ME-X741-PS-419(A) 3-11 PSHOT250

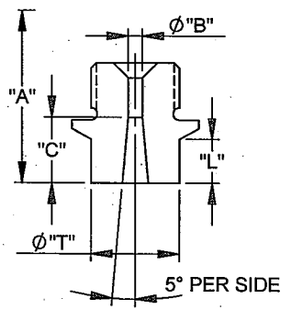
250 SERIES TIP SUB-ASSEMBLIES PACKING SLIP

DIMENSIONS ARE IN INCHES

DME
Every step of the way

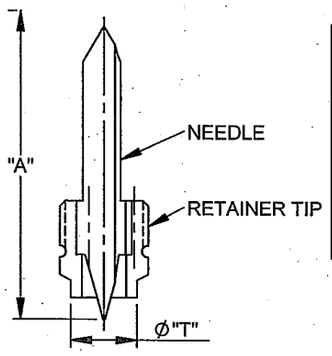
Tip Sub-Assemblies

All 250 Series tips have 1/2-24 UNS threads



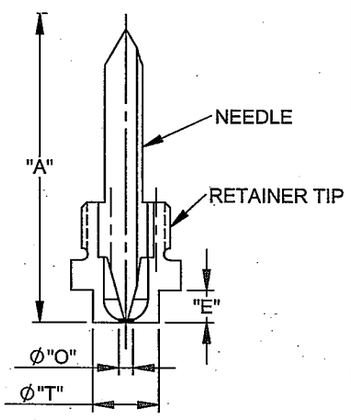
Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	"B" DIA.	"T" DIA.	"L"	"C"
SPRUE GATE	EHT0010	.080	.500	.250	.375
	EHT0011		.750		
	EHT0012		1.000	.100	
EXTENDED SPRUE GATE	EHT0013		.500	1.000	1.125
	EHT0014		.750		
	EHT0015		1.000	.850	



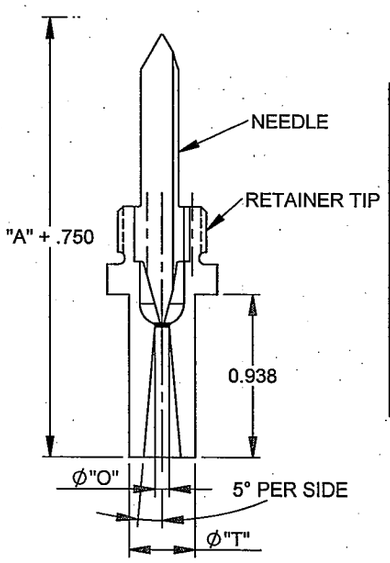
Point Gate (Bodyless)

TYPE	ITEM NUMBER	INCLUDES		"T" DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT0005	EHN0015	EHT0024	.375
	EHT1314		EHT0324	
WEAR RESISTANT	EHT1308	EHN0401	EHT0324	
	EHT1313		EHT1324	



Point Gate (Full Body)

TYPE	ITEM NUMBER	"T" DIA.	"O" DIA.	"E"	INCLUDES	
					NEEDLE	RETAINER TIP
STANDARD	EHT2001	.375	.060	.187	EHN0015	EHT0026
	EHT2002		.080			EHT0027
	EHT2003	.500	.060			EHT0028
	EHT2004		.080			EHT0029
WEAR RESISTANT	EHT2005	.375	.060		EHN0401	EHT1326
	EHT2006		.080			EHT1327
	EHT2007	.500	.060			EHT1328
	EHT2008		.080			EHT1329



Extended Point Gate (Full Body)

TYPE	ITEM NUMBER	"T"	"O"	DESCRIPTION	
				NEEDLE	RETAINER
STANDARD	EHT2301	.375	.060	EHN0015	EHT2326
	EHT2302		.080		EHT2327
	EHT2303	.500	.060		EHT2328
	EHT2304		.080		EHT2329
WEAR RESISTANT	EHT2305	.375	.060	EHN0401	EHT2326
	EHT2306		.080		EHT2327
	EHT2307	.500	.060		EHT2328
	EHT2308		.080		EHT2329

For selection of gate diameter it is important to take into consideration the materials flow characterisitics, shear rate of resin, molding conditions, fill time requirements, gate vestige, wall thickness and configuration of part to be molded. Situations requiring high injection velocities must be considered when selecting small gate diameters. High injection rates may require larger gates due to shear heat build up (e.g. high weight, thin wall applications). See material manufacturer's literature for further information regarding materials to be molded.

To compensate for nozzle's growth when heat is applied, the linear expansion of the nozzle (BE) at a given temperature must be added to the nominal "A" dimension (See catalog for "A" lengths). The formula below shows how to figure boring depth (dimension "A" + BE) The tip of the nozzle will now be flush with the cavity line at processing temperature.

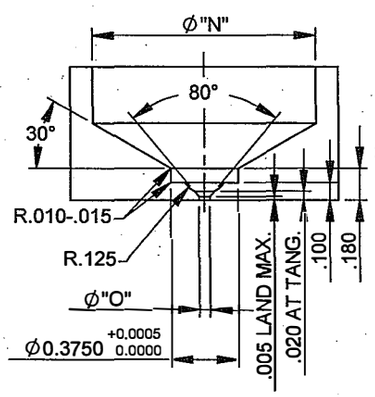
Formula for determining this expansion factor is as follows:
BE = "A" dimension x 0.00000633 x (Nozzle set point temperature - 68°F)

EXAMPLE: Given a 4 inch "A" dimension, with a nozzle set point temperature of 500°F:
BE = 4 x 0.00000633 x (500 - 68) = 0.011
Thus "A" + BE will be 4.011

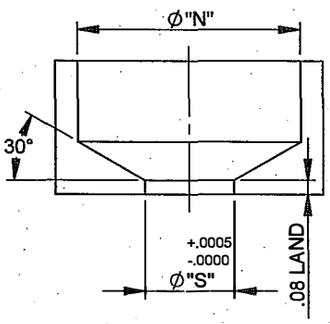
Note: the above information is only given as an example, variations may occour based on mold configurations and cooling factor. In some instances it may be nessessary to obtain an empirical factor.

250 SERIES GATE MACHINING DIMENSIONS

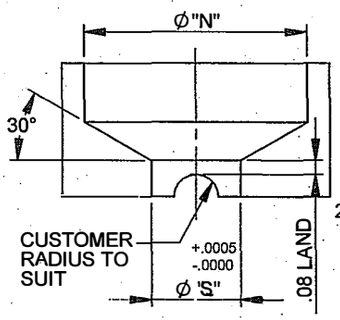
POINT GATE (BODYLESS)



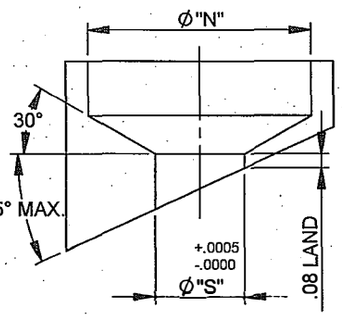
STD. SPRUE AND POINT GATE (FULLBODY)



EXTENDED SPRUE AND EXTENDED POINT GATE (FULL BODY) RUNNER DESIGN



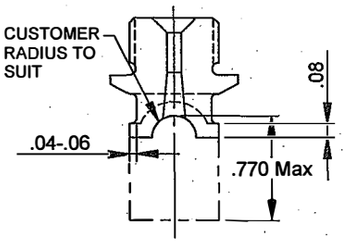
EXTENDED SPRUE AND EXTENDED POINT GATE (FULL BODY) ANGLE DESIGN



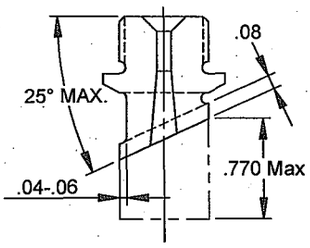
"O" DIA.		"N" DIA.	"S" DIA.
UNFILLED RESIN	FILLED RESIN	SQ. COIL OR HIGH PERFORMANCE	
.028 MIN.	.060 MIN.	1.187 MIN. - 1.250 MAX.	* .3755
			.5005
			.7505
			1.0005

* Point Gate (Fullbody) only.

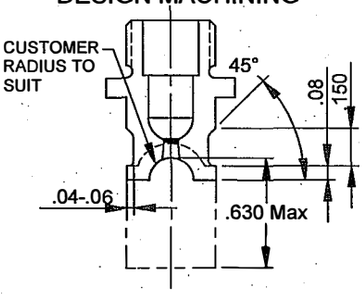
EXTENDED SPRUE RUNNER DESIGN MACHINING



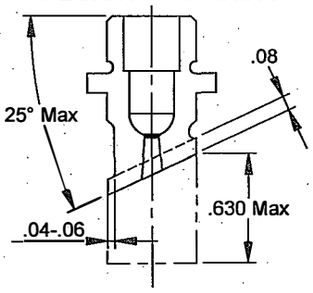
EXTENDED SPRUE ANGLE DESIGN MACHINING



EXTENDED POINT GATE RUNNER DESIGN MACHINING



EXTENDED POINT GATE ANGLE DESIGN MACHINING



Nozzle body head must be keyed to prevent body from turning when tip is installed into body. Customer to torque (30±5 Ft Lbs) tip into shank of nozzle body in mold three times to set tip before marking the runner or angle on the tip. This will ensure that the tip will line up after runner or angle is machined onto tip. Customer may machine relief on Extended Sprue Gate and Extended Point Gate Tips for molding heat sensitive or engineering grade materials. (see drawings above)

OPERATING & SERVICING INSTRUCTIONS:

All interchangeable nozzles are similar, and differ only in size and material flow capacity.

OPERATING PROCEDURE

The nozzles are supplied with a Square (Flat) Coil or High Performance heater equipped with a Type "J" Thermocouple.
It is recommended to use a DME closed loop Temperature Controller for optimum temperature control with Step Smart Ⓡ or Smart Step Ⓡ. These systems will allow heater to dissipate any moisture and then change automatically to set point.
It is essential to use controllers with the proper votage and wattage capabilities.
The voltage and wattage of each heater is clearly marked on the heater tag. Step Smart Ⓡ, Smart Step Ⓡ and DME Ⓡ are all registered trademark of DME LLC company.

DISASSEMBLY PROCEDURE

1. Nozzle has been designed to have the tip removed in the press.
2. For removal of tip from nozzle, a 6 point deep well socket is recommended. The nozzle must be at processing temperature and the heater should be turned off when removing tip counter-clockwise from the nozzle.

ASSEMBLY PROCEDURE

1. Tip and nozzle thread area must be clean of any material before reassembling.
2. Apply an anti-seize compound on the tip threads.
3. Torque tip into the shank of the nozzle body. Torque and untorque two or three times making sure there is a good contact between the tip and the nozzle. Torque the tip into the nozzle using 30±5 ft-lbs. For protection of the tip a six point deep well socket is recommended.

IMPORTANT SAFETY INFORMATION

A hot-runner system includes electrical elements and may contain molten plastic at elevated temperature and pressure. To avoid injury, exercise caution by reading these instructions before servicing or operating the system.
These instructions must be passed on to the end user where they should be read before using this product. Failure to do so can result in serious injury or death.

⚠ DANGER

Failure to comply will result in serious injury or death.
ELECTRICAL HAZARDS
Improper voltages or grounding can result in electrical shock. Use only with proper voltage and a proper earth ground.
To avoid electrical shock, do not operate product when wet
Do not operate this equipment with covers or panels removed.
To avoid electrical shock, turn off main power disconnect and lockout/tag out before servicing this device. Do not connect temperature sensor to electrical power. It will damage the product and it could cause fire, severe injuries or even death.
If green ground wire present, wire must be connected to the ground.
Do not rebend rigid leads. Rebending leads might result in damage to circuit.
Product might absorb moisture when cool. Use low voltage or power to drive out residual moisture before applying full power. Failure to do so may cause damage to this product.

⚠ WARNING

Failure to comply can result in serious injury or death.
STORED ENERY AND HIGH TEMPERATURE HAZARDS
This product maintains molten plastic at high pressure. Use caution when operating and servicing the system.
Physical contact with molten plastic may result in severe burns. Proper protective equipment, including eye protection, must be worn.
This product has heated surfaces. Use caution when operating and servicing the system to avoid severe burns. Proper protective equipment should be worn.

ME-X741-PS-419(A) 3-11 PSHOT250

250 SERIES TIP SUB-ASSEMBLIES PACKING SLIP

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