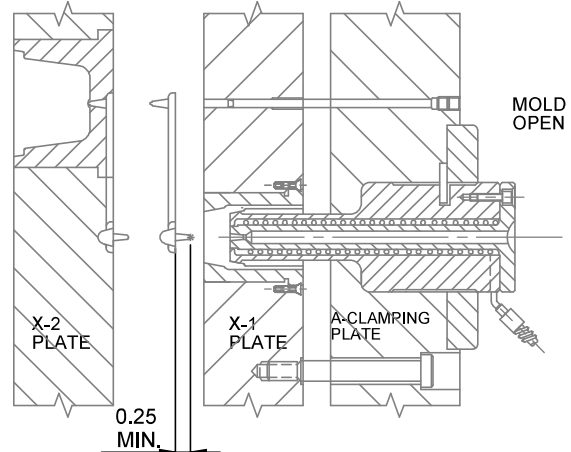
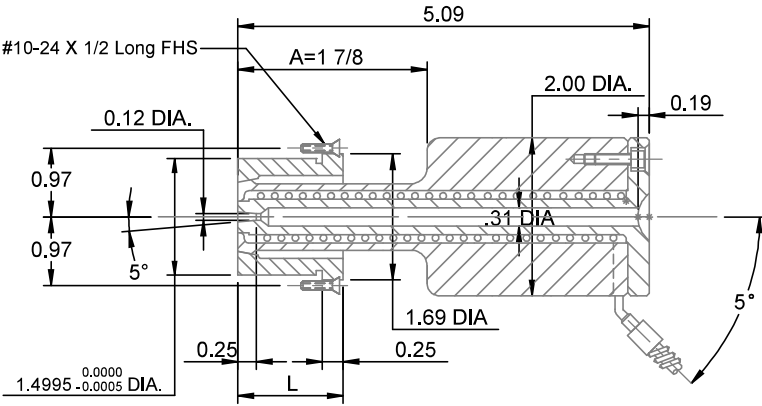




Note: Dimensions shown in Inches.

**TR-Series Straight Shot®  
 HOT SPRUE BUSHINGS**

**TYPICAL APPLICATION**

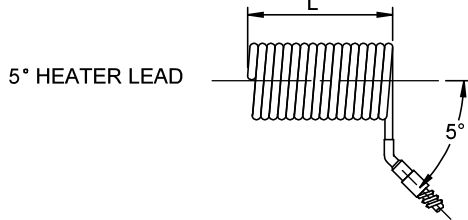


The D M E Standard TR-Series Straight Shot Hot Sprue bushings, like the Standard T-Series, improves the performance of three-plate runner molds by minimizing the length of protrusion on the runner system. This bushing features a "reverse taper" design that originates from under the heat source, providing easier start-ups when molding nylon or polyester . . . even during an interrupted molding cycle. The TR-series design can also be used when a reverse taper will benefit a particular application. The bushing is supplied with a 0.12 diameter orifice and a 0.25 long reverse taper. The orifice may be enlarged and the taper increased to suit. The bushing available with either 1/2" or 3/4" spherical radius, 120-volt or 240-volt heater and a 7/8" or 1 3/8" long stripper-plate bushing to suit the application.

NOTE: The 45° heater lead is standard. A 90° heater lead is available on special request.

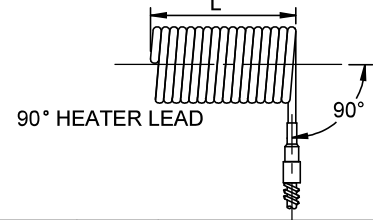
**IMPORTANT;**  
 To prevent "pushback" of the hot sprue bushing due to injection pressure and assure a positive tapered seal with the stripper plate bushing-SECURE the hot sprue bushing to the A-Clamping plate. A dowel or flat key installed under the locating ring (shown) or damping-type locating ring may be used.

**REPLACEMENT HEATERS FOR  
 STRAIGHT SHOT HOT SPRUE BUSHINGS  
 STANDARD**



NOTE: DME Standard ER-Series Straight Shot Hot Sprue Bushing (short style) (SSTC-42/SSTC-42-90) not recommended to be used with DME type SSM-15-02 and DSS-15-02 temperature controllers.

**REPLACEMENT HEATERS FOR  
 STRAIGHT SHOT HOT SPRUE BUSHINGS  
 AVAILABLE ON REQUEST**



CATALOG NUMBER	VOLTS	WATTS	L	BUSHING SERIES
SSTC-31	120	300	4 5/8	ER (Long style) & TR
SSTC-32	240	300	4 5/8	ER (Long style) & TR
SSTC-42	240	250	2 1/2	ER (Short style)

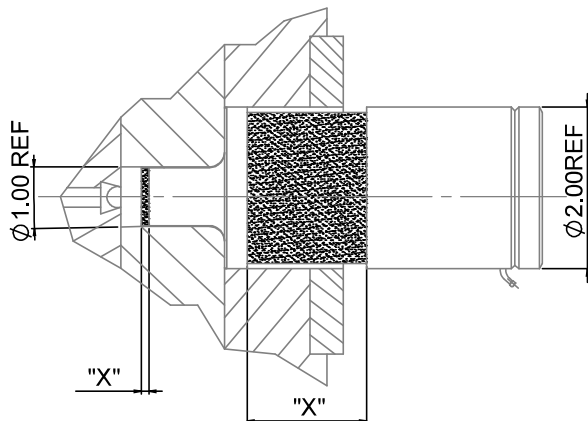
CATALOG NUMBER	VOLTS	WATTS	L	BUSHING SERIES
SSTC-31-90	120	300	4 5/8	ER (Long style) & TR
SSTC-32-90	240	300	4 5/8	ER (Long style) & TR
SSTC-42-90	240	250	2 1/2	ER (Short style)

**WIRING INFORMATION**

Square Coil Heaters are supplied with 45" long leads. Heaters are 240 VAC or 120 VAC depending on the configuration. 2 power leads are Multi Color. 1 ground lead is GREEN.

Thermocouple is "J" Type. Thermocouple is supplied with 45" leads.  
 1 T/C lead is WHITE and negative (-) constantan (non-magnetic).  
 1 T/C lead is BLACK and positive (+) iron (magnetic).

**INSTALLATION DATA  
 D M E Standard  
 ER AND TR-SERIES  
 Straight Shot  
 HOT SPRUE BUSHINGS**



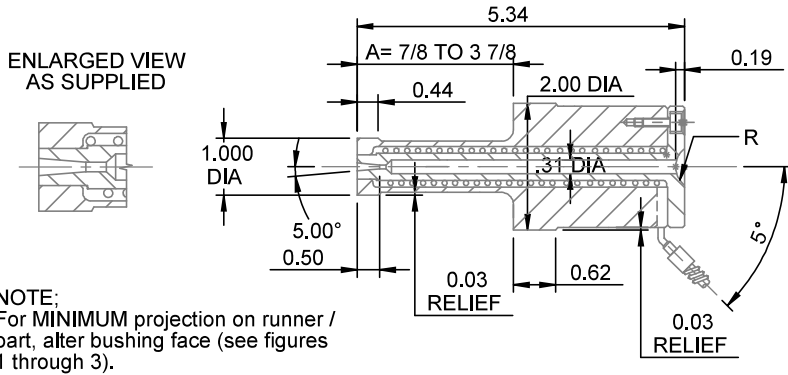
**SHADED AREAS DIMENSIONED WITH "X" MAY BE REDUCED IN DIAMETER AS SHOWN TO PROVIDE ADDITIONAL RELIEF.**  
 Excessive contact between the 1" and 2" outside diameters of the Straight Shot and matching 1" and 2" bores in the mold base may result in a heat loss, causing repeated bushing freeze off. If freeze off due to heat loss should occur, the Straight Shot Hot Sprue Bushings may be relieved as shown. Minimize the amount of O.D. bushing contact to the mold, leaving sufficient contact on the 1" and 2" diameters to assure flash-free molding and proper support. This will help insulate and keep the heat in the bushing.

**PLEASE READ CAREFULLY BEFORE INSTALLATION**

D M E SHALL NOT BE LIABLE FOR MISUSE OR FAILURE TO FOLLOW THE ENCLOSED INSTRUCTIONS AND SPECIFICATIONS. D M E HERBY TO DISCLAIMS ALL IMPLIED NTIES, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR E. IN NO EVENT SHALL D-M-E BE RESPONSIBLE FOR LOSS OF USE, REVENUE OR PROFIT, OR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGED.



**ER-SERIES (LONG STYLE)**

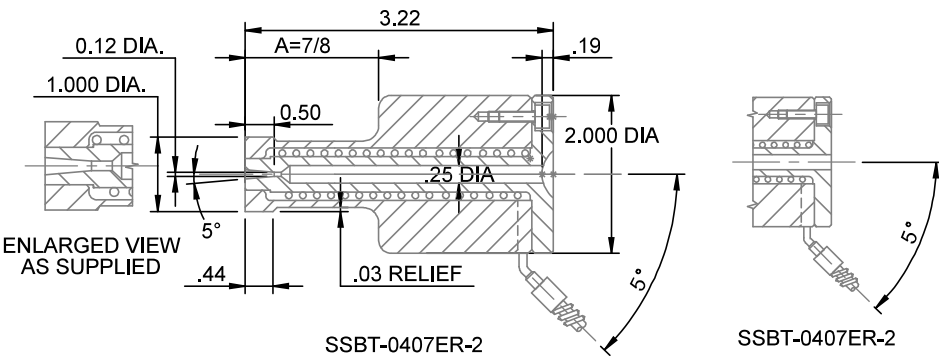


DME Standard ER-Series Straight Shot Hot Sprue Bushings (Long and Short Styles) like the Standard E-series, are supplied with a 0.25 extra stock allowance on the front face to permit machining of runner profiles or part contours into that face.

These bushings feature a "reverse taper" design that originates from under heat source, providing easier start-ups when molding nylon or polyester. . . even during an interrupted molding cycle.

The ER-Series design can also be used when a reverse taper will benefit a particular application. These bushings are supplied with a 0.12 diameter orifice and a 0.50 long reverse taper. The orifice may be enlarged and the taper increase to suit.

**ER-SERIES (SHORT STYLE)**



The DME Standard ER-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 ER-series Straight Shot (long Style) can be retrofitted to suit the particular molding application.

NOTE; The 5° heater lead is standard. A 90° heater lead is available on special request.

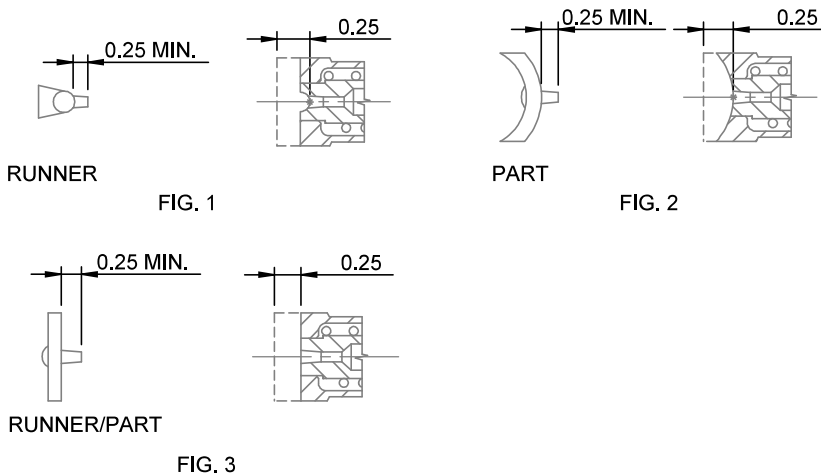
The DME Standard ER-Series Straight-Shot (Short Style) is intended to suit the requirements of smaller injection molding machines such as Arburg, Boy and Jaco. It is supplied with a 7/8 "A" dimension can be altered to suit the particular molding application.

NOTE: The 5° heater lead is standard. A 90° heater lead is available on special request.

NOTE:  
 For MINIMUM projection on runner / part, alter bushing face (see figures 1 through 3).

NOTE:  
 For MINIMUM projection on runner / part, alter bushing face (see figures 1 through 3).

**DESIGN GUIDELINES FOR ALTERING ER-SERIES STRAIGHT SHOT® HOT SPRUE BUSHINGS (Long and Short Styles).**



For MINIMUM projection on runner/part, machine the runner profile or part contour 0.25 deep into the bushing face at the centerline of the orifice (see figures 1 and 2).

When gating into a flat surface, remove the 0.25 extra stock allowance on the bushing face (See Figure 3). However, do not weaken the bushing face by exceeding the 0.25 dimension. The "A" dimension can be altered by removing stock from the front face of the 2.00 diameter bushing shoulder.

**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.



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 sensors to electrical power. It will damage the product and it can 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.



Failure to comply can result in serious injury or death:  
**STORED ENERGY AND HIGH TEMPERATURE HAZARDS**

This product maintains molten plastic at high pressure. Use caution when operating and 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 caution when operating and servicing the system to avoid severe burns. Proper protective equipment should be worn.