ME-X741-PS-420(A) 3-11 PSHOT375

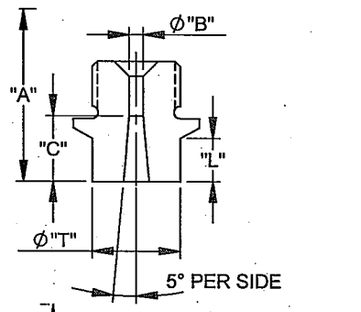
375 SERIES TIP SUB-ASSEMBLIES PACKING SLIP

Dimensions are in inches

DME
Every step of the way

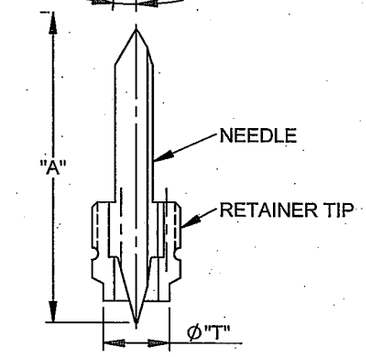
Tip Sub-Assemblies

All 375 Series tips have 5/8-20 UN threads



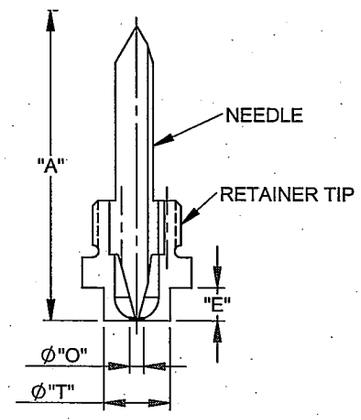
Sprue Gate/Extended Sprue Gate

TIP	ITEM NUMBER	"B" DIA.	"T" DIA.	"L"	"C"
SPRUE GATE	EHT0016	.125	.500	.250	.375
	EHT0017		.750		
	EHT0018		1.000		
EXTENDED SPRUE GATE	EHT0019		.500	1.000	1.125
	EHT0020		.750		
	EHT0021		1.000		



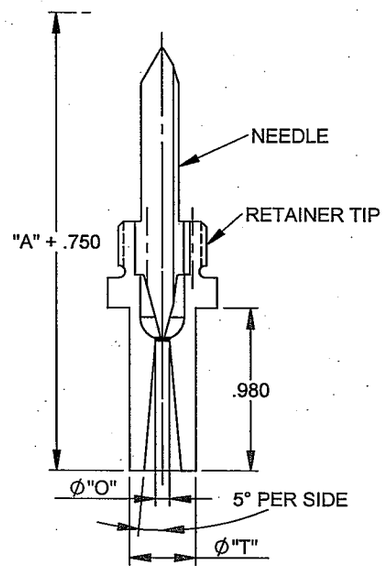
Point Gate (Bodyless)

TYPE	ITEM NUMBER	INCLUDES		"T" DIA.
		NEEDLE	RETAINER TIP	
STANDARD	EHT0039	EHN0016	EHT0025	.500
	EHT1312		EHT0325	
WEAR RESISTANT	EHT1303	EHN0400	EHT0325	
	EHT1309		EHT1325	



Point Gate (Full Body)

TYPE	ITEM NUMBER	"T" DIA.	"O" DIA.	"E"	INCLUDES	
					NEEDLE	RETAINER TIP
STANDARD	EHT2009	.500	.080	.230	EHN0016	EHT0030
	EHT2010		.100			EHT0031
	EHT2011	.750	.080			EHT0032
	EHT2012		.100			EHT0033
	EHT2013	1.000	.080			EHT0034
	EHT2014		.100			EHT0035
WEAR RESISTANT	EHT2015	.500	.080		EHN0400	EHT1330
	EHT2016		.100			EHT1331
	EHT2017	.750	.080			EHT1332
	EHT2018		.100			EHT1333
	EHT2019	1.000	.080			EHT1334
	EHT2020		.100			EHT1335



Extended Point Gate (Full Body)

Type	Item Number	"T"	"O"	DESCRIPTION	
				NEEDLE	RETAINER
Standard	EHT2309	.500	.080	EHN0016	EHT2330
	EHT2310		.100		EHT2331
	EHT2311	.750	.080		EHT2332
	EHT2312		.100		EHT2333
	EHT2313	1.000	.080		EHT2334
	EHT2314		.100		EHT2335
Wear Resistant	EHT2315	.500	.080	EHN0400	EHT2330
	EHT2316		.100		EHT2331
	EHT2317	.750	.080		EHT2332
	EHT2318		.100		EHT2333
	EHT2319	1.000	.080		EHT2334
	EHT2320		.100		EHT2335

For selection of gate diameter it is important to take into cosideration the material flow characterisitics, shear rate of resin, molding conditions, fill time requirements, gate vestige, wall thickness and configuration of part to be molded. Situations requiiring high injection velocities must be considered when selesting 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.

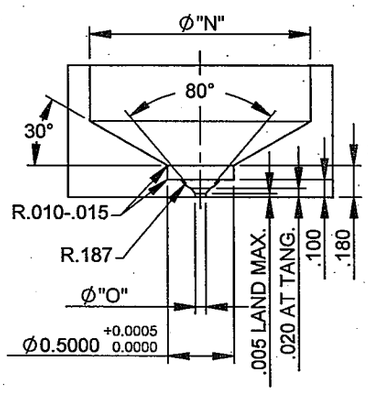
Formula for determining this expansion factor is as follows:
BE = "A" dimension x 0.00000633 x (Nozzle set point temperature - 68°F)

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

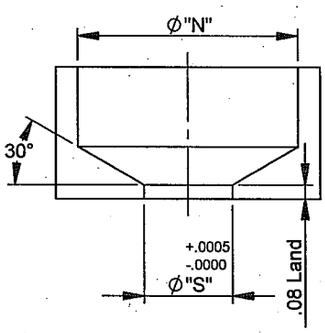
Note: the above information is only given as an example, variations may occour based on mold configurations and cooling factor. In some instances it may be nessessary to obtain an empirical factor.

375 SERIES GATE MACHINING DIMENSIONS

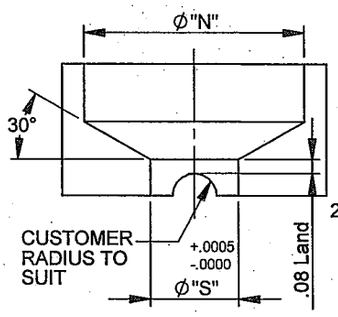
POINT GATE (BODYLESS)



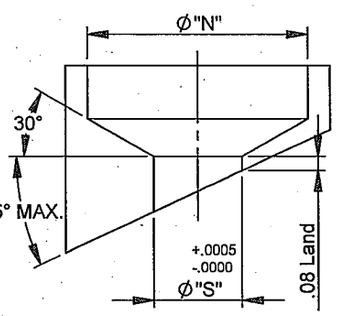
STD. SPRUE AND POINT GATE (FULLBODY)



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.	1.437 MIN. - 1.625 MAX.	.5005
			.7505
			1.0005

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 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.

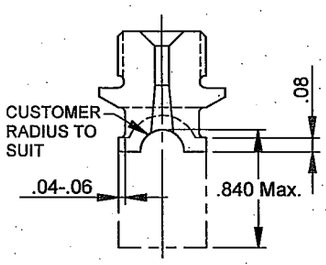
⚠ DANGER

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.

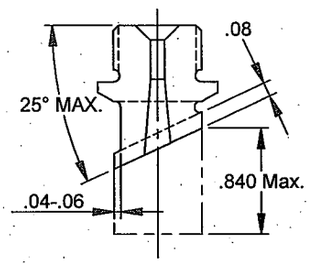
⚠ WARNING

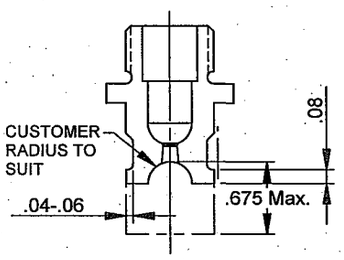
Failure to comply can result in serious injury or death.
STORED ENERY AND HIGH TEMPERATURE HAZARDS
This product maintains molten plastic at high pressure. Use caution when operating ans servicing the system.
Physical contact with molten plastic may result in severe burns. Proper protective equipment,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

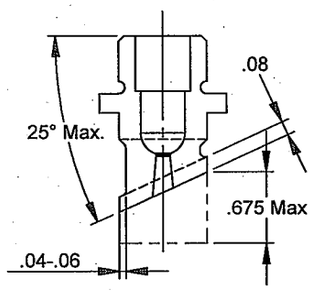
EXTENDED SPRUE AND EXTENDED POINT GATE (FULL BODY) RUNNER DESIGN MACHINING



EXTENDED SPRUE AND EXTENDED POINT GATE (FULL BODY) 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 Tips and Extended Point Gate Tips for molding heat sensitive or engineering grade materials. (see drawings above)

ME-X741-PS-420(A) 3-11 PSHOT375

375 SERIES TIP SUB-ASSEMBLIES PACKING SLIP

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