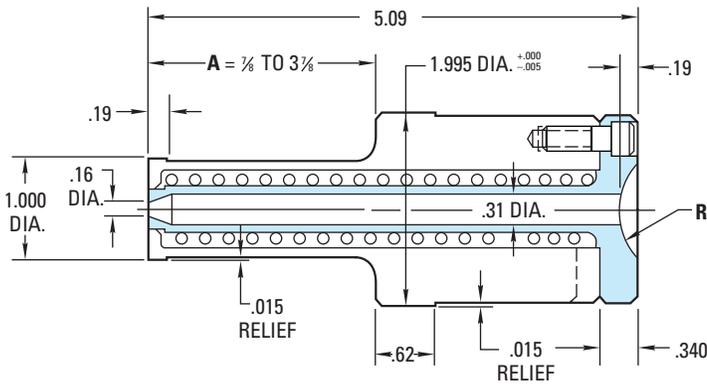


# S-Series Straight-Shot™



U.S. Patent No. 4,273,525



**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.

## Larger Shots – Extended Heater Life

D-M-E developed Straight-Shot Hot Sprue Bushings to eliminate sprues, permit larger shots and faster fills, and greatly extend heater life.

The bushings feature an unrestricted “straight-shot” channel to feed the part or runner. Material in the channel is heated by a special helical tubular heater which surrounds the melt stream. This heater distributes heat uniformly throughout the bushing and is virtually impervious to moisture, gases and plastics contamination.

The helical tubular heater (120 or 240 volt) is thermocouple equipped so temperature can be closely controlled using a D-M-E single-zone Closed Loop Temperature Controller.

The Standard S-Series Straight-Shot is designed for direct part gating or for feeding half-round or trapezoidal runners. It is supplied with a .16 diameter gate and no gate land. Available in seven standard shoulder lengths with either a 1/2" or 3/4" spherical radius and 120 or 240 volt heater. The S-Series Straight-Shot can be retrofitted to almost any mold that uses a conventional sprue bushing.

**NOTE:** 5° heater lead is standard. For 90° lead, add “90” to end of item number (e.g., SSBT-4507S-1-90).

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

## Typical Applications

