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Resin Handling Bins

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

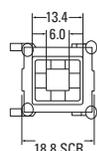
Resin Bins Features:

- 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

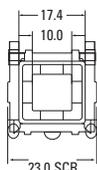


[RESIN HANDLING BINS](#)

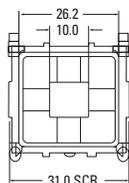
	Stackable			Non-Stackable			
Part Number	RB90L	RB175L	RB400L	RB800L	RB800LC	RB1200L	RB1200LC
Capacity	81lbs	158lbs	368lbs	800lbs	800lbs	1200lbs	1200lbs
Volume	2.3 CF	4.5 CF	10.5 CF	22.7 CF	22.7 CF	34.2 CF	34.2 CF
Size (L x W x H)	18.8" x 18.8" x 30.1"	23" x 23" x 37.6"	31" x 31" x 42.8"	37.5" x 37.5" 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



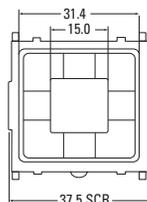
VOLUME = 2.3 Cu. Ft
CAPACITY = 81 Lbs.
(STACKABLE)



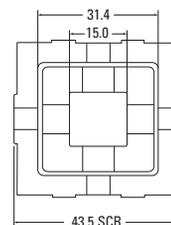
VOLUME = 4.5 Cu. Ft
CAPACITY = 158 Lbs.
(STACKABLE)



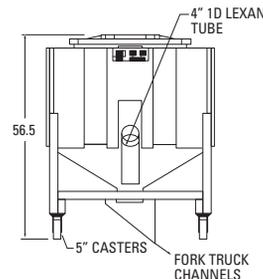
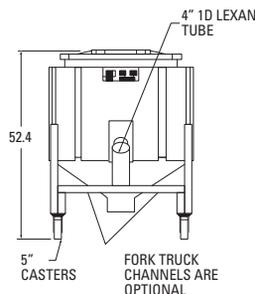
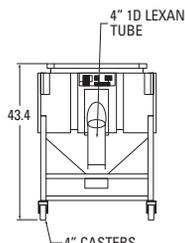
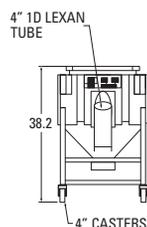
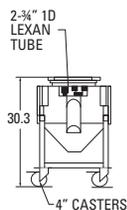
VOLUME = 10.5 Cu. Ft
CAPACITY = 368 Lbs.
(STACKABLE)



VOLUME = 22.7 Cu. Ft
CAPACITY = 800 Lbs.
(NON-STACKABLE)



VOLUME = 34.2 Cu. Ft
CAPACITY = 1200 Lbs.
(NON-STACKABLE)



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

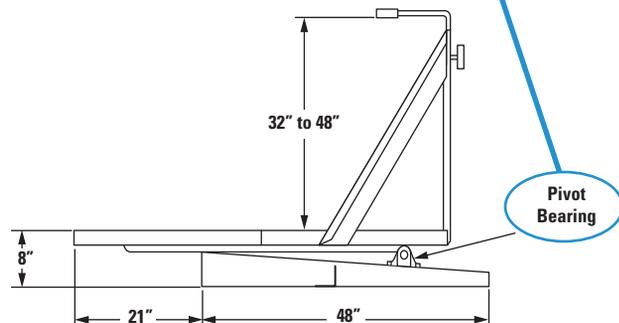
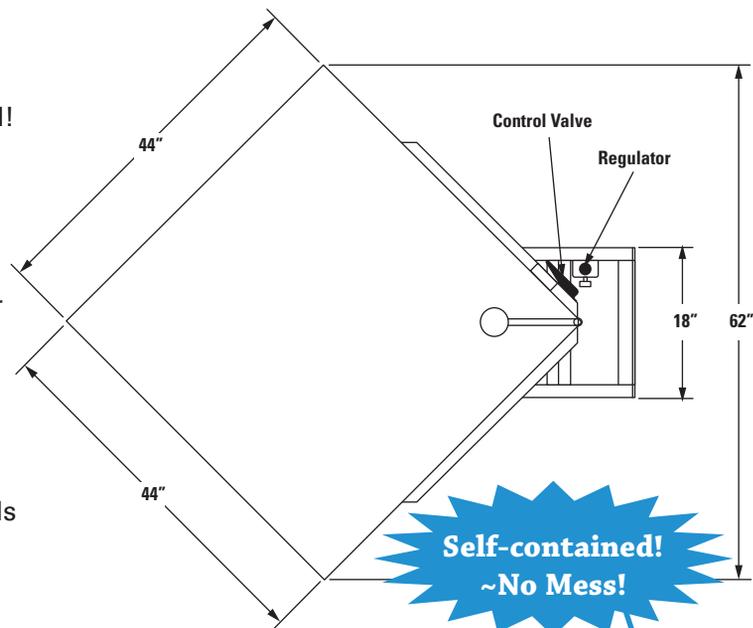
Optional Features:

- 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

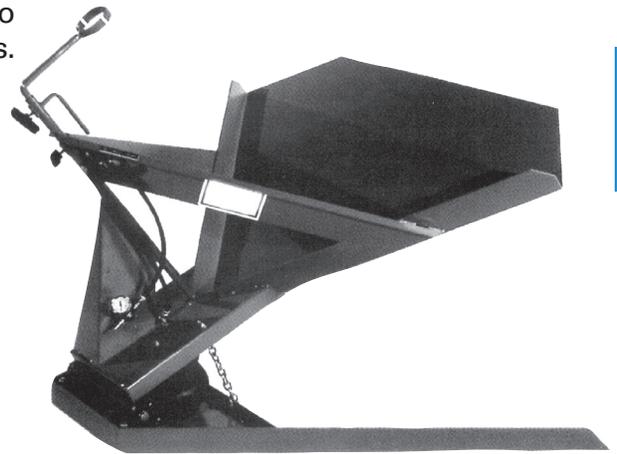
These products carry a full two-year warranty covering defects in materials, manufacture and workmanship. Also, all STANDARD products are covered by a 30-day trial period guaranteeing customer satisfaction!



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.



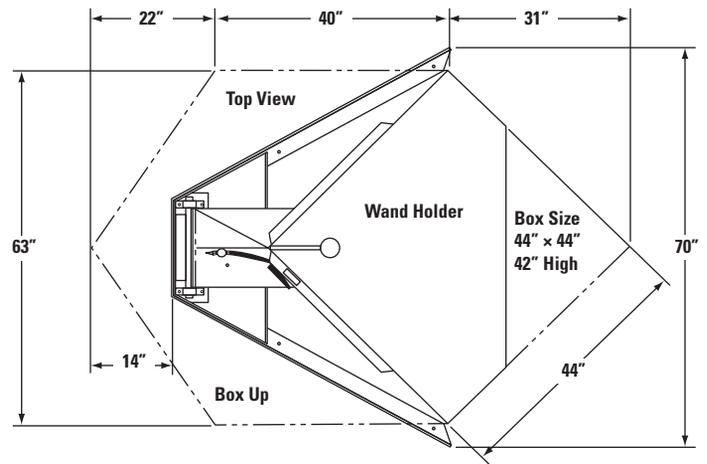
GROUND ENTRY
PNEUMATIC GAYLORD
TILTER

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

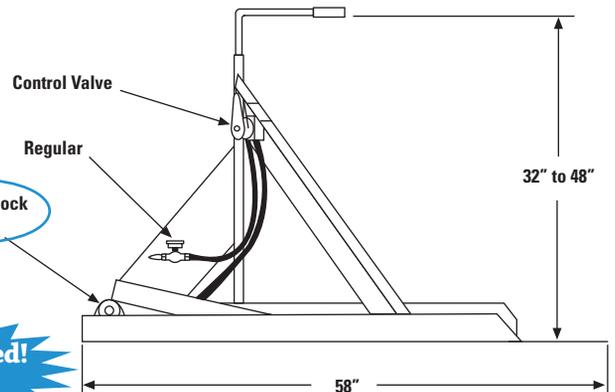


Part Number TT2

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

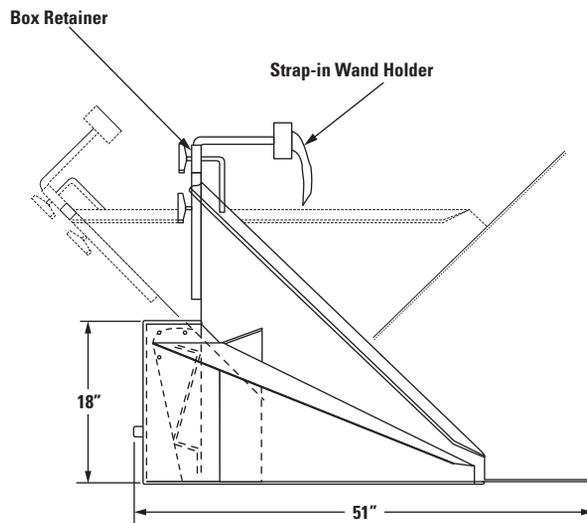
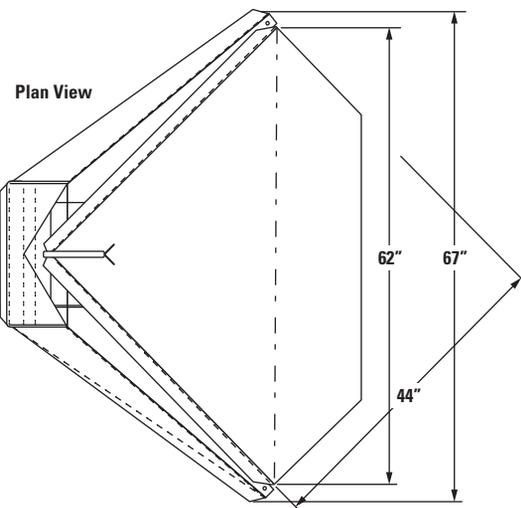
Optional Features:

- 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

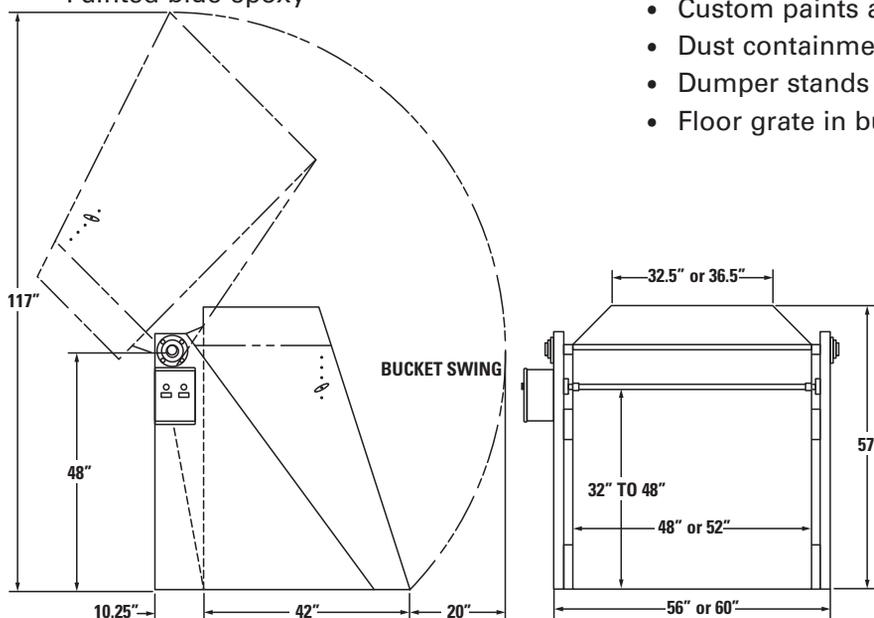
Premier Hydraulic Dumper

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

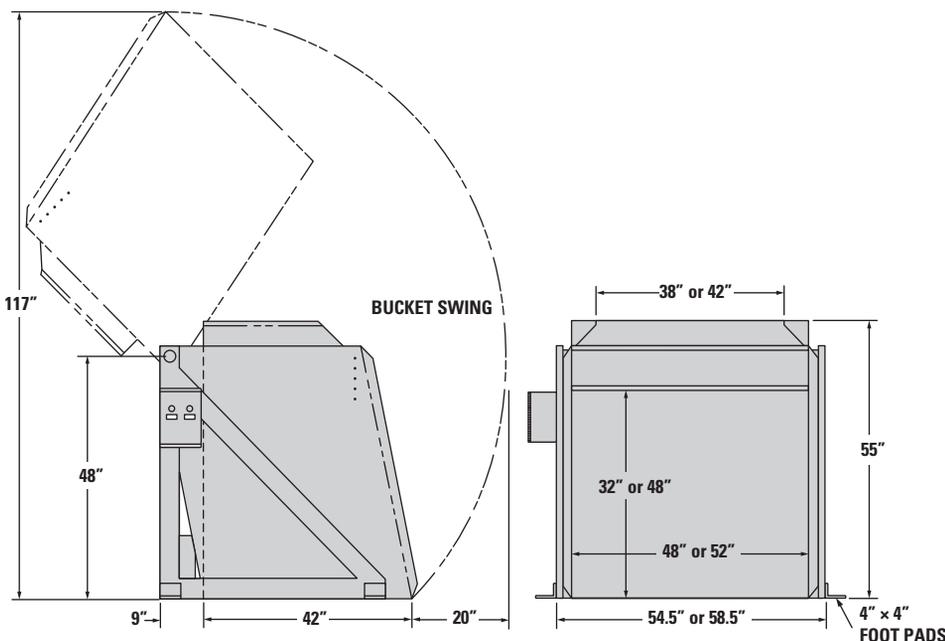
Major Options:

- 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:

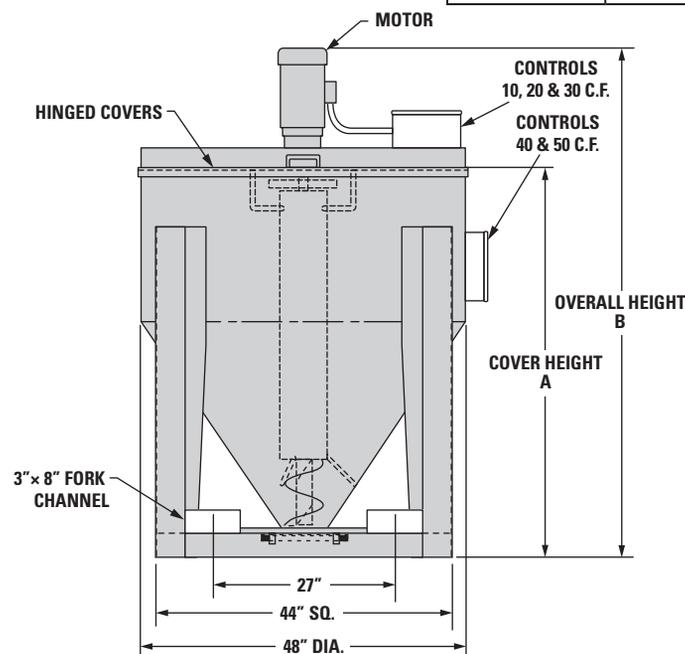
- Timer controlled, direct-drive vertical auger mixers
- 10 through 60 cubic foot capacities
- Eight-inch diameter discharge for fast unloading
- 14 gauge body and industrial weight auger for durability
 - steep-sided conical body handles most materials

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)

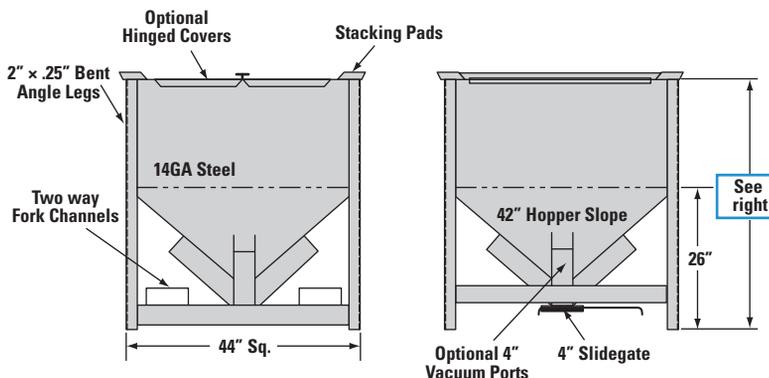
Other options available - or will custom design to fit your needs!

Portable Storage Bins

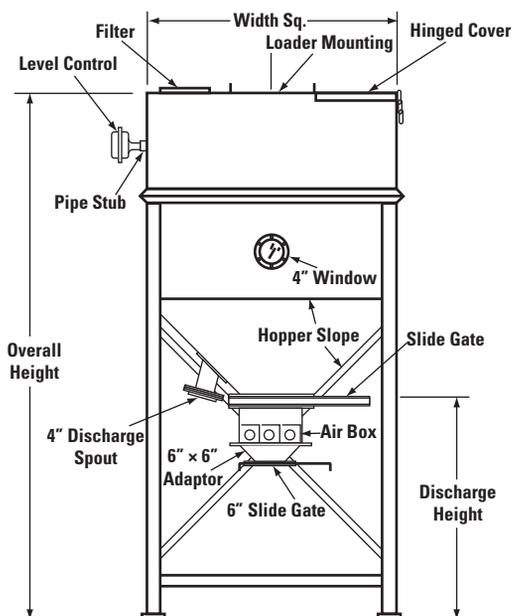
Part Number	Description
40-2000	PSB-20 cu. ft. base unit
40-2100	PSB-20 cu. ft. with 4-way vacuum ports
40-2010	PSB-20 cu. ft. with 2-piece cont. hinged covers
40-2110	PSB-20 cu. ft. with vacuum ports AND covers
40-3000	PSB-30 cu. ft. base unit
40-3100	PSB-30 cu. ft. with 4-way vacuum ports
40-3010	PSB-30 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

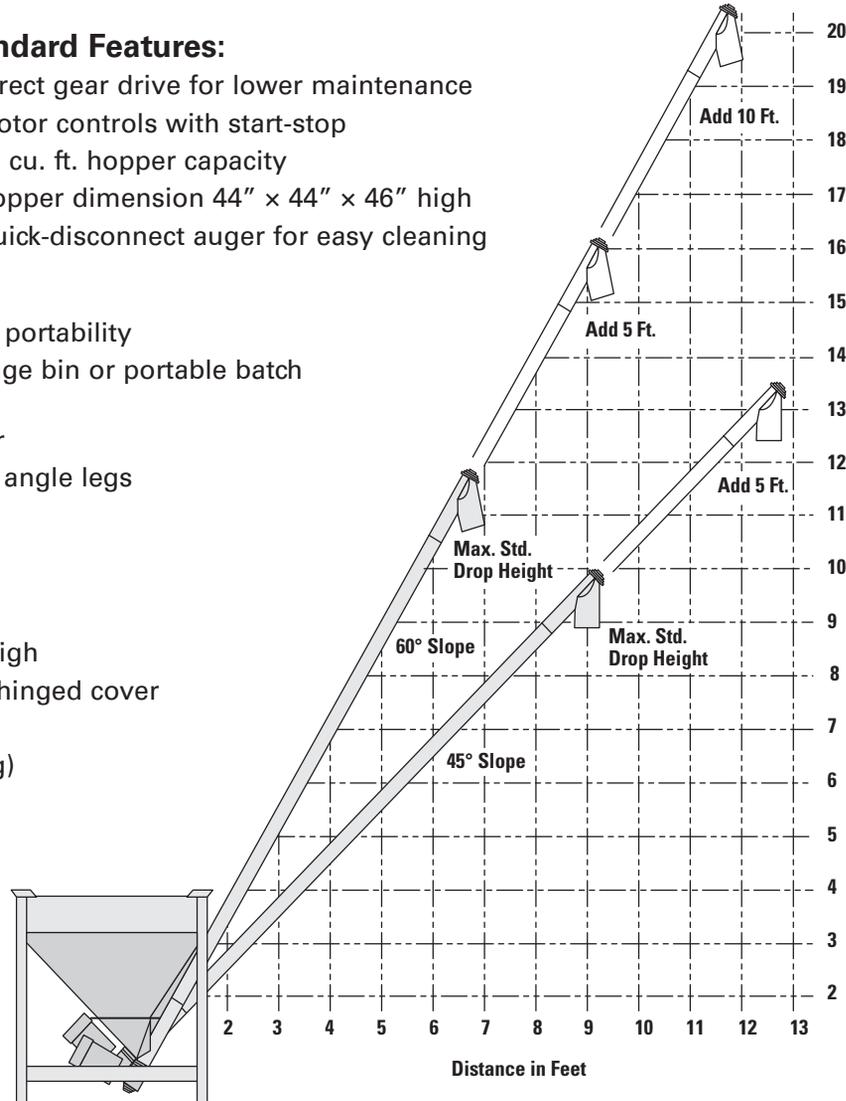
- Compressible dust seal
- Two-way fork channels for easy portability
- Stacking pads for portable storage bin or portable batch mixer
- Foot pads to secure unit to floor
- 12 gauge hopper with 1/4" bent angle legs
- 45° or 60° auger slope
- Epoxy painted, blue

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.

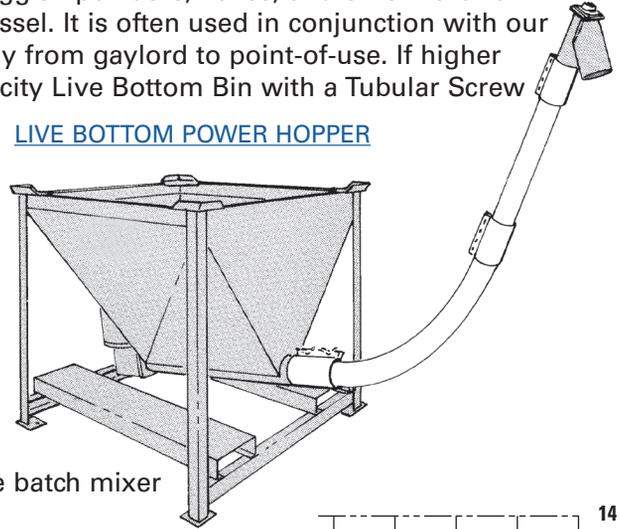
Check with us before ordering to make sure the model you have selected will meet your requirements.

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

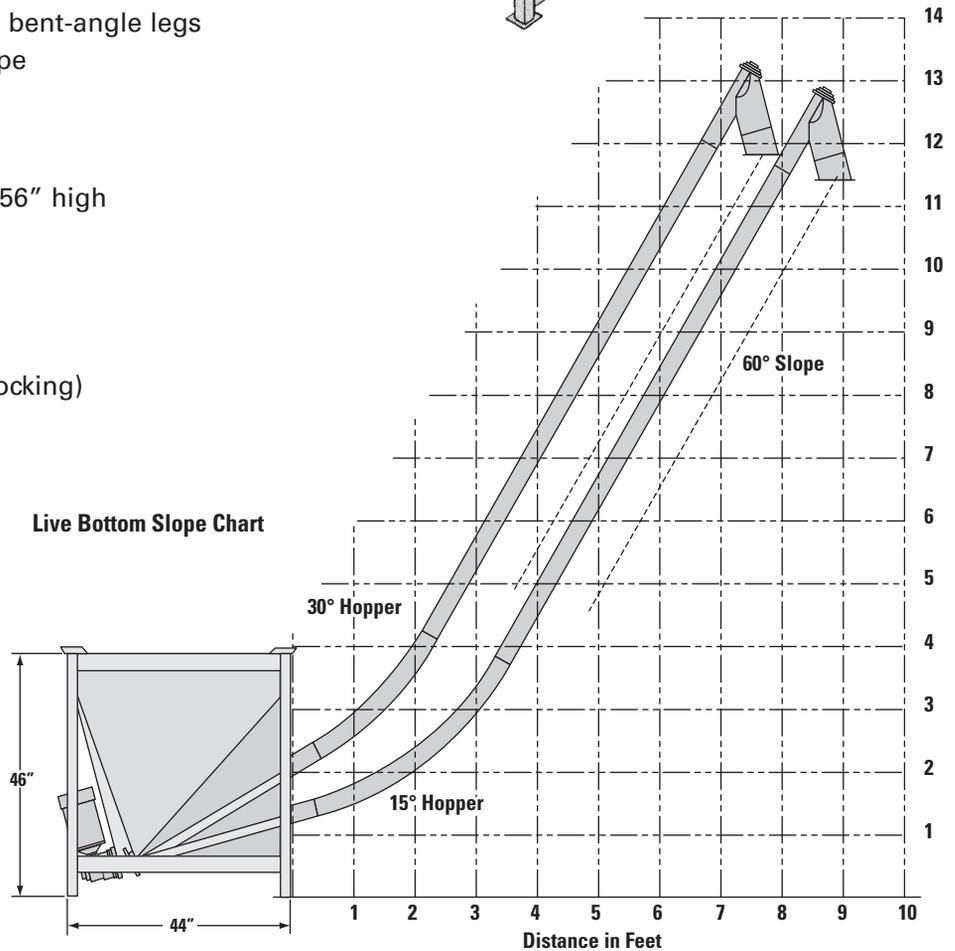
Options:

- 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.



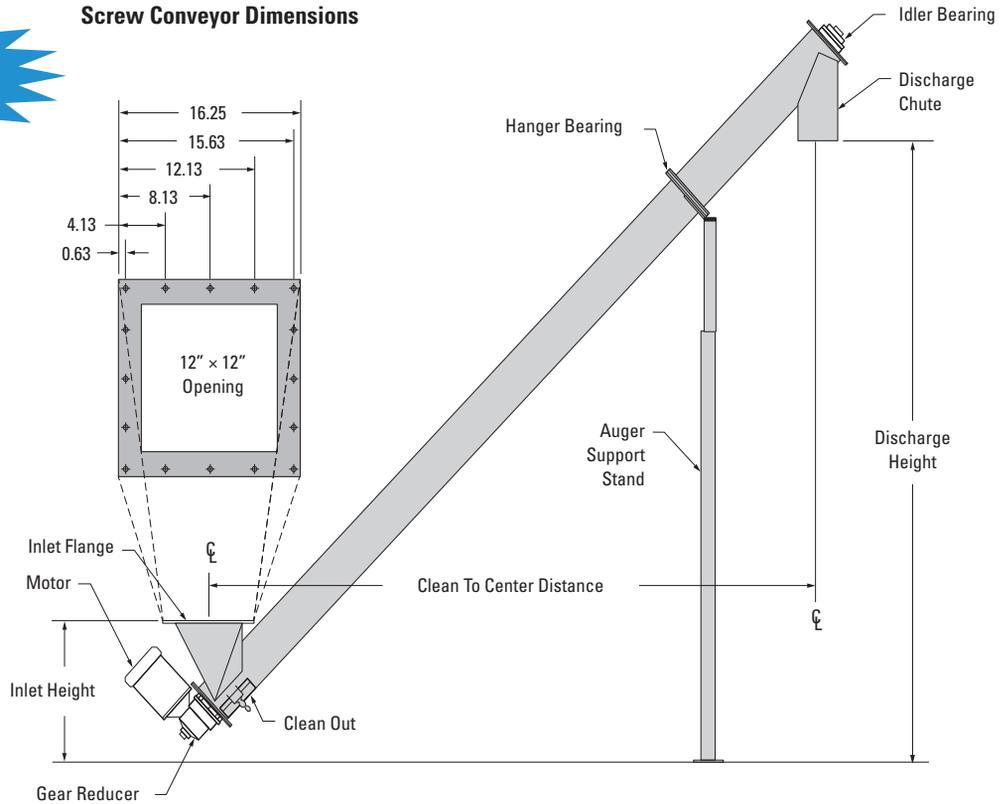


Screw Conveyor

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®

PACKAGING CLIPS

Part Number

OCLIPS



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)	(m³/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

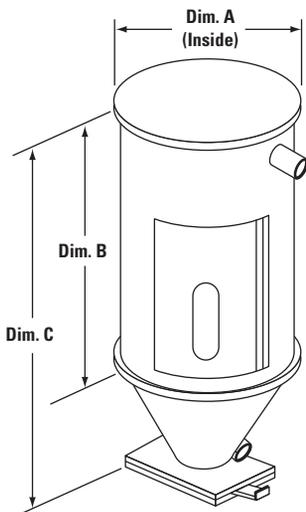
- Floor Stand
- Take Off Box (NA on 5)
- Adjustable Fill Sensor

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.



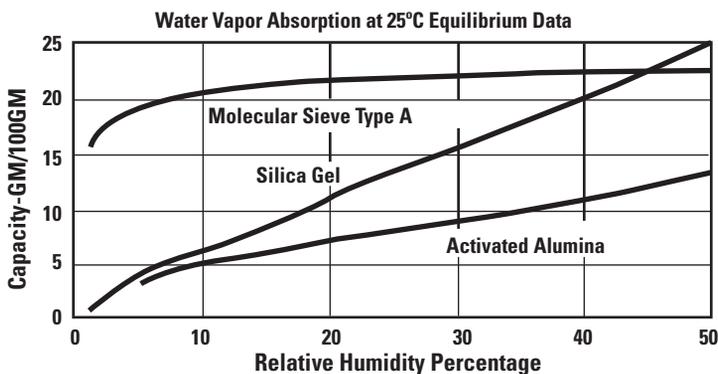
Dryer Model	Hopper Capacity	Number of hoppers	Dimensions
CAHB5-3	5 lbs/hr	3	48" (l) x 28" (w) x 43" (h)
CAHB15-3	15 lbs/hr	3	48" (l) x 28" (w) x 50" (h)

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

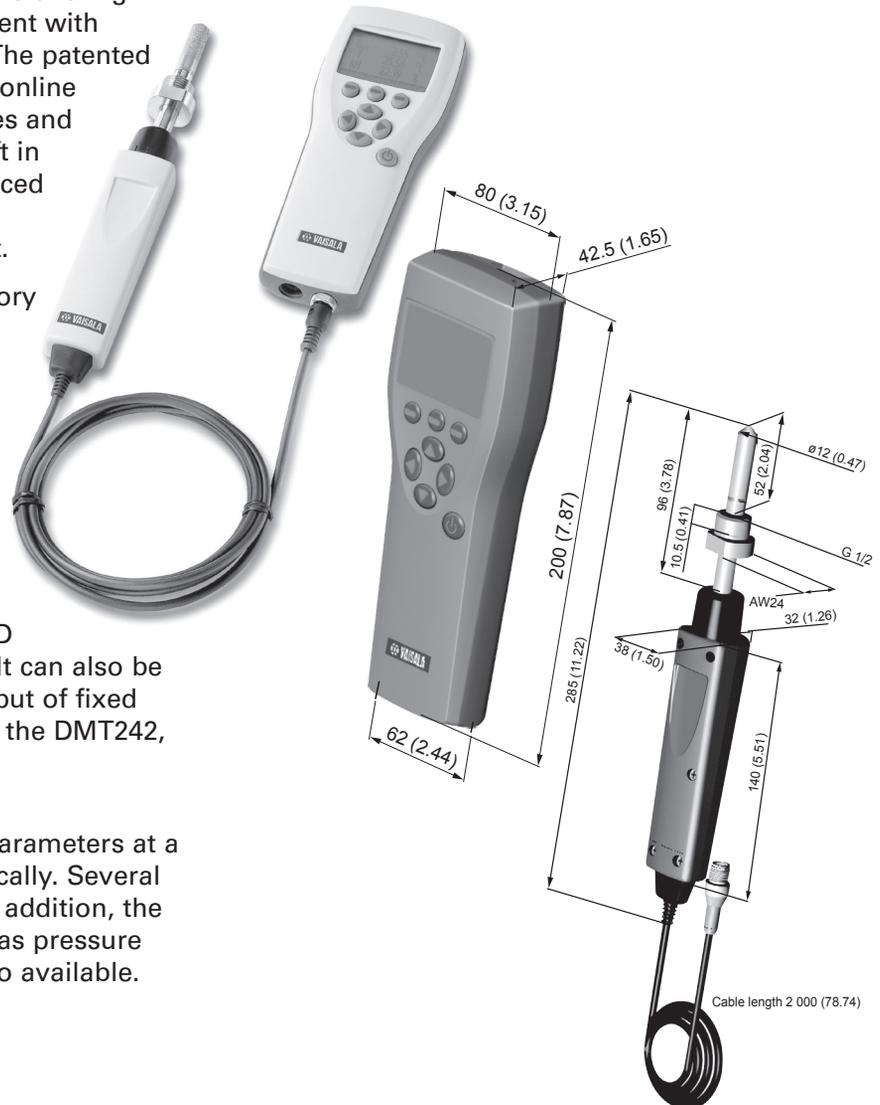
The DM70 has a versatile and easy-to-use, menu-based user interface and a clear graphical LCD display with datalogger function. It can also be used as a tool for reading the output of fixed Vaisala dewpoint transmitters like the DMT242, DMT142 and DMP248.

Various display variables

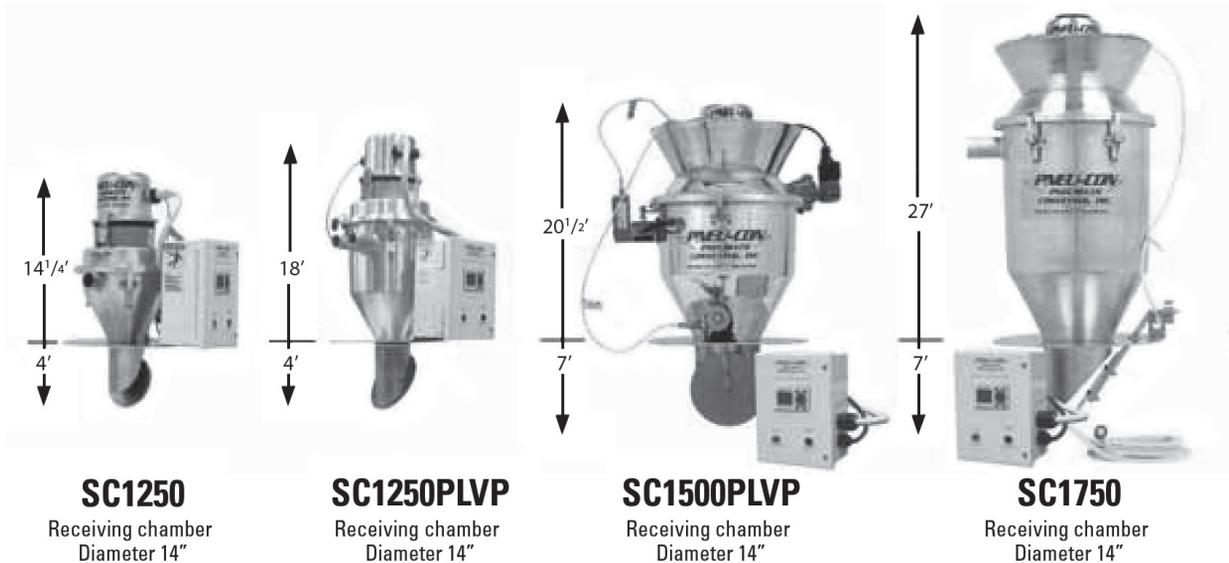
The DM70 displays one to three parameters at a time, either numerically or graphically. Several humidity units can be selected. In addition, the DM70 includes conversion from gas pressure dewpoint. An analog output is also available.

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)



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.

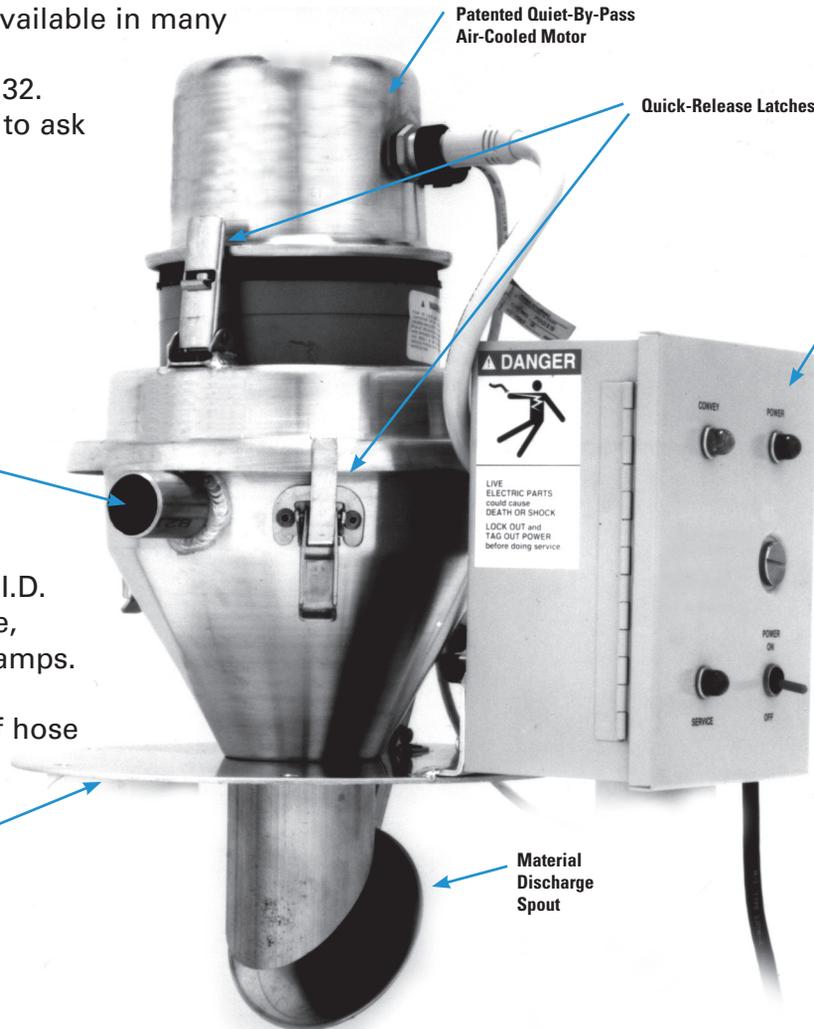


Whisper Loaders™

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



Patented Quiet-By-Pass
Air-Cooled Motor

Quick-Release Latches

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

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

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)

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)

Stainless Steel Model SC1250SS

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

Self-Cleaning Model SC1250VP

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

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

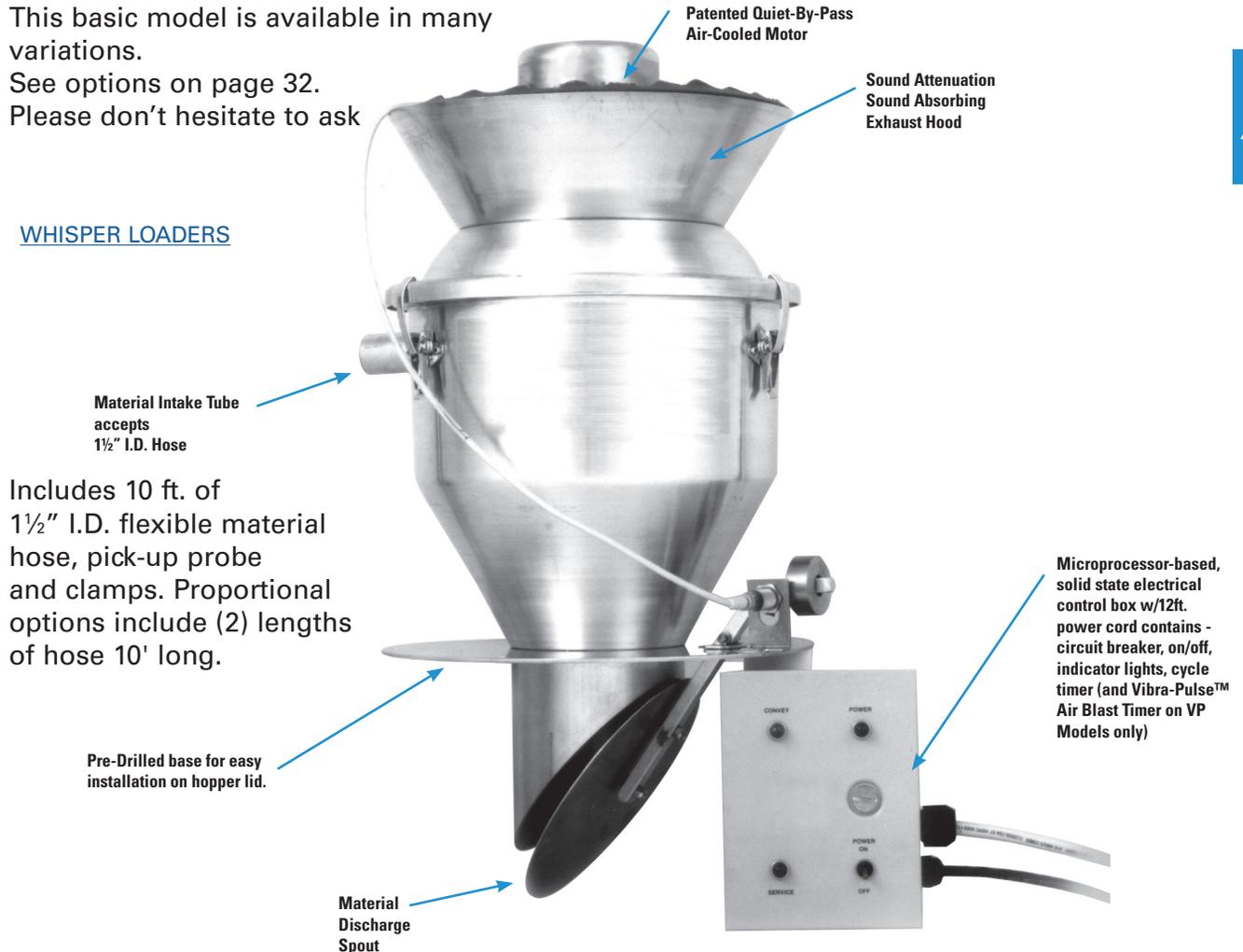
Whisper Loaders™

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



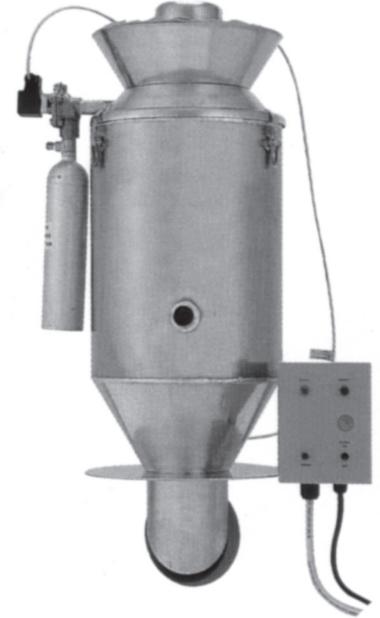
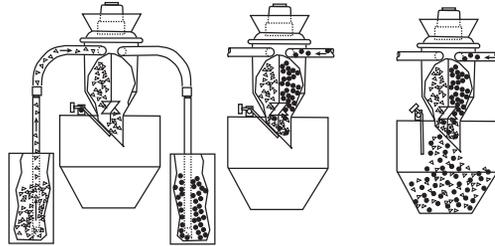
WHISPER LOADERS



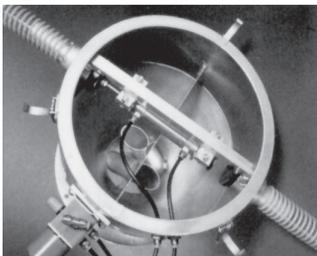
Proportional Control Timer

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

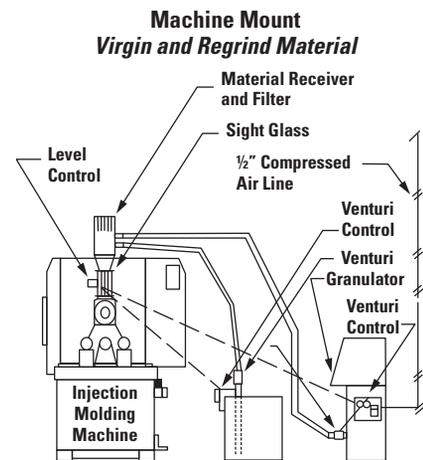
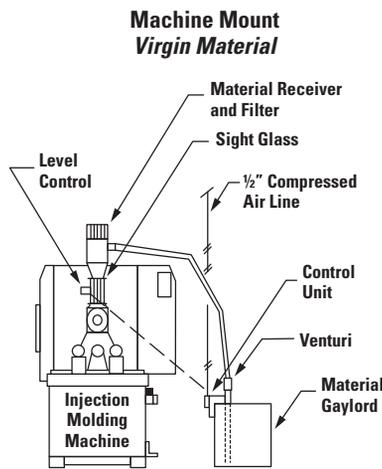
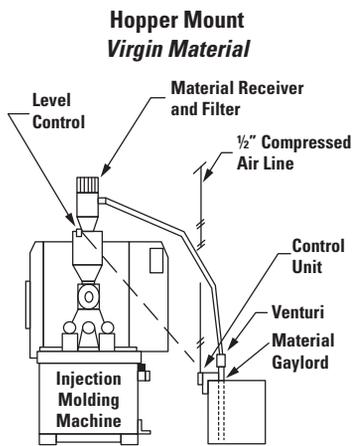
Model NSO3S includes:

- 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.

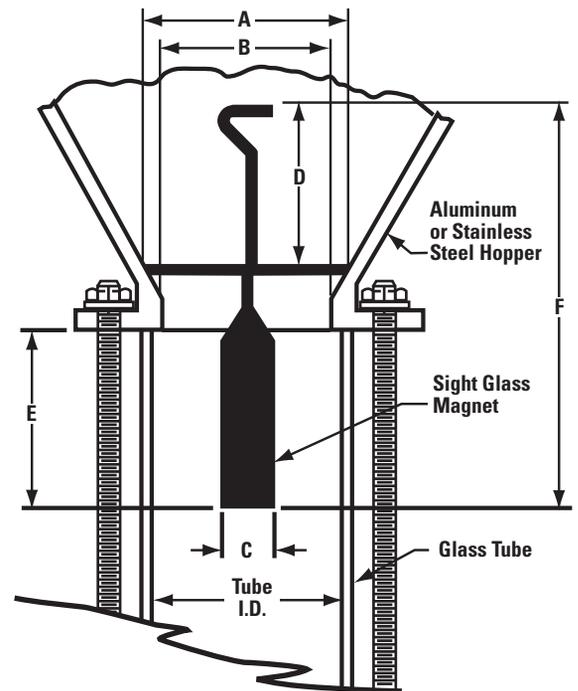
The Sight Glass Magnet is visible through the JIT's glass tube for easy inspection of tramp metal build-up. The magnetic pole located on the bottom of the cartridge allows tramp metal to collect in a protected area, preventing wash-off of the collected metal back into the product flow. Tramp metal should 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"



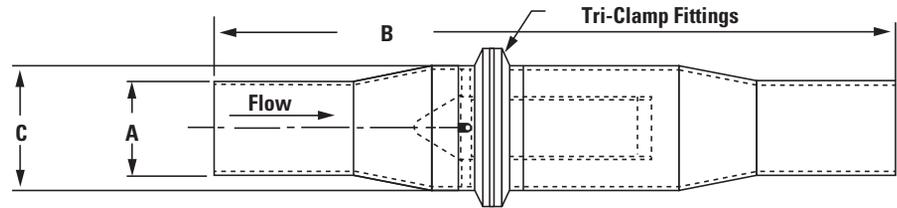
Torpedo In-Line Magnet

Vacuum Line Magnet



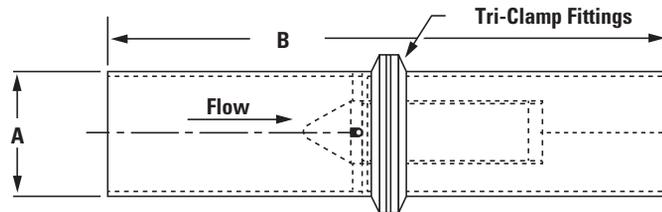
Part Number	Line Size A (O.D.)	Overall Length B
ITM112	1-1/2"	11 13/16"
ITM200	2"	9 1/16"
ITM212	2-1/2"	9 1/16"

TORPEDO INLINE MAGNET



Features:

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



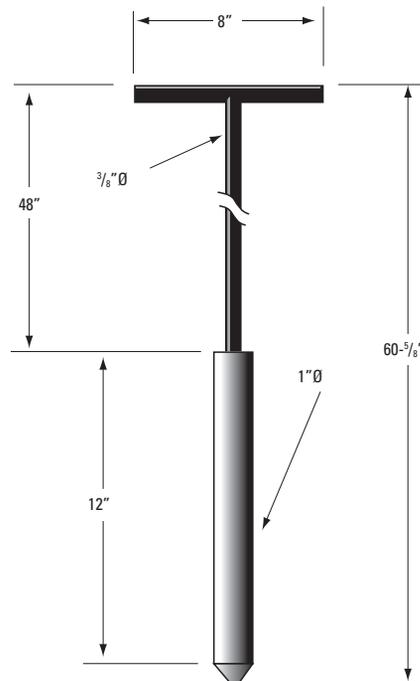
"T" Handle Magnetic Wands

"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



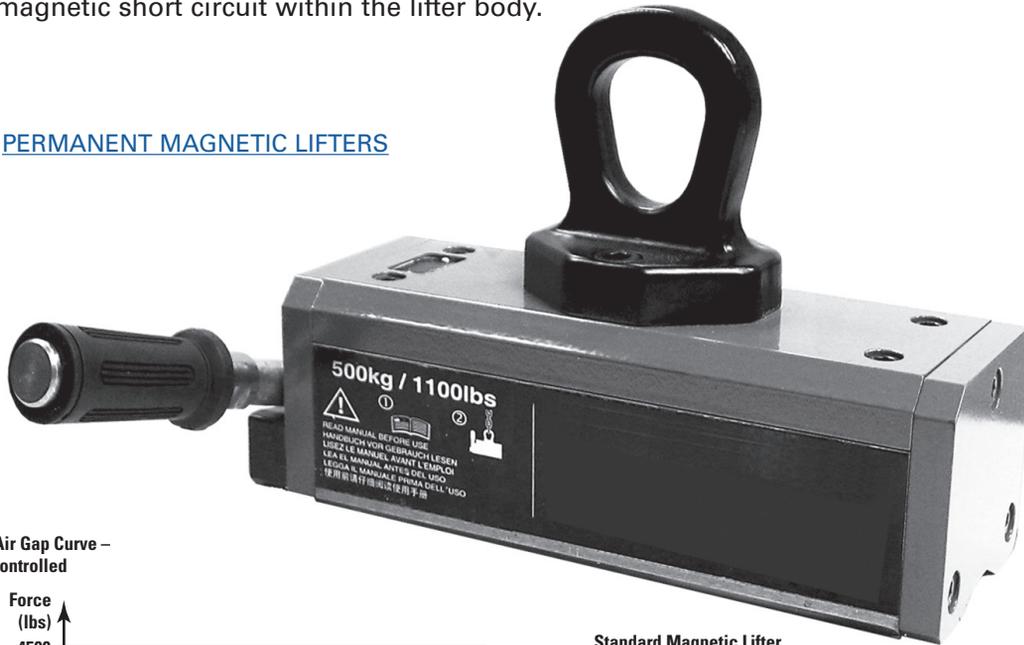
Save Time and Labor

Bunting® MagLift™ Hand-Controlled Permanent Magnetic Lifters

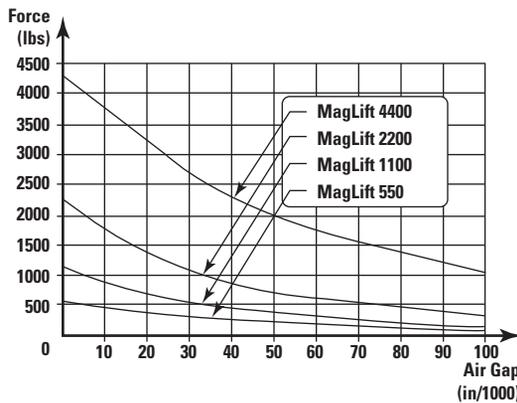
Bunting® MagLift Permanent Magnetic Lifters are powered by blocks of high-energy neodymium magnetic material. Switching is achieved by making one of these blocks reversible. In the “on” position, the reversible block is in parallel with the static blocks so that a concentrated magnetic field is produced 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.



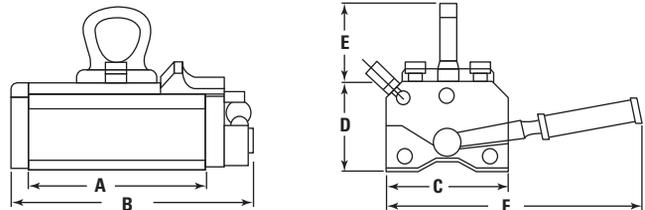
PERMANENT MAGNETIC LIFTERS



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

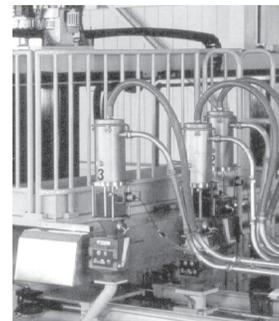
The Industry Standard for Extruders, Injection and Blow Molding Equipment



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



Model FF4400-PL

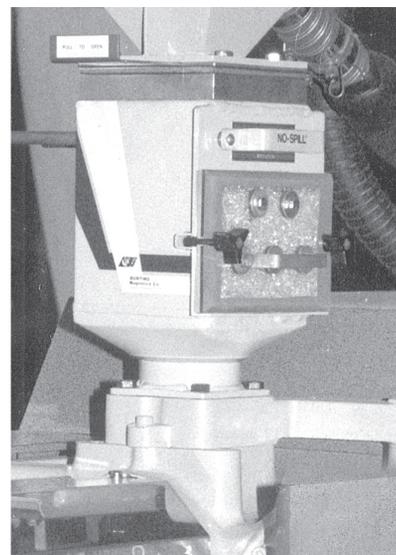


over 40 years, American industry has relied on Bunting as a single-source supplier for the best in magnetic separation equipment.

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

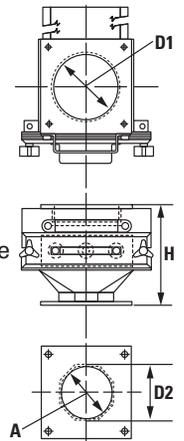
Part Number	Drawer Model	Features	Top/Bottom Flange Size	Top Opening	Bottom Opening
DR1600D	LP1600PL	Low Profile	6" x 6" sq.	4¼" dia.	2⅞" dia.
DR2100D	FF4600PLS	w/Slide Gate	6" x 6" sq.	4¼" dia.	2⅞" dia.
DR2200D	FF4800PLS	w/Slide Gate	8" x 8" sq.	4¼" dia.	2⅞" dia.
DR3500D	FF4800PLS	w/Slide Gate	8" x 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	7 ¹ / ₄	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	7 ¹ / ₂	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.

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.

Custom Drawer Magnets

Model Number	Throat Size*
FF4400PL	1 3/4" or smaller
FF4600PL	1 7/8" or 3 7/8"
FF4800PL	4" to 6"
FF4100PL	6 1/8" to 8"

[BUNTING DRAWER MAGNETS](#)

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

Custom Drawer Magnets w/Slide-Gate

Model Number	Throat Size*
FF4400PLS	1 3/4" or smaller
FF4600PLS**	1 7/8" or 3 7/8"
FF4800PLS**	4" to 6"
FF4100PLS	6 1/8" 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

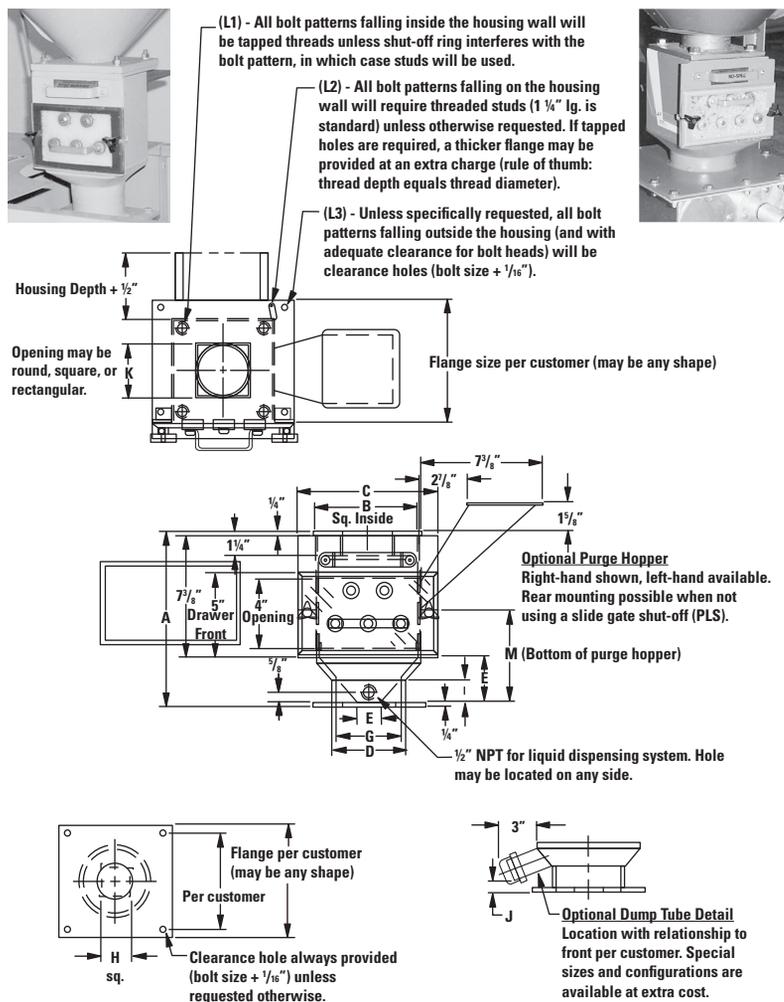
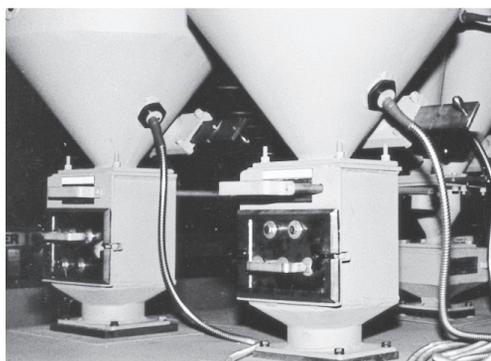
Drawer Magnets

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: _____

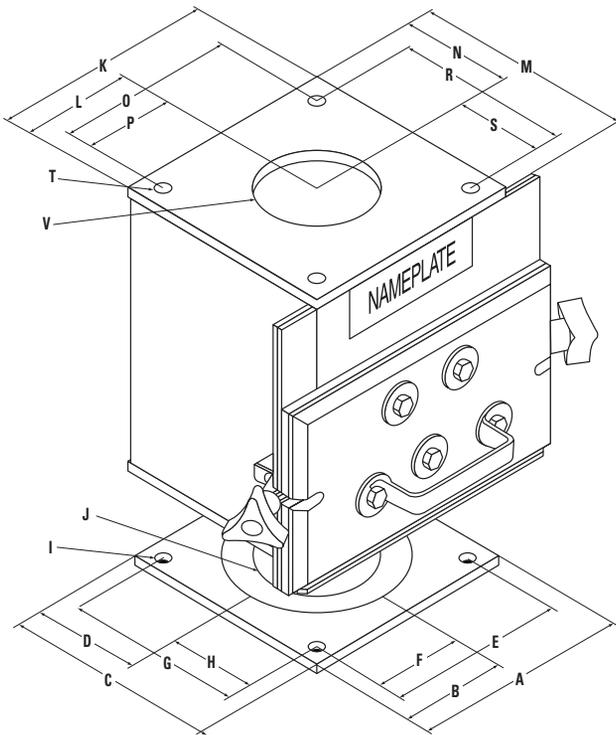
THIS IS AN ORDER THIS IS A QUOTATION REQUEST

Quantity	Bunting Model No.	Description	Unit Price	Amount

Optional Equipment

<input type="checkbox"/> Slide gate Shut-off	<input type="checkbox"/> With Discharge Dump Tube	<input type="checkbox"/> Rear	<input type="checkbox"/> Other _____
<input type="checkbox"/> With Purge Hopper	<input type="checkbox"/> Tapped Hole for	Liquid Dispensing System	
<input type="checkbox"/> R.H. Side <input type="checkbox"/> L.H. Side			
<input type="checkbox"/> 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

*Studs will be required if bolt pattern falls on housing body

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. _____

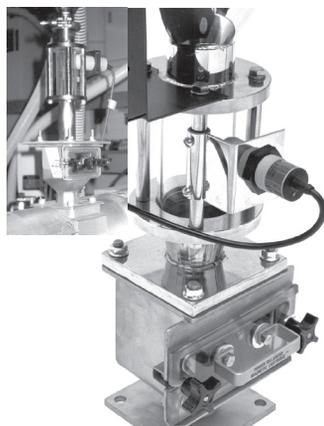
Model: _____ Screw Size: _____ Ounce: _____

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

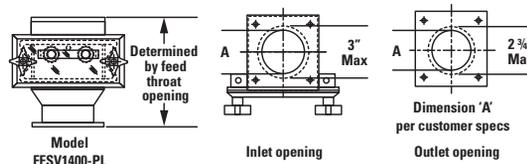
operations, Bunting Magnetics now manufactures two drawer magnets specifically designed for these systems.

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

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”.

Part Number	Description
FFV1400PL	Mild Steel Unit
FFSV1400PL	Stainless Steel Unit



MINI LOADER MAGNET

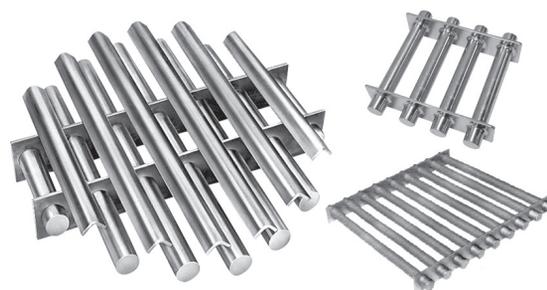
Hopper Magnets-Grate Style

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.

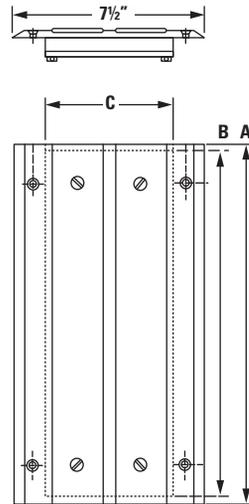


Grinder Plate Magnets

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”



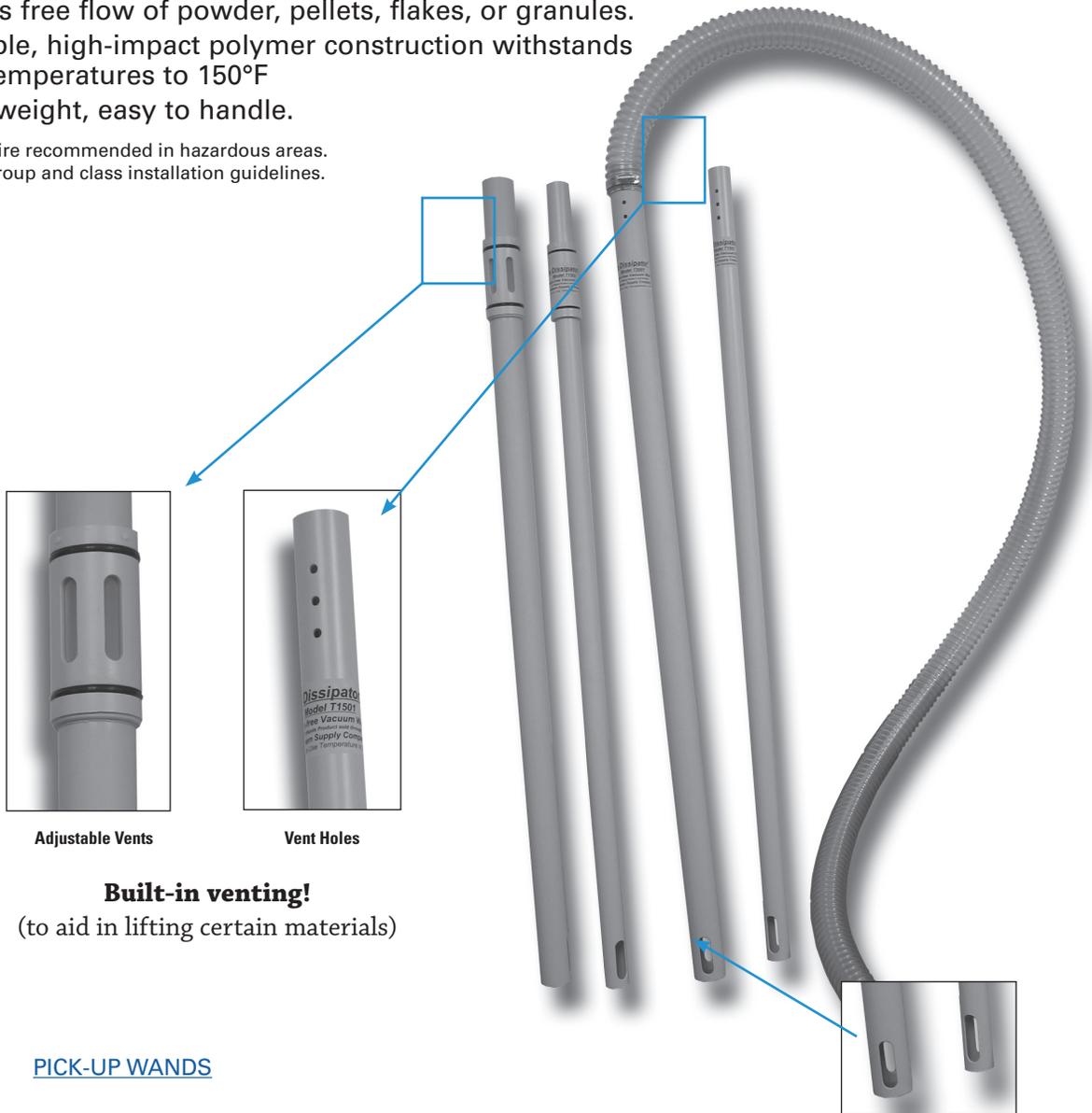
[MMS METAL SEPARATORS](#)



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.



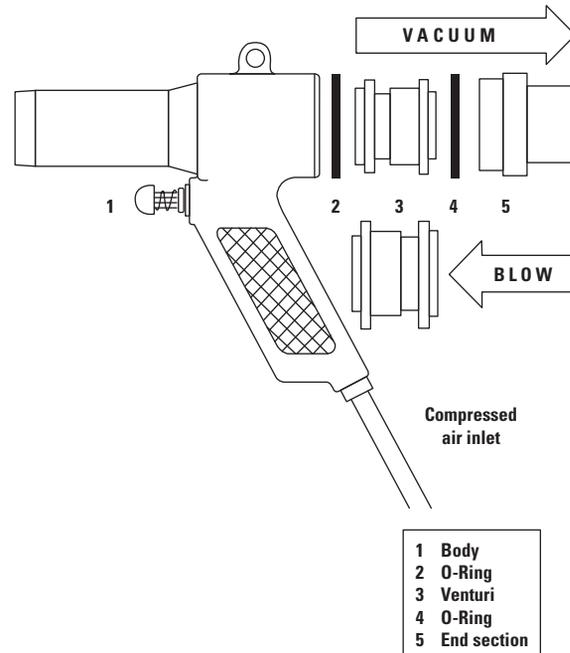
Wonder Gun

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.



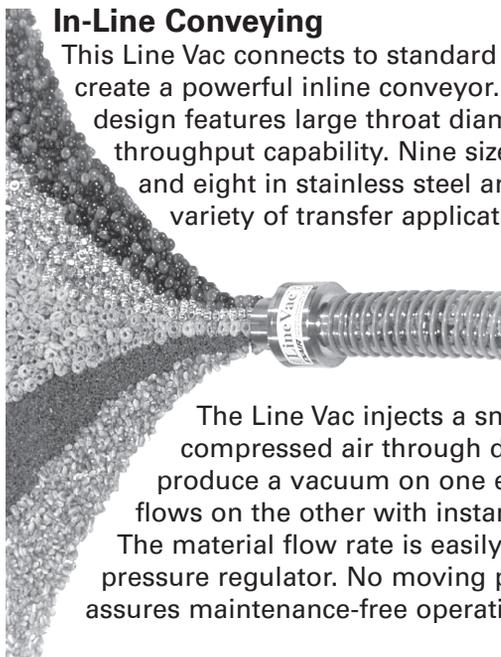
WONDER GUN



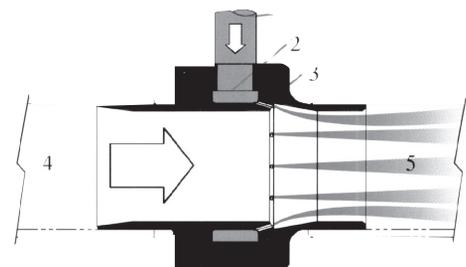
Conveys Parts, Materials & Waste - with No Moving Parts!

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.



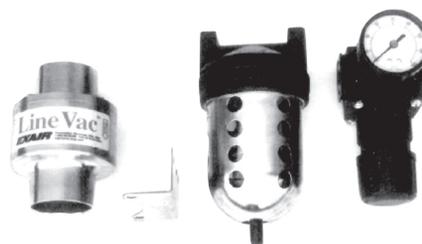
How Line Vac Works

- (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



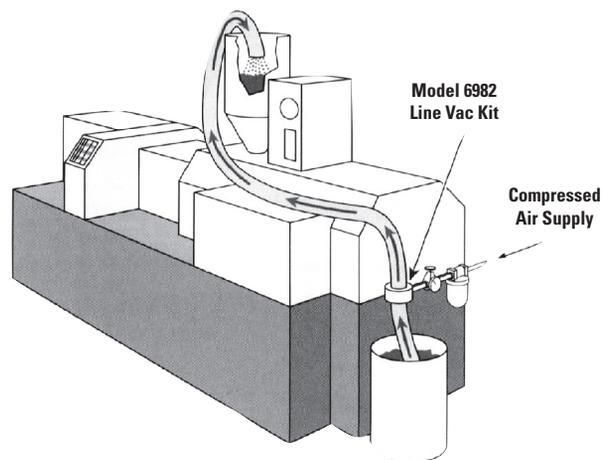
Line Vac Kit includes a Line Vac, mounting bracket, filter separator and a pressure regulator

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!

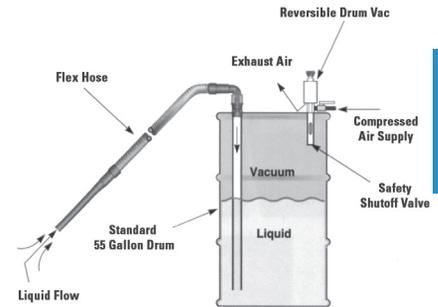
What is the Drum Vac?

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

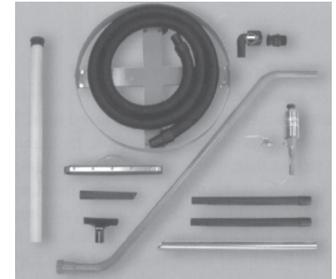
Applications

- 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!

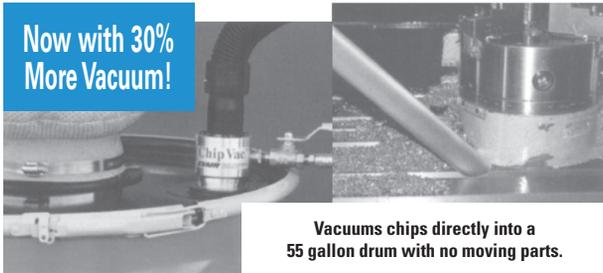


The Model 6296 Deluxe Reversible Drum Vac System includes a 55 gallon drum dolly, spill recovery kit, vacuum hose and all tools.

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.

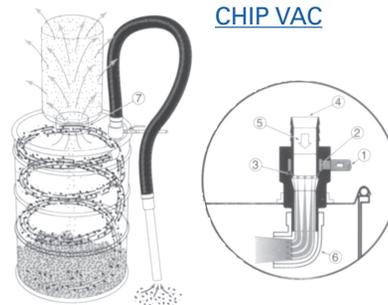


Room air remains dust-free as the Chip Vac removes dusty absorbent.

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

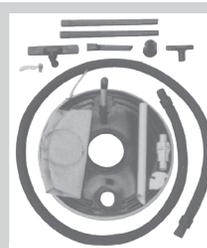
Applications

- 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

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



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.

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.

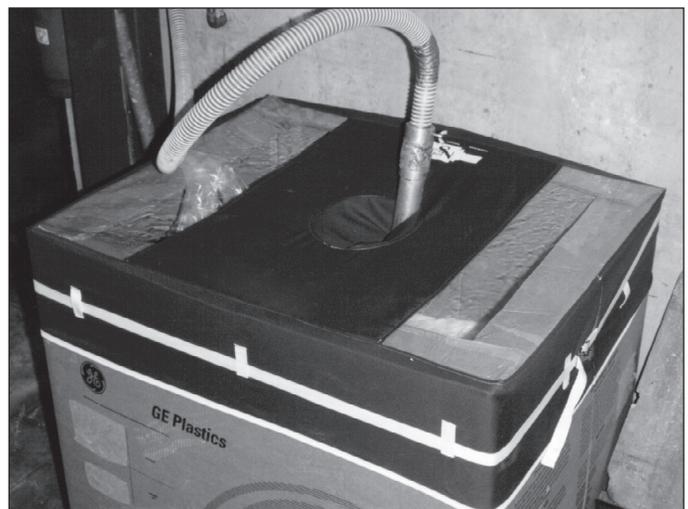
GP3442

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.

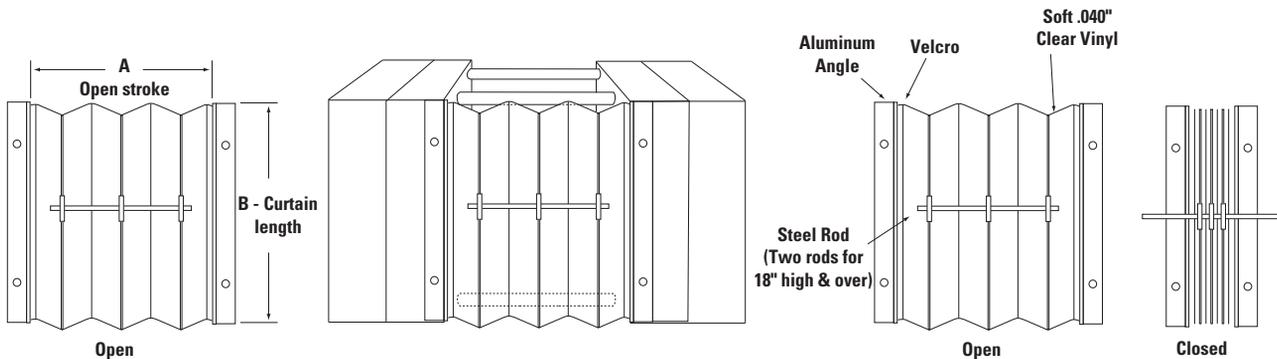


or visit www.dme.net/rfq

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

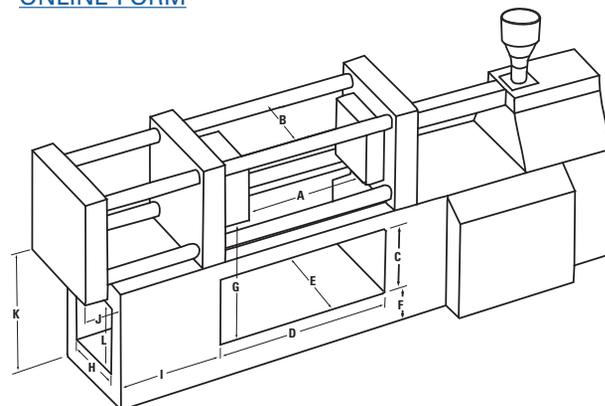
Note: Side curtains require 3" gap between mold and tie bar. The curtain can only be as long as the tie bar spacing if adequate space does not exist.

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

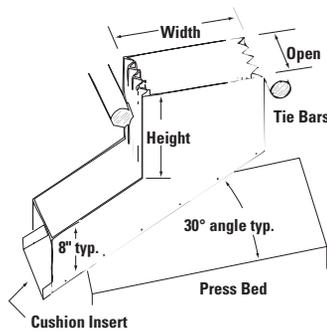
ONLINE FORM

- 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

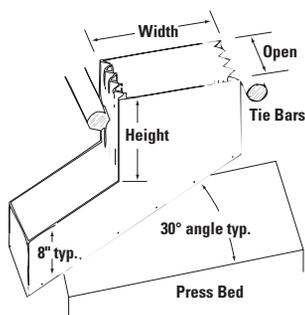


Complete with mounting brackets, bars, grub & screws

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

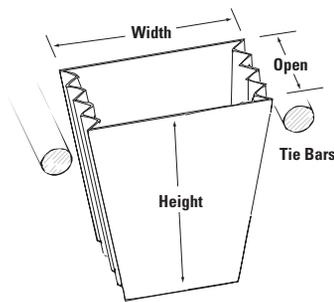
Open	Width	Height	Chute Length	Chute Width	Part No.
6"	12"	8"	24"	8"	MD06
12"	18"	10"	30"	8"	MD16
18"	22"	12"	34"	8"	MD26
18"	26"	14"	38"	8"	MD36
18"	30"	16"	42"	8"	MD46



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.

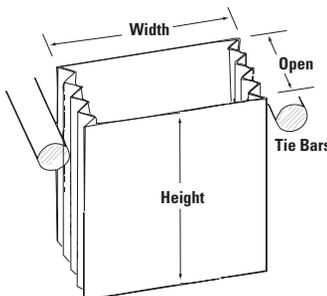
Open	Width	Height	Part No.
6"	12"	8"	SCG07
12"	18"	10"	SCG17
18"	22"	12"	SCG27
18"	26"	14"	SCG37
18"	30"	16"	SCG47



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

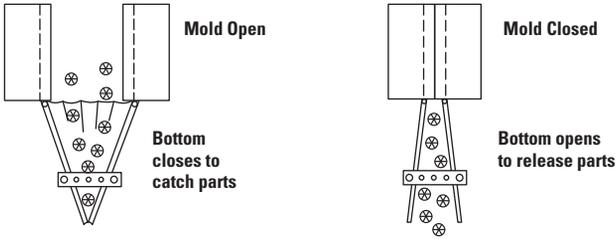
Options:

- 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

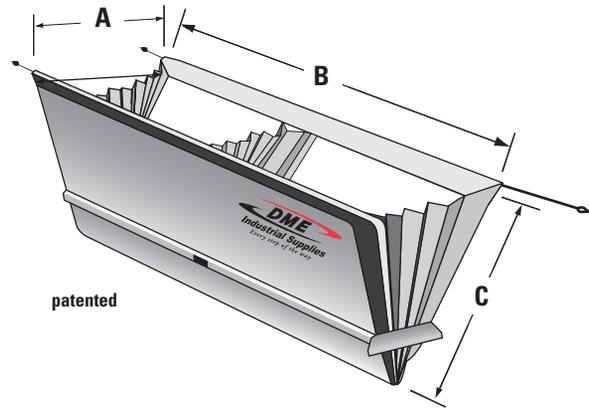
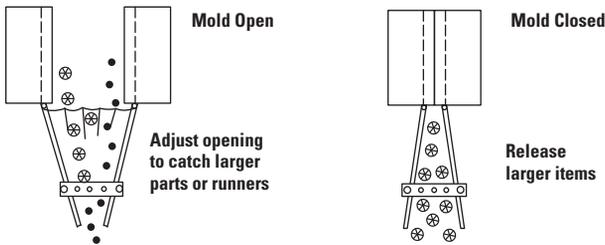
Soft Drop Application



Protects delicate molded parts

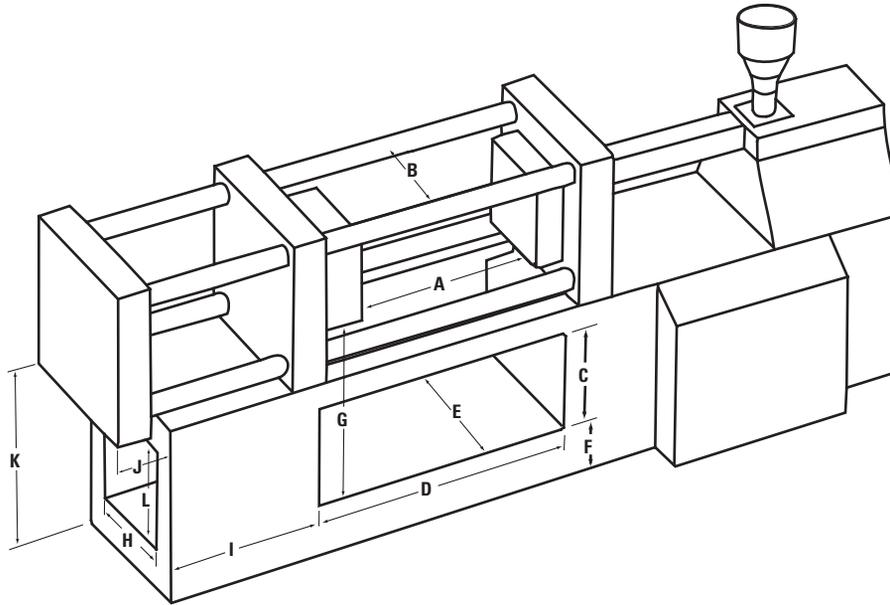
Delayed drop guideskirts provide a soft, delayed, controlled drop of molded parts - prevents damage and increases output of delicate molded parts.

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

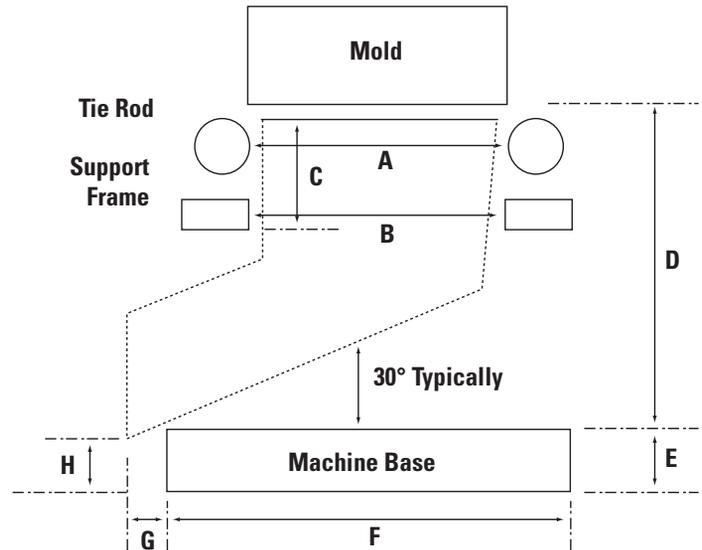


Company Name:
Account Number:
Contact Person:
Address:
City, State, Zip:
Phone, Fax:
Email:

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



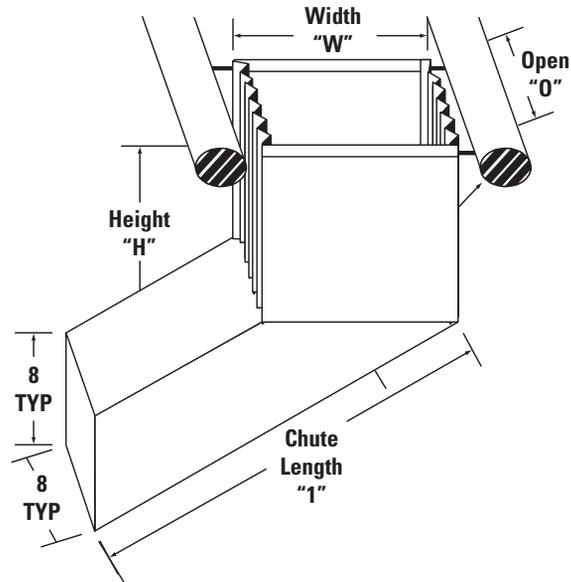
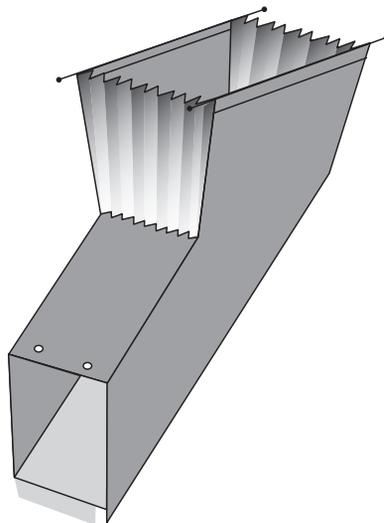
1. Mold Opening (daylight): (MAX is 24")
2. (A) Width between Tie Rods:
3. (B) Width between Frame:
4. (C) Clearance Height:
5. (D) Machine Clearance mold to base:
6. (E) Base to floor:
7. (F) Width of base:
8. (G) Desired extension past base:
9. (H) Desired discharge height:
10. Size of Parts: L x W 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)



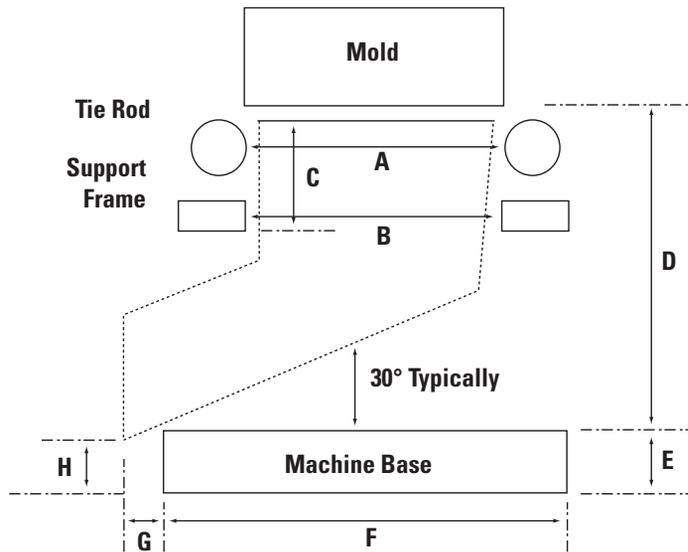
Soft Chute Guideskirt

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:	

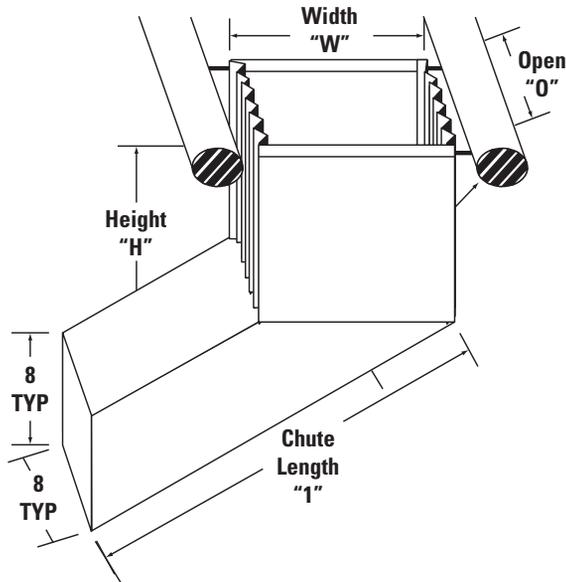
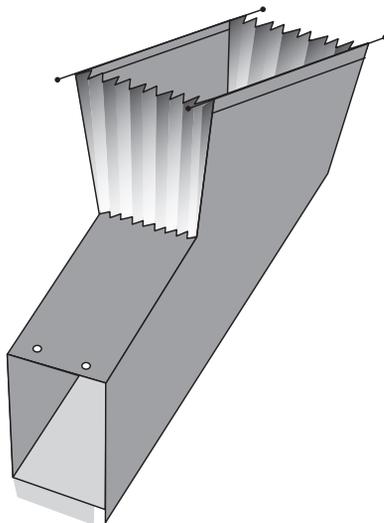
- Mold Opening (daylight): (MAX is 24")
- (A) Width between Tie Rods:
- (B) Width between Frame:
- (C) Clearance Height:
- (D) Machine Clearance mold to base:
- (E) Base to floor:
- (F) Width of base:
- (G) Desired extension past base:
- (H) Desired discharge height:
- Size of Parts: L x W x H
- Runner 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)



Flat Belt Conveyors

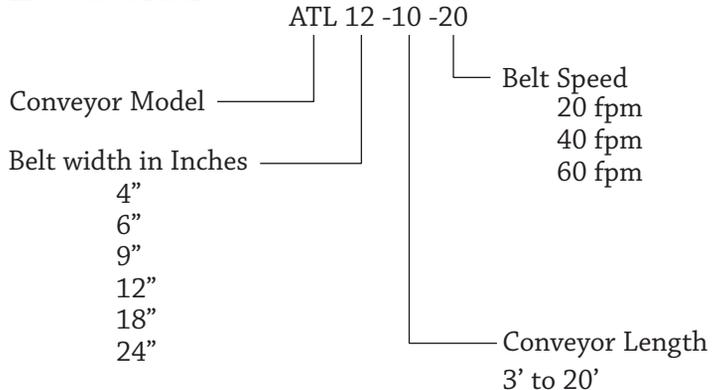


FLAT BELT CONVEYORS

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

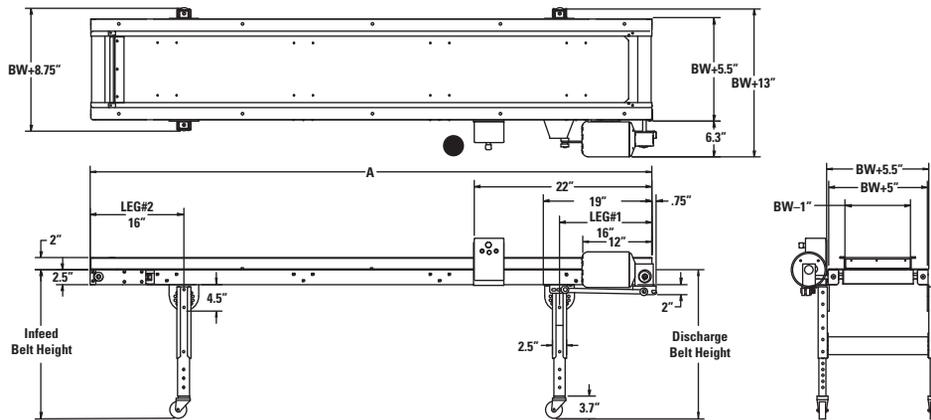
How to Order:



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.

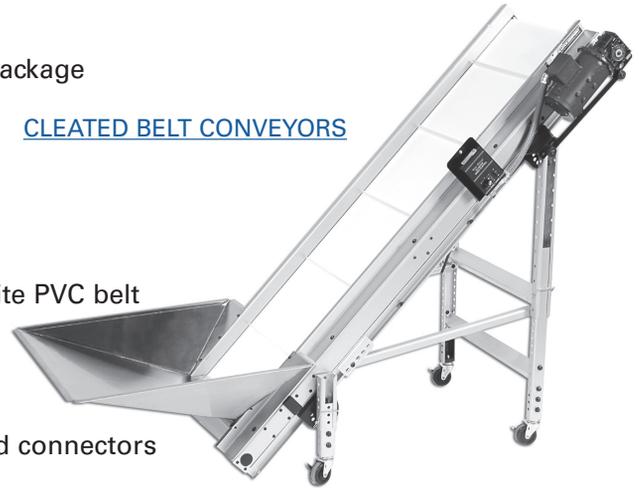
Cleated Belt Conveyors



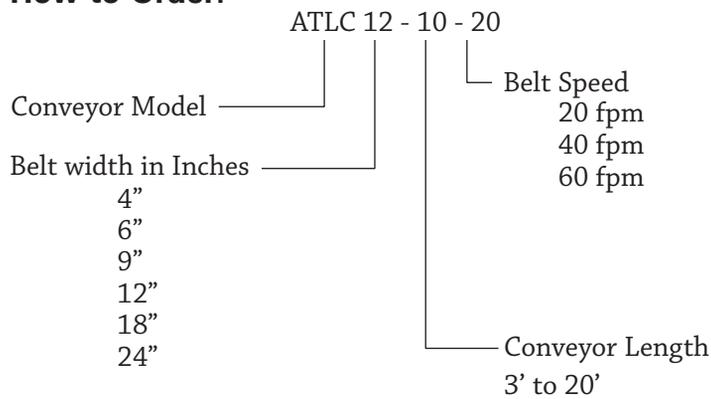
Unique Features:

- 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:

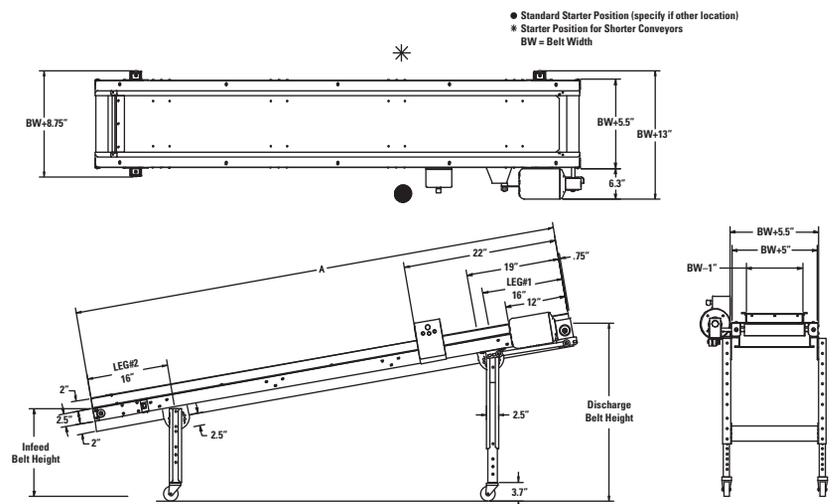


How to Order:

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



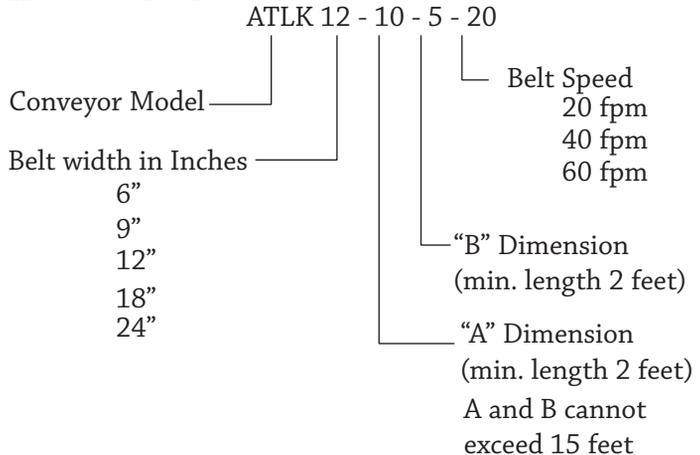
ADJUSTABLE BELT CONVEYORS

How to Order:

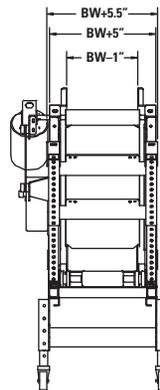
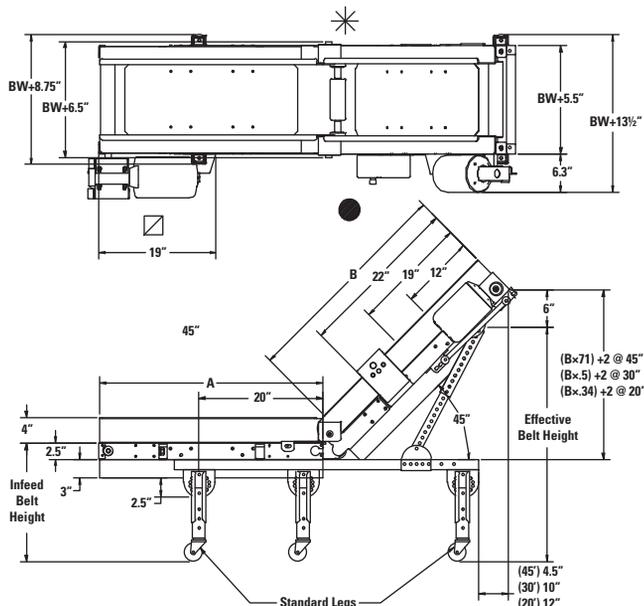
1. Determine the **belt width** you need
2. Select either the 3' x 4' or 4' x 5' Model
3. Select the conveyor infeed belt height you want
4. The correct leg sets will be supplied with locking casters

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.

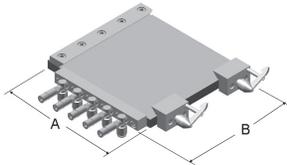


EOAT (End-Of-Arm Tooling)



Quick-Change System

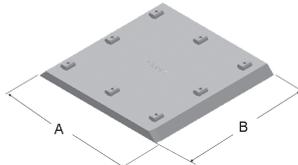
SWM... Quick-Change Mounting Chuck



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

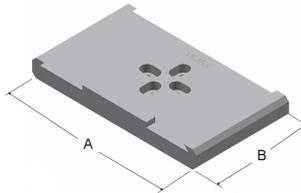
GPM... Quick-Change Mounting Plates



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

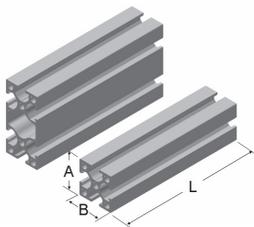


Part Number	Compatible	
	A	Fitting
94-4902	M5	92-5002
94-0104	G $\frac{1}{8}$	92-0204
94-0306	G $\frac{1}{4}$	92-0406
92-5002	M5	94-4902
92-0204	G $\frac{1}{8}$	94-0104
92-0406	G $\frac{1}{4}$	94-0306

Part Number Example: 94-0104

Frame Profiles

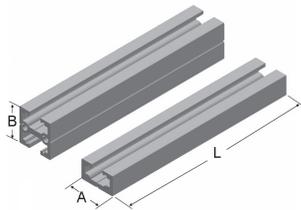
X Aluminium Profile



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

Part Number Example: X25/25

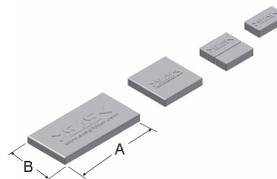
C Light... Aluminum Profile



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

Part Number Example: C18/18L

ADK... Profile End Caps

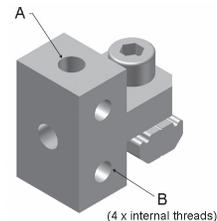


Part Number				
Type	A	B	Profile	Colour
ADK	18/	10Y	L	Yellow
ADK	18/	18Y	L	Yellow
ADK	25/	25Y	X	Yellow
ADK	50/	25Y	X	Yellow

Part Number Example: ADK 18/18Y

Pneumatic Connectors

VTB... Manifold Block

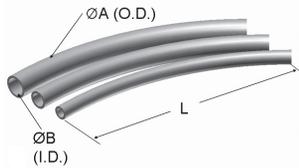


Part Number			
Type	A	Profile	B
VTB	M5	L	M5
VTB	1/4	X	G $\frac{1}{8}$

Part Number Example: VTB 1/4X

Pneumatic Tubing Connectors

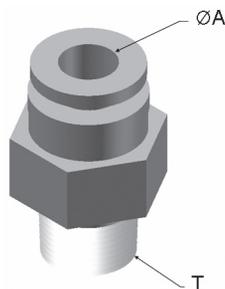
Tubing



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

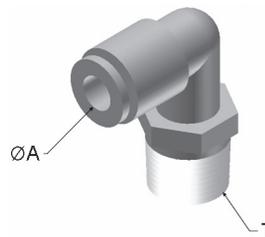
H... Male Connector One-Touch Fitting



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

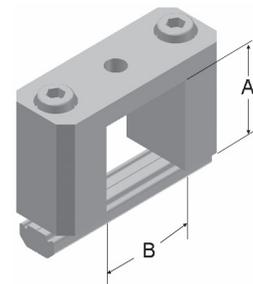


Part Number			
Type	ØA-	T	Thread
L	04	M5	M5
L	04-	01S	G $\frac{1}{8}$
L	06	M5	M5
L	06-	01S	G $\frac{1}{8}$
L	06-	02S	G $\frac{1}{4}$
L	08-	01S	G $\frac{1}{8}$
L	08-	02S	G $\frac{1}{4}$

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: WST20X				Part Number Example: WSL20X NT or AL				Part Number Example: WSS1/8X				Part Number Example: WLS1/8L/X																																																																																									

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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

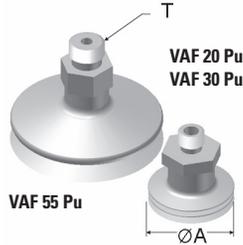
VS3... 2.5 Bellows Vacuum Cup



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

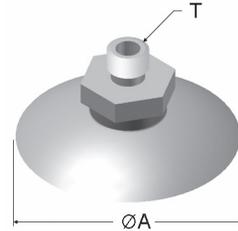
VAF... Telescopic Vacuum Cup/ Adapter



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

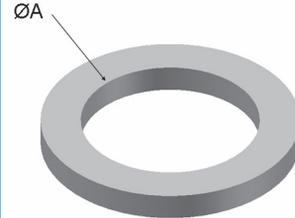
VAS... Flat Vacuum Cup/ Adapter



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

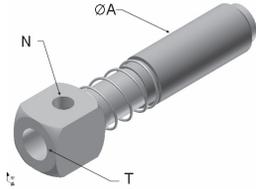


Part Number	ØA
14-49	M5
15-01	G½"
15-03	G¼"

Part Number Example: 14-49

Gripper/Mounting Arms

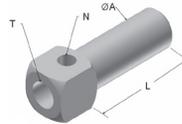
GAF... Spring Loaded Gripper Arm



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

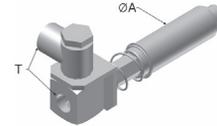
GSE... Gripper Arm



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

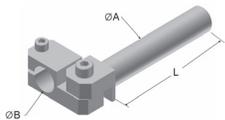


Part Number				
Type	ØA	Shaft	Stroke	T
GGG	10	C	10	M5
GGG	10	M	10	M5
GGG	14	C	15	G½"
GGG	14	M	15	G½"
GGG	14	C	40	G½"
GGG	14	M	40	G½"
GGG	20	C	20	G¼"
GGG	20	M	20	G¼"
GGG	20	C	50	G¼"
GGG	20	M	50	G¼"

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

Gripper/Mounting Arms

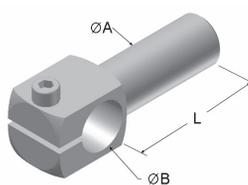
GLA... Elbow Arm



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

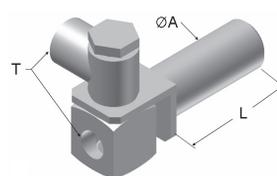
WKA... Angle Arm



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

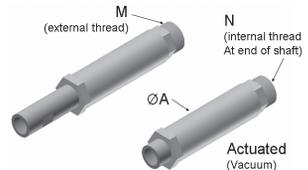
GGE... Elbow Gripper Arm



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

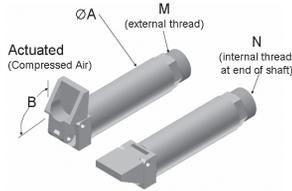
RVA... Retracting Vacuum Arm



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

Gripper Fingers

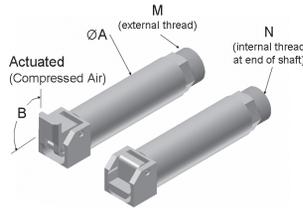
GRF... Gripper Finger (Spring Return)



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

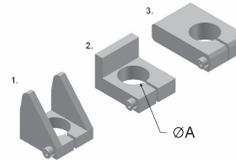
GRF... Gripper Finger (Spring Return)



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

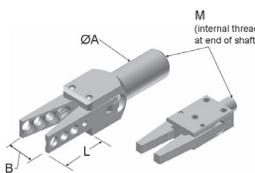


Part Number			
Type	ØA	M	L
ZTB	10	M8 x 1	50
ZTB	14	M12 x 1	110
ZTB	20	M17 x 1	110
ZTB	30	M27 x 1	100

Part Number Example: ZTB20

Part/Sprue Pliers & Grippers

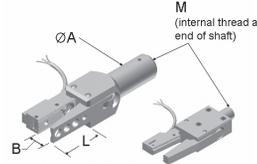
GRZ... Sprue/Parts Pliers



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

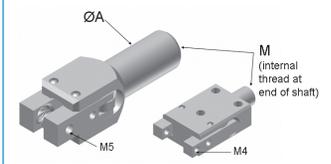
GRZ... Sprue/Parts Pliers w/PNP Sensor



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

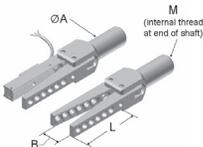


Part Number				
Type	ØA	Bore	Jaw	M
GRZ	10-	10	A	M5
GRZ	20-	16	A	G $\frac{1}{2}$

Part Number Example: GRZ20-16A

Part/Sprue Pliers & Grippers

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

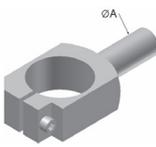


Part Number						
Type	ØA	Bore	Jaw	L	B	M
GRZ	20-	16	LC	69	34	G $\frac{1}{2}$
GRZ	20-	16	LC	69	34	G $\frac{1}{2}$

Part Number Example: GRZ20-16LC

Sprue Cutters

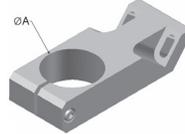
ASZ-KS... Standard Sprue Cutter Clamp



Part Number		
Type	Cutter	ØA
ASZKS20	MR20M	20
ASZKS30	MR30AM	20

Part Number Example: ASZKS20

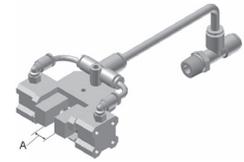
ASZ-HS... Sprue Cutter Holder



Part Number	
Type	Cutter
ASZHS20	MR20M
ASZHS30	MR30AM

Part Number Example: ASZHS20

ASZ-AH... Sprue Holder

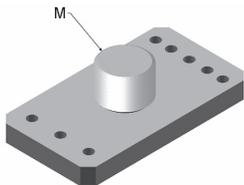


Part Number		
Type	Cutter	A
ASZAH20	MR20M	11
ASZAH30	MR30AM	16

Part Number Example: ASZAH20

Sprue Cutters

ASZ-HP... Adapter for ME Cutters



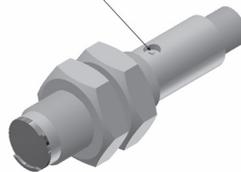
Part Number			
Type	Type	ME Size	ØA
ASZ	HP	3/5/10	M17 x 1
ASZ	HP	20/30	M17 x 1

Part Number Example: ASZHP20/30

Part Sensors

LRS... Part Sensor

Sensitivity Adjustment



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

Part Number Example: LRS18

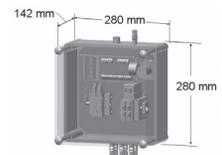
RPL & KK1... Junction Boxes



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

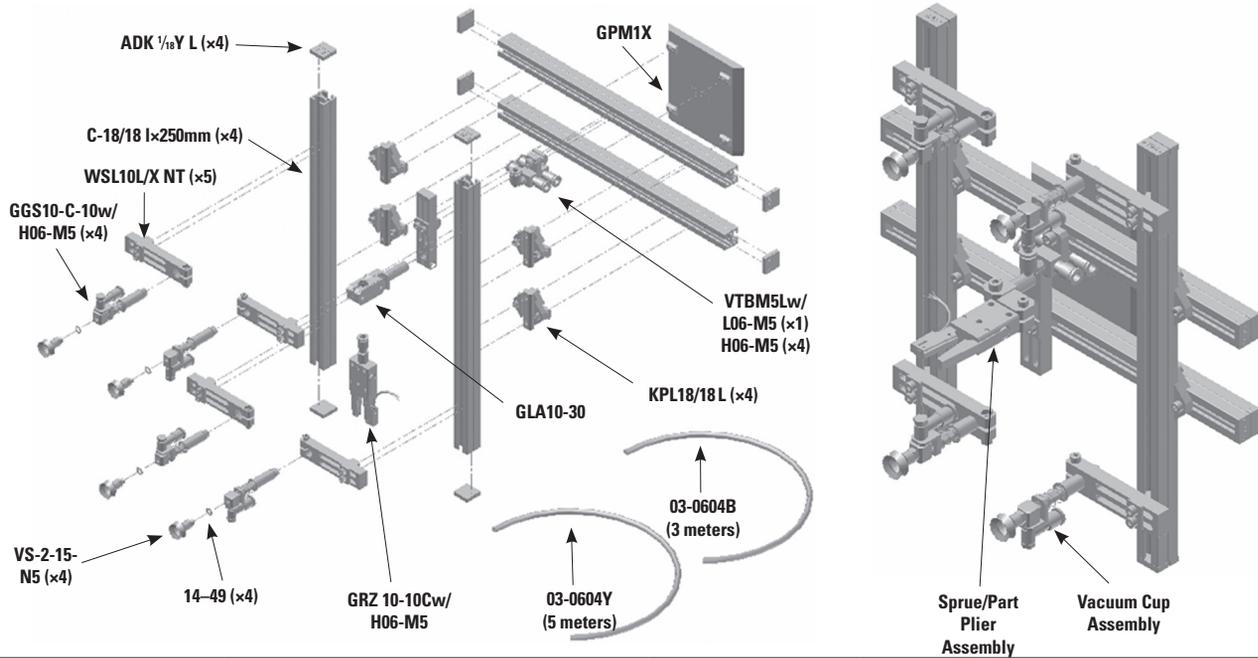
Part Number Example: RVB1-2U22
Includes solenoid valves for EOAT and pressure circuits, robotics interference boards (RPL+KK1) and air regulator



EOAT (End-Of-Arm Tooling)

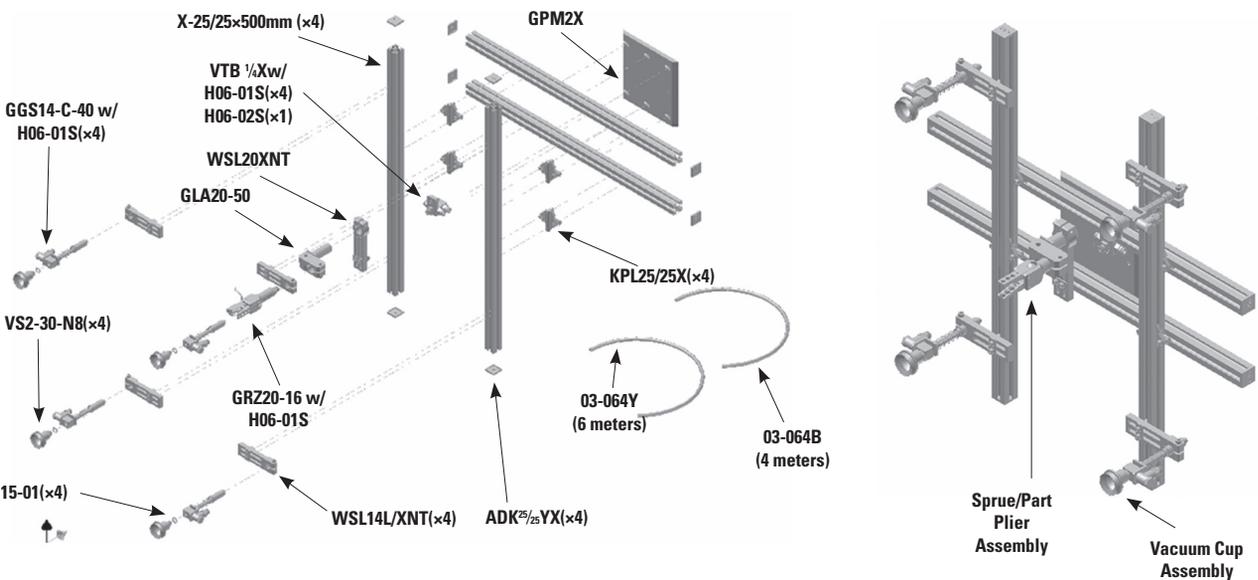


Gripper EOAT Kit C-18/18 for Robots



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)



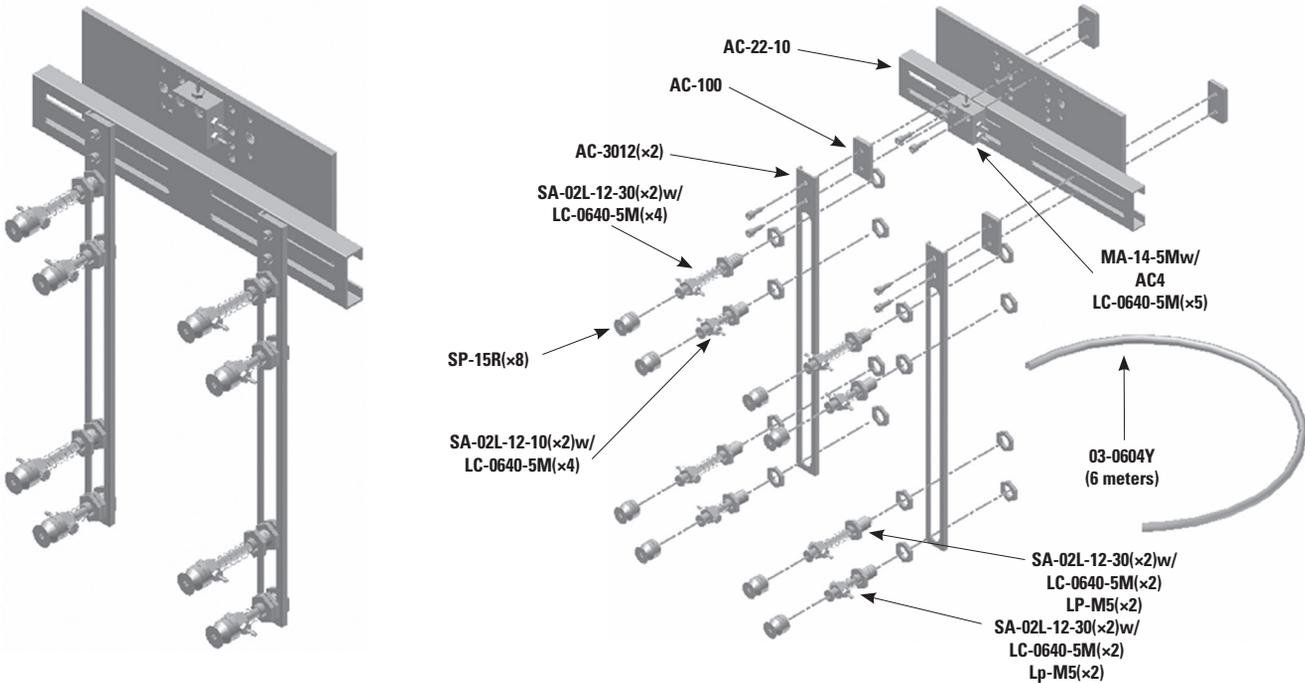
<p>Quick-Change System Assembly</p>	<p>Part/Sprue Plier & Gripper Assembly</p>	<p>Special Cylinder Assembly</p>
<p>Pneumatic Connector/Accessories Assembly</p>	<p>Mounting Clips Assembly</p>	<p>Special Cylinder & Gripper/Mounting Arm Assembly</p>
<p>Gripper/Mounting Arm Assembly</p>	<p>Gripper Finger 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)

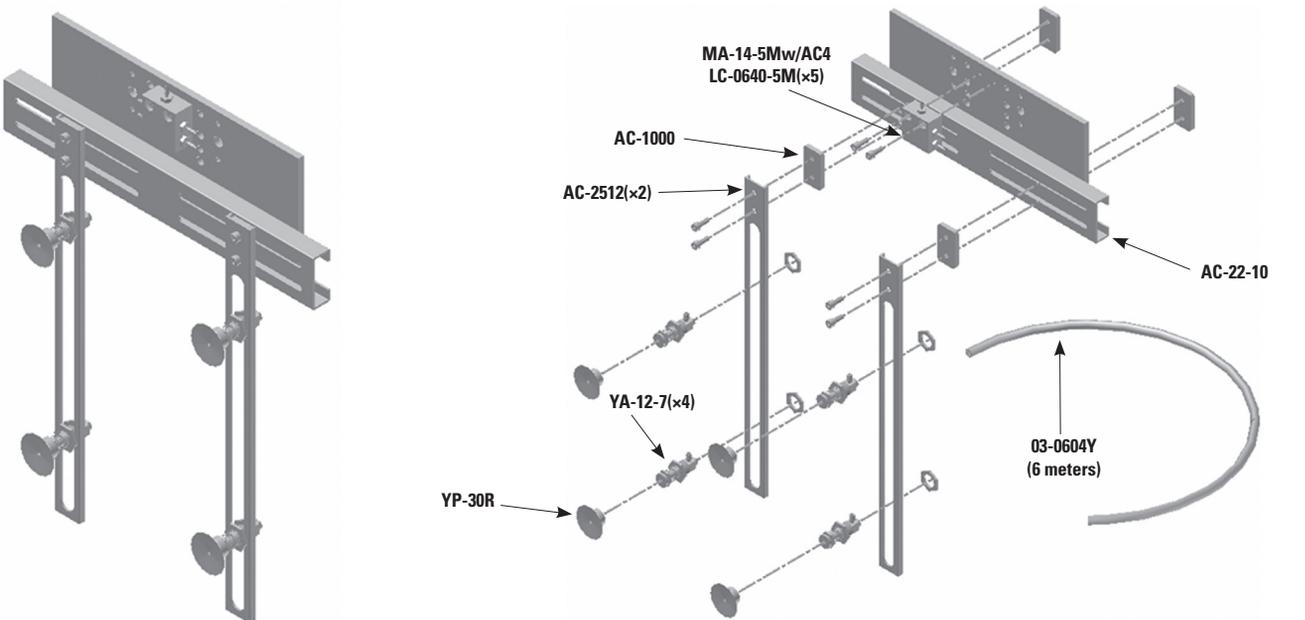


Gripper Kit 8-Cup for EOAT/Sprue Pickers



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



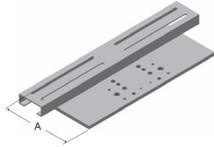
Part Number	# of Vacuum Cup Assemblies	Est. Part Weight	Max. Horizontal Cup Spacing	Max. Vertical Cup Spacing
Gripper Kit 8 Cup For Sprue Pickers	4	500 grams	225	195

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

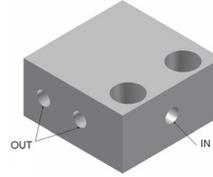
Mounting Fasteners for Rails



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



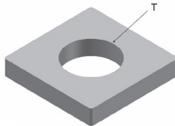
Part Number	T
AC4	M4

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

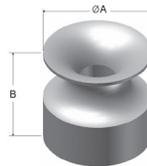
SP... S-Series Suction Cup



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

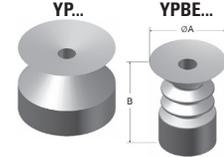
HP... H-Series Suction Cup



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

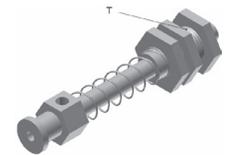
YP... Y-Series Suction Cup



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

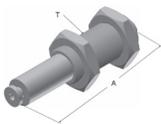


Part Number	T	Stroke
SA01L	10-	5
SA01L	12-	10
SA02L	10-	5
SA02L	12-	5
SA02L	12-	10
SA02L	12-	30

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

Holder/Mounting Arm

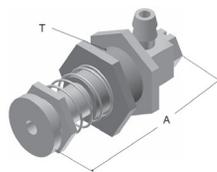
HA... Suction Cup Holder for H-Series



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

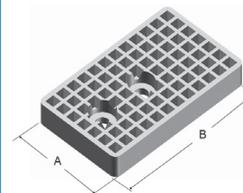
AMC... Mini Cylinder



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

Note: S = Sensor
Part Number Example: AMC20

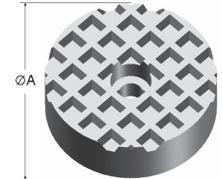
MA... Rectangular Pad



Part Number	A	B
MA01	30	50
MA01S	30	50

Note: S = Silicon
Part Number Example: MA01

MA... Round Pad w/Rubber

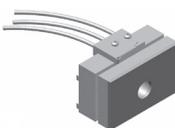


Part Number	A
MA03	25
MA04	50

Part Number Example: MA04

Cylinder, Grippers & Accessories

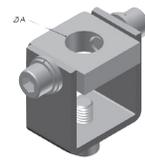
MA... Rectangular Pad w/Rubber & Sensor



Part Number
MA05

Part Number Example: MA-05

AB... Suction Cup Angle Bracket

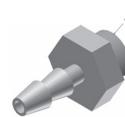


Part Number	A
AB	10
AB	12

Part Number Example: AB12

Pneumatic Connectors

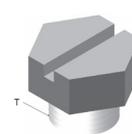
LC... Barb Fittings



Part Number	Tubing	T
LC	0425	M5
LC	0640	M5

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

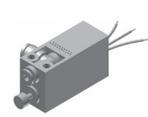
LP... Plug



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

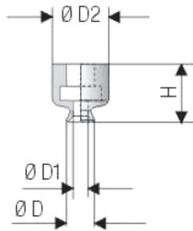
● **Recommended**

⊙ **Good**

X Not Recommended

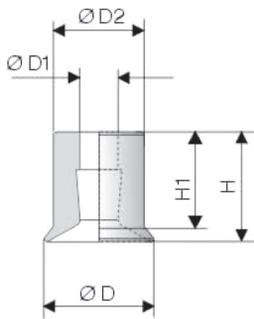
Vacuum Suction Cups

Flat Suction Cups



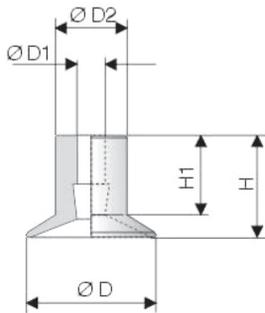
Art. No.*	Material Material Matériel			ØD	ØD1	ØD2	H
102.002.004	NBR (sw), Si (tr), si-AS (sw), PUR (bl), PUR (ge)	0,4 mm	0,2 g	2,0	1,0	4,0	4,0
102.003.005		0,5 mm	0,2 g	3,5	1,0	4,0	4,0

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



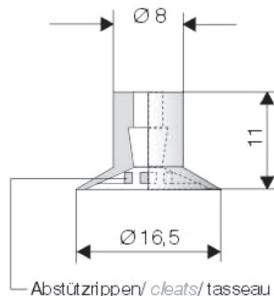
Art. No.*	Material Material Matériel			ØD	ØD1	ØD2	H	H1
102.005.090	NBR (sw),	0,5 mm	0,2 g	5,0	2,0	4,5	6,0	5,5
102.011.093	Si (tr),	1,0 mm	0,3 g	11,0	3,8	9,0	10,5	9,2

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



Abstützrippen/ cleats/ tasseau

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

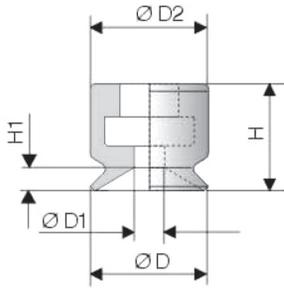
Art. No.*	Art.No.	Fittings
104.016.003	270.003	G 1/8" AG
	270.104	M 6 AG
	270.134	M 5 AG
	270.109	G 1/8" IG



Vacuum Suction Cups

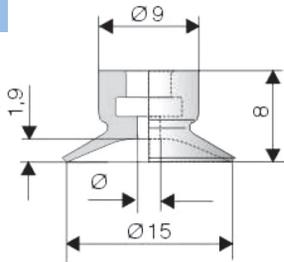
Flat Suction Cups

A



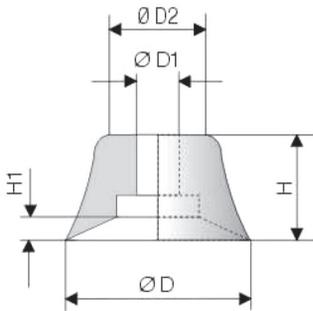
From	Art. No.*	Material Material Matériel			Ø D	Ø D1	Ø D2	H	H1
A	102.005.009	NBR (sw),			5,0	1,5	7,5	6,5	0,9
	102.006.013	Si (tr),							
	102.008.017	Si-AS (sw),							
	102.010.024	PUR (bl)							
B	102.015.309	NBR (sw), Si (tr), PUR (bl)			15,0		9,0	8,0	1,9

B



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

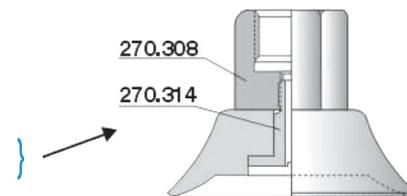
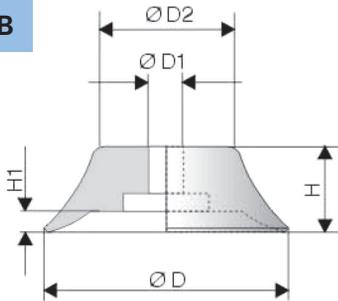
A



From	Art. No.*	Material Material Matériel			Ø D	Ø D1	Ø D2	H	H1
A	102.015.030	NBR (sw), Si (tr), PUR (bl)			15	4,5	10	8	1,9
	102.020.041								
	102.025.047								
	102.030.053								
B	102.035.056	PUR (bl)			35	6,0	18	14	3,0
	102.040.061								
	102.050.065								

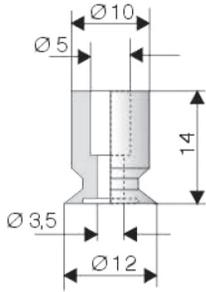
Art. No.*		Art.No.	Fittings	
102.015.030		270.005	M 5 IG	
			270.010	M 5 AG
			270.017	G 1/8" IG
			270.021	G 1/8" AG
102.020.041		270.006	G 1/8" AG	
			270.018	G 1/8" IG
102.025.047		270.019	G 1/8" IG	
			270.030	G 1/8" AG
102.030.053		270.274	G 1/4" AG	
			270.275	G 1/4" IG
102.035.056		270.312	M 6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

B



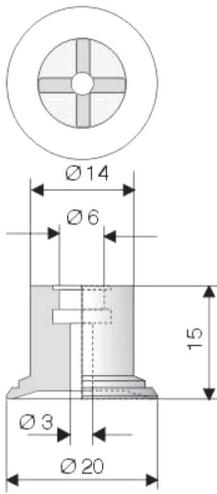
Vacuum Suction Cups

Flat Suction Cups



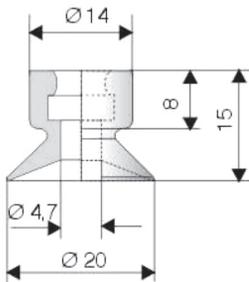
Art. No. 107.012.002_*	NBR (sw), Si (tr), NR-E (b)		
		0,4 mm	0,5 g

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



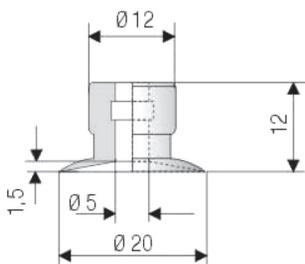
Art. No.	Material Material Matériel		
102.020.083.2	Si (tr) 30 Shore		
102.020.080.1	NBR (sw) 40 Shore		
102.020.082.1	NBR (sw) 60 Shore		
102.020.084.2	Si (r) 60 Shore		

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



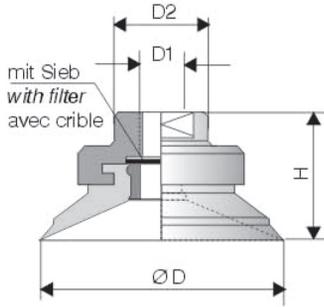
Art. No. 126.020.005_*	NBR (sw). Si (tr), NR (sw)		
		1,5 mm	1,0g

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

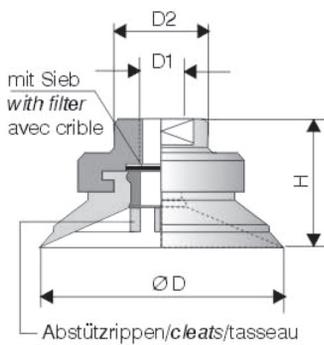


Vacuum Suction Cups

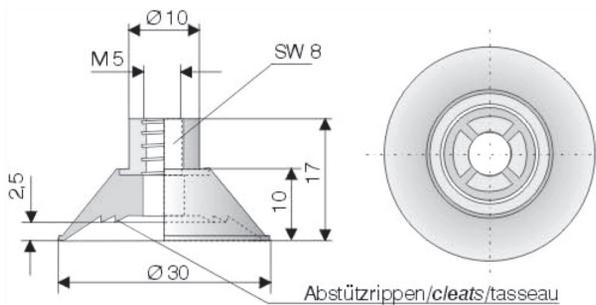
Flat Suction Cups



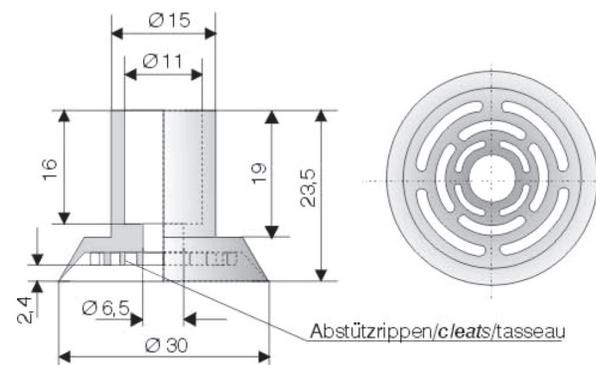
Art. No.*	Material Material Matériel			ØD	D1	D2	H	Ersatzsauger Spare Cup Vent. de rechange
120.020.006	NBP (sw), Si (tr)		3,5 g	22	M5	G $\frac{1}{8}$ "*	16	102.020.095
120.030.013			4,4 g	32	M5	G $\frac{1}{8}$ "	18	102.030.096
120.040.076			10,6 g	42	G $\frac{1}{8}$ "*	-	21	102.040.094
120.050.078		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



Art. No.*	Material Material Matériel			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

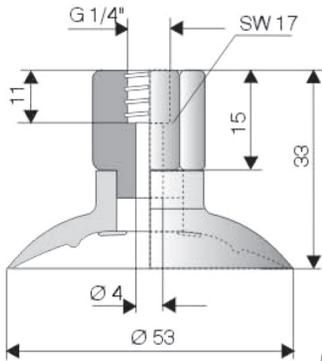
Art. No. 50.043

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

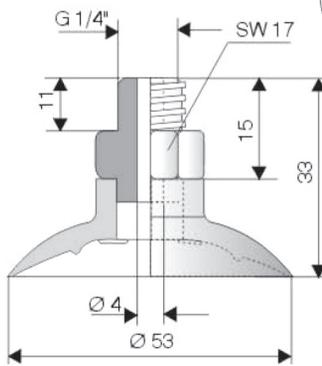
*When ordering please indicate desired material.

Vacuum Suction Cups

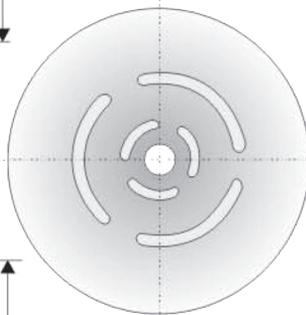
Flat Suction Cups



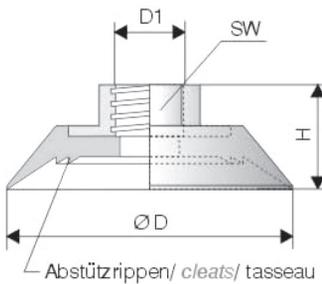
Art. No. 110.053.082_*	NBR (sw), Si (r)		
		3,0 mm	23,0 g



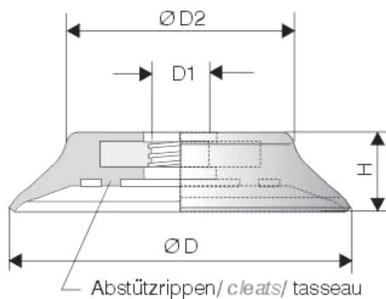
Art. No. 110.053.083_*	NBR (sw), Si (r)		
		3,0 mm	19,6 g



A



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	G 1/8"	18	14
150.075.033		6,0 mm	38,0 g	75	G 1/4"	24	17



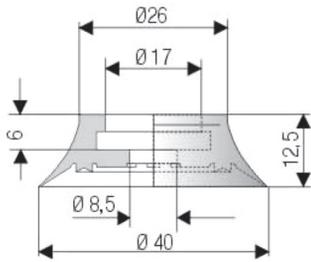
Art. No.*	Material Material Matériel			Ø D	D1	D2	H
102.060.303	FKM (g)	5,0 mm	15,2 g	60	G 1/4"	38,5	16
102.080.304	NBR (sw) Si (tr), PUR (or)	6,0 mm	52,8 g	80	G 1/4"	53,0	18
102.095.305		6,0 mm	92,0 g	95	G 1/4"	68,0	19

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



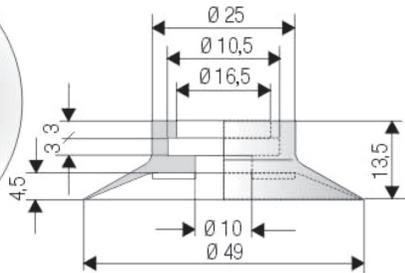
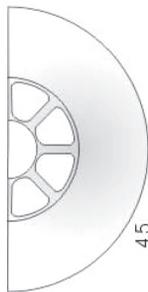
Vacuum Suction Cups

Flat Suction Cups



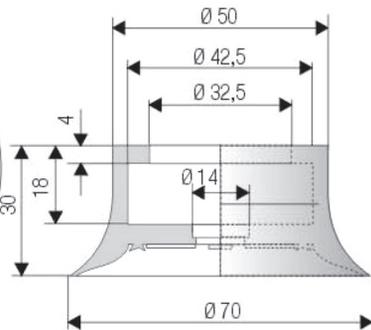
Art. No.*	Material Material Matériel			Art.No.	Fittings
102.040.357.*	Si (tr)	3,0 mm	20 g	270.234	G $\frac{1}{4}$ " IG
	NR-E (b) 40° Sh				

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



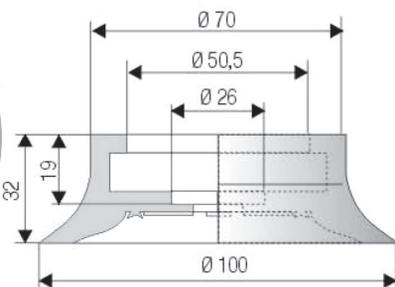
Art. No.*	Material Material Matériel			Art.No.	Fittings
154.049.068.1	NBR (gr)	3,5 mm	22 g	270.234	G $\frac{1}{4}$ " IG

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

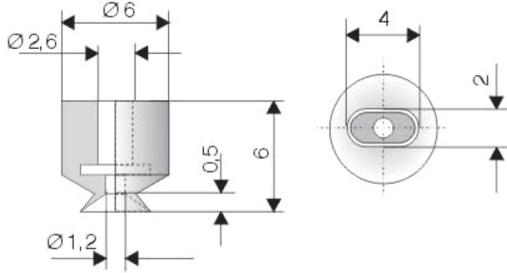
*When ordering please indicate desired material (see page 84).

Vacuum Suction Cups

Oval Suction Cups

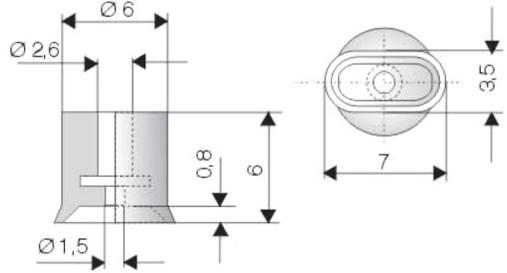


A



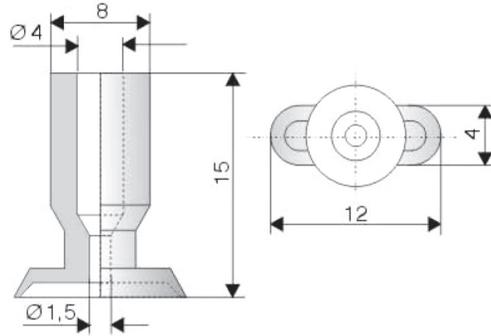
Art. No. 132.4 x 2.031_*	NBR (sw), Si (tr), Si-AS (sw) PUR (bl)		
		1,5 mm	0,05 g

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



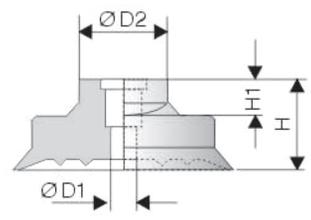
Art. No. 132.7 x 4.034_*	NBR (sw), Si (tr), Si-AS (sw) FUR (bl)		
		0,6 mm	0,1 g

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



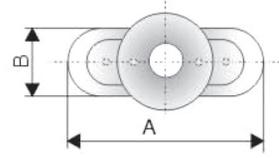
Art. No. 132.12 x 4.004_*			

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



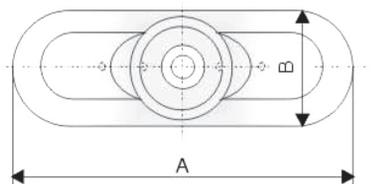
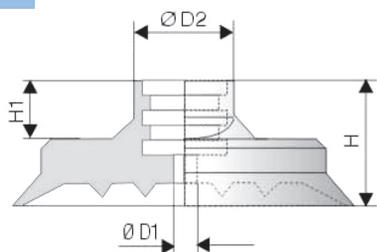
Art. No.*	Art.No.	Fittings
132.15 x 5.008	270.094	M5 AG
132.18 x 6.012		G 1/8" AG
132.24 x 8.016		G 1/8" IG
132.30 x 10.018		
132.36 x 12.019		



Vacuum Suction Cups

Oval Suction Cups

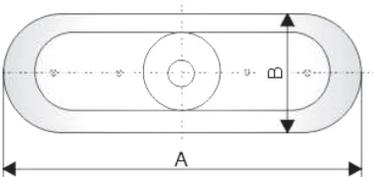
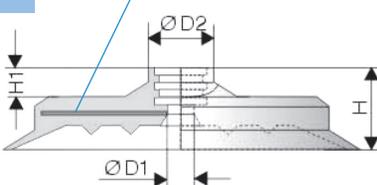
A



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

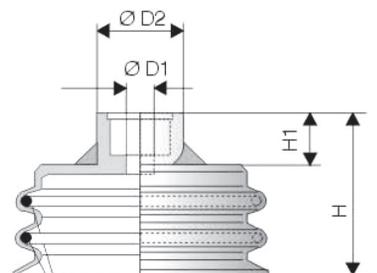
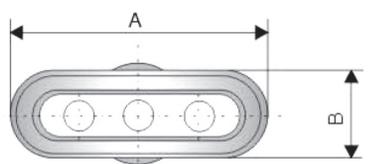
Silikon (tr) auf Anfrage/Silicone (tr) on request/Silicone (tr) sur demande

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		



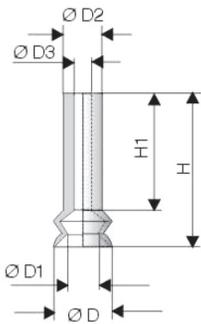
Drahtbügel
Stiffener (wire)
Fil de renforcement

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	270.094 270.095 270.096	M5 AG G $\frac{1}{8}$ " AG G $\frac{1}{8}$ " IG
138.45 x 15.003 138.75 x 25.004	270.097 270.098	G $\frac{1}{4}$ " AG 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	

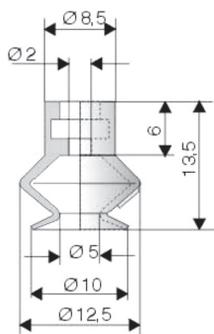
Art. No. 23.005.181.*					
NBR (sw), Si (tr), PUR (ge), FKM (g)			2,0 mm		0,8 g
ØD	ØD1	ØD2	ØD3	H	HI
5	2	3	1,5	13	9,5
	Art.No.	270.001 M5 AG		Seite/page 16	

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

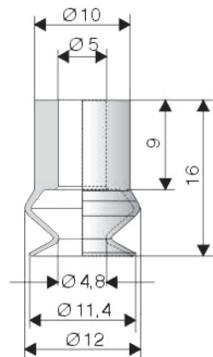
Art. No. 23.008.057.2		
Si (tr) Si-AS (sw)		3,5 mm
		0,4 g

Art.No.	Fittings
270.104	M6 AG
270.134	M5 AG



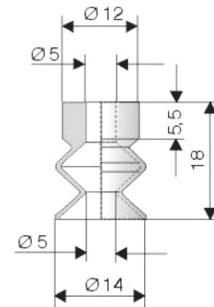
Art. No. 23.010.123.*		
NBR (sw), Si (tr), Si-AS (sw), PUR (bl), CR (sw)		4,0 mm
		0,6 g

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



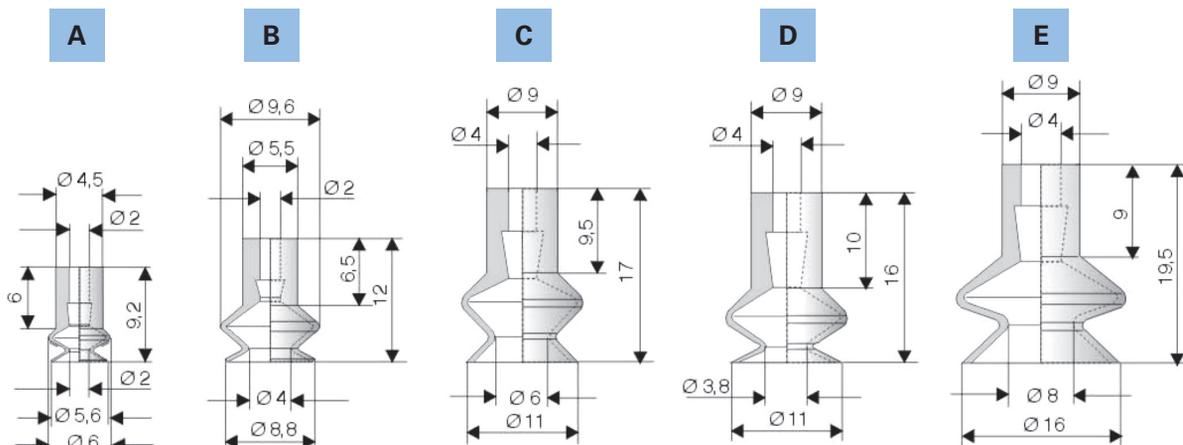
Art. No. 23.014.010.*		
NBR (sw), Si (r), NR-E (b), PUR (b), FKM (g)		8,0 mm
		1,2 g

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

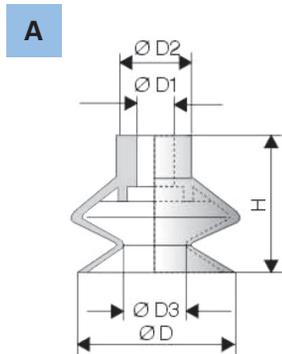
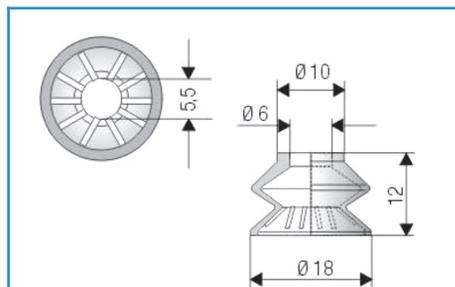


Vacuum Suction Cups

Bellows Suction Cups w/ 1½ folds

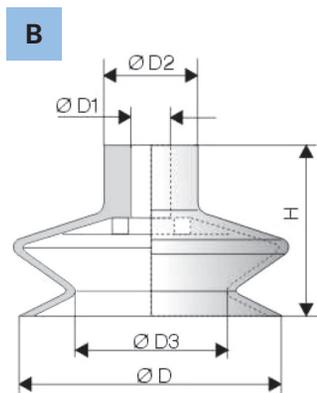


Form	Art. No.*	Material Material Matériel			Art.No.	Fittings
A	23.005.178	NBR (sw), Si (r)	2,0 mm	0,2 g	270.153	M 5 AG
B	23.008.166	NBR (sw), Si (tr)	3,5 mm	0,2 g	270.153	M 5 AG
C	23.011.007	NBR (sw), Si (tr), PUR (or)	5,0 mm	0,6 g	270.003	G½" AG
D	23.011.138.2r	Si (r)	4,0 mm	1,0 g	270.015	G½" IG
E	23.016.015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

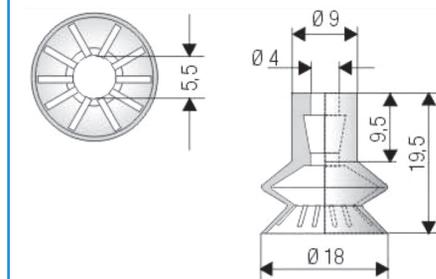
Form	Abmessungen Dimensions Dimensions	D Ø	D1 Ø	D2 Ø	D3 Ø	H
A	23.016.016	16	5	10	7,0	19
	23.022.028	22	5	10	10,6	19
	23.033.039	33	8	18	17,0	27
B	23.043.096	43	8	18	21,0	28
	23.053.033	53	8	18	33,0	34



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 mm	0,6 g

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



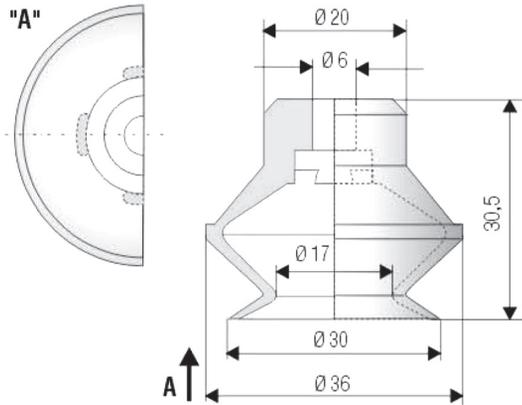
Art. No. *	Material Material Matériel		
23.018.175._*	Si (tr), NR-E (bl)	5,5 mm	2,0 g

Art. No.	Art.No.	Fittings
23.018.175._*	270.003	G ½" 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).

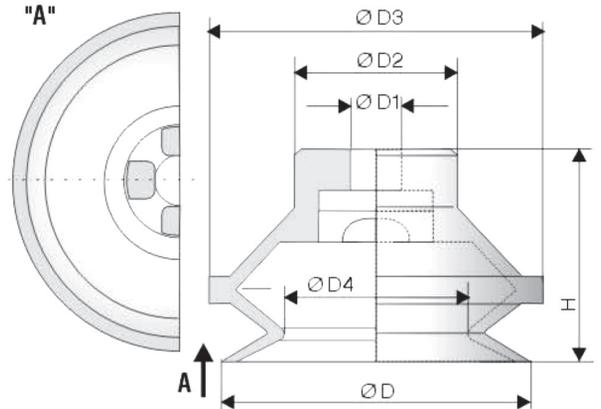
Vacuum Suction Cups

Bellows Suction Cups w/ 1½ folds



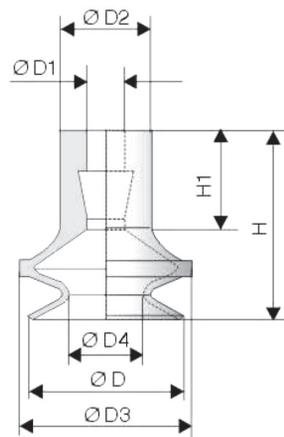
Art. No. 23.030.125_*			
NBK (sw), Si (tr), PUR (bl)			
	9 mm	9,0 g	Art.No. 270.019

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



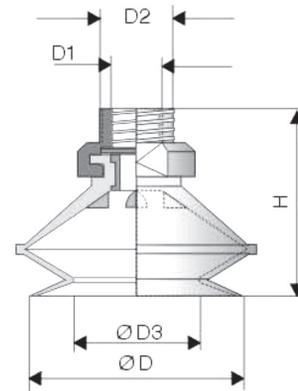
Art. No.*			D Ø	D1 Ø	D2 Ø	D3 Ø	D4 Ø	H
23.040.126	10 mm	15 g	40	6	25,0	46,0	23,0	30,5
23.050.127	10 mm	23 g	50	8	28,5	59,5	32,4	36,5

Art. NO.*		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				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																														
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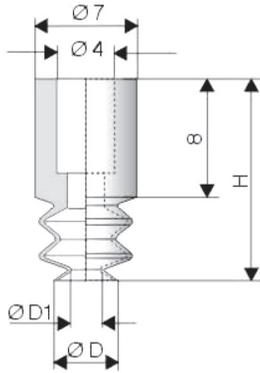
Bellows suction cups with 2½ folds

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).

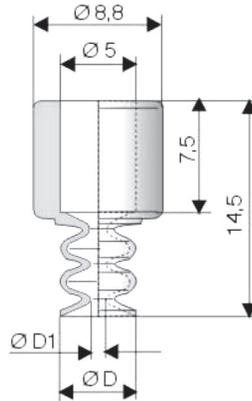
Vacuum Suction Cups

Bellows Suction Cups w/ 2½ folds



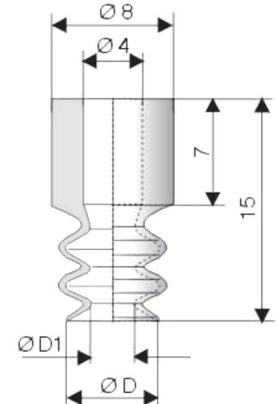
Art. No.*	Material Material Matériel	D Ø	D1	H
21.004.083	Si (tr)	4,2	2,2	14,0
21.005.058	NBR (sw), Si (tr)	5,0	1,3	13,5

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



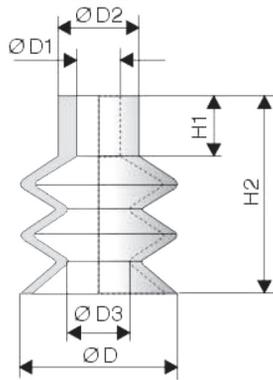
Art. No.	D Ø	D1		
21.005.086.2	5,0	1,0	3,5 mm	0,4 g
21.006.087.*	6,5	2,6	3,5 mm	0,4 g
Material/Material/Matériel				
21.005.086.2	Si (tr)			
21.006.087.*	Si (tr).NBR (\$w) 65°Sri			

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)				

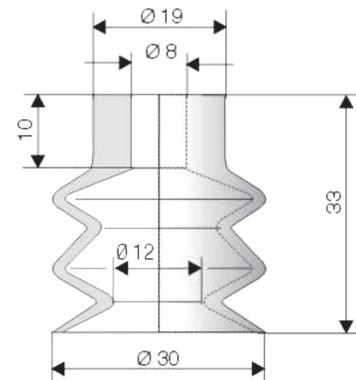
Art.No.	Fittings
270.003	G½" AG
270.015	G½" IG
270.104	M 6 AG
270.134	M 5 AG



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).



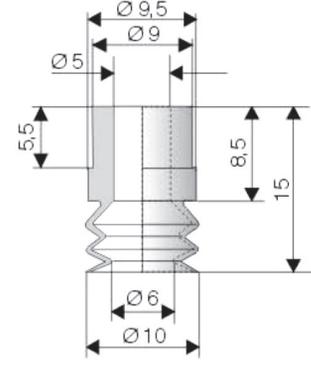
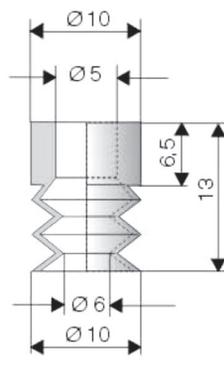
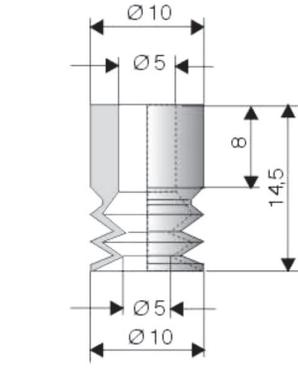
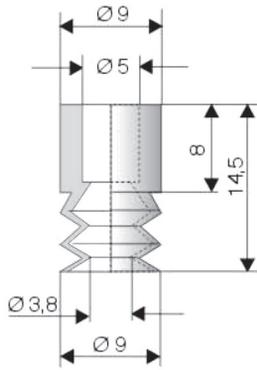
Art. No.*	Material Material Matériel		
21.030.019	NBR (sw), Si (r) NR-E (bg), PUR (bl) EPDM (g)	13,0	8,0

Art.No.	Fittings
270.092	G½" IG
270.093	G½" AG
270.248	G¼" IG
270.249	G¼" 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

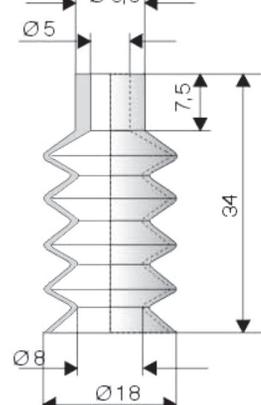
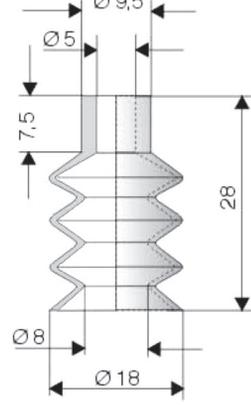
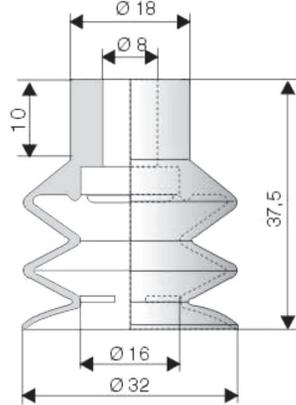
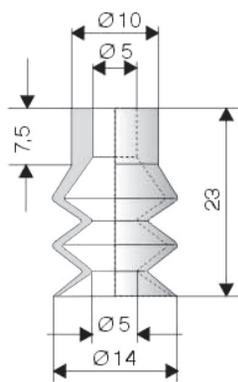
Art. No. 21.010.056_*	
Si (bl), Si (r), FKM (g) 70° Sh	4,0 mm, 0,6 g

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).

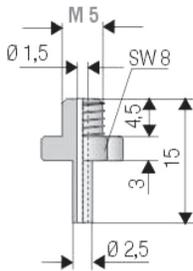
Vacuum Suction Cups

Fittings

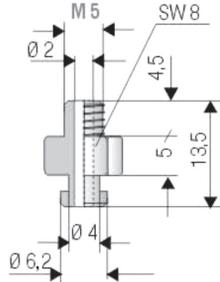


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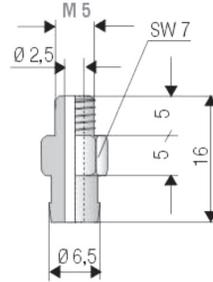
M 5 AG



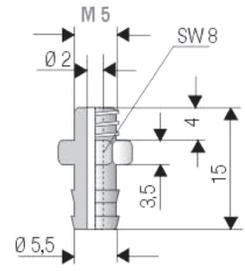
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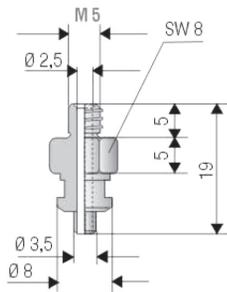
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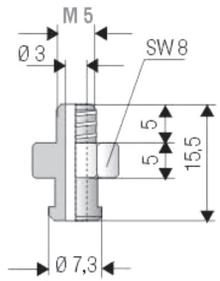
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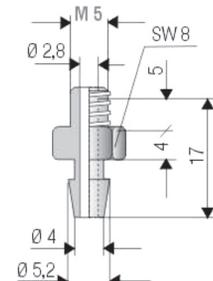
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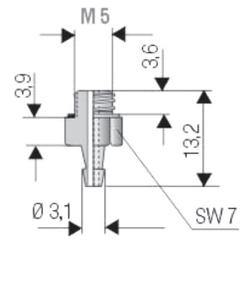
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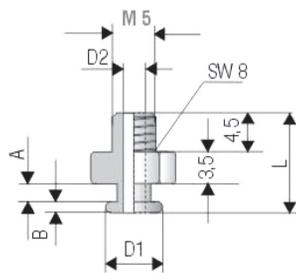
Art. No. 270.094



Art. No. 270.134

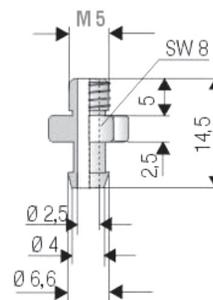


Art. No. 270.153



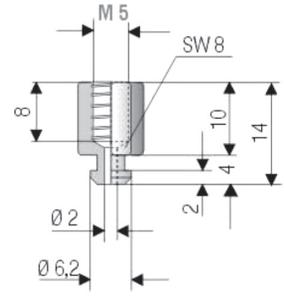
Art. No.	D	D2	L	A	B
270.300	Ø 3	Ø 1,2	10,5	1,5	1,0
270.301	Ø 6	Ø 2,5	12,0	2,0	2,0

Art. No. 270.300/301



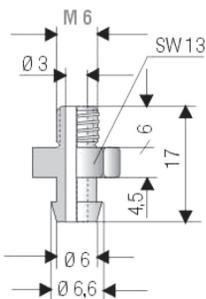
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M 5 IG

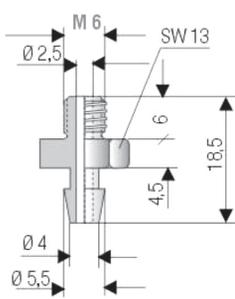


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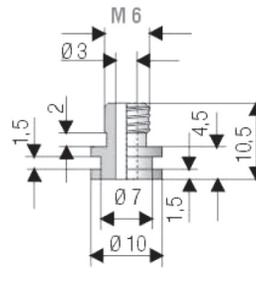
M 6 AG



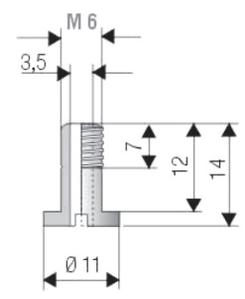
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Art. No. 270.104

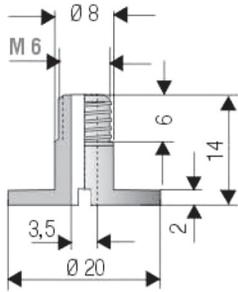


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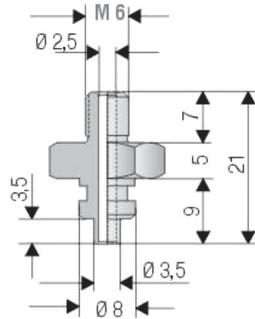


Art. No. 270.312

M 6 AG

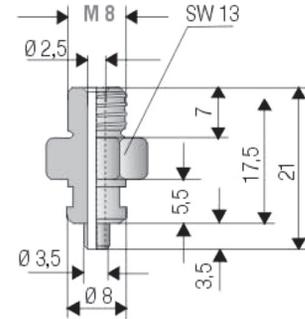


Art. No. 270.314



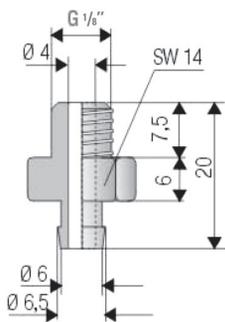
Art. No. 270.373

M 8 AG

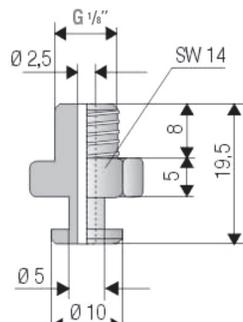


Art. No. 270.374

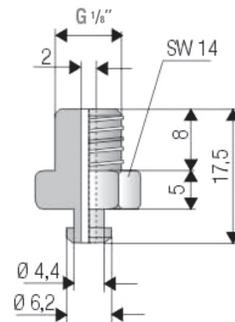
G 1/8" AG



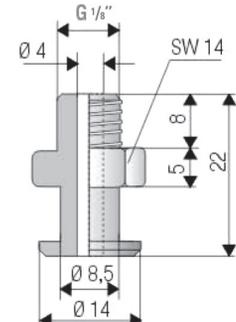
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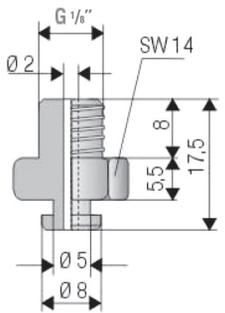
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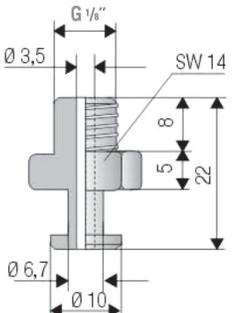
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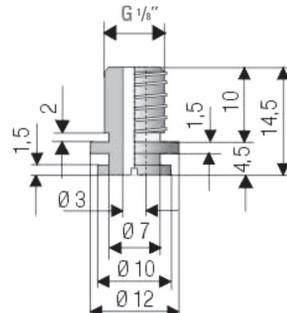
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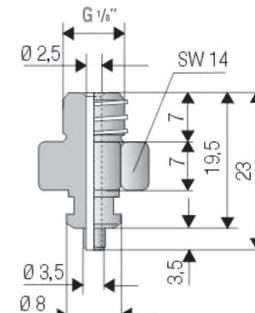
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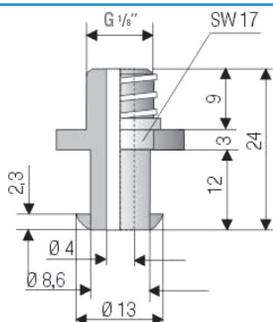
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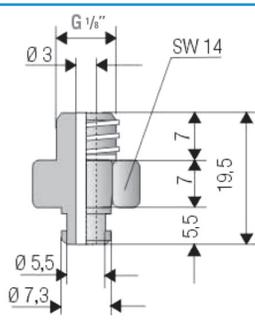
Art. No. 270.077



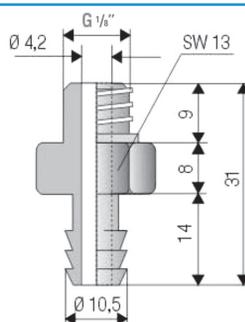
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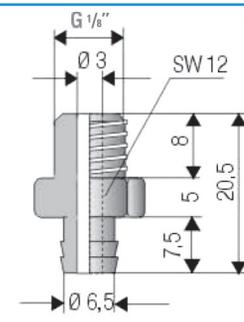
Art. No. 270.093



Art. No. 270.095



Art. No. 270.132



Art. No. 270.205

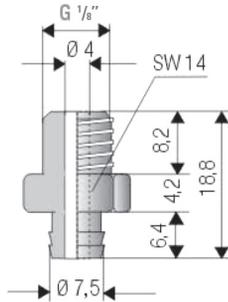
Vacuum Suction Cups

Fittings

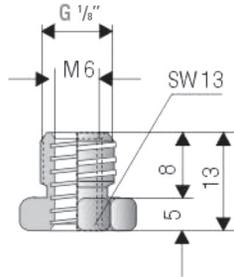


A

G 1/8" AG

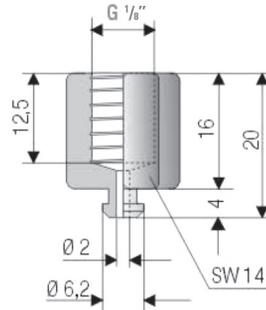


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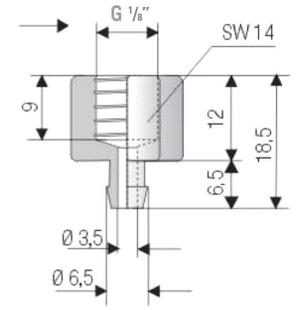


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G 1/8" IG

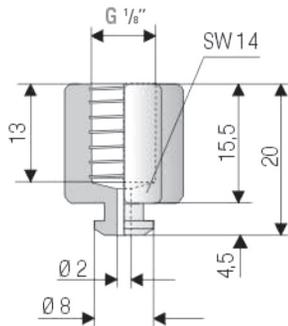


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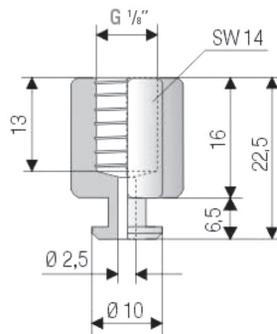


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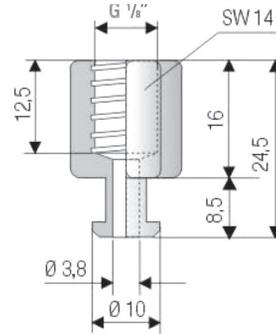
G 1/8" IG



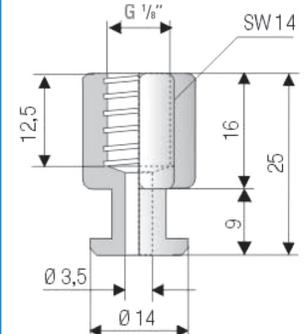
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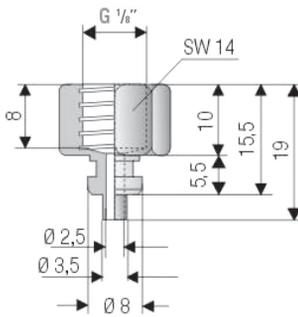
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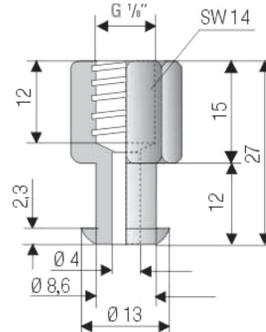
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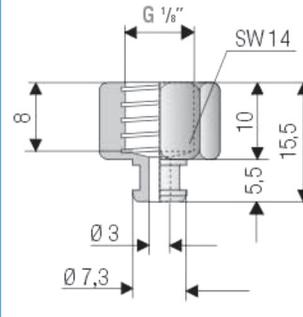
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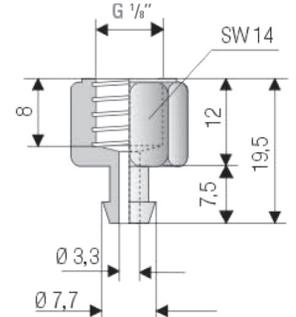
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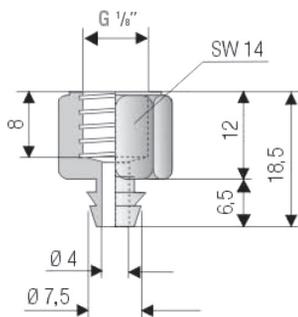
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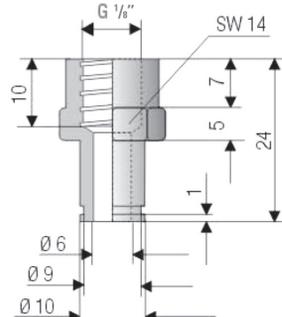
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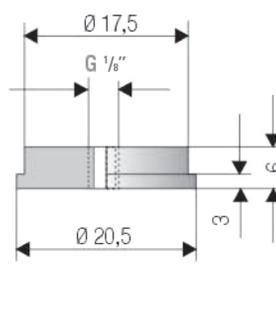
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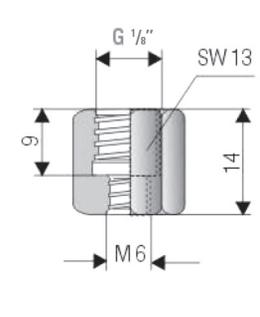
Art. No. 270.110



Art. No. 270.114



Art. No. 270.234



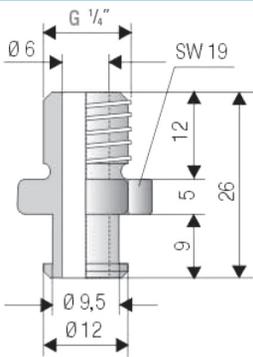
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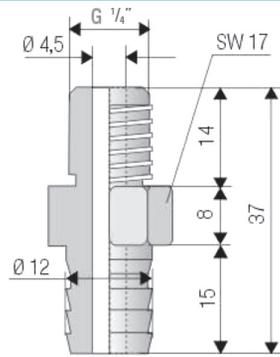
Vacuum Suction Cups

Fittings

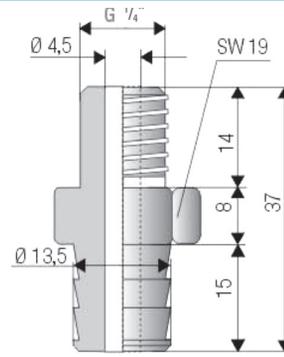
G 1/4" AG



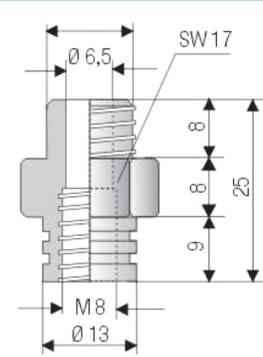
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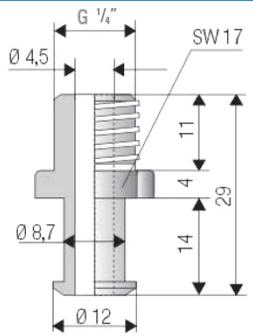
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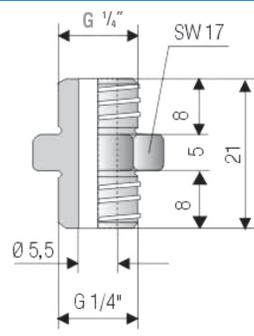
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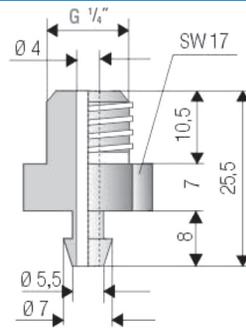
Art. No. 270.097



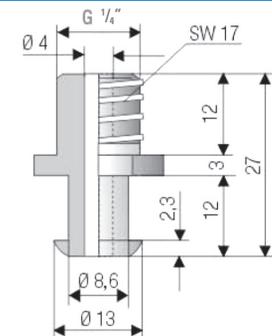
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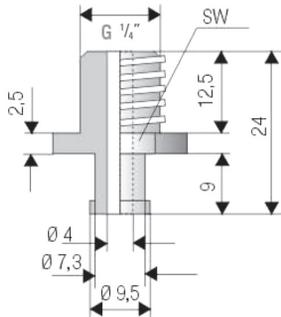
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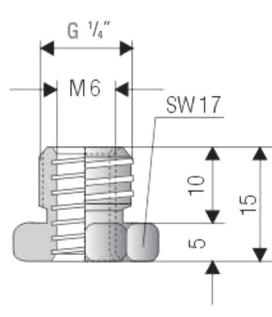
Art. No. 270.194



Art. No. 270.249

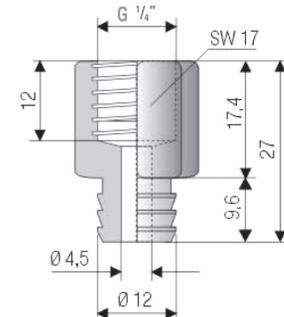


Art. No. 270.274



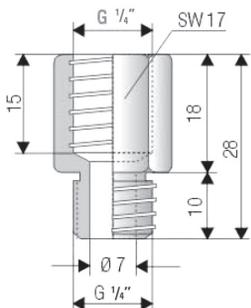
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G 1/4" IG

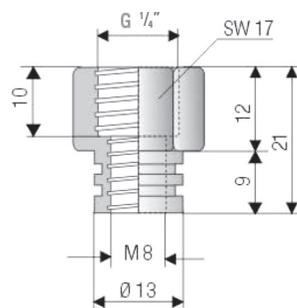


Art. No. 270.046

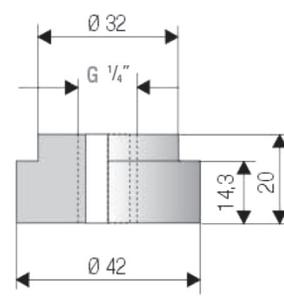
G 1/4" IG



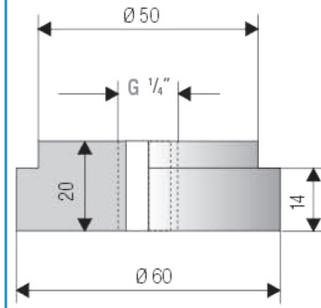
Art. No. 270.078



Art. No. 270.098



Art. No. 270.179



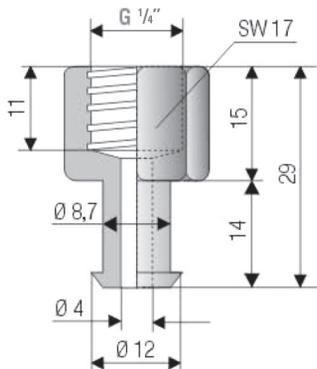
Art. No. 270.180

Vacuum Suction Cups

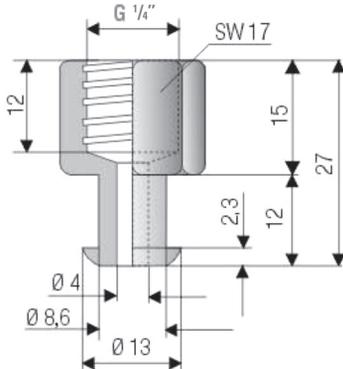
Fittings



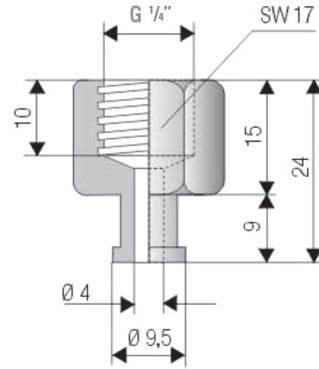
G 1/4" IG



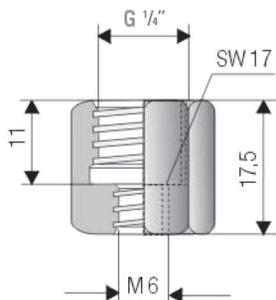
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Art. No. 270.248

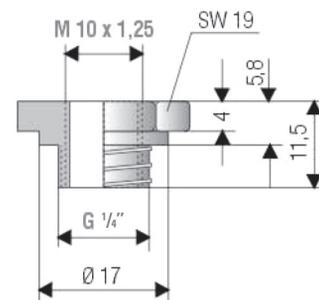


Art. No. 270.275



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.

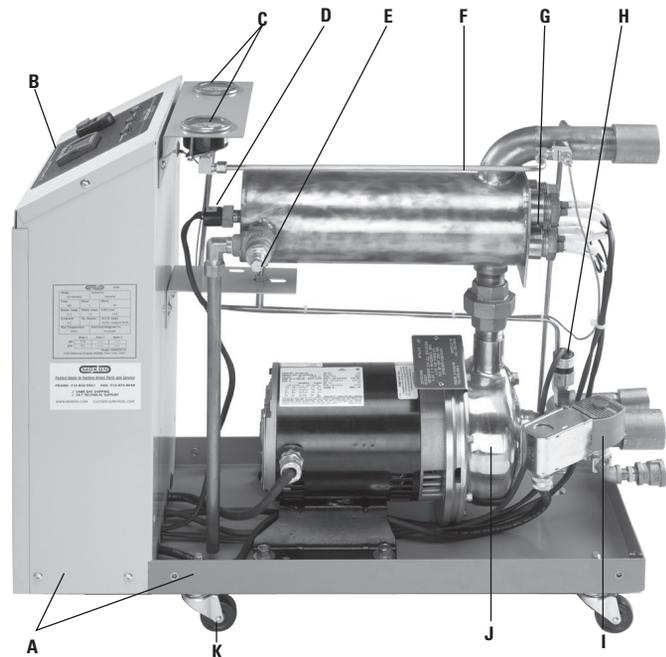
Circulating Water Temperature Control System

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.

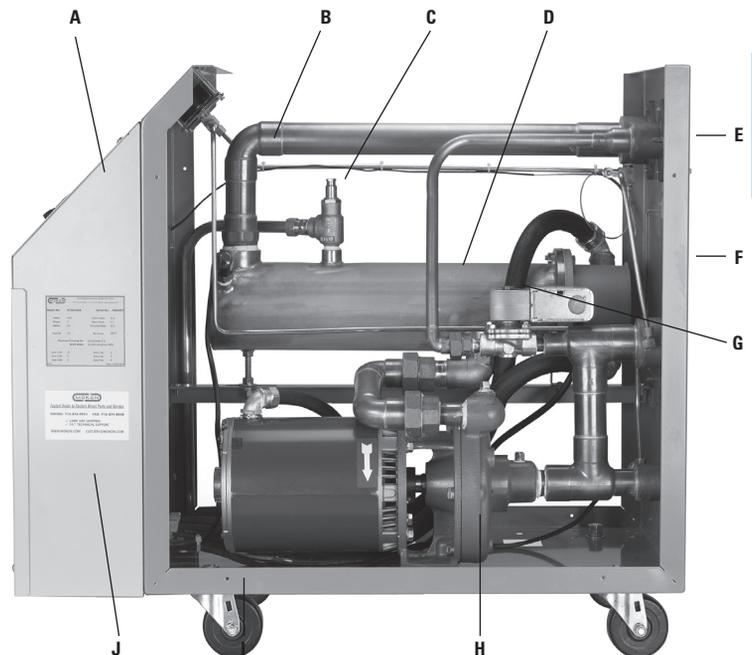
Circulating Water Temperature Control System

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	_____	_____	_____	_____
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Sizes of Lines	_____	_____	_____	_____
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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 Amps⁶ (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 AMPS⁶ (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.

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.

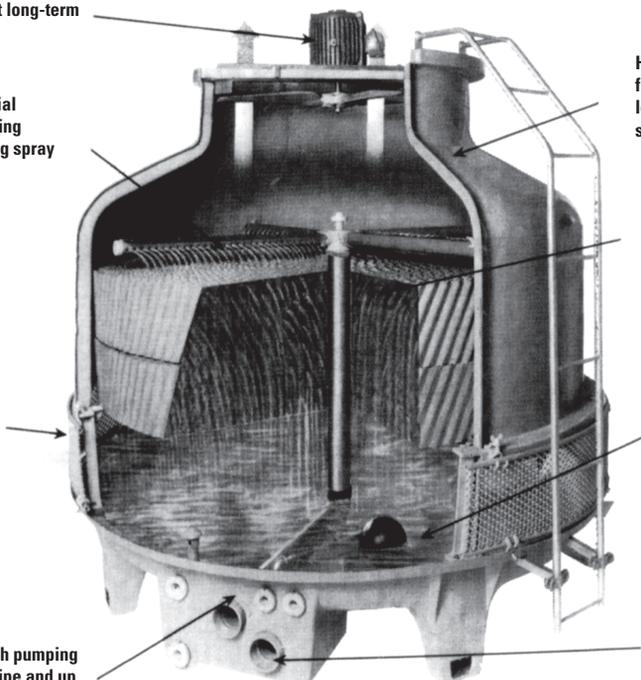
COOLING TOWERS

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.



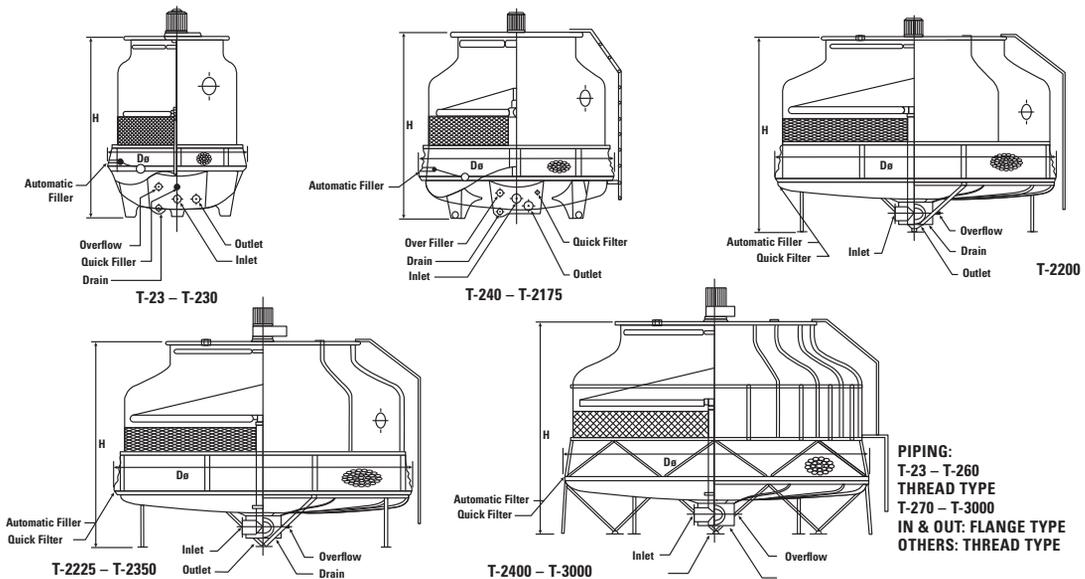
Housing panels and water basin are built of fiberglass-reinforced plastic ensuring rust-free, long-term performance even under the most severe environmental conditions.

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 Towers

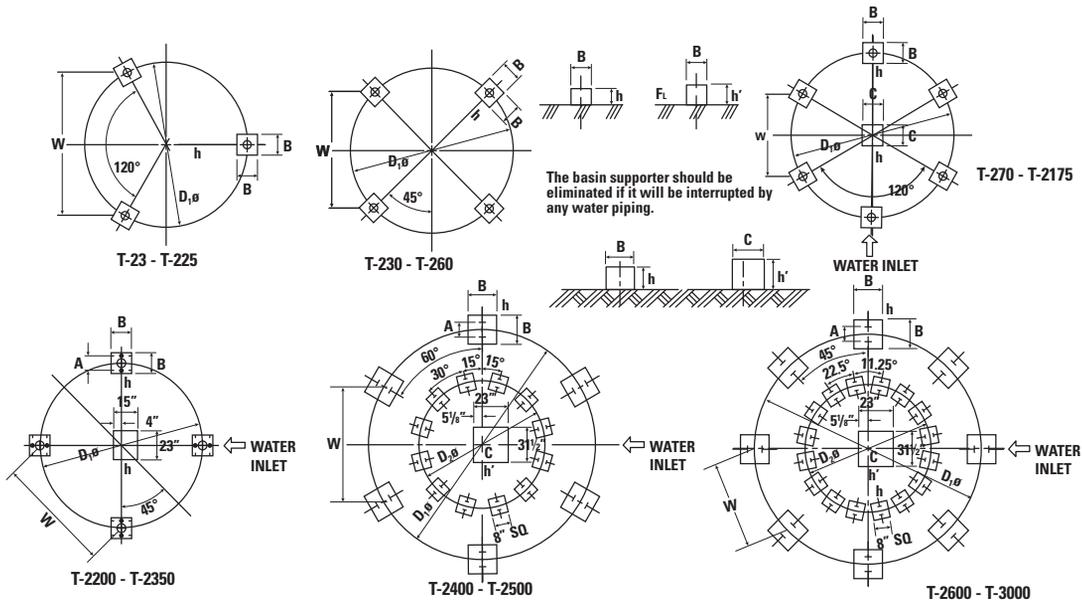


T Model	Dimensions (In.)		Pipe Connections (In.)						Fan Motor (HP)	Fan Diameter (Inch)	Air Volume (CFM)	Nominal Water Flow (GPM)
	Height	Dia.	In	Out	O	Dr	Float	Q				
T-25	52	33½	1½	1½	1	¾	½	–	⅓*	19½	2118	15
T-28	56	33½	1½	1½	1	¾	½	–	⅓*	19½	2648	23
T-210	54	41¾	1½	1½	1	¾	½	–	¼*	26⅜	3531	30
T-215	59	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***	57⅜	24500	295
T-2125	87	120⅜	6	6	2	1	1	–	3***	57⅜	29060	369
T-2150	90	130	6	6	2	2	1	–	5***	68⅜	33260	446
T-2175	97⅜	130	5	5	2	2	1	–	5***	68⅜	40250	518
T-2200	117¾	148⅜	6	6	2	2	1¼	1¼	5***	68⅜	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	131⅜	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	153⅜	203⅝	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	259⅝	10	10	4	2	2	2	20***	133⅜	125000	1777
T-2700	181 ⁵ / ₁₆	259⅝	10	10	4	2	2	2	20***	133⅜	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.



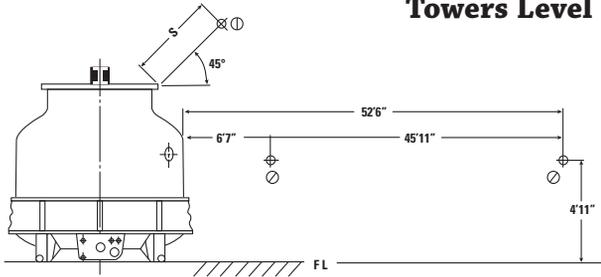
Cooling Towers



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:

- Point 1 is 45° extension of fan discharge.
- Distance "S":
 - T Models 2125 & lower - 4'11"
 - 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	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	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	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	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														T Model
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		
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		



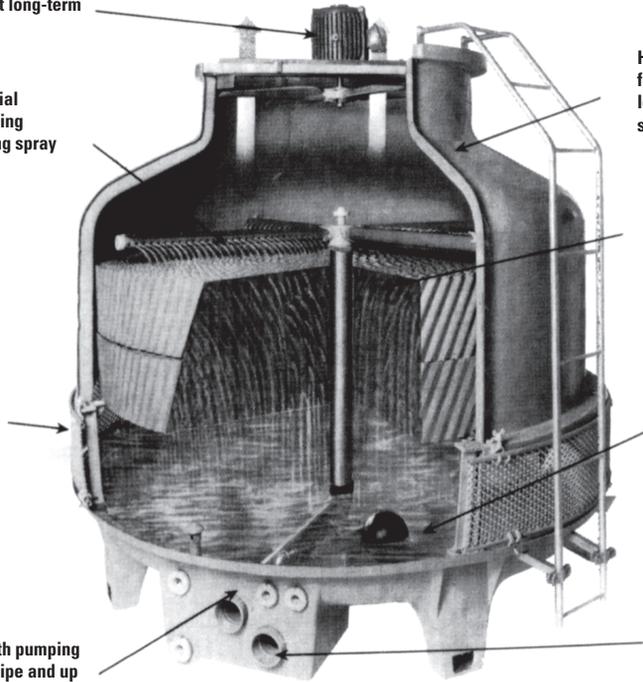
Cooling Towers

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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:

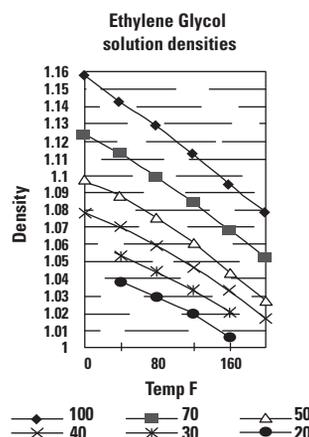
Ethylene Glycol Inhibited is almost odorless, easily mixes with water, and is moderately toxic.

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

ETHYLENE GLYCOL



Uninhibited Ethylene Glycol

UNINHIBITED ETHYLENE GLYCOL

- Pure ethylene glycol circulator fluid, no additives
- Guaranteed analysis by Shell
- For use from -40° to $+250^{\circ}\text{F}$ (dilute)
- Good rust preventative properties
- Non-corrosive, will not build-up
- High flashpoint, $+240^{\circ}\text{F}$
- 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

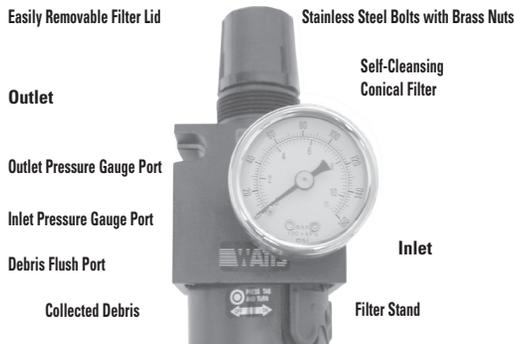
The Thompson Strainer



- 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

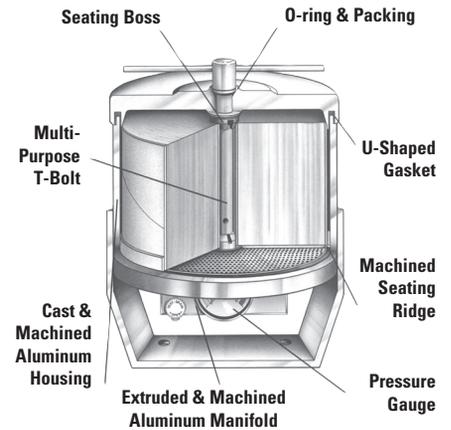
Filtration System



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

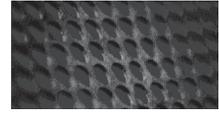
FILTROI SYSTEM



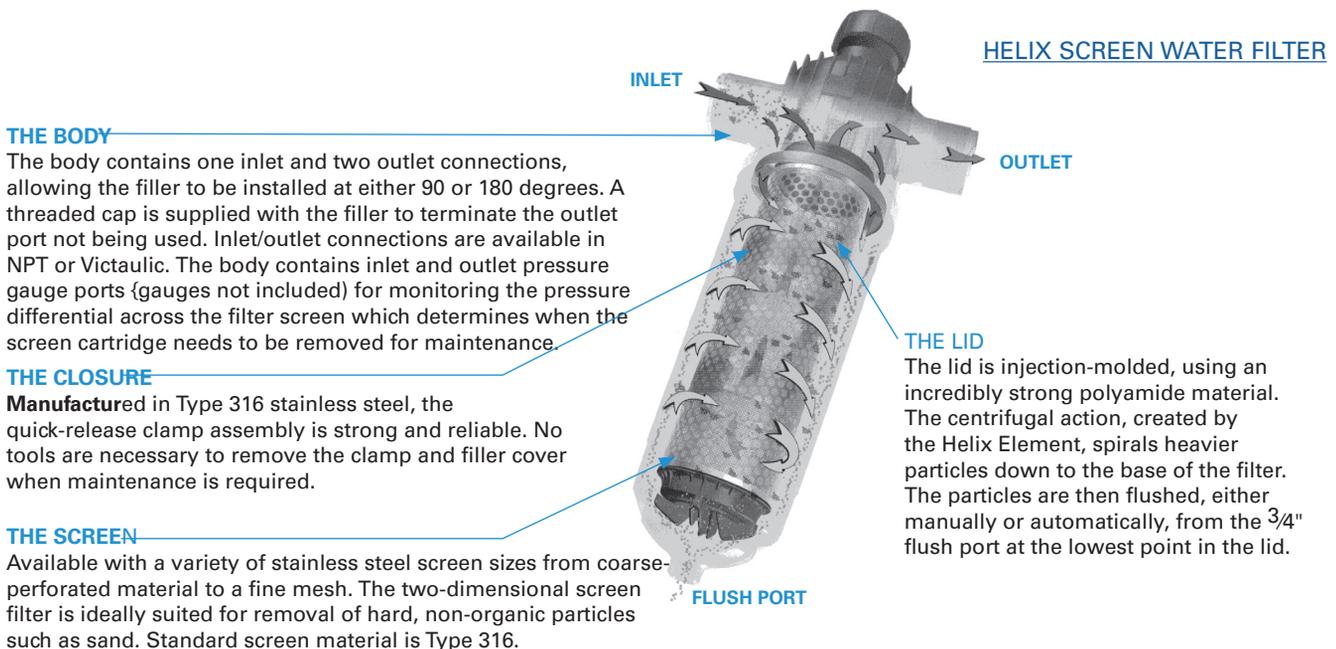
	BU50	BU100	BU200	BU400	BU1600
Quantity of oil in machine	up to 150 gal.	up to 325 gal.	up to 450 gal.	up to 100 gal.	over 1000 gal.
Oil (ISO) cleanliness	16/14/11 or better				
Replacement element (change every 2,000 hours or 3 months of operation)	50E	100E	200E	(2) 200E	(8) 200E
Replacement gasket set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



DME 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

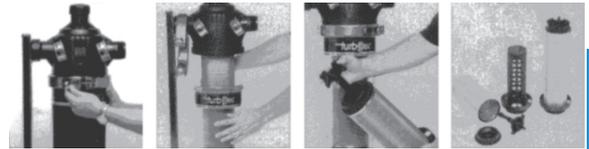
1. Dirty water enters the filter housing through the inlet connection.
2. As dirty water passes through the Helix Element, the water starts to spin at high velocity. This centrifugal action spins the particles away from the screen, minimizing manual cleaning frequency.
3. As particles are spun down to 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

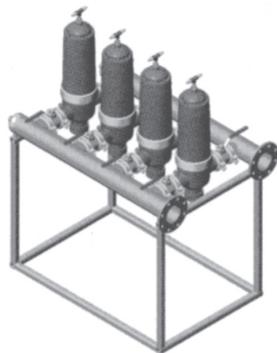
* Maximum flow rates should be derated for high solids loading, particularly for finer mesh sizes.

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

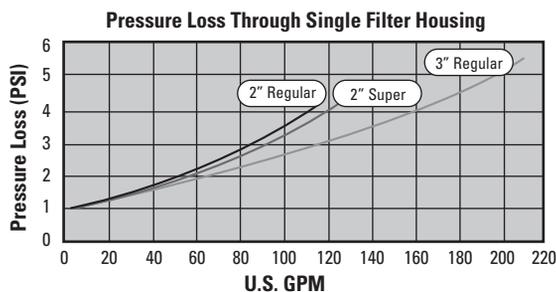
Screen: Stainless Steel (Type 316)

Gaskets: EPDM

Filter Pod Clamp: Stainless Steel (Type 316)

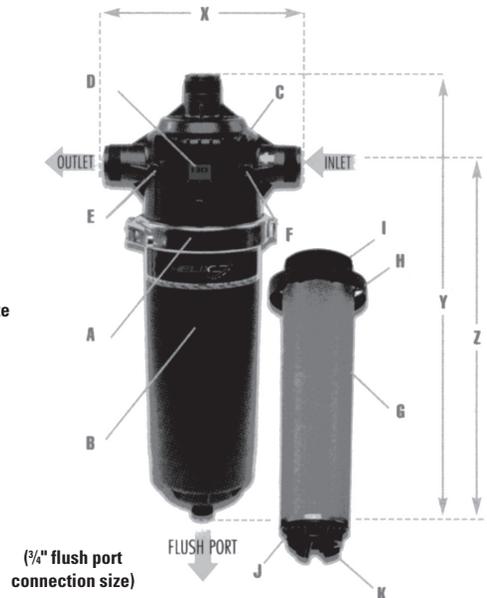
Screen Sizes Available

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

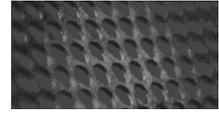


Part Number	Model Type	Inlet/Outlet Size & Type	Filter Surface Area (Sq. In.)	Max. Flow (GPM)	(Refer to Diagram Above)		
					X	Y	Z
HS2NA*	Regular	2"/NPT	186	100	12-1/8"	24-1/8"	18"
HS2SA*	Super	2"/NPT	263	100	12-1/8"	28-3/4"	22-15/16"
HS3NA*	Regular	2"/NPT	263	200	13-1/4"	30"	22-15/16"
HS2NW*	Regular	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)

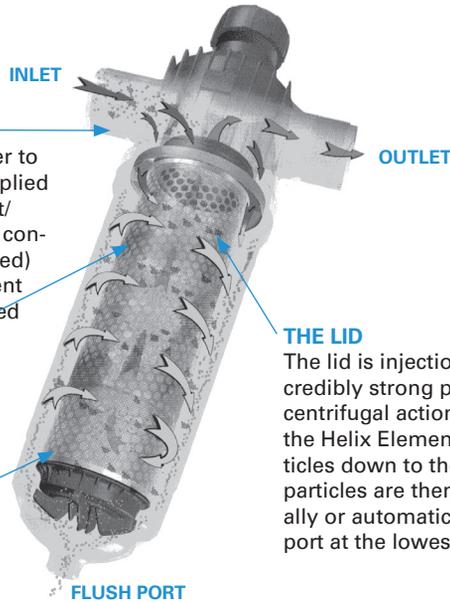


Helix Disc Water Filter



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

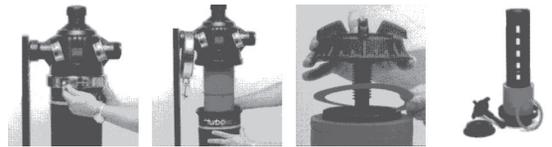
1. Dirty water enters the filter housing through the inlet connection.
2. As dirty water passes through the Helix Element, the water starts to spin at high velocity. This centrifugal action spins the particles away from the disc media, minimizing manual cleaning frequency.
3. As particles are spun down 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

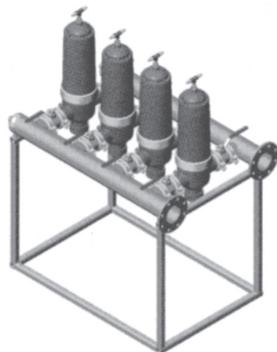
2" and 3" models available with NPT and/or Victaulic inlet/outlet connections
 In-line and 90-degree configurations standard
 (Filter is supplied with a cap for outlet port not being used)

Construction Materials

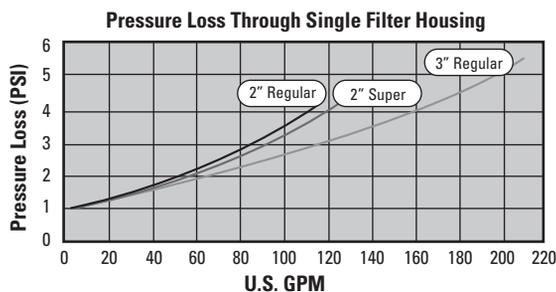
Housing: Polyamide
 Discs: Polypropylene
 Gaskets: EPDM
 Filter Pod Clamp: Stainless Steel (Type 316)

Micron Options Available

■ 200 Micron (80 Mesh) ■ 100 Micron (150 Mesh)
 ■ 130 Micron (120 Mesh) ■ 50 Micron (250 Mesh)

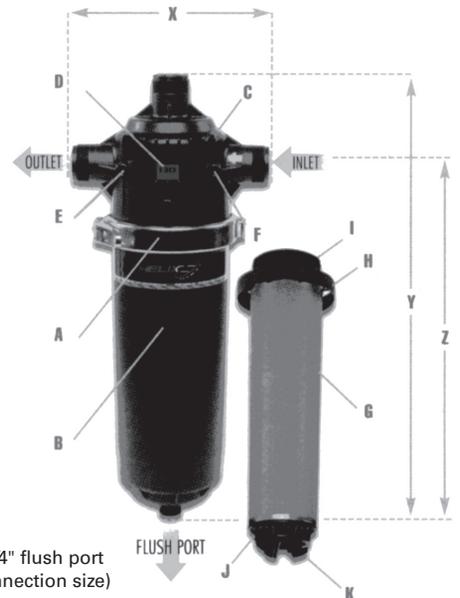


Please contact DME about modular capabilities.



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)



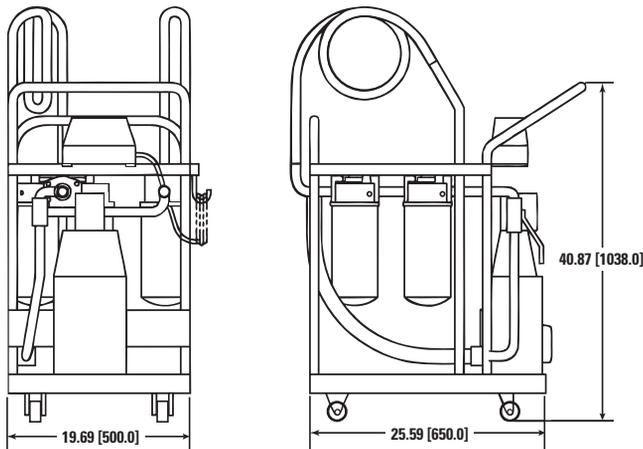
Portable Filter Carts

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

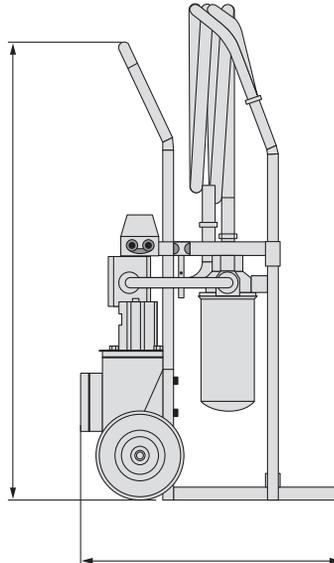
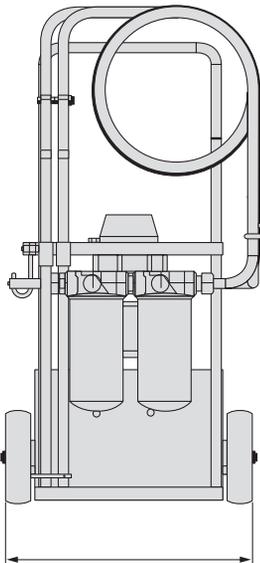
Portable Filter Carts

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

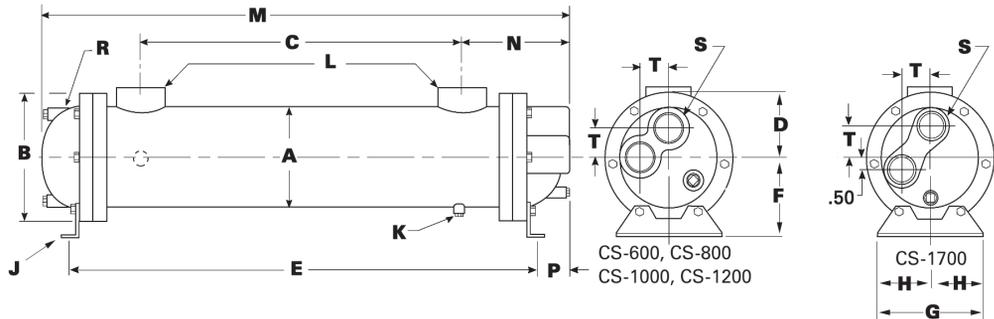


AOCH Series

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!



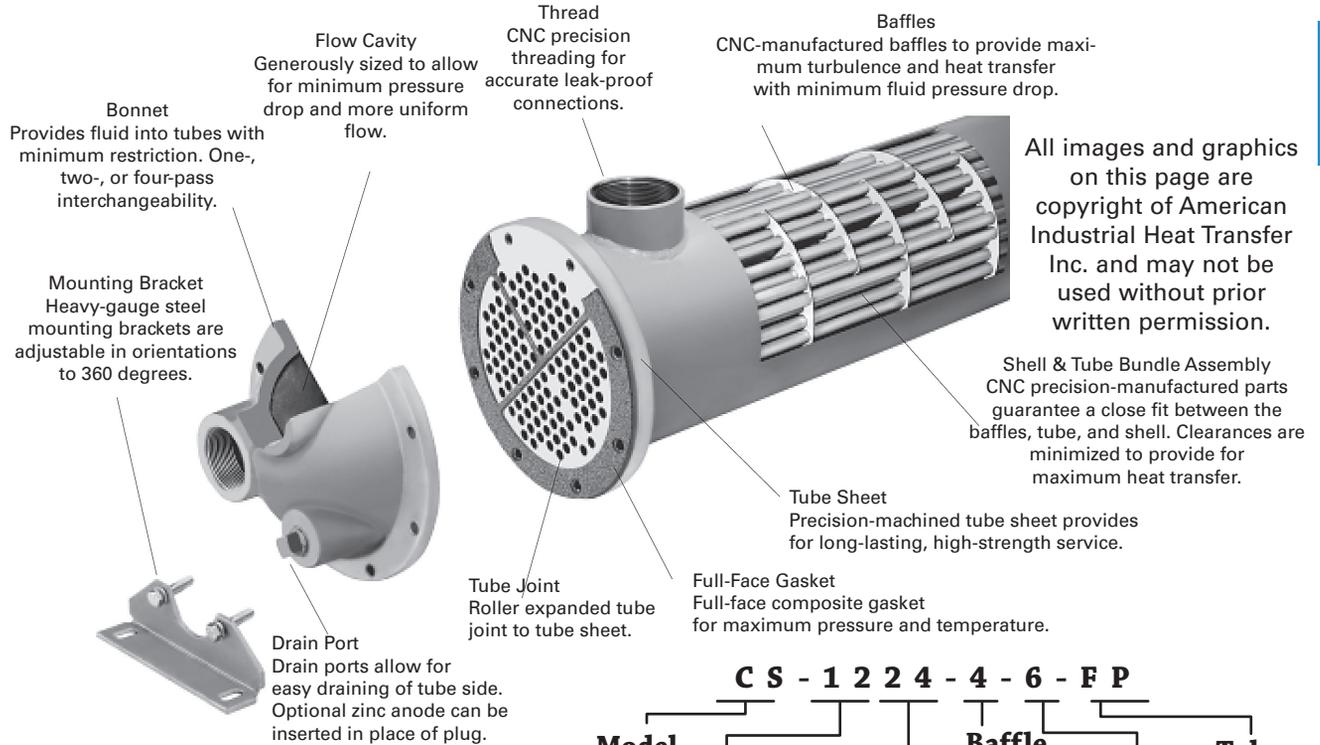
Dimensions

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 Series	Constr. Materials
Shell	Steel
Tubes	Copper
Baffle	Steel
Tube Sheet	Steel
End Bonnets	Cast Iron
Mounting Brackets	Steel
Gasket	Hypalon Composite

C S - 1 2 2 4 - 4 - 6 - F P

Model	Shell Diameter	Effective Tube Length	Baffle Spacing Code	Cooling Tube Diameter	Tube Side Passes
CS	600 = 3.25"	14"	1.5"	4 = 1/4"	FP = 4-pass
	800 = 4.25"	24"	2.0"	6 = 3/8"	
	1000 = 5.25"	36"	3.0"	10 = 5/8"	
	1200 = 6.25"	48"	4.0"		
	1700 = 8.25"	72"	6.0"		

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



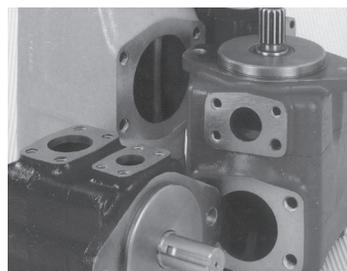
Hydraulic Pumps

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:

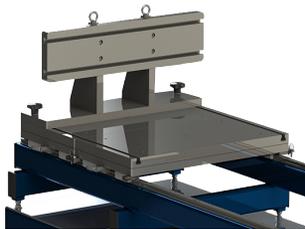
- 1.5, 2, 3 and 6 ton weight capacity
- Provides a working height of 850mm (33.46")
- Tables include: Pivot Plates, Platform & Tool Plate
- Optional accessories- Mechanical Brackets, Magnetic Brackets and Drawer Units



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.