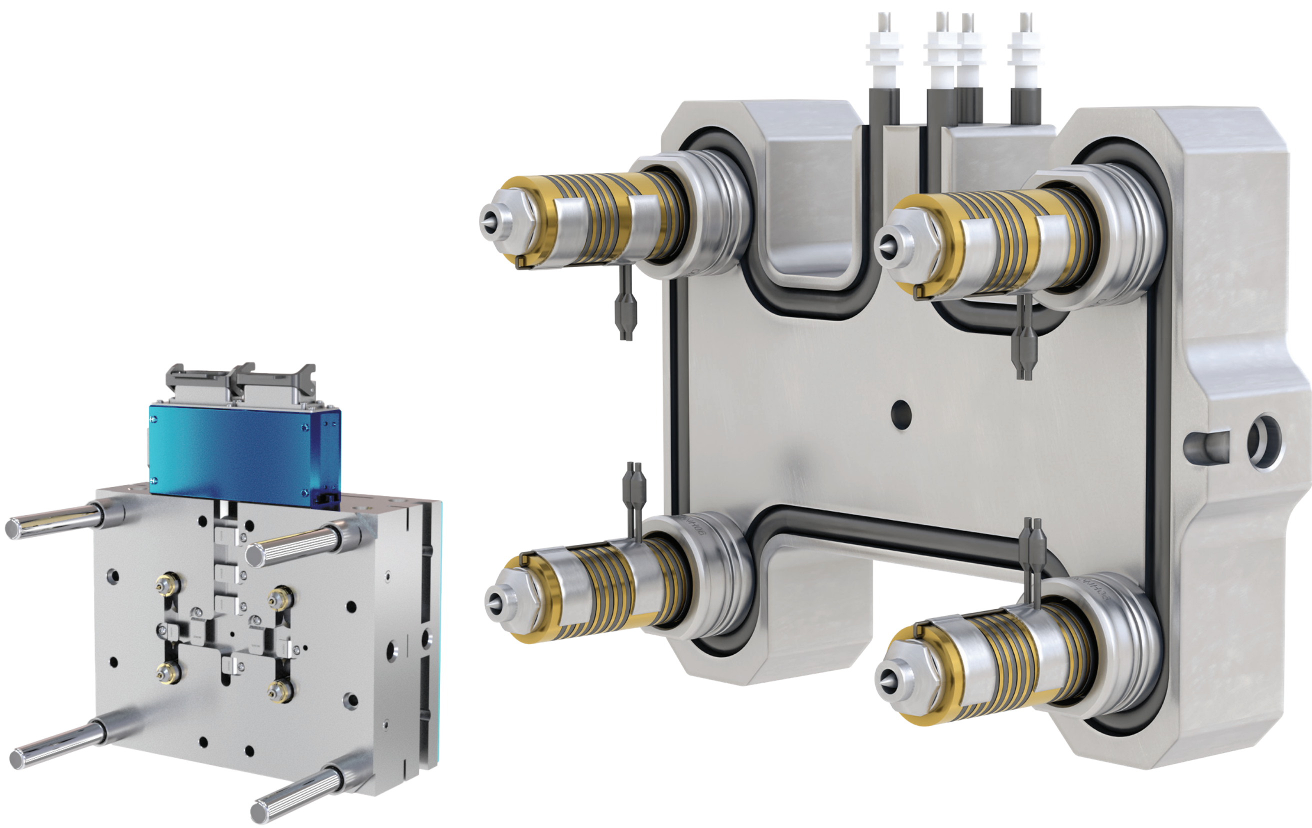
DME®



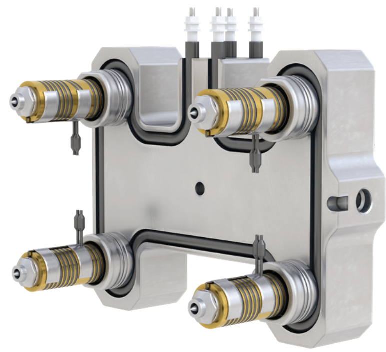
EcoONE series

CONFIGURATION GUIDE

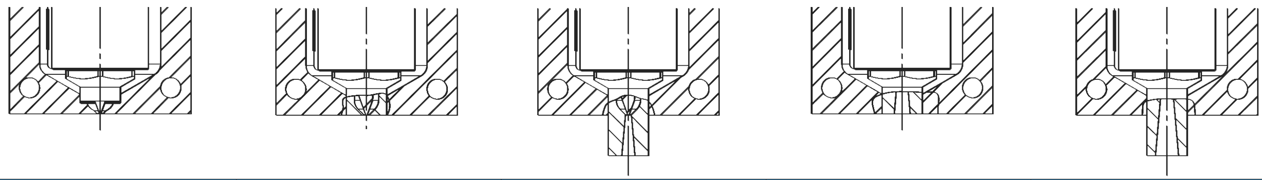
A HIGHLY ECONOMICAL STANDARDIZED SYSTEM
FOR SIMPLE COMMODITY APPLICATIONS

EcoONE series

CONFIGURATION GUIDE



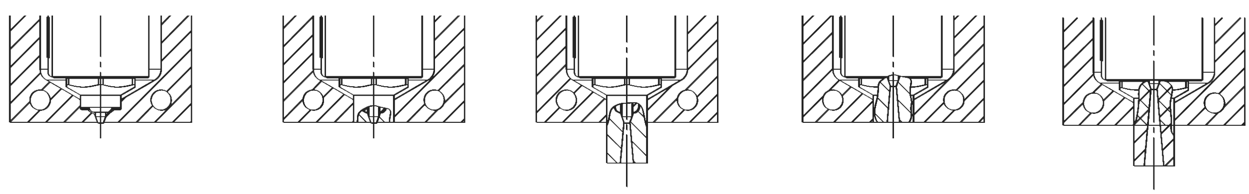
STEP 1: CHOOSE YOUR GATE SEAL



Non-Valved

	POINT GATE BODILESS	POINT GATE FULL BODY	POINT GATE FULL BODY EXT.	SPRUE GATE	SPRUE GATE EXT.
04	SOPGA04 SOPGA04-WR	SOFBOP04 SOFBOP04-WR	SOFBOP04EX SOFBOP04EX-WR	SOSRT0401	SOSRT0402
06	SOPGA06 SOPGA06-WR	SOFBOP06 SOFBOP06-WR	SOFBOP06EX SOFBOP06EX-WR	SOSRT0601	SOSRT0602
08	SOPGA08 SOPGA08-WR	SOFBOP08 SOFBOP08-WR	SOFBOP08EX SOFBOP08EX-WR	SOSRT0801	SOSRT0802
10	SOPGA10 SOPGA10-WR	SOFBOP10 SOFBOP10-WR	SOFBOP10EX SOFBOP10EX-WR	SOSRT1001	SOSRT1002
12	SOPGA12 SOPGA12-WR	SOFBOP12 SOFBOP12-WR	SOFBOP12EX SOFBOP12EX-WR	SOSRT1201	SOSRT1202
16	SOPGA16 SOPGA16-WR	SOFBOP16 SOFBOP16-WR	SOFBOP16EX SOFBOP16EX-WR	SOSRT1601	SOSRT1602

WR = Wear Resistant



Valved

	BODILESS TIP	FULL BODY TIP	FULL BODY TIP EXT.	SPRUE TIP	SPRUE TIP EXT.
06	SOVGBA06 SOVGBA06-WR	SOVGFBA06 SOVGFBA06-WR	SOVGFBA06EX SOVGFBA06EX-WR	SOSRT0603	SOSRT0604
08	SOVGBA08 SOVGBA08-WR	SOVGFBA08 SOVGFBA08-WR	SOVGFBA08EX SOVGFBA08EX-WR	SOSRT0803	SOSRT0804
10	SOVGBA10 SOVGBA10-WR	SOVGFBA10 SOVGFBA10-WR	SOVGFBA10EX SOVGFBA10EX-WR	SOSRT1003	SOSRT1004
12	SOVGBA12 SOVGBA12-WR	SOVGFBA12 SOVGFBA12-WR	SOVGFBA12EX SOVGFBA12EX-WR	SOSRT1203	SOSRT1204
16	SOVGBA16 SOVGBA16-WR	SOVGFBA16 SOVGFBA16-WR	SOVGFBA16EX SOVGFBA16EX-WR	SOSRT1603	SOSRT1604

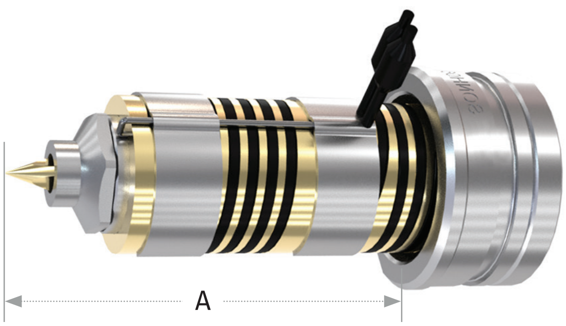
WR = Wear Resistant

Polymer Viscosity Key	EcoONE-Series Gate Selection Guide								JULY 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						
VALVE GATE														
EcoONE-06	Sprue Tip	1.5	2.0	0.061	0.098	400	300	150						
	Point Tip Bodiless	1.0	2.0	0.041	0.098	225	150	90						
	Point Tip Full Body	1.5	2.0	0.061	0.098	225	150	90						
EcoONE-08	Sprue Tip	2.5	2.5	0.102	0.098	500	450	250						
	Point Tip Bodiless	1.0	2.5	0.041	0.098	450	300	220						
	Point Tip Full Body	2.5	2.5	0.102	0.098	450	300	220						
EcoONE-10	Sprue Tip	2.5	2.5	0.102	0.098	775	625	375						
	Point Tip Bodiless	1.0	2.5	0.041	0.098	610	460	280						
	Point Tip Full Body	2.5	2.5	0.102	0.098	610	460	280						
EcoONE-12	Sprue Tip	4.0	4.5	0.163	0.177	900	725	425						
	Point Tip Bodiless	1.5	4.5	0.061	0.177	725	525	315						
	Point Tip Full Body	4.0	4.5	0.163	0.177	725	525	315						
EcoONE-16	Sprue Tip	5.0	6.0	0.204	0.236	1200	950	600						
	Point Tip Bodiless	2.0	6.0	0.082	0.236	940	640	475						
	Point Tip Full Body	5.0	6.0	0.204	0.236	940	640	475						

STEP 2: CHOOSE YOUR NOZZLE SIZE & LENGTH

	NOZZLE RANGE	04	06	08	10	12	16
	Shot size* (g)	<10	<50	<150	<400	<1,000	<1,500
Runner ø	**Non-Valved (mm)**	4	6	8	10	12	16
	Valved (mm)	-	6	8	10	12	16
Pitch (Min)	**Non-Valved (mm)**	28	38	42	44	44	50
	Valved (mm)	-	54	61	70	86	104
	Nozzle Bore ø (mm)	18	28	30	34	36	42
	Length Range[1] (mm)	50 – 140	60 – 160	60 – 180	50 – 160	50 – 200	70 – 300

*Application dependent.

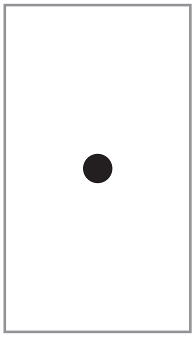


NOZZLE SERIES	LENGTH (A DIMENSION)	NOZZLE BODY #	HEATER #	WATTAGE @ 230V
04	50	SONB4050	SONH10047	200
	70	SONB4070	SONH10067	200
	80	SONB4080	SONH10077	240
	100	SONB4100	SONH10097	240
	120	SONB4120	SONH10117	240
	140	SONB4140	SONH10137	300
06	60	SONB6060	SONH18055	350
	70	SONB6070	SONH18065	400
	80	SONB6080	SONH18075	400
	90	SONB6090	SONH18085	400
	100	SONB6100	SONH18095	400
	140	SONB6140	SONH18135	600
	160	SONB6160	SONH18155	600
08	60	SONB8060	SONH20055	350
	80	SONB8080	SONH20075	400
	100	SONB8100	SONH20095	500
	120	SONB8120	SONH20115	500
	180	SONB8180	SONH20175	700

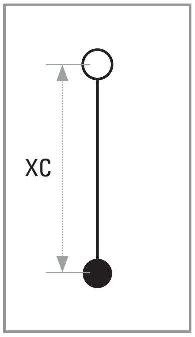
NOZZLE SERIES	LENGTH (A DIMENSION)	NOZZLE BODY #	HEATER #	WATTAGE @ 230V
10	50	SONB10050	SONH22045	350
	70	SONB10070	SONH22065	400
	90	SONB10090	SONH22085	500
	100	SONB10100	SONH22095	500
	120	SONB10120	SONH22115	600
	160	SONB10160	SONH22155	700
12	50	SONB12050	SONH24043	280
	70	SONB12070	SONH24063	450
	90	SONB12090	SONH24083	525
	110	SONB12110	SONH24103	600
	140	SONB12140	SONH24133	660
	160	SONB12160	SONH24153	660
	200	SONB12200	SONH24193	800
16	70	SONB16070	SONH28062	450
	100	SONB16100	SONH28092	600
	120	SONB16120	SONH28112	660
	140	SONB16140	SONH28132	660
	200	SONB16200	SONH28192	900
	260	SONB16260	SONH28252	1000
	300	SONB16300	SONH28292	1000

STEP 3: CHOOSE YOUR MANIFOLD LAYOUT

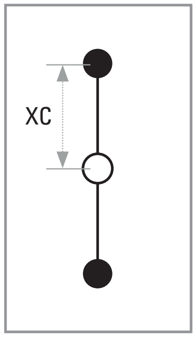
1-Drop



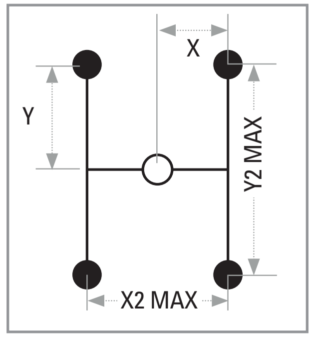
1-Drop Offset



2-Drop Inline



4-Drop H

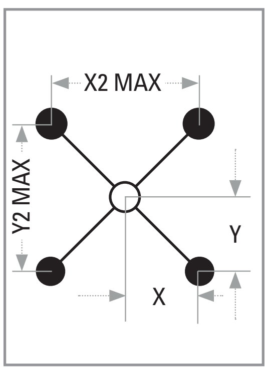


Single Level Only,
Gun-Drilled,
Pressed-in Heater

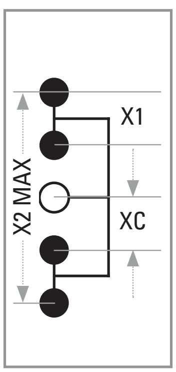
ManifoldThickness:
40-60mm

NOTE: Maximum manifold block size is 600mm x 600mm (24"x24").

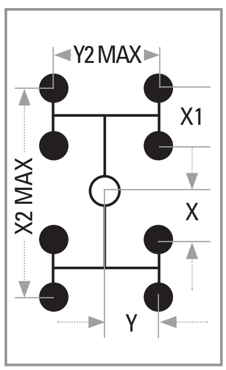
4-Drop X



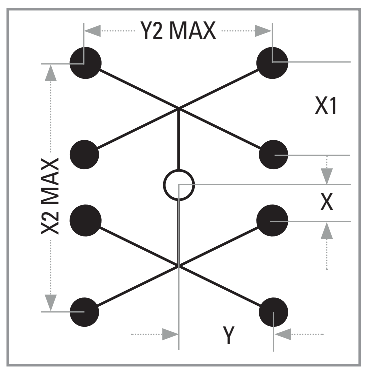
4-Drop Inline



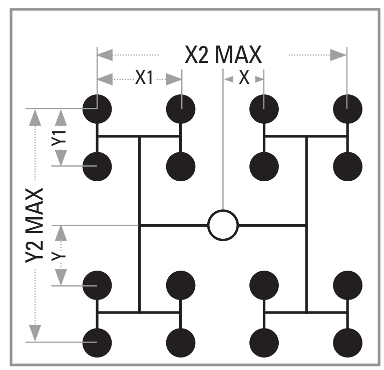
8-Drop HH



8-Drop XX

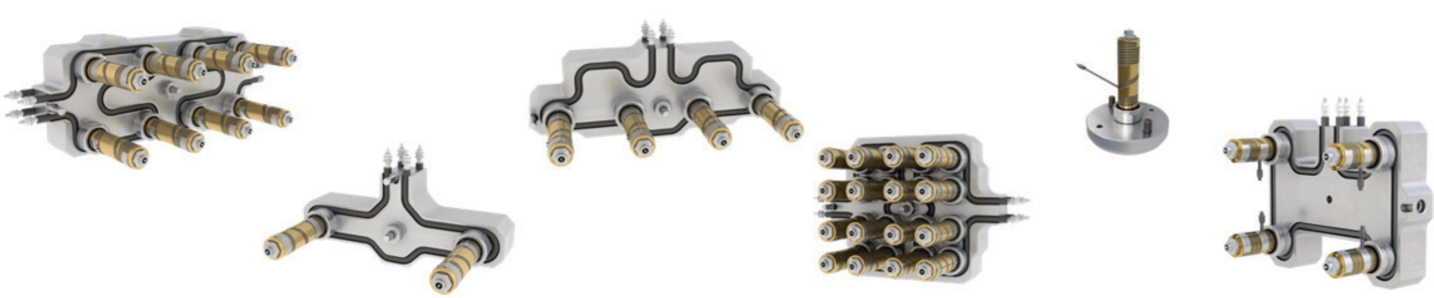


16-Drop HH



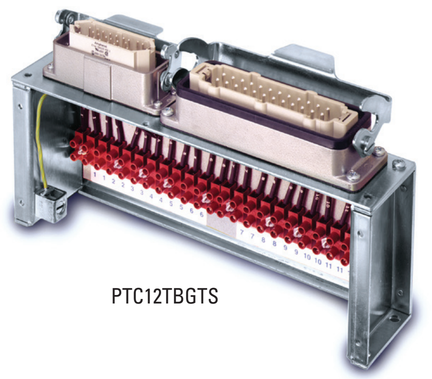
Manifold Layout Dimensions

NOZZLE SERIES	THERMAL GATE (mm)								VALVE GATE (mm)							
	XC MIN*	X MIN	X2 MAX	X1 MIN	Y MIN	Y2 MAX	Y1 MIN	ØD MIN	XC MIN*	X MIN	X2 MAX	X1 MIN	Y MIN	Y2 MAX	Y1 MIN	ØD MIN
04	30	20	538	28	20	538	28	56.6	-	-	-	-	-	-	-	-
06	35	24	538	38	24	538	38	67.9	65	45	538	54	45	538	72	127.3
08	35	25	538	42	25	538	42	70.7	75	45	538	61	50	538	82	134.5
10	40	26	534	44	26	534	44	73.5	80	50	534	70	56	534	94	150.1
12	40	26	516	44	26	516	44	73.5	88	54	516	86	66	516	112	170.6
16	45	28	500	50	28	500	50	79.2	98	64	500	104	73	500	130	194.2



STEP 4: CHOOSE YOUR ELECTRICAL PLUGS

DEFAULT
DME Standard Connectors
- PTC12TBGTS
- Includes complete E-Box assembly



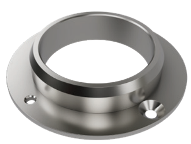
PTC12TBGTS

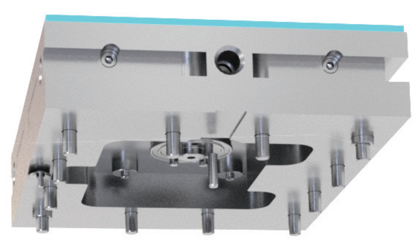
OPTIONAL
24-Pin Male Connector HBE-24 (TC/Power)
- Part No: PICO12
- Double Latch
- Compatible with E-Box MTC12TBG (single) or PTCO12TB (double)
- Mounting hardware not included

24-Pin Female Connector HBE-24 (TC Only)
- Part No: MTCO12
- Double Latch
- Compatible with E-Box MTC12TBG (single) or PTCO12TB (double)
- Mounting hardware not included

STEP 5: CHOOSE YOUR OPTIONAL COMPONENTS & SERVICES (NOT MANDATORY)

- Locating ring
- Drool ring
- Application review
- Installation support

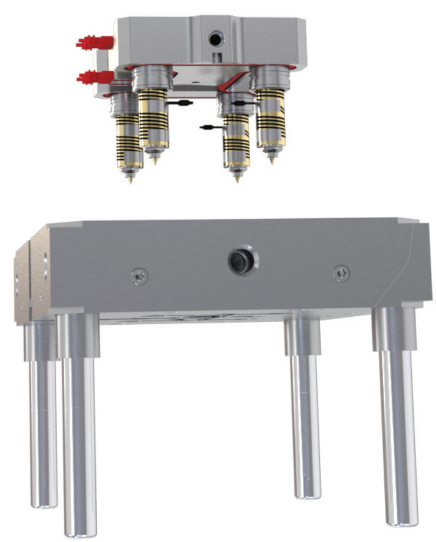




STEP 6: CHOOSE YOUR HOT HALF PLATES (OPTIONAL)

Currently available for non-valve gated systems only.
5 Standard Plate Sizes Available (Metric / DIN)
- 350mm x 400mm (346mm x 396mm)
- 400mm x 500mm (396mm x 496mm)
- 600mm x 600mm (596mm x 596mm)
- 600mm x 800mm (596mm x 796mm)
- 800mm x 800mm (796mm x 796mm)

NOTE: Hot Half cost includes EcoONE-Series System, Clamp Plate, Nozzle Plate, Insulator Plate (0.25"), Leader Pins, Assembly Bolts & Final Assembly (Hot Runner + Plates + Wiring + Electrical Test).



HOT RUNNER RFQ FORM

EcoONE series

CUSTOMER DETAILS

Company:

Customer ID:

Contact Name:

Email:

Phone:

System Delivery Date:

End User:

Molder:

Drawings Email:

Sales Engineer:

APPLICATION TECHNICAL DETAILS

Part Name:

Part Weight:

Material:

Grade:

Industry: -Select One-

No. of Cavities:

No. of Drops:

Gate Wall Thickness:

Cold Runner Weight:

Process/Mold Temp.:

Customer Supplied: ☐ 3D Files ☐ 2D Files ☐ Material Data Sheet

HOT RUNNER DETAILS

GATING DETAIL

Actuation: -Select One-

Style: -Select One-

Part Number:

NOZZLE DETAILS

Size: -Select One-

Length (A): -Select One-

Nozzle Body #:

Heater #:

MANIFOLD DETAILS

Layout: -Select One-

XC:

X :

X1:

X2:

Y:

Y1:

Y2:

ØD:

Inlet: -Select One-

ELECTRICAL PLUGS & EBOX	POWER CABLE	TC CABLE
-Select One-	-Select One-	-Select One-

OPTIONS				
-Select One-	-Select One-	-Select One-	-Select One-	-Select One-

COMMENTS

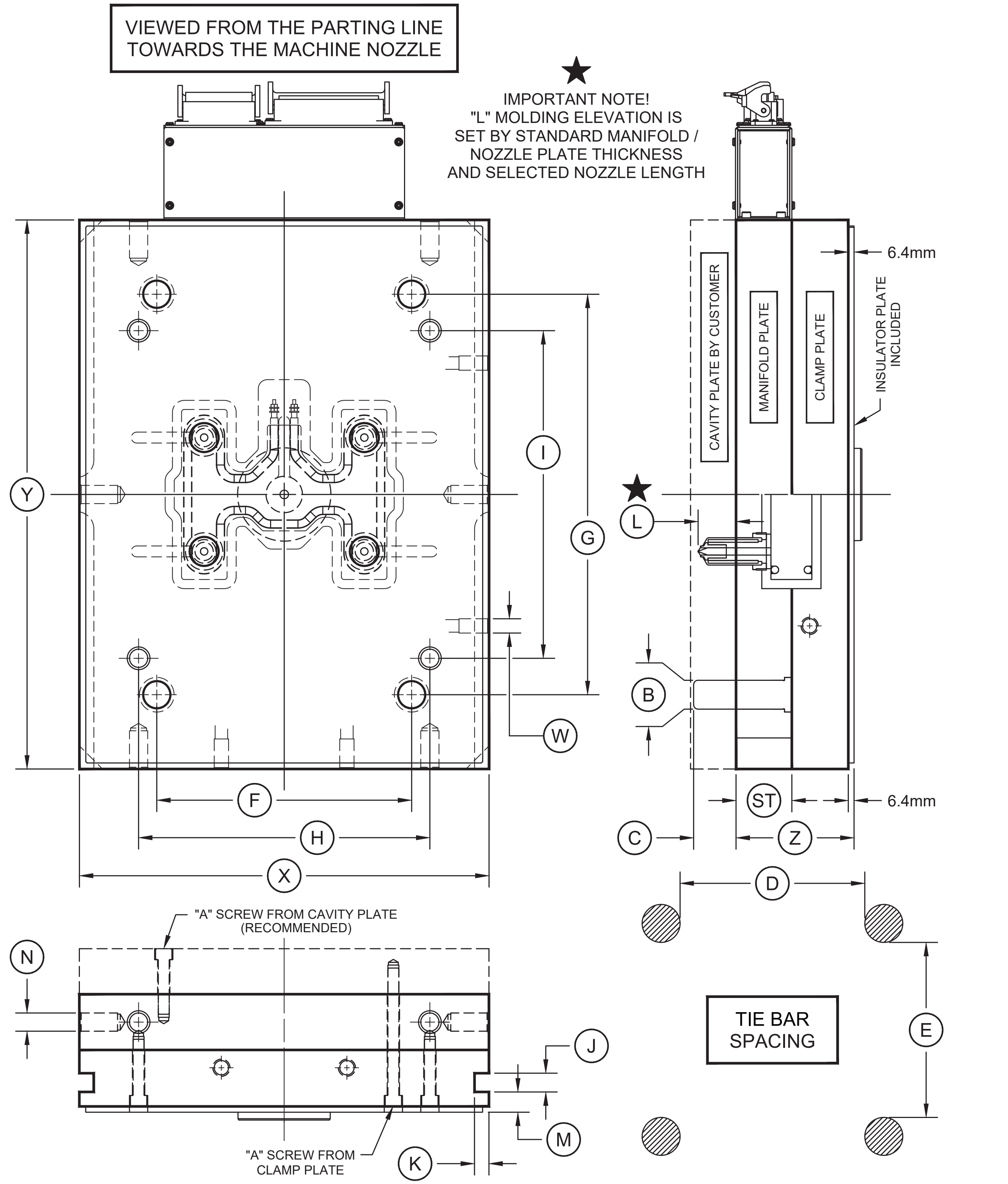
Email your completed RFQ form to: EcoONEQuote@DME.net

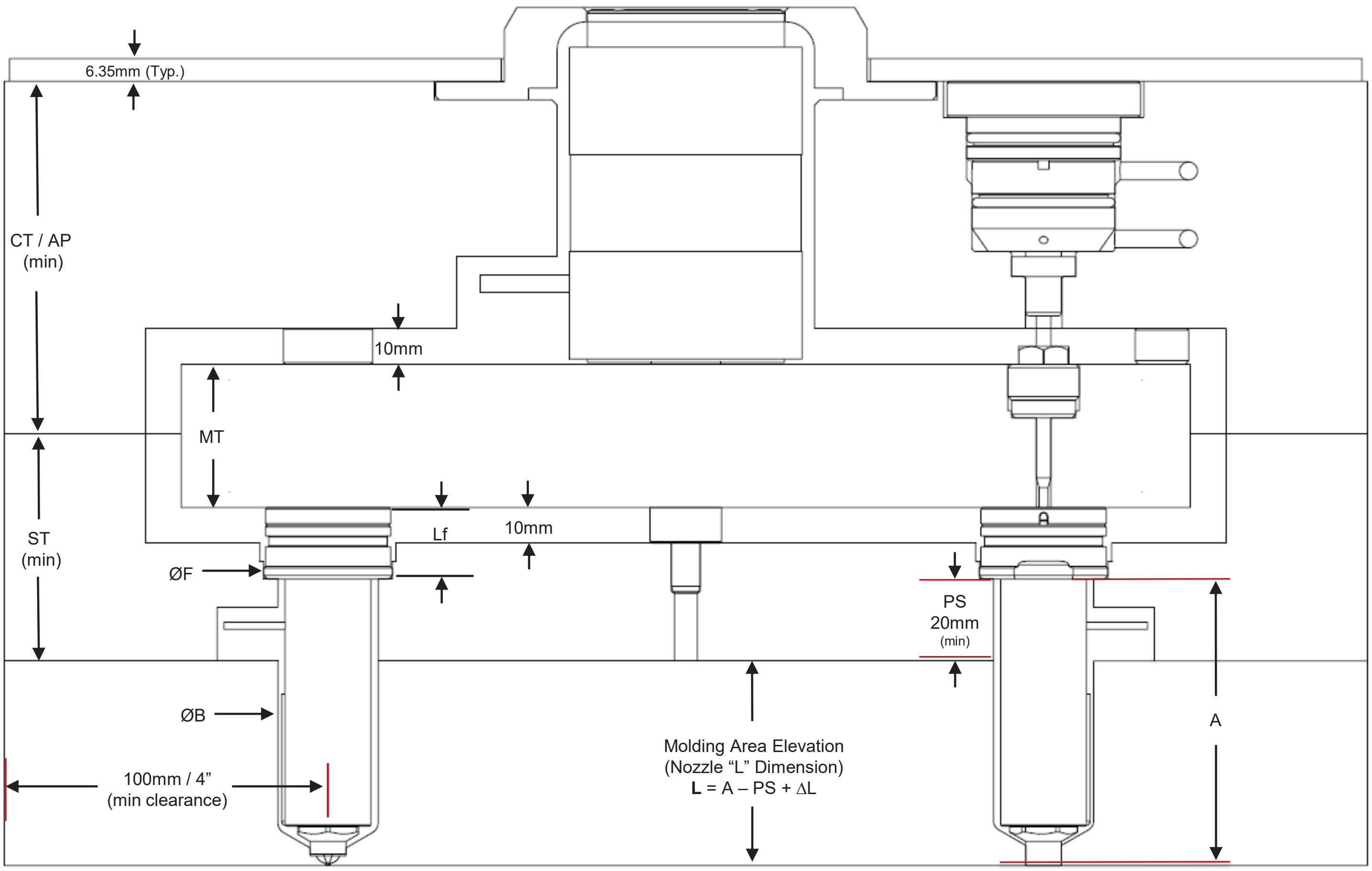
MEASUREMENT	FRAME / PLATE SIZE		LEADER PINS			CUSTOMER SELECTION/ VALUE
	METRIC	DIN	DIAMETER (B)	LENGTH	PROTRUSION (C)	
X	350mm	346mm	25mm			
Y	400mm	396mm				
X	400mm	396mm	30mm			
Y	500mm	496mm				
X	600mm	596mm	40mm	"ST" + "L" + 10mm (min)	"L" + 10mm (min)	
Y	600mm	596mm				
X	600mm	596mm	40mm			
Y	800mm	796mm				
X	800mm	796mm	50mm			
Y	800mm	796mm				
ST	**Manifold Plate Thickness (see hot half design guideline chart)**					
L	**Molding Elevation (L= A - PS + ΔL)** NOTE: Molding elevation (L) is automatically determined by the standard manifold plate required to accommodate the size and length of your nozzle selection as noted above. Please design according to the hot half design guidelines. L= A - PS + ΔL					
NOZZLE SIZE	**04**	**06**	**08**	**10**	**12**	**16**
STACK-UP HEIGHT (Z)	**121.4mm**	**129.4mm**	**131.4mm**	**133.4mm**	**151.4mm**	**151.4mm**
D	**Tie Bar Spacing - Horizontal**					
E	**Tie Bar Spacing - Vertical**					
F	**X Leader Pin Dimension**					
G	**Y Leader Pin Dimension**					
H	**X Assembly Screw Dimension**					
I	**Y Assembly Screw Dimension**					
"A" Assembly Screw (A) Size & Orientation						
"A" Screw Thread Type & Size						
From Cavity Plate (Recommended)						
From Clamp Plate						
J	**Clamp Slot Width**					
K	**Clamp Slot Depth**					
M	**Clamp Slot Distance from Platen**					
N	**Lift Hole Thread Type & Size**					
W	**Water Line Thread Type & Size**					
Water Lines Recessed (Y/N)?						

Notes:

1. Clearly Indicate gate / drop location coordinates on the mold drawing (0.0000" / 0.000mm)
2. Clearly indicate hot runner leader pin location coordinates on mold drawing (0.0000" / 0.000mm)
3. Clearly indicate assembly screw coordinates on mold drawing (0.000" / 0.00mm)

APPENDIX: HOT HALF MEASUREMENTS





NOZZLE SIZE		04	06	08	10	12	16
Nozzle Length Range	A	50-140	60-160	60-180	50-160	50-200	70-300
Nozzle Flange Height	Lf	15	20	20	20	20	20
Nozzle Flange Ø	ØF	26	38	42	44	44	50
Nozzle Bore Cut-Out Ø	ØB	18	28	30	34	36	42
Plate Split (Min)	PS	20	20	20	20	20	20
Manifold Thickness (Typical)	MT	40	45	45	50	60	60
Manifold Plate Thickness (Min)	ST	55	63	63	65	70	70
Clamp Plate Thickness - NV (Min)	CT	60	60	62	62	75	75
Actuator Plate Thickness - V (Min)	AP	-	102	102	105	120	120

DME HOT RUNNER SERVICE CENTER

SERVICE AND SUPPORT FOR ALL HOT RUNNER SYSTEM BRANDS

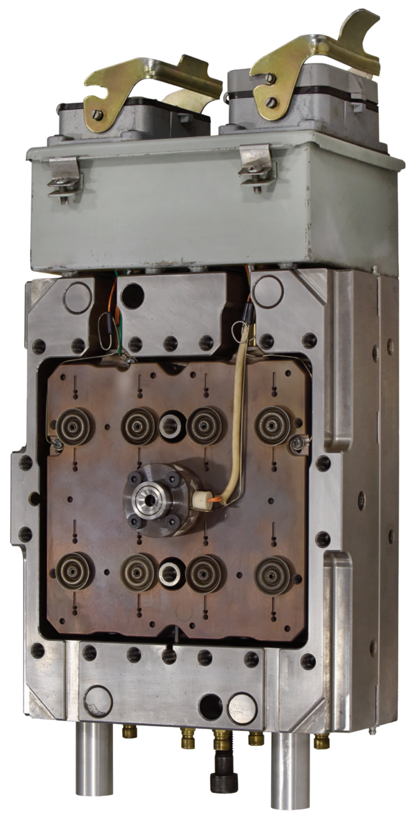
Our well-equipped service centers along with our dedicated team of hot runner technical specialists are ready to support all brands of hot runner systems. Our team has over three decades of experience installing, assembling, and repairing hot runner systems. Our goal is to ensure your system is returned to you as quickly and cost effectively as possible. DME's full service hot runner service center offers a variety of services which include:

Repairs
- All brands accepted.
- Original OEM spare parts.
- Emergency services available.

System Cleanings
- Remove degraded material.
- Enhance molded part quality.
- Improve color change performance.

Preventative Maintenance
- Replace worn components.
- Maintain system performance.
- Maintain part quality.
- Prevent unscheduled downtime.
- Protect your investment.

Refurbishment
- Restore tool performance to "like new"
- Extend the service life of the tool
- More economical than a full tool replacement



Contact us to discuss your hot runner service needs today!

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