

# OSCO<sup>®</sup> inc.

RUNNERLESS MOLDING SYSTEMS

## Valve Gate Drops, Manifold Application



**TWO-SHOT**



**TWO-SHOT**



Valve Gate Drops, Manifold Application



**SEQUENTIAL**



**SEQUENTIAL  
FAMILY**

**Where Innovation Flows**



Proudly Made in the USA

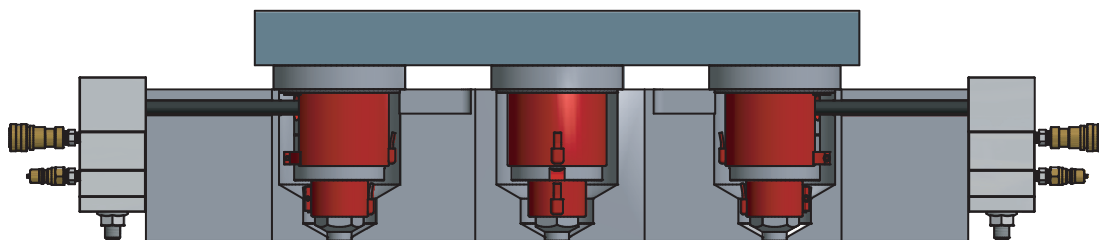
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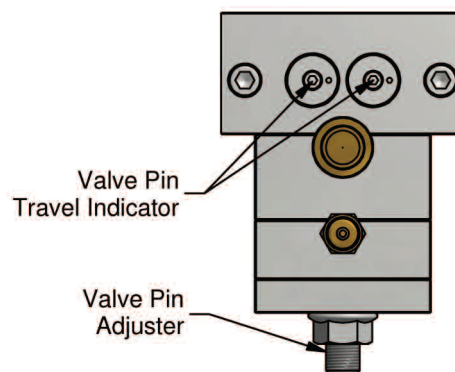
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# External Cylinder Valve Gate

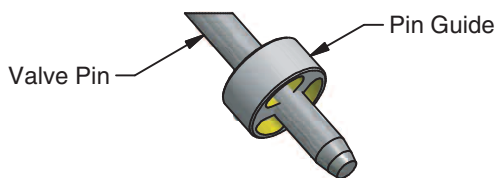
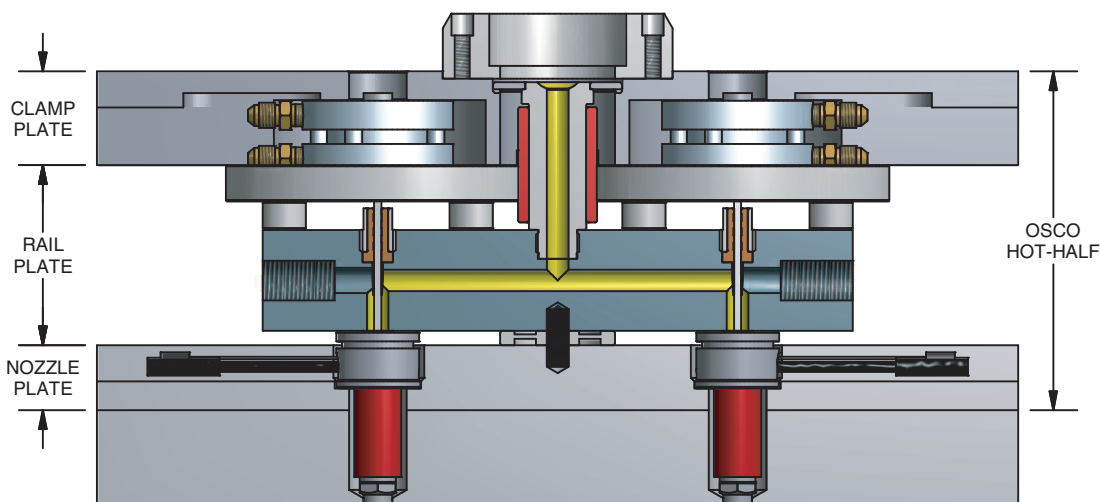


## Externally Mounted Cylinder

- Reduces machining time
- Increases life by removing cylinder from heated mold



# Internal Cylinder Valve Gate



Valve Pin with Pin Guide

Set and  
Adjust Valve  
Pin from  
Outside the  
Mold

Manifold  
Thermal  
Expansion  
Concerns are  
Eliminated

Design  
Versatility

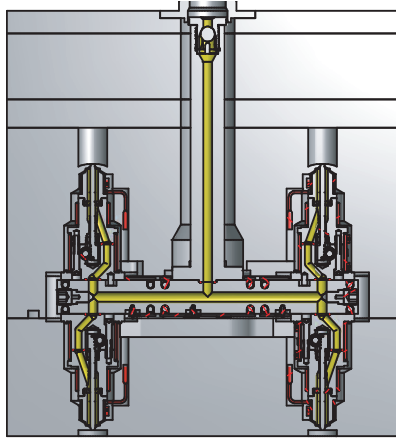


STANDARD  
COMPONENTS  
IN STOCK

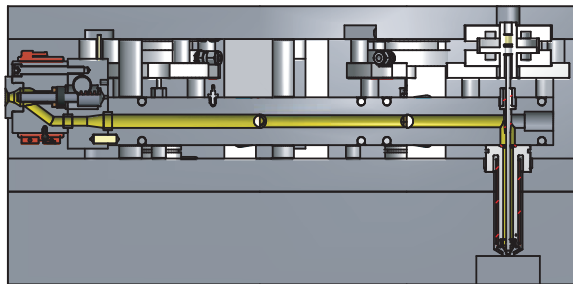


# Design Versatility

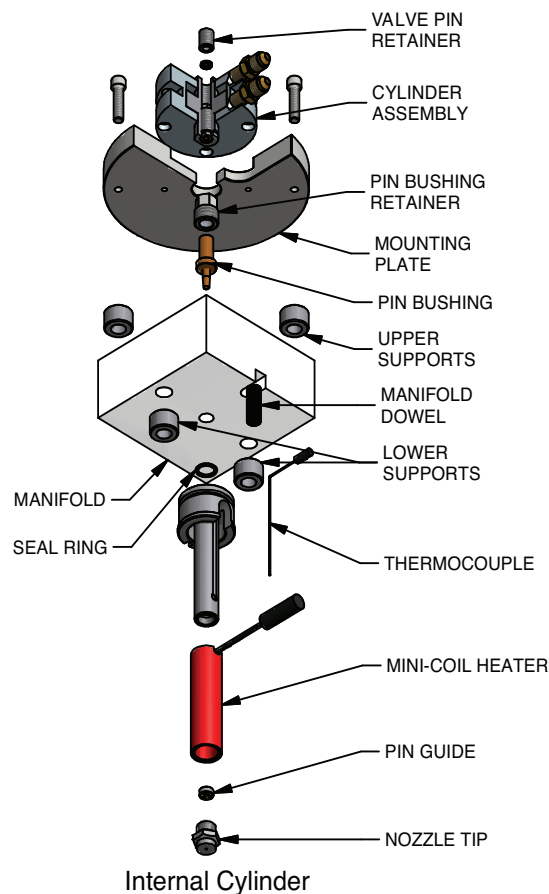
STACK MOLD



SIDE INJECT MOLD



# Field Serviceable



## APPLIANCE



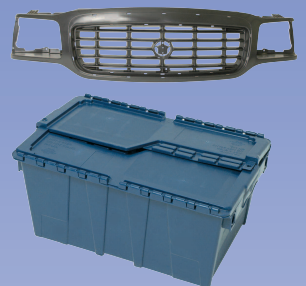
## LENS



## TWO-SHOT



## SEQUENTIAL GATING



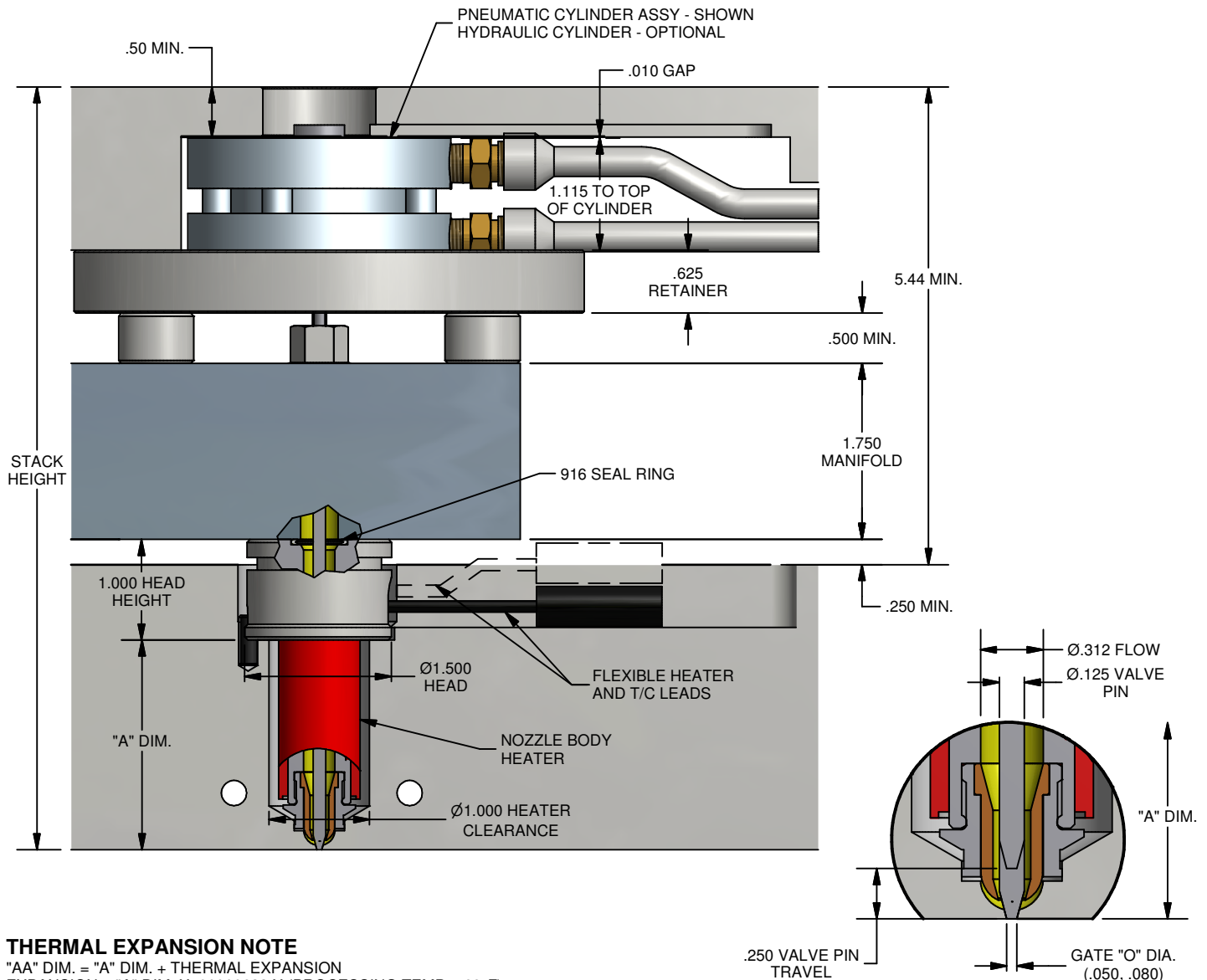
**STANDARD  
COMPONENTS  
IN STOCK**



# BLV-50-VG

## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 50

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Body Less Valve Gate Nozzle is designed to feed the molded part. The "BLV" is an ideal selection when gate cosmetics are paramount and the circular witness mark from the nozzle tip "T" diameter is not allowable. Each "BLV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68 °F)

## HOW TO ORDER

CATALOG #	"A" DIM.
BLV-0520	2.000
BLV-0525	2.500
BLV-0530	3.000
BLV-0535	3.500
BLV-0540	4.000
BLV-0545	4.500
BLV-0550	5.000
BLV-0560	6.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

GATE "O" DIAMETERS *	
.050 MIN.	.080 MAX.

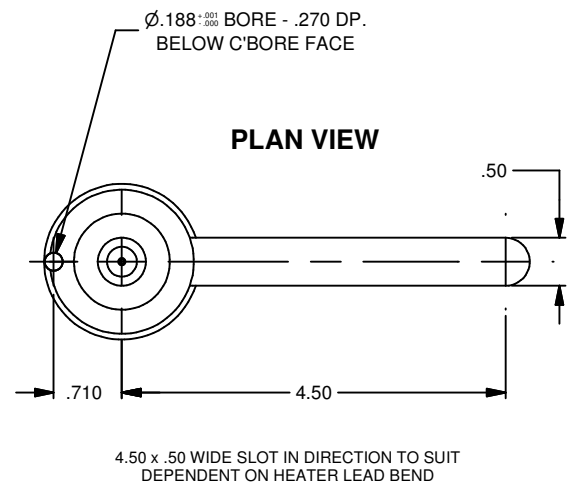
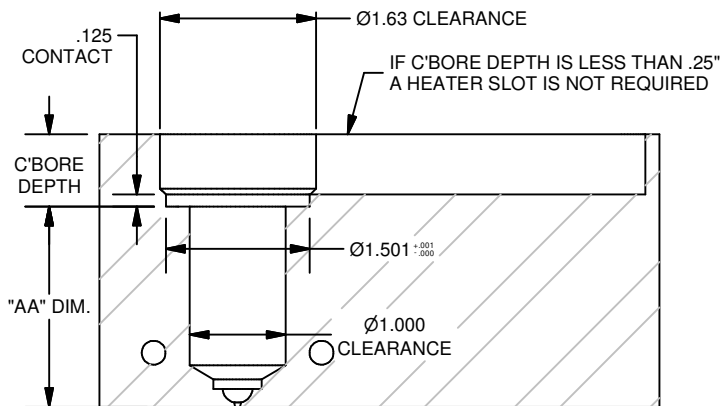
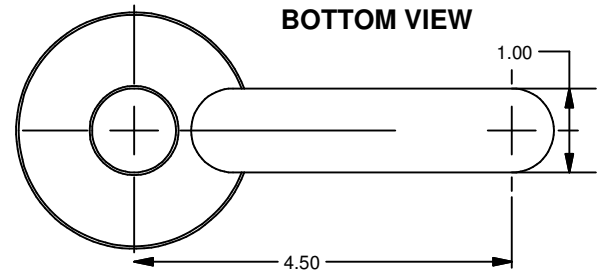
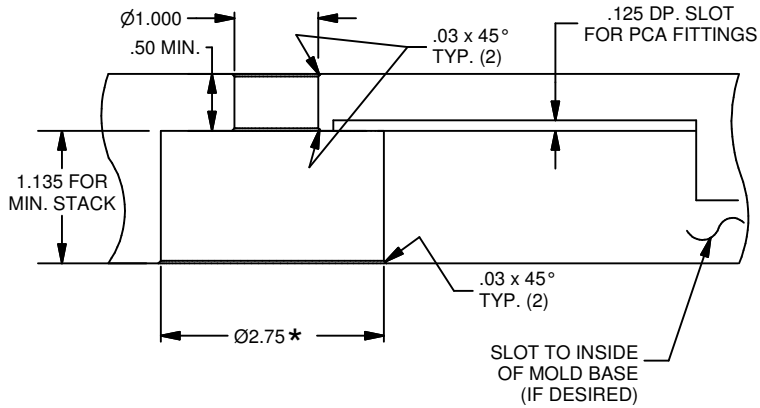
NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# BLV-50-VG BORING

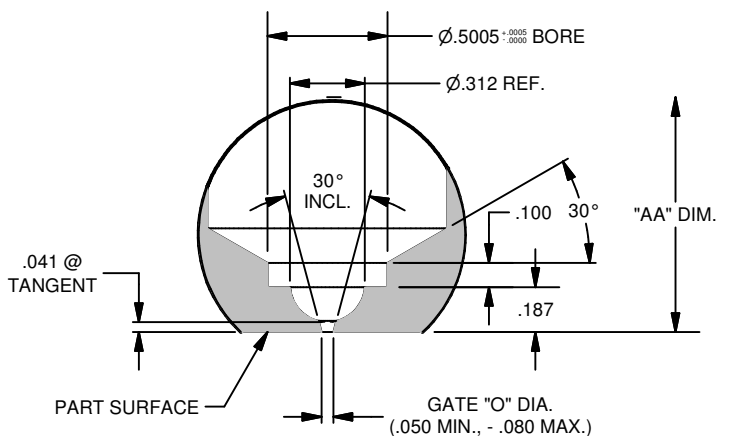
## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 50

### AIR CYLINDER DETAILS



#### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. (Due to the Body Less Nozzle Design, thermal expansion does not need to be considered.)

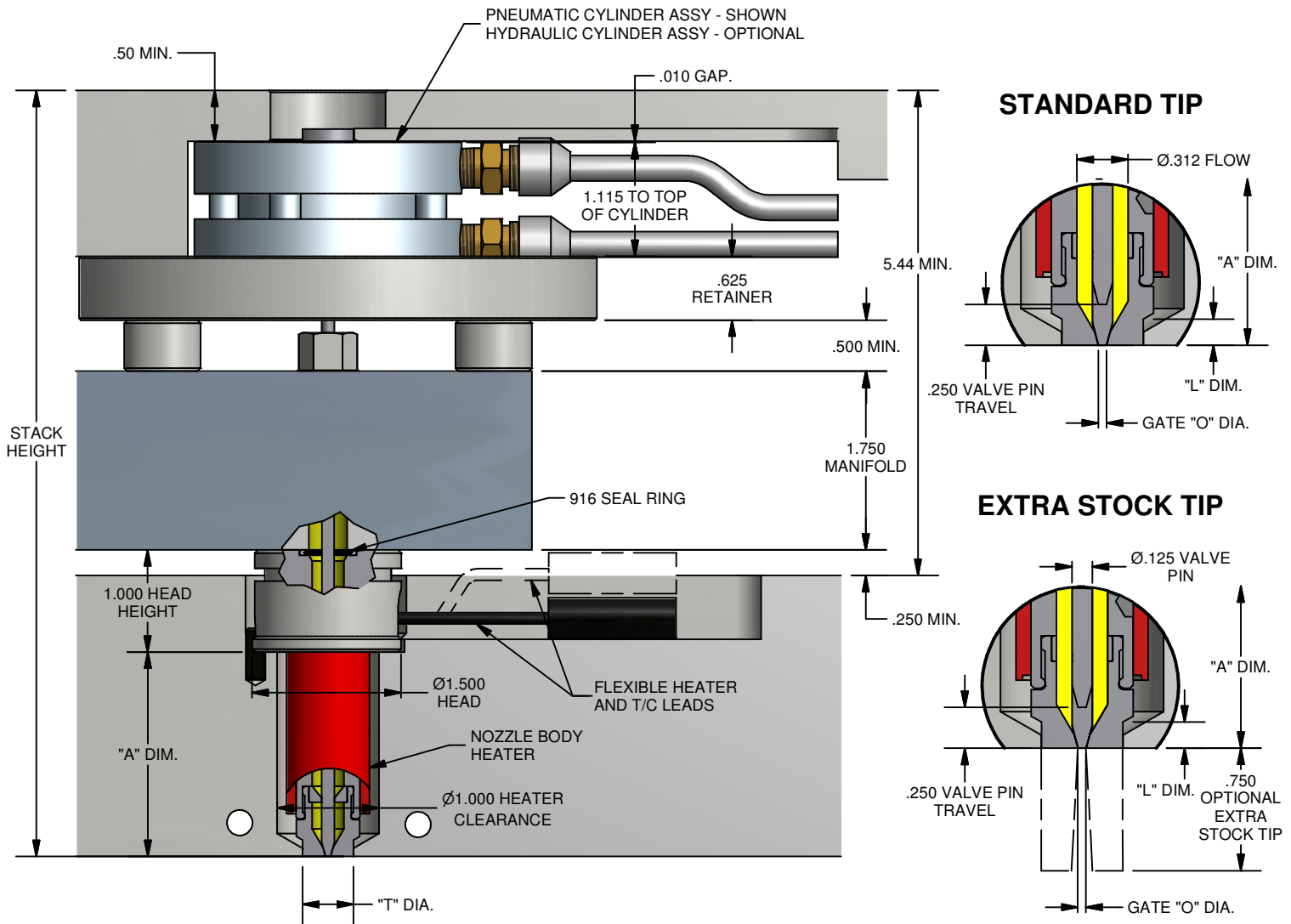


\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# FBV-50-VG

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 50

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Full Body Valve Gate Nozzle is designed to feed the part or runner. The "FBV" is an ideal selection when the nozzle tip "T" diameter witness mark is allowable. Each "FBV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

## HOW TO ORDER

CATALOG #	"A" DIM.
FBV-0520	2.000
FBV-0525	2.500
FBV-0530	3.000
FBV-0535	3.500
FBV-0540	4.000
FBV-0545	4.500
FBV-0550	5.000
FBV-0560	6.000

### SPECIFY:

- Nozzle Catalog Number
- "A" Dimension
- "T" Diameter
- "O" Gate Diameter
- Stack Height: Gate to Platen Side of cylinder
- Resin to be processed

### GATE "O" DIAMETERS

.050 MIN. .080 MAX.

### TIP INFORMATION

"T" DIA.	"L" DIM.
.500	.160
.750	.150
1.000	.150

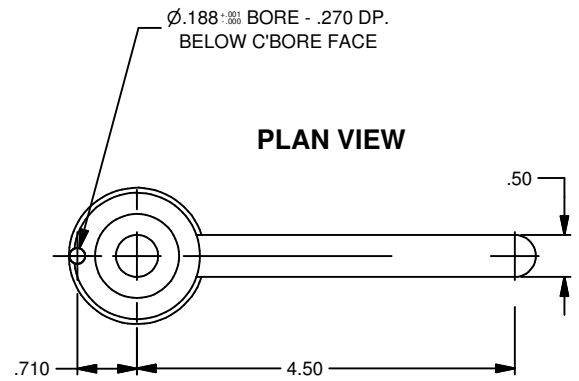
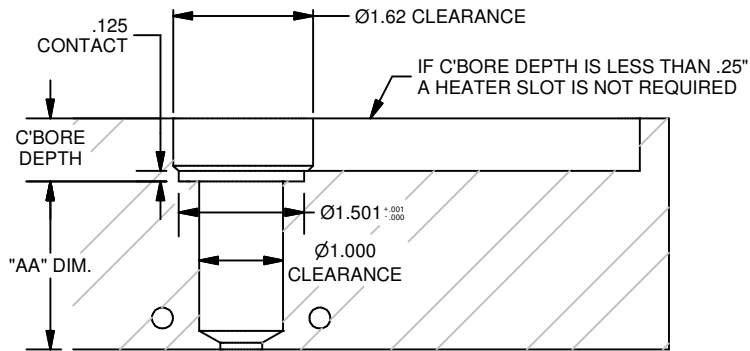
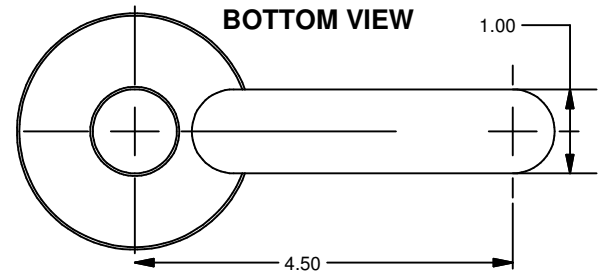
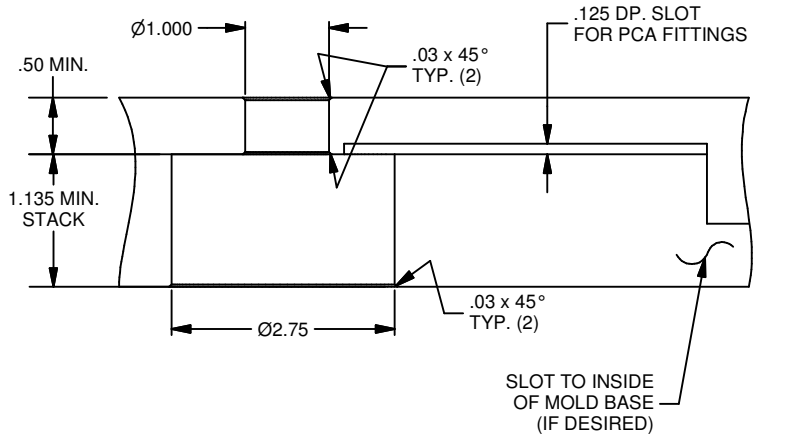
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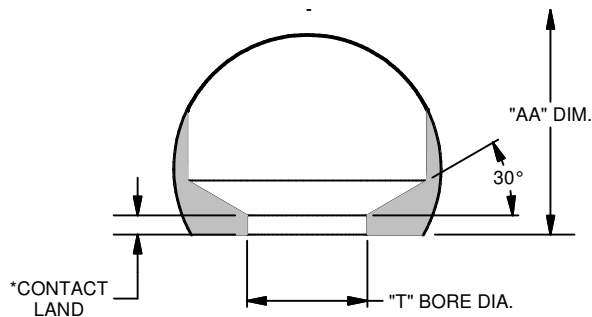
# FBV-50-VG BORING

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 50

### AIR CYLINDER DETAILS



4.50 x .50 WIDE SLOT IN DIRECTION TO SUIT  
DEPENDENT ON HEATER LEAD BEND



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

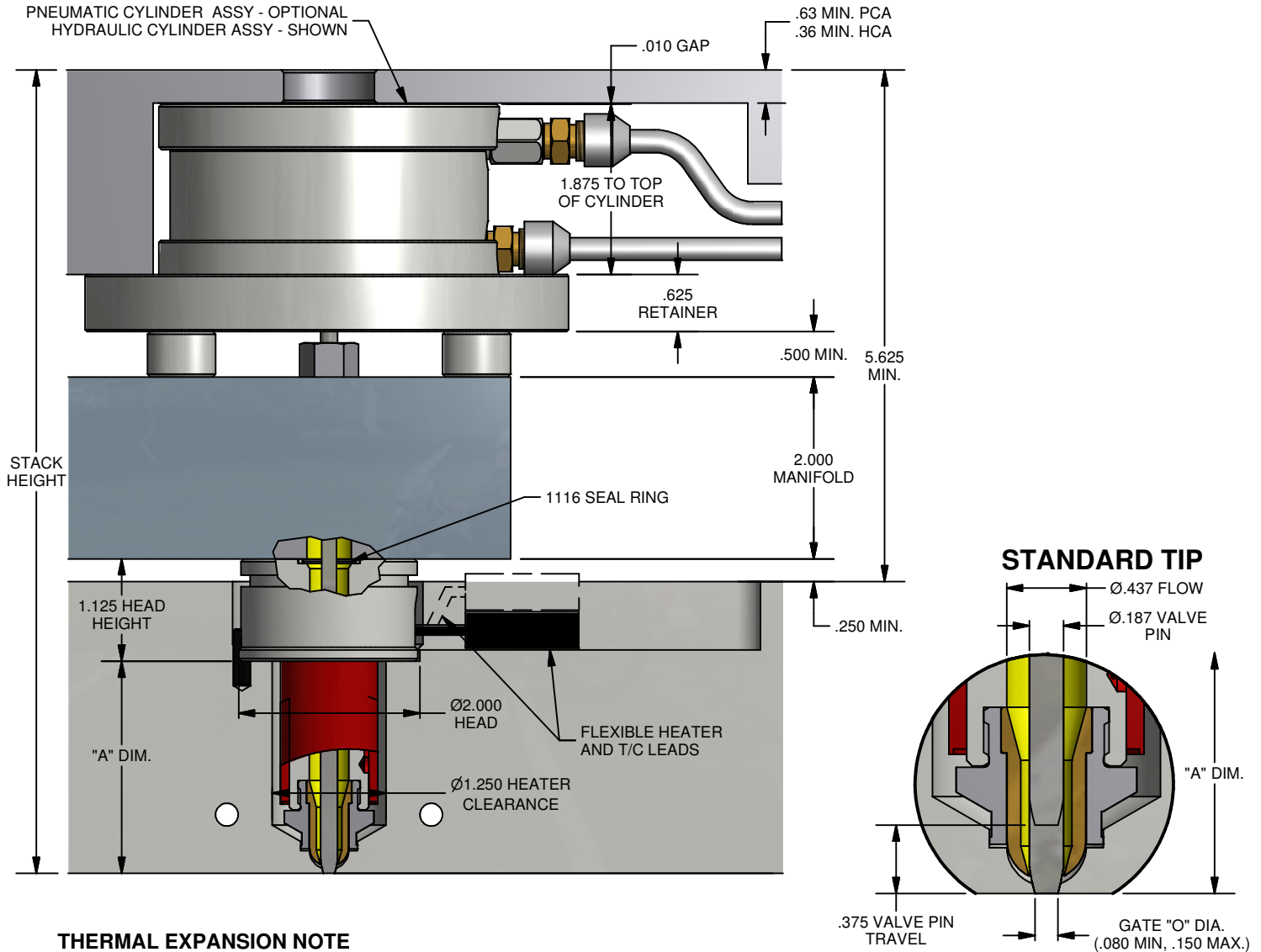
TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. +.0005 BORE -.0000	CONTACT LAND *
.500	.160	.5005	.080
.750	.150	.7505	.150
1.000	.150	1.0005	.150

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# BLV-100-VG

## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 100

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Body Less Valve Gate Nozzle is designed to feed the molded part. The "BLV" is an ideal selection when gate cosmetics are paramount and the circular witness mark from the nozzle tip "T" diameter is not allowable. Each "BLV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

## HOW TO ORDER

CATALOG #	"A" DIM.
BLV-1020	2.000
BLV-1025	2.500
BLV-1030	3.000
BLV-1035	3.500
BLV-1040	4.000
BLV-1045	4.500
BLV-1050	5.000
BLV-1060	6.000
BLV-1070	7.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

### GATE "O" DIAMETERS\*

.080 MIN. .150 MAX.

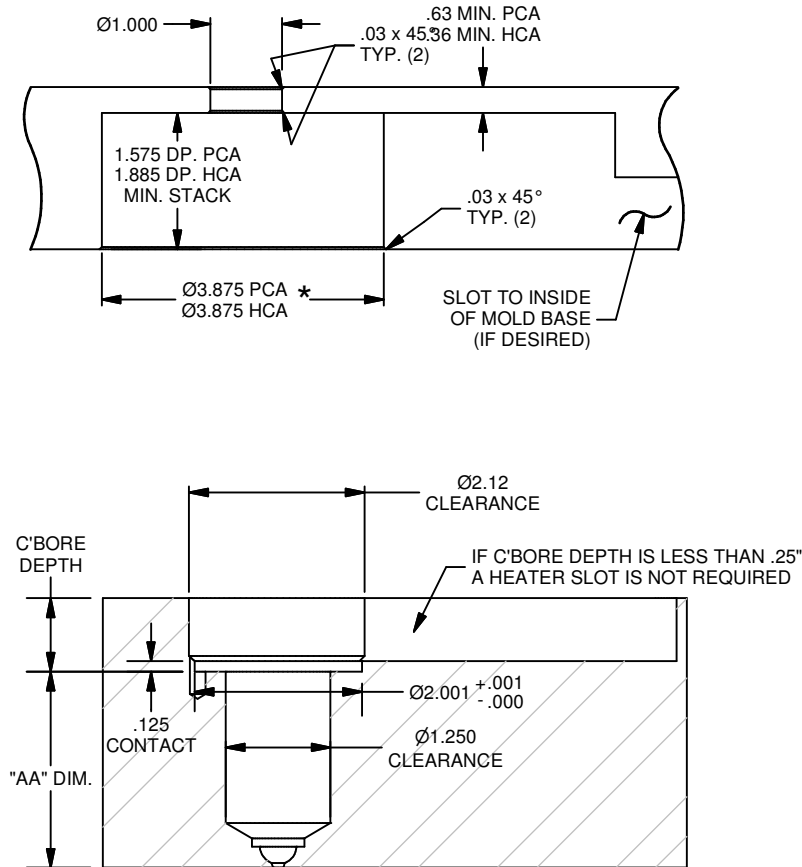
NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

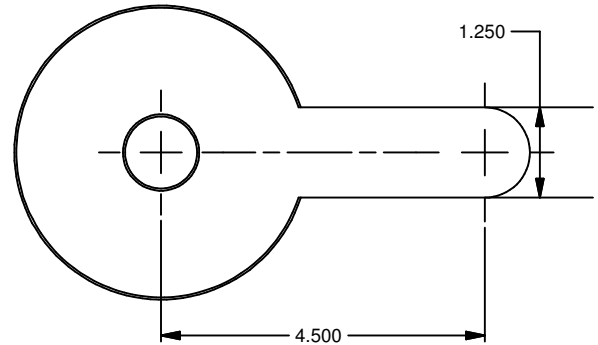
# BLV-100-VG BORING

## BODYLESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 100

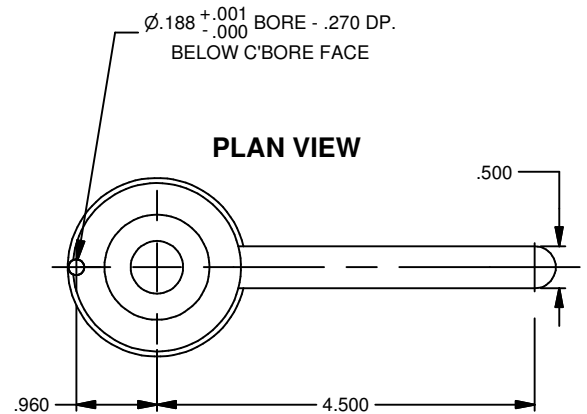
### CYLINDER DETAILS



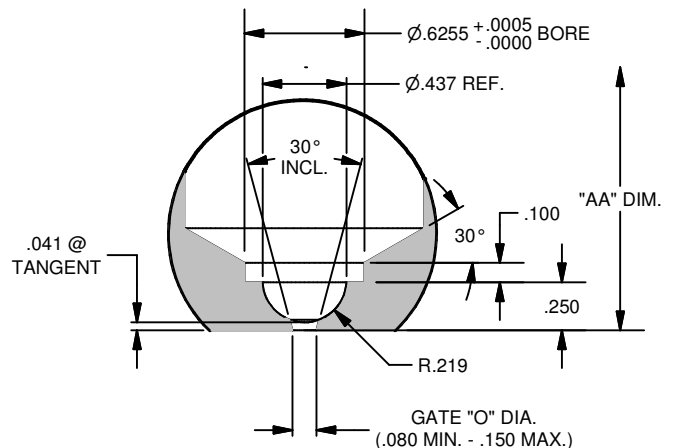
### BOTTOM VIEW



### PLAN VIEW



4.50 x .50 WIDE SLOT IN DIRECTION TO SUIT  
DEPENDENT ON HEATER LEAD BEND



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. (Due to the Body Less Nozzle Design, thermal expansion does not need to be considered.)

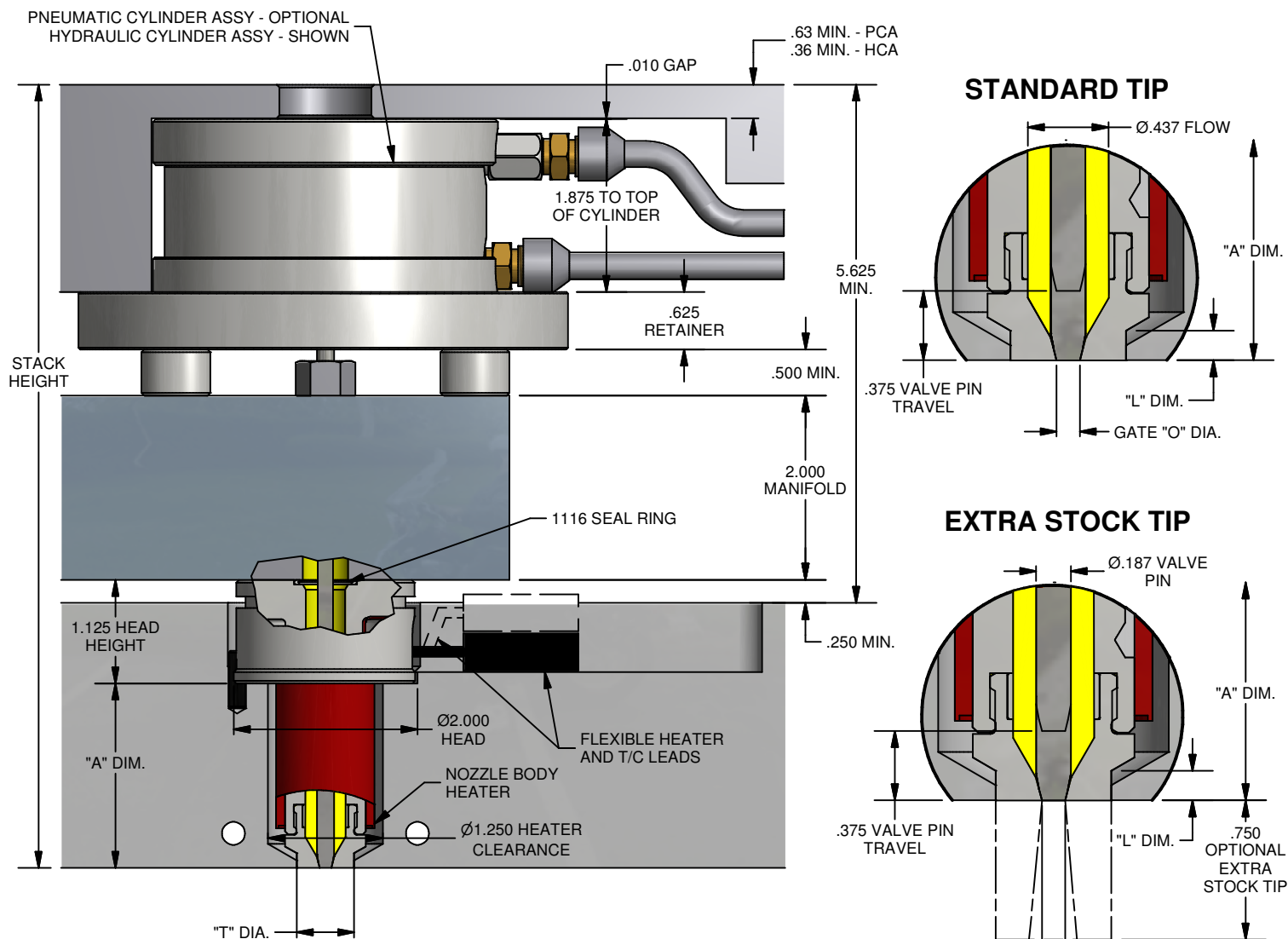
\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.



# FBV-100-VG

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 100

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Full Body Valve Gate Nozzle is designed to feed the part or runner. The "FBV" is an ideal selection when the nozzle tip "T" diameter witness mark is allowable. Each "FBV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68 °F)

## HOW TO ORDER

CATALOG #	"A" DIM.
FBV-1020	2.000
FBV-1025	2.500
FBV-1030	3.000
FBV-1035	3.500
FBV-1040	4.000
FBV-1045	4.500
FBV-1050	5.000
FBV-1060	6.000
FBV-1070	7.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "T" Diameter
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

### GATE "O" DIAMETERS

.080	.125
------	------

### TIP INFORMATION

"T" DIA.	"L" DIM.
.500	.125
.750	.150
1.000	.150

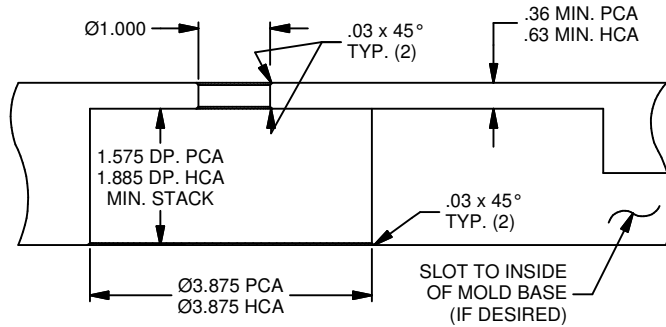
NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

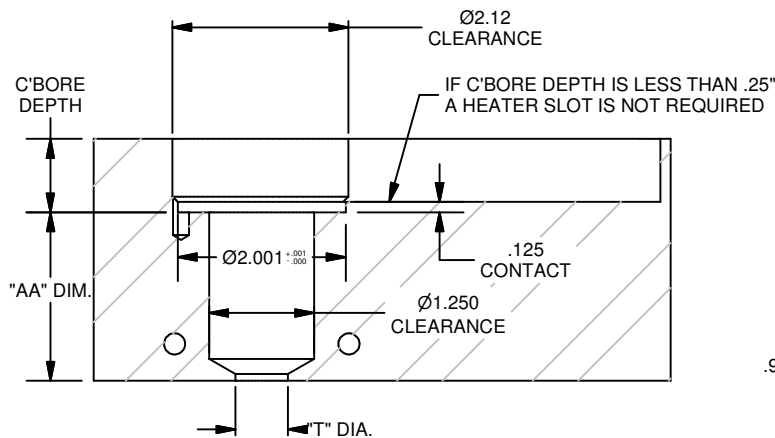
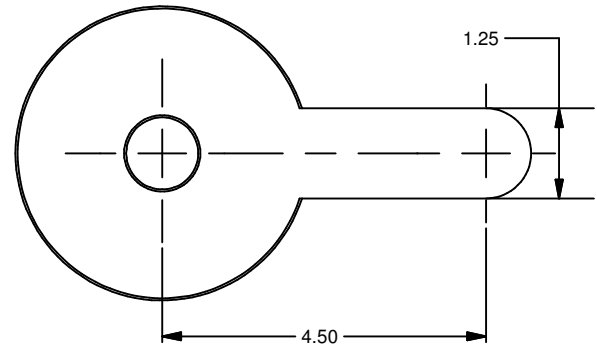
# FBV-100-VG BORING

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 100

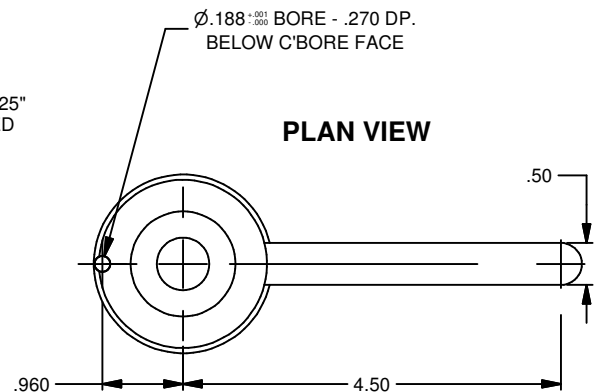
### CYLINDER DETAILS



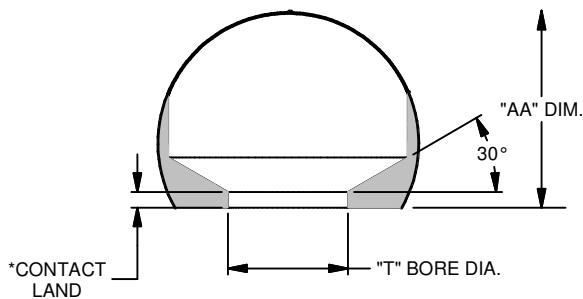
### BOTTOM VIEW



### PLAN VIEW



4.50 x .50 WIDE SLOT IN DIRECTION TO SUIT  
DEPENDENT ON HEATER LEAD BEND



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION

EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68 °F)

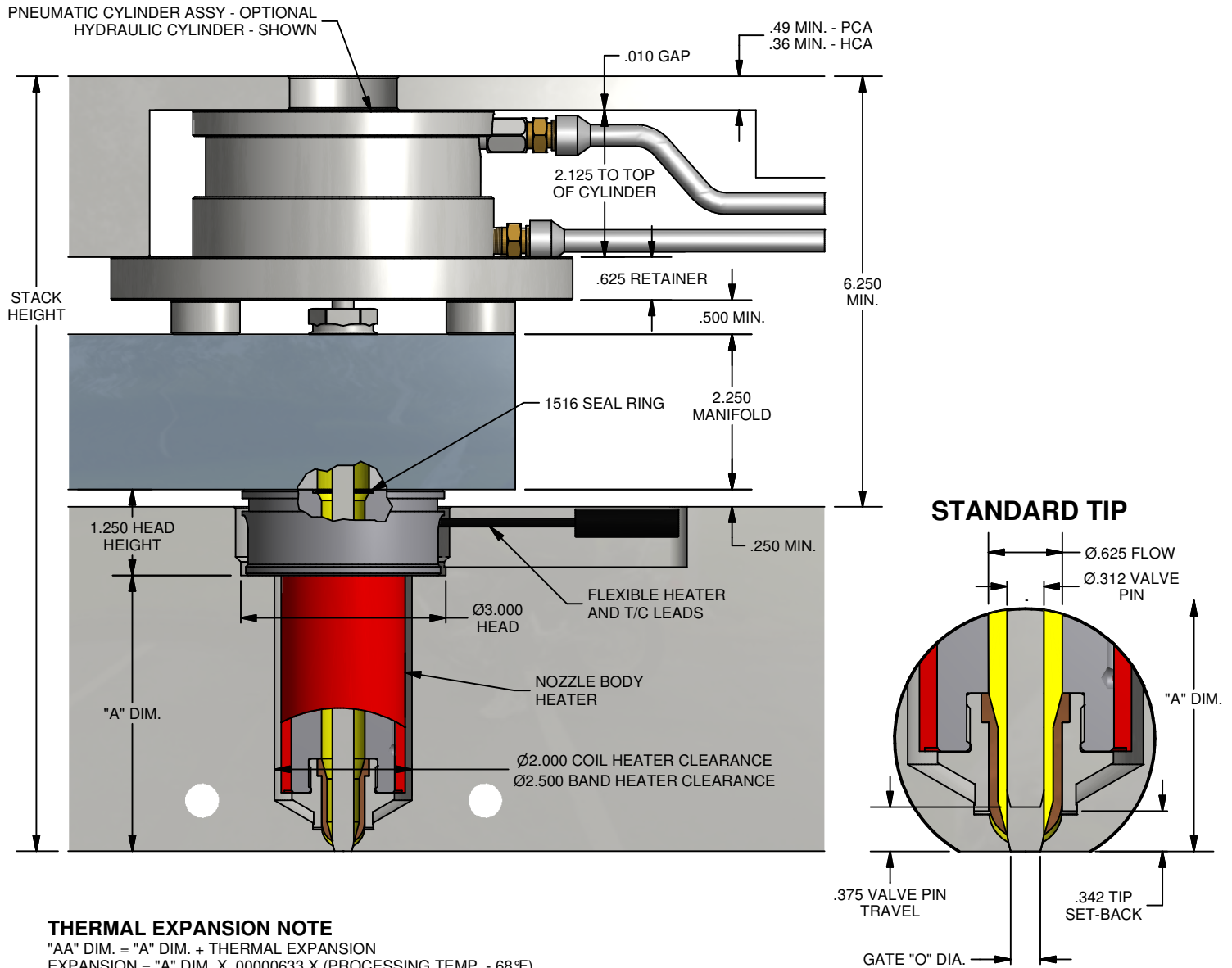
TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. $^{+.0005}_{-.0000}$ BORE	CONTACT LAND *
.500	.125	.5005	.060
.750	.230	.7505	.080
1.000	.150	1.0005	.150

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# BLV-200-VG

## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 200

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Body Less Valve Gate Nozzle is designed to feed the molded part. The "BLV" is an ideal selection when gate cosmetics are paramount and the circular witness mark from the nozzle tip "T" diameter is not allowable. Each "BLV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



## HOW TO ORDER

CATALOG #	"A" DIM.
BLV-2030	3.000
BLV-2040	4.000
BLV-2050	5.000
BLV-2060	6.000
BLV-2070	7.000
BLV-2080	8.000
BLV-2090	9.000
BLV-2100	10.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

### GATE "O" DIAMETERS \*

.150 MIN. .250 MAX.

NOTE: For sizes other than shown, please contact Osco Tech Service.

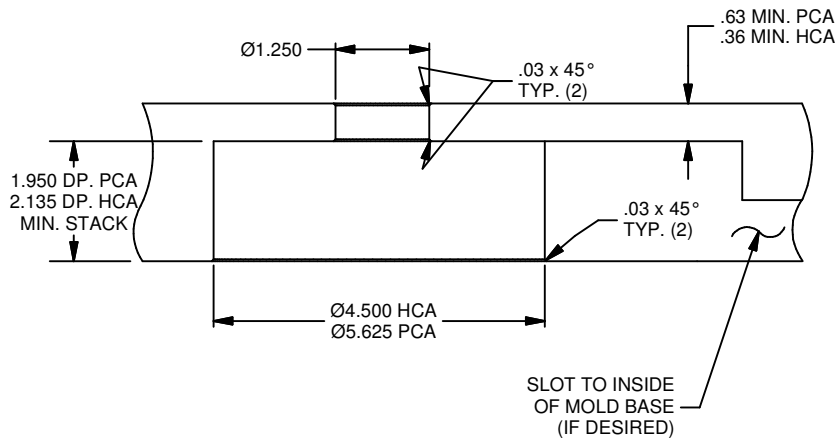
\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.



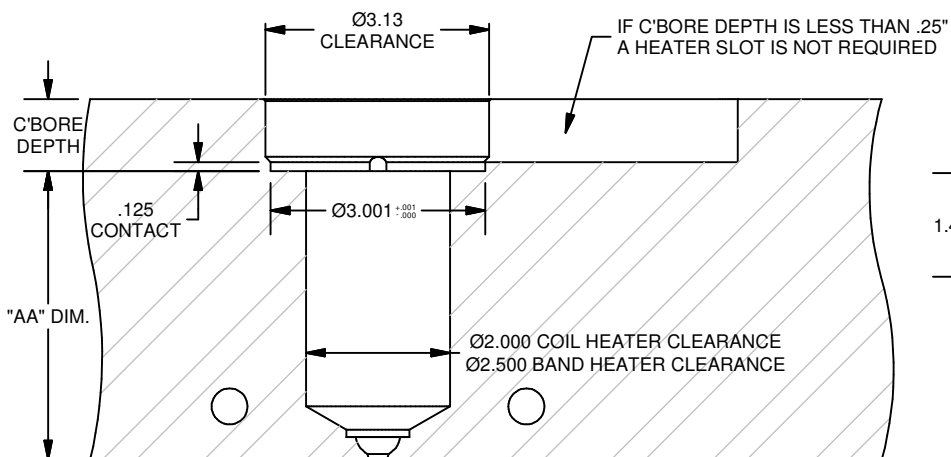
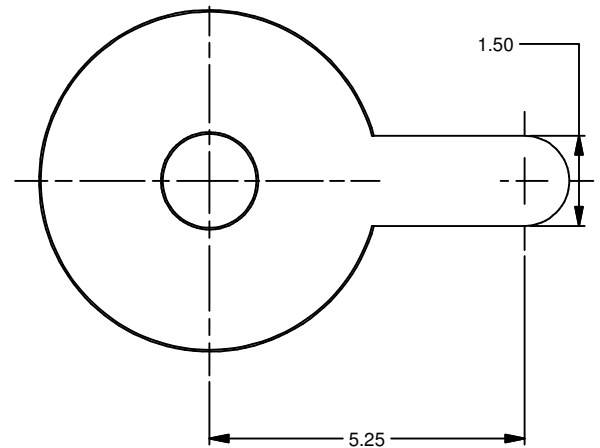
# BLV-200-VG BORING

## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 200

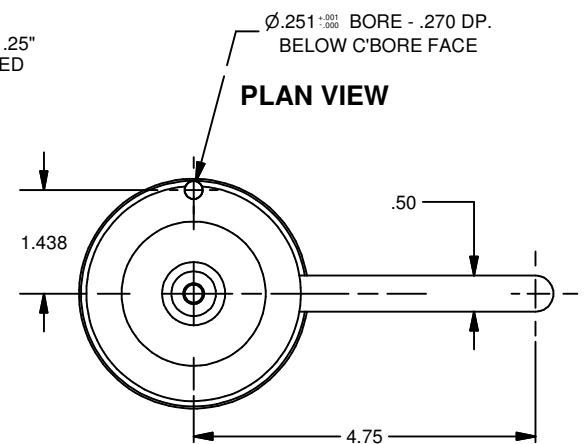
### CYLINDER DETAILS



### BOTTOM VIEW



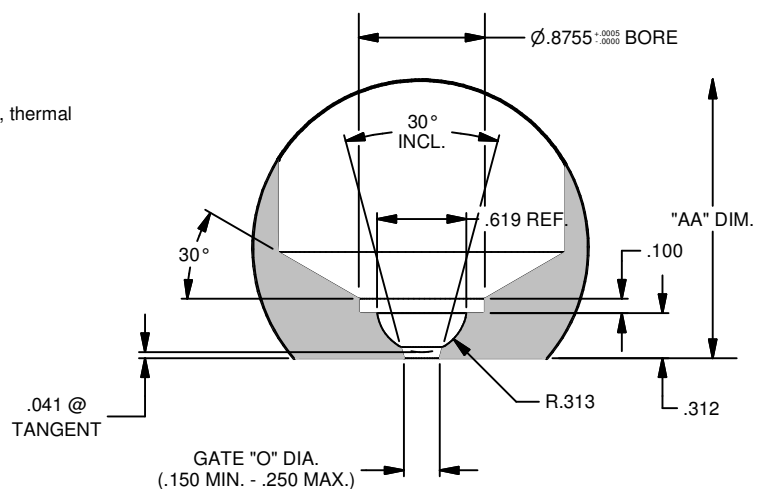
### PLAN VIEW



4.75 x .50 WIDE SLOT IN DIRECTION TO SUIT  
DEPENDENT ON HEATER LEAD BEND

### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. (Due to the Body Less Nozzle Design, thermal expansion does not need to be considered.)

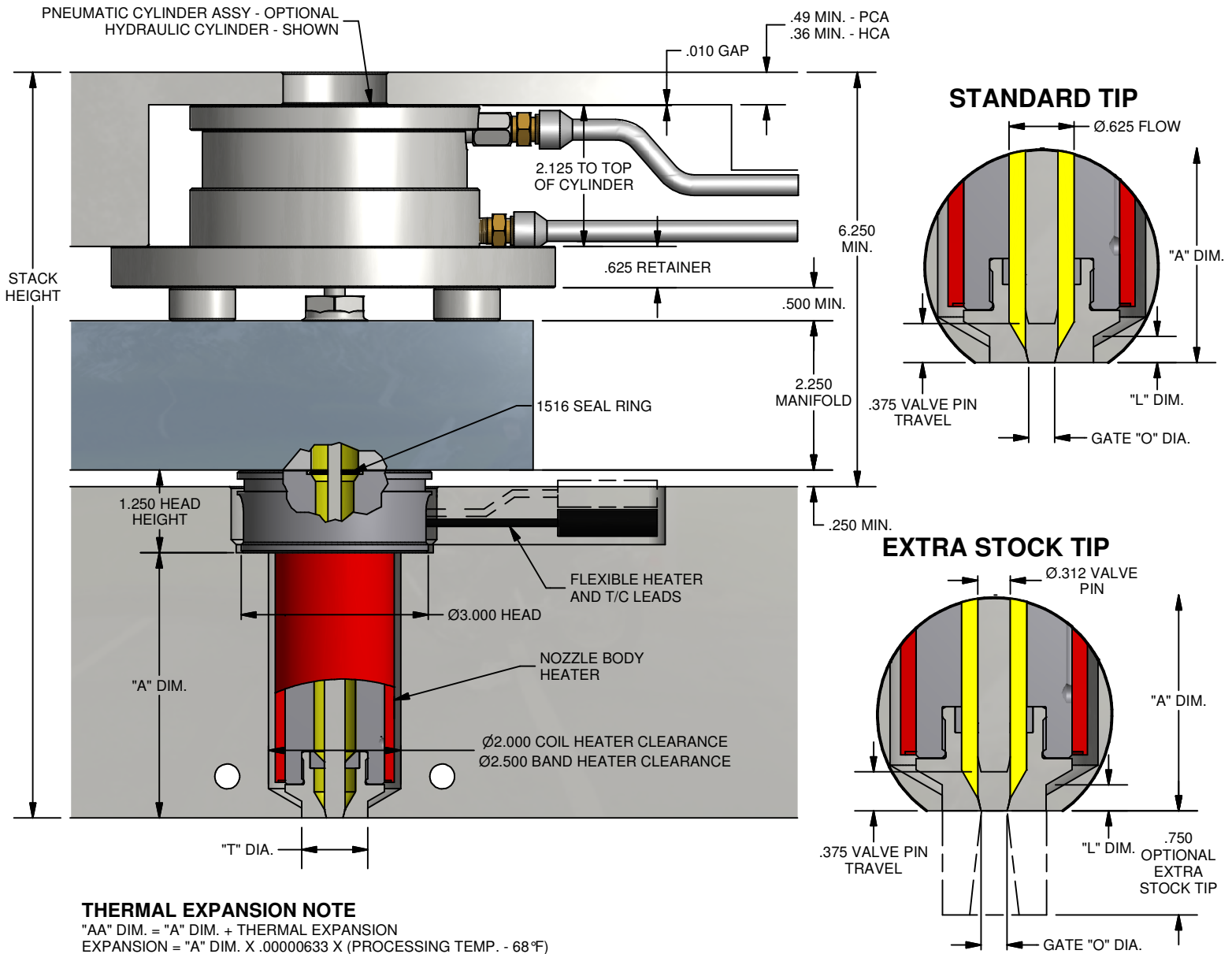


\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# FBV-200-VG

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 200

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Full Body Valve Gate Nozzle is designed to feed the part or runner. The "FBV" is an ideal selection when the nozzle tip "T" diameter witness mark is allowable. Each "FBV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



## HOW TO ORDER

CATALOG #	"A" DIM.
FBV-2040	4.000
FBV-2050	5.000
FBV-2060	6.000
FBV-2070	7.000
FBV-2080	8.000
FBV-2090	9.000
FBV-2100	10.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "T" Diameter
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

### GATE "O" DIAMETERS

.150 MIN. .250 MAX.

### TIP INFORMATION

"T" DIA.	"L" DIM.
.750	.187
1.000	.250

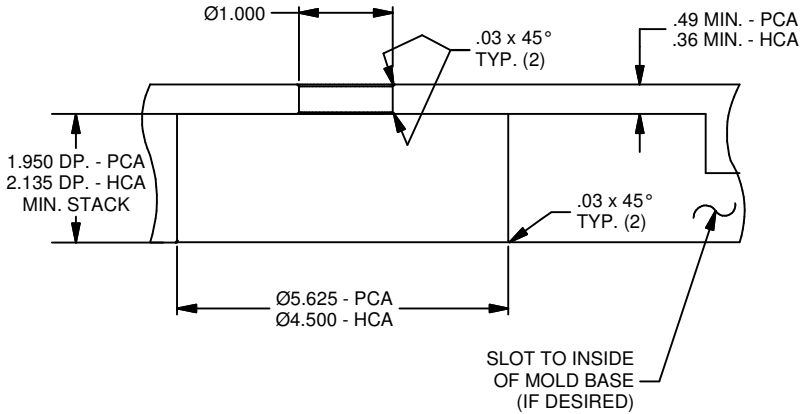
NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

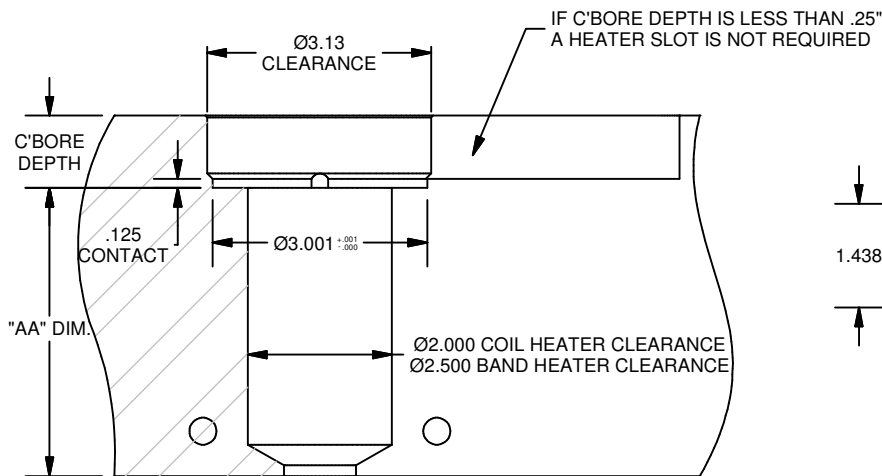
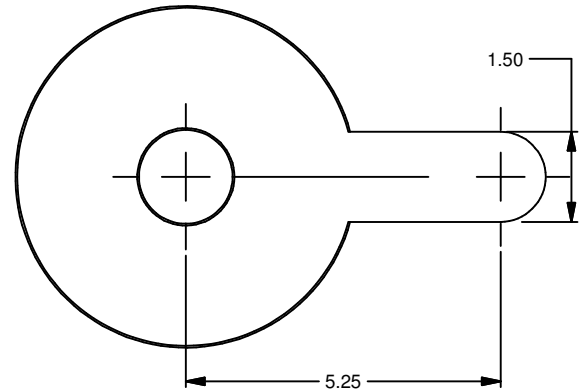
# FBV-200-VG BORING

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 200

### CYLINDER DETAILS

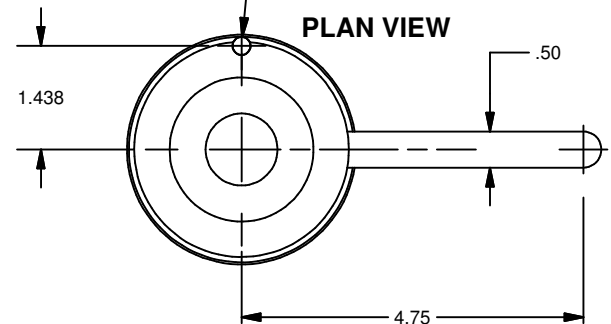


### BOTTOM VIEW

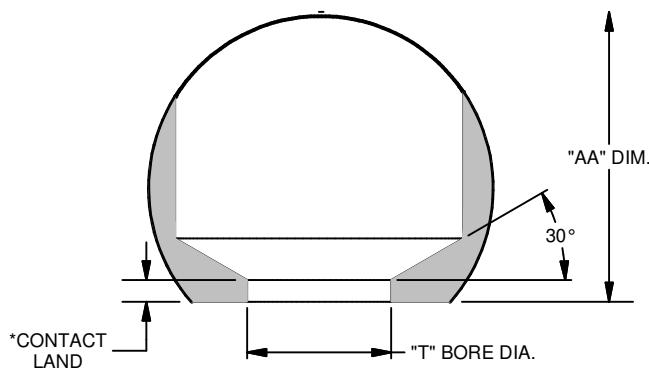


Ø.251  $\pm .001$  /  $-.000$  BORE - .270 DP.  
BELOW C'BORE FACE  
(90° FROM LEAD EXIT)

### PLAN VIEW



4.75 x .50 WIDE SLOT IN DIRECTION TO SUIT  
DEPENDENT ON HEATER LEAD BEND



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION

EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. $\pm .0005$ BORE $-.0000$	CONTACT LAND *
.750	.187	.7505	.100
1.000	.250	1.0005	.150

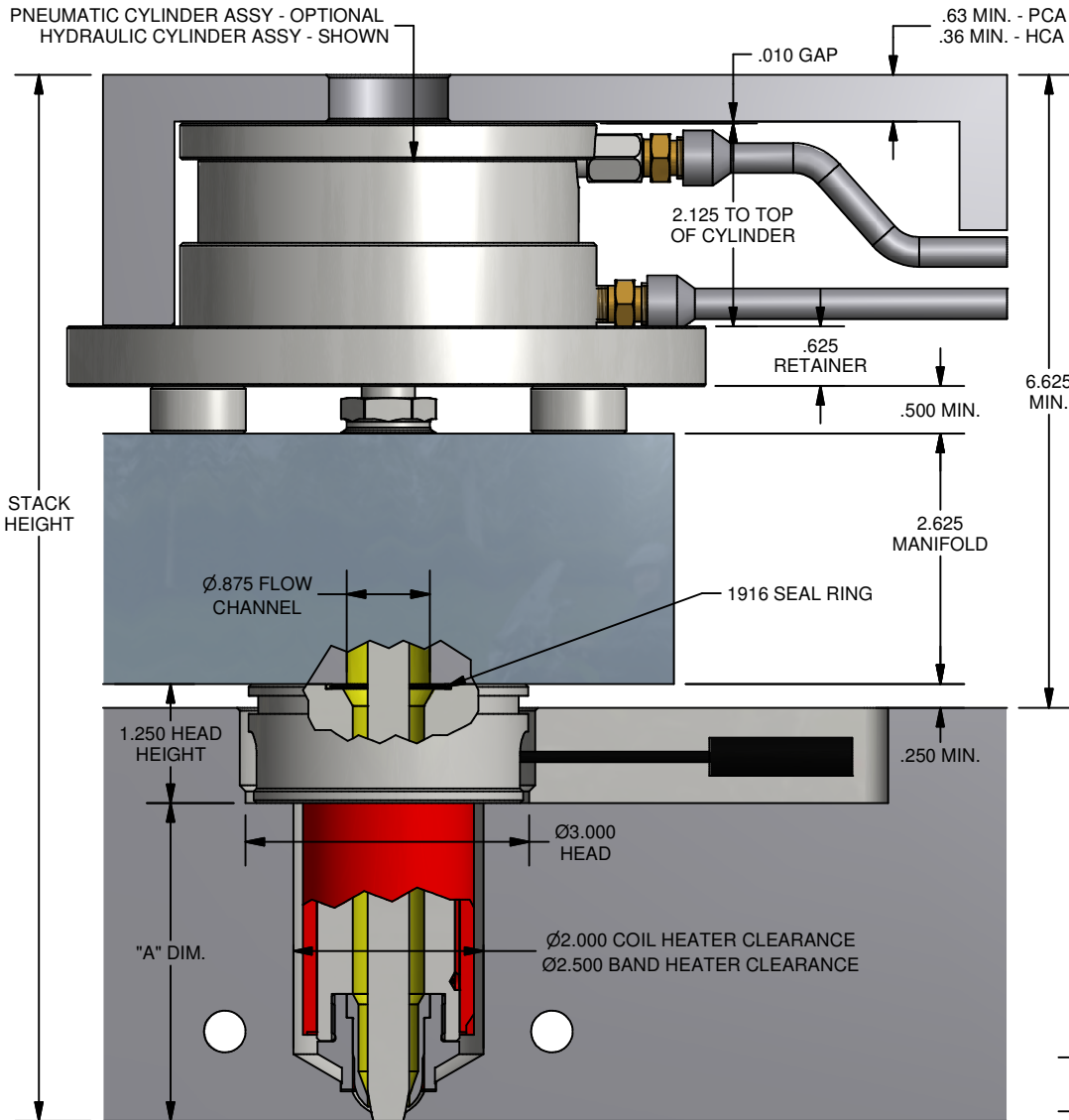
\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.



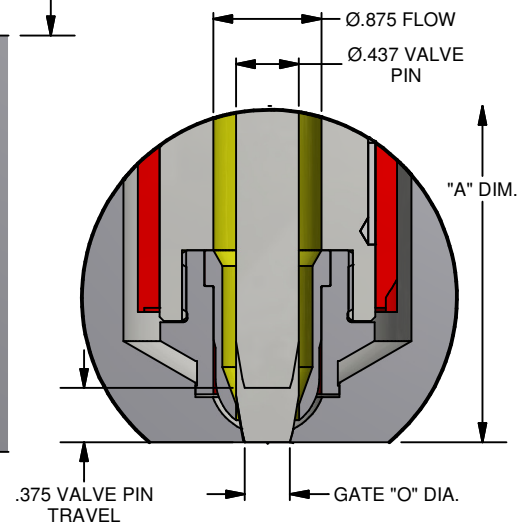
# BLV-300-VG

## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 300

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Body Less Valve Gate Nozzle is designed to feed the molded part. The "BLV" is an ideal selection when gate cosmetics are paramount and the circular witness mark from the nozzle tip "T" diameter is not allowable. Each "BLV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



### STANDARD TIP



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

## HOW TO ORDER

CATALOG #	"A" DIM.
BLV-3030	3.000
BLV-3040	4.000
BLV-3050	5.000
BLV-3060	6.000
BLV-3070	7.000
BLV-3080	8.000
BLV-3090	9.000
BLV-3100	10.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

### GATE "O" DIAMETERS \*

.250 MIN. .375 MAX.

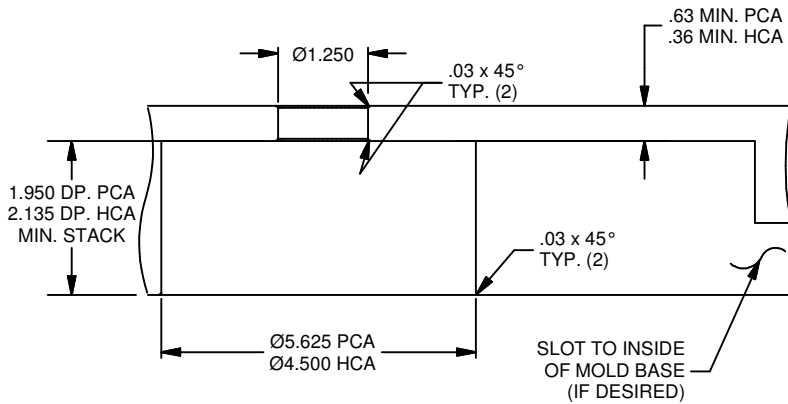
NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

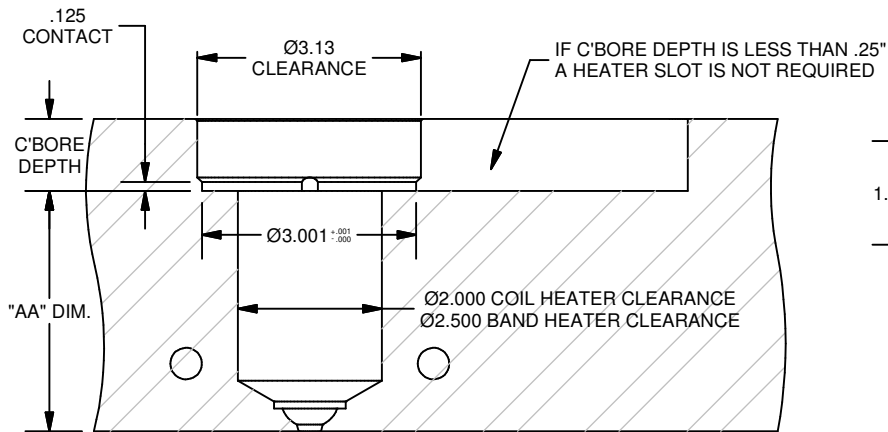
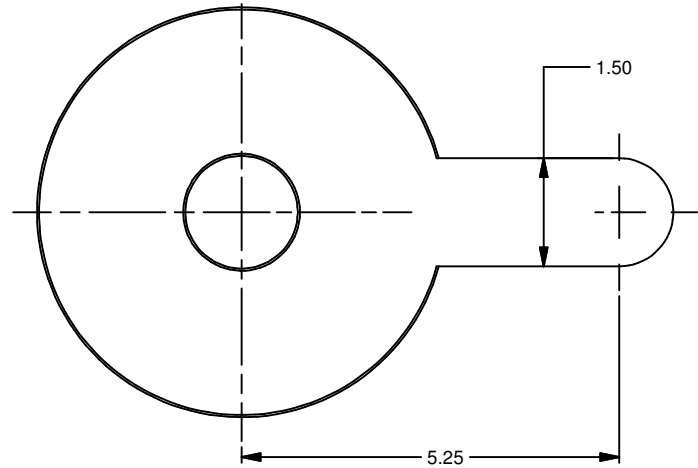
# BLV-300-VG BORING

## BODY LESS VALVE GATE NOZZLE SYSTEM, "BLV" SERIES 300

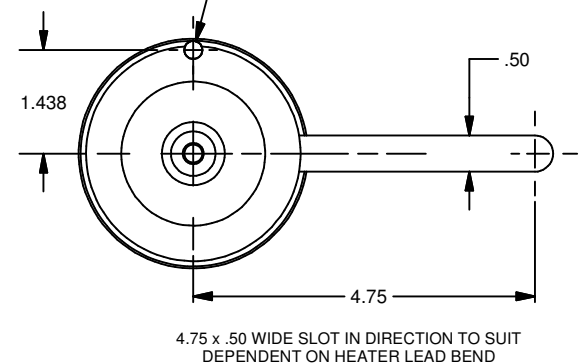
### CYLINDER DETAILS



### BOTTOM VIEW

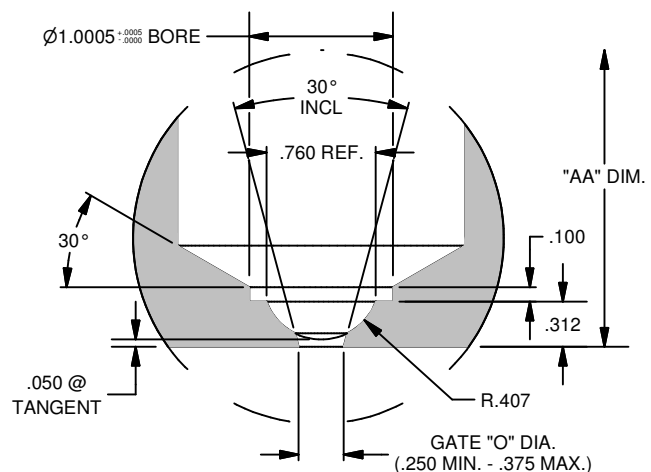


### PLAN VIEW



### THERMAL EXPANSION NOTE

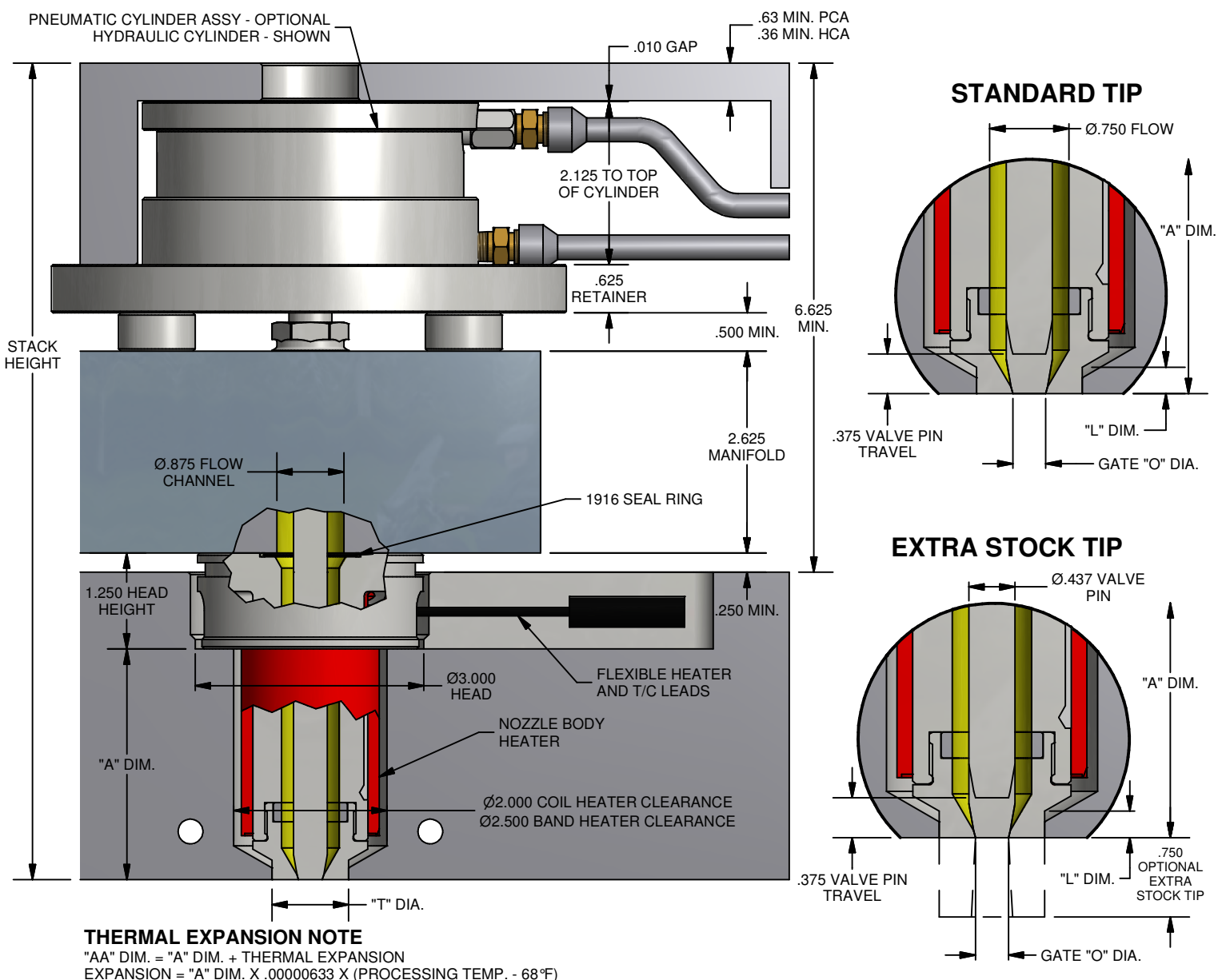
"AA" DIM. = "A" DIM. (Due to the Body Less Nozzle Design, thermal expansion does not need to be considered.)



# FBV-300-VG

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 300

**NOZZLE DESCRIPTION:** OSCO Valve Gates are designed to run sequentially or with common gate open/close sequence. The Full Body Valve Gate Nozzle is designed to feed the part or runner. The "FBV" is an ideal selection when the nozzle top "T" diameter witness mark is allowable. Each "FBV" nozzle is thermocouple controlled and incorporates a unique heater design to provide uniform nozzle heat and extended service life.



## HOW TO ORDER

CATALOG #	"A" DIM.
FBV-3030	3.000
FBV-3040	4.000
FBV-3050	5.000
FBV-3060	6.000
FBV-3070	7.000
FBV-3080	8.000
FBV-3090	9.000
FBV-3100	10.000

**Specify:**

- Nozzle Catalog Number
- "A" Dimension
- "T" Diameter
- "O" Gate Diameter
- Stack Height: Gate to Platen side of cylinder
- Resin to be processed

GATE "O" DIAMETERS	
.250 MIN.	.388 MAX.

TIP INFORMATION	
"T" DIA.	"L" DIM.
1.000	.150

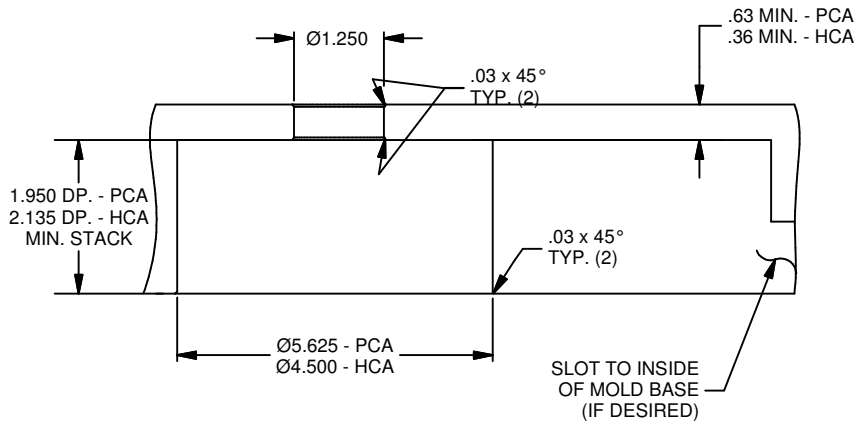
*NOTE: For sizes other than shown, please contact Osco Tech Service.*

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

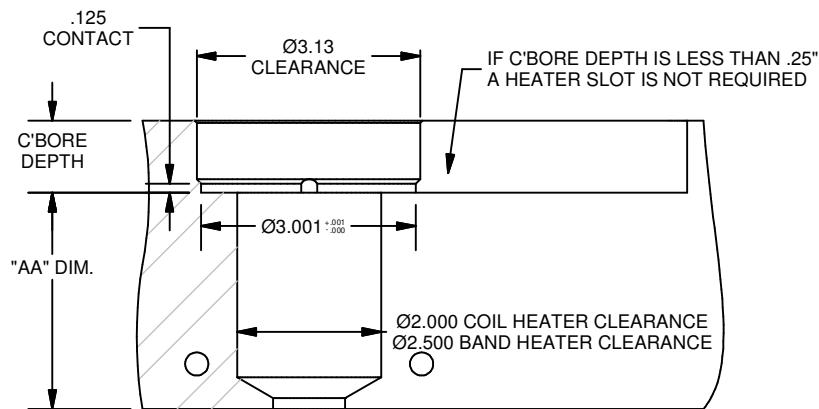
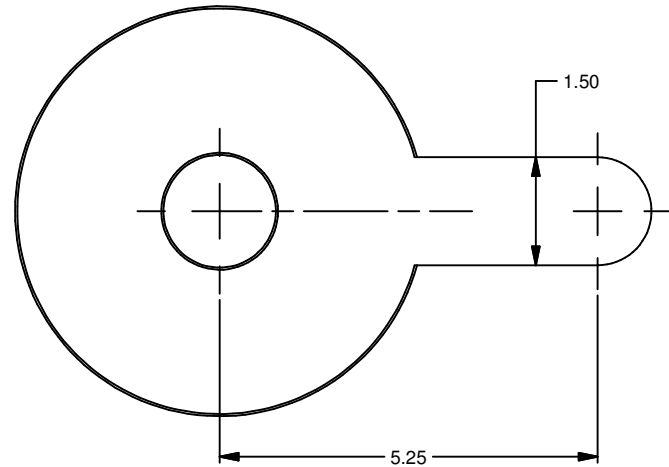
# FBV-300-VG BORING

## FULL BODY VALVE GATE NOZZLE SYSTEM, "FBV" SERIES 300

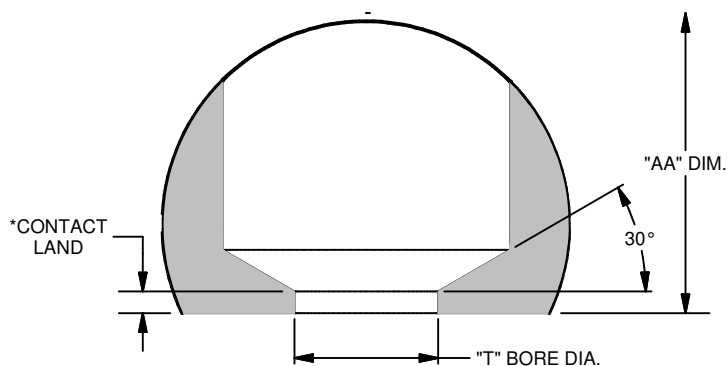
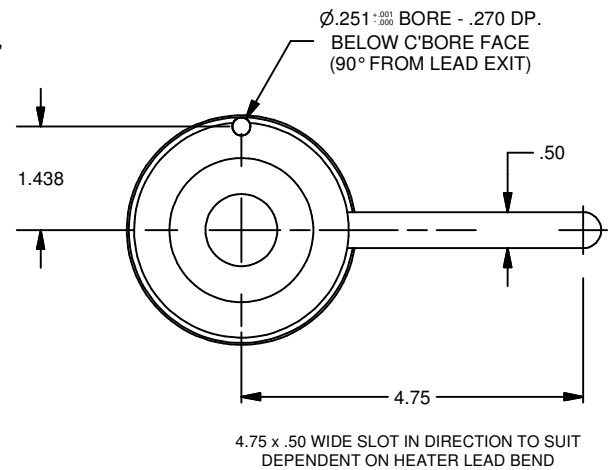
### CYLINDER DETAILS



### BOTTOM VIEW



### PLAN VIEW



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

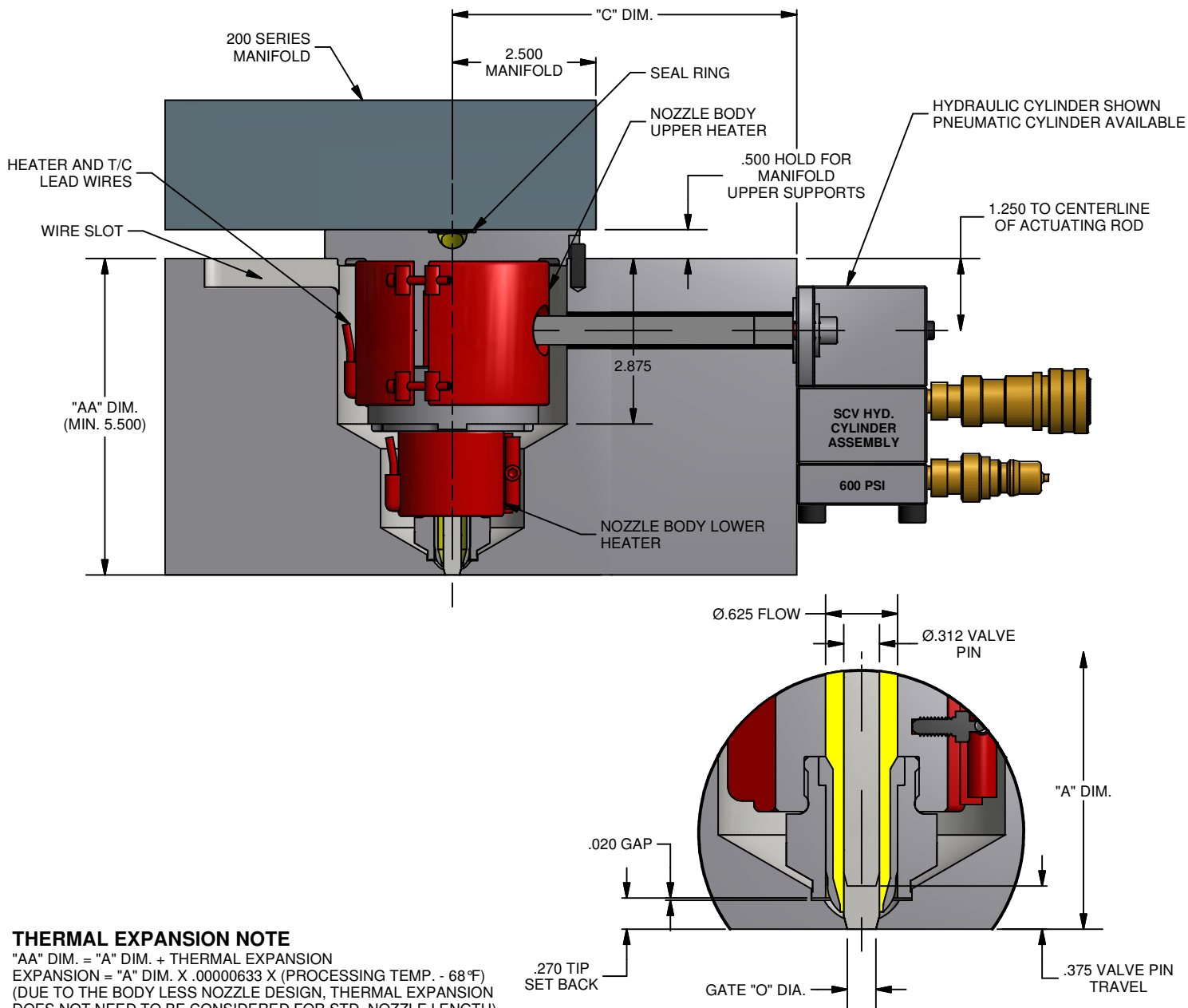
\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. +.0005 BORE -.0000	CONTACT LAND *
1.000	.250	1.0005	.150

# SCBM-200

## Self Contained Body Less Valve Gate Nozzle System, "SCBM" SERIES 200

**NOZZLE DESCRIPTION:** The "SCBM" Nozzle Systems are engineered for manifold applications. The 200 Series "SCBM" Nozzle is designed to fill small to medium sized parts. The nozzle utilizes Ø.375" flow channels with up to a Ø.250" gate diameter, permitting faster fills and better quality molded parts. Each nozzle is furnished with two zones of temperature control. The "SCBM" Nozzle is an ideal choice when the nozzle tip "T" diameter witness mark is not allowable.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)  
(DUE TO THE BODY LESS NOZZLE DESIGN, THERMAL EXPANSION DOES NOT NEED TO BE CONSIDERED FOR STD. NOZZLE LENGTH)

## HOW TO ORDER

CATALOG #	"A" DIM.
SCBM-2055	5.500
SCBM-2060	6.000
SCBM-2065	6.500
SCBM-2070	7.000
SCBM-2075	7.500
SCBM-2080	8.000
SCBM-2090	9.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- "C" Dimension
- Resin To Be Processed

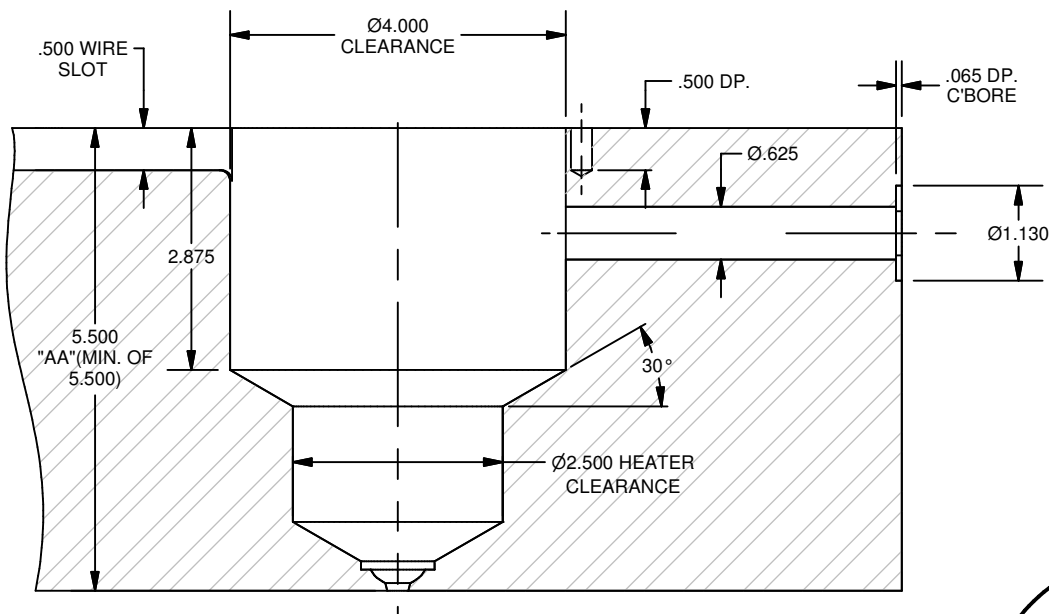
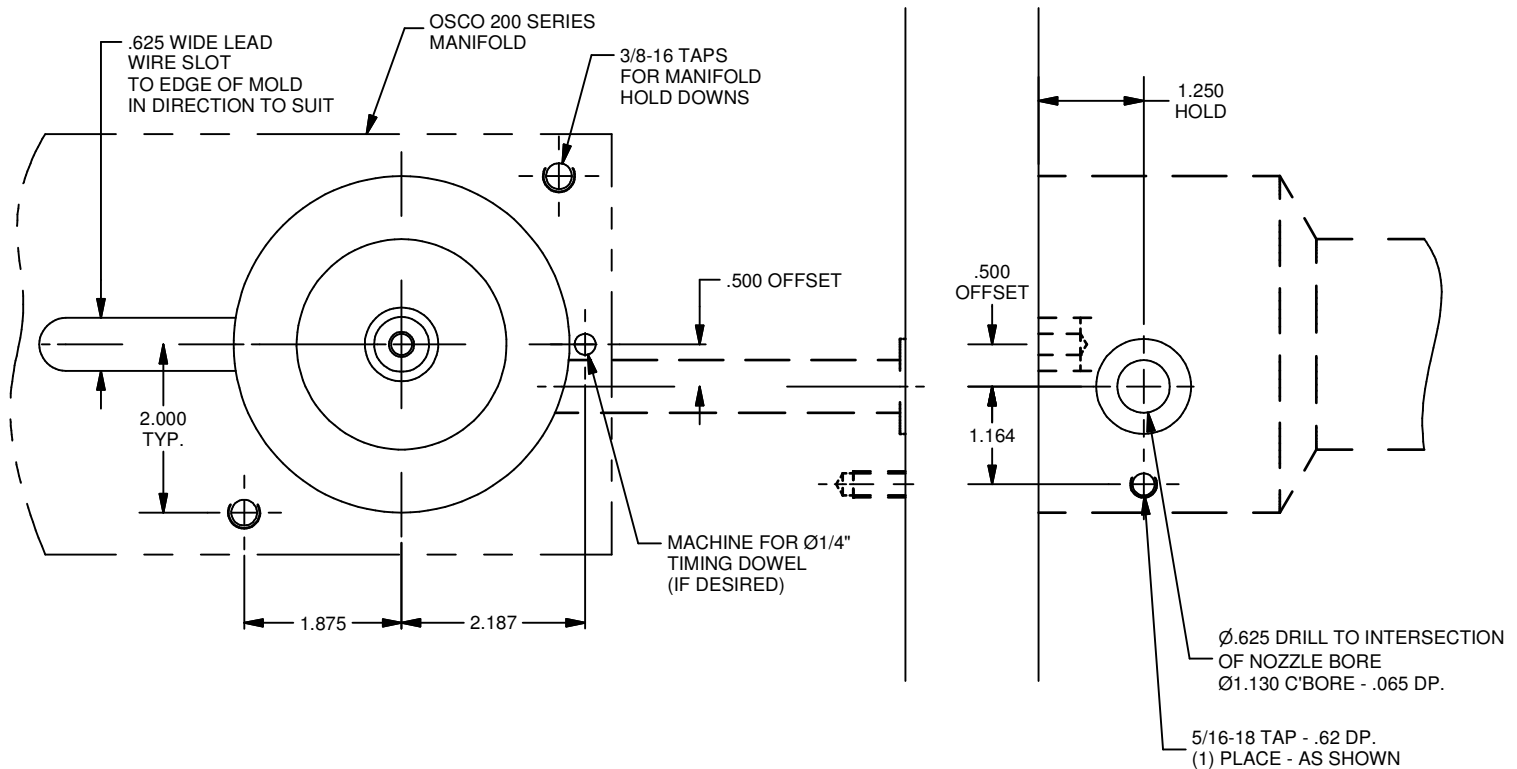
GATE "O" DIAMETER *	
MIN.	Ø.062
MAX.	Ø.250

NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

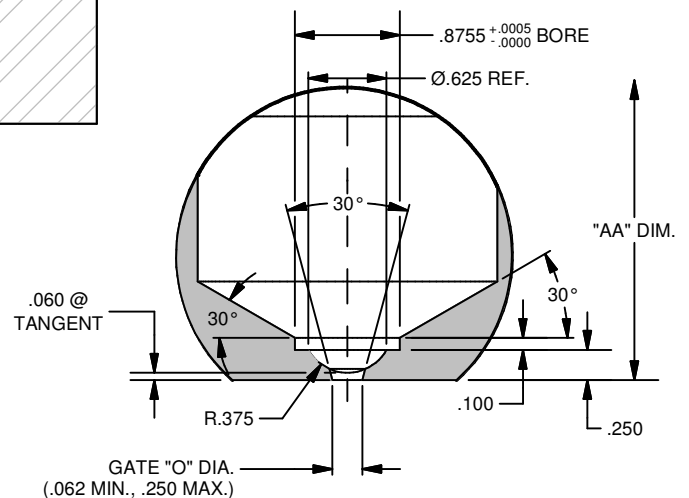
# SCBM-200 BORING

## Self Contained Body Less Valve Gate Nozzle System, "SCBM" SERIES 200 - Machining Details



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68 °F)



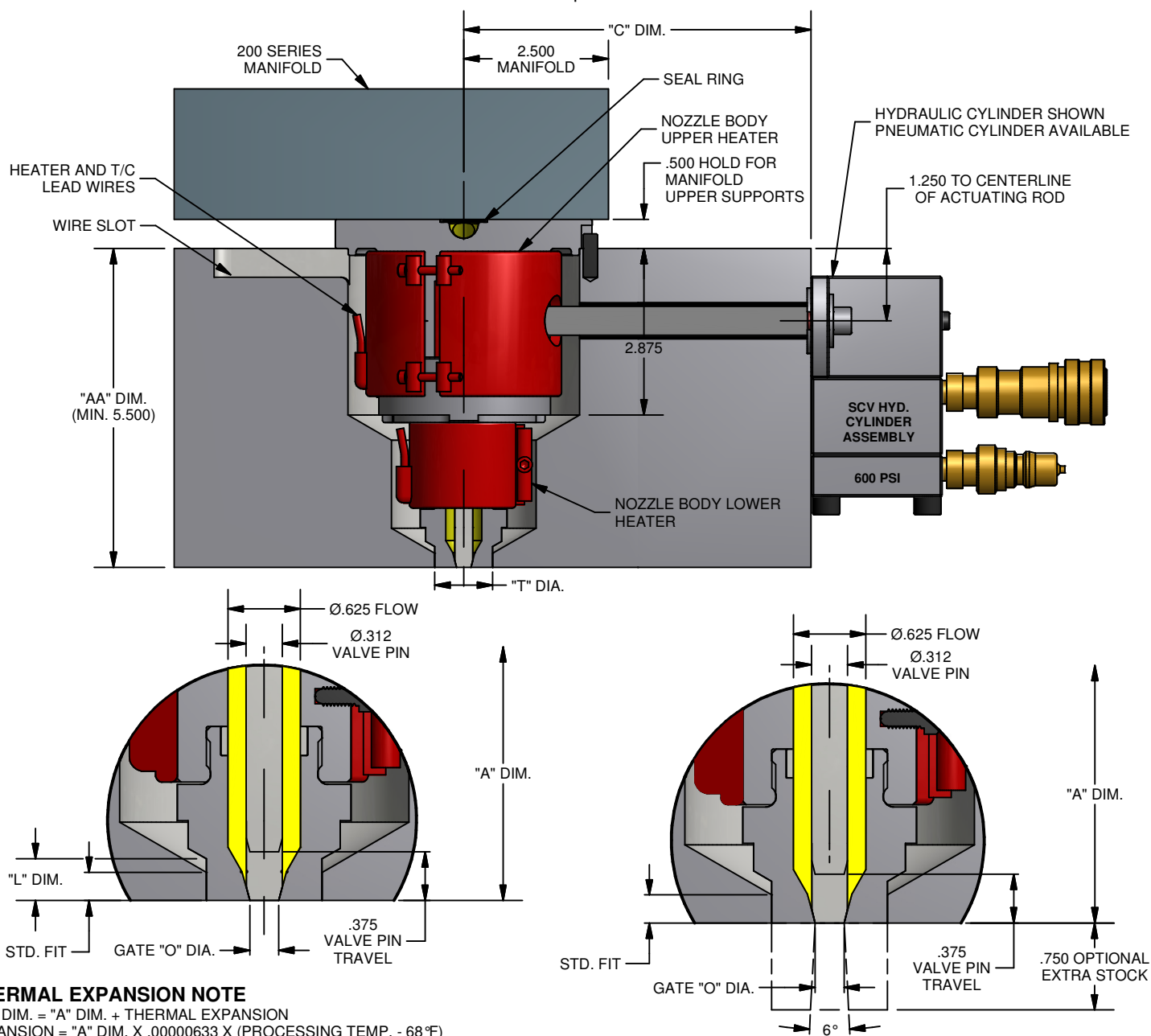
\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.



# SCFM-200

## Self Contained Full Body Valve Gate Nozzle System, "SCFM" SERIES 200

**NOZZLE DESCRIPTION:** The "SCFM" Nozzle Systems are engineered for manifold applications. The 200 Series "SCFM" Nozzle is designed to fill small to medium sized parts. The nozzle utilizes Ø.375" flow channels with up to a Ø.250" gate diameter, permitting faster fills and better quality molded parts. Each nozzle is furnished with two zones of temperature control. The "SCFM" Nozzle is an ideal choice when the nozzle tip "T" diameter witness mark is allowable.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

## HOW TO ORDER

CATALOG #	"A" DIM.
SCFM-2055	5.500
SCFM-2060	6.000
SCFM-2065	6.500
SCFM-2070	7.000
SCFM-2075	7.500
SCFM-2080	8.000
SCFM-2090	9.000

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- "C" Dimension
- Resin To Be Processed

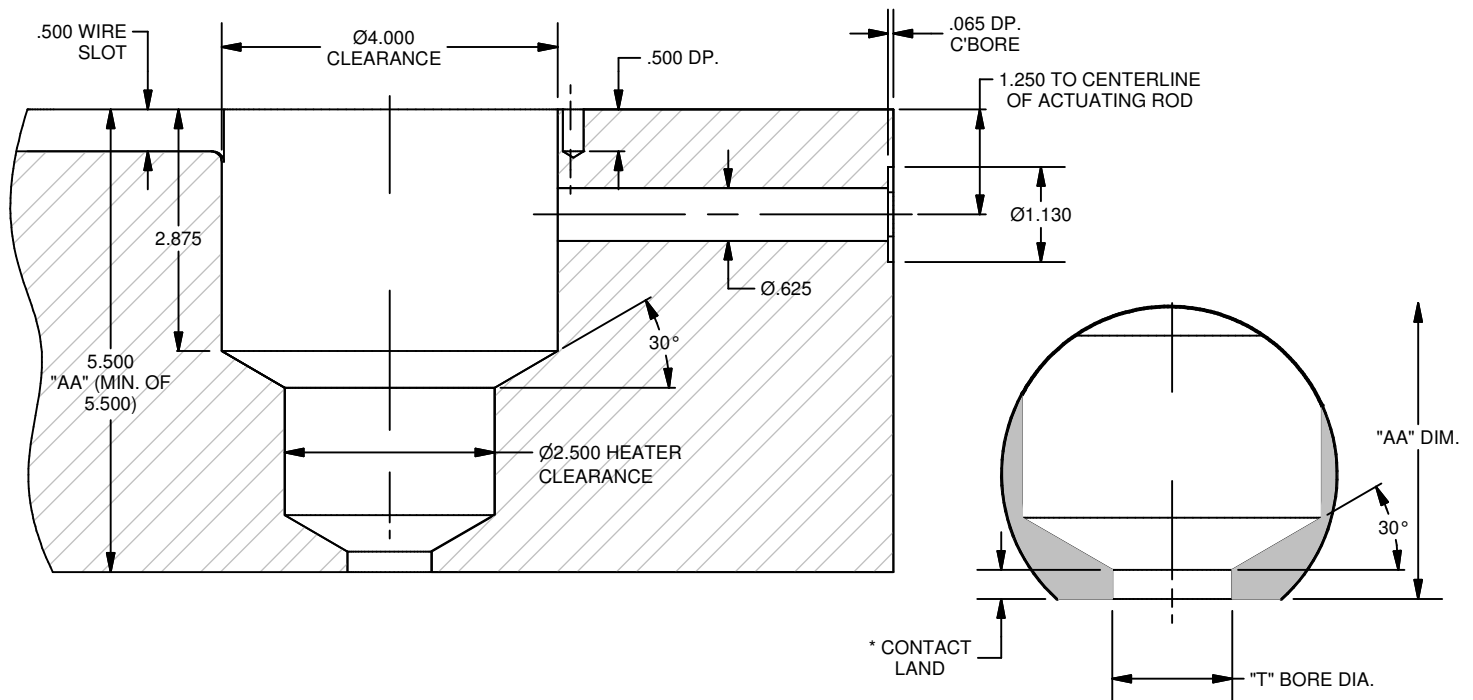
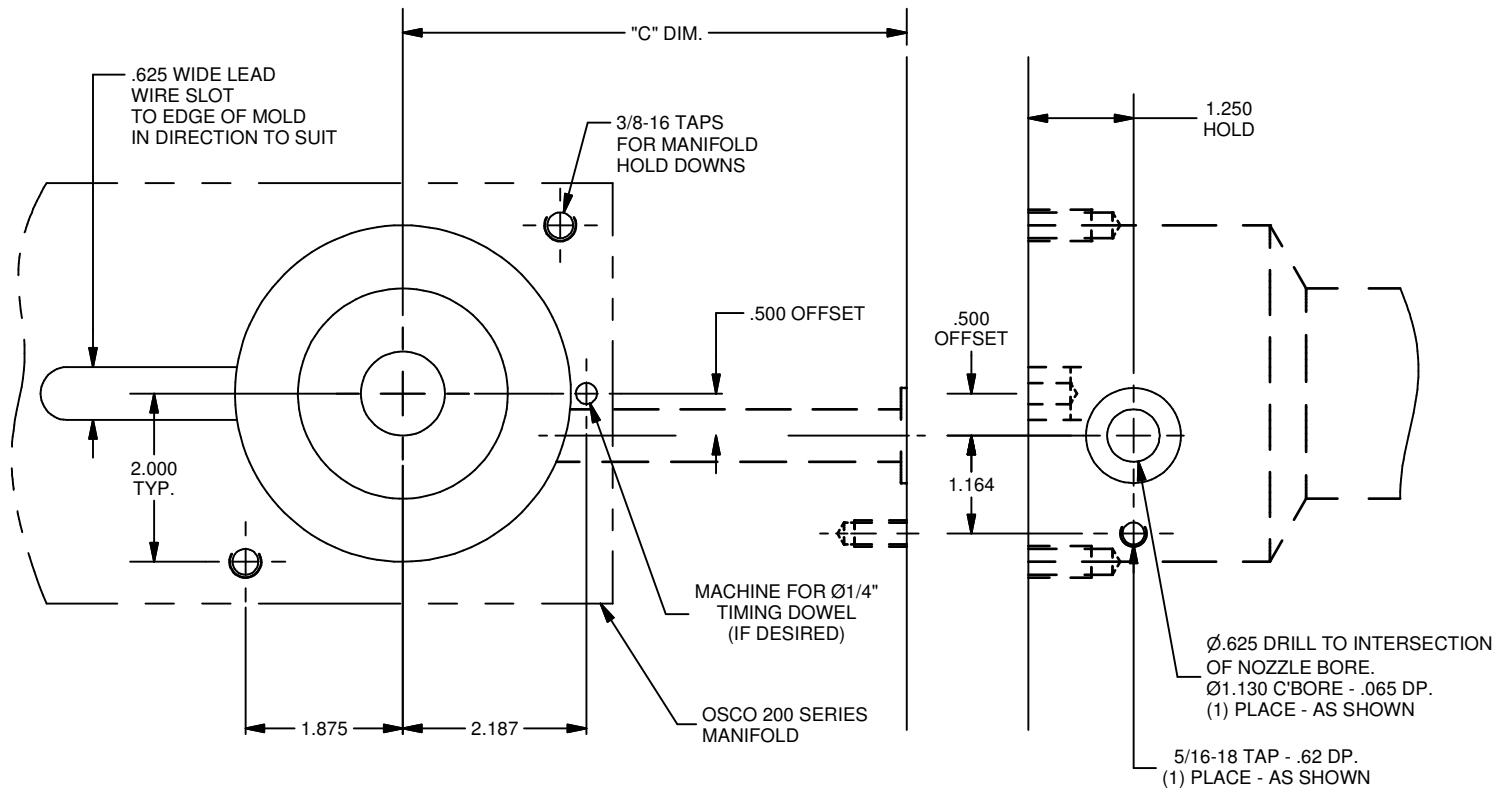
GATE "O" DIAMETER		
.062	.125	.250

TIP INFORMATION	
"T" DIA.	"L" DIM.
Ø.750	.230
Ø1.000	.359

NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

## Self Contained Full Body Valve Gate Nozzle System, “SCFM” SERIES 200 - Machining Details



### THERMAL EXPANSION NOTE

**THERMAL EXPANSION NOTE**  
 "AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68 °F)

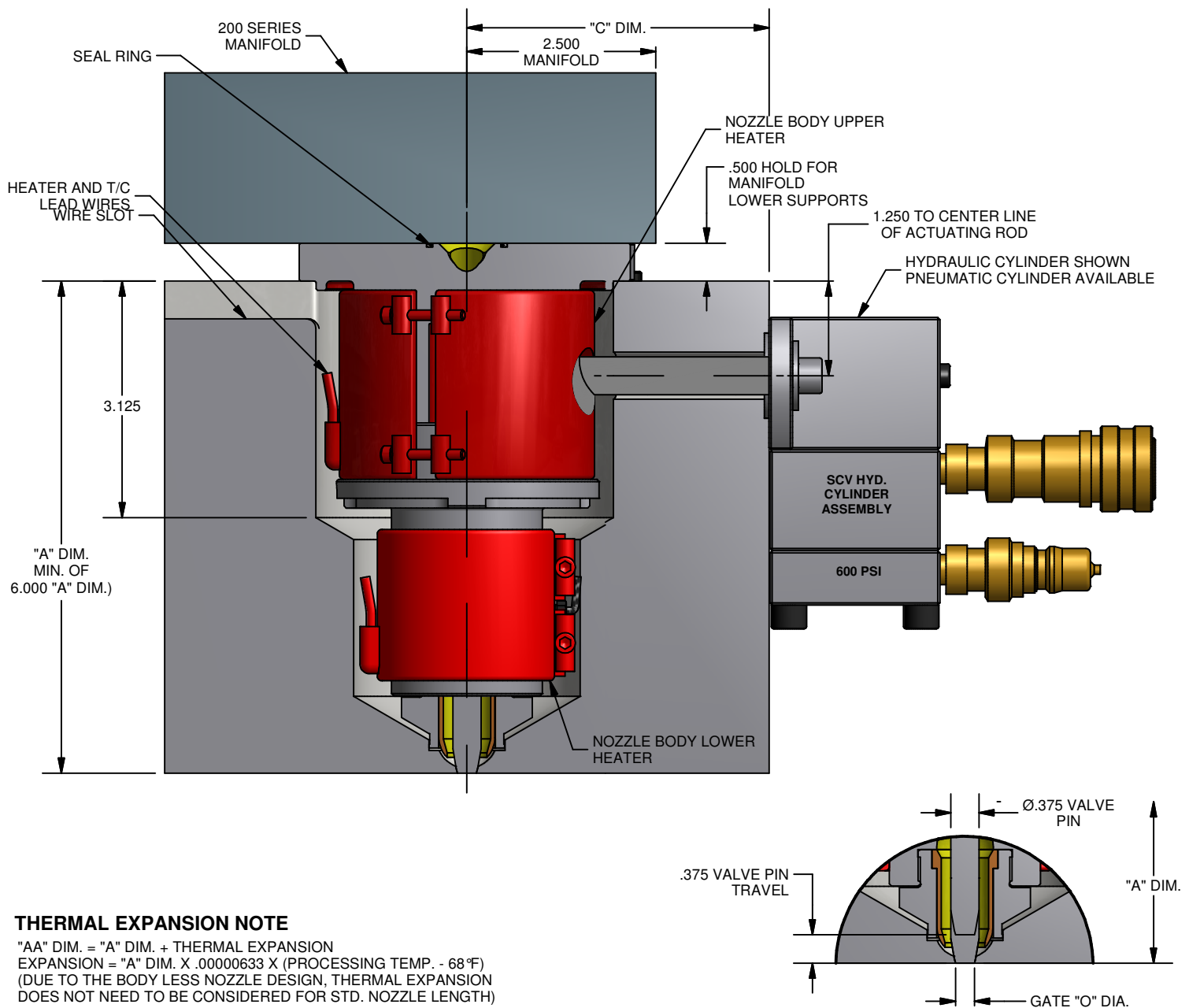
TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. +.0005 BORE -.0000	CONTACT LAND *
Ø.750	.230	Ø.7505	.187
Ø1.000	.359	Ø1.0005	.250

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# SCBM-400

## Self Contained Body Less Valve Gate Nozzle System, "SCBM" SERIES 400

**NOZZLE DESCRIPTION:** The 400 Series "SCBM" Nozzle is designed to fill large parts. The nozzle utilizes  $\varnothing.437$ " flow channels with up to a  $\varnothing.312$ " gate diameter, permitting faster fills and better quality molded parts. Each nozzle is furnished with two zones of temperature control. The "SCBM" Nozzle is an ideal choice when the nozzle tip "T" diameter witness mark is not allowable.



## HOW TO ORDER

CATALOG #	"A" DIM.
SCBM-4060	6.000
SCBM-4070	7.000
SCBM-4080	8.000
SCBM-4090	9.000
SCBM-4100	10.000

### Specify:

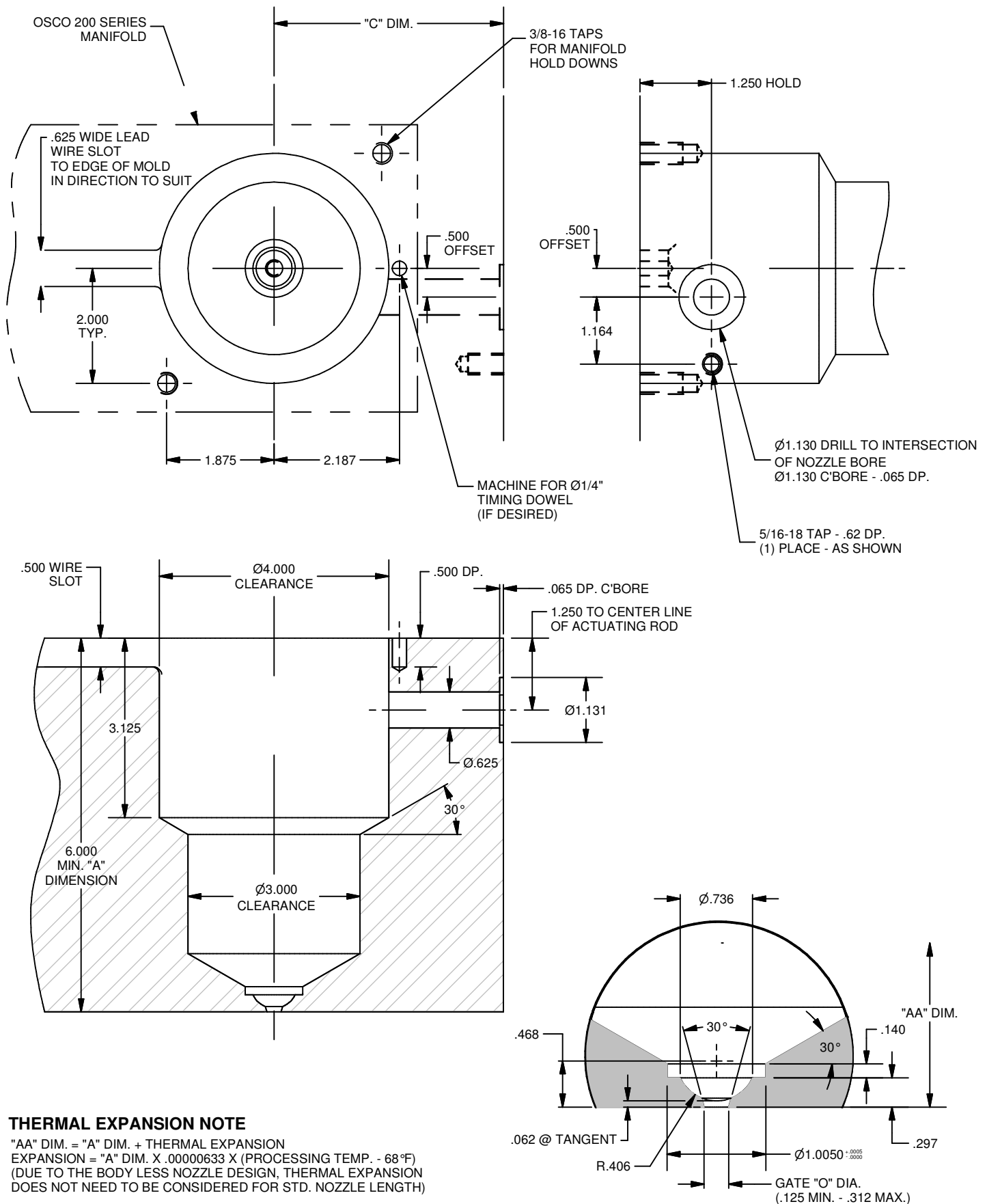
- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- "C" Dimension
- "R" Radius Pocket
- Resin To Be Processed

GATE "O" DIAMETER *	
MIN.	$\varnothing.125$
MAX.	$\varnothing.312$

NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

## Self Contained Body Less Valve Gate Nozzle System, "SCBM" SERIES 400 - Machining Details

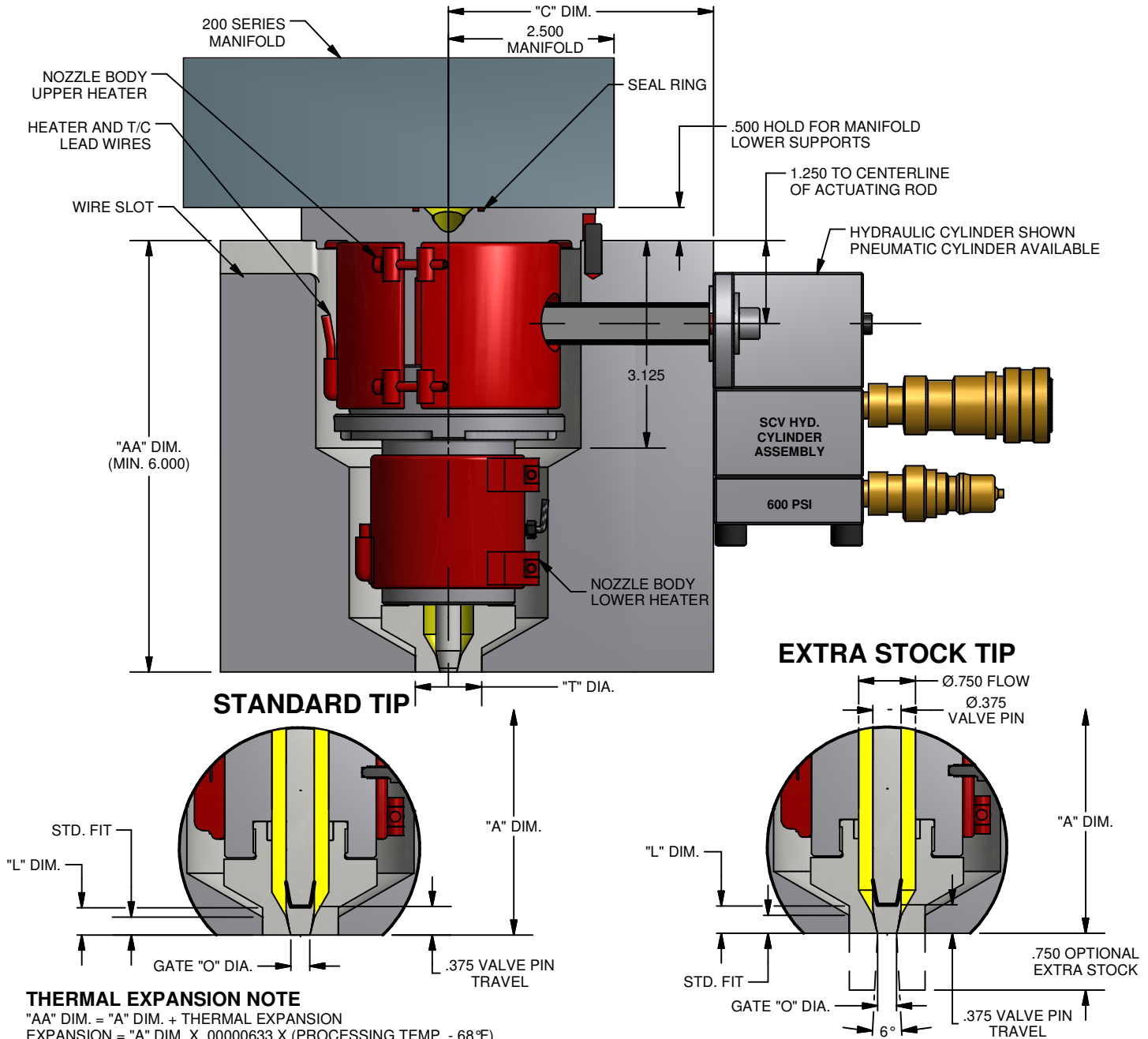


\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# SCFM-400

## Self Contained Full Body Valve Gate Nozzle System, "SCFM" SERIES 400

**NOZZLE DESCRIPTION:** The "SCFM" Nozzle Systems are engineered for manifold applications. The 400 Series "SCFM" Nozzle is designed to fill large parts. The nozzle utilizes Ø.4375" flow channels with up to a Ø.313" gate diameter, permitting faster fills and better quality molded parts. Each nozzle is furnished with two zones of temperature control. The "SCFM" Nozzle is an ideal choice when the nozzle tip "T" diameter witness mark is allowable.



## HOW TO ORDER

CATALOG #	"A" DIM.
SCFM-4060	6.000
SCFM-4065	6.500
SCFM-4070	7.000
SCFM-4075	7.500
SCFM-4080	8.000
SCFM-4090	9.000
SCFM-4100	10.000

### Specify:

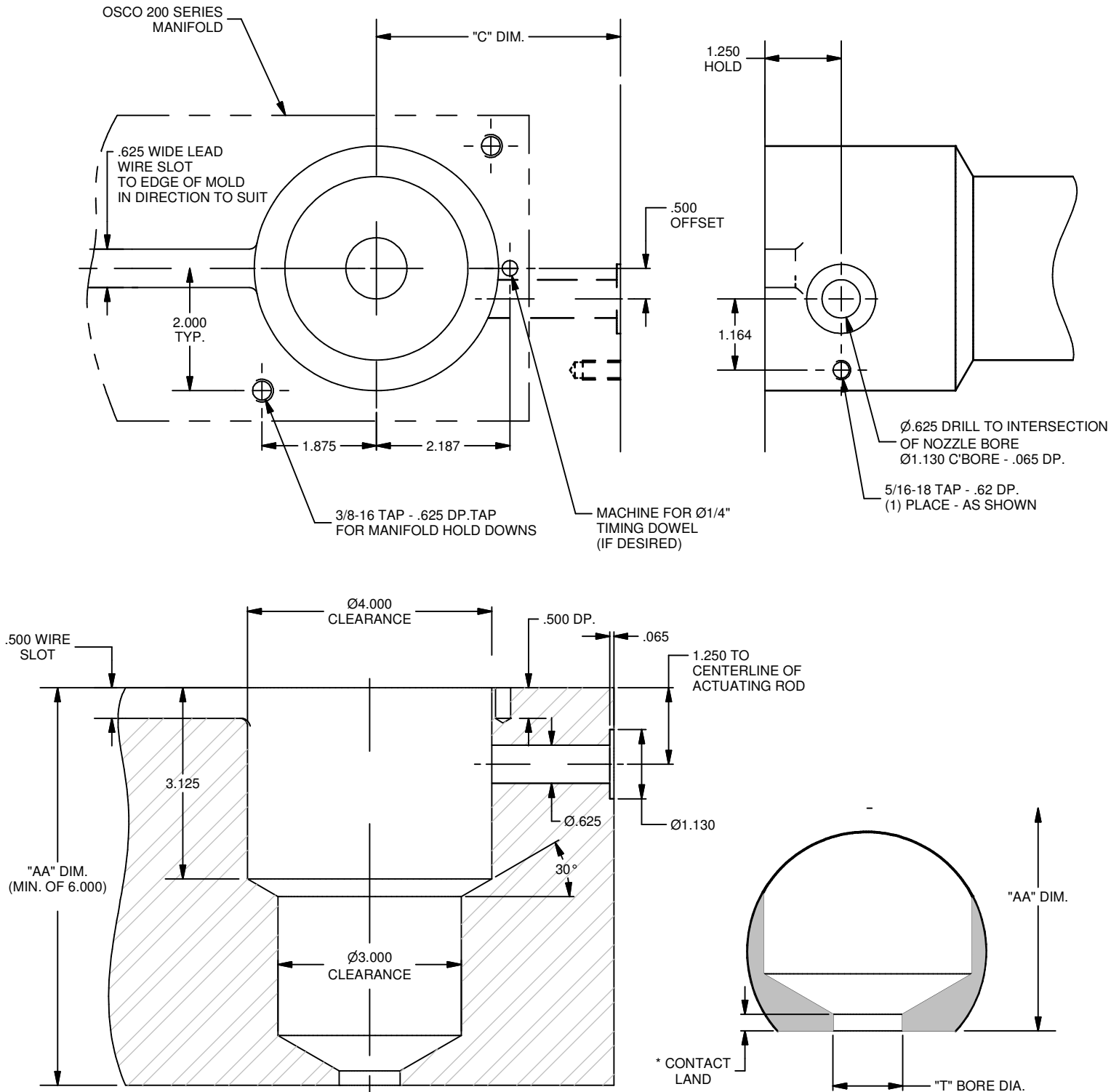
- Nozzle Catalog Number
- "A" Dimension
- "T" Tip Diameter
- "O" Gate Diameter
- "C" Dimension
- Resin To Be Processed

GATE "O" DIAMETER		
.125	.250	.312

TIP INFORMATION	
"T" DIA.	"L" DIM.
Ø.750	.230
Ø1.000	.359

# SCFM-400 BORING

## Self Contained Full Body Valve Gate Nozzle System, "SCFM" SERIES 400 - Machining Details



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68 °F)

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

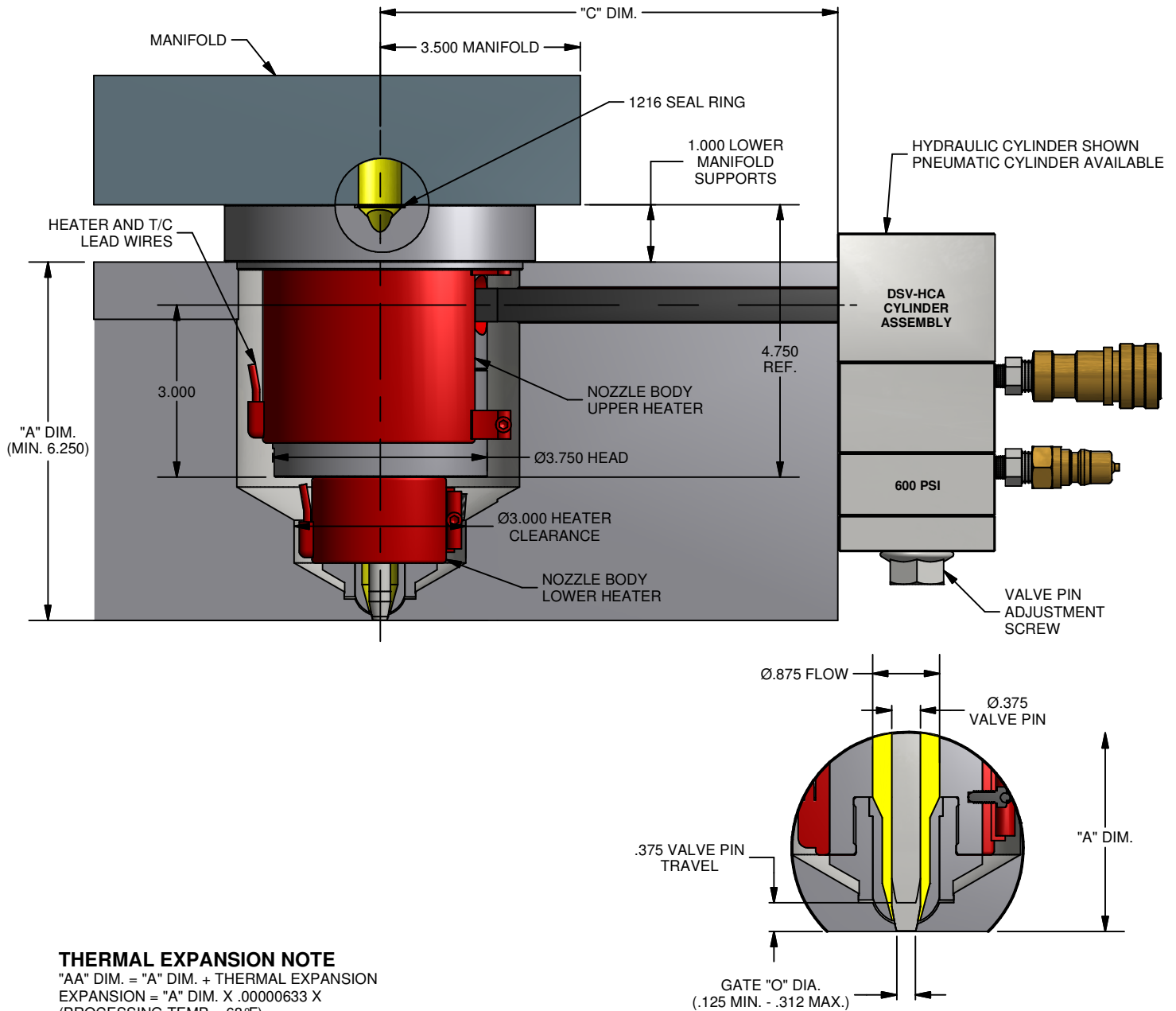
TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. +.0005 BORE -.0000	CONTACT LAND *
Ø.750	.230	Ø.7505	.187
Ø1.000	.359	Ø1.0005	.250



# DMB-500

## Dual Self Contained Body Less Valve Gate Nozzle System, Manifold Application

**NOZZLE DESCRIPTION:** The "DMB" 500 Nozzle Assembly is a robust valve gate system engineered for the most demanding applications. The 500 Series "DMB" Nozzle is designed to fill large sized parts. Available with up to Ø.312 gate diameter and designed with two zones of temperature control. The "DMB" Nozzle is an ideal choice when the nozzle tip "T" diameter witness mark is not allowable.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X  
 (PROCESSING TEMP. - 68 °F)

## HOW TO ORDER

CATALOG #	"A" DIM.
DMB-5062	6.250
DMB-5067	6.750
DMB-5072	7.250
DMB-5077	7.750
DMB-5082	8.250
DMB-5087	8.750
DMB-5097	9.750

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- "C" Dimension
- Resin To Be Processed

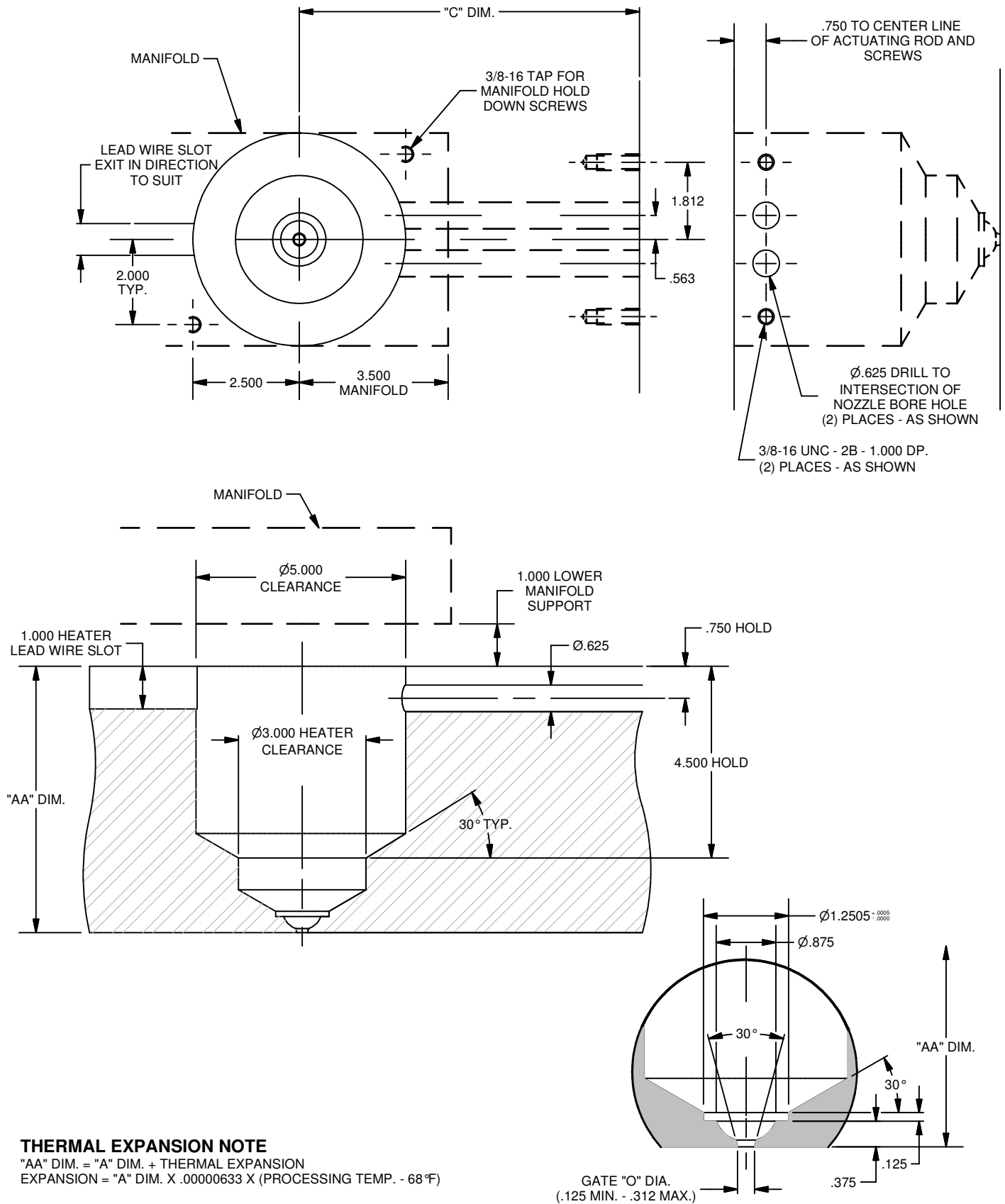
### GATE "O" DIAMETERS

.125 MIN. .312 MAX.

NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

## Dual Self Contained Body Less Valve Gate Nozzle System, Manifold Application - Machining Details



### THERMAL EXPANSION NOTE

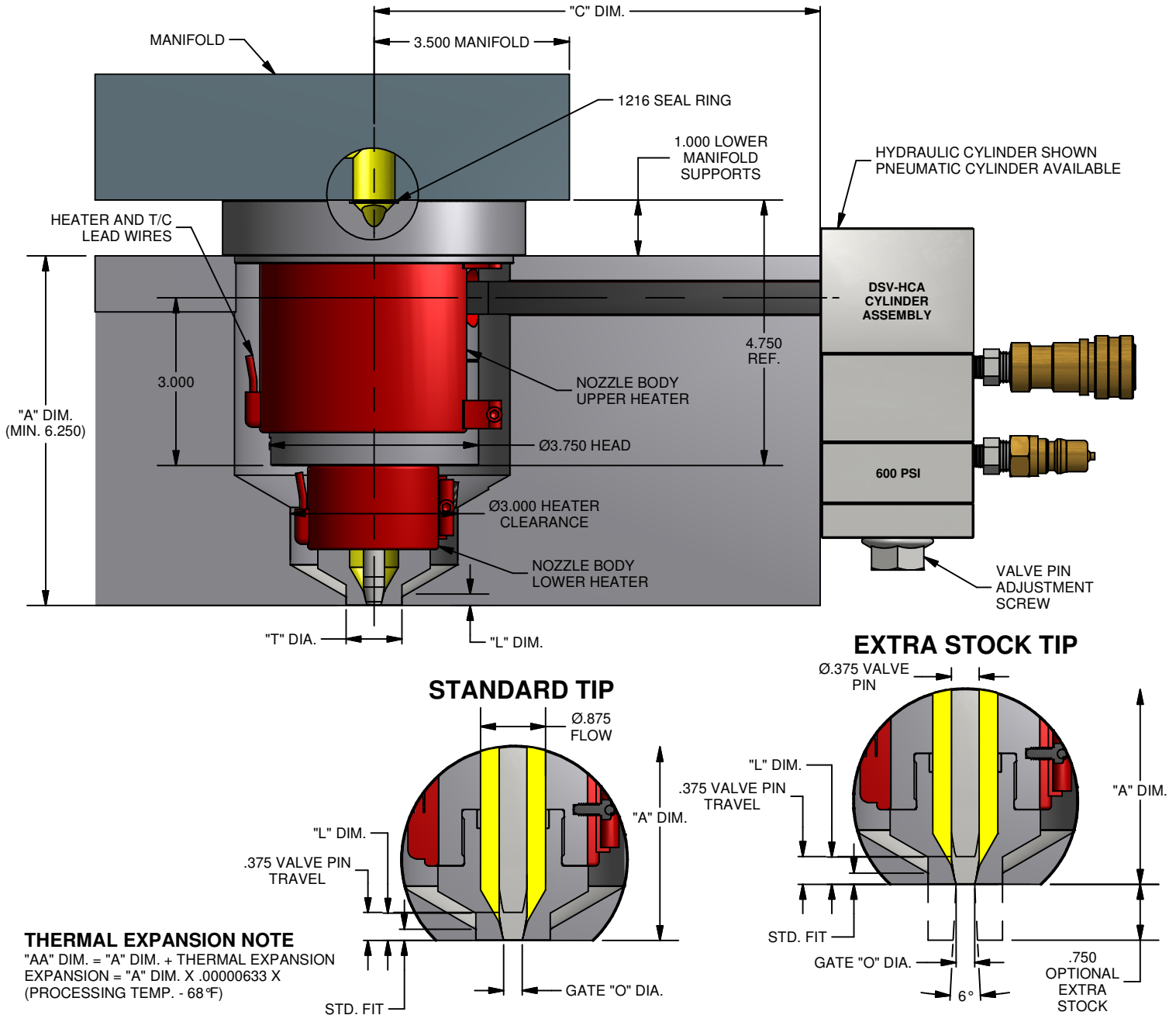
"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

★ Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# DMF-500

## Dual Self Contained Full Body Valve Gate Nozzle System, Manifold Application

**NOZZLE DESCRIPTION:** The "DMF-500" Nozzle Assembly is engineered for manifold applications. The 500 series "DMF" nozzle is designed to fill large size parts. The 500 "DMF" Nozzle is a robust valve gate system engineered for the most demanding applications. Available with up to a Ø.312 gate diameter, the "DMF" Nozzle is an ideal choice when the nozzle tip "T" diameter witness mark is allowable.



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
EXPANSION = "A" DIM. X .00000633 X  
(PROCESSING TEMP. - 68°F)

## HOW TO ORDER

CATALOG #	"A" DIM.
DMF-5062	6.250
DMF-5067	6.750
DMF-5072	7.250
DMF-5077	7.750
DMF-5082	8.250
DMF-5087	8.750
DMF-5097	9.750

### Specify:

- Nozzle Catalog Number
- "A" Dimension
- "O" Gate Diameter
- "T" Tip Diameter
- "C" Dimension
- Resin To Be Processed

### GATE "O" DIAMETERS

.125	.250	.312
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### TIP INFORMATION

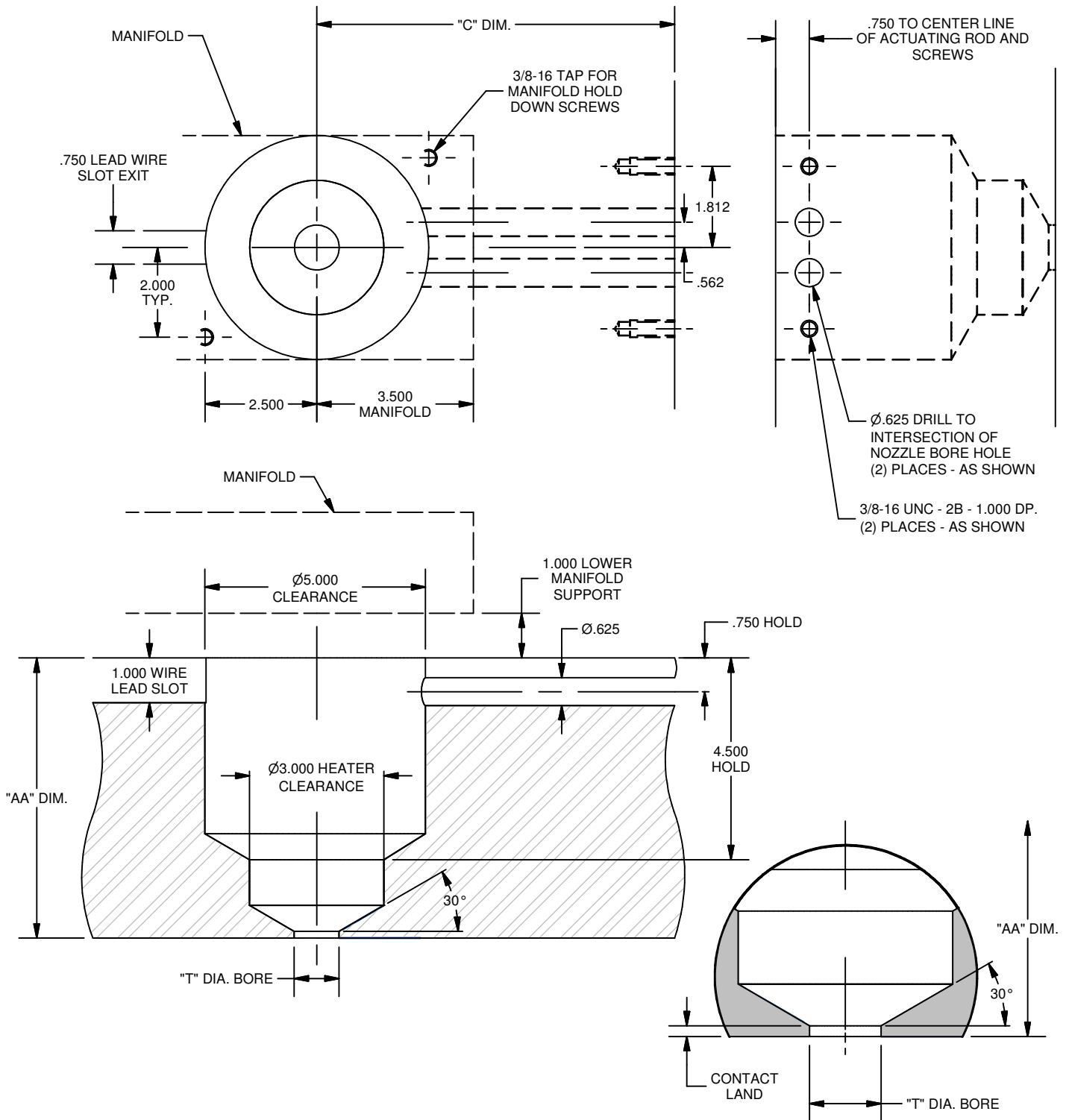
"T" DIA.	"L" DIM.
Ø1.000	.359"
Ø1.250	.359"

NOTE: For sizes other than shown, please contact Osco Tech Service.

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.

# DMF-500 BORING

## Dual Self Contained Full Body Valve Gate Nozzle System, Manifold Application - Machining Details



### THERMAL EXPANSION NOTE

"AA" DIM. = "A" DIM. + THERMAL EXPANSION  
 EXPANSION = "A" DIM. X .00000633 X (PROCESSING TEMP. - 68°F)

TIP INFORMATION		BORING INFORMATION	
"T" DIA.	"L" DIM.	"T" DIA. +.0005 BORE -.0000	CONTACT LAND
Ø1.000	.359	Ø1.0005	.150
Ø1.250	.359	Ø1.2505	.150

\* Note: The information given here should be used as a guide. A variation in growth of any nozzle from the formulation is possible due to cooling conditions or mold configuration. It is advisable to allow a margin of safety. For some very critical applications, an empirical factor may have to be obtained.