Angular flow path allows connecting pipe fittings to be torqued tight without choking off flow
- Accurate length adjustments are easy with the patented custom mold thread system

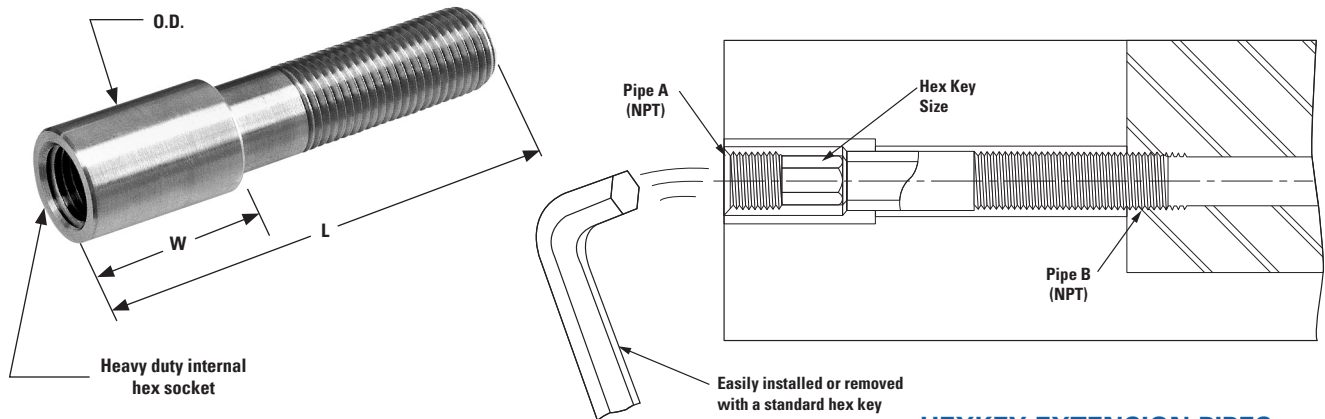


HEXKEY EXTENSION ELBOWS

Part Number								Pipe Size A	Pipe Size B	E	O.D.	Min. Clearance Dia.	Hex Key Size
Overall Length "L"													
2½"	4"	5½"	7"	8½"	10"	11½"	13"						
EKL16-212	EKL16-4	EKL16-512	EKL16-7	EKL16-812	EKL16-10	EKL16-1112	EKL16-13	⅛	⅛	.531	.552	⅜	¼
EKL18-212	EKL18-4	EKL18-512	EKL18-7	EKL18-812	EKL18-10	EKL18-1112	EKL18-13	⅜	⅜	.580	.615	⅝	⅝
EKL14-212	EKL14-4	EKL14-512	EKL14-7	EKL14-812	EKL14-10	EKL14-1112	EKL14-13	¼	¼	.660	.860	⅞	⅜
EKL38-212	EKL38-4	EKL38-512	EKL38-7	EKL38-812	EKL38-10	EKL38-1112	EKL38-13	⅝	⅝	.780	.985	1	½
EKL50-212	EKL50-4	EKL50-512	EKL50-7	EKL50-812	EKL50-10	EKL50-1112	EKL50-13	½	½	.940	1.235	⅞	½



HexKey Extension Pipes



HEXKEY EXTENSION PIPES

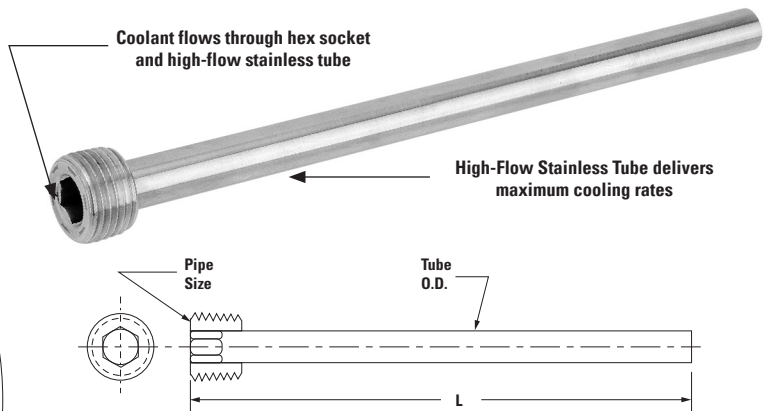
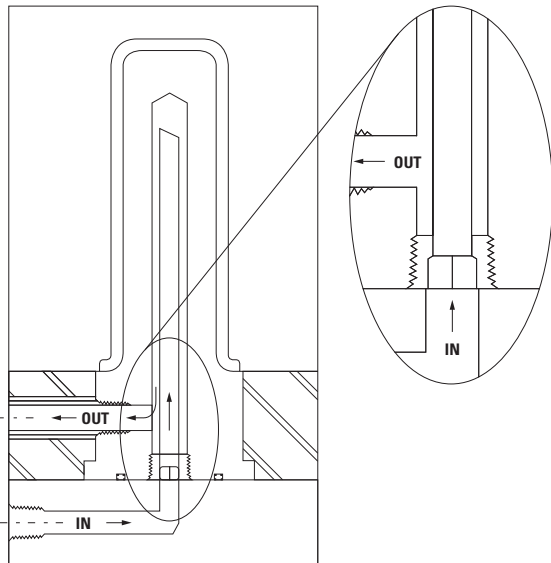
- **HexKey Extension Pipes** are available in a wide variety of special lengths and threads
- Accurate length adjustments are easy with the custom mold adjustable thread system

Part Number Overall Length "L"					Pipe Size A	Pipe Size B	W	O.D.	Hex Key Size
2½"	4"	5½"	7"	8½"					
EP18-212	EP18-4	EP18-512	EP18-7	EP18-812	⅙	⅙	¾	½	¼
EP14-212	EP14-4	EP14-512	EP14-7	EP14-812	¼	¼	1	1⅛	⅜
EP38-212	EP38-4	EP38-512	EP38-7	EP38-812	⅜	⅜	1¼	1⅜	½
EP50-212	EP50-4	EP50-512	EP50-7	EP50-812	½	½	1½	1	⅝

Piston Tubes



- Precision brazed assembly provides high strength and reliable performance
- Flow-thru pipe plug available in brass, steel or stainless steel



PISTON TUBES

Part Number Overall Length "L"				Pipe Size (NPT)	Tube O.D.	Tube I.D.
12"	24"	36"	48"			
PT16-12	PT16-24	PT16-36	PT16-48	⅙	.125	.109
PT18-12	PT18-24	PT18-36	PT18-48	⅙	.187	.167
PT14-12	PT14-24	PT14-36	PT14-48	¼	.250	.230
PT38-12	PT38-24	PT38-36	PT38-48	⅜	.375	.345
PT12-12	PT12-24	PT12-36	PT12-48	½	.375	.345
PT34-12	PT34-24	PT34-36	PT34-48	¾	.437	.407



Piston Tubes

Part Number	Description
PT12-375-18	PISTON TUBE 1/2" NPT 0.365 OD 0.340 ID 18" OAL
PT12-437-18	PISTON TUBE 1/2" NPT 0.427 OD 0.397 ID 18" OAL
PT14-312-48	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 48" OAL
PT16-072-12	PISTON TUBE 1/16 NPT 0.072 OD 0.060 ID 12
PT16-072-18	PISTON TUBE 1/16 NPT 0.072 OD 0.060 ID 18
PT38-437-18	PISTON TUBE 3/8" NPT 0.427 OD 0.397 ID 18" OAL
PT12-375-18	PISTON TUBE 1/2" NPT 0.365 OD 0.340 ID 18" OAL
PT12-437-12	PISTON TUBE 1/2" NPT 0.427 OD 0.397 ID 12" OAL
PT12-437-12	PISTON TUBE 1/2" NPT 0.427 OD 0.397 ID 12" OAL
PT12-437-24	PISTON TUBE 1/2" NPT 0.427 OD 0.397 ID 24" OAL
PT12-437-36	PISTON TUBE 1/2" NPT 0.427 OD 0.397 ID 36" OAL
PT12-437-48	PISTON TUBE 1/2" NPT 0.427 OD 0.397 ID 48" OAL
PT12-500-12	PISTON TUBE 1/2" NPT 0.500 OD 0.444 ID 12" OAL
PT12-500-18	PISTON TUBE 1/2" NPT 0.500 OD 0.444 ID 18" OAL
PT12-500-24	PISTON TUBE 1/2" NPT 0.500 OD 0.444 ID 24" OAL
PT12-500-36	PISTON TUBE 1/2" NPT 0.500 OD 0.444 ID 36" OAL
PT12-500-48	PISTON TUBE 1/2" NPT 0.500 OD 0.444 ID 48" OAL
PT14-187-12	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 12" OAL
PT14-187-18	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 18" OAL
PT14-187-24	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 24" OAL
PT14-187-36	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 36" OAL
PT14-187-48	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 48" OAL
PT14-250-18	PISTON TUBE 1/4" NPT 0.250 OD 0.230 ID 18" OAL
PT14-312-12	PISTON TUBE 1/4" NPT 0.312 OD 0.288 ID 12" OAL
PT14-312-18	PISTON TUBE 1/4" NPT 0.187 OD 0.167 ID 18" OAL
PT14-312-24	PISTON TUBE 1/4" NPT 0.312 OD 0.288 ID 24" OAL
PT14-312-36	PISTON TUBE 1/4" NPT 0.312 OD 0.288 ID 36" OAL
PT16-072-24	PISTON TUBE 1/16 NPT 0.072 OD 0.060 ID 24
PT16-072-36	PISTON TUBE 1/16 NPT 0.072 OD 0.060 ID 36
PT16-072-48	PISTON TUBE 1/16 NPT 0.072 OD 0.060 ID 48
PT16-093-12	PISTON TUBE 1/16 NPT 0.090 OD 0.076 ID 12
PT16-093-18	PISTON TUBE 1/16 NPT 0.090 OD 0.076 ID 18
PT16-093-24	PISTON TUBE 1/16 NPT 0.090 OD 0.076 ID 24
PT16-093-36	PISTON TUBE 1/16 NPT 0.090 OD 0.076 ID 36
PT16-093-48	PISTON TUBE 1/16 NPT 0.090 OD 0.076 ID 48
PT16-109-12	PISTON TUBE 1/16 NPT 0.109 OD 0.095 ID 12
PT16-109-18	PISTON TUBE 1/16 NPT 0.109 OD 0.095 ID 18
PT16-109-24	PISTON TUBE 1/16 NPT 0.109 OD 0.095 ID 24

Piston Tubes



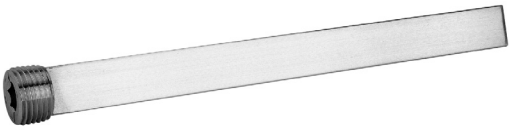
Part Number	Description
PT16-109-36	PISTON TUBE 1/16 NPT 0.109 OD 0.095 ID 36
PT16-109-48	PISTON TUBE 1/16 NPT 0.109 OD 0.095 ID 48
PT16-125-18	PISTON TUBE 1/16 NPT 0.125 OD 0.109 ID 18
PT16-187-12	PISTON TUBE 1/16 NPT 0.187 OD 0.167 ID 12
PT16-187-18	PISTON TUBE 1/16 NPT 0.187 OD 0.167 ID 18
PT16-187-24	PISTON TUBE 1/16 NPT 0.187 OD 0.167 ID 24
PT16-187-36	PISTON TUBE 1/16 NPT 0.187 OD 0.167 ID 36
PT16-187-48	PISTON TUBE 1/16 NPT 0.187 OD 0.167 ID 48
PT18-125-13	PISTON TUBE 1/8" NPT 0.125 OD 0.109 ID 18" OAL
PT18-125-18	PISTON TUBE 1/8" NPT 0.125 OD 0.109 ID 12" OAL
PT18-125-24	PISTON TUBE 1/8" NPT 0.125 OD 0.109 ID 24" OAL
PT18-125-36	PISTON TUBE 1/8" NPT 0.125 OD 0.109 ID 36" OAL
PT18-125-48	PISTON TUBE 1/8" NPT 0.125 OD 0.109 ID 48" OAL
PT18-187-18	PISTON TUBE 1/8" NPT 0.187 OD 0.167 ID 18" OAL
PT18-250-12	PISTON TUBE 1/8" NPT 0.250 OD 0.230 ID 12" OAL
PT18-250-18	PISTON TUBE 1/8" NPT 0.250 OD 0.230 ID 18" OAL
PT18-250-24	PISTON TUBE 1/8" NPT 0.250 OD 0.230 ID 24" OAL
PT18-250-36	PISTON TUBE 1/8" NPT 0.250 OD 0.230 ID 36" OAL
PT18-250-48	PISTON TUBE 1/8" NPT 0.250 OD 0.230 ID 48" OAL
PT34-437-18	PISTON TUBE 3/4" NPT 0.427 OD 0.397 ID 18" OAL
PT34-500-12	PISTON TUBE 3/4" NPT 0.500 OD 0.444 ID 12" OAL
PT34-500-18	PISTON TUBE 3/4" NPT 0.500 OD 0.444 ID 18" OAL
PT34-500-24	PISTON TUBE 3/4" NPT 0.500 OD 0.444 ID 24" OAL
PT34-500-36	PISTON TUBE 3/4" NPT 0.500 OD 0.444 ID 36" OAL
PT34-500-48	PISTON TUBE 3/4" NPT 0.500 OD 0.444 ID 48" OAL
PT34-625-12	PISTON TUBE 3/4" NPT 0.625 OD 0.569 ID 12" OAL
PT34-625-18	PISTON TUBE 3/4" NPT 0.625 OD 0.569 ID 18" OAL
PT34-625-24	PISTON TUBE 3/4" NPT 0.625 OD 0.569 ID 24" OAL
PT34-625-36	PISTON TUBE 3/4" NPT 0.625 OD 0.569 ID 36" OAL
PT34-625-48	PISTON TUBE 3/4" NPT 0.625 OD 0.569 ID 48" OAL
PT38-312-12	PISTON TUBE 3/8" NPT 0.312 OD 0.288 ID 12" OAL
PT38-312-18	PISTON TUBE 3/8" NPT 0.312 OD 0.288 ID 18" OAL
PT38-312-24	PISTON TUBE 3/8" NPT 0.312 OD 0.288 ID 24" OAL
PT38-312-36	PISTON TUBE 3/8" NPT 0.312 OD 0.288 ID 36" OAL
PT38-312-48	PISTON TUBE 3/8" NPT 0.312 OD 0.288 ID 48" OAL
PT38-375-18	PISTON TUBE 3/8" NPT 0.365 OD 0.340 ID 18" OAL
PT38-437-12	PISTON TUBE 3/8" NPT 0.427 OD 0.397 ID 12" OAL
PT38-437-24	PISTON TUBE 3/8" NPT 0.427 OD 0.397 ID 24" OAL
PT38-437-36	PISTON TUBE 3/8" NPT 0.427 OD 0.397 ID 36" OAL
PT38-437-48	PISTON TUBE 3/8" NPT 0.427 OD 0.397 ID 48" OAL





Straight Blade Plug Baffles

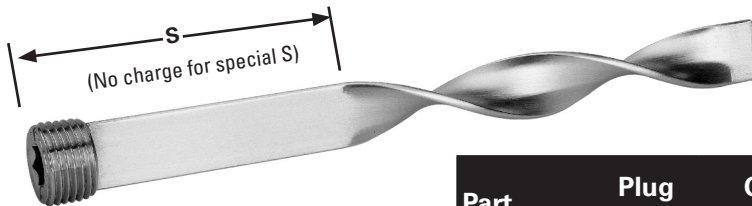
STRAIGHT BLADE PLUG BAFFLES



- Flush-seal type ($\frac{7}{8}$ taper) brass pipe plugs standard; alloy, stainless, and oversize ($\frac{3}{4}$ taper) plugs available
- Precision soldered to exacting tolerances to closely fit the cooling channel
- Same day shipment on custom length baffles
- Custom stepped width blades, and plug size combinations quoted on request
- $\frac{3}{4}$ " NPT brass plug baffles for use with $\frac{29}{32}$ " tap drill are available from stock

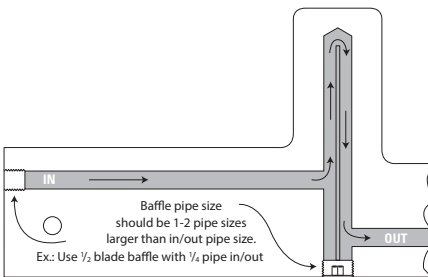
Part Number	Plug Size (NPT)	Overall Length	Blade Width	Drill Dia.	Blade Thickness
SB16x4	$\frac{1}{16}$	4"	$\frac{1}{4}$	$\frac{1}{4}$	.050
SB16x8	$\frac{1}{16}$	8"	$\frac{1}{4}$	$\frac{1}{4}$	.050
SB16x12	$\frac{1}{16}$	12"	$\frac{1}{4}$	$\frac{1}{4}$	.050
SB18x4	$\frac{1}{8}$	4"	$\frac{5}{16}$	$\frac{5}{16}$	.050
SB18x8	$\frac{1}{8}$	8"	$\frac{5}{16}$	$\frac{5}{16}$	.050
SB18x12	$\frac{1}{8}$	12"	$\frac{5}{16}$	$\frac{5}{16}$	.050
SB14x5	$\frac{1}{4}$	5"	$\frac{7}{16}$	$\frac{7}{16}$	.080
SB14x10	$\frac{1}{4}$	10"	$\frac{7}{16}$	$\frac{7}{16}$	.080
SB14x15	$\frac{1}{4}$	15"	$\frac{7}{16}$	$\frac{7}{16}$	.080
SB38x6	$\frac{3}{8}$	6"	$\frac{9}{16}$	$\frac{9}{16}$	.090
SB38x12	$\frac{3}{8}$	12"	$\frac{9}{16}$	$\frac{9}{16}$	.090
SB38x18	$\frac{3}{8}$	18"	$\frac{9}{16}$	$\frac{9}{16}$	.090
SB12x8	$\frac{1}{2}$	8"	$\frac{11}{16}$	$\frac{11}{16}$	.090
SB12x16	$\frac{1}{2}$	16"	$\frac{11}{16}$	$\frac{11}{16}$	.090
SB34x12	$\frac{3}{4}$	12"	$\frac{15}{16}$	$\frac{15}{16}$	.090
SB34x20	$\frac{3}{4}$	20"	$\frac{15}{16}$	$\frac{15}{16}$	.090
SB1x16	1	16"	$1\frac{1}{8}$	$1\frac{1}{8}$	.105
SB1x24	1	24"	$1\frac{1}{8}$	$1\frac{1}{8}$	.105

Turbo Blade Plug Baffles



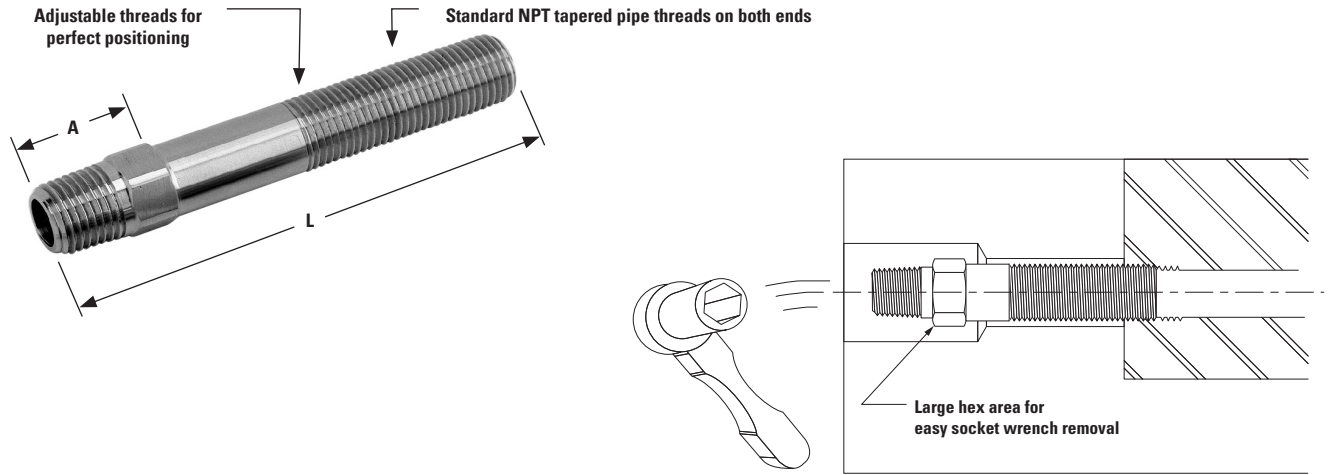
TURBO BLADE PLUG BAFFLES

- Spiral provides turbulent cooling action and keeps blade centered in waterline for maximum flow rates



Part Number	Plug Size (NPT)	O Overall Length	Blade S Straight Length	Width (-.005) (-.015)	Drill Dia.	Blade Thickness
TB16x4	$\frac{1}{16}$	4"	2"	$\frac{1}{4}$	$\frac{1}{4}$	.050
TB16x8	$\frac{1}{16}$	8"	4"	$\frac{1}{4}$	$\frac{1}{4}$	.050
TB16x12	$\frac{1}{16}$	12"	6"	$\frac{1}{4}$	$\frac{1}{4}$	.050
TB18x4	$\frac{1}{8}$	4"	2"	$\frac{5}{16}$	$\frac{5}{16}$	.050
TB18x8	$\frac{1}{8}$	8"	4"	$\frac{5}{16}$	$\frac{5}{16}$	.050
TB18x12	$\frac{1}{8}$	12"	6"	$\frac{5}{16}$	$\frac{5}{16}$	.050
TB14x5	$\frac{1}{4}$	5"	2"	$\frac{7}{16}$	$\frac{7}{16}$	.080
TB14x10	$\frac{1}{4}$	10"	4"	$\frac{7}{16}$	$\frac{7}{16}$	.080
TB14x15	$\frac{1}{4}$	15"	6"	$\frac{7}{16}$	$\frac{7}{16}$	.080
TB38x6	$\frac{3}{8}$	6"	2"	$\frac{9}{16}$	$\frac{9}{16}$	.090
TB38x12	$\frac{3}{8}$	12"	4"	$\frac{9}{16}$	$\frac{9}{16}$	.090
TB38x18	$\frac{3}{8}$	18"	6"	$\frac{9}{16}$	$\frac{9}{16}$	.090
TB12x8	$\frac{1}{2}$	8"	3"	$\frac{11}{16}$	$\frac{11}{16}$	.090
TB12x16	$\frac{1}{2}$	16"	5"	$\frac{11}{16}$	$\frac{11}{16}$	.090
TB34x12	$\frac{3}{4}$	12"	4"	$\frac{15}{16}$	$\frac{15}{16}$	.090
TB34x20	$\frac{3}{4}$	20"	6"	$\frac{15}{16}$	$\frac{15}{16}$	.090
TB1x16	1	16"	5"	$1\frac{1}{8}$	$1\frac{1}{8}$	.105
TB1x24	1	24"	8"	$1\frac{1}{8}$	$1\frac{1}{8}$	.105

Adjustable Hex Nipple



- Especially useful when installing Cascade Heads, Hex Elbows, etc. inside molds and slides
- Longer or special exact lengths available
- Also available in special thread combinations (including BSP)

ADJUSTABLE HEX NIPPLE

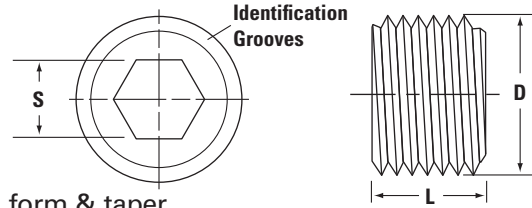
Part Number								Pipe Size (NPT)	A	Hex Size
Overall Length "L"										
2½"	4"	5½"	7"	8½"	10"	11½"	13"			
APN16-212	APN16-4	APN16-512	APN16-7	APN16-812	APN16-10	APN16-1112	APN16-13	1/16	11/16	3/8
APN18-212	APN18-4	APN18-512	APN18-7	APN18-812	APN18-10	APN18-1112	APN18-13	1/8	3/4	7/16
APN14-212	APN14-4	APN14-512	APN14-7	APN14-812	APN14-10	APN14-1112	APN14-13	1/4	7/8	9/16
APN38-212	APN38-4	APN38-512	APN38-7	APN38-812	APN38-10	APN38-1112	APN38-13	3/8	1	11/16
APN12-212	APN12-4	APN12-512	APN12-7	APN12-812	APN12-10	APN12-1112	APN12-13	1/2	1 3/8	7/8

E



Pressure Plugs-Threaded

Threaded



- 7/8 taper for flush installation – closely controlled thread size, form & taper
- High-pressure seal is developed through a deliberate difference in taper between plug & tapped hole
- Steel is high-grade alloy type heat treated to Rc 35-40

PRESSURE PLUGS THREADED

Brass 7/8 Taper				Steel 7/8 Taper			
Size	Part Number	S-Key Size	Tap Drill	L-Body Length	Threads Per Inch	Size	Part Number
1/16"	BP1	5/32	15/64	.250	27	1/16"	SP1M
1/8"	BP2	3/16	21/64	.250	27	1/8"	SP2
1/4"	BP4	1/4	27/64	.406	18	1/4"	SP4
3/8"	BP6	5/16	9/16	.406	18	3/8"	SP6M
1/2"	BP8	3/8	11/16	.531	14	1/2"	SP8M
3/4"	BP12	9/16	57/64	.531	14	3/4"	SP12M
1"	BP16	5/8	1-1/8	.656	11-1/2	1"	SP16M
1-1/4"	BP20M	3/4	1-15/32	.656	11-1/2		
1-1/2"	BP24	1	1-25/32	.656	11-1/2		

Pressure Plugs - Threadless

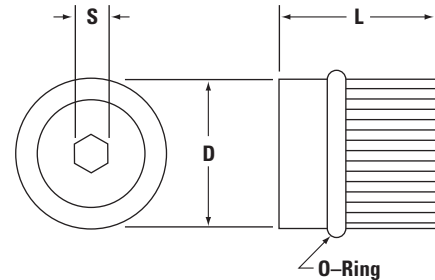
Brass threadless plugs have a time-saving expandable O-ring design. When the plug's socket head screw is tightened, the O-ring expands to provide a positive seal. No tapping necessary; easy installation and removal. Perfect solution for limited space situations.

- Seals rough and corroded holes
- No tapping needed
- Withstands pressures up to 72 PSI

Part Number	Hex Nominal Size	Drill Length L	Size S	Size D	O-Rings Pkg. Of 10
BTP2	1/8"	.50	5/64	11/32	BTO2
BTP2OS	1/8"+	.50	5/64	23/64	BTO2
BTP4	1/4"	.56	1/8	7/16	BTO4
BTP4OS	1/4"+	.56	1/8	29/64	BTO4
BTP6	3/8"	.62	1/8	9/16	BTO6
BTP6OS	3/8"+	.62	1/8	37/64	BTO6
BTP8	1/2"	.62	1/8	11/16	BTO8
BTP8OS	1/2"+	.62	1/8	45/64	BTO8



PRESSURE PLUGS THREADLESS



9 Pc. Folding Hex Key Set



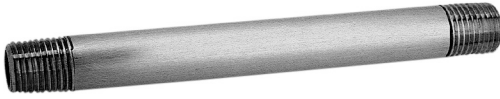
- Chrome vanadium steel
- Hardened and tempered for strength
- Plated handle
- Black oxide finish
- Sizes: 0.050", 5/64", 7/64", 9/64", 3/16", 1/16", 3/32", 1/8", 5/32"

Part Number HEK9C

Brass Pipe Nipples



BRASS PIPE NIPPLES



Brass Long Nipples	
Part Number	Pipe Size × Length
1/16	
BNL110	1/16 × 1
BNL115	1/16 1 1/2
BNL120	1/16 2
BNL125	1/16 2 1/2
BNL130	1/16 3
BNL140	1/16 4
BNL160	1/16 6
BNL180	1/16 8
BNL1100	1/16 10
BNL1200	1/16 12
1/8	
BNL215	1/8 × 1 1/2
BNL220	1/8 2
BNL225	1/8 2 1/2
BNL230	1/8 3
BNL235	1/8 3 1/2
BNL240	1/8 4
BNL250	1/8 5
BNL260	1/8 6
BNL280	1/8 8
BNL2100	1/8 10
BNL2120	1/8 12
1/4	
BNL415	1/4 1 1/2
BNL420	1/4 2
BNL425	1/4 2 1/2
BNL430	1/4 3
BNL435	1/4 3 1/2
BNL440	1/4 4
BNL445	1/4 4 1/2
BNL450	1/4 5
BNL460	1/4 6
BNL480	1/4 8
BNL4100	1/4 10
BNL4120	1/4 12

Brass Long Nipples	
Part Number	NPT Size
3/8	
BNL615	3/8 × 1 1/2
BNL620	3/8 × 2
BNL625	3/8 × 2 1/2
BNL630	3/8 × 3
BNL635	3/8 × 3 1/2
BNL640	3/8 × 4
BNL660	3/8 × 6
BNL680	3/8 × 8
1/2	
BNL815	1/2 × 1 1/2
BNL820	1/2 × 2
BNL825	1/2 × 2 1/2
BNL830	1/2 × 3
BNL835	1/2 × 3 1/2
BNL840	1/2 × 4
BNL860	1/2 × 6
BNL880	1/2 × 8
3/4	
BNL1215	3/4 × 1 1/2
BNL1220	3/4 × 2
BNL1225	3/4 × 2 1/2
BNL1230	3/4 × 3
BNL1235	3/4 × 3 1/2
1	
BNL1620	1 × 2
BNL1625	1 × 2 1/2
BNL1630	1 × 3
BNL1635	1 × 3 1/2

Brass Close Nipples	
Part Number	NPT Size
BNS2	1/8"
BNS4	1/4"
BNS6	3/8"
BNS8	1/2"
BNS12	3/4"
BNS16	1"
BNS20	1 1/4"
BNS24	1 1/2"





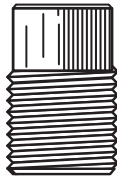
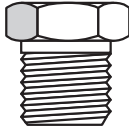
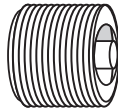
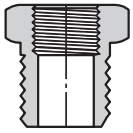
Brass Pipe Adapters

BRASS PIPE NIPPLES

Brass Pipe Bushings

Part Number	NPT Sizes
BPB2-1	1/8 x 1/16
BPB4-2	1/4 x 1/8
BPB6-2	3/8 x 1/8
BPB6-4	3/8 x 1/4
BPB8-2	1/2 x 1/8
BPB8-4	1/2 x 1/4
BPB8-6	1/2 x 3/8
BPB12-2	3/4 x 1/8
BPB12-4	3/4 x 1/4
BPB12-6	3/4 x 3/8
BPB12-8	3/4 x 1/2
BPB16-4	1 x 1/4
BPB16-6	1 x 3/8
BPB16-8	1 x 1/2
BPB16-12	1 x 3/4
BPB20-8*	1 1/4 x 1/2
BPB20-12*	1 1/4 x 3/4
BPB20-16*	1 1/4 x 1
BPB24-8*	1 1/2 x 1/2
BPB24-12*	1 1/2 x 3/4
BPB24-16*	1 1/2 x 1
BPB24-20*	1 1/2 x 1 1/4

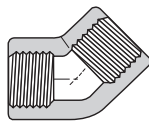
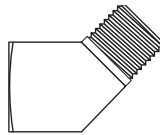
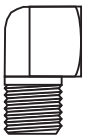
*Bronze



Brass Street Elbow 90°

Part Number	Size F x M
BE9S2-2	1/8 x 1/16
BE9S2-4	1/8 x 1/4
BE9S4-2	1/4 x 1/8
BE9S4-4	1/4 x 1/4
BE9S4-6	1/4 x 3/8
BE9S6-4	3/8 x 1/4
BE9S6-6	3/8 x 3/8
BE9S6-8	3/8 x 1/2
BE9S8-6	1/2 x 3/8
BE9S8-8*	1/2 x 1/2
BE9S12-12*	3/4 x 3/4

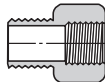
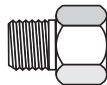
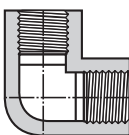
*Bronze



Brass Elbow 90°

Part Number	NPT Size
BE9-2-2	1/8
BE9-4-4	1/4
BE9-6-6*	3/8
BE9-8-8*	1/2

*Bronze



Brass Allen Plug

Part Number	Size
BAP1	1/16
BAP2	1/8
BAP4	1/4
BAP6	3/8
BAP8	1/2
BAP12	3/4

Please see Pressure Plugs for 7/8 taper mold plugs

Brass Square Plugs

Part Number	NPT Size
BSP2	1/8
BSP4	1/4
BSP6	3/8
BSP8	1/2
BSP12	3/4
BSP16*	1
BSP20*	1 1/4
BSP24*	1 1/2

*Bronze

Brass Street Elbow 45°

Part Number	NPT Size
BE4S2-2	1/8
BE4S4-4	1/4
BE4S6-6	3/8
BE4S8-8	1/2

Brass Elbow 45°

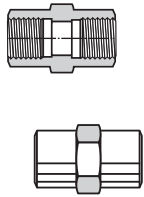
Part Number	NPT Size
BE4-2	1/8
BE4-4	1/4
BE4-6*	3/8
BE4-8*	1/2

*Bronze

Brass Female x Male

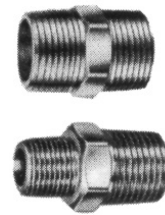
Part Number	Size F x M
BMF2-2	1/8 x 1/8
BMF4-2	1/4 x 1/8
BMF4-4	1/4 x 1/4
BMF6-2	3/8 x 1/8
BMF6-4	3/8 x 1/4
BMF6-6	3/8 x 3/8
BMF8-4	1/2 x 1/4
BMF8-6	1/2 x 3/8
BMF8-8	1/2 x 1/2

Brass Pipe Adapters

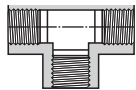


Brass Pipe Coupling	
Part Number	Size
BPC2-2	1/8" x 1/8"
BPC4-2	1/4" x 1/8"
BPC4-4	1/4" x 1/4"
BPC6-2	3/8" x 1/8"
BPC6-4	3/8" x 1/4"
BPC6-6	3/8" x 3/8"
BPC8-4	1/2" x 1/4"
BPC8-6	1/2" x 3/8"
BPC8-8	1/2" x 1/2"
BPC12-8	3/4" x 1/2"
BPC12-12	3/4" x 3/4"

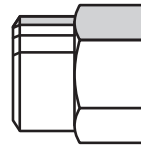
PIPE ADAPTERS



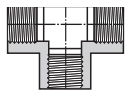
Brass Hex Nipple	
Part Number	Size
BHN2-1	1/8" x 1/16"
BHN2-2	1/8" x 1/8"
BHN4-2	1/4" x 1/8"
BHN4-4	1/4" x 1/4"
BHN6-2	3/8" x 1/8"
BHN6-4	3/8" x 1/4"
BHN6-6	3/8" x 3/8"
BHN8-4	1/2" x 1/4"
BHN8-6	1/2" x 3/8"
BHN8-8	1/2" x 1/2"
BHN12-12	3/4" x 3/4"



Brass Pipe Tee	
Part Number	Size
BPT2-2	1/8" x 1/8"
BPT4-4	1/4" x 1/4"
BPT6-6	3/8" x 3/8"
BPT8-8	1/2" x 1/2"



Brass Pipe Cap	
Part Number	Size
BPCA2-2	1/8" x 1/8"
BPCA4-4	1/4" x 1/4"
BPCA6-6	3/8" x 3/8"
BPCA8-8	1/2" x 1/2"



Brass Branch Tee	
Part Number	Size
BBT2-2	1/8" x 1/8"
BBT4-4	1/4" x 1/4"
BBT6-6	3/8" x 3/8"



Thread Sealing Tape



- Permanent non-flammable seal
- Remains plastic permanently
- -450°F to +500°F
- Perfect for water connections, hydraulics, air, gas, petroleum
- The finest quality PTFE tape available
- NEVER use thinner, cheaper substitutes

THREAD SEALING TAPE

Part Number	Length	Thickness	Width
TT100	260" (21.6')	0.0035	1/2"
TT200	520" (43.3')	0.0035	1/2"
TT300	520" (43.3')	0.0035	3/4"



Standard Hose Barbs

STANDARD HOSE BARBS

Male Hose Barbs		
Part Number	Hose I. D.	Pipe Thread
205-4-2	1/4	1/8
205-4-4	1/4	1/4
205-4-6	1/4	3/8
205-5-2	5/16	1/8
205-5-4	5/16	1/4
205-6-2	3/8	1/8
205-6-4	3/8	1/4
205-6-6	3/8	3/8
205-6-8	3/8	1/2
205-8-4	1/2	1/4
205-8-6	1/2	3/8
205-8-8	1/2	1/2
205-8-12	1/2	3/4
205-10-8	5/8	1/2
205-10-12	5/8	3/4
205-12-8	3/4	1/2
205-12-12	3/4	3/4
205-16-12	1	3/4
205-16-16	1	1
205-20-16	1 1/4	1



Male Swivel Hose Barbs		
Part Number	Hose I. D.	Pipe Thread
215-4-4	1/4	1/4
215-6-4	3/8	1/4
215-6-6	3/8	3/8
215-8-8	1/2	1/2
215-12-12	3/4	3/4



Hose Mender Barbs	
Part Number	Hose I. D.
250-4-4	1/4
250-5-5	5/16
250-6-6	3/8
250-8-8	1/2
250-10-10	5/8
250-12-12	3/4



Male Hose Barbs - 90°		
Part Number	Hose I. D.	Pipe Thread
209-4-2	1/4	1/8
209-4-4	1/4	1/4
209-6-4	3/8	1/4
209-6-6	3/8	3/8
209-8-6	1/2	3/8
209-8-8	1/2	1/2



Female 37° Swivel Hose Barbs		
Part Number	Hose I. D.	Flare Size
237-4-4	1/4	1/4
237-4-6	1/4	3/8
237-6-6	3/8	3/8
237-6-8	3/8	1/2
237-8-8	1/2	1/2
237-8-10	1/2	5/8



Female 45° Swivel Hose Barbs		
Part Number	Hose I. D.	Flare Size
245-4-4	1/4	1/4
245-4-6	1/4	3/8
245-6-6	3/8	3/8
245-6-8	3/8	1/2
245-8-8	1/2	1/2
245-8-10	1/2	5/8



Female Ball Seat Hose Barbs		
Part Number	Hose I. D.	Pipe Thread
220-4-4	1/4	1/4
220-6-4	3/8	1/4
220-6-6	3/8	3/8



Rigid Female Hose Barbs		
Part Number	Hose I. D.	Pipe Thread
210-4-2	1/4	1/8
210-4-4	1/4	1/4
210-6-4	3/8	1/4
210-6-6	3/8	3/8
210-8-4	1/2	1/4
210-8-6	1/2	3/8
210-8-8	1/2	1/2

Steel Constructed

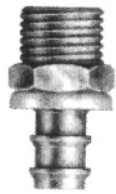
Male King Nipples		
Part Number	Hose I. D.	Pipe Thread
206-8-8	1/2	1/2
206-12-12	3/4	3/4
206-12-16	3/4	1
206-16-16	1	1
206-16-20	1	1 1/4
206-20-20	1 1/4	1 1/4
206-24-24	1 1/2	1 1/2
206-32-32	2	2



Brass Push-On Hose Barbs



BRASS PUSH ON HOSE BARBS



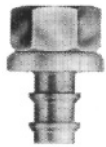
Male Push-On

Part Number	Hose I. D.	Pipe Thread
305-4-2	1/4	1/8
305-4-4	1/4	1/4
305-4-6	1/4	3/8
305-6-2	3/8	1/8
305-6-4	3/8	1/4
305-6-6	3/8	3/8
305-6-8	3/8	1/2
305-8-4	1/2	1/4
305-8-6	1/2	3/8
305-8-8	1/2	1/2
305-10-8	5/8	1/2
305-10-12	5/8	3/4
305-12-8	3/4	1/2
305-12-12	3/4	3/4



Female 37° Swivel Push-On

Part Number	Hose I. D.	Flare Size
337-4-4	1/4	1/4
337-4-6	1/4	3/8
337-6-6	3/8	3/8
337-6-8	3/8	1/2
337-8-8	1/2	1/2
337-8-10	1/2	5/8
337-10-10	5/8	5/8
337-12-12	3/4	3/4



Rigid Female Pipe Push-On

Part Number	Hose I. D.	Pipe Thread
310-4-2	1/4	1/8
310-4-4	1/4	1/4
310-6-4	3/8	1/4
310-6-6	3/8	3/8
310-8-6	1/2	3/8
310-8-8	1/2	1/2



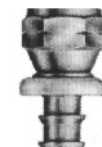
Female 45° Swivel Push-On

Part Number	Hose I. D.	Flare Size
345-4-4	1/4	1/4
345-4-6	1/4	3/8
345-6-6	3/8	3/8
345-6-8	3/8	1/2
345-8-6	1/2	3/8
345-8-8	1/2	1/2
345-8-10	1/2	5/8
345-10-8	5/8	1/2
345-10-10	5/8	5/8
345-12-12	3/4	3/4



Male Pipe Swivel Push-On

Part Number	Hose I. D.	Pipe Thread
315-4-4	1/4	1/4
315-6-4	3/8	1/4
315-6-6	3/8	3/8
315-8-8	1/2	1/2
315-12-12	3/4	3/4



Female Pipe Swivel

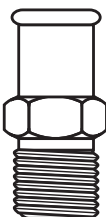
Part Number	Hose I. D.	Flare Size
325-4-2	1/4	1/8
325-4-4	1/4	1/4
325-6-4	3/8	1/4
325-6-6	3/8	3/8
325-8-8	1/2	1/2

Use Genuine Oetiker Hose Clamps with these Beaded Hose Barbs!
P. 484



Hose Mender Push-On

Part Number	Hose I. D.
350-4-4	1/4
350-6-6	3/8
350-8-8	1/2
350-10-10	5/8
350-12-12	3/4



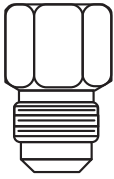
Brass Beaded Hose Barbs

Part Number	Hose I. D.	Pipe Thread	Part Number	Hose I. D.	Pipe Thread
208-4-2	1/4	1/8	208-8-6	1/2	3/8
208-4-4	1/4	1/4	208-8-8	1/2	1/2
208-6-2	3/8	1/8	208-10-8	5/8	1/2
208-6-4	3/8	1/4	208-12-12	3/4	3/4
208-6-6	3/8	3/8			



45° Brass Pipe Adapters

PIPE ADAPTERS (ALL)



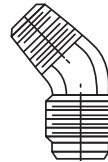
Male Flare x Female Pipe			
Part Number	Flare Size	Pipe Thread	
346-4-2	1/4	1/8	
346-4-4	1/4	1/4	
346-6-2	3/8	1/8	
346-6-4	3/8	1/4	
346-6-6	3/8	3/8	
346-8-6	1/2	3/8	
346-8-8	1/2	1/2	



Flare x Pipe		
Part Number	Flare Size	Pipe Thread
348-2-2	1/8	1/8
348-4-2	1/4	1/8
348-4-4	1/4	1/4
348-4-6	1/4	3/8
348-6-2	3/8	1/8
348-6-4	3/8	1/4
348-6-6	3/8	3/8
348-6-8	3/8	1/2
348-8-6	1/2	3/8
348-8-8	1/2	1/2
348-10-8	5/8	1/2
348-10-12	5/8	3/4
348-12-12	3/4	3/4

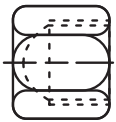


Flare x Pipe - 90°		
Part Number	Flare Size	Pipe Thread
349-4-2	1/4	1/8
349-4-4	1/4	1/4
349-6-2	3/8	1/8
349-6-4	3/8	1/4
349-6-6	3/8	3/8
349-8-6	1/2	3/8
349-8-8	1/2	1/2
349-10-8	5/8	1/2
349-12-12	3/4	3/4

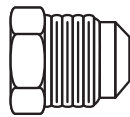


Flare x Pipe - 45°		
Part Number	Flare Size	Pipe Thread
347-4-2	1/4	1/8
347-4-4	1/4	1/4
347-6-4	3/8	1/4
347-6-6	3/8	3/8
347-8-6	1/2	3/8
347-8-8	1/2	1/2

37° Steel Pipe Adapters



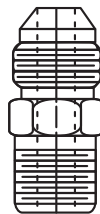
Cap Nut		
Part Number	Das Size	Flare Size
820-4	1/4	7/16-20
820-6	3/8	9/16-18
820-8	1/2	3/4-16



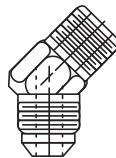
Plug		
Part Number	Das Size	Flare Size
821-4	1/4	7/16-20
821-6	3/8	9/16-18
821-8	1/2	3/4-16



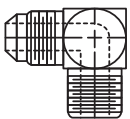
Union		
Part Number	Das Size	Flare Size
824-4	1/4	7/16-20
824-6	3/8	9/16-18
824-8	1/2	3/4-16



Flare x Pipe		
Part Number	Flare Size	Pipe Thread
816-4-2	1/4	1/8
816-4-4	1/4	1/4
816-6-4	3/8	1/4
816-6-6	3/8	3/8
816-8-6	1/2	3/8
816-8-8	1/2	1/2
816-12-12	3/4	3/4



Flare x Pipe - 45°		
Part Number	Flare Size	Pipe Thread
823-4-2	1/4	1/8
823-4-4	1/4	1/4
823-6-4	3/8	1/4
823-6-6	3/8	3/8
823-8-6	1/2	3/8
823-8-8	1/2	1/2
823-12-12	3/4	3/4



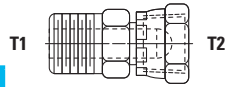
Flare x Pipe - 90°		
Part Number	Flare Size	Pipe Thread
822-4-2	1/4	1/8
822-4-4	1/4	1/4
822-6-4	3/8	1/4
822-6-6	3/8	3/8

Flare x Pipe - 90°		
Part Number	Flare Size	Pipe Thread
822-8-6	1/2	3/8
822-8-8	1/2	1/2
822-10-8	5/8	1/2
822-12-12	3/4	3/4

Steel Hydraulic Adapters

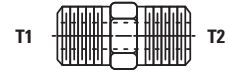


HYDRAULIC ADAPTERS (ALL)

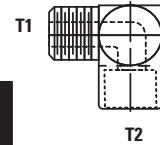


Male Pipe Adapter		
Part Number	T1	T2
708-2-2	1/8"	1/8"
708-2-4	1/8"	1/4"
708-4-4	1/4"	1/4"
708-4-6	1/4"	3/8"
708-6-4	3/8"	1/4"
708-6-6	3/8"	3/8"
708-6-8	3/8"	1/2"
708-8-4	1/2"	1/4"
708-8-6	1/2"	3/8"
708-8-8	1/2"	1/2"
708-12-8	3/4"	1/2"
708-12-12	3/4"	3/4"
708-12-16	3/4"	1"
708-16-12	1"	3/4"
708-16-16	1"	1"

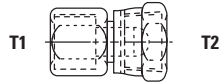
Male Pipe Coupling		
Part Number	T1	T2
751-2-2	1/8"	1/8"
751-4-2	1/4"	1/8"
751-4-4	1/4"	1/4"
751-6-6	3/8"	3/8"
751-8-8	1/2"	1/2"
751-12-12	3/4"	3/4"



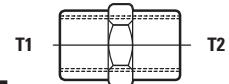
90° Street Elbow		
Part Number	T1	T2
754-2-2	1/8"	1/8"
754-4-2	1/4"	1/8"
754-4-4	1/4"	1/4"
754-6-6	3/8"	3/8"
754-8-8	1/2"	1/2"



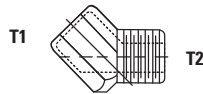
Female Pipe Adapter		
Part Number	T1	T2
709-2-2	1/8"	1/8"
709-4-4	1/4"	1/4"
709-6-6	3/8"	3/8"
709-8-8	1/2"	1/2"
709-12-12	3/4"	3/4"
709-16-16	1"	1"



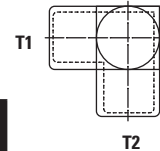
Female Union		
Part Number	T1	T2
750-2-2	1/8"	1/8"
750-4-2	1/4"	1/8"
750-4-4	1/4"	1/4"
750-6-6	3/8"	3/8"
750-8-8	1/2"	1/2"



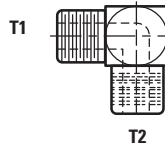
45° Street Elbow		
Part Number	T1	T2
755-2-2	1/8"	1/8"
755-4-4	1/4"	1/4"
755-6-6	3/8"	3/8"
755-8-8	1/2"	1/2"



90° Female Pipe		
Part Number	T1	T2
756-2-2	1/8"	1/8"
756-4-4	1/4"	1/4"
756-6-6	3/8"	3/8"
756-8-8	1/2"	1/2"



90° Male Pipe		
Part Number	T1	T2
759-2-2	1/4"	1/8"
759-4-4	1/4"	1/4"
759-6-6	3/8"	3/8"
759-8-8	1/2"	1/2"

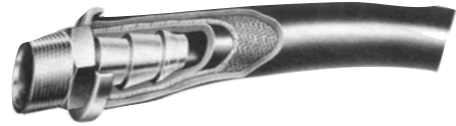




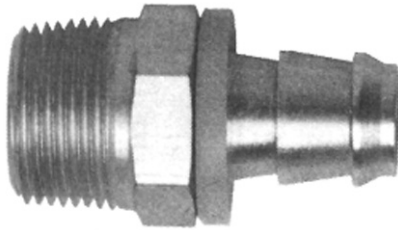
Push-Lok™ Hose Barbs

Parker®

The very best hose deserves the very best fittings! Parker Push-Lok Fittings are perfectly matched to Parker Push-Lok Hose to ensure a maximum service life. We recommend using only Parker Fittings with Parker Push-Lok Hose.

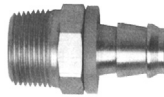


PUSH-LOK HOSE BARBS



Male Pipe Thread

Part Number	Hose I. D.	Pipe Thread
30182-2-4B	1/4"	1/8"
30182-4-4B	1/4"	1/4"
30182-4-6B	3/8"	1/4"
30182-6-6B	3/8"	3/8"
30182-8-6B	3/8"	1/2"
30182-6-8B	1/2"	3/8"
30182-8-8B	1/2"	1/2"
30182-12-8B	1/2"	3/4"
30182-8-10B	5/8"	1/2"
30182-12-12B	3/4"	3/4"



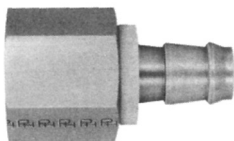
Male Pipe Swivel

Part Number	Hose I. D.	Pipe Thread
31382-4-4	1/4"	1/4"
31382-6-6	3/8"	3/8"
31382-8-8	1/2"	1/2"



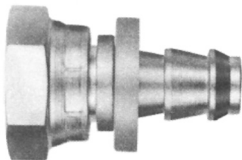
90° Female Swivel

Part Number	Hose I. D.	Pipe Thread	Fits Flare
33982-4-4	1/4"	7/16 - 20	37°/45°
33982-6-6	3/8"	9/16 - 18	37°
33982-8-8	1/2"	3/4 - 16	37°/45°



Female Pipe Swivel

Part Number	Hose I. D.	Pipe Thread
30282-4-4B	1/4"	1/4"
30282-6-6B	3/8"	3/8"
30282-8-8B	1/2"	1/2"



Female Pipe Ridge

Part Number	Hose I. D.	Pipe Thread
37G82-4-4	1/4"	1/4"
37G82-4-6	3/8"	1/4"
37G82-6-6	3/8"	3/8"
37G82-8-8	1/2"	1/2"
37G82-8-10	5/8"	1/2"
37G82-12-12	3/4"	3/4"



Hose Menders

Part Number	Hose I. D.
38282-4-4B	1/4"
38282-6-6B	3/8"
38282-8-8B	1/2"

Helical Thread Inserts



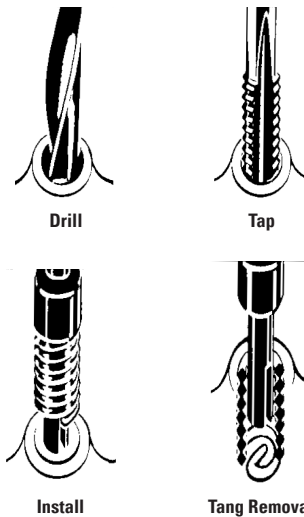
The insert system was devised as a simple method of repairing stripped or damaged threads in any metal or valuable parts. Inserts are also used in die castings and plastics where excessive stress on threads could cause damage or failure. Inserts are helical coils of diamond-shaped 18-8 stainless steel wire which meets or exceeds AMS-7245 specification. Inserts are sized to provide a precisely controlled interference fit in an oversize tapped hole. The tap used for this purpose is the same pitch as the original thread, but has a larger diameter. When the insert is installed, the hole is returned to its original size.

Because the insert provides an enlarged bearing area, the restored fastening is stronger than the original. It is also more durable, since the stainless steel thread is generally tougher than the original material. Inserts are corrosion resistant and their 22 micro-inch or better surface finish provides a smooth-running, wear-resistant fastening.

Inserts Only – UNC

Thread Size	Part Number	Length
1/4 – 20	RC03043	.375
1/4 – 20	RC03044	.500
3/8 – 16	RC03063	.563
3/8 – 16	RC03064	.750
1/2 – 13	RC03083	.750
1/2 – 13	RC03084	1.000
5/8 – 11	RC03103	.983
5/8 – 11	RC03104	1.250
3/4 – 10	RC03123	1.125
3/4 – 10	RC03124	1.500
1 – 8	RC03163	1.500
1 – 8	RC03164	2.000
1 1/8 – 7	RC03183	2.500
1 1/4 – 7	RC03203	2.500
1 3/8 – 6	RC03223	2.750
1 1/2 – 6	RC03243	3.000

Simple Installation:



HELICAL THREAD INSERTS



- 18-8 stainless steel
- Corrosion resistant
- 22 micro-inch or better surface finish provides a smooth running, wear-resistant fastening



Repair Kits - UNC

Kit includes: Inserts, Tap, Tool and Case

Thread Size	Part Number	Inserts per Kit
4 – 40	RC33540	12
5 – 40	RC33550	12
6 – 32	RC33560	12
8 – 32	RC33580	12
10 – 24	RC33600	12
12 – 24	RC33620	12
1/4 – 20	RC33040	12
5/16 – 18	RC33050	10
3/8 – 16	RC33060	10
7/16 – 14	RC33070	6
1/2 – 13	RC33080	6
9/16 – 12	RC33090	6
5/8 – 11	RC33100	6
3/4 – 10	RC33120	4
7/8 – 9	RC33140	6
1 – 8	RC33160	6
1 1/8 – 7	RC33180	5
1 1/4 – 7	RC33200	4
1 3/8 – 6	RC33220	4
1 1/2 – 6	RC33240	4

Inserts in kits are 1.5 times screw diameter in length.



Galvanized & Black Pipe Nipples

GALVANIZED & BLACK PIPE NIPPLES

Close Nipples			
Size	Close Length	Galvanized Part Number	Black Pipe Part Number
1/8"	3/4"	GNS2	BLNS2
1/4"	7/8"	GNS4	BLNS4
3/8"	1"	GNS6	BLNS6
1/2"	1 1/8"	GNS8	BLNS8
3/4"	1 3/8"	GNS12	BLNS12
1"	1 1/2"	GNS16	BLNS16
1 1/4"	1 5/8"	GNS20	BLNS20
1 1/2"	1 3/4"	GNS24	BLNS24
2"	2"	GNS32	BLNS32
1/8" Pipe			
Close		GNS2	BLNS2
1 1/2"		GNL215	BLNL215
2"		GNL220	BLNL220
2 1/2"		GNL225	BLNL225
3"		GNL230	BLNL230
3 1/2"		GNL235	BLNL235
4"		GNL240	BLNL240
4 1/2"		GNL245	BLNL245
5"		GNL250	BLNL250
5 1/2"		GNL255	BLNL255
6"		GNL260	BLNL260
7"		GNL270	BLNL270
8"		GNL280	BLNL280
9"		GNL290	BLNL290
10"		GNL2100	BLNL2100
12"		GNL2120	BLNL2120
1/4" Pipe			
Close		GNS4	BLNS4
1 1/2"		GNL415	BLNL415
2"		GNL420	BLNL420
2 1/2"		GNL425	BLNL425
3"		GNL430	BLNL430
3 1/2"		GNL435	BLNL435
4"		GNL440	BLNL440
4 1/2"		GNL445	BLNL445
5"		GNL450	BLNL450
5 1/2"		GNL455	BLNL455
6"		GNL460	BLNL460
7"		GNL470	BLNL470
8"		GNL480	BLNL480
9"		GNL490	BLNL490
10"		GNL4100	BLNL4100
11"		GNL4110	BLNL4110
12"		GNL4120	BLNL4120
3/8" Pipe			
Close		GNS6	BLNS6
1 1/2"		GNL615	BLNL615
2"		GNL620	BLNL620
2 1/2"		GNL625	BLNL625
3"		GNL630	BLNL630
3 1/2"		GNL635	BLNL635
4"		GNL640	BLNL640
4 1/2"		GNL645	BLNL645
5"		GNL650	BLNL650
5 1/2"		GNL655	BLNL655
6"		GNL660	BLNL660
8"		GNL680	BLNL680



1/2" Pipe		
Length	Galvanized Part Number	Black Pipe Part Number
Close	GNS8	BLNS8
1 1/2"	GNL815	BLNL815
2"	GNL820	BLNL820
2 1/2"	GNL825	BLNL825
3"	GNL830	BLNL830
3 1/2"	GNL835	BLNL835
4"	GNL840	BLNL840
4 1/2"	GNL845	BLNL845
5"	GNL850	BLNL850
5 1/2"	GNL855	BLNL855
6"	GNL860	BLNL860
7"	GNL870	
12"	GNL8120	
3/4" Pipe		
Close	GNS12	BLNS12
1 1/2"	GNL1215	BLNL1215
2"	GNL1220	BLNL1220
2 1/2"	GNL1225	BLNL1225
3"	GNL1230	BLNL1230
3 1/2"	GNL1235	BLNL1235
4"	GNL1240	BLNL1240
4 1/2"	GNL1245	BLNL1245
5"	GNL1250	BLNL1250
5 1/2"	GNL1255	BLNL1255
6"	GNL1260	BLNL1260
8"	GNL1280	
1" Pipe		
Close	GNS16	BLNS16
2"	GNL1620	BLNL1620
2 1/2"	GNL1625	BLNL1625
3"	GNL1630	BLNL1630
3 1/2"	GNL1635	BLNL1635
4"	GNL1640	BLNL1640
4 1/2"	GNL1645	BLNL1645
5"	GNL1650	BLNL1650
5 1/2"	GNL1655	BLNL1655
6"	GNL1660	BLNL1660
1 1/4" Pipe		
Close	GNS20	BLNS20
2"	GNL2020	BLNL2020
2 1/2"	GNL2025	BLNL2025
3"	GNL2030	BLNL2030
3 1/2"	GNL2035	BLNL2035
4"	GNL2040	BLNL2040
4 1/2"	GNL2045	BLNL2045
5"	GNL2050	BLNL2050
5 1/2"	GNL2055	BLNL2055
6"	GNL2060	BLNL2060
1 1/2" Pipe		
Close	GNS24	BLNS24
2"	GNL2420	BLNL2420
2 1/2"	GNL2425	BLNL2425
3"	GNL2430	BLNL2430
3 1/2"	GNL2435	BLNL2435
4"	GNL2440	BLNL2440
4 1/2"	GNL2445	BLNL2445
5"	GNL2450	BLNL2450
5 1/2"	GNL2455	BLNL2455



Galvanized & Black Pipe Fittings



GALVANIZED & BLACK PIPE FITTINGS



Tees

Size	Galvanized Part Number	Black Part Number
1/8"	GPT2	BLPT2
1/4"	GPT4	BLPT4
3/8"	GPT6	BLPT6
1/2"	GPT8	BLPT8
3/4"	GPT12	BLPT12
1"	GPT16	BLPT16
1 1/4"	GPT20	BLPT20
1 1/2"	GPT24	BLPT24
2"	GPT32	BLPT32



Square Head Plugs

Size	Galvanized Part Number	Black Part Number
1/8"	GSP2	BLSP2
1/4"	GSP4	BLSP4
3/8"	GSP6	BLSP6
1/2"	GSP8	BLSP8
3/4"	GSP12	BLSP12
1"	GSP16	BLSP16
1 1/4"	GSP20	BLSP20



Reduced Couplings

Size	Galvanized Part Number	Black Part Number
1/4 x 1/8"	GRC4-2	BLRC4-2
3/8 x 1/8"	GRC6-2	BLRC6-2
3/8 x 1/4"	GRC6-4	BLRC6-4
1/2 x 1/8"	GRC8-2	BLRC8-2
1/2 x 1/4"	GRC8-4	BLRC8-4
1/2 x 3/8"	GRC8-6	BLRC8-6
3/4 x 1/4"	GRC12-4	BLRC12-4
3/4 x 3/8"	GRC12-6	BLRC12-6
3/4 x 1/2"	GRC12-8	BLRC12-8
1 x 1/2"	GRC16-8	BLRC16-8
1 x 3/4"	GRC16-12	BLRC16-12
1 1/4 x 1/2"	GRC20-8	BLRC20-8
1 1/4 x 3/4"	GRC20-12	BLRC20-12
1 1/4 x 1"	GRC20-16	BLRC20-16
1 1/2 x 1/2"	GRC24-8	BLRC24-8
1 1/2 x 3/4"	GRC24-12	BLRC24-12
1 1/2 x 1"	GRC24-16	BLRC24-16
1 1/2 x 1 1/4"	GRC24-20	BLRC24-20
2 x 1"	GRC32-16	BLRC32-16
2 x 1 1/4"	GRC32-20	BLRC32-20
2 x 1 1/2"	GRC32-24	BLRC32-24



Hex Bushings

Size	Galvanized Part Number	Black Part Number
Machined		
1/4 x 1/8"	GPBM4-2	BLPBM4-2
3/8 x 1/8"	GPBM6-2	BLPBM6-2
3/8 x 1/4"	GPBM6-4	BLPBM6-4
Malleable		
3/8 x 1/4"	GPB6-4	
1/2 x 1/8"	GPB8-2	BLPB8-2
1/2 x 1/4"	GPB8-4	BLPB8-4
1/2 x 3/8"	GPB8-6	BLPB8-6
3/4 x 1/8"	GPB12-2	
3/4 x 1/4"	GPB12-4	BLPB12-4
3/4 x 3/8"	GPB12-6	BLPB12-6
3/4 x 1/2"	GPB12-8	BLPB12-8
1 x 3/8"	GPB16-6	BLPB16-6
1 x 1/2"	GPB16-8	BLPB16-8
1 x 3/4"	GPB16-12	BLPB16-12
1 1/4 x 3/8"	GPB20-6	
1 1/4 x 1/2"	GPB20-8	BLPB20-8
1 1/4 x 3/4"	GPB20-12	BLPB20-12
1 1/4 x 1"	GPB20-16	BLPB20-16
1 1/2 x 1/2"	GPB24-8	BLPB24-8
1 1/2 x 3/4"	GPB24-12	BLPB24-12
1 1/2 x 1"	GPB24-16	BLPB24-16
1 1/2 x 1 1/4"	GPB24-20	BLPB24-20
2 x 1/2"	GPB32-8	BLPB32-8
2 x 3/4"	GPB32-12	BLPB32-12
2 x 1"	GPB32-16	BLPB32-16
2 x 1 1/4"	GPB32-20	BLPB32-20
2 x 1 1/2"	GPB32-24	BLPB32-24

E



Galvanized & Black Pipe Fittings

GALVANIZED & BLACK PIPE FITTINGS

90° Street Elbows

Size	Galvanized Part Number	Black Part Number
1/8"	GE9S2-2	BLE9S2-2
1/4"	GE9S4-4	BLE9S4-4
3/8"	GE9S6-6	BLE9S6-6
1/2"	GE9S8-8	BLE9S8-8
3/4"	GE9S12-12	BLE9S12-12
1"	GE9S16-16	BLE9S16-16
1 1/4"	GE9S20-20	BLE9S20-20
1 1/2"	GE9S24-24	BLE9S24-24
2"	GE9S32-32	BLE9S32-32



45° Street Elbows

Size	Galvanized Part Number	Black Part Number
1/8"	GE4S2-2	BLE4S2-2
1/4"	GE4S4-4	BLE4S4-4
3/8"	GE4S6-6	BLE4S6-6
1/2"	GE4S8-8	BLE4S8-8
3/4"	GE4S12-12	BLE4S12-12
1"	GE4S16-16	BLE4S16-16
1 1/4"	GE4S20-20	BLE4S20-20
1 1/2"	GE4S24-24	BLE4S24-24
2"	GE4S32-32	BLE4S32-32



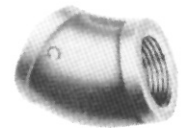
90° Elbows

Size	Galvanized Part Number	Black Part Number
1/8"	GE9-2-2	BLE9-2-2
1/4"	GE9-4-4	BLE9-4-4
3/8 x 1/4"	GE9-6-4	BLE9-6-4
3/8"	GE9-6-6	BLE9-6-6
1/2 x 3/8"	GE9-8-6	BLE9-8-6
1/2"	GE9-8-8	BLE9-8-8
3/4 x 1/2"	GE9-12-8	BLE9-12-8
3/4"	GE9-12-12	BLE9-12-12
1 x 3/4"	GE9-16-12	BLE9-16-12
1"	GE9-16-16	BLE9-16-16
1 1/4 x 1"	GE9-20-16	BLE9-20-16
1 1/4"	GE9-20-20	BLE9-20-20
1 1/2 x 1 1/4"	GE9-24-20	BLE9-24-20
1 1/2"	GE9-24-24	BLE9-24-24
2 x 1 1/2"	GE9-32-24	BLE9-32-24
2"	GE9-32-32	BLE9-32-32



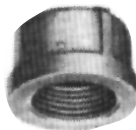
45° Elbows

Size	Galvanized Part Number	Black Part Number
1/8"	GE4-2-2	BLE4-2-2
1/4"	GE4-4-4	BLE4-4-4
3/8"	GE4-6-6	BLE4-6-6
1/2"	GE4-8-8	BLE4-8-8
3/4"	GE4-12-12	BLE4-12-12
1"	GE4-16-16	BLE4-16-16
1 1/4"	GE4-20-20	BLE4-20-20
1 1/2"	GE4-24-24	BLE4-24-24
2"	GE4-32-32	BLE4-32-32



Pipe Caps

Size	Galvanized Part Number	Black Part Number
1/8"	GPCA2	BLCA2
1/4"	GPCA4	BLCA4
3/8"	GPCA6	BLCA6
1/2"	GPCA8	BLCA8
3/4"	GPCA12	BLCA12
1"	GPCA16	BLCA16
1 1/4"	GPCA20	BLCA20
1 1/2"	GPCA24	BLCA24
2"	GPCA32	BLCA32



Pipe Cross

Size	Galvanized Part Number	Black Part Number
1/8"	GCR2	BLCR2
1/4"	GCR4	BLCR4
3/8"	GCR6	BLCR6
1/2"	GCR8	BLCR8
3/4"	GCR12	BLCR12
1"	GCR16	BLCR16
1 1/4"	GCR20	BLCR20
1 1/2"	GCR24	BLCR24
2"	GCR32	BLCR32



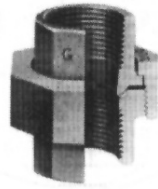
Galvanized & Black Pipe Fittings



GALVANIZED & BLACK PIPE FITTINGS

Pipe Unions - 150 lb.

Size	Galvanized Part Number	Black Part Number
1/8"	GPU2	BLPU2
1/4"	GPU4	BLPU4
3/8"	GPU6	BLPU6
1/2"	GPU8	BLPU8
3/4"	GPU12	BLPU12
1"	GPU16	BLPU16
1 1/4"	GPU20	BLPU20
1 1/2"	GPU24	BLPU24
2"	GPU32	BLPU32



Pipe Coupling

Size	Galvanized Part Number	Black Part Number
1/8"	GPC2-2	BLPC2-2
1/4"	GPC4-4	BLPC4-4
3/8"	GPC6-6	BLPC6-6
1/2"	GPC8-8	BLPC8-8
3/4"	GPC12-12	BLPC12-12
1"	GPC16-16	BLPC16-16
1 1/4"	GPC20-20	BLPC20-20
1 1/2"	GPC24-24	BLPC24-24
2"	GPC32-32	BLPC32-32



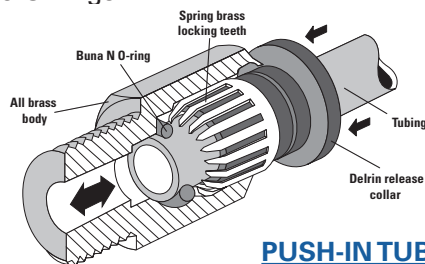
Push-in Tube Fittings

Features

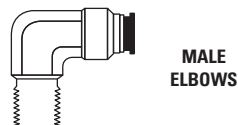
- Easy one-piece connection
- No tools or extra components needed to connect fitting
- Fittings designed to work with polyurethane, nylon and polyethylene tubing
- Reduced assembly time...up to 75% savings compared to compression fittings
- Automatically locks and seals to max. working pressure
- Wide-release collar allows fast and easy removal of tubing for line checks
- Positive gripping-action of locking teeth allows tubing to withstand vibration with or without pressure
- Because there is no nut, fittings can be closely mounted
- Unrestricted tube I.D. allows for maximum airflow
- Poly-matic fittings are fully reusable
- Silicon-free O-rings

Specifications

- Working pressure: From 27" Hg to 250 PSI
- Working temperature: -40°F to +200°F
- Materials: Brass body, spring brass locking teeth, oil-resistant Buna-N O-ring, tough Delrin release collar
- Fluid applications: Compressed air, oil, water or other non-corrosive liquids
- To connect tubing - simply push the tubing into the fitting until it bottoms; to remove tubing - push in release collar; while pressing on collar, pull tubing out.



PUSH-IN TUBE FITTINGS



MALE ELBOWS

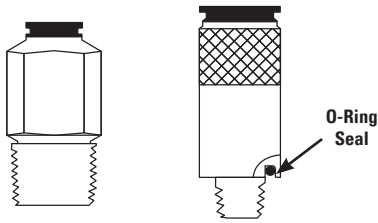
Male Elbows

Tube OD	Pipe Thread	Part Number
5/32	10-32 UNF	55010
5/32	1/8	56912
5/32	1/4	56914
1/4	1/8	56942
1/4	1/4	56944
3/8	1/4	56964
3/8	3/8	56966
1/2	3/8	56986
1/2	1/2	56988

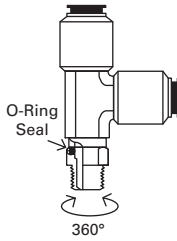


Push-In Tube Fittings

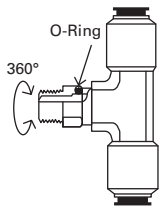
PUSH-IN TUBE FITTINGS



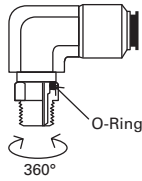
MALE CONNECTORS



MALE SWIVEL RUN TEE



MALE SWIVEL BRANCH TEE



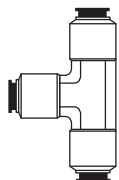
360° SWIVEL ELBOWS



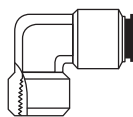
UNION REDUCER



STRAIGHT UNION



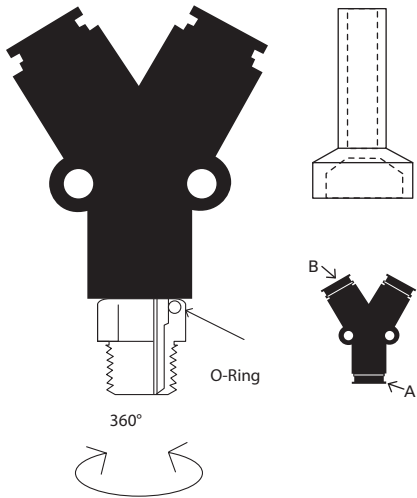
UNION TEE



FEMALE ELBOW

Tube O.D.	Pipe Thread	Part Number
Male Connectors		
5/32	10/32 UNF	56810
5/32	1/8	56812
5/32	1/4	56814
1/4	10/32 UNF	56840
1/4	1/8	56842
1/4	1/4	56844
1/4	3/8	56846
3/8	1/4	56864
3/8	3/8	56866
3/8	1/2	56868
1/2	3/8	56886
1/2	1/2	56888
Male Swivel Run Tee		
1/4	1/8	57142
1/4	1/4	57144
3/8	3/8	57164
1/2	1/2	57188
Male Swivel Branch Tee		
1/4	1/8	57242
1/4	1/4	57244
360° Swivel Elbows		
5/32	1/8	57912
5/32	1/4	57914
1/4	1/8	57942
1/4	1/4	57944
1/4	3/8	57946
3/8	1/4	57964
3/8	3/8	57966
1/2	3/8	57986
1/2	1/2	57988
Union Reducer		
1/4	1/8	59742
1/4	5/32	59741
3/8	1/4	59764
1/2	3/8	59786
Straight Union		
5/32	—	56211
1/4	—	56244
3/8	—	56266
1/2	—	56288
Union Tee		
1/4	—	56444
3/8	—	56466
Female Elbow		
1/4	1/8	57042
1/4	1/4	57044
3/8	1/4	57064

Push-In Tube Fittings



Tube O.D.	Pipe Thread	Part Number
Branch "Y"		
5/32	1/8	54312
3/8	3/8	54366
Plug		
1/8	—	52620
5/32	—	52610
1/4	—	52640
3/8	—	52660
1/2	—	52680
Union "Y"		
5/32 (3 PT)	5/32	54011
1/4 (3 PT)	5/32	54114
1/4 (3 PT)	1/4	54144

Cam & Groove Couplings

- Very low cost
- Interchangeable with other brands
- For use with pneumatic conveying and low pressure liquids
-20° to 200°F
- Special seals may be required for oils and aromatics; please consult DME when ordering



Type A



Type B

Size	Aluminum	Brass	Stainless
3/4"	A75AL	A75BR	A75SS
1"	A1AL	A1BR	A1SS
1 1/4"	A125AL	A125BR	A125SS
1 1/2"	A150AL	A150BR	A150SS
2"	A2AL	A2BR	A2SS
2 1/2"	A250AL	A250BR	A250SS
3"	A3AL	A3BR	A3SS
4"	A4AL	A4BR	A4SS
5"	A5AL	A5BR	
6"	A6AL	A6BR	
3/4"	B75AL	B75BR	B75SS
1"	B1AL	B1BR	B1SS
1 1/4"	B125AL	B125BR	B125SS
1 1/2"	B150AL	B150BR	B150SS
2"	B2AL	B2BR	B2SS
2 1/2"	B250AL	B250BR	B250SS
3"	B3AL	B3BR	B3SS
4"	B4AL	B4BR	B4SS
5"	B5AL	B5BR	
6"	B6AL	B6BR	

CAM & GROOVE COUPLINGS

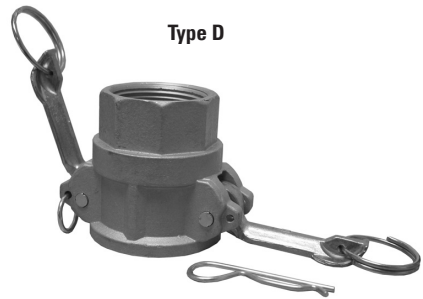


Cam & Groove Couplings

CAM & GROOVE COUPLINGS



Type C



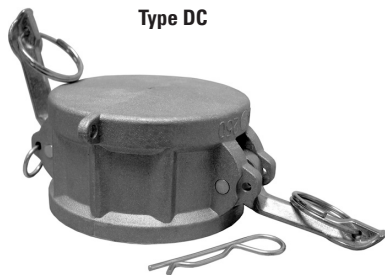
Type D



Type E



Type F



Type DC

Size	Aluminum	Brass	Stainless
3/4"	C75AL	C75BR	C75SS
1"	C1AL	C1BR	C1SS
1 1/4"	C125AL	C125BR	C125SS
1 1/2"	C150AL	C150BR	C150SS
2"	C2AL	C2BR	C2SS
2 1/2"	C250AL	C250BR	C250SS
3"	C3AL	C3BR	C3SS
4"	C4AL	C4BR	C4SS
5"	C5AL	C5BR	
6"	C6AL	C6BR	
3/4"	D75AL	D75BR	D75SS
1"	D1AL	D1BR	D1SS
1 1/4"	D125AL	D125BR	D125SS
1 1/2"	D150AL	D150BR	D150SS
2"	D2AL	D2BR	D2SS
2 1/2"	D250AL	D250BR	D250SS
3"	D3AL	D3BR	D3SS
4"	D4AL	D4BR	D4SS
5"	D5AL	D5BR	
6"	D6AL	D6BR	
3/4"	E75AL	E75BR	E75SS
1"	E1AL	E1BR	E1SS
1 1/4"	E125AL	E125BR	E125SS
1 1/2"	E150AL	E150BR	E150SS
2"	E2AL	E2BR	E2SS
2 1/2"	E250AL	E250BR	E250SS
3"	E3AL	E3BR	E3SS
4"	E4AL	E4BR	E4SS
5"	E5AL	E5BR	
6"	E6AL	E6BR	
3/4"	F75AL	F75BR	F75SS
1"	F1AL	F1BR	F1SS
1 1/4"	F125AL	F125BR	F125SS
1 1/2"	F150AL	F150BR	F150SS
2"	F2AL	F2BR	F2SS
2 1/2"	F250AL	F250BR	F250SS
3"	F3AL	F3BR	F3SS
4"	F4AL	F4BR	F4SS
5"	F5AL	F5BR	
6"	F6AL	F6BR	
3/4"	DC75AL	DC75BR	DC75SS
1"	DC1AL	DC1BR	DC1SS
1 1/4"	DC125AL	DC125BR	DC125SS
1 1/2"	DC150AL	DC150BR	DC150SS
2"	DC2AL	DC2BR	DC2SS
2 1/2"	DC250AL	DC250BR	DC250SS
3"	DC3AL	DC3BR	DC3SS
4"	DC4AL	DC4BR	DC4SS
5"	DC5AL	DC5BR	
6"	DC6AL	DC6BR	

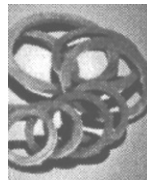
Cam & Groove Couplings



Type DP



Size	Aluminum	Brass	Stainless
3/4"	DP75AL	DP75BR	DP75SS
1"	DP1AL	DP1BR	DP1SS
1 1/4"	DP125AL	DP125BR	DP125SS
1 1/2"	DP150AL	DP150BR	DP150SS
2"	DP2AL	DP2BR	DP2SS
2 1/2"	DP250AL	DP250BR	DP250SS
3"	DP3AL	DP3BR	DP3SS
4"	DP4AL	DP4BR	DP4SS
5"	DP5AL	DP5BR	
6"	DP6AL	DP6BR	



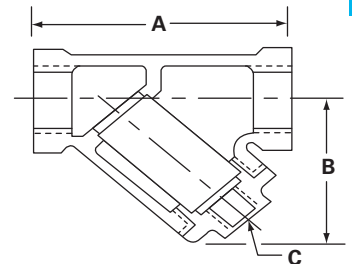
Gaskets

Size	Part Number	Size	Part Number
3/4"	CGG034	2-1/2"	CGG212
1"	CGG100	3"	CGG300
1-1/4"	CGG114	4"	CGG400
1-1/2"	CGG112	5"	CGG500
2"	CGG200	6"	CGG600

Bronze "Y" Pattern Strainer

E

Y-strainers are constructed of heavy-duty bronze. They have a 20 mesh 304 stainless steel screen in sizes "-2" and a 1/16" perforated strainer in 2" and 3". The bronze retainer cap is gasketed and tapped for a closure plug (closure plug furnished). Install strainers upstream to protect valves, regulators, and meters, etc. from rust, pipe scale and dirt. Self cleaning can be accomplished by opening the valve or plug connected to the blow-off outlet.



- Y pattern body
- 304 stainless steel screen
- 300 PSI WOG non-shock
- Screwed cap and plug
- Threaded ends
- 150 PSI saturated steam

Part	Specifications
Body	Bronze
Cap	Bronze
Screen	Type 304 S.S.

Part Number	Thread Size	A	B	C (NPT)	Replacement Strainers
					Part Number
BYS523	1/2"	2.94	2.95	1/4"	BYS523R
BYS524	3/4"	3.38	3.37	1/4"	BYS524R
BYS525	1"	4.13	3.97	3/8"	BYS525R
BYS526	1-1/4"	4.82	4.55	3/8"	BYS526R
BYS527	1-1/2"	5.38	4.94	1/2"	BYS527R
BYS528	2"	6.63	6.25	1/2"	BYS528R
BYS529	2-1/2"	9.00	7.5	1-1/4"	BYS529R
BYS530	3"	10.00	8.5	1-1/2"	BYS530R

BRONZE Y PATTERN STRAINER

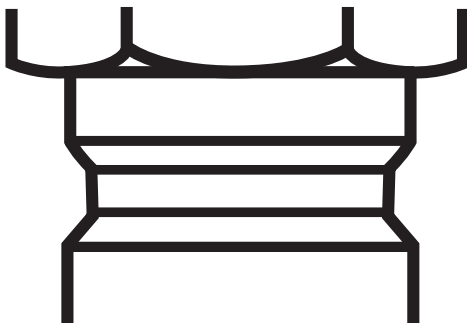


Split Flange Adapters

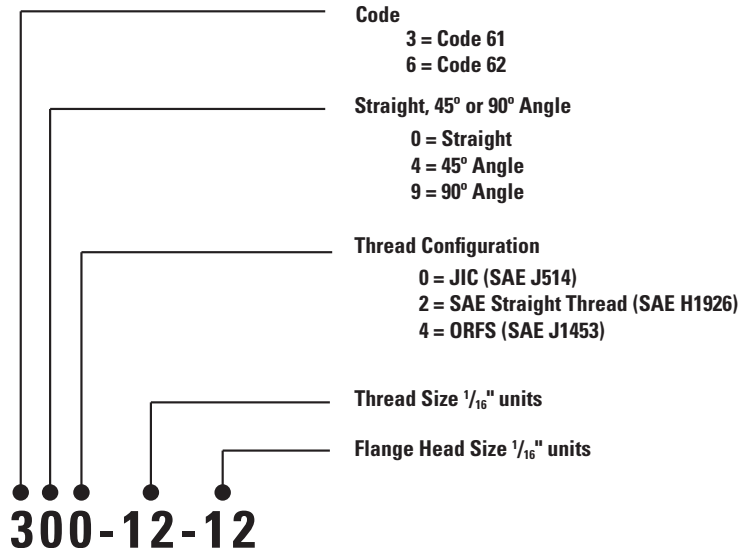
- One-piece carbon steel construction simplifies installation, eliminates potential leak points
- Zinc dichromate finish for high corrosion resistance
- Compact design simplifies assembly
- Optional thread configurations - BSPP and NPTF (call DME for availability)

JIC Thread					
Part Number	Tube O.D.	Flange Size	A	B	Thread
Code 61					
300-8-8	1/2	1/2	2.60	1.188	3/4-16
300-8-12	1/2	3/4	2.75	1.500	3/4-16
300-12-12	3/4	3/4	2.75	1.500	1 1/16-12
300-16-12	1	3/4	2.75	1.500	1 5/16-12
300-12-16	3/4	1	2.80	1.750	1 1/16-12
300-16-16	1	1	2.80	1.750	1 5/16-12
300-20-16	1 1/4	1	2.80	1.750	1 5/8-12
300-16-20	1	1 1/4	2.80	2.000	1 5/16-12
300-20-20	1 1/4	1 1/4	2.80	2.000	1 5/8-12
300-24-20	1 1/2	1 1/4	3.40	2.000	1 7/8-12
300-20-24	1 1/4	1 1/2	3.50	2.375	1 5/8-12
300-24-24	1 1/2	1 1/2	3.50	2.375	1 7/8-12
300-32-24	2	1 1/2	4.20	2.375	2 1/2-12
300-24-32	1 1/2	2	3.73	2.812	1 7/8-12
300-32-32	2	2	3.98	2.812	2 1/2-12
Code 62					
600-12-12	3/4	3/4	2.75	1.625	1 1/16-12
600-16-12	1	3/4	2.75	1.625	1 5/16-12
600-12-16	3/4	1	2.80	1.875	1 1/16-12
600-16-16	1	1	2.80	1.875	1 5/16-12
600-20-16	1 1/4	1	2.80	1.875	1 5/8-12
600-16-20	1	1 1/4	3.05	2.125	1 5/16-12
600-20-20	1 1/4	1 1/4	3.05	2.125	1 5/8-12
600-24-20	1 1/2	1 1/4	3.30	2.125	1 7/8-12
600-20-24	1 1/4	1 1/2	3.50	2.500	1 5/8-12
600-24-24	1 1/2	1 1/2	3.50	2.500	1 7/8-12
600-32-24	2	1 1/2	4.94	2.500	2 1/2-12
600-24-32	1 1/2	2	3.98	3.125	1 7/8-12
600-32-32	2	2	4.23	3.125	2 1/2-12

SPLIT FLANGE ADAPTERS-JIS



Ordering System:



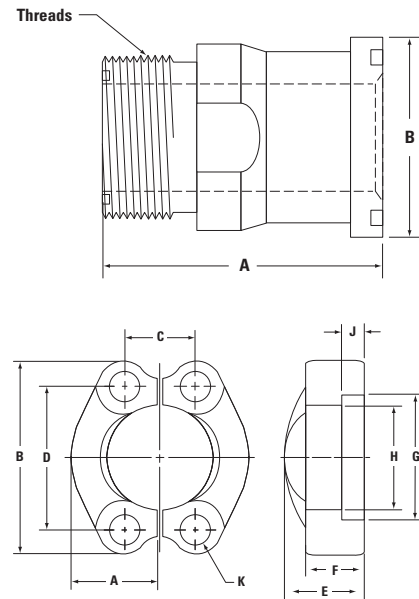
Split Flange Adapters



ORFS Thread

Part Number	Tube O.D.	Flange Size	A	B	Thread
Code 61					
304-12-12	3/4	3/4	2.75	1.500	1 3/16-12
304-16-12	1	3/4	2.75	1.500	1 7/16-12
304-12-16	3/4	1	2.80	1.750	1 3/16-12
304-16-16	1	1	2.80	1.750	1 7/16-12
304-20-16	1 1/4	1	2.80	1.750	1 11/16-12
304-16-20	1	1 1/4	2.80	2.000	1 7/16-12
304-20-20	1 1/4	1 1/4	2.80	2.000	1 11/16-12
304-24-20	1 1/2	1 1/4	3.20	2.000	2-12
304-20-24	1 1/4	1 1/2	3.50	2.375	1 11/16-12
304-24-24	1 1/2	1 1/2	3.50	2.375	2-12
304-24-32	1 1/2	2	3.33	2.812	2-12
Code 62					
604-8-8	1/2	1/2	2.58	1.250	1 3/16-16
604-12-12	3/4	3/4	2.75	1.625	1 3/16-12
604-16-12	1	3/4	2.75	1.625	1 7/16-12
604-12-16	3/4	1	2.80	1.875	1 3/16-12
604-16-16	1	1	2.80	1.875	1 7/16-12
604-20-16	1 1/4	1	3.20	1.875	1 11/16-12
604-16-20	1	1 1/4	3.05	2.125	1 7/16-12
604-20-20	1 1/4	1 1/4	3.05	2.125	1 11/16-12
604-24-20	1 1/2	1 1/4	3.30	2.125	2-12
604-20-24	1 1/4	1 1/2	3.50	2.500	1 11/16-12
604-24-24	1 1/2	1 1/2	3.50	2.500	2-12
604-24-32	1 1/2	2	3.581	3.125	2-12

SPLIT FLANGE ADAPTERS-ORFS



CONTACT US

Split Flange Kits

Flange Half No.	*KIT	Flange Size	A	B	D	E	F	G	H	J	K	O-Ring	HHCS
Code 61													
8SF-2	8SFO	0.50	0.86	2.12	1.50	0.75	0.5	1.22	0.96	0.245	0.344	210	5/16-18 x 1.25
12SF-2	12SFO	0.75	0.98	2.56	1.88	0.88	0.56	1.53	1.27	0.245	0.406	214	3/8-16 x 1.25
16SF-2	16SFO	1.00	1.11	2.75	2.06	0.94	0.62	1.78	1.52	0.295	0.406	219	3/8-16 x 1.25
20SF-2	20SFO	1.25	1.39	3.12	2.31	0.88	0.56	2.03	1.72	0.295	0.469	222	7/16-14 x 1.50
24SF-2	24SFO	1.50	1.58	3.69	2.75	1.00	0.62	2.41	2.00	0.295	0.531	225	1/2-13 x 1.50
32SF-2	32SFO	2.00	1.86	4.00	3.06	1.03	0.62	2.84	2.47	0.355	0.531	228	1/2-13 x 1.50
40SF-2	40SFO	2.50	2.09	4.50	3.50	1.50	0.75	3.34	2.95	0.355	0.531	232	1/2-13 x 1.75
48SF-2	48SFO	3.00	2.53	5.31	4.19	1.62	0.88	4.03	3.58	0.355	0.656	237	5/8-11 x 1.75
56SF-2	56SFO	3.50	2.70	6.00	4.75	1.12	0.88	4.53	4.03	0.422	0.656	241	5/8-11 x 2.00
64SF-2	64SFO	4.00	2.95	6.38	5.13	1.38	1.00	5.03	4.53	0.422	0.656	245	5/8-11 x 2.00
Code 62													
8SFX-2	8SFXO	0.50	0.89	2.22	1.59	0.88	0.62	1.28	.970	0.285	0.344	210	5/16-18 x 1.25
12SFX-2	12SFXO	0.75	1.14	2.81	2.00	1.12	0.75	1.66	1.28	0.325	0.406	214	3/8-16 x 1.50
16SFX-2	16SFXO	1.00	1.33	3.19	2.25	1.31	0.94	1.91	1.53	0.355	0.469	219	7/16-14 x 1.75
20SFX-2	20SFXO	1.25	1.48	3.75	2.63	1.50	1.06	2.16	1.75	0.385	0.531	222	1/2-13 x 1.75
24SFX-2	24SFXO	1.50	1.83	4.44	3.13	1.69	1.19	2.53	2.03	0.475	0.656	225	5/8-11 x 2.25
32SFX-2	32SFXO	2.00	2.20	5.25	3.81	2.06	1.44	3.16	2.66	0.475	0.781	228	3/4-10 x 2.75

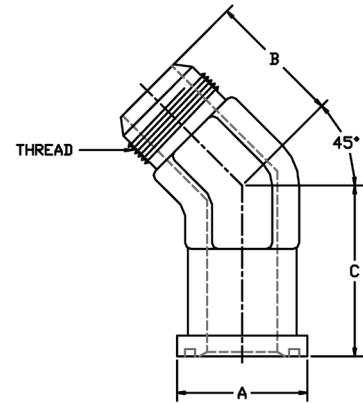
* Kit includes (2) split flange halves, (4) hex head bolts & lock washers and (1) Buna N o-ring.



Split Flange Adapters

45° JIC Thread

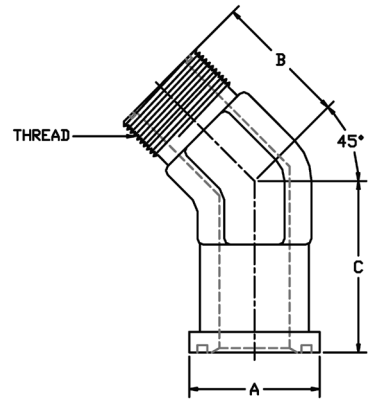
Part Number	Tube O.D.	Flange Size	A	B	C	Thread
CODE 61						
340-12-12	3/4	3/4	1.500	1.28	1.58	1 1/16-12
340-16-16	1	1	1.750	1.47	1.85	1 5/16-12
340-20-20	1 1/4	1 1/4	2.000	1.59	2.04	1 5/8-12
340-24-24	1 1/2	1 1/2	2.375	1.78	2.38	1 7/8-12
340-32-32	2	2	2.812	2.22	3.00	2 1/2-12
CODE 62						
640-12-12	3/4	3/4	1.625	1.28	1.58	1 1/16-12
640-16-16	1	1	1.875	1.47	1.85	1 5/16-12
640-20-20	1 1/4	1 1/4	2.125	1.59	2.04	1 5/8-12
640-24-24	1 1/2	1 1/2	2.500	1.78	2.38	1 7/8-12
640-32-32	2	2	3.125	2.22	3.00	2 1/2-12



SPLIT FLANGE ADAPTERS-JIS

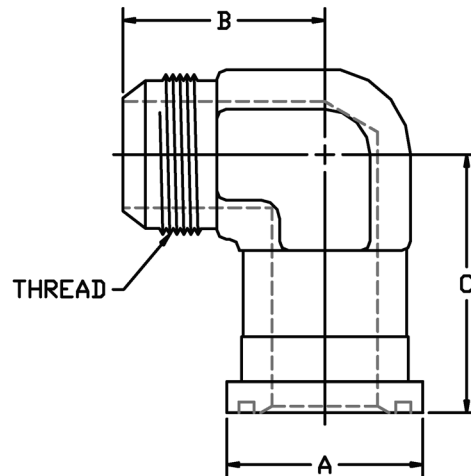
45° ORFS Thread

Part Number	Tube O.D.	Flange Size	A	B	C	Thread
CODE 61						
344-12-12	3/4	3/4	1.500	1.28	1.58	1 3/16-12
344-16-16	1	1	1.750	1.47	1.85	1 7/16-12
344-20-20	1 1/4	1 1/4	2.000	1.59	2.04	1 11/16-12
344-24-24	1 1/2	1 1/2	2.375	1.78	2.38	2-12
CODE 62						
644-12-12	3/4	3/4	1.625	1.28	1.58	1 3/16-12
644-16-16	1	1	1.875	1.47	1.85	1 7/16-12
644-20-20	1 1/4	1 1/4	2.125	1.59	2.04	1 11/16-12
644-24-24	1 1/2	1 1/2	2.500	1.78	2.38	2-12



SPLIT FLANGE ADAPTERS-ORFS

Split Flange Adapters



90° JIC Thread

Part Number	Tube O.D.	Flange Size	A	B	C	Thread
CODE 61						
390-8-12	1/2	3/4	1.500	1.660	2.130	3/4-16
390-12-12	3/4	3/4	1.500	1.660	2.130	1 1/16-12
390-16-12	1	3/4	1.500	1.660	2.130	1 5/16-12
390-12-16	3/4	1	1.750	1.810	2.370	1 1/16-12
390-16-16	1	1	1.750	1.810	2.370	1 5/16-12
390-20-16	1 1/4	1	1.750	1.810	2.370	1 5/8-12
390-16-20	1	1 1/4	2.000	2.060	2.620	1 5/16-12
390-20-20	1 1/4	1 1/4	2.000	2.060	2.620	1 5/8-12
390-20-24	1 1/4	1 1/2	2.375	2.330	3.150	1 5/8-12
390-24-24	1 1/2	1 1/2	2.375	2.330	3.150	1 7/8-12
390-32-24	2	1 1/2	2.375	2.330	3.150	2 1/2-12
390-24-32	1 1/2	2	2.812	3.060	4.250	1 7/8-12
390-32-32	2	2	2.812	3.060	4.250	2 1/2-12
CODE 62						
690-12-12	3/4	3/4	1.625	1.660	2.130	1 1/16-12
690-16-12	1	3/4	1.625	1.660	2.130	1 5/16-12
690-12-16	3/4	1	1.875	1.810	2.370	1 1/16-12
690-16-16	1	1	1.875	1.810	2.370	1 5/16-12
690-20-16	1 1/4	1	1.875	1.810	2.370	1 5/8-12
690-16-20	1	1 1/4	2.125	2.060	2.760	1 5/16-12
690-20-20	1 1/4	1 1/4	2.125	2.060	2.760	1 5/8-12
690-24-20	1 1/2	1 1/4	2.125	2.190	2.760	1 7/8-12
690-20-24	1 1/4	1 1/2	2.500	2.330	3.150	1 5/8-12
690-24-24	1 1/2	1 1/2	2.500	2.330	3.150	1 7/8-12
690-32-24	2	1 1/2	2.500	3.060	4.250	2 1/2-12
690-24-32	1 1/2	2	3.125	3.060	4.250	1 7/8-12
690-32-32	2	2	3.125	3.060	4.250	2 1/2-12



Parker® Hose

Jiffy™ Push-On Multipurpose Oil Resistant Hose Series 7212

Parker's Series 7212 Jiffy Push-On/Push Lock Oil Resistant Multipurpose Industrial Hose provides excellent service across a wide variety of media and multiple applications. This hose is designed to transfer air, mild chemicals, oil, water, and refined fuels such as biodiesel, ethanol, and gasoline in applications 212° F and 300 PSI. The flexible hose construction is compatible with push-on couplings for easy and secure attachment in the field and at the jobsite.

The flame retardant cover protects operators from fire hazards and is available in multiple colors for easy identification. Series 7212 is an abrasion, oil and weather resistant hose that provides versatile service in many common industrial applications.



SERIES 7212 HOSE

2 stock colors available: Red and Blue

Part Number	Hose I. D.	Hose O. D.	Max. W. P.	Feet Per Reel
7212-381BL	3/8"	5/8"	300 (PSI)	700
7212-381RD	3/8"	5/8"		700
7212-501BL	1/2"	3/4"		600
7212-501RD	1/2"	3/4"		600

Features & Benefits

- **Tube:** Black Class A nitril for exceptional fuel and oil resistance to 212° F and 300 PSI
- **Tube:** Silicone free to eliminate contamination of air powered paint sprays systems
- **Reinforcement:** One textile braid for strength and kink resistance
- **Cover:** Chloroprene for abrasion, flame oil and weather resistance
- **Cover Colors:** Blue and Red for easy identification (additional colors can be quoted through our specials group)
- **Couplings:** Push-on; also qualified with steel crimp couplings for a durable, safe, and secure connection

WARNINGS: The hose does not include a static wire; transfer of refined fuel may create an accumulation and catastrophic discharge of static electrical buildup.

This product can expose you to chemicals including 1,3-Butadiene, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.p65warnings.ca.gov.

Parker® Push-Lok® 801 Color Coded

Standard Duty - Rugged, Reliable...PARKER

For long-term savings and reliable performance Push-Lok Hose from Parker is the first choice! Unmatched in quality and performance.

6 stock colors available:

Red, Blue, Gray, Yellow, Green and Black

Applications: Used worldwide for plastic molding temperature control, shop air and all types of general maintenance.

Temperature Range: -40 to 212°F, except air, 150°F and water, 180°F

Design: Smooth pressed cure synthetic rubber cover, one textile braid reinforcement, synthetic rubber inner tube.

Use for: anti-freeze, water, air, gasoline, diesel & lubrication oils.



Part Number	Hose I. D.	Hose O. D.	Max. W. P.	Min. Burst	Feet Per Reel
801-4-*	1/4"	.50	350 (PSI)	1400 (PSI)	600
801-6-*	3/8"	.63			450
801-8-*	1/2"	.78	300 (PSI)	1200 (PSI)	*300
801-10-*	5/8"	.91			300
801-12-*	3/4"	1.03			200
801-16-*	1"	1.28	200 (PSI)	800 (PSI)	150

*Specify stock color

PUSH-LOK HOSE



High Temperature, Heat Resistant Hose Parker's Push-Lok Pride!
The right hose to use when elevated temperatures are a problem. The PKR elastomer is compatible with most fluids. If you are having temperature problems with hose this might be just the solution.

Construction: PKR elastomer liner, one fabric braid reinforcement, blue (or black) PKR elastomer cover.
Temperature Range: -55 to 300°F, except air, 200°F max. and 180°F max. Continuous use at extremes of temp. & pressure will materially reduce service life.
Applications: anti-freeze, water, air, diesel fuels, lubrication oils, maintenance and general industrial applications.

Choice of blue or black color.

Part Number	Hose I. D.	Hose O. D.	Max. W. P.	Min. Burst	Feet Per Reel
836-4◆	1/4"	.50	400psi	1000psi	600
836-6◆	3/8"	.62	400psi	1000psi	450
836-8◆	1/2"	.78	400psi	1000psi	300

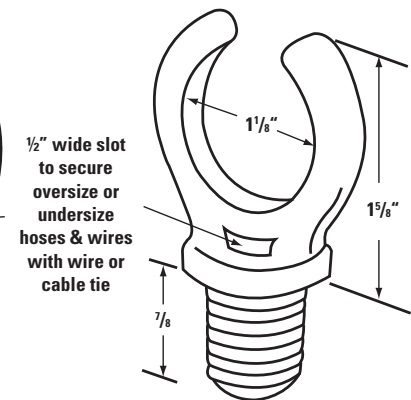
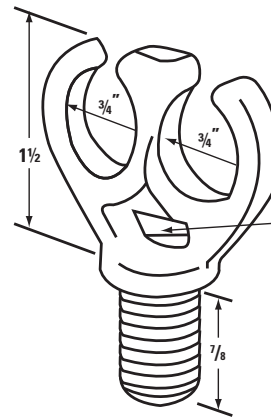
HIGH-TEMP. PUSH-LOK HOSE

◆ Add "blue" or "black" to part number to indicated color choice

Platen Hose Clips

- Metric & inch sizes!
- Low cost, very handy!
- Prevents pinching & abrasion
- Works for tubing too!
- Extends hose life
- Thread sizes to fit most platen holes
- Satisfaction guaranteed!

	Single	Double
Overall Height	2 9/16"	2 3/8"
Height Above Base	1 5/8"	1 3/8"
Thickness Of Clip	3/8"	3/8"
Clip O. D.	1 11/16"	2"
Clip I. D.	1 5/32"	3/4"
Clip Opening	5/8"	3/8"



Single Hose Clip

Double Hose Clip

PLATEN HOSE CLIPS

Thread Sizes	Fits Hose Sizes	Part Number	Fits Hose Sizes	Part Number
1/2-13	FROM	PHC1-8	FROM	PHC2-8
5/8-11	5/8"	PHC1-10	3/8" TO	PHC2-10
3/4-10	TO	PHC1-12	3/4"	PHC2-12
1-8	1-1/8" O.D.	PHC1-16	O.D.	PHC2-16
M12 x 1.75mm	FROM	PHC1-12M	FROM	PHC2-12M
M14 x 2.00mm	5/8"	PHC1-14M	3/8" TO	PHC2-14M
M16 x 2.00mm	TO	PHC1-16M	3/4"	PHC2-16M
M20 x 2.50mm	1-1/8" O.D.	PHC1-20M	O.D.	PHC2-20M



General Purpose Air & Water Hose

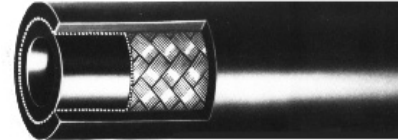
Norflex GP Hose is an economical air and water hose offering limited oil resistance for a variety of uses in industrial applications.

Strong and Flexible: GP Hose is reinforced with a single synthetic braid which offers both strength and flexibility. It is ideal for air, water, mild chemicals, alkalies and sprays. It resists the effects of small amounts of oil often found in air lines.

Pressure Resistance: GP Hose is made with a strong synthetic cord and will perform well in most applications not exceeding 200 PSI (150 PSI - larger sizes).

Minimum Burst is 800 PSI -20° to 200°F. operating range

Colors:



- Black
- Red

Part Number	Ref. No.	Hose I.D.	Hose O.D.	Stock Colors	Working Pressure	Feet Per Reel
GP4*	WLH250	¼"	.47	Red/Black	200PSI	700
GP5RED	WLH312	⅝"	.66	Red	200PSI	700
GP6*	WLH375	⅜"	.66	Red/Black	200PSI	700
GP8*	WLH500	½"	.81	Red/Black	200PSI	700
GP12*	WLH750	¾"	1.08	Red/Black	200PSI	700
GP16*	WLH1000	1"	1.48	Red/Black	200PSI	700
GP20*	-	1¼"	1.73	Red/Black	150PSI	300
GP24*	-	1½"	1.98	Red/Black	150PSI	300

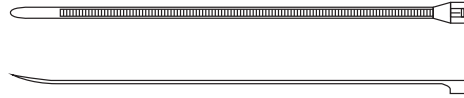
[GENERAL AIR & WATER](#)

*Specify color; full 4:1 safety factor.

Nylon Cable Ties



- Made in USA
- High quality, low price!
- Use for: wire, cable, hose, ducting, retaining and repair



Ties feature a patented locking system that assures a firm grip. These natural-color cable ties have smooth edges and a taper tip for easy installation. UL approved.

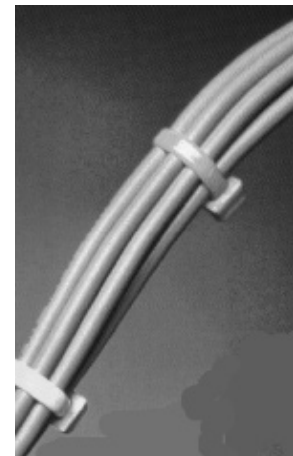
NYLON TIES

Natural Color (off white) Ties

Part Number	Length O.A.	Max. Dia.	Tensile Looped	Pieces Per Bag
NCT4	4"	$1\frac{3}{16}$ "	18	100
NCT7	7"	$1\frac{3}{4}$ "	50	100
NCT11	11"	3"	50	100
NCT14	14"	4"	50	100
NCT14HD	$14\frac{1}{2}$ "	4"	175	100
NCT24HD	$24\frac{1}{2}$ "	7"	175	50

Black Color Ties

Part Number	Length O.A.	Max. Dia.	Tensile Looped	Pieces Per Bag
NCT4BLK	4"	$1\frac{3}{16}$ "	18	100
NCT7BLK	7"	$1\frac{3}{4}$ "	50	100
NCT11BLK	11"	3"	50	100
NCT14BLK	14"	4"	50	100
NCT14HDBLK	$14\frac{1}{2}$ "	4"	175	100
NCT24HDBLK	$24\frac{1}{2}$ "	7"	175	50



E

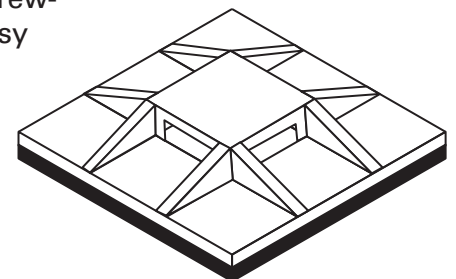
Cable Tie Bases

These Cable Tie Bases make mounting wire and cable a quick, easy and secure process. They are designed so they can be screw-mounted, and they also have an adhesive backing for extra easy application.

Black Nylon Cable Tie Base

Part Number	Description
6295	0.75" x 0.75" Base
6297	1" x 1" Base

CABLE BASE





PTFE Tape

- Permanent non-flammable seal
- Remains plastic permanently
- -450°F to +500°F
- Perfect for water connections, hydraulics, air, gas, petroleum
- This is the finest quality PTFE Tape available
- NEVER use thinner, cheaper substitutes



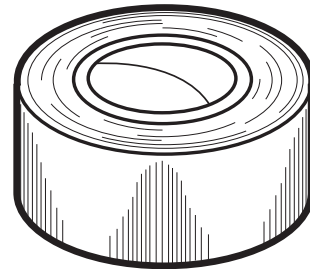
[PTFE TAPE](#)

Part Number	Length	Thickness	Width
TT100	260" (21.6')	0.0035	1/2"
TT200	520" (43.3')	0.0035	1/2"
TT300	520" (43.3')	0.0035	3/4"

PVC Silver Duct Tape

- 2" x 180' (60 yards)
- Strong adhesion
- Cloth backed
- High-tensile strength
- Great for use with dryer and loader hose
- Great value

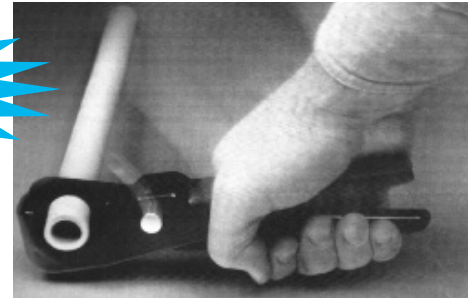
Part Number
RDT180



[PVC SILVER DUCT TAPE](#)

Standard Hose Cutter cuts up to 1½" I.D. hose

- More rigid and sturdy
- Safe, quick & clean
- Replaceable high-carbon, steel blade
- Blade closes into its own handle for safe carrying and handling
- Up to 8 times faster than sawing and deburring
- Cuts PE & PB through 1½" I.D., PVC up to 1¼"
- Ideally suited to limited working space, the cutter adapts easily where a conventional hacksaw cannot be used



Part Number	Description
T135	Hose Cutter
BT135	Blades for Cutter

X-Large Hose Cutter cuts up to 2" I.D. hose

- cuts rubber hose and tubing through 2" I.D., P.E., through 1½" I.D., Class PVC through 1¼" I.D.

Part Number	Description
T200	XL Hose Cutter
BT200	Blades for Cutter

HOSE CUTTERS



Push-Lok® Cut-off Assembly Tool

Parker®

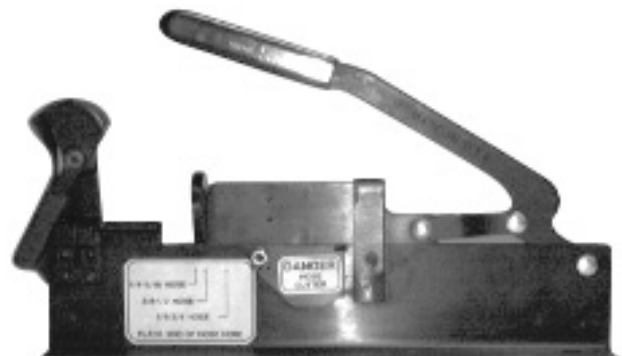
This unique tool combines a hose cutter with a toggle-action that presses the fitting into the hose.

Designed to handle Push-Lok hose from ¼" through ¾", this tool makes the job easier whether making one assembly or one hundred.

Overall Length 16"
Weight approx. 4 pounds

Part Number 881540

PUSH-LOK CUT-OFF ASSEMBLY TOOL





Hose Reels- B Series

The B Series Reels are best applied where shorter, low-volume hoses are used, such as auto-truck service garages for all air applications as well as anti-freeze, motor oil, ATF and grease. The 100% brass main shaft and swivel assure less corrosion for extended seal life in the low pressure rating (available up to 1000 PSI).

LOW PRESSURE - Air, water, anti-freeze

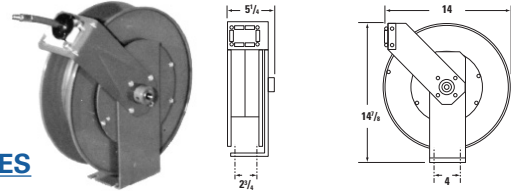
Hose Reel & 50'

1/4" multi-purpose hose 300 PSI

Part Number LB250 **

*Inlet is 3/8" NPT
Max. Temp -200°F*

HOSE REELS-B SERIES



Other sizes, lengths and PSI available, ask one of our knowledgeable sales people.

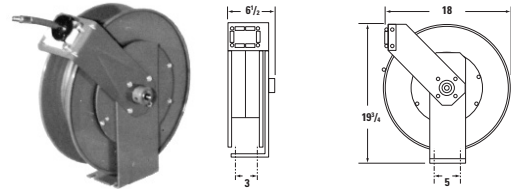
Hose Reels - C Series

The C Series - Low Pressure Reels are ideally suited for plant maintenance, service trucks and many other industrial functions where hose storage is a problem. Standard hose for air, water and light oils. Other hoses available upon request.

Hose Reel complete with 50' of 3/8" multi-purpose hose 300 PSI

Part Number LC350 **

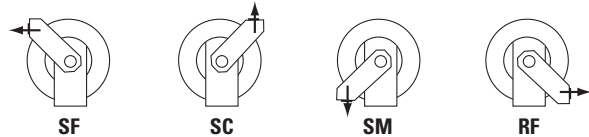
*Inlet is 1/2" NPT
Max. Temp - 200°F*



Contact DME for other available sizes, lengths and PSI.

Universal Installation

The narrow size and a guide arm that can be easily rotated to any of the positions shown virtually solves all installation problems.



*** Reels are shipped in the SF position unless otherwise requested.*

HOSE REELS-C SERIES

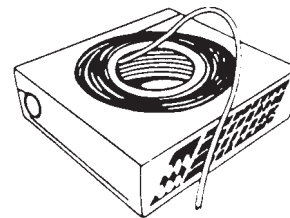
Nylon & Polyethylene Tubing

NYLON & POLYETHYLENE TUBING

Polyethylene Tubing (-40° to +135°F)

Part Number	Tubing		Burst Pressure	Wall Thick.	Box Quantity
	OD	ID			
PE44-100	1/4"	.170	500	.040	100
PE88-100	1/2"	.375	500	.062	100

- Good all-purpose tubing
- Extremely low cost
- Many plant uses



Flexible Nylon Tubing (-60° to +250°F)

Part Number	Tubing		Burst Pressure	Wall Thick.	Box Quantity
	OD	ID			
NY44-100	1/4"	.215	1000	.035	100

- High burst pressure & temperature
- More flexible than standard nylon
- Bends tighter without kinking

High Temperature Hose



Extruded Silicone

Go to extremes...with Norflex Silicone High Temperature Hose! This hose is perfect for extremely high and low temperatures! Right at home in under-the-hood high temperatures, it remains flexible and maintains its seal in temperatures from -65 to 350°F (-54 to 177°C); the ultimate in low pressure hose. Norflex Silicone Hose meets your requirements for permanent plumbing. It delivers everything you've come to expect from silicone hose...and more!

- Excellent resistance to hardening and shrinking which is often the cause of leakage in hose
- Flexibility in extremely low temperatures helps guarantee long service in "as new" condition
- Because Norflex Silicone is unaffected by ozone, it breathes easily during long, hot summers
- Because it never cracks, it avoids costly shutdowns due to hose failure



High Temp. Extruded Silicone Hose Meets & Exceeds All Performance Specs Of SAE J20 Part 3, SAE 20 R3 Class A

Part Number	Hose I.D.	Hose O.D.	Max. Working PSI Pressure	Burst PSI Pressure	Reel Length
NHC04	1/4"	.460"	85	125	250
NHC06	3/8"	.635"	80	125	250
NHC08	1/2"	.760"	80	125	250
NHC10	5/8"	.925"	70	125	250
NHC12	3/4"	1.070"	70	125	250

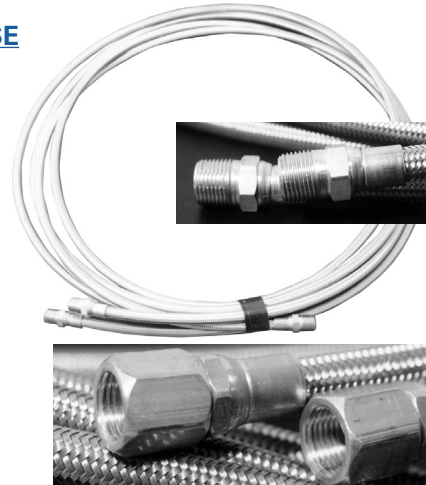
HIGH TEMP HOSE

Be sure to use lined hose clamps with extruded hose (p. 481). *Special order 500' reels.

PTFE High Heat Hose Assemblies

- Hot oil hose
- RIM monomer mixing
- Low volumetric expansion
- Smooth, clean, high temperature
- +450° operating pressures to 3000 PSI

PTFE HIGH HEAT HOSE



Reference Dimensions

Nominal Hose I.D.	Actual I.D. (Inches)	Working Pressure	Burst Pressure	Min. Bend Radius
1/4"	.250	3000 PSI	12,000 PSI	2.0"
3/8"	.312	2500	10,000	4"
1/2"	.406	2000	8000	5.2"
3/4"	.625	1200	4800	7.7"

With NPT Brass Male Fittings Swaged Onto Both Ends, Same As Hose Size

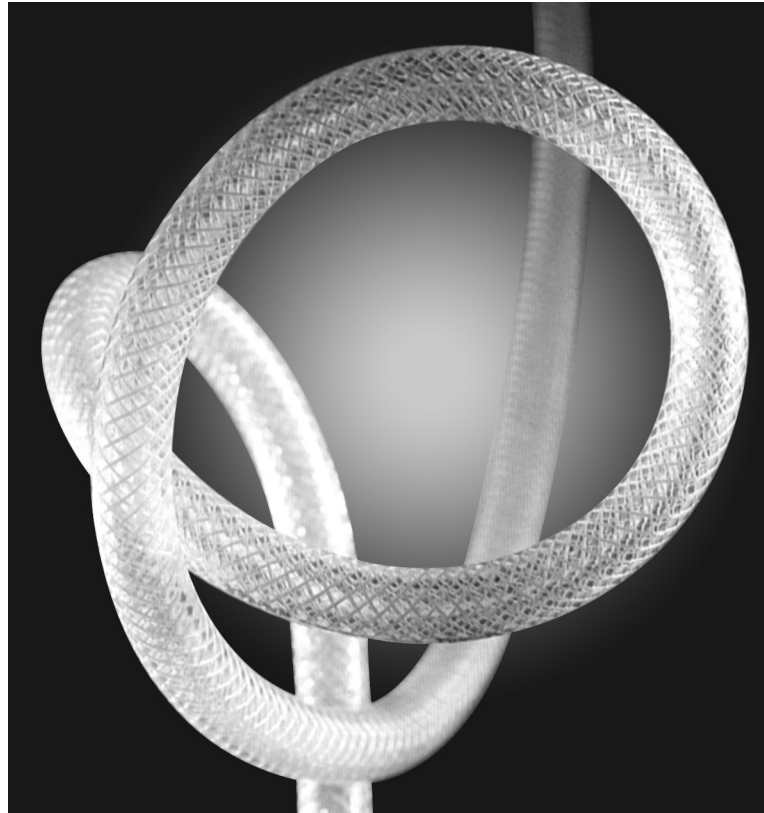
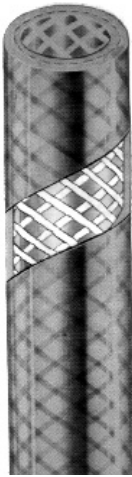
Length	1/4"	3/8"	1/2"	3/4"
4'	TH04-MP48	TH06-MP48	TH08-MP48	TH12-MP48
6'	TH04-MP72	TH06-MP72	TH08-MP72	TH12-MP72
8'	TH04-MP96	TH06-MP96	TH08-MP96	TH12-MP96
10'	TH04-MP120	TH06-MP120	TH08-MP120	TH12-MP120
12'	TH04-MP144	TH06-MP144	TH08-MP144	TH12-MP144

Female swivel JIC and stainless fittings are available; contact DME Industrial Supplies.



PVC Air & Water Hose

- Choice of clear, red or blue
- Tough yet lightweight
- Very flexible
- Highly abrasion resistant
- Non-marking food grade PVC
- Resistant to most chemicals
- Good for water, air & mild chemicals
- Temperature range: -20° to 150°F (-5° to 65°C)



1125 PVC - Opaque Hose

Part Number						
Clear	Red	Blue	Inside Dia.	Outside Dia.	Working Pressure	Coil Length
1125-04	1125-04R	1125-04B	1/4"	.438	250 PSI	300 Ft.
1125-05	-	-	5/16"	.525		
1125-06	1125-06R	1125-06B	3/8"	.625	225 PSI	
1125-08	1125-08R	1125-08B	1/2"	.750	200 PSI	
1125-10	-	-	5/8"	.875	200 PSI	
1125-12	-	-	3/4"	1.025	150 PSI	200 Ft.
1125-16	-	-	1"	1.312	125 PSI	
1125-20	-	-	1 1/4"	1.656	100 PSI	100 Ft.
1125-24	-	-	1 1/2"	1.937	100 PSI	
1125-32	-	-	2"	2.500	75 PSI	

PVC AIR & WATER HOSE

Translucent Hose

Part Number	Color	Inside Diameter	Outside Diameter	Working Pressure	Coil Length
1125-06KR	Red	3/8"	5/8"	200 PSI	82 Ft
1125-06KB	Blue				
1125-08KR	Red	1/2"	3/4"		
1125-08KB	Blue				

Nylon Recoil



A quality, permanently coiled hose made of tough abrasion-resistant Nylon 11. This hose will provide a long service life at temperatures to 170°F and pressures to 200 PSI. The coil hose assemblies are resistant to most chemicals, including hydrocarbons, ketones, esters and alkalies.



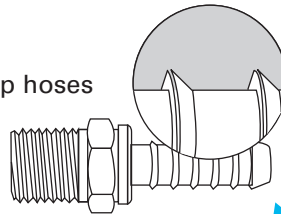
Nylon Recoil

Part Number	Hose Size	Male Swivels	Hose Length	Retracted Length
RC04-12S	1/4"	1/4"	12'	5"
RC04-25S	1/4"	1/4"	25'	10"

NYLON RECOIL

Polyurethane Recoil

- Extremely flexible - resists kinking
- Impervious to abrasion & heat
- Made with pigtails on coil - no need for whip hoses
- Less operator fatigue - low tension
- Superior elasticity & coil memory
- Special full flow fittings



The barb fittings used with our polyurethane hose are designed with this unique serrated gripping surface to hold the hose in place, especially under pressure.

Polyurethane Recoil

Part Number	Hose Size	Male Swivel	Hose Length
PU04-10S	1/4"	1/4"	10'
PU04-15S	1/4"	1/4"	15'
PU04-25S	1/4"	1/4"	25'

POLYURETHANE RECOIL



Both ends swivel.

Tool Balancing System

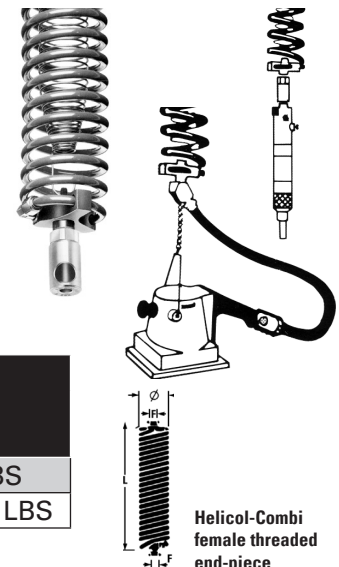
Helicol-Combi®

Applications

Balancing and supplying portable pneumatic tools:

- On pre-assembly workstations
- On spot-welding and riveting stations
- On packaging lines - staplers, hoop binders, nailing heads

Two functions of balancing and supplying compressed air in one single integrated vertically suspended apparatus. Fitted with a robust safety chain which prevents the spring from being strained - a safe form of suspension for larger air-driven tools.



Part Numbers	Tube Ø	Length		Thread F	Coil Ø	
		L	Max. Extension			
HEC2002	1/4"	10"	40"	1/4 FPT	3 1/8"	For tools up to 4.5 LBS
HEC5002	3/8"	15"	70"	3/8 FPT	4"	For tools from 4.5 to 11 LBS



1400 Silicone Duct

1400 High Temperature Duct

- Fabric: Standard silicone impregnated fiberglass cloth
- Helix: Galvanized steel
- Available diameters: 2"-24"
- Standard length: 25'
- Temperature range: -65°F to 600°F
- Positive pressure: 20" W.G.
- Typical applications:
- High-temperature air, dust or fume control
- Resists alkalies, ozone & fungi

Available
in 25'
sections



1400 SILICONE DUCT

"Adhesive-Free" Construction

The 1400 High Temperature Duct is manufactured by a mechanical process without the use of adhesives. This enables our standard ducts to operate at higher temperatures than conventional ducts because there is no worry of glue melting down or burning.

Part Number	Hose I. D.
1400-2	2"
1400-212	2½"
1400-3	3"
1400-4	4"

1500 Insulated Duct

Service Conditions

A hose designed to move hot air from source to site of use, with minimal heat loss:

- Reduces heat loss/gain
- Clamps right to dryer take-off tube

Sold in
12 foot

Material

Outer: Polyester/Neoprene - U-Lok 100
Inner: Silicone/Fiberglass - U-Lok 401

Construction: Mechanical bond, corrosion resistant

Size: 2" to 20" I.D. - larger sizes available

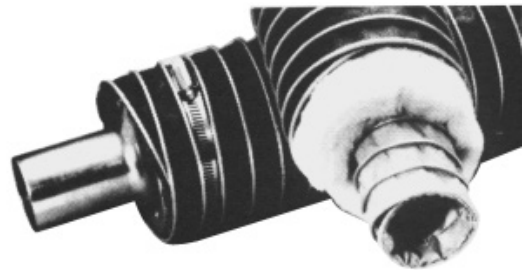
Bend radius: 2 x I.D.

Standard length: 12 ft. long

Weight: 6" I.D. = 2.1 lbs/ft.

Temperature range: - 65°F to 600°F

1500 INSULATED DUCT



Part Number	Hose I. D.
1500-2	2"
1500-3	3"
1500-4	4"
1500-5	5"
1500-6	6"

Silicone Dryer Hose



Silicone-coated fiberglass is highly resistant to extreme temperatures and is odor-free in hot air service. DME stocks most sizes listed below. We offer same-day shipping on most items... Isn't it time to replace that old, cracked and patched ducting?

- Choose single- or double- ply
- Non-kicking, lightweight
- Industry standard product!
- Best selection of sizes, lowest prices!
- Orange cover

Sold in 12 foot sections
(except where noted)



SILICONE DRYER HOSE

Single-Ply Silicone Duct — Rated to 600° F (500° continuous)

Part Number	Hose I. D.	Working Pressure	Stock Length
NSD1-2	2"	10	12'
NSD1-212	2½"	10	12'
NSD1-3	3"	10	12'
NSD1-5	5"	6	12'
NSD1-6	6"	4	12'
NSD1-8	8"	3	12'

Other sizes by request. 20' lengths may be available in other sizes but are not stocked.

Hose sold only in lengths of 12' or 20' as listed in last column.

Double-Ply Silicone Duct — Rated to 600° F (500° continuous)

Part Number	Hose I. D.	Stock Length	Working Pressure
NSD2-114	1¼"	12'	60
NSD2-112	1½"	12'	55
NSD2-134	1¾"	12'	55
NSD2-2	2"	12'	50
NSD2-212	2½"	12'	45
NSD2-3	3"	12'	45
NSD2-4	4"	12'	40
NSD2-5	5"	12'	35
NSD2-6	6"	12'	30

Other sizes on request.

Sold in 12 foot sections
(except where noted)

E



NND Return Air Duct

Neoprene Duct

- Rated to 350°F
- Perfect for return air or low-temp dryer
- Single-ply stocked - double-ply from factory; contact DME



NND RETURN AIR DUCT

**Sold in
12 foot
sections**

Part Number	Hose I. D.	Stock Length
NND112	1½"	12'
NND134	1¾"	12'
NND2	2"	12'
NND212	2½"	12'
NND3	3"	12'
NND4	4"	12'
NND5	5"	12'
NND6	6"	12'

Thread hoses together for longer lengths.

High Performance Hose

Series 1180 High Performance Hose is ideally suited for the transfer of pellets, granules and other abrasive materials.

This hose features a heavy-wall tube made of urethane, a resilient material known for its abrasion resistance and long-term performance under demanding conditions. A rigid PVC helix provides reinforcement.

With helix wrapped around the outside diameter of hose, a "bearing" surface is created which makes it easy to drag hose across concrete and other rough surfaces.

Series 1180 Urethane Hose is much lighter than conventional suction hoses. It is very flexible and easy to handle. This hose maintains its flexibility at sub-zero temperatures which adds to its versatility.

Construction: Clear urethane tube; white PVC helix cover

Temperature Range: -4° to +150°F



HIGH PERFORMANCE HOSE

Part Number	Inside Diameter	Outside Diameter	Bend Radius	Working PSI at 72°
1180-24	1½"	1.85	3.8"	30
1180-32	2"	2.50	5.5"	25
1180-40	2½"	3.00	7.0"	20
1180-48	3"	3.60	8.0"	20

**Sold in
25 foot
sections**

Vacuum Loader Hose



- FDA approved for food service
- Tough, yet very flexible
- Abrasion resistant
- Smooth bore - low friction loss
- Clear for visual inspection
- Temperature range:
 - 4° to 150°F (-20° to 66°C) - static conditions
 - 14° to 104°F (-10° to 40°C) - dynamic conditions

Sold in
25 foot
sections



Sizes up to and including 2½" ship
UPS, anything larger goes LTL

Part Number	Inside Diameter	Vacuum Rating At 68°F Hg	Minimum Bend Radius	O.D. Size	Max. W.P. At 68°F	Weight Lbs/Ft
1175-16	1"	28"	3"	1¼"	60 PSI	.19
1175-20	1¼"	28"	3"	1½"	50 PSI	.29
1175-24	1½"	28"	3"	1⅞"	50 PSI	.34
1175-28	1¾"	28"	3½"	2⅛"	45 PSI	.40
1175-32	2"	28"	4"	2⅜"	45 PSI	.50
1175-35	2⅜"	28"	4"	2⅞"	40 PSI	.57
1175-36	2¼"	28"	5"	2⅞"	40 PSI	.63
1175-40	2½"	28"	6"	2⅞"	40 PSI	.77
1175-48	3"	28"	8"	3½"	35 PSI	1.02
1175-64	4"	28"	10"	4⅝"	35 PSI	1.64

VACUUM LOADER HOSE

Vacuum Grounded Loader Hose

- Grounded safety
- Static ground wire - full length
- Smooth bore, very flexible
- For pellets, powders & granules
- Static conditions: -4°F to 150°F
- Dynamic conditions: 14°F to 104°F
- Choose cut length or full roll

Sold in
25 foot sections
(except as noted*)



VACUUM GROUNDED

Lightweight, Flexible Economy Style - Caution: Not for use with high-abrasive applications

Part Number	Inside Diameter	Vacuum Rating At 68°F Hg	Minimum Bend Radius	Max. W.P. At 68°F
1175G24	1½"	28"	3.2"	50 PSI
1175G28	45MM (1¾")	28"	3.2"	40 PSI
1175G32	2"	28"	3.2"	40 PSI
1175G40	2½"	28"	4.5"	35 PSI

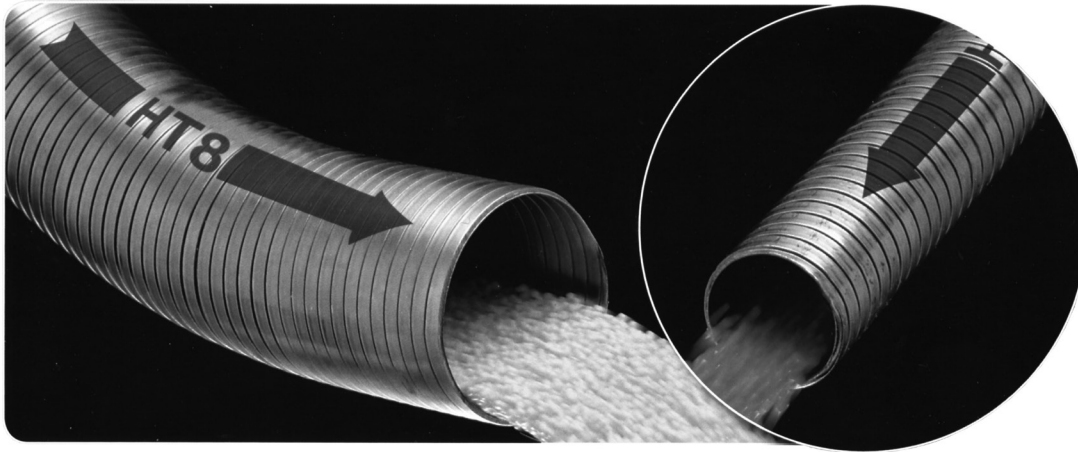
Heavy, More Durable Style

Part Number	Inside Diameter	Vacuum Rating At 68°F Hg	Minimum Bend Radius	Max. W.P. At 68°F
H1175G20	1¼"	28"	5"	50
H1175G24	1½"	28"	5"	50
H1175G28 *	1¾"	28"	5"	45
H1175G32	2"	28"	5"	40
H1175G40	2½"	28"	6"	40

* 60 foot section



Metal Loader Hose



HT5000 Interlocked Metal Hose combines the Hose Tec® single-strip interlocking construction with a smooth liner, providing a flexible metal hose that resists material buildup and internal abrasion. Materials flow smoothly in direction shown by arrows.

Construction

- An armor strip is combined with a strip of liner material and formed to create a lined, flexible, interlocked metal hose that offers superior strength and abrasion-resistance.

Applications

- Railcar offloading
- Pneumatic dry bulk unloading of grains, pellets, powders and dry chemicals
- Ideal hose for general bulk unloading applications
- Transfer of hot materials (not for hot tar or asphalt)
- Bulk unloading of highly abrasive materials
- Plastic pellet transfer

Features

- Flow indication arrows are provided on each length
- Stainless steel liner provides additional strength and greater resistance to abrasion
- Smooth liner reduces material degradation and improves unloading time
- Provides maximum flow rates for pneumatic conveying applications
- Available in standard 25' lengths

Maximum Service Temperature

- Series 300 stainless steel: up to 1500°F

[METAL LOADER HOSE](#)

Part Number	Description
HTSS150	1½" Metal Vacuum Loader Hose
HTSS175	1¾" Metal Vacuum Loader Hose
HTSS200	2" Metal Vacuum Loader Hose
HTSS225	2¼" Metal Vacuum Loader Hose
HTSS250	2½" Metal Vacuum Loader Hose
HTSS300	3" Metal Vacuum Loader Hose
HTSS350	3½" Metal Vacuum Loader Hose
HTSS400	4" Metal Vacuum Loader Hose
HTSS500	5" Metal Vacuum Loader Hose
HTSS600	6" Metal Vacuum Loader Hose

Oetiker 1 & 2 Ear Clamps



- No retightening needed
- Install quickly
- Allows tight installations
- No clamp creeping



1-Ear Clamps
smaller range,
thinner
Low price!!



2-Ear Clamps
large range,
thicker
Low price!



EAR CLAMPS

1 Ear Clamp		*100 pieces per bag	
Zinc Plated Part Number	Stainless Steel Part Number	Clamp Range (mm) Closed – Open	Clamp Range (inches) Closed – Open
EC105	ECS105	8.9 – 10.5	0.350 – 0.413
EC113	ECS113	9.7 – 11.3	0.382 – 0.445
EC123	ECS123	10.4 – 12.3	0.409 – 0.484
EC133	ECS133	11.4 – 13.3	0.449 – 0.524
EC145	ECS145	12.6 – 14.5	0.496 – 0.571
EC157	ECS157	13.5 – 15.7	0.531 – 0.618
EC170	ECS170	15.1 – 17.0	0.594 – 0.669
EC185	ECS185	15.7 – 18.5	0.618 – 0.728
EC198	ECS198	17.0 – 19.8	0.669 – 0.780
EC210	ECS210	18.2 – 21.0	0.717 – 0.827
EC226	ECS226	19.8 – 22.6	0.780 – 0.890
EC241	ECS241	21.3 – 24.1	0.839 – 0.949
EC256	ECS256	22.8 – 25.6	0.898 – 1.008
EC271	ECS271	24.0 – 27.1	0.945 – 1.067
EC301	ECS301	27.0 – 30.1	1.063 – 1.185
EC331	ECS331	30.0 – 33.1	1.181 – 1.303
EC361	ECS361	33.0 – 36.1	1.299 – 1.421
EC381	ECS381	35.0 – 38.1	1.378 – 1.500

2 Ear Clamp		*100 pieces per bag	
Zinc Plated Part Number	Stainless Steel Part Number	Clamp Range (mm) Closed – Open	Clamp Range (inches) Closed – Open
EC0709	ECS0709	7.0 – 9.0	0.276 – 0.354
EC0811	ECS0811	8.1 – 11.0	0.319 – 0.433
		8.0 – 11.0	0.315 – 0.433
EC1113	ECS1113	10.8 – 13.0	0.425 – 0.512
		11.0 – 13.0	0.433 – 0.512
EC1315	ECS1315	12.5 – 15.0	0.492 – 0.591
EC1517	ECS1517	14.0 – 17.0	0.551 – 0.669
EC1518	ECS1518	15.0 – 18.0	0.591 – 0.709
EC1720	ECS1720	16.2 – 20.0	0.638 – 0.787
EC1922	ECS1922	18.0 – 22.0	0.709 – 0.866
		18.1 – 22.0	0.713 – 0.866
EC2023	ECS2023	19.0 – 23.0	0.748 – 0.906
		19.1 – 23.0	0.752 – 0.906
EC2225	ECS2225	21.0 – 25.0	0.827 – 0.984
		21.1 – 25.0	0.831 – 0.984
EC2327	ECS2327	22.5 – 27.0	0.886 – 1.063
EC2528	ECS2528	24.0 – 28.0	0.945 – 1.102
EC2731	ECS2731	26.3 – 31.0	1.035 – 1.220
EC3134	ECS3134	29.3 – 34.0	1.154 – 1.339
EC3437	ECS3437	32.0 – 37.0	1.260 – 1.457
EC3740	ECS3740	35.0 – 40.0	1.378 – 1.575





Stainless Hose Clamps

Tridon®

TRIDON

Standard 100% Stainless Hose Clamps

SHC Clamps

- Unique interlocking design
 - One-piece housing & band
 - Slotted carbon chromate plate
- Clamp Materials

- Band - 1/2" 301 stainless
- Housing - 301 stainless



STAINLESS HOSE CLAMP

Part Number	Diameter Range	
	Min.	Max.
SHC6	3/8	7/8
SHC8	7/16	1
SHC10	1/2	1-1/16
SHC12	1/2	1-1/4
SHC16	11/16	1-1/2
SHC20	3/4	1-3/4
SHC24	1	2
SHC28	1-1/4	2-1/4
SHC32	1-1/2	2-1/2
SHC36	1-3/4	2-3/4
SHC40	2	3
SHC44	2-1/4	3-1/4
SHC48	2-1/2	3-1/2
SHC52	2-3/4	3-3/4
SHC56	3	4
SHC60	3-1/4	4-1/4
SHC64	2-1/2	4-1/2
SHC72	3	5
SHC80	3-1/2	5-1/2
SHC96	4-1/2	6-1/2
SHC104	5	7
SHC152	7-1/8	10
SHC188	12-1/4	12-1/4

Miniature Stainless Hose Clamps

MSC Clamps

- Easy to install in confined areas
- Hold tough in tight spots

Clamp Materials

- Band - 5/16" 301 stainless
- Housing - 301 stainless
- Screw 1/4" 410 stainless hex head

Part Number	Diameter Range	
	Min.	Max.
MSC04	1/4	5/8
MSC06	5/16	7/8
MSC08	3/8	1
MSC10	3/8	1-1/16
MSC12	1/2	1-1/4

MINI HOSE CLAMP

Lined Stainless Hose Clamps

LHC Clamps

- Use for soft hose of any type
- Use for all silicone hoses
- Liner prevents extrusion of thru screw notches

Clamp Materials

- Band - 5/16" 301 stainless
- Housing - 301 stainless

Part Number	Diameter Range	
	Min.	Max.
LHC6	5/8	7/8
LHC8	5/8	1
LHC10	3/4	1-1/16
LHC12	7/8	1-1/4
LHC16	1	1-1/2
LHC20	1-1/8	1-3/4

LINED HOSE CLAMP

Stainless Hose Clamps



Kuri-Clamp™ Worm Gear Clamps



KURI CLAMP



Stainless Hose Clamps

Heavy-Duty Worm Gear

Stainless Steel Band & Housing with Carbon steel screw

General Applications:

- Small Diameter applications
- Air & water lines

Construction: Four-piece construction consisting of:

- 9/16" wide. 300 series stainless steel band
- Plated carbon steel hex screw with 5/16 head.
- 300 series stainless steel housing.

Part Number	Diameter Range	
	Min.	Max.
WHCCSHD06	7/16	25/32
WHCCSHD08	1/2	29/32
WHCCSHD10	9/16	1-1/16
WHCCSHD12	11/16	1-1/4
WHCCSHD20	13/16	1-3/4
WHCCSHD24	1-1/16	2
WHCCSHD28	1-5/16	2-1/4
WHCCSHD32	1-9/16	2-1/2
WHCCSHD36	1-13/16	2-3/4
WHCCSHD40	2-1/16	3
WHCCSHD44	2-5/16	3-1/4
WHCCSHD48	2-9/16	3-1/2
WHCCSHD104	4-1/8	7
WHCCSHD188	9-3/8	12-1/4

Mini Worm Gear

Stainless Steel Band & Housing with Carbon steel screw

General Applications:

- Small Diameter applications
- Air & water lines

Construction: Three-piece construction consisting of:

- 5/16" wide. 300 series stainless steel band
- Plated carbon steel hex screw with 1/4" head
- One-piece 300 series stainless steel housing



Part Number	Diameter Range	
	Min.	Max.
WHCMCS04	7/32	5/8
WHCMCS06	7/16	25/32
WHCMCS08	1/2	29/32
WHCMCS10	9/16	1-1/16
WHCMCS12	11/16	1-1.4



Stepless Ear Clamp

The term “stepless” refers to the absence of steps or gaps on the circumference of the clamp. The stepless design of the Stepless Ear Clamp provides uniform compression and a 360° seal. The unique “tongue-in-groove” design was developed to assure that the inner circumference is free of steps or gaps that could be detrimental to the sealing ability of the clamp.

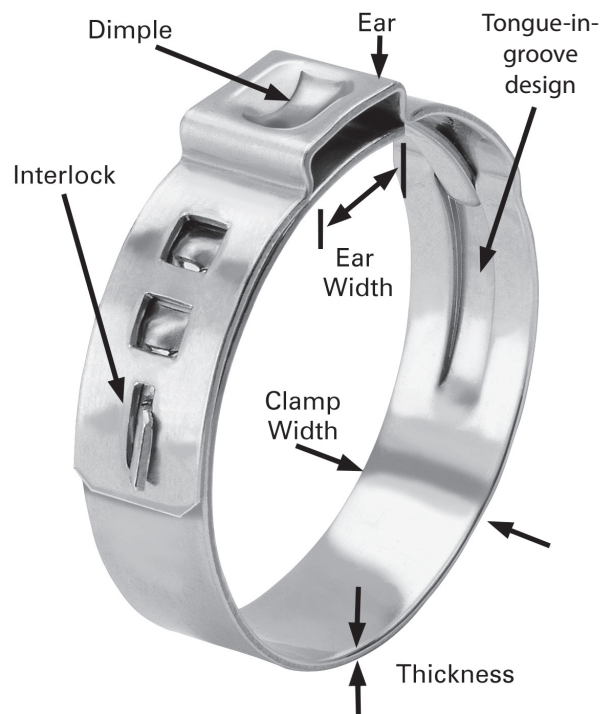
The groove is extruded 1x material thickness on the outer surface and is approximately 1/3 the band width; the mating tongue provides a uniform inner circumference. During the clamp closing process, the tongue engagement increases in the groove, minimizing the reduced surface area, ensuring uniform compression or surface pressure over the full 360° of the assembled parts.

- Stainless steel band UNS S 30400 or Din 1.4301
- 360° stepless design - no steps or gaps on the inner circumference
- Narrow band, concentrated seal compression
- Smooth-edged band steel prevents damage to hose
- Lightweight
- Tamper detectable design



STEPLESS EAR CLAMP

Part Number	Size Ref. (mm)	Clamp Range (mm)		Clamp Range (inches)	
		Closed	Open	Closed	Open
SEC145	14.5	12.0	14.5	0.472	0.571
SEC153	15.3	12.8	15.3	0.504	0.602
SEC157	15.7	13.2	15.7	0.520	0.618
SEC162	16.2	13.7	16.2	0.539	0.638
SEC17	17.0	14.5	17.0	0.571	0.669
SEC185	18.5	15.3	18.5	0.602	0.728
SEC198	19.8	16.6	19.8	0.654	0.780
SEC21	21.0	17.8	21.0	0.701	0.827
SEC226	22.6	19.4	22.6	0.764	0.890
SEC235	23.5	20.3	23.5	0.799	0.925
SEC241	24.1	20.9	24.1	0.823	0.949
SEC256	25.6	22.4	25.6	0.882	1.008
SEC271	27.1	23.9	27.1	0.941	1.067



Pincers & Service Kits



Service Kits - Zinc-Plated, 2-Ear Clamps

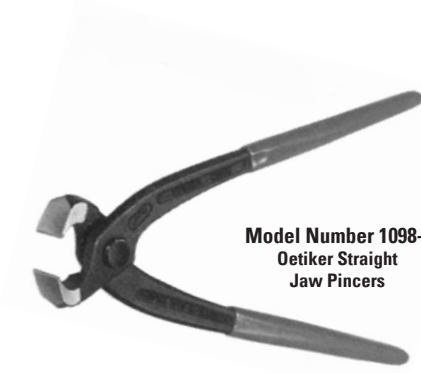
Kit number SK1098 - contains model 1098I pincers & clamps listed below. Low cost - handy!

SK-1098

Kits contain 15 of each of the following zinc-plated 2-Ear Clamps: $\frac{5}{16}$ " , $\frac{7}{16}$ " , $\frac{1}{2}$ " , $\frac{9}{16}$ " , $\frac{5}{8}$ " , $\frac{3}{4}$ " , $\frac{7}{8}$ " , $\frac{15}{16}$ " , & 1"



PINCERS & SERVICE KITS

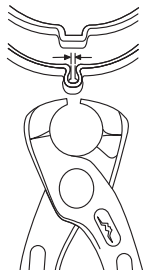


Model Number 1098-I
Oetiker Straight
Jaw Pincers



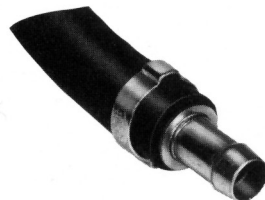
Model Number 1099-I
Oetiker Side
Jaw Pincers

Installation:

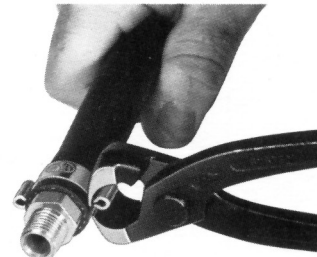


When installing Oetiker Ear Type Clamps, please note that each ear must be crimped as recommended to obtain a proper seal. An incorrectly made installation may impair the best connection. If a clamp ear can be closed all the way, the clamp size selected is probably too big and the next smaller clamp should be ordered.

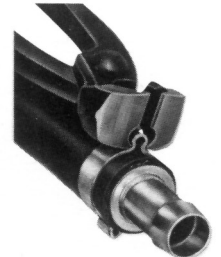
How to Apply:



Position clamp on hose as illustrated.

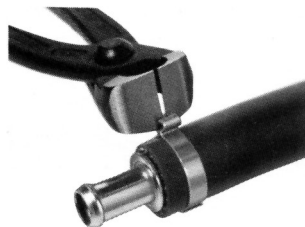


Give each ear a firm squeeze with your Oetiker Pincers.



Where access to ear is difficult use Oetiker Side Jaw Pincers #1099-I.

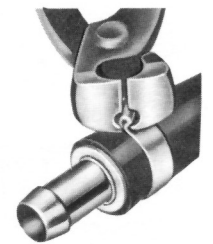
How to



Grip the outer edge of ear firmly and cut through it with either pincers.



Cut the ear by taking several small bites at its base with either pincers.



Then grip ear firmly and twist it off.



T-Clips

T-Clips provide a quick, adaptable and inexpensive answer to securing, attaching and routing of tubes, wires, hose and pipe.

T-Clips provide an exact uniform spacing to dual runs and can be mounted on walls, cabinets, boards, enclosures and bulkheads. T-Clips are available in a wide range of sizes.

A countersunk centerhole is provided in each T-Clip for the fastener of your choice.

T-Clip Number	Spacer Number	Fits Hose O.D.	
		From	To
T4	-	5/32	1/4
T6	-	1/4	5/16
T8	D8	5/16	3/8
T10	D10	3/8	1/2
T12	D12	1/2	5/8
T15	D15	5/8	3/4
T18	D18	3/4	7/8
T22	D22	7/8	1"

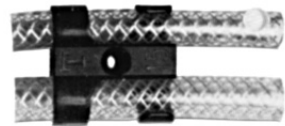
T-CLIPS



1. Place open sides of T-Clip between tubes.



2. Snap T-Clip onto tubes with a quick quarter turn.



3. T-Clip is ready for mounting with tubes held in uniform spacing.

Heli-Tube® Hose & Wire Wrap

Heli-Tube®

Spirally Cut Wrap

- Protects hose from abrasion
- Can be applied with hose in place
- U.V. resistant
- Low cost, great value!



HELI-TUBE HOSE & WIRE WRAP

Specifications:

- Temperature range: -105°F to +190°F
- Abrasion resistance - M6 loss per M cycles: 20
- Di-Electric constant T-D-50: 2.6
- Tensile strength @ 73°F-D-412-51T PSI: 1800
- Specific gravity - D792-50: 0.93
- Material: polyethylene

Part Number	Size Range Dia.*	Nom. O.D.	Wall	Spool Length
HT18C	1/16 to 1/2"	1/8"	.032	100'
HT316C	1/4 to 1 1/2"	3/16"	.031	100'
HT14C2	3/16 to 2"	1/4"	.035	100'
HT38C	5/16 to 3"	3/8"	.052	100'
HT34C	3/4 to 5"	3/4"	.065	100'
HT1C	1 to 7"	1"	.095	100'

*Sizes are tight - order larger than actual size needed.

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Staticide™

General Purpose Staticide® Outperforms! For Non-Porous Surfaces

Staticide is non-toxic, nonflammable, non-staining, completely biodegradable and safe to use. It's the key component in any total environmental static control program.

When properly applied, Staticide complies with or exceeds all electrostatic decay criteria established for antistatic performance as set forth by NFPA and MIL B-81705B, when tested in accordance with Federal Test Standard 101B Method 4046.

Solves static-related problems such as:

- The attraction of dirt, dust and bacteria to all environmental surfaces, products and product packaging
 - Charge generation on surfaces of tote boxes and carriers used to process and store electronic components
 - Damage or destruction of sensitive electronic components and subassemblies during their manufacture, shipping or receiving
 - Data processing "glitches"... memory loss, data errors, paper jams
- General Purpose Staticide is packaged in ready-to-use quart bottles with trigger sprayers or in easy-to-pour gallon containers.

Please call DME for available in bulk quantities.



General Purpose Staticide Quarts w/ Sprayer
Part Number
ACL2003
General Purpose Staticide Gallons
Part Number
ACL2001

STATICIDE

Static Charge Measuring Device

Measures Static Charge Instantly, Reliably and Economically!

- Measures static charges from zero to 30,000 volts
- Convenient pocket size
- Designed for close-in repetitive readings
- Uses standard 9 volt battery
- Battery test feature
- Low drift
- Repeatability ± 1%, accuracy ± 10%
- One-year warranty on parts and labor

Features a unique "quick zero" function which instantly zeroes the instrument and provides ground compensation for the user. Size: 4-3/8" x 2-5/8" x 1-5/16"



Static Charge Measuring Device - Part Number ACL300B
Protective Carrying Case - Part Number ACLCS13

STATIC CHARGE MEASURING DEVICE

Digital Static Charge Meter



ESD Digital Static Meter

Industrial Digital Electrostatic Meter

Accurate, sensitive and responsive, the Model 7905 Digital Static Charge Meter allows easy one-hand static measurements. It indicates the surface voltage and polarity on objects up to ± 20 kV at a spacing of one inch (25mm). The Digital Static Meter features a push button "hold" for readings and automatic "power off."

Designed for use by industrial, maintenance, electrical and other field personnel, the 7905 has a rugged, hard shell plastic case and a compact design. With low drift and trouble-free operation, maintenance consists of periodic replacement of its 9 volt battery.

The 7905's digital readout instantly indicates the magnitude and polarity of any static charge. It's easy to locate and monitor potential trouble spots, position static elimination equipment, and evaluate the effectiveness of existing systems.

Part Number #7905 (unit includes rugged hard shell carrying case and battery)

Specifications

Range: 0 to ± 20 kV at 1"

Power: (1) 9 volt battery (Eveready 216)

Distance: The meter reads true at 1" from thick the test surface

Size: 4.14" (10.6cm) long, 2.4" (6.1cm) wide, 1" (2.5cm)

Color: black

Accuracy: $\pm 10\%$ of full scale (113 grams)

Weight: Approximately $\frac{1}{4}$ pound



DIGITAL STATIC CHARGE METER

Cold Air Gun

F

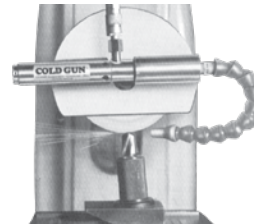
Replace messy mist systems - improve dry machining with clean, cold air! Clean, cold air at 50°F below supply air temperature, with no moving parts!

Features

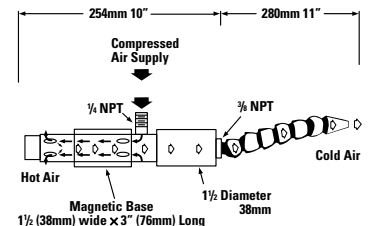
- Low cost
- Compact
- No moving parts
- Maintenance-free
- Quiet
- Magnetic base

Use For

- Cooling parts
- Cooling core pins
- Setting hot melts
- Minimize heat sinks
- Stop drooling or freeze-off a nozzle



COLD AIR GUN



How the Cold Gun Works:

The Cold Gun Air Coolant System incorporates a vortex tube to convert an ordinary supply of compressed air into two low pressure streams: one hot and one cold. The hot air stream is muffled and discharged through the hot air exhaust. The cold air is muffled and discharged through the flexible hose, which directs it to the point of use. The magnetic base provide easy mounting and portability.

Ordering Information

Cold Gun Kits include: Cold Gun with magnetic base, pneumatic filter with manual drain, single or double point flexible hose kit.

CG5215

Single Point Cold Gun Kit

U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000

459

dme.net • store.dme.net

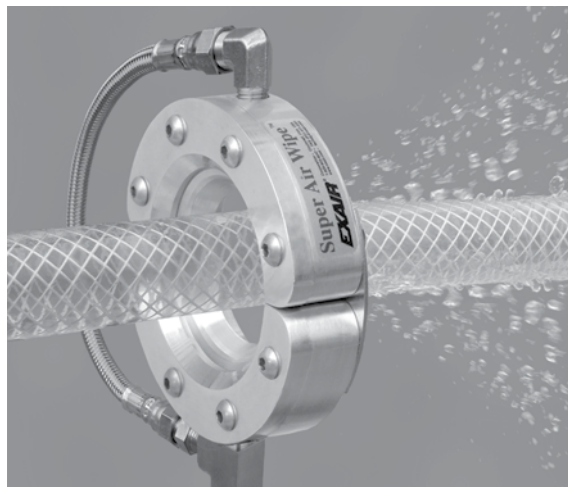


Super Air Wipes

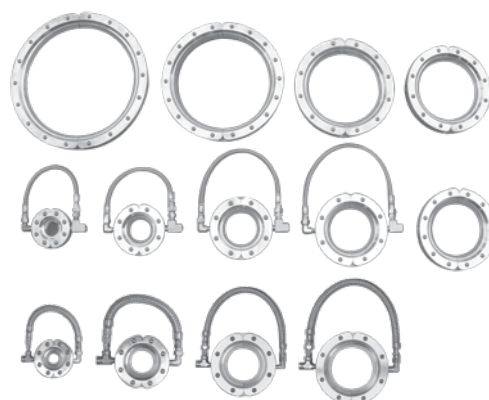
Blow off, dry, clean and cool pipe, cable, extruded shapes and hose!

Split design requires no threading!

EXAIR's Super Air Wipe provides a uniform 360° airstream that is ideal for blowoff, drying, cleaning and cooling of pipe, cable, extruded shapes, hose and more. The split design offers easy clamping around the surface of the material moving through it, eliminating the need for threading. All models include stainless steel screws and shims. Stainless steel wire braided hose is also included on sizes up to 4" (102mm) for added corrosion and heat resistance. Aluminum models are rated for temperatures up to 400°F (204°C) and stainless steel models for temperatures up to 800°F (427°C).



SUPER AIR WIPES



Air Wipe Performance			
80 PSIG (5.5 BAR)	Air Consumption		Sound Level @ 3' (.91m)
Model	SCFM	SLPM	dBA
2401, 2401SS	19.1	541	76
2402, 2402SS	29.5	835	77
2403, 2403SS	39.8	1127	79
2404, 2404SS	50.2	1422	81
2405	60.6	1716	82
2406	71.0	2010	84
2407	81.3	2302	85
2409	102.1	2891	87
2411	122.8	3477	89

Advantages

- Quiet
- Low air consumption
- Uniform airflow across the entire diameter
- Stainless steel hardware resists corrosion
- Aluminum models for temperatures up to 400°F (204°C); stainless steel models for temperatures to 800°F (427°C)
- Stainless steel hose supplied on sizes up to 4" (102mm)
- No electricity, no moving parts
- Non-contact - no wiper blade
- Split design - compact, rugged, easy to install
- Lightweight, low profile
- Tapped holes for mounting
- Variable force and flow
- Meets OSHA maximum dead-end pressure and noise requirements

The Aluminum Super Air Wipe is available in 9 sizes from stock. The Stainless Steel Super Air Wipe is available in 4 sizes from stock. Other sizes are available by special order.

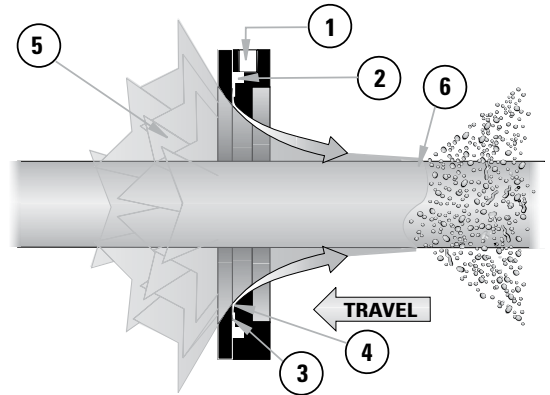
Applications

- Drying after wash, cleaning, plating or coating
- Blow off dust and contaminants
- Cool hot extruded shapes
- Uniformly wipe surfaces
- Eliminate solution carryover - no cross contamination
- Remove excess coatings, water and oil
- Minimize solution loss due to drag-out
- Dry screen printed and ink jet surfaces
- Ideal for pipe, cable, extrusions, wire, rod and hose

SUPER AIR WIPES

How The Air Wipe Works

Compressed air flows through an inlet (1) of the Air Wipe into an annular chamber (2). It is then throttled through a small ring nozzle (3) at high velocity. This primary airstream adheres to the Coanda effect (4), which directs it down the angled surface of the Air Wipe. A low pressure area is created at the center (5) inducing a high volume flow of surrounding air into the primary airstream. As the airflow leaves the Air Wipe, it creates a conical 360° ring of air that attaches itself to the surface of the material running through it (6), uniformly wiping the entire surface with the high velocity airflow.



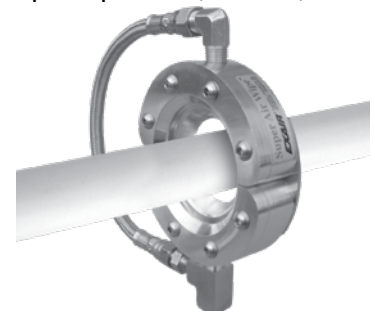
Super Air Wipe Systems

Super Air Wipe	
Model Number	Description
2401	1" (25mm)
2402	2" (51mm)
2403	3" (76mm)
2404	4" (102mm)
2405	5" (127mm)
2406	6" (152mm)
2407	7" (178mm)
2409	9" (229mm)
2411	11" (279mm)

Super Air Wipe Kit	
<i>Kit includes Super Air Wipe, filter separator, pressure regulator and shim set</i>	
Model Number	Description
2451	1" (25mm)
2452	2" (51mm)
2453	3" (76mm)
2454	4" (102mm)
2455	5" (127mm)
2456	6" (152mm)
2457	7" (178mm)
2459	9" (229mm)
2461	11" (279mm)

Super Air Wipe Is Easy To Use

There is a 1/4" NPT female inlet on each half of the Super Air Wipe on sizes up to 7" (178mm). Larger sizes include two 1/4" NPT female inlets on each half in order to maintain proper air volume and performance. Aluminum Super Air Wipes up to 4" (102mm) include a brass tee that supplies one half directly and a stainless steel wire braided coupling hose rated at 400°F (204°C) to supply the other half. Stainless steel Super Air Wipes up to 4" (102mm) include a stainless steel tee and a stainless steel wire braided coupling hose rated at 800°F (427°C). Larger sizes should be piped directly.



The Model 2402 2" (51mm) Super Air Wipe cools PVC pipe as it is ejected from an extruder.

Stainless Steel Super Air Wipe	
Model Number	Description
2401SS	1" (25mm)
2402SS	2" (51mm)
2403SS	3" (76mm)
2404SS	4" (102mm)

Stainless Steel Super Air Wipe Kit	
<i>Kit includes Super Air Wipe, filter separator, pressure regulator and shim set</i>	
Model Number	Description
2451SS	1" (25mm)
2452SS	2" (51mm)
2453SS	3" (76mm)
2454SS	4" (102mm)

Super Air Wipe Shim Set	
<i>Shim Sets include (2) .002" (.05mm) thick stainless steel shim</i>	
Model Number	Description
2351SS	1" (25mm)
2352SS	2" (51mm)
2353SS	3" (76mm)
2354SS	4" (102mm)
2355SS	5" (127mm)
2356SS	6" (152mm)
2357SS	7" (178mm)
2359SS	9" (229mm)
2361SS	11" (279mm)

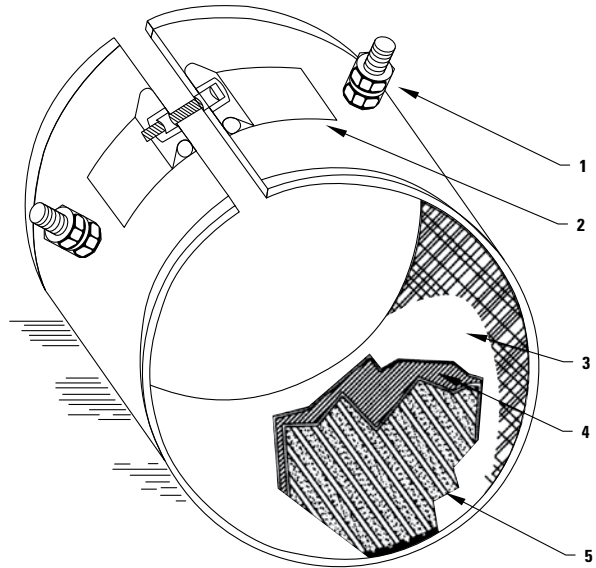


Mica Insulated Heater Band

Time-tested materials & manufacturing techniques make this heater a proven, economical, reliable performer. In applications where a flat surface requires uniform heating, this heater has no equal.

Material List

- 1) Stainless steel post terminals are supplied with nuts and washers. Connections are attached to the oversized terminal head for superior electrical contact. Many other terminations and leads available.
- 2) Stainless steel welded on clamps have precision drilled and tapped barrel nuts and are supplied with high torque 10–32 socket head cap screws. These are used for firm clamping and excellent heat transfer.
- 3) The two-piece sheath is composed of a rust-resistant, matte finish, zinc-coated bottom plate and galvanized top plate. This construction provides excellent heat emissivity and corrosion resistance.
- 4) Mica provides complete electrical insulation of the heater case from the steel case, while providing maximum heat transfer.
- 5) Flat nickel-alloy ribbon wire provides the highest heating area possible. Each heater is engineered for wire size and pitch to provide the highest efficiency, while minimizing winding temperature.



MICA HEATER BAND

Maximum Recommended Watts

When heating objects to higher temperatures, lower watt density heater bands should be used. This will help to prevent overheating and provide a longer heater band life.

Watt density is the total wattage of the heater band divided by the heated surface area of the heater band. Use this table below to help determine the recommended watt density for the application. Lower watt densities can be achieved by operating a 240 volt heater band on 120 volts. In doing this the wattage and watt density are derated by a factor of 4.

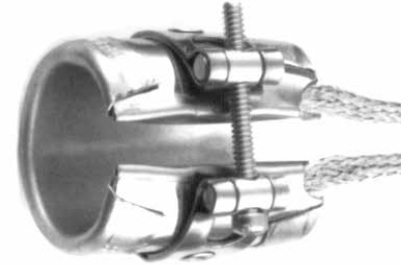
- One piece and 2-piece bands
- Fiberglass leads, stainless leads and post terminals
- 120 and 240 volt styles
- Uniform heat, high watt density
- Many wattage options
- High-quality sheet mica construction
- Many sizes in stock ready to ship
- Custom bands available in rush and standard delivery option

Operating Temp.	Maximum Recommended Watts Per Sq. In.
300°F (149°C)	40
400°F (204°C)	30
500°F (260°C)	21
600°F (316°C)	12
700°F (371°C)	10
800°F (427°C)	10
900°F (482°C)	10

Metric Heater Bands



- Low cost, quality bands
- For other sizes, please see Standard Mica Heater Band pages that follow
- 12" stainless steel leads



METRIC HEATER BAND

Metric (mm)		U.S. (in)		Volts	Watts	Part Number
Dia.	Width	Dia.	Width			
25	25	.984	.984	240	85	MHB2525-85
25	35	.984	1.378	240	125	MHB2535-125
30	30	1.181	1.181	240	135	MHB3030-135
30	38	1.181	1.496	240	185	MHB3038-185
32	25	1.260	.984	240	115	MHB3225-115
32	30	1.260	1.181	240	145	MHB3230-145
32	38	1.260	1.496	240	195	MHB3238-195
32	50	1.260	1.969	240	250	MHB3250-250
35	20	1.378	.787	240	95	MHB3520-95
35	25	1.378	.984	240	125	MHB3525-125
35	30	1.378	1.181	240	155	MHB3530-155
35	35	1.378	1.378	240	180	MHB3535-180
35	38	1.378	1.496	240	210	MHB3538-210
35	50	1.378	1.969	240	265	MHB3550-265
38	30	1.496	1.181	240	170	MHB3830-170
38	35	1.496	1.378	240	200	MHB3835-200
38	50	1.496	1.969	240	300	MHB3850-300
40	25	1.575	.984	240	160	MHB4025-160
40	30	1.575	1.181	240	200	MHB4030-200
40	38	1.575	1.496	240	270	MHB4038-270
40	50	1.575	1.969	240	345	MHB4050-345



Heat Transfer Compound

HEAT TRANSFER COMPOUND



- Transfers heat away from electronic devices
- High thermal conductivity
- Temperature range to 400°F

Highly effective when used with rectifiers, ignition control modules, voltage regulators and other heat generating electronic devices.

Part Number 49643 - 5 oz. tube



Nozzle Bands

- Low cost, quality bands
- For other sizes, please see Standard Mica Heater Band pages that follow

Inside Diameter	Width	Volts	Watts	Part Number	Reference Number	Lead Type*
1" Diameter	1"	120	100	HB1-101012-100	BN1010A1	FG
	1"	240	100	HB1-101024-100	BN1010A2	FG
	1"	120	125	HB1-101012-125S	-	SS
	1"	240	125	HB1-101024-125S	-	SS
	1"	120	125	HB1-101012-125	-	FG
	1"	240	125	HB1-101024-125	-	FG
	1½"	120	150	HB1-101512-150	-	FG
	1½"	240	150	HB1-101524-150	BN1015A2	FG
	2"	120	200	HB1-102012-200	BN1020A1	FG
	2"	240	200	HB1-102024-200	BN1020A2	FG
	3"	120	300	HB1-103012-300	BN1030A1	FG
	3"	240	300	HB1-103024-300	BN1030A2	FG
1½" Diameter	1"	120	150	HB1-151012-150	BN1510A1	FG
	1"	240	150	HB1-151024-150	BN1510A2	FG
	1½"	120	275	HB1-151512-275	-	FG
	1½"	240	275	HB1-151524-275	-	FG
	1½"	120	275	HB1-151512-275S	-	SS
	1½"	240	275	HB1-151524-275S	-	SS
	2"	120	300	HB1-152012-300	BN1520A1	FG
	2"	240	300	HB1-152024-300	BN1520A2	FG
	2"	120	300	HB1-152012-300S	BN1520B1	SS
	2"	240	300	HB1-152024-300S	BN1520B2	SS
	3"	120	450	HB1-153012-450	BN1530A1	FG
	3"	240	450	HB1-153024-450	BN1530A2	FG
	4"	120	550	HB1-154012-550	-	FG
	4"	240	550	HB1-154024-550	-	FG
	5"	120	700	HB1-155012-700	-	FG
	5"	240	700	HB1-155024-700	-	FG
1¾" Dia.	1½"	120	250	HB1-1751512-250	BN1715A1	FG
	1½"	240	250	HB1-1751524-250	BN1715A2	FG
2" Dia.	1"	120	200	HB1-201012-200	BN2010A1	FG
	1"	240	200	HB1-201024-200	BN2010A2	FG



NOZZLE BANDS

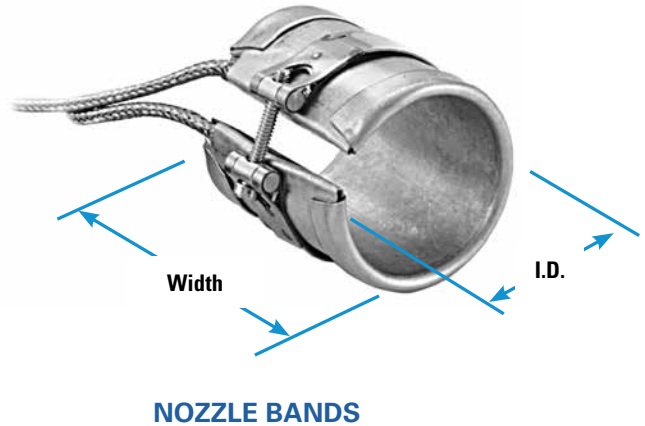
*12" lead lengths standard

FG = fiberglass

SS = stainless steel

**All Nozzle Bands Include
12" Stainless Steel Braided Leads!!!**

Inside Diameter	Width	Watts	Volts	Part Number
3/4"	1"	100	240	B029586
	1 1/2"	150	240	B016886
	1 1/2"	200	240	B028956
	2"	200	240	B020010
	2"	150	120	B031793
	3"	300	240	B029537
1 1/4"	1"	150	240	B028271
	1 1/2"	200	240	B028272
	2"	250	240	B029837
1 1/2"	1"	150	240	B017022
	1 1/4"	250	240	B034406
	2"	350	240	B011941
	2"	350	120	B030459
	2"	400	240	B033555
	2 1/2"	300	240	B029521
	4"	500	240	B012933
1 5/8"	1 1/2"	300	240	B034363
1 3/4"	1"	200	240	B013847
	1 1/2"	250	240	B029274
	1 1/2"	300	240	B034459
	2"	300	240	B029541
	2"	300	120	B033605
1 7/8"	3"	450	240	B031023
	2"	350	240	B030666
2"	1"	200	240	B029542
	1 1/2"	325	240	B029050
	1 1/2"	325	120	B018274
	2"	350	240	B030113
	2"	350	120	B030885
	2"	400	240	B035725
2 1/2"	1"	150	240	B037454
	1 1/2"	300	240	B035329
	1 1/2"	420	120	B042475





Standard Mica Heater Bands

- High-quality sheet mica construction
- Uniform heat, high watt density
- 10" high temperature leads with protective sleeves are standard



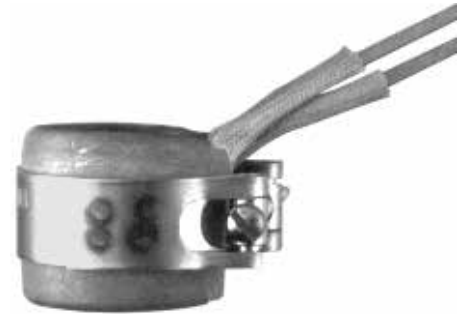
STANDARD MICA HEATER BANDS

I.D. x Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
3/4 x 1	120	75		SHB121612-75
	240	75		SHB121624-75
3/4 x 1 1/2	240	100		SHB122424-100
7/8 x 1	120	80		SHB141612-80
	240	80		SHB141624-80
7/8 x 1 1/4	120	90		SHB142012-90
	240	90		SHB142024-90
7/8 x 1 1/2	120	100		SHB142412-100
	240	100		SHB142424-100
1 x 1	120	100		HB1-101012-100
	240	100		HB1-101024-100
	120	100	10" Stainless	SHB161612-100S
	240	100	10" Stainless	SHB161624-100S
	120	125	10" Stainless	HB1-101012-125S
	240	125	10" Stainless	HB1-101024-125S
	120	125		HB1-101012-125
	240	125		HB1-101024-125
1 x 1 1/2	120	150		HB1-101512-150
	240	150		HB1-101524-150
1 x 2	120	200		HB1-102012-200
	240	200		HB1-102024-200
1 x 2 1/2	120	250		SHB164012-250
	240	250		SHB164024-250
	240	250	34" Stainless	SHB164024-250S
1 x 3	120	300		HB1-103012-300
	240	300		HB1-103024-300
1 x 4	120	400		SHB166412-400
	240	400		SHB166424-400
1 x 5	120	500		SHB168012-500
	240	500		SHB168024-500
30mm x 30mm	240	150	12" SS Braid	B041556

Standard Mica Heater Bands



I.D. x Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
1¼ x ⅝	120	100	10" Stainless	SHB201012-100S
1¼ x 1	120	125		SHB201612-125
	240	125		SHB201624-125
1¼ x 1½	120	200		SHB202412-200
	240	200		SHB202424-200
1¼ x 1¾	240	275		SHB202824-275
1¼ x 2	120	250		SHB203212-250
	240	250		SHB203224-250
1¼ x 3	120	400		SHB204812-400
	240	400		SHB204824-400
1¼ x 3½	240	300		SHB205624-300
1⅜ x 1	120	150		SHB221612-150
	240	150		SHB221624-150
1⅜ x 1½	120	200		SHB222012-200
	240	200		SHB222024-200
1⅜ x 2	120	275		SHB223212-275
	240	275		SHB223224-275
1⅜ x 3½	240	250		SHB225624-250
1½ x ½	120	100		SHB240812-100
	240	100		SHB240824-100
1½ x ⅝	120	100		SHB241012-100
	240	100		SHB241024-100
1½ x ¾	120	100		SHB241212-100
	240	100		SHB241224-150
1½ x 1	120	150		HB1-151012-150
	240	150		HB1-151024-150
	120/ 240	150		SHB24161224-150
1½ x 1½	230	200		SHB242423-200
	240	200	24" SS Braid	B041830
	240	250	24" Leads	B021993
	240	250		SHB242424-250
	120	275		HB1-151512-275
	240	275		HB1-151524-275
	240	275	24" SS Braid	B017026
	240	275	34" Leads	SHB242424-275-34
	480	275	12" SS Braid	B038203
	120/ 240	275		SHB24241224275
	120	275	34" Leads	SHB242412275-34
	240	275	34" Leads	SHB242424-275-34



STANDARD MICA HEATER BANDS





Standard Mica Heater Bands

I.D. x Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
1½ x 1½	120	275	10" Stainless	HB1-151512-275S
	240	275	10" Stainless	HB1-151524-275S
	120	275	Post	SHB242412-275P
	240	275	Post	SHB242424-275P
	120	275	With TC Hole	SHB242412275TC
	240	275	With TC Hole	SHB242424275TC
	230	275	Type A 54"	50387B
	240	300	10" Stainless	SHB242424-300S
1½ x 1¾	120	285		SHB242812-285
	240	285		SHB242824-285
1½ x 2	120	300		HB1-152012-300
	240	300		HB1-152024-300
	120	300	10" Stainless	HB1-152012-300S
	240	300	10" Stainless	HB1-152024-300S
1½ x 2½	120	400		SHB244012-400
	240	400		SHB244024-400
	240	400	34" Stainless	SHB244024-400S
1½ x 3	120	450	10" Stainless	SHB244812-450S
	240	450	10" Stainless	SHB244824-450S
	120	450		HB1-153012-450
	240	450		HB1-153024-450
	120/ 240	450	12" Stainless	SHB244824-450S
1½ x 3½	120	525		SHB245612-525
	240	525		SHB245624-525
1½ x 4	120	550		HB1-154012-550
	240	550		HB1-154024-550
	120/ 240	550		SHB24641224550
1½ x 5	120	700		HB1-155012-700
	240	700		HB1-155024-700
	240	700	12" SS Braid	B044624
1½ x 6	240	700	24" SS Braid	B027067
	240	850		SHB249624-850
1½ x 7	240	800	24" SS Braid	B027068
1⅝ x 3	240	300	12" SS Braid	B036062
1¾ x 1	120	175		SHB281612-175
	240	175		SHB281624-175



STANDARD MICA HEATER BANDS

Standard Mica Heater Bands



I.D. × Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
1¼ × 1½	120	250		HB1-1751512-250
	240	250		HB1-1751524-250
1¼ × 1¾	240	350	24" SS Braid	B038843
1¾ × 2	120	350		SHB283212-350
	240	350		SHB283224-350
1¾ × 2½	120	450		SHB284012-450
	240	450		SHB284024-450
1¾ × 3	120	500		SHB284812-500
	240	500		SHB284824-500
1¾ × 3½	120	500		SHB285612-500
	240	500		SHB285624-500
1¾ × 4	120	700		SHB286412-700
	240	700		SHB286424-700
1¾ × 5	240	900	34" Stainless	SHB288024-750S
	120	900		SHB288012-900
	240	900		SHB288024-900
1¾ × 6	120	1000		SHB289612-1000
	240	1000		SHB289624-1000
1⅞ × 1	120	300	Post	SHB301612-300P
	240	300	Post	SHB301624-300P
2 × 1	120	200		HB1-201012-200
	240	200		HB1-201024-200
2 × 1⅜	240	300		SHB322224-300
2 × 1½	120	300		SHB322412-300
	240	300		SHB322424-300
	120/ 240	300		SHB32241224300
2 × 2	120	400		SHB323212-400
	240	400		SHB323224-400
2 × 2½	120	500		SHB324012-500
	240	500		SHB324024-500
2 × 3	120	600		SHB324812-600
	240	600		SHB324824-600
	240	675	12" SS Braid	B039887
2 × 4	120	800		SHB326412-800
	240	800		SHB326424-800
2 × 5	120	900		SHB328012-900
	240	900		SHB328024-900
2 × 6	120	1200		SHB329612-1200
	240	1200		SHB329624-1200
2⅞ × 1	120	225		SHB341612-225
	240	225		SHB341624-225
2⅞ × 1½	120	300		SHB342412-300
	240	300		SHB342424-300
2⅞ × 2	120	400		SHB343212-400
	240	400		SHB343224-400



STANDARD MICA HEATER BANDS





Standard Mica Heater Bands

I.D. x Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
2 1/8 x 3	120	600		SHB344812-600
	240	600		SHB344824-600
2 1/4 x 1	120	225		SHB361612-225
	240	225		SHB361624-225
2 1/4 x 1 1/2	120	350		SHB362412-350
	240	350		SHB362424-350
	240	500	24" SS Braid	B019091
2 1/4 x 2	120	450		SHB363212-450
	240	450		SHB363224-450
2 1/4 x 2 1/2	240	600	Post	SHB364024-600P
	120	600		SHB364012-600
	240	600		SHB364024-600
2 1/4 x 3	120	700		SHB364812-700
	240	700		SHB364824-700
2 3/8 x 1	120	150		SHB381612-250
	240	250	Post	SHB381624-250
	240	250	Post	36210B*
	460	250	Post	47937B*
2 3/8 x 1 1/2	120	400		SHB382412-400
	240	400		SHB382424-400
2 7/16 x 1	230	250	72" Leads	66270B*
2 1/2 x 1	120	300		SHB401612-300
	240	300		SHB401624-300
	120	300	Post	SHB401612-300P
	240	300	Post	SHB401624-300P
2 1/2 x 1 1/2	120	350		SHB402412-350
	240	350		SHB402424-350
2 1/2 x 1 3/4	240	500		SHB402824-500
2 1/2 x 2	240	350	24" SS Braid	B017045
	120	500		SHB403212-500
	240	500		SHB403224-500
2 1/2 x 2 3/8	120	550	Post	SHB403812-550P
	240	550	Post	SHB403824-550P
	120	650	Post	SHB403812-650P
	240	650	Post	SHB403824-650P
3 x 1	240	300	24" SS Braid	B022530
2 1/2 x 3	120	700		SHB404812-700
	240	700		SHB404824-700
2 1/2 x 4	240	850	Post	SHB406424-850P
2 1/2 x 5	240	1150	Post	SHB408024-1150P
	230	900	Post	45982B*
2 3/4 x 1 1/2	120	400		SHB442412-400
	240	400		SHB442424-400



STANDARD MICA HEATER BANDS

*Equal to Van Dorn O.E.M. heater band. Full listing by Van Dorn part number follows these bands.
 **270° coverage, post terminals, padded strap, stainless sheath, high temp. construction. For 2 piece bands, total wattage & voltage are shown.

Standard Mica Heater Bands



I.D. × Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
3 × 1	120	300		SHB481612-300
	240	300		SHB481624-300
	230	400	Post	12393B*
	460	400	2 pc/Post Terms	51191B*
	460	400		66301B*
	230	400		66302B*
3 × 1½	120	500		SHB482412-500
	220	400	Post	36211B*
	240	500		SHB482424-500
	240	500	12" SS Braid	B030030
3 × 2	120	600		SHB483212-600
	240	600		SHB483224-600
	240	600	12" SS Braid	B030114
3 × 3	120	900		SHB484812-900
	240	900		SHB484824-900
3⅛ × 1	240	400		SHB501624-400
3⅛ × 1½	240	500		SHB502424-500
3¼ × 1	120	350		SHB521612-350
3½ × 1	120	350		SHB561612-350
	240	400	24" SS Braid	B014594
3½ × 1½	240	500	12" SS Braid	B027889
	240	500	Post	SHB562424-500P
3½ × 2	240	650	Post	SHB563224-650P
	230	625	Post	64890B*- Ceramic
3⅝ × 1½	240	625	Post	40978B*
	240	650	Post	SHB602424-650P
	240	400	12" SS Braid	B039990
4 × 1	240	400	24" SS Braid	B018999
	240	625	Post	SHB641624-625P
	240	625	Post	32138B*
	240	625	Post	SHB642424-625P
4 × 1½	220	625	Post	25148B*
	230	400	Post	41989B*
	230	625	18" Leads	303137B*
	460	625	18" Leads	66258B*
	230	625	Post	66952B*-
	230	725	Post	307225B*
4 × 2	240	650	12" SS Braid	B038061
	240	800	12" SS Braid	B037691
	240	800	Post	SHB643224-800P
	460	460	2 pc/**see below	78540B*
	460	1100	Post	307660B*
	230	1250		67736B*- (Ceramic)



STANDARD MICA HEATER BANDS

*Equal to Van Dorn O.E.M. heater band. Full listing by Van Dorn part number follows these bands.
 **270° coverage, post terminals, padded strap, stainless sheath, high temp. construction. For 2-piece bands, total wattage & voltage are shown.





Standard Mica Heater Bands

I.D. x Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
4 x 2¼	120	800		SHB643612-800
4½ x 1½	240	750	Post	SHB722424-750P
4½ x 4	240	1400	24" SS Braid	B036704
5 x 1½	240	800	12" SS Braid	B021068
5 x 2	240	1000	Term Posts	B021396
	240	1000	12" SS Braid	B046757
5⅛ x 1½	230	700	Post	29339B*
5¼ x 1	230	600	Post	65982B*
	460	600	34" Leads	301659B*
5¼ x 1½	230	300	Post	74842B*
	230	600	Post	16526B*
	230	600		64584B*- Ceramic
	230	500	Post	74840B*
	230	1000	Post	12391B*
	230	1000		77685B*- Ceramic
	480	600	2 Pc Post	74842B*
5¼ x 2	460	666	2 pc/**see below	77123B*
5¼ x 3	230	1700	Post	302454B*
5¼ x 4½	230	2400	Post	302456B*
	230	2700	Post	307865B*
5¼ x 5	230	2400	Post	307866B*
5½ x 1½	240	700	24" SS Braid	B041264
5¾ x 1	460	600	34" Leads	307260B*
5¾ x 1½	230	600	Post	28784B*
	230	600	Post	68105B*- Ceramic
	460	1000	Post	302514B*
6 x 1	240	500	48" SS Braid	B014595
6 x 1½	230	600	Post	37587B*
	230	1000	2 pc Post	41987B*
	230	1000	2 pc Post	66821B*- Ceramic
	240	1000	Term Posts	B012799
	460	1000	Post	307863B*
6¾ x 1½	230	815	Post	25147B*
	240	1000	Post	51137B*
	230	600	Post	41988B*
	460	1000	Post	307861B*
6¾ x 2½	460	1150	2 pc/**see below	76928B*
6¾ x 4	230	2600	Post	307864B*
6¾ x 6	230	3750	Post	307859B*
	460	3750	Post	307860B*
7½ x 1½	230	815	Post	28786B*
7⅝ x 3	230	2000	Post	27213B*
	230	1800	Post	27214B*



STANDARD MICA HEATER BANDS

*Equal to Van Dorn O.E.M. heater band. Full listing by Van Dorn part number follows these bands.
 **270° coverage, post terminals, padded strap, stainless sheath, high temp. construction. For 2-piece bands, total wattage & voltage are shown.

Standard Mica Heater Bands



I.D. x Width	Volts	Watts	10" Flexible Leads Unless Noted	Part Number
8¼ x 2	220	1800	2 pc/Post Terms	29347B*
	440	1800	2 pc/Post Terms	31805B*
8¼ x 3	230	1800	Post	37186B*
	230	2000	Post	30465B*
8½ x 4	230	1800	Post	38948B*
9½ x 3	240	2000	Post	29341B*
	460	1930	2 pc/**see below	78541B*
9½ x 6	460	4000	2 pc/Post Terms	38947B*
11 x 3	230	1000	Post	71922B*
11¼ x 3	460	2400	2 pc/Post Terms	45985B*

**High Quality & Low,
Low Prices!**

*Equal to Van Dorn O.E.M. heater band. Full listing by Van Dorn part number follows these bands.
 **270° coverage, post terminals, padded strap, stainless sheath, high temp. construction. For 2-piece bands, total wattage & voltage are shown.

STANDARD MICA HEATER BANDS



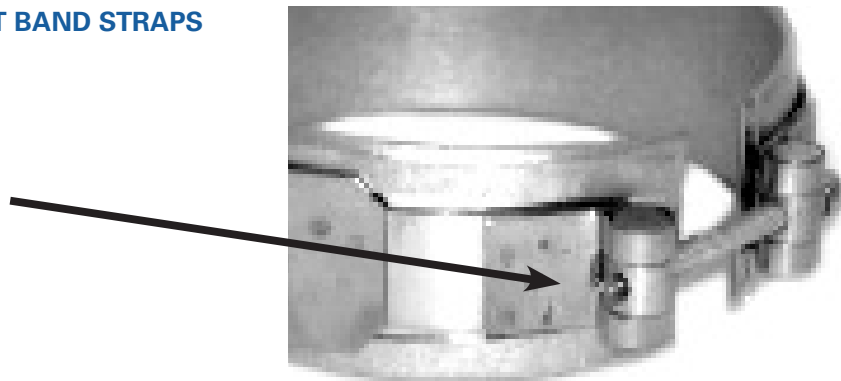
Replacement Heater Band Straps



Item	Part Number
Replacement bands for : 1" x 1" Band Strap	HB1STRAP
Replacement bands for: 1½" x 1½" Band Strap	HB112STRAP

REPLACEMENT BAND STRAPS

Replacement strap





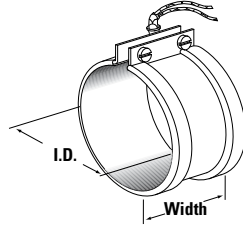
Mica Heater Bands

With Flange Lock-up

Heavy-Duty Nozzle Bands with Flange Lock-up

Far superior to low cost alternatives, these bands provide the most economical option for the long term.

- Premium quality natural mica insulation
- Reinforced lead exit for long life
- High watt density
- Ultra-smooth I.D. bore - reduces hot spots



Dual voltage bands (120/240V) can be configured for either voltage

- For 240V, use two red wires as power leads; white wire is not used (insulate with tape)
- For 120V, connect 2 red wires and use as on power lead; use red wire as second lead

Mix and match sizes for maximum discount.

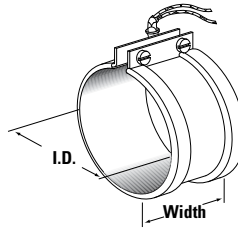
I. D.	Width	Watts	Volts	Lead Length & Configuration	Part Number
7/8"	1"	75W	240	36" Flexible Glass Covered	NB0810A2
1"	1"	100W	120	14" Flexible Glass Covered	NB1010A1
			240		NB1010A2
			120/240		NB1010AD
1"	1 1/2"	150W	120	14" Flexible Glass Covered	NB1015A1
			240		NB1015A2
			120/240		NB1015AD
1"	2"	200W	120	14" Flexible Glass Covered	NB1020A1
			240		NB1020A2
			120/240		NB1020AD
1"	2 1/2"	250W	120	14" Flexible Glass Covered	NB1025A1
			240		NB1025A2
1"	3"	300W	120	14" Flexible Glass Covered	NB1030A1
			240		NB1030A2
1 1/4"	1"	125W	240	14" Flexible Glass Covered	NB1210A2
1 1/4"	1 1/2"	200W	240	14" Flexible Glass Covered	NB1215A2
1 1/4"	2"	250W	240	14" Flexible Glass Covered	SHB203224-250
1 1/4"	3"	400W	240	14" Flexible Glass Covered	SHB204824-400
1 3/8"	1"	150W	240	14" Flexible Glass Covered	NB1310A2
1 3/8"	1 1/2"	200W	240	14" Flexible Glass Covered	SHB222024-200
					240	SHB223224-275
1 3/8"	2"	300W	120/240	14" Flexible Glass Covered	NB1320AD
			240		
1 1/2"	5/8"	100W	120	14" Flexible Glass Covered	NB1506A1
			240		NB1506A2
1 1/2"	1"	150W	120	14" Flexible Glass Covered	NB1510A1
			240		NB1510A2
			120/240		NB1510AD
1 1/2"	1 1/2"	250W	120	14" Flexible Glass Covered	NB1515A1
			240		NB1515A2
			120/240		NB1515AD
1 1/2"	2"	300W	120	14" Flexible Glass Covered	NB1520A1
			240		NB1520A2
			120/240		NB1520AD
			240		36" Flexible S. Steel Armor NB1520C2

MICA HEATER BANDS

Heavy-Duty Nozzle Bands with Flange Lock-up

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- High watt density
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Dual voltage bands (120/240V) can be configured for either voltage

- For 240V, use two red wires as power leads; white wire is not used (insulate with tape)
- For 120V, connect 2 red wires and use as on power lead; use red wire as second lead

Mix and match sizes for maximum discount.

I. D.	Width	Watts	Volts	Lead Length & Configuration	Part Number
1½"	2½"	350W	120	14" Flexible Glass Covered	NB1525A1
			240		NB1525A2
			120/240		NB1525AD
1½"	3"	450W	120	14" Flexible Glass Covered	NB1530A1
			240		NB1530A2
			120/240		NB1530AD
			240	14" Flexible S. Steel Armor	SHB244824-450S
1½"	4"	600W	120	14" Flexible Glass Covered	NB1540A1
			240		NB1540A2
			120/240		NB1540AD
1½"	5"	750W	120	14" Flexible Glass Covered	NB1550A1
			240		NB1550A2
			120/240		NB1550AD
1½"	6"	850W	120	14" Flexible Glass Covered	NB1560A1
			240		NB1560A2
			120/240		NB1560AD
1⅞"	1½"	250W	240	14" Flexible Glass Covered	NB1615A2
1⅞"	2"	325W	120	14" Flexible Glass Covered	NB1620A1
			240		NB1620A2
1¾"	1"	175W	120	14" Flexible Glass Covered	SHB281612-175
			240		NB1710A2
1¾"	1½"	250W	120	14" Flexible Glass Covered	NB1715A1
			240		NB1715A2
			120/240		NB1715AD
1¾"	2"	350W	240	14" Flexible Glass Covered	NB1720A2
			120/240		NB1720AD
1¾"	3"	500W	240	14" Flexible Glass Covered	NB1730A2
			120/240		NB1730AD
1¾"	4"	700W	120	14" Flexible Glass Covered	NB1740A1
			240		NB1740A2
1¾"	5"	900W	240	14" Flexible Glass Covered	NB1750A2
1¾"	6"	1000W	120	14" Flexible Glass Covered	NB1760A1
2"	1"	200W	120	14" Flexible Glass Covered	NB2010A1
			240		NB2010A2

MICA HEATER BANDS





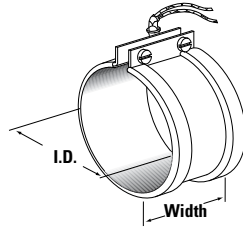
Mica Heater Bands

With Flange Lock-up

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- For 240V, use two red wires as power leads; white wire is not used (insulate with tape)
- For 120V, connect 2 red wires and use as on power lead; use red wire as second lead

Mix and match sizes for maximum discount.

I. D.	Width	Watts	Volts	Lead Length & Configuration	Part Number
2"	1½"	300W	240	14" Flexible Glass Covered	NB2015A2
2"	2"	400W	240	14" Flexible Glass Covered	NB2020A2
2"	2½"	500W	240	14" Flexible Glass Covered	NB2025A2
2"	3"	600W	240	14" Flexible Glass Covered	NB2030A2
2"	4"	800W	120	14" Flexible Glass Covered	NB2040A1
2⅛"	1"	200W	240	14" Flexible Glass Covered	NB2110A2
2⅛"	1½"	300W	240	14" Flexible Glass Covered	NB2115A2
2¼"	1"	225W	240	14" Flexible Glass Covered	NB2210A2
			120/240		NB2210AD
2¼"	3"	700W	120	14" Flexible Glass Covered	NB2230A1
2⅜"	1"	250W	240	14" Flexible Glass Covered	NB2310A2
2⅜"	1½"	400W	120	14" Flexible Glass Covered	NB2315A1
			240		NB2315A2
2½"	1"	250W	240	14" Flexible Glass Covered	NB2510A2
			120/240		NB2510AD
2½"	1½"	375W	120	14" Flexible Glass Covered	NB2515A1
			240		NB2515A2
			120/240		NB2515AD
2½"	2"	500W	240	14" Flexible Glass Covered	NB2520A2
2½"	3"	750W	240	14" Flexible Glass Covered	NB2530A2
			240	36" Flexible S. Steel Armor	NB2530C2
2¾"	1½"	400W	120	14" Flexible Glass Covered	NB2715A1
			240		NB2715A2
3"	1"	300W	120	14" Flexible Glass Covered	NB3010A1
			240		NB3010A2
3"	1½"	450W	240	14" Flexible Glass Covered	NB3015A2
			120/240		NB3015AD
3"	2"	600W	240	14" Flexible Glass Covered	NB3020A2
3"	3"	900W	240	14" Flexible Glass Covered	NB3030A2
3½"	1"	350W	240	14" Flexible Glass Covered	NB3510A2
3½"	1½"	525W	120	14" Flexible Glass Covered	NB3515A1
			240		NB3515A2
3½"	2"	700W	240	14" Flexible Glass Covered	NB3520A2
3½"	2½"	875W	240	14" Flexible Glass Covered	NB3525A2

MICA HEATER BANDS

Wedge-Lock Heater Bands



Where Heater Band Clearance is Problematic! Ideal for Recessed Sprues.

Applications: Use where recessed sprue bushings and similar obstructions create limited space for nozzle heater bands. These bands require only $\frac{3}{8}$ " to $\frac{1}{2}$ " diameter clearance. ($\frac{3}{16}$ " to $\frac{1}{4}$ " on a side.)

Example: Using nozzle with $1\frac{1}{2}$ " body diameter plus Wedge-Lock band, the clearance required is only 2" or less.

This band is frequently used in place of regular nozzle bands due to ease of installation and removal.

14" Flexible Fiberglass

Covered Leads

To install, simply slide band over nozzle, then tap tapered key. Band will automatically tighten to snug fit.

To remove, simply tap tapered key in opposite direction, then pull off band.



Wedge type tapered key locking device requires only $\frac{3}{8}$ " to $\frac{1}{2}$ " clearance on diameter.

WEDGE LOCK HEATERS

Dia.	Width	Watts	Part Number	
			120V	240V
1"	1"	100	F1011	F1012
	1½"	150	F1015	F1016
	2"	200	F1021	F1022
	2½"	250	F1025	F1026
	3"	300	F1031	F1032
1¼"	1"	125	F1211	F1212
	1½"	200	F1215	F1216
	2"	250	F1221	F1222
	3"	400	F1231	F1232
1⅜"	2"	300	F1321	F1322
1½"	1"	150	F1511	F1512
	1½"	250	F1515	F1516
	2"	300	F1521	F1522
	2½"	350	F1525	F1526
	3"	450	F1531	F1532
	4"	600	F1541	F1542
1¾"	1"	175	F1711	F1712
	1½"	250	F1715	F1716
	2"	350	F1721	F1722
	3"	500	F1731	F1732
	4"	700	F1741	F1742
	6"	1000	F1761	F1762
2"	1"	200	F2011	F2012
	1½"	300	F2015	F2016
	2"	400	F2021	F2022
	3"	600	F2031	F2032
	4"	800	F2041	F2042
2½"	1½"	375	F2515	F2516
	2"	500	F2521	F2522
	3"	750	F2531	F2532
3"	1½"	450	F3015	F3016
	2"	600	F3021	F3022
	3"	900	F3031	F3032



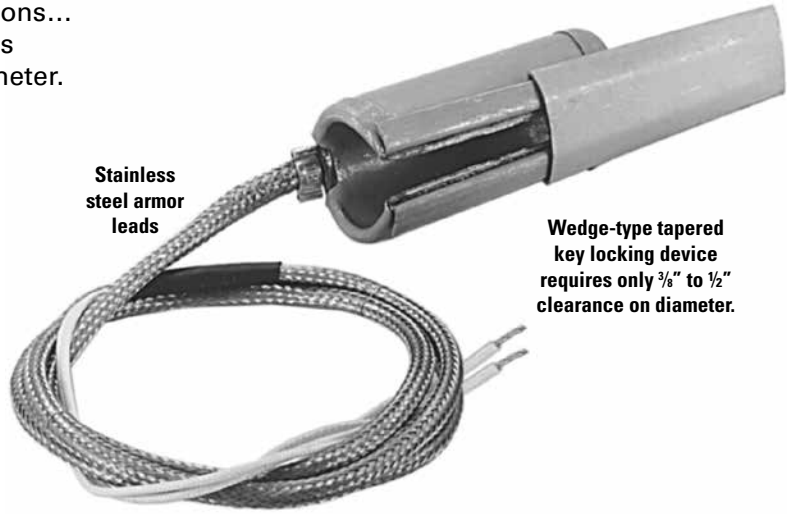


Wedge-Lock Heater Bands

Use for Recessed Sprue Bushing Applications...
 Wedge-Type Tapered Locking Heater Bands
 require only $\frac{3}{8}$ " to $\frac{1}{2}$ " clearance on diameter.

Standard 14" or 36" Stainless Steel Armor Leads

14" or 36" flex leads exit 180° from
 heater band opening. Also available
 with longer length stainless steel
 flexible armored lead.



Wedge-type tapered
 key locking device
 requires only $\frac{3}{8}$ " to $\frac{1}{2}$ "
 clearance on diameter.

Dia.	Width	Watts	Volts	14" Stainless	36" Stainless
				Steel Leads	Steel Leads
				Part Number	Part Number
1"	1"	100	120	F1011B	F1011C
			240	F1012B	F1012C
	1½"	150	120		F1015C
			240	F1016B	F1016C
	2"	200	120	F1021B	F1021C
			240	F1022B	F1022C
	2½"	250	120	F1025B	F1025C
			240	F1026B	F1026C
	3"	300	120		F1031C
			240	F1032B	F1032C
4"	400	240	F1042B	F1042C	
		240		F1232C	
3"	400	240		F1232C	
1⅜"	2"	300	120	F1321B	F1321C
1½"	1"	150	120	F1511B	F1511C
			240		F1512C
	1½"	250	120		F1515C
			300	F1516B	F1516C
	2"	300	240	F1522B	F1522C
			120	F1525B	F1525C
	2½"	350	240	F1526B	F1526C
			120		F1531C
	3"	450	240	F1532B	
			120		F1541C
4"	600	240	F1542B		
		120	F1551B	F1551C	
5"	750	240	F1552B	F1552C	
		240			
1¾"	1"	175	240	F1712B	F1712C
	2"	350	240	F1722B	F1722C
	3"	500	120	F1731B	F1731C
	4"	700	120		F1741C
	6"	1000	240	F1762B	

WEDGE LOCK HEATERS

OEM Replacement Bands



Cincinnati Milacron

OEM REPLACEMENT BANDS

OEM Number	Part Number	Type	I.D.	Width	Watts	Volts
326330	CMN00033	Mineral	5	1½	580	240/480
326331	CMN00034	Mineral	6½	1½	1000	240/480
326332	CMN00035	Mineral	7½	1½	900	240/480
326333	CMN00036	Mineral	8	1½	1000	240/480
326334	CMN00037	Mineral	9	1½	1400	240/480
326335	CMN00038	Mineral	10	1½	1200	240/480
326336	CMN00039	Mineral	11	1½	1480	240/480
326337	CMN00040	Mineral	7	1½	580	240/480
326338	CMN00041	Mineral	8	1½	800	240/480
326340	CMN00043	Mineral	9	1½	1100	240/480
326341	CMN00045	Mineral	9½	1½	1000	240/480
326342	CMN00047	Mineral	13	1½	1400	240/480
326344	CMN00049	Mineral	14½	1½	1480	240/480
326346	CMN00051	Mineral	5	1½	770	240/480
326347	CMN00053	Mineral	7	1½	1000	240/480
3901991	CMN00055	Mica	1½	1½	275	120
3901993	CMN00056	Mica	1½	4	500	120
3904526	CMN00057	Mica	1½	1½	300	120
3994402	CMN00058	Mica	5⅞	5¼	2350	240/480
3994523	CMN00059	Mica	7½	7¼	5000	240/480
5021019	CMN00060	Mica	9 ⁷ / ₁₆	2	1700	240/480
5021020	CMN00061	Mica	9 ⁷ / ₁₆	3½	3000	240/480
5021021	CMN00062	Mica	8 ⁷ / ₁₆	4	2100	240/480
5021022	CMN00063	Mica	8 ⁷ / ₁₆	9¼	4900	240/480
5021232	CMN00065	Mica	11 ¹³ / ₁₆	2	2200	240/480
5021233	CMN00066	Mica	11 ¹³ / ₁₆	3½	3900	240/480
5021234	CMN00067	Mica	8 ⁷ / ₁₆	3½	2800	240/480
5021235	CMN00068	Mica	8 ⁷ / ₁₆	8½	6800	240/480
5021402	CMN00069	Mica	4 ¹⁵ / ₁₆	2 ³ / ₈	1000	240/480
5021428	CMN00070	Mica	4 ¹⁵ / ₁₆	2 ³ / ₈	1200	240/480
5022010	CMN00071	Mica	6½	5½	3000	240/480
5022013	CMN00072	Mica	4 ¹⁵ / ₁₆	4	1000	240/480
5022015	CMN00073	Mica	5½	4½	1700	240/480





OEM Replacement Bands

Cincinnati Milacron

OEM REPLACEMENT BANDS

OEM Number	Part Number	Type	I.D.	Width	Watts	Volts
5024377	CMN00074	Mica	10 ⁷ / ₁₆	2	2000	240/480
5024378	CMN00076	Mica	10 ⁷ / ₁₆	3 ¹ / ₂	3300	240/480
5024379	CMN00078	Mica	8 ¹ / ₂	5 ¹ / ₂	3800	240/480
5024380	CMN00079	Mica	8 ¹ / ₂	10	7000	240/480
5025037	CMN00080	Mica	8 ¹ / ₂	7 ⁷ / ₈	7000	240/480
5025306	CMN00081	Mica	8 ¹ / ₂	2	1900	240/480
5027465	CMN00082	Mica	13	2 ¹ / ₂	3000	240/480
5027466	CMN00083	Mica	13	4 ³ / ₄	5000	240/480
5027467	CMN00084	Mica	9 ⁷ / ₁₆	3	2300	240/480
5032143	CMN00086	Mica	7 ¹ / ₂	3 ¹ / ₂	2325	240
5032147	CMN00087	Mica	8 ⁷ / ₁₆	4 ¹ / ₂	2275	240
5032153	CMN00088	Mica	9 ⁷ / ₁₆	4 ⁵ / ₈	3425	240
5033192	CMN00089	Mineral	13	2	3000	240/480
5033194	CMN00090	Mineral	9 ⁷ / ₁₆	4	4000	240/480
5034485	CMN00091	Mineral	9 ⁷ / ₁₆	3	2400	240/480
5034486	CMN00092	Mineral	9 ⁷ / ₁₆	2	1600	240/480
5034487	CMN00093	Mineral	8 ¹ / ₁₆	3	2000	240/480
5035117	CMN00094	Mineral	8 ⁷ / ₁₆	4	2650	240/480
5035761	CMN00095	Mineral	11	4	3500	240/480
5038858	CMN00096	Mineral	5 ⁷ / ₈	5	2350	240/480
5038989	CMN00097	Mineral	4 ¹⁵ / ₁₆	4	1200	240/480
5039028	CMN00098	Mineral	8 ⁷ / ₁₆	5	3250	240/480
5039197	CMN00099	Mineral	6 ¹ / ₂	5	3000	240/480
5039239	CMN00100	Mineral	7 ¹ / ₂	3	2325	240/480
5039247	CMN00101	Mineral	9 ⁷ / ₁₆	3	2300	240/480
3988972-3	CMN00102	Mica	5 ⁷ / ₈	1 ¹ / ₂	675	240/480
3989010-3	CMN00103	Mica	6 ¹ / ₂	1 ¹ / ₂	900	240/480
3989120-4	CMN00104	Mica	7 ¹ / ₂	1 ¹ / ₂	1500	240/480
3990305-3	CMN00105	Mica	5 ¹ / ₂	2 ¹ / ₂	950	240/480
3991263-3	CMN00106	Mica	4 ⁷ / ₈	2 ¹ / ₂	720	240/480

OEM Replacement Bands



Van Dorn

OEM REPLACEMENT BANDS

Part Number	I.D.	Width	Volts	Watts	Leads or One Piece	Terminals
12391B	5¼	1½	230	1000	Yes	Post
12393B	3	1	230	400	Yes	Post
12473B	5¾	1½	230	1000	Yes	Post
16526B	5¼	1½	230	600	Yes	Post
25147B	6¾	1½	220	815	Yes	Post
25148B	4	1½	220	625	Yes	Post
27213B	7⅞	3	230	2000	Yes	Post
27214B	7⅞	3	230	1800	Yes	Post
28784B	5¾	1½	230	600	Yes	Post
28786B	7½	1½	230	815	Yes	Post
29339B	5⅞	1½	230	700	Yes	Post
29341B	9½	3	240	2000	Yes	Post
29347B	8¼	2	220	1800	2 pc.	Post
301659B	5¼	1	460	600	Yes	34" Leads
302454B	5¼	3	230	1700	Yes	Post
302455B	5¼	4½	230	3300	Yes	Post
302456B	5¼	4½	230	2400	Yes	Post
302457B	5¼	2¼	230	1300	Yes	Post
302458B	5¼	2¼	460	1300	Yes	Post
302459B	3	1	230	400	Yes	100" Leads
302511B	6¾	1½	230	1300	Yes	Post
302512B	5¾	1	460	600	Yes	Post
302514B	5¾	1½	460	1000	Yes	Post
302517B	5¼	1	460	600	Yes	Post
302748B	3	1½	240	500	Yes	Post
302971B	5¼	3	460	1700	Yes	Post
302972B	5¼	4½	460	2400	Yes	Post
303137B	4	1½	230	625	Yes	118" Leads
303142B	6¾	1½	460	1100	Yes	Post
303147B	6¾	5	230	4700	Yes	Post
303150B	6¾	4¼	230	3100	Yes	Post
303152B	7½	1½	230	1100	Yes	Post
303508B	5	2½	230	1300	Yes	172" Leads
304265B	6¾	5	230	3700	Yes	Post
304266B	6¾	4¼	460	3100	Yes	Post
304624B	6	1½	460	1100	2 pc.	Post
30465B	8¼	3	230	2000	Yes	Post
305562B	4	2¼	230	1100	Yes	Post
305748B	5¼	1½	460	800	Yes	Post
305916B	2½	4	115	1200	Mineral	154" Leads
307223B	3⅞	1½	230	525	Yes	Post
307224B	3⅞	1½	230	650	Yes	Post
307225B	4	1½	230	725	Yes	Post
307228B	6	1½	230	1000	Yes	Post
307232B	6¾	3½	230	2400	Yes	Post





OEM Replacement Bands

Van Dorn

OEM REPLACEMENT BANDS

Part Number	I.D.	Width	Volts	Watts	Leads or One Piece	Terminals
307235B	7 ⁵ / ₈	4 ¹ / ₂	460	3150	Yes	Post
307236B	7 ⁵ / ₈	3 ¹ / ₂	460	2250	Yes	Post
307283B	8 ¹ / ₄	2	460	1600	Yes	Post
307240B	8 ¹ / ₄	4	460	3350	2 pc.	Post
307242B	9 ¹ / ₂	5	460	4500	2 pc.	Post
307245B	11	3	460	2950	2 pc.	Post
307247B	13	3	460	3500	2 pc.	Post
307249B	13	6	460	7000	2 pc.	Post
307260B	5 ³ / ₄	1	460	600	Yes	34" Leads
307293B	8 ¹ / ₄	2 ¹ / ₂	460	2000	2 pc.	Post
307356B	7 ⁵ / ₈	3	460	2200	Yes	Post
307357B	9 ¹ / ₂	5 ¹ / ₂	460	4900	2 pc.	Post
307358B	9 ¹ / ₂	6	460	5300	2 pc.	Post
307359B	9 ¹ / ₂	6	460	5400	2 pc.	Post
307360B	11 ¹ / ₄	5	460	5100	2 pc.	Post
307659B	5 ¹ / ₄	7	460	600	Yes	Post
307660B	4	2	460	1100	Yes	Post
307695B	5 ¹ / ₄	1	460	600	Yes	36" Leads
307857B	9 ¹ / ₂	2	460	1800	2 pc.	Post
307859B	6 ³ / ₄	6	230	3750	Yes	Post
307860B	6 ³ / ₄	6	460	3750	Yes	Post
307861B	6 ³ / ₄	1 ¹ / ₂	460	1000	Yes	Post
307862B	6 ³ / ₄	3 ¹ / ₂	460	2400	Yes	Post
307863B	6	1 ¹ / ₂	460	1000	Yes	Post
307864B	6 ³ / ₄	4	230	2600	Yes	Post
307865B	5 ¹ / ₄	4 ¹ / ₂	230	2700	Yes	Post
307866B	5 ¹ / ₄	5	230	2400	Yes	Post
307867B	6 ³ / ₄	1 ¹ / ₂	460	1200	Yes	Post
307868B	5 ³ / ₄	1	230	600	Yes	36" Leads
31805B	8 ¹ / ₄	2	440	1800	2 pc.	Post
32138B	4	1	240	625	Yes	Post
36210B	2 ³ / ₈	1	240	250	Yes	Post
36211B	3	1 ¹ / ₂	220	450	Yes	Post
37186B	8 ¹ / ₄	3	230	1800	Yes	Post
37587B	6	1 ¹ / ₂	230	600	Yes	Post
38947B	9 ¹ / ₂	6	460	4000	2 pc.	Post
38948B	8 ¹ / ₂	4	230	1800	2 pc.	Post
40978B	3 ⁵ / ₈	1 ¹ / ₂	240	625	Yes	Post
41987B	6	1 ¹ / ₂	230	1000	2 pc.	Post
41988B	6 ³ / ₄	1 ¹ / ₂	230	600	Yes	Post
41989B	4	1 ¹ / ₂	230	400	Yes	Post
45982B	2 ¹ / ₂	5	230	900	Yes	Post
45983B	5 ¹ / ₂	3	230	1000	Yes	Post
45985B	11 ¹ / ₄	3	460	2400	2 pc.	Post
47937B	2 ³ / ₈	1	460	250	Yes	Post

OEM Replacement Bands



Van Dorn

OEM REPLACEMENT BANDS

Part Number	I.D.	Width	Volts	Watts	Leads or One Piece	Terminals
50070B	4	1	460	626	2 pc.	Post
50071B	4	1½	460	625	Yes	Post
50387B	1½	1½	230	275	Yes	Stainless. 54"
51137B	6¾	1½	240	1000	Yes	Post
51191B	3	1	460	400	2 pc.	Post
51796B	3⅝	1½	460	625	Yes	Post
61367B	7⅝	2	460	1300	2 pc.	Post
64584B	5¼	1½	230	600		Ceramic Bands
64890B	3⅝	1½	230	625		Ceramic Bands
65982B	5¼	1	230	600	Yes	Post
66258B	4	1½	460	625	Yes	18"Leads
66270B	27/16	1	230	250	Yes	70"Leads
66301B	3	1	460	400	Yes	10"Leads
66302B	3	1	230	400	Yes	10"Leads
66821B	6	1½	230	1000		Ceramic Bands
66822B	6¾	1½	230	1000		Ceramic Bands
66952B	4	1½	230	625		Ceramic Bands
67082B	4	1½	460	400	Yes	12"Leads
67729B	8¼	2	230	1800	Yes	Post
67736B	4	2	230	1250		Ceramic Bands
67769B	5⅛	1½	230	700	Yes	168"Leads
67945B	3	1	240	400	Yes	36"Leads
68103B	6¾	1½	230	815		Ceramic Bands
68105B	5¾	1½	230	600		Ceramic Bands
71922B	11	3	230	1000	2 pc.	Post
74840B	5¼	1½	230	500	2 pc.	Post
74842B	5¼	1½	480	600	2 pc.	Post
76928B	6¾	2½	460	1150	2 pc.	See below
77123B	5¼	2	460	666	2 pc.	See below
77529B	7⅝	3	460	1800	2 pc.	Post
77685B	5¼	1½	230	1000		Ceramic Bands
78498B	6¾	1½	460	816	2 pc.	Post
78540B	4	2	460	460	2 pc.	See below
78541B	9½	3	460	1930	2 pc.	See below
99533B	1½	1½	230	275	Yes	144"Leads

F



Custom Mica Heater Bands

CUSTOM MICA HEATER BANDS

Heater Designs & Construction



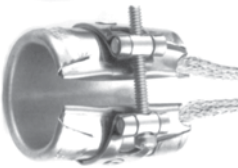
PC
Partial Coverage



TYPE W3-A
Post Terminals
Both posts on one side of gap
Minimum I.D. - 3"
Minimum width - 3/4"



TYPE W3-LE
Fiberglass Covered Leads
Leads exit each side of gap
Minimum I.D. - 3/4"
Minimum width - 1"



TYPE W3-KS
Stainless Covered Leads
Leads exit each side of gap
Minimum I.D. - 3/4"
Minimum width - 1"



HINGED T7
Separate Straps
Minimum I.D. - 1 1/2"
Minimum width - 1"



TYPE W3-B
Post Terminals
Both posts on one side of gap
Minimum I.D. - 1 1/2"
Minimum width - 3/4"

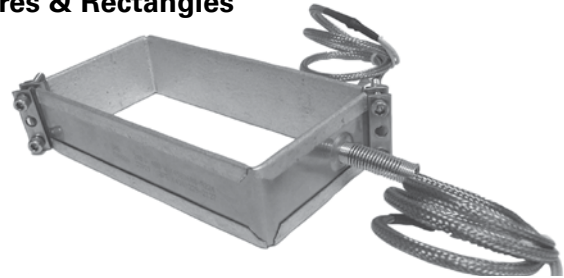


TYPE W3-L
Fiberglass Covered Leads
Minimum I.D. - 1"
Minimum width - 3/4"



TYPE W3-K
Stainless Covered Leads
Minimum I.D. - 1"
Minimum width - 3/4"

Squares & Rectangles



TYPE W3-C
Post Terminals
Both posts on one side of gap
Minimum I.D. - 1 1/2"
Minimum width - 3/4"



TYPE W3-KB
Stainless Steel Covered Leads
Lead exit opposite gap from edge
Min. I.D. - 1/2" Min. width - 1"

European Plugs

W3-EP
Min. I.D. - 1 1/2"

W3-EP90
Min. width - 1"



Terminal Boxes W3-Q
XB Type XB Type
Min. I.D. - 2 1/2" Min. I.D. - 2 1/2"
Min. width - 3/4" Min. width - 1 3/4"



TYPE W3-G
Armor Covered Leads
Minimum I.D. - 1"
Minimum width - 3/4"

Order Your Custom Bands Today!

Standard delivery for non-stock items is 2 - 3 weeks

Rush delivery in 2 - 3 days add 25%

Design Features

- Energy-efficient, less power consumption
- High sheath temperature capability up to 1600°F
- Thermally insulated
- Uniform temperature
- Flexible, easy to install and remove

Terminal Box Cover

Heavy gauge, rust-resistant material has knockouts for ½" conduit connections.

Ceramic Fiber Insulation

The standard insulation is ¼" thick to improve energy conservation 25% or more than non-insulated bands (½" thick insulation optional). In the Maxi-Insulated design, an additional ½" non-compressed layer of insulation is contained in a separate, flexible chamber for even greater energy savings.

Serrated Sheath

Sheath material is resistant to heat and corrosion. Unique serrations maximize flexibility, increase surface contact and provide easy opening and installation of the heater, eliminating the necessity of two-piece band heaters up to 18" in diameter.

Simplified Installation, Additional Energy Conservation

Ceramic Band Heaters can be manufactured in widths much greater than what is practical in Mica Band Heaters, eliminating heat losses between gaps in narrow band heaters and simplifying installation.

Mounting Flange Included Standard

Quick-release latch is optional for ease of installation. Spring-loaded screw on flange is available to compensate for thermal expansion and contraction (over 18" diameter).

Termination

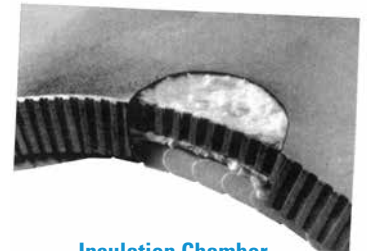
Located at gap or 180° from the gap.

Thermocouple

Should be located through gap or through hole in overlap flange where possible. Contact DME about holes and cut-outs through sheath.



CERAMIC HEATER BANDS



Insulation Chamber

F



Ceramic Heater Bands

Expandable

Expandable Ceramic 1 1/2" Heater Bands

- 240 volt
- 1 1/2" wide
- One size fits many
- Stainless steel sheath
- Terminal boxes — add BX to part number



Part Number	Fits Diameter (mm)	Total Watts	1-1/2" Wide
CEB-1000-1	4" - 4 1/2" (102-114)	650	
CEB-1002-1	4 1/2" - 5" (114-127)	750	
CEB-1003-1	5" - 5 1/2" (127-140)	825	
CEB-1004-1	5 1/2" - 6" (140-152)	900	
CEB-1005-1	6" - 6 1/2" (152-166)	1000	
CEB-1006-1	6 1/2" - 7" (165-178)	1100	
CEB-1007-1	7" - 7 1/2" (178-190)	1150	
CEB-1008-1	7 1/2" - 8" (190-203)	1250	
CEB-1009-1	8" - 8 1/2" (203-216)	1300	
CEB-1010-1	8 1/2" - 9" (229-241)	1400	
CEB-1011-1	9" - 9 1/2" (229-241)	1500	
CEB-1012-1	9 1/2" - 10" (241-254)	1575	
CEB-1013-1	10" - 10 1/2" (254-267)	1650	
CEB-1014-1	10 1/2" - 11" (267-279)	1725	
CEB-1015-1	11" - 11 1/2" (279-292)	1800	
CEB-1016-1	11 1/2" - 12" (292-305)	1900	

Each band expands over 1/2"!

CERAMIC HEATER BANDS

A very versatile band - keep them in stock!

Expandable Ceramic 2 1/2" Heater Bands

- 240 volt
- 1 1/2" wide
- One size fits many
- Stainless steel sheath
- Terminal boxes — add BX to part number



Part Number	Fits Diameter (mm)	Total Watts	2-1/2" Wide
CEB-1000-2	4" - 4 1/2" (102-114)	1100	
CEB-1002-2	4 1/2" - 5" (114-127)	1200	
CEB-1003-2	5" - 5 1/2" (127-140)	1300	
CEB-1004-2	5 1/2" - 6" (140-152)	1500	
CEB-1005-2	6" - 6 1/2" (152-166)	1650	
CEB-1006-2	6 1/2" - 7" (165-178)	1750	
CEB-1007-2	7" - 7 1/2" (178-190)	1900	
CEB-1008-2	7 1/2" - 8" (190-203)	2000	
CEB-1009-2	8" - 8 1/2" (203-216)	2200	
CEB-1010-2	8 1/2" - 9" (229-241)	2300	
CEB-1011-2	9" - 9 1/2" (229-241)	2475	
CEB-1012-2	9 1/2" - 10" (241-254)	2600	
CEB-1013-2	10" - 10 1/2" (254-267)	2750	
CEB-1014-2	10 1/2" - 11" (267-279)	2875	
CEB-1015-2	11" - 11 1/2" (279-292)	3000	
CEB-1016-2	11 1/2" - 12" (292-305)	3100	

Each band expands over 1/2"!

CERAMIC HEATER BANDS



A very versatile band - keep them in stock!



Mineral Insulated Heater Bands

Designed for Modern High-Temperature Molding Operations

Two fiberglass-insulated lead wires exit in a single metal braid for good abrasion protection, lead flexibility and wiring convenience. Leads are 2" longer than braid. Standard length is 12". Specify if longer leads are required.



Dia.	Width	Watts	Watts/Sq. In.	Volts	Part Number	
1"	1"	100	47	120	MI1010B1X	
		150	70	120	MI1010B1	
					MI101012-150F	
	1½"	1½"	200	58	120	MI1015B1X
			200	58	240	MI1015B2X
			300	87	120	MI1015B1
300			87	240	MI1015B2	
1¼"	1"	250	86	120	MI1210B1	
		250	86	240	MI1210B2	
	1½"	350	75	120	MI1215B1	
		350	75	240	MI1215B2	
1½"	1"	200	54	120	MI1510B1X	
		200	54	240	MI1510B2X	
		300	81	120	MI1510B1	
		300	81	240	MI1510B2	
	1½"	1½"	300	52	120	MI1515B1
			300	52	240	MI1515B2X
			450	77	240	MI1515B2A
	2"	2"	300	38	240	MI1520B2X
			450	57	240	MI1520B2
		3"	350	29	240	MI1530B2X
			500	41	240	MI1530B2
1¾"	1½"	300	43	120	MI1715B1	
		300	43	240	MI1715B2	
2"	1"	350	66	120	MI2010B1	
		350	66	240	MI2010B2	
	1½"	400	49	240	MI2015B2	
		750	73	240	MI2020B2	
2¼"	2½"	1000	72	240	MI2225B2	
2½"	1"	400	58	240	MI2510B2	
	1½"	500	48	240	MI2515B2	

**MINERAL INSULATED
HEATER BAND**

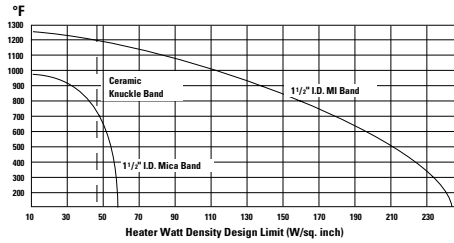
When ordering, specify lead length and terminal location. 12" length leads are standard. For special wattages, voltages or other requirements, please contact DME.

Mineral Insulated Heater Bands



Up to 1400°F and 230 Watts/in. sq.

For today's high melt-temperature engineering materials. Mica bands cannot operate safely above 900°F which makes them inadequate for high-heat engineering materials such as PTFE Ultem, Zytel & Peak. Mineral insulated bands are the solution, capable of continued operating temperatures as high as 1400°F. Also, high thermal conductivity mineral insulation and uniform element construction provide extended life. Optional Ceramic Terminal Covers CTC0124 ordered separately. Includes post terminals, welded on barrel nut hinge, plus clamp.



Operating Temperatures up to 1400°F

Very high-watt density for use in high-heat applications.

Dia.	Width	Type	Volts	Watts	Watts/sq. in.	Part Number
3"	1"	1pc.	240	400	51	MI3010P2
	1 1/2"	1pc.	240	500	40	MI3015P2
		2pc.	230/460	525	53	MI3015P4
3 1/2"	2"	1pc.	240	800	42	MI3520P2
3 5/8"	1 1/2"	2pc.	230/460	650	51	MI3615P2
4"	1"	1pc.	240	700	62	MI4010P2
	1 1/2"	1pc.	240	800	48	MI4015P2
		2pc.	230/460	625	43	MI4015P4
		2pc.	230/460	725	50	MI4015P5
4 1/2"	2 1/2"	1pc.	240	1250	40	MI4525P2
5"	1 1/2"	2pc.	240/480	1000	52	MI5015P2
5 1/4"	1 1/2"	2pc.	240/480	1000	48	MI5215P2
		2pc.	230/460	600	29	MI5215P4
		2pc.	230/460	1700	40	MI5230P2
	4 1/2"	2pc.	230/460	2400	38	MI5245P2
		2pc.	230/460	2700	43	MI5245P4
5 1/2"	1 1/2"	2pc.	240/480	1000	45	MI5515P2
6"	1 1/2"	2pc.	240/480	1000	41	MI6015P2
6 1/2"	1 1/2"	2pc.	240/480	1250	47	MI6515P2
6 3/4"	1 1/2"	2pc.	230/460	815	29	MI6715P2
		2pc.	230/460	1000	36	MI6715P4
	4"	2pc.	230/460	2600	35	MI6740P2
	5"	2pc.	230/460	3700	40	MI6750P2
7"	6"	2pc.	230/460	3750	33	MI6760P2
	1 1/2"	2pc.	240/480	1250	43	MI7015P2
7 1/2"	1 1/2"	2pc.	240/480	1500	47	MI7515P2
7 5/8"	3"	2pc.	230/460	1800	28	MI7630P2
	4 1/2"	2pc.	230/460	3150	33	MI7645P2
8"	1 1/2"	2pc.	240/480	1250	37	MI8015P2
9"	1 1/2"	2pc.	240/480	1500	39	MI9015P2
9 1/2"	3"	2pc.	230/460	3000	37	MI9530P2
11 1/4"	3"	2pc.	230/460	2400	24	MI11230P2
	5"	2pc.	230/460	5100	31	MI11250P2

MINERAL INSULATED HEATER BAND



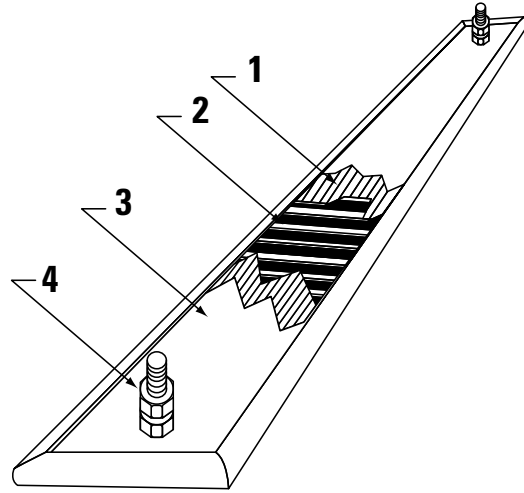


Custom Strip Heaters

Time-tested materials & manufacturing techniques make the Custom Strip Heater a proven, economical, reliable performer. In applications where a flat surface requires uniform heating, the strip heater has no equal.

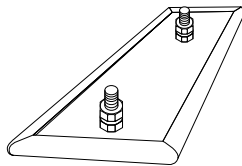
Material List

- 1) Mica provides complete electrical insulation of the heater case from the steel case, while providing maximum heat transfer.
- 2) Flat nickel-alloy ribbon wire provides the highest heating area possible. Each heater is engineered for wire size and pitch to provide the highest efficiency, while minimizing winding temperature.
- 3) The two-piece sheath is composed of a rust-resistant, matte finish, zinc-coated bottom plate and a polished stainless steel top plate. The highly reflective properties of the stainless steel send maximum heat to the working surface. This construction provides excellent heat emissivity and corrosion resistance.
- 4) Stainless steel post terminals are supplied with nuts and washers. Other terminations are available; see below.



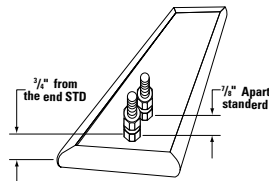
Standard Post Terminal Options

FO-A



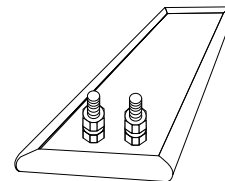
Post Terminals - one on each end; minimum width 3/4"

FO-C



Post Terminals - tandem (inline); minimum width 3/4"

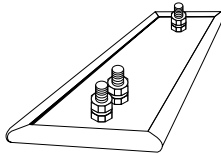
FO-B



Post Terminals - parallel (side by side); minimum width 3/4"

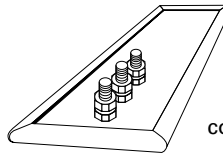
Optional Terminations

Dual-A-Dual Volt 3PH-A-3 Phase



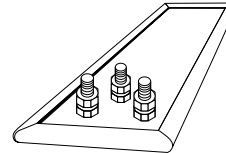
common

Dual-C-Dual Volt 3PH-C-3 Phase



common

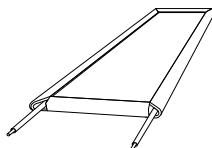
Dual-B-Dual Volt 3PH-B-3 Phase



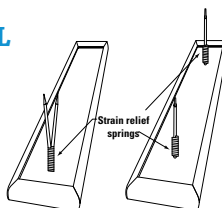
common

Minimum width 1"; 5/8" to 1" wide available but leads will be one on each end

LD

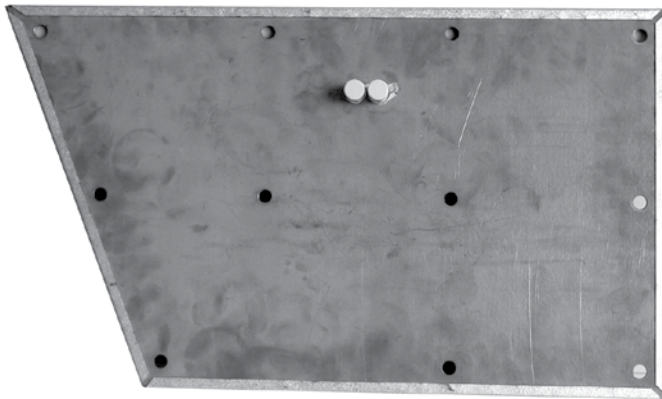
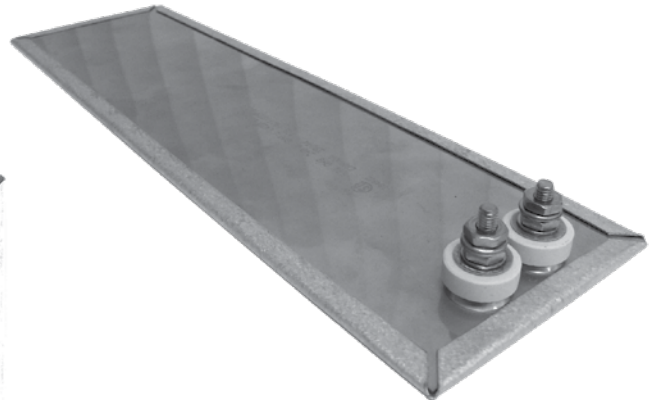
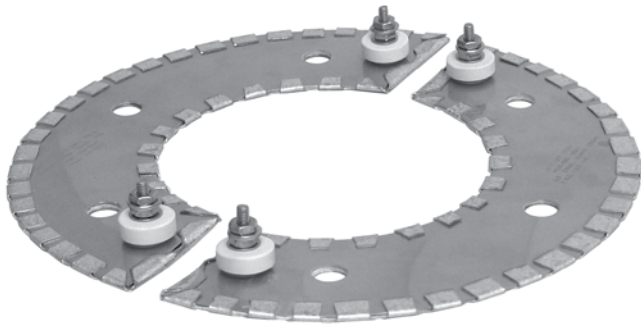


L



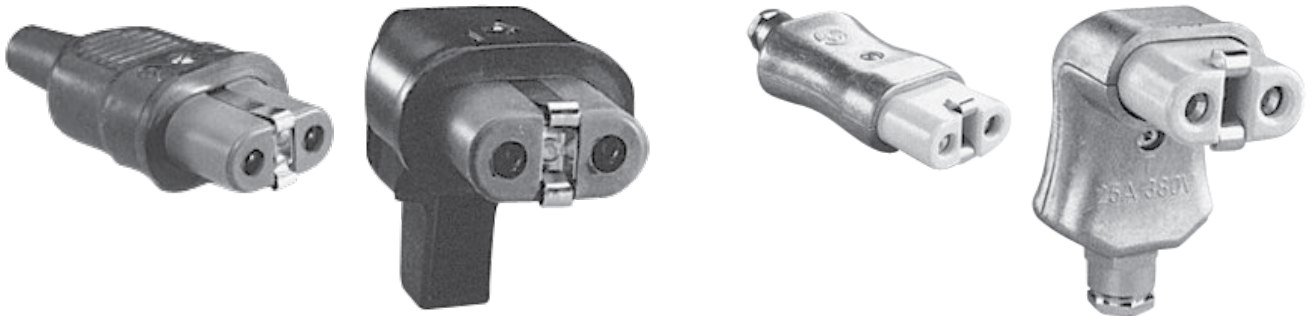
LT

Minimum width 3/4"



Electric Plugs

Plugs and receptacles for connecting heater bands. Available in basic styles commonly used in European machines. Straight or angled 2-pin plugs with steel or brass prongs in ceramic or rubber insulation with metal case.



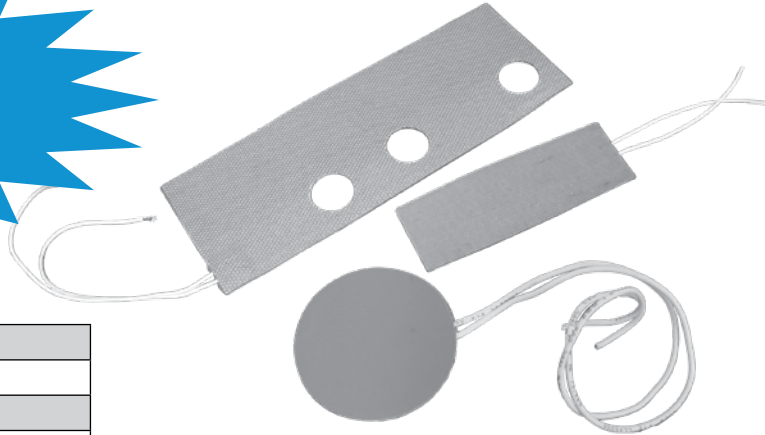
Part Number	Type	AMPS	Configuration
B2M	Silicone Rubber Case	16	Straight Stem
A92M	Silicone Rubber Case	16	90° Angle Stem
B3M	Aluminum Case	25	Straight Stem
A93M	Aluminum Case	25	90° Angle Stem



Silicone Rubber Heaters

Fiberglass reinforced Silicone Rubber Heaters are moisture and chemical resistant. Although thin and flexible, Silicone Rubber Heaters have a rugged construction and can be made to adhere to practically any surface. These heaters can accommodate holes and cutouts, and can come with a PSA back or a thermostat. Silicone Rubber Heaters are suitable for temperatures below 500°F.

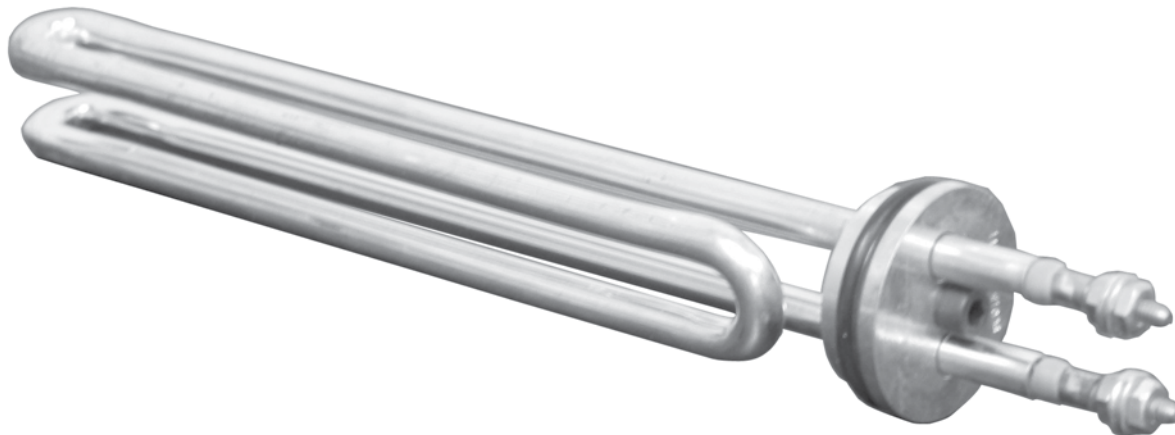
C.S.A. Certified!



Specifications

Max. Size	38" x 98"
Thickness	0.060"
Max. Temp.	450°F
Max. Voltage	480 VAC
Wattage	+5/-10%
Std. Lead Wire	12" PTFE Insulated
Dielectric Strength	1000 VAC

Immersion Heaters



Part Number	Description
30700	Immersion Heater #09-019A, 115V, 650W
30701	Immersion Heater #09-019B, 115V, 1000W
30702	Immersion Heater #09-019C, 115V, 2160W

IMMERSION HEATERS

Flexible Tubular Heaters



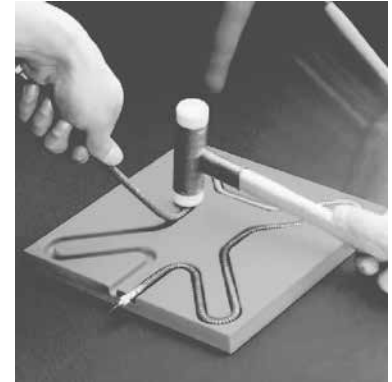
Important/ Caution: Heated section **MUST** be inside of the groove. A small portion of the unheated section may be inside of the groove.

Any heated section outside and exposed to open air will fail. Also the 30mm cold section on each end **MUST NOT** be bent.

hotset

Disappointed by downtime and waiting for your tubular heater?

- Reduce costly, unnecessary downtime
- Reduce your stocking requirements
- Eliminate tooling or setup costs
- Tap in place with a rubber mallet
- Order today, resume manufacturing tomorrow!

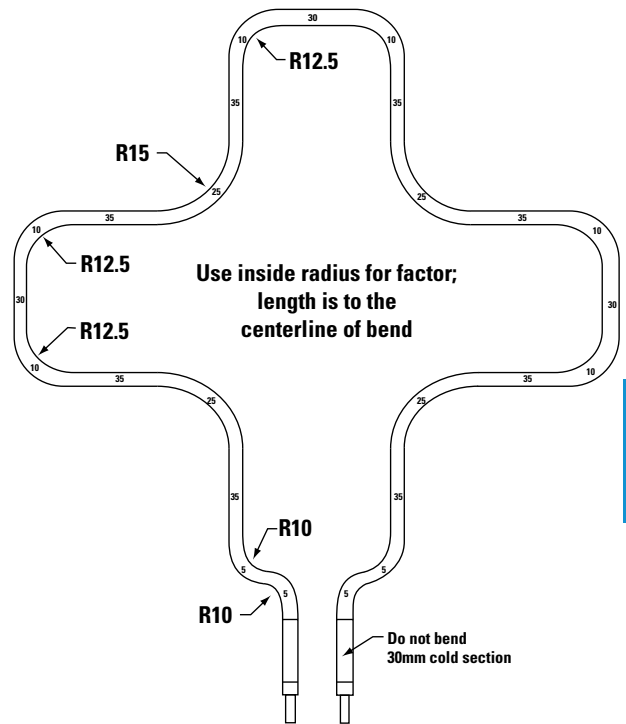


Easily select the correct 8.0mm Hotflex® flexible tubular heater

1. Measure and add total lengths in each category for the diameter that applies to your application.

8.0mm groove ø

	Totals
2. Length of each straight section	<input type="text"/> × 1 = <input type="text"/> a
3. Length of each 10mm radius	<input type="text"/> × .92 = <input type="text"/> b
4. Length of each 12.5mm radius	<input type="text"/> × .93 = <input type="text"/> c
5. Length of each 15mm radius	<input type="text"/> × .94 = <input type="text"/> d
6. Length of each >15mm radius	<input type="text"/> × .96 = <input type="text"/> e
7. Add lines a,b,c,d and e	+ <input type="text"/>
8. Add 60mm for the cold section (30mm + 30mm)	+ 60 <input type="text"/>
9. Round this number down to the nearest 50mm increment	
This is your Hotflex® part number	HTFLX <input type="text"/> MM



Specifications

Heated flexible stainless steel sheath
 Max. operating temp. = 1292°F
 Min. bending radius = 10mm
 Max. voltage = 250V
 Max. current = 25A
 High-voltage resistance (cold) = 1000 VAC

Current leakage (cold) ≤ 0.5mA at 253 VAC
 Insulation resistance (cold) ≥ 5Mohm at 500 VDC
 Ø tolerance = ± 0.1mm
 Length tolerance = ± 1.5%
 Wattage tolerance = ± 10%
 Surface loading up to 15W/cm²



Flexible Tubular Heaters

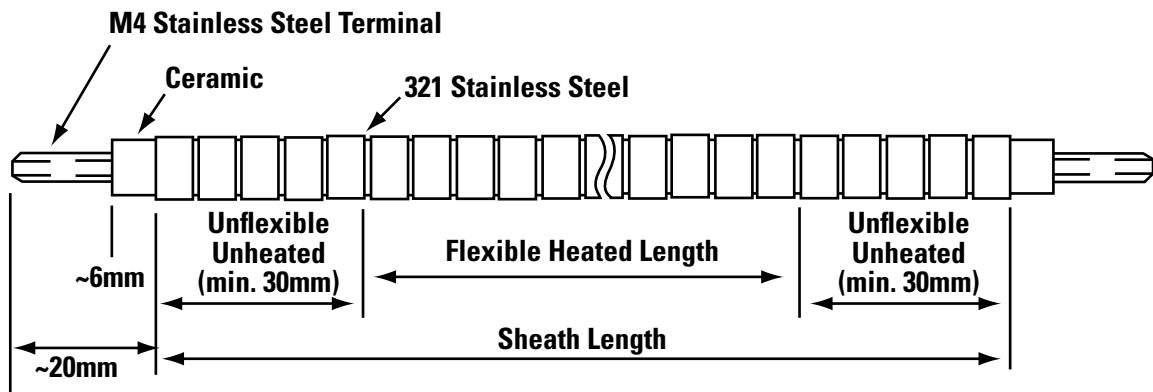
Diameter: 8.0mm (0.315")
 Voltage: 240 VAC
 Unheated: 30.0mm (1.18") each end
 Connection: M4 thread w/ hardware (type B)

Part Number	Sheath Length	Heated Length	Sheath Length	Heated Length	Wattage
HTFLX300MM	300mm	240mm	11.81"	9.45"	660
HTFLX350MM	350mm	290mm	13.78"	11.42"	675
HTFLX400MM	400mm	340mm	15.75"	13.39"	795
HTFLX450MM	450mm	390mm	17.72"	15.35"	910
HTFLX500MM	500mm	440mm	19.69"	17.32"	1025
HTFLX550MM	550mm	490mm	21.65"	19.29"	1145
HTFLX600MM	600mm	540mm	23.62"	21.26"	1260

NOT AVAILABLE

PLEASE SEE HOTRUNNER CATALOG

HTFLX1200MM	1200mm	1140mm	47.24"	44.88"	2665
HTFLX1250MM	1250mm	1190mm	49.21"	46.85"	2780
HTFLX1300MM	1300mm	1240mm	51.18"	48.82"	2895
HTFLX1350MM	1350mm	1290mm	53.15"	50.79"	3015
HTFLX1400MM	1400mm	1340mm	55.12"	52.76"	3130
HTFLX1450MM	1450mm	1390mm	57.09"	54.72"	3245
HTFLX1500MM	1500mm	1440mm	59.06"	56.69"	3365



Down and waiting for your tubular heater?
Place your order today, resume manufacturing tomorrow!

Flexible Tubular Heaters



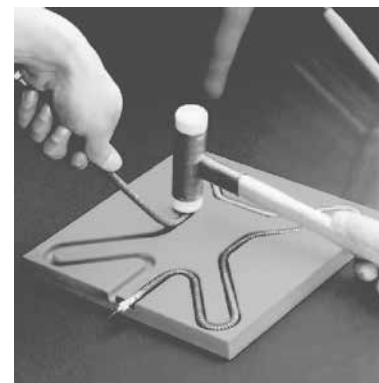
Important/ Caution: Heated section **MUST** be inside of the groove. A small portion of the unheated section may be inside of the groove.

Any heated section outside and exposed to open air will fail. Also the 30mm cold section on each end **MUST NOT** be bent.

hotset

Disappointed by downtime and waiting for your tubular heater?

- Reduce costly, unnecessary downtime
- Reduce your stocking requirements
- Eliminate tooling or setup costs
- Tap in place with a rubber mallet
- Order today, resume manufacturing tomorrow!

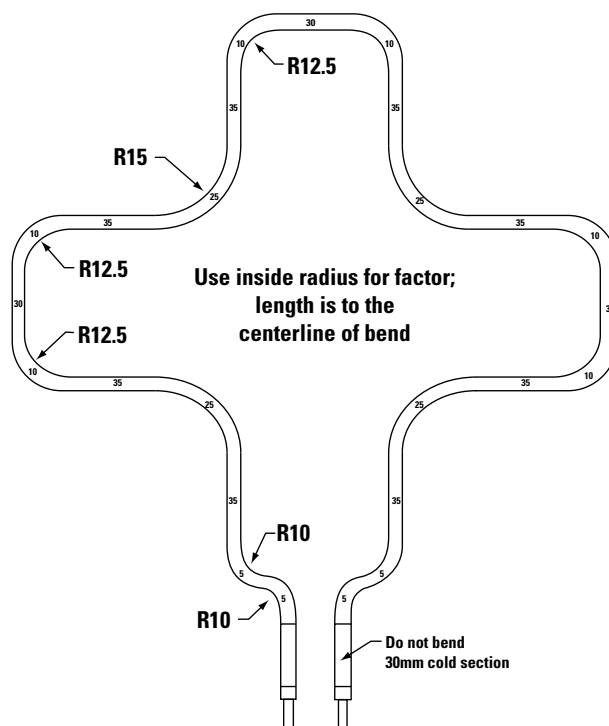


Easily select the correct 8.5mm Hotflex® flexible tubular heater

1. Measure and add total lengths in each category for the diameter that applies to your application.

8.5mm groove ø

	Totals
2. Length of each straight section	<input type="text"/> × 1 = <input type="text"/> a
3. Length of each 10mm radius	<input type="text"/> × .94 = <input type="text"/> b
4. Length of each 12.5mm radius	<input type="text"/> × .95 = <input type="text"/> c
5. Length of each 15mm radius	<input type="text"/> × .95 = <input type="text"/> d
6. Length of each >15mm radius	<input type="text"/> × .96 = <input type="text"/> e
7. Add lines a,b,c,d and e	+ <input type="text"/>
8. Add 60mm for the cold section (30mm + 30mm)	+ 60 <input type="text"/>
9. Round this number down to the nearest 50mm increment	
This is your Hotflex® part number	HF85 <input type="text"/>



Specifications

Heated flexible stainless steel sheath
 Max. operating temp. = 1292°F
 Min. bending radius = 10mm
 Max. voltage = 250V
 Max. current = 25A
 High voltage resistance (cold) = 1000 VAC

Current leakage (cold) ≤ 0.5mA at 253 VAC
 Insulation resistance (cold) ≥ 5Mohm at 500 VDC
 Ø tolerance = ± 0.1mm
 Length tolerance = ± 1.5%
 Wattage tolerance = ± 10%
 Surface loading up to 15W/cm²



Flexible Tubular Heaters

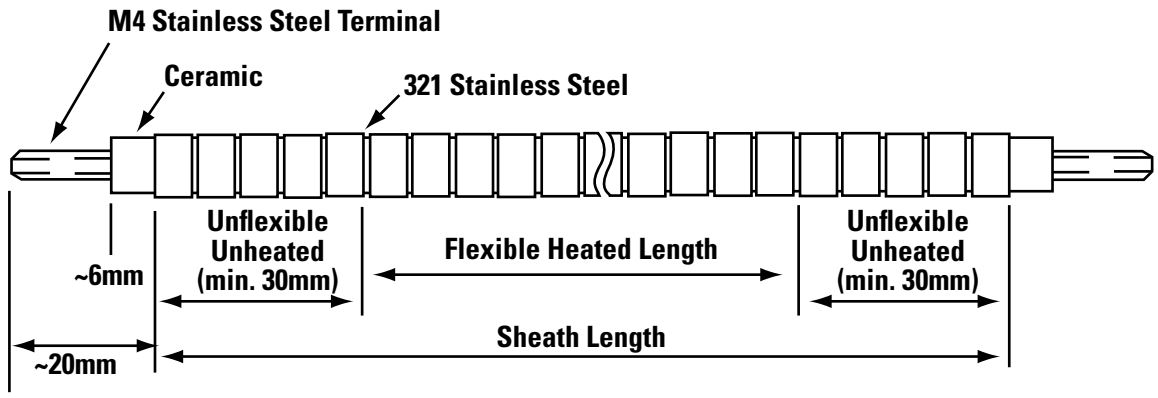
Diameter: 8.5mm (0.334")
 Voltage: 230 VAC
 Unheated: 30.0mm (1.18") each end
 Connection: M4 thread w/ hardware (type B)

Part Number	Sheath Length	Heated Length	Sheath Length	Heated Length	Wattage
HF85350	350mm	290mm	13.78"	11.42"	750
HF85500	500mm	440mm	19.69"	17.32"	1150

NOT AVAILABLE

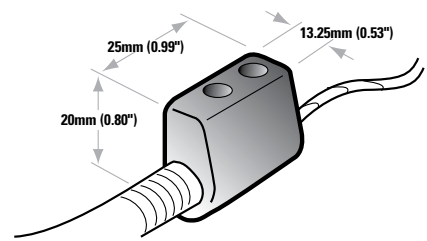
PLEASE SEE HOTRUNNER CATALOG

HF851050	1050mm	990mm	41.34"	38.96"	2800
HF851100	1100mm	1040mm	43.31"	40.94"	2930
HF851150	1150mm	1090mm	45.28"	42.91"	3060
HF851200	1200mm	1140mm	47.24"	44.88"	3190



Plug 'n' Heat Ceramic Lead Adapter

- Heat resistant to 230°C (intermittent to 280°C)
- Accepts 1³/₄ AWG wire
- Two required to terminate both ends of Hotflex®
- Part Number PLUGNHEAT



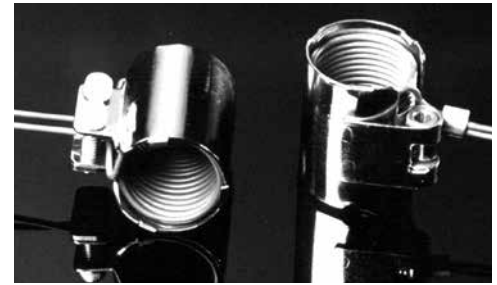
Down and waiting for your tubular heater?
Place your order today, resume manufacturing tomorrow!

Mini Coil Heaters



70 & 80 Series

70 Series Mini Coil Heaters offer a very long life solution to precision-heating applications such as hot runner systems. The hermetically sealed construction prevents moisture from entering the heater, resulting in very long life and long-term resistance stability. A standard resistance tolerance of $\pm 2\%$ produces excellent cavity-to-cavity repeatability in runnerless systems and is easier to control than more loosely tolerated heaters. The heater's nickel sheath is much more efficient for heat transfer than the stainless steel and Inconel sheaths used by other manufacturers, and makes the cold leads more flexible for ease in routing through wiring channels.



MINI COIL HEATERS

Specifications

Dielectric strength – 800 VAC
 Current leakage – <0.1 mA at 240 VDC (cold)
 Insulation resistance – >100 M Ω at 500 VDC (cold)
 Cable diameter – 0.055" (1.4mm)

Standard Features

Hermetic seal
 72" insulated leadwire
 200 Series nickel sheath

CAM OPERATED - Mini Coil Heaters

Order Number	OEM Number	Rosemount Number	Inside Diameter	Length	Watts at 240 Volts
70A10	534234	904FE-101	3/4"	1.2"	149
70A20	534233	904FE-131	3/4"	1.2"	268

5" & 7" lead lengths

TWIN SCREW - Mini Coil Heaters

Order Number	OEM Number	Rosemount Number	Inside Diameter	Length	Watts at 240 Volts
70B10	520156	904EN/EJ101	3/4"	1.2"	149
70B20	521334	904EN/EJ/FB131	3/4"	1.2"	268
70B40	n/a	904EN/EJ/FB141	7/8"	1.2"	268

5" & 7" lead lengths

WEDGE STYLE AXIAL - Clamp Heaters

Order Number	OEM Number	Rosemount Number	Inside Diameter	Length	Watts at 240 Volts
80A10	534234	n/a	0.75	1.2"	240
80A20	534233	n/a	0.75	1.2"	240

5" & 7" lead lengths

Standard Features

Hermetic seal
 72" insulated leadwire
 200 Series nickel sheath (cold)

Specifications

Dielectric strength – 1000 VAC
 Current leakage – <0.1 mA at 240 VDC (cold)
 Insulation resistance – >100 M Ω at 500 VDC
 Cable diameter – .075" (1.9mm)

Utilizing the same technology as our 70 Series, the 80 Series, larger cross-sectional area results in exceptional electrical properties. As with the 70 Series heaters, the hermetically sealed construction prevents moisture from entering the heater, resulting in very long life and long-term resistance stability. A standard resistance tolerance of $\pm 3\%$ ($\pm 2\%$ upon request) produces excellent cavity-to-cavity repeatability in hot runner systems and is easier to control than more loosely tolerated heaters. The flattened nickel sheath is much more efficient for heat transfer than the SS and Inconel sheaths used by other manufacturers which results in faster heat-up than even our 70 Series. 80 Series mini coil heaters are offered in a variety of sizes, wattages and clamping options. Standard diameters are .750", .875" & 1.000"; other sizes & wattages available on request.

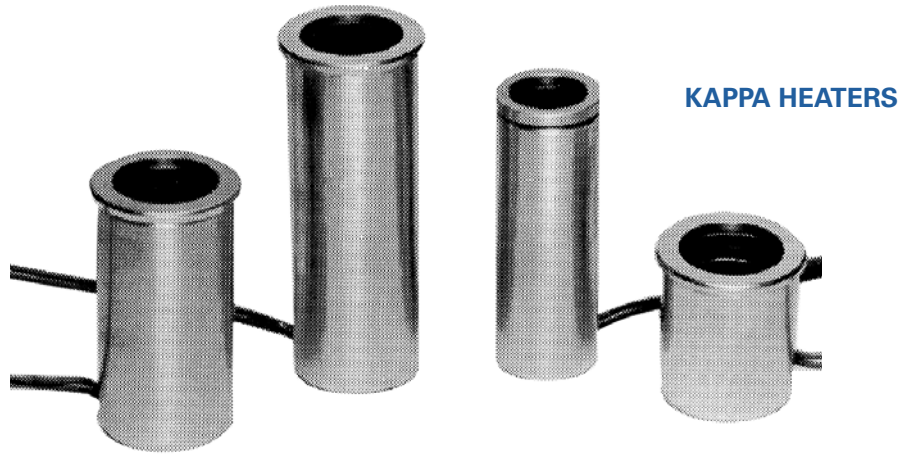
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Heaters

Kappa® Heaters



The Kappa Series Heaters are constructed with a nickel-plated copper inner sleeve and a stainless outer sleeve. The heater is tightly sandwiched between these sleeves eliminating the heat transfer problems associated with other dual-sleeved designs. The materials used direct the heat inward toward the nozzle, resulting in a very efficient heater with even heat distribution. The tightly-toleranced I.D. allows a slip fit with no clamping required.

Features

- Slip fit, no clamp required
- Very long life
- Efficient
- Optimum heat distribution
- Profiled heating available
- Low profile

Specifications

- Over 100 watts/in² possible
- 5- and 7-inch cold leads standard
- ± .0005 inch I.D. tolerance
- ± 2% resistance tolerance
- 72-inch lead wires standard
- 0.130" wall thickness

Part Number	OEM P/N	I.D.	Length	Wattage	Volts
75K75	534975	19.05mm	30mm	220W	240V
75K77	534977	19.05mm	50mm	220W	240V
75-400	535181	Cap			

Cartridge Heaters



Standard

- Widely used throughout the industry as a rugged dependable heat source
- High-quality materials and craftsmanship
- 5 diameters offered as standard
- 12" standard high-temperature leads



CATRIDGE HEATERS-CH

Diameter	Sheath Length	Volts	Watts	Watt Density	Part Number
1/4" (.246" ± .002")	1 1/2"	120	75	94	CH41512-75
		240	75	94	CH41524-75
		120	100	125	CH41512-100
	2"	120	150	118	CH42012-150
		240	150	125	CH42024-150
	2 1/2"	120	200	126	CH42512-200
		240	200	126	CH42524-200
	3"	120	200	105	CH43012-200
		120	250	127	CH43012-250
		240	250	127	CH43024-250
	4"	120	300	110	CH44012-300
		240	300	110	CH44024-300
	5"	240	350	110	CH45024-350
	6"	240	400	95	CH46024-400
3/8" (.371" ± .002")	1"	120	70	88	CH61012-70
	1 1/2"	120	100	86	CH61512-100
		240	150	128	CH61524-150
	2"	120	100	57	CH62012-100
		120	150	85	CH62012-150
		240	150	85	CH62024-150
		120	200	172	CH62012-200
		240	200	172	CH62024-200
		2 1/4"	120	175	86	CH622512-175
	2 1/2"	240	165	75	CH62524-165
		240	185	80	CH62524-185
		240	200	85	CH62524-200
		240	250	106	CH62524-250
		240	300	117	CH62524-300
	3"	120	365	116	CH63012-365
		240	200	68	CH63024-200
		240	250	86	CH63024-250
		240	375	121	CH63024-375
	3 1/2"	120	425	114	CH63512-425
		240	300	85	CH63524-300
		240	425	114	CH63524-425
	4"	120	500	116	CH64012-500
		240	250	62	CH64024-250
		240	350	85	CH64024-350
		240	500	117	CH64024-500





Cartridge Heaters

Standard

- Widely used throughout the industry as a rugged dependable heat source
- High-quality materials and craftsmanship
- 5 diameters offered as standard



CATRIDGE HEATERS-CH

Diameter	Sheath Length	Volts	Watts	Watt Density	Part Number
3/8" (.371" ± .002")	4 1/2"	240	450	95	CH64524-450
	5"	120	650	118	CH65012-650
	5"	240	300	57	CH65024-300
	5 1/2"	240	550	93	CH65524-550
	6"	240	500	78	CH66024-500
	6"	240	600	94	CH66024-600
	6"	240	800	120	CH66024-800
	7"	240	600	80	CH67024-600
	7"	240	800	104	CH67024-800
	8"	120	1090	121	CH68012-1090
	8"	240	600	69	CH68024-600
	8"	240	900	102	CH68024-900
	9"	240	1000	100	CH69024-1000
	10"	240	600	54	CH610024-600
	10"	240	1000	91	CH610024-1000
10"	240	1350	119	CH610024-1350	
12"	240	750	55	CH612024-750	
12"	240	1000	75	CH612024-1000	
1/2" (.496" ± .002")	1 1/2"	120	190	97	CH81512-190
	2"	120	295	126	CH82012-295
	2"	240	200	86	CH82024-200
	2"	240	300	128	CH82024-300
	2 1/4"	120	150	55	CH822512-150
	2 1/4"	240	250	92	CH822524-250
	2 1/2"	120	390	120	CH82512-390
	2 1/2"	240	200	64	CH82524-200
	2 1/2"	240	250	80	CH82524-250
	2 1/2"	240	300	98	CH82524-300
	2 1/2"	240	400	128	CH82524-400
	3"	240	250	64	CH83024-250
	3"	240	300	77	CH83024-300
	3"	240	500	128	CH83024-500
	3 1/2"	240	500	107	CH83524-500
	3 1/2"	240	580	114	CH83524-580
	4"	120	685	117	CH84012-685
	4"	240	300	55	CH84024-300
	4"	240	500	92	CH84024-500
	4"	240	685	117	CH84024-685
	4 1/2"	240	650	103	CH84524-650
5"	120	880	118	CH85012-880	
5"	240	500	72	CH85024-500	
5"	240	750	108	CH85024-750	



Cartridge Heaters



Standard

- Widely used throughout the industry as a rugged dependable heat source
- High-quality materials and craftsmanship
- 5 diameters offered as standard



CATRIDGE HEATERS-CH

Diameter	Sheath Length	Volts	Watts	Watt Density	Part Number
1/2" (.496" ± .002")	5"	240	880	118	CH85024-880
	5 1/2"	240	750	95	CH85524-750
	6"	240	500	58	CH86024-500
	6"	240	850	98	CH86024-850
	6"	240	1075	119	CH86024-1075
	6 1/2"	240	900	96	CH86524-900
	7"	240	1000	98	CH87024-1000
	8"	240	750	64	CH88024-750
		240	1000	86	CH88024-1000
		240	1470	121	CH88024-1470
	8 1/2"	120	1000	80	CH88512-1000
	9"	120	1000	76	CH89012-1000
	9 1/2"	240	1250	88	CH89524-1250
	10"	120	1000	67	CH810012-1000
		240	1500	100	CH810024-1500
		240	1860	122	CH810024-1860
	10 1/2"	240	1500	96	CH810524-1500
11"	240	1750	106	CH811024-1750	
12"	120	1000	56	CH812012-1000	
	240	1500	84	CH812024-1500	
	240	2000	112	CH812024-2000	
	240	2200	122	CH812024-2250	
5/8" (.621" ±.002")	2"	240	200	68	CH102024-200
		240	250	73	CH102024-250A
		240	250	85	CH102024-250B
		240	365	103	CH102024-365
	2 1/2"	240	400	102	CH102524-400
	3"	120	600	109	CH103012-600
		240	250	52	CH103024-250
		240	500	104	CH103024-500
	4"	120	850	114	CH104012-850
		240	500	73	CH104024-500
		240	750	110	CH104024-750
	4 1/2"	240	750	96	CH104524-750
	5"	240	500	57	CH105024-500
		240	750	86	CH105924-750
		240	1000	114	CH105024-1000
	5 1/2"	240	750	82	CH105524-750
	6"	120	1325	117	CH106012-1325
		240	850	79	CH106024-850
		240	1000	93	CH106024-1000
		240	1325	117	CH106024-1325





Cartridge Heaters

Standard

- Widely used throughout the industry as a rugged dependable heat source
- High-quality materials and craftsmanship
- 5 diameters offered as standard
- 12" standard high-temperature leads



CATRIDGE HEATERS-CH

Diameter	Sheath Length	Volts	Watts	Watt Density	Part Number
5/8" (.621" ± .002")	7"	240	800	104	CH107024-800
		120	1590	119	CH107012-1590
		240	1000	78	CH107024-1000
		240	1590	119	CH107024-1590
	7 1/2"	240	1000	73	CH107524-1000
	8"	120	1825	120	CH108012-1825
		240	1000	68	CH108024-1000
		240	1200	82	CH108024-1200
		240	1500	102	CH108024-1500
		240	1825	120	CH108024-1825
	9"	240	1250	75	CH109024-1250
	10"	240	1000	54	CH1010024-1000
	10"	240	1500	81	CH1010024-1500
	10"	240	2325	121	CH1010024-2325
	12"	240	1500	66	CH1012024-1500
12"	240	2000	89	CH1012024-2000	
12"	240	2800	121	CH1012024-2800	
3/4" (.746" ± .002")	2"	120	200	57	CH122012-200
	2 1/2"	240	350	74	CH122524-350
	3"	120	725	168	CH123012-725
	3"	240	400	68	CH123024-400
	3"	240	500	85	CH123024-500
	3"	240	600	102	CH123024-600
	3"	240	725	109	CH123024-725
	3 1/2"	240	550	72	CH123524-550
	4"	240	500	61	CH124024-500
	4"	240	750	91	CH124024-750
	4"	240	1000	117	CH124024-1000
	4"	240	1025	114	CH124024-1025
	4 1/2"	240	875	94	CH124524-875
	5"	240	850	80	CH125024-850
	5"	240	1000	95	CH125024-1000
	5"	240	1300	115	CH125024-1300
	5 1/2"	240	900	77	CH125524-900
	6"	240	1000	77	CH126024-1000
	6"	240	1250	96	CH126024-1250
	6 1/2"	240	1250	88	CH126524-1250



- Widely used throughout the industry as a rugged dependable heat source
- High-quality materials and craftsmanship
- 5 diameters offered as standard

Diameter	Sheath Length	Volts	Watts	Watt Density	Part Number
3/4" (.746" ± .002")	7"	240	1000	66	CH127024-1000
	7"	240	1500	98	CH127024-1500
	8"	240	1750	100	CH128024-1750
	8"	240	2000	114	CH128024-2000
	8"	240	2200	120	CH128024-2200
	9"	240	1800	90	CH129024-1800
	9"	240	2000	100	CH129024-2000
	10"	240	2000	90	CH1210024-2000
	10"	240	2250	112	CH1210024-2250
	12"	240	1500	55	CH1212024-1500

Watlube

Cartridge Heater Release and Heat Transfer Agent

A protective lubricant for use when installing any cartridge heater. It provides a tighter fit, thus improving thermal conductance, permitting higher watt densities and extending heater life.

As a barrier to high temperature oxidation, it assures easy removal of the heater after extended service.

Simple to apply. Avoid contact with leads or end plug.



Size	Part Number
4 oz.	WATLUBE

WATLUBE

F



Cartridge Heaters

Premium quality Cartridge Heaters - Incolloy® sheath provides optimum heat transfer.



12" standard glass covered leads

Delivery: Standard leads from stock. Alternative lead terminations shipped within 72 hours.

Length	Volts	Watts	Watts /Sq. In.	Part Number
1/8" diameter (nominal) actual 0.122" ± 0.002"				
1 1/4"	120	25	87	C1E14
	120	50	174	C1E13
	240	35	113	C1E42
1 1/2"	120	30	78	C1J5
	120	60	156	C1J6
2"	120	50	87	C2A4
	120	100	174	C2A5
1/4" diameter (nominal) actual 0.246" ± 0.002"				
1"	120	80	208	E1A51
	120	100	260	E1A52
	120	150	390	E1A53
	240	100	250	E1A66
1 1/4"	120	75	130	E1E41
	120	100	173	E1E42
	120	150	260	E1E43
1 1/2"	240	225	390	E1E61
	120	50	65	E1J39
	120	100	130	E1J40
	120	150	195	E1J41
1 1/2"	240	175	228	E1J49
	120	200	260	E1J42
	240	200	260	E1J52
	240	250	325	E1J35
	2"	120	80	68	E2A136
120		100	87	E2A55
240		125	108	E2A82
120		150	130	E2A56
240		150	130	E2A77
120		200	173	E2A57
240		200	173	E2A50
120		250	217	E2A72
240		250	215	E2A76
240		300	260	E2A83
2 1/2"	120	250	159	E2J80
	240	250	159	E2J49
3"	120	100	52	E3A48
	120	200	104	E3A49
	240	200	104	E3A60
	240	250	128	E3A124
	120	300	156	E3A50
4"	240	300	156	E3A51
	120	100	37	E4A28
4"	120	200	74	E4A29
	240	200	74	E4A32

Length	Volts	Watts	Watts /Sq. In.	Part Number	
1/4" diameter (cont) actual 0.246" ± 0.002"					
4"	120	300	111	E4A30	
	240	300	111	E4A6	
4 1/2"	120	200	64	E4J30	
5"	240	350	101	E5A45	
	120	400	113	E5A57	
	240	400	113	E5A34	
6"	240	400	94	E6A46	
3/8" diameter (nominal) actual 0.371" ± 0.002"					
1"	120	55	95	G1A71	
	120	100	172	G1A29	
	120	150	259	G1A38	
	240	200	344	G1A83	
1 1/4"	120	100	115	G1E91	
	120	125	144	G1E74	
	120	150	172	G1E92	
	240	150	172	G1E93	
	120	200	230	G1E94	
	240	200	230	G1E95	
1 1/2"	120	400	426	G1E99	
	120	100	104	G1F13	
	240	100	104	G1F15	
1 5/8"	120	150	160	G1F17	
	240	160	151	G1G23	
1 7/8"	120	100	94	G1H6	
1 1/2"	120	50	43	G1J25	
	120	75	65	G1J70	
	120	80	68	G1J66	
	120	100	86	G1J59	
	240	100	86	G1J110	
	240	125	106	G1J182	
	120	150	129	G1J31	
	240	150	129	G1J39	
	120	200	173	G1J85	
	240	200	173	G1J73	
	120	250	216	G1J86	
	240	250	216	G1J54	
	1 3/4"	120	125	86	G1N45
		120	175	122	G1N46
120		250	172	G1N43	
1 13/16"	240	250	172	G1N32	
	240	150	98	G1P14	
1 13/16"	120	200	129	G1P15	
	240	250	161	G1P11	
1 7/8"	120	250	152	G1R14	

PREMIUM CARTRIDGE HEATERS

Cartridge Heaters



It is recommended that Watlube Heat Transfer Agent & Release Compound be used to improve thermal conductivity, reduce hot spots and increase heater life.

Length	Volts	Watts	Watts /Sq. In.	Part Number
$\frac{3}{8}$ " diameter (nominal) actual 0.371" \pm 0.002"				
2"	120	50	29	G2A53
	120	75	42	G2A192
	120	100	57	G2A84
	240	100	57	G2A76
	120	150	86	G2A56
	240	150	86	G2A81
	120	200	115	G2A127
	240	200	115	G2A37
	120	250	144	G2A47
	240	250	144	G2A73
	120	300	172	G2A139
	240	300	172	G2A98
	120	400	230	G2A153
	240	400	230	G2A146
	120	500	282	G2A95
	240	500	282	G2A97
2 $\frac{1}{8}$ "	240	200	106	G2C13
2 $\frac{1}{4}$ "	120	75	37	G2E88
	120	125	62	G2E89
	240	125	62	G2E138
	240	150	73	G2E68
	120	175	86	G2E90
	120	250	123	G2E2
	240	250	123	G2E78
	120	300	148	G2E108
	240	300	148	G2E12
	120	350	173	G2E91
	240	350	173	G2E75
	2 $\frac{1}{2}$ "	120	200	87	G2J110
240		200	87	G2J81
120		250	108	G2J46
240		250	108	G2J80
120		300	130	G2J118
240		300	130	G2J119
120		400	174	G2J26
240		400	174	G2J146
120		500	216	G2J109
240		500	216	G2J52
2 $\frac{3}{16}$ "	120	60	122	G2P9
	120	250	92	G2P3
	240	300	110	G2P5
3"	120	100	100	G3A55
	240	100	100	G3A137
	120	150	150	G3A121
	120	200	200	G3A61
	240	200	200	G3A39
	120	250	250	G3A52
	240	250	250	G3A54
	120	300	300	G3A73
	240	300	300	G3A92

Length	Volts	Watts	Watts /Sq. In.	Part Number
$\frac{3}{8}$ " diameter (cont) actual 0.371" \pm 0.002				
3"	120	400	400	G3A44
	240	400	400	G3A65
	120	500	500	G3A119
	240	500	500	G3A120
	240	600	600	G3A133
3 $\frac{1}{16}$ "	120	500	152	G3F24
3 $\frac{1}{2}$ "	120	250	72	G3J77
	240	250	72	G3J65
	120	300	87	G3J87
	240	300	87	G3J68
	120	500	144	G3J22
	240	500	144	G3J63
3 $\frac{3}{16}$ "	120	150	38	G3P8
	240	500	128	G3P3
4"	120	125	31	G4A54
	240	125	31	G4A163
	120	150	37	G4A78
	120	175	43	G4A191
	120	250	62	G4A40
	240	250	62	G4A87
	120	300	74	G4A94
	240	300	74	G4A95
	120	400	99	G4A48
	240	400	99	G4A44
	240	450	109	G4A65
	120	500	123	G4A96
	240	500	123	G4A92
	120	550	134	G4A200
4 $\frac{1}{4}$ "	240	300	67	G4E25
	240	750	167	G4E15
4 $\frac{1}{2}$ "	120	300	65	G4J54
	240	300	65	G4J33
	120	500	108	G4J55
240	500	108	G4J37	
4 $\frac{3}{16}$ "	240	300	59	G4P11
	240	500	98	G4P3
5"	120	150	29	G5A68
	240	150	29	G5A56
	120	300	58	G5A69
	240	300	58	G5A70
	120	500	96	G5A38
	240	500	96	G5A71
	240	750	144	G5A67
240	1000	192	G5A115	
5 $\frac{1}{4}$ "	240	200	45	G5E16
	240	600	104	G5J36
5 $\frac{1}{2}$ "	240	1000	173	G5J45
	120	200	31	G6A80
6"	120	250	39	G6A40
	240	250	39	G6A92

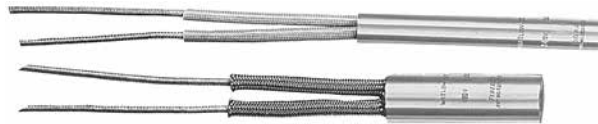
PREMIUM CARTRIDGE HEATERS





Cartridge Heaters

Premium quality Cartridge Heaters - Incolloy® sheath provides optimum heat transfer.



12" standard glass covered leads

Delivery: Standard leads from stock. Alternative lead terminations shipped within 72 hours.

Length	Volts	Watts	Watts /Sq. In.	Part Number	Length	Volts	Watts	Watts /Sq. In.	Part Number	
$\frac{3}{8}$ " diameter (cont) actual 0.371" ± 0.002"					$\frac{1}{2}$ " diameter (cont) actual 0.496" ± 0.002"					
6"	120	400	63	G6A81	1"	120	50	65	J1A30	
	240	400	63	G6A82		120	150	193	J1A31	
	120	500	79	G6A125	1¼"	120	50	43	J1E50	
	240	500	79	G6A59		120	125	107	J1E51	
	120	600	94	G6A56		240	125	107	J1E58	
	240	600	94	G6A51		240	200	172	J1E52	
	240	750	117	G6A46		240	250	212	J1E88	
	240	1000	157	G6A83	1½"	120	50	32	J1J47	
6½"	240	600	86	G6J23		120	150	97	J1J48	
	240	1000	144	G6J33		240	150	97	J1J96	
7"	120	250	33	G7A40		120	200	128	J1J59	
	240	250	33	G7A32		240	200	128	J1J38	
	240	500	65	G7A30	2"	120	75	32	J2A80	
	120	600	80	G7A41		120	200	86	J2A49	
	240	600	80	G7A42		240	200	86	J2A75	
	240	1000	133	G7A43		120	250	108	J2A85	
7½"	240	600	74	G7J27		240	250	108	J2A71	
	240	1000	124	G7J28		120	300	128	J2A95	
8"	7⅜"	240	750	87		G7P5	240	300	128	J2A96
		240	400	45		G8A109	120	400	171	J2A81
	8"	120	300	34	G8A54	240	400	171	J2A82	
		240	300	34	G8A47	2¼"	120	75	28	J2E86
		120	400	45	G8A109		120	125	46	J2E87
		120	500	58	G8A81		120	250	92	J2E56
		240	500	58	G8A32		240	250	92	J2E69
		120	600	69	G8A53		120	400	147	J2E114
		240	600	69	G8A37		240	400	147	J2E115
		240	700	79	G8A98		120	500	184	J2E6
240	1000	115	G8A45	240	500		184	J2E88		
8⅝"	240	500	52	G8L3	2⅝"		120	100	34	J2G35
9"	240	1000	100	G9A37			240	100	34	J2G28
	240	600	57	G9J20		120	250	86	J2G34	
9½"	240	1000	96	G9J12		240	250	86	J2G37	
	120	400	36	G10A48		120	500	172	J2G36	
10"	120	600	54	G10A35	240	500	172	J2G38		
	240	600	54	G10A31	2½"	120	100	32	J2J67	
	240	1000	91	CH610024-1000		240	100	32	J2J57	
	10⅜"	240	375	31		G10P5	120	250	81	J2J68
120		400	30	G12A45		240	250	81	J2J69	
12"	120	600	45	G12A29		120	300	96	J2J109	
	240	600	45	G12A46		240	300	96	J2J110	
	240	1000	75	G12A47		120	400	128	J2J81	
	240	1000	69	G12P3		240	400	128	J2J82	

PREMIUM CARTRIDGE HEATERS

Cartridge Heaters



It is recommended that Watlube Heat Transfer Agent & Release Compound be used to improve thermal conductivity, reduce hot spots and increase heater life.

Length	Volts	Watts	Watts /Sq. In.	Part Number
½" diameter (cont.) actual 0.496" ± 0.002"				
2½"	120	500	161	J2J66
	240	500	161	J2J70
2⅝"	120	350	108	J2K6
	240	300	93	J2K3
2¾"	240	400	115	J2N43
	120	400	115	J2N45
3"	120	125	32	J3A108
	240	125	32	J3A109
	120	250	64	J3A107
	240	250	64	J3A89
	120	300	78	J3A65
	120	350	89	J3A173
	240	300	78	J3A73
	120	400	104	J3A132
	240	400	104	J3A29
	120	500	129	J3A110
	240	500	129	J3A111
	120	600	154	J3A51
	240	600	154	J3A127
	120	750	193	J3A137
240	750	193	J3A112	
120	1000	254	J3A79	
3½"	120	250	54	J3J44
	240	250	54	J3J64
	240	350	75	J3J65
	120	500	107	J3J45
	240	500	107	J3J46
	240	750	162	J3J63
3⅜"	120	500	96	J3P9
	240	250	48	J3P2
4"	120	150	28	J4A117
	240	150	28	J4A122
	120	250	46	J4A118
	240	250	46	J4A90
	120	300	56	J4A63
	240	300	56	J4A26
	120	350	65	J4A1
	240	350	65	J4A103
	120	400	74	J4A139
	240	400	74	J4A68
	120	500	92	J4A16
	120	550	100	J4A242
	240	500	92	J4A92
	120	750	138	J4A198
240	750	138	J4A119	
240	1000	184	J4A73	
4⅝"	120	550	92	J4F5
4½"	120	550	80	J4J69
	240	500	80	J4J57
	120	750	120	J4J70

PREMIUM CARTRIDGE HEATERS

Length	Volts	Watts	Watts /Sq. In.	Part Number
½" diameter (cont.) actual 0.496" ± 0.002"				
4½"	240	750	120	J4J32
4⅜"	240	300	44	J4P3
	240	1000	148	J4P6
5"	120	200	29	J5A85
	240	200	29	J5A74
	120	350	50	J5A86
	240	350	50	J5A63
	120	400	58	J5A98
	240	400	58	J5A46
	120	500	72	J5A52
	240	500	72	J5A45
	120	750	108	J5A121
	240	750	108	J5A72
5½"	240	1000	143	J5A87
	240	200	25	J5J38
	120	500	64	J5J43
	240	500	64	J5J33
	240	650	83	J5J69
	120	750	97	J5J44
5¾"	240	750	97	J5J45
	120	700	86	J5N6
5⅞"	240	700	86	J5N8
	240	300	36	J5P10
6"	120	250	29	J6A114
	240	250	29	J6A171
	240	300	35	J6A66
	240	350	41	J6A119
	120	500	59	J6A115
	240	500	59	J6A94
	120	750	88	J6A99
	240	750	88	J6A90
	240	1000	117	J6A53
	240	1000	117	J6A36
6½"	240	500	54	J6J45
	240	1000	108	J6J27
7"	120	250	25	J7A79
	120	500	50	J7A80
	240	500	50	J7A57
	120	600	60	J7A50
	240	600	60	J7A95
	240	1000	99	J7A81
7½"	240	500	46	J7J25
	240	1000	92	J7J26
8"	120	300	26	J8A71
	240	300	26	J8A111
	120	500	43	J8A64
	240	500	43	J8A66
	120	1000	86	J8A84
	240	1000	86	J8A60
240	1500	129	J8A100	





Cartridge Heaters

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12" standard glass covered leads

Delivery: Standard leads from stock. Alternative lead terminations shipped within 72 hours.

PREMIUM CARTRIDGE HEATERS

Length	Volts	Watts	Watts /Sq. In.	Part Number
½" diameter (cont.) actual 0.496" ± 0.002"				
8"	240	2000	172	J8A101
8½"	240	300	24	J8J39
	240	500	40	J8J30
	240	1000	80	J8J28
9"	240	500	38	J9A35
	240	1000	76	J9A58
9½"	240	500	36	J9J14
	240	1000	72	J9J12
10"	120	500	34	J10A61
	240	500	34	J10A62
	120	1000	68	J10A63
	240	1000	68	J10A42
	240	1500	102	J10A33
11"	240	1000	61	J11A60
	120	500	28	J12A63
12"	240	500	28	J12A76
	120	1000	56	J12A40
	240	1000	56	J12A49
	240	1500	84	J12A37
	240	2000	112	J12A89
	240	1000	48	J14A41
14"	240	2300	110	J14A39
	240	1500	66	J15A19
15"	240	1000	41	J16A12
18"	240	1500	55	J18A19
	240	1700	62	J18A23
⅝" diameter (nominal) actual 0.621" ± 0.002"				
1¼"	120	50	34	L1E26
	120	200	137	L1E24
	120	250	171	L1E27
1½"	120	250	128	L1J23
	240	250	128	L1J24
2"	120	100	34	L2A48
	120	200	68	L2A49
	240	500	170	L2A54
2¼"	120	100	29	L2E49
	120	250	73	L2E50
	240	250	73	L2E12
	120	350	103	L2E40
	240	350	103	L2E51
2⅝"	120	280	77	L2G18
	240	280	77	L2G19
3"	120	150	31	L3A81

Length	Volts	Watts	Watts /Sq. In.	Part Number
⅝" diameter (cont.) actual 0.621" ± 0.002"				
3"	120	250	51	L3A82
	240	250	51	L3A9
	120	400	81	L3A94
	120	500	102	L3A113
	240	500	102	L3A33
	240	750	154	L3A71
3¾"	120	525	82	L3N12
	240	525	82	L3N1
4"	120	250	37	L4A99
	240	250	37	L4A104
	240	400	58	L4A47
	240	500	73	L4A53
	240	600	88	L4A44
	240	750	110	L4A100
5"	120	1000	146	L4A71
	120	250	28	L5A76
	240	250	28	L5A107
	240	500	57	L5A24
	240	750	86	L5A31
	240	1000	114	L5A77
5⅝"	120	800	84	L5G3
	240	800	84	L5G1
6"	120	300	28	L6A28
	240	300	28	L6A64
	240	500	47	L6A73
	240	750	70	L6A70
	240	1000	93	L6A71
	120	1500	139	L6A163
6½"	240	1500	139	L6A94
	120	500	43	L6J43
7"	240	500	43	L6J55
	120	500	39	L7A42
	240	500	39	L7A15
8"	240	1000	79	L7A37
	240	1500	118	L7A12
	120	500	34	L8A96
	240	500	34	L8A46
	240	850	58	L8A115
10"	240	1000	68	L8A10
	240	1500	102	L8A37
	240	2000	137	L8A80
	120	500	27	L10A51
10"	240	500	27	L10A40
	240	750	40	L10A69

PREMIUM CARTRIDGE HEATERS

It is recommended that Watlube Heater Release and Heat Transfer Agent be used to improve thermal conductivity, reduce hot spots and increase heater life (see below)

Length	Volts	Watts	Watts /sq.in.	Part Number
5/8" diameter (cont) actual 0.621" ± 0.002"				
10"	240	1000	54	L10A52
	240	1500	81	L10A8
	240	2000	108	L10A50
12"	120	500	22	L12A81
	240	500	22	L12A80
	240	900	40	L12A102
	120	1000	45	L12A82
	240	1000	45	L12A34
	120	1500	66	L12A147
	240	1500	67	L12A39
	240	2000	89	L12A63
14"	240	3700	140	L14A21
15"	240	750	27	L15A35
	240	2400	84	L15A20
	240	4000	141	L15A41
16"	240	2500	82	L16A33
	240	4500	148	L16A40
18"	240	1500	44	L18A32
	240	3000	87	L18A34
	240	4700	137	L18A36
20"	240	1500	40	L20A19
	240	3500	92	L20A13
	240	4700	123	L20A14
24"	240	2000	44	L24A19
	240	4700	102	L24A14
36"	240	3000	43	L36A8
3/4" diameter (nominal) actual 0.746" ± 0.002"				
2"	120	200	49	N2E8
3"	120	250	43	N3A11
	240	500	85	N3A12
4"	120	250	31	N4A16
	240	500	61	N4A17
5"	240	1000	122	N4A15
	120	300	28	N5A19
	240	500	47	N5A12
6"	240	1000	95	N5A20
	120	500	39	N6A19
	240	500	39	N6A20
	240	1000	78	N6A21
7"	240	1500	116	N6A82
	240	2000	155	N6A22
	120	500	33	N7A15
	240	500	33	N7A1
8"	240	1000	66	N7A16
	120	500	28	N8A19
	240	500	28	N8A20
	240	1000	57	N8A21
10"	240	2000	114	N8A22
	240	1000	45	N10A15
240	2000	90	N10A14	

Length	Volts	Watts	Watts /sq.in.	Part Number
3/4" diameter (cont) actual 0.621" ± 0.002"				
12"	240	1000	37	N12A15
	240	2000	74	N12A24
	240	4000	148	N12A25
13"	240	1000	34	N13A26
14"	240	1250	40	N14A22
	240	2500	79	N14A20
	240	4500	142	N14A21
15"	240	1500	44	N15A26
16"	240	1800	49	N16A26
	240	4700	129	N16A18
18"	240	2000	49	N18A13
	240	5000	122	N18A15
20"	240	1150	25	N20A21
	240	2250	49	N20A22
	240	5250	115	N20A10
24"	240	1375	25	N24A24
	240	2750	50	N24A23
	240	5500	100	N24A13
36"	240	2500	30	N36A4

Watlube

Cartridge Heater Release and Heat Transfer Agent

A protective lubricant for use when installing any cartridge heater. It provides a tighter fit, thus improving thermal conductance, permitting higher watt densities and extending heater life.

As a barrier to high temperature oxidation, it assures easy removal of the heater after extended service.

Simple to apply. Avoid contact with leads or end plug.



Size	Part Number
4 oz.	WATLUBE



Cartridge Heaters

Lead Options

Swaged-in PTFE leads with seal

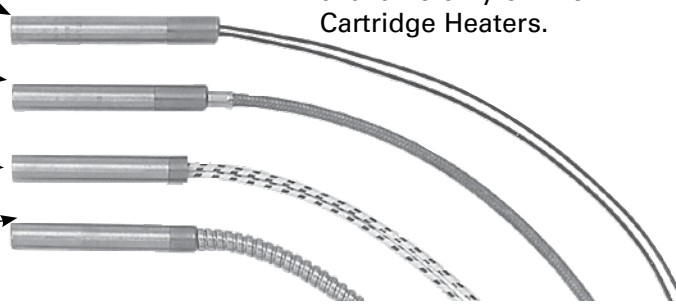
Swaged-in stainless steel braid

Swaged-in flexible leads

Swaged-in stainless steel conduit

Swaged-in leads

These lead options are available only on Premium Cartridge Heaters.



For customers having special requirements, DME offers the lead options shown on these pages. These swaged-in, flexible leads offer a wide choice in terms of capacity, cost, size, durability and ease of installation. Available from stock in any diameter with any lead length.

These lead adaptations are of improved construction and will stand up to extra heavy usage. Unheated sections are reduced up to one-half the area, resulting in lower watt densities and consequent longer life. Leads are flexible over their full length.

Modification Type	Length Dia.	Length Added to Heater	Std. Unheated Portion	Std. Lead Length
Swaged-in flex leads	all	3/16"	7/16"	10"
Swaged-in stainless steel braid	1/4"	3/4"	1"	14"
	3/8"			
	1/2"			
	5/8"			
Swaged-in PTFE	all exc. 1/4" dia.	3/4"	1"	10"
	1/4"			
Swaged-in stainless steel conduit	3/8"	3/8"	5/8"	14"
	1/2"			
	5/8"			
	3/4"			

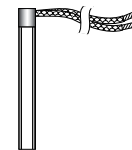
Right Angle Swaged-In Leads

For applications where space is limited or confining, swaged-in flexible leads are also offered in right angle configuration with lead wires exiting at side of sheath.

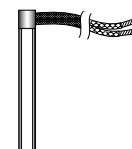


These lead options are available only on Premium Cartridge Heaters.

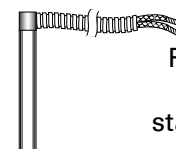
Modification Type	Dia.	Length added to heater	Unheated portion	Std. lead length
Rt. angle swaged-in flex leads	3/8"	3/8"	5/8"	10"
	others	7/16"	11/16"	
Rt. angle swaged-in stainless steel braid	3/8"	9/16"	13/16"	14"
	1/2"			
	5/8"			
Rt. angle swaged-in stainless steel conduit	3/8"	9/16"	13/16"	14"
	1/2"			
	5/8"			



Right angle swaged-in flexible leads



Right angle swaged-in stainless steel braid



Right angle swaged-in stainless steel conduit

Cartridge Heaters



Thermocouple

- 36" standard, high-temperature leads
- 48" standard, J calibration thermocouple
- Pin leads with high-temperature sleeving



Diameter	Sheath Length	Volts	Watts	Part Number
1/4" .246" (± .002")	1 1/2"	240	200	CH41524-200T
	1 3/4"	240	200	CH417524-200T
	2"	240	200	CH42024-200T
	2 1/2"	240	200	CH42524-200T
	3"	240	200	CH43024-200T
	3 1/2"	240	250	CH43524-250T
	4"	240	250	CH44024-250T
3/8" .371" (± .002")	5"	240	250	CH45024-250T
	1 1/2"	240	200	CH61524-200T
	1 3/4"	240	200	CH617524-200T
	1 3/4"	240	250	CH617524-250T
	2"	240	200	CH62024-200T
	2"	240	250	CH62024-250T
	2 1/2"	240	250	CH62524-250T
	3"	240	260	CH63024-260T
	3"	240	300	CH63024-300T
	3 1/2"	240	320	CH63524-320T
	3 1/2"	240	350	CH63524-350T
	4"	240	370	CH64024-370T
	4 1/2"	240	420	CH64524-420T
	5"	240	300	CH65024-300T
	5"	240	470	CH65024-470T
	5 1/2"	240	525	CH65524-525T
	6"	240	575	CH66024-575T
	6 1/2"	240	625	CH66524-625T
	7"	240	675	CH67024-675T
	7 1/2"	240	724	CH67524-724T
8"	240	775	CH68024-775T	
8 1/2"	240	835	CH68524-835T	
9"	240	885	CH69024-885T	
9 1/2"	240	940	CH69524-940T	
10"	240	990	CH610024-990T	
1/2" .496" (± .002")	1 3/4"	240	230	CH817524-230T
	2 1/2"	240	280	CH82524-280T
	3"	240	500	CH83024-500T
	3 1/2"	240	420	CH83524-420T
	4"	240	490	CH84024-490T
	4 1/2"	240	550	CH84524-550T
	5"	240	625	CH85024-625T
	5 1/2"	240	700	CH85524-700T
	6"	240	775	CH86024-775T
6 1/2"	240	850	CH86524-850T	

CARTRIDGE HEATERS THERMO-COUPLE





Drum Heaters

Our Drum Heater is a portable, lightweight heat source designed for standard drum sizes but versatile enough for use on any similar-sized vessel where quick, adjustable heating is required.

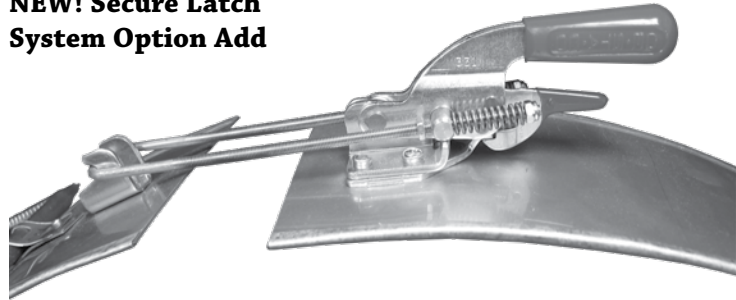
The watt density does not exceed 8.5, so it is suitable for most materials and solutions requiring heat for handling, dipping, coating or mixing.

Features

- Heavy-duty cord & plug on all models
- Rust-resistant stainless steel
- Lightweight, one-piece construction
- Minimum - maximum heat control
- New heavy-duty construction



NEW! Secure Latch System Option Add



Drum Capacity	Heater Model Number	Volts	Watts	I.D.	Width
45 IMP. GAL. 55 U.S. GAL.	D130120 D130240	120 240	1900 3000	22½"	5"
25 IMP. GAL. 30 U.S. GAL.	D140120 D140240	120 240	1900 2500	18"	5"
5 IMP. GAL. 6 U.S. GAL.	D135120 D135240	120 240	1500 1500	11"	5"

Part Number	Capacity	Volts/Watts
D130120	45 Gal. Metal Drum	120V/1900W
D130240	45 Gal. Metal Drum	240V/3000W
D135120	5 Gal. Metal Drum	120V/1500W
D135240	5 Gal. Metal Drum	240V/1500W
D140120	25 Gal. Metal Drum	120V/1900W
D140240	25 Gal. Metal Drum	240V/2500W

DRUM HEATERS

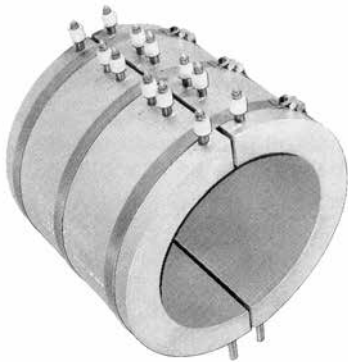
Cast Heaters are used to heat plastics injection molding and extrusion machinery, packaging machinery, sealer bars, laboratory heaters, hydraulic platens and many applications where durability and extended heater life is important.

Cast Heaters consist of high-quality tubular heaters cast into specific grades of non-ferrous alloys all chosen for excellent thermal conductivity properties.

Cast Heaters can be designed as band heaters, band heaters with cooling tubes, finned band heaters and platen heaters. The Cast Heaters can be supplied with strap lockup or flange lockup, armoured cable leads, terminal posts or protective terminal boxes.

Air-Cooled Finned Heaters

Cast aluminum finned heaters are designed to provide rapid cooling response and temperature control on air-cooled machines and are incorporated as original equipment by many extruder manufacturers.



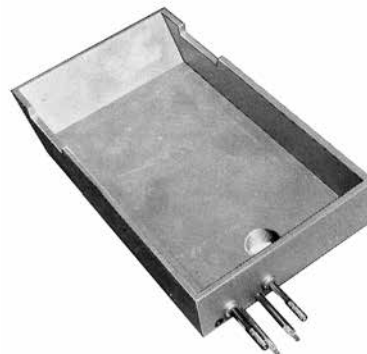
Cylindrical heat and cool heaters for extrusion machinery



Platen heaters for packaging, food warming & die heating



Cylindrical finned heaters for air-cool extrusion machinery



Glue pots and pan heaters for industrial and food warming applications



SCR Power Controls

Power Up/Power Down All Units-Fused and Ready to Mount!

Applications

- Nozzle band heaters
- Hot runners
- Band or cartridge

Features

- Compact and durable design
- Half the price of an electro-mechanical voltage controller
- Solid state reliability
- Low price, high quality

SCR POWER CONTROLS

Model 18TBP/TB Controls

Provide infinitely variable control of single-phase AC voltage to resistive heating elements. These controls are solid-state replacements for variable transformers, saturable core reactors, and electro mechanical contactors. Power Triacs replace contacts and brushes to control electric power without moving parts, and, when operated within their stated ratings for current, voltage, and temperature, have no known life expectancy rating.



18TBP Series, single hole mounting to panels and enclosure doors

Panel- or Chassis-Mount

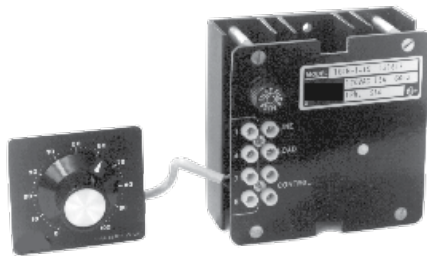
Model 18TBP controls are compact, lightweight packages that employ single hole mounting to panels and enclosure doors. Model 18TB controls are designed for rear or rack mounting.

Performance Note

Triac power circuits may "slave" when multiple units are used on 240 VAC lines derived from three-phase mains. For optimum performance, use on single phase, 240 VAC derived from 3-wire, 120/240 VAC mains.

Part Number	Input Volts	Max AMPS	Output Voltage
18TBP1-15	120V	15 AMP	0-120
18TBP2-15	240V	15 AMP	0-240

Note: Use only factory-recommended fuses



Note: Use only factory-recommended fuses

Part Number	Input Volts	Max AMPS	Output Voltage
18TB1-25	120V	25 AMP	0-120
18TB2-25	240V	25 AMP	0-240

18TB Series designed for rear or rack mounting

18TP Series Features

- 5 and 10 AMP load capacity at 120 or 240 VAC
- Lighted ON/OFF switch
- Built-in "2 millisecond" fuse protection
- 6' power cord with plug
- NEMA standard 120 or 240 VAC receptacle
- Small size - only 4.7" x 3.3" x 2.5"
- Low price, high quality



Part Number	Input Volts	Max AMPS	Output Voltage
18TP1-10	120V	10 AMP	0-120
18TP2-10	240V	10 AMP	0-240

Temp/Process Controller

Fuzzy Pro™

Choose 1/16, 1/8 or 1/4 DIN

These units feature a 10 AMP relay!

Features

- PID - FUZZY or On/Off control
- Heating/cooling + 2 alarms
- Field input selection TC, RTD, linear
- Outputs relay, pulsed DC, 4-20 mA
- Dual display- red/green + LED% output
- Self tuning with inhibited overshoot
- Low panel depth 3 1/8" (80mm)
- 16 ramp/dwell segments option

- Heater saver power limit function
- Multiple alarms on a single output
- Scalable linear input
- Rapid cycling controls faster systems
- Customized operator interface
- Setpoint range limit
- Plug in from front
- Operator lockout security setting



TEMP/PROCESS CONTROLLER

DIN Size	Part Number	Output Type	Alarm or Cooling Output
1/16	F16101	Relay, SPBT 3A/240 VAC	Relay 10A/240V SPST
1/16	F16201	SSR Pulse/20 VDC/20mA	Relay 10A/240V SPST
1/8	F18101	Relay, SPST 3A/240 VAC	Relay 10A/240V SPST
1/4	F14101	Relay, SPST 3A/240 VAC	Relay 10A/240V SPST





Gentran Transducer

Plastic Melt Pressure Transducer GT76

Precise Pressure Measurement

Gentran Models GT72 and GT76 have non-linearity specifications of $\pm 0.5\%$ and $\pm 1.0\%$ of full scale BFSL, respectively. Repeatability for both models is better than 0.1% of full scale.

Easily Installed

These transducers can be installed directly into the extruder, melt pump or other pressure tap. All mating cable assemblies are terminated with spade lugs for simple electrical connection.

Industry Compatible

All Gentran products are configured to industry standards for effortless replacement of parts. We offer compatible units complete with flexible armor stems so that you can replace a transducer without disturbing your existing wiring or indicator configuration.

Versatility

Gentran offers various body lengths, thread dimensions and options for thermocouples. Integral, flexible armored cable is also available. For special applications, we can custom design unique configurations to fit your needs.

Rugged and Durable

Our units last up to six times longer than other units because of our thicker 17-4 PH stainless steel diaphragms that operate from 0 to 750°F.



Ordering Info

Typical Part Number

GT72 /6 J C D6 Z1 -10K

Transducer

Melt Pressure Transducer Model	Barrel Length	Thermocouple Type	Diaphragm Material	Wiring Options	"Z" Options	Pressure Range
GT72 High Accuracy Unit $\pm 0.5\%$	6 6 inch "A" Length	J "J" Type K "K" Type T "T" Type	None 17-4 PH SST C Hard Chrome H Hastelloy C-276	None Standard 6-pin Cannon Connector	None Standard Unit Z1 18" Integral Flexible Armored Cable	5C 0-500* 1K 0-1,000* 1.5K 0-1,500 3K 0-3,000
GT76 Standard Accuracy Unit $\pm 1.0\%$	12 12 inch "A" Length	R "RTD" Type	I Inconel 718 N Titanium Nitride-TIN NN Double Coated TIN	D6 Bendix 6-pin Connector D8 Bendix 8-pin Connector	Z2 24" Integral Flexible Armored Cable Z3 30" Integral Flexible Armored Cable	5K 0-5,000 7.5K 0-7,500 10K 0-10,000 15K 0-15,000 20K 0-20,000* 350BAR 0-350 BAR 700BAR 0-700 BAR 1400BAR 0-1400 BAR 500KG 0-500 kg/cm ² 700KG 0-700 kg/cm ²

Typical Part Number

Cable Assembly

72 04 02 -10

Cable Type	Transducer Type	Connector Type	Cable Length*
72 Standard	04 No Thermocouple	02 Gentran	10 10 Feet
75 Armored	64 "J" Type 74 "K" Type 94 "T" Type 84 "RTD" Type	11 Bendix 8-pin (D8) 13 Bendix 6-pin (D6)	20 20 Feet 40 40 Feet

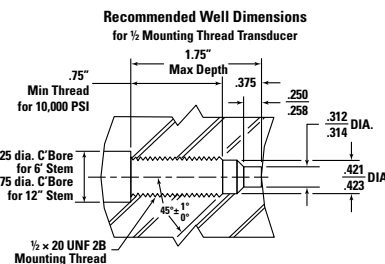
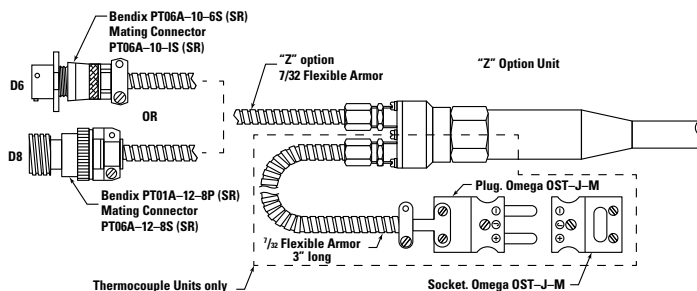
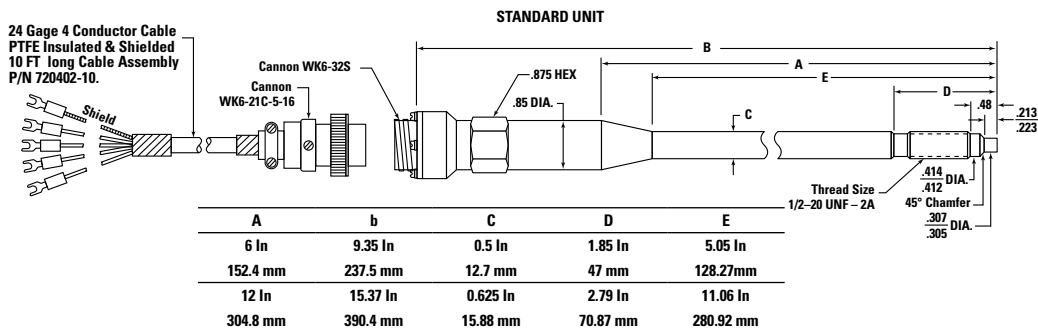
*Other ranges available upon request.
*Special range.

Plastic Melt Pressure Transducer GT76

Specifications: GT72 & GT76

Performance Characteristics	Electrical Characteristics	Temperature Characteristics	Mechanical Characteristics
<p>Standard Pressure Ranges: 0-1,500 psig, 0-3,000 psig, 0-5,000 psig, 0-10,000 psig, 0-15,000 psig, 0-350 BAR, 0-700 BAR, 0-1,400 BAR, 0-500 kg/cm² 0-700 kg/cm²</p> <p>Special Ranges: 0-500 psig, 0-1,000 psig, 0-20,000 psig Other ranges available upon request</p> <p>Accuracy: GT2: ±0.5% of full scale maximum (BFSL) GT76: ±1.0% of full scale maximum (BFSL)</p> <p>Repeatability: Within ± 0.1% of full scale maximum</p> <p>Resolution: Infinite</p> <p>Overload Pressure: 150% of rated range, no damage</p>	<p>Sensor Type: Bonded strain gauge, 4 Leg Wheatstone Bridge</p> <p>Bridge Resistance: 350 ohms, ±5.0%</p> <p>Sensitivity: 3.0 mV/V nominal (open circuit)</p> <p>Zero Balance: ±10.0%</p> <p>Excitation: 5-12 VDC or AC (RMS), maximum 15 Volts</p> <p>External Shunt Calibration Resistor Standard feature, options available.</p> <p>Insulation Resistance: >1,000 Mohms @ 50 VDC</p> <p>Thermocouple: Types J, K, and RTD available as an Internal option</p>	<p>Diaphragm: 0 to 750°F (-18 to 400°C)</p> <p>Electrical Connector: 0 to 250°F (-18 to 121°C)</p> <p>Zero Drift: ± 0.01% of full scale/°F ± .002% of full scale/°C</p> <p>Sensitivity Drift: ± 0.01% of full scale/°F ± 0.02% of full scale/°C</p>	<p>Diaphragm Material: Standard 17-4 PH Stainless steel, options include Hastelloy, hard chrome plate, Inconel 718 & titanium nitride</p> <p>Pressure Fitting: ½ inch-20 UNF-2A Metric m 18 x 1.5 optional custom options available</p>

Dimensions





Melt Pressure Gauges

Rigid Stem

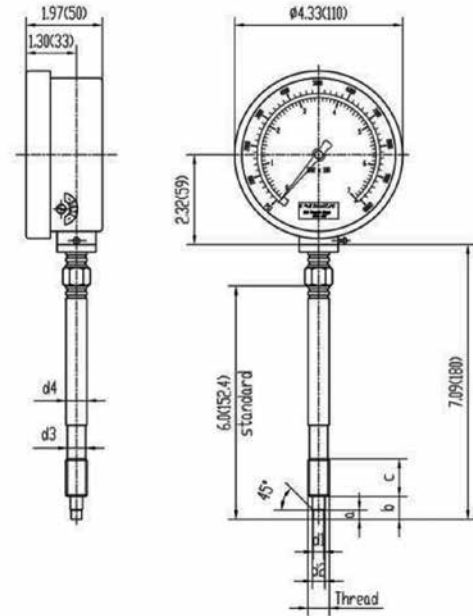
Melt Pressure Gauge - Model ERTG

Melt Pressure Gauge Model ERTG is a totally mechanical device, requiring no power. This rugged, totally self-contained Melt Pressure Gauge is available in either 0–5,000 psi or 0–10,000 PSI ranges. This gauge allows the user to benefit from the improved efficiency and quality that goes along with melt pressure monitoring at an affordable price.

Melt Pressure Gauge Model ERTG comes standard with a 6" rigid stem, 1/2–20 UNF mounting thread.

Features & Benefits

- Requires no electrical power and is totally maintenance free
- All stainless steel construction
- Large 4" gauge head with safety glass can be rotated 300° for pressure reading convenience
- Accuracy +/- 2%
- Optional type J or type K thermocouple output



MELT PRESSURE GAUGE RIGID STEM

Thread	d1	d2	a	b	c	d3	d4
1/2" – 20	ø0.307 (7.8)	ø0.413 (10.5)	0.217 (5.5)	0.441 (11.2)	0.629 (16.0)	ø0.41 (10.5)	ø0.5 (12.7)
	ø0.303 (7.7)	ø0.407 (10.35)	0.211 (5.35)	0.233 (11.0)			
M18	ø0.394 (10.0)	ø0.610 (15.5)	0.236 (6.0)	0.551 (14.0)	0.787 (20.0)	ø0.63 (16.0)	ø0.709 (18.0)
	ø0.386 (9.8)	ø0.602 (15.3)	0.230 (5.85)	0.543 (13.8)			

Part Number	Description	Pressure Range	Thermocouple
ERTG6-5M	6" Rigid Stem Only	0–5,000 psi	None
ERTG6-5MTCJ	6" Rigid Stem Only	0–5,000 psi	Type J
ERTG6-5MTCK	6" Rigid Stem Only	0–5,000 psi	Type K
ERTG6-10M	6" Rigid Stem Only	0–10,000 psi	None
ERTG6-10MTCJ	6" Rigid Stem Only	0–10,000 psi	Type J
ERTG6-10MTCK	6" Rigid Stem Only	0–10,000 psi	Type K
ERTG12-5M	12" Rigid Stem Only	0–5,000 psi	None
ERTG12-5MTCJ	12" Rigid Stem Only	0–5,000 psi	Type J
ERTG12-5MTCK	12" Rigid Stem Only	0–5,000 psi	Type K
ERTG12-10M	12" Rigid Stem Only	0–10,000 psi	None
ERTG12-10MTCJ	12" Rigid Stem Only	0–10,000 psi	Type J
ERTG12-10MTCK	12" Rigid Stem Only	0–10,000 psi	Type K

Melt Pressure Gauges



Flexible Stem

MELT PRESSURE GAUGE FLEXIBLE STEM

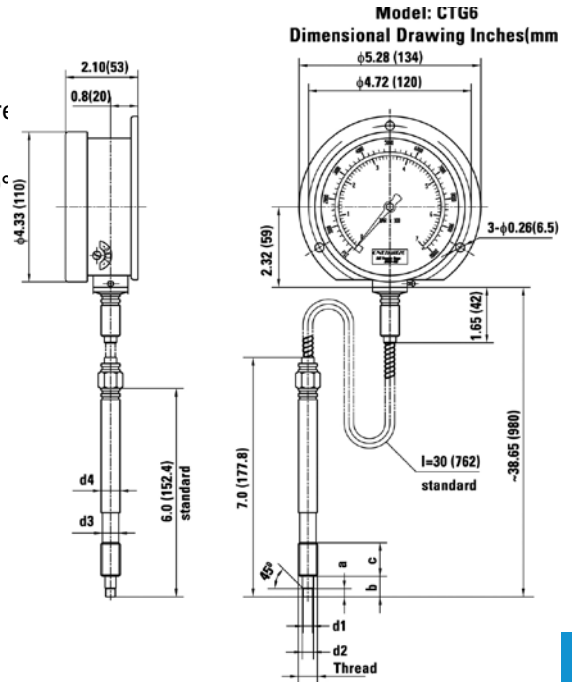
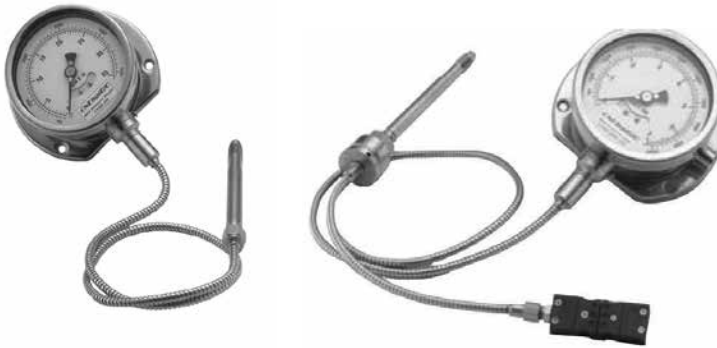
Melt Pressure Gauge - Model ECTG

Melt Pressure Gauge Model ECTG is a totally mechanical device, requiring no power. This rugged, totally self-contained Melt Pressure Gauge is available in either 0–5,000 psi or 0–10,000 psi ranges. This gauge allows the user to benefit from the improved efficiency and quality that goes along with melt pressure monitoring at an affordable price.

Melt Pressure Gauge Model ECTG comes standard with a 6" rigid stem and 30" of flexible capillary, and 1/2–20 UNF thread.

Features & Benefits

- Requires no electrical power and is totally maintenance free
- All stainless steel construction
- Large 4" gauge head with safety glass can be rotated 300° for pressure reading convenience
- Accuracy +/- 2%
- Optional type J or type K thermocouple output



Thread	d1	d2	a	b	c	d3	d4
1/2" - 20	ø0.307 (7.8) ø0.303 (7.7)	ø0.413 (10.5) ø0.407 (10.35)	0.217 (5.5) 0.211 (5.35)	0.441 (11.2) 0.233 (11.0)	0.629 (16.0)	ø0.41 (10.5)	ø0.5 (12.7)
M18	ø0.394 (10.0) ø0.386 (9.8)	ø0.610 (15.5) ø0.602 (15.3)	0.236 (6.0) 0.230 (5.85)	0.551 (14.0) 0.543 (13.8)	0.787 (20.0)	ø0.63 (16.0)	ø0.709 (18.0)

Part Number	Description	Pressure Range	Thermocouple
ECTG6-5M	6" Rigid Stem w/30" Capillary	0–5,000 psi	None
ECTG6-5MTCJ	6" Rigid Stem w/30" Capillary	0–5,000 psi	Type J
ECTG6-5MTCK	6" Rigid Stem w/30" Capillary	0–5,000 psi	Type K
ECTG6-10M	6" Rigid Stem w/30" Capillary	0–10,000 psi	None
ECTG6-10MTCJ	6" Rigid Stem w/30" Capillary	0–10,000 psi	Type J
ECTG6-10MTCK	6" Rigid Stem w/30" Capillary	0–10,000 psi	Type K
ECTG12-5M	12" Rigid Stem w/30" Capillary	0–5,000 psi	None
ECTG12-5MTCJ	12" Rigid Stem w/30" Capillary	0–5,000 psi	Type J
ECTG12-5MTCK	12" Rigid Stem w/30" Capillary	0–5,000 psi	Type K
ECTG12-10M	12" Rigid Stem w/30" Capillary	0–10,000 psi	None
ECTG12-10M2TCK	12" Rigid Stem w/30" Capillary	0–10,000 psi	Type K
ECTG12-10MTCJ	12" Rigid Stem w/30" Capillary	0–10,000 psi	Type J



Temperature Controllers

UATC20 Temperature Controllers

The UATC20 Temperature Control Module is a fully microprocessor based unit which has been intelligently designed for Hot Runner Mold Temperature Control Applications where advanced operational and diagnostic features are needed.

The well developed circuitry of the UATC20 produces a module which is simple to operate, rugged and dependable. The advanced diagnostic functions (which are operator programmable to the specific heating zone) provide a snapshot of the operation of that specific heating zone.

Some of the exceptional Analytical functions found on the UATC20 are:

- A diagnostic snapshot of the heater operating characteristics are revealed when the current sensing feature is employed.
- Detects and alerts to the potential dangerous conditions of current leaking to ground.
- If power to the heater exceeds a selected value, the module will alarm and disable power to the heater preventing damage.
- Advanced circuitry detects, alarms and disables power to the heater in the event the triac fails in a shorted condition.
- Heater diagnostics can be performed by checking the average amperage draw of the heater.
- In the event of a thermocouple, open or shorted condition, the module will automatically go into "APO" (Average Power Output) mode, allowing operations to continue by providing the same average power to the heater as applied prior to the failure.
- Real time diagnostics fault detection & error display.
- Audible alarm warns in the case of an error condition.
- A diagnostic snapshot of the heaters operating characteristics are revealed when the current sensing feature is employed.



UATC20

The UATC20 Temperature Control Module is a fully microprocessor based instrument, which has been intelligently designed for Hot Runner Mold temperature control applications where advanced operational and diagnostic features are needed. The well developed circuitry of UATC20 produces a full featured module which is simple to operate and will stand up to rigors of harsh environments.

An interesting feature of the UATC20 is its capacity to provide a snapshot of operation of the heating zone by displaying amperage draw. The UATC20 also has the ability to adjust maximum amperage draw to a point just above maximum wattage of the heater. When the controller detects a current which is greater than that value, it will sound an alarm so the offending components can be replaced. This improvement allows for greater operating and maintenance efficiency by detecting leakage in mold wires, cables, heaters, etc. at an early stage.

The Circuitry of the UATC20 provides improved protection to the mold in the event that the triac becomes shorted. This circuitry enables the controller to turn off the power to the heater if it detects continued power draw when the temperature is well above the set point.

ITC has addressed one of the most serious and costly problems of Hot Runner Temperature Controllers by incorporating of our Anti-Arching Feature. This enhancement can greatly reduce the probability of damage to either the main frame or module if a module is accidentally changed while the main frame is under power. This feature alone can save molders lot of money for repair or replacement.

FEATURES

- All features and parameters are fully selectable from the menu feature on the keypad.
- Amperage measuring & display.

- APO (average power output) in thermocouple failure condition.
- Automatic test of "LED" segments.
- Operating voltage 240vac, 50/60 Hz, or 120vac
- Cold junction compensation.
- Zero crossing triac.
- This module operates of ITC's 15 amp main frames.
- Ground Fault Detection – detects if there is a short to ground in the heating circuit. This is selectable range.
- High Amperage Alarm – detects if the amperage draw to the heater exceeds a selectable value which can be
- Entered from the menu.
- Thermocouple – Open, Shorted & Reversed. This is indicated by both an error message and audible alarm.
- Triac – Open and Shorted condition. This is indicated by both an error message and audible alarm.
- High & Low Temperature Condition – Activates when the process temperature varies more than 30° F from set point. This is indicated by both an error message and audible alarm.
- Blown Fuse – This is indicated when the blown fuse "LED" comes on

SAFETY FEATURES:

- High Voltage Thermocouple Protection – Fused
- Module High Current Protection – Fused
- Power Disabled to Heater when:
 - Triac is Shorted
 - Heater is Open
 - High Amperage Condition
 - Triac is Open
 - Over Temperature Condition
 - Audible Alarm

Voltage: 208 to 240vac, single phase

Current: 15 amps

Frequency: 50/60 Hz

Wattage: 3600

On/Off Key: Auto Latching (stays on last setting if power is lost)

Physical Configuration: Plugs in for easy interchangeability

Compatibility: Compatible with "G" Series housings

Size: 2" Wide, 7" High, 7-1/2" Deep

Weight: 1-1/2 #

DC Power Supply: Internally generated regulated and compensated

Module Power Usage: Less than 5 watts, excluding load

Set point Range: 0o to 999o F (537o C)

Control Accuracy: +/- 1o F (0.5o C) dependent on total thermal system

Calibration Accuracy: Better than 0.2% of full range

Operating Temperature Range: 32 to 120 degrees F (0 to 48° C)

Thermocouple: Type J, or Type K grounded or ungrounded

External Thermocouple Resistance: High impedance potentiometer input allows long distance T/C wiring

Output Drive: Internal solid state triac, zero crossing AC pulses

Ground Fault Sensitivity: 60 to 180 mA, default 120 mv.

High/Low Temperature Alarm: Factory set @ +/- 30 degrees F (16° C)

Overload Protection: Fuses on both sides of AC line

Transient Protection: dv/dt and transient pulse suppression

Shorted Triac Heater Protection: Highly sensitive, fast acting relays cut power to load



Temperature Controllers

UATC20 Temperature Controllers

Power Line Isolation: Optically and transformer isolated from AC lines. Isolation voltage greater than 2500 volts

Display: Dual LED displays, 3-digit, 7-segment

Manual Mode: Maintains constant output power to within 1% of manual set power. Adjustable from 0 to 100%

Soft Start: Variable stepped voltage, phase fired

Soft Start Duration: 5 Minutes (Adjustable – 0 to 20) up to 212° F (100° C)

Soft Start Override: Temperature 212° F (100° C)

Operational Modes:

- Soft Start precedes Auto Mode
- Thermocouple break overrides Soft Start and Auto Mode
- Reversed or shorted thermocouple overrides Soft Start and Auto Mode
- Manual Mode overrides thermocouple break, reversed, shorted thermocouple and Auto Mode.
- Output is disabled during all fault conditions.

Cold Junction Compensation: Automatic, better than 0.02°F/F° (0.01°C/C)

Open Thermocouple Protection: Automatically disables power to heater or Average Power Output (APO). Selectable

Reversed Thermocouple Protection: Automatically disables power to heater

Shorted Thermocouple Protection: Automatically disables power to heater or Average Power Output (APO). Selectable

Warranty: 2-Years

MFH1

The MFH1 Single Zone Temperature Control System delivers precise temperature control with enhanced diagnostic and control functions. This 10 amp, microprocessor based temperature control system is compact in size, enclosed within a rugged extruded frame and manufactured to standup to the rigors of industrial environments.

Employing the latest in microprocessor technology, the MFH1 offers the user many improved and unique operating features, which provide ease of use, menu selectable flexibility with advanced PID control algorithm for precise control.

Unlike others the MFH1 does not use a wimpy lightweight sheet metal enclosure, but instead the MFH1 uses a robust heavy wall extruded frame which will withstand industrial use.

SUPERIOR FEATURES:

- Compact
- Durable
- Full Featured
- Easy to use
- Enhanced Diagnostic Features

Large, Dual Digital Displays (Temperature, Setpoint, Error Codes)

Audible Alarm

Rear Mounted Fuses

Soft Start "LED" Indicator

Heater Load "LED" Indicator

Bumpless Transfer—APO (average power output)

SELECTABLE FEATURES:

Auto or Manual Operation – LED mode indicator

Type J or K Thermocouple – LED mode indicator

F° or C° Temperature Range – LED mode indicator

Amperage Monitoring & Display – LED indicates

AMP mode

- Audible Alarm – Selectable on /off
- Front Panel Lockout – Selectable on/off



MFH1

MFH1 Temperature Controllers

ENHANCED DIAGNOSTICS:

- High/Low Temperature LED – Selectable Range
- tCr Error Display – Thermocouple Reverse
- tCO Error Display – Thermocouple Open
- tCS Error Display – Thermocouple Shorted
- tOh Error Display – Triac/Heater Open
- tSh Error Display – Triac Shorted
- HiC Error Display – High Amperage Alarm – Selectable Range

SAFETY FEATURES:

- High Voltage Thermocouple Protection (fused)
- Module High Current Protection (fused)
- Electrically Isolated Front Panel
- Power Disabled to Heater:
- Triac Shorted
- Triac Open
- Heater Open
- Over Temperature
- High Amperage

Product Specifications – * Specifications may change without notice

- 208 to 240VAC, single phase
- 50/60 Hz
- 10 Amp Capable
- 2400 Watts
- Size: 6 1/2" Wide, 2" High, 10" Deep
- Control System Power Usage, Less than 5 watts
- Set Point Range – 0° to 999° F
- Control Accuracy – +/- 1° F (0.5° C)
- Calibration Accuracy – Better than 0.2% full range
- Cold Junction Compensation
- Operating Temperature Range -32° to 120° F
- Output Drive – Internal solid state triac, zero crossing AC pulse

OPTIONS:

MPTC10 OR MPTC20 - Single Zone Mold Power / Thermocouple Cable

CKPTM1 - Single Zone Cable End Kit—For Frame End:

NOTE: CKPTM1& MFH1-IPP are provided.

SPECIFICATIONS:

Maximum Amperage: 10 Amps 2400 Watts

Input Power: 240 VAC, Single Phase, 3 wire (2 AC & 1 Ground), 50/60 Hz.

Power to Heater: 240 VAC Single Phase, 50/60 Hz. 10 Amps Max.

Thermocouple: Type "J" or "K"

Mold Interface: Accomplished with an optional combination power and thermocouple cable with ground, Five (5) wire.

(Part No. MPTC10 OR MPTC20).

Dimensions & Weight: 2" (H) x 7" (W) x 11.5" (D) Approx. 7 lbs. (without cables & connectors)

Construction: Totally self contained system with heavy duty extruded aluminum frame: Combination Power & Thermocouple connector (CKPTOC1), 5 pin, female is mounted on rear of cabinet. Input Power Plug (MFH1-IPP) is mounted on rear of cabinet. (Combination Power/Thermocouple connector & Input Power Plug are supplied standard with this system)



Temperature Controllers

MFH1 Temperature Controllers

Accessories – Supplied: CKPTM1 -Cable End Connector (Combination Power/Thermocouple) which plugs into cabinet. MFH1-IPP -Cord End Connector for Input Power Cord (Must use SJO 143 Style & Type of power cord).

- Accessories – Not Supplied: Main Frame Connector (CKPTOC1) Mold Connector (CKPTIC1) Combination Power/Thermocouple Cable (MPTC10 OR MPTC20) Input Power Cord (MFH1-IPC).
- Input Power Cord: CAUTION -If customer is going to make their own input power cord, Use only SJO 14-3 type and style of power cord. Only this type and style of cord will fit the supplied connector.
- Power Usage: Less than 5 watts
- Setpoint Range: 0° to 999° F
- Control Accuracy: +/- 1° F (0.5° C)
- Calibration Accuracy: Better than 0.2% full range
- Operating Temperature Range: -32° F to 120° F
- Output Drive: Internal Solid State Triac, zero crossing, AC pulse
- Transient Protection: dv/dt and transient pulse suppression
- Shorted Triac Heater Protection: Highly sensitive, fast acting relays cut power to load
- Power Line Isolation: Optically and transformer isolated from AC lines. Isolation voltage greater than 2500 volts
- Display: Dual LED displays, 3-digit, 7-segment
- Manual Mode: Maintains constant output power to within 1% of manual set power. Adjustable from 0 to 100%
- Soft Start: Variable stepped voltage, phase fired
- Soft Start Duration: 5 Minutes (Adjustable – 0 to 20) up to 212° F (100° C)
- Soft Start Override: Temperature 212° F (100° C)
- Operational Modes:
 - Soft Start precedes Auto Mode
 - Thermocouple break overrides Soft Start and Auto Mode
 - Reversed or shorted thermocouple overrides Soft Start and Auto Mode
 - Manual Mode overrides thermocouple break, reversed, shorted thermocouple and Auto Mode.
 - Output is disabled during all fault conditions.
- Cold Junction Compensation: Automatic, better than 0.02°F/F° (0.01°C/C)
- Open Thermocouple Protection: Automatically disables power to heater or Average Power Output (APO). Selectable
- Reversed Thermocouple Protection: Automatically disables power to heater
- Shorted Thermocouple Protection: Automatically disables power to heater or Average Power Output (APO). Selectable
- Warranty: 2-Years

Temperature Controllers



NOTE: ITC brand mainframes for USA and Mexico use only. Outside of US please buy the DME standard MFP Main Frame Package.

NOTE: Control cards not included with mainframes.



MF12150

- Input Voltage: 240vac, 3 Phase, 50/60Hz
- Heater Voltage: 240vac, Single Phase
- Max. Amps per Zone: 15 Amps

ACCESSORIES:

- Mold Cable: MPC12C10G, MPC12C20G or MPC12C30G
- Mold TC Cable: TC12C10G, TC12C20G or TC12C30G
- Mold T/C Connector: MTC12G
- Mold Power Connector: PIC12G
- Floor Stand: MFS512G
- Module: UATC20



MF5150

- Input Voltage: 240vac, 3 Phase, 50/60Hz
- Heater Voltage: 240vac, Single Phase
- Max. Amps per Zone: 15 Amps

ACCESSORIES:

- Mold Cable: MPC5C10G, MPC5C20G or MPC5C30G
- Mold TC Cable: TC5C10G, TC5C20G or TC5C30G
- Mold T/C Connector: MTC5G
- Mold Power Connector: PIC5G
- Floor Stand: MFS512G
- Module: UATC20

MF8150

- Input Voltage: 240vac, 3 Phase, 50/60Hz
- Heater Voltage: 240vac, Single Phase
- Max. Amps per Zone: 15 Amps

ACCESSORIES:

- Mold Power Cable: MPC8C10G, MPC8C20G or MPC8C30G
- Mold T/C Cable: TC8C10G, TC8C20G or TC8C30G
- Mold Power Connector: PIC8G
- Mold T/C Connector: MTC8G
- Floor Stand: MFS512G
- Module: UATC20

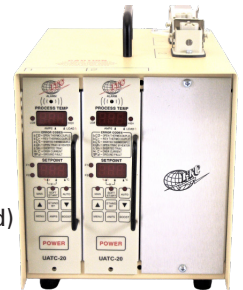


MF2

- Input Voltage: 240vac, 1 Phase, 50/60Hz
- Heater Voltage: 240vac, Single Phase
- Max. Amps per Zone: 10 Amps
- Total System Watts: 2,400 Watts

ACCESSORIES:

- Mold Cable: MPTC10 or MPTC20 (2 required)
- Mold Connector: CKPTIC1 (2 required)
- Module UATC20

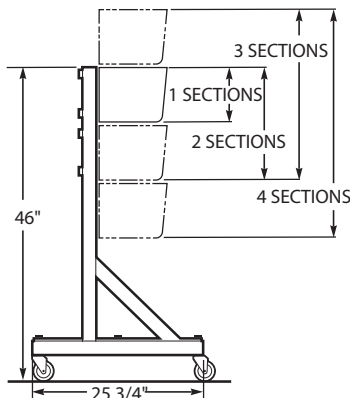


MF1

- Input Voltage: 240vac, 1 Phase, 50/60Hz
- Heater Voltage: 240vac, Single Phase
- Max. Amps per Zone: 10 Amps
- Total System Watts: 2,400 Watts

ACCESSORIES:

- Mold Cable: MPTC10 or MPTC20
- Mold Connector: CKPTIC1
- Module: UATC20

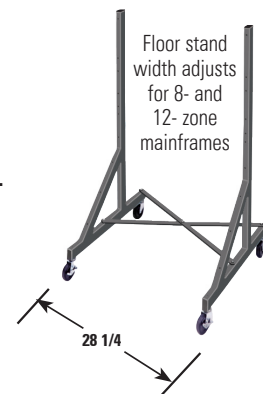


Universal Floor Stand

The Universal Floor Stand will accommodate all 15 or 30 amp Mainframes from one to four sections high. Stand is made from heavy gauge steel and includes locking casters (400 lb. rating). All assembly and Mainframe mounting hardware is included. Heavy duty floor stand available for larger systems (1000 lb. rating).

ITEM NUMBER	RATING
MFS512G	400 LBS

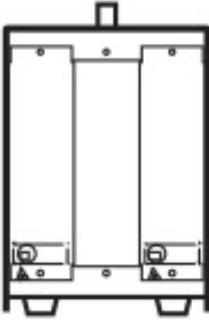
Floor stand comes with plates for 5-zone frame mounting on 8-zone "x" pattern



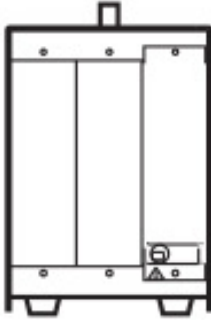


Temperature Controllers

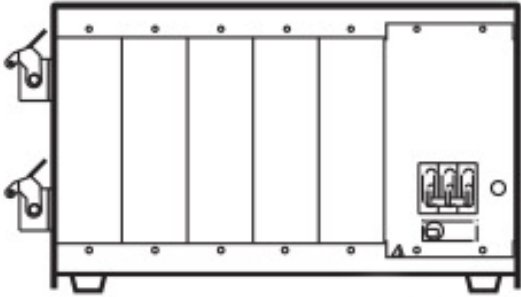
Standard Mainframe Configurations



MF1

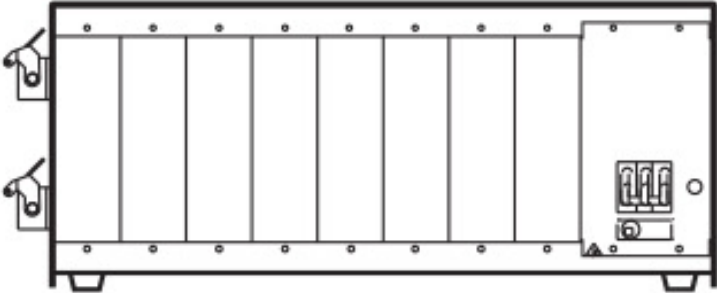


MF2



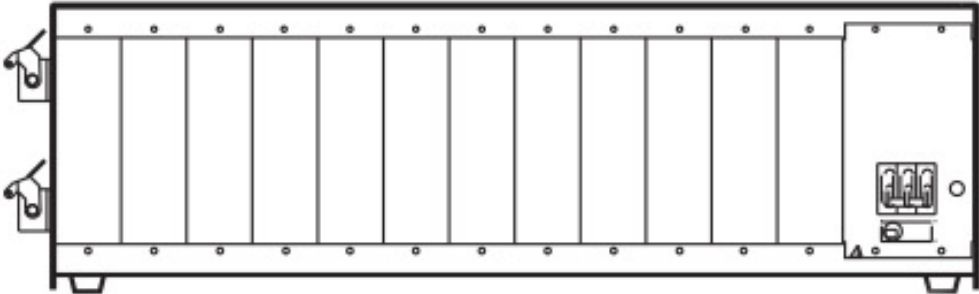
MF5150

50 AMP



MF8150

50 AMP



MF12150

50 AMP

Temperature Controllers



Control System Components

MAINFRAMES, CABLES & CONNECTORS ALL SOLD SEPERATELY

	PART NUMBER	DESCRIPTION
	UATC20	Module, Single Zone Temperature Controller, Dual Display
1 ZONE	MF1	1-Zone Mainframe; Standard 1-phase 3 Wire, 208-240 VAC, 10 Amps
	MPTC10	1-Zone Mold Power Cable; 10' O.A.L.
	MPTC20	1-Zone Mold Power Cable; 20' O.A.L.
	CKPTIC1	1-Zone Mold Power Input Connector
2 ZONE	MF2	2 -Zone Mainframe; Standard 1-phase 3 Wire, 208-240 VAC, 10 Amps
	MPTC10	1-Zone Mold Power Cable; 10' O.A.L. (2 required)
	MPTC20	1-Zone Mold Power Cable; 20' O.A.L. (2 required)
	CKPTIC1	1-Zone Mold Power Input Connector (2 required)
5 ZONE	MF5150	5-Zone Mainframe; Standard 3-phase 4 Wire, 208-240 VAC, 15 Amps
	MPC5C10G	5-Zone Mold Power Cable; 10' O.A.L.
	MPC5C20G	5-Zone Mold Power Cable; 20' O.A.L.
	MPC5C30G	5-Zone Mold Power Cable; 30' O.A.L.
	TC5C10G	5-Zone Thermocouple Cable; 10' O.A.L.
	TC5C20G	5-Zone Thermocouple Cable; 20' O.A.L.
	TC5C30G	5-Zone Thermocouple Cable; 30' O.A.L.
	PIC5G	5-Zone Mold Power Input Connector
MTC5G	5-Zone Mold Thermocouple Connector	
8 ZONE	MF8150	8-Zone Mainframe; Standard 3-Phase 4 Wire, 208-240 VAC, 15 Amps
	MPC8C10G	8-Zone Mold Power Cable; 10' O.A.L.
	MPC8C20G	8-Zone Mold Power Cable; 20' O.A.L.
	MPC8C30G	8-Zone Mold Power Cable; 30' O.A.L.
	TC8C10G	8-Zone Thermocouple Cable; 10' O.A.L.
	TC8C20G	8-Zone Thermocouple Cable; 20' O.A.L.
	TC8C30G	8-Zone Thermocouple Cable; 30' O.A.L.
	PIC8G	8-Zone Mold Power Input Connector
MTC8G	8-Zone Mold Thermocouple Connector	
12 ZONE	MF12150	12-Zone Mainframe; Standard 3-Phase 4 Wire, 208-240 VAC, 15 Amps
	MPC12C10G	12-Zone Mold Power Cable; 10' O.A.L.
	MPC12C20G	12-Zone Mold Power Cable; 20' O.A.L.
	MPC12C30G	12-Zone Mold Power Cable; 30' O.A.L.
	TC12C10G	12-Zone Thermocouple Cable; 10' O.A.L.
	TC12C20G	12-Zone Thermocouple Cable; 20' O.A.L.
	TC12C30G	12-Zone Thermocouple Cable; 30' O.A.L.
	PIC12G	12-Zone Mold Power Input Connector
MTC12G	12-Zone Mold Thermocouple Connector	





Temperature Controllers

Accessories



Universal Mainframe Floorstand.

Stand accommodates from one to four mainframes. Kit includes the uprights, casters and hardware.

Part# MFS512G & MFS512GHD



Mainframe Blank Panels

Blank panels cover unused mainframe zones to protect operators from dangerous high voltage.

Part# MFBP30G & MFBP10G

Module Replacement Fuses		
Part Number	AMPS	Qty.
ABC1	1	5
ABC10	10	5
ABC15	15	5
13X10	10	5
13X15	15	5

FUSES

Temperature Controllers

Cables

Part Number		Part Number		Part Number	
Zones	(10' Length)	Zones	(15' Length)	Zones	(20' Length)
Mold Power Cable					
5	MPC5C10G	5	GMPC5-15	5	MPC5C20G
8	MPC8C10G	8	GMPC8-15	8	MPC8C20G
12	MPC12C10G	12	GMPC12-15	12	MPC12C20G
Thermocouple Cable					
5	TC5C10G	5	GTC5-15	5	TC5C20G
8	TC8C10G	8	GTC8-15	8	TC8C20G
12	TC12C10G	12	GTC12-15	12	TC12C20G



Temperature Controllers

Connectors

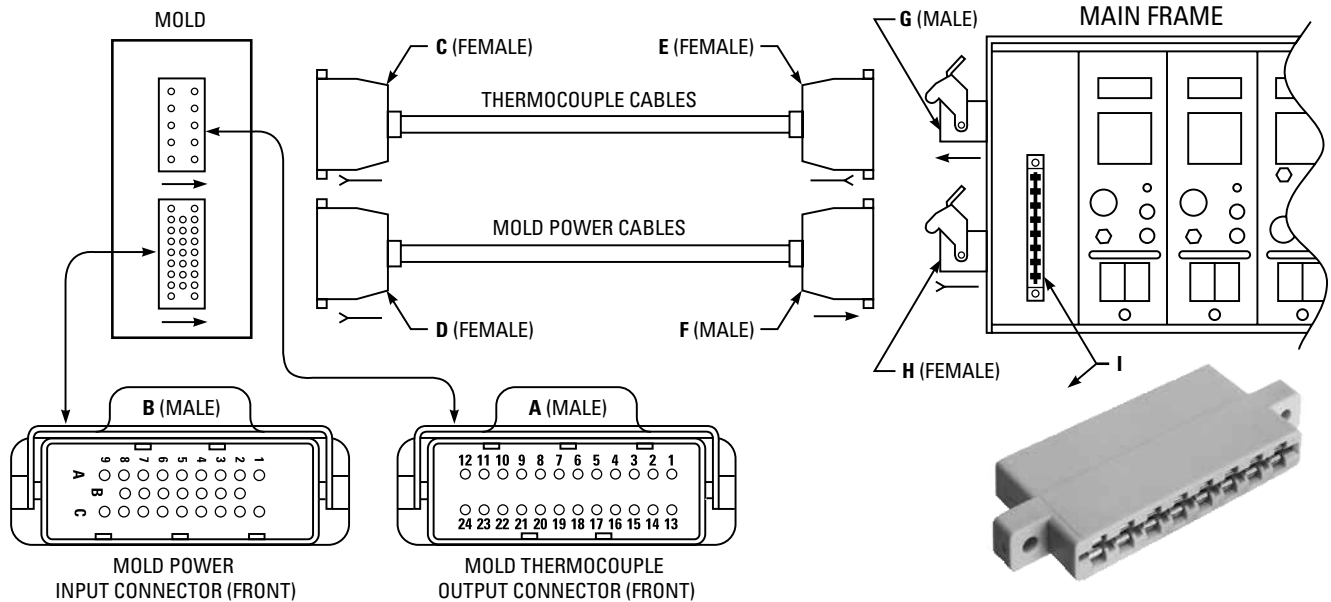
Zones	Part Number
Mold Power Input Connectors	
5	PIC5G
8	PIC8G
12	PIC12G
Mold Thermocouple Connectors	
5	MTC5G
8	MTC8G
12	MTC12G



Temperature Controllers



Mold Connectors, Terminal Boxes and Connector Kits



Connectors/Connector Kits (5 – 48 Zone, 15 AMP; 2 – 5 Zone, 30 AMP)

Reference Letter	Description	Part Number
A	Mold Thermocouple Output Connectors	MTC5G MTC8G MTC12G
B	Mold Power Input Connectors	PIC5G PIC8G PIC12G
C	Mold End Kit for 5-Zone Thermocouple Cable (10, 15 or 30 AMP)	CKTF15G
	Mold End Kit for 8-Zone Thermocouple Cable (10 or 15 AMP)	CKTF18G
	Mold End Kit for 12-Zone Thermocouple Cable (10 or 15 AMP)	CKTF112G
D	Mold End Kit for all 10 or 15 AMP Power Cables	CKPF112BG
	Mold End Kit for 2- or 3-Zone 30 AMP Power Cables	CKPF13CG
	Mold End Kit for 5-Zone 30 AMP Power Cables	CKPF15CG
E	Frame End Kit for all Thermocouple Cables (10, 15 or 30 AMP)	CKTF112AG
F	Frame End Kit for all 10 or 15 AMP Power Cables	CKPM112BG
	Frame End Kit for 2- or 3-Zone, 30 AMP Power Cables	CKPM13CG
	Frame End Kit for 5-Zone, 30 AMP Power Cables	CKPM15CG
G	Thermocouple Input Kit for all Mainframes (10, 15 or 30 AMP)	CKTM212AG
H	Power Output Kit for all 10 or 15 AMP Mainframes	CKPF212BG
	Power Output Kit for 2- or 3-Zone, 30 AMP Mainframes	CKPF23CG
	Power Output Kit for 5-Zone, 30 AMP Mainframes	CKPF25CG
I	Edge Card Connector Kit for all Mainframe PC Boards (10, 15 or 30 AMP)	CKF312G

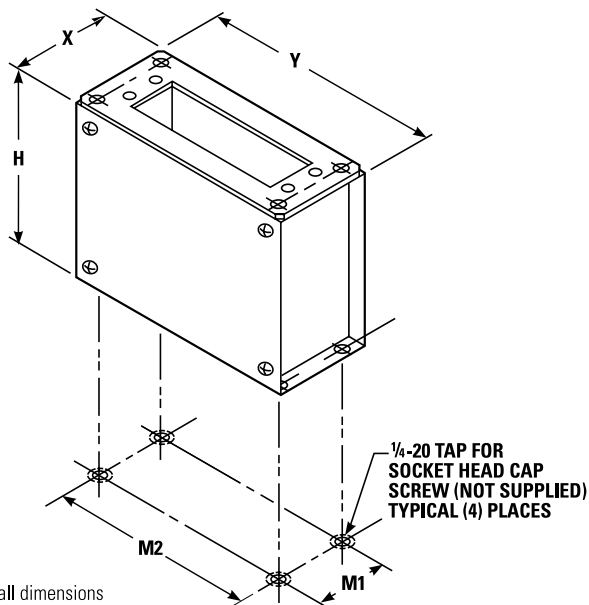


Temperature Controllers

Terminal Box Detail and Mold Connectors

Terminal Mounting Boxes

Terminal Mounting Boxes provide the easiest and most economical method of mounting power and thermocouple connectors on the mold. Constructed of plated, heavy-gauge steel, each box is pre-cut and drilled for quick mounting of the connector to the box, and box to the mold. Connector mounting hardware is supplied. Connectors are ordered separately.



NOTE: Overall dimensions shown include allowances for hardware (assembly screws) but not connectors.



PTC8TBG
(Connectors ordered separately)



PTC5TBG



PTC0012



PTC210



PIC512TBG

Terminal Mounting Boxes for Mold Power Input Connectors **TERMINAL**

Part Number	X	Y	H	M1	M2	Accepts
PIC512TBG	2.75	4.875	4.25	1.500	4.250	PIC5, 8 or 12G
PICH23TBG	2.75	5.614	4.25	1.500	4.990	PICH23G
PICH5TBG	4.46	6.676	4.25	3.250	6.052	PICH5G

Terminal Mounting Boxes for Thermocouple Connectors **TERMINAL**

Part Number	X	Y	H	M1	M2	Accepts
MTC5TBG	2.75	4.875	4.25	1.500	4.250	MTC5G
MTC8TBG	2.75	5.614	4.25	1.500	4.990	MTC8G
MTC12TBG	2.75	6.676	4.25	1.500	6.052	MTC12G

Combination Terminal Mounting Boxes

COMBINATION

Part Number	X	Y	H	M1	M2	Accepts
PTC210	2.75	4.88	4.25	1.500	4.250	(2) CKPTIC1
PTC5TBG	2.75	8.66	4.25	1.500	8.031	PIC5G, MTC5G
PTC8TBG	2.75	9.47	4.25	1.500	8.843	PIC8G, MTC8G
PTC12TBG	2.75	10.53	4.25	1.500	9.906	PIC12G, MTC12G
PTCH1TBG**	4.46	4.88	4.25	3.250	4.250	AC1240MI, TCS1
PTCH23TBG	2.75	10.53	4.25	1.500	9.906	PICH23G, MTC5G
PTCH5TBG	4.46	11.06	4.25	3.250	10.431	PICH5G, MTC5G
PTC0012	4.46	7.66	4.25	3.250	7.160	TPC0001

* Used with 2-zone, 15 AMP mainframe MFFPR2G ** Used with 1-zone, 30 AMP mainframe MFHP1G

Temperature Controllers



Standalone Integral Controller

Single and Two-Zone 10 AMP Mainframes

The DME Portable 10 AMP Mainframes are designed for use with 10 or 15 AMP* Smart Series or G-Series Temperature Control Modules. Mainframe is supplied with power input and power-thermocouple output connectors. Circuit breaker provides safety for operation. Control modules and cables are to be ordered separately.

Note: Maximum safe operating amperage is 10 AMPS per zone when using 15 AMP modules. If application will draw more than 10 AMPS per zone, use 15 AMP Mainframe (MFFPR2G).

* User must install ABC10 (10 AMP) fuses in the 15 AMP control modules to protect the mainframe.

Single and Two-Zone 10 AMP Mainframes (50–60 Hz, Single Phase)

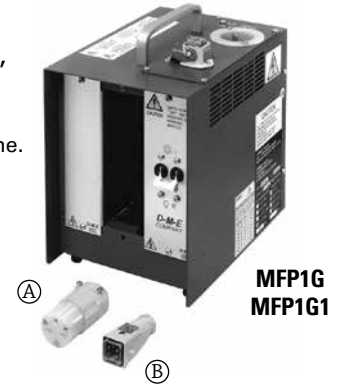
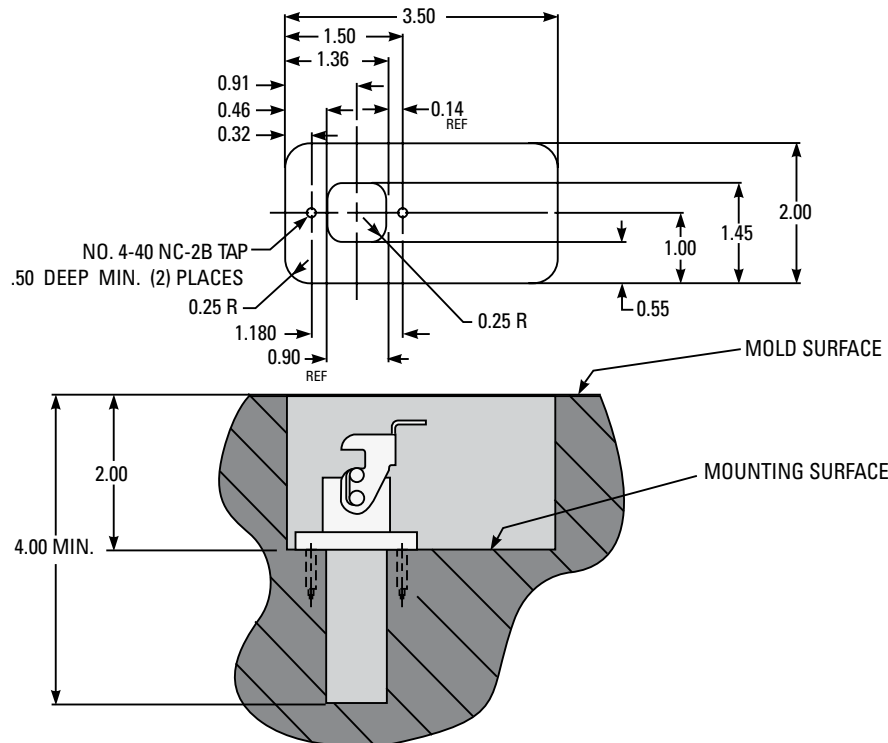
Zones	Part Numbers**	Volts	Watts Per Zone	Connectors Supplied
1	MFP1G1	120	1200	(1) AC1512F (Power In) (1) CKPTM1 (Power-TC Out)
1	MFP1G	240	2400	(1) AC2024F (Power In) (1) CKPTM1 (Power-TC Out)
2	MFPR2G	240	2400	(1) AC2024F (Power In) (2) CKPTM1 (Power-TC Out)

** Includes frame and connectors listed. Modules and cables ordered separately.

Note: Replacement power connectors in frame are also available on special order.

Recommended Mold Pocket Layout

(For Mold Power-Thermocouple Input Connector CKPTIC1)



A: AC2024F (power to mainframe); AC1512F supplied with MFP1G1
B: CKPTM1 (connector to heater)

This single-zone controller is ideal for use with Straight-Shot hot sprue bushings.



A: AC2024F (power to mainframe);
B: CKPTM1 (connector to heater)

Single zone, horizontal 10 AMP controllers (SSH1022/21) also available following page.

Dimensions
Frame 7"W x 9"H x 10"D
(9"H dimension does not include connectors or handle)



Temperature Controllers

RoHS/WEEE Compliant Smart Series® Single Zone Temperature Controller

SSH1022/21 (10 AMP)

- Compact
- Easy-to-use
- Includes new, improved and unique features
- Provides microprocessor-based PID control
- More accurate than analog or variac controllers
- Built-in thermocouple diagnostics
- Ideal for use with a hot sprue bushing or a machine nozzle



Key Features

- Large digital display
 - For easier readability of temperature, % power and faults
- Setpoint pushwheel
 - For setting desired setpoint temperature
 - Allows adjustment of setpoint before turning power on
- AUTO % power display
 - Shows % power output while in AUTO mode
 - Indicates average % power requirement on thermocouple failure
 - A diagnostic tool for solving problems

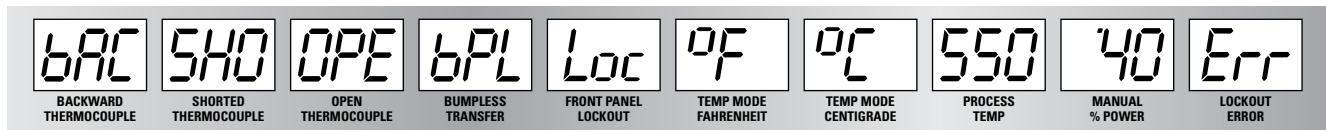
Switchable Options

- Shorted thermocouple sensitivity adjustment
 - Operation can be tailored to fast or slow reaction times
 - Sensitivity can be adjusted with internal switches
 - Very useful for zones with long startup times
- Switchable °C/°F operation
 - Scale indicated at startup
- K type thermocouple support
- Cut feature
 - Gain cut feature for small nozzles and heaters with ungrounded internal thermocouples

Operational Refinements

- Improved SmartStart®
 - A more gradual temperature rise leads to a more effective heater dry out period, thereby extending heater life
 - SmartStart® now available as an option in manual mode
- SelectiveCycle®
 - A very high-speed power output approach
 - Enables accurate temperature control and longer heater life
- Bumpless transfer
 - When a thermocouple failure occurs, operation is automatically continued with a learned % power
 - Unique software accurately assigns percent power setting
- Third fuse
 - Allows for display of low temperature alarm when the load fuses are blown

Front Panel Digital LED Indicators



Temperature Controllers



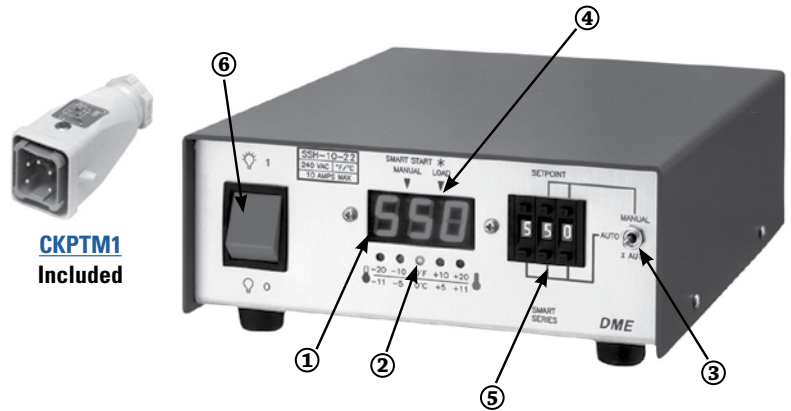
RoHS/WEEE Compliant Smart Series® Single Zone Temperature Controller

SSH1022/21 (10 AMP)

Controller includes 19-foot power cord, mating mold power and thermocouple connector (CKPTM1) and two spare fuses (ABC10). Additional cables and/or connectors must be ordered separately. See following page for detailed information on cables and connectors. Warranty: Three year (excluding triac and fuses).

Controller Part Number	Volts (VAC)
SSH1022	240
SSH1021	120

Cable* Part Number	Length (Feet)
MPTC10	10
MPTC20	20



Front Panel Controls and Indicators

- Process Temperature Display:**
Shows process temperature, thermocouple faults and other operational modes. Displays % power when switch (3) is pressed down.
- Temperature Deviation Lights:**
Indicates deviation from setpoint. Outer lights blink at more than $\pm 40^{\circ}\text{F}$ (22°C) from setpoint.
- Auto/Manual/% Auto Power Switch:**
Selects AUTO or MANUAL control mode. Shows % power when pressed into "% AUTO" position.
- LED Mode Indicators:**
Left LED illuminates during manual mode. Right LED illuminates when power is supplied to heater. Right LED blinks during SmartStart®.
- Setpoint Pushwheel:**
Three-digit switch programs setpoint in AUTO mode. Right two digits program % power in MANUAL mode.
- Power On/Off Switch:**
Controls AC power to module.

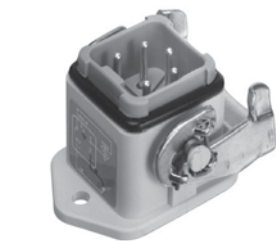


Mold Power and Thermocouple Connector* Part Number
CKPTIC1

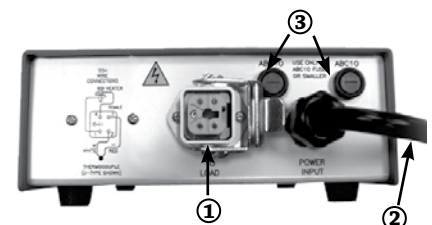
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Rear Panel

- Mold Power and Thermocouple Output Connector:**
CKPTIC1 connects to the heater and thermocouple. Mating connector CKPTM1 is supplied with controller.
- Power Input Cord:**
Nineteen-foot cord supplies power to controller. Plug supplied with SSH1021 (120 VAC) units. No plug supplied with SSH1022.
- Load Fuse Receptacles:**
Provides safe and easy replacement of load fuses.



* Items ordered separately





Temperature Controllers

RoHS/WEEE Compliant: Smart Series® Single and 2-Zone Mainframe Accessories (10 AMP)

For Use With MFP1G, MFP1G1, MFPR2G, SSH1022 and SSH1021

Mold Power-Thermocouple Input Connector

A Single-Zone Power-Thermocouple Input Connector is available for mounting in or on the mold to accept the power-thermocouple cable from the mainframe. Water resistant, the connector has an integral retaining latch for a secure cable connection and numbered screw-type terminals for power and thermocouple lead wires.

*Can be mounted on top of mold for use with DME Straight Shot hot sprue bushings.



Part Number
MPTC10
MPTC20

Armored Mold Power-Thermocouple Cables

Single-Zone Mold Power-Thermocouple Cables are constructed of special lead wire for use in high temperature environments, and are available to connect the mainframe to the connector on the mold. Available in lengths of 10 or 20 feet. Integral retaining latches on the mainframe and mold connections provide secure cable connections. Connector configurations ensure proper insertion of cable.

Replacement Connector Kits (for Controller & Cables)

Male Power-TC Connectors

- CKPTM1 is on MPTC10/20 Cables; mates with Frame or CKPTF1L only
- CKPTM1L mates with CKPTF1 only

Female Power-TC Connectors

- CKPTF1 is on MPTC10/20 Cables; mates with Mold or CKPTM1L only
- CKPTF1L mates with CKPTM1 only

AC1512F



CKPTM1



CKPTF1



PTC210



AC2024F



CKPTM1L



CKPTF1L



Power Input Connectors for Mainframe

Part Number	Volts
AC1512F	120
AC2024F	240

Part Number
CKPTM1
CKPTM1L
CKPTM1MH (metal hood)
CKPTM1LMH (metal hood)

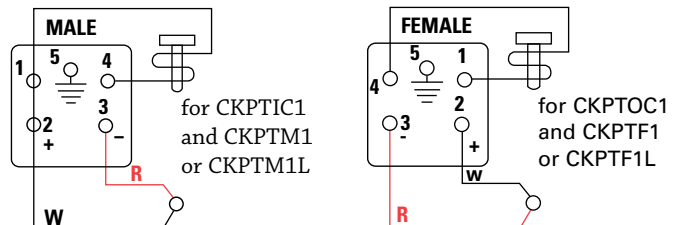
Part Number
CKPTF1
CKPTF1L
CKPTF1MH (metal hood)
CKPTF1LMH (metal hood)

Part Number
PTC210

Wiring Diagrams



Part Number
[CKPTOC1](#)
Power-Thermocouple Output Connector
(for Mainframe Bulkhead)



Temperature Controllers



RoHS/WEEE Compliant: Smart Series® Single and 2-Zone Mainframe Accessories (10 AMP)

Two-Zone 15 AMP Mainframes

Provides 15 AMP (3600 watts) per zone. For use with Smart Series or G-Series modules. Supplied with built-in cooling fan, power input, power output and thermocouple input connectors. Control modules and cables are ordered separately.



Two-Zone 15 AMP Mainframe (240 VAC, 50–60 Hz, Single Phase)

Part Number	Watts Per Zone	Connectors Supplied
MFFPR2G	3600	(1) AC1240F (Power In) (2) AC1524M (Power Out) (3) M2MJ (TC In)

Includes frame and connectors listed. Modules and cables ordered separately.

Part Number	Description
AC1240F*	Female 240 VAC twist-lock power input connector (mates with male frame power input)
AC1524M*	Male 240 VAC power output connector (mates with female frame power outputs)
M2MJ.*	Thermocouple mini-plug mates with frame as jack strip connector
PTC2TBGTS	2 zone, pre-wired terminal mounting box with terminal strip (mounts to mold; mates with PTC0110 or PTC0120 cables)

* Included with MFFPR2G

Frame Dimensions

7"W × 9"H × 10"D
(9"H dimension does not include connectors or handle)

Armored Mold Power – Thermocouple Cables (15 AMP)

Single-Zone Mold Power-Thermocouple Cable is constructed of special lead wire for use in high temperature environments. This cable connects the mainframe to the connector on the mold. Available in lengths of 10 or 20 feet. Retaining latches on the mold connector provide secure cable connections.



Part Number

[PTC0110](#)

[PTC0120](#)

For use with MFFPR2G only

Terminal Mounting Boxes – Prewired (15 AMP)

Terminal Mounting Boxes provide the easiest and most economical method of mounting power and thermocouple connectors on the mold. Constructed of plated, heavy-gauge steel, each box is pre-cut and drilled for quick mounting of the box to the mold (2-zone, prewired terminal mounting box with terminal strip shown with cover plate removed).



Part Number

[PTC2TBGTS](#)

For use with MFFPR2G only



Epic® Connectors

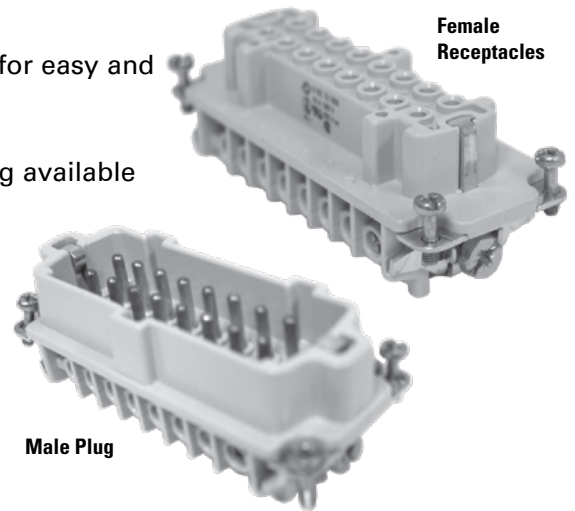
EPIC CONNECTORS

Part	Part Number
6 Contacts, HBE Series	
Male Plug	10.1900
Receptacle	10.1910
Single Latch	
Panel Base	RPM0060
Surface Base	10.0050
Top Hood	RPM0060
Side Hood	10.0120
6 Contacts, H-BS Series	
Male Plug	10.1700
Receptacle	10.1710
Single Latch	
Panel Base	RPM0060
Surface Base	10.0749
Top Hood	RPM0069
Side Hood	10.0829
Double Latch	
Panel Base	10.0720
Surface Base	10.0740
Top Hood	10.0800
Side Hood	10.0820
10 Contacts, HBE Series	
Male Plug	RPM0062
Receptacle	RPM0065
Single Latch	
Panel Base	RPM0059
Surface Base	10.0349
Top Hood	RPM0068
Side Hood	10.0429
Double Latch	
Panel Base	10.0320
Surface Base	10.0340
Top Hood	10.0400
Side Hood	10.0420
10 Contacts, HA Series	
Male Plug	10.4400
Receptacle	10.4410
Single Latch	
Panel Base	10.4420
Surface Base	10.4481
Top Hood	10.4460
Side Hood	10.4450

Part	Part Number
12 Contacts, H-BS Series	
Male Plug	10.1820
Receptacle	10.1830
Double Latch	
Panel Base	10.1320
Surface Base	10.1370
Top Hood	10.1330
Side Hood	10.1350
16 Contacts, H-BE Series	
Male Plug	RPM0063
Receptacle	RPM0066
Single Latch	
Panel Base	RPM0060
Surface Base	10.0749
Top Hood	RPM0069
Side Hood	10.0829
Double Latch	
Panel Base	10.0720
Surface Base	10.0740
Top Hood	10.0800
Side Hood	10.0820
24 Contacts, H-BE Series	
Male Plug	RPM0064
Receptacle	RPM0067
Single Latch	
Panel Base	RPM0061
Surface Base	10.1049
Top Hood	RPM0070
Side Hood	10.1139
Double Latch	
Panel Base	10.1020
Surface Base	10.1040
Top Hood	10.1210
Side Hood	10.1130
25 Contacts, H-D Series	
Male Plug	RPM0072
Receptacle	RPM0073
Single Latch	
Panel Base	RPM0074
Surface Base	10.5670
Top Hood	10.5650
Side Hood	10.5640

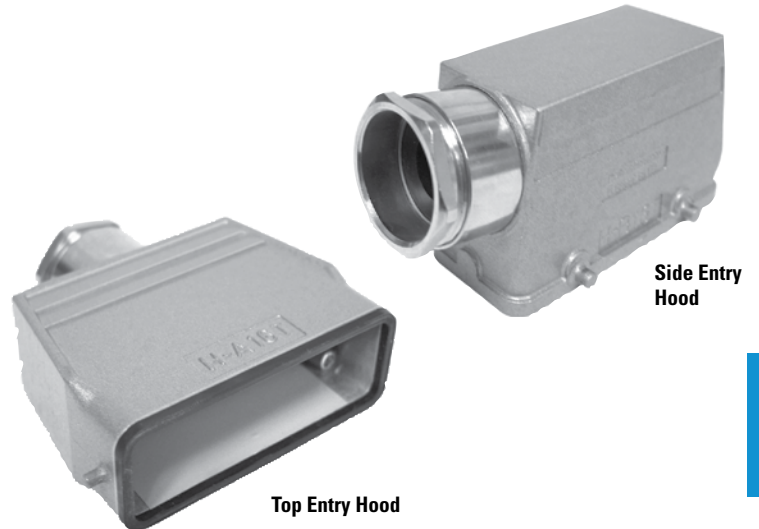
Male Plugs and Female Receptacles

- With screw terminals: 3 to 48 captive, backed-off screws for easy and convenient wire termination
- With crimped terminals 7 to 216 contacts
- Contacts are hard, silver-plated copper alloy. (Gold plating available in crimp versions.)
- Ground-safety feature “makes first, breaks last.”
- Insulators are interchangeable within either base or hood, and are key-molded to ensure proper assembly
- Terminals are number coded, front and back, for easy installation



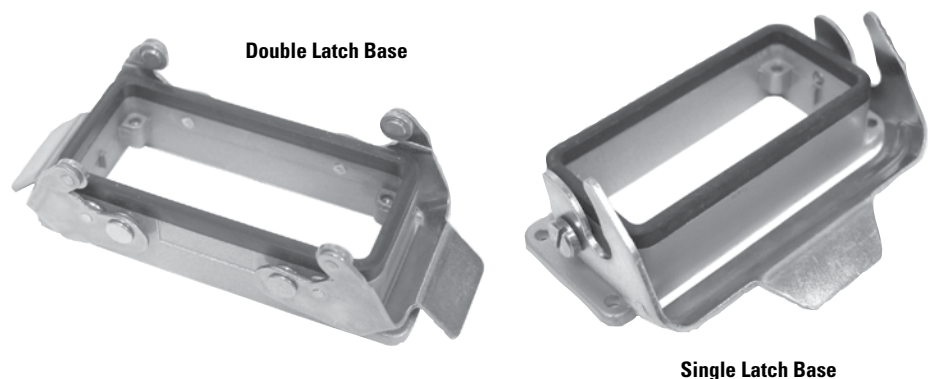
Hood

- Built to withstand severe environmental and industrial hazards
- Provides protection against dirt, grease, oil, water, vibration and impact
- Durable, rugged, single-piece aluminum die casting
- Designed for flexible cable; adaptable for seal-tight connections
- Available with front, angled or top entry
- Fully adaptable - a multi-cut Neoprene gasket provides for cables of different sizes



Base

- Positive, spring-loaded locking-latches for quick connect and disconnect
- Designed with a lip-mounted Neoprene gasket for long protection against harsh environments
- Available in panel-mount base and single or double-entry, surface-mount base versions
- Available with spring-loaded or string-attached dust covers





Digital Pocket Thermometer

Wide Range
40° to 450°F

Updates: At 10 second intervals
or instantly when button is pushed

Display: LCD, 1/4" high

Stem: Stainless steel

Range: -40° to 450°F

Resolution: 0.1°F

Accuracy: 0.4% of total range between -4° and
77°F; 0.8% maximum over entire range

Maximum Temperature: Intermittent use 400°-
450°F

Update Interval: 10 sec (or instant when update
button pressed)

Auto-Off: After 50 minutes of non-use

Battery: Eveready #392 or equivalent

Minimum Insertion: 1 inch

Part Number D-450

Analog Pocket Thermometer

Part Number	Temp. Range
K795	50 to 550°F



Dial Thermometers



Standard Ranges: Fahrenheit

Range	0-200°	*0-250°	*50-300°	*50-500°	150-750°	200-1000°
Divisions	2°	2°	2°	5°	10°	10°

*Stock Range

Standard Ranges: Celsius

Range	0-100°	*0-150°	0-300°	Range	50-300°F/ 10-150°C.	50-500°F/ 10-260°C.
Divisions	1°	1°	2°	Divisions	2°	5°

Dual Ranges

1/8", 1/4" or 1/2" NPT Stem
Diameter Industrial
Thermometers

- Type 304 stainless steel
- All welded construction
- Easy to read
- Rustproof
- Dustproof
- Leakproof
- Corrosion resistant
- Accuracy to ± 1% of range
- Dampened for minimum vibration
- Perfect for hopper dryers, barrels, fluid heaters, etc.

Model Number	LN250	212	00200
NPT Stem			
1/8" NPT and 2-3/8" Head Dia	LN200		
1/4" NPT and 2-3/8" Head Dia	LN250		
1/2" NPT and 3" Head Dia	GT300		
	Stem Length		
	2-1/2"	212	
	4"	400	
	6"	600	
	9"	900	
	12"	1200	
	15"	1500	
	18"	1800	
Temperature Range °F			
	0-200		00200
	0-250		00250
	50-300		50300
	50-500		50500
	150-750		150750
	200-1000		2001000



DIAL THERMOMETERS

F



Non-Contact Thermometers

Wide Range Mini IR Thermometer

Compact Thermometer with Wide Temperature Range

- Measures temperature from -58 to 1000°F with 0.1° resolution up to 199.9°
- Built-in laser pointer identifies target area
- 2000 count backlit display
- Over range indicator
- Automatic data hold when trigger is released
- Fixed 0.95 emissivity covers 90% of surface applications
- Auto power off saves battery life
- Complete with 9V battery



Part Number 42510

Specifications	
Display Counts	2000 count backlit LCD
Basic Accuracy	±2% of reading
Field of View	8:1
Dimensions	3.2 x 1.6 x 6.3" (82 x 42 x 160 mm)
Weight	6.4 oz (180g)

Non-Contact Thermometers

Wide Range IR Thermometer with Type K Input

Measures Both Non-Contact and Contact Temperature Plus Stores 20 Readings

- Wide temperature range IR temperature and type K thermocouple measurements
- Automatic emissivity adjustment (for temperatures 212°F or higher)
- Memory stores up to 20 readings
- Large LCD display with bright backlight for easy-to-read measurements and programming parameters
- Laser pointer provides better aim and accuracy
- Auto-hold activates when the measurement trigger is released
- Adjustable high/low alarm alerts user visually and audibly when temperature exceeds programmed limits
- MAX/MIN/AVG/DIF features display highest, lowest, average, and MAX minus MIN values
- Data hold, auto power off, and low battery indication
- Switches built into handle allow for °C/°F display selection, auto power off defeat, and alarm on/off control
- Complete with 9V battery, type K thermocouple sensor (-4 to 482°F/-20 to 250°C), and carrying case



Part Number 42515

Specifications	
Display Counts	4000 count backlit LCD
Range	IR: -58 to 1472°F (-50 to 800°C) Type K: -58 to 2498°F (-50 to 1370°C)
Basic Accuracy	IR: (±2% of reading or 4°F/2°C) whichever is greater < 932°F/500°C ± (2.5% rdg +5°) > 932°F/500°C Type K: (±1.5% Reading + 5° For 3°C)
Max Resolution	0.1°F/°C
Emissivity	Adjustable 0.10 to 1.00
Field of View	13:1 distance to target ratio
Dimensions	3.2 x 1.6 x 6.3" (82 x 42 x 160 mm)
Weight	6.4 oz (180g)

NOTE: The included type K temperature probe plugs into bottom of handle when in use.

Type K Thermometers with single or dual input direct or differential measurements to 0.1°

Features

- Rugged design for field use - includes rubber holster
- Dual input model provides differential readings
- Accurate to 0.3%, C°/F° switchable
- Front panel offset adjustment to optimize accuracy
- Displays maximum reading plus data hold on large LCD display
- Includes (6) AAA batteries, holster with stand, and temperature probe



EXTECH
INSTRUMENTS

Single Input – Part Number EA11

Dual Input – Part Number EA10

Specifications	Ranges	Accuracy
Temperature	-50 to 1300°C	(0.3% rdg + 1°C); >1000°C (0.5%)
	-58 to 2000°F	(0.3% rdg + 2°F)
Resolution	0.1° or 1°	
Dimensions	5.2 x 2 x 2.8 x 1.2" (135 x 72 x 31mm)/6 x 2.8 x 1.5" (152 x 72 x 37mm)	
Weight	8.3 oz. (235g)	

Principles of Thermocouples & Thermocouple selection

General Information

Thermocouples are the most widely used devices to measure temperature in the injection molding industry. They consist of a welded (hot) junction, between two lead wires of dissimilar metals (usually iron and constantan, Type J) and a reference junction at the other end of the lead wires. The hot junction creates an electrical current which can be measured at the reference junction. This measurement corresponds to a specific temperature, which provides output reading or control switching. Advantages of using thermocouples include the ability to measure a wide temperature range, durability at high temperature, fast response time, and low cost.

Junctions

Grounded – In grounded thermocouples, the conductors are contained in a stainless steel sheath. The hot junction is welded to the end of the sheath (see diagram 1). This provides high durability and environmental protection without sacrificing response time. The disadvantage of this construction is that there is no electrical protection from voltage surges coming into contact with the sheath. Grounded construction is the most common thermocouple type used in the plastics industry. Most DME thermocouples are grounded. Insulated thermocouples are available on request.

Ungrounded (Insulated): In ungrounded construction the hot junction is insulated from the sheath within mineral insulating compound (see diagram 2). This provides complete isolation from any stray voltage that may be present in the application. The drawback with this construction is increased response time due to increased time for heat to penetrate the insulation and reach the hot junction.

Exposed – The conductors extend beyond the sheath (see diagram 3), providing very rapid response time, but no protection from the environment or stray voltages. Exposed thermocouples are fragile.

Fig. 1

 **Grounded**
Hot junction welded to sheath tip. Earthed output provides fast response time.

Fig. 2

 **Insulated**
Hot junction insulated from sheath. Insulation resistance over 100 Megohms.

Fig. 3

 **Exposed**
Hot junction extends beyond sheath.

Calibration (Type)

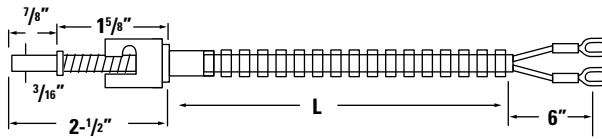
Thermocouples are made of two dissimilar metals with specific electrical characteristics. The specific metals used determine the type of thermocouple. Most thermocouples used in the U.S. plastics industry are Type J (iron/constantan). Less commonly used is Type K (chromel/alumel). Check your machine or temperature control to determine which type you need. If you are unsure, determine the type from the wire color coding in the table

ISA Code	Conductor Characteristics		Temperature Range (°F)	Limits of Error		Application Notes
	Positive	Negative		Standard	Special	
J	Iron (magnetic)	Constantan (non-magnetic)	0 to 530	±4.0°F	±2.0°F	Reducing atmosphere recommended
			530 to 1400	±0.75%	±0.38%	
K	Chromel (non-magnetic)	Alumel (magnetic)	0 to 530	±4.0°F	±2.0°F	Oxidizing atmosphere recommended
			530 to 2300	±0.75%	±0.38%	
T	Copper	Constantan	-75 to 200	±1.8°F	±0.9°F	Can be used in oxidizing or reducing atmosphere; Corrosion resistant
			200 to 700	±0.75%	±0.38%	
E	Chromel	Constantan	0 to 600	±3.0°F	±1.8°F	Oxidizing atmosphere recommended; highest EMF output
			600 to 1600	±0.5%	±0.38%	

Thermocouple and Extension Wire Color Codes

U.S. ANSI/ASTM Code	U.S. ANSI/ASTM TC	U.S. ANSI/ASTM Extension	U.K. BS 1843	Germany DIN 43710	Japan JIS C1610-1981	Europe IEC 584-3
Type J Pos. Magnetic						

Standard Thermocouples



STANDARD

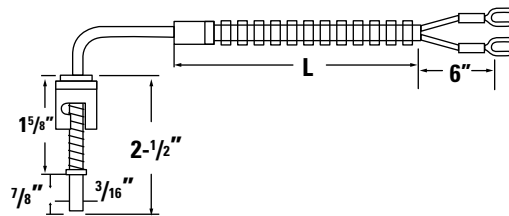


Straight model TCJ

Standard Thermocouples have a variable immersion depth of 1 1/4" to 1 3/4" with a probe mounting length of 2 1/2". Featuring heavy-duty armor covered leads with standard wire lug lead termination and a 3/16" probe diameter, they will accommodate most requirements in either a straight or 90° bend. Off-the-shelf delivery and a very low price make our standard thermocouples just what you need. Also available in K & RTD types.

Standard Thermocouple

Part Number	Lead Length	End
TCJ1048	48"	Straight
TCJ1060	60"	Straight
TCJ1072	72"	Straight
TCJ1120	120"	Straight

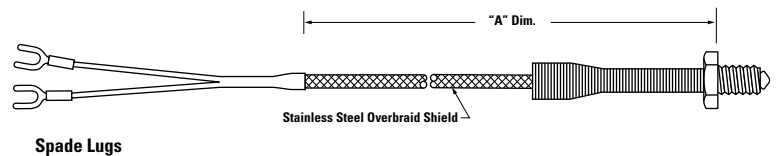


90-degree bend model TCJ9

Standard Thermocouple - 90°

Part Number	Lead Length	End
TCJ9-1048	48"	90°
TCJ9-1060	60"	90°
TCJ9-1072	72"	90°
TCJ9-1120	120"	90°

Shallow Nozzle Thermocouples



Shallow nozzle thermocouples are available in J or K type and 3 thread sizes. Our 1/2" swivel will seat in shorter holes but also provide accurate readings in deep holes.

Shallow Nozzle Type Thermocouples

Metrics Fit Nissei, Kawaguchi and Others

Part Number	TC Type	Thread Size	(A) Lead Length
NTJ-48	J	1/4-28 N.F.	48"
NTJ-72	J	1/4-28 N.F.	72"
NTJ-48M6	J	M6 x 1 Metric	48"
NTJ-72M6	J	M6 x 1 Metric	72"
NTJ-48M8	J	M8 x 1 Metric	48"
NTJ-72M8	J	M8 x 1 Metric	72"
NTK-48	K	1/4-28 N.F.	48"
NTK-72	K	1/4-28 N.F.	72"
NTK-48M6	K	M6 x 1 Metric	48"
NTK-72M6	K	M6 x 1 Metric	72"
NTK-48M8	K	M8 x 1 Metric	48"
NTK-72M8	K	M8 x 1 Metric	72"

SHALLOW NOZZLE



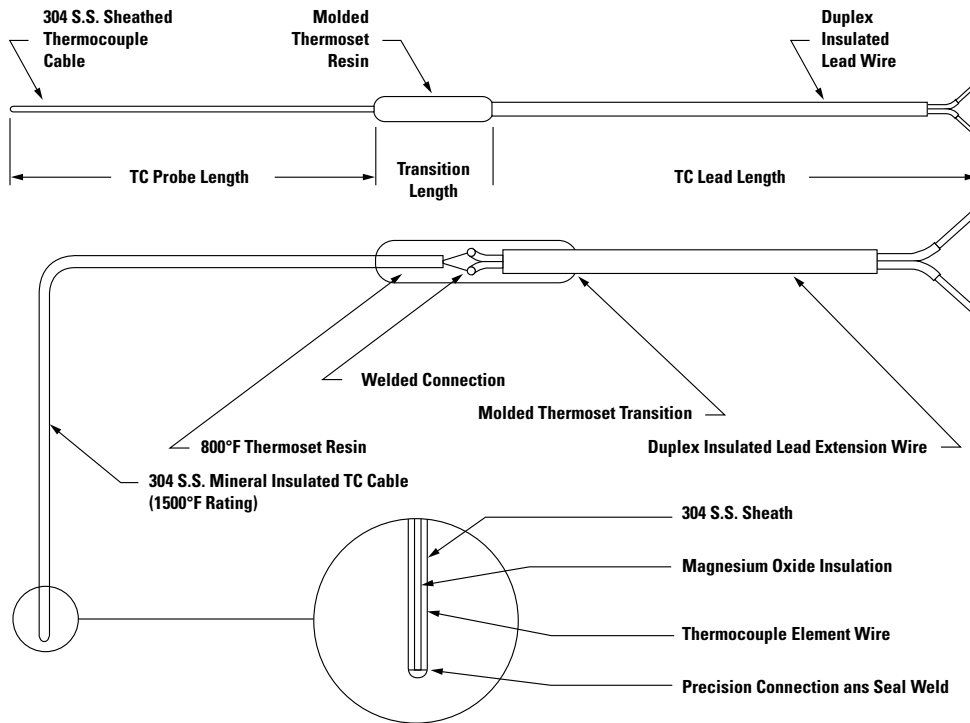
Hi-Temp. Thermocouples

Style "MMT" Miniature Molded Transition

Sensor accuracy and reliability are essential to the precise control of temperatures in multi-component industrial processing systems. Our mineral-insulated style "MMT" thermocouples feature a high-temperature, molded thermoset lead transition. The durable and cost-effective molded transition provides heat and moisture resistance for demanding applications. These high-quality thermocouples are manufactured to stringent specifications and have gained a reputation for unsurpassed performance and reliability. All alloys used in the cable and leads meet or exceed the ANSI specifications for thermocouple grade wire. A full range of lead insulation materials allows selection of leads based on application requirements.

The precision-welded element and lead connections are totally encapsulated in a high-temperature molded thermoset material. If very durable, small diameter thermocouple transitions are required the style "MSMT" thermocouples which are molded into a protective stainless steel cover should be considered. The molded transition provides the highest level of moisture resistance. The standard molded thermoset transition is rated at 800°F. These thermocouples can be readily installed into small diameter thermowells, drilled holes or grooves. When required, tabs, rings and other fastening devices can be induction brazed to the cable to simplify their attachment tool surfaces.

Style "MMT" Miniature Molded Transition Thermocouples



HIGH TEMP THERMOCOUPLES

Part Number	Type	Junction	Probe		Transition		Lead Length	Lead Type
			Dia.	Length	Dia.	Length		
MMT040JG06S48K	J	Grounded	.040"	6"	.188"	.750"	48"	Kapton
MMT040JG14S48K			.040"	14"	.188"	.750"		
MMT063JG06S48K			.063"	6"	.204"	.750"		
MMT063JG14S48K			.063"	14"	.204"	.750"		

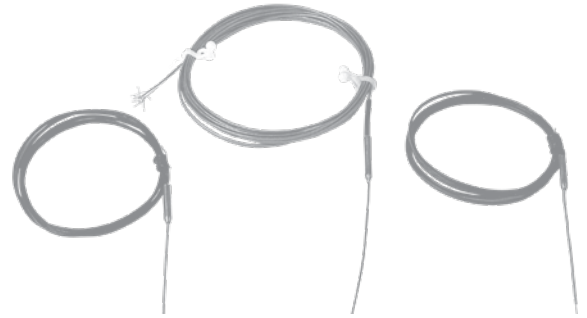
Hi-Temp. Thermocouples



Miniature

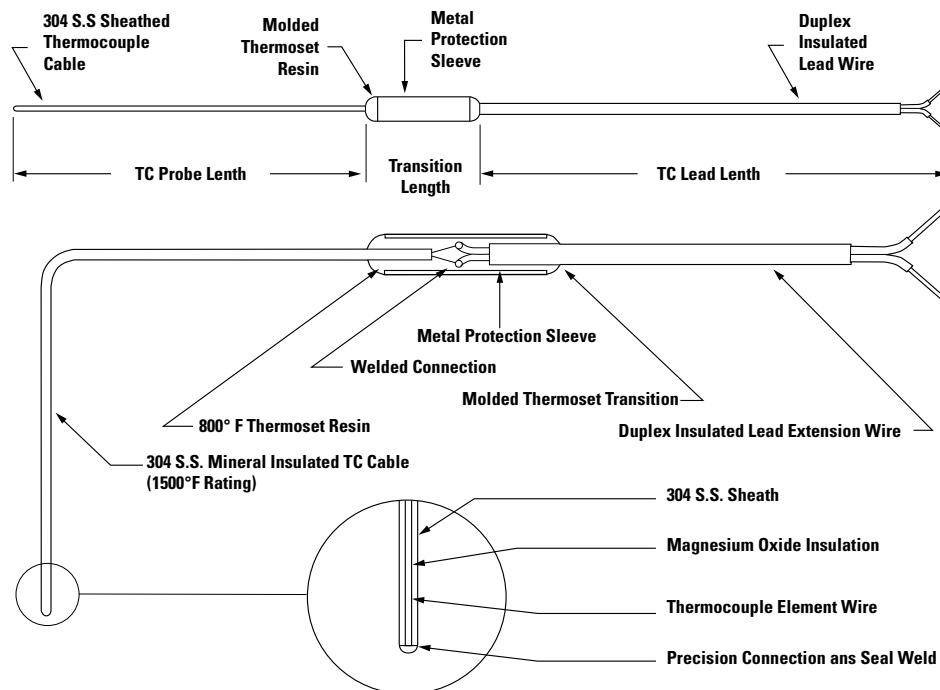
For Hot Runner Molding Applications

- Type "J" calibration (others on request)
- Kapton leads
- Grounded junction
- OEM quality at substantial savings!
- Other probe & lead lengths on request



MINI HI-TEMP THERMOCOUPLES

Probe Dia.	Transition Dia.	Length	Lead Gauge	Probe Length	Lead Length	Part Number
.020"	.135"	.750"	#24	6"	48"	MHID020JG06S48T
.020"	.135"	.750"	#24	14"	48"	MHID020JG14S48T
.025"	.135"	.750"	#24	6"	48"	MHID025JG06S48T
.025"	.135"	.750"	#24	14"	48"	MHID025JG14S48T
.031"	.135"	.750"	#24	6"	48"	MHID031JG06S48T
.031"	.135"	.750"	#24	14"	48"	MHID031JG14S48T
.040"	.165"	.750"	#20	6"	48"	MHID040JG06S48T
.040"	.165"	.750"	#20	14"	48"	MHID040JG14S48T
.063"	.165"	.750"	#20	6"	48"	MHID062JG06S48T
.063"	.165"	.750"	#20	14"	48"	MHID062JG14S48T
.093"	.188"	.875"	#20	6"	48"	MHID093JG06S48T
.093"	.188"	.875"	#20	14"	48"	MHID093JG14S48T
.125"	.250"	.875"	#20	6"	48"	MHID125JG06S48T
.125"	.250"	.875"	#20	14"	48"	MHID125JG14S48T





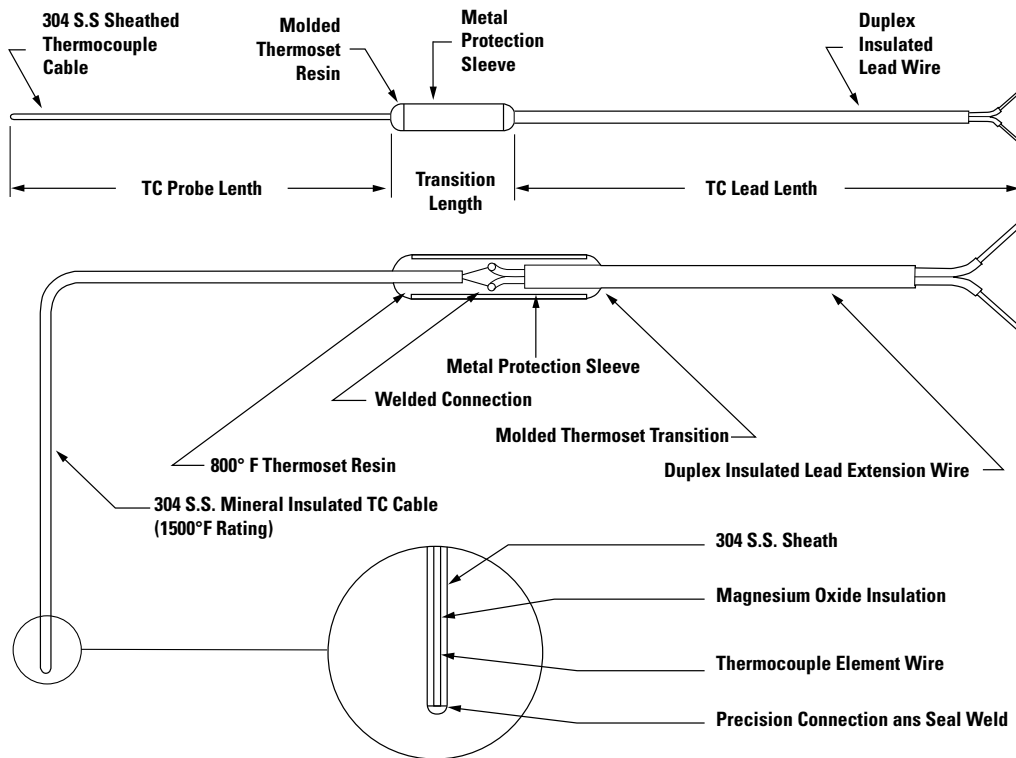
Hi-Temp. Thermocouples

Style "MSMT" Mini SLEEVE Molded Transition

Sensor accuracy and reliability are essential to the precise control of temperatures in multi-component industrial processing systems. Our mineral-insulated style "MSMT" thermocouples feature a metal-sleeved, high-temperature molded thermoset lead transition. The durable and cost-effective molded transition provides maximum strength, heat resistance and moisture resistance for demanding applications. These high-quality thermocouples are manufactured to stringent specifications and have gained a reputation for unsurpassed performance and reliability. All alloys used in the cable and leads meet or exceed the ANSI specifications for thermocouple grade wire. All lead types can be supplied with lead protection for additional abuse resistance. The precision-welded element and lead connections are totally encapsulated in a high-temperature thermoset material molded directly into a protective stainless steel cover.

The metal-sleeved, molded transition provides the highest level of moisture resistance and durability. The standard, metal-sleeved style molded thermoset transition is rated at 800°F. These thermocouples can be readily installed into small diameter thermowells, drilled holes or grooves. Tabs, rings and other fastening devices can be molded in to the transition or attached to the metal sleeve by brazed or welding.

Style "MSMT" Miniature Sleeve Molded Transition Thermocouples



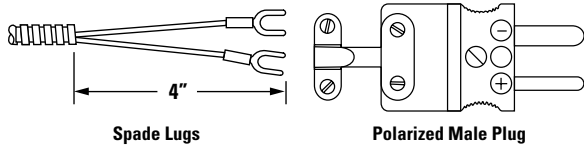
MINI SLEEVE

Part Number	Type	Junction	Probe		Transition		Lead Length	Lead Type
			Dia.	Length	Dia.	Length		
MSMT040JG06S48K	J	Grounded	.040"	6"	.165"	.750"	48"	Kapton
MSMT040JG14S48K			.040"	14"	.165"	.750"		
MSMT063JG06S48K			.063"	6"	.165"	.750"		
MSMT063JG14S48K			.063"	14"	.165"	.750"		

Thermocouples



Adjustable Depth



- Stainless steel leads
- Accurate to 1000°F
- Fits all standard adapters
- Fits hole depth from 1/2" to 10"
- Flexible probe bends to any angle
- Best selection, in-stock!

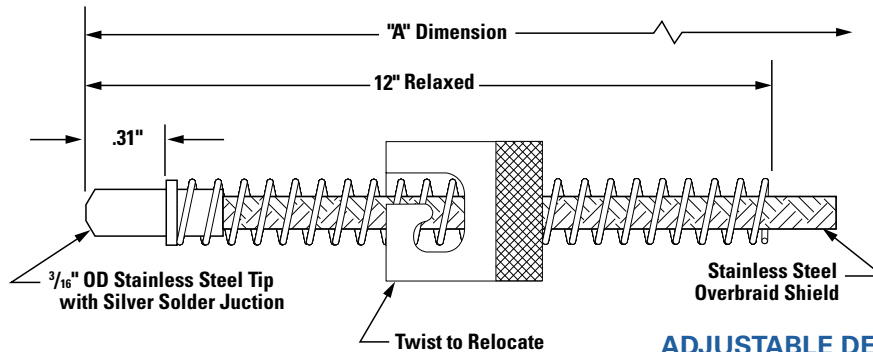
Type J—Stainless Overbraid - Adjustable Depth - Grounded

with Spade Lugs		with Polarized Male Plug	
Part Number	(A) Overall Length	Part Number	(A) Overall Length
ADT1024	24"	ADT1024P	24"
ADT1036	36"	ADT1036P	36"
ADT1048	48"	ADT1048P	48"
ADT1060	60"	ADT1060P	60"
ADT1072	72"	ADT1072P	72"
ADT1096	96"	ADT1096P	96"
ADT1120	120"	ADT1120P	120"
ADT1144	144"	ADT1144P	144"

Type J—Stainless Overbraid - Adjustable Depth - Ungrounded

with Spade Lugs	
Part Number	(A) Overall Length
ADT1030U	30"
ADT1036U	36"
ADT1048U	48"
ADT1072U	72"
ADT1096U	96"
ADT1120U	120"
ADT1144U	144"

ADJUSTABLE DEPTH-TYPE J



ADJUSTABLE DEPTH-TYPE K

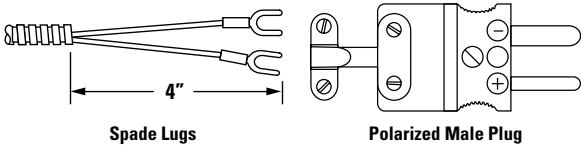
Type K—Stainless Overbraid - Adjustable Depth - Grounded

with Spade Lugs		with Polarized Male Plug	
Part Number	(A) Overall Length	Part Number	(A) Overall Length
ADK1024	24"	ADK1024P	24"
ADK1036	36"	ADK1036P	36"
ADK1048	48"	ADK1048P	48"
ADK1072	72"	ADK1072P	72"
ADK1120	120"	ADK1120P	120"
ADK1144	144"	ADK1144P	144"



Thermocouples

Adjustable Depth - Armor Covered



- Stainless steel armor leads
- Accurate to 1000°F
- Fits all standard adapters
- Fits hole depth from 1/2" to 10"
- Flexible probe bends to any angle
- Best selection, in-stock!

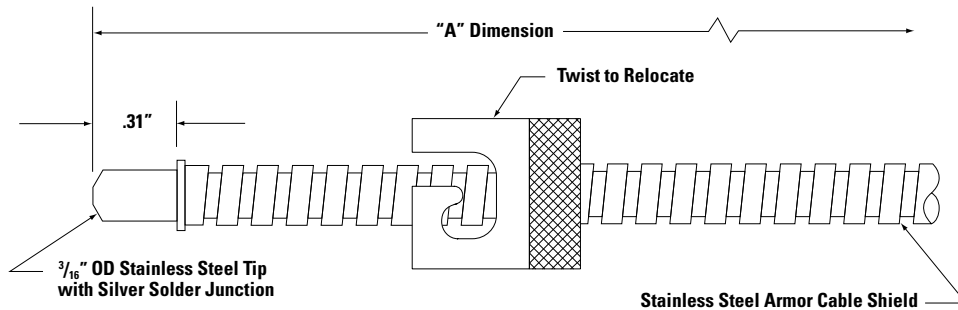
Type J—Armor Covered - Adjustable Depth - Grounded

ADJUSTABLE DEPTH-TYPE J

with Spade Lugs		with Polarized Male Plug	
Part Number	(A) Overall Length	Part Number	(A) Overall Length
AAT1024	24"	AAT1024P	24"
AAT1036	36"	AAT1036P	36"
AAT1048	48"	AAT1048P	48"
AAT1072	72"	AAT1072P	72"
AAT1096	96"	AAT1096P	96"
AAT1120	120"	AAT1120P	120"
AAT1144	144"	AAT1144P	144"

Type K—Armor Covered - Adjustable Depth - Grounded

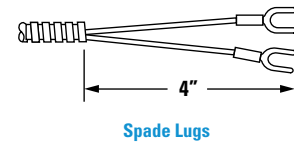
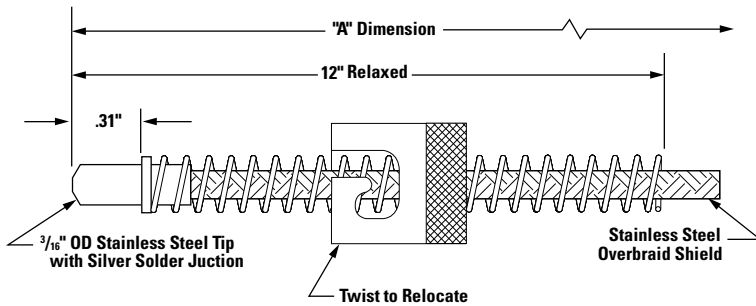
AAK1024	24"	AAK1024P	24"
AAK1036	36"	AAK1036P	36"
AAK1048	48"	AAK1048P	48"
AAK1072	72"	AAK1072P	72"
AAK1120	120"	AAK1120P	120"
AAK1144	144"	AAK1144P	144"



Adjustable Depth - Resistive Temp. Device (RTD)

DME adjustable depth RTDs can be used with thermocouple holes from 1/2" to 10" deep. Standardize on one model RTD for most requirements. Featuring threaded locking cap, which can be rotated or threaded up or down the spring to obtain the desired immersion length.

To install, place probe end in thermocouple hole allowing the tip to rest on the bottom of the hole. Screw bayonet cap down to bayonet adaptor, then back off 2 to 3 turns to provide tension. Push the cap down and twist-lock in place. The spring maintains positive pressure contact between probe tip and thermocouple hole bottom for accurate temperature readings.



- 100 ohm platinum sensor
- 3/16" diameter probe
- 2-wire type
- Stainless overbraid
- In stock, low priced!

This is not a Thermocouple

Part Number	(A) Overall Length
RTD1024	24"
RTD1036	36"
RTD1048	48"
RTD1072	72"
RTD1120	120"

ADJUSTABLE DEPTH-RTD



F

Thermocouples

Spade Type

Spade thermocouples have the thermocouple sandwiched between two very thin stainless steel shims. They are usually installed between the heater band and the nozzle.

Type J		(A) Lead Length
Part Number		
STC48		48"
STC72		72"
Type K		(A) Lead Length
Part Number		
STK48		48"
STK72		72"

SPADE TYPE

More Sizes Available! Call for Pricing!





Thermocouples

Lug Mount



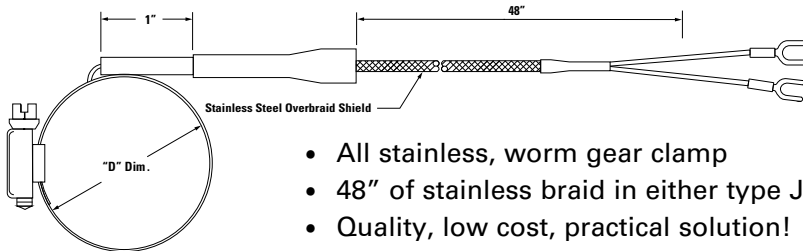
Our washer thermocouples are designed to be used for surface temperature readings of nozzles, barrels, molds, cylinders or die heads. These handy molding accessories can be mounted by a bolt, screw or threaded stud and nut.

Type J				
Part Number	(A) Lead Length	Washer I.D.	Screw or Bolt Size	Washer O.D.
WTC336	36"	3/16"	#6-8-10 Screw	3/8"
WTC348	48"	3/16"	#6-8-10 Screw	3/8"
WTC360	60"	3/16"	#6-8-10 Screw	3/8"
WTC372	72"	3/16"	#6-8-10 Screw	3/8"
WTC396	96"	3/16"	#6-8-10 Screw	3/8"
WTC3120	120"	3/16"	#6-8-10 Screw	3/8"
WTC536	36"	5/16"	1/4"-5/16" Bolt	21/32"
WTC548	48"	5/16"	1/4"-5/16" Bolt	21/32"
WTC560	60"	5/16"	1/4"-5/16" Bolt	21/32"
WTC572	72"	5/16"	1/4"-5/16" Bolt	21/32"
Type K				
Part Number	(A) Lead Length	Washer I.D.	Screw or Bolt Size	Washer O.D.
WTK536	36"	5/16"	1/4"-5/16" Bolt	21/32"
WTK548	48"	5/16"	1/4"-5/16" Bolt	21/32"
WTK560	60"	5/16"	1/4"-5/16" Bolt	21/32"
WTK572	72"	5/16"	1/4"-5/16" Bolt	21/32"

LUG MOUNT

Thermocouples

Pipe Clamp



- All stainless, worm gear clamp
- 48" of stainless braid in either type J or K with spade lug terminations
- Quality, low cost, practical solution!

Pipe Clamp Thermocouple—Type J Pipe Clamp Thermocouple—Type K PIPE CLAMP

T/C Type	Clamping Range Inches	Part Number	TC Type	Clamping Range Inches	Part Number
			K	1/2 to 7/8	PCK006
J	7/8 to 1-1/2	PCJ016	K	7/8 to 1-1/2	PCK016
J	1-5/16 to 2-1/4	PCJ032	K	1-5/16 to 2-1/4	PCK032
J	2-1/4 to 3-5/16	PCJ048	K		
J	3-5/16 to 4-1/4	PCJ064	K		
J	4-1/4 to 5-1/4	PCJ096	K	4-1/4 to 5-1/4	PCK096

Pipe Clamp Adapters

Clamping Range Inches	Adapter O.A.L.	Part Number
1/2 to 7/8	1 3/4"	PCA100

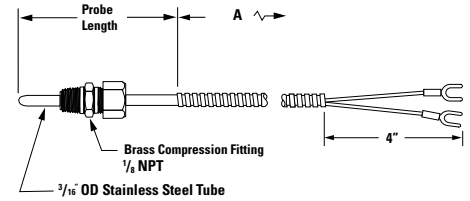


Thermocouples



Bendable Probe

The Bendable Probe Thermocouple is designed for hard-to-reach places. The probe tube can be bent to any angle. This thermocouple can also be used in a variety of hole depths.



BENDABLE PROBE

Bendable Probe Thermocouples – Includes Compression Fitting

Part Number	(A) Overall Length	Probe Length	Diameter	TC Type
BPJ6048	48"	6"	3/16"	J
BPJ6072	72"	6"	3/16"	J
BPJ60120	120"	6"	3/16"	J
BPJ1248	48"	12"	3/16"	J
BPJ1272	72"	12"	3/16"	J
BPJ12120	120"	12"	3/16"	J
BPK6048	48"	6"	3/16"	K
BPK6072	72"	6"	3/16"	K
BPK60120	120"	6"	3/16"	K
BPK1248	48"	12"	3/16"	K
BPK1272	72"	12"	3/16"	K
BPK12120	120"	12"	3/16"	K

Extra Compression Fittings

Part Number
CF68-3-2

Thermocouples

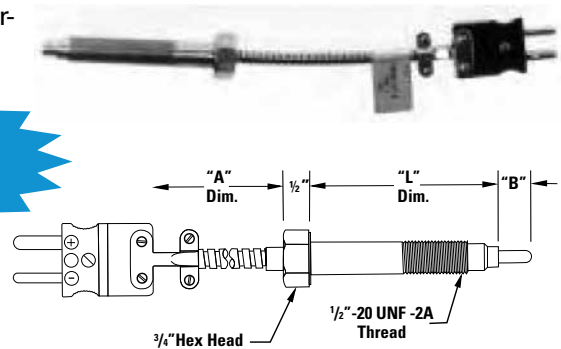
Melt Bolt

Melt Bolt Thermocouples are used to measure the melt temperature as it moves down the extruder barrel, and is in direct contact with the melting plastic for the most accurate readings.

- 1/8" tip diameter
- 1/2 - 20 UNF thread
- 20,000 P.S.I. pressure rating
- 1000°F maximum temperature
- Grounded for faster response
- 304 stainless bolt & extensions

More Sizes Available!
Call for Pricing!

MELT BOLT



Flexible Extension - Type J

Flexible Extension - Type K

TC Type	(L) Bolt Length	Part Number	(B) Tip Length	"A" Length	TC Type	(L) Bolt Length	Part Number	(B) Tip Length	"A" Length
J	3"	MBJ0-3F	Flush	4"	K	3"	MBK0-3F	Flush	4"
J	3"	MBJ2-3F	1/8"	4"	K	3"	MBK2-3F	1/8"	4"
J	3"	MBJ4-3F	1/4"	4"	K	3"	MBK4-3F	1/4"	4"
J	6"	MBJ0-6F	Flush	4"	K	6"	MBK0-6F	1/8"	4"
J	6"	MBJ2-6F	1/8"	4"	K	6"	MBK2-6F	1/4"	4"
J	6"	MBJ4-6F	1/4"	4"	K	6"	MBK4-6F	Flush	4"



Thermocouples

Newbury (Type J)

Newbury OEM-type thermocouples are held in place by means of a set screw which is tapped into the nozzle hex. The thermocouple junction is side sensing and can be inserted from either side of the nozzle. The probe is 1/8" diameter by 1" long with a 90° bend, strain reliever and stainless braid leads.



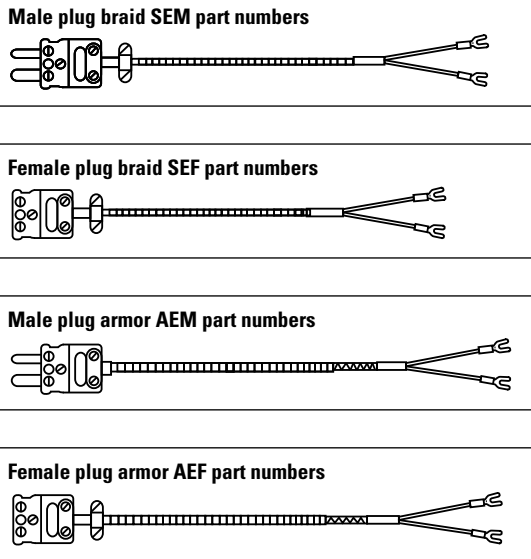
Part Number	Overall Length
NNT48	48"
NNT72	72"

NEWBURY

Thermocouples

Extensions

Part Number	Lead Length
SEM48	48"
SEM72	72"
SEM120	120"
SEF48	48"
SEF72	72"
SEF120	120"
AEM48	48"
AEM72	72"
AEM120	120"
AEF48	48"
AEF72	72"
AEF120	120"



EXTENSIONS

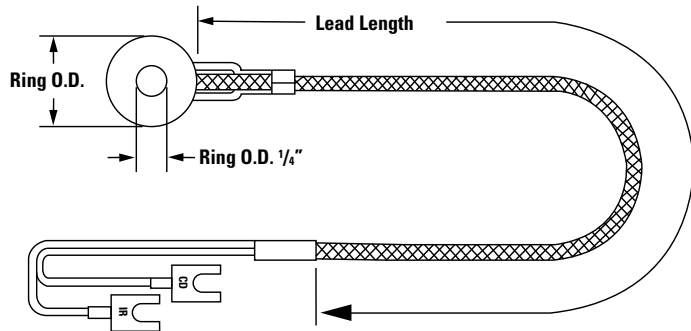
Thermocouple extensions stock - Type J ; all other types on request.

Thermocouples



Ring Mount

Gasket thermocouples can be quickly and firmly secured to any flat surface with an appropriate sized bolt. Gasket thermocouples are often used in parallel with other types of sensors to create an average temperature measurement between surface and internal temperatures.



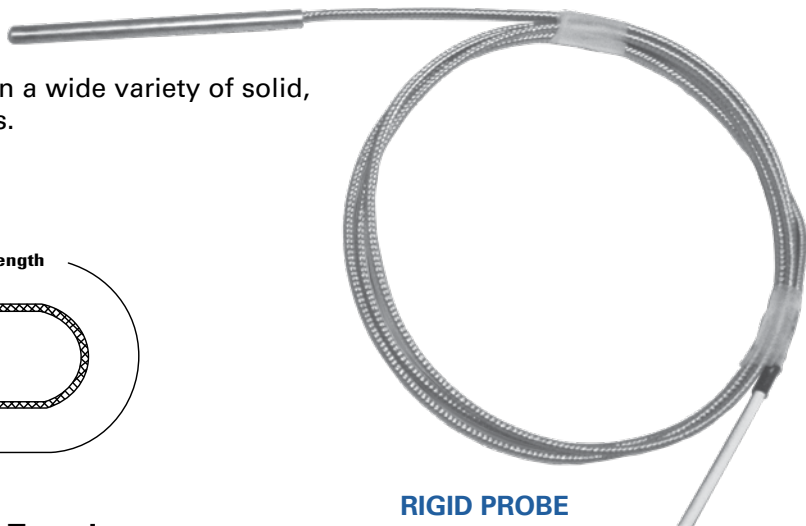
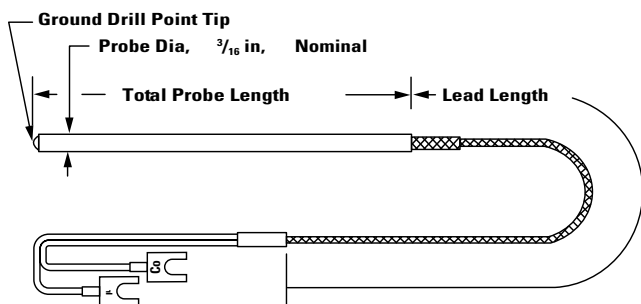
Part Number	Desc.
60J723	SS br. 72" str.
60J91201	SS br. 120" 90 deg. plug
60J9723	Kapton 72" 90 deg.
60J91443	Kapton 144" 90 deg.

RING MOUNT

Thermocouples

Rigid Probe Thermocouples

Rigid probe thermocouples are useful in a wide variety of solid, gas and liquid temperature applications.



RIGID PROBE

All Thermocouples Listed Below are Type J

Part Number	Probe	Lead Description
RPTC11	1/8" dia. x 1" long	36" stainless steel braid
RPTC14	1/8" dia. x 2" long	72" stainless steel braid
RPTC01	3/16" dia. x 1/2" long	48" stainless steel braid
RPTC02	3/16" dia. x 3" long	48" stainless steel braid
RPTC03	3/16" dia x 3" long	72" stainless steel braid





Insulated Quick Disconnects

“Quick-Slide” male and female fully Insulated Quick Disconnects give reliable connection, and resist corrosion and arcing while improving conductivity. Funnel barrel for easy insertion of wire. Centered male blade allows reversible entry; female connector has corrugated barrel.

- Rated for 300VAC
- 221°F/105°C
- Tab size - .250" x .032"

50 Pieces Per Bag	Male/Female Wire Range	Male 22-18	Female 22-18	Male 16-14	Female 16-14
	Part Number	NQM-2216	NQF-2216	NQM-1614	NQF-1614



Non-Insulated Quick Disconnects

50 Pieces Per Bag	Male/Female Wire Range	Male 22-18	Female 22-18	Male 16-14	Female 16-14
	Part Number	QM-2216	QF-2216	QM-1614	QF-1614

Bayonet Adapters

1/8-27 N.P.T.		3/8-24 N.F.		BAYONET ADAPTERS
Part Number	Length	Part Number		
BA-72	7/8"	BA-76		
BA-202	1 1/4"	BA-206		
BA-362	2 1/4"	BA-366		
BA-562	3"			

Metric-to-English Adapters

Metric Thread	English Thread	Length	Part Number
10 x 1.5	1/8-27	1"	MBA-10
12 x 1	1/8-27	1"	MBA-12
14 x 1.5	1/8-27	1"	MBA-14

Screw into metric threaded hole and then use standard 1/8-27 NPT Bayonet Adapter



METRIC TO ENGLISH ADAPTERS

Panel Jacks

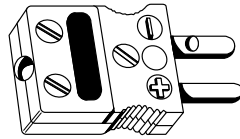
Part Number	Size	Descpt.	PANEL JACKS
630RJ	1-1/8" dia.	Round - J	
630RK	1-1/8" dia.	Round - K	
630RJM	1-1/8" dia.	Mini - J	
631J1	2" square	1 Jack	
631J5	3-1/4" x 5"	5 Jack	
631J5M	2" x 4"	5 - Mini J	

Standard Male Plugs



STANDARD MALE PLUGS

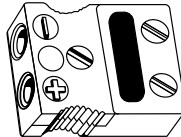
Part Number
MPJ
MPK



Glass-filled nylon -
rated to 400°;
type J is black,
type K yellow

Standard Female Jacks

Part Number
FJJ
FJK



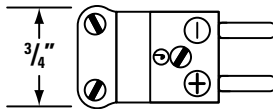
Glass-filled nylon -
rated to 400°;
type J is black,
type K yellow

STANDARD FEMALE JACKS

Miniature Male Plugs

Part Number
MMPJ
MMPK

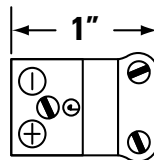
MINI MALE PLUGS



Glass-filled nylon -
rated to 400°;
type J is black,
type K yellow

Miniature Female Jacks

Part Number
MFJJ
MFJK



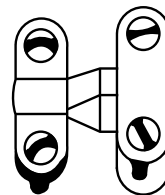
Glass-filled nylon -
rated to 400°;
type J is black,
type K yellow

MINI FEMALE JACKS

Cable Clamp

Part Number	Size
CC610	Std
CCM610	Mini

CABLE CLAMP

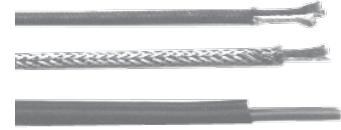




Thermocouple Wire

High Temperature

- High quality
- In stock for immediate shipment



THERMOCOUPLE WIRE

Thermocouple Extension Wire

Part Number	Wire Size	Wire Type	Rated Description	°F	Wire	Overall
Type J						
TCEW1	20 Ga	Stranded	Fiberglass Jacket Over Insulated Duplex Parallel Conductors	900°	Glass	Glass
TCEW1S	20 Ga	Solid	Fiberglass Jacket Over Insulated Duplex Parallel Conductors	900°	Glass	Glass
TCEW2	20 Ga	Stranded	Stainless Braid Jacket Over Fiberglass Insulated Duplex Parallel Conductors	900°	Glass	Stainless
TCEW2S	20 Ga	Solid	Stainless Braid Jacket Over Fiberglass Insulated Duplex Parallel Conductors	900°	Glass	Stainless
TCEW3	20 Ga	Stranded	PVC Jacket Over Insulated Duplex Parallel Conductors	220°	PVC	PVC
TCEW3S	20 Ga	Solid	PVC Jacket Over Insulated Duplex Parallel Conductors	220°	PVC	PVC
TCEW6	20 Ga	Stranded	PTFE Jacket Over Insulated Duplex Parallel Conductors	500°	PTFE	PTFE
TCEW6S	20 Ga	Solid	PTFE Jacket Over Insulated Duplex Parallel Conductors	500°	PTFE	PTFE
Type K						
TCEW8	20 Ga	Stranded	Fiberglass Jacket Over Insulated Duplex Parallel Conductors	900°	Glass	Glass
TCEW9	20 Ga	Stranded	Stainless Braid Jacket Over Fiberglass Insulated Duplex Parallel Conductors	900°	Glass	Stainless
TCEW12S	20 Ga	Solid	Parallel Conductors	Red 220°	PVC	PVC

Stainless Steel Armor

STAINLESS STEEL ARMOR

Use for molding machines, granulators, chillers, general wiring, heater extensions, controller wiring and all types of plant applications. Stainless armor will withstand extremes in heat (1700°F) and abrasion without rusting or crushing.



- Use on heater bands, cartridge heaters, thermocouples, etc.
- Solid stainless steel construction
- Crush-resistant shielding, easy to install
- Rust, corrosion, and vibration resistant

Part Number	I.D. Inches	O.D. Inches	Bend Radius
SSA316	3/16 (.187)	9/32	1-7/8"
SSA140	1/4 (.250)	11/32	2"
SSA380	3/8 (.375)	1/2	2-1/4"
SSA120	1/2 (.500)	5/8	2-1/2"

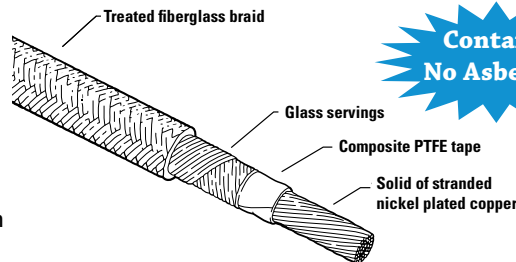
Heater Wire



High Temperature - Type TGGT

HEATER WIRE

600 volt/250°C
 Conductor: flexible stranded, 10% nickel-plated copper
 Tape Wrap: PTFE tape
 Insulation: ceramic tape
 Jacket: PTFE-impregnated glass braid
 Physical Properties: The ceramic tape insulation combines high dielectric strength with excellent flexibility and ease of stripping to achieve a lead wire of superior resistance to high temperature, abrasion, chemicals and moisture.



Contains No Asbestos

Listing: listed by UL (style 5251) and CSA (type C3)
 Nominal Thickness: TFE tape - all sizes .015" (.38mm); ceramic tape - 24-8 AWG .010" (.25mm) 6-4/0 AWG .015" (.38mm); glass braid - 24/0 AWG .005" (.13mm) 6-2 AWG .0075" (.19mm) 1-4/0 AWG .010" (.25mm)

Best utilized: for internal wiring of heating equipment, wiring and extensions for heating equipment used in plastics processing, heating equipment and industrial cooking equipment.

Hi-Temp Heater Extension Wire 482° Rated (750°F. Intermittent)

Part Number	Size AWG	Strand	Nom. O.D. (In./mm)	Bend Rad. (In./cm)	Ampacity*
TGGT18	18	19 x .010	.114/2.90	.66/1.68	23
TGGT16	16	26 x .010	.124/3.15	.72/1.83	40
TGGT14	14	41 x .010	.140/3.56	1.12/2.84	53
TGGT12	12	65 x .010	.162/4.11	1.28/3.25	70
TGGT10	10	105 x .010	.204/5.18	1.48/3.76	93
TGGT8	8	168 x .010	.248/6.30	2.30/5.87	115

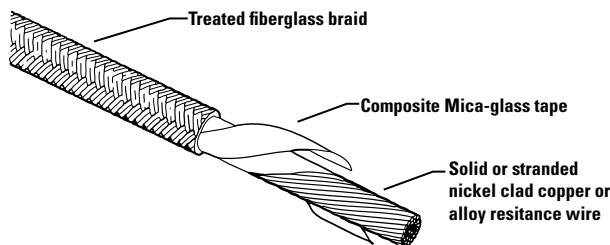
*Ampacity is based on maximum conductor temperature of 250°C in free air at ambient temperature of 30°C

Heater Wire

HEATER WIRE

600 volt/450°C
 Conductor: flexible, stranded, 27% nickel-clad copper
 Insulation: glass reinforced mica tapes
 Jacket: glass braid impregnated with high-temperature finisher
 Physical Properties: superior resistance to high temperature and the effects of radiation; insulating materials retain their integrity after exposure to 1012

High Temperature - Type MG



Listing: listed by UL (style 5107) CSA - applied for
 Nominal Thickness:
 Insulation Jacket
 22-12 AWG .025" (.64mm); 22-12 AWG .007" (.18mm)
 10-4 AWG .030" (.76mm); 10-4 AWG .015" (.38mm)
 2-4/0 AWG .035" (.89mm) 2-4/0 AWG .020" (.51mm)

Best utilized: for wiring high temperature heating equipment, wiring and extensions for heating equipment used in plastic processing machinery. Well suited for presses and extruders, hot gates etc.

Extreme Temp Heater Extension Wire 868° Rated (1350°F. Intermittent)

Part Number	Size AWG	Strand	Nom. O.D. (In./mm)	Bend Rad. (In./cm)	Ampacity*
MG20	20	7 x .0126	.110/2.79	.66/1.68	27
MG18	18	19 x .010	.120/3.05	.72/1.83	39
MG16	16	26 x .010	.131/3.33	.78/1.97	51
MG14	14	41 x .010	.142/3.61	1.12/2.84	64
MG12	12	65 x .010	.163/4.14	1.20/3.04	86
MG10	10	105 x .010	.226/5.74	1.76/4.49	115
MG8	8	168 x .010	.266/6.76	2.60/6.63	120

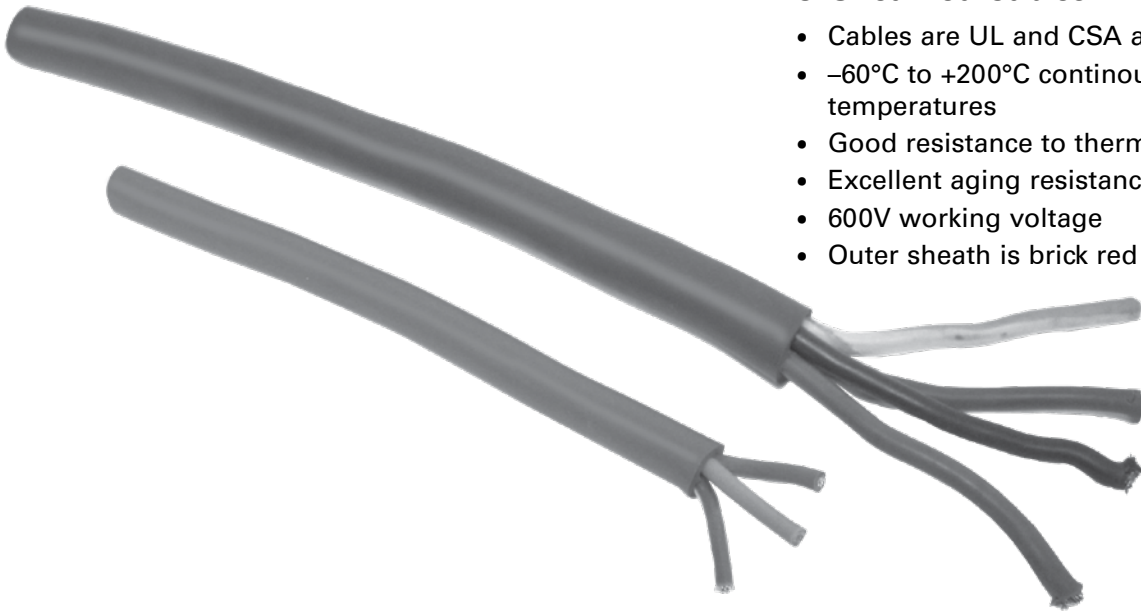
*Ampacity is based on maximum conductor temperature of 250°C in free air at ambient temperature of 30°C



Sheathed Cables

Multiconductor Silicone-Insulated & Sheathed Cables

- Cables are UL and CSA approved
- -60°C to +200°C continuous working temperatures
- Good resistance to thermal shock
- Excellent aging resistance
- 600V working voltage
- Outer sheath is brick red in color



SHEATHED CABLES

Number of Conductors	AWG	Part Number
3 core	16 gauge	CORE3
4 core		CORE4

Silicone Sleeving

Custom-formulated silicone rubber extruded over electrical grade braided fiberglass

- Flexible
- Grade C
- -70°C to +200°C temperature range



SILICONE SLEEVING

Part Number	I.D.
SS12M	0.133
SS25M	0.263
SS31M	0.313
SS37M	0.375
SS50M	0.5

Spring Return Wire Strippers-KCT600

- Cuts and strips copper or aluminum 10–18 AWG solid and stranded wire
- Holes on the side of the jaws are intended for looping solid wire
- Use pliers to tighten or loosen small nuts
- Precision ground cutting and stripping jaws
- Spring return

•

KCT600





Fiberglass Sleeving

Special high-temperature "E" Type Fiberglass® developed to provide protection in elevated temperatures that are encountered with molding and extruding applications. E-Glass is non-fray sleeving which is heat treated to remove impurities in the yarn and to retard fraying and splaying. Passes VW-1 flammability requirements. Sleeving may be easily distended to cover terminals and solder connections.

Temperature Ranges:

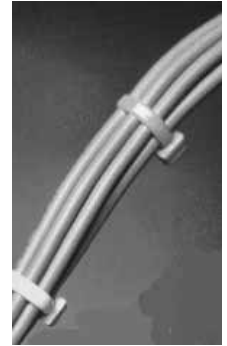
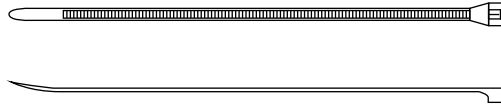
Continuous service: 500°F (260°C)
Sustained service: 800°F (430°C)
Intermittent use: 1400°F (760°C)



FIBERGLASS SLEEVING

Part Number	Nominal Size	Sleeve I.D.	Fits Wire Sizes
FGS12	12	.091	1 - #12 Wire or Smaller 2 - #18 Wire
FGS7	7	.158	1 - #7 Wire or Smaller 2 - #14 Wires 3 - #16 Wires
FGS2	2	.278	2 - #8 Wires 3 - #12 Wires 6 - #18 Wires 10 - #22 Wires
FGS50	1/2"	.524	4 - #8 Wires 6 - #12 Wires 8 - #14 Wires 12 - #18 Wires 18 - #22 Wires

- Made in USA
- High quality, low price!
- Use for: wire, cable, hose, ducting, retaining and repair



Ties feature a patented locking system that assures a firm grip. These natural-color cable ties have smooth edges and a taper tip for easy installation. UL approved.

Natural Color (off white) Ties

Part Number	Length O.A.	Max. Dia.	Tensile Looped	Pieces Per Bag
NCT4	4"	$1\frac{3}{16}$ "	18	100
NCT7	7"	$1\frac{3}{4}$ "	50	100
NCT11	11"	3"	50	100
NCT14	14"	4"	50	100
NCT14HD	$14\frac{1}{2}$ "	4"	175	100
NCT18HD	$18\frac{1}{2}$ "	$5\frac{1}{4}$ "	175	50
NCT24HD	$24\frac{1}{2}$ "	7"	175	50

NYLON CABLE TIES

Black Color Ties

Part Number	Length O.A.	Max. Dia.	Tensile Looped	Pieces Per Bag
NCT4BLK	4"	$1\frac{3}{16}$ "	18	100
NCT7BLK	7"	$1\frac{3}{4}$ "	50	100
NCT11BLK	11"	3"	50	100
NCT14BLK	14"	4"	50	100
NCT14HDBLK	$14\frac{1}{2}$ "	4"	175	100
NCT18HDBLK	$18\frac{1}{2}$ "	$5\frac{1}{4}$ "	175	50
NCT24HDBLK	$24\frac{1}{2}$ "	7"	175	50



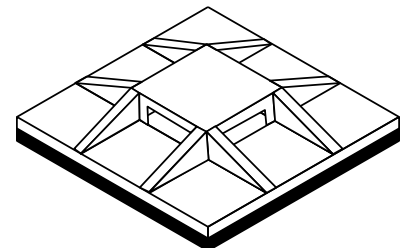
Cable Tie Bases

These Cable Tie Bases make mounting wire and cable a quick, easy and secure process. They are designed so they can be screw-mounted, and they also have an adhesive backing for extra easy application.

Black Nylon Cable Tie Base

Part Number	Description
6295	0.75" x 0.75" Base
6297	1" x 1" Base

CABLE TIE BASES





Butt Connectors

	Part Number	Max. Temp.	Wire Size
Non-Insulated	BCC18	600°F	22-18
	BCC14	600°F	16-14
	BCC10	600°F	12-10
	BCS18	900°F	22-18
	BCS14	900°F	16-14
	BCS10	900°F	12-10
Nylon Insulated	BCC18N	300°F	22-18
	BCC14N	300°F	16-14
	BCC10N	300°F	12-10

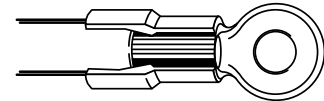


BUTT CONNECTORS

High Temperature Terminal Lugs

Features & Construction

- Wire ranges clearly marked on all terminals
- Load capacity greater than wire itself
- One-piece construction for greater strength & economy
- Full ¼" long shank provides extra length for fast, easy location when crimping, and wide crimping area for permanent vibration-free and moisture-proof connections
- Extra added feature - beveled O.D.



Extreme Temp. Terminal Lugs - 900°F

Part Number	Wire Size	Stud Size
HTTL18	22-18	1/8
HTTL14	16-14	3/16
HTTL10	12-10	3/16

TERMINAL LUGS

Tan/Red Super Wire Connectors



3M®

Features

- One connector replaces three
- Compact size and red miniskirt
- Quick bite spring design
- Comfortable wing design for a better grip
- UL listed, CSA certified & CE
- Temp rating 221°F/105°C
- 600 volts maximum

TRBOX

100 pieces per box

Tan/Red Super Wire Connectors



Ceramic Wire Connectors

- For very high temperature applications
- Usable up to 1740°F/950°C
- Ribbed design for easy use
- 600 volt max.

CERAMIC WIRE CONNECTORS

F

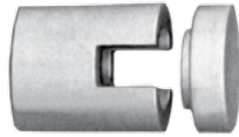
Part Number	Wire Sizes	
	Min.	Max
CWN20	2-#16	2-#16 & 1-#18
CWN16	3-#16	2-#16 & 2-#18
CWN10	2-#14	3-#16 & 1-#18





Ceramic Terminal Covers

Part Number	Thd Size
CTC1024	10-24
CTC1032	10-32



CERAMIC TERMINAL COVER

Economy Glass Tape

Economy Glass Cloth Therm-X Electrical Tapes are designed to offer efficiencies in application and versatility in selection.

730 Glass Cloth Electrical Tape

- Operates at 130° (266°F)
- 7 mil. thickness
- Roll length 180'

7300 Glass Cloth Electrical Tape

- Operates at 180° (356°F)
- 7.5 mil. thickness
- Roll length 108'



Part Number	Width	Rated Temp Range	Thickness	Length
730-500	1/2"	266°F/130°C	7 Mil	180'
730-750	3/4"	266°F/130°C	7 Mil	180'
730-1000	1"	266°F/130°C	7 Mil	180'
7300-500	1/2"	356°F/180°C	7.5 Mil	108'
7300-750	3/4"	356°F/180°C	7.5 Mil	108'
7300-1000	1"	356°F/180°C	7.5 Mil	108'

ECONOMY GLASS TAPE

PVC Electrical Tape

PVC Electrical Tape

Part Number ET750

- 7 mil., 3/4" wide, 60' long
- UL listed
- Individually cello wrapped
- All purpose – all weather
- Service temperature: 176°F/80°C



3M Vinyl Electrical Tape

- 7 mil., 3/4" wide, 66' long
- UL & SA listed
- Stickier, stretchier and highly conformable
- All purpose – all weather
- Operating range up to 20°F/105°C
- Flame-retardant
- Hot and cold weather-resistant
- Use Super 33 + as a primary insulation for wire cable splices up to 600V and for fixture and wire splices up to 1 kV

Meets requirements of ASTM d-3005 Type 1, UL 510, HHI-595C and CSA C22.2

PN # SUPER 33



Features

- 7 mil, 3/4" wide, 66' long
- 9 colors
- UL listed & CSA certified
- All purpose - all weather

35**
1 roll (3/4" x 66')

** To complete part number, add the color of the tape desired from the list to the right (e.g. Red tape would make the part number 35RED)

**Product on
this page is
no longer**

- Color coding, phase identification, marking, wire harnessing
- Temp rating 220°F/105°C



Colors Available

- RED
- GREEN
- BROWN
- WHITE
- YELLOW
- GRAY
- ORANGE
- VIOLET

3M Electrical Tape Multi-Pack

Features

- 5 colors in one pack: blue, green, red, white & yellow
- Color coding, phase identification, marking, wire harnessing

PN: 35 Multipack
5 rolls (1/2" x 20')

available

- 7 mil - 1/2" wide x 20' long
- UL listed & CSA certified
- All purpose - all weather
- Temp rating 220°F/105°C



3M Hi-Heat Electrical Tapes

3M Hi-Heat Electrical Tapes are ideal for use on heater bands and thermocouple lead extensions as well as all high-heat applications. We offer two temperature ratings and mill thicknesses. Both are thermosetting and pressure sensitive for a long service life.

27 Glass Cloth Electrical Tape

- Operates at 130°C (266°F)
- 7 mil thickness
- UL recognized component listing for 150°C (guide OANZ2, file E17385). CSA accepted component 130°C file LR93411. Meets MIL-I-15126F type GFT

Part Number	Width	Rated Temp Range	Thickness
27-500	1/2"	266°F/130°C	7 Mil
27-750	3/4"	266°F/130°C	7 Mil
69-500	1/2"	356°F/180°C	7.5 Mil
69-750	3/4"	356°F/180°C	7.5 Mil

69 Glass Cloth Electrical Tape

- Operates at 180°C (356°F)
- 7.5 mil thickness
- Meets requirements of MIL-I-19166C and has UL recognized component listing for 200°C (guide OANZ2, file E17385). CSA accepted component 180°C file LR93411





GPMS Solid State Relays

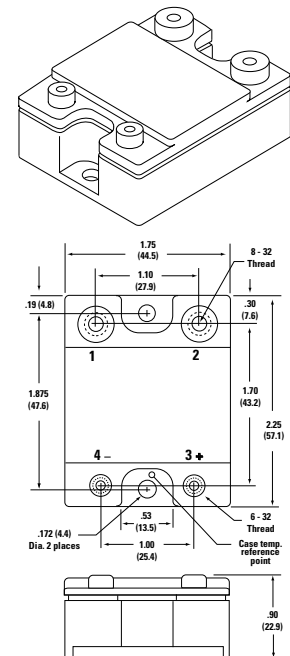
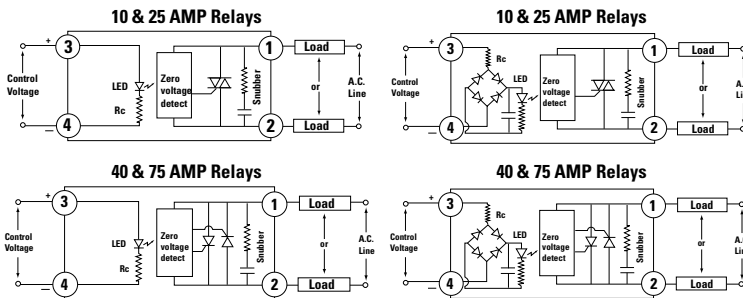
Applications for Solid State Relays are typically used to operate devices such as motors, heaters and lights from low-power signals such as those generated by computers, microprocessors and other logic systems. Here are some examples: heating controls, P.C. drilling machines, industrial process controls, electrostatic precipitators, electromagnets, assembly equipment, plastics thermoforming, welding controls, artificial vision systems, fire and alarm systems, production equipment, lubrication systems, industrial fans and blowers, utility control systems.



Long life reliability when properly used, the Solid State Relay (SSR) provides a high degree of reliability, long life and reduced Electro-Magnetic Interference(EMI), together with fast response and high vibration resistance. No moving parts; the absence of moving parts means that there is nothing to "wear out." Fast switching Solid State Relays can switch up to 80 times per second, much faster than any electro-mechanical relays low input power required SSR's allows the switching of high loads via ultra-sensitive input power. A low level logic signal (TTL) can activate a switch for as much as 100 AMPS. Resistant to shock and vibration, our solid state relays are filled with an epoxy compound. When cured, the epoxy hardens so that the finished relay is a solid block. This prevents damage to the unit by the shock or vibration present in many industrial usages. Quiet operation, completely quiet switching. Beneficial in many areas where quiet operations are desirable.

- Optically isolated
- Built-in snubber
- 4000 volt isolation
- Zero voltage turn-on
- Direct copper bonded SCR's
- High surge capability
- 100% tested at rated current
- UL recognized
- CSA certified
- CE compliance
- 600 volt peak blocking voltage (1200 volt peak blocking voltage)*
- LED status indicator*
- Clear safety cover included*

* Features available on the 660 volt AC output models only



DC Control Models				
Part Number	Maximum Current	Line Voltage	Min. Control Voltage	Max. Control Voltage
610DC	10A	24-330 VAC	3 VDC	32 VDC
625DC	25A	24-330 VAC	3 VDC	32 VDC
640DC	40A	24-330 VAC	4 VDC	28 VDC
675DC	75A	24-330 VAC	4 VDC	28 VDC
500DC	50A	48-660 VAC	4 VDC	28 VDC
750DC	75A	48-660 VAC	4 VDC	28 VDC
AC Control Models				
610AC	10A	24-330 VAC	100 VAC	280 VAC
625AC	25A	24-330 VAC	100 VAC	280 VAC
640AC	40A	24-330 VAC	100 VAC	280 VAC
675AC	75A	24-330 VAC	100 VAC	280 VAC
500AC	50A	48-660 VAC	100 VAC	280 VDC
750AC	75A	48-660 VAC	100 VAC	280 VDC

- Totally encapsulated
- Moisture resistant
- Stainless steel tube
- High speed
- Hermetically sealed
- Long lasting
- Cool and quiet
- High reliability
- 3 styles available:
 - Single pole
 - Double pole
 - Triple pole

• , & Listed

Specifications

Life: Five million operations minimum for resistive loads
 Dielectric withstand: min. 2500VRMS
 Temperature range: -35°C to 85°C
 Coil terminals:
 #6 binding head screws
 Load terminals:
 Pressure connectors,
 AWG #6-14 for 35A
 AWG #2-12 for 60A
 Operate time: .05 second
 Release time: .08 second
 Contact resistance:
 35 AMP: .003 Ohms
 60 AMP: .002 Ohms
 Pull-In Voltage: 65% of normal



MERCURY CONTACTORS

1 Pole-Normally Open

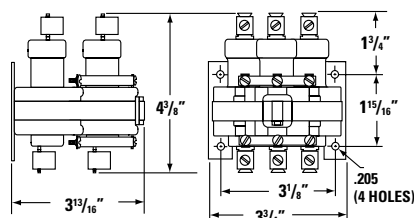
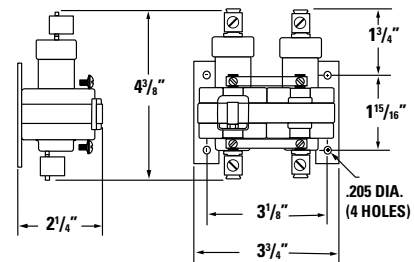
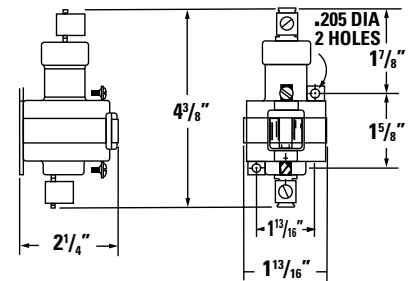
Part Number	Contact Rating at 480VAC	Coil Information		
		Voltage	Watts	Volt AMP
MC35-1201	35 A.	120	3.5	6.4
MC35-2401	35 A.	208/240	3.2/4.0	5.4/7.0
MC60-1201	60 A.	120	2.9	5.8
MC60-2401	60 A.	208/240	3.0/4.0	5.2/7.0
MC100-1201	100 A.	120	7.1	16.4
MC100-2401	100 A.	208/240	7.5	16.1

2 Pole-Normally Open

Part Number	Contact Rating at 480VAC	Coil Information		
		Voltage	Watts	Volt AMP
MC35-1202	35 A.	120	7	12.8
MC35-2402	35 A.	208/240	6.4/8.0	10.8/14.0
MC60-1202	60 A.	120	5.8	11.6
MC60-2402	60 A.	208/240	6.0/8.0	10.4/14.0
MC100-1202	100 A.	120	14.2	32.8
MC100-2402	100 A.	208/240	15	32.2

3 Pole-Normally Open

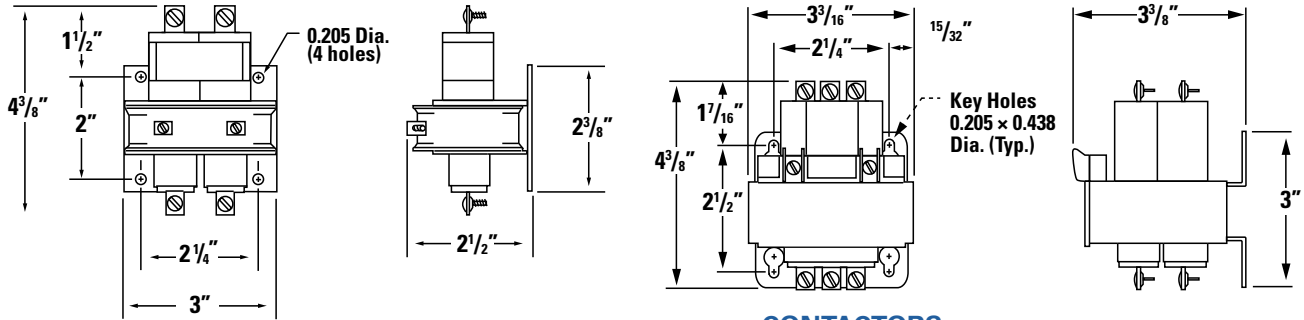
Part Number	Contact Rating at 480VAC	Coil Information		
		Voltage	Watts	Volt AMP
MC35-1203	35 A.	120	10.5	19.2
MC35-2403	35 A.	208/240	9.6/8.0	16.2/21.0
MC60-1203	60 A.	120	8.7	17.4
MC60-2403	60 A.	208/240	9.0/12.0	15.6/21.0
MC100-1203	100 A.	120	21.3	49.2
MC100-2403	100 A.	208/240	22.5	48.3





30 AMP Contactors

Quantum IM Mounts



CONTACTORS

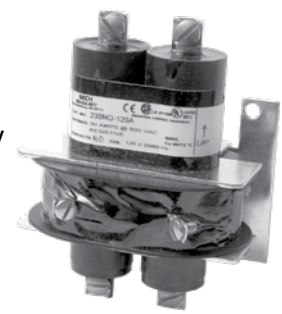
Double Pole

Part Number	Voltage	Wattage	Volt AMPS
CMC30-24DC2	24 VDC	6.3	6.3
CMC30-24AC2	24V-50/60Hz	4.9	13.9
CMC30-1202	120V-50/60Hz	4.9	13.8
CMC30-2402	220V-50/60Hz	4.4	11.7

Triple Pole

Part Number	Voltage	Wattage	Volt AMPS
CMC30-24DC3	24 VDC	5.2	5.2
CMC30-24AC3	24V-50/60Hz	5.0	19.6
CMC30-1203	120V-50/60Hz	4.2	16.8
CMC30-2403	220V-50/60Hz	3.9	14.5

- Contact resistance
- Dielectric withstand 2,500 VAC RMS min
- Operation time: 50 mille second
- Release time: 70 mille second
- 30 AMP @ 600 RES rating per pole
- PTFE plunger guides
- UL listing CSA certified
- Coil terminals - #6 screw
- Load terminals - #8 screw

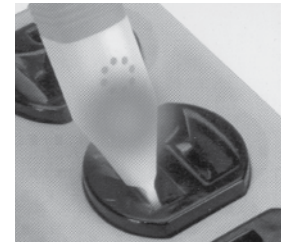


Voltage Sensor

With Both Visual and Audible Alarm!



- Detects 50–1000 volts AC
- CAT3 & CAT4 rated
- Detects defective grounds
- No switch required - always ready to go!
- Buzzer will only react to an AC field - NOT static electricity
- Safety instrument - locates defective grounds, breaks in wires, energized circuits, blown fuses, etc.
- Non-conductive surfaces
- Personal verification - lockout/tagout procedures



Part Number VP200

VOLTAGE SENSOR

Current Ring Indicators



Current Rings are totally self-contained devices for detecting current flow. These devices provide a safe, economical way of indicating the presence of an absence of electrical current flow. The indicator is attached directly to a current-carrying wire. When the current exceeds the turn-on point, the LED will illuminate to indicate the presence of current.

Applications

- Monitor status of heater element
- Observe remote loads
- Indicate phase loss
- Monitor motor operation

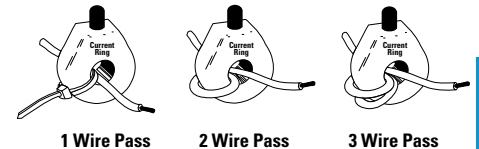
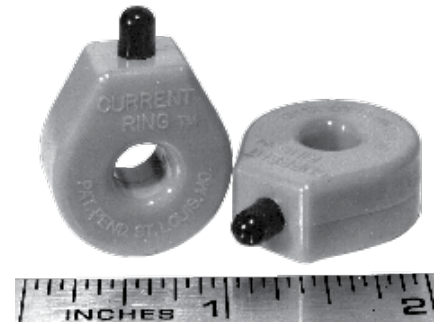
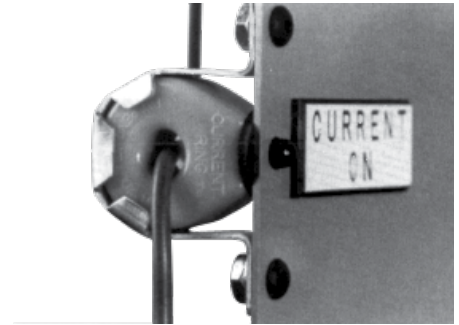
Features

- Self-powered
- Red or green indicator
- Easy to install
- Supplied with plastic tie
- Bright yellow case for easy I.D.
- Panel-mounting bracket available

Specifications

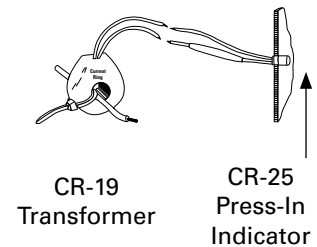
Min. turn-on point:
 2 AMPS for CR-45-R
 2.5 AMPS for CR-45-G
 Indicating Range:
 2 to 100 AMPS (for CR-45-R)
 2.5 to 100 AMPS (for CR-45-G)
 Max. Continuous Current:
 100 AMPS

LED Type: T1 3/4 diffused
 LED Color: Red or green
 Case Material: Thermoplastic
 Case Color: Bright safety yellow
 Weight: .5 oz.
 Frequency: 50 – 60 Hz
 Mounting Bracket Material:
 Non-magnetic aluminum

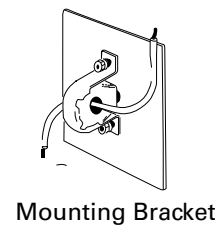


Wire Passes	Turn-On Point		Max. Wire Diameter
	Red	Green	
1	2	2.5	.29
2	1	1.25	.14
3	.66	.83	.13
4	.5	.62	.12
N	2, N	2.5, N	

CURRENT RING INDICATORS



Part Number	Description
CR45R	Current Ring - Red
CR45G	Current Ring - Green
CR19	Current Transformer
CR25	Press-In Indicator
MB45	Mounting Bracket





Sound Level Meters

Analog & Digital Sound Level Meters

Check Noise Levels Economically

Features

- Tripod mount ideal for field use
- Analog output for connection to chart recorders, data loggers, etc.
- Selectable weighting ('A' or 'C') and response time (Fast or Slow)
- MAX HOLD front-panel select switch locks highest reading on the display
- Complete with battery

Applications

- Identify noise ordinance violations, traffic noise measurements, community noise measurements, theater acoustic studies, stereo balancing.



Specifications

	407706 Analog SLM	407730 Digital SLM
Range:	54 to 126 dB	40 to 130 dB
Accuracy:	± 3dB @ 94 dB,1000Hz	± 2dB @ 94 dB,1000Hz
Weighting:	'A' and 'C' (Selectable)	'A' and 'C' (Selectable)
Response time:	FAST and SLOW (Selectable)	FAST and SLOW
(Selectable)		
Microphone:	0.5 Electret Condenser Type	0.5 Electret Condenser Type
Analog output:	AC: 0.707 Vrms	AC: 0.707 Vrms
Power supply:	Heavy duty, 9V Battery	(4) AAA batteries
Dimensions:	2.7 x 7.1 x 1.4 (68 x 180 x 36mm)	2.2 x 9 x 1.7 (57 x 230 x 44mm)
Weight:	5.1 oz. (145g)	5.6 oz. (160g)

Digital Sound Level Meter

- Analog bargraph with 50 dB range updates every 40ms
- ± 2dB accuracy with 0.1 dB resolution
- AC analog output
- Complete with microphone wind-screen and four AAA batteries

Digital Sound Level Meter

Part Number 407730

Economical True RMS Multimeter with 11 functions

Features

- Advanced measurements include capacitance, frequency, and duty cycle
- Relative function for establishing a base line reference
- Easy-to-read large 4000 count backlit display
- True RMS AC measurements
- Type K thermometer built-in for surface or air temperature measurements
- Input fuse protection and mis-connection warnings with audible and visible signals
- Auto power off saves battery life
- Data hold freezes current display reading
- Ergonomically designed to fit comfortably in hand
- Protective holster with test lead holder
- Complete with CAT III test leads, multi-position tilt stand, hanging strap, holster with built-in test lead storage, bead wire temperature probe, and 9V battery

Specifications	Range
Basic Accuracy	$\pm 0.3\%$ (VDC)
AC/DC Voltage	0.1mV to 600V (DC/AC)
AC/DC Current	0.1 μ A to 20A
Resistance (Ω)	0.1 Ω to 40M Ω
Capacitance	0.01nF to 100 μ F
Frequency	0.001Hz to 10MHz
Temperature	-4 to 1382°F (-20 to 750°C)
Diode/Continuity	0.1 to 99.9%
Dimensions/Weight	7.4 x 3.2 x 2" (187 x 81 x 50mm)/0.75 lbs (342g)



Part Number:EX430



1000A Clamp Meters

With IR Thermometer



Features

- Autoranging with manual range override
- Data hold, min./max, and auto power off
- Peak hold for inrush currents
- Dimensions: 10.6 × 4.3 × 2, weight 13.6 oz
- AC/DC voltage, resistance, capacitance and frequency
- Complete with test leads, 9V battery and belt holster

Specifications

Display Counts	4000 count backlit LCD
Basic Accuracy	±3% rdg (AC)
AC/DC Volt (max res)	600V (0.1mV)
Resistance (max res)	40MΩ (0.1Ω)
Capacitance (max res)	40mF (0.001nF)

Specifications

Frequency (max res)	4kHz (1Hz)
IR Temp	-58 to 518°F
	-50 to 270°C
Temp. Type K	-4 to 1832°F
(only on EX820)	-20 to 1000°C

Part Number EX810 (average responding)

Part Number EX820 (True RMS and Type K thermocouple temp. probe)

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Slide & Cut Power Units

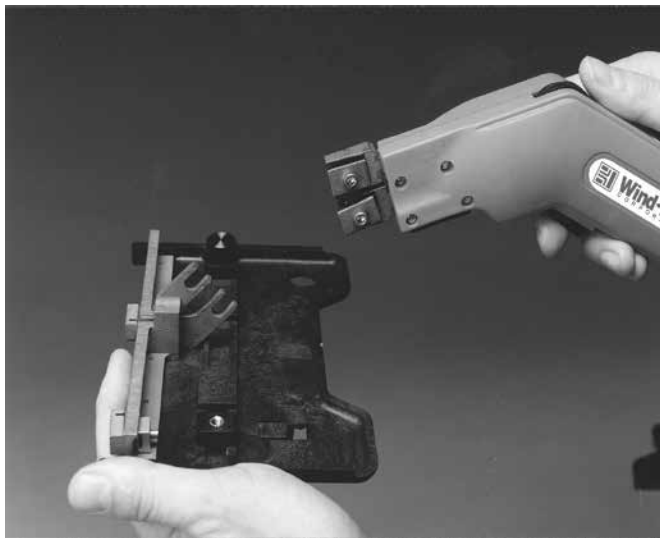
MG Series.....	615
ME Series.....	615
Replacement Blades.....	616





Quick Cut Hot Knife Kit

The groove sled attachment holds shaped blades up to 6" wide and 3" deep. A straight edge can be attached for perfectly straight cutting.



Buy the kit and save!

- QC hot knife
- 6" sled
- 4" straight blade
- 2 pc. — 12" flat blades
- Pro GateMouth® Jr. canvas bag

[QCKIT](#)

Deburring Tools by SHAVIV



DEBURRING TOOLS

Shaviv Set B The Workhorse
Popular set for holes, slots & edges. Supports all B blades. Blades can be inserted axially or perpendicular to holder.



Straight Edge Hole Edge

Set Name	Part Number	Handle	Holder	Blades
Shaviv Set B	3SBi	Classic Handle A	B	B10 B20



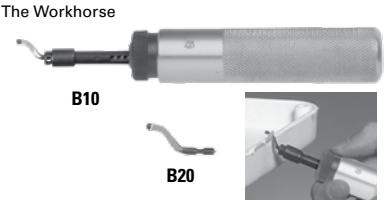
Deburs steel, aluminum, copper, brass, cast iron and plastics.

Shaviv Set B Aluminum The Workhorse
Popular set for holes, slots & edges. Supports all B blades. Blades can be inserted axially or perpendicular to holder.



Straight Edge Hole Edge

Set Name	Part Number	Handle	Holder	Blades
Shaviv Set B Aluminum	3SBi	Classic Handle A	B	B10 B20



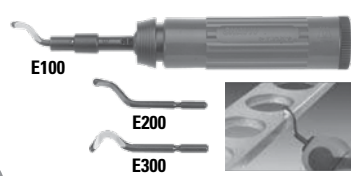
Deburs steel, aluminum, copper, brass, cast iron and plastics.

Shaviv Set E Heavy DeBurr
Rugged deburring set for heavy-duty deburring of holes, slots and edges. Supports all E blades.



Straight Edge Hole Edge Cross-Hole (both edges)

Set Name	Part Number	Handle	Holder	Blades
Shaviv Set E	3SEi	Classic Handle A	E & Mango Adapter E	E100 E200 E300



Deburs steel, aluminum, copper, brass, cast iron and plastics.

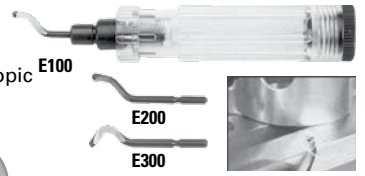
Set 1 Slot Edge Cleaner

The original set for heavy-duty deburring of holes and edges. Features a built-in, non-telescopic steel blade holder which holds blades close to handle.



Straight Edge Hole Edge Cross-Hole (both edges)

Set Name	Part Number	Handle	Blades
Shaviv Set 1	3S1i	Handle 1	E100 E200 E300



Deburs steel, aluminum, copper, brass, cast iron and plastics.

Shaviv Set C The Scraper

Features triangular blades with 3 cutting edges for high-quality finishing & scraping. The telescopic blade holder lets you get to difficult-to-reach areas. Includes key for safely removing blades.



Straight Edge Hole Edge Hole Back-Edge

Set Name	Part Number	Handle	Holder	Blades
Shaviv Set C	3SCi	Classic Handle A	C	C42



Deburs steel, aluminum, copper, brass, cast iron, stainless steel and plastics.

Flat Surface Hole Inner Surface

Set Name	Part Number	Handle	Set Name	Part Number	Handle	Holder	Blades
Shaviv Set C	3SCi	Classic Handle A	Shaviv Set C	3SCi	Classic Handle A	C	C42

Shaviv Set F The Countersink

Powerful tool; excellent for chamfering and countersinking.



Hole Edge

Deburs steel, aluminum, copper, brass, Cast iron, stainless steel and plastics.

Set Name	Part Number	Handle	Holder	Blades
Shaviv Set F	3SFi	Classic Handle A	F	F20



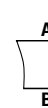
Shaviv Set L External Pipe-Edge Cleaner

Great for removing burrs from the external edges of pipes and tubes; 0.79" (20mm) diameter and up. Holder L with metal roller.



Straight Edge Outer Edge

L10 blade



"A" side for spiral chips
"B" side for powdery chips

Deburs steel, aluminum, copper, brass and plastics.

Set Name	Part Number	Handle	Holder	Blades
Shaviv Set L	3SLi	Classic Handle A	L	C10

Set HC Handy Chuck

Delivers pin vise versatility for finishing & scraping applications. Also used for gripping miniature files, drills, reamers, taps, wires, countersinks and other small objects—0.04"–0.32" (1–8mm) in diameter. Handy for assembling electronic components and watch repair.



Deburs steel, aluminum, copper, brass, cast iron, stainless steel and plastics.

Set Name	Part Number	Handle	Blades
Shaviv Set HC	3SHC5i	Handy Chuck	C50





Deburring Tools by SHAVIV

DEBURRING TOOLS

Mango II Set B - The Workhorse

Popular set for holes, slots & edges. Supports all B blades. Blades can be inserted axially or perpendicular to holder.

Get the Mango II handle for maximum comfort.

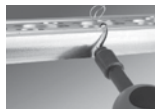
Set includes the Mango II handle, The "B" blade holder, & one each B10 & B20 blades.



Straight Edge



Hole Edge



Deburrs steel, aluminum, copper, brass, cast iron and plastics.

Set Name	Part Number	Handle	Holder	Blades
Mango II Set B	3SBViP	Mango II	B	B10 B20

Mango II Set E - Heavy DeBurr

Rugged deburring set for heavy-duty deburring of holes, slots and edges. Supports all E blades. Get the Mango II handle for maximum comfort.

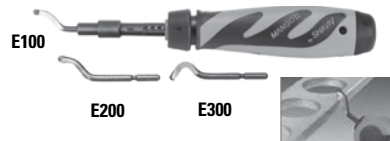
Set includes the Mango II handle, The "E" blade holder, & one each of E100, E200 & E300 blades.



Straight Edge



Hole Edge



Cross-Hole
(both edges)

Deburrs steel, aluminum, copper, brass, cast iron and plastics.

Set Name	Part Number	Handle	Holder	Blades
Mango II Set E	3SEViP	Mango II	E	E100 E200 E300

Mango II Set C40 - The Scraper

Features triangular blades with three cutting edges for high-quality finishing & scraping. The telescopic blade holder gets to difficult-to-reach areas. Includes key for safely removing blades. Get the Mango II handle for maximum comfort.

Set includes the Mango II handle, the "C" blade holder, & one C40 blade.



Straight Edge



Hole Edge



Hole Back
Edge



Flat Surface



Hole Inner
Surface



Deburrs steel, aluminum, copper, brass, cast iron, stainless steel and plastics.

Set Name	Part Number	Handle	Holder	Blades
Mango II Set C40	3SC1ViP	Mango II	C	C40

Mango II Set C - The Scraper

The telescopic blade holder gets to difficult-to-reach areas. Includes key for safely removing blades.

Get the Mango II handle for maximum comfort.

Set includes the Mango II handle, the "C" blade holder, & one C42 blade.



Straight Edge



Hole Edge



Hole Back
Edge



Flat Surface



Hole Inner
Surface



Deburrs steel, aluminum, copper, brass, cast iron, stainless steel and plastics.

Set Name	Part Number	Handle	Holder	Blades
Mango II Set C	3SCViP	Mango II	C	C42

*Bit fits in ANY 1/4" holder! *DIN 3126-C6, 3*ISO 1173

Finishing Bit Set - Patented

New generation finishing tool



Straight Edge



Hole Edge

Set Name	Part Number	Handle	Blades
Finishing Bit Set	3SDBi	Screwdriver Bit Holder	D1 Finishing Bit
Bit 4-Pack	3FD1B12B4	(4) D1 Finishing Bits	

Mango II Set FR

Features FR ratchet holder which is ideal for rotational chamfering even when workspace is limited. For inside diameter (ID) up to 0.79" (20mm). Get the Mango II handle for maximum comfort.

Set includes the Mango II handle, the "FR" blade holder, & one F20 blade.

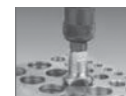


Hole Edge



F20

Deburrs steel, aluminum, copper, brass, cast iron, stainless steel and plastics.



Set Name	Part Number	Handle	Holder	Blades
Mango II Set FR	3SFRViP	Mango II	FR	F20

Deburring Tools by SHAVIV



DEBURRING TOOLS

Mango II Set F The Countersink

Powerful tool. Excellent for chamfering and countersinking. Get the Mango II handle for maximum comfort.

Set includes the Mango II handle, the "F" blade holder, & one F20 blade.



Hole Edge

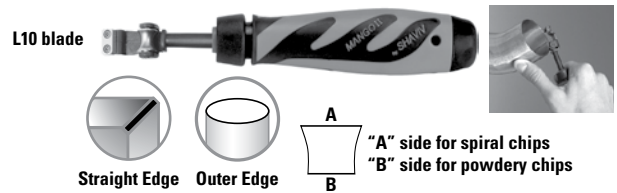
Deburrs steel, aluminum, copper, brass, cast iron, stainless steel and plastics.

Set Name	Part Number	Handle	Holder	Blades
Mango II Set F	3SFViP	Mango II	F	F20

Mango II Set L - External Pipe Edge Cleaner

Great for removing burrs from the external edges of pipes and tubes; 0.79" (20mm) diameter and up. Holder L with metal roller.

Set includes the Mango II handle, The "L" blade holder, & one L10 blade.



L10 blade



"A" side for spiral chips
"B" side for powdery chips

Straight Edge Outer Edge

Deburrs steel, aluminum, copper, stainless steel and plastics.

Set Name	Part Number	Handle	Holder	Blades
Mango II Set L	3SLViP	Mango II	L	L10



Shaviv Bonus Packs

for Extra Close Work

Each Bonus Pack includes 10 blades and a FREE Mango IIB or Mango IIE handle

with hi-speed steel or cobalt blades.

Bonus packs feature plastic 10-pack packaging for easy storage and removal.

Sets with cobalt blades are excellent for longer blade life and great for high-end material such as stainless steel.

Set Name	Part Number	Handle	Holder	Blades
Mango IIB + B10	29249	Mango IIB	None	10 × B10
Mango IIE + E100	29250	Mango IIE	None	10 × E100
Mango IIB + B10S	29255	Mango IIB	None	10 × B10S
Mango IIE + E100S	29251	Mango IIE	None	10 × E100S

Shaviv Bonus Packs

for Long Reach Work

Each Bonus Pack includes 10 blades and a FREE Mango II handle, a "B" or "E" blade holder and

10 hi-speed steel or cobalt blades.

Bonus packs feature plastic 10-pack packaging for easy storage and removal.

Sets with cobalt blades are excellent for longer blade life and great for high-end material such as stainless steel.



Set Name	Part Number	Handle	Holder	Blades
Mango II + B10 w/HLDR	29252	Mango II	B	10 × B10
Mango II + E100 w/HLDR	29253	Mango II	E	10 × E100
Mango II + B10S w/HLDR	29256	Mango II	B	10 × B10S
Mango II + E100S w/HLDR	29254	Mango II	E	10 × E100S



Kit Classic KWC

Universal Box Wooden Case

Excellent all-around deburring kit for your workshop.

All the tools you need for 1000+ applications.

Contains:

- Classic handle A
- Holders - B, C, D, E & F
- Blades - B10, B20, B30, B50, B60, B70, C40, C42, D80, E100, E200, E300, E350, E600 & F20

Set Name	Part Number
Kit Classic KWC	3KWCi

Shaviv Aeroburr Sets

for the Aviation/Aerospace/Medical Industries

Each Aeroburr Set includes 5 titanium nitride-coated blades for extra-long life over standard blades. along with a Mango II handle & a "B" or "E" blade holder.

The titanium nitride-coated blades included are the B11P for standard applications or the E111P for heavy-duty applications. These blades are specially customized to deburr curves & holes as small as 1/16" .



Set Name	Part Number	Handle	Holder	Blades
Aeroburr Set B11P	90110	Mango II	B	5 × B11P
Aeroburr Set E111P	90111	Mango II	E	5 × E111P



Deburring Tools by SHAVIV

DEBURRING TOOLS



Premium Kit

For Deburring & Deflashing
The perfect micro kit for deflashing plastics.
Convenient packaging for storing tools.
Contains:

- Mango II handle
- Cera-Burr ceramic blade tool
- Holders - B & E
- Blades - B10, B11, B25, E111, E250, E400 & E707



Set Name	Part Number
Premium Kit - Deburring & Deflashing	29263



Kit KPA Mango II

Plastics Deflashing
The perfect kit for deflashing plastics.
Contains:

- Mango II handle
- UB38 deburring tool
- Holders - B, E, G3 & LP
- Blades - B12, B25, E110, D700, G30 & L10



Set Name	Part Number
Kit KPA Mango II	90102

Glo-Burr B - The Rainbow Series

Popular, easy-to-grip deburring tools. Strong, yet lightweight. Features convenient pocket clip and blade storage. Each Glo-Burr B supplied with (one) B10 blade, but can hold other popular B blades.



Straight Edge

Hole Edge

Deburrs steel, aluminum, copper and plastics.

Set Name	Color	Part Number
Glo-Burr B	Red	3SUB2PiR
	Blue	3SUB2PiB
	Green	3SUB2PiG
	Yellow	3SUB2PiY

Glo-Burr E - The Rainbow Series

Popular, easy-to-grip deburring tools. Strong, yet lightweight. Features convenient pocket clip and blade storage. Each Glo-Burr B supplied with (one) heavy-duty E100 blade, but can hold other popular B blades.



Straight Edge

Hole Edge

Deburrs steel, aluminum, copper and plastics.

Set Name	Color	Part Number
Glo-Burr E	Red	3SM2PiR
	Blue	3SM2PiB
	Green	3SM2PiG
	Yellow	3SM2PiY

UB2 DisposaBurr - Uniburr

Popular, slim-grip deburring tools. Strong, yet lightweight. Features convenient pocket clip. Each UB2 is supplied with (one) B10 blade.



Straight Edge

Hole Edge

Deburrs steel, aluminum, copper and plastics.

Set Name	Color	Part Number
UB2	Red	3UB2RDWi
	Blue	3UB2BLWi
	Green	3UB2GRWi
	Yellow	3UB2YLBi
	Black	3UB2BKSi

UB1 DisposaBurr - Uniburr

Popular, slim-grip deburring tools. Strong, yet lightweight. Features convenient pocket clip. Each UB1 is supplied with (one) heavy-duty E100 blade.



Straight Edge

Hole Edge

Deburrs steel, aluminum, copper and plastics.

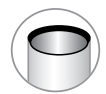
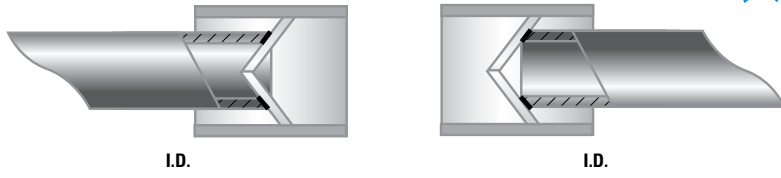
Set Name	Color	Part Number
UB1	Red	3UB1RDWi
	Blue	3UB1BLWi
	Green	3UB1GRWi
	Yellow	3UB1YLBi
	Black	3UB1BKSi

Ceramic Knives by SHAVIV

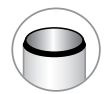


CERAMIC KNIVES

Plum-Burr Pipe Cleaner
Deburr tubing on both inner and outer edges. Excellent for plumbers, installers and electricians.



Inner Edge



Outer Edge

CERAMIX



Plum-Burr Plastic

Set Name	Part Number
Plum-Burr Plastic	15590083
Plum-Burr Metal (heavy-duty)	15590082

Cera-Burr Ceramic Blade Tool
High-quality ceramic blade affixed on strong, lightweight handle. Excellent for deflashing plastics and deburring soft metals. The ideal tool to remove unwanted mold gate trim on plastic work pieces.



Straight Edge

Flat Surface

Slot/ Keyways

Sheet

Mold Gate Trim



Set Name	Part Number	Handle	Blades
Cera-Burr	15590084	Glo-Burr	Permanent

Ceramix Set Q10 Ceramic Deflashing Tool
Heavy-duty handle with Ceramix™ Q10 blade. Adjust the cutting angle between the blade and the material for best results and to prevent scratches. Flip blade for two types of jobs.

CERAMIX

Unique Dual Blade Design!



Free standard utility blade provided with set!



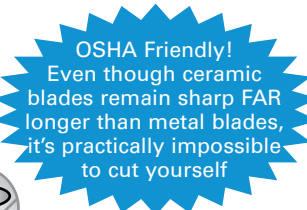
Straight Edge

Flat Surface

Slot/Keyways

Sheet

Hole Edges



Flip blade for 2 types of jobs!

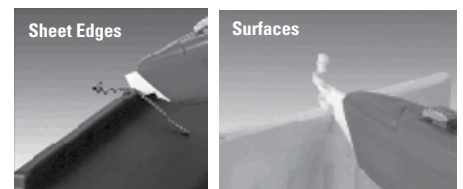


Side 1: Surface Cleaner



Side 2: Sheet Edge Cleaner

Set Name	Part Number	Handle	Blades
Ceramix Set Q10	3SQ10i	Ceramix	Q10
Replacement Blade	3BQ10	1 Replacement Ceramic Blade	
Ceramix Set Q12	Q12	Ceramix	Q11
Replacement Blade	Q11	1 Replacement Ceramic Blade	





Deburring Holders/Blades

DEBURRING HOLDERS

Blade Holder B

Holds all B – series blades.



Set Name	Part Number
Blade Holder B	3LB

Blade Holder E

Holds all E – series blades.



Set Name	Part Number
Blade Holder E	3LE

Blade Holder C

Holds C40 & C42 blades.



Set Name	Part Number
Blade Holder C	3LC

Blade Holder F

Holds all F – series blades.



Set Name	Part Number
Blade Holder F	3LF

Blade Holder M

Holds both B – series & E – series blades.



Set Name	Part Number
M Holder	3LM

Blade Holder FR

Ratchet holder for all F – series blades.



Set Name	Part Number
Blade Holder FR	3LFR

Blade Holder L

Holds the L10 blade.



Set Name	Part Number
Blade Holder L	3LL

Blade Holder L5

Angled to offer easy access to work area. Holds L10 blades.



Set Name	Part Number
Blade Holder L5	3LL5

Shaviv TiN Blade B Multipack

for handling several standard deburring applications

Each Multipack Set includes 2 each of 5 different styles of TiN-coated blades for extra long life over standard blades.

Includes 2 ea. of B10P, B11P, B12P, B20P & B30P blades. All blades fit into SHAVIV "B" style handles and holders.



Shaviv TiN Blade E Multipack

for handling several heavy-duty deburring applications

Each Multipack Set includes 2 each of 5 different styles of TiN-coated blades for extra long life over standard blades.

Includes 2 ea. of E100P, E110P, E111P, E200P & E300P blades. All blades fit into SHAVIV "E" style handles and holders.



Set Name	Part Number	Blades
TiN-coated "B" MULTI-PACK	29275	2 × B10P, B11P, B12P, B20P & B30P

Set Name	Part Number	Blades
TiN-coated "E" MULTI-PACK	29274	2 × E100P, E110P, E111P, E200P & E300P blades

Replacement blades located on following pages.

Deburring Blades



DEBURRING BLADES









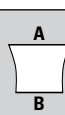
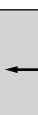












































Blade Name	Part Number	Description	Blade (work direction shown)
E100	3BE100	Heavy-duty HSS; deburrs materials with spiral chips	
E100C	3BE100C	Wear-resistant carbide; E100 geometry	
E100D	3BE100D	Diamond-coated; E100 geometry	
E100L	3BE100L	E100 for left-handed users	
E100P	3BE100P	PVD TiN-coated for high resistance to wear; E100 geometry	
E100S	3BE100S	Long-lasting, cobalt-enriched; E100 geometry	
E110	3BE110	E shaft, B10 cutting edge for materials with spiral chips; deburrs holes with min. diameter 0.08" (2mm)	
E110P	3BE110P	PVD TiN-coated for high resistance to wear; E110 geometry	
E111	3BE111	Thin-nosed HSS; deburrs holes with min. diameter 0.06" (1.5mm)	
E120	3BE120	E shaft, B20 cutting edge for materials with powdery chips; rotates both clockwise and counterclockwise	
E200	3BE200	HSS for materials with powdery chips; rotates both clockwise and counterclockwise	
E200P	3BE200P	PVD TiN-coated for high resistance to wear; E200 geometry	
E200C	3BE200C	Wear-resistant carbide; E200 geometry	
E250	3BE250	Specially designed for plastics; very thin, heavy-duty	
E300	3BE300	HSS for materials with spiral chips; simultaneously deburrs the inside and outside of holes up to 0.24" (6mm) thick	
E300P	3BE300P	PVD TiN-coated for high resistance to wear; E300 geometry	
E320	3BE320	HSS for materials with spiral chips; simultaneously deburrs the inside and outside of holes up to 0.24" (6mm) thick; Rotates both clockwise and counterclockwise	
E350	3BE350	HSS for materials with powdery chips; rotates both clockwise and counterclockwise	
E500C	3BE500C	Carbide tipped scriber; can be reground	
E600	3BE600	HSS; removes burrs from back edges of holes up to 0.8" (20mm) thick	
E601	3BE601	Extra-long HSS; removes burrs from back edges of holes up to 1.6" (40mm) thick	
E700	3BE700	HSS for materials with spiral chips; excellent for deburring & scraping inside thick-walled holes and cross-holes	
E720	3BE720	HSS for materials with powdery chips; excellent for deburring & scraping inside thick-walled holes and cross-holes; rotates clockwise & counterclockwise	
E750	3BE750	HSS specially designed for deburring rubber & soft plastics without poking or sticking into workpiece	
E755	3BE755	HSS for deburring corner edges of 0.04" (1mm) high steps	
E800	3BE800	HSS for materials with spiral chips; removes burrs from corner edges of shallow steps	
E10	3BE10	Long-lasting, cobalt-enriched for materials with spiral chips; ideal for heavy-duty jobs	





Deburring Blades

DEBURRING BLADES

Blade Name	Part Number	Description	Blade (work direction shown)
F12	3BF12	Countersink for hole edges with up to 0.5" (12mm) dia.	 
F20	3BF20	Countersink for hole edges with up to 0.8" (20mm) dia.	 
F30	3BF30	Countersink for hole edges with up to 1.18" (30mm) dia.	 
F26X	3BF26X	Excellent for chamfering of pipes, tubes and other items with up to 1.02" (26mm) diameter	 
L10	3BL10	HSS, 4 cutting edges; removes burrs from external edges, O.D. 0.79" (20mm) and up; "A" side deburrs materials with spiral chips; "B" side for powdery chips	 
B10	3BB10	HSS; deburrs materials with spiral chips	 
B10C	3BB10C	Solid carbide; B10 geometry	 
B10D	3BB10D	Diamond-coated; B10 geometry	 
B10L	3BB10L	B10 for left-handed users	 
B10P	3BB10P	PVDTiN-coated for high resistance to wear; B10 geometry	 
B10PL	3BB10PL	Long-lasting, cobalt-enriched; B10 geometry	 
B10S	3BB10S	Extra-thin, HSS; deburrs holes with min. diameter 0.08" (2mm)	 
B11	3BB11	Short-nosed; HSS	 
B12	3BB12	Short-nosed; PVDTiN-coated for high resistance to wear	 
B12P	3BB12P	E shaft; B20 cutting edge for materials with powdery chips; rotates both clockwise and counterclockwise	 
B20	3BB20	HSS; rotates both clockwise and counterclockwise	 
B20C	3BB20C	Solid resistant carbide; rotates both clockwise & counterclockwise	 
B20P	3BB20P	PVDTiN-coated for high resistance to wear; rotates both clockwise & counterclockwise	 
B25	3BB25	Thin-nosed; specially designed for plastics	 
B25C	3BB25C	Solid carbide, thin-nosed; specially designed for abrasive plastics	 
B30	3BB30	PVDTiN coated for high resistance to wear; E300 geometry	 
B30P	3BB30P	Simultaneously deburrs the inside and outside of holes up to 0.16" (4mm) thick	 
B32	3BB32	PVDTiN-coated for high resistance to wear; B30 geometry	 
B50	3BB50	Carbide tipped scriber; can be reground	 
B60	3BB60	HSS; removes burrs from back edges of holes up to 0.8" (20mm) thick	 
B70	3BB70	Carbide tipped; deburrs sheet metal up to 1.18" (4.5mm) thick	 
B1	3BBN1	Long-lasting, cobalt-enriched; deburrs materials with spiral chips	 

Retractable Utility Knife



SK099 Utility Knife - Retractable Blade

- Three-position retractable blade - full, half and one-quarter out
- Furnished with 3 each SK-921 heavy-duty blades
- Blade storage in handle



STANLEY

Interlock™ Retractable Utility Knife

SK179 Interlock™ Utility Knife - Retractable Blade

- Interlocking design prevents nose spread
- Die cast zinc handle with diagonal ribs for non-slip grip
- Three-position retractable
- furnished with 3 each SK-921 heavy-duty blades
- Blade storage in handle
- Recommended for heavy-duty cutting



STANLEY

Economy Retractable Utility Knife

SK175 Retractable Utility Knife - Economy Model

- Half zinc/half plastic body is durable and lightweight
- Interlock™ nose prevents nose spread
- Three-position retractable
- Blade storage in handle



STANLEY

Fixed Blade Utility Knife

SK299 Utility Fixed Blade

- Durable, die cast aluminum handle
- Furnished with one SK-911 blade
- Blade storage in handle

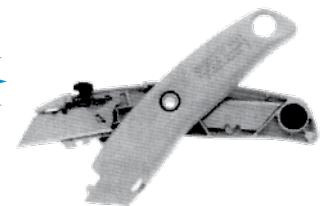


STANLEY

Swivel-Lock® Utility Knife

SK989 Swivel-Lock® Utility Retractable Blade

- The Swivel-Lock® knife body swivels open for quick and easy blade change
- Three-position retractable blade.
Durable die cast aluminum body
- Furnished with 3 each SK-921 heavy-duty blades -
blade storage in handle



STANLEY



High Visibility Utility Knife

- Extra heavy-duty die cast body
- 3 position extension - includes 1 blade
- Overlapped tip to prevent spreading
- Smooth all metal slider
- Very popular
- Made for all-day use
- Accepts 2 notch blades



Safety Overlap

Our most popular knives - the UK-500 and the new Neon UK-500N - feature this important safety feature.

High visibility - neon yellow

Part Number	Description
UK500	Overlapped tip, 3-position HD knife color: Dark Gray
UK500N	Same as above except color

Economy Fixed Blade Utility Knife

- Very ergonomic and comfortable to use
- Die cast body - includes 1 blade
- Low cost & durable
- Accepts 2 or 3 notch blades



Part Number
UK5

Heavy Duty Fixed Blade Utility Knife

Embossed texture finish is non-slip and durable - die cast, heavy-duty body. Texture works well with gloves or in hot weather; helps prevent slipping.

- Accepts 2 notch blades



Part Number
UK5HD

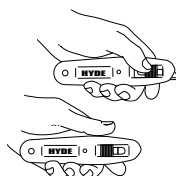
Self Retracting Utility Knife

"Quick Draw" Self-Retracting Utility Knife (Right or Left Hand)

Blade automatically retracts into handle when knife is released. Prevents many cuts and injuries. Blade length can be preset for either 5/16" or 1/2" exposure. Accepts regular blades or special safety blades. Bright orange, die cast body.



Part Number	Description
UK500QD	Quick-draw knife
UK500QD5	Blades with rounded tips - 5 per pack



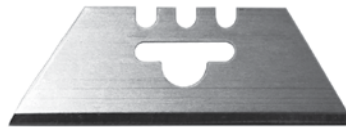
Standard Utility Knife Blades



Two Notch Blades

Part Number	Description
UKB5	5 pack
UKB100	Box of 100
UKBB500	500 pc. bulk

Extra Sharp and Long Lasting!



Three Notch Blades

Part Number	Description
UKB	5 pack
UKBB	Box of 100
UKB500	500 pc. bulk

[REPLACEMENT BLADES](#)

Stanley® Utility Knife Blades

.017 & .025 Utility Knife Blades
High carbon steel for long life 100 - pack safety dispenser

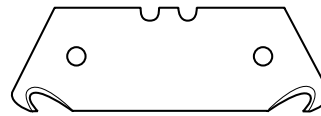
[SK911A](#) .017 thickness 2" length,
[SK921A](#) .025 thickness 2" length,
100 blades per safety dispenser 100 blades per safety dispenser



Hooked Utility Knife Blades

Part Number	Description
UKBH5	5 pack
UKBHB	Box 100 (20 x 5)

100 Pack Safety
Dispenser available
in Standard and
Hook Style



Fits all standard brands

Straight Edge Blade Holder

Retractable

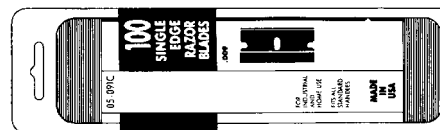
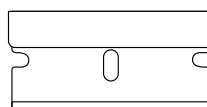
Part Number [SEB1](#)
* Does not come with
blade

Made in
U.S.A.



Straight Edge Blades

Part Number	Thick-ness	Package Qty.
SEB009-100	.009	100
SEB012-100	.012	100





Knife Handles

#1 Light Aluminum Handle



#2 Medium Aluminum Handle



#5 Plastic Handle



Part Number
#1 Light Aluminum Handle
TK100
#2 Medium Aluminum Handle
TK200
#5 Plastic Handle
TK500

KNIFE HANDLES

Knife Blades

Part Number	Description
Blade #10	
TK110-5	5 pc. pack
TK110B	100 pc. pack
TK110B1	1000 pc. pack
Blade #17	
TK117-5	5 pc. pack
TK117B	100 pc. pack
TK117B1	1000 pc. pack
Blade #2	
TK202-5	5 pc. pack
TK202B	100 pc. pack
TK202B1	1000 pc. pack
Blade #18	
TK218-5	5 pc. pack
TK218B	100 pc. pack
TK218B1	1000 pc. pack
Blade #22	
TK222-5	5 pc. pack
TK222B	100 pc. pack
TK222B1	1000 pc. pack
Blade #11	
TK111-5	5 pc. pack
TK111B	100 pc. pack
TK111B1	1000 pc. pack
Blade #11 – Stainless	
TK111BS	100 pc. pack
TK111B1S	1000 pc. pack
Blade #23	
TK223-5	5 pc. pack
TK223B	100 pc. pack
TK223B1	1000 pc. pack
Blade #24	
TK224-5	5 pc. pack
TK224B	100 pc. pack
TK224B1	1000 pc. pack
Blade #28	
TK228-5	5 pc. pack
TK228B	100 pc. pack
TK228B1	1000 pc. pack

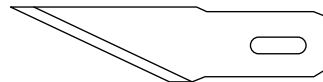
Use with: #1 Light Aluminum Handle



Use with: #1 Light Aluminum Handle



Use with: #2 or #5 Handle



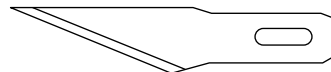
Use with: #2 or #5 Handle



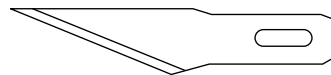
Use with: #2 or #5 Handle



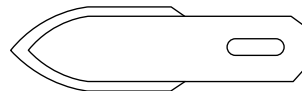
Use with: #1 Light Aluminum Handle



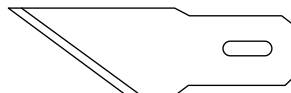
Use with: #1 Light Aluminum Handle



Use with: #2 or #5 Handle



Use with: #2 or #5 Handle



Use with: #2 or #5 Handle



KNIFE BLADES

Standard Snap Knives



13 Point Standard Duty Knife

Part Number

SK100

8 Point Standard Duty Knife

Part Number

SK200

STANDARD SNAP



5" Molded Handle



6" Molded Handle

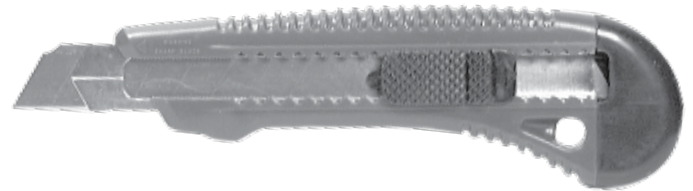
Heavy-Duty Snap Knives

- Aluminum channel handle for blade
- Long lasting
- Very durable
- 5 blade automatic load cartridge

8 Point Heavy Duty Knife

Part Number

SK200HD

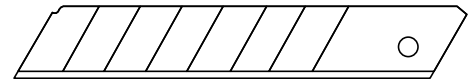


8 Point Blades

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Part Number	Description
SK8-5	5 per card
SK8-100	100 pack
SK8B	650 bulk pack

REPLACEMENT BLADES



13 Point Blades

Part Number	Description
SK13-5	5 per card
SK13-100	100 pack
SK13B	800 bulk pack





Hose Cutters

HOSE CUTTERS

Standard Hose Cutter Cuts to 1½" I.D. Hose

- Rigid and sturdy
- Safe, quick & clean
- Replaceable high-carbon; PTFE-coated steel blade
- Blade closes into its own handle for safe carrying and handling
- Up to 8 times faster than sawing and deburring
- Cuts PE & PB through 1½" I.D.; PVC up to 1¼"
- Ideally suited to limited working space, the cutter adapts easily where a conventional hacksaw cannot be used



Part Number	Description
T135H	Hose Cutter
BT135	Blades for Cutter

X-Large Hose Cutter

Cuts up to 2" I.D. hose

- Cuts rubber hose and tubing through 2" I.D., P.E. through 1½" I.D.; class PVC through 1¼" I.D.

Part Number	Description
T200	XL Hose Cutter
BT200	Blades for Cutter

Selecting the Correct Gate Cutter for Your Application

To ensure a quality finished product, it is important to choose the proper gate cutter. Consider the following when selecting a cutter!

- Contour of the back of the blade The blade characteristics should match the part at the area of de-gating.
- Blade length Blade opening Handle length

Blade Contour

Flat Face:

For general purpose cutting where the sprue is fully accessible or proud of the cutting surface.

Nipper Type (slightly rounded):

For sprue cutting where access to the sprue may be slightly recessed.

Angle Heads:

For recessed sprue cutting and access to internal cavities.

Convex/Concave:

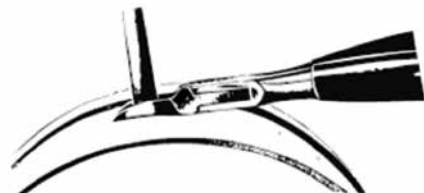
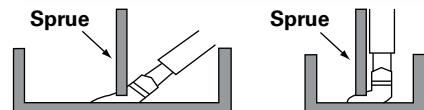
For special applications where the sprue is recessed.

Blade Stop:

When cutting hard or brittle material it is recommended to use a cutter with a blade stop. Adjusting the stop so the blades stop short of hitting each other will extend the life of the blades.

Handles:

How much pressure an operator must exert when cutting a sprue or determined by the length of the cutter handle. A handle that is too long operator's hand is difficult to grip while a handle that is too short causes excessive strain. Match the cutter with the operator's hand and the sprue being cut. Ergonomic handles are an effective way to reduce operator fatigue and decrease the risk of carpal tunnel syndrome



Quick Reference Guide



Sub Header

	Handle Length	Blade Length	Blade Opening		Blade Stop	Ergonomic Handle	Weight Oz.
			Tip	Base			
Flat Face							
FF4	4-5/8"	11/16"	5/8"	3/16"			2-1/2
FF5A	5"	3/4"	5/8"	3/16"			3-1/4
FF5	5"	3/4"	5/8"	3/16"			3-1/4
GR5	5-3/4"	7/8"	3/4"	1/4"			4
FF6P	6"	3/4"	3/4"	1/4"	Yes		4-5/8
FF6A	6-1/4"	13/16"	7/8"	1/4"			4-1/2
FF6	6-1/8"	13/16"	3/4"	3/16"			4-1/2
FF6EL	6-1/8"	7/8"	3/4"	1/4"		Yes	4-1/2
FF6ER	6-1/8"	7/8"	3/4"	1/4"		Yes	4-1/2
FF7P	7-1/2"	1"	1"	1/4"	Yes		7-1/2
FF7A	7-1/2"	1"	1"	1/4"			7-1/2
FF7	7-1/2"	1"	1"	1/4"			7-1/2
FF7EL	7-1/2"	1-1/16"	1"	1/4"		Yes	7-1/2
FF7ER	7-1/2"	1-1/16"	1"	1/4"		Yes	7-1/2
FF8	8"	1-1/4"	1-1/8"	3/8"			11-1/4
Nipper Type							
S4	4-5/8"	11/16"	11/16"	3/16"			2-1/2
S5	5"	3/4"	5/8"	1/8"			3-1/4
S5A	5"	9/16"	1/4"	1/16"			3-1/4
S6A	6"	13/16"	7/8"	5/16"			5
S6P	6"	3/4"	3/4"	1/4"	Yes		5
S6	6-1/8"	7/8"	3/4"	3/16"			5
S6EL	6-1/8"	7/8"	3/4"	1/4"		Yes	5
S6ER	6-1/8"	7/8"	3/4"	1/4"		Yes	5
S7A	7-1/2"	1"	1"	1/4"			7-1/2
S7	7-1/2"	1"	1"	1/4"			7-1/2
S7EL	7-1/2"	1-1/16"	1"	1/4"		Yes	7-1/2
S7ER	7-1/2"	1-1/16"	1"	1/4"		Yes	7-1/2
S8	8"	1-1/4"	1-1/8"	3/8"			11-1/4
Angle Head							
GA5	5-7/8"	1"	3/4"	1/4"			4-1/2
GA7	6-1/2"	1"	3/4"	1/4"			5-1/2
GA6	5-1/2"	3/4"	7/8"	3/8"			7-1/2
GA6A	5-3/4"	3/4"	1/2"	1/2"			5-1/2
Convex/Concave							
GCX5	5-7/8"	7/8"	5/16"	1/4"			5-3/8
GCX6	6-3/8"	1"	1/2"	3/8"			5-11/16
GCC5	5-5/8"	7/8"	3/8"	1/4"			5-3/8
End Cutters							
24EF	4-1/2"	1/4"	3/16"	NA			2-1/4
25EF	5-3/4"	3/8"	7/16"	NA			3-7/8
Force Multiplying							
WA1000	6-3/8"	11/16"	3/8"	1/8"			5-1/2
Mini Nippers							
NM008	5"	1/2"	1/2"	1/4"			2
NM009	5"	1/2"	3/8"	1/4"			2
CN5-51	4-1/2"	5/8"	5/16"	3/16"			3-1/2

G



Standard Gate Cutters

STANDARD GATE CUTTERS

5" Flat Faced Cutter

Part Number FF5A
Ref. Number PL550

3¼ Oz. Wgt.



6" Flat Faced Cutter

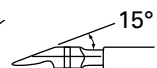
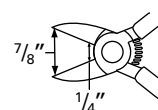
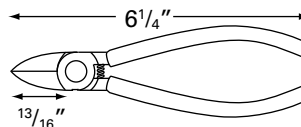
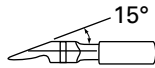
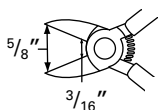
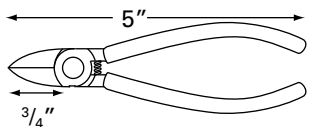
Part Number FF6A
Ref. Number PL560

4½ Oz. Wgt.

Low profile



Flat Face
for flush
cutting

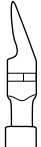


Standard Gatecutters

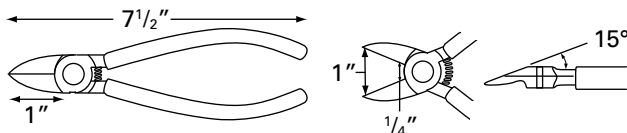


STANDARD GATE CUTTERS

7" Flat Faced Cutter
Part Number FF7A
Ref. Number PL570
7½ Oz. Wgt.



Flat Face
for flush
cutting



Holsters

Single and Double Clip-on Gate Cutter Holsters clip on plier sheath for gate cutters, knives, flashlights and more! Easily clips on top of pants. No belt required. Made of durable, lightweight, reinforced nylon. Made in USA.



C02
7" x 3" Single
Clip-on Holster



C013

C04
8" x 3" Double
Clip-on Holster

Gate Cutter Holsters with Security Flap

7" Universal Single Holder
 CO12 (not shown)
 Double Plier Holder
 CO13





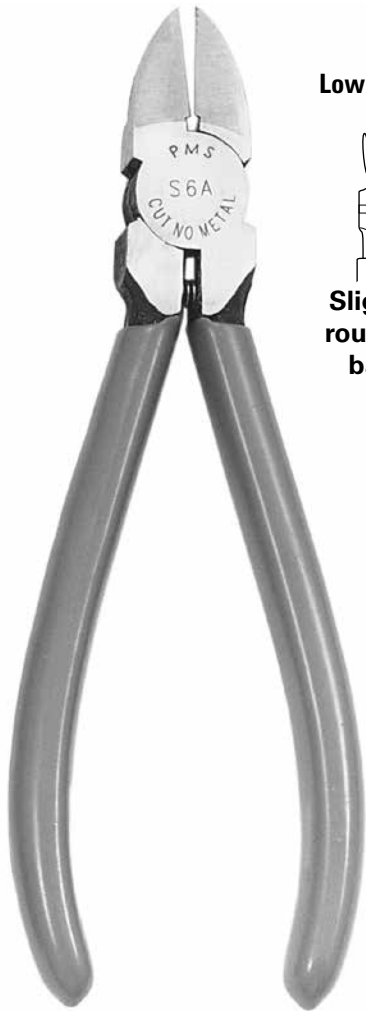
Standard Gatecutters

STANDARD GATE CUTTERS

6" Nipper (Rounded Back)

Part Number S6A

5 Oz. Wgt.



Low profile



Slightly rounded back



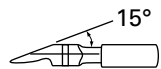
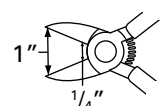
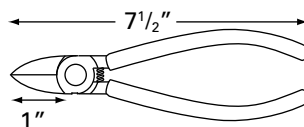
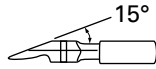
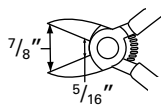
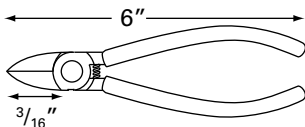
7" Nipper (Rounded Back)

Part Number S7A

7½ Oz. Wgt.



Slightly rounded back



Premium Gatecutters

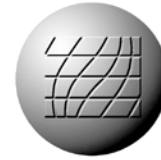


Flat Faced

4" Flat Faced Cutter
Part Number FF4 Ref. Number PL724
2½ Oz. Wgt.

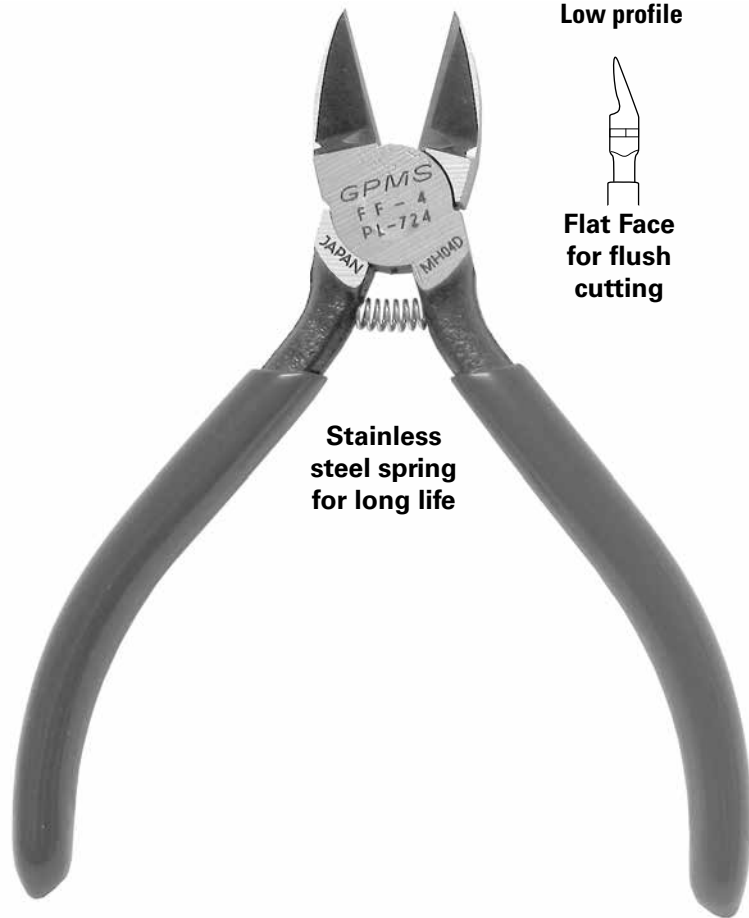
Spare springs PSPG2

PREMIUM GATE CUTTERS



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

- Precision-ground and hardened, ultra-sharp cutting blades
- Precision blades cut with a 'snap'
- Small size cutter - ideal for lightweight jobs and frequent use



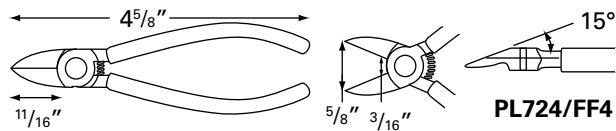
Low profile



Flat Face
for flush
cutting



Stainless
steel spring
for long life





Premium Gatecutters

5" Flat Faced



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

Special Plastic Cutting Pliers
Flat Back for flush cutting - top quality



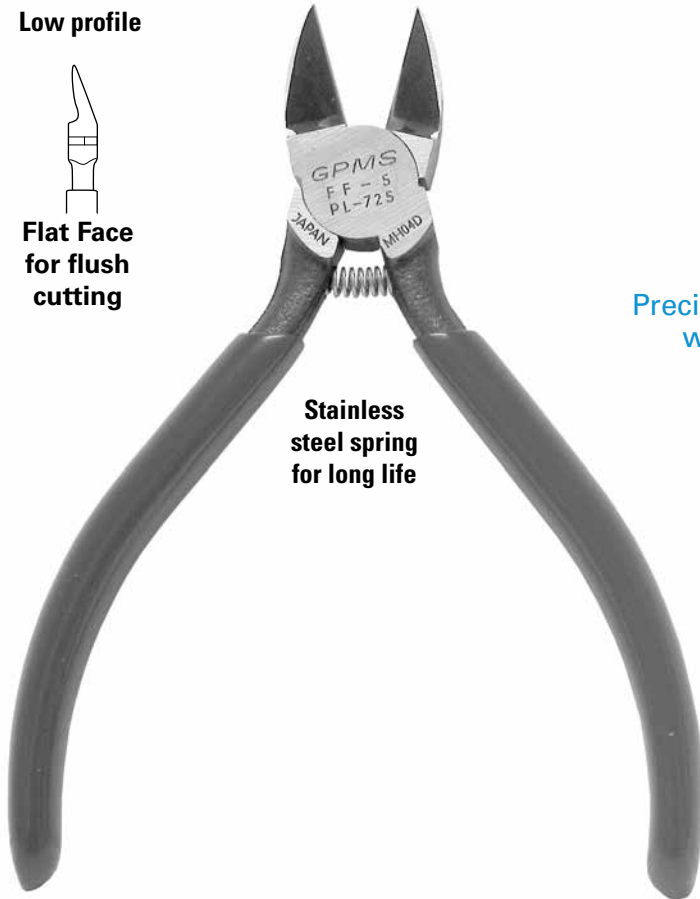
5" Flat Faced Cutter
Part Number FF5
Ref. Number PL725
3/4 Oz. Wgt.
<i>Spare springs PSPG2</i>

PREMIUM GATE CUTTERS

Low profile



**Flat Face
for flush
cutting**

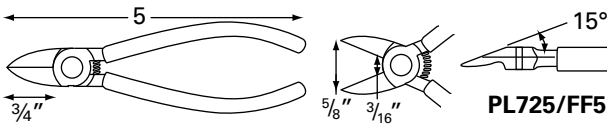


**Stainless
steel spring
for long life**

Precision blades cut
with a 'snap'



Made from our own dies
Best Quality!



Note: Repetitive hand action can lead to incidence of repetitive use syndrome (carpal tunnel). Ergonomic cutters shown on the following pages are recommended; however, operators should take frequent rests and use wrist support.

Premium Gatecutters

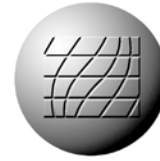


6" Flat Faced

Specially Designed for the Plastics Industry...

Our most popular model!

UNIQUE... made from our own dies and produced in large quantities, this flat-faced, flush-cutting plier is ideal for small to medium parts where much repetitious cutting is involved. Lightweight and good balance reduce operator fatigue without sacrificing quality..... AND the price is right!



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

6" Flat Faced Cutter

Part Number GR5

4 Oz. Wgt.

New Hardened Spring...

5 times longer life!!!

Years of research have produced this new spring... good for 100,000+ cuts vs. 20,000 average for most pliers.

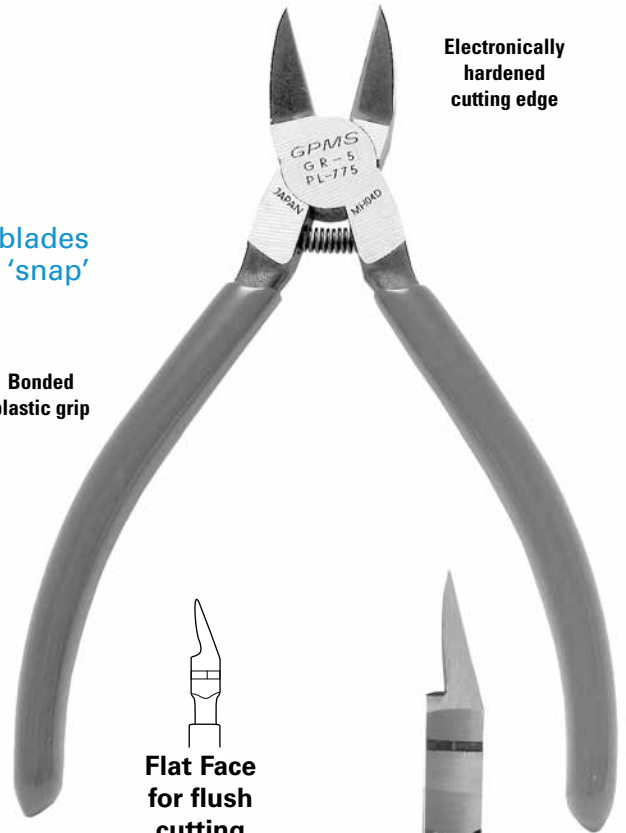


Lightweight (4 oz.)
+ perfect balance =
less operator fatigue

Precision blades
cut with a 'snap'

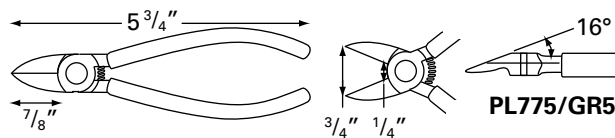
Bonded
plastic grip

Electronically
hardened
cutting edge



Flat Face
for flush
cutting

PREMIUM GATE CUTTERS



Note: Repetitive hand action can lead to incidence of repetitive use syndrome (carpal tunnel). Ergonomic cutters shown on the following pages are recommended; however, operators should take frequent rests and use wrist support. Spare springs PSPG2



Premium Gatecutters

6" Flat Faced



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

6" Flat Faced Cutter
Part Number FF6
Ref. Number PL726
4½ Oz. Wgt.

Spare springs PSPG2

Precision blades
cut with a 'snap'

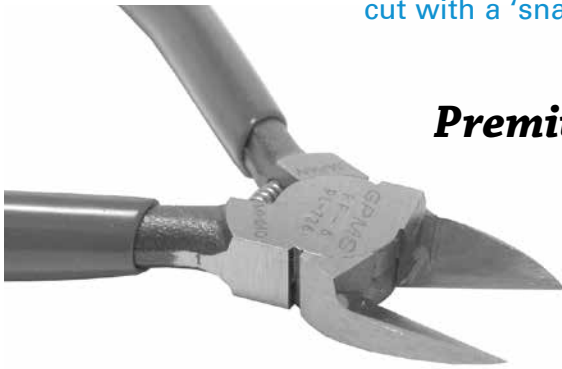
Special Plastic Cutting Pliers

Precision-ground and
hardened, ultra-sharp
cutting blades



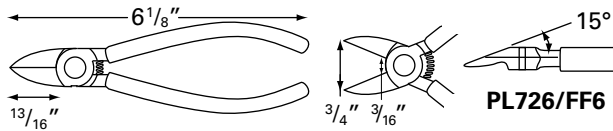
**Flat Face
for flush
cutting**

Premium Quality



**Stainless
steel spring
for long life**

**Flat Back for flush
cutting - top quality**



PREMIUM GATE CUTTERS



Low profile

**Made from our own dies
Best quality!**

Note: Repetitive hand action can lead to incidence of repetitive use syndrome (carpal tunnel). Ergonomic cutters shown on the following pages are recommended; however, operators should take frequent rests and use wrist support.

Premium Gatecutters



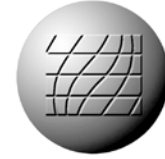
7" Flat Faced

7" Flat Faced Cutter

Part Number FF7
Ref. Number PL727

7½ Oz. Wgt.

Spare springs PSPG3



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

Special Plastic Cutting Pliers

Flat Back for flush cutting -
Top quality!



- Precision blades cut with a 'snap'

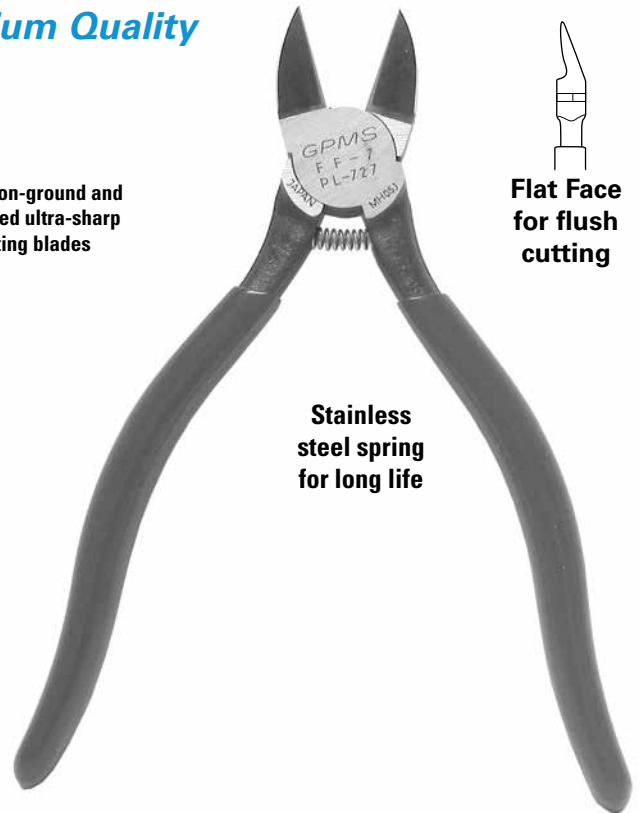
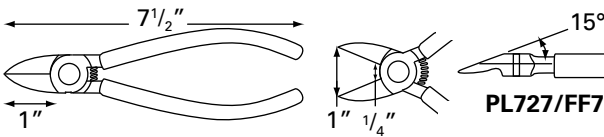
Premium Quality

Precision-ground and
hardened ultra-sharp
cutting blades



Low profile

Made from our own dies
Best Quality!



Flat Face
for flush
cutting

Stainless
steel spring
for long life



PREMIUM GATE CUTTERS



Premium Gatecutters

6" & 7" Flat-Faced Adjustable Stop

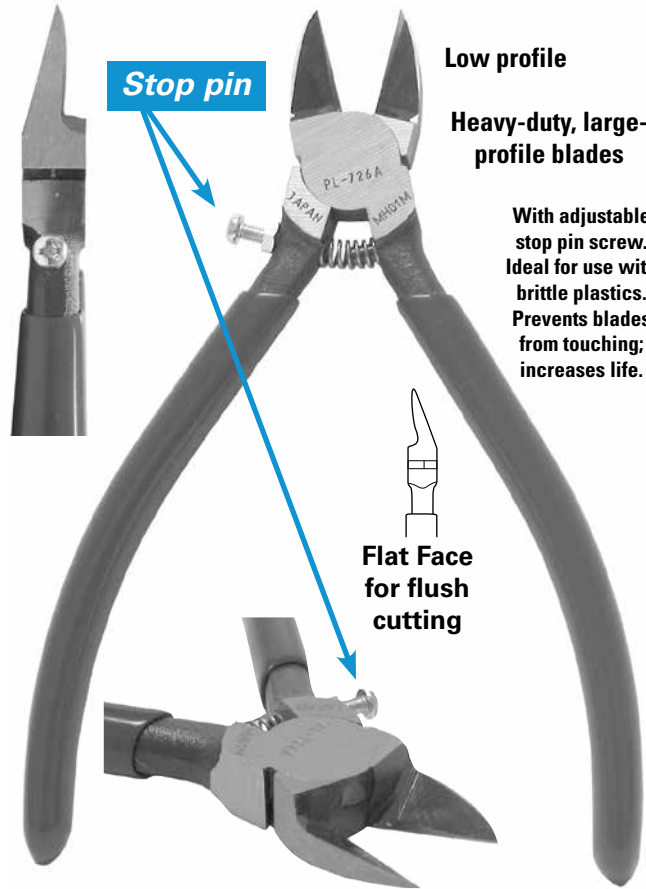


**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

6" Flat Faced Cutter
Part Number FF6P
Ref. Number PL726A
4⁵/₈ Oz. Wgt.

Spare springs PSPG3

Rugged Flatback Cutters or Heavy Sprues
With stop pin - prolongs blade life



Low profile

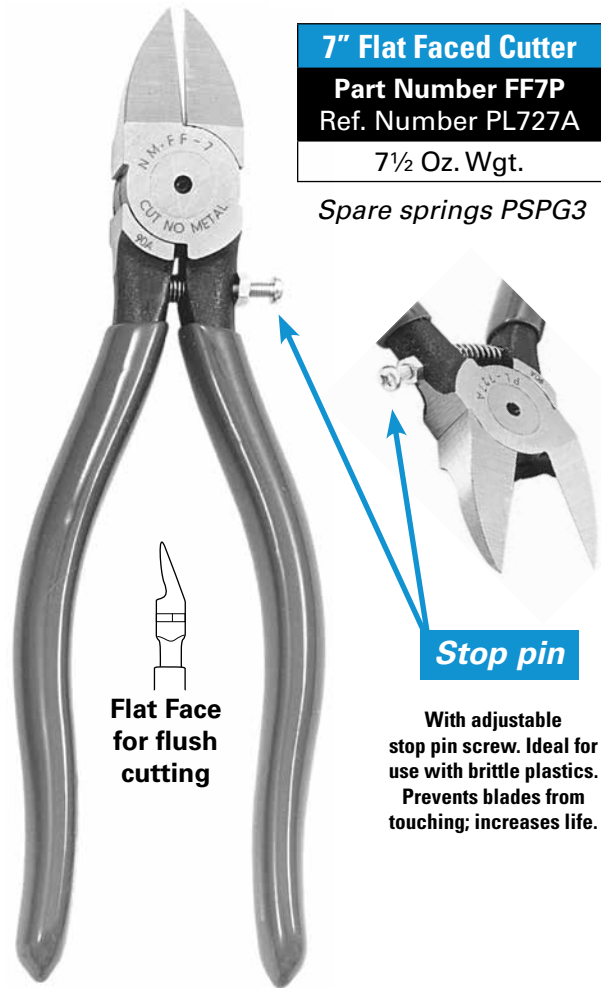
Heavy-duty, large-profile blades

With adjustable stop pin screw. Ideal for use with brittle plastics. Prevents blades from touching; increases life.

Flat Face for flush cutting

7" Flat Faced Cutter
Part Number FF7P
Ref. Number PL727A
7¹/₂ Oz. Wgt.

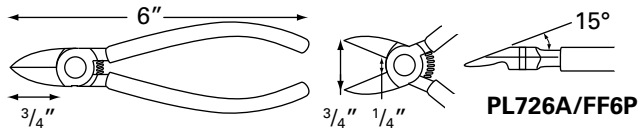
Spare springs PSPG3



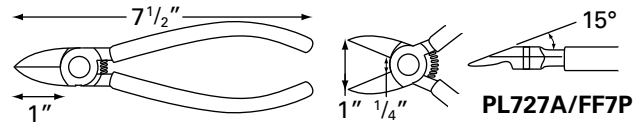
Stop pin

Flat Face for flush cutting

With adjustable stop pin screw. Ideal for use with brittle plastics. Prevents blades from touching; increases life.



PL726A/FF6P



PL727A/FF7P

PREMIUM GATE CUTTERS

Premium Gatecutters



8" Flat Faced

Special Plastic Cutting Pliers

Flat Back for flush cutting - top quality!

8" Flat Faced Cutter

Part Number FF8

11¼ Oz. Wgt.

Spare springs PSPG3



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

PREMIUM GATE CUTTERS



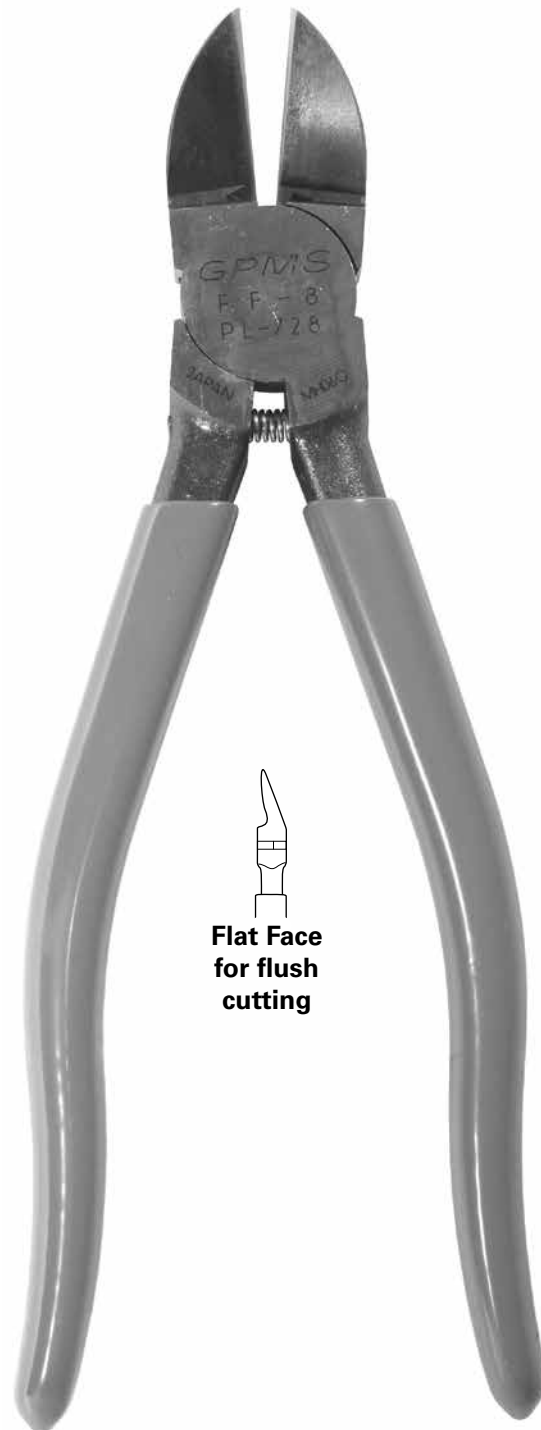
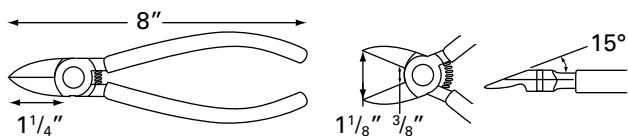
Precision blades cut with a 'snap'

Premium Quality

Precision-ground and hardened, ultra-sharp cutting blades



Made from our own dies
Best quality!



Flat Face for flush cutting





Premium Gatecutters

6" Flat Faced Ergonomic Cutters

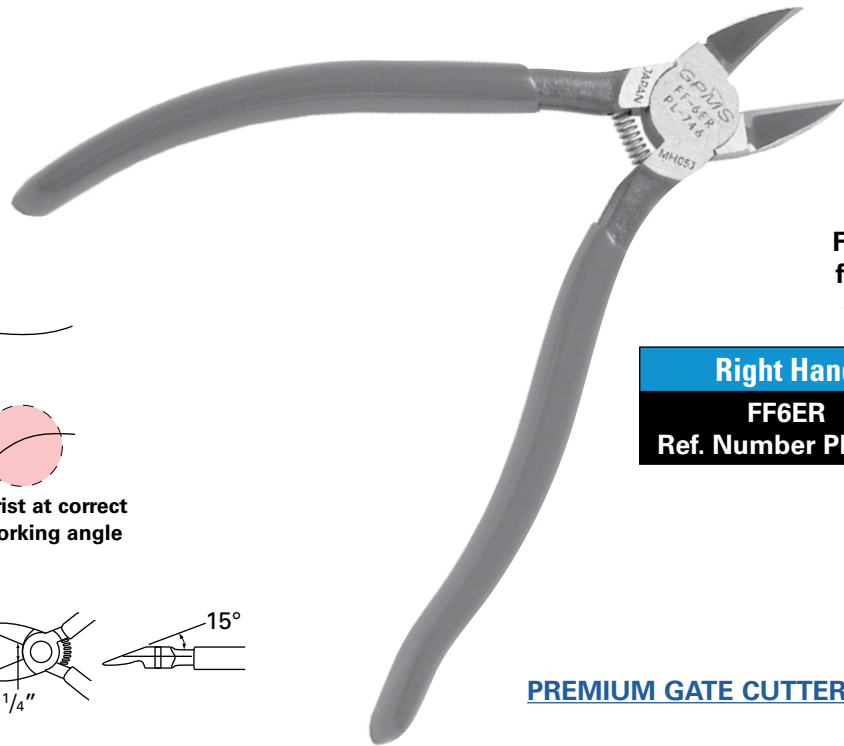
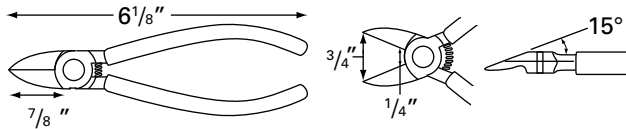


**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

Ergonomic cutters – Help prevent carpal tunnel syndrome

Left Hand
FF6EL
Ref. Number PL746L

Spare springs PSPG2



**Flat Face
for flush
cutting**

Right Hand
FF6ER
Ref. Number PL746R

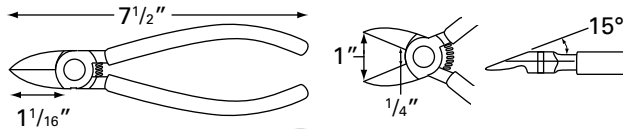
PREMIUM GATE CUTTERS

Premium Gatecutters

7" Flat Faced Ergonomic Cutters

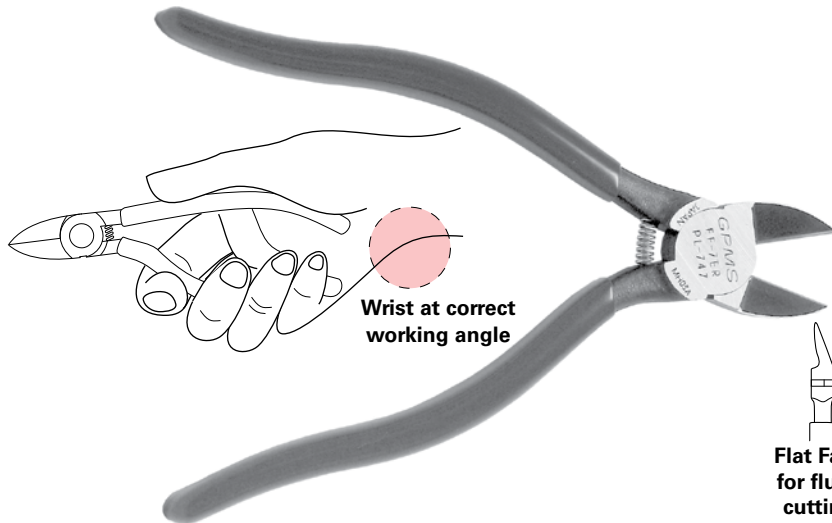
Ergonomic cutters – Ideal for repetitive jobs

Left Hand
FF7EL
Ref. Number PL747L



Right Hand
FF7ER
Ref. Number PL747R

Spare springs PSPG2



**Wrist at correct
working angle**



**Flat Face
for flush
cutting**

Premium Gatecutters



4" & 5" Nipper Type Cutters

4" Nipper (rounded back)

Part Number S4
Ref. Number PL714

2½ Oz. Wgt.

Spare springs PSPG2

Small but with strong head -
for limited access, tough cutting
jobs



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

Made from our own dies
Best quality!

5" Nipper (rounded back)

Part Number S5A

3¼ Oz. Wgt.

Spare springs PSPG4

**Premium
Quality**

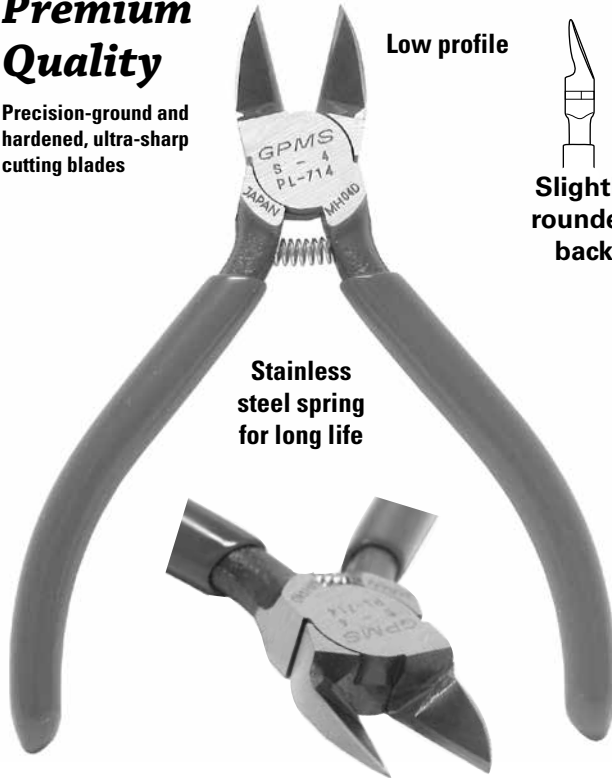
Precision-ground and
hardened, ultra-sharp
cutting blades

Precision blades
cut with a 'snap'

Low profile



Slightly
rounded
back



Stainless
steel spring
for long life

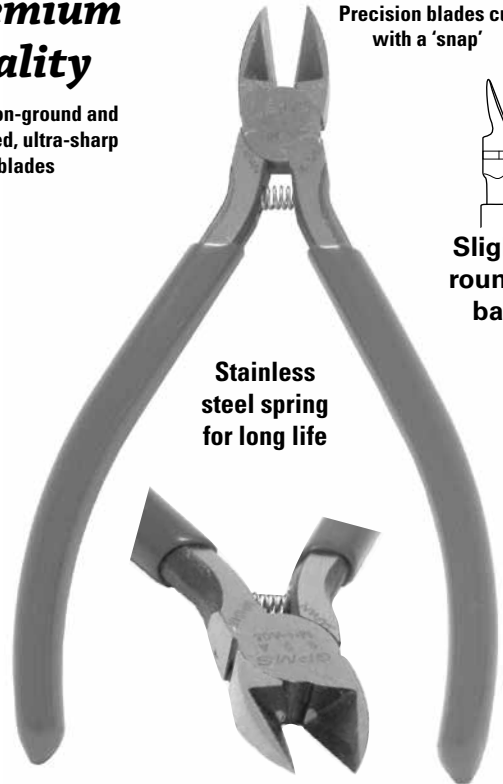
**Premium
Quality**

Precision-ground and
hardened, ultra-sharp
cutting blades

Precision blades cut
with a 'snap'

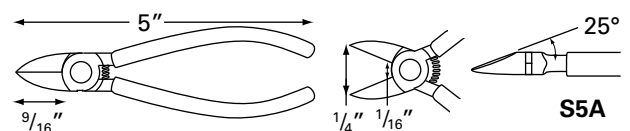
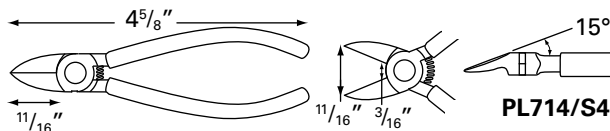


Slightly
rounded
back



Stainless
steel spring
for long life

PREMIUM GATE CUTTERS





Premium Gatecutters

5" & 6" Nipper Type Cutters



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

5" Nipper (rounded back)

Part Number S5
Ref. Number PL715

3/4 Oz. Wgt.

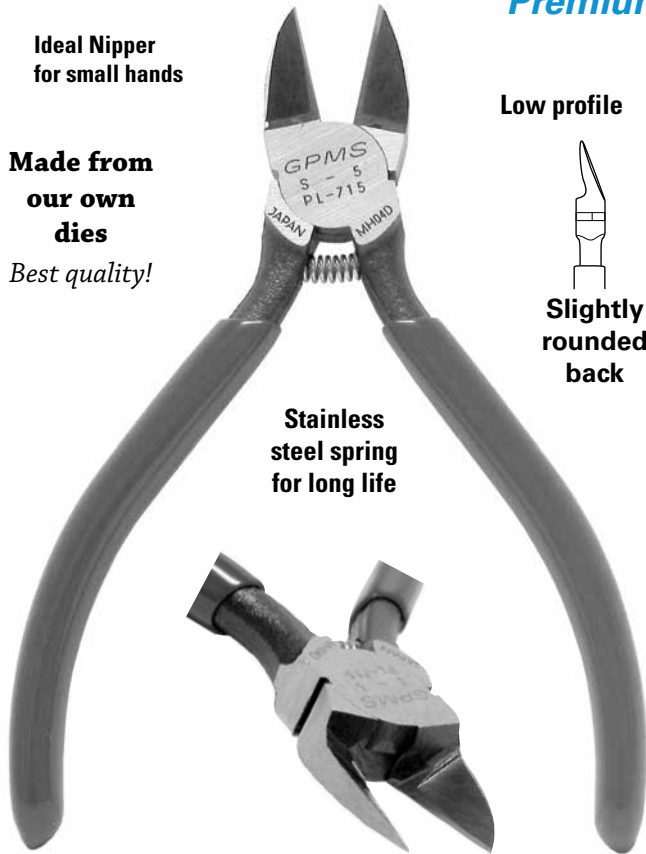
Spare springs PSPG2

Precision blades
cut with a 'snap'

Ideal Nipper
for small hands

**Made from
our own
dies**

Best quality!



**Stainless
steel spring
for long life**

**Thin Points - slightly rounded
back - flush cutting**

Premium Quality

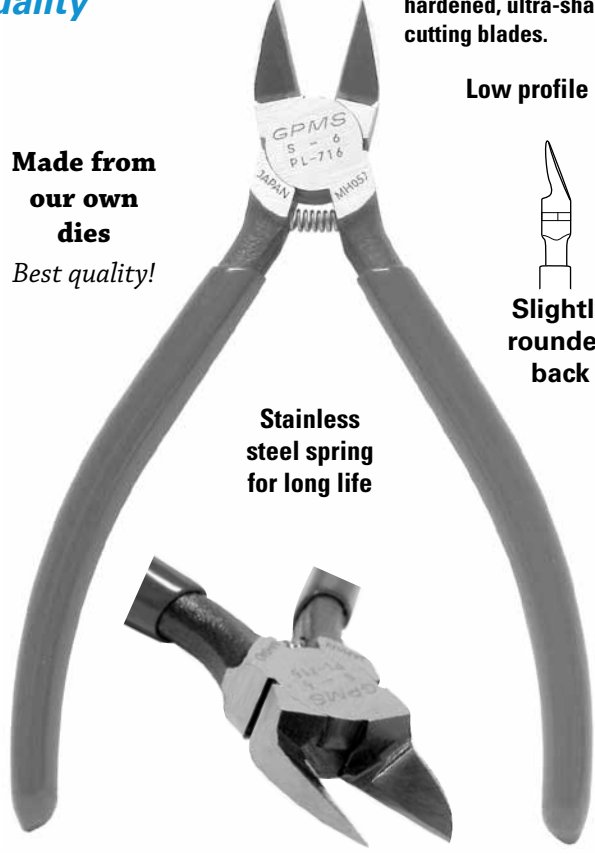
Low profile



Slightly
rounded
back

**Made from
our own
dies**

Best quality!



**Stainless
steel spring
for long life**

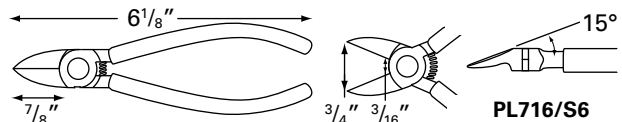
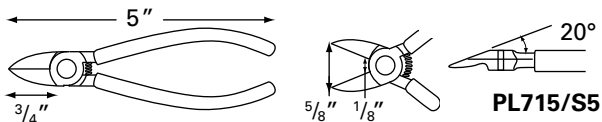
Precision-ground and
hardened, ultra-sharp
cutting blades.

Low profile



Slightly
rounded
back

PREMIUM GATE CUTTERS



Premium Gatecutters



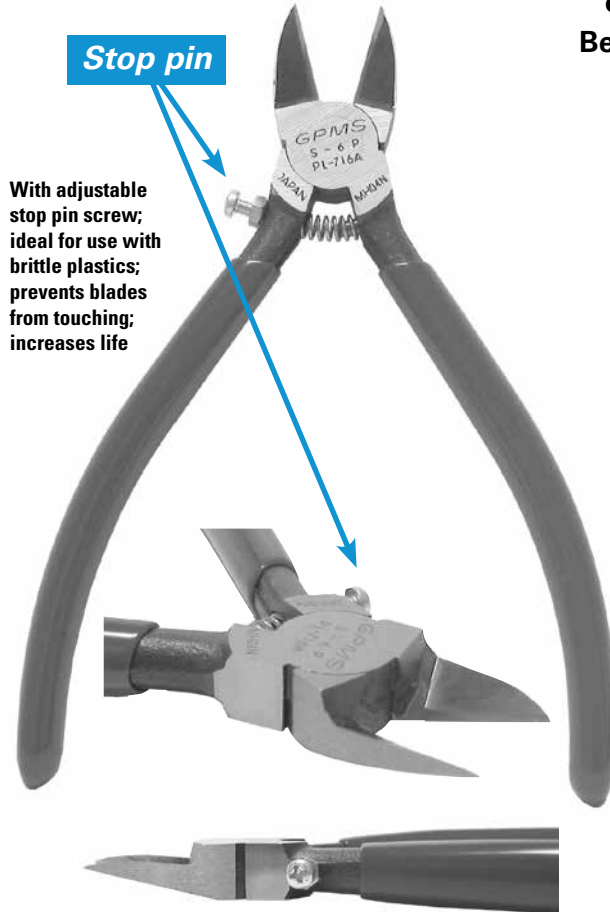
6" w/ Adjustable Stop & 7" Nipper Type Cutters

6" Nipper (rounded back)

Part Number S6P
Ref. Number PL716A

5 Oz. Wgt.

Spare springs PSPG3



Stop pin

With adjustable stop pin screw; ideal for use with brittle plastics; prevents blades from touching; increases life



GLOBAL PLASTIC MOULDING SUPPLIES

Made from our own dies
Best quality!



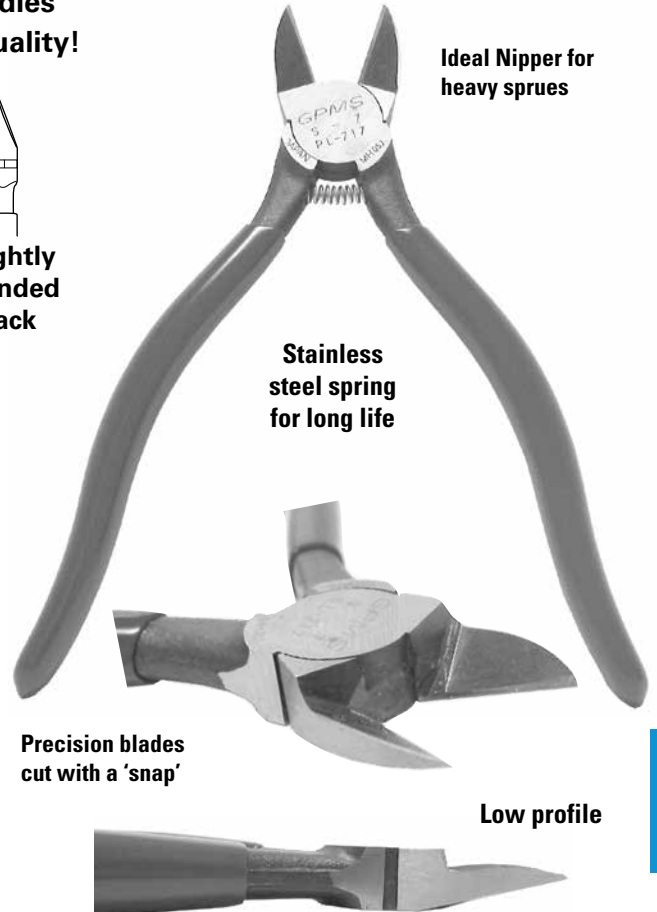
Slightly rounded back

7" Nipper (rounded back)

Part Number S7
Ref. Number PL717

7½ Oz. Wgt.

Spare springs PSPG3



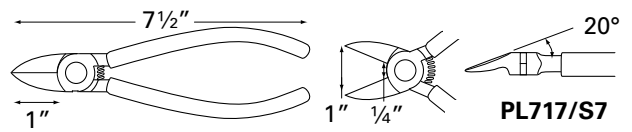
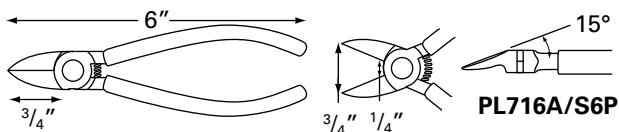
Ideal Nipper for heavy sprues

Stainless steel spring for long life

Precision blades cut with a 'snap'

Low profile

PREMIUM GATE CUTTERS





Premium Gatecutters

8" Nipper Type Cutters



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

Premium Quality

Special Plastic Cutting Pliers

Thin Points - slightly rounded back - flush cutting

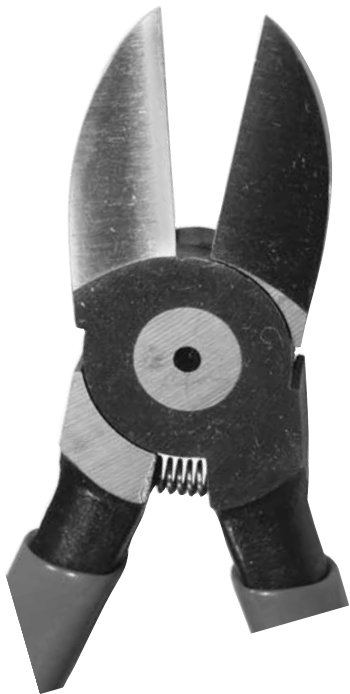
8" Nipper (rounded back)

Part Number S8

11¼ Oz. Wgt.

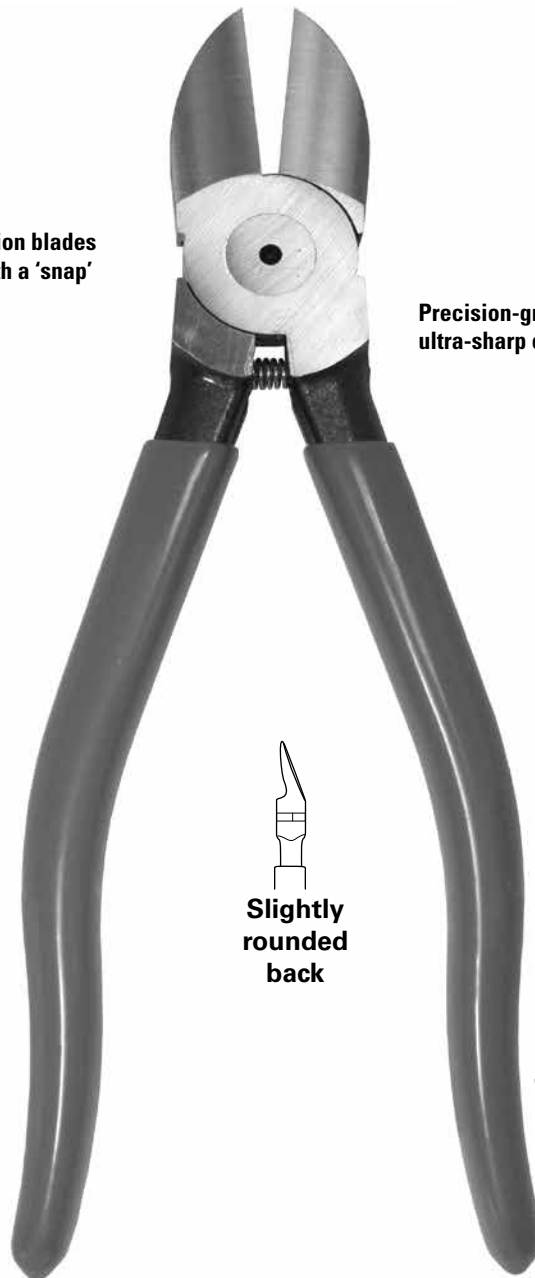
Spare springs PSPG3

Made from our own dies
Best quality!



Precision blades cut with a 'snap'

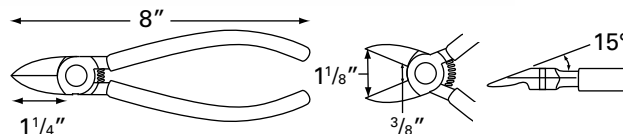
Precision-ground and hardened, ultra-sharp cutting blades




Slightly rounded back



PREMIUM GATE CUTTERS



Premium Gatecutters



45° Angle Cutters

Part Number GA5
Ref. Number PL756

4½ Oz. Wgt.

Spare springs PSPG2



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

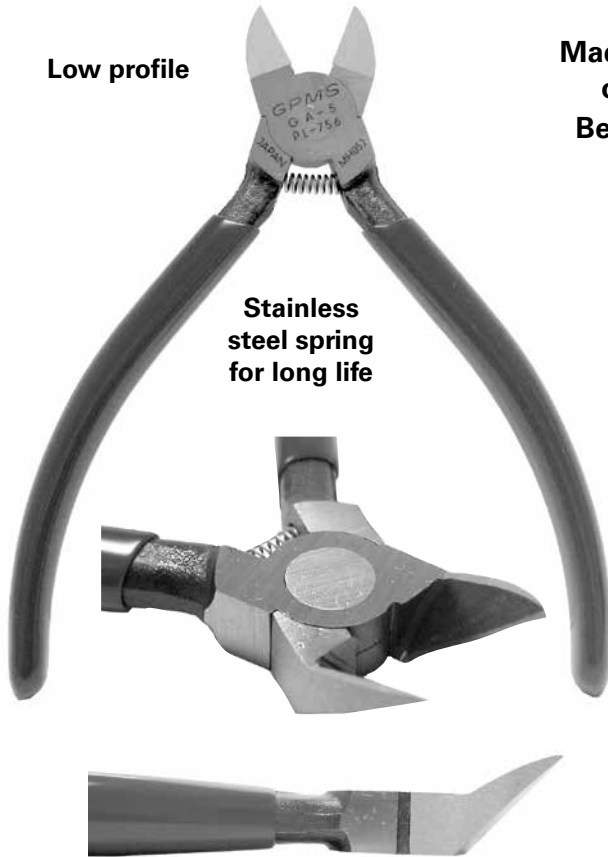
Part Number GA7
Ref. Number PL757

5½ Oz. Wgt.

Spare springs PSPG2

**Angled Cutters - Ideal for recessed
sprues**

Low profile



**Stainless
steel spring
for long life**

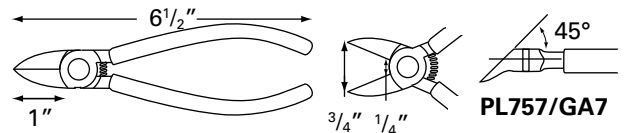
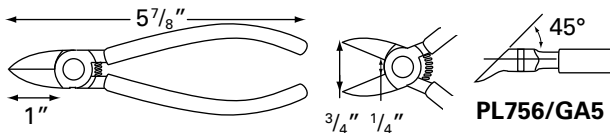
**Made from our
own dies
Best quality!**

Low profile



**Stainless
steel spring
for long life**

PREMIUM GATE CUTTERS





Premium Gatecutters

90° Angle Cutter



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

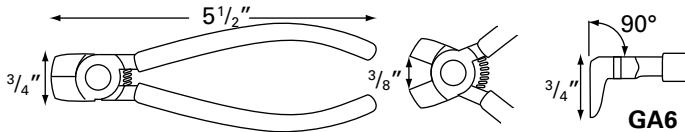
**Angled Cutters - Ideal
for recessed sprues**



Part Number GA6

7½ Oz. Wgt.

PREMIUM GATE CUTTERS



*Now available -
high-quality
precision 90° cutter
with standard lap
hinge*

Premium Gatecutters

6" Nipper Type Ergonomic Cutters

Left Hand

S6EL

Ref. Number PL736L

Right Hand

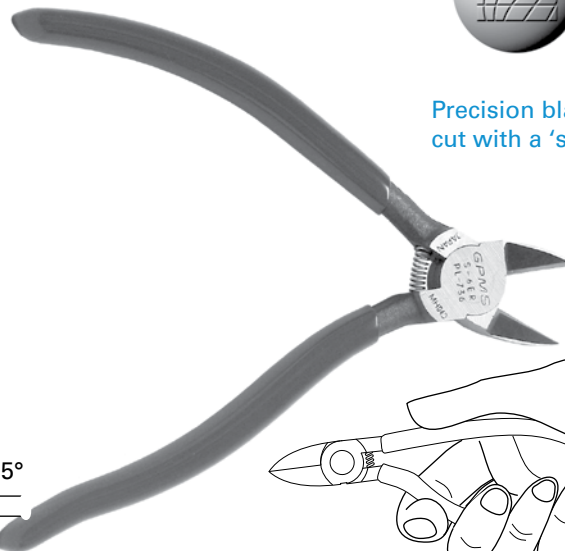
S6ER

Ref. Number PL736R

*Special curved handle shape reduces stress on
wrist - ideal for repetitive tasks*



**GLOBAL
PLASTIC
MOULDING
SUPPLIES**

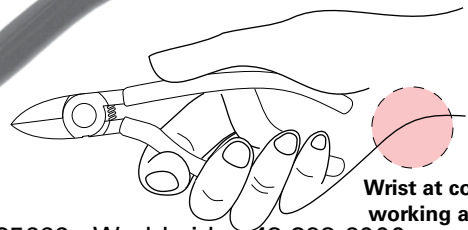
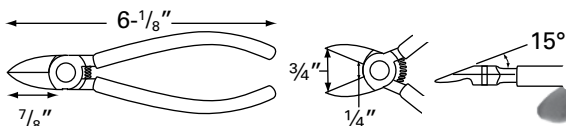


*Precision blades
cut with a 'snap'*



**Slightly
rounded
back**

Spare springs PSPG2



**Wrist at correct
working angle**

606 U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000

dme.net • store.dme.net

Premium Gatecutters

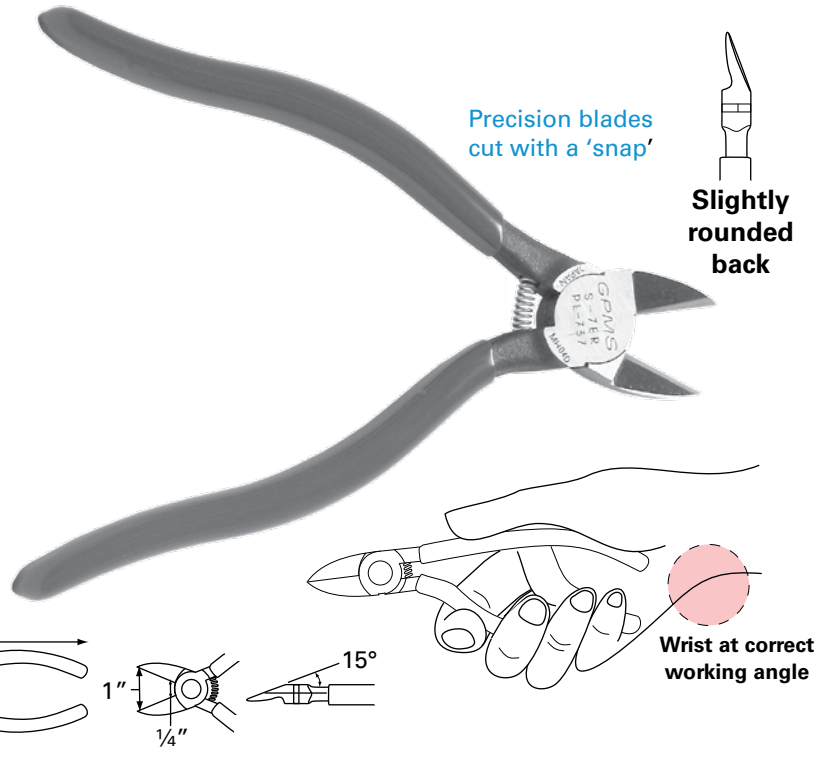


7" Nipper Type Ergonomic Cutters

Left Hand
S7EL
Ref. Number PL737L

Right Hand
S7ER
Ref. Number PL737R

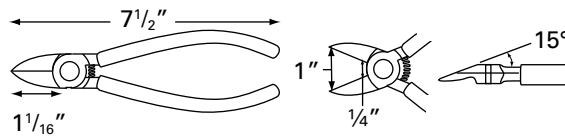
Spare springs PSPG2



Precision blades cut with a 'snap'

Slightly rounded back

PREMIUM GATE CUTTERS



Specialized Gatecutters

Convex, Concave

SPECIALIZED GATE CUTTERS

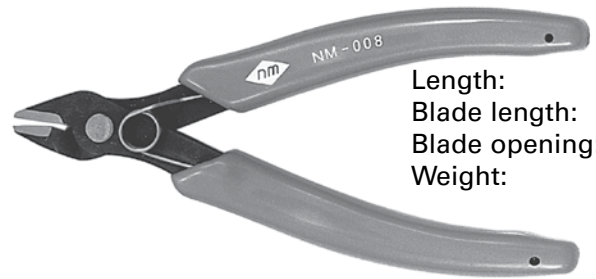
Mini Nippers

NM008

Spare springs PSPG6

Top Quality

Extremely sharp;
cuts with a "snap"; weighs just 2 oz.



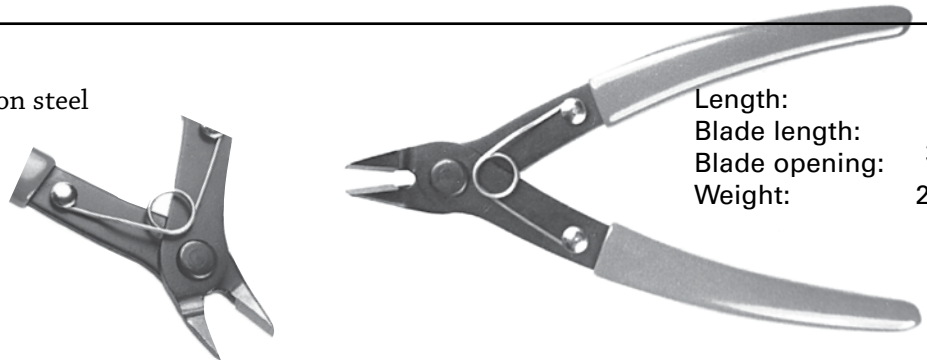
Length: 5"
Blade length: 1/2"
Blade opening: 1/2"
Weight: 2 oz.



Budget Model

Extremely sharp - high carbon steel

NM009



Length: 5"
Blade length: 1/2"
Blade opening: 3/8"
Weight: 2 oz.



Specialized Gatecutters

End Cutters

Length	4½"	5¾"
Cutting Length	3 mm	3 mm
Weight	2.1 oz.	3.8 oz.
Opening at Tip	⅜"	⅞"
Opening at Base	NA	NA
Part Number	24EF	25EF

Two sizes available

4½"
5¾"



SPECIALIZED GATE CUTTERS



6" Slightly Rounded Back

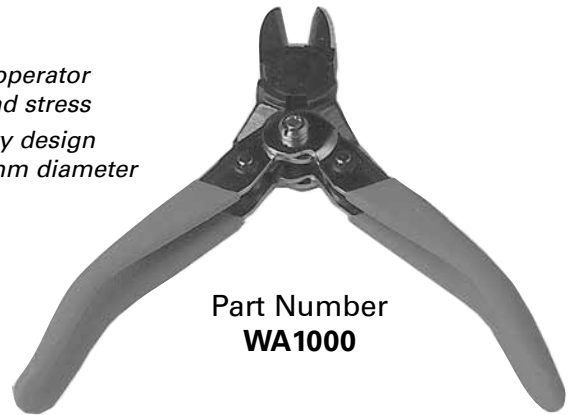


Blade length 1⅞"

Overall length: 6"
 Blade length: 1⅞"
 Cutting capacity 5 mm
 Opening at tip (max): ⅜"
 Opening at base (max): 1/8"
 Weight (oz) 5.5
 Weight (g) 140

Reduces operator fatigue and stress
Heavy-duty design cuts up to 5 mm diameter

Force Multiplying



Part Number
WA1000



This cutter fits in the palm of your hand; precise control and excellent for precision work

Part Number **CN5-51**

Part Number **CNF51**

Replacement blades only

Mini Cutters

Single and Double Clip-on Gate Cutter Holsters

Clip-on Plier Sheath for gate cutters, knives, flashlights and more! Easily clips on top of pants. No belt required. Made of durable, lightweight, reinforced nylon. Made in USA.

7" x 3" Single Clip-on Holster - C02

8" x 3" Double Clip-on Holster - C04

Gate Cutter Holsters (with security flap)

7" Universal Single Holder C012 (not shown)
 Double Plier Holder C013

Holsters



C02



C04



C013

**Lightweight and
silent in operation**^{File}



Applications

- Cutting auto-panel, baffles and members, etc.
- Cutting urethane bumpers
- Cutting mufflers and pipes
- Processing installation holes for bumpers, fog lamps, speakers, etc.
- Cutting holes in steel plates and finishing
- Finishing wooden or plastic products
- Cutting holes in plaster board for power receptacles
- Finishing dies
- Chamfering parts after machining
- Deburring diecastings

AIR FILE SAW

Part Number	Length	Wt.	Grip Size	Stroke	Speed (strokes per min)	Air Consumption	Cutting Capacity*	Blade/Files Included
AF5	158 mm	380 g	29 x 29 mm	5 mm	3,500	200/min	500 mm	(2) R0536 (1) AFF50 (1) AFR50 (1) AFT50
AF10	201 mm	750 g	39 x 37 mm	10 mm	5,500	280/min	1000 mm	(2) AF1032 (1) R1032 (1) AFF50 (1) AFR50 (1) AFT50

*Cutting capacity is measured by cutting a 1 mm thick iron plate in one minute.

Saw Blades - Replacement		
Part Number	Teeth Per Inch	Shape
SR1036	36	
R1010	10	
W1014	14	
R0536	36	
AF1032	32	
R1032	32	

Files - Replacement	
Part Number	Shape
AFF50	Flat
AFR50	Round
AFT50	Triangular



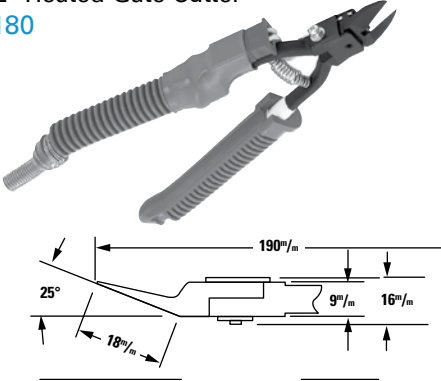


Heated Gate Cutters

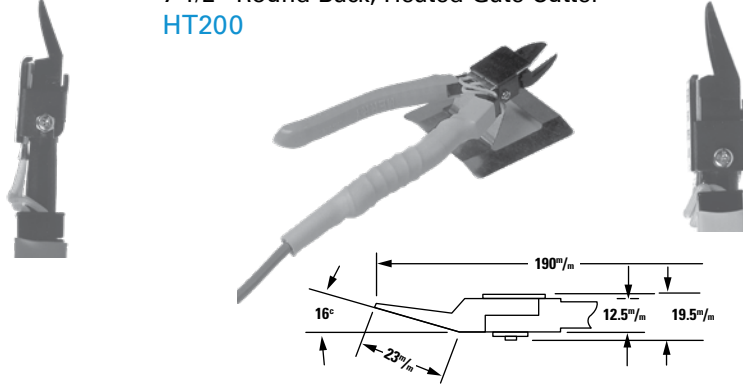
Handheld Series

HEATED GATE CUTTERS

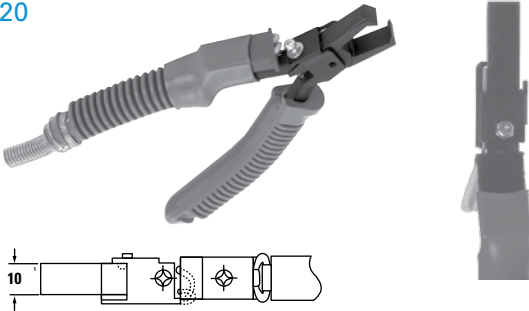
7-1/2" Heated Gate Cutter
HT180



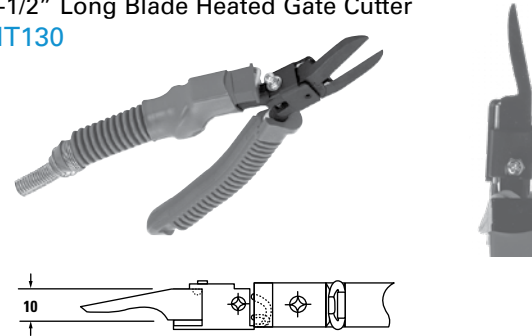
7-1/2" Round Back, Heated Gate Cutter
HT200



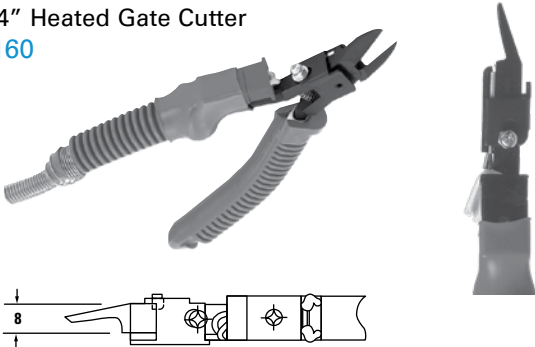
6" End Cutter Heated Gate Cutter
HT120



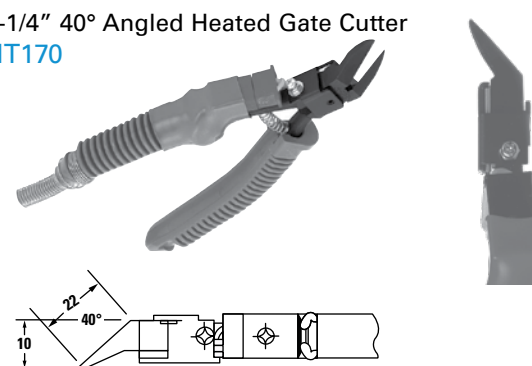
6-1/2" Long Blade Heated Gate Cutter
HT130



6-1/4" Heated Gate Cutter
HT160



6-1/4" 40° Angled Heated Gate Cutter
HT170



Specifications

Part No.	Cutting Capacity	Blade Type	OAL Inch	OAL mm	Blade Length	Weight oz	Weight g	Open @ Tip	Open @ Base	Max Blade Temp
HT180	4 mm	Rnd - 23°	7-1/2"	190	3/4"	10.2	290	1/2"	3/16"	160° C
HT200	7 mm	Rnd - 20°	7-1/2"	190	7/8"	13	370	1/2"	3/16"	170° C
HT120	4 mm	End Cut	6-1/4"	150	3/8"	9.5	270	5/16"	N/A	140° C
HT130	4 mm	Flat - 12°	6-1/2"	165	1-1/8"	9.5	270	7/16"	1/8"	140° C
HT160	4 mm	Rnd - 20°	6-3/8"	160	11/16"	9.0	255	5/16"	3/16"	160° C
HT170	4 mm	Flat - 40°	6-1/4"	150	15/16"	9.5	270	3/8"	3/16"	140° C

Please note if heated nippers are left connected to a transformer whose power is left on the blade tips will remain hot. The power will stay ON and the cutters will not turn OFF automatically. Power to the cutters must be manually turned off in this instance.

Accessories (for Heated Cutters)



ACCESSORIES

TRF25-100V

Controller for AH & HT Series Cutters



W19

19 Watt Heater for HT120 to HT180



W29

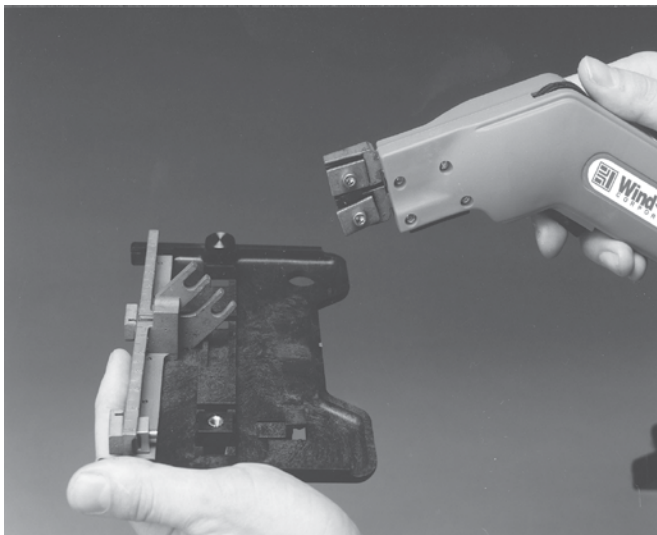
29 Watt Heater for HT200



Quick Cut Hot Knife Kit

The groove sled attachment holds shaped blades up to 6" wide and 3" deep. A straight edge can be attached for perfectly straight cutting.

SLED6



Buy the kit and save!

- QC hot knife
- 6" sled
- 4" straight blade
- 2 pc.—12" flat blades
- Pro GateMouth® Jr. canvas bag

[QCKIT](#)



Pneumatic Cutters

Handheld or Bracket Mounted

PNEUMATIC CUTTERS

MP35A

990 lbs. cutting power!
(Blade sold separately)

Length	12"
Weight	36 oz.
Diameter	2- ³ / ₁₆ "
Cutting Pressure	990 lbs.
Air Pressure	72~87 PSI



Blade (for MP35A)

F9P*

MR30A

615 lbs. cutting power!
(Blade sold separately)

Length	9- ³ / ₄ "
Weight	18 oz.
Diameter	2- ¹ / ₈ "
Cutting Pressure	615 lbs.
Air Pressure	72~87 PSI



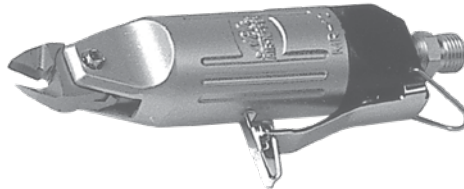
Blade (for MP30A)

F9P*

MR10

130 lbs. cutting power!
(Blade sold separately)

Length	5- ⁵ / ₈ "
Weight	7 oz.
Diameter	1- ³ / ₈ "
Cutting Pressure	130 lbs.
Air Pressure	58~72 PSI



Blade (for MR10)

F3

MR3

130 lbs. cutting power!
(Blade sold separately)

Length	5"
Weight	3 oz.
Diameter	³ / ₄ "
Cutting Pressure	59 lbs.
Air Pressure	58~72 PSI



Blade (for MR3)

F10

Check out Page 662 for Mounting Brackets!

*Different sizes of blades available for these particular models! Check out page 664

All cutters have ¹/₄" male NPT fittings.

Helicol-Combi® Tool Balancing



Applications:

Balancing and supplying portable pneumatic tools.

- On pre-assembly and assembly workstations
- On spot-welding and riveting stations
- On packaging lines: staplers, hoop cutters, nailing heads

2 functions: balancing and supplying the compressed air in one single integrated vertically suspended apparatus.

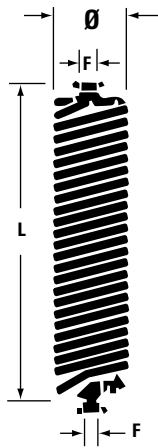
Fitted with a robust safety chain which prevents the spring from being strained, and a safe platform for suspension of larger air-driven tools.

Installation:

- Determine the attachment point for your balancing unit after having mounted the air-driven tool on the free end. To obtain the effective height
- Attach the balancing unit to a bracket; Helicol-Combi® can be attached in a number of ways: by direct thread, with quick-release connectors, flexible hose, or chain type suspension

Construction:

- Hose in special light-protected blue color Polyamid 12
- Model HEC 50 is fitted with the SL type safety chain



	For tools up to 4.5 lbs.	For tools from 4.5 to 11 lbs.
Tube Ø	1/4"	3/8"
L	10"	15"
Max. Extension	40"	70"
Thread F	1/4"	3/8"
Coil Ø	3-1/8"	4"
Part Numbers	HEC2002	HEC5002





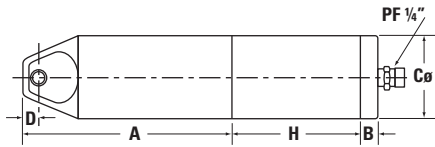
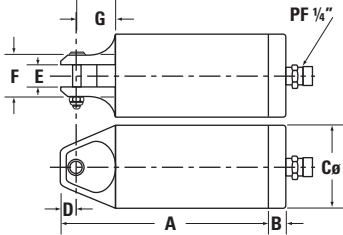
Fixture Mount Cutters

Non-Valved

FIXTURE MOUNT CUTTERS

MP25AM

Rounded Body Fixture Cutter
444 lbs. cutting power (without blade)



Blade (for both MP25AM & MP20M)

FD5

Note: See page 664 for different sizes of blades available for these cutters!

MR20M

Rounded Body Fixture Cutter
311 lbs. cutting power (without blade)

	Dimensions (mm)								Body Diameter	OAL Inch	Weight oz	Max PSI	Cutting Power
	A	B	C	D	E	F	G	H					
MR20M	109	12	45	9	12	23	22	-	1-3/4"	5-3/8"	8.8	85	311 lbs.
MR25AM	109	12	45	0	12	23	22	87	1-3/4"	9-5/16"	16.3	85	444 lbs.

Mounting Brackets & Foot Valve

MOUNTING BRACKETS & FOOT VALVE



Type A

Mounting Bracket for MR-3 and MR-10 (dia. range = 1 13/16" ~ 1 23/32")



Type B

Mounting Bracket for MR-30A, MP25AM, MP20M (dia. range = 2 7/32" ~ 1 29/32")



FB70S

Foot Valve with Guard
For all pneumatic cutters with two 1/4" NPT fittings

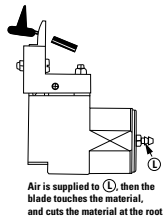
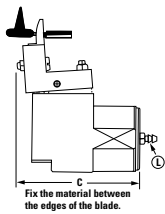
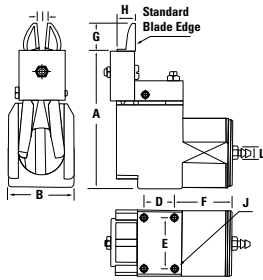
All bracket bases = 4" x 4" OAL=6"

Slide & Cut Power Units



"MG" Series

SLIDE & POWER CUT UNITS



MG20SPC

6mm cutting capacity;
308 lbs. cutting power!

(without blade)

Blade (for **MG20SPC**)
Part Number FG5

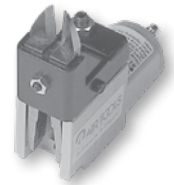


MG10SPC

4mm cutting capacity;
132 lbs. cutting power!

(without blade)

Blade (for **MG10SPC**)
Part Number FG3



MG3SPC

2mm cutting capacity;
110 lbs. cutting power!

(without blade)

Blade (for **MG3SPC**)
Part Number FG10

Part Number	Dimensions (mm)											Cutting Capacity	Weight (w/o Blade)	PSI Req'd	Air Consumption
	A	B	C	D	E	F	G	H	I	J	L				
MG3SPC	50	20	60	16	14	25	15	7	4	M3	ø4	2mm	2.8 oz.	70	1.3 cu. in./stroke
MG10SPC	73	35	73	20	27	29	17.5	9	7	M3	ø4	4mm	8.1 oz.	70	3.6 cu. in./stroke
MG20SPC	95	46	89	21	36	39	19	12	8	M4	ø4	6mm	14.8 oz.	85	5.5 cu. in./stroke

Slide & Cut Power Units

"ME" Series

ME5

1.2mm cutting capacity;
66 lbs. cutting power!

(without blade)

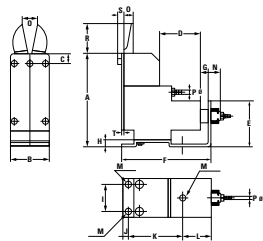
Blade (for **ME5**)
Part Number F1E

ME10

2.5mm cutting capacity;
121 lbs. cutting power!

(without blade)

Blade (for **ME10**)
Part Number F3E

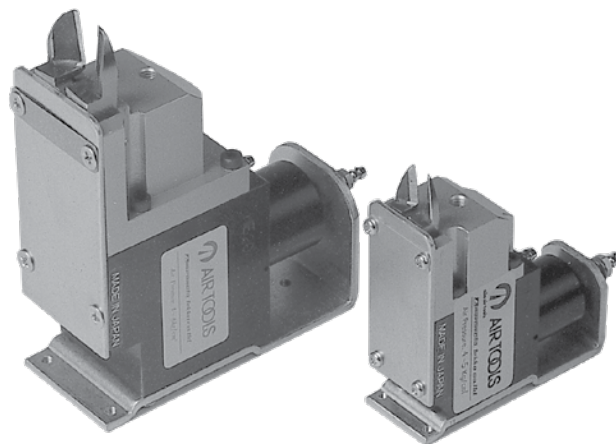


ME20

4.5mm cutting capacity;
132 lbs. cutting power!

(without blade)

Blade (for **ME20**)
Part Number F5E



See following page for more details on replacement blades!

Part Number	Dimensions (mm)											Cutting Capacity	Weight (w/o Blade)	Max. PSI	Air Consumption
	A	B	C	D	E	F	G	H	I	J	L				
ME5	75.2	29	31.2	77.2	22	5	50	22.2	M3	ø4	21	1.2mm	2.8 oz.	70 PSI	2.4 cu. in./stroke
ME10	97.2	35	42.2	88.2	26	5	50	33.2	M3	ø4	21	2.5mm	8.1 oz.	70 PSI	5.5 cu. in./stroke
ME20	111.2	44	48.2	103.2	34	5	85	13.2	M4	ø4	27	4.5mm	14.8 oz.	85 PSI	9.2 cu. in./stroke

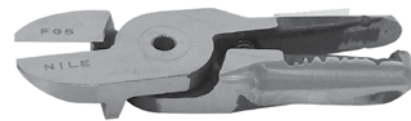




Replacement Blades

REPLACEMENT BLADES

Blade Number	Fits Cutters Number	Open @ Base	Open @ Tip	Blade Length	Blade Type
F10	MR3	0.0615"	0.1015"	0.5865"	Rounded
F3	MR10	0.1155"	0.1895"	0.5920"	Rounded
F3	MS10V	0.1190"	0.1995"	0.5920"	Rounded
F9P	MR30A	0.2950"	0.5790"	1.9430"	Rounded
F9P	MP35A	0.2690"	0.5505"	1.9430"	Rounded
F9P	MS30V	-	-	1.9430"	Rounded
FD9P	MR30A	0.3520"	0.5545"	1.7065"	Rounded
FD9P	MP35A	0.3410"	0.5515"	1.7065"	Rounded
FD9P	MS30V	-	-	1.7065"	Rounded
FG10	MG3	0.7400"	0.1500"	0.5885"	Flat
FG3	MG10	0.1585"	0.2955"	0.5570"	Flat
FG5	MG20	0.1980"	0.3650"	0.7960"	Flat
F1E	ME5	0.1170"	0.2295"	0.5370"	Flat
F3EA	ME10	0.15555"	0.2945"	0.5500"	Flat
F5E	ME20	0.1975"	0.3765"	0.7625"	Flat
F5	MR20M	0.2665"	0.4525"	0.8235"	Rounded
F5	MP25AM	0.2725"	0.4525"	0.8235"	Rounded
F5	MS20V	0.2455"	0.4090"	0.8235"	Rounded
FD5	MR20M	0.2780"	0.3910"	0.8870"	Rounded
FD5	MP25AM	0.2835"	0.4075"	0.8870"	Rounded
FD5	MS20V	0.2785"	0.3940"	0.8870"	Rounded



Part No. FG5



Part No. F1E



Part No. F3EA



Part No. F10



Part No. FD9P



Part No. F5E



Part No. F3



Part No. FG10



Part No. F5



Part No. F9P



Part No. FG3



Part No. FD5

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Purging Compound

FRESH START

When you need more than just another purging compound.

Fresh Start Purging Solutions are a patented, revolutionary, all-purpose purging compounds which are intended to cover the needs of the plastic industry. The MC-2 and GP solutions are only two in a series of innovative and ground breaking purges designed for the removal of unwanted pigments, polymers and contaminants without leaving residue. Designed for quick color change and formulated for ease of use.

Safe, non-abrasive, non-hazardous purging solution developed around General Recognized As Safe (GRAS) ingredients under FDA 21 CFR.

MC-2™ - FRESH START PURGING SOLUTION™

MC-2 is a proprietary solution for mechanical purge applications where hybrid / chemical purges are not preferred.

- Designed for quick color changes
- Specifically formulated for cleaning manifolds, hot runners and other channels with tight clearance

PART NUMBER	DESCRIPTION
MC2A55	MC2-A PE BASED 55LBS - MECHANICAL
MC2A1320	MC2-A PE BASED 1320LBS - MECHANICAL

GP-HYBRID FRESH START PURGING SOLUTION™

GP Hybrid is a patented pending mechanical / chemical purging solution designed for cleaning out Engineering resins in difficult situations.

- Ideal for quick color changes overs, particular liquid pigment dispersions, dyes and engineered resins
- Not recommended for POM resins

**Note: Acetal materials are not compatible with Fresh Start Purging Solution GP-Hybrid™. Fresh Start Purging Solution MC-2™ is recommended for this purpose .*

PART NUMBER	DESCRIPTION
GPA55	GP-A PE BASED 55LBS - HYBRID CHEMICAL/MECHANICAL
GPA1320	GP-A PE BASED 1320LBS - HYBRID CHEMICAL/MECHANICAL

Applications:	Injection- cold and hot runners, blow molding Extrusion- profile, sheet, cast film, compounding, blow film
Temperature Range:	350° F- 625° F (177° C- 329° C)
Types of Resins:	All types
Minimum Clearance:	.010 inch or 254µm (microns)

Process		Grades	
		GP Hybrid	MC-2
Injection Molding	Hot Runner Systems	•	•
	Cold Runner/Conventional	•	•
Other Processes	Blow Molding	•	•
	Compounding	•	•
Extrusion	Blown Film	•	•
	Cast Film	•	•
	Sheet	•	•
	Profile	•	•
Processing Temp.	Low (°F)	350	350
	High (°F)	625	625
	Low (°C)	177	177
	High (°C)	329	329



General usage guidelines:

For initial use- Multiply machine tonnage by 8 and divide by 454 grams. For regular usage- Multiply machine tonnage by 6 and divide by 454 grams.

618 U.S. 800-626-6653 • Canada 800-387-6600 • Mexico 52-442-7135666 • Worldwide 248-398-6000

dme.net • store.dme.net

Purging Compound



Purging Compound



**COMPLETE PURGING THROUGH REACTIVE CHEMISTRY.
NO NEED FOR MULTIPLE PURGING PRODUCTS.
TEMPERATURE RANGE OF 160°-600°F.
READY TO USE - NO MIXING. FDA COMPLIANT.
USE WITH MOST RESINS. NOT FOR USE WITH ACETAL OR DELRIN.**

45105	5 lb. Jug
4511300	1300 lb. Gaylord

[NPT](#)

The most effective new purging technology developed in decades, Slide NPT Nu Purge eliminates the need for multiple purging products since it effectively operates at temperature ranges from 160-600°F. It removes all traces of barrel residue in any plastics processing application in less time and for less cost.

Slide NPT Nu Purge solves the major problem of removing stubborn residue between color or resin changes. The most effective new purging technology developed in decades, Slide NPT Nu Purge consists of concentrated purge pellets that react chemically to heat, quickly and effectively cleaning machinery without extra soak time, excess downtime or lost productivity. The resulting purge is so effective that even resin deposits accumulated over long periods are often removed the first time Slide NPT Nu Purge is used.

Easy to use, Slide NPT Nu Purge requires no mixing or preparation time, shortening the clean-up cycle. Just pour the recommended amount directly into the throat of the machine. Slide NPT Nu Purge is so concentrated that less compound - up to one-half the amount of cracked acrylic - is needed for a complete purge. Slide NPT Nu Purge is non-hazardous, FDA compliant and free of harsh odors.



P.D.Q. Concentrate

Concentrated Liquid Purging Compound

Heat stable. Non-toxic. Non-corrosive. Non-flammable. Almost odorless. Use with carrier resin for the removal of all thermoplastics - resin to resin and color to color. Purge quickly, easily, safely and at a fraction of the cost of conventional purges - injection, extrusion or blow molding. Requires no soaking. No need to keep cracked acrylic purging resin inventory. Unique self-measuring bottle "meters out" just the right amount with little waste. Net 32 fl. oz.

Bottle
43432

[PDQ](#)

P.D.Q. Ready-To-Use Packets

Liquid Purging Compound

No mixing required. Non-flammable. Almost odorless. Purging doesn't get any easier than this. Just toss bag in hopper, that's all there is to it. P.D.Q. liquid purging

compound is the no soak, no mess, no waste, easy-to-store purge solution. P.D.Q. works in the carrier resin, saving time and money. Just one product works on all resin temperatures.

Box
43401





Purging Compound



800 ml bottle

Powerful Overall Cleaner

When changing your molding machine to run a different material and/or switching the color of the mixture, you need a purging compound that will not only remove all traces of the previous mix, including degraded material from the screw and barrel, but accomplish this with as little downtime as possible. CORATEX® Liquid Purging Compound cleans the entire plasticator, mixed with a minimum amount of plasticizing material.

It can be used immediately after the molding process to avoid costly delays in production. It will clean not only the pigments and plastic residue from the barrel and screw but, when used without a carrier, is also an excellent polishing medium for removing oxidation from metal. CORATEX® contains approximately 30% solvents so should not be used near food or food preparation equipment or be allowed to drain into ground water.

It is not water soluble, has a slight odor of ammonia and is barely, not explosively, flammable.

Coratex®
Part Number CPC1

[CORATEX](#)

Typical mixing ratios of Coratex® purging emulsion to pellets - example: when purging polyethylene, mix 1 part Coratex® with 100 parts pellets, by weight.

Mixing Ratio	
Material	Coratex: Pellets
ABS	1:50
Nylon	1:20
Polyethylene (HD & LD)	1:100
Polypropylene	1:50
PVC	1:30
Styrene	1:30

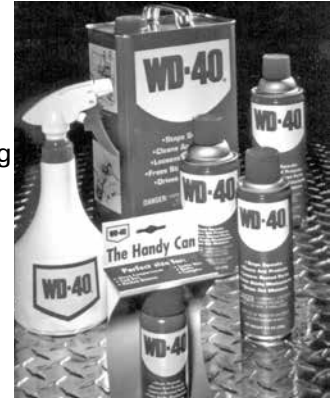
Displaces Moisture. WD-40 is formulated for ultra-high surface attraction to metal. It completely covers surfaces, including microscopic irregularities, even in the presence of moisture. WD-40 is a non-conductor of electricity and quickly eliminates moisture-induced short circuits.

Penetrates. WD-40's ultra-high surface attraction results in a super-penetrating action that loosens rust-to-metal bonds and frees stuck, frozen or rusted metal parts.

Protects. WD-40 deposits corrosion-resistant ingredients over the entire surface area, including microscopic irregularities. This protective barrier shields against moisture and other corrosive elements.

Cleans. WD-40's ultra-high surface attraction enables it to get under dirt, grime, caked grease, and oil to clean the surface at the same time it forms a corrosion-resistant barrier.

Lubricates. WD-40's ultra-high surface attraction assures the lubricating ingredients in WD-40 will be widely dispersed and tenaciously held to all moving parts.



Smart Straw Aerosol

Protect, clean and lubricate thousands upon thousands of items - without ever losing the straw again! The new WD-40® Smart Straw Aerosol features a permanently attached straw that sprays two ways. Flip it up for a precision stream and down for regular spray action.

This new design allows for one-handed application and puts an exciting new twist on this true American original.

Part Number	Description
WD40-12	12 oz. Smart Straw
WD40-1G	1 gallon can
WD40-5G	5 gallon can

[WD-40](#)





Compressed Air Sprayers



“The sensible alternative to aerosols”

- Ideal for our bulk mold sprays
- Uses compressed air as propellant
- No CFCs, Freon or disposal
- Completely reusable & refillable
- 5 models to suit your needs
- Choose your sprayer and spray and say goodbye to aerosols!

Part Number	Description	Empty Weight	Includes
SS1000	1 qt. (32 oz.) capacity painted steel; choose: red, green, black or white	2.5 lbs.	Multi-purpose 30 oz nozzle
SS8000PL	16 oz. capacity – aluminum	12 oz.	

COMPRESSED AIR SPRAYERS

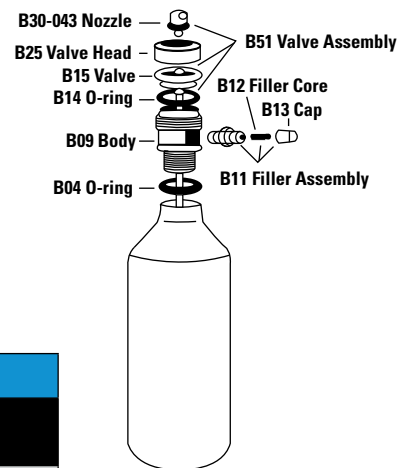
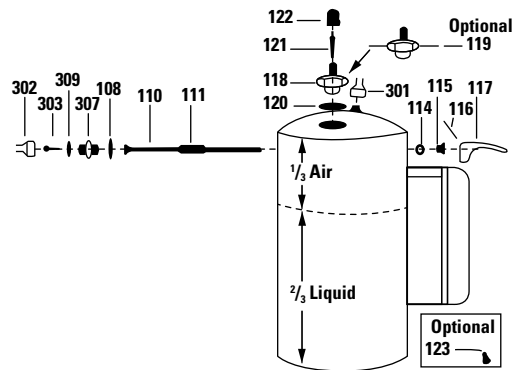
Spare Parts – Model 8000 & 8500

Part Number	Description
SSB05EP	E.P. O-ring (aluminum)
SSB05N	Neoprene O-ring (aluminum)
SSB10PL	Body (8000 & 8300)
SSB11	Filler assembly includes B12, B13
SSB14	O-ring - neoprene
SSB15	Valve – 6 pack
SSB25	Valve head
SSB45	Canister (8000) – 16 oz.
SSB51	Valve assembly

Spare Parts – Model SS1000

Part Number	Description
SS110	Valve assembly*
SS114	Stuffing packing
SS115	Stuffing nut
SS116	Cotter pin
SS117	Valve trigger
SS118	Filler cap
SS120	Filler gasket
SS121	Valve core
SS122	Valve cap
SS301	Pin stream – 20'
SS302	Spray jet -GP mist
SS309	Outer adapter washer
Repair Kits	
SS10	Full repair kit

* SS110 includes PTFE valve, valve spring and cotter pin.



Spare Nozzles – Model SS1000

Part Number	Description
SS301	Pin stream – 20' range
SS302B	Coarse mist
SS302C	Extra fine mist
SS602	Adjustable – fine-to-pin stream
SS305	Extra uniform – fine mist
SS707	Extra, extra fine mist

Spare Nozzles – 6 per pack

Part Number	Description
SSB30-035	Medium mist – tight pattern
SSB30-001	Pin stream with 6" Ex Tube

Fits models SS-8000, 8300, 8500 & 8800

The SLIDE® Guide to Productivity

The following pages feature the entire line of
SLIDE® Mold Care Products!

All products are in stock for fast delivery!

SLIDE®
Solutions for Success



Contract Pricing

DME Industrial Supplies offers contract pricing on all Slide products, DME can set up special pricing based on your usage. Simply fill out the following page with your monthly or annual usage of any mold spray and we will quote you a special price. This unique option allows you to receive up to last column pricing based on your long-term buying. Just another way to let you know, we appreciate your business!

Beware!

Compare Prices Ounce for Ounce!

It has come to our attention that some of our competitors may be offering a lower price per can but a higher price per ounce! Check the ounces per can before comparing prices. Many of their cans may have air space and less product. Slide gives you more ounces of better product at a lower cost per ounce!





Economy Mold Releases

Slide® – Try these Best Selling Mold Releases

ECONOMY MOLD RELEASES

Econo-Spray® 1 Silicon Mold Release Agent No. 40510



- Non-paintable silicone
- No chlorinated solvents
- Approved for food machinery*

Econo-	Per Case	(12 cans)
	40510	Case
	40510CAN	10oz can
40555B	55 gallon	

Econo-Spray 1 is a highly effective, economical, non-paintable silicone mold release. It provides an excellent release with all thermoplastics
Maximum operating temperature: 600°F.

* Lubricants are suitable for food contact; use as indicated in Title 21 of the Code of Federal Regulations. The appropriate sections for release agents are 175.300, 177,1210 and 181.28. Federal Definitions and Standards of identity for Food CFR 121.101 (G.R.A.S.)

Econo-Spray® 2 Mold Release Agent No. 40710



Paintable; contains no chlorinated solvents

Econo-	Per Case	(12 cans)
	40710	Case
	40710CAN	10 oz. can

Econo-Spray 2 paintable release contains no chlorinated solvents. It permits post-decorating of molded parts without prior cleaning.
Maximum operating temperature: 600°F.

Econo-Spray® 3 Mold Release Agent No. 40810



Paintable non-silicone contains no chlorinated solvents; food-approved*

Econo-Spray	Per Case	(12 cans)
	40810	Case
	40810CAN	10 oz. can
40855B	55 gallon	

Econo-Spray 3 contains a highly effective non-silicone release which is approved as a direct food additive.* No chlorinated solvents. This product is highly paintable, and will permit ultra-sonic welding of molded parts. It affords excellent release of all thermoplastics.

Pre-test all resins. Maximum operating temperature: 600°F.

*Lubricants are suitable for food contact as indicated in Title 21 of the Code of Federal Regulations. Federal Definitions and Standards of Identity for Food CFR 121.101 (G.R.A.S.)

Light and Medium Duty Mold Releases



Slide®

LIGHT & MEDIUM MOLD RELEASES



Economist® 41612
Light-Duty Silicone Release
 Approved for food machinery*.
 Non-staining and same high-quality ingredients as premium Silicone Release except formulated to be used for light-duty applications.
 Maximum operating temperature: 600°F.
 Net wt. 11.5 oz. (16 fl. oz.)

Per Case	(12 cans)
41612	Case
41612CAN	11.5 oz. can
41635N	Cylinder (equal to 4 doz. 11.5 oz. aerosol cans)



Quick Silicone 44612
Medium-Duty All-Temp Release
 Fast-drying on cold and hot molds. No chlorinated solvents. No volatile organic chemicals. Imparts a smooth, dry, non-toxic film. Silicone is FDA-approved and USDA-approved for food machinery.
 Operating temps: 35°F– 600°F

Per Case	(12 cans)
44612	Case
44612CAN	12 oz. can



Paintable 40012
Light-Duty Biodegradable Release
 Paint over it. Plate over it. Hot-stamp over it. No spalling. No fish-eyes. Perfect finish! Ideal production line release. No special treatment of molding needed. Perfect finishes every time.
 At least 25% more cycles per can over other comparable PAINTABLE releases.
 Maximum operating temperature: 650°F
 Net wt. 11.5 oz. (16 fl. oz.)

Per Case	(12 cans)
40012	Case
40012NCAN	11.5 oz. can
40035N	Cylinder (equal to 4 doz. 11.5 oz. aerosol cans)



Quick Paintable 44712
Medium-Duty All-Temp Release
 Fast-drying on cold and hot molds. No chlorinated solvents. No VOC'S. Biodegradable. Imparts a smooth, dry non-toxic film. Use Paintable where parts will be painted or hot-stamped.
 Operating temps: 35°F–650°F
 Net Wt. 12 oz. (12 fl. oz.)

Per Case	(12 cans)
44712	Case
44712CAN	12 oz. can



LMR® Lecithin 43512
Light-Duty Natural Release
 A direct food additive† for most injection and compression molding and some flexible and semi-flexible urethane foams. Non-silicone, fully paintable non-crazing. Neutral color and odor. Will not interfere with part bonding, heat sealing, laminating, ultrasonic welding, post-decorating. No build-up on mold surfaces or drift. Minimal migration. Max. operating temp: 500°F.
 Net wt. 11.5 oz. (16 fl. oz.)

Per Case	(12 cans)
43512	Case
43512NCAN	16 oz. can



Quick Lecithin 44812
Medium-Duty All-Temp Release
 Fast-drying on cold and hot molds. No chlorinated solvents. No VOC'S. Biodegradable. Imparts a smooth, dry non-toxic film. Lecithin is food-approved and paintable. Operating temperatures: 35°F–500°F.
 Net Wt. 12 oz. (12 fl. oz.)

Per Case	(12 cans)
44812	Case
44812CAN	12 oz. can

*Federal Register of the F.D.A. Paragraph 173.300; also Paragraph 176.80. Federal Definitions and Standards of Identity for Food CFR 121.101 (G.R.A.S.)





Heavy Duty Mold Releases

Slide®

HEAVY DUTY MOLD RELEASES



Silicone 40112 Heavy-Duty Release

Faster molding. More production. Eliminates rejects. Heat stable. Nontoxic. Approved for food machinery*, Lubricates. Non-staining. High-quality, pure silicone oil provides more cycles per 12-ounce can. Save up to 40% in actual production. Very effective for all plastic molding operations, injection or compression. Maximum operating temp.: 600°F. Net wt. 12 oz.

Per Case	(12 cans)
40112	Case
40112NCAN	12 oz. can
40105B	5 gallon
40155B	55 gallon

(equal to 4 doz. 12 oz. aerosol cans)



Polycarbonate 41412 Heavy-Duty Paintable

No crazing or blemishing. Non-toxic. Odorless. UL approved. Specially developed for polycarbonate resins; ideal where parts are to be painted, hot-stamped or metalized. Approved by the General Electric Co. for use on Lexan[‡] resin. Maximum operating temperature: 650°F. Net wt. 12 oz. (16 fl. oz.).

‡ trademark of General Electric Co.

Per Case	(12 cans)
41412	Case
41412NCAN	12 oz. can



Universal 42612 Heavy-Duty, Non-Silicone Paintable

Use where parts must be painted, hot stamped. Non-toxic. Odorless. Biodegradable. UL approved. Meets certain requirements for molding medical products; contact DME for details. Food-approved. Does not contain lecithins. Approved as a direct food additive. Use on all thermoplastics including sensitive plastics. Permits ultrasonic welding of plastic parts. Maximum operating temp. 600°F. Net wt. 12 oz. (16 fl. oz.)

Per Case	(12 cans)
42612	Case
42612NCAN	12 oz. can
42605B	5 gallon
42655B	55 gallon

Water Based Mold Releases

Slide® – Environmentally Safe

E/S Environmentally Safe Mold Releases are

- Water-based with no known harmful ingredients
- Chlorine free
- Biodegradable
- Non-flammable
- More effective in most applications than other ODC-free releases, especially on molds 130°F and above
- Available in silicone, (44312) and paintable lecithin formulations (44512)
- Max. oper. temp. 500°/700°F : net wt. 12 oz.



44312



44512

Per Case	(12 cans)
44312	Case
44312CAN	12 oz. can

Per Case	(12 cans)
44512	Case
44512NCAN	12 oz. can

*Federal Register of the F.D.A. Paragraph 173.300; also Paragraph 176.80. Federal Definitions and Standards of Identity for Food CFR 121.101 (G.B.A.S.)

Speciality Mold Releases



Slide®

SPECIALITY MOLD RELEASES



DFL® "Cold" (Fluorocarbon) 41112

For cold molds below 120°F. Excellent on all thermoplastics including polycarbonates. Lubricates conveyors, sliding panels, control cables, gaskets, pipe joints, couplings, locks, computer keyboards and more. Contains: Krytox* fast-drying formula. Excellent lubricant for injection molding. Recommended where clarity and deep draw are important, especially with hard, brittle resins. The dry film will not pick up dust or dirt. Lubricates in temperatures -50° to 500°F. Remains inert to most corrosive agents. Maximum operating temp. 500°F. Net wt. 12 oz. (16 fl. oz.)

Per Case	(12 cans)
41112	Case
41112NCAN	12 oz. can
41105B	5 gallon
41155B	55 gallon



Electronic 42712

For Plastic Electronic Parts

Non-silicone. Fully paintable. Formulated specifically not to interfere with electronic properties of molded electronic parts. Maximum operating temperature: 550°F. Net wt. 12 oz. (16 fl. oz.)

Per Case	(12 cans)
42712	Case
42712NCAN	12 oz. can



Heavy-Duty Mold Release and Pin Lube 54912

Non-silicone

Paintable

Food-approved

Dry release minimizes leaching out onto parts.

An ideal lubricant for the front half of ejector pins (pins in forward position). This almost dry lubricant minimizes the possibility of leaching out onto molded parts. Use in combination with application of Super Grease on back side of ejector pins. Stable at temperatures up to 400°F. Heavy-Duty Mold Release and Pin Lube can be used on plastics, rubber, waxes, glass-filled nylon and similar materials.

Net wt. 11.5 oz.

Per Case	(12 cans)
54912	Case
54912CAN	11.5 oz. can



HI-Temp 1800 44110

For Temperatures up to 1800°F

Paintable. Non-silicone. Ideal for the latest high-temperature resins. It is also an excellent release for die casting of low melting point metals such as lead, zinc and aluminum. Maximum operating temperature: 1800°F.

Net wt. 10 oz. (16 fl. oz.)

Per Case	(12 cans)
44110	Case
44110CAN	10 oz. can



Mold Saver 42510T

Neutralizes Corrosive Vapors

Non-silicone. Eliminates mold build-up. Prevents deposit build-up. Fully paintable. Neutralizes corrosive vapors emitted by flame-retardant plastics and PVC during molding.

It is imperative that Mold Saver be sprayed into the cavity regularly while molding to prevent mold deposits from forming and attacking the mold. Maximum operating temp. 550°F. Net wt. 10 oz. (Previous part no. 42519)

Per Case	(12 cans)
42510T	Case
42510TCAN	10 oz. can

*Federal Register of the F.D.A. Paragraph 173.300; also Paragraph 176.80. Federal Definitions and Standards of Identity for Food CFR 121.101 (G.R.A.S.)





Speciality Mold Releases

Slide®

SPECIALITY MOLD RELEASES



Pure Eze Mold Release

A paintable non-silicone release that is ideal for medical and food applications. Unlike vegetable-based releases, Pure Eze is based on a neutral white oil. It does not contain any lecithins, so it will not turn color or rancid over long periods of time. Pure Eze Mold Release is ideal for use with all thermoplastic resins, especially polyolefins including polyethylene and polypropylene. Also releases polycarbonates, rubbers & some epoxies.

- Paintable, non-silicone
- Idea for medical, food, electrical and optical molding
- UL approved
- Colorless, odorless and tasteless
- Meets USDA and FDA standards

Per Case	(12 cans)
45712	Case
45712NCAN	11.5 oz. can
45705B	5 gallon
45755B	55 gallon



Water Soluble 41212 Paintable Release

Permits ultrasonic welding of parts. Does not contain silicones. 100% paintable. No removal necessary. Does not contain water. Permits complete cleaning of molded parts with water. In most cases this release need not be removed prior to painting, hotstamping or plating. Anti-static properties reduce dirt pick-up on molded parts. Max. oper. temp.: 450°F. Net wt. 12 oz. (16 fl. oz.)

Per Case	(12 cans)
41212	Case
41212NCAN	12 oz. can



Zinc Stearate 41012 Lubricant Powder

For polypropylenes, polysulfones and rubber molding. Dry, light, water repellent powder. Economical to use and gives better finishes. Results in fewer rejects and lower production costs. Maximum operating temperature: 600°F. Net wt. 12 oz. (16 fl. oz.)

Per Case	(12 cans)
41012	Case
41012CAN	12 oz. can
41025	25 lb. bag

Thermostat Releases



Slide®

THERMOSTAT RELEASE



Dura Kote 41712
Semi-Permanent for Thermosets
Completely dry. Will not discolor. Extremely thin film. Urethane molding. Paintable epoxy molding. Excellent rotational mold release.
For thermoplastics and thermosetting resins.
A solvent dispersion of a special air-drying release resin that will not transfer into molded part.
Provides a dry, dust-free film on all hard-surfaced molds. Air dry for 10 min. For a more durable film, bake on for 15 minutes at 250°F using infrared heaters. Max. oper. temp: 600°F.
Net wt. 16 oz.

Per Case	(12 cans)
41712	Case
41712CAN	16 oz. can
41701B	1 gallon
41705B	5 gallon
41755B	55 gallon

Mold Releases

MOLD RELEASES

Slide®



Epoxease® Mold Release Agent No. 40614
Synthetic wax-based product. for injection molding, encapsulating, potting.

Non-silicone mold release agent for thermosets. For epoxy, polyester and phenolic molding. Formulated to prevent sticking caused by using all-purpose agents on epoxies.

Maximum operating temperature: 450°F.

Per Case	(12 cans)
40614	Case
40614CAN	10 oz. can
40601B	1 gallon
40605B	5 gallon
40655B	55 gallon



Thermoset Mold Release Agent No. 45414
Contains no silicones or oils. Thermoset Release is made with synthetic carnauba wax, the most effective formulation for molded thermoset plastics, rubber and similar materials.
It stops parts from sticking, maximizing productivity. It is ideal for injection, compression and transfer molding. Maximum operating temperature 600F.

Per Case	(12 cans)
45414	Case
45414CAN	14 oz. can

Specialty Mold Releases

Slide® – Urethane Mold Release



- Developed especially for polyurethane resins
- Can be used with rigid, semi-rigid and flexible foam urethanes
- No Class I or II ozone-depleting chemicals
- No chlorinated solvents and is safe for all urethanes
- Will not build up on the mold and is non-marking for the parts
- Contains a non-paintable silicone

Per Case	(12 cans)
45812H	Case
45812NCAN	11.5 oz. can

SPECIALITY MOLD RELEASE



Lubricants

Slide®

LUBRICANTS

All products on these pages are 100% ODC Free!



Silicone Spray Lube 42112

All-around lubricant. Use on windows, locks, hinges, zippers, household appliances, sporting goods, fabrics (incl. synthetics), metal runners, cutting edges, sewing needles, cameras and more. Especially recommended for sliding wood surfaces. Polishes all plastics, stainless steel and aluminum. Removes water spots. Approved as indirect food additive. *Operating temperature: -100°F to 600°F. Net wt 12 oz. (16 fl. oz.)

Per Case	(12 cans)
42112	Case
42112NCAN	12 oz. can



Heavy-Duty Mold Release and Pin Lube 54912

Non-silicone
Paintable
Food-approved
Dry release minimizes leaching out onto parts.
An ideal lubricant for the front half of ejector pins (pins in forward position). This almost dry lubricant minimizes the possibility of leaching out onto molded parts. Use in combination with application of Super Grease on back side of ejector pins. Stable at temperatures up to 400°F. Heavy-Duty Mold Release and Pin Lube can be used on plastics, rubber, waxes, glass-filled nylon and similar materials. Net wt. 11.5 oz.

Per Case	(12 cans)
54912	Case
54912CAN	11.5 oz. can



TAP-IT® 40412

Reduces tap breakage. Produces cleaner threads. For reaming, dressing abrasive wheels, etc. For aluminum, titanium, stellate, magnesium alloys, chromes, moly, beryllium copper and stainless steel. Net wt. 12 oz.

40401B	1 gallon
40405B	5 gallon
40455B	55 gallon



Cutting Oil 41314

With high pressure additives. For drilling, cutting, sawing & tapping. Pressurized spray forces cutting oil into hard-to-lubricate areas. Contents 100% usable. Net wt. 14 oz.

41301B	1 gallon
41305B	5 gallon
41355B	55 gallon

Slide® Super Grease



Super Grease 43911

Wide Temperature Range Grease

Colorless. Odorless. Non-toxic. FDA dielectric. Contains PTFE. Will not freeze, melt or gum up. Compatible with other lubricants. No silicones. Will not wash out. USDA-listed H1. Repels water. Will not separate, run or fall out. Thixotropic properties provide excellent mechanical stability when sudden temperature changes occur. Exceptional load-bearing properties. Clear, clean, non-yellowing grease. For injection molds and mold assemblies, especially medical and food-grade plastic parts. Prevents corrosion. Oper. temps: -65° to +650°F Net wt. 11 oz.

Per Case	(12 cans)
43911	Case
43911CAN	11 oz. can

SUPER GREASE

Super Grease now comes in a 14 oz. and 3 oz. tube as well as the original 11 oz. aerosol can!



43900-01	10 gram tube
43900-03	3 oz. tube
43900T	14 oz. tube
43900-7	7 lb. tube
43900-35	35 lb. bucket
43900-400	400 lb. drum

Pistol Type

- Compact trigger-release design to easily reach recessed and hard-to-reach fittings
- Three-way loading for versatility:
 - Standard 14oz. cartridge (not included)
 - Load with a pressure filler
 - Bulk load
- 24-inch flexible hose for extended working reach
- ¼ inch NPT thread air inlet
- Inlet air pressure of 35 to 150 PSI
- Rugged baked enamel and chrome finishes
- Comfortable hand grip and balanced design eliminate operator fatigue



- The angle design and lightweight construction allow easy operation in cramped or hard-to-reach spaces
- Air vent valve allows trapped air in the tube to escape after filling.

Part Number	Description
GG01	Pistol type grease gun

PNEUMATIC GREASE GUN



Freedom Sprayer Unit

- Just plug and spray
- Easy to use, no hard wiring required
- Save money and save time
- Operate more productively
- Works with aerosol cylinder or pressure pot

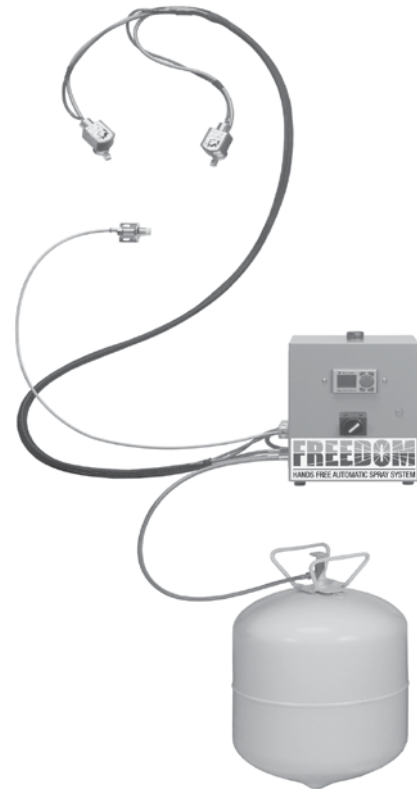
The new Freedom automatic spray unit is easy to program and works autonomously from all your equipment. You just plug it in and spray.

A proximity sensor placed near the mold cavity detects when the mold opens and signals the unit to deliver release. Nozzles can be attached with brackets (included) or optional magnetic mounting blocks. Position them anywhere to spray release to any point, such as trouble spots in the cavity, the entire face of the mold, both mold cavities, or even to create a "cloud" of release between the cavities.

The extremely compact control unit has protective rubber feet so it can sit on any flat surface, or mount directly to the machine. And it can be plugged directly into any 110V, 15 AMP circuit.

The Freedom Sprayer Unit comes complete with easy-to-program control unit, 10-ft spray hose and two nozzles, 6-ft. cord and proximity sensor, 5-ft. tank hose, and 10-ft. power cord. Aerosol spray cylinder or pressure pot additional.

Experience the true Freedom of hands-free automatic spraying with the new Freedom Sprayer Unit.



ACCESSORIES

Part Number	Description
43200	Freedom Automatic Spray Unit with Aerosol Cylinder (for use with Slide aerosol cylinders)
43200M	Freedom Unit spray head magnet (optional)

"Valve-Up"

Giant Aerosol Cylinder

This money-saving aerosol is a versatile spraying unit for use with automated or robotic equipment.* Each 'one-way' disposable**cylinder equals 4 dozen aerosol cans 100% useable. Offered in many SLIDE products.

- *Not installed by Slide Products, Inc.
- **Non-refillable by federal regulation



*Federal Register of the F.D.A. paragraph 173.300; and paragraph 176.80. Federal Definitions and Standards of Identity for Food CFR 121.101 (G.R.A.S.)

ACCESSORIES

Aerosol Can Holder

(holds 3 cans)

The Slide Spray Can Holder helps organize space and keeps cans in place. Extruded from PVC, these extremely durable can holders can easily be bolted directly onto the side of a molding machine or tool cart to hold various Slide cans.



Part Number	Description
43800	Aersol can holder (holds 3 cans)



Air-O-Spray System for Compressed Air Slide Spray 12oz. Applicator

This easy-to-handle unit is specially designed for use with Slide bulk products. It operates entirely on the atomizing principle. Air-O-Spray has combined internal and external action in which mold releases, lubricants, cleaner, etc. can be atomizing at low pressure and low mist.

Any air compressor providing 50 PSI us ideal for this unit.

12oz. Slide Spray Applicator

Part Number	Description
42202	Handheld Sprayer w/ hose (includes 10' braided metal hose with 1/4" pipe-threaded fitting, and 12oz plastic bottle)



Pump Sprayer & Bottle

Package of 2 units per box. Plastic bottle and sprayer to be used with Slide bulk products.

Part Number	Description
42300	Pump sprayer & bottle (package of 2)





Rust Preventatives

Slide®

RUST PREVENTATIVES



Mold Shield® 42910 Dry Rust Preventive

- No chlorinated solvents
- New Ultra-Dry formula
- Non-penetrating
- Will not bleed out and mark parts
- Neutralizes fingerprints
- Non-silicone/
non-wax
- Self-cleaning in start-up
- Seals out condensation

A unique rust preventive formulation. Designed, through a special ultra-dry spray package, to deliver a dry mist spray which will not penetrate into moving mold parts, including ejector pin holes, slides, cams, etc. This special feature prevents marking of plastic parts when molds are put back in service, where normally a conventional rust preventive may leach out of mold crevices and mark parts, resulting in lost production time and rejected parts. Protects up to two years under normal conditions.

Per Case	(12 cans)
42910	Case
42910CAN	10 oz. can
42905HB	5 gallon
42955B	55 gallon



Penetrant Plus® 41812 Short Term Rust Preventive

Choice of spray or stream. Dust free. Non-staining. Harmless to most plastics, rubber, paint, etc. Cleans and dries out electrical equipment. Monomolecular penetrating film frees rust-froze parts. Lifts and replaces moisture with protective film. Lubricates without affecting performance of electrical equipment. Non-conductive because it has high dielectric strength and lubricates delicate electronic equipment. Protects up to six months under normal conditions. Net wt. 12 oz. Conforms to MIL-C 23411.

Per Case	(12 cans)
41812	Case
41812CAN	12 oz. can
41801B	1 gallon
41805B	5 gallon
41855B	55 gallon



Quick Rust Preventive 42810R (Quick RP) with Red Indicator Dye

- No chlorinated solvents
- Red indicator dye shows where rust preventive is applied.
- Dry formula makes oils stay where they are sprayed
- Fast cleanup.
- 2 years protection.

Slide Quick RP employs a combination of fast evaporating solvents and oils to set up quickly on your mold surfaces, providing immediate protection against moisture and light acids. This unique ""dry"" package makes cleanup quick and easy when the mold is put back into production, saving time and money.

Per Case	(12 cans)
42810R	Case
42810RCAN	10 oz. can
42805B	5 gallon
42855B	55 gallon

RUST PREVENTATIVES



Acid Vapor Neutralizer

44011 Protection when Molding PVC and Flame-Retardant Resins The one-step rust preventive formulated to protect plastics molding dies while in storage from corrosive attack by hydrochloric and hydroboric acids, plus protects molds from most common corrosive damage that is found in the atmosphere. Protects against fingerprint acid. Acid vapors produced during molding will be neutralized when they come in contact with Acid Vapor Neutralizer. Length of protection is dependent on amount of PVC and F/R being molded.

Per Case	(12 cans)
44011	Case
44011CAN	11 oz. can
44005B	5 gallon
44055B	55 gallon



No-RUST® 40212

Long-Term Rust Preventive

Non-silicone. Neutralizes fingerprint acids.

Self-cleaning. The one-step rust preventive that contains both neutralizer and rust preventive. Ideal for plastics mold protection. Guarantees positive protection by displacing moisture from metal surfaces. Adheres tightly. Accurate spray pattern concentrates protection in normally inaccessible crevices. Protects up to five years under normal conditions. Net wt. 12 oz. (12 fl. oz.).

Conforms to MIL-C-23411.

Per Case	(12 cans)
40212	Case
40212CAN	12 oz. can
40201B	1 gallon
40205B	5 gallon
40255B	55 gallon



White Rhino NSF-H1 Registered Rust Preventive 46710

Slide White Rhino Rust Preventive wraps your mold base in a tough, protective second skin. Comprised of food-approved active ingredients, it's ideal for plastics processing applications. Fast-drying formulation sets up quickly to protect immediately against moisture and light acids. Self-cleaning in startup.

Features and Benefits

- No chlorinated solvents
- 2-year protection
- Contains food-approved ingredients
- Dry formulation
- Self-cleaning and self healing
- Neutralizes fingerprint acids

Per Case	(12 cans)
46710	Case
46710CAN	10 oz. can
46705B	5 gallon
46755B	55 gallon





Mold Cleaners

Slide®

MOLD CLEANERS



NFC Mold Cleaner 47112

NFC Mold Cleaner is a powerful, non-flammable (no flashpoint) metal cleaner that contains no chlorinated solvents. It thoroughly removes greases, silicones and other contaminants, and is an excellent solder flux remover. Net wt. 12 oz.

Features and Benefits

- Non-flammable
- No chlorinated solvents
- Excellent solder flux remover
- Not listed as a hazardous air pollutant (HAP)

Per Case	(12 cans)
47112	Case
47112CAN	12 oz. can
47101B	1 gallon
47105B	5 gallon
47155B	55 gallon



Resin Remover 41914

- Removes resin buildup from polyacetals, urethanes and flame-retardant mold deposits
- No chlorinated solvents
- Removes most color deposits

Compounded with powerful solvents to remove resin buildup on molds. This buildup can be stripped without removal of mold (injection or transfer). Will remove, strip and/or aid in the removal of many resinous plastics. Mold off deposits with mold temperature above 180°F. Discard next 3 to 4 shots. For flame-retardant resins; apply Slide mold release before attempting this procedure.

Per Case	(12 cans)
41914	Case
41914CAN	14 oz. can
41901B	1 gallon
41905B	5 gallon
41955B	55 gallon



Quick Mold Cleaner 40910

Slide Quick Mold Cleaner is the no wipe, no CFC, non-chlorinated cleaning machine. Get every nook. Every cranny. Get your mold completely clean - without wiping - with new Quick Mold Cleaner. Its powerful cleaning agents easily remove silicones, grease, oil and wax buildup on mold surfaces, etc. It leaves no residue. And its fast-evaporating formulation helps maximize the productivity of your operation.

Per Case	(12 cans)
40910	Case
40910CAN	10 oz. can
40905B	5 gallon
40955B	55 gallon



Mold Cleaner Plus Degreaser 4 No. 46910

- No chlorinated solvents
- Evaporates fast
- Leaves no residue

Slide Mold Cleaner Plus Degreaser 4 contains no chlorinated solvents and provides a convenient method for removal of silicones, grease, oil and wax buildup on mold surfaces, etc. without the need for wiping. Ideal for cold molds, it leaves no residue so it cleans without wiping. It has a fast evaporating formulation, is non-conductive and non-abrasive.

Per Case	(12 cans)
46910	Case
46910CAN	10 oz. can
46905B	5 gallon
46955B	55 gallon
46930	Cylinder

MOLD CLEANERS



On/Cycle 44212

At-The-Press Warm Mold Cleaner

No chlorinated solvents. Will not stain aluminum. Multi-purpose cleaning as well as equipment cleaning. No caustic or acidic compounds. Use on ordinary soil and most painted surfaces. The ideal mold cleaner while in production. Works on warm molds up to 150°F. Easily removes releases, oils, greases and many resinous buildups before they can become a problem. Made from citrus oils which destroy odors and also give it a pleasant orange scent

Net wt. 12 oz. (16 fl. oz.)

Per Case	(12 cans)
44212	Case
44212CAN	12 oz. can
44201B	1 gallon
44205B	5 gallon
44255B	55 gallon



Econo-Spray Mold Cleaner 45612

Approved for Indirect Food Contact*

Food approved. No chlorinated chemical.

Very low odor. Mold cleaner quickly removes silicones, grease, oil and wax buildup on mold surfaces. It is also good for cleanup of non-operating electrical equipment and general decreasing on machine solvent-sensitive plastics. Net wt. 12 oz.

* FDA regulation 21 CFR 172.882, 172.884, 178.3530, 178.3650; 40 CFR 180.1001 (c) & (e)

Per Case	(12 cans)
45612	Case
45612NCAN	12 oz. can
45601B	1 gallon
45605B	5 gallon
45655B	55 gallon

Veri-Kleen 42012 Contact & Metal Cleaner



Will not harm rubber, paint etc. Excellent contact cleaner and flux remover. Ideal for circuit boards, tape heads, motors and a variety of metal cleaning applications.

Non-conductive and non-flammable. It has a very mild odor. Can be used safely on operating electrical equipment, leaving no residue after evaporating. Net wt. 12 oz.



Silicone Remover 43016

Concentrate for Use with Water
Completely removes all traces of silicone.

A specially formulated wetting agent to be mixed with water to remove silicone from molded plastic parts through repeated washing or by the use of an ultra-sonic cleaning bath. It is designed to replace organic solvents that are harmful to certain plastics, such as polycarbonates, styrenes and acrylics. Net wt. 16 fl. oz.

Per Case	(12 cans)
42102CAN	12 oz. can

Per Case	(12 cans)
43016CAN	16 oz. can

Mold & Metal Wipes 46370

Presaturated Cleaning Towels

Fast, convenient, presaturated sheets quickly clean almost any surface.* Use for preparing molds for production or storage; touch-up cleaning during production; surface prep prior to secondary operations; and general maintenance and all-purpose cleaning. Using wipes reduces solvent consumption and VOC's emissions. Canister of 70 wipes.

*Pre-test on non-metal surfaces.



Per Canister	70 wipes
46370	Canister



Per Box	(50 single wipes)
46301	Box





Cleaners

Slide®



Mold & Metal Polish

Clean and restore surfaces, easily wipes on and off. Removes plate-out, oxidation and stains. Leaves no residue, brings surfaces to a high luster. Safely removes plate-out, oxidation and stains on fine tooling surfaces quickly and cost-effectively. Ideal for all types of molds, dies and fixtures, it restores surface finish, while providing a high, luster sheen. The polish has proven effective on steel, stainless, aluminum, brass, bronze, beryllium, kirksite, zinc, powdered metals and other materials used in injection, blow, extrusion, compression, and rim molding.

45210 | 10 oz. Can

45202 | 1.76 oz Tube



PC Polish Cleaner 43310 Old Yellow

Removes stains and mold deposits. Conditions your mold for faster startups and improved release properties. Protects as it cleans. Does not contain diamond dust. Particle size <5 microns. Handy plastic squeeze bottle. Use on all metal molds for removal of stains and discoloration. Can be used on cold or warm injection molds. Leaves a non-transferring, micron-thin film that reduces mold wear. Reduces the need for all types of internal and external release agents. Net 10 fl. oz.

43310 | 10 fl. oz. bottle



Citra-Cling 46515

This mold and metal cleaning product is formulated with a natural orange citrus solvent (d'limonene) that cleans most surfaces. Slide formulated this product to dispense with a foaming action that has tremendous clinging ability. This feature allows for the product to hang on vertical surfaces, maximizing the cleaning time for the product. Simply spray this foaming product on and wipe clean. It contains no chlorinated solvents, petroleum distillates or glycol ethers. The product is 99% biodegradable, non-toxic and can be used on painted surfaces. Excellent for removing mold release, dirt, oil and greases from most any surface. Net wt. 15 oz.

Per Case	(12 cans)
46515	Case
46515CAN	16 oz. can



Nexgen Metal & Mold Cleaner 46410

Direct alternative to trichloroethylene and methylene chloride. Food approved (GRAS). Leaves no oily residue. No global warming compounds. Not a hazardous air pollutant (Not HAP). Non-corrosive and not SARA reportable. Biodegradable and rinses with water. Meets tough health, safety and environmental regulations. High solvency for resins, polymers and dies. Nexgen is the most extraordinary cleaning product available. Formulated purely from citrus and vegetable products, it is much more than you might have experienced with previous "natural" cleaners. It meets or exceeds the toughest health and safety issues, without sacrificing RAW CLEANING POWER. Biodegradable, it easily rinses away with water and leaves no residue. Use it for general cleaning and wiping, oil spill clean-up, ink, tar and adhesive removal, paint and graffiti removal, removing silicone and lithium grease, and degreasing. Net wt. 10 oz.

Per Case	(12 cans)
46410	Case
46410CAN	10 oz. can
46401B	1 gallon
46405B	5 gallon
46455B	55 gallon



Plastic Cleaner with Foamaction™ 41515

Slide Plastic Cleaner uses FOAMACTION™ foaming spray to effectively remove oil and dirt marks from all plastics, even sensitive polycarbonates. Just spray and wipe clean, then polish with a clean, dry cloth. Plastic Cleaner is ideal for cleaning plastic parts and helps remove mold releases prior to secondary operations. Plastic Cleaner also works as a general purpose cleaner. Operating temps: 35°F – 650°F. Net wt. 15 oz.

Per Case	(12 cans)
41515	Case
41515CAN	15 oz. can

BLUE MAGIC™ Professional Quality Metal Polish Cream - Unique Formula. BLUE MAGIC™ is the most effective and versatile cleaner, polish and protectant you can use. BLUE MAGIC™ is renowned for its performance on a wide variety of metal, including precious metals. **Chemically Deep Cleans** the surface to remove tarnish, oxidation and other dulling agents. **Easy to use. Satisfaction guaranteed!**



Ideal for Use on:

- Chrome
- Gold
- Brass
- Pewter
- Aluminum
- Silver
- Stainless Steel
- Plexiglass
- Magnesium
- Copper
- Bronze
- Fiberglass

Part Number	Container Size
MP100-12	100 gram tube (3.53 oz.)
MP500-12	500 gram plastic jar (19.38 oz.)

Silicone Compound

- Similar to Dow Corning 111
- Excellent wash-away resistance
- Operating range: -40°F to +500°F
- Chemically inactive – non-solidifying
- Corrosion protectorant/release agent
- Right from the tube or thin with mineral spirits
- Prevents drying and cracking of rubber components
- Won't carbonize or harden

Part Number	Size
SG151	5.3 oz. tube

Lithium Grease

White Lithium Grease

- Extra-duty white lube that protects against rust and corrosion
- Use for with mold cams, pins, bushings and all mold components
- Makes contact surfaces friction free, use from -40°F to +500°F
- Excellent for metal-to-metal contact, nontoxic, nonflammable, will not stain
- Resists moisture & high heat; will not separate under load

Part Number	Container Size
49596	16 oz. aerosol
49594	1.5 oz. tube
49595	16 oz. tub

[LITHIUM GREASE](#)

Copper & Nickel Anti-Seize

High Temperature Anti-Seize & Lubricating Compounds

- Choose copper or nickel base; rated to 2000°F
- Eliminates galling & seizing
- Suggested for nozzles, screw tips, cylinder bolts, mold clamps, etc.



Part Number	Compound Type	Container Size & Type	Max. Temp. Rating (°F)
ASC4	Aluminum Anti-Seize w/ Copper Flake	4 oz/brush-top	2000°
ASC8	Aluminum Anti-Seize w/ Copper Flake	8 oz/brush-top	2000°
CAS8	Pure Copper	8 oz/brush-top	2000°
ASN8	Pure Nickel	8 oz/brush-top	2000°
ASC16	Aluminum Anti-Seize w/ Copper Flake	16 oz/brush-top	2000°

[ANTI-SEIZE](#)

*Meets MIL-90; contains no moly-disulfide. Copper/Aluminum also available in 42 lb. pails



TPFE Paste

Heavy-Duty Sealant and Lubricant

- Brushable paste dries slowly; non-hardening
- Withstands up to 3000 PSI on gases at temps from -50°F to +500°F
- Use on water, steam, natural and LP gas, oils, fuels, dilute acids
- Apply to metals, PVC, CPVC, ABS, polypropylene and nylon
- Heavy duty, UPC listed

Part Number	Description
23030	4 oz. brush-top bottle
23045	8 oz. brush-top bottle
23060	1 pint brush-top bottle
23075	1 quart brush-top plastic can

TPFE PASTE

Tape Thread Sealant

- Permanent non-flammable seal
- Remains plastic permanently
- Operation temps -450°F to +500°F
- For water connections, hydraulics, air, gas & petroleum

Part Number	Length	Thickness	Width
TT100	260" (21.6')	0.0035	1/2"
TT200	520" (43.3')	0.0035	1/2"
TT300	520" (43.3')	0.0035	3/4"

TAPE THREAD SEALANT

Pipe Thread Sealant with PTFE

- Resists corrosion, leakage and loosening from vibration and moisture
- Anaerobic sealant chemically cures in the absence of air
- Use from -65°F to +350°F

- Allows final adjustments up to 24 hours after application
- Use for hydraulics, pneumatics, process piping or steam
- Locks and seals threaded fittings
- Easy disassembly without damage to threads
- Won't shrink away from fitting

Part Number	Container Size
49486	50 ml tube
49495	16 oz. brush-top

PIPE THREAD SEALANT

RTV Silicone

RTV Silicone Adhesive Sealant

- Bonds most plastics many assemblies uses
- Cures at room temperature to a tough flexible rubber
- Resists shrinkage
- Perfect for caulking, sealing, waterproofing & bonding
- Bonds & seals terminals, connectors, mounting fixtures, mechanical gaskets, glass, metal, masonry, plastic, tile, rubber, wood & fabric

Operational temp.(RTV Silicone): -60°F to +450°F

Max temp.(Silicone Gasket Makers): 650°F



Part Number	Container Size	Color
49204	3 oz. tube	Clear
49294	11 oz. cartridge	Clear*
	Silicone Gasket Makers	
49202	3 oz. tube	Red
49292	11 oz. cartridge	Red

RTV SILICONE

* Available in marine grade & mildew resistant

Dynatex high strength Boltlocker is a single component, anaerobic liquid which chemically cures in the absence of air between close fitting metal surfaces. It has a high strength anaerobic threadlocking material that cures between engaged threads. Locks and seals metal threaded assemblies in a wide range of applications. Prevents nuts, bolts and other fasteners from loosening due to vibration. Prevents rusting of threads. Fixture tight in minutes.



49442 Medium Strength – Blue For application before assembly. Eliminates stocking lock washers & lock nuts. Can be removed without special tools. Fills gaps to .006"

49452 High Strength – Red Locks & seals where high strength is required.

Fills gaps to .008" Protects threads against corrosion.

49462 Wicking Type – Green

Locks & seals metal threads after assembly & adjustments are complete. Fills gaps to .005" Migrates into pre-assembled threads. Secures in minutes.

49472 Sleeve Retainer – Green

Eliminates press & slip fits. Replaces splines & keys. Returns worn out-of-tolerance assemblies to fit.

Locks & seals studs, shafts & bearings. Fills gaps to .006"

Part Number	49442	49452	49462	49472
Color	Blue	Red	Green	Green
Viscosity	1,000 CPS	2,500 CPS	15 CPS	500 CPS
Gap Filling	0.007	0.010	0.003	0.01
Breakaway Torque	75-100	<125	<50	50-150
Prevailing Torque	30-100	<150	150-300	>200
Fixture Cure	20 min.	5 min.	3 min.	15 min.
Full Cure	8-24 hrs.	8-24 hrs.	8-24 hrs.	8-24 hrs.
Temp Range	-75 to 300°F			
Spec. Gravity	1.09	1.10	1.10	1.10

BOLTLOCKER

Superglue

SUPERGLUE

Instantly bonds glass, metals, plastics, & rubber. Bonds close-fitting parts in seconds. Works on clean surfaces of aluminum, copper, brass, steel, vinyl, PVC, polyester, nylon, fiberglass & wood.

#49403 Super Glue – Instant Bond

- 3 gram bottle
- Ethyl grade
- Bonds close fitting parts in seconds
- For aluminum, copper, brass, steel, vinyl, PVC, polyester, nylon, fiberglass & wood

#49431 Super Glue – Instant Bond

- 20 gram bottle
- Ethyl grade
- Bonds close fitting parts in seconds
- For aluminum, copper, brass, steel, vinyl, PVC, polyester, nylon, fiberglass & wood



Part Number	49403	49431
Color	Clear	Clear
Viscosity	100	100
Gap Filling	.002	.002
Holding Strength	3,200 PSI	
Fixture Cure - (Secs)	20-40	30-40
Full Cure - (Hrs)	8-24 hrs.	8-24 hrs.
Temp Range	-65°F to 180°F	
Spec. Gravity	1.06	1.06



Diamond Compound

DIAMOND COMPOUND

DME Diamond Polishing Compound For High-Quality Mold and Die Polishing

Quality of mold or die finish is frequently an important factor in how a mold or die operates. DME Diamond Compound is proven to produce the finest quality finish with considerable savings in time and labor.

DME Diamond Compound contains no adulterants, nor non-graded, non-working diamond “fines.” The precision-graded diamond particles are uniformly and permanently dispersed and blended in a high-quality, universally soluble, synthetic vehicle giving the best compositions possible. Available in 5 gram and 18 gram sizes.

*Note: Our compounds are not water soluble.
For best results use with our lubricating oil. See page 694*



Usage	Micron Size	Color	Amount	Concentration	Part Number
Final Polishing	1/10	Gray	5 Grams	Medium	DC11M5
				Standard	DC11S5
				Heavy	DC11H5
			18 Grams	Medium	DC11M18
				Standard	DC11S18
				Heavy	DC11H18
	1/4		5 Grams	Medium	DC14M5
				Standard	DC14S5
				Heavy	DC14H5
			18 Grams	Medium	DC14M18
				Standard	DC14S18
				Heavy	DC14H18
	1/2		5 Grams	Medium	DC12M5
				Standard	DC12S5
				Heavy	DC12H5
			18 Grams	Medium	DC12M18
				Standard	DC12S18
				Heavy	DC12H18
1	Ivory	5 Grams	Medium	DC1M5	
			Standard	DC1S5	
			Heavy	DC1H5	
		18 Grams	Medium	DC1M18	
			Standard	DC1S18	
			Heavy	DC1H18	

DIAMOND COMPOUND

Usage	Micron Size	Color	Amount	Concentration	Part Number
Lapping/Pre-Polishing	3	Yellow	5 Grams	Medium	DC3M5
				Standard	DC3S5
				Heavy	DC3H5
			18 Grams	Medium	DC3M18
				Standard	DC3S18
				Heavy	DC3H18
	6	Orange	5 Grams	Medium	DC6M5
				Standard	DC6S5
				Heavy	DC6H5
			18 Grams	Medium	DC6M18
				Standard	DC6S18
				Heavy	DC6H18
	9	Green	5 Grams	Medium	DC9M5
				Standard	DC9S5
				Heavy	DC9H5
18 Grams			Medium	DC9M18	
			Standard	DC9S18	
			Heavy	DC9H18	
15	Blue	5 Grams	Medium	DC15M5	
			Standard	DC15S5	
			Heavy	DC15H5	
		18 Grams	Medium	DC15M18	
			Standard	DC15S18	
			Heavy	DC15H18	
Rapid Stock Removal	30	Red	5 Grams	Medium	DC30M5
				Standard	DC30S5
				Heavy	DC30H5
			18 Grams	Medium	DC30M18
				Standard	DC30S18
				Heavy	DC30H18
	45	Brown	5 Grams	Medium	DC45M5
				Standard	DC45S5
				Heavy	DC45H5
			18 Grams	Medium	DC45M18
				Standard	DC45S18
				Heavy	DC45H18
	60	Natural	5 Grams	Medium	DC60M5
				Standard	DC60S5
				Heavy	DC60H5
18 Grams			Medium	DC60M18	
			Standard	DC60S18	
			Heavy	DC60H18	









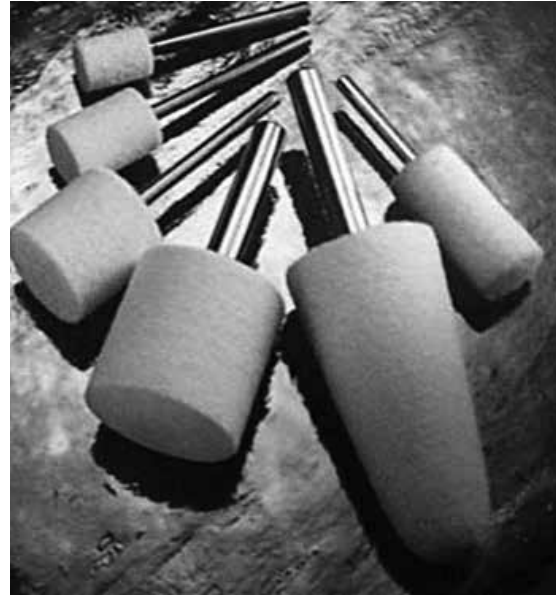


Felt Bobs & Lubricant

Mounted Wool Felt Bobs

Our felt bobs are made of pure wool in a broad variety of sizes, shapes, and degrees of hardness - for any finishing requirement. The mandrels are exactly centered for true-running operation.

Shape	Part Number	Width	Depth
	FB503MS1A	1/2"	1"
	FB503MS2A	1/2"	1/2"
	FB503MS3F	1/2"	1"
	FB503MS5A	1/2"	3/4"
	FB503MS6A	1/2"	1/2"
Cylinders			
	FB503CB2A	3/8"	3/8"
	FB503CB4	1/2"	1/2"



FELT BOBS

OS Type IV Lubricant

This low-viscosity, oil soluble lubricant is compatible with oil-based slurries and compounds, including our DME Diamond Compound.

Part Number	Description
OS510-2030	4 oz. lubricating oil

Part Number	Description
FPK301H312524	FPK301 H3 12,5x24 Felt Polish Bobs
FPK301H3S12524	FPK301 H3S 12,5x24 Felt Polish Bobs
FPK302H306515	FPK302 H3 06,5x15 Felt Polish Bobs
FPK302H3S06515	FPK302 H3S 06,5x15 Felt Polish Bobs
FPK304H313012	FPK304 H3 13,0x12 Felt Polish Bobs
FPK304H3S13012	FPK304 H3S 13,0x12 Felt Polish Bobs
FPK305H311015	FPK305 H3 11,0x15 Felt Polish Bobs
FPK305H3S11015	FPK305 H3S 11,0x15 Felt Polish Bobs
FPK306H322004	FPK306 H3 22,0x04 Felt Polish Bobs
FPK306H3S22004	FPK306 H3S 22,0x04 Felt Polish Bobs
FPK307H306010	FPK307 H3 06,0x10 Felt Polish Bobs
FPK307H3S06010	FPK307 H3S 06,0x10 Felt Polish Bobs
FPK308H308010	FPK308 H3 08,0x10 Felt Polish Bobs
FPK308H3S08010	FPK308 H3S 08,0x10 Felt Polish Bobs
FPK309H310012	FPK309 H3 10,0x12 Felt Polish Bobs
FPK309H3S10012	FPK309 H3S 10,0x12 Felt Polish Bobs
FPK310H312015	FPK310 H3 12,0x15 Felt Polish Bobs
FPK310H3S12015	FPK310 H3S 12,0x15 Felt Polish Bobs
FPK611H310015	FPK611 H3 10,0x15 Felt Polish Bobs
FPK611H3S10015	FPK611 H3S 10,0x15 Felt Polish Bobs
FPK612H312020	FPK612 H3 12,0x20 Felt Polish Bobs
FPK612H3S12020	FPK612 H3S 12,0x20 Felt Polish Bobs
FPK613H320025	FPK613 H3 20,0x25 Felt Polish Bobs
FPK613H3S20025	FPK613 H3S 20,0x25 Felt Polish Bobs
FPK614H3S12020	FPK614 H3S 12,0x20 Felt Polish Bobs
FPK618H310015	FPK618 H3 10,0x15 Felt Polish Bobs
FPK618H3S10015	FPK618 H3S 10,0x15 Felt Polish Bobs
FPK619H3S12020	FPK619 H3S 12,0x20 Felt Polish Bobs
FPK620H320025	FPK620 H3 20,0x25 Felt Polish Bobs
FPK620H3S20025	FPK620 H3S 20,0x25 Felt Polish Bobs





Safety Supplies

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Cotton Inspection Gloves

- Bleached cotton jersey
- Soft & hypo-allergenic
- Eliminates scratching
- Handle hotter parts sooner
- Prevents transfer of hand oils
- Disposable & recyclable
- Sizes to fit every worker
- Great value & quality

COTTON INSPECTION GLOVES

Part Number	Description
LL500	Ladies lightweight
ML500	Mens Lightweight
ML500J	Mens JUMBO-Lightwgt.
LM502	Ladies Medium-weight
MM502	Mens Medium-weight
LH503	Ladies Heavyweight
MH503	Mens Heavyweight



Nylon Inspection Gloves

- Lint-free nylon
- Stretchable
- Reversible
- Disposable
- Avoids static
- Handle hotter parts
- Feel for flaws
- Protects hands
- Keep parts clean
- Prevents scratching

Part Number
LTH700
MTH700

NYLON INSPECTION GLOVES



Heavy Duty Safety Gloves



We offer excellent style and quality in our operator safety gloves. These cotton/poly blend gloves will protect hands and absorb perspiration, yet allow air to circulate around hand and fingers. These gloves keep parts protected from hand oils and fingerprints, while allowing your operator's maximum dexterity and tactile sense for part finishing. Gloves are reversible, washable, stretchable and reusable.

Part Number	
Men	Ladies
COTTON/POLY BLEND SOLD IN DOZEN	
MSG500	LSG500
DUPONT KEVLAR® SOLD IN PAIRS	
MKG500	LKG500

SAFETY GLOVES



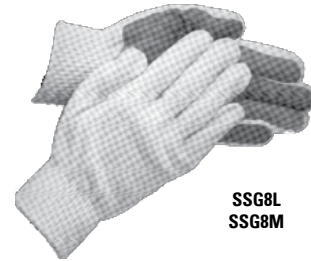
MSG500
LSG500

Grip-Tite™ Safety Gloves

- Can be laundered or dry cleaned
- Cotton-acrylic knit shell, nitrile coating on palm: tough, flexible, long-wearing
- Grips tite, handles heat without melting
- Comfortable, seamless construction
- A great work glove for many areas!
- Cool & comfortable - absorbs perspiration

Part Number	
Men	Ladies
SSG8M	SSG8L

GRIP TITE



SSG8L
SSG8M



Rubber Gloves



Latex Rubber Gloves

- Yellow color
- Embossed palm & finger tips
- 13" long
- 18 mil thickness
- Excellent dexterity
- Puncture resistant

RUBBER GLOVES

Grip-Right™ Rubber Coated Gloves

- Long-lasting, perspiration-free and long-wearing natural rubber coated palm is sure grip while the knitted shell breathes for added comfort
- Natural rubber coating has a embossed finish for extra gripping

Part Number	Size
Grip-Right™ Safety Gloves (Per Pair)	
GRG300M	Medium
GRG300L	Large
GRG300X	X-Large
Latex Rubber Gloves (Per DOZEN Pair)	
LRG500S	Small
LRG500M	Medium
LRG500L	Large
LRG500X	X-Large

Work Gloves



Cotton Jersey Gloves

- Brown color
- Clute pattern
- Knit wrist
- 9 oz. weight

Part Number	Size
Cotton Jersey Work Gloves	
CJG239L	Ladies
CJG239M	Men
100% Cotton Canvas Work Gloves	
CCG208L	Ladies
CCG208M	Men

WORK GLOVES



Cotton Canvas Gloves

- White color
- 8 oz. cotton
- Knit wrist for protection
- Soft, comfortable & washable

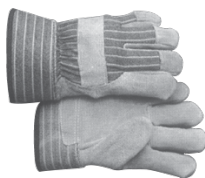
Leather Palm Work Gloves

Standard

Our standard leather palm work glove features full, shoulder-leather palm and fingers. They are heavy fabric backed with an elastic wrist strap and full rubberized 2 1/2" safety wrist cuff.

Double Leather Palm

Same features as our standard leather glove with the addition of an extra layer of leather sewn over the palm, thumb and index finger for extra protection.



Part Number	Description
122	Standard Leather Palm Glove
122L	Same as above ~ except Ladies Size
122DLP	Double Leather Palm Glove

LEATHER GLOVES



Comfort Grip General

The Lightweight Heavyweight

Nitrile palm coating makes this glove a light, flexible, abrasion-resistant and long lasting alternative to many cotton and latex gloves. The nylon stretch liner makes these gloves perfect for light- to medium-duty jobs that require precision handling, especially in hot sweaty conditions

Applications:

- General material handling
- Handling small parts
- Electrical component assembly

Product on



this page is

PART NUMBER	DESCRIPTION
CGMGU	GENERAL WORK GLOVE, NYLON WITH NITRILE PALM - MEDIUM
CGLGU	GENERAL WORK GLOVE, NYLON WITH NITRILE PALM - LARGE
CGXLGU	GENERAL WORK GLOVE, NYLON WITH NITRILE PALM, CUT LEVEL 1 - EXTRA LARGE

Comfort Grip Cut Resistant **no longer**

A Cut Above

These medium duty gloves have the same features as the General Use glove with even greater cut, puncture and tear resistance. They are excellent for jobs requiring dexterity when handling sharp parts

Applications:

- Handling abrasive or sharp material
- Forming, bending or machining sharp parts
- Cable pulling and wire handling

available



PART NUMBER	DESCRIPTION
CGMCR	CUT RESISTANT GLOVE, NYLON WITH NITRILE PALM, CUT LEVEL 3- MEDIUM
CGLCR	CUT RESISTANT GLOVE, NYLON WITH NITRILE PALM, CUT LEVEL 3 - LARGE
CGXLCR	CUT RESISTANT GLOVE, NYLON WITH NITRILE PALM, CUT LEVEL 3 - EXTRA LARGE

3M™ Gripping Material / Work

Grip Lighter, Hold Tighter

Comprised of thousands of micro fingers, these gloves provide excellent grip, even in dirty, wet or oily conditions. The gripping material sewn into the palm and fingertips of these gloves helps improve the grip while providing slip resistance. The durable synthetic suede, combined with padded fingers and thumbs, adds protection, while the expansion areas on the finger backs and knuckles provide a comfortable fit.

Applications:

- Factory and maintenance work
- Heavy equipment operation

PART NUMBER	DESCRIPTION
WGS	GRIPPING MATERIAL WORK GLOVE - SMALL
WGM	GRIPPING MATERIAL WORK GLOVE - MEDIUM
WGL	GRIPPING MATERIAL WORK GLOVE - LARGE
WGXL	GRIPPING MATERIAL WORK GLOVE - EXTRA LARGE





POSIGRIP®

A white nylon shell with gray palm coated lunar foam nitrile for excellent grip with dry, oily or wet applications. This glove has a knit wrist, is machine washable and is silicone free.

Applications:

- Material handling
- Manufacturing
- Machinery assembly



[POSIGRIP](#)

PART NUMBER	DESCRIPTION
MGP715SNFLWS	WHITE NYLON WITH GRAY NITRILE FOAM COATING , GENERAL - SMALL
MGP715SNFLWM	WHITE NYLON WITH GRAY NITRILE FOAM COATING , GENERAL - MEDIUM
MGP715SNFLWL	WHITE NYLON WITH GRAY NITRILE FOAM COATING , GENERAL - LARGE
MGP715SNFLWXL	WHITE NYLON WITH GRAY NITRILE FOAM COATING , GENERAL - EXTRA LARGE

Kevlar® Steel Cut Resistant

13g Kevlar® cut resistant glove with extended cuff, excellent abrasion resistance and microfoam nitrile palm coating. Antibacterial: DMF free. Cut level 4, heat rating 2.

Applications:

- Glass handling
- Metal fabrication
- Manufacturing & steel handling



[KEVLAR CUT RESISTANT](#)

PART NUMBER	DESCRIPTION
MCR713KSSNS	KEVLAR CUT RESISTANT LEVEL 4 - SMALL
MCR713KSSNM	KEVLAR CUT RESISTANT LEVEL 4 - MEDIUM
MCR713KSSNL	KEVLAR CUT RESISTANT LEVEL 4 - LARGE
MCR713KSSNXL	KEVLAR CUT RESISTANT LEVEL 4 - EXTRA LARGE

Pro Series® Tank® Gloves

TANK® features a hook and loop wrist, 4-way stretch spandex back of hand, synthetic leather palm, neoprene padded knuckle, heavy duty lycra fourchettes, synthetic leather patched palm with foam padding, terry thumb and reinforced thumb saddle.

Applications:

- Equipment operation
- Hand and power tool usage
- Rigging

[PRO SERIES TANK](#)



PART NUMBER	DESCRIPTION
MWG86500M	SYNTHETIC LEATHER WITH STRETCH SPANDEX BACK WORK GLOVE - MEDIUM
MWG86500L	SYNTHETIC LEATHER WITH STRETCH SPANDEX BACK WORK GLOVE - LARGE
MWG86500XL	SYNTHETIC LEATHER WITH STRETCH SPANDEX BACK WORK GLOVE - EXTRA LARGE

Thermoshield™ Gloves



Excellent Insulation - Thousands of terry cloth loops create a cushion of air that insulates against extreme temperatures. The range of thermal protection varies according to the duration of exposure.

Ergonomically - By eliminating stiff, bulky, uncomfortable seams, Thermoshield™ gloves provide a better fit, better breathability and greater comfort for enhanced productivity and less fatigue.

Reversible - Thermoshield™ gloves are reversible, to ensure maximum use from each individual glove; they pair easily after washing and can be replaced one glove at a time.

Superior Cost - Because Thermoshield™ gloves are machine knitted they provide greater consistency of quality than standard cut and sewn gloves.



Applications

- Glass handling
- Injection molding
- Plastic processing
- Steel manufacturing

Part Number	Description
24AC	24 oz. Loop-out Terrycloth

THERMOSHIELD

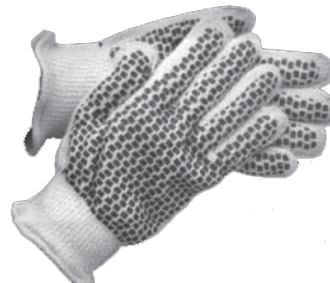
Hot Mill Gloves

HMG500

- Comfortable and breathable
- Low-cost comfort
- Good to 450°F
- Seamless double knit
- High-heat nitrile blocks



HMG500

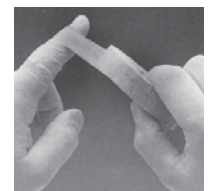


Part Number		Description
Men	Women	
HMG500	HLG500	Hot Mill Gloves

HOT MILL GLOVES

Safe-T-Tape™

Safe-T-Tape sticks only to itself - not skin. No loss of finger sensitivity, allows skin to breathe. Protects without hindering precision. Replaces bulky gloves. Protects against abrasive surfaces, lessens harmful effects of friction. Works well in oil and water. Easy to apply and painless to remove; use to wrap fingers, wrists and hands. Excellent for many manufacturing applications.



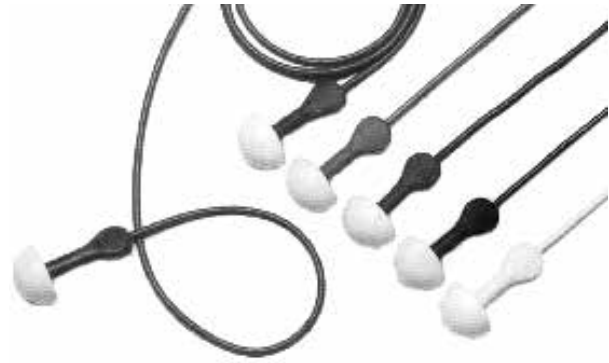
SAFETY TAPE

Part Number	Color	Width	Bag Qty	Case Qty
110-075W	White	3/4"	16 rolls	320 rolls
110-075G	Green	3/4"	16 rolls	320 rolls
110-100G	Green	1"	12 rolls	240 rolls



E.A.R. Express™ Pod Plugs

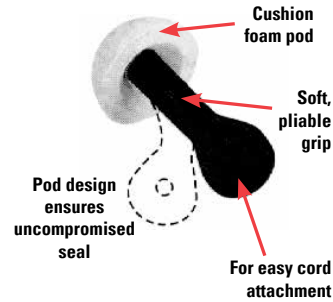
Pod Plugs are so comfortable you might forget you're wearing hearing protection! This new plug has a patented InstaSeal™ design which combines the comfort of a foam sealing pod and the convenience of a soft pliable grip for easy insertion and removal. When inserted, the pod instantly seals; these unique plugs provide a custom, secure fit in each unique ear canal. Pod plugs provide the needed protection with minimal distortion. They are ideal for noisy environments where communication is essential. Dispenser box of 100 pair contains mixture of colors (yellow, green, red, blue & purple).



NRR 25

E•A•R® Express™
Pod Plugs with patented InstaSeal™ System

- Soft plug with grip that allows quick, clean insertion
- Reusable yet economical enough to be disposable
- Colorful grips allow easy compliance monitoring



Part Number	Description
228008	Uncorded
228010	Corded
100 pair per box.	

E.A.R. EXPRESS PODS

E.A.R.™ Foam Ear Plugs

- Soft polymer foam expands for a custom fit
- Non-irritating improved fit
- Dermatologically safe, yellow foam

Part Number	Description
230005	Uncorded
230007	Corded
200 pair per box.	

EAR FOAM PLUGS



NRR 29

TaperFit 2 Ear Plugs

- 2 sizes - regular and large corded or uncorded
- Non-irritating, improved fit!
- Dermatologically safe, yellow foam

TaperFit Ear Plugs

Part Number	Description
230015	Uncorded - Reg. Size
230016	Corded - Reg. Size
230012	Uncorded - Plus Size
230014	Corded - Plus Size

200 pair per box.

NRR= 32





Sound Shield Ear Muffs



Sound Shield #2900 NRR=29

- Maximum ratings and comfort
- 3 position ear muff
- Soft-Seal™ ear cushions and super-soft head pad
- Premium materials, design and fit

Part Number	NRR
2900	29

[Sound Shield Ear Muffs](#)

Sound Level Meter

- 3-½ digit LCD display with 0.1 dB resolution 30-segment analog bar graph
- Measure sound level from 40 to 130 dB
- Built-in 1" electric microphone for convenient one-hand operation
- Complete with 9V battery and carrying case



[Digital Sound Level Meter #407730](#)

[Sound Level Meter](#)

3M V4 Virtua Safety Glasses

The Virtua V4 protective eyewear line combines outstanding style, protection and affordability, all while offering wrap around coverage and soft, dual-injected temples that help relieve hot spots around the ears. Designed for indoor or outdoor use, Virtua V4 protective eyewear is a valuable choice in vision safety.

[3M V4 Virtua Safety Glasses](#)

- Unisex styling
- Soft, dual-injected temples
- Wrap-around lens
- Meets the High Impact Requirements of ANSI Z87.1-2003



Part Number	Description
11670	Clear hard coated lens, black/gray frames
11672	Clear anti-fog lens, black/gray frames

- Offers an unobstructed view, superior impact protection and exceptional comfort
- Cushioned brow, universal-fit nose bridge, and soft tip temples ensure a comfortable fit
- Polycarbonate lenses that filter out 99.9% of UV
- Compliant with ANSI Z87.1-2003 High Impact requirements

Part Number	Description
11228	Clear uncoated
11326	Clear hard coated
11329	Clear anti-fog

See quantity discount schedule at bottom of this page



[3M Virtua Safety Glasses](#)

3M Virtua Clear Anti-Fog with Foam

3M™ Virtua™ CCS Protective Eyewear with Foam Gasket features a comfortable seal that helps limit eye exposure to nuisance dust while providing additional cushioning. The anti-fog lens coating and removable foam-lined gasket with airflow vents make this protective eyewear ideal for humid environments.

Part Number	Description
11872	Clear, anti-fog lens

[3M Virtua Clear Anti-fog with Foam](#)



3M Virtua Clear Readers

Designed for workers who have difficulty reading small print or who are engaged in small detail work. Unisex styling. Lightweight design weighs less than one ounce. High wrap offers additional coverage. Contoured temples for comfortable fit. Polycarbonate lens absorbs 99.9% UV. Bifocal readers with three magnification diopters: +1.5, +2.0, +2.5. Meets the High Impact Requirements of ANSI Z87.1-2003.

Part Number	Description
11513	Readers AF+1.5, Diopter
11514	Readers AF+2.0, Diopter
11515	Readers AF+2.5, Diopter

[3M Clear Readers](#)



3M Safety Goggles

Safety Splash Goggles

- Venting system circulates air to help minimize fogging while keeping liquids out
- Dependable protection from liquids and particles
- Fits over most prescription glasses
- Meets the High Impact Requirements of ANSI Z87.1-2003.

Part No.	Description
40661	Safety Splash
40300	Safety Impact

Safety Impact Goggles

- Helps protect eyes from impact and particulates.
- Oversized, .060" lens thickness
- Comfortable elastic headband
- Meets the requirements of ANSI Z87.1-2003



Dispensers for Glasses

- Mount on wall or free-standing
- Encourages wearing of safety glasses
- Easy to see when you're running low
- Durable transparent acrylic
- Use with loose or boxed glasses

Part Number
SGD999

Dispenser

[CALL FOR AVAILABILITY ALL THIS PAGE](#)



Elastic Wrist Wrap

- With thumb loop
- 3" wide elastic with Velcro closure
- Comfortable protection

Part Number	Description
881832	Elastic Wrist Wrap



Elastic Wrist Support

For wrist sprains, strains, fatigue and carpal tunnel syndrome. Elastic body provides compression and stability allowing worker to continue daily activities. Hook & loop closure, tapered tension strap. 7" length, black color.

Part Number	Right Hand	Left Hand
Small	884400	884401
Medium	884402	884403
Large	884404	884405
X-Large	884406	884407

Back Support

These back support belts are ergonomically designed and provide controlled support to the lower back region. Research has shown that most common back injuries are caused by lack of intra-abdominal pressure - or IAP - created by the constricting of abdominal and spinal muscles. The greater IAP, the higher the load the spine is able to accommodate without injury. Our back support belts are engineered to help increase the IAP to the highest level possible, while strengthening the lower lumbar area.



Removable Suspenders - easily detach so you can wear the belt alone



	Part Number	Size
Stretch band w/non-removable suspenders • Light lifting • Single adjustable 5" waistband	RC629-7S	S (28"-32")
	RC629-7M	M (33"-38")
	RC629-7XL	XL (45"-49")
Breathable nylon w/removable suspenders • All day use • Dual adjustable 4" waistband	RC629-3CS	S (28"-32")
	RC629-3CM	M (33"-38")
	RC629-3CXL	XL (45"-49")

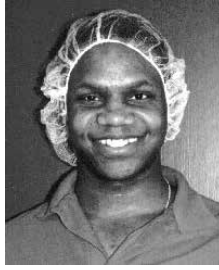


Hair & Beard Nets



Non-Woven Head Cover

A low-cost disposable bouffant-style white polypropylene hairnet used in molding, inspection, assembly, clean-room and other areas requiring hair restraint. Meets all requirements for safety & sanitation.



Mesh Hair Nets

A washable bouffant-style white nylon hairnet used in cleanroom, assembly, molding, inspection and other areas requiring hair restraint. Elastic band assures a comfortable fit. 100 per box.

Beard Restraint

Breathable, non-woven fabric conceals beard, mustache and face area to help eliminate contamination. Stays secure with elastic band.

Part Number	Description	Size
530515	Mesh Hair Net (100/bag)	21"
530516	Mesh Hair Net (100/bag)	24"
530551	Non-Woven Head Cover (100/bag)	21"
530552	Non-Woven Head Cover (100/bag)	24"
530518	Beard Restraint (100/bag)	—

HAIR/BEARD NETS

Posi-Wear™



PS3712 Posi-Wear™ 18" Arm Covers, elastic at both ends, one size fits all. 100 pair per case.

PS3714 Posi-Wear™ Shoe Covers, elastic opening, one size fits all. 100 pair per case.

Note: Both shoe & arm covers are priced per pair and the coveralls are priced each.

POSI-WEAR

PS3700 Posi-wear™ Coveralls with zipper & collar, available in M, L, XL ~25 per case.

Part Number	Description	Case Qty
PS3714	18" shoe cover	100 pairs
PS3712	18" arm cover	100 pairs
PS3700*	Coverall w/zippered front	25 each

*Add M, L or XL to specify size.

3M[®] #8511 Dust/Mist Respirator



- Cool Flow™ valve allows for easy breathing
- Straps are out of the way, low profile design
- PEL not less than .05 mg/m³

Part Number	Description
8511	3M dust/mist respirator



10 Per Box

RESPIRATOR

Meets OSHA guidelines for use up to NIOSH/M10XPEL



Bandages

Plastic Sheer Strips - Sterile, waterproof, vented to promote healing, low cost and ready to peel and stick. Rounded corners prevent roll-back and interference with work.

Woven bandages - Bend with constant motion. Constructed of comfortable, breathable woven material to keep workers cool and comfortable. Individual packages ensure sanitization.



Plastic Strips – 100 Per Box	
Part Number	Size
882324	¾" x 3"
882321	1" x 3"
Bulk Pack – 750/Tray	
882346	¾" x 3"
882344	1" x 3"

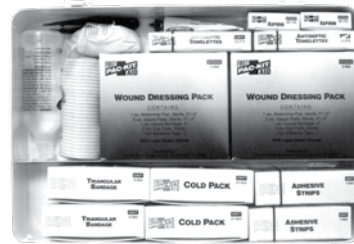
Woven Bandages – 100 Per Box	
Part Number	Size
882320	¾" x 3"
882318	1" x 3"
Bulk Pack – 650/Tray	
882347	¾" x 3"
882345	1" x 3"

BANDAGES

Industrial First Aid Kits

Sturdy metal cabinets can hang on the wall, yet if left unattached they are very easy to transport from area to area. Each First Aid Cabinet contains the maximum amount of supplies for your needs, economically priced to fit in your budget! Two sizes available. Each kit contains treatments for on-the-job injury and illness.

First Aid Kits	# 6430	# 6450
	25 person	50 person
1" x 3" adhesive bandage	50	100
Large wound compress	1	1
3" gauze pads	10	
4" gauze pads		25
Triangular bandages	1	1
2" x 5 yard gauze bandage		1
4" x 5 yard gauze bandage	1	1
½" x 5 yard adhesive tape	1	1
1 oz. eye flush, pads, tape kit	1	
4 oz. eye flush, pads, tape kit		1
Antiseptic towelettes	10	20
ABT first aid/burn cream in .5 gm pkgs.	12	12
Elastic bandage 2" x 5 yards		1
Cold pack	1	2
Forceps	1	1
Scissors	1	1
First aid guide	1	1
Latex gloves - 2 pair	1	1



Contents of 50-person kit



Contents of 25-person kit

Model Number 6430 Weatherproof plastic 25-person kit measures 10" x 7.5" x 3"

Model Number 6450 Weatherproof steel 50-person kit measures 14" x 9.5" x 3"

FIRST AID KIT

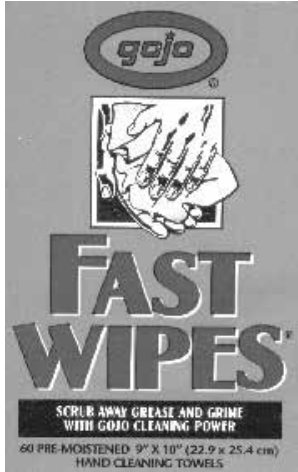
Eye & Skin Flush Station

Immediate irrigation is the critical first step to treat a chemical splash to the eye. The clinical outcome of this type of accident is directly related to how quickly treatment is begun. The formulation of this eye & skin flush solution is a sterile, isotonic, buffered solution that will work to neutralize the effects of acids and alkalis, while flushing away chemicals, foreign particles or irritants from the eye.

[Model Number 24-202 32 oz. Eye & Skin Flush Station](#)

[Model Number 24-201 32 oz. Replacement Bottles](#)





FAST-WIPES® Pre-Moistened Hand Cleaning Towels

FAST WIPES® are high-strength, disposable hand cleaning towels. Each towel is impregnated with a special GOJO heavy-duty, hand-cleaning formula that removes grease, grime and other soils in one fast, easy step while taking good care of your hands.

FAST WIPES® provide a quick cleanup, eliminating the need for many time-consuming trips to the sink throughout the day.

Part Number	Description
904-285	Gojo FastWipes® – 60 pack
904-298	Gojo FastWipes® – value pack (150)

[FAST WIPES](#)

Natural* Orange with Pumice Cleaner



Gojo® Natural* Orange with Pumice

This lotion hand cleaner is a petroleum-free citrus formula and has scrubbing pumice to deep clean, plus lanolin, aloe and jojoba to help protect hands.

*Natural citrus ingredient

Part Number	Description
904-008	1 gal. orange w/pumice ~ no bracket

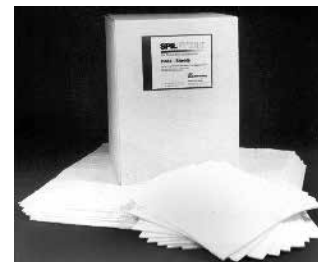
[NATURAL ORANGE](#)

Absorbent Pads

Perfect for soaking up oil around or under leaking machinery or for cleaning up oily tools. Use on benches for assembly or disassembly of pumps, gears and dirty or oily pieces.

Part Number	Size	Case Qty.
151012	12"×12" Pads	100
151050	20"×16" Pads	100

[ABSORBENT PADS](#)



6 Qt Utility Pan

Great multi-purpose plastic utility pan can be used for collecting oil, water or other non-aggressive liquid drips. Also may be used to collect and move parts.

[Part Number UP1](#)





Spill Control Kits

SPILL CONTROL KITS



Universal Sorbent, Zipper Bag Spill Kit

Absorbs up to 5 gallons!

Part Number 4553BG

Contents (20) single-weight SFG-70 16" x 18" universal pads

- (1 pr) nitrile gloves
- (1 pr) splash goggles
- (1) disposal bag
- (1) clear zipper bag
- (3) 3" x 4' universal socks
- Easy to use and store, Grab & Go Zipper Bag Spill Kits contain a variety of spill response materials and equipment specifically designed to meet your needs
- Clear bag is easy-to-handle and carry, and keeps the contents visible to the spill responder
- Each kit has grommets, allowing it to be mounted on walls or other surfaces
- Zipper bag keeps sorbents clean and protected when not in use
- Kit measures approximately 22" x 6" x 18" and weighs 5 pounds

Universal Mobile Spill Kaddie Kit

Absorbs up to 22 gallons!

Part Number 4500K2

Contents:

- (5) 3" x 4' Socks
- (8) 10" x 10" pillows
- (1) 15" x 75' universal sorbent roll
- (1) Disposal bag & twist tie
- (1 pair) nitrile gloves
- (1 pair) splash goggles
- Spill Kaddie on wheels



Features and Benefits

- Convenient and mobile spill kit with all the contents needed to handle a spill
- Contents stay clean and protected when not in use
- Mobile Kaddie can be moved and stored in a variety of locations
- Mobile Kaddie has easy open doors and hard plastic wheels
- Kaddie measures 36" L x 24" W x 16" D and weighs 36 pounds

Refill Kit for Universal Mobile Spill Kaddie

Part Number 4500K2R

Contents:

- (5) 3" x 4' Socks
- (8) 10" x 10" pillows
- (1) 15" x 75' universal sorbent roll
- (1) Disposal bag & twist tie
- (1 pair) nitrile gloves
- (1 pair) splash goggles

SPILL CONTROL WIPES



Light-Duty Utility Wipes

Part Number 53600

Spilfyter brand light-duty utility wipes are a 2-ply wipe measuring 10.25" x 12". There are 125 wipes in a convenient pop-out box.

A great value tissue-based wipe.



Medium-Duty Utility Wipes

Part Number 50900

Spilfyter brand medium-duty utility wipes are a 4-ply wipe measuring 10.25" x 12". There are 150 wipes in a convenient pop-out box. Reinforced with a nylon scrim netting, these wipes hold up to tough cleaning jobs where durability is needed. Designed with a 4-ply construction and nylon wipe reinforcement, these scrim wipes can take on the toughest job.



Heavy-Duty Utility Wipes

Part Number 51800

Spilfyter brand heavy-duty utility wipes are a strong and durable 1-ply wipe measuring 10.25" x 12". There are 125 wipes in a convenient pop-out box.



Pre-Moistened Degreaser Wipes

Part Number SW20-70

Spilfyter brand pre-moistened degreaser wipes are a strong and durable wipe measuring 10" x 12". There are 70 wipes in a canister. A citrus degreaser, this wipe dissolves grime and works on the toughest grease, tar and printer's ink acting as a rust inhibitor.





Absorbent Pillows

Common machinery leaks and oil spills cause floors to become unappealing and dangerous. These products are designed for quick and economical cleanup of all non-aggressive liquid leaks and spills. Constructed primarily of cellulose fibers, this maintenance sorbent is also biodegradable.

- The easy-to handle solution to cleanup of oil spills on land and water
- Pillows are highly absorbent, picking up many times their weight in oil
- Designed for quick and economical cleanup of all non-aggressive liquid leaks and spills



Part Number	Size	Case Qty.
150032	12"×12"	12

[PILLOWS](#)

Absorbent Rolls



Use rolls on all sizes of oily spills and non-aggressive liquid discharges. Rolls can be cut to cover small areas such as under leaking machinery. Sold individually.

Part Number	Size
151048	18"×150' Roll

[ROLLS](#)

Absorbent Socks

Ideal for soaking up non-aggressive fluids, oils and other petroleum products. The moldable shape easily conforms to fit around equipment, drums, tanks, sinks or walkways. Sold individually.



Part Number	Size	Case Qty.
150304	3"× 4 Ft.	40
150310	3"× 10 Ft.	6

[SOCKS](#)





INDUSTRIAL SUPPLIES

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888-808-4363 (toll-free fax)
dme@dme.net

DME Canada

A- 99 First Gulf BLVD
Brampton , ON
L6W 4T8 Canada
800-387-6600 (toll-free)
905-677-6370
800-461-9985 (toll-free fax)
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