

# E-Series Straight-Shot™

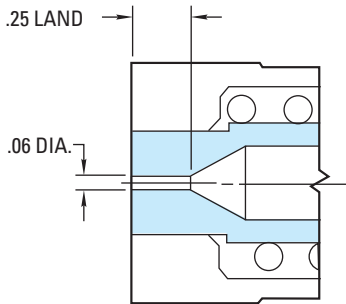
D-M-E Standard E-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles) provide a .25 inch extra stock allowance on the front face to permit machining of runner profiles or part contours into that face. They are supplied with a .06 diameter gate and a .25 inch gate land. The gate diameter can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



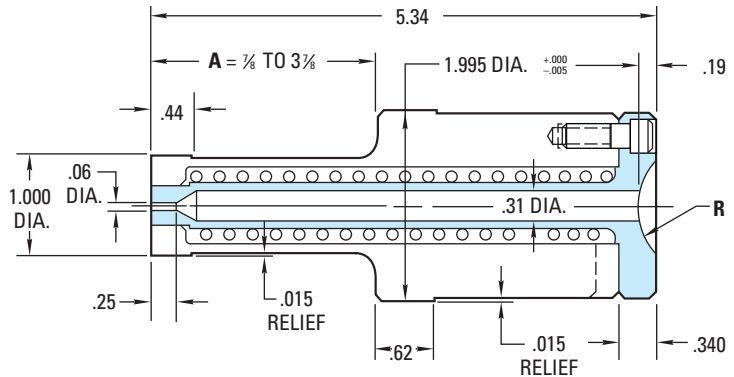
Long Style  
See D-M-E Control Systems Catalog for temperature controllers.

## E-Series (Long Style)

**NOTE:**  
Must always be altered as shown in Figures 1 thru 6 (see p. 166).



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:  
 $BE = 1.375 \times .0000063 \times (\text{nozzle setpoint} - 68^\circ\text{F})$

**EXAMPLE:**  
Given a setpoint of 500°F.  
 $BE = 1.375 \times .0000063 \times (500 - 68) = .004$  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.

The D-M-E 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., SSBT-4507E-1-90).

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

R	WITH 120 VOLT HEATER	SHOULDER LENGTH	WITH 240 VOLT HEATER
	ITEM NUMBER	A	ITEM NUMBER
1/2	SSBT-4507E-1	7/8	SSBT-4507E-2
	SSBT-4513E-1	1 1/8	SSBT-4513E-2
	SSBT-4517E-1	1 1/4	SSBT-4517E-2
	SSBT-4523E-1	2 1/8	SSBT-4523E-2
	SSBT-4527E-1	2 1/4	SSBT-4527E-2
	SSBT-4533E-1	3 1/8	SSBT-4533E-2
	SSBT-4537E-1	3 1/4	SSBT-4537E-2
3/4	SSBT-6507E-1	7/8	SSBT-6507E-2
	SSBT-6513E-1	1 1/8	SSBT-6513E-2
	SSBT-6517E-1	1 1/4	SSBT-6517E-2
	SSBT-6523E-1	2 1/8	SSBT-6523E-2
	SSBT-6527E-1	2 1/4	SSBT-6527E-2
	SSBT-6533E-1	3 1/8	SSBT-6533E-2
SSBT-6537E-1	3 1/4	SSBT-6537E-2	

# E-Series Straight-Shot™

The D-M-E 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.



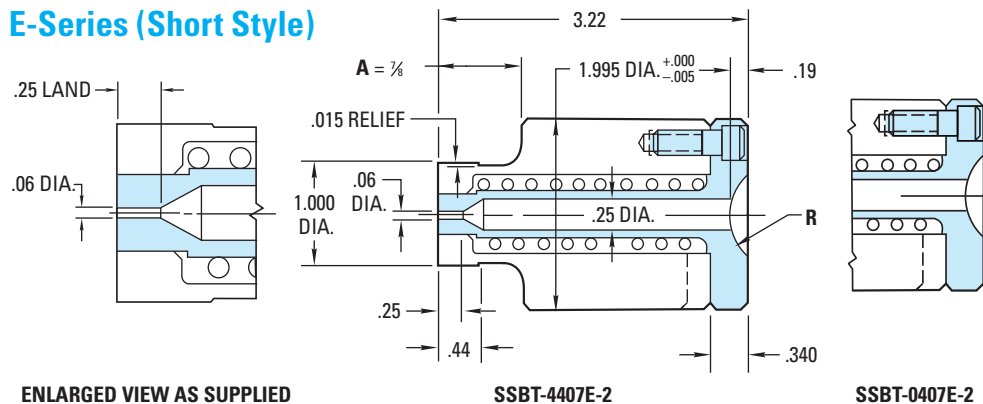
## E-Series Straight-Shot Hot Sprue Bushings (Short Style)

WITH 240 VOLT HEATER	R	A DIMENSION
ITEM NUMBER		
SSBT-4407E-2	1/2	7/8
SSBT-0407E-2	NONE	

**NOTE:** 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT-4407E-2-90).

Short Style  
See the D-M-E Control Systems Catalog for temperature controllers.

### E-Series (Short Style)



**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:  $BE = 1.375 \times .000063 \times (\text{nozzle setpoint} - 68^\circ\text{F})$ .

**EXAMPLE:**  
Given a setpoint of 500°F.  
 $BE = 1.375 \times .000063 \times (500 - 68) = .004$  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.

**NOTE:** Must always be altered as shown in Figures 1 thru 6.

## 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).

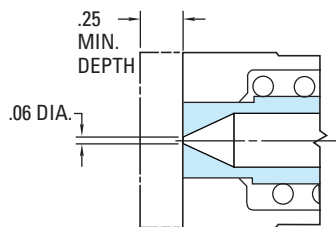


FIG. 1

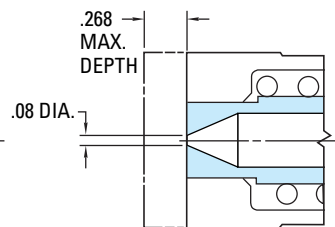


FIG. 2

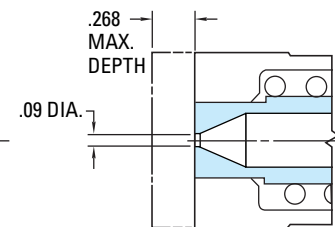


FIG. 3

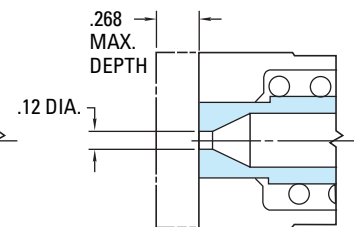


FIG. 4

**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.

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

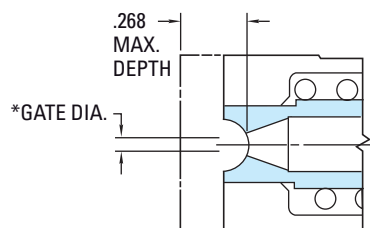


FIG. 5

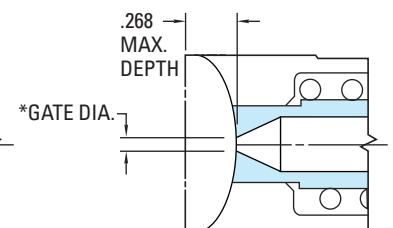


FIG. 6