

EcoONE
series

INSUL

HEIGHT

101.40^{+0.05}_{-0.00}

77.00

D DIA

E DIA

F DIA

PS
15.00
MIN

C DEPTH

B DEPTH

BL

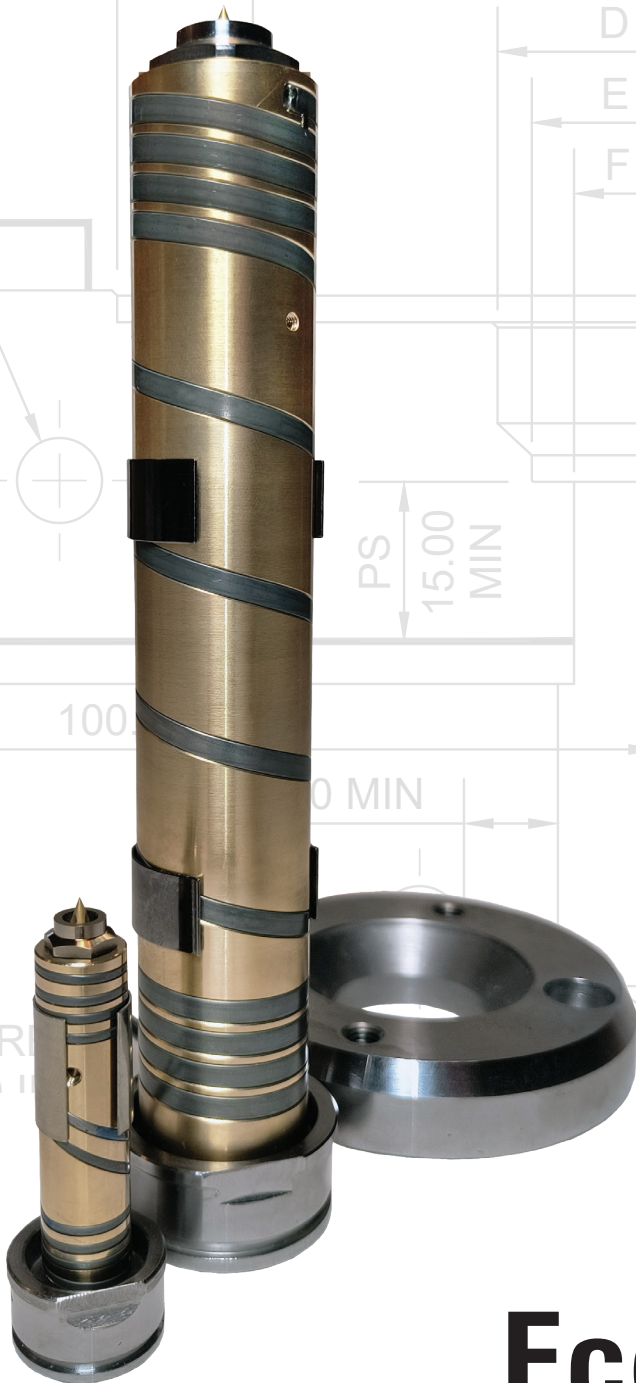
MOLDING
ELEVATION

(NOZZ
L = BL

100

0 MIN

INES AR
MENDED I



EcoONE-SERIES

Single Nozzles

THE SMART SOLUTION
FOR SIMPLE HOT SPRUE APPLICATIONS

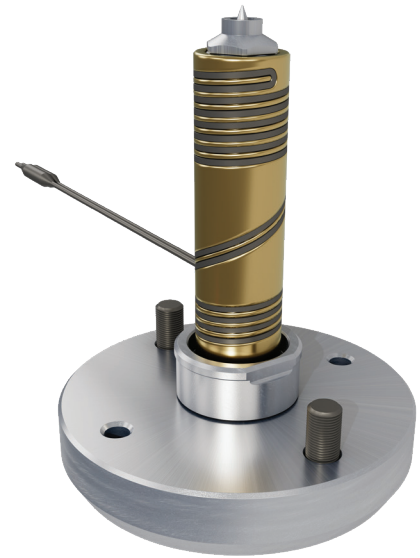
EcoONE-SERIES HOT SPRUE BUSHINGS

Simplicity

The EcoONE Single Nozzle / Hot Sprue Bushing is an economical solution for simple hot sprue requirements. The one-piece body, single heater construction is suitable for commodity, non-filled resin applications.

The nozzle uses the same tips / gate seals as DME's multi-drop StellarONE hot runner system, making this single nozzle perfect for prototype tools intended to go to multi-drops after validation.

Six runner sizes and length combinations with five gating options makes EcoONE a cost effective and versatile solution for single drop applications.

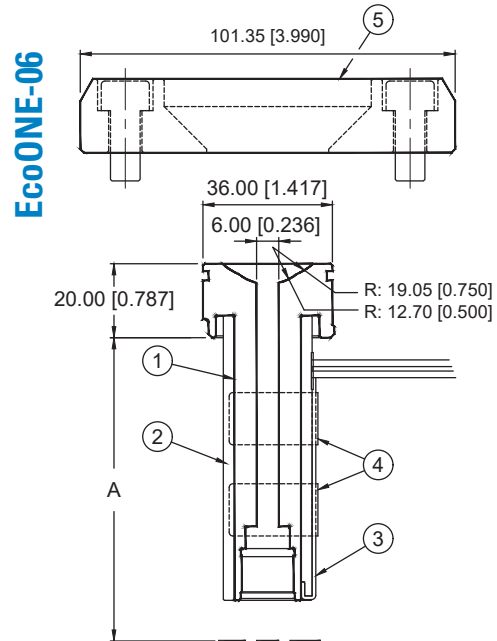
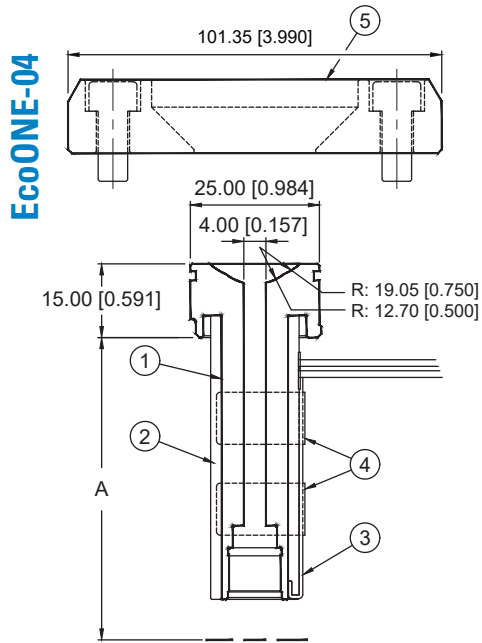


EcoONE-Series Gate Selection Guide										NOVEMBER 2024					
Polymer Viscosity Key L=Low M=Medium H=High	The values expressed in grams are for reference only and are determined by using a nominal wall thickness of 1.8mm (.070") and unfilled polypropylene. Part dimension, wall thickness, length of fill within part, mold conditions and molding parameters must also be considered.	Recommended Gate Diameter Range				Maximum Flow Capacity (Grams)			GENERIC POLYMER NAME (TRADE NAME) [A=AMORPHOUS or C=CRYSTALLINE]						
									COMMODITY RESINS						
						Viscosity			TPE (Elastomer) [A]	PE (Polyethylene) [C] Includes LDPE, HDPE, LLDPE & MDPE	PS (Polystyrene) [A]	TPO [C]	PP (Polypropylene) [C]	ABS [A]	
NOZZLES	TIP	Min (mm)	Max (mm)	Min (inch)	Max (inch)	Low	Medium	High	L	L	M	L	M	M	
THERMAL GATE															
EcoONE-04	Sprue Gate	1.5	2.0	0.061	0.079	20	15	10							
	Point Gate Bodiless	0.8	1.5	0.033	0.059	10	10	7							
	Point Gate Full Body	1.0	1.5	0.041	0.059	10	10	7							
EcoONE-06	Sprue Gate	1.5	3.0	0.061	0.118	500	400	225							
	Point Gate Bodiless	0.8	2.0	0.033	0.079	175	125	80							
	Point Gate Full Body	1.0	2.0	0.041	0.079	175	125	80							
EcoONE-08	Sprue Gate	2.5	3.0	0.102	0.118	625	575	325							
	Point Gate Bodiless	0.8	2.5	0.033	0.098	250	175	125							
	Point Gate Full Body	1.5	2.5	0.061	0.098	250	175	125							
EcoONE-10	Sprue Gate	2.5	3.5	0.102	0.138	850	700	425							
	Point Gate Bodiless	1.0	3.0	0.041	0.118	310	200	150							
	Point Gate Full Body	1.5	3.0	0.061	0.118	310	200	150							
EcoONE-12	Sprue Gate	3.0	4.0	0.122	0.157	1000	775	475							
	Point Gate Bodiless	1.0	3.2	0.041	0.126	500	375	275							
	Point Gate Full Body	2.0	3.2	0.082	0.126	500	375	275							
EcoONE-16	Sprue Gate	3.0	4.5	0.122	0.177	1500	1100	750							
	Point Gate Bodiless	1.5	3.5	0.061	0.138	800	550	400							
	Point Gate Full Body	2.5	3.5	0.102	0.138	800	550	400							

EcoONE-SERIES SINGLE NOZZLE ASSEMBLIES

EcoONE-04 Series Single Nozzles

A LENGTH	HSB ASSEMBLY	TIP TYPE	GATE PACKAGE	ASSEMBLY INCLUDES					
				1 NOZZLE BODY	2 BODY HEATER	WATTS (230V)	3 THERMOCOUPLE	4 T/C RETAINER	5 LOCATING RING
50	SOHSB4050SRT01	STD SPRUE	SOSRT0401	SOHSBNB4050	SONH10047	200	SOTC10150-J	SONHC04	SOHSBLR04
	SOHSB4050SRT02	EXT SPRUE	SOSRT0402						
	SOHSB4050PGA	BODILESS PT GT	SOPGA04						
	SOHSB4050FBOP	FULL BODY PT GT	SOFBOP04						
	SOHSB4050FBOPEX	EX FULL BODY PT GT	SOFBOP04EX						
100	SOHSB4100SRT01	STD SPRUE	SOSRT0401	SOHSBNB4100	SONH10097	240	SOTC10200-J	SONHC04	SOHSBLR04
	SOHSB4100SRT02	EXT SPRUE	SOSRT0402						
	SOHSB4100PGA	BODILESS PT GT	SOPGA04						
	SOHSB4100FBOP	FULL BODY PT GT	SOFBOP04						
	SOHSB4100FBOPEX	EX FULL BODY PT GT	SOFBOP04EX						



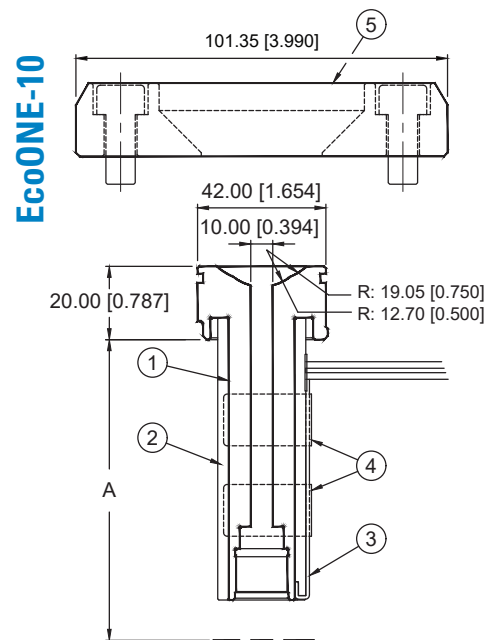
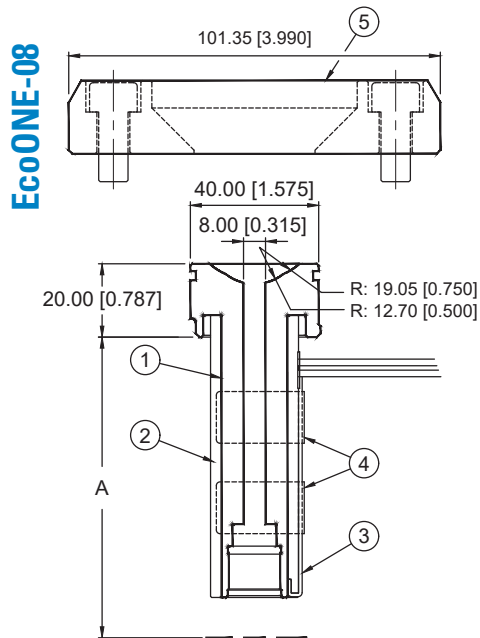
EcoONE-06 Series Single Nozzles

A LENGTH	HSB ASSEMBLY	TIP TYPE	GATE PACKAGE	ASSEMBLY INCLUDES					
				1 NOZZLE BODY	2 BODY HEATER	WATTS (230V)	3 THERMOCOUPLE	4 T/C RETAINER	5 LOCATING RING
60	SOHSB6060SRT01	STD SPRUE	SOSRT0601	SOHSBNB6060	SONH18055	350	SOTC10150-J	SONHC06	SOHSBLR06
	SOHSB6060SRT02	EXT SPRUE	SOSRT0602						
	SOHSB6060PGA	BODILESS PT GT	SOPGA06						
	SOHSB6060FBOP	FULL BODY PT GT	SOFBOP06						
	SOHSB6060FBOPEX	EX FULL BODY PT GT	SOFBOP06EX						
100	SOHSB6100SRT01	STD SPRUE	SOSRT0601	SOHSBNB6100	SONH18095	400	SOTC10200-J	SONHC06	SOHSBLR06
	SOHSB6100SRT02	EXT SPRUE	SOSRT0602						
	SOHSB6100PGA	BODILESS PT GT	SOPGA06						
	SOHSB6100FBOP	FULL BODY PT GT	SOFBOP06						
	SOHSB6100FBOPEX	EX FULL BODY PT GT	SOFBOP06EX						

EcoONE-SERIES SINGLE NOZZLE ASSEMBLIES

EcoONE-08 Series Single Nozzles

A LENGTH	HSB ASSEMBLY	TIP TYPE	GATE PACKAGE	ASSEMBLY INCLUDES					
				1 NOZZLE BODY	2 BODY HEATER	WATTS (230V)	3 THERMOCOUPLE	4 T/C RETAINER	5 LOCATING RING
60	SOHSB8060SRT01	STD SPRUE	SOSRT0801	SOHSBNB8060	SONH20055	350	SOTC10150-J	SONHC08	SOHSBLR08
	SOHSB8060SRT02	EXT SPRUE	SOSRT0802						
	SOHSB8060PGA	BODILESS PT GT	SOPGA08						
	SOHSB8060FBOP	FULL BODY PT GT	SOFBOP08						
	SOHSB8060FBOPEX	EX FULL BODY PT GT	SOFBOP08EX						
100	SOHSB8100SRT01	STD SPRUE	SOSRT0801	SOHSBNB8100	SONH20095	500	SOTC10200-J	SONHC08	SOHSBLR08
	SOHSB8100SRT02	EXT SPRUE	SOSRT0802						
	SOHSB8100PGA	BODILESS PT GT	SOPGA08						
	SOHSB8100FBOP	FULL BODY PT GT	SOFBOP08						
	SOHSB8100FBOPEX	EX FULL BODY PT GT	SOFBOP08EX						



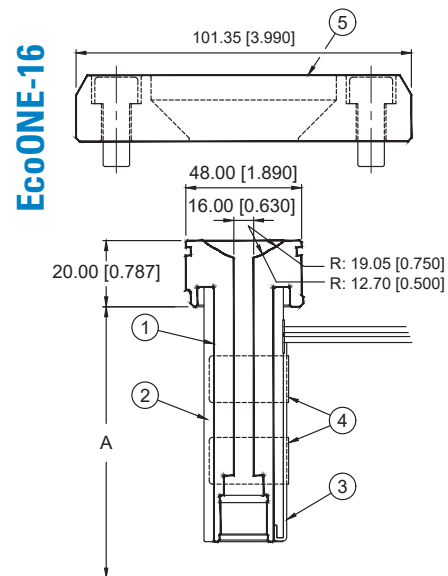
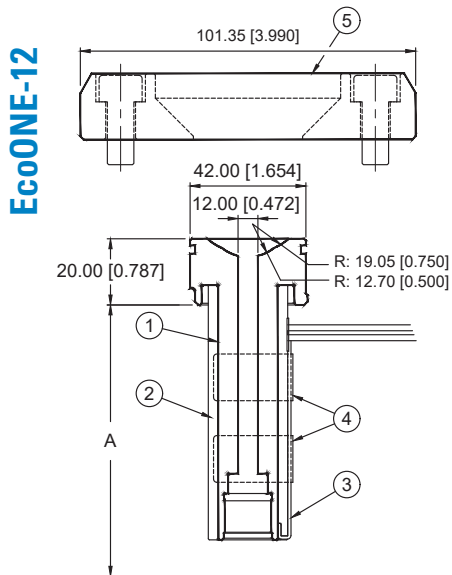
EcoONE-10 Series Single Nozzles

A LGTH	HSB ASSEMBLY	TIP TYPE	GATE PACKAGE	ASSEMBLY INCLUDES					
				1 NOZZLE BODY	2 BODY HEATER	WATTS (230V)	3 THERMOCOUPLE	4 T/C RETAINER	5 LOCATING RING
70	SOHSB10070SRT01	STD SPRUE	SOSRT1001	SOHSBN10070	SONH22065	400	SOTC10150-J	SONHC10	SOHSBLR10
	SOHSB10070SRT02	EXT SPRUE	SOSRT1002						
	SOHSB10070PGA	BODILESS PT GT	SOPGA10						
	SOHSB10070FBOP	FULL BODY PT GT	SOFBOP10						
	SOHSB10070FBOPEX	EX FULL BODY PT GT	SOFBOP10EX						
120	SOHSB10120SRT01	STD SPRUE	SOSRT1001	SOHSBN10120	SONH22115	600	SOTC10200-J	SONHC10	SOHSBLR10
	SOHSB10120SRT02	EXT SPRUE	SOSRT1002						
	SOHSB10120PGA	BODILESS PT GT	SOPGA10						
	SOHSB10120FBOP	FULL BODY PT GT	SOFBOP10						
	SOHSB10120FBOPEX	EX FULL BODY PT GT	SOFBOP10EX						

EcoONE-SERIES SINGLE NOZZLE ASSEMBLIES

EcoONE-12 Series Single Nozzles

A LENGTH	HSB ASSEMBLY	TIP TYPE	ASSEMBLY INCLUDES						
			GATE PACKAGE	1 NOZZLE BODY	2 BODY HEATER	WATTS (230V)	3 THERMOCOUPLE	4 T/C RETAINER	5 LOCATING RING
70	SOHSB12070SRT01	STD SPRUE	SOSRT1201	SOHSBN12070	SONH24063	450	SOTC10150-J	SONHC12	SOHSBLR12
	SOHSB12070SRT02	EXT SPRUE	SOSRT1202						
	SOHSB12070PGA	BODILESS PT GT	SOPGA12						
	SOHSB12070FBOP	FULL BODY PT GT	SOFBOP12						
	SOHSB12070FBOPEX	EX FULL BODY PT GT	SOFBOP12EX						
110	SOHSB12110SRT01	STD SPRUE	SOSRT1201	SOHSBN12110	SONH24103	600	SOTC10200-J	SONHC12	SOHSBLR12
	SOHSB12110SRT02	EXT SPRUE	SOSRT1202						
	SOHSB12110PGA	BODILESS PT GT	SOPGA12						
	SOHSB12110FBOP	FULL BODY PT GT	SOFBOP12						
	SOHSB12110FBOPEX	EX FULL BODY PT GT	SOFBOP12EX						
200	SOHSB12200SRT01	STD SPRUE	SOSRT1201	SOHSBN12200	SONH24193	800	SOTC10250-J	SONHC12	SOHSBLR12
	SOHSB12200SRT02	EXT SPRUE	SOSRT1202						
	SOHSB12200PGA	BODILESS PT GT	SOPGA12						
	SOHSB12200FBOP	FULL BODY PT GT	SOFBOP12						
	SOHSB12200FBOPEX	EX FULL BODY PT GT	SOFBOP12EX						



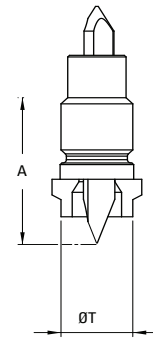
EcoONE-16 Series Single Nozzles

A LENGTH	HSB ASSEMBLY	TIP TYPE	ASSEMBLY INCLUDES						
			GATE PACKAGE	1 NOZZLE BODY	2 BODY HEATER	WATTS (230V)	3 THERMOCOUPLE	4 T/C RETAINER	5 LOCATING RING
70	SOHSB16070SRT01	STD SPRUE	SOSRT1601	SOHSBNB16070	SONH28062	450	SOTC10200-J	SONHC16	SOHSBLR16
	SOHSB16070SRT02	EXT SPRUE	SOSRT1602						
	SOHSB16070PGA	BODILESS PT GT	SOPGA16						
	SOHSB16070FBOP	FULL BODY PT GT	SOFBOP16						
	SOHSB16070FBOPEX	EX FULL BODY PT GT	SOFBOP16EX						
120	SOHSB16120SRT01	STD SPRUE	SOSRT1601	SOHSBNB16120	SONH28112	660	SOTC10250-J	SONHC16	SOHSBLR16
	SOHSB16120SRT02	EXT SPRUE	SOSRT1602						
	SOHSB16120PGA	BODILESS PT GT	SOPGA16						
	SOHSB16120FBOP	FULL BODY PT GT	SOFBOP16						
	SOHSB16120FBOPEX	EX FULL BODY PT GT	SOFBOP16EX						
200	SOHSB16200SRT01	STD SPRUE	SOSRT1601	SOHSBNB16200	SONH28192	900	SOTC10250-J	SONHC16	SOHSBLR16
	SOHSB16200SRT02	EXT SPRUE	SOSRT1602						
	SOHSB16200PGA	BODILESS PT GT	SOPGA16						
	SOHSB16200FBOP	FULL BODY PT GT	SOFBOP16						
	SOHSB16200FBOPEX	EX FULL BODY PT GT	SOFBOP16EX						

THERMAL GATE TIPS

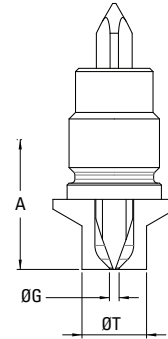
Bodiless Point Gate

SERIES	ITEM NUMBER	INCLUDES		T DIA.
		NEEDLE	RETAINER	
StellarONE-04	SOPGA04	SOPGN0401	SOBRT0401	8
StellarONE-06	SOPGA06	SOPGN0601	SOBRT0601	10
StellarONE-08	SOPGA08	SOPGN0801	SOBRT0801	12
StellarONE-10	SOPGA10	SOPGN1001	SOBRT1001	14
StellarONE-12	SOPGA12	SOPGN1201	SOBRT1201	16
StellarONE-16	SOPGA16	SOPGN1601	SOBRT1601	20



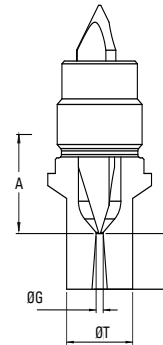
Full Body Point Gate

SERIES	ITEM NUMBER	INCLUDES		G DIA.	T DIA.
		NEEDLE	RETAINER		
StellarONE-04	SOFBOP04	SOPGN0401	SOFRT0401	1.0	8
StellarONE-06	SOFBOP06	SOPGN0601	SOFRT0601	1.5	10
StellarONE-08	SOFBOP08	SOPGN0801	SOFRT0801	1.5	12
StellarONE-10	SOFBOP10	SOPGN1001	SOFRT1001	1.5	14
StellarONE-12	SOFBOP12	SOPGN1201	SOFRT1201	2.0	16
StellarONE-16	SOFBOP16	SOPGN1601	SOFRT1601	2.5	20



Full Body Extended Point Gate

SERIES	ITEM NUMBER	INCLUDES		G DIA.	T DIA.	L
		NEEDLE	RETAINER			
StellarONE-04	SOFBOP04EX	SOPGN0401	SOFRT0402	1.0	8	10
StellarONE-06	SOFBOP06EX	SOPGN0601	SOFRT0602	1.5	10	10
StellarONE-08	SOFBOP08EX	SOPGN0801	SOFRT0802	1.5	12	10
StellarONE-10	SOFBOP10EX	SOPGN1001	SOFRT1002	1.5	14	10
StellarONE-12	SOFBOP12EX	SOPGN1201	SOFRT1202	2.0	16	10
StellarONE-16	SOFBOP16EX	SOPGN1601	SOFRT1602	2.5	20	10

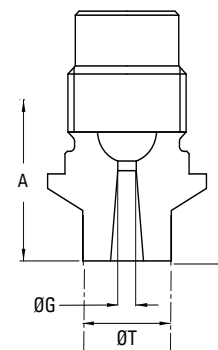


Standard Sprue Gate

Series	Item Number	G DIA.	T DIA.	L
StellarONE-04	SOSRT0401	1.5	8	NA
StellarONE-06	SOSRT0601	2	10	NA
StellarONE-08	SOSRT0801	2.5	12	NA
StellarONE-10	SOSRT1001	2.5	14	NA
StellarONE-12	SOSRT1201	3.0	16	NA
StellarONE-16	SOSRT1601	3.0	20	NA

Extended Sprue Gate

Series	Item Number	G DIA.	T DIA.	L
StellarONE-04	SOSRT0402	1.5	8	10
StellarONE-06	SOSRT0602	2	10	10
StellarONE-08	SOSRT0802	2.5	12	10
StellarONE-10	SOSRT1002	2.5	14	10
StellarONE-12	SOSRT1202	3.0	16	10
StellarONE-16	SOSRT1602	3.0	20	10



THERMAL EXPANSION ALLOWANCE

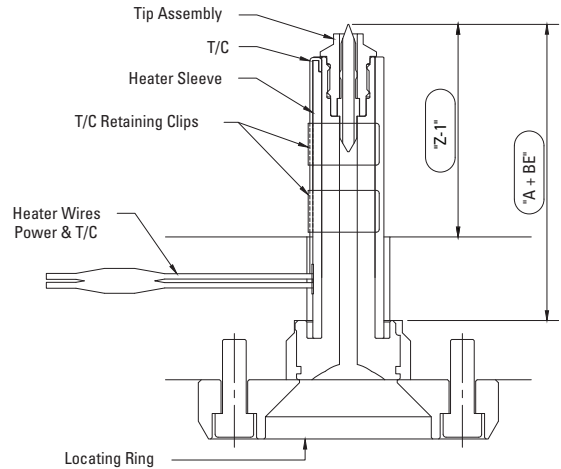
The expansion factor must be taken into consideration prior to machining and installing the nozzle. This factor must be added to the nozzle nominal "A" dimension.

$Z-1 = \text{Nozzle Length "A"} + \text{"BE" Thermal Expansion } (\Delta L) - \text{Nozzle Plate Thickness}$

The formula for determining the thermal expansion is as follows:
 $BE = \text{"A" dimension} * 0.0000115 * (\text{nozzle setpoint temperature} - \text{mold temperature } ^\circ\text{C})$

Note: The expansion coefficient for $^\circ\text{F}$ is 0.00000633
 EXAMPLE: Nozzle "A" dimension 120mm, setpoint temperature 260 $^\circ\text{C}$, mold operating temperature 50 $^\circ\text{C}$.

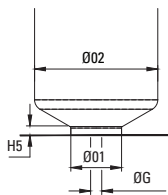
$BE = 120\text{mm} * 0.0000115 * (260^\circ - 50^\circ) = 0.2898\text{mm}$. Thus nozzle length "A" 120mm + BE 0.2898 = 120.290mm



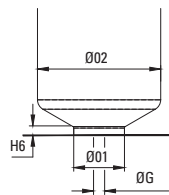
EcoONE SNHR / HSB Nozzle Pocket Dimensions

NOZZLE SERIES	Ø1	Ø02	H1	H2	H5	H6
EcoONE-04	8	18	2.6	4.5	4.5	14.5
EcoONE-06	10	28	2.6	4.6	5	15
EcoONE-08	12	30	2.6	4.7	5	15
EcoONE-10	14	34	2.6	4.7	5	15
EcoONE-12	16	36	4.6	6.7	6.5	14
EcoONE-16	20	42	4.6	7.1	7	17

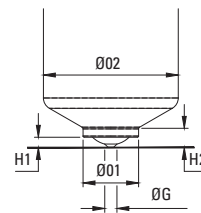
THERMAL SPRUE
THERMAL FULL BODY



THERMAL EXT SPRUE
THERMAL EXT FULL BODY

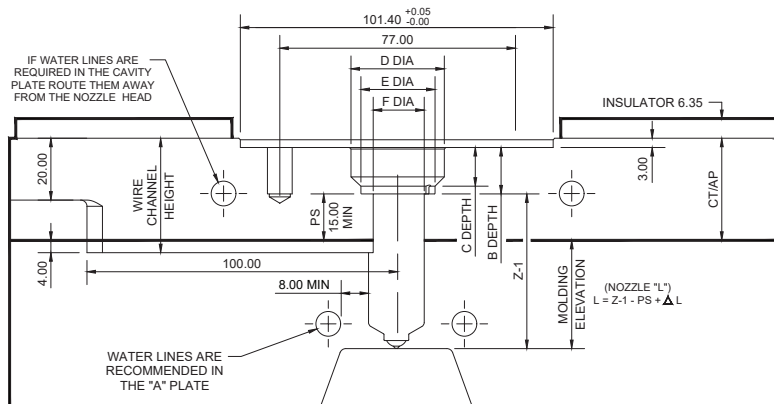


THERMAL BODILESS



EcoONE SNHR / HSB Plate & Nozzle Pocket Dimensions

NOZZLE SERIES	HEAD HEIGHT mm	B DEPTH mm (+0.02mm / -0.00mm)	C DEPTH mm	D DIA mm	E DIA mm (+0.02mm / -0.00mm)	F DIA mm	PS mm MINIMUM	CT/AP mm MINIMUM
EcoONE-04	15	15	12.5	31	25	18	15	33
EcoONE-06	20	20	16.5	42	36	28	15	38
EcoONE-08	20	20	16.5	46	40	30	15	38
EcoONE-10	20	20	16.5	48	42	32	15	38
EcoONE-12	20	20	16.5	48	42	36	15	38
EcoONE-16	20	20	16.5	54	48	42	15	38



With tens of thousands of products to choose from, DME is your one-stop shop for everything molding. From complex undercuts solutions and plate control to standard pins, bushings and interlocks, the DME line of mold components will help you build or rebuild your mold base inside out, top to bottom. Industrial Supplies, Mold Bases, MUD Quick-Change, Control Systems, and Hot Runner solutions round out our extensive offering to truly be your one-stop shop.



store.DME.net



World Headquarters

DME Company LLC

29111 Stephenson Highway
Madison Heights, MI 48071

800-626-6653 toll-free tel

248-398-6000 tel

www.DME.net web

DME@DME.net e-mail

DME Canada

5345 Outer Drive Unit 3
Windsor, Ontario
Canada N9G 0C4

800-387-6600 toll-free tel

905-677-6370 tel

DME_Canada@DME.net e-mail

DME Mexico / South America

Circuito el Marques Notre, No.55
Parque Industrial El Marqués
El Marqués, Querétaro, CP 76246

52.442.713.5666 tel

DME_Mexico@DME.net e-mail

