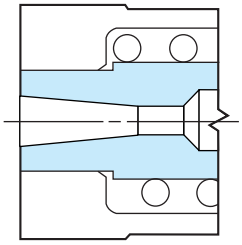
ER-Series Straight-Shot™

The DME standard ER-Series Straight-Shot Hot Sprue Bushings (Long and Short Styles), like the standard E-Series, are supplied with a .25 inch extra stock allowance on the front face to permit machining of runner profiles or part contours into that face. These bushings feature a "reverse taper" design that originates from under the heat source, providing easier start-ups.

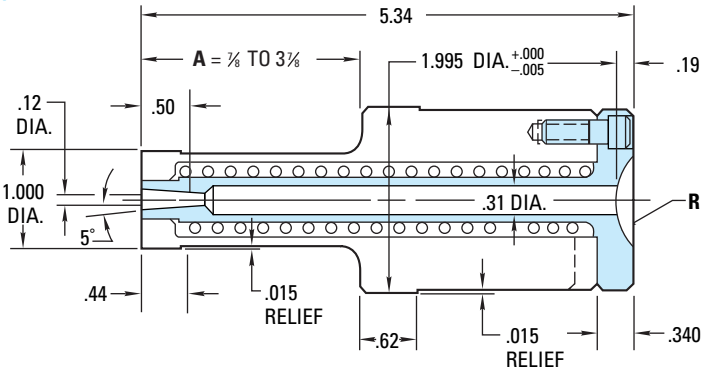
The ER-Series design can also be used when a reverse taper will benefit a particular application. These bushings are supplied with a .12 diameter orifice and a .50 long reverse taper. The orifice may be enlarged and the taper increased to suit.

(Long Style)

ER-Series (Long Style)



ENLARGED VIEW AS SUPPLIED



NOTE: For minimum projection on runner/part, alter the bushing face (See figures 1 thru 3 on next page).

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 × .0000063 × (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.

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

R	WITH 120 VOLT HEATER ITEM NUMBER	SHOULDER LENGTH A	WITH 240 VOLT HEATER ITEM NUMBER
½	SSBT4507ER1	⅞	SSBT4507ER2
	SSBT4513ER1	1⅜	SSBT4513ER2
	SSBT4517ER1	1⅞	SSBT4517ER2
	SSBT4523ER1	2⅜	SSBT4523ER2
	SSBT4527ER1	2⅞	SSBT4527ER2
	SSBT4533ER1	3⅜	SSBT4533ER2
	SSBT4537ER1	3⅞	SSBT4537ER2
¾	SSBT6507ER1	⅞	SSBT6507ER2
	SSBT6513ER1	1⅜	SSBT6513ER2
	SSBT6517ER1	1⅞	SSBT6517ER2
	SSBT6523ER1	2⅜	SSBT6523ER2
	SSBT6527ER1	2⅞	SSBT6527ER2
	SSBT6533ER1	3⅜	SSBT6533ER2
	SSBT6537ER1	3⅞	SSBT6537ER2

The DME Standard ER-Series Straight-Shot (Long Style) is available in seven standard shoulder lengths with either a ½" or ¾" spherical radius and 120 or 240 volt heater. The ER-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., SSBT4507ER190).

ER-Series Straight-Shot™

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

NOTE: 5° heater lead is standard. For 90° lead, add "90" to end of item number (e.g., SSBT4407ER290).

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.

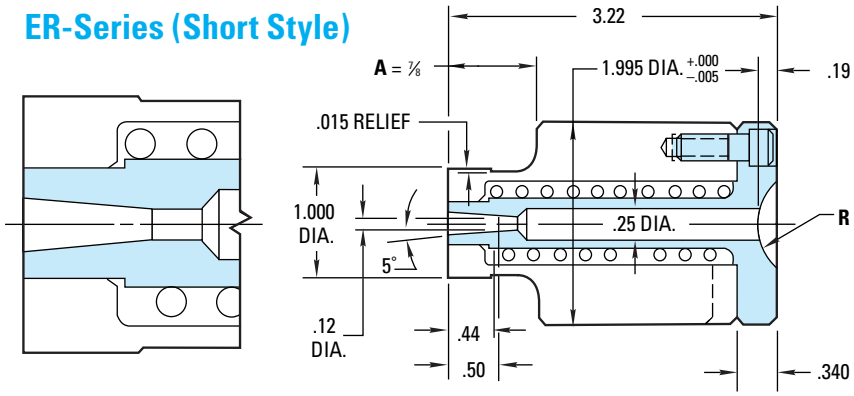
EXAMPLE:
Given a setpoint of 500°F: BE = 1.375 × .0000063 × (500 – 68) = .004 thus 1.375 + .004 = 1.379. Please note that the above information is given as an example. Variations may occur based on mold configuration and cooling factor. In some instances, it may be necessary to obtain an empirical factor.

Short Style

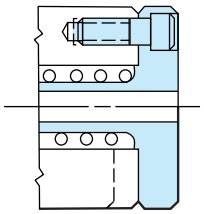
ER-Series Straight-Shot Hot Sprue Bushings (Short Style)

WITH 240 VOLT HEATER ITEM NUMBER	R	A DIMENSION
SSBT4407ER2	½	7/8
SSBT0407ER2	NONE	

ER-Series (Short Style)



ENLARGED VIEW AS SUPPLIED — SSBT4407ER2



SSBT0407ER2

NOTE:
For minimum projection on runner/part, alter the bushing face (See figures 1 through 3 below).

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

FIG. 1

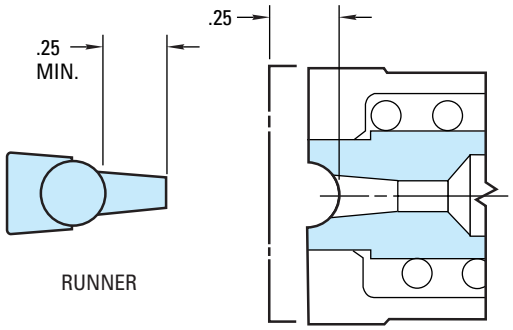


FIG. 2

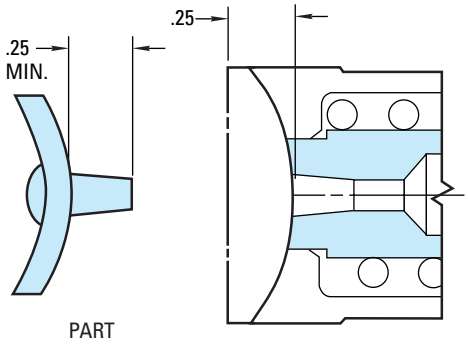
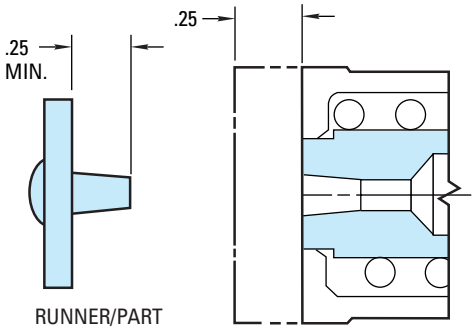


FIG. 3



For minimum projection on runner/part, machine the runner profile or part contour .25 inch deep into the bushing face at the centerline of the orifice (See Figures 1 and 2). When gating into a flat surface, remove the .25 inch extra stock allowance on the bushing face (See Figure 3). However, do not weaken the bushing face by exceeding the .25 inch dimension. The A dimension can be altered by removing stock from the front face of the 2.00 diameter bushing shoulder.