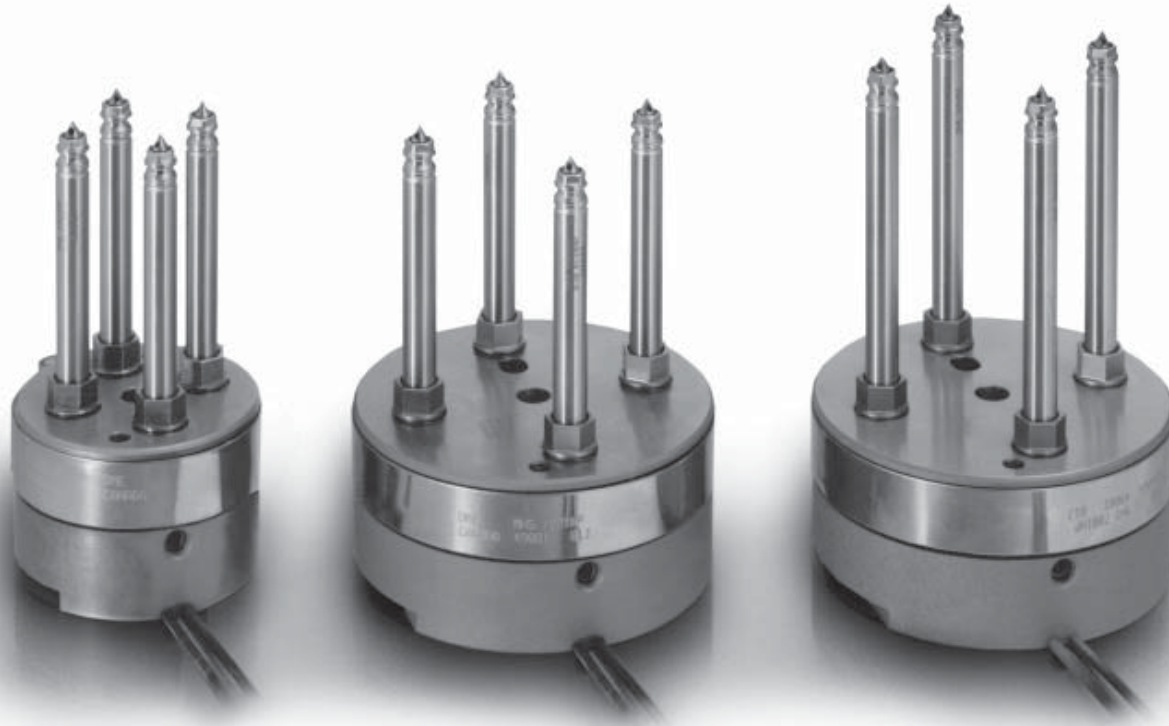


# DME Stellar<sup>®</sup> 5000 Hot Runner Systems *Round MNAs*



# SECTION 1

## Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

### TABLE OF CONTENTS

#### Section 1

Round MNA Pre-Assembly & Machining Guidelines. . . . .	3-65
General Assembly – Section View . . . . .	4
Design Procedure/Gating Style Selection . . . . .	5
Gate Details . . . . .	6-7
Manifold Options . . . . .	8
Heated and Unheated MEN Options . . . . .	9
Metric Dimensions . . . . .	10-37
Nozzle Selection and Stack Height Calculations (Metric) . . . . .	10-11
Metric Machining Details – Ø40 . . . . .	12-16
Metric Machining Details – Ø50 . . . . .	17-21
Metric Machining Details – Ø70 . . . . .	22-26
Metric Machining Details – Ø90 . . . . .	27-31
Round MNA Manifold Heater Layout. . . . .	32
Top Side (MEN) of Round Manifolds . . . . .	33-36
Metric Wire Pocket Machining Details. . . . .	37
Inch Dimensions. . . . .	38-65
Nozzle Selection and Stack Height Calculations (Inch) . . . . .	38-39
Inch Machining Details – Ø40 . . . . .	40-44
Inch Machining Details – Ø50 . . . . .	45-49
Inch Machining Details – Ø70 . . . . .	50-54
Inch Machining Details – Ø90 . . . . .	55-59
Round MNA Manifold Heater Layout. . . . .	60
Top Side (MEN) of Round Manifolds . . . . .	61-64
Inch Wire Pocket Machining Details . . . . .	65

#### Section 2

Round MNA Assembly Information . . . . .	66-78
Assembly Section View . . . . .	66
Assembly Instructions . . . . .	67-68
Nozzle and Tip Assembly. . . . .	69
Nozzles with Coil Heater . . . . .	70-71
Nozzles with High Performance Heater. . . . .	72
Nozzle Body Removal Instructions . . . . .	73
Wiring Schematics . . . . .	74
Parts List . . . . .	75-78

#### Section 3

Round MNA Ordering Information . . . . .	79-86
Ordering Procedure . . . . .	79
Manifold and Components Sub-Assembly Section View . . . . .	80
Sub-Assembly Parts List and Item Numbers. . . . .	81-82
Nozzle Body Information . . . . .	83
Heated MEN Sub-Assembly . . . . .	84
Unheated MEN Sub-Assembly . . . . .	85
Locating Rings . . . . .	86

## SECTION 1

Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

### 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 may result in serious injury or death.



Failure to comply may 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 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 may result in serious injury or death:

#### **STORED ENERGY AND HIGH TEMPERATURE HAZARDS**

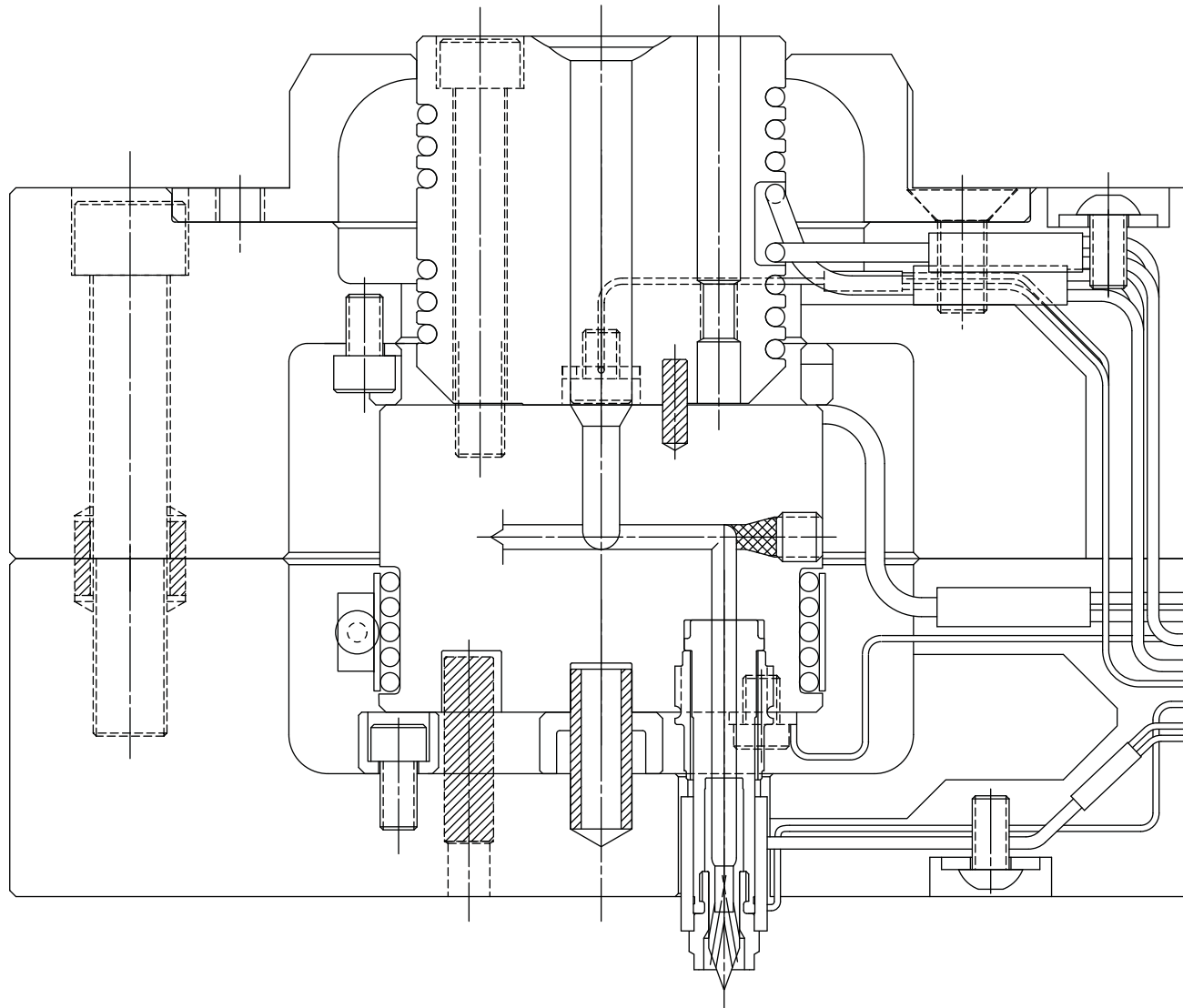
This product maintains molten plastic at high pressure. Use caution when operating and servicing the system. Physical contact with molten plastic may result in severe burns. Proper protective equipment, including eye protection, must be worn. This product has heated surfaces. Use caution when operating and servicing the system to avoid severe burns. Proper protective equipment should be worn.

# SECTION 1

Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

## General Assembly – Section View

Fig. 1-1



Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

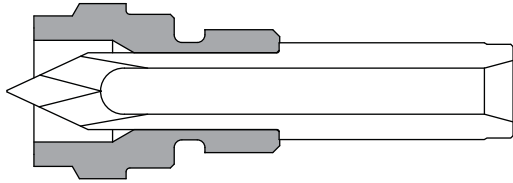
# SECTION 1

## Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

### Gating Style Selection

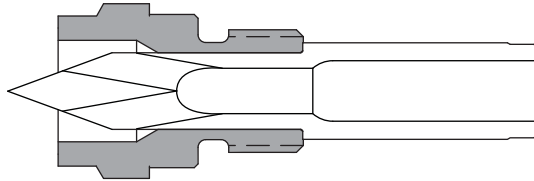
#### Standard Point Gate Tip Sub-Assembly, SXG5110

- For use with unfilled resins up to 290°C (550°F)
- Fits Gate Details shown in Fig. 1-2



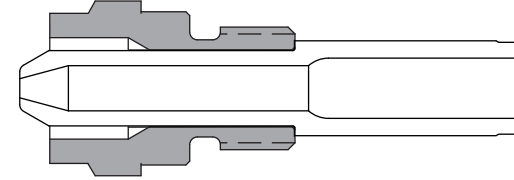
#### High Performance Point Gate Tip Sub-Assembly, SXG5020

- For use with unfilled and filled resins up to 330°C (625°F)
- Fits Gate Details shown in Fig. 1-2



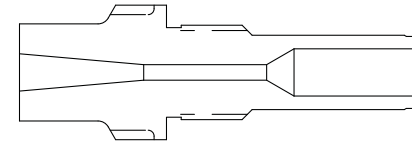
#### High Performance Thru Hole Tip Sub-Assembly, SXG5201

- For use with unfilled and filled resins up to 330°C (625°F)
- Fits Gate Details shown in Fig. 1-2



#### Sprue Gate Tip, SXT1040

- For use with unfilled and filled resins up to 330°C (625°F)
- Fits Gate Details shown in Fig. 1-3



### Gating Style Selection – Item Numbers

TIP Sub-Assembly Item Number	Description	TIP Item Number	TIP CTE (10 -6/degC)	Retainer Item Number	Gating Style	Applicable Stellar System
SXG5110	Standard Point Gate Tip Sub-Assembly	SXT4010	17.5	SXF5100	Point Gate	Standard
SXG5020	High Performance Point Gate Tip Sub-Assembly	SXT5010	5.5	SXF5000	Point Gate	High Performance
SXG5201	High Performance Thru Hole Tip Sub-Assembly	SXT5200	5.5	SXF5000	Thru Hole Gate	High Performance
SXT1040	Sprue Gate	SXT1040	12.8	N/A	Sprue Gate	Standard

### Design Procedure

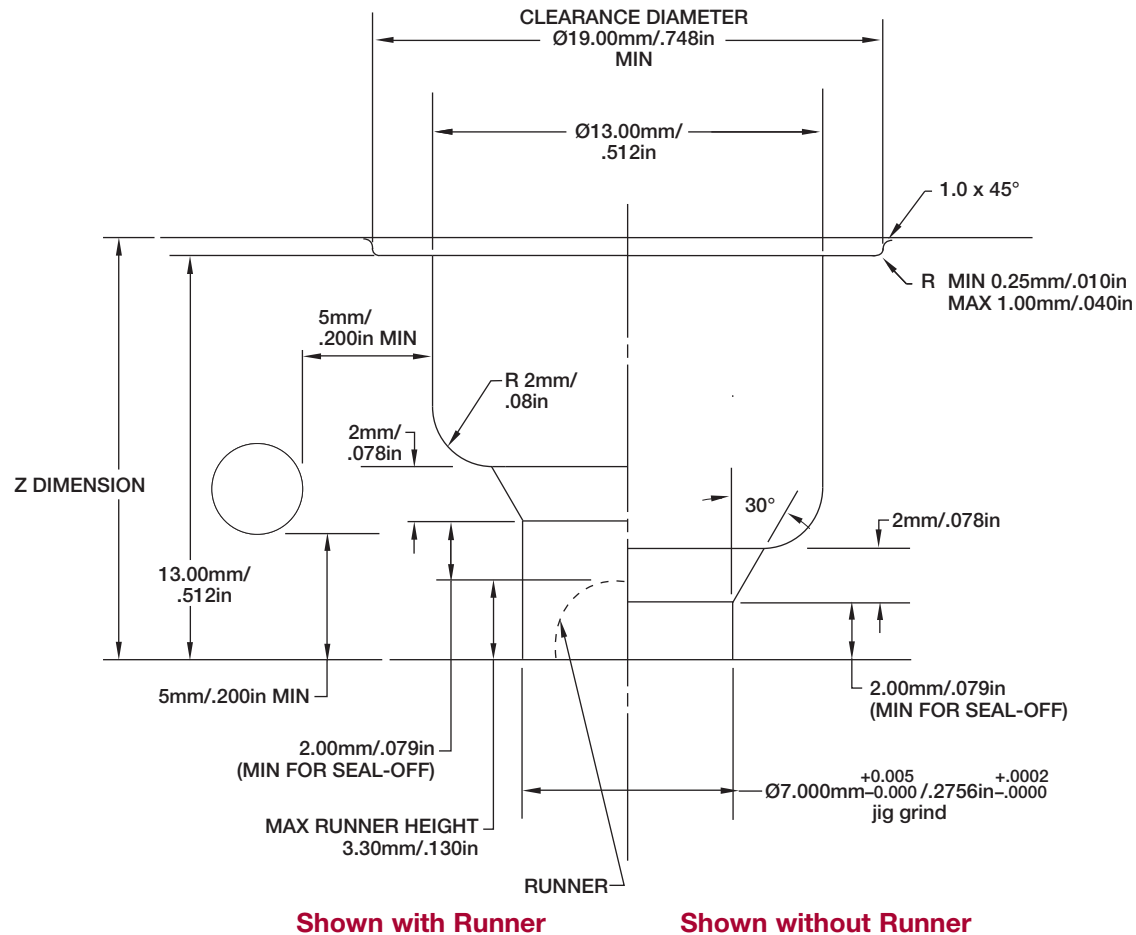
1. Select the proper gating style.
2. Select the appropriate round manifold configuration. See pages 8-9.
3. Calculate the nozzle plate thickness. See pages 10-11 (metric) or pages 38-39 (inch).
4. Follow the machining guidelines for the nozzle plate and the manifold retainer plate for the manifold size required. See pages 10-37 (metric) or pages 38-65 (inch).
5. Add the wire channel paths, assembly bolts, alignment dowels, water lines, guide/leader pins, etc., as needed. For wire channel design, see page 37 (metric) or page 65 (inch).



# SECTION 1

## Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

**Fig. 1-3 Gate Details for Sprue Gate Tips, SXT1040**



**NOTES for Figures 1-2 and 1-3:**

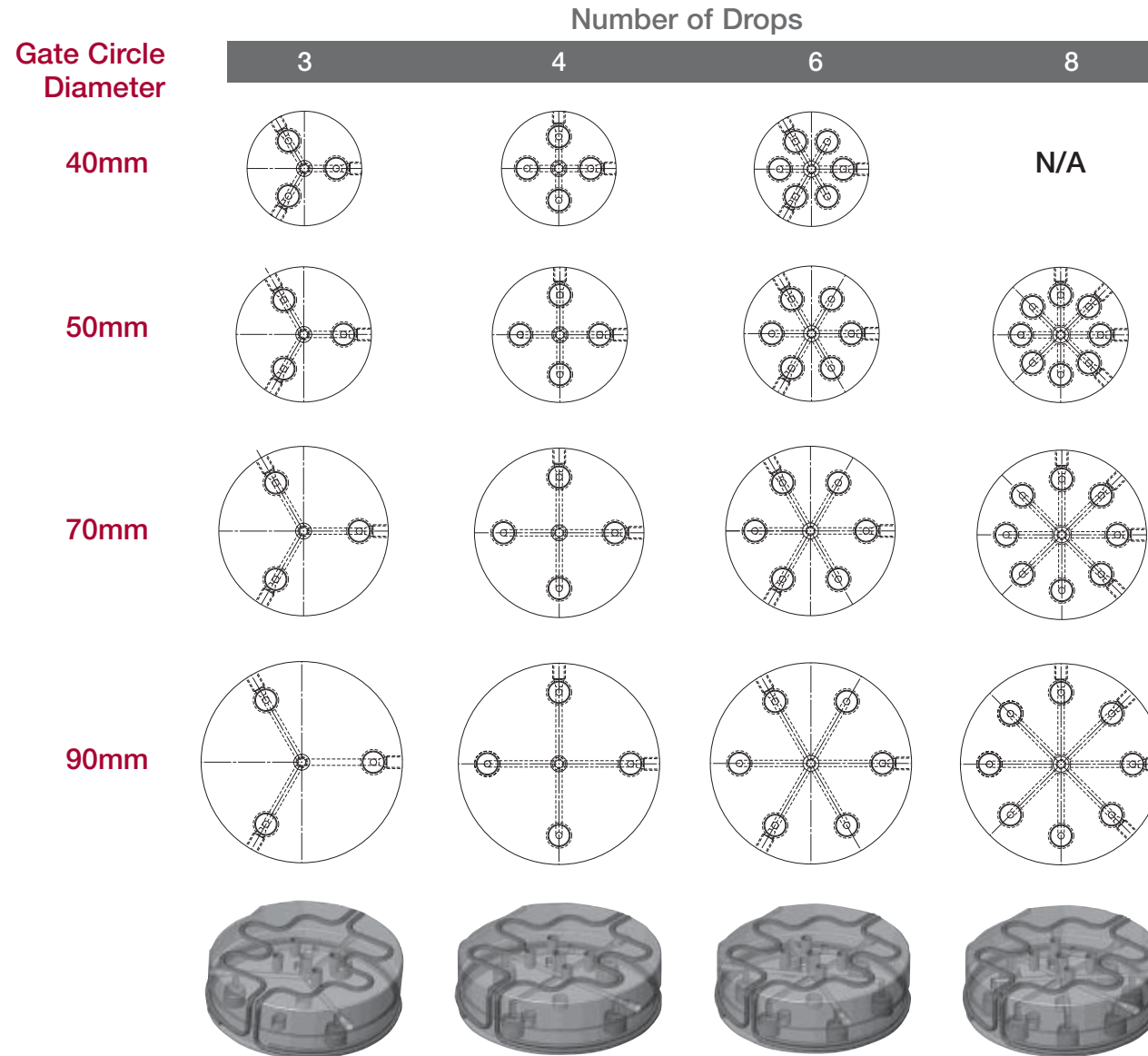
1. If gate detail does not properly fit the application, contact DME for assistance about gate detail options.
2. Position gate detail within  $\pm 0.013\text{mm}/.0005\text{in}$  from nominal.
3. The gate diameter can be opened by the customer to suit the application. (The  $90^\circ$  angle must be re-machined to maintain the maximum land after increasing the gate diameter.)
4. Water lines are required in "A" plate for proper gate cooling.
5. Position water lines as close as possible but not closer than the minimum distance shown to provide a safe steel condition.
6. For faster color changes, remove ("decone") the resin from the front of each point gate tip prior to changing colors.
7. See page 11 (Metric) and page 39 (Inch) for minimum and maximum "Z" dimensions.

# SECTION 1

## Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

### Manifold Options

**NOTE:** Position gate detail within  $\pm 0.013\text{mm}/.0005\text{in}$  from nominal.



### Number of Drops for Each Gate Circle Diameter

Gate Circle Diameter (mm)	Number of Drops			
	3	4	6	8
40	✓	✓	✓	—
50	✓	✓	✓	✓
70	✓	✓	✓	✓
90	✓	✓	✓	✓

### Round MNA Item Numbers

Manifold and Components Sub-Assembly Item No.	Description	O.D.
SRD4003	Ø40 3-Drop	Ø72.00 [2.835]
SRD4004	Ø40 4-Drop	
SRD4006	Ø40 6-Drop	
SRD5003	Ø50 3-Drop	Ø85.00 [3.346]
SRD5004	Ø50 4-Drop	
SRD5006	Ø50 6-Drop	
SRD5008	Ø50 8-Drop	
SRD7003	Ø70 3-Drop	Ø106.50 [4.193]
SRD7004	Ø70 4-Drop	
SRD7006	Ø70 6-Drop	
SRD7008	Ø70 8-Drop	
SRD9003	Ø90 3-Drop	Ø126.50 [4.980]
SRD9004	Ø90 4-Drop	
SRD9006	Ø90 6-Drop	
SRD9008	Ø90 8-Drop	



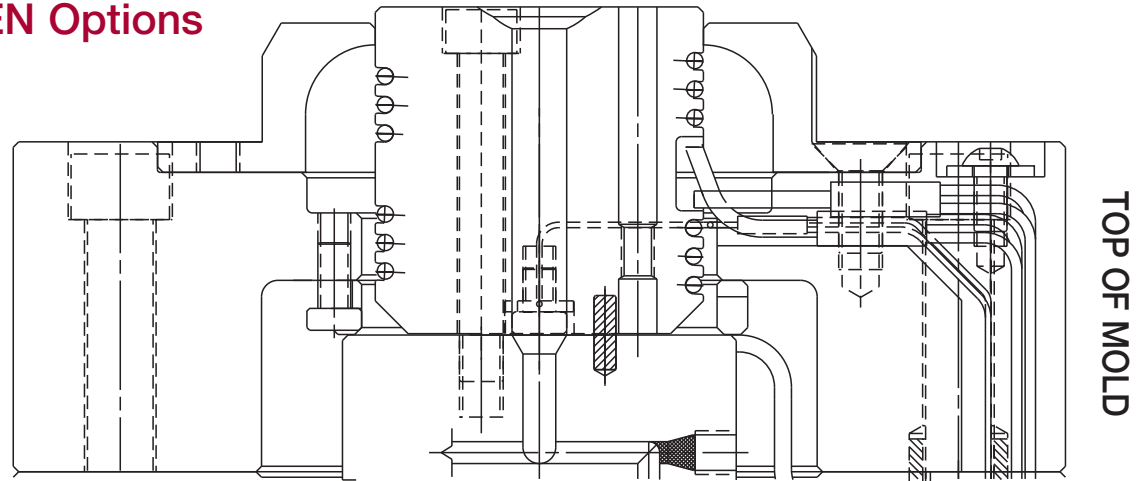
# SECTION 1

## Stellar® Round MNA Pre-Assembly Design & Machining Guidelines

### Heated and Unheated MEN Options

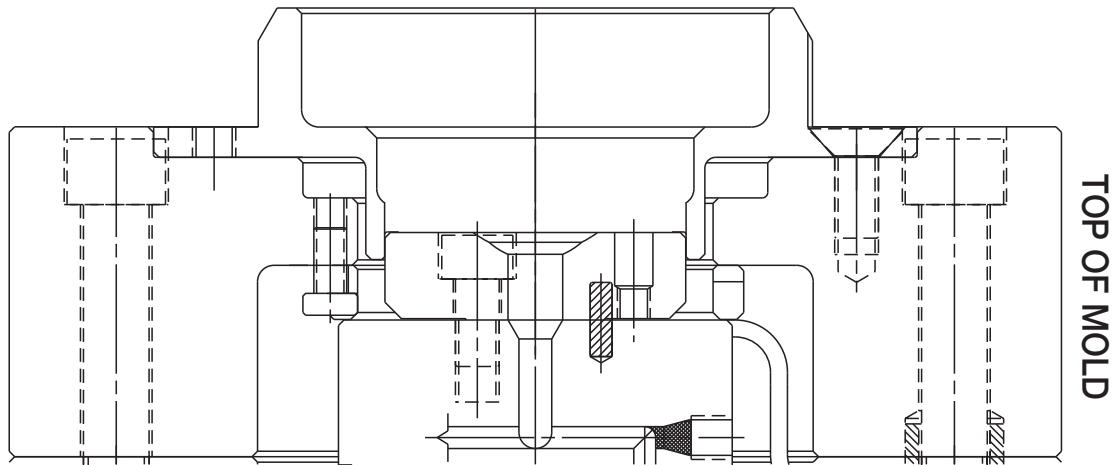
#### Heated MEN Design

Preferred for most applications.



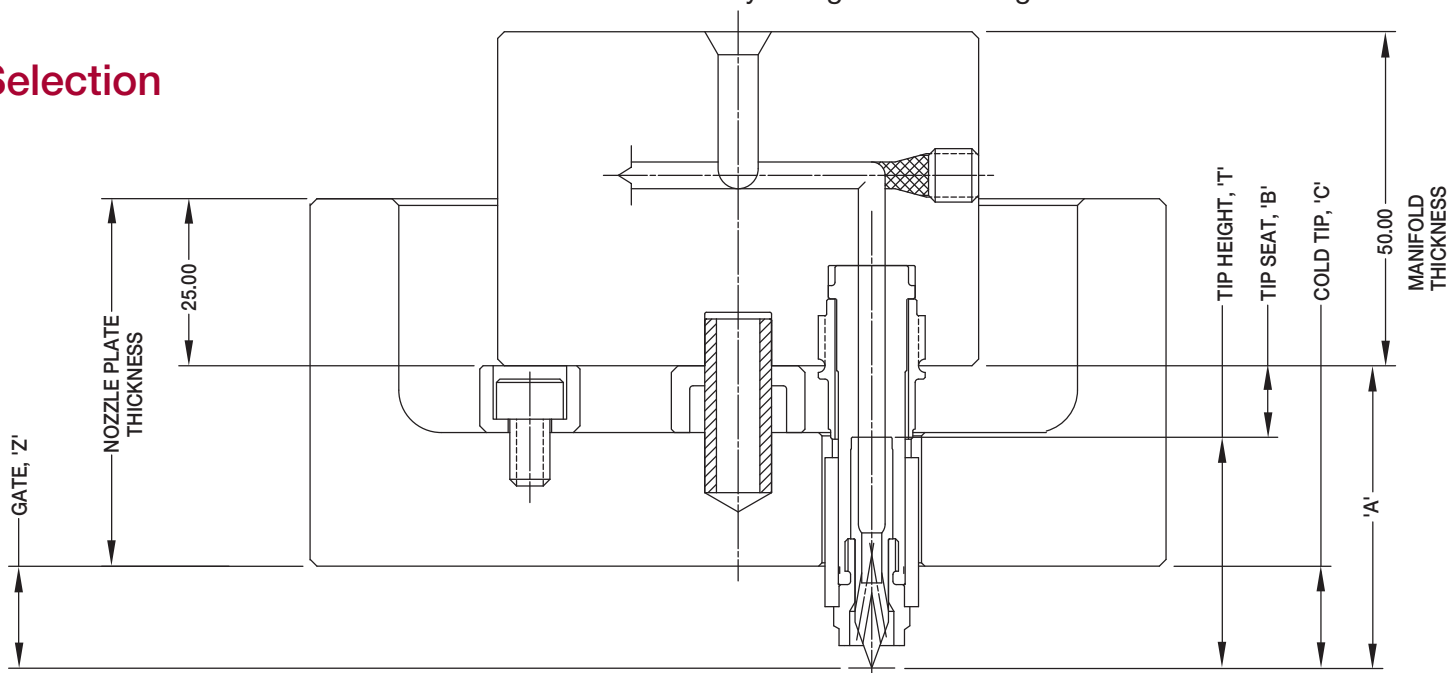
#### Unheated MEN Design

For use with commodity resins only; i.e., PE, PP, PS.



**NOTE:** See Fig. 1-1 for nozzle plate section view.

Nozzle Selection



Tip Information for Gating Styles

TIP Sub-Assembly Item No.	Gating Style	TIP CTE (10-6/degC)	"T" "T" = "A" - "B"	Applicable Stellar System
SXG5110	Standard Point Gate Tip Sub-Assembly	17.5	34.40	Standard
SXG5020	High Performance Point Gate Tip Sub-Assembly	5.5	34.40	High Performance
SXG5201	High Performance Thru Hole Tip Sub-Assembly	5.5	34.40	High Performance
SXT1040	Sprue Gate	12.8	34.40	Standard

"A" and "B" Chart for Gating Styles

Nozzle Sub-Assembly Item No.	Point Gate "A"	Sprue Gate "A"	"B"	Notes
SXY0065 SXY0965	65.10	N/A	30.70	Standard coil heater; High performance heater
SXY0085 SXY0985	85.10	N/A	50.70	Standard coil heater; High performance heater
SXY0105 SXY0905	105.10	N/A	70.70	Standard coil heater; High performance heater
SXY0125 SXY0925	125.10	N/A	90.70	Standard coil heater; High performance heater
SXY0145 SXY0945	145.10	N/A	110.70	Standard coil heater; High performance heater
SXY8065	N/A	65.10	30.70	Standard coil heater with snap ring
SXY8085	N/A	85.10	50.70	Standard coil heater with snap ring
SXY8105	N/A	105.10	70.70	Standard coil heater with snap ring
SXY8125	N/A	125.10	90.70	Standard coil heater with snap ring
SXY8145	N/A	145.10	110.70	Standard coil heater with snap ring

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

NOTE: All units are in mm.

### Metric Calculations

#### Equations

1. “Z” = “C” + Expansion

**NOTE:** The minimum “Z” dimension is 13.00 for the point gate and sprue gate.  
The maximum “Z” dimension is 115.00 for the point gate and sprue gate.

2. Nozzle Plate Thickness = 25 + “A” – “C,” Thickness ≥ 55.00

3. Expansion = Delta T (°C) x [0.0000115 x (Manifold Thickness + “B”) + CTE tip x “T”] – 0.09  
+ 0.0002875 x [T mold (°C) – 20]

**NOTE:** Valid for point gate tips. For the sprue gate tips use the point gate nozzle plate thickness.

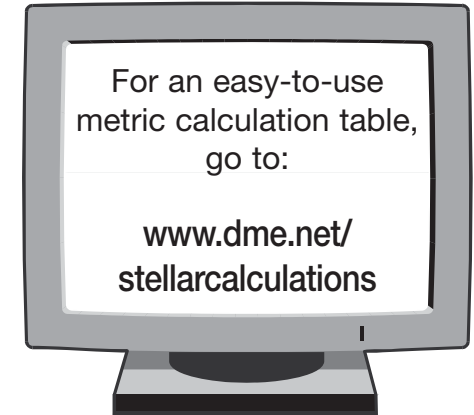
4. Upper Support Ring Gap = (Delta T (°C) x 0.0000115 x Manifold Thickness) – 0.03

Where: CTE tip is the coefficient of thermal expansion of the tip

$$\text{Delta T (°C)} = \text{T melt} - \text{T mold (expressed in °C)}$$

$$\text{Delta T (°C)} = \text{Delta T (°F)} / 1.8$$

“Z,” “C,” “B,” “T,” Upper Support Ring Gap, Expansion and Nozzle Plate Thickness are all expressed in mm.



#### Procedure and Notes

1. Calculate expansion
2. Calculate “C”
3. Calculate plate thickness
4. Calculate upper support ring gap

The calculations may need to be repeated in order to maintain the nozzle plate thickness requirement. **NOTE:** Start with the smallest “A” dimension and increase “A” dimension as needed. This approach will generate a design with the minimum stack height.

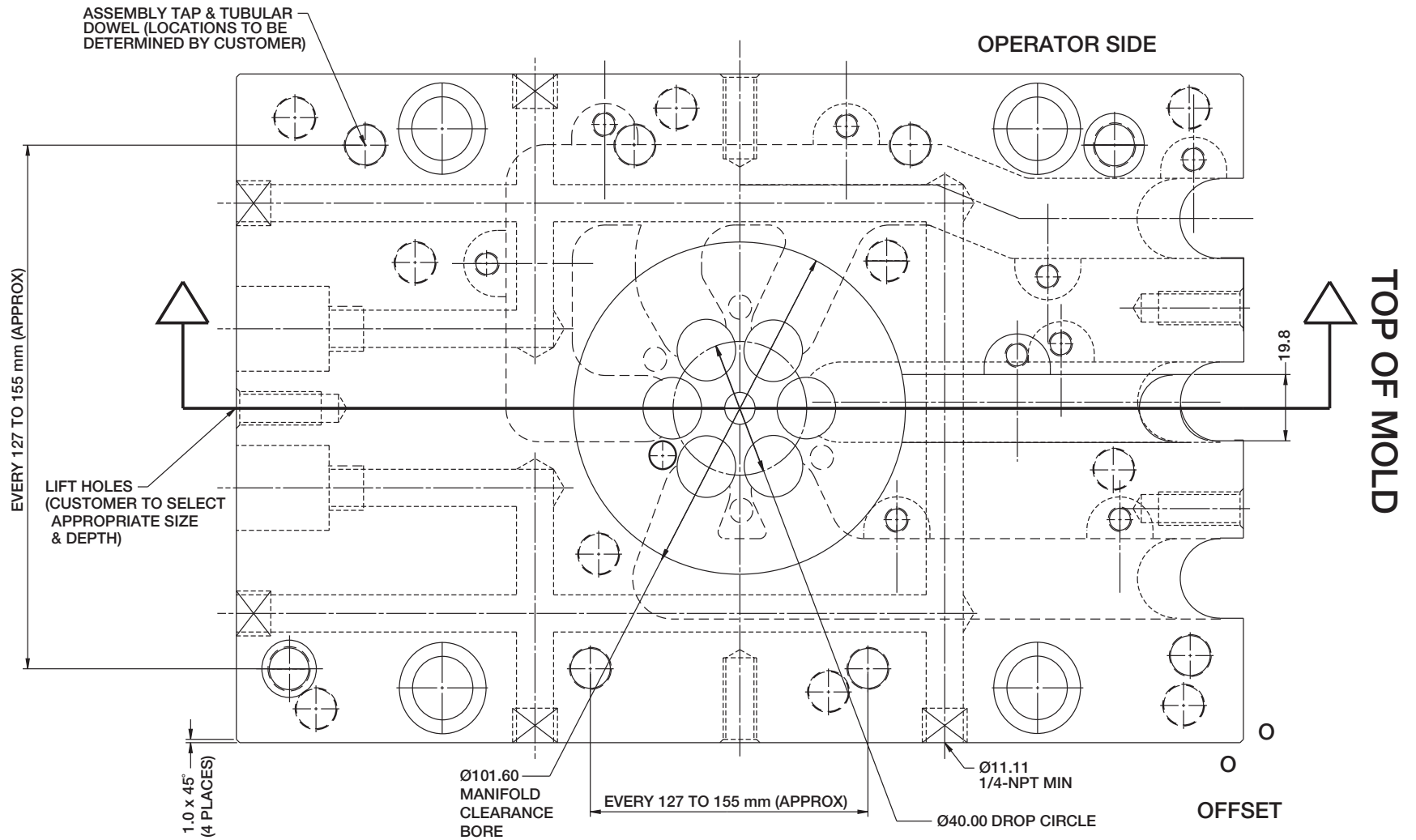
#### Design Suggestions

The most difficult area of design will be the layout of the wire channels in the nozzle plate. Please evaluate the wire channel depth and path carefully. Three possible scenarios (1 = simplest; 2 = more difficult; 3 = most difficult):

1. If the nozzle plate thickness is >65.00, the wire channel will be 19.0 deep throughout its path.
2. If the nozzle plate thickness is 60.00 to 65.00, the wire channel will be 19.0 deep throughout its path, but the wire channel cannot cross under the support pad taps because the screws will protrude into the wire channel.
3. If the nozzle plate thickness is 55.00 to <60.00, the wire channel will be 12.7 deep underneath the manifold clearance pocket. The wire channel can be 19.0 deep only outside of the pocket. Also, the wire channel cannot cross under the support pad taps because the screws will protrude into the wire channel.

In order to avoid scenarios 2 and 3, choose the next longer “A” dimension, which will increase the stack height by approximately 20.00mm.

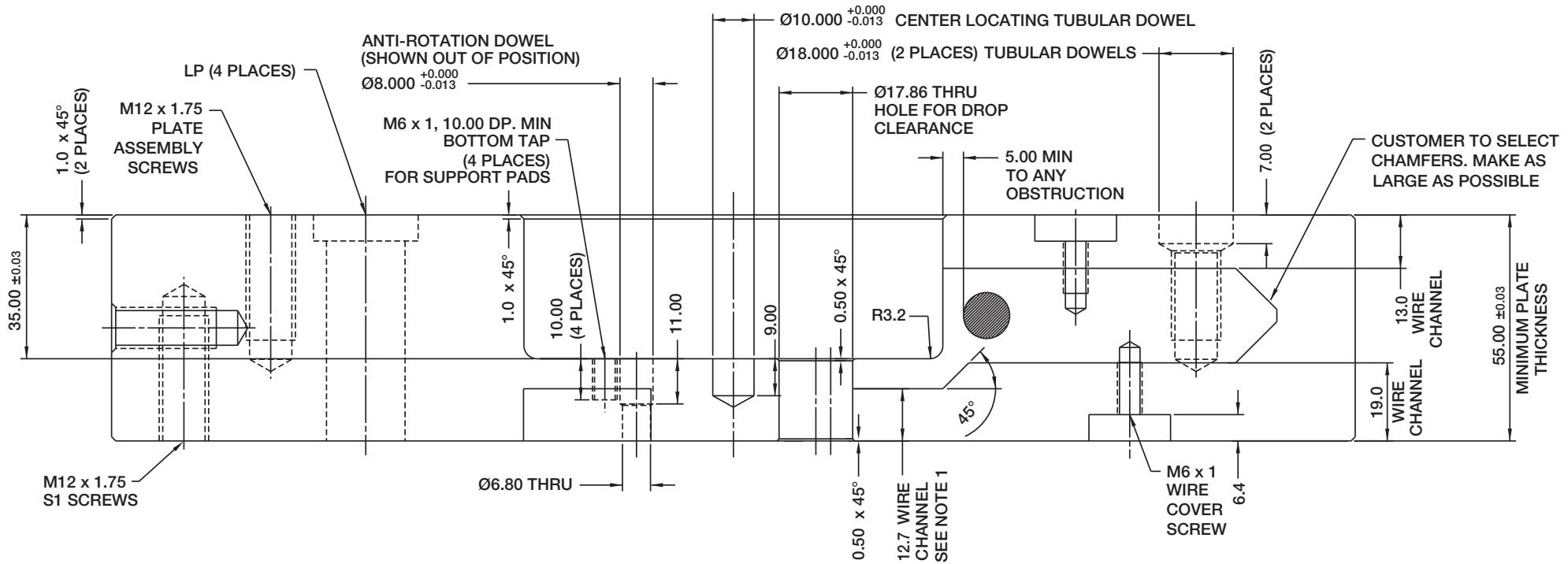
Ø40 Round MNA – Nozzle Plate Machining Detail



**NOTES:**

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 200mm x 302mm mold shown.
2. For inch dimensions, see pages 38-65.

Ø40 Round MNA – Nozzle Plate Machining Detail (continued)

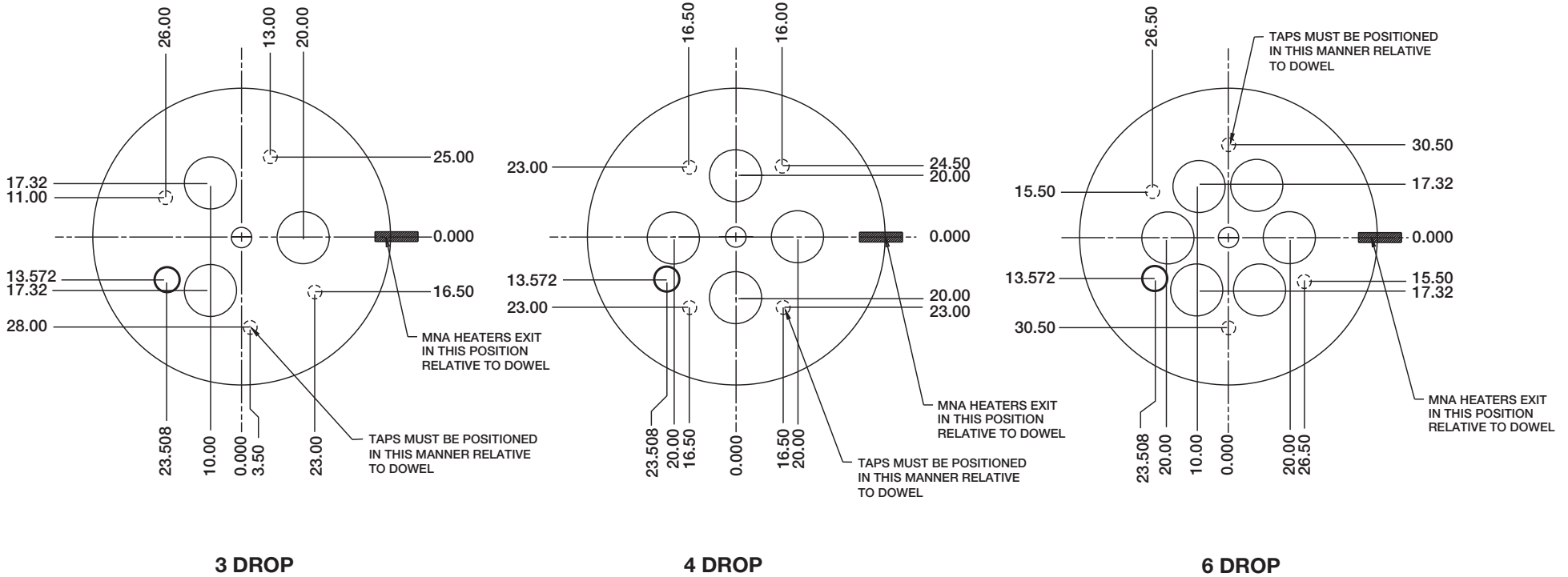


**NOTES:**

1. Wire channel to be 19.0mm deep except when plate thickness does not provide 6.35mm steel support underneath pocket. In that case, wire channel depth to be 12.7mm deep under the pocket and then chamfered (45°) to 19.0mm deep outside the pocket. CAUTION: Wire channel should not be under center support pad.
2. For inch dimensions, see pages 38-65.

Ø40 Round MNA – Nozzle Plate Machining Detail (continued)

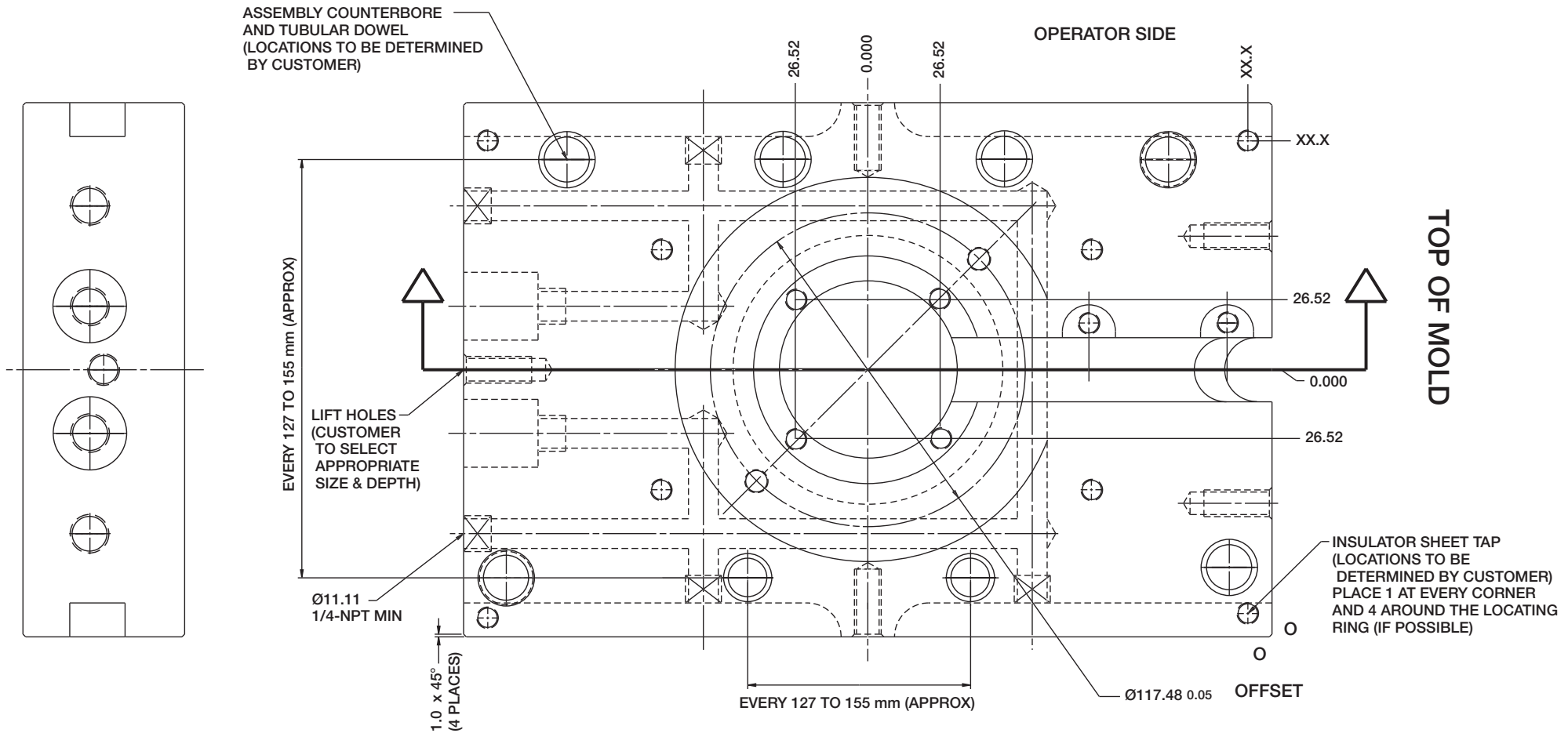
Available Drop Configurations



**NOTE:** For inch dimensions, see pages 38-65.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Ø40 Round MNA – Manifold Retainer Plate Machining Detail



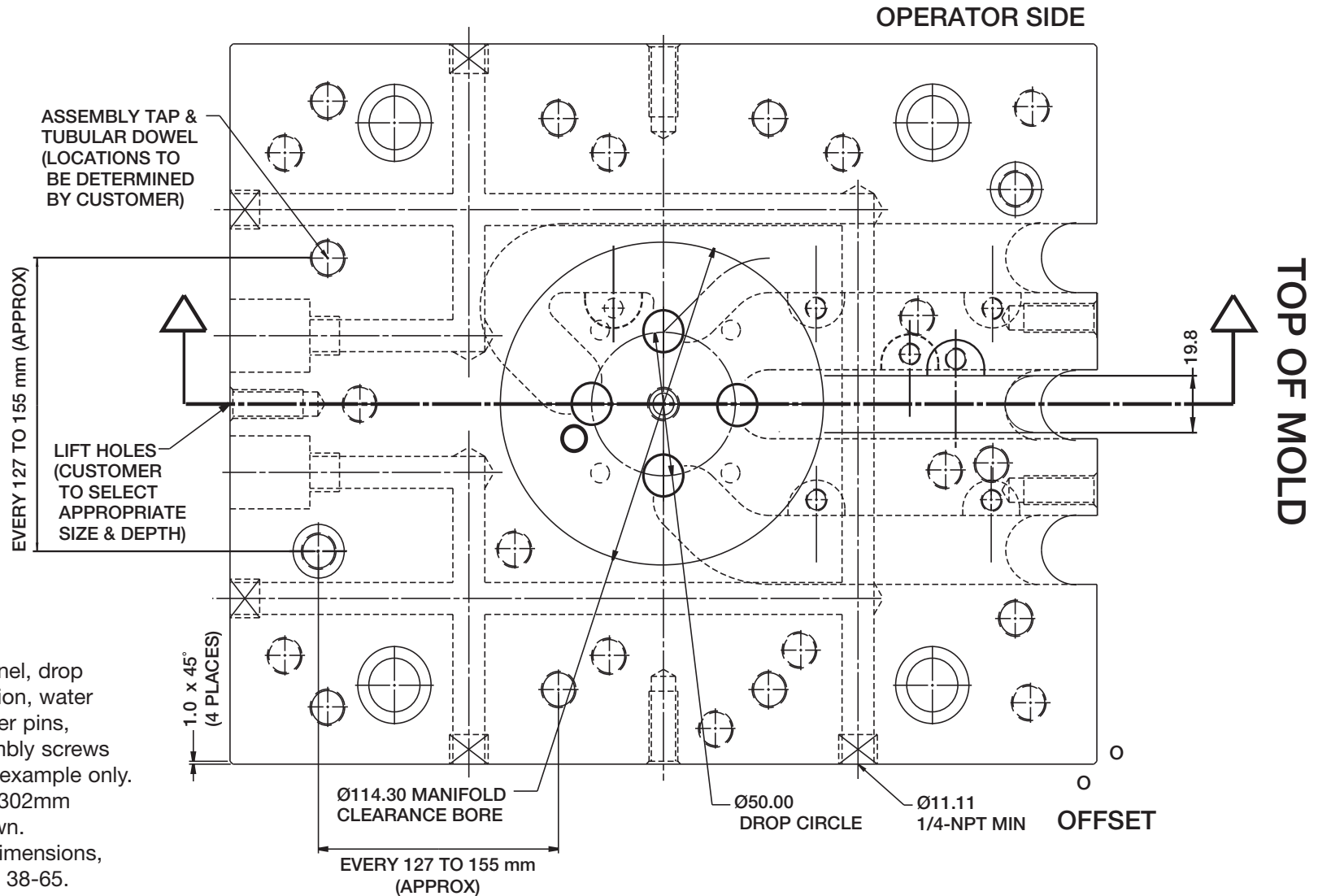
NOTES:

1. Water lines, assembly counterbores and insulator sheet taps shown as example only. 200mm x 302mm mold shown.
2. For inch dimensions, see pages 38-65.





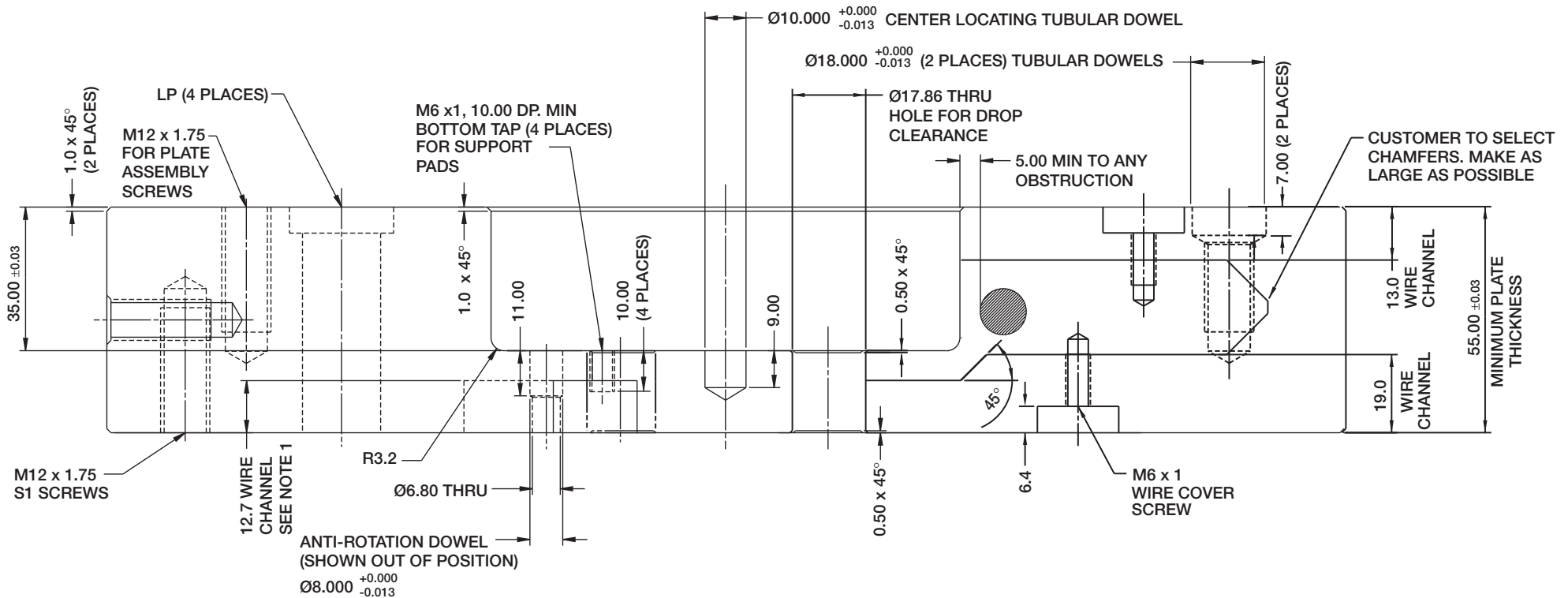
Ø50 Round MNA – Nozzle Plate Machining Detail



NOTES:

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 251mm x 302mm mold shown.
2. For inch dimensions, see pages 38-65.

Ø50 Round MNA – Nozzle Plate Machining Detail (continued)



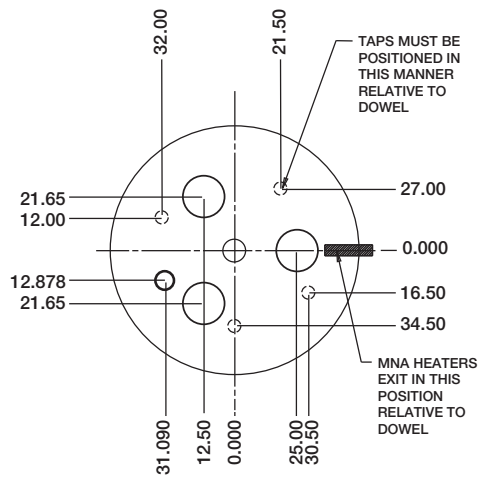
NOTES:

1. Wire channel to be 19.0mm deep except when plate thickness does not provide 6.35mm steel support underneath pocket. In that case, wire channel depth to be 12.7mm deep under the pocket and then chamfered (45°) to 19.0mm deep outside the pocket. CAUTION: Wire channel should not be under center support pad.
2. For inch dimensions, see pages 38-65.

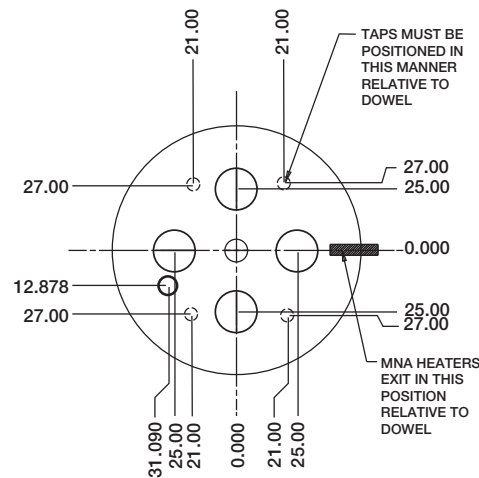
Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Ø50 Round MNA – Nozzle Plate Machining Detail (continued)

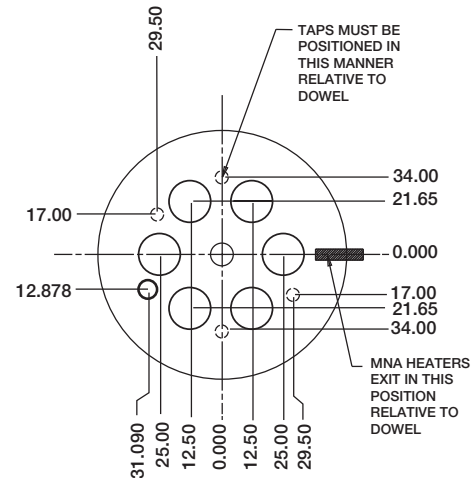
Available Drop Configurations



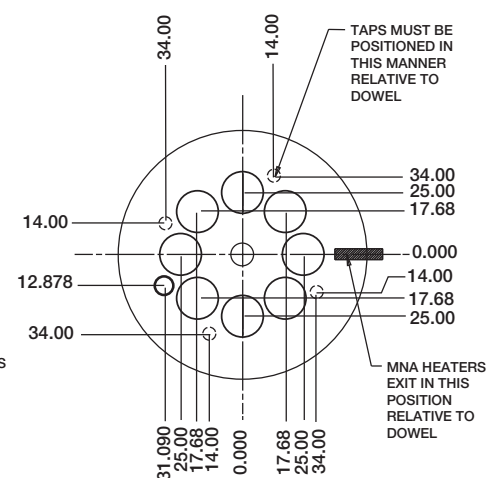
3 DROP



4 DROP



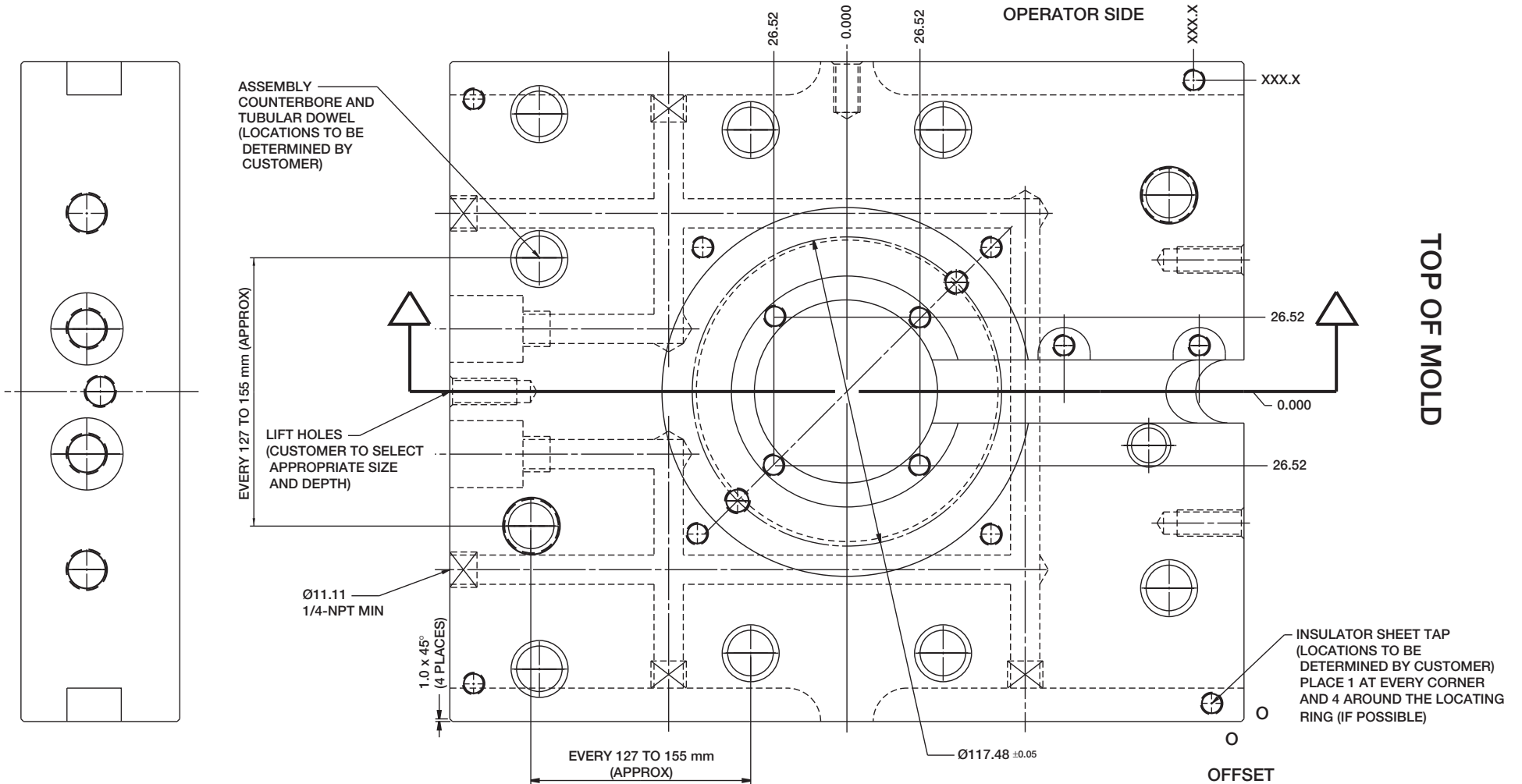
6 DROP



8 DROP

**NOTE:** For inch dimensions, see pages 38-65.

Ø50 Round MNA – Manifold Retainer Plate Machining Detail

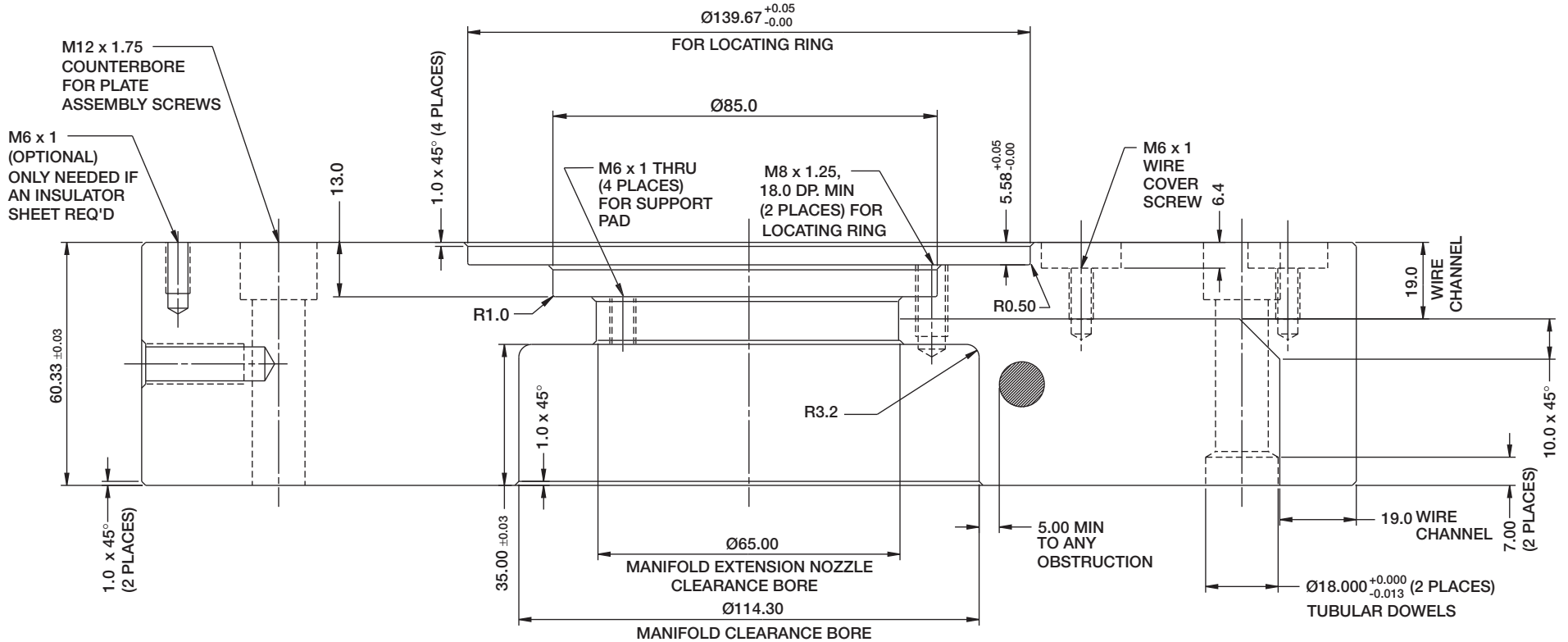


NOTES:

1. Water lines, assembly counterbores and insulator sheet taps shown as example only. 251mm x 302mm mold shown.
2. For inch dimensions, see pages 38-65.

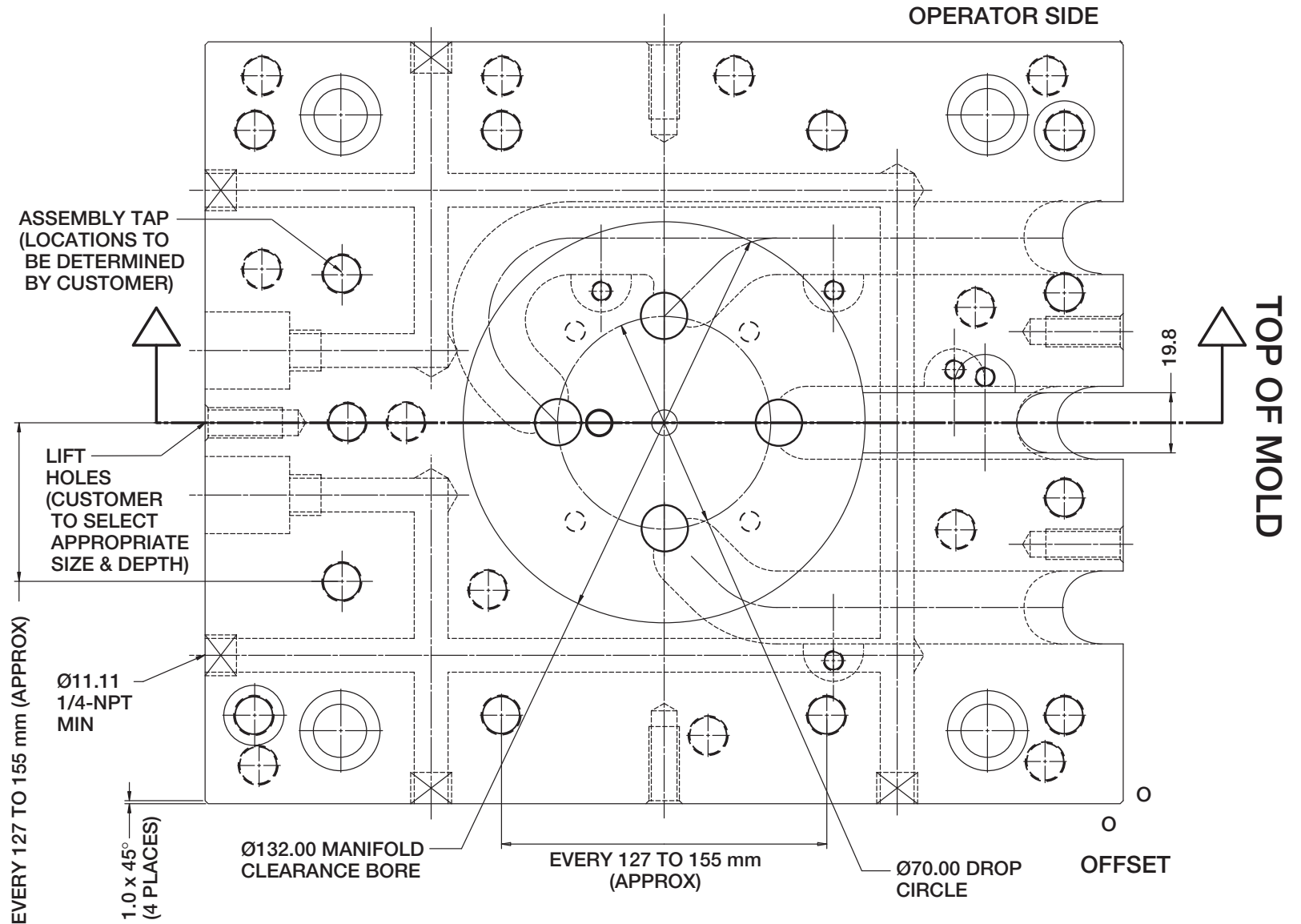
Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Ø50 Round MNA – Manifold Retainer Plate (continued)



NOTE: For inch dimensions, see pages 38-65.

**Ø70 Round MNA – Nozzle Plate Machining Detail**

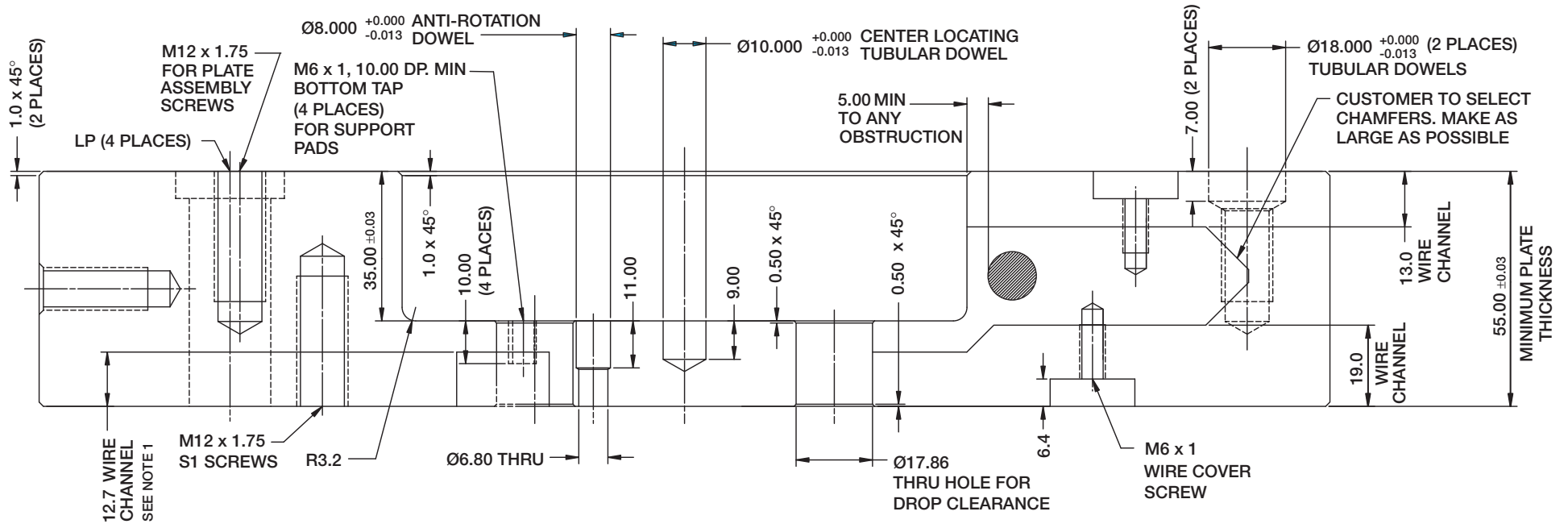


**NOTES:**

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 251mm x 302mm mold shown.
2. For inch dimensions, see pages 38-65.

**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

Ø70 Round MNA – Nozzle Plate Machining Detail (continued)

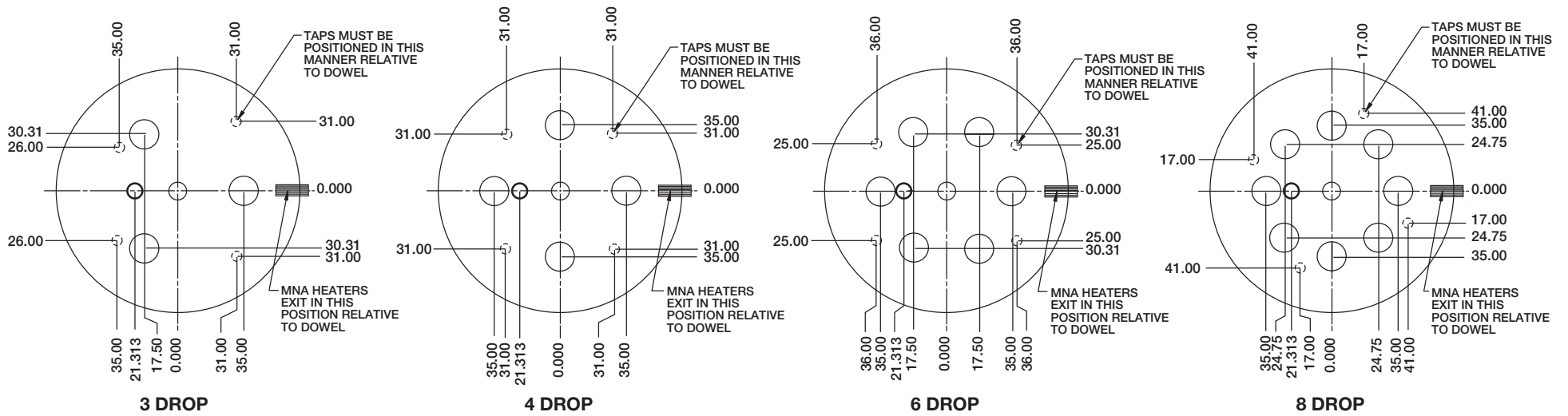


NOTES:

1. Wire channel to be 19.0mm deep except when plate thickness does not provide 6.35mm steel support underneath pocket. In that case, wire channel depth to be 12.7mm deep under the pocket and then chamfered (45°) to 19.0mm deep outside the pocket. CAUTION: Wire channel should not be under center support pad.
2. For inch dimensions, see pages 38-65.

Ø70 Round MNA – Nozzle Plate Machining Detail (continued)

Available Drop Configurations



NOTE: For inch dimensions, see pages 38-65.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

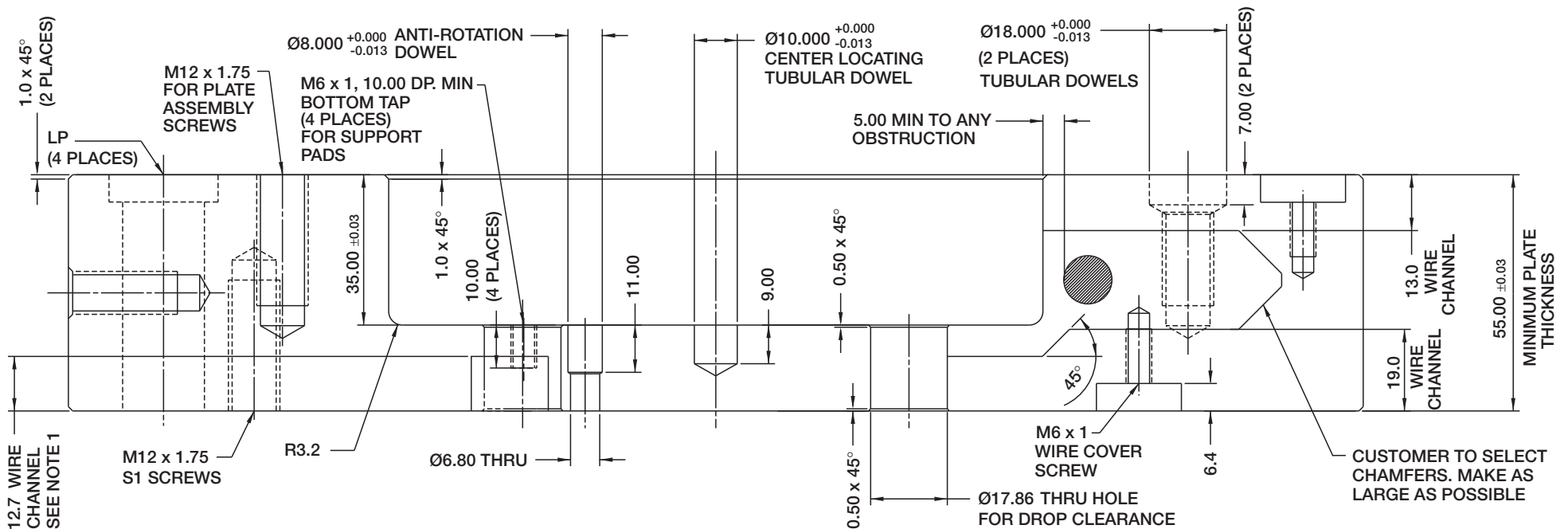








Ø90 Round MNA – Nozzle Plate Machining Detail (continued)



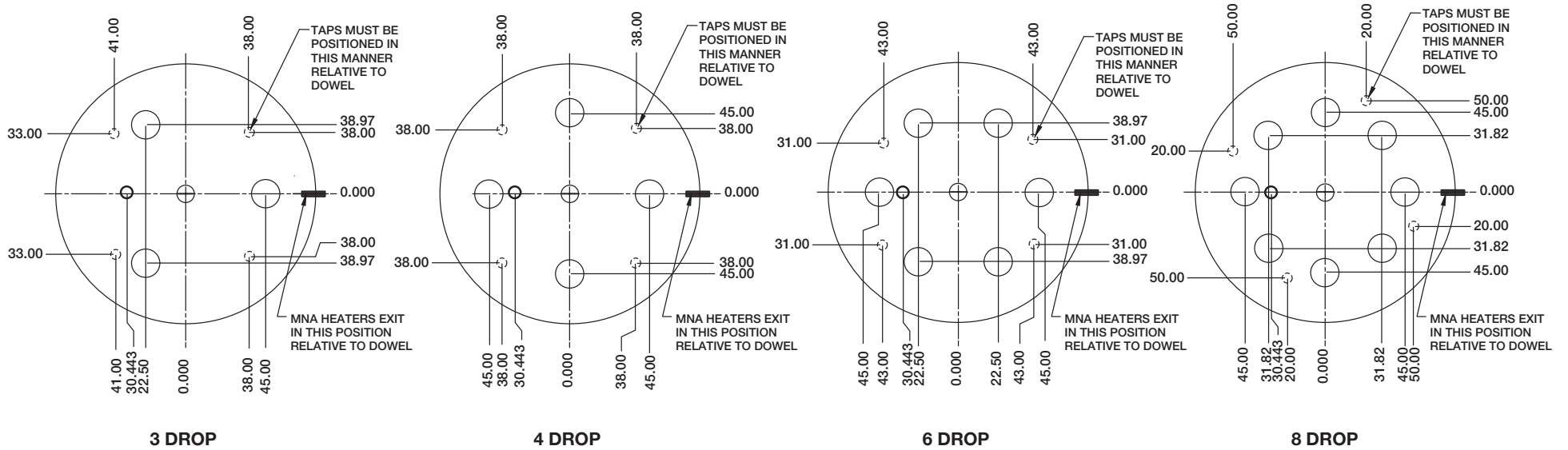
NOTES:

1. Wire channel to be 19.0mm deep except when plate thickness does not provide 6.35mm steel support underneath pocket. In that case, wire channel to be 12.7mm deep under the pocket and then chamfered (45°) to 19.0mm deep outside the pocket.  
CAUTION: Wire channel should not be under center support pad.
2. For inch dimensions, see pages 38-65.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

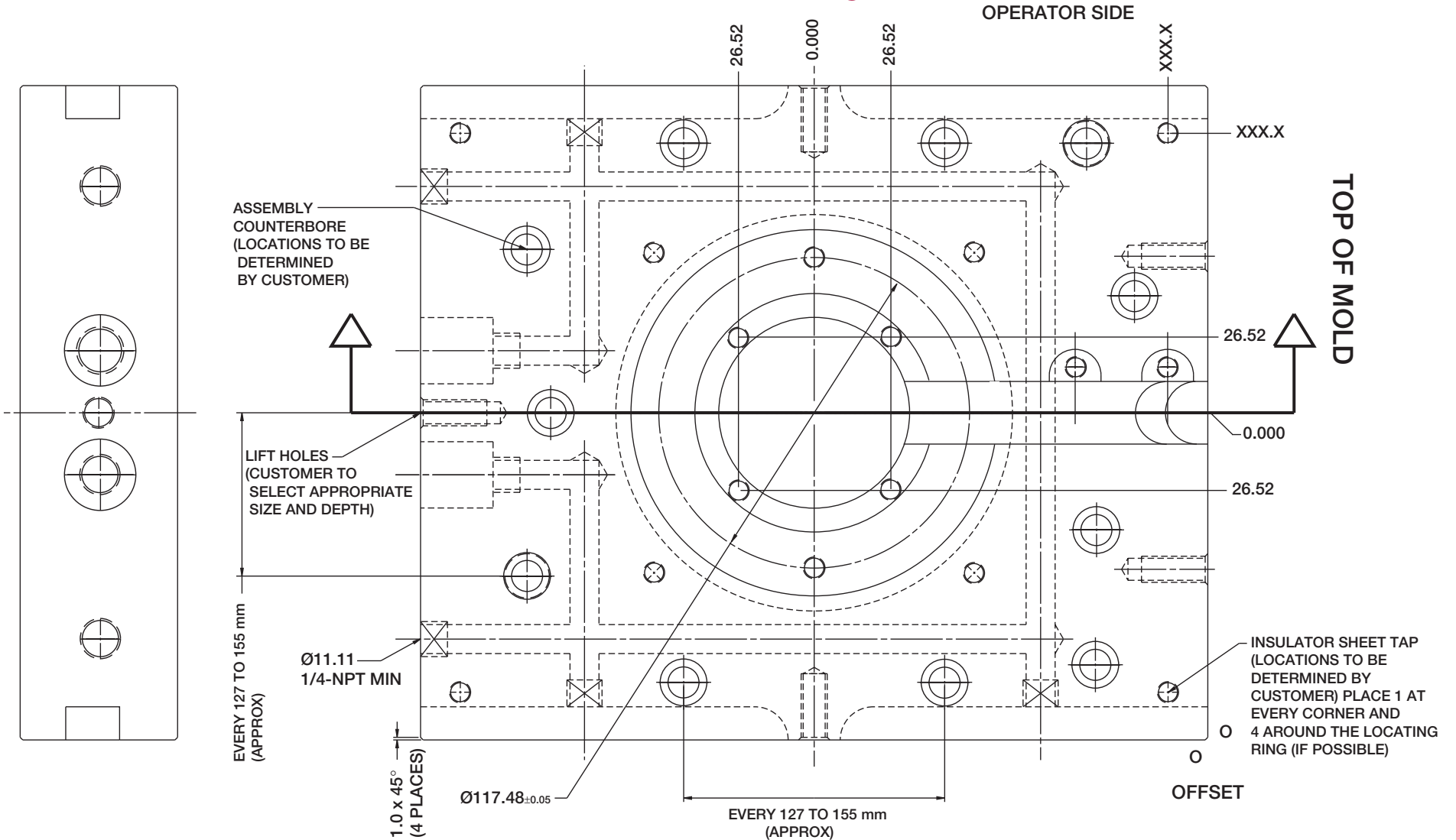
Ø90 Round MNA – Nozzle Plate Machining Detail (continued)

Available Drop Configurations



NOTE: For inch dimensions, see pages 38-65.

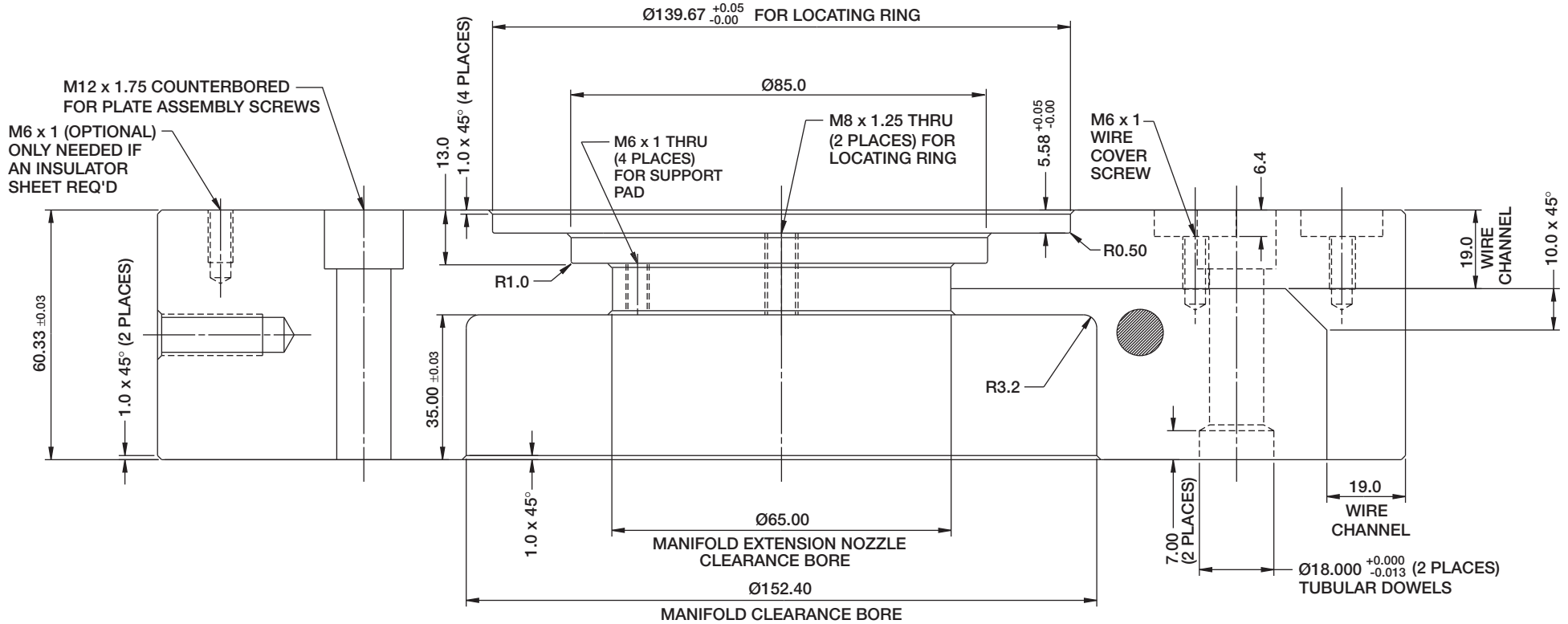
Ø90 Round MNA – Manifold Retainer Plate Machining Detail



**NOTES:**

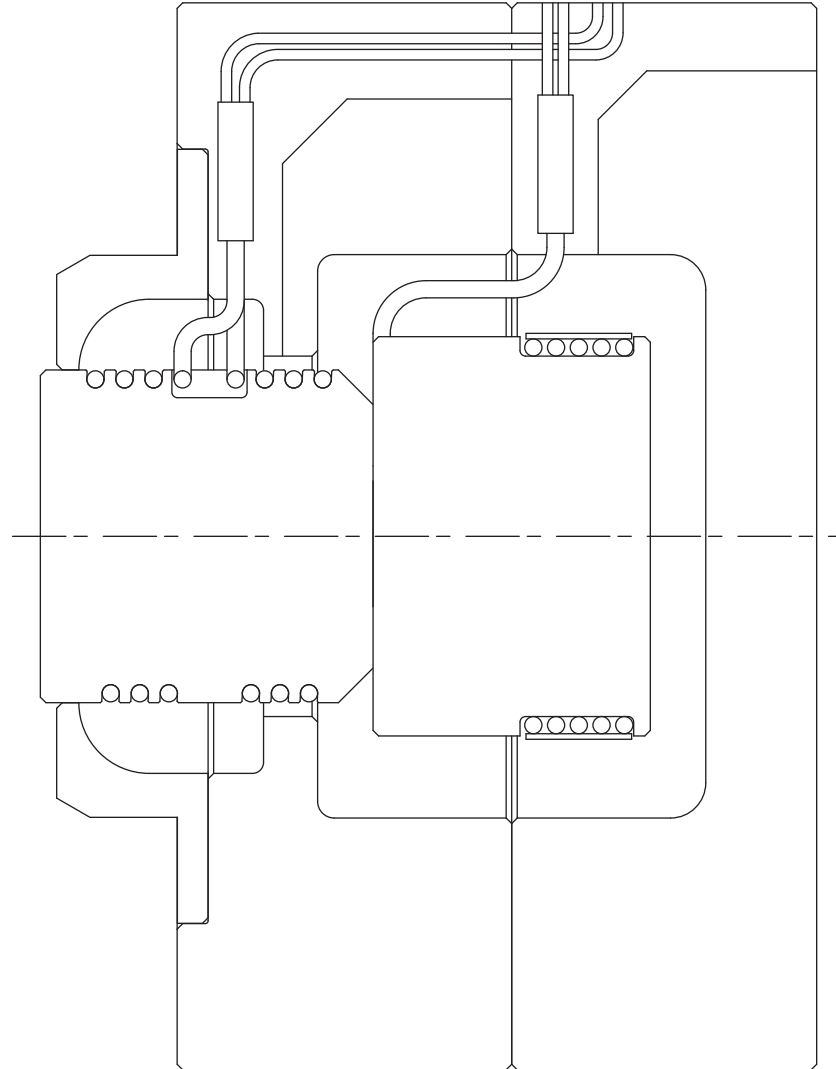
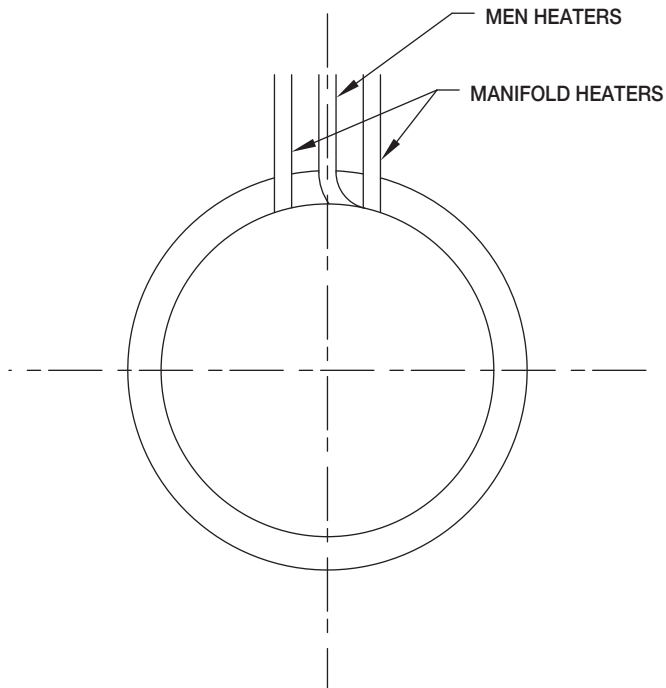
1. Water lines, assembly counterbores and insulator sheet taps shown as example only. 251mm x 302mm mold shown.
2. For inch dimensions, see pages 38-65.

Ø90 Round MNA – Manifold Retainer Plate Machining Detail (continued)



NOTE: For inch dimensions, see pages 38-65.

Round Multi-Nozzle Assemblies  
Manifold Heater Layout

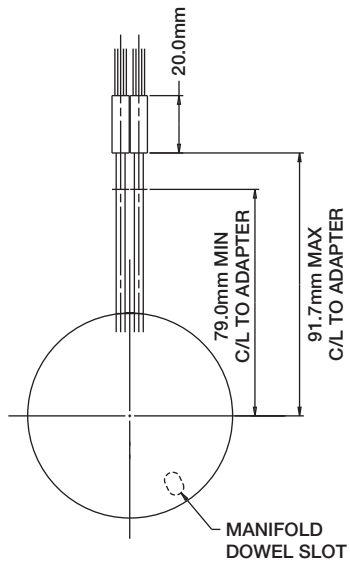


Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

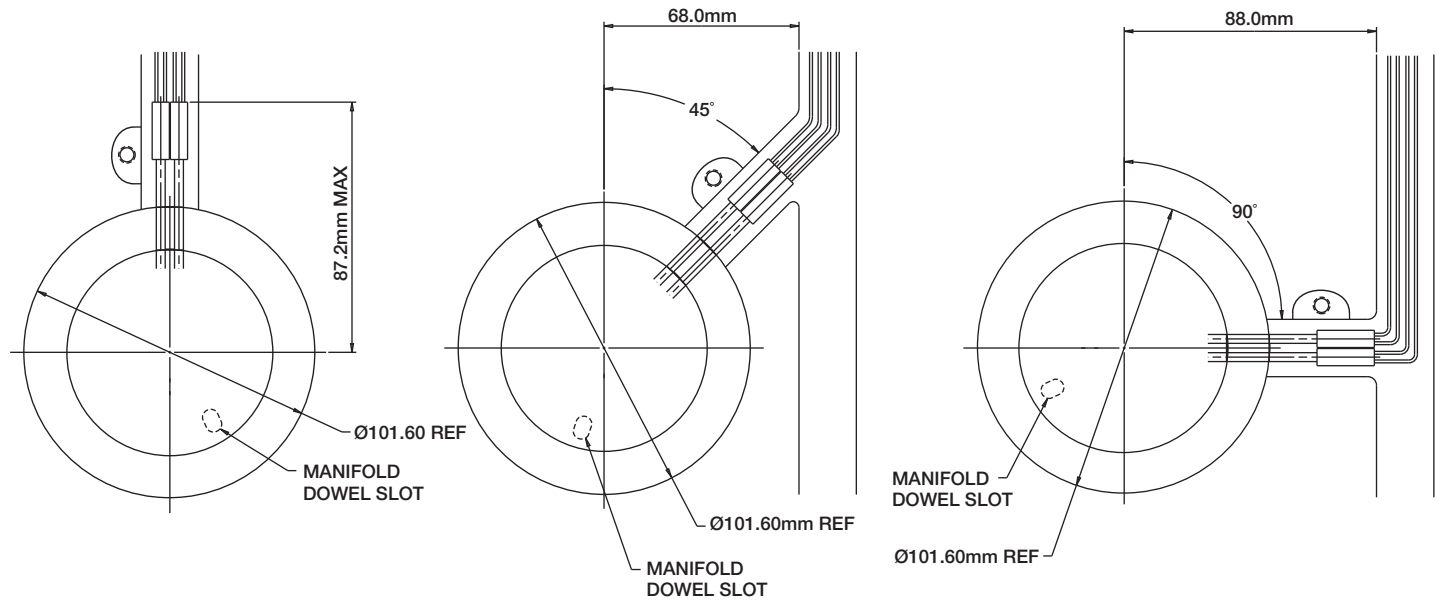


Top Side (MEN) of Round Manifolds

SRD4003, SRD4004 and SRD4006



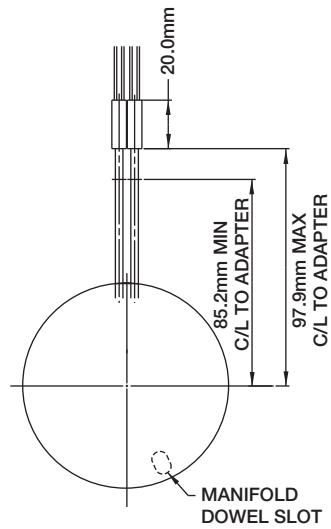
MANIFOLD AND MEN HEATERS  
STRAIGHT BEFORE  
BENDING INTO WIRE SLOT



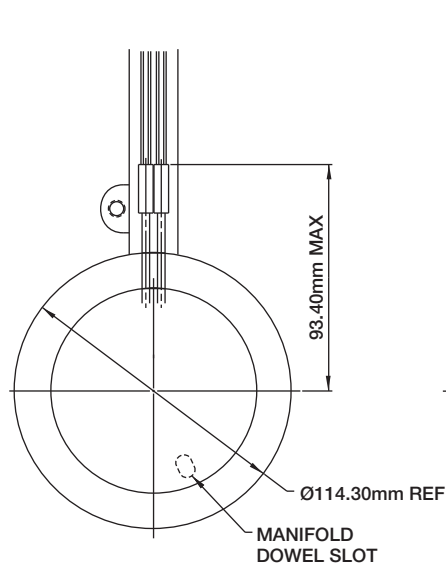
MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT

Top Side (MEN) of Round Manifolds (continued)

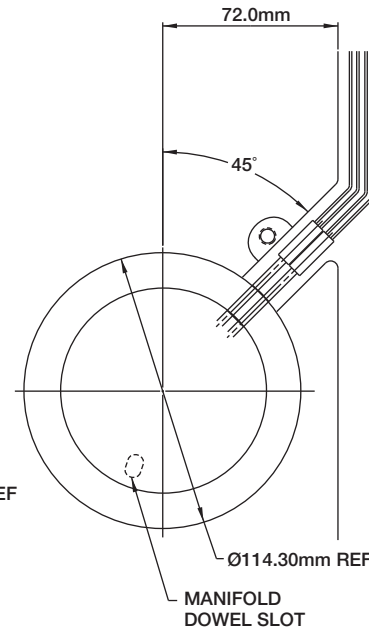
SRD5003, SRD5004, SRD5006 and SRD5008



MANIFOLD AND MEN HEATERS STRAIGHT BEFORE BENDING INTO WIRE SLOT

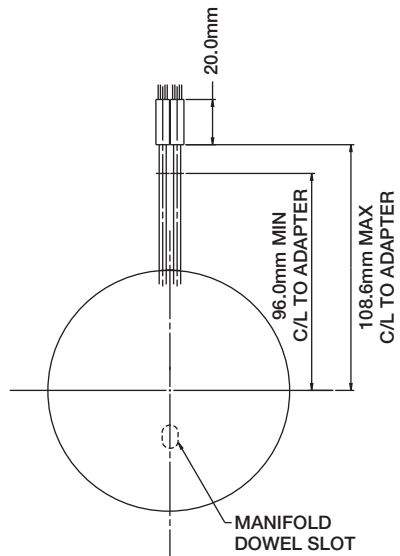


MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT

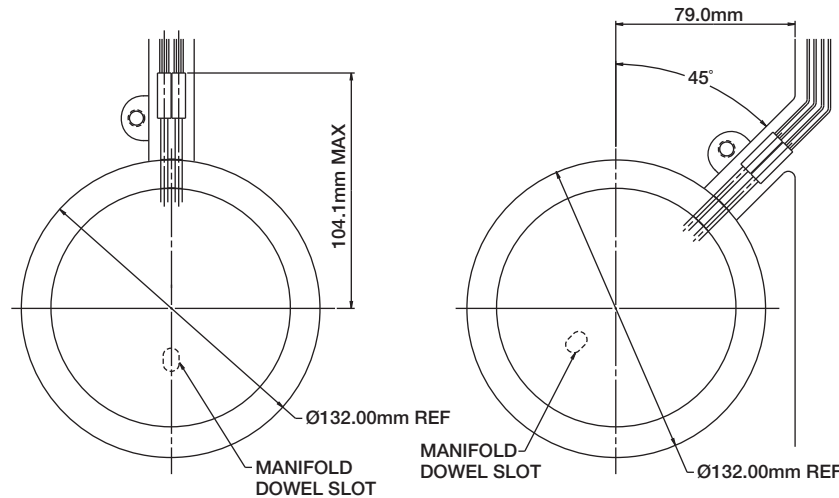


Top Side (MEN) of Round Manifolds (continued)

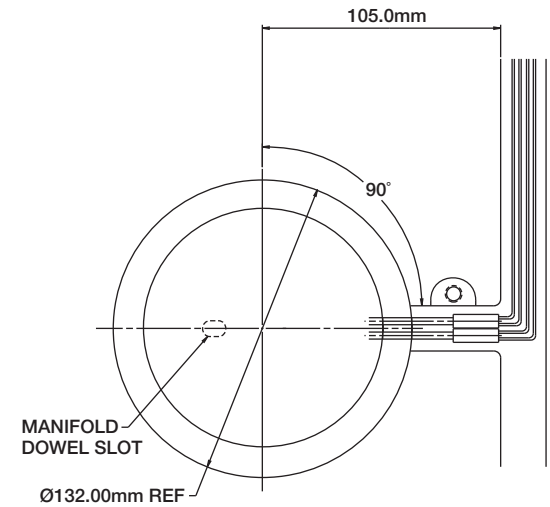
SRD7003, SRD7004, SRD7006 and SRD7008



MANIFOLD AND MEN HEATERS  
STRAIGHT BEFORE  
BENDING INTO WIRE SLOT

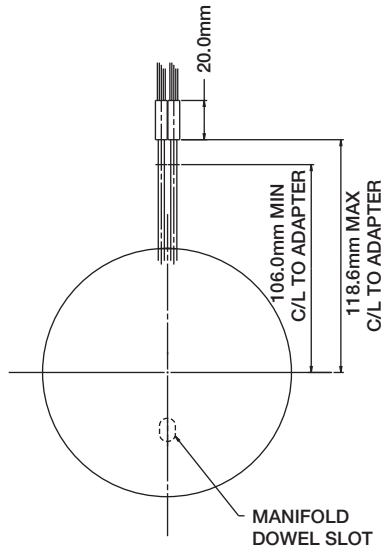


MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT

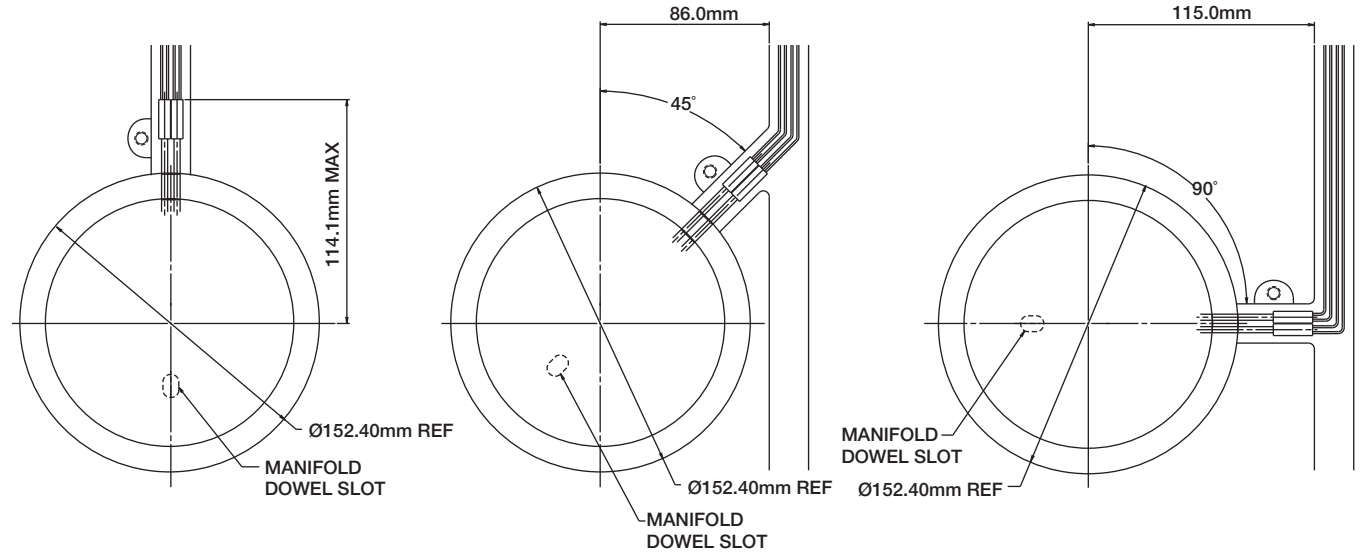


Top Side (MEN) of Round Manifolds (continued)

SRD9003, SRD9004, SRD9006 and SRD9008

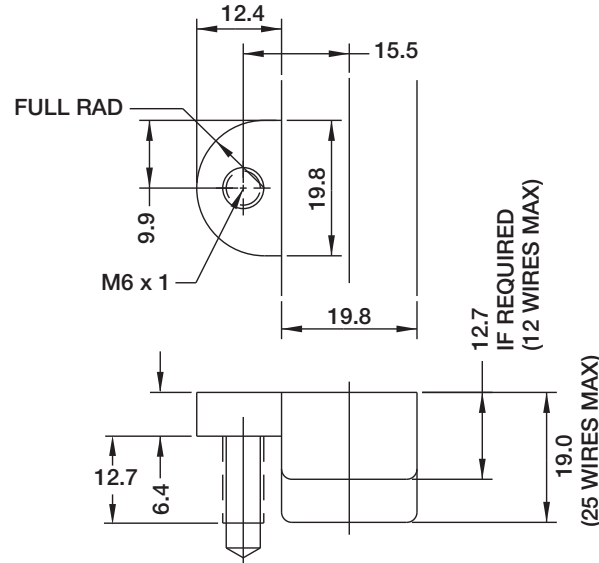
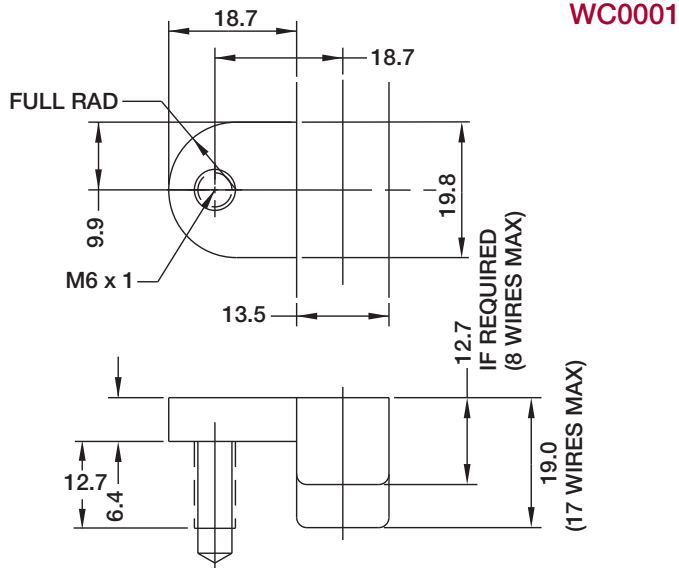


MANIFOLD AND MEN HEATERS  
STRAIGHT BEFORE  
BENDING INTO WIRE SLOT



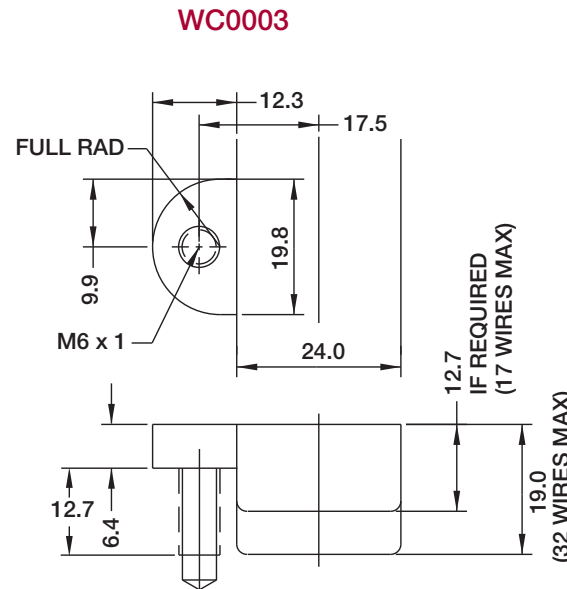
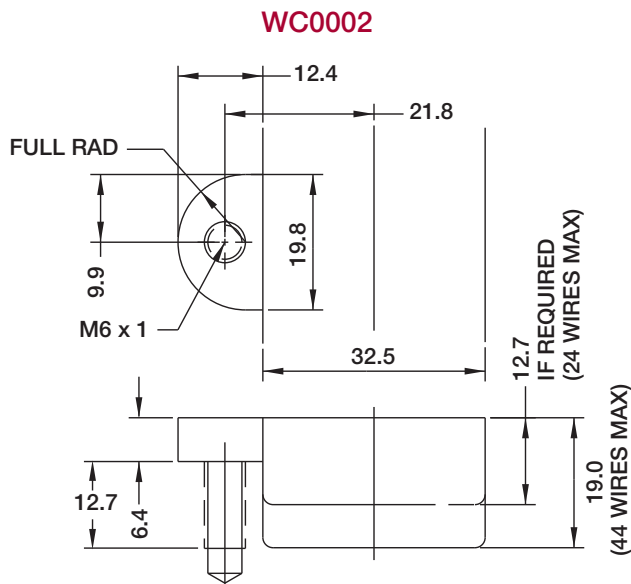
MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT

Wire Cover Pocket Machining Details

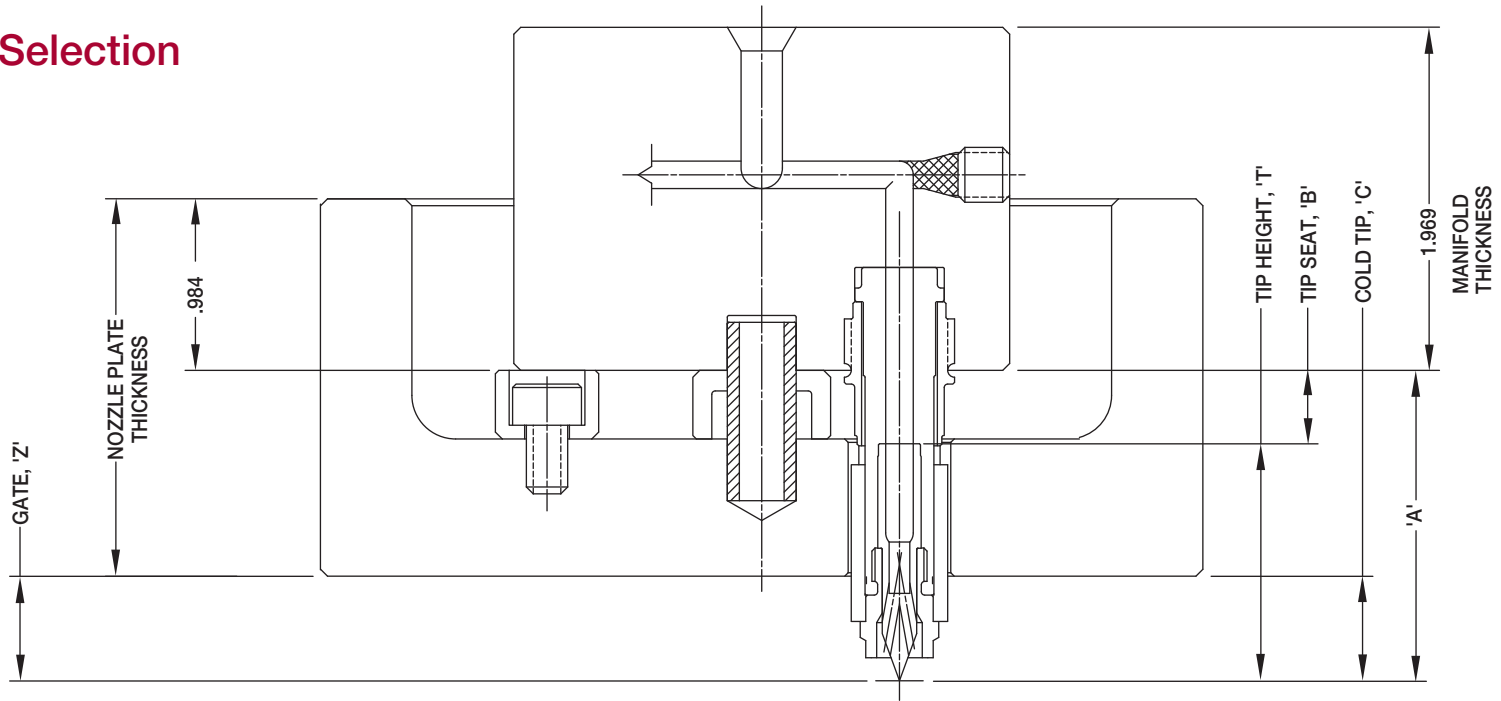


**NOTES:**

1. Use M6 x 12mm long BHCS and torque to 16 N.m (11.7 ft.-lbs.) for each wire cover.
2. To facilitate assembly use 75% of the maximum number of wires. Nozzle heater = 2 wires; Manifold heaters = 4 wires (total); MEN heaters = 4 wires (total); Nozzle thermocouple = 1 wire; Manifold thermocouple = 1 wire; MEN thermocouple = 1 wire.
3. Radius all wire channels to suit.
4. For inch dimensions, see pages 38-65.



### Nozzle Selection



### Tip Information for Gating Styles

TIP Sub-Assembly Item No.	Gating Style	TIP CTE (10-6/degF)	"T" = "A" - "B" (inch)	Applicable Stellar System
SXG5110	Standard Point Gate Tip Sub-Assembly	9.72	1.3543	Standard
SXG5020	High Performance Point Gate Tip Sub-Assembly	3.06	1.3543	High Performance
SXG5201	High Performance Thru Hole Tip Sub-Assembly	3.06	1.3543	High Performance
SXT1040	Sprue Gate	7.11	1.3543	Standard

### "A" and "B" Chart for Gating Styles

Nozzle Sub-Assembly Item No.	Point Gate "A"	Sprue Gate "A"	"B"	Notes
SXY0065 SXY0965	2.563	N/A	1.209	Standard coil heater; High performance heater
SXY0085 SXY0985	3.350	N/A	1.996	Standard coil heater; High performance heater
SXY0105 SXY0905	4.138	N/A	2.783	Standard coil heater; High performance heater
SXY0125 SXY0925	4.925	N/A	3.570	Standard coil heater; High performance heater
SXY0145 SXY0945	5.712	N/A	4.358	Standard coil heater; High performance heater
SXY8065	N/A	2.563	1.209	Standard coil heater with snap ring
SXY8085	N/A	3.350	1.996	Standard coil heater with snap ring
SXY8105	N/A	4.138	2.783	Standard coil heater with snap ring
SXY8125	N/A	4.925	3.570	Standard coil heater with snap ring
SXY8145	N/A	5.712	4.358	Standard coil heater with snap ring

**NOTE:** All units are in inches.

### Inch Calculations

#### Equations

1. “Z” = “C” + Expansion

**NOTE:** The minimum “Z” dimension is 0.512 for the point gate and sprue gate. The maximum “Z” dimension is 4.528 for the point gate and sprue gate.

2. Nozzle Plate Thickness =  $0.984 + \text{“A”} - \text{“C,” Thickness} \geq 2.165$

3. Expansion =  $\Delta T (^{\circ}\text{F}) \times [0.00000639 \times (\text{Manifold Thickness} + \text{“B”}) + \text{CTE tip} \times \text{“T”}] - 0.0035 + 0.00000639 \times [T_{\text{mold}}(^{\circ}\text{F}) - 68]$

**NOTE:** Valid for point gate tips. For the sprue gate tips use the point gate nozzle plate thickness.

4. Upper Support Ring Gap =  $(\Delta T (^{\circ}\text{F}) \times 0.00000639 \times \text{Manifold Thickness}) - 0.0011811$

Where: CTE tip is the coefficient of thermal expansion of the tip

$\Delta T (^{\circ}\text{F}) = T_{\text{melt}} - T_{\text{mold}}$  (expressed in  $^{\circ}\text{F}$ )

$\Delta T (^{\circ}\text{F}) = \Delta T (^{\circ}\text{C}) / 1.8$

“Z,” “C,” “B,” “T,” Upper Support Ring Gap, Expansion and Nozzle Plate Thickness are all expressed in inches.

#### Procedure and Notes

1. Calculate expansion
2. Calculate “C”
3. Calculate plate thickness
4. Calculate upper support ring gap

The calculations may need to be repeated in order to maintain the nozzle plate thickness requirement. **NOTE:** Start with the smallest “A” dimension and increase “A” dimension as needed. This approach will generate a design with the minimum stack height.

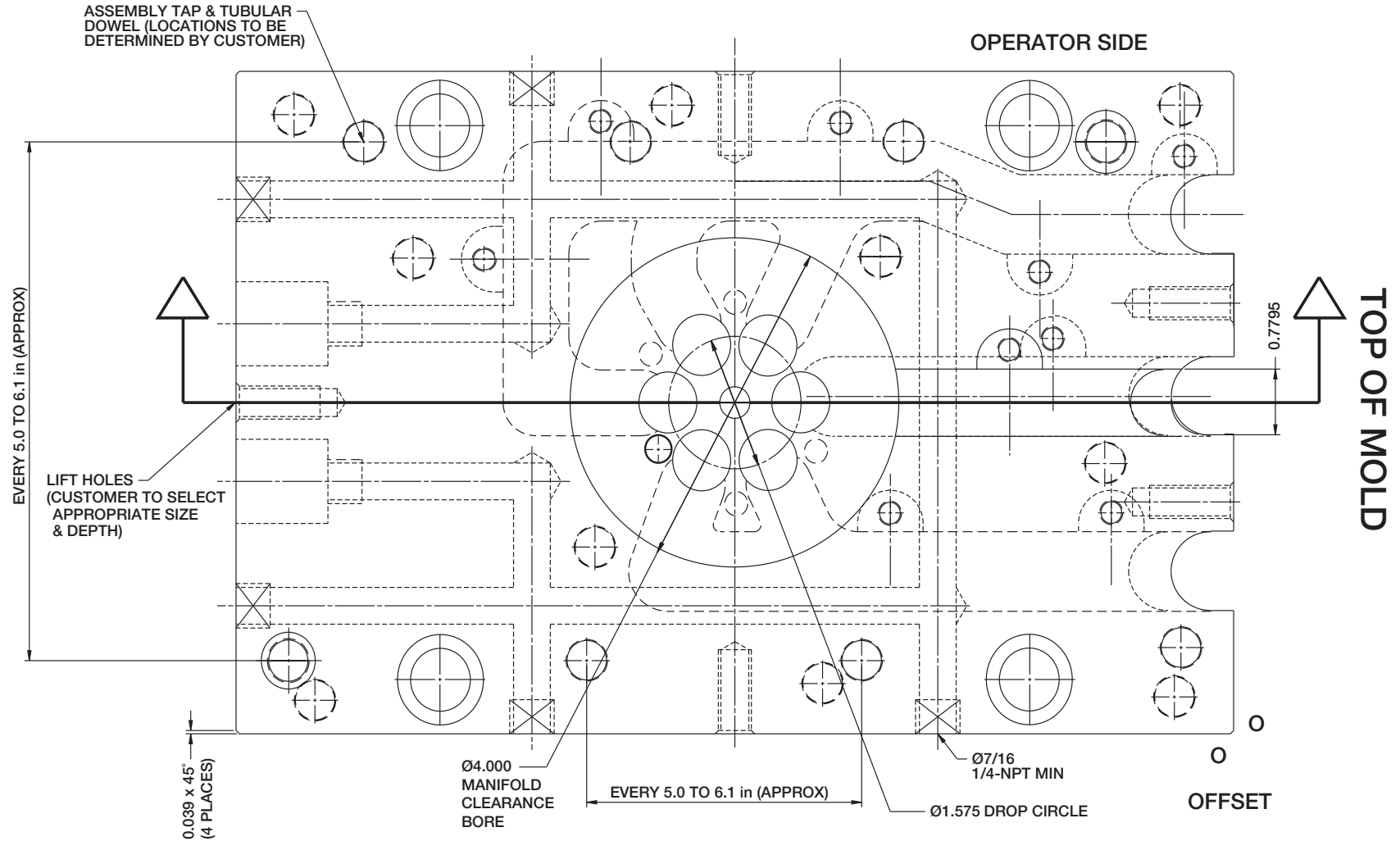
#### Design Suggestions

The most difficult area of design will be the layout of the wire channels in the nozzle plate. Please evaluate the wire channel depth and path carefully. Three possible scenarios (1 = simplest; 2 = more difficult; 3 = most difficult):

1. If the nozzle plate thickness is  $>2.559$ , the wire channel will be 0.75 deep throughout its path.
2. If the nozzle plate thickness is 2.362 to 2.559, the wire channel will be 0.75 deep throughout its path, but the wire channel cannot cross under the support pad taps because the screws will protrude into the wire channel.
3. If the nozzle plate thickness is 2.165 to  $<2.362$ , the wire channel will be .50 deep underneath the manifold clearance pocket. The wire channel can be 0.75 deep only outside of the pocket. Also, the wire channel cannot cross under the support pad taps because the screws will protrude into the wire channel.

In order to avoid scenarios 2 and 3, choose the next longer “A” dimension, which will increase the stack height by approximately 0.787 inches.

Ø40 Round MNA – Nozzle Plate Machining Detail



**NOTES:**

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 7-7/8" x 11-7/8" mold shown.
2. For metric dimensions, see pages 10-37.

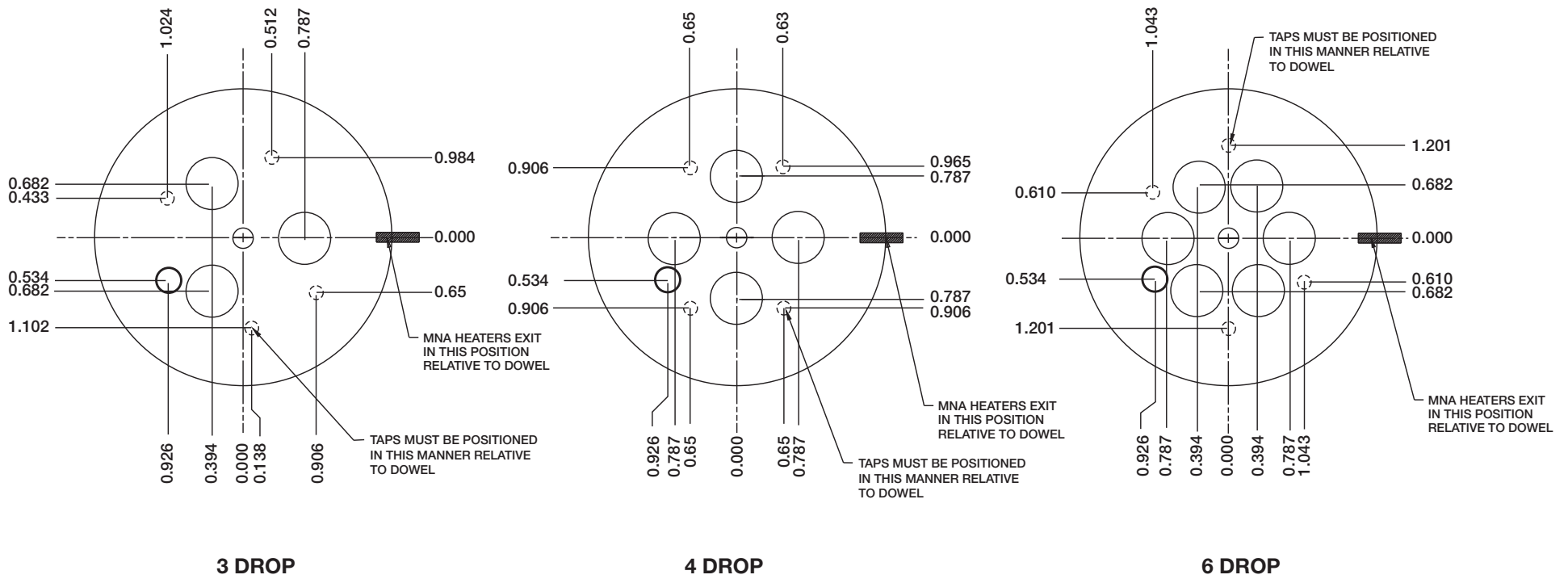
**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**





Ø40 Round MNA – Nozzle Plate Machining Detail (continued)

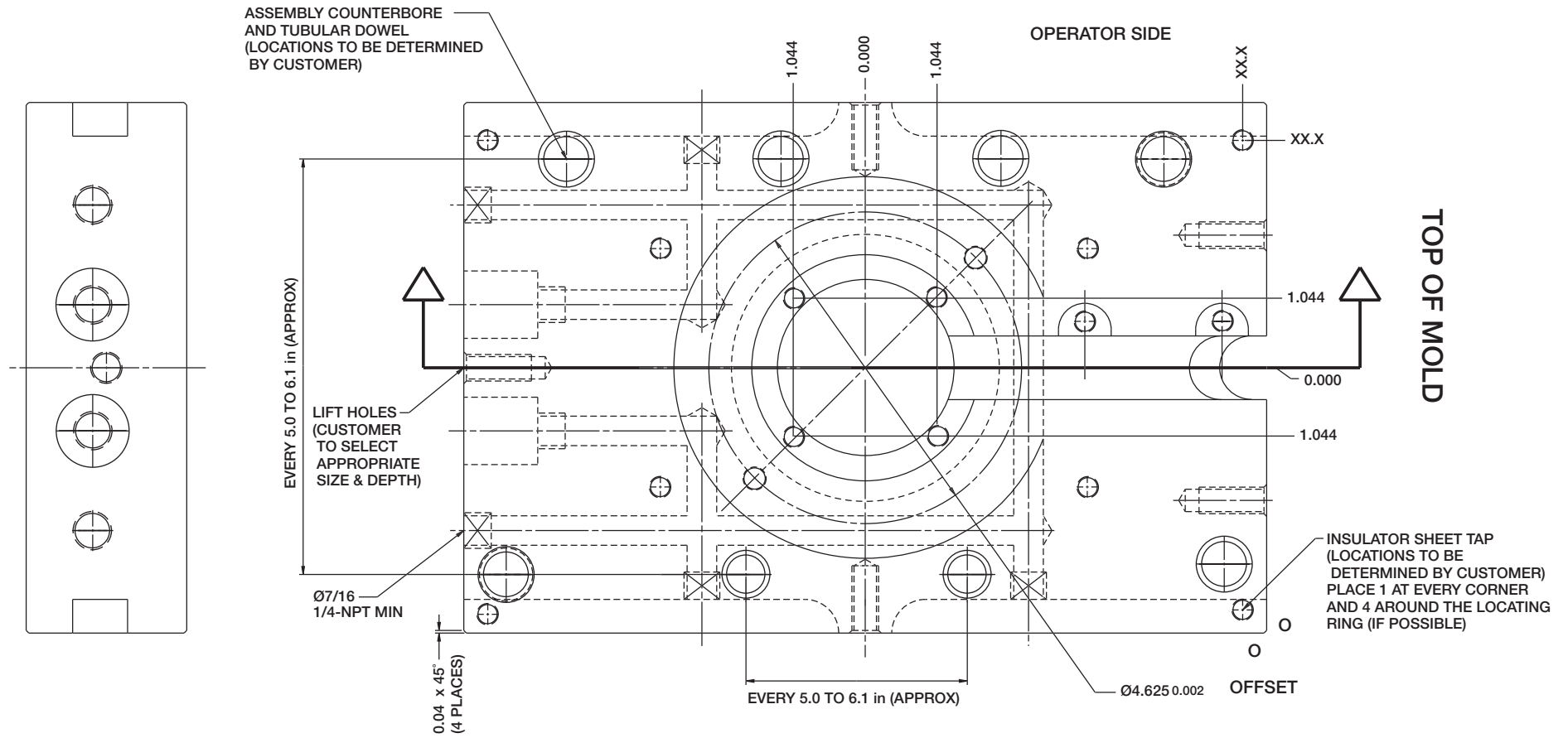
Available Drop Configurations



NOTE: For metric dimensions, see pages 10-37.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

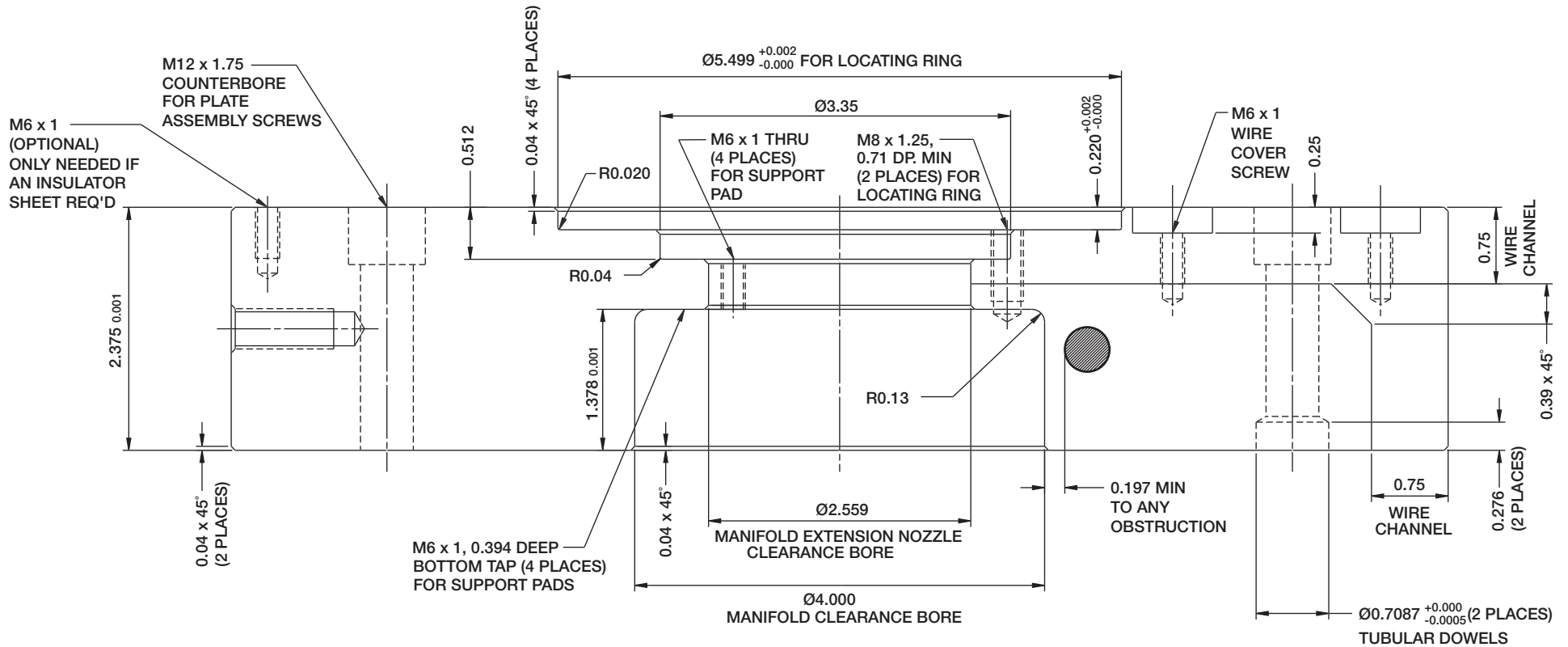
Ø40 Round MNA – Manifold Retainer Plate Machining Detail



NOTES:

1. Water lines, assembly counterbores and insulator sheet taps shown as example only. 7-7/8" x 11-7/8" mold shown.
2. For metric dimensions, see pages 10-37.

Ø40 Round MNA – Manifold Retainer Plate Machining Detail (continued)

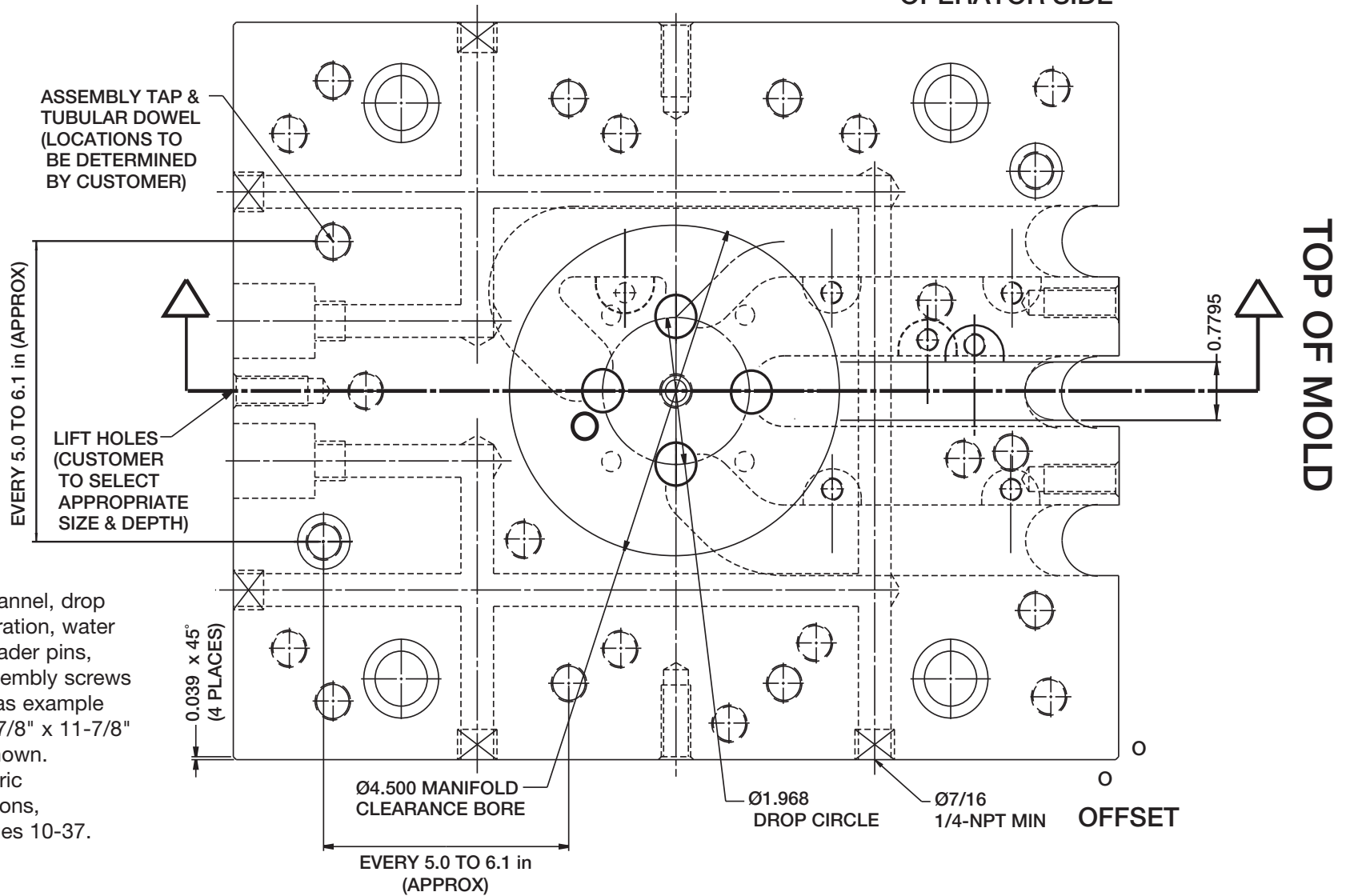


NOTE: For metric dimensions, see pages 10-37.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Ø50 Round MNA – Nozzle Plate Machining Detail

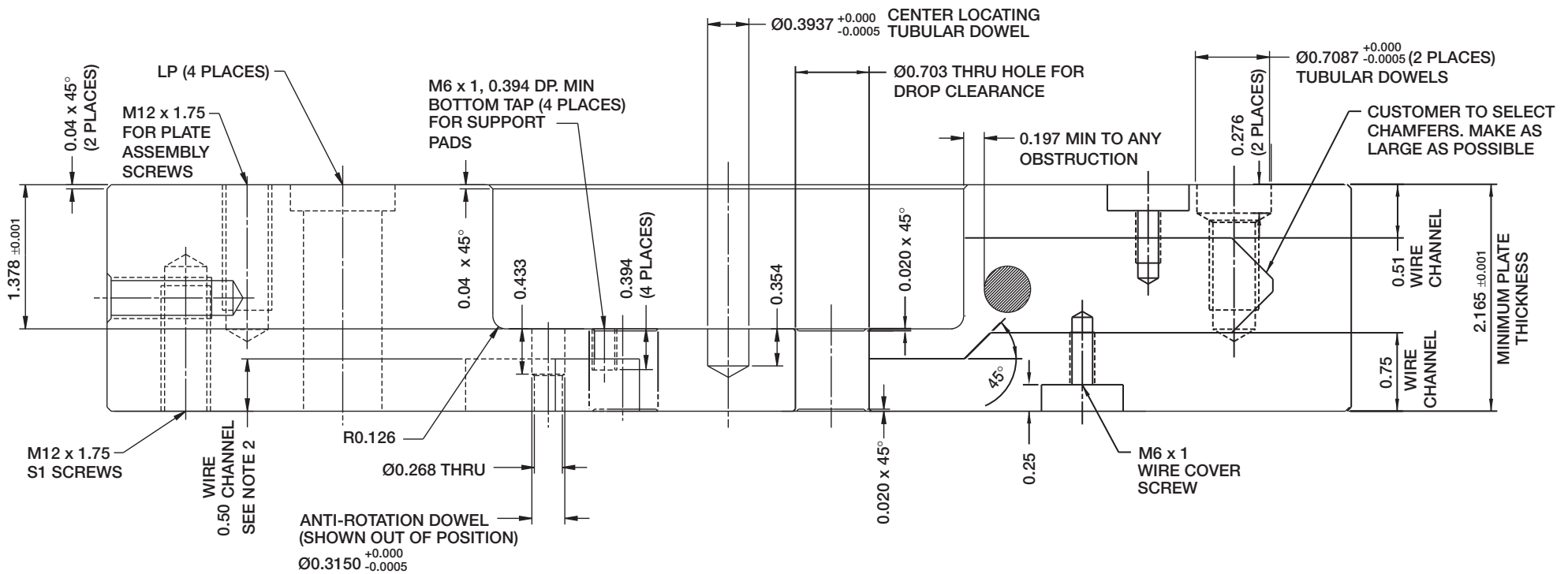
OPERATOR SIDE



NOTES:

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 9-7/8" x 11-7/8" mold shown.
2. For metric dimensions, see pages 10-37.

Ø50 Round MNA – Nozzle Plate Machining Detail (continued)



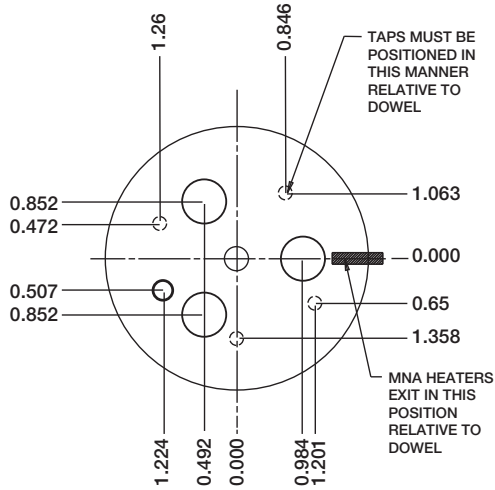
NOTES:

1. Metric screws are required for assembly.
2. Wire channel to be 0.75 inch deep except when plate thickness does not provide 0.25 inch steel support underneath pocket. In that case, wire channel depth to be 0.5 inch deep under the pocket and then chamfered (45°) to 0.75 inch deep outside the pocket.  
CAUTION: Wire channel should not be under center support pad.
3. For metric dimensions, see pages 10-37.

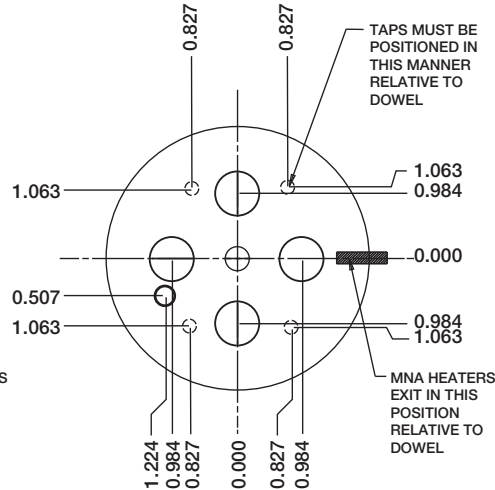
Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Ø50 Round MNA – Nozzle Plate Machining Detail (continued)

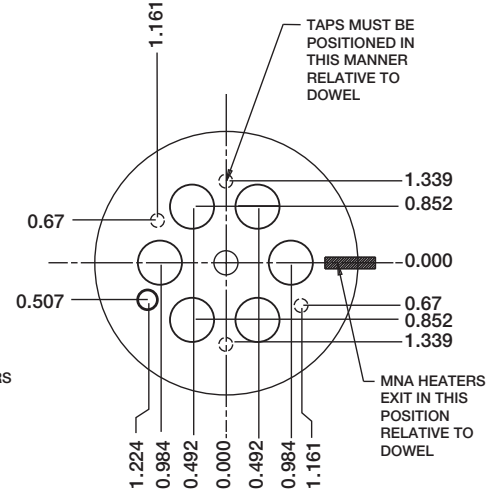
Available Drop Configurations



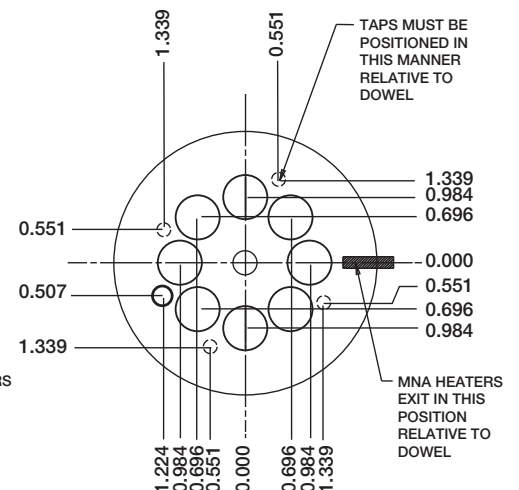
3 DROP



4 DROP



6 DROP



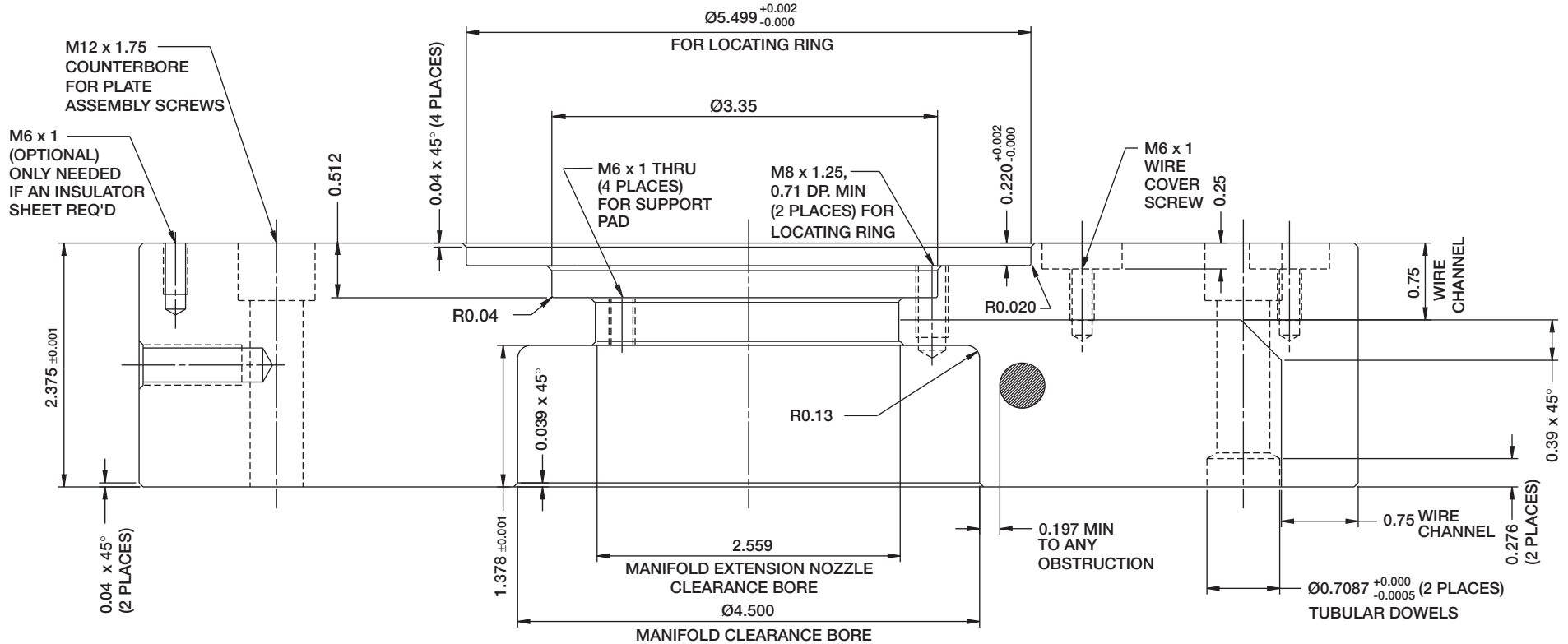
8 DROP

NOTE: For metric dimensions, see pages 10-37.



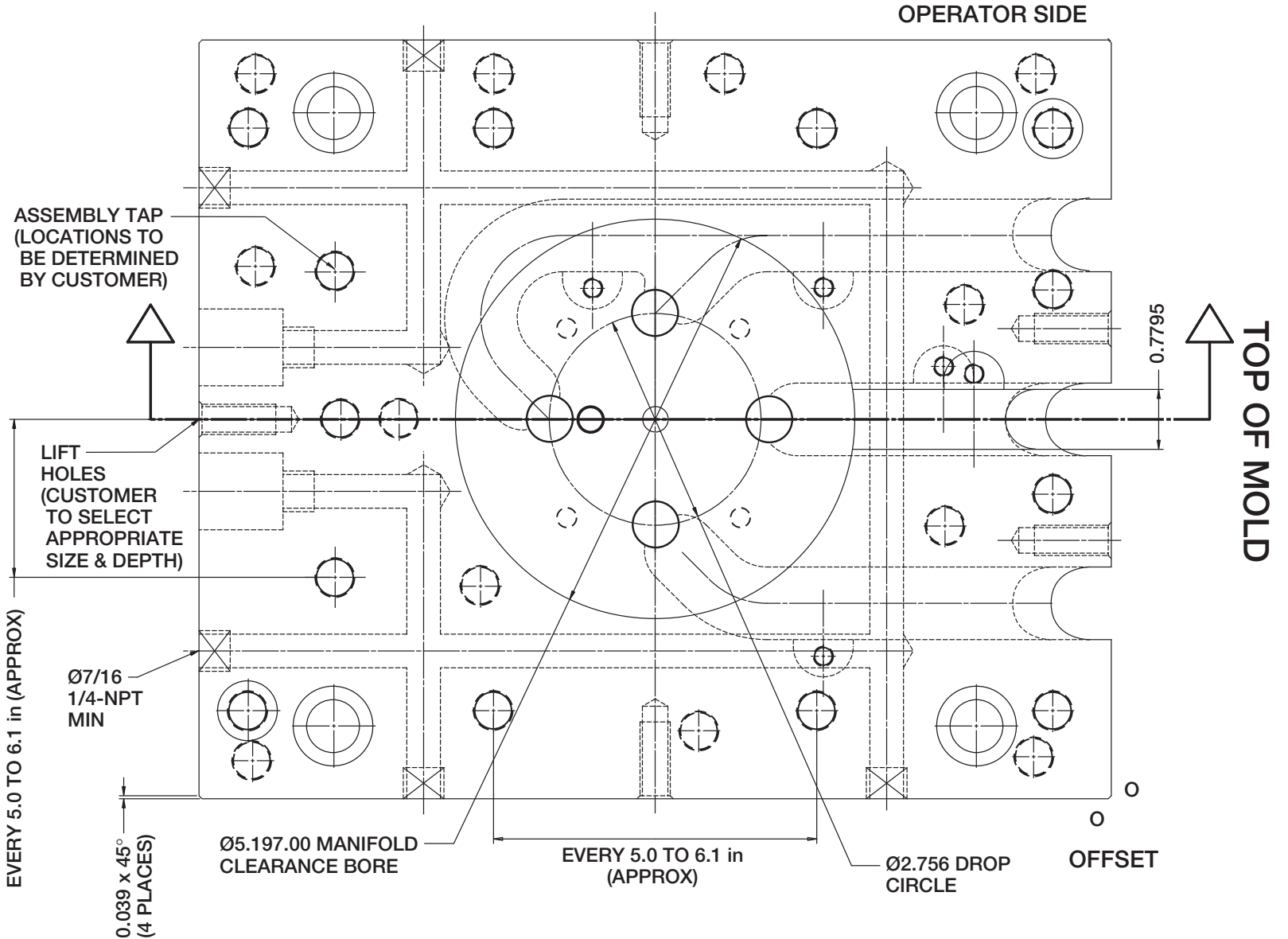


Ø50 Round MNA – Manifold Retainer Plate (continued)



NOTE: For metric dimensions, see pages 10-37.

Ø70 Round MNA – Nozzle Plate Machining Detail

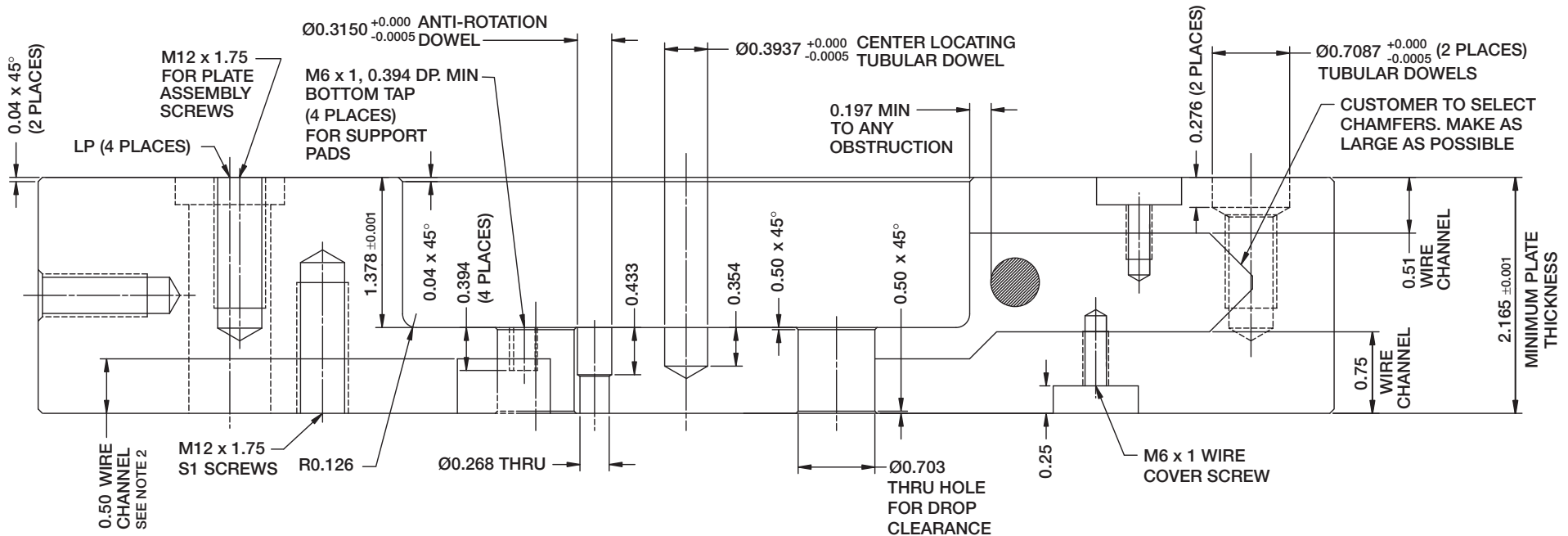


**NOTES:**

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 9-7/8" x 11-7/8" mold shown.
2. For metric dimensions, see pages 10-37.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Ø70 Round MNA – Nozzle Plate Machining Detail (continued)



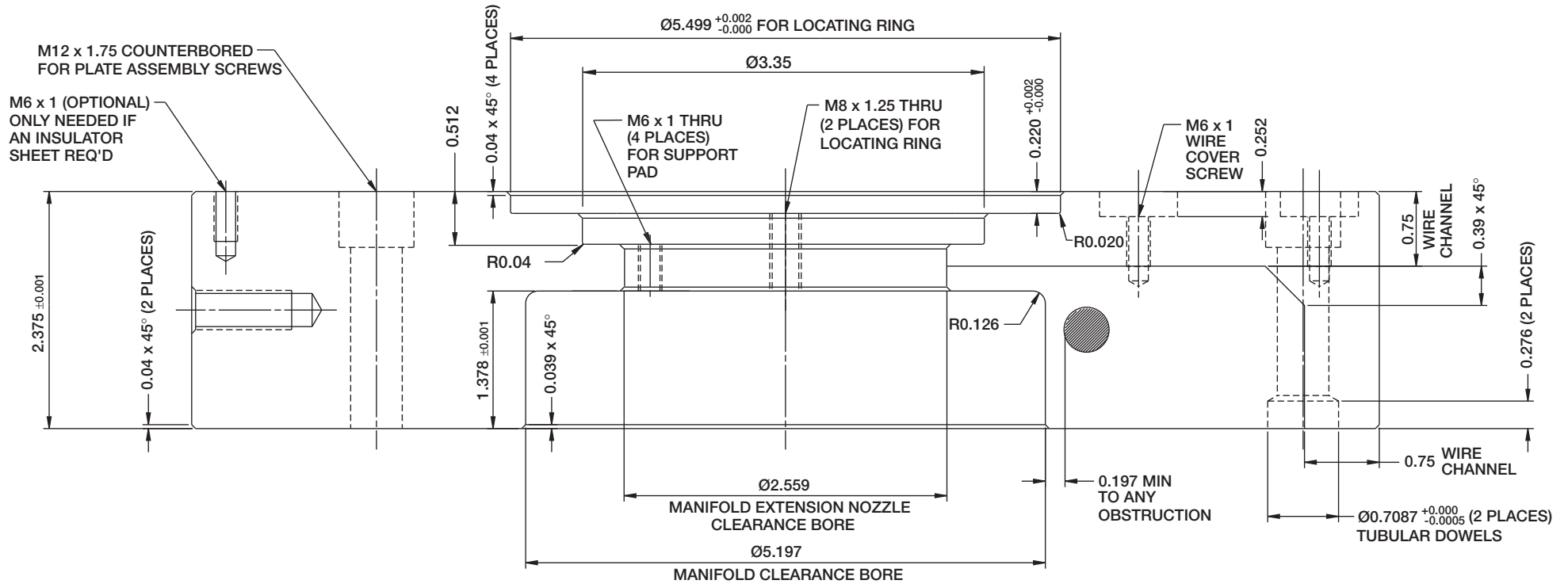
NOTES:

1. Metric screws are required for assembly.
2. Wire channel to be 0.75 inch deep except when plate thickness does not provide 0.25 inch steel support underneath pocket. In that case, wire channel depth to be 0.5 inch deep under the pocket and then chamfered (45°) to 0.75 inch deep outside the pocket.  
CAUTION: Wire channel should not be under center support pad.
3. For metric dimensions, see pages 10-37.





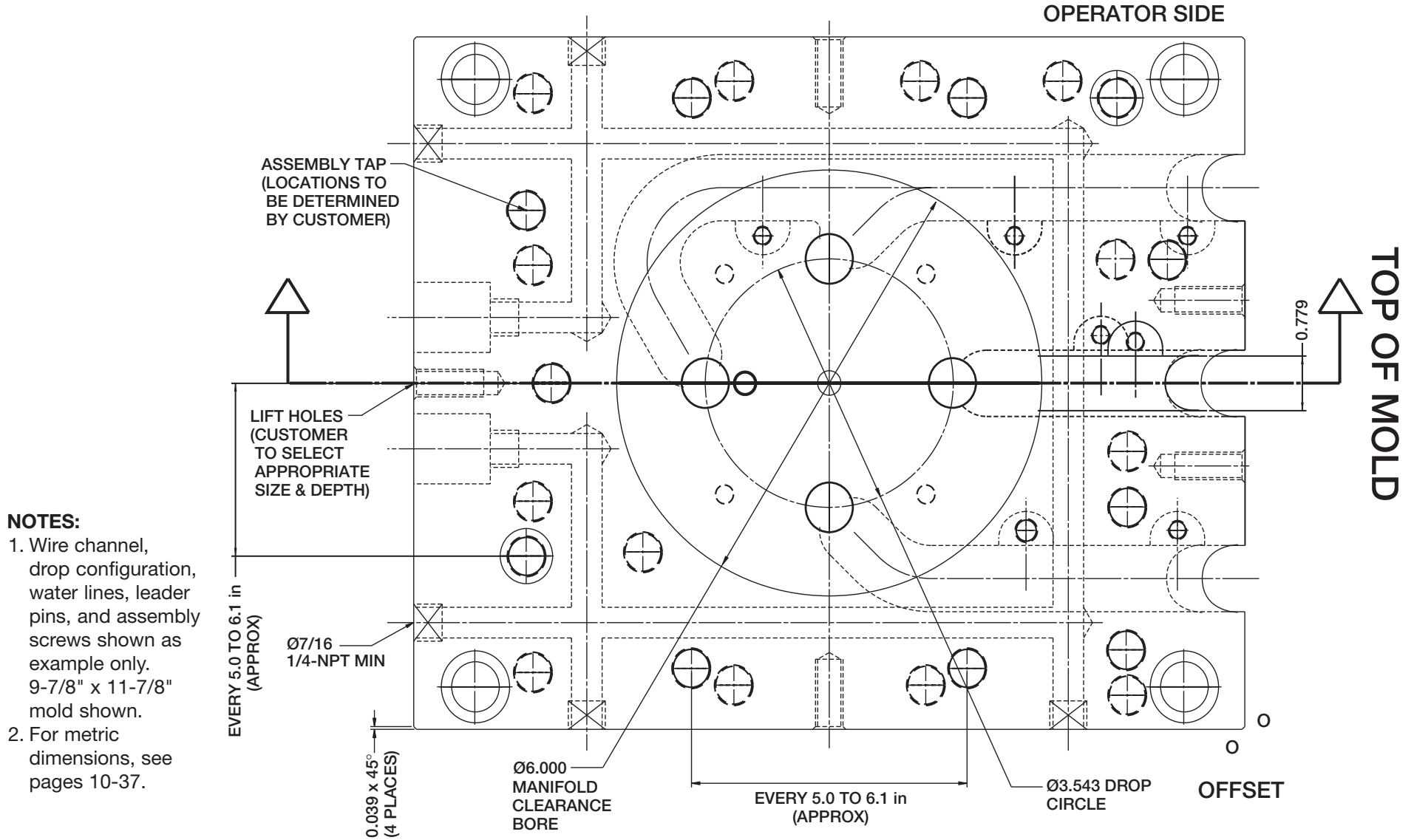
Ø70 Round MNA – Manifold Retainer Plate Machining Detail (continued)



NOTE: For metric dimensions, see pages 10-37.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

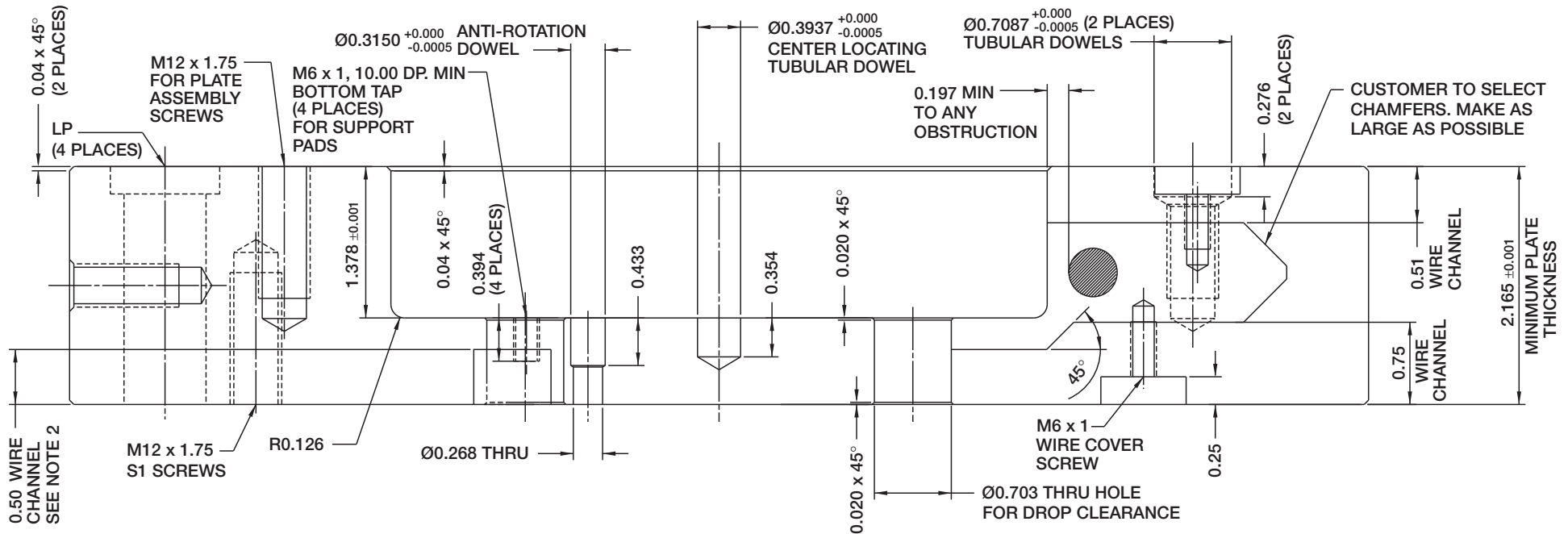
Ø90 Round MNA – Nozzle Plate Machining Detail



NOTES:

1. Wire channel, drop configuration, water lines, leader pins, and assembly screws shown as example only. 9-7/8" x 11-7/8" mold shown.
2. For metric dimensions, see pages 10-37.

Ø90 Round MNA – Nozzle Plate Machining Detail (continued)



NOTES:

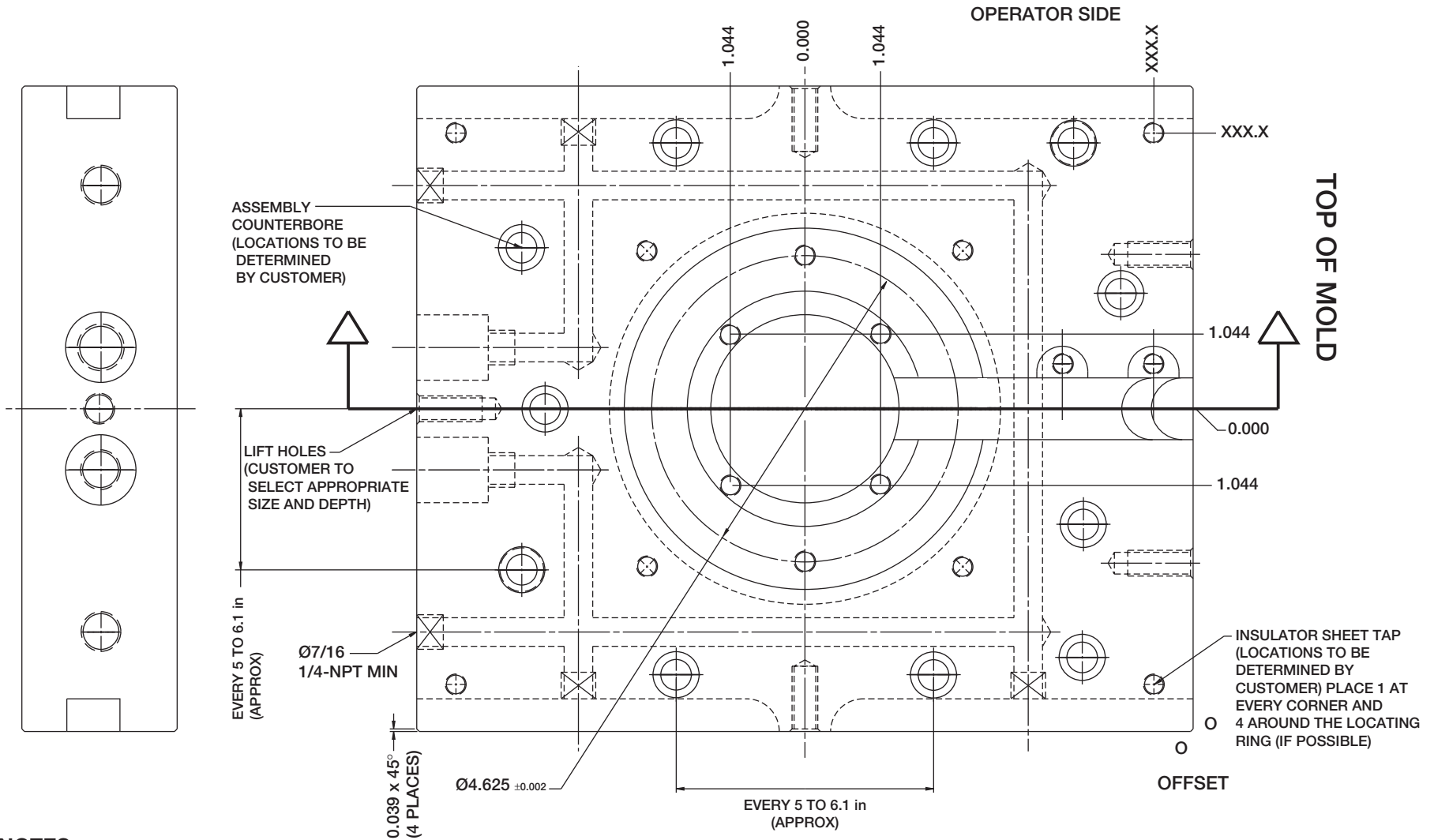
1. Metric screws are required for assembly.
2. Wire channel to be 0.75 inch deep except when plate thickness does not provide 0.25 inch steel support underneath pocket. In that case, wire channel depth to be 0.5 inch deep under the pocket and then chamfered (45°) to 0.75 inch deep outside the pocket.  
CAUTION: Wire channel should not be under center support pad.
3. For metric dimensions, see pages 10-37.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)





Ø90 Round MNA – Manifold Retainer Plate Machining Detail



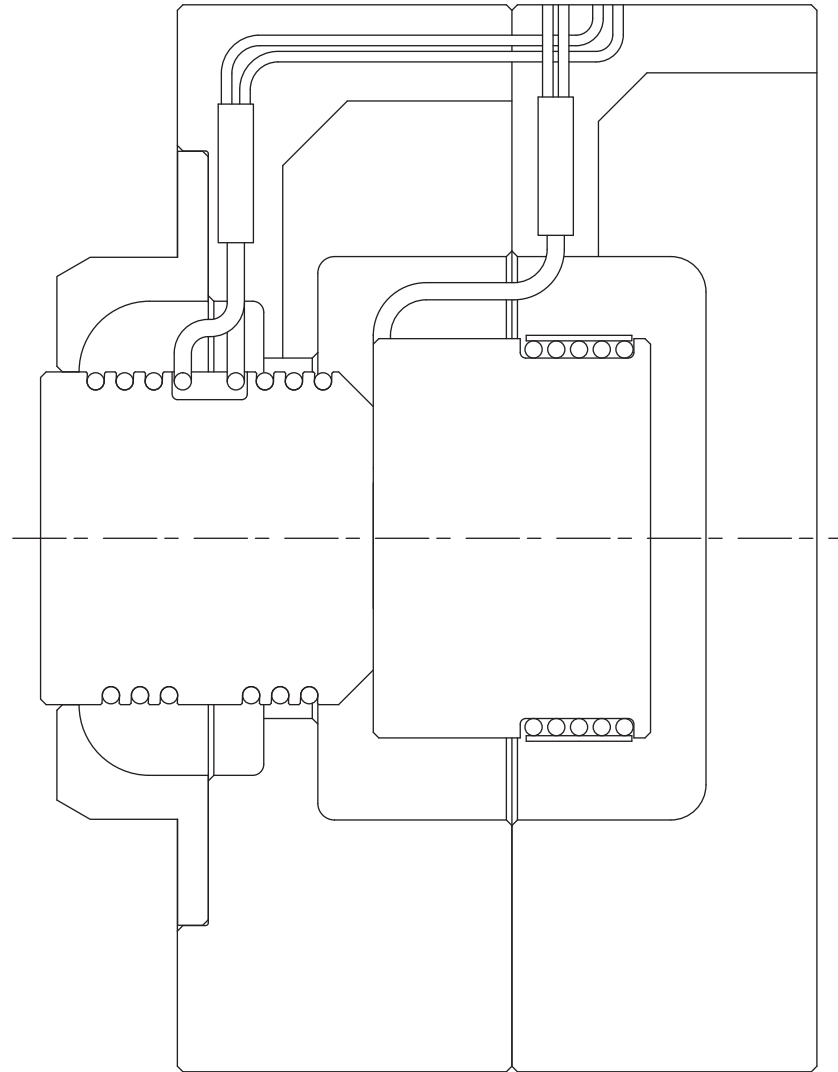
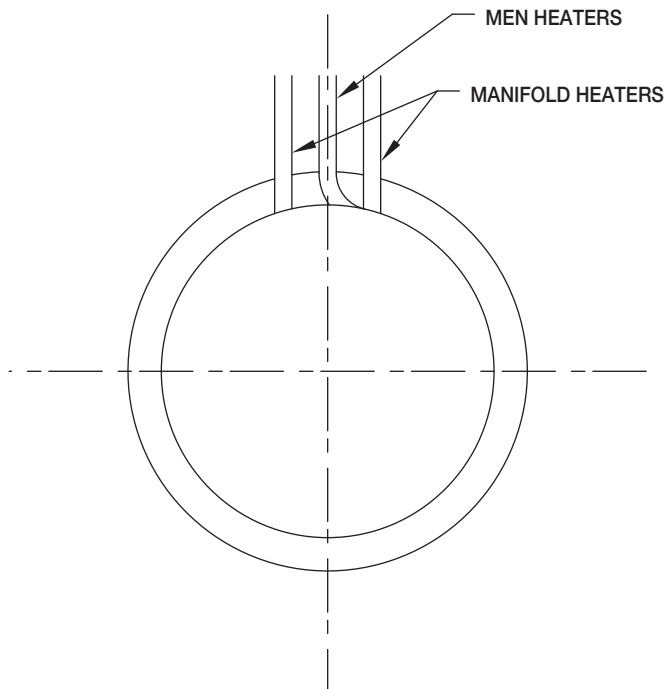
NOTES:

1. Water lines, assembly counterbores and insulator sheet taps shown as example only. 9-7/8" x 11-7/8" mold shown.
2. For metric dimensions, see pages 10-37.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)



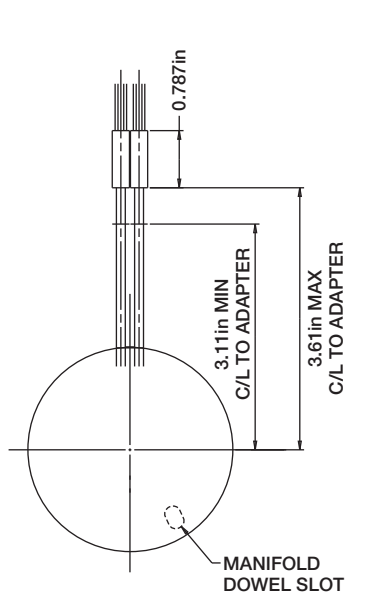
Round Multi-Nozzle Assemblies  
Manifold Heater Layout



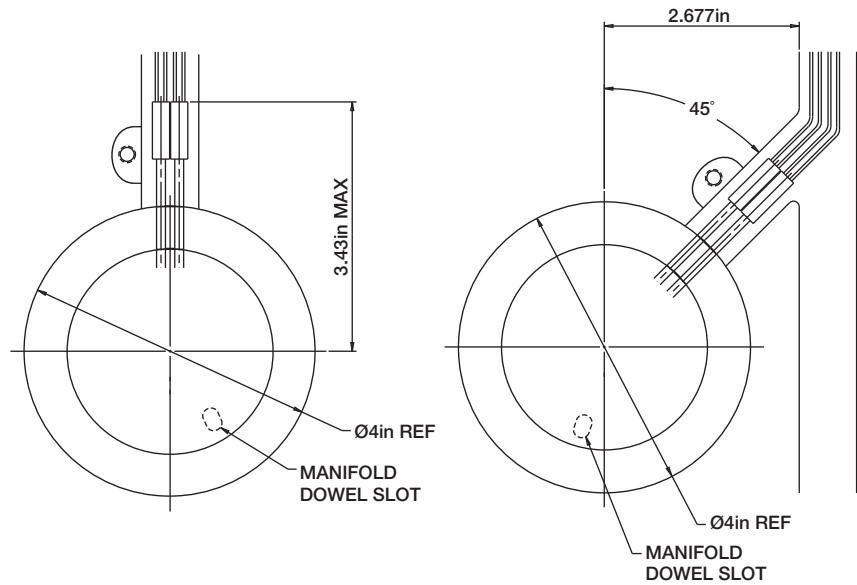
Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Top Side (MEN) of Round Manifolds

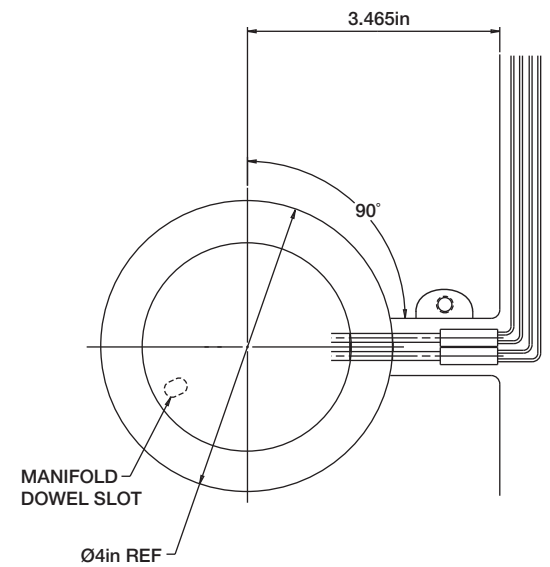
SRD4003, SRD4004 and SRD4006



MANIFOLD AND MEN HEATERS  
STRAIGHT BEFORE  
BENDING INTO WIRE SLOT

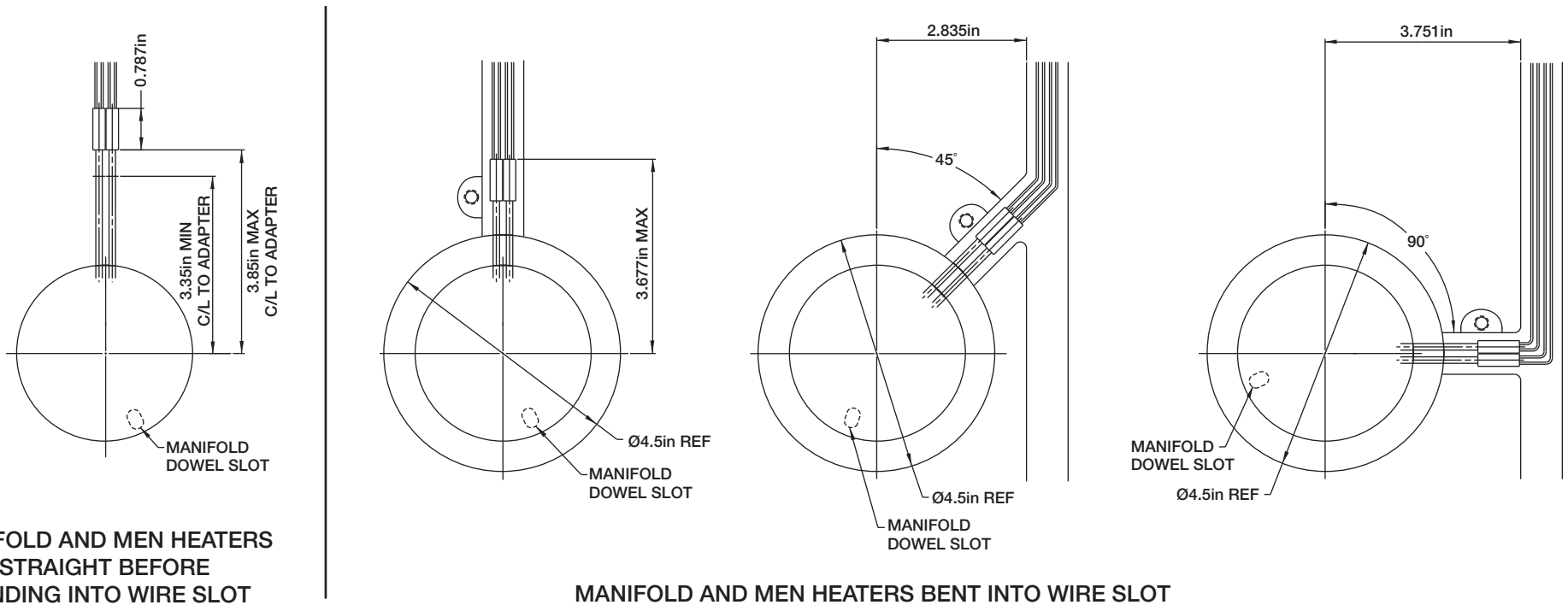


MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT



Top Side (MEN) of Round Manifolds (continued)

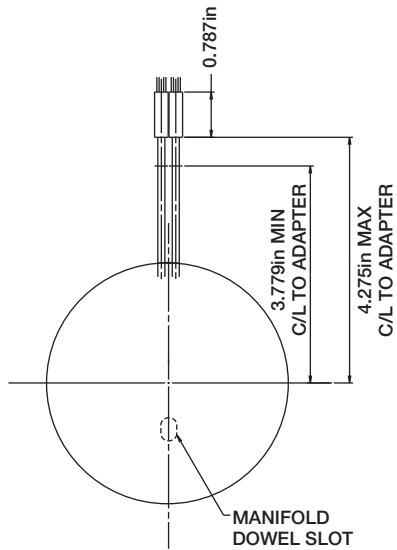
SRD5003, SRD5004, SRD5006 and SRD5008



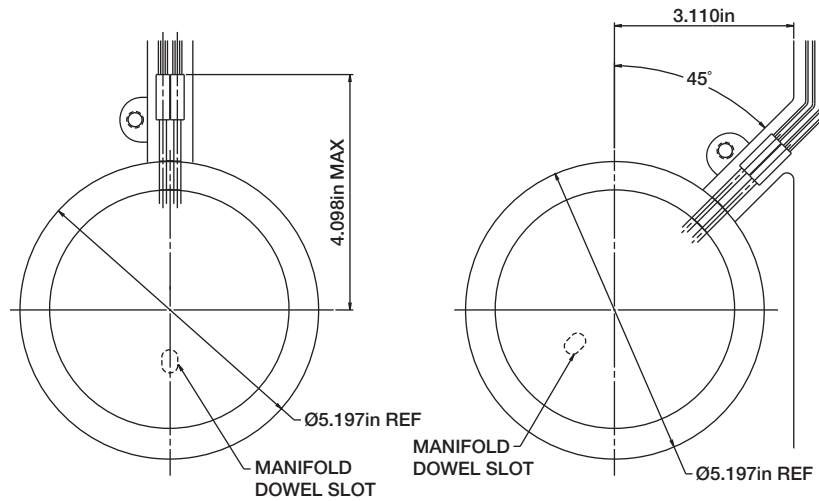
Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

Top Side (MEN) of Round Manifolds (continued)

SRD7003, SRD7004, SRD7006 and SRD7008



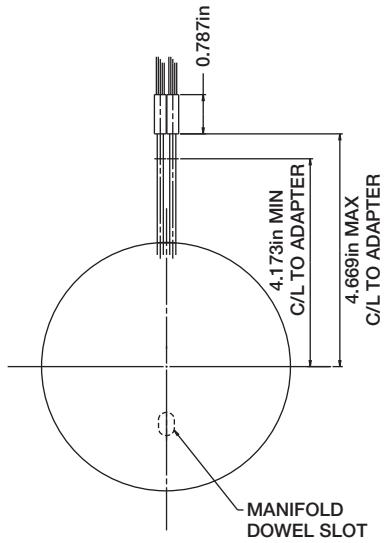
MANIFOLD AND MEN HEATERS  
STRAIGHT BEFORE  
BENDING INTO WIRE SLOT



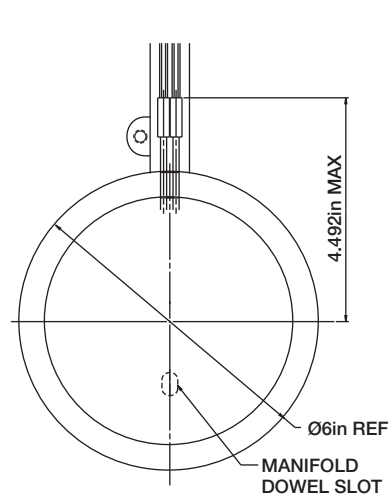
MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT

Top Side (MEN) of Round Manifolds (continued)

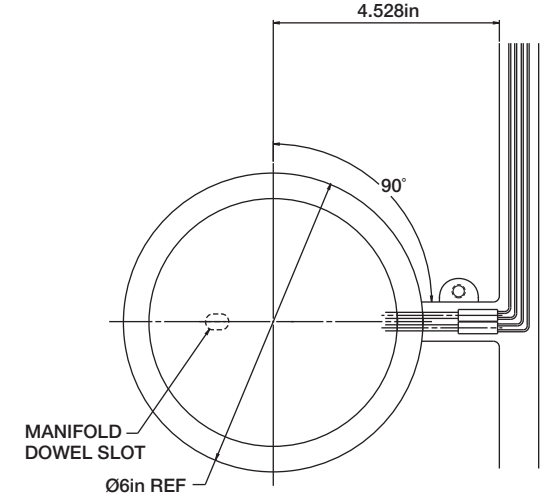
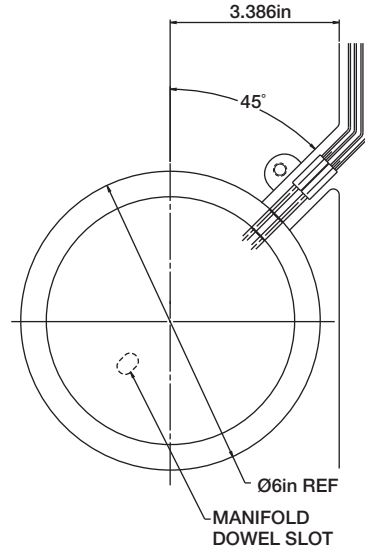
SRD9003, SRD9004, SRD9006 and SRD9008



MANIFOLD AND MEN HEATERS  
STRAIGHT BEFORE  
BENDING INTO WIRE SLOT



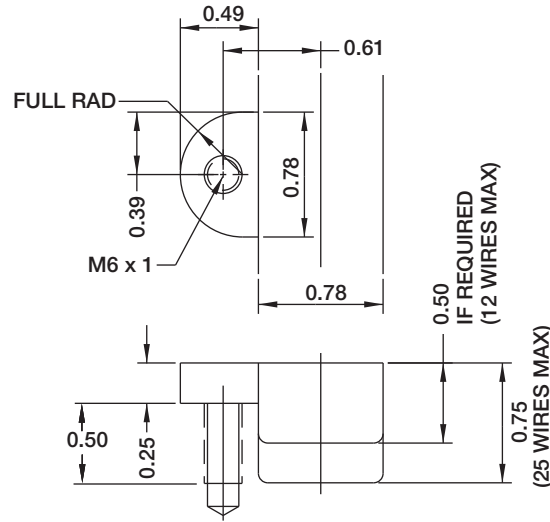
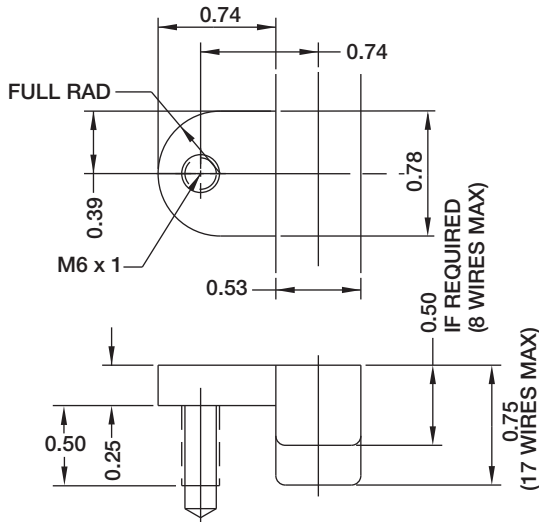
MANIFOLD AND MEN HEATERS BENT INTO WIRE SLOT





## Wire Cover Pocket Machining Details

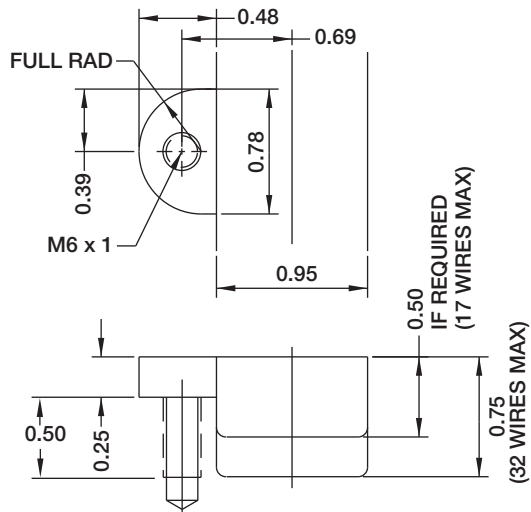
**WC0001**



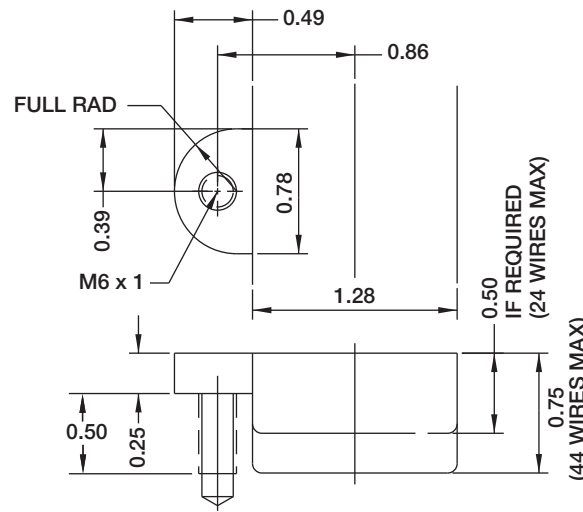
**NOTES:**

1. Use M6 x 12mm long BHCS and torque to 11.7 N.m (105 in.-lbs.) for each wire cover.
2. To facilitate assembly use 75% of the maximum number of wires. Nozzle heater = 2 wires; Manifold heaters = 4 wires (total); MEN heaters = 4 wires (total); Nozzle thermocouple = 1 wire; Manifold thermocouple = 1 wire; MEN thermocouple = 1 wire.
3. Radius all wire channels to suit.
4. For metric dimensions, see pages 10-37.

**WC0002**



**WC0003**

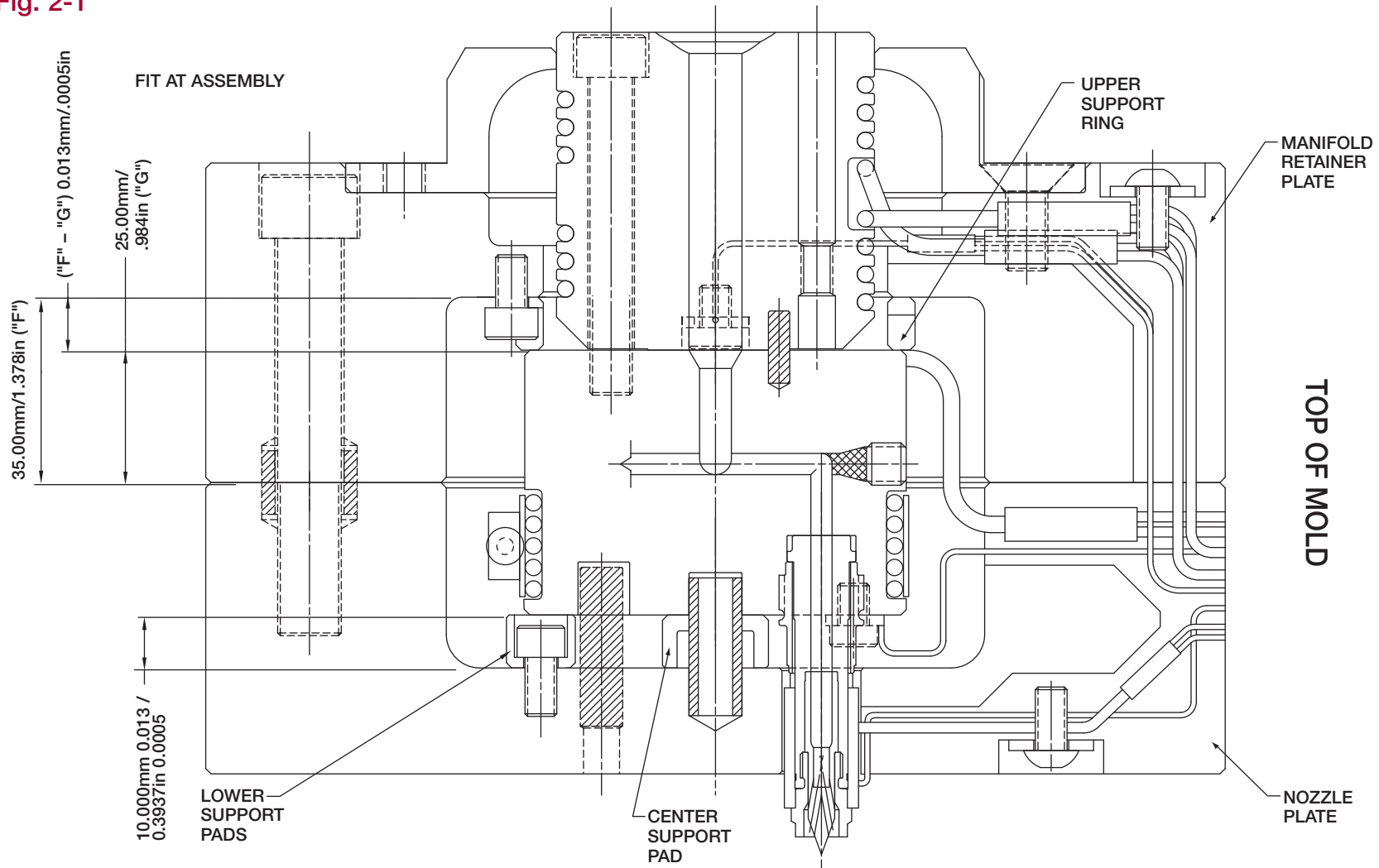


## SECTION 2

Stellar® Round MNA Assembly Information

### Assembly Section View

Fig. 2-1



Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

## SECTION 2

### Stellar® Round MNA Assembly Information

## Inspection of the Stellar Manifold and Components

Prior to system assembly, DME strongly suggests that you complete the following inspection and establish the procedures that will facilitate proper system assembly.

1. Ensure that all components provided are the correct part numbers and quantities.
2. Check all the supplied heaters for proper resistance in ohms ( $\Omega$ ) and for insufficient resistance to ground conditions by doing the following:
  - Measure each heater's resistance and determine if they are equivalent. Record on Master Inspection Sheet. (Insufficient resistance to ground is defined as a reading to ground of 20,000  $\Omega$  or less.)

## Assembly Instructions

(Refer to numbered items in Fig. 2-7 and Table 2-2.)

### Nozzle Plate

1. Place tubular dowel (item 6) into center bore in the nozzle plate and the anti-rotation dowel (item 8) into the hole in the nozzle plate.
2. Place (2) tubular dowels (item 18) into bore in the nozzle plate.
3. Grind the (4) lower support pads (item 9) and center support pad (item 7) to  $10.000 \pm 0.013\text{mm}$  (grind together to ensure even height).
4. Place center support pad (item 7) concentric with the tubular dowel (item 6).
5. Attach the (4) lower support pads (item 9) into the nozzle plate pocket using the support pad screws (item 10).

### Manifold

6. Place the (2) MEN locating dowels (item 13) into the manifold.
7. Attach the manifold thermocouple (item 4) on nozzle side using the manifold thermocouple screw (item 5).
8. Insert the manifold assembly (item 1) into the pocket in the nozzle plate and bend the manifold heater and thermocouple wires into channel.
9. Measure "F" (35.00mm nominal—see Fig. 2-1) pocket depth in the manifold retainer plate. Measure "G" (25.00mm nominal) height from the top of the nozzle plate to the top of the manifold. Grind the upper support ring (item 11) to a height that ensures there is a gap present. The size of the gap is determined by the equation on p. 11 (metric), p. 39 (inch) or on the calculation table.

## SECTION 2

### Stellar® Round MNA Assembly Information

#### Assembly Instructions (continued)

(Refer to numbered items in Fig. 2-7 and Table 2-2.)

##### Manifold Retainer Plate

10. Attach the upper support ring (item 11) to the manifold retainer plate using the support ring screws (item 12).
11. Lower the manifold retainer plate on top of the nozzle plate as shown ensuring the proper orientation of tubular dowels (item 18) and wire channels (the wire channels in both plates should exit at the “top of mold” side).
12. Attach the manifold retainer plate to the nozzle plate with M12 screws (item 17). Torque the screws equally to 135 N.m [100 ft. lbs.].

##### Manifold Extension Nozzle (MEN)

13. If the MEN is the heated style, attach the MEN thermocouple into slot on manifold side using the MEN thermocouple screw.
14. Attach the MEN to the manifold with (4) M8 screws. Ensure proper orientation with the (2) dowels (item 13). Torque the screws equally to 40 N.m [30 ft. lbs.].
15. If applicable, tag the wires of the MEN thermocouple and heaters then route into the wire channel, bending as necessary.
16. Install wire covers (item 19) as needed to retain the wires in the channel of the manifold retainer plate using the wire cover screws (item 20).

##### Locating Ring

17. Attach the locating ring (item 15) to the manifold retainer plate with (2) M8 flat head cap screws (item 16).

##### Nozzles

18. Verify gate detail dimensions as shown in Figs. 1-2 and 1-3.
19. Attach nozzles to the manifold following the steps outlined in Fig. 2-2.
20. Place the nozzle heaters, nozzle thermocouples, and snap rings on the nozzle bodies (see Fig. 2-3 through 2-6). Tag and place wires into the wire channels.
21. Tag and place the wires of the manifold thermocouple and manifold heaters into the proper wire channels on the nozzle plate.
22. Install wire covers (item 19) to retain wires in the channels in the nozzle plate using the wire cover screws (item 20).
23. **Optional:** Attach an insulator sheet to the manifold retainer plate. Insulator sheet and mounting screws are not shown and tapped holes are not provided.
24. Connect all wires to electrical connectors in the terminal mounting box. See wiring schematics, Table 2-1.

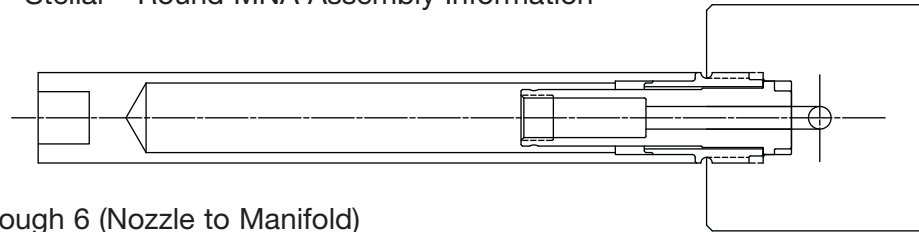
**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

## SECTION 2

### Stellar® Round MNA Assembly Information

## Nozzle Assembly

Fig. 2-2

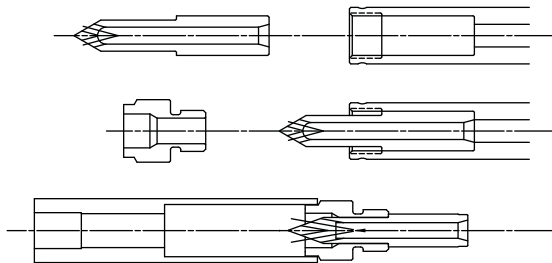


Steps 1 through 6 (Nozzle to Manifold)

1. Safety glasses should be worn when assembling components.
2. Threads and counterbore of manifold must be clean of any plastic.
3. Place nozzle body into manifold.
4. Apply high temperature anti-seize compound to nut threads to prevent galling or seizing. Use Fel-Pro C5-A or equivalent anti-seize compound.
5. Hold nozzle body down by threading nut into manifold.
6. Torque nut to 81 N.m [60 ft. lbs.] using nut socket tool (SXW0002).

## Point Gate Tip and Thru Hole Tip Sub-Assembly

Fig. 2-2a



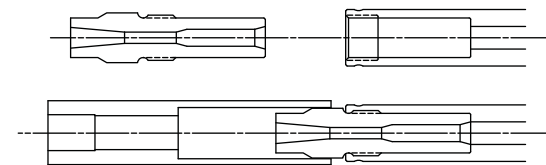
Steps 7 through 11  
(Tip Sub-Assembly and Retainer to Nozzle)

7. Safety glasses should be worn when assembling components.
8. Threads and counterbore of nozzle must be clean of any plastic.
9. Slide tip into nozzle body.
10. Thread retainer into nozzle body.
11. Place socket tool carefully over retainer so as to not damage tip. Torque retainer to 11.3 N.m [100 in. lbs.] using a 10mm deep well 6-point socket tool and torque wrench.

**NOTE:** For Thru Hole Tip follow same instructions as for Point Gate Tip.

## Sprue Gate Tip Assembly

Fig. 2-2b



Steps 12 through 15  
(Sprue Gate Tip to Nozzle)

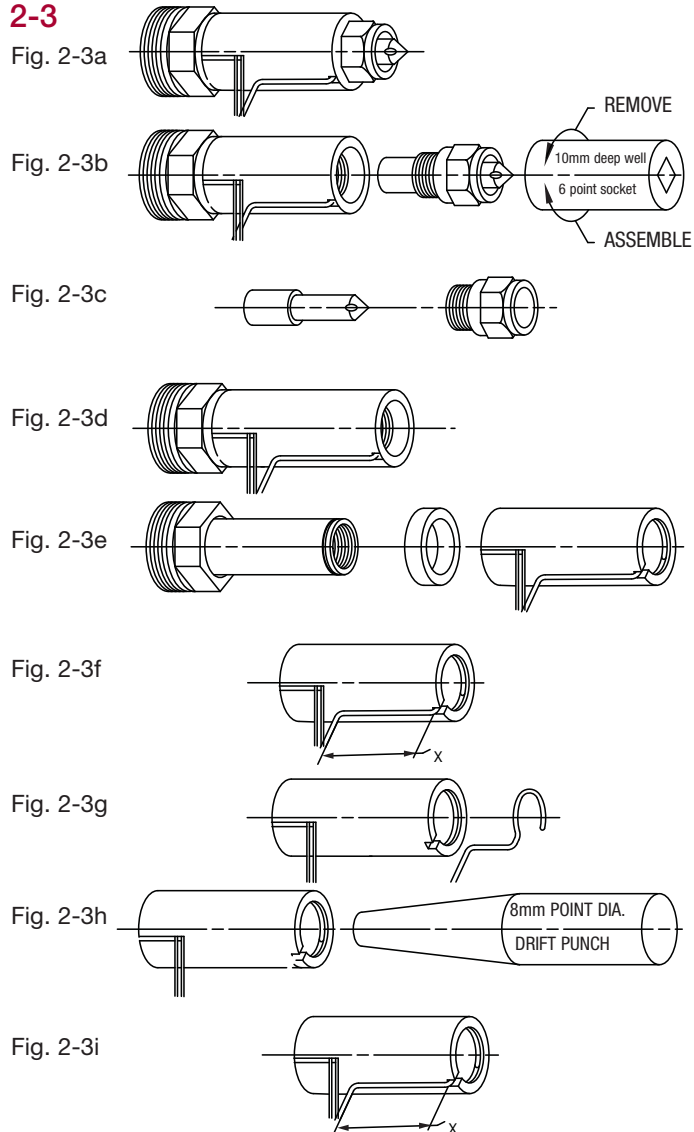
12. Safety glasses should be worn when assembling components.
13. Threads and counterbore of nozzle must be clean of any plastic.
14. Thread sprue gate tip into nozzle body.
15. Place socket tool carefully over tip so as to not damage front surface and edge of tip. Torque tip to 14 N.m [125 in. lbs.]. For sprue gate tip, use socket tool (SXW0003).

## SECTION 2

### Stellar® Round MNA Assembly Information

## Nozzles with Standard Coil Heater and Point Gate Tip Tip, Retainer, Heater and Thermocouple Removal Instructions

**Fig. 2-3**



1. Stellar nozzle sub-assembly with tip sub-assembly (see Fig. 2-3a). Threaded style nozzle with SXF5100 retainer and SXT4010 tip shown. Same instructions apply to SXT5010 or SXT5200 Tips using SXF5000 Retainer.
2. Safety glasses and gloves should be worn when working on the mold.
3. Turn nozzle heater on, and set at 10-38°C (50-100°F) below set point of processing temperature to allow for easier tip removal.
4. Carefully clean plastic material from around tip and retainer.
5. Remove retainer with 10mm deep well 6-point socket turning counterclockwise (see Fig. 2-3b). Socket will fit over the front seal-off area when placed on retainer hex. **DO NOT DAMAGE SEAL-OFF AREA.**
6. Carefully remove tip from retainer (see Fig. 2-3c). Inspect seal-off area for out of roundness and/or score marks on seal area, and replace retainer if either condition occurs. Inspect tip for any wear and replace if wear has occurred.
7. Clean plastic material from thread and counterbore areas in nozzle body to ensure proper assembly (see Fig. 2-3d).
8. Turn off nozzle heater and disconnect heater and thermocouple leads from connectors on mold. Allow nozzle time to cool down.
9. Remove heater, thermocouple and spacer from nozzle body (see Fig. 2-3e).
10. Measure thermocouple leads "X" (see Fig. 2-3f).
11. Remove thermocouple from heater end cap groove (see Fig. 2-3g).
12. Carefully place new thermocouple into heater end cap groove with lead coming out the slot. Use an 8mm (5/16") point diameter drift punch by hand to spread the thermocouple into the heater end cap groove. This will allow the heater with thermocouple to slide onto nozzle body (see Fig. 2-3h).
13. Bend thermocouple lead 90° along the length of the heater (see Fig. 2-3i). Bend heater and thermocouple leads to the correct "X" length at 90° angle to the heater. Do not rebend rigid leads. Rebending leads can result in damage to circuit.
14. Slide spacer and heater with thermocouple over nozzle body (see Fig. 2-3e).
15. **DO NOT LUBRICATE OR USE ANTI-SEIZE ON RETAINER THREADS.**
16. Assemble tip into retainer.
17. Thread retainer clockwise into the nozzle body and torque to 11.3N.m (8.3 ft-lbs/100 in-lbs) using a 10mm deep well 6-point socket tool and torque wrench (see Fig. 2-3b).
18. Wire heater and thermocouple leads to connectors on mold. Do not connect thermocouple leads to electric power.
19. Product may absorb moisture when cool. Use low voltage or power to drain out residual moisture before applying full power. Failure to do so may cause damage to this product.

**NOTE:** Drift Punch not supplied by DME.

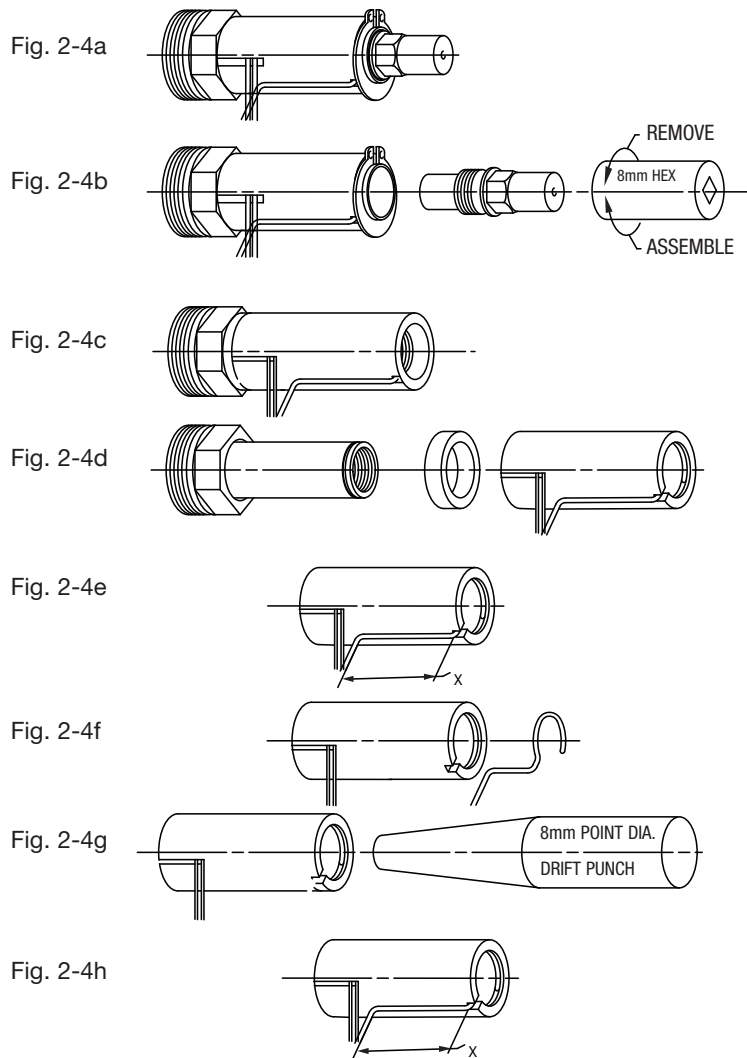
**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

## SECTION 2

### Stellar® Round MNA Assembly Information

## Nozzles with Standard Coil Heater and Sprue Gate Tip Tip, Retainer, Heater and Thermocouple Removal Instructions

Fig. 2-4



1. Stellar nozzle sub-assembly with tip sub-assembly (see Fig. 2-4a). Threaded style nozzle with sprue gate tip shown.
2. Safety glasses and gloves should be worn when working on the mold.
3. Turn nozzle heater on, and set at 10-38°C (50-100°F) below set point of processing temperature to allow for easier tip removal.
4. Carefully clean plastic material from around tip and retainer.
5. Remove sprue gate tip with a 8mm deep well socket turning counterclockwise. Do not damage 7mm diameter seal-off area or front molding surface (see Fig. 2-4b).
6. Clean plastic material from nozzle and tip threads. Also, clean plastic material from tip counterbore in nozzle body to ensure proper assembly.
7. Turn off nozzle heater and allow to cool down (see Fig. 2-4c).
8. Remove snap ring, heater, thermocouple and spacer from nozzle body (see Fig. 2-4d).
9. Measure thermocouple leads "X" (see Fig. 2-4e).
10. Remove thermocouple from heater end cap groove (see Fig. 2-4f).
11. Carefully place new thermocouple into heater end cap groove with lead coming out the slot. Use an 8mm (5/16") point diameter drift punch by hand to spread the thermocouple into the heater end cap groove. This will allow the heater with thermocouple to slide onto nozzle body (see Fig. 2-4g).
12. Bend thermocouple lead 90° along the length of the heater (see Fig. 2-4h). Bend heater and thermocouple leads to the correct "X" length at 90° angle to the heater. Do not rebend rigid leads. Rebending leads can result in damage to circuit.
13. Slide spacer, and heater with thermocouple, over nozzle body (see Fig. 2-4d). Add snap ring.
14. DO NOT LUBRICATE OR USE ANTI-SEIZE ON THREADS.
15. Thread tip clockwise into the nozzle body and torque to 14 N.m [10.42 ft-lbs/125 in-lbs] using an 8mm deep well socket tool (see Fig. 2-4b).
16. Wire heater and thermocouple leads to connectors on mold. Do not connect thermocouple leads to electric power.
17. Product may absorb moisture when cool. Use low voltage or power to drain out residual moisture before applying full power. Failure to do so may cause damage to this product.

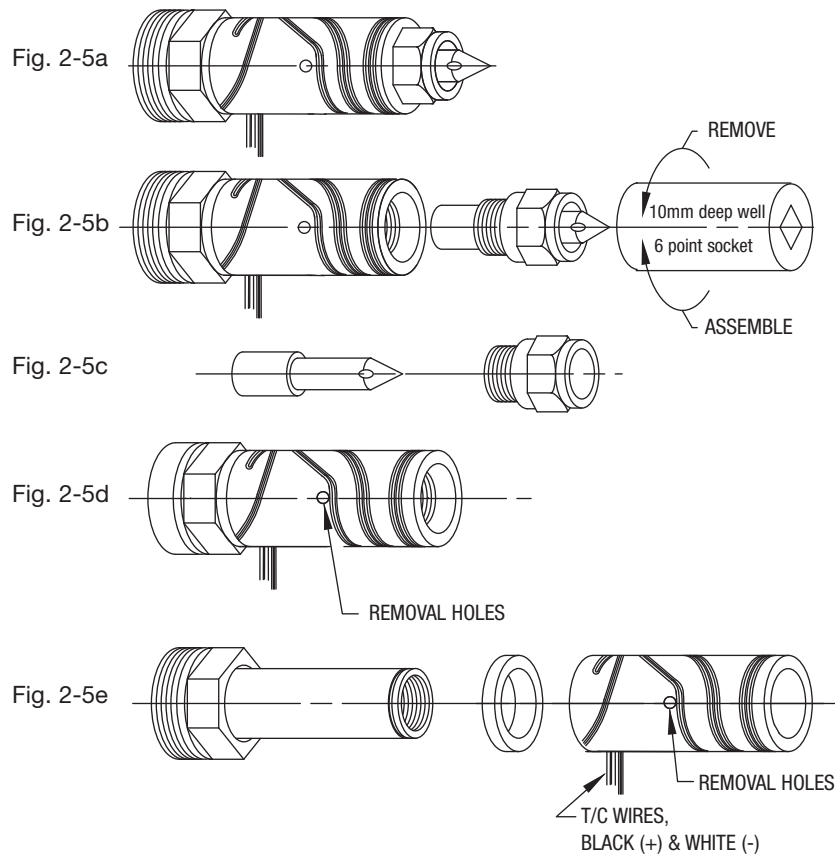
**NOTE:** Drift Punch not supplied by DME.

## SECTION 2

### Stellar® Round MNA Assembly Information

## Nozzles with High Performance Heater and Point Gate Tip Tip, Retainer and Heater Removal Instructions

Fig. 2-5



1. Stellar nozzle sub-assembly with tip sub-assembly (see Fig. 2-5a). Threaded style nozzle with SXF5000 retainer and SXT5010 tip shown. Same instructions apply to SXT5200 Tip.
2. Safety glasses and gloves should be worn when working on the mold.
3. Turn nozzle heater on, and set at 10-38°C (50-100°F) below set point of processing temperature to allow for easier tip removal.
4. Carefully clean plastic material from around tip and retainer.
5. Remove retainer with 10mm deep well 6-point socket turning counterclockwise (see Fig. 2-5b). Socket will fit over the front seal-off area when placed on retainer hex. **DO NOT DAMAGE SEAL-OFF AREA.**
6. Carefully remove tip from retainer (see Fig. 2-5c). Inspect seal-off area for out of roundness and/or score marks on seal area, and replace retainer if either condition occurs. Inspect tip for any wear and replace if wear has occurred.
7. Clean plastic material from thread and counterbore areas in nozzle body to ensure proper assembly (see Fig. 2-5d).
8. Turn off nozzle heater and disconnect heater and thermocouple leads from connectors on mold. Allow nozzle time to cool down.
9. Remove heater and spacer from nozzle body (see Fig. 2-5e).
10. If the heater is hard to remove use the removal holes placed 180° apart on the heater body (see Fig. 2-5d). Do not use the leads to pull the nozzle off.
11. Bend heater and thermocouple leads only if needed to better fit in the wire channel. For most cases, the heater leads will exit into the wire channel. **CAUTION: REPEATED BENDING OF THE HEATER AND THERMOCOUPLE LEADS CAN FRACTURE LEAD WIRES.**
12. Slide spacer and heater with thermocouple over nozzle body (see Fig. 2-5e).
13. **DO NOT LUBRICATE OR USE ANTI-SEIZE ON RETAINER THREADS.**
14. Assemble tip into retainer.
15. Thread retainer clockwise into the nozzle body and torque to 11.3 N.m (8.3 ft-lbs/100 in-lbs) using a 10mm deep well 6-point socket tool and torque wrench (see Fig. 2-5b).
16. Wire heater and thermocouple leads to connectors on mold. Do not connect thermocouple leads to electric power.
17. Product may absorb moisture when cool. Use low voltage or power to drain out residual moisture before applying full power. Failure to do so may cause damage to this product.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

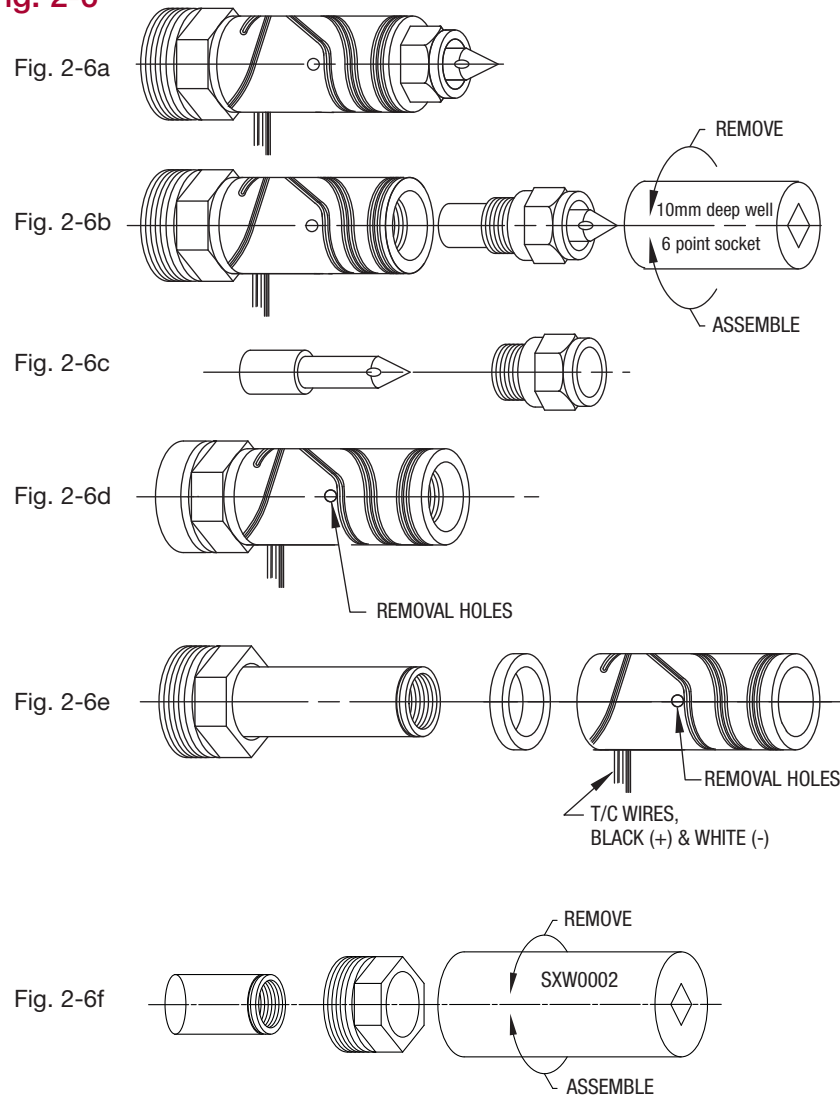


## SECTION 2

### Stellar® Round MNA Assembly Information

## Nozzle Body (Threaded Style) Removal Instructions

Fig. 2-6



1. Stellar nozzle sub-assembly with tip sub-assembly (see Fig. 2-6a). Threaded style nozzle with SXF5000 Retainer and SXT5010 Tip shown. Instructions also apply to SXT5200 Tip.
2. Safety glasses and gloves should be worn when working on the mold.
3. Turn nozzle heater on, and set at 10-38°C (50-100°F) below set point of processing temperature to allow for easier tip removal.
4. Carefully clean plastic material from around tip and retainer.
5. Remove retainer with 10mm deep well 6-point socket turning counterclockwise (see Fig. 2-6b). Socket will fit over the front seal-off area when placed on retainer hex. **DO NOT DAMAGE SEAL-OFF AREA.**
6. Carefully remove tip from retainer (see Fig. 2-6c). Inspect seal-off area for out of roundness and/or score marks on seal area, and replace retainer if either condition occurs. Inspect tip for any wear and replace if wear has occurred.
7. Clean plastic material from thread and counterbore areas in nozzle body to ensure proper assembly (see Fig. 2-6d).
8. Turn off nozzle heater and disconnect heater and thermocouple leads from connectors on mold. Allow nozzle time to cool down.
9. Remove heater, thermocouple and spacer from nozzle body (see Fig. 2-6e).
10. Remove nut counterclockwise with socket tool DME Item No. SXW0002 (see Fig. 2-6f).
11. Remove nozzle body from manifold.
12. Clean plastic material from thread and counterbore areas in manifold to ensure proper assembly.
13. Place nozzle body into manifold.
14. Thread nut clockwise into the manifold and torque to 81N.m (60 ft-lbs) using nut socket tool and torque.
15. Slide spacer and heater with thermocouple over nozzle body (see Fig. 2-6e).
16. **DO NOT LUBRICATE OR USE ANTI-SEIZE ON RETAINER THREADS.**
17. Assemble tip into retainer.
18. Thread retainer clockwise into the nozzle body and torque to 11.3 N.m (8.3 ft-lbs/100 in-lbs) using a 10mm deep well 6-point socket tool and torque wrench (see Fig. 2-6b).
19. Wire heater and thermocouple leads to connectors on mold. Do not connect thermocouple leads to electric power.
20. Product may absorb moisture when cool. Use low voltage or power to drain out residual moisture before applying full power. Failure to do so may cause damage to this product.

## SECTION 2

### Stellar® Round MNA Assembly Information

## Wiring Schematics






Wiring into the terminal box to be as shown in the table below.

**Table 2-1**

LAYOUT	D-M-E CONTROLLER	ZONE NUMBER														
		ZONE #1	ZONE #2	ZONE #3	ZONE #4	ZONE #5	ZONE #6	ZONE #7	ZONE #8	ZONE #9	ZONE #10	ZONE #11	ZONE #12			
3 DROPS	5 ZONE	NOZZLE #1	NOZZLE #2	NOZZLE #3	MANIFOLD	MEN*										
4 DROPS	8 ZONE	NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	MANIFOLD								MEN*	-----	-----
6 DROPS		NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	NOZZLE #5								NOZZLE #6	MANIFOLD	MEN*
8 DROPS	12 ZONE	NOZZLE #1	NOZZLE #2	NOZZLE #3	NOZZLE #4	NOZZLE #5	NOZZLE #6	NOZZLE #7	NOZZLE #8	MANIFOLD	MEN*	-----	-----			

\*When using heated MEN option.

1. Designed to operate on a 230-volt supply.
2. Manifold heaters wired in parallel.
3. MEN heaters wired in parallel.
4. Thermocouple leads are black and white. White is negative (-); black is positive (+).

J TYPE THERMOCOUPLE STANDARDS			
	STANDARD	+ LEAD (MAGNETIC)	- LEAD
INTERNATIONAL	IEC 584-3	Black	White
	ASTM E230	White	Red
	BS 1843	Yellow	Blue
	DIN 43710	Red	Blue
	JIS C 1610-1981	Red	White
	NFC 42-324	Yellow	Black

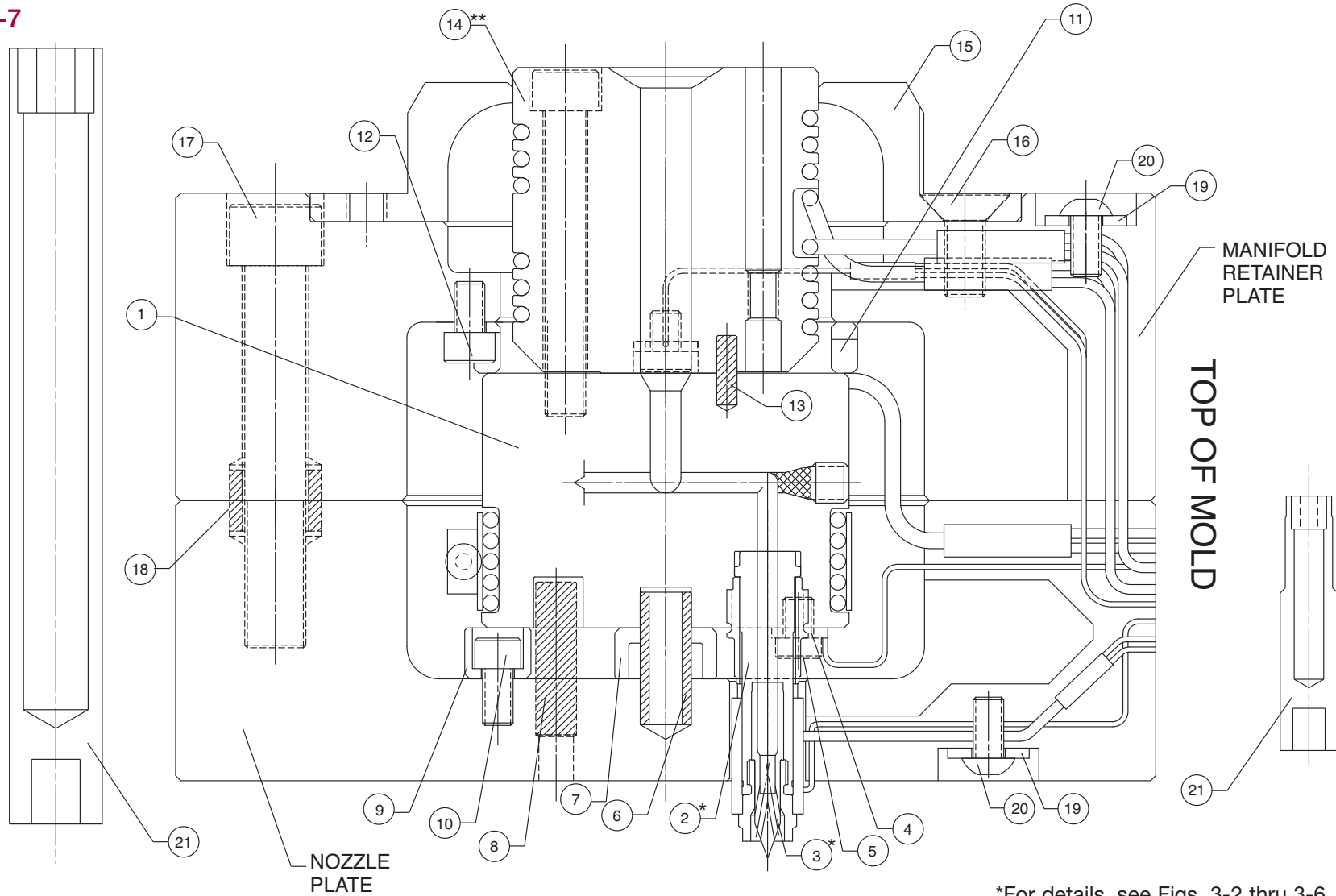
**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

## SECTION 2

### Stellar® Round MNA Assembly Information

#### Parts List

Fig. 2-7



\*For details, see Figs. 3-2 thru 3-6.  
\*\*For details, see Figs. 3-7 thru 3-10.

## SECTION 2

### Stellar® Round MNA Assembly Information

## Parts List

Table 2-2

CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.	CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.	CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.
1	<b>Ø40 3-drop manifold and components sub-assembly</b>	1	SRD4003	1	<b>Ø50 6-drop manifold and components sub-assembly</b>	1	SRD5006	1	<b>Ø70 8-drop manifold and components sub-assembly</b>	1	SRD7008
	Ø40 3-drop manifold sub-assembly	1	ARD4003		Ø50 6-drop manifold sub-assembly	1	ARD5006		Ø70 8-drop manifold sub-assembly	1	ARD7008
	Ø40 manifold heater	2	MRH0001		Ø50 manifold heater	2	MRH0002		Ø70 manifold heater	2	MRH0003
	Ø40 heater strap	1	MHS4001		Ø50 heater strap	1	MHS5001		Ø70 heater strap	1	MHS7001
	end plugs	3	GXP3004		end plugs	3	GXP3004		end plugs	4	GXP3004
	set screws	3	GXK3008		set screws	3	GXK3008		set screws	4	GXK3008
1	<b>Ø40 4-drop manifold and components sub-assembly</b>	1	SRD4004	1	<b>Ø50 8-drop manifold and components sub-assembly</b>	1	SRD5008	1	<b>Ø90 3-drop manifold and components sub-assembly</b>	1	SRD9003
	Ø40 4-drop manifold sub-assembly	1	ARD4004		Ø50 8-drop manifold sub-assembly	1	ARD5008		Ø90 3-drop manifold sub-assembly	1	ARD9003
	Ø40 manifold heater	2	MRH0001		Ø50 manifold heater	2	MRH0002		Ø90 manifold heater	2	MRH0004
	Ø40 heater strap	1	MHS4001		Ø50 heater strap	1	MHS5001		Ø90 heater strap	1	MHS9001
	end plugs	2	GXP3004		end plugs	4	GXP3004		end plugs	3	GXP3004
	set screws	2	GXK3008		set screws	4	GXK3008		set screws	3	GXK3008
1	<b>Ø40 6-drop manifold and components sub-assembly</b>	1	SRD4006	1	<b>Ø70 3-drop manifold and components sub-assembly</b>	1	SRD7003	1	<b>Ø90 4-drop manifold and components sub-assembly</b>	1	SRD9004
	Ø40 6-drop manifold sub-assembly	1	ARD4006		Ø70 3-drop manifold sub-assembly	1	ARD7003		Ø90 4-drop manifold sub-assembly	1	ARD9004
	Ø40 manifold heater	2	MRH0001		Ø70 manifold heater	2	MRH0003		Ø90 manifold heater	2	MRH0004
	Ø40 heater strap	1	MHS4001		Ø70 heater strap	1	MHS7001		Ø90 heater strap	1	MHS9001
	end plugs	3	GXP3004		end plugs	3	GXP3004		end plugs	2	GXP3004
	set screws	3	GXK3008		set screws	3	GXK3008		set screws	2	GXK3008
1	<b>Ø50 3-drop manifold and components sub-assembly</b>	1	SRD5003	1	<b>Ø70 4-drop manifold and components sub-assembly</b>	1	SRD7004	1	<b>Ø90 6-drop manifold and components sub-assembly</b>	1	SRD9006
	Ø50 3-drop manifold sub-assembly	1	ARD5003		Ø70 4-drop manifold sub-assembly	1	ARD7004		Ø90 6-drop manifold sub-assembly	1	ARD9006
	Ø50 manifold heater	2	MRH0002		Ø70 manifold heater	2	MRH0003		Ø90 manifold heater	2	MRH0004
	Ø50 heater strap	1	MHS5001		Ø70 heater strap	1	MHS7001		Ø90 heater strap	1	MHS9001
	end plugs	3	GXP3004		end plugs	2	GXP3004		end plugs	3	GXP3004
	set screws	3	GXK3008		set screws	2	GXK3008		set screws	3	GXK3008
1	<b>Ø50 4-drop manifold and components sub-assembly</b>	1	SRD5004	1	<b>Ø70 6-drop manifold and components sub-assembly</b>	1	SRD7006	1	<b>Ø90 8-drop manifold and components sub-assembly</b>	1	SRD9008
	Ø50 4-drop manifold sub-assembly	1	ARD5004		Ø70 6-drop manifold sub-assembly	1	ARD7006		Ø90 8-drop manifold sub-assembly	1	ARD9008
	Ø50 manifold heater	2	MRH0002		Ø70 manifold heater	2	MRH0003		Ø90 manifold heater	2	MRH0004
	Ø50 heater strap	1	MHS5001		Ø70 heater strap	1	MHS7001		Ø90 heater strap	1	MHS9001
	end plugs	2	GXP3004		end plugs	3	GXP3004		end plugs	4	GXP3004
	set screws	2	GXK3008		set screws	3	GXK3008		set screws	4	GXK3008

**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

## SECTION 2

### Stellar® Round MNA Assembly Information

## Parts List

Table 2-2 (continued)

CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.	CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.	CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.	
2	<b>Nozzle sub-assembly (A = 65) (standard heater)</b>	3-8	SXY0065	2	<b>Nozzle sub-assembly (A = 65) (high performance heater)</b>	3-8	SXY0965	2	<b>Nozzle sub-assembly (A = 65) (standard heater)</b>	3-8	SXY8065	
	Nozzle body	3-8	SXB4068		Nozzle body	3-8	SXB4068		Nozzle body	3-8	SXB4068	
	Nozzle heater	3-8	SHH1039		Nozzle heater	3-8	SXE1039		Nozzle heater	3-8	SHH1039	
	Nozzle body nut*	3-8	SXE2013	2	<b>Nozzle sub-assembly (A = 85) (high performance heater)</b>	3-8	SXY0985		Nozzle body nut*	3-8	SXE2013	
	Nozzle thermocouple	3-8	SXC1001		Nozzle body	3-8	SXB4088		Nozzle thermocouple	3-8	SXC1001	
	Nozzle heater stop*	3-8	SXD6501		Nozzle heater	3-8	SXE1059		Snap ring*	3-8	SXR1001	
2	<b>Nozzle sub-assembly (A = 85) (standard heater)</b>	3-8	SXY0085	2	<b>Nozzle sub-assembly (A = 105) (high performance heater)</b>	3-8	SXY0905	2	<b>Nozzle sub-assembly (A = 85) (standard heater)</b>	3-8	SXY8085	
	Nozzle body	3-8	SXB4088		Nozzle body	3-8	SXB4108		Nozzle body	3-8	SXB4088	
	Nozzle thermocouple	3-8	SXC1001		Nozzle body	3-8	SXB4108		Nozzle thermocouple	3-8	SXC1001	
	Nozzle heater	3-8	SHH1059		Nozzle heater	3-8	SXE1079		Nozzle heater	3-8	SHH1059	
2	<b>Nozzle sub-assembly (A = 105) (standard heater)</b>	3-8	SXY0105	2	<b>Nozzle sub-assembly (A = 125) (high performance heater)</b>	3-8	SXY0925	2	<b>Nozzle sub-assembly (A = 105) (standard heater)</b>	3-8	SXY8105	
	Nozzle body	3-8	SXB4108		Nozzle body	3-8	SXB4128		Nozzle body	3-8	SXB4108	
	Nozzle thermocouple	3-8	SXC1001		Nozzle heater	3-8	SXE1099		Nozzle thermocouple	3-8	SXC1001	
	Nozzle heater	3-8	SHH1079		2	<b>Nozzle sub-assembly (A = 145) (high performance heater)</b>	3-8		SXY0945	Nozzle heater	3-8	SHH1079
2	<b>Nozzle sub-assembly (A = 125) (standard heater)</b>	3-8	SXY0125	2		Nozzle body	3-8	SXB4148	2	<b>Nozzle sub-assembly (A = 125) (standard heater)</b>	3-8	SXY8125
	Nozzle body	3-8	SXB4128			Nozzle heater	3-8	SXE1119		Nozzle body	3-8	SXB4128
	Nozzle thermocouple	3-8	SXC1001			2	2	2		Nozzle thermocouple	3-8	SXC1001
	Nozzle heater	3-8	SHH1099		Nozzle heater					3-8	SHH1099	
2	<b>Nozzle sub-assembly (A = 145) (standard heater)</b>	3-8	SXY0145	2	2				2	<b>Nozzle sub-assembly (A = 145) (standard heater)</b>	3-8	SXY8145
	Nozzle body	3-8	SXB4148							Nozzle body	3-8	SXB4148
	Nozzle thermocouple	3-8	SXC1001			Nozzle thermocouple	3-8	SXC1001				
	Nozzle heater	3-8	SHH1119			Nozzle heater	3-8	SHH1119				

\* Common for all Stellar nozzle sub-assemblies in each individual column.

**NOTE:** Items SXY8065, SXY8085, SXY8105, SXY8125 and SXY8145 for Sprue Gate only.

## SECTION 2

### Stellar® Round MNA Assembly Information

## Parts List

Table 2-2 (continued)

CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.	CALLOUT NO.	DESCRIPTION	QTY	ITEM NO.
3	Point gate tip sub-assembly - Standard	3-8	SXG5110	14	<b>Heated MEN sub-assembly for 8-drop manifolds with 15.5mm spherical radius</b>	1	SXX2012
3	Point gate tip sub-assembly - High Performance	3-8	SXG5020			MEN body	1
3	Thru hole tip sub-assembly - High Performance	3-8	SXG5201		14	<b>Unheated MEN sub-assembly for 3-, 4- &amp; 6-drop manifolds with 1/2 and 3/4 in. spherical radius</b>	1
3	Sprue gate tip	3-8	SXT1040	MEN body			1
4	Manifold thermocouple	1	SXC2001	14	MEN screws***	4	M816
5	Manifold thermocouple screw	1	M68 LHCS	14		<b>Unheated MEN sub-assembly for 8-drop manifolds with 1/2 and 3/4 in. spherical radius</b>	1
6	Tubular dowel	1	PH 10-26		MEN body		1
7	Center support	1	SXS3010	14	<b>Unheated MEN sub-assembly for 3-, 4- &amp; 6-drop manifolds with 15.5mm spherical radius</b>	1	SXX2210
8	Anti-rotation dowel	1	DP830			MEN body	1
9	Lower support pads	4	SXS3030	14	<b>Unheated MEN sub-assembly for 3-, 4- &amp; 6-drop manifolds with 15.5mm spherical radius</b>	1	SXX2212
10	Lower support pad screws	4	M610SHCS			MEN body	1
11	Upper support ring	1	SXS3040	14	Locating ring for heated MEN	1	GXL2001
12	Upper support ring screws	4	M612LHCS			Locating ring for unheated MEN	1
13	MEN locating dowels	2	DP 412	14	Locating ring screws	2	M820 FHCS
14	<b>Heated MEN sub-assembly for 3-, 4- &amp; 6-drop manifolds with 1/2 and 3/4 in. spherical radius</b>	1	SXX1010			14	<b>Unheated MEN sub-assembly for 8-drop manifolds with 15.5mm spherical radius</b>
	MEN body	1	SXM1010	MEN body	1		
	MEN screws**	4	M860 SHCS	15	Plate assembly screws	Y	M1275 SHCS
	MEN heater**	2	MRH0012	15	Tubular dowels	2	PH 18-12
	MEN thermocouple**	1	SXC2001	16	Wire covers	X	WC0001, WC0002 & WC0003
MEN thermocouple screw**	1	M68 LHCS	14	Wire cover screws	X	M612BHCS	
14	<b>Heated MEN sub-assembly for 8-drop manifolds with 1/2 and 3/4 in. spherical radius</b>	1			SXX1012	17	Nut socket tool
	MEN body	1	SXM1012	18	Sprue Gate Tip socket tool		
14	<b>Heated MEN sub-assembly for 3-, 4- &amp; 6-drop manifolds with 15.5mm spherical radius</b>	1	SXX2010			19	
	MEN body	1	SXM2010				

\* Common for all Stellar nozzle sub-assemblies in each individual column.

\*\* Common for all Stellar heated MEN sub-assemblies.

\*\*\* Common for all Stellar unheated MEN sub-assemblies.

**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

# SECTION 3

## Stellar® Round MNA Ordering Information

### Ordering Procedure

#### REQUIRED ORDERING INFORMATION:

1. **Number of Nozzles Required:**  
*Determine the number of nozzles required.*
2. **Gate Circle Required:**  
*Choose the gate circle required Ø40, Ø50, Ø70, or Ø90mm. Record the manifold and components sub-assembly item number from Table 3-1, "Sub-Assembly Parts List"; e.g., for a Ø40 3-drop, the item number is SRD4003.*
3. **Manifold and Components Sub-Assembly:**  
*Select an appropriate gating method. For quick reference see pages 5, 10 (metric) or 38 (inch), "Nozzle Selection."*
4. **Nozzle Tip or Nozzle Tip Sub-Assembly:**  
*Determine the nozzle body sub-assembly item number required from the calculation sheets. For quick reference see pages 10 (metric) or 38 (inch) and 83, "Nozzle Selection" and "Nozzle Body Information." Determine nozzle heater type: Coil Heater or High Performance Embedded Heater.*
5. **Nozzle Body Sub-Assembly:**
6. **Heated or Unheated MEN:**  
*Specify heated or unheated MEN style (Figs. 3-7 and 3-8) and machine nozzle spherical radius: 1/2 in, 3/4 in, or 15.5 mm.*
7. **Machine Nozzle Spherical Radius:**  
*Specify 1/2 in, 3/4 in, or 15.5 mm*

#### First-Time Customers Will Need:

8. **Sprue Gate Tip Socket Tool** (see Fig. 3-5):
9. **Nut Socket Tool** (see Fig. 3-6):

#### Additional Items:

10. **Locating Ring:**  
*(if required, specify GXL2001 for heated MEN or SXL1100 for Unheated MEN, see Figs. 3-9 and 3-10)*
11. **Power and Thermocouple Connectors:**  
*(5-, 8-, and 12-zone options)*
12. **Combination Terminal Mounting Box with Terminal Strip:**  
*(5-, 8-, and 12-zone options)*

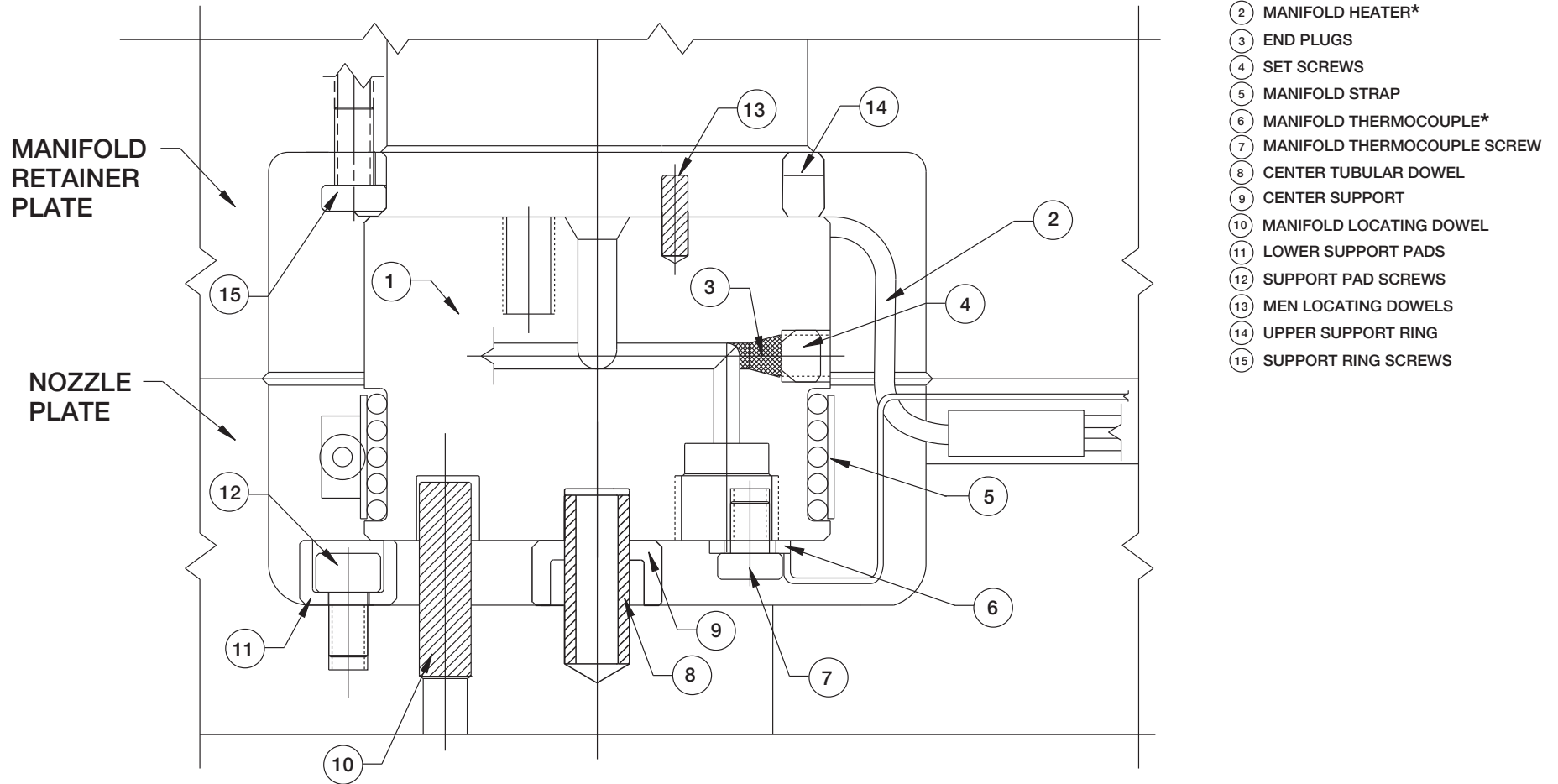
Worksheet	Example:
1. _____	3
2. _____	Ø40
3. _____	SRD4003
4. _____	SXT1040
5. _____	SXY8085
6. _____	Heated
7. _____	1/2 in
8. _____	SXW0003
9. _____	SXW0002
10. _____	GXL2001
11. _____	5-Zone
12. _____	5-Zone

## SECTION 3

Stellar® Round MNA Ordering Information

### Manifold and Components Sub-Assembly Section View

Fig. 3-1



\*NOTE: Manifold heater and thermocouple bending performed at assembly.

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)



## SECTION 3

Stellar® Round MNA Ordering Information

### Sub-Assembly Parts List and Item Numbers

Table 3-1

		Ø40 3-DROP		Ø40 4-DROP		Ø40 6-DROP		Ø50 3-DROP		Ø50 4-DROP		Ø50 6-DROP		Ø50 8-DROP	
		SRD4003		SRD4004		SRD4006		SRD5003		SRD5004		SRD5006		SRD5008	
		ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY
Manifold and Components Sub-Assembly consists of these items	MANIFOLD AND COMPONENTS SUB-ASSEMBLY ITEM NO.														
	Manifold Sub-Assembly	ARD4003	1	ARD4004	1	ARD4006	1	ARD5003	1	ARD5004	1	ARD5006	1	ARD5008	1
	Manifold Thermocouple	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1
	Manifold Thermocouple Screw (LHCS)	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1
	Manifold Locating Dowel	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1
	Center Support	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1
	Center Tubular Dowel	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1
	Upper Support Ring	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1
	Upper Support Screws	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4
	Lower Support Pads	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4
	Lower Support Pad Screws (SHCS)	M610	4	M610	4	M610	4	M610	4	M610	4	M610	4	M610	4
MEN Locating Dowels	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2	
		ARD4003		ARD4004		ARD4006		ARD5003		ARD5004		ARD5006		ARD5008	
Manifold Sub-Assembly consists of these items	MANIFOLD SUB-ASSEMBLY ITEM NO.														
	Manifold	MRD4003	1	MRD4004	1	MRD4006	1	MRD5003	1	MRD5004	1	MRD5006	1	MRD5008	1
	Manifold Heater	MRH0001	2	MRH0001	2	MRH0001	2	MRH0002	2	MRH0002	2	MRH0002	2	MRH0002	2
	Manifold Strap	MHS4001	1	MHS4001	1	MHS4001	1	MHS5001	1	MHS5001	1	MHS5001	1	MHS5001	1

**NOTE:** All manifold sub-assemblies include end plugs and set screws installed.

# SECTION 3

## Stellar® Round MNA Ordering Information

### Sub-Assembly Parts List and Item Numbers (continued)

Table 3-1 (continued)

		Ø70 3-DROP		Ø70 4-DROP		Ø70 6-DROP		Ø70 8-DROP		Ø90 3-DROP		Ø90 4-DROP		Ø90 6-DROP		Ø90 8-DROP	
		SRD7003		SRD7004		SRD7006		SRD7008		SRD9003		SRD9004		SRD9006		SRD9008	
		ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY
<b>MANIFOLD AND COMPONENTS SUB-ASSEMBLY ITEM NO.</b>	Manifold Sub-Assembly	ARD7003	1	ARD7004	1	ARD7006	1	ARD7008	1	ARD9003	1	ARD9004	1	ARD9006	1	ARD9008	1
	Manifold Thermocouple	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1
	Manifold Thermocouple Screw (LHCS)	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1	M68LHCS	1
	Manifold Locating Dowel	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1	DP830	1
	Center Support	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1	SXS3010	1
	Center Tubular Dowel	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1	PH 10-26	1
	Upper Support Ring	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1	SXS3040	1
	Upper Support Screws	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4	M612LHCS	4
	Lower Support Pads	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4	SXS3030	4
	Lower Support Pad Screws (SHCS)	M610	4	M610	4	M610	4	M610	4	M610	4	M610	4	M610	4	M610	4
	MEN Locating Dowels	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2	DP412	2
	<b>MANIFOLD SUB-ASSEMBLY ITEM NO.</b>		ARD7003		ARD7004		ARD7006		ARD7008		ARD9003		ARD9004		ARD9006		ARD9008
Manifold		MRD7003	1	MRD7004	1	MRD7006	1	MRD7008	1	MRD9003	1	MRD9004	1	MRD9006	1	MRD9008	1
Manifold Heater		MRH0003	2	MRH0003	2	MRH0003	2	MRH0003	2	MRH0004	2	MRH0004	2	MRH0004	2	MRH0004	2
Manifold Strap		MHS7001	1	MHS7001	1	MHS7001	1	MHS7001	1	MHS9001	1	MHS9001	1	MHS9001	1	MHS9001	1

**NOTE:** All manifold sub-assemblies include end plugs and set screws installed.

**Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)**

# SECTION 3

## Stellar® Round MNA Ordering Information

### Nozzle Body Information

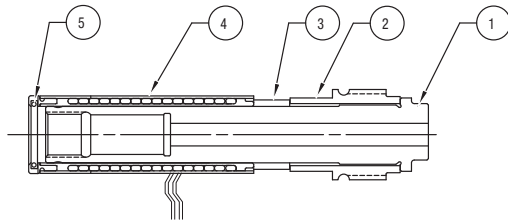


Fig. 3-2

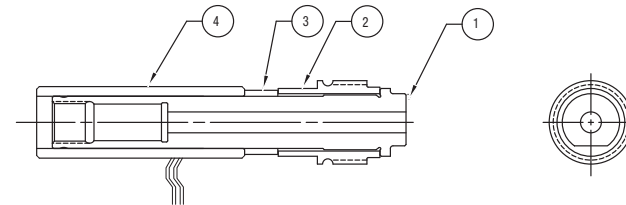


Fig. 3-4

#### Item Numbers for Threaded Style Standard

Heater Nozzle Assemblies		SXY0065	SXY0085	SXY0105	SXY0125	SXY0145
SUB-ASSEMBLY COMPONENT	CALLOUT NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.
Nozzle Body -SXB4xxx	1	SXB4068	SXB4088	SXB4108	SXB4128	SXB4148
Nut	2	SXE2013	SXE2013	SXE2013	SXE2013	SXE2013
Heater Stop	3	SXD6501	SXD6501	SXD6501	SXD6501	SXD6501
Nozzle Heater	4	SHH1039	SHH1059	SHH1079	SHH1099	SHH1119
Nozzle Thermocouple	5	SXC1001	SXC1001	SXC1001	SXC1001	SXC1001

#### Item Numbers for Threaded Style High Performance

Heater Nozzle Assemblies		SXY0965	SXY0985	SXY0905	SXY0925	SXY0945
SUB-ASSEMBLY COMPONENT	CALLOUT NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.
Nozzle Body -SXB4xxx	1	SXB4068	SXB4088	SXB4108	SXB4128	SXB4148
Nut	2	SXE2013	SXE2013	SXE2013	SXE2013	SXE2013
Heater Stop	3	SXD6501	SXD6501	SXD6501	SXD6501	SXD6501
Nozzle Heater	4	SXE1039	SXE1059	SXE1079	SXE1099	SXE1119

**NOTES:** For high performance heater, thermocouple is embedded in the heater body.

Tip information and Gating Styles are provided on page 5, Section 1.

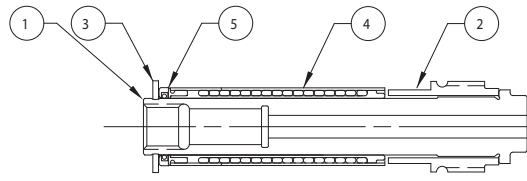


Fig. 3-3

#### Item Numbers for Threaded Style Standard

Heater Nozzle Assemblies		SXY8065	SXY8085	SXY8105	SXY8125	SXY8145
SPRUE GATE ONLY						
SUB-ASSEMBLY COMPONENT	CALLOUT NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.	ITEM NO.
Nozzle Body -SXB4xxx	1	SXB4068	SXB4088	SXB4108	SXB4128	SXB4148
Nut	2	SXE2013	SXE2013	SXE2013	SXE2013	SXE2013
Snap Ring	3	SXR1001	SXR1001	SXR1001	SXR1001	SXR1001
Nozzle Heater	4	SHH1039	SHH1059	SHH1079	SHH1099	SHH1119
Nozzle Thermocouple	5	SXC1001	SXC1001	SXC1001	SXC1001	SXC1001

### Assembly Tools

Fig. 3-5 Sprue Gate Tip Socket Tool (SXW0003)



Fig. 3-6 Nut Socket Tool (SXW0002)

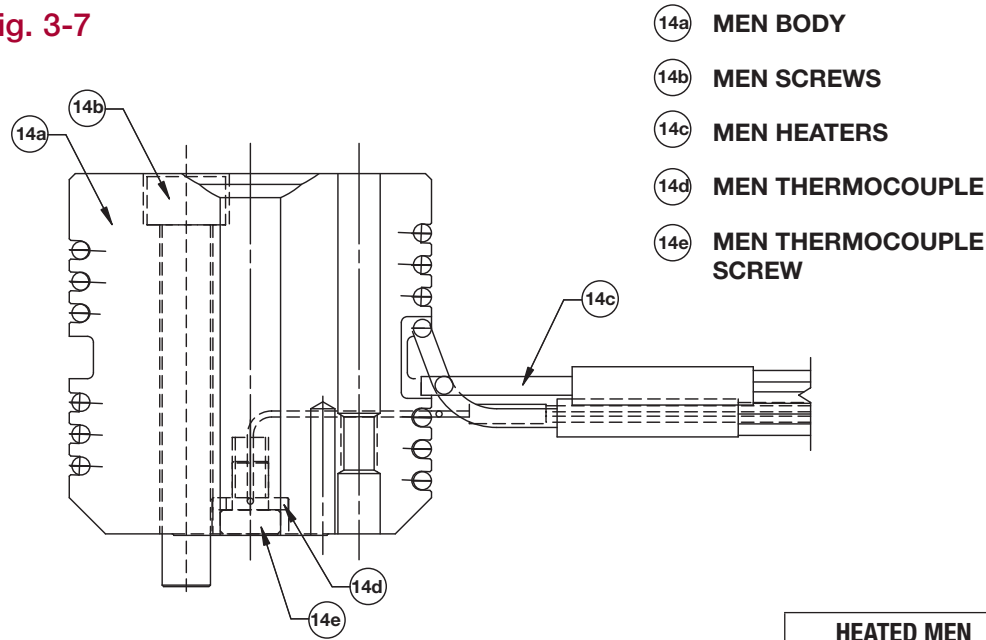


# SECTION 3

Stellar® Round MNA Ordering Information

## Heated MEN Sub-Assembly

Fig. 3-7



- 14a MEN BODY
- 14b MEN SCREWS
- 14c MEN HEATERS
- 14d MEN THERMOCOUPLE
- 14e MEN THERMOCOUPLE SCREW

**NOTES:**

1. Customer to specify machine nozzle spherical radius. Proper MEN sub-assembly will be selected by DME to correspond with manifold sub-assembly.
2. Locating ring is optional and must be ordered separately. Locating ring item no. GXL2001 includes two M820 FHCS.

		COMBINATION 1/2 AND 3/4 INCH SPHERICAL RADIUS				15.5mm SPHERICAL RADIUS			
		FLOW CHANNEL		FLOW CHANNEL		FLOW CHANNEL		FLOW CHANNEL	
		Ø10	Ø12	Ø10	Ø12	Ø10	Ø12	Ø10	Ø12
HEATED MEN SUB-ASSEMBLY ITEM NO.		SXX1010		SXX1012		SXX2010		SXX2012	
Heated MEN sub-assembly consists of these items	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	
	MEN Body	SXM1010	1	SXM1012	1	SXM2010	1	SXM2012	1
	MEN Screws (SHCS)	M860	4	M860	4	M860	4	M860	4
	MEN Heaters	MRH0012	2	MRH0012	2	MRH0012	2	MRH0012	2
	MEN Thermocouple	SXC2001	1	SXC2001	1	SXC2001	1	SXC2001	1
MEN Thermocouple Screw (LHCS)	M68LH	1	M68LH	1	M68LH	1	M68LH	1	

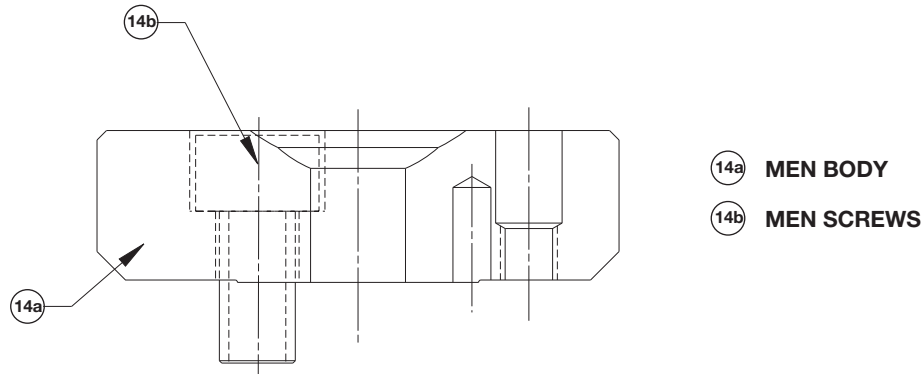
Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

# SECTION 3

Stellar® Round MNA Ordering Information

## Unheated MEN Sub-Assembly

Fig. 3-8



**NOTES:**

1. Customer to specify machine nozzle spherical radius. Proper MEN sub-assembly will be selected by DME to correspond with manifold sub-assembly.
2. Locating ring is optional and must be ordered separately. Locating ring item no. SXL1100 includes two M820 FHCS.

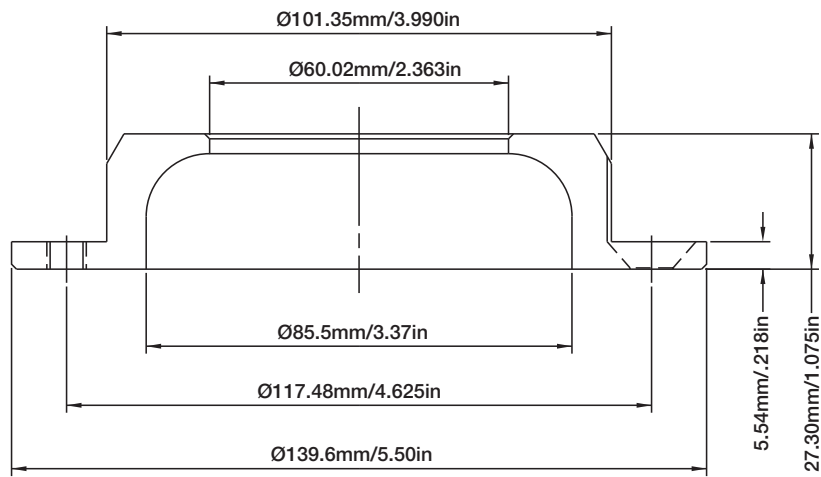
		COMBINATION 1/2 AND 3/4 INCH SPHERICAL RADIUS				15.5mm SPHERICAL RADIUS			
		FLOW CHANNEL		FLOW CHANNEL		FLOW CHANNEL		FLOW CHANNEL	
		Ø10	Ø12	Ø10	Ø12	Ø10	Ø12	Ø10	Ø12
UNHEATED MEN SUB-ASSEMBLY ITEM NO.		SXX1210		SXX1212		SXX2210		SXX2212	
Unheated MEN sub-assembly consists of these items		ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY	ITEM NO.	QTY
	MEN Body	SXM1210	1	SXM1212	1	SXM2210	1	SXM2212	1
	MEN Screws (SHCS)	M816	4	M816	4	M816	4	M816	4

# SECTION 3

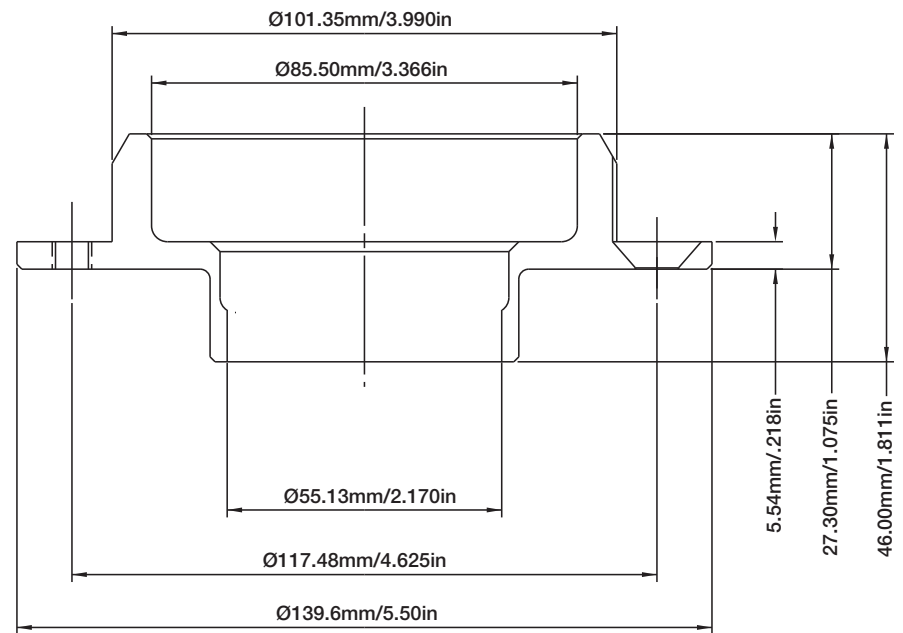
Stellar® Round MNA Ordering Information

## Locating Rings

**Fig. 3-9**  
**Locating Ring for Heated MEN**



**Fig. 3-10**  
**Locating Ring for Unheated MEN**



LOCATING RING	ITEM NO.
For Heated MEN	GXL2001
For Unheated MEN	SXL1100

Questions? Call DME at 1-800-626-6653 (U.S.) or 1-800-387-6600 (Canada)

# Stellar® Micromolding Hot Runner Systems

## Stellar® Hot Runner Systems – Benefits



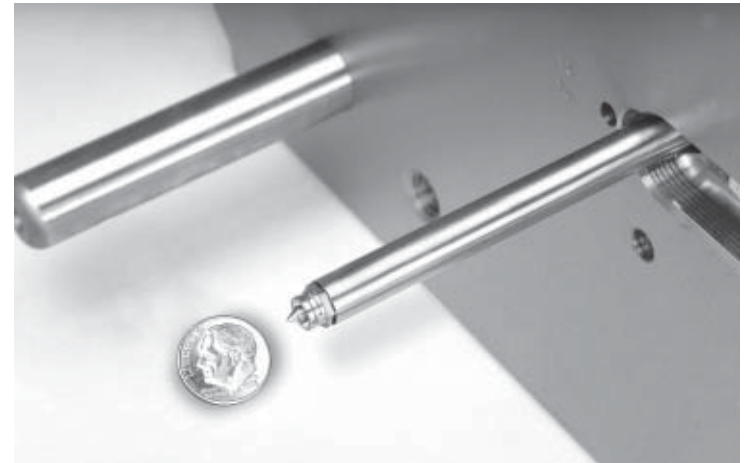
### Excellent Results with Engineering Thermoplastics

The complexity of today's very small part molding applications demands the added properties of high performance engineered materials. Stellar was designed for outstanding processing of these materials. Challenging amorphous materials such as PET or crystalline materials including PBT and PA are easily processed with the Stellar Hot Runner System. Highly conductive tip designs and precise heat profiling in all nozzle lengths ensure consistent processing temperatures.

### Modularity Increases Application Flexibility

The Stellar Hot Runner System from DME is built on a standardized architecture of modular components. Key features include:

- Choice of balanced multi-nozzle assemblies (MNAs) for stand-alone use or under a manifold for higher cavitation molds
- Threaded nozzle connection for standard manifolds and compression nozzle connection for custom manifolds
- Three different "A" dimensions from 65-105mm are available for threaded style nozzles
- Six different "A" dimensions, from 55-105mm are available for compression nozzle connection
- Three interchangeable tip styles – Point Gate, Thru Hole Gate and Sprue Gate



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*Every step of the way*