

E-Series Straight-Shot™

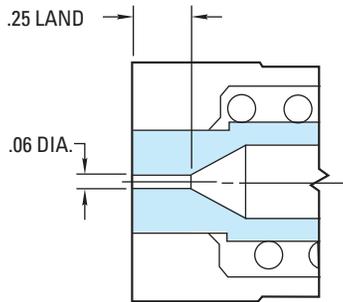
DME Standard E-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles) provide a .25 inch extra stock allowance on the front face to permit machining of runner profiles or part contours into that face. They are supplied with a .06 diameter gate and a .25 inch gate land. The gate diameter can be enlarged to suit the particular molding application.



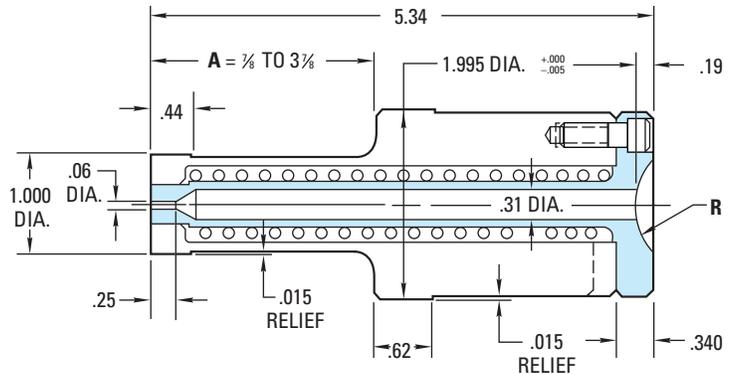
Long Style
See DME Control Systems Catalog for temperature controllers.

E-Series (Long Style)

NOTE:
Must always be altered as shown in Figures 1 thru 6 (see next page).



ENLARGED VIEW AS SUPPLIED



NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows:
BE = "A" dimension x 0.00000633 x nozzle set point - 68°F (assuming the mold is at 68°F during operation). If mold temperature is different, substitute 68°F with actual mold temperature.

EXAMPLE:
Given a setpoint of 500°F:
BE = 1.375 x .0000063 x (500 - 68) = .004 thus 1.375 + .004 = 1.379.
Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

The DME Standard E-Series Straight-Shot (Long Style) is available in seven standard shoulder lengths with either a 1/2" or 3/4" spherical radius and 120 or 240 volt heater. The E-Series Straight-Shot (Long Style) can be retrofitted to suit the particular molding application.

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT4507E190).

E-Series Straight-Shot (Long Style) Hot Sprue Bushings

R	WITH 120 VOLT HEATER	SHOULDER LENGTH A	WITH 240 VOLT HEATER
	ITEM NUMBER		ITEM NUMBER
1/2	SSBT4507E1	7/8	SSBT4507E2
	SSBT4513E1	1 1/8	SSBT4513E2
	SSBT4517E1	1 1/4	SSBT4517E2
	SSBT4523E1	2 1/8	SSBT4523E2
	SSBT4527E1	2 1/4	SSBT4527E2
	SSBT4533E1	3 1/8	SSBT4533E2
	SSBT4537E1	3 1/4	SSBT4537E2
3/4	SSBT6507E1	7/8	SSBT6507E2
	SSBT6513E1	1 1/8	SSBT6513E2
	SSBT6517E1	1 1/4	SSBT6517E2
	SSBT6523E1	2 1/8	SSBT6523E2
	SSBT6527E1	2 1/4	SSBT6527E2
	SSBT6533E1	3 1/8	SSBT6533E2
SSBT6537E1	3 1/4	SSBT6537E2	

E-Series Straight-Shot™

The DME Standard E-Series Straight-Shot (Short Style) is intended to suit the requirements of smaller injection molding machines and is supplied with a 7/8" A dimension. The A dimension can be altered to suit the particular molding application.



Short Style
See the DME Control Systems Catalog for temperature controllers.

E-Series Straight-Shot Hot Sprue Bushings (Short Style)

WITH 240 VOLT HEATER	R	A DIMENSION
SSBT4407E2	1/2	7/8
SSBT0407E2	NONE	7/8

NOTE:
The expansion factor must be taken into consideration prior to machining for and installation of the bushing. This factor (BE) must then be added to the A dimension. The formula for determining this expansion factor is as follows:

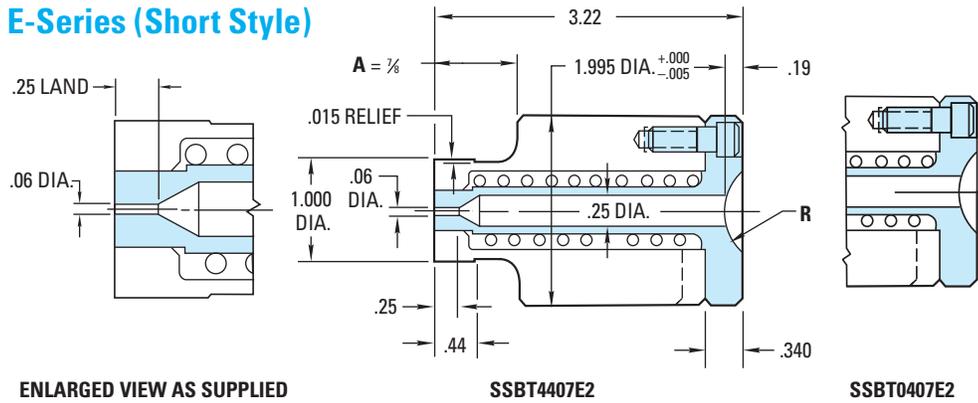
$$BE = "A" \text{ dimension} \times 0.00000633 \times \text{nozzle set point} - 68^{\circ}\text{F} \text{ (assuming the mold is at } 68^{\circ}\text{F during operation). If mold temperature is different, substitute } 68^{\circ}\text{F with actual mold temperature.}$$

EXAMPLE:

Given a setpoint of 500°F:
 $BE = 1.375 \times .00000633 \times (500 - 68) = .004$ thus $1.375 + .004 = 1.379$.

Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

E-Series (Short Style)



ENLARGED VIEW AS SUPPLIED

SSBT4407E2

SSBT0407E2

NOTE: Must always be altered as shown in Figures 1 thru 6 (see below).

Design Guidelines for Altering E-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles)

Always remove the .25 extra stock allowance and alter the A dimension to suit whenever gating into a flat part surface. Minimum stock removal of .25 provides an approximate .06 gate diameter (Figure 1).

Maximum stock removal of .268 provides an approximate .08 gate diameter (Figure 2). Maximum stock removal of .268 is recommended for gate diameters larger than .08 (Figures 3 and 4).

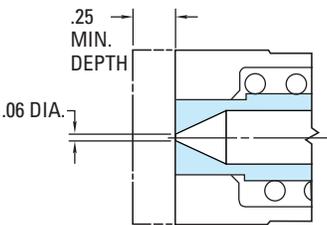


FIG. 1

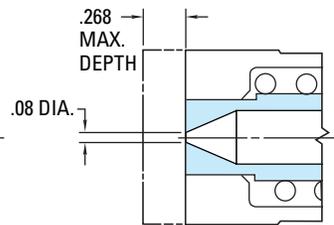


FIG. 2

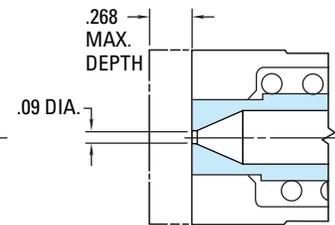


FIG. 3

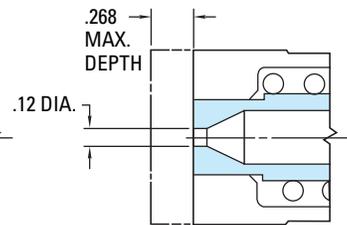


FIG. 4

Always machine runner profile or part contour to the .268 maximum depth at centerline of gate (Figures 5 and 6). However, do not weaken the bushing face by exceeding this maximum dimension.

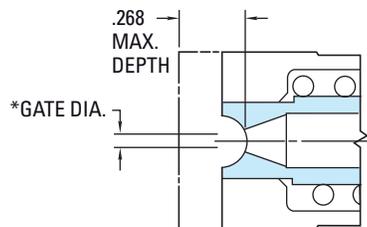


FIG. 5

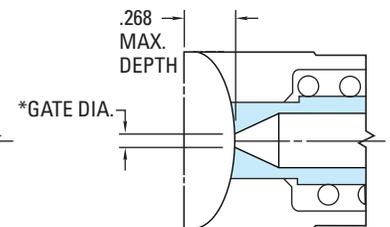


FIG. 6

* Resultant gate diameter may be enlarged to suit the particular molding application.