

MANIFOLDS

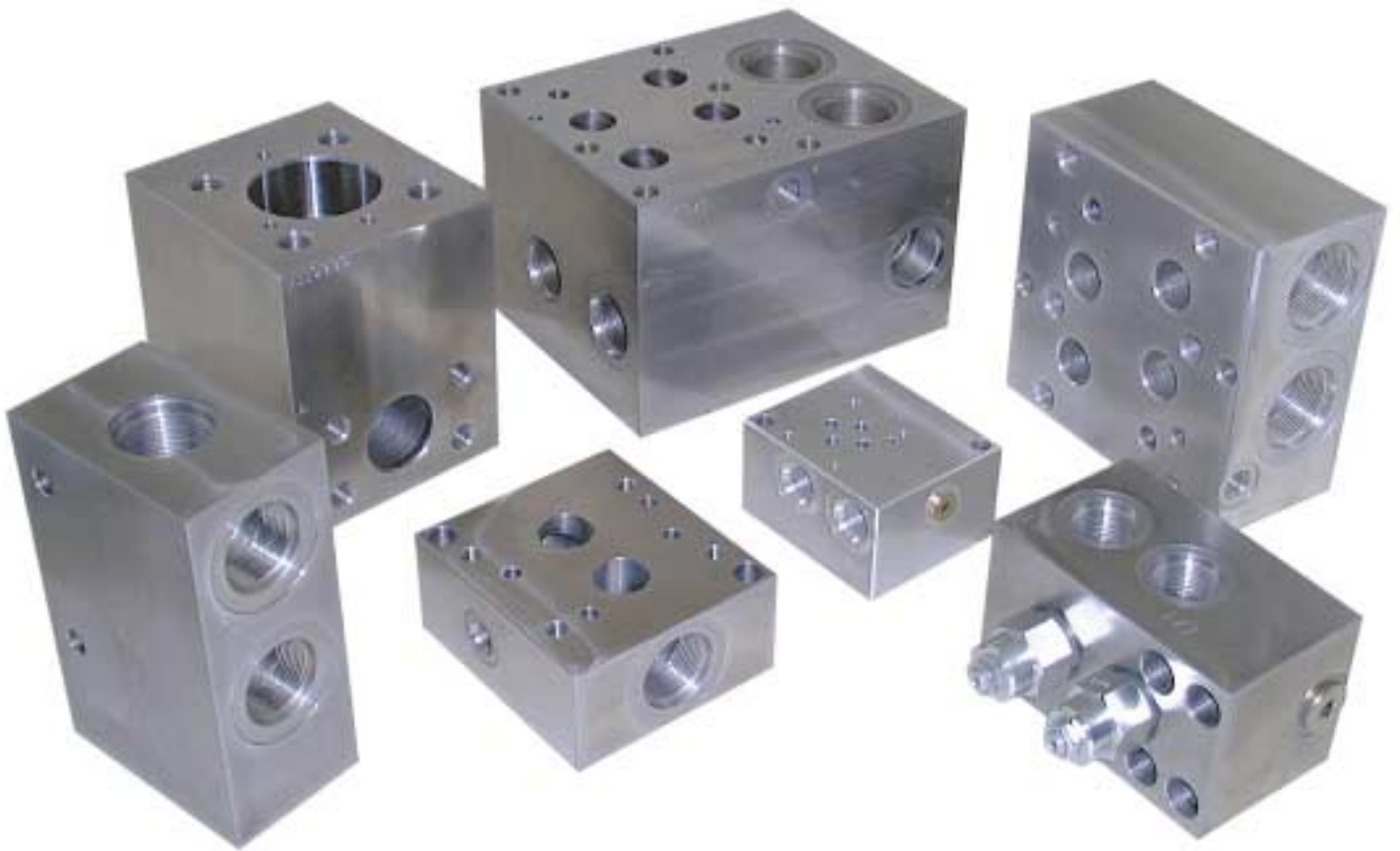


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Introduction

Sealum Industries has designed and manufactured hydraulic manifolds for over twenty years. Our CNC mills and lathes are tooled up for all common cavity ports, and we have the expertise to produce manifolds as large as 60" x 48" x 40" and as small as ½" x 1" x 2".

Stock Manifolds

Most of the manifolds shown on the following pages are stock items. They are inventoried in steel and aluminum and are available with special coatings (zinc, anodized, and black oxide coatings) if requested. Coatings will add approximately one week to the delivery.

Custom Manifolds

Sealum Industries can design and manufacture custom manifolds to your specifications when you supply us with a circuit with a list of valves, port sizes, type of material, and any special features. A quotation will then be sent to you, and if this results in a purchase order, a part number will be issued. Our engineering department will work with you on the details of the layout and can also supply you with a layout drawing if requested. Sealum Industries does not supply manufacturing drawings and custom manifolds will not be sold to others without the consent of the customer. As a general rule, surface mounted valves will be on the top, inlet ports on one side with outlet ports opposite, and cartridges can go anywhere suitable. Mounting holes are also provided and can be either tapped or through holes. Custom manifolds take approximately two to three weeks to produce, will not be accepted back for credit and are subject to a cancellation fee once manufacturing has begun.

Material Selection

Unless otherwise specified, the following materials will be used:

Steel – G40.21-44W or C1018

Aluminum – 6061-T6

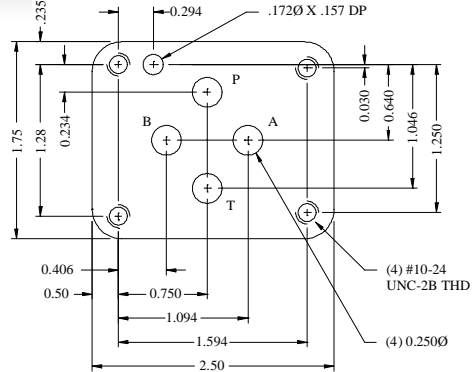
Stainless Steel – 316L

It is the responsibility of the customer to select the appropriate material. When doing so, the following factors should be taken into consideration.

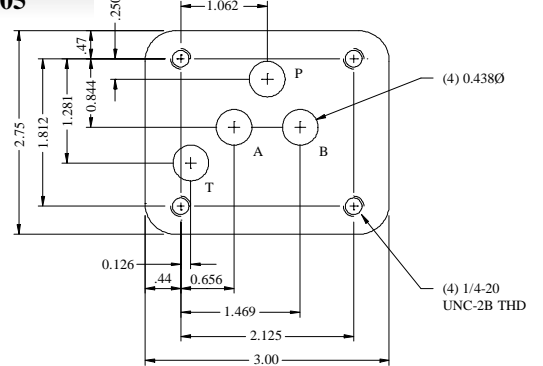
- **Pressure:** Normally, aluminum is rated for 3,000 PSI while steel is rated for 6,000 PSI. The pressure rating of the valves itself should also be taken into consideration.
- **Heat:** Steel should be used when the valves generate high heat such as pressure relieving and pressure reducing valves. The coefficient of linear expansion for aluminum is twice that of steel cartridges and plugs. Therefore they will expand at a different rate and may loosen.
- **Erosion:** If the oil velocity is very high as the oil leaves the cartridge, there is a danger of erosion on the walls of the cavity. In this case steel would be a better choice.
- **Corrosion:** If corrosion is a factor, a special coating may be required. We can supply you with regular or hard anodizing on our aluminum manifolds, and zinc plating or black oxide on our steel manifolds.
- **Weight:** Weight is normally not a factor since the manifold itself is considerably smaller than the rest of the equipment. However, if weight is a concern, a steel manifold will weigh about three times as much as the same manifold in aluminum.

Valve Specifications

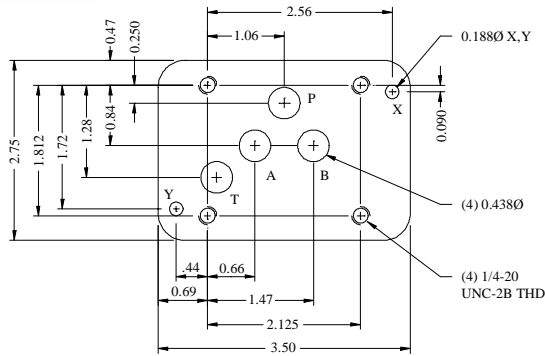
NFPA D03



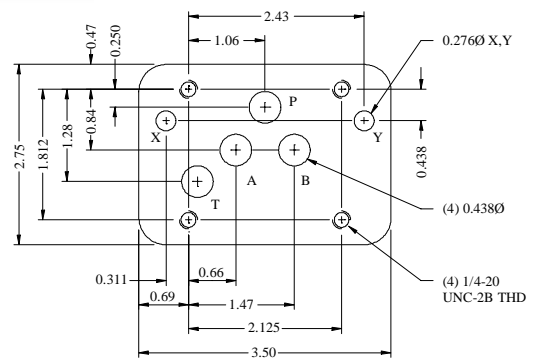
NFPA D05



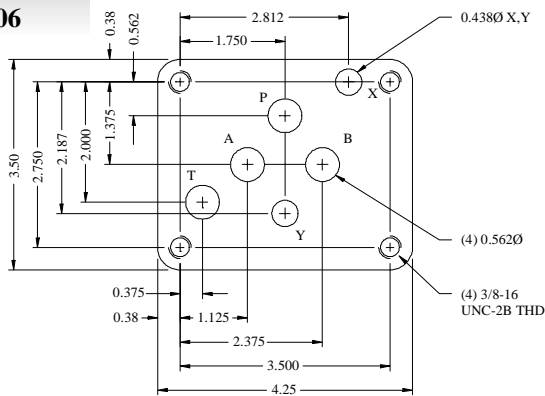
D05H



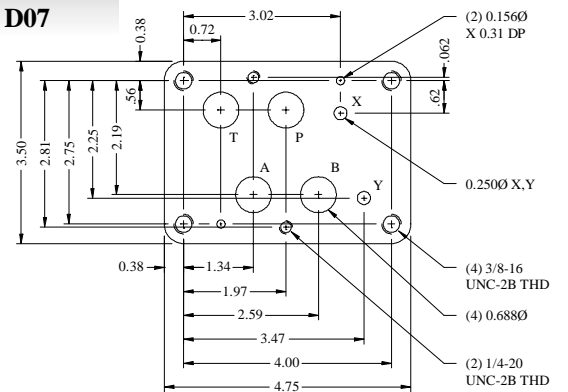
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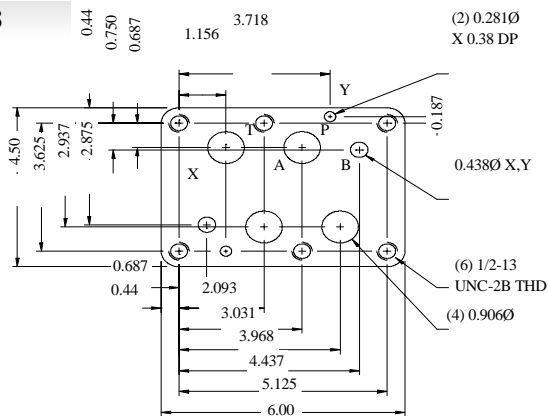
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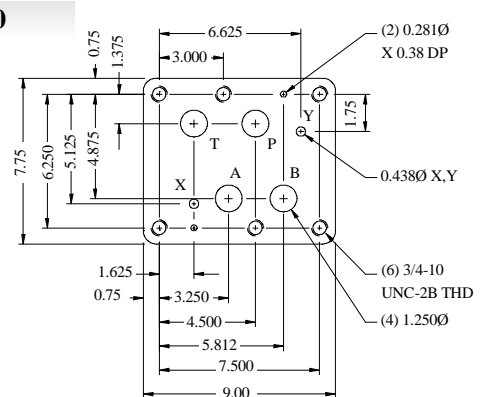
NFPA D07



NFPA D08

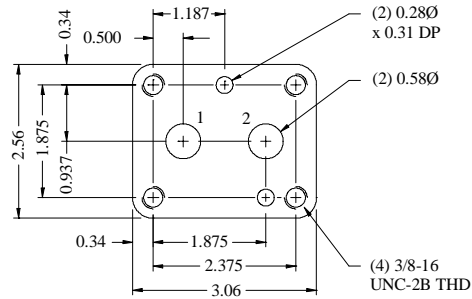


NFPA D10

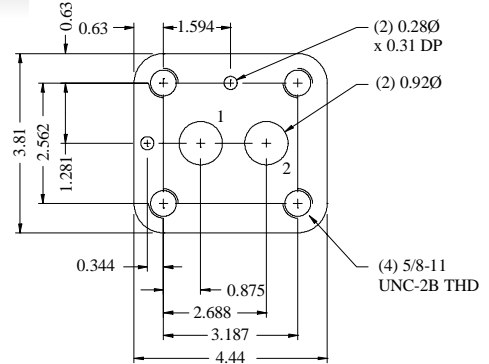


Valve Specifications

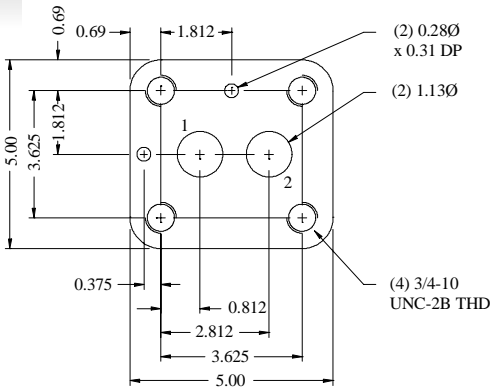
C03



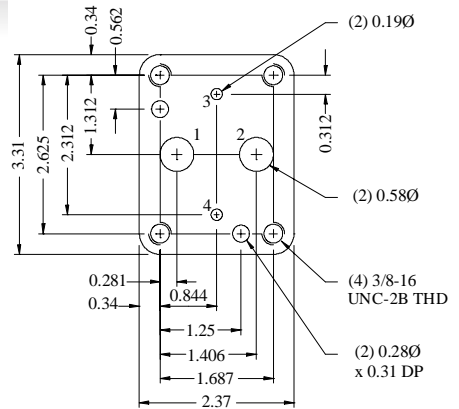
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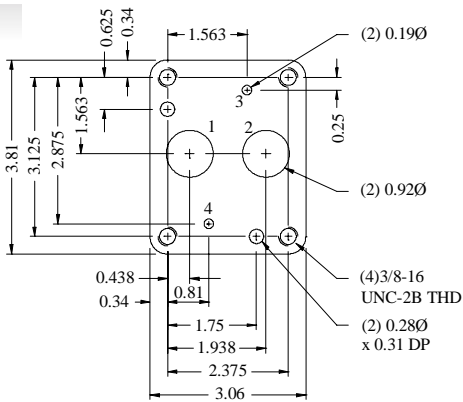
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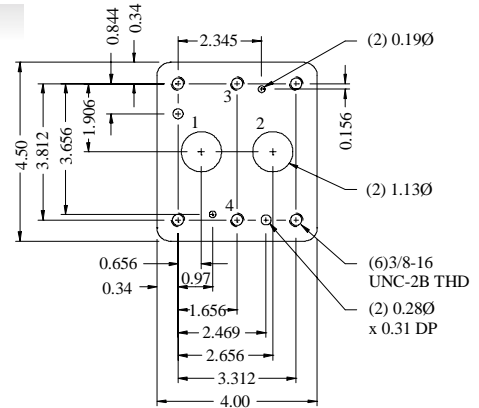
P06



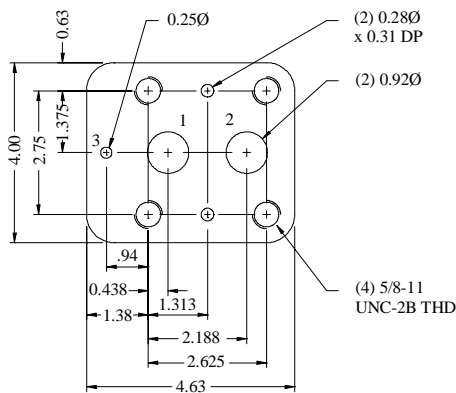
P08



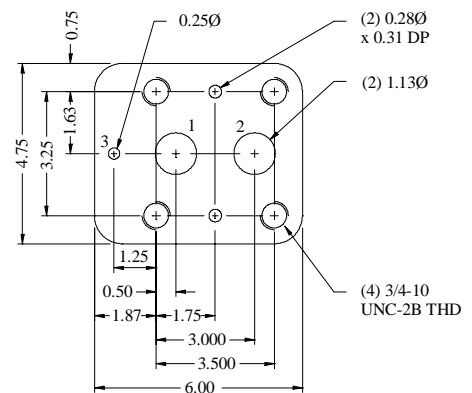
P10



R08

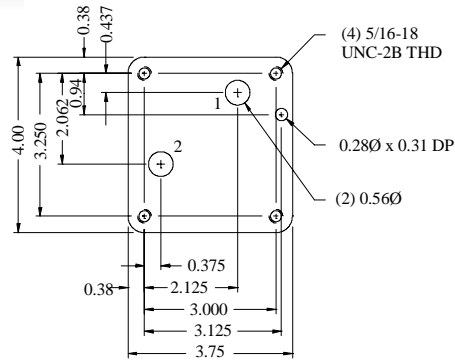


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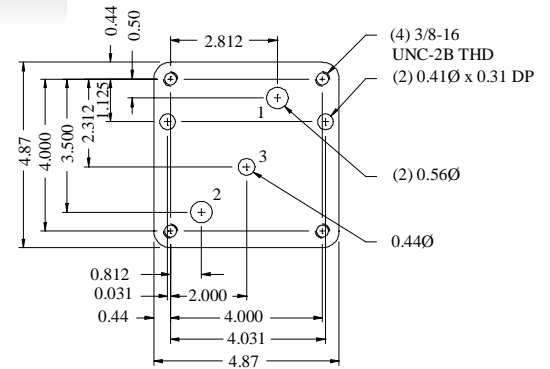


Valve Specifications

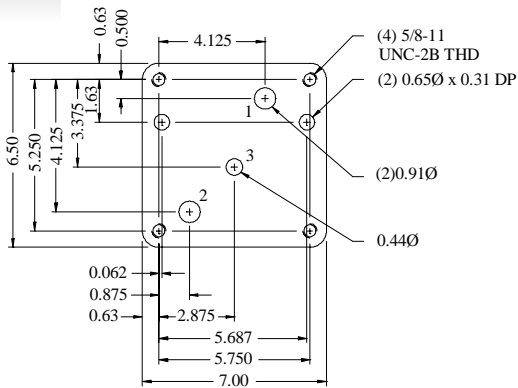
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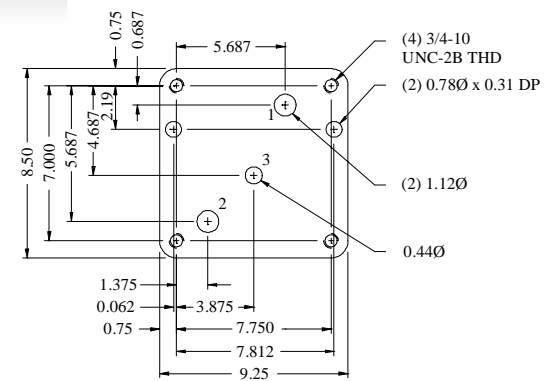
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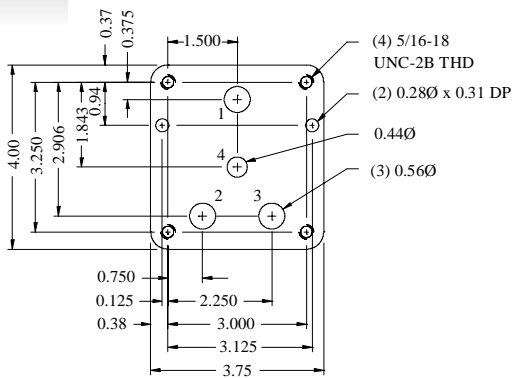
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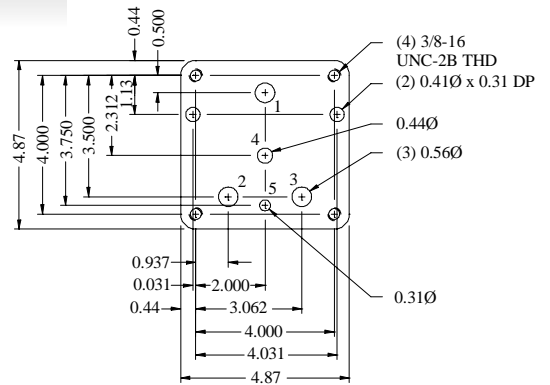
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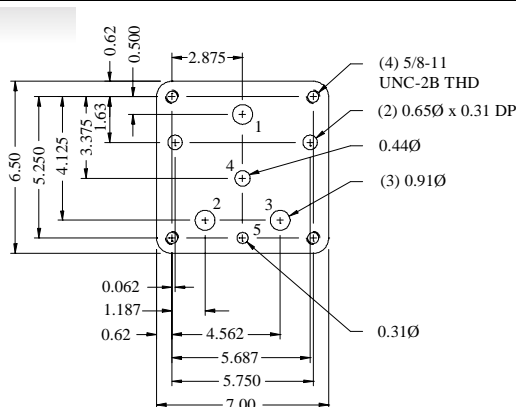
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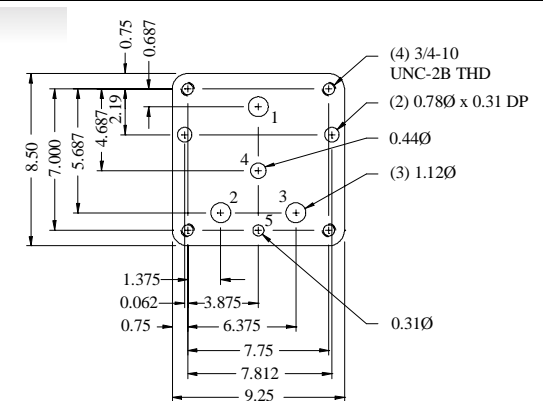
3F03



3F06

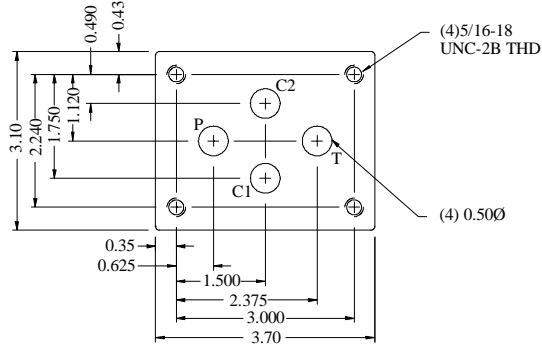


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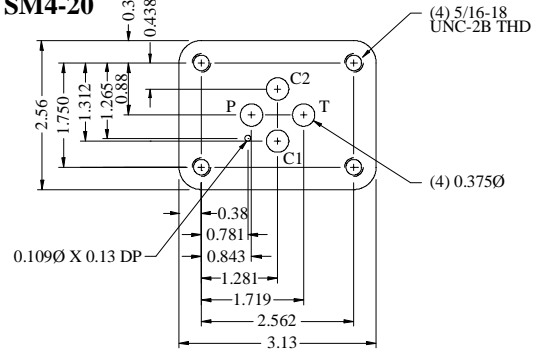


Valve Specifications

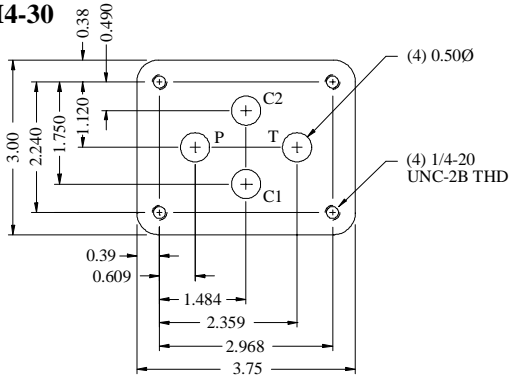
ATCHLEY CONTROLS 242



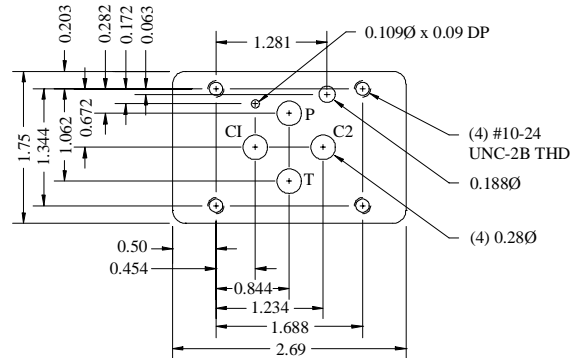
**MOOG 62-100 SERIES / ATCHLEY CONTROLS 215A
VICKERS SM4-20**



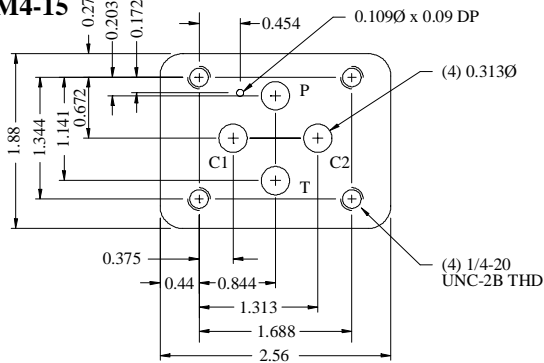
**MOOG 62-300 SERIES / ATCHLEY CONTROLS 241
VICKERS SM4-30**



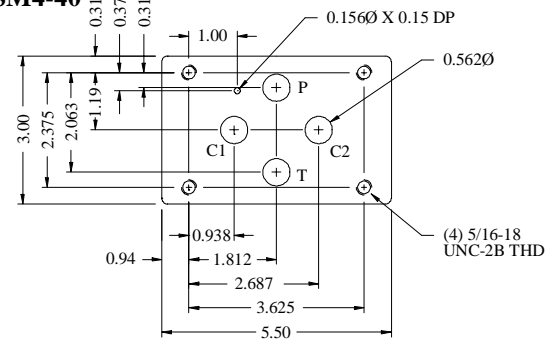
MOOG 772 / ATCHLEY CONTROLS 211A



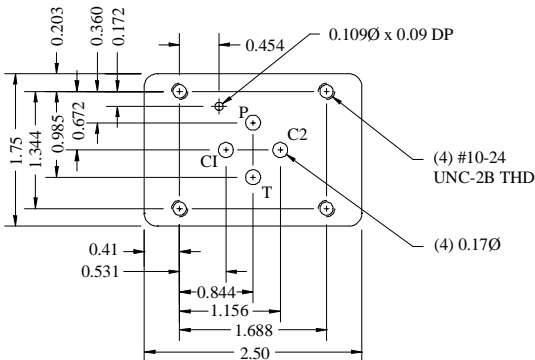
**MOOG 773 / ATCHLEY CONTROLS 218
VICKERS SM4-15**



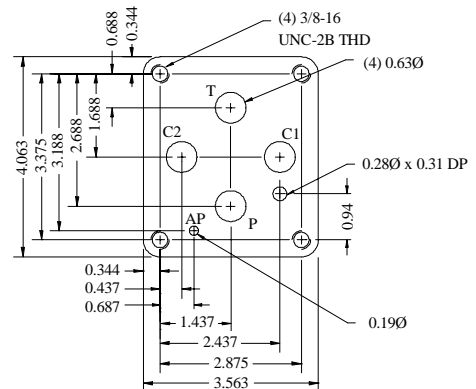
**MOOG 78-100 SERIES / ATCHLEY CONTROLS 240
VICKERS SM4-40**



**MOOG 771 / ATCHLEY CONTROLS 206 / 208A
VICKERS SM4-10**

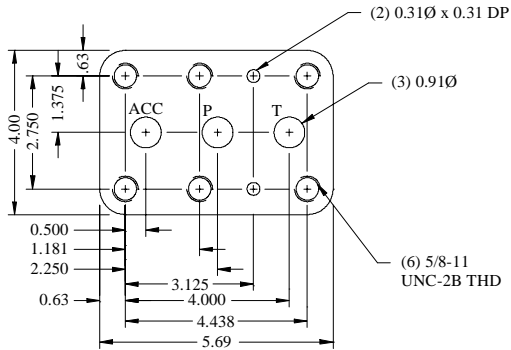


MOOG 72 / ATCHLEY CONTROLS 261

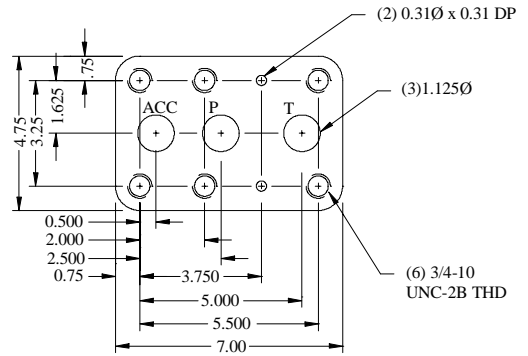


Valve Specifications

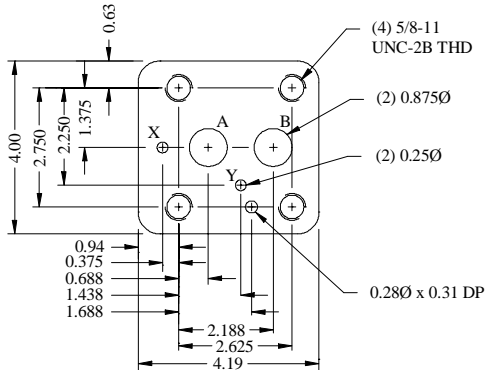
VICKERS URG06



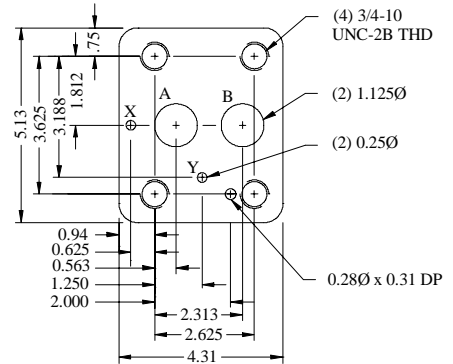
VICKERS URG10



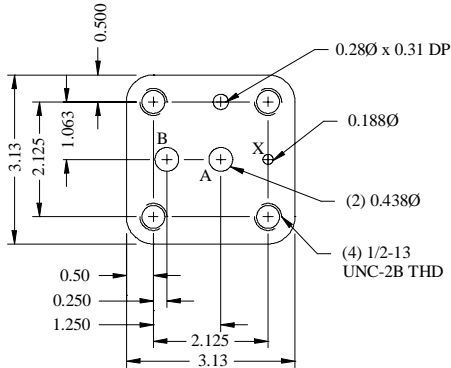
VICKERS CG06



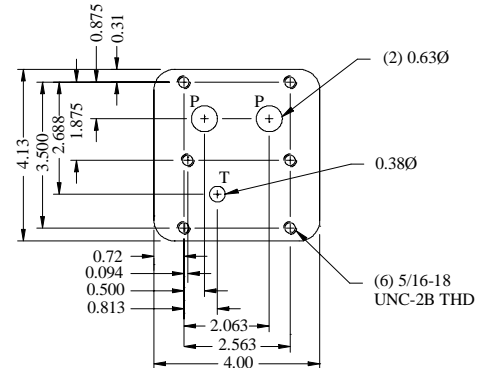
VICKERS CG10



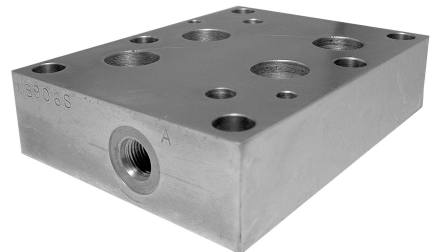
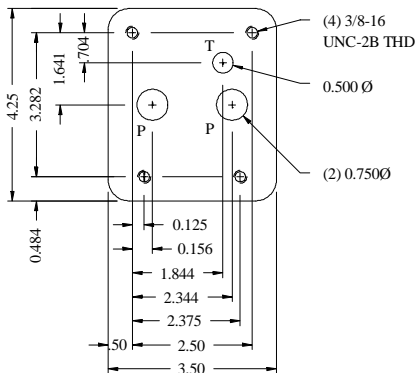
R06 / VICKERS CG03



SUNDSTRAND HOT OIL SHUTTLE 9510648



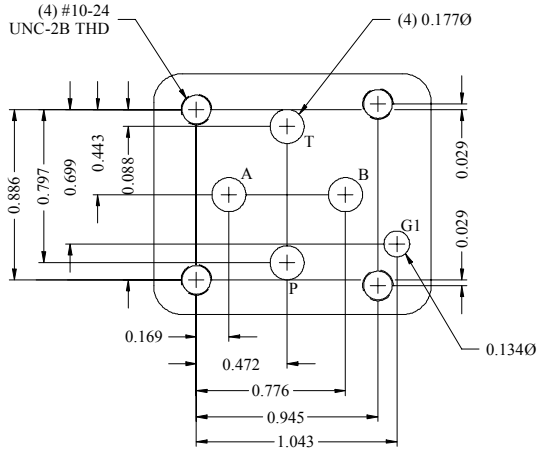
EATON HOT OIL SHUTTLE



Valve Specifications

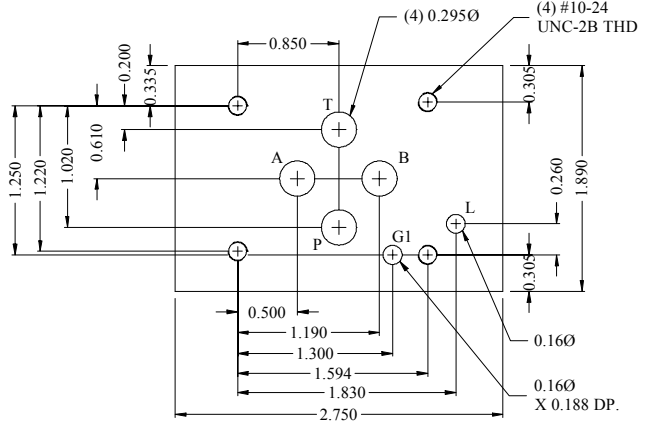
D02

ISO 4401-02-01-0-94
NFPA T3.5.1 R2 D02



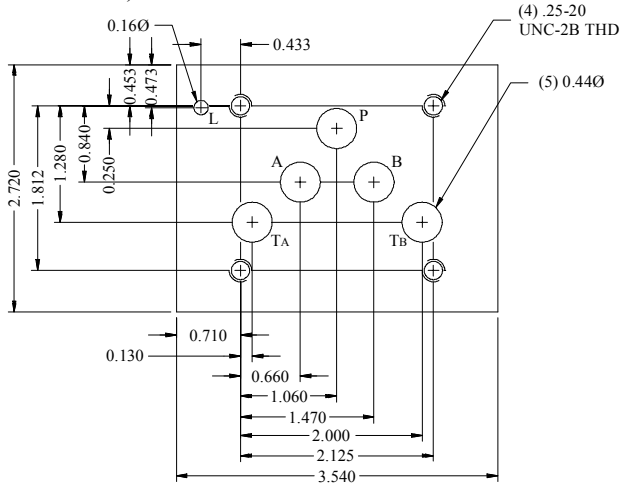
D03 with L

ISO 4401-03-02-0-94
NFPA T3.5.1 R2 D03



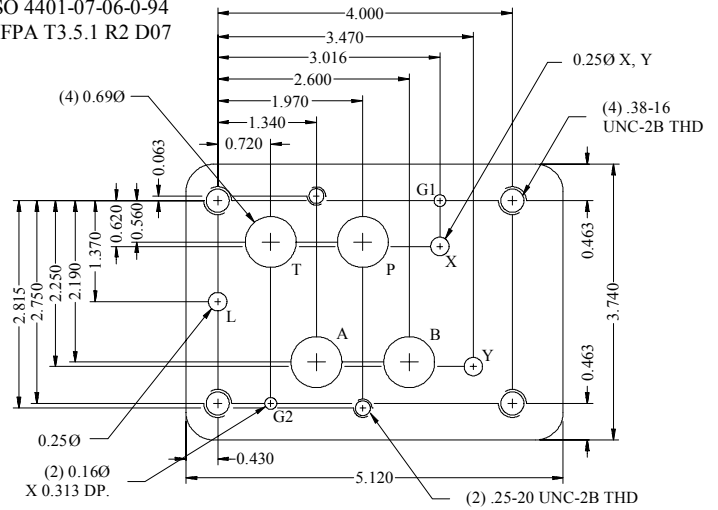
D05 with L

ISO 4401-05-04-0-94, NFPA T3.5.1 R2 D05



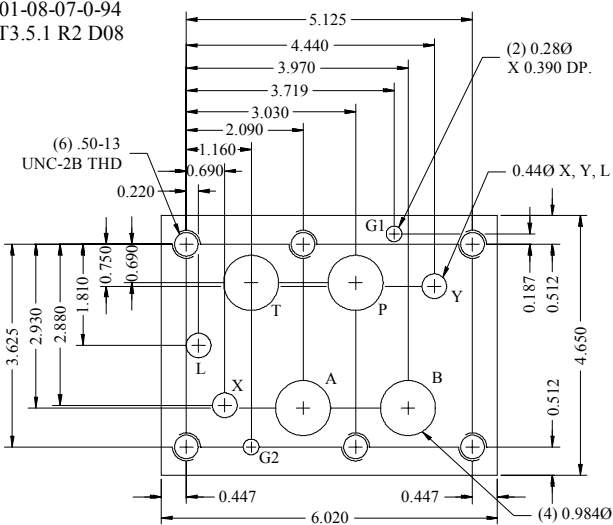
D07 with L

ISO 4401-07-06-0-94
NFPA T3.5.1 R2 D07



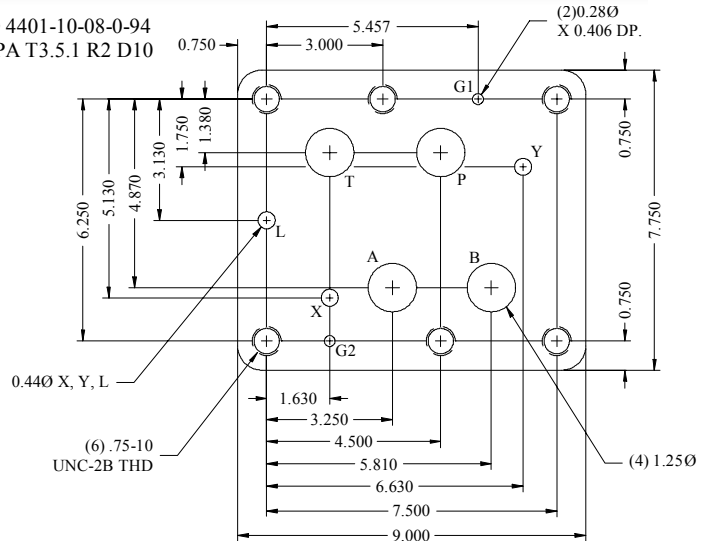
D08 with L

ISO 4401-08-07-0-94
NFPA T3.5.1 R2 D08



D10 with L

ISO 4401-10-08-0-94
NFPA T3.5.1 R2 D10



Subplates

Directional Valves

Servo Valves

Surface Mounted Valves

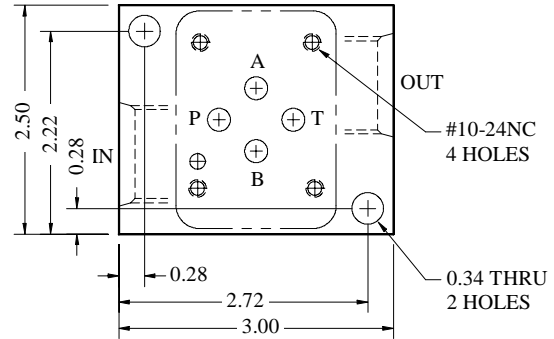
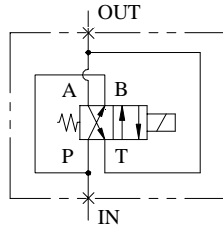


Double Flow Manifold

D03

PART NO: **MB1083S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
IN, OUT: **#12 SAE ORB**

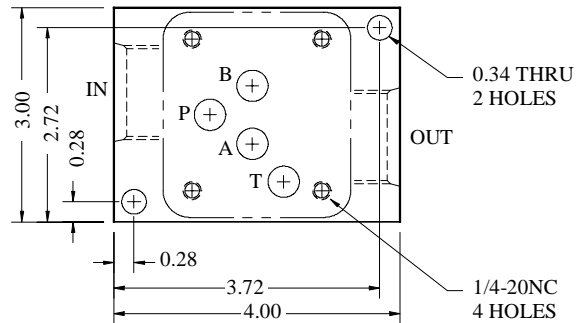
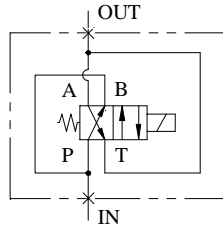
2" THICK



D05

PART NO: **MB1085S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
IN, OUT: **#16 SAE ORB**

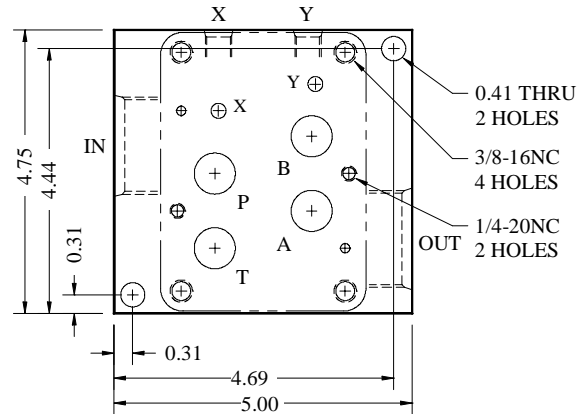
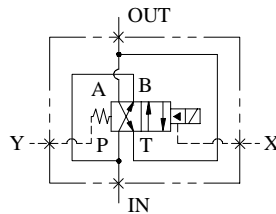
2" THICK



D07

PART NO: **MB1974S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
IN, OUT: **#20 SAE ORB**
X, Y: **#4 SAE ORB**

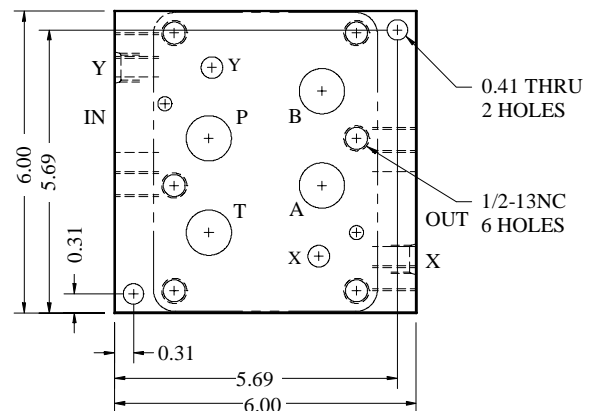
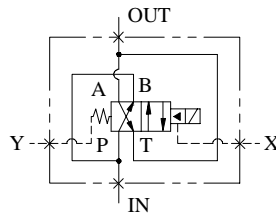
2 1/2" THICK



D08

PART NO: **MB1434S**
MATL: **STEEL**
PRESSURE: **3000 PSI WORKING PRESSURE**
IN, OUT: **1 1/2 C61 SAE 4-BOLT FLANGE**
X, Y: **#6 SAE ORB**

4" THICK



FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

FLANGE MOUNTING HOLES ARE IN INCHES.

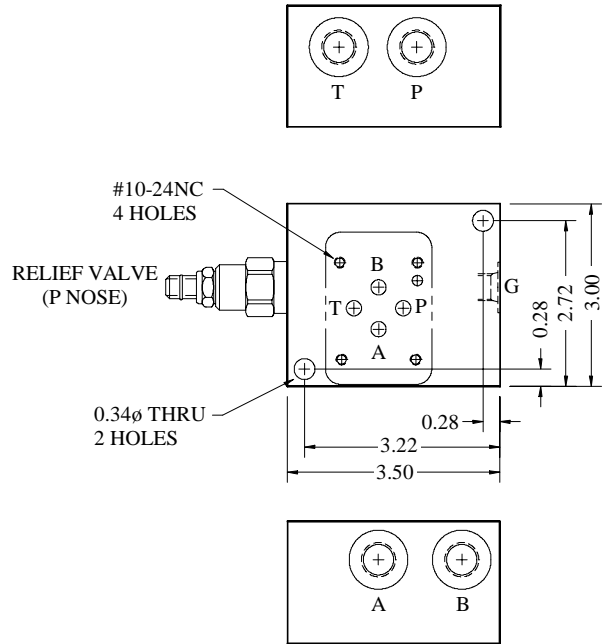
Directional Subplate

D03 - SAE ORB SIDE PORT

MB201-0-8AM

- M - WITH 1/2" MOUNTING PLATE
(OMIT IF NO MOUNTING PLATE)
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 8 - #8 SAE ORB
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

TO ORDER MOUNTING PLATE ONLY: **MB581-3**
G (GAGE ON P): #4 SAE ORB
2" THICK

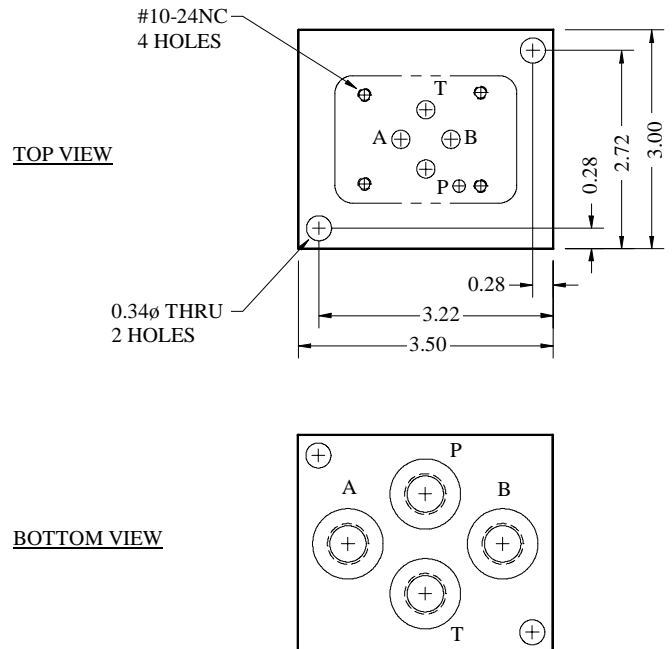


D03 - SAE ORB BOTTOM PORT

MB606-8A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 8 - #8 SAE ORB

1 1/4" THICK



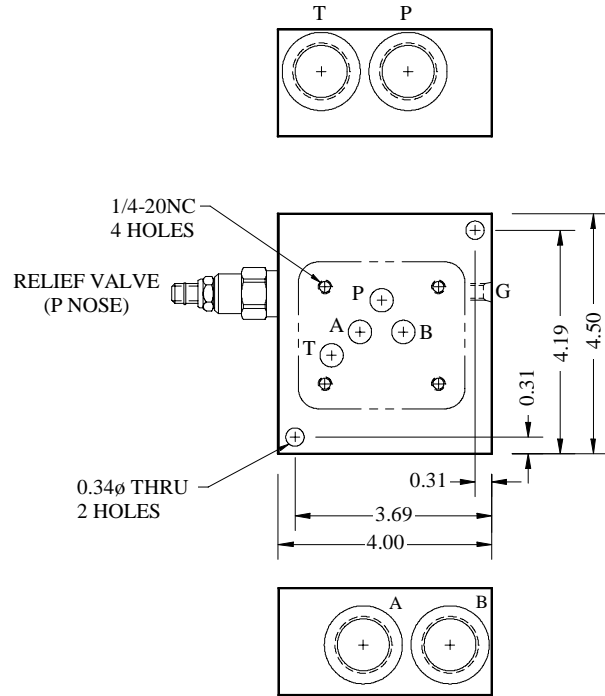
Directional Subplate

D05 - SAE ORB SIDE PORT

MB202-0-12AM

- M - WITH 1/2" MOUNTING PLATE
(OMIT IF NO MOUNTING PLATE)
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 12 - #12 SAE ORB
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

TO ORDER MOUNTING PLATE ONLY: **MB581-5**
G (GAGE ON P): #4 SAE ORB
2" THICK

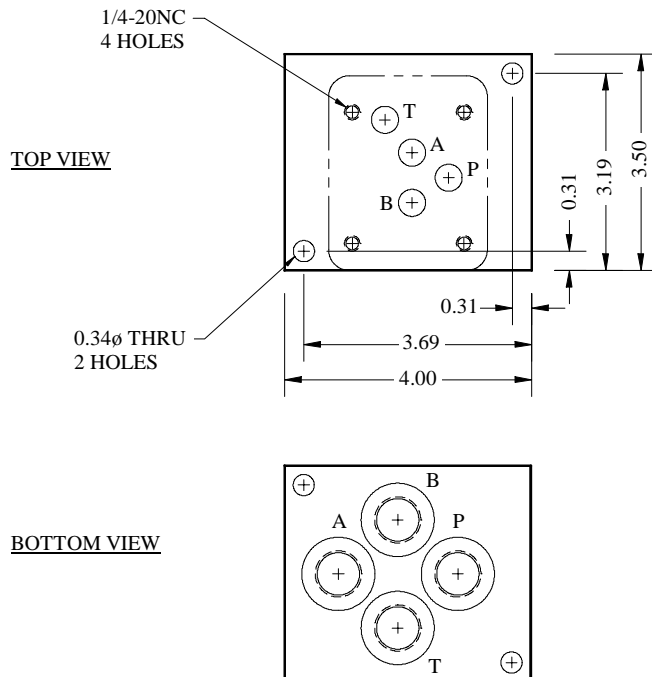


D05 - SAE ORB BOTTOM PORT

MB564-8A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 8 - #8 SAE ORB

1 1/4" THICK

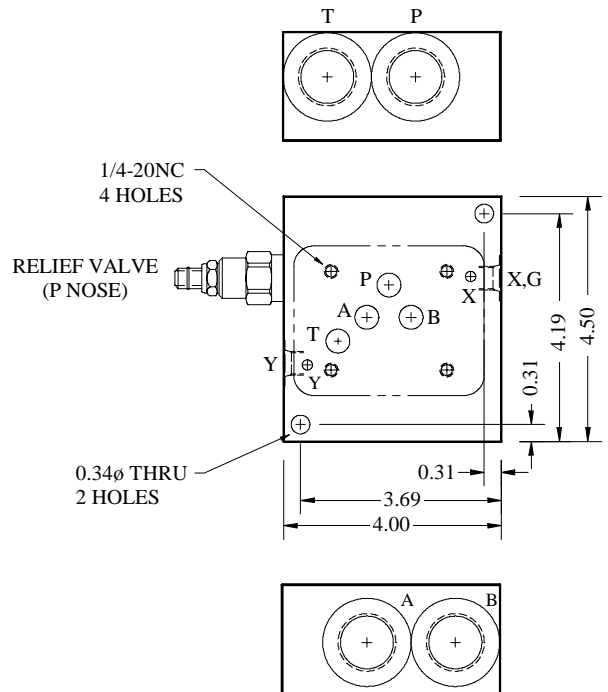


Directional Subplate

D05H - SAE ORB SIDE PORT

MB203-0-12AM

- M - WITH 1/2" MOUNTING PLATE
(OMIT IF NO MOUNTING PLATE)
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 12 - #12 SAE ORB
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

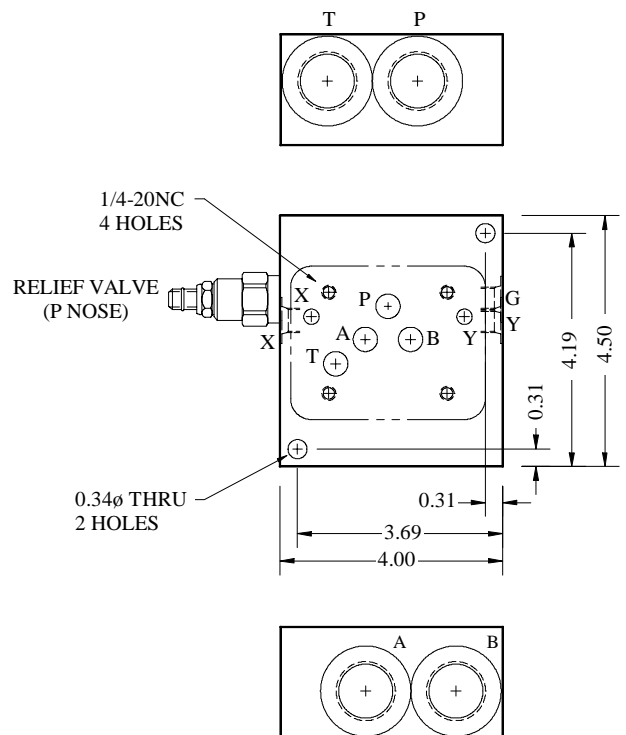


TO ORDER MOUNTING PLATE ONLY: **MB581-5**
X, Y, G (GAGE ON P): #4 SAE ORB
2" THICK

D05HE - SAE ORB SIDE PORT

MB504-0-12AM

- M - WITH 1/2" MOUNTING PLATE
(OMIT IF NO MOUNTING PLATE)
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 12 - #12 SAE ORB
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY



TO ORDER MOUNTING PLATE ONLY: **MB581-5**
X, Y, G (GAGE ON P): #4 SAE ORB
2" THICK

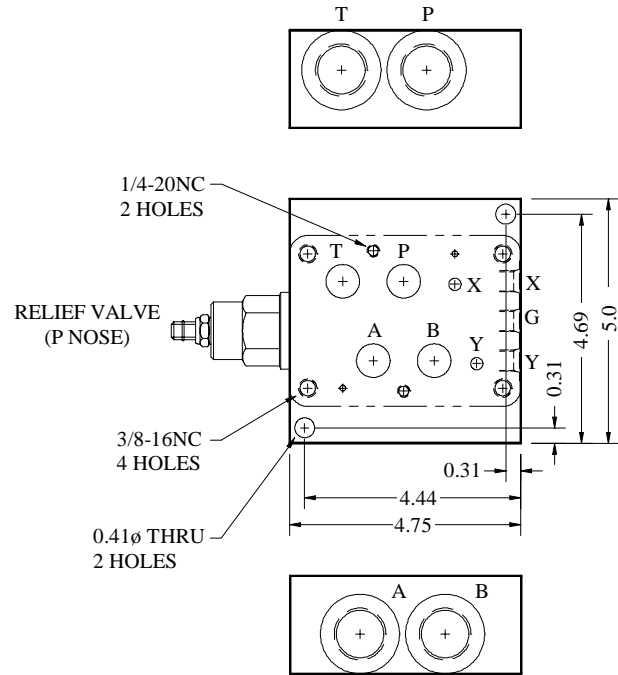
Directional Subplate

D07 - SAE ORB SIDE PORT

MB654-0-12AM

- M - WITH 1/2" MOUNTING PLATE
(OMIT IF NO MOUNTING PLATE)
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 12 - #12 SAE ORB
- 16 - #16 SAE ORB
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY

TO ORDER MOUNTING PLATE ONLY: **MB831-7**
 X, Y, G (GAGE ON P): #4 SAE ORB
 2" THICK FOR #12 SAE ORB
 2 1/2" THICK FOR #16 SAE ORB

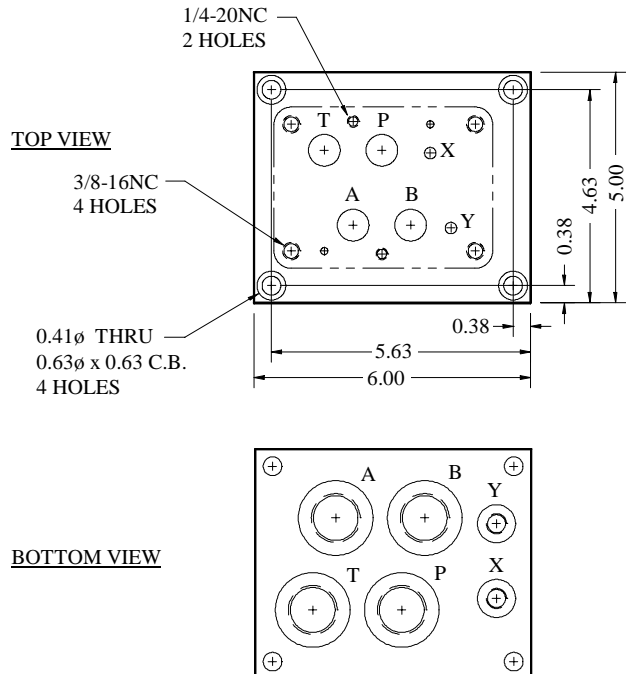


D07 - SAE ORB BOTTOM PORT

MB2210-12A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- 12 - #12 SAE ORB
- 16 - #16 SAE ORB

X, Y: #4 SAE ORB
2" THICK



Directional Subplate

D07 - SAE 4-BOLT FLANGE SIDE PORT

MC1466-0-20C1S

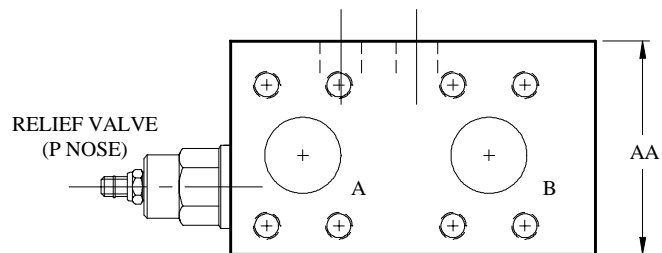
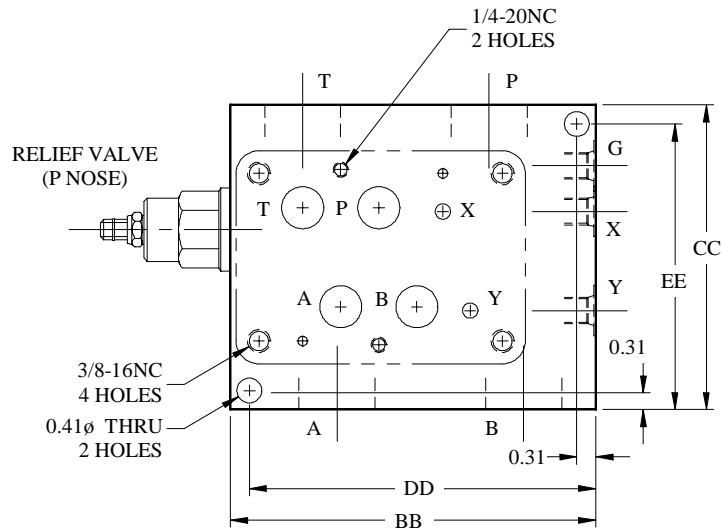
20C1S - 1 1/4 C61 P, T, A, B
20C2S - 1 1/4 C62 P, A, B 1 1/4 C61 T
24C1S - 1 1/2 C61 P, T, A, B
24C2S - 1 1/2 C62 P, A, B 1 1/2 C61 T

0 - NO RELIEF CAVITY
M - STD C-16-2 CAVITY
S - SUN T-3A CAVITY

X, Y, G (GAGE): #4 SAE ORB
MATL: STEEL

FOR DIMENSIONS OF FLANGE PORTS AND
PRESSURE RATING SEE PAGE 41-12.

FLANGE MOUNTING HOLES ARE IN INCHES.



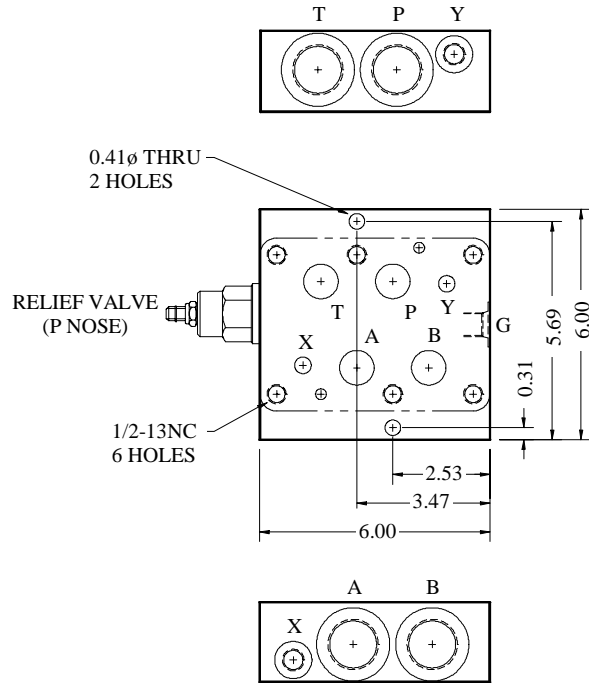
Part No.	P, A, B	T	AA	BB	CC	DD	EE
MC1466 - * - 20C1S	1 1/4 C61	1 1/4 C61	3.50	6.00	5.00	5.69	4.69
MC1466 - * - 20C2S	1 1/4 C62	1 1/4 C61	4.00	6.25	5.00	5.94	4.69
MC1466 - * - 24C1S	1 1/2 C61	1 1/2 C61	4.00	6.63	5.00	6.31	4.69
MC1466 - * - 24C2S	1 1/2 C62	1 1/2 C61	5.00	7.00	5.25	4.13	4.94

Directional Subplate

D08 - SAE ORB SIDE PORT

MB652-0-16AM

- M - WITH 1/2" MOUNTING PLATE
(OMIT IF NO MOUNTING PLATE)
- A - 6061T6 ALUMINUM 3000 PSI
S - C1018 STEEL 5000 PSI
- 16 - #16 SAE ORB
20 - #20 SAE ORB
- 0 - NO CAVITY
M - C-16-2 CAVITY
S - SUN T-3A CAVITY
S1 - SUN T-16A CAVITY



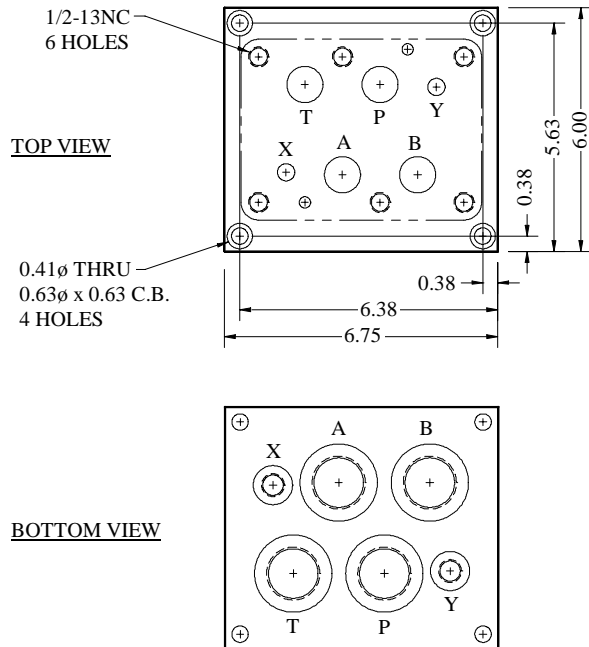
TO ORDER MOUNTING PLATE ONLY: **MB831-8**

X, Y: #6 SAE ORB
G (GAGE ON P): #4 SAE ORB
2" THICK FOR #16 SAE ORB
3" THICK FOR #20 SAE ORB

D08 - SAE ORB BOTTOM PORT

MB2211-16A

- A - 6061T6 ALUMINUM 3000 PSI
S - C1018 STEEL 5000 PSI
- 16 - #16 SAE ORB
20 - #20 SAE ORB



X, Y: #6 SAE ORB
1 1/2" THICK FOR #16 SAE ORB
2 1/2" THICK FOR #20 SAE ORB

Directional Subplate

D08 - SAE 4-BOLT FLANGE SIDE PORT

MC1313-0-20C1S

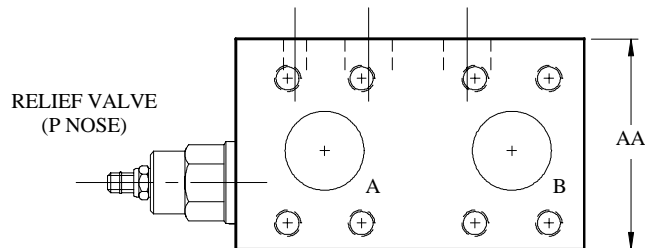
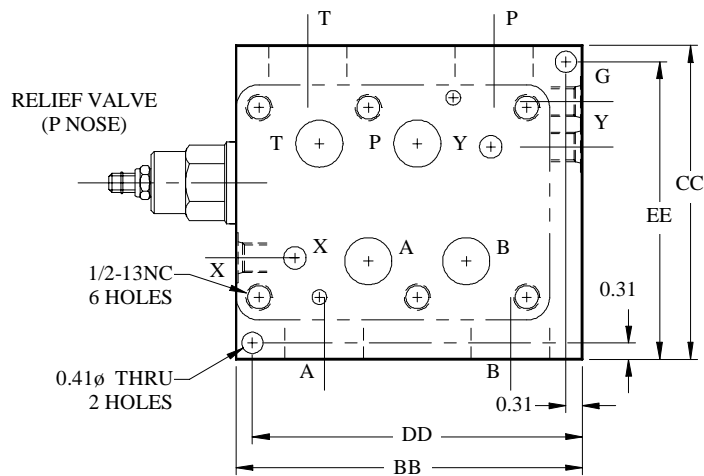
- 20C1S - 1 1/4 C61 P, T, A, B
- 20C2S - 1 1/4 C62 P, A, B 1 1/4 C61 T
- 24C1S - 1 1/2 C61 P, T, A, B
- 24C2S - 1 1/2 C62 P, A, B 1 1/4 C61 T
- 32C1S - 2 C61 P, T, A, B
- 32C2S - 2 C62 P, A, B 2 C61 T

- 0 - NO RELIEF CAVITY
- M - STD C-16-2 CAVITY
- S - SUN T-16A CAVITY

X, Y, G (GAGE): # 6 SAE ORB
MATL: STEEL

FOR DIMENSIONS OF FLANGE PORTS AND
PRESSURE RATING SEE PAGE 41-12.

FLANGE MOUNTING HOLES ARE IN INCHES.



Part No.	P, A, B	T	AA	BB	CC	DD	EE
MC1313 - * - 20C1S	1 1/4 C61	1 1/4 C61	3.50	6.00	6.00	5.69	5.69
MC1313 - * - 20C2S	1 1/4 C62	1 1/4 C61	4.00	6.25	6.00	5.94	5.69
MC1313 - * - 24C1S	1 1/2 C61	1 1/2 C61	4.00	6.63	6.00	6.31	5.69
MC1313 - * - 24C2S	1 1/2 C62	1 1/2 C61	5.00	7.00	6.25	4.13	5.94
MC1313 - * - 32C1S	2 C61	2 C61	4.50	7.50	6.00	4.38	5.69
MC1313 - * - 32C2S	2 C62	2 C61	6.00	8.38	6.50	4.75	6.19

Directional Subplate

D10 - SAE ORB OR SAE 4-BOLT SIDE PORT

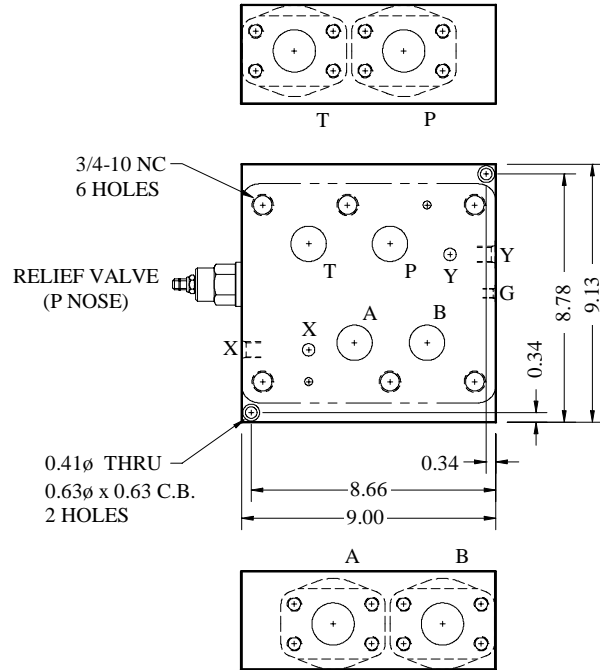
MC700-0-24C1S

- S - 44W STEEL
(5000 PSI SAE ORB PORTS)
(4000 PSI FLANGE PORTS)
- 24 - #24 SAE ORB
24C1 - 1 1/2 CODE 61
4-BOLT COMP FLANGE
- 0 - NO CAVITY
S - SUN T-18A CAVITY

X, Y: #8 SAE ORB
G (GAGE ON P): #4 SAE ORB
3" THICK (SAE ORB PORTS)
3 1/2" THICK (FLANGE PORTS)

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING
SEE PAGE 41-12.

FLANGE MOUNTING HOLES ARE IN INCHES.

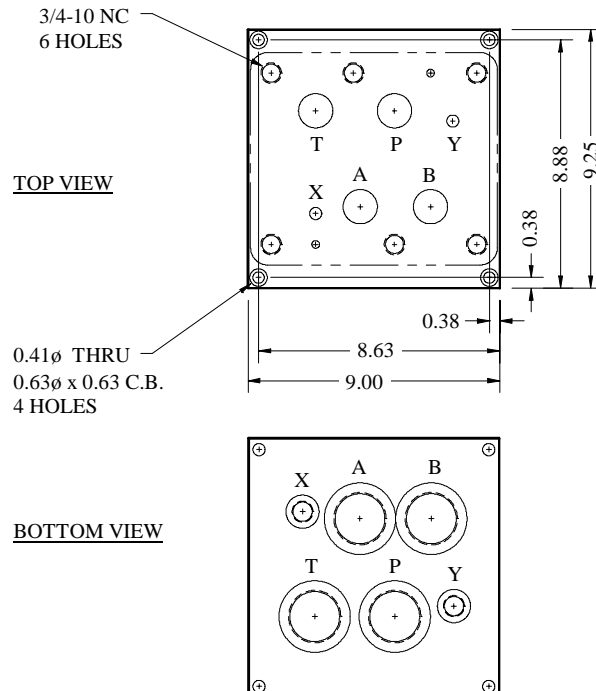


D10 - SAE ORB BOTTOM PORT

MC1467-24S

- S - 44W STEEL 5000 PSI
- 24 - #24 SAE ORB

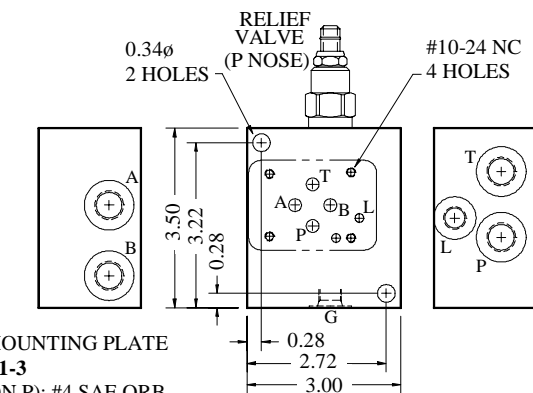
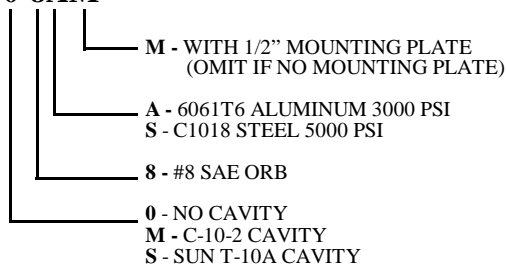
X, Y: #8 SAE ORB
1 1/2" THICK



Directional Subplate with L

D03 With L - SAE ORB SIDE PORT

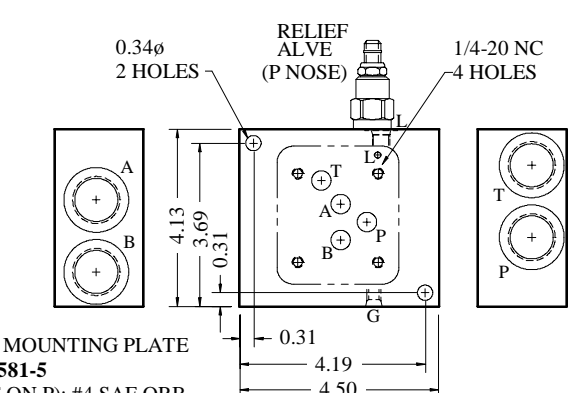
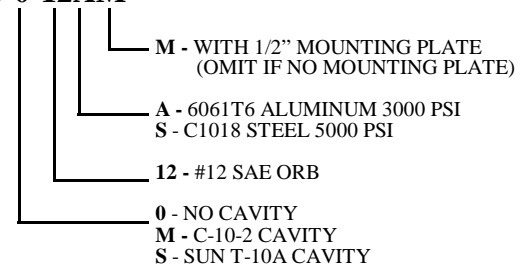
MB2555-0-8AM



TO ORDER MOUNTING PLATE ONLY: **MB581-3**
L, G (GAGE ON P): #4 SAE ORB
2" THICK

D05 With L - SAE ORB SIDE PORT

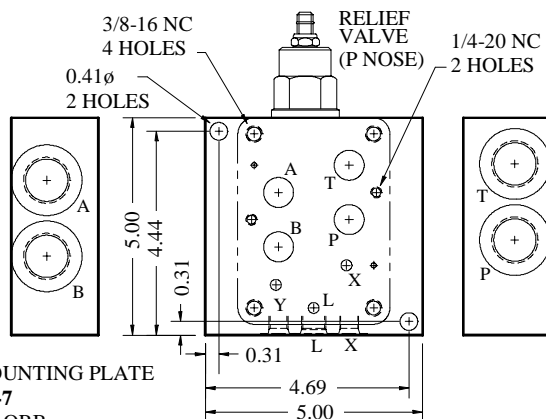
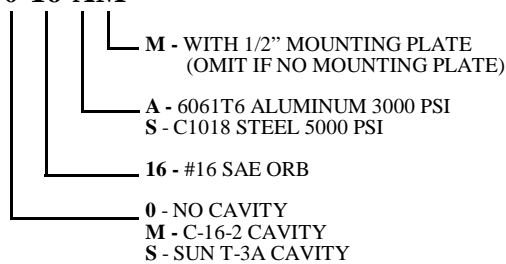
MB2556-0-12AM



TO ORDER MOUNTING PLATE ONLY: **MB581-5**
L, G (GAGE ON P): #4 SAE ORB
2" THICK

D07 With L - SAE ORB SIDE PORT

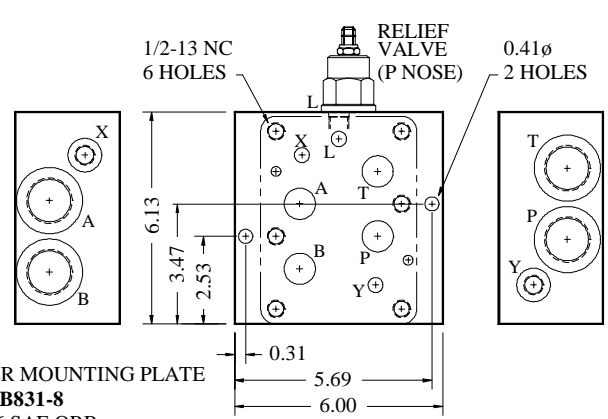
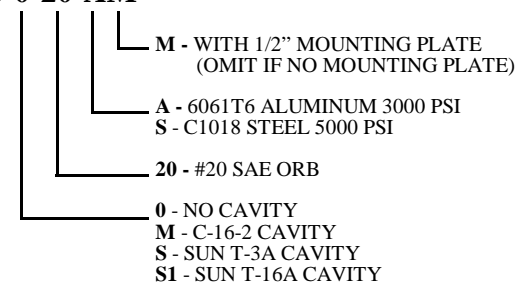
MB2557-0-16-AM



TO ORDER MOUNTING PLATE ONLY: **MB831-7**
L, X, Y: #4 SAE ORB
2 1/2" THICK

D08 With L - SAE ORB SIDE PORT

MB2558-0-20-AM

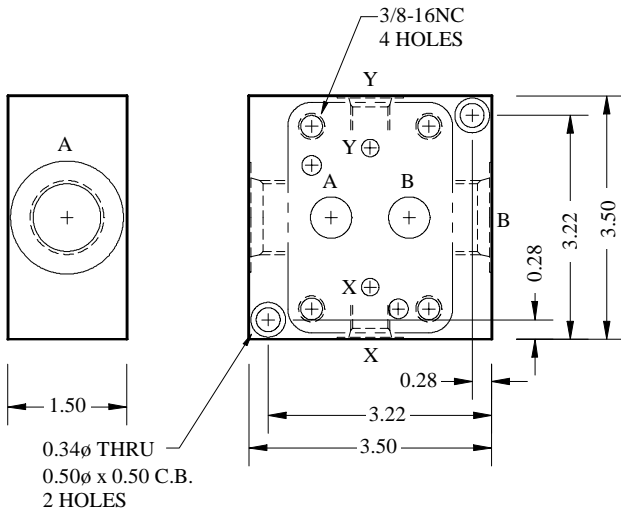


TO ORDER MOUNTING PLATE ONLY: **MB831-8**
L, X, Y: #6 SAE ORB
3" THICK

Surface Mounted Valve Subplate - SAE ORB Ports

P06 - SIDE PORT

PART NO: **MB532-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#12 SAE ORB**
X, Y: **#6 SAE ORB**



P06 - BOTTOM

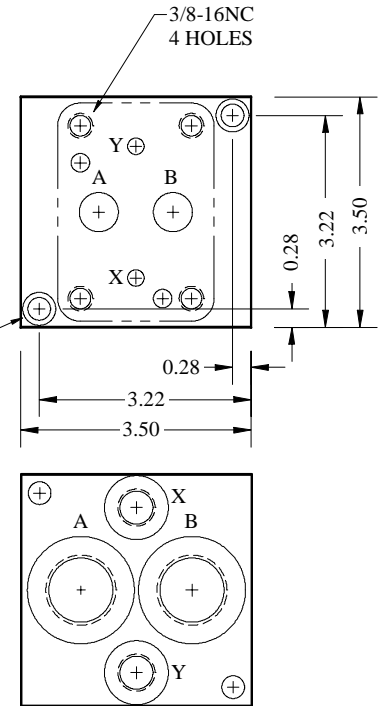
PART NO: **MB529-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#12 SAE ORB**
X, Y: **#6 SAE ORB**

1 1/2" THICK

TOP VIEW

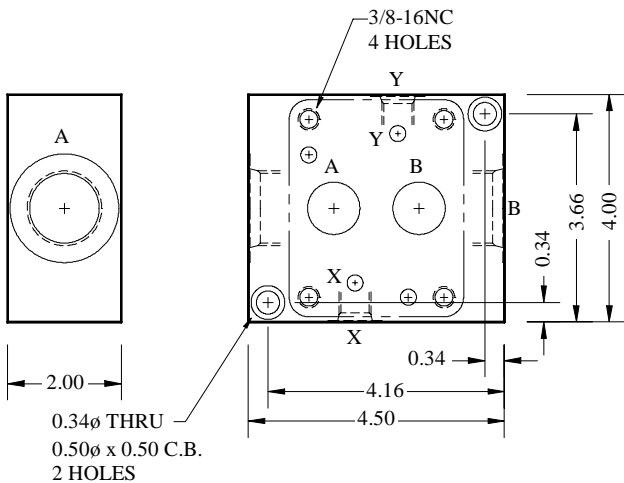
0.34 ϕ THRU
0.50 ϕ x 0.50 C.B.
2 HOLES

BOTTOM VIEW



P08 - SIDE PORT

PART NO: **MB530-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**
X, Y: **#6 SAE ORB**



P08 - BOTTOM PORT

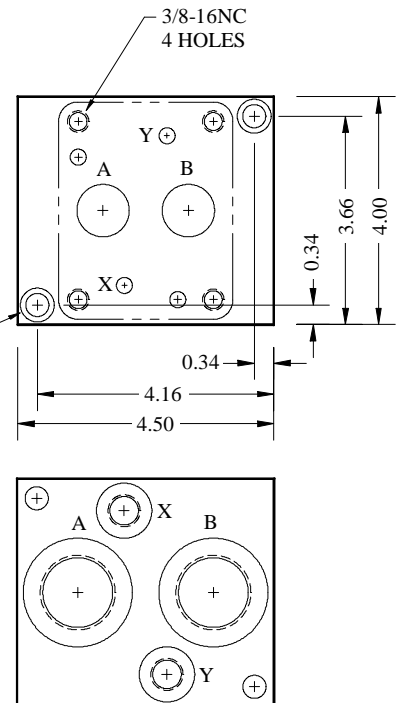
PART NO: **MB527-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**
X, Y: **#6 SAE ORB**

2" THICK

TOP VIEW

0.34 ϕ THRU
0.50 ϕ x 0.50 C.B.
2 HOLES

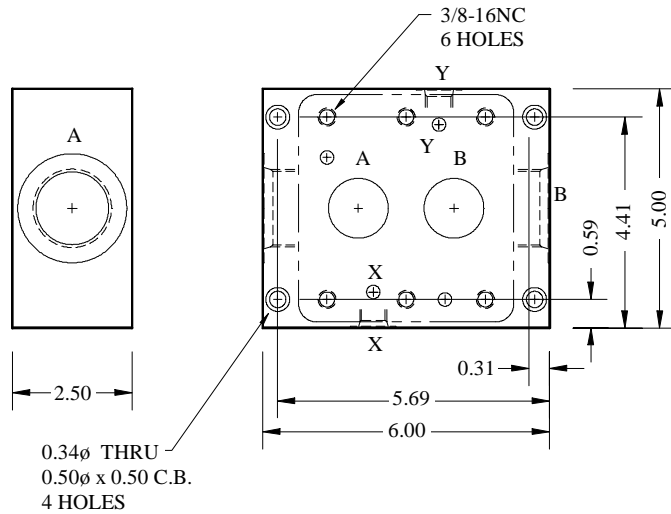
BOTTOM VIEW



Surface Mounted Valve Subplate – SAE ORB Ports

P10 - SIDE PORT

PART NO: **MB528-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**
X, Y: **#6 SAE ORB**

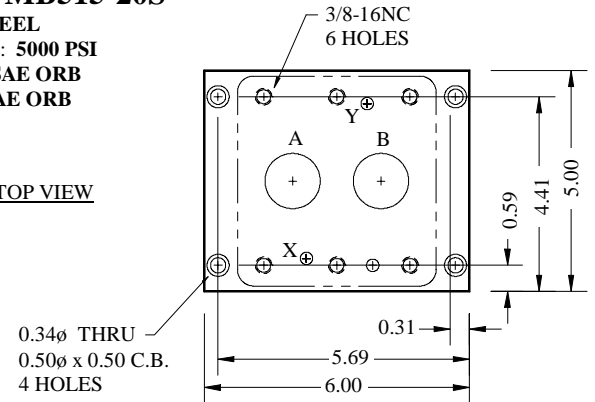


P10 - BOTTOM PORT

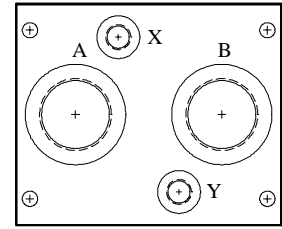
PART NO: **MB515-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**
X, Y: **#6 SAE ORB**

2" THICK

TOP VIEW

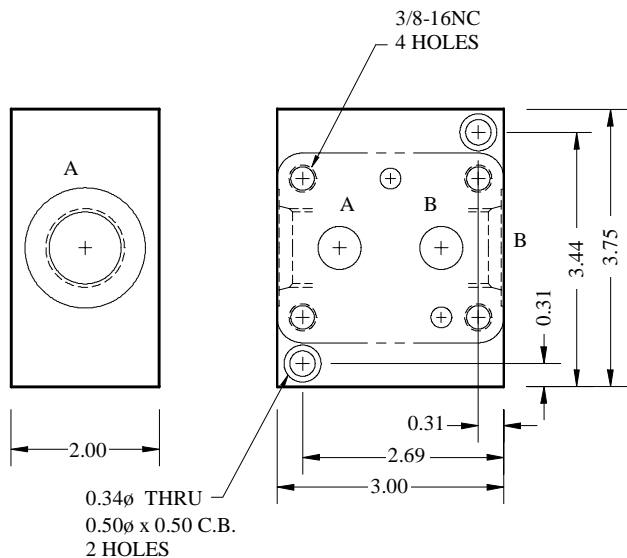


BOTTOM VIEW



C03 - SIDE PORT

PART NO: **MB992-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#12 SAE ORB**

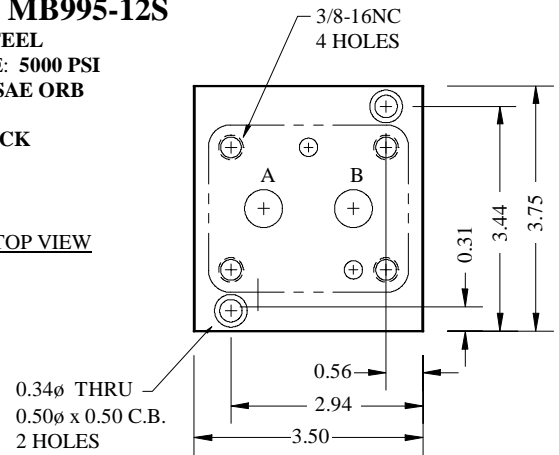


C03 - BOTTOM PORT

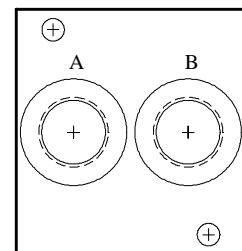
PART NO: **MB995-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#12 SAE ORB**

1 1/4" THICK

TOP VIEW



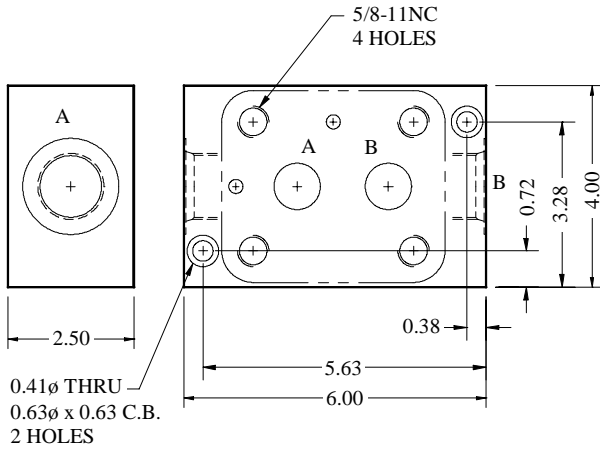
BOTTOM VIEW



Surface Mounted Valve Subplate – SAE ORB Ports

C06 - SIDE PORT

PART NO: **MB994-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**

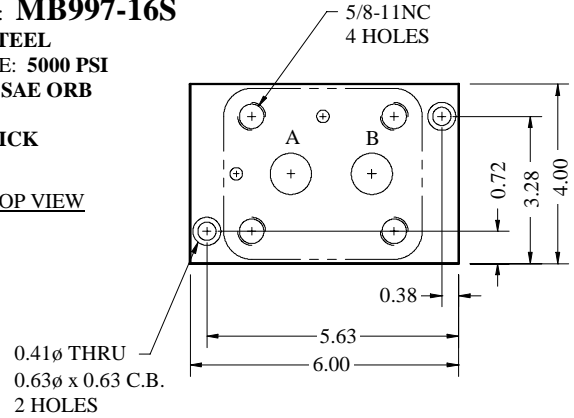


C06 - BOTTOM PORT

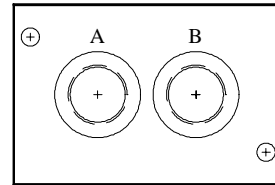
PART NO: **MB997-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**

1 1/2" THICK

TOP VIEW

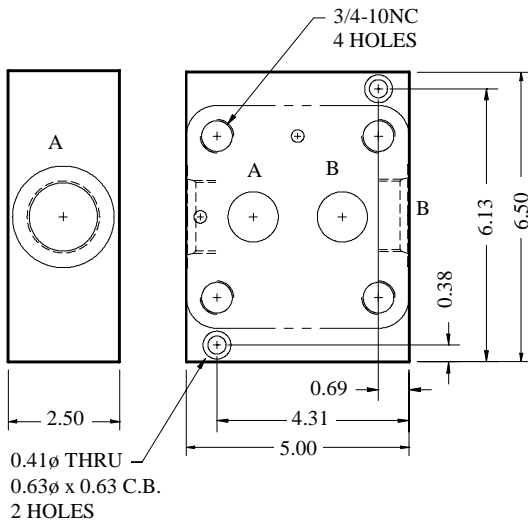


BOTTOM VIEW



C10 - SIDE PORT

PART NO: **MB996-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**

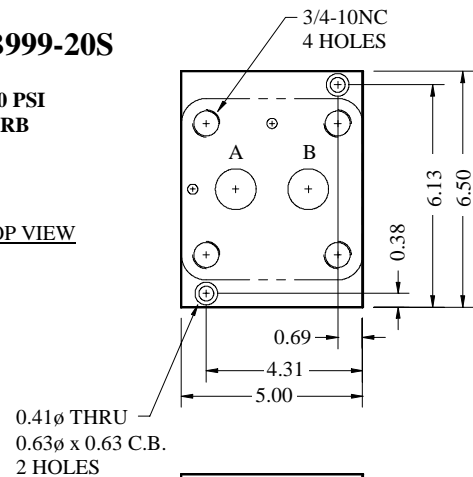


C10 - BOTTOM PORT

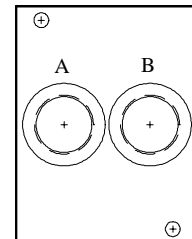
PART NO: **MB999-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**

2" THICK

TOP VIEW



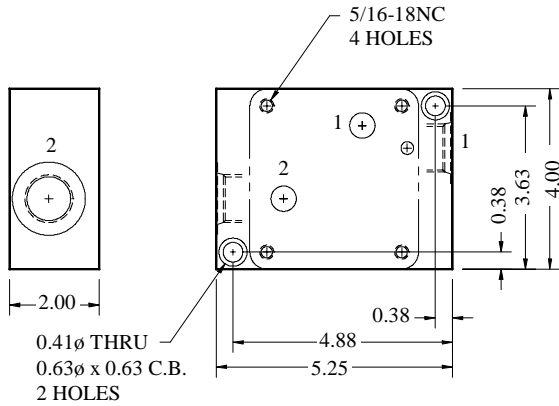
BOTTOM VIEW



Surface Mounted Valve Subplate – SAE ORB Ports

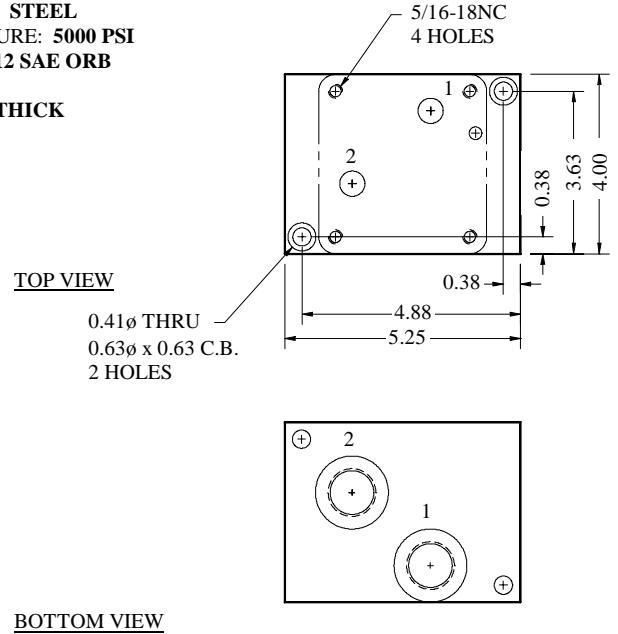
2F02 - SIDE PORT

PART NO: **MB2048-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
1, 2: **#12 SAE ORB**



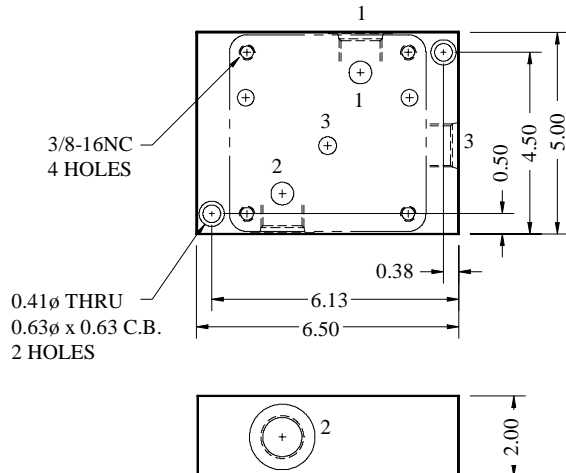
2F02 - BOTTOM PORT

PART NO: **MB991-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
1, 2: **#12 SAE ORB**
1 1/4" THICK



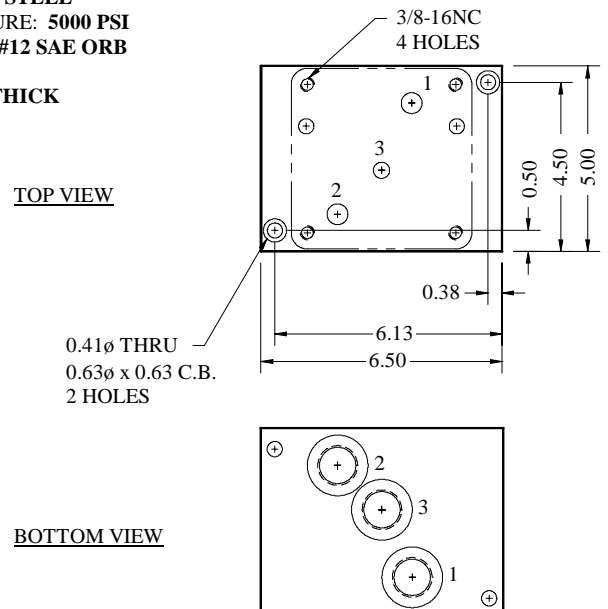
2F03 - SIDE PORT

PART NO: **MB2051-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
1, 2, 3: **#12 SAE ORB**



2F03 - BOTTOM PORT

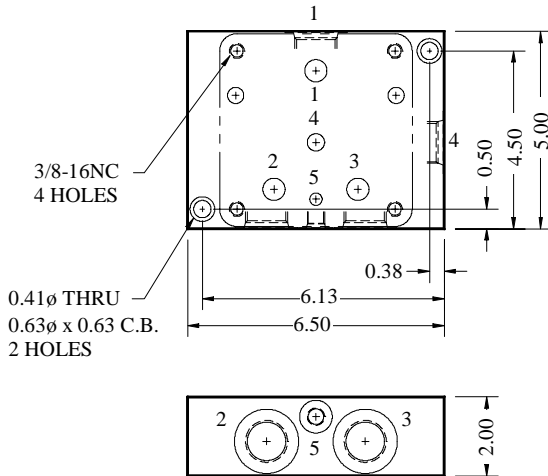
PART NO: **MB993-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
1, 2, 3: **#12 SAE ORB**
1 1/4" THICK



Surface Mounted Valve Subplate – SAE ORB Ports

3F03 - SIDE PORT

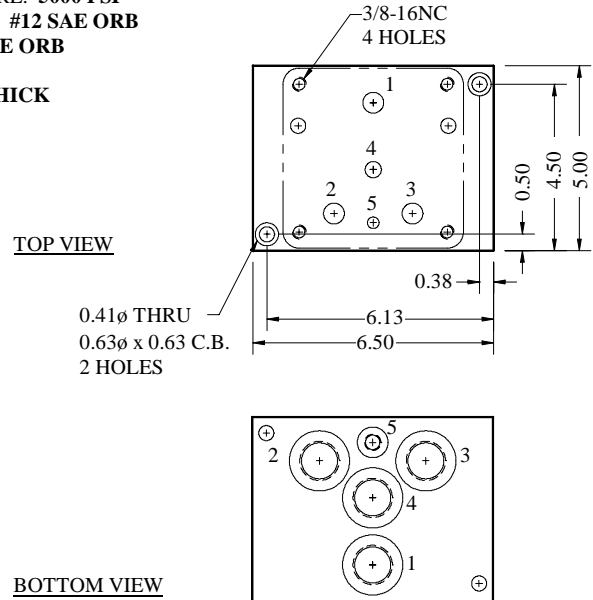
PART NO: **MB2056-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
1, 2, 3, 4: **#12 SAE ORB**
5: **#4 SAE ORB**



3F03 - BOTTOM PORT

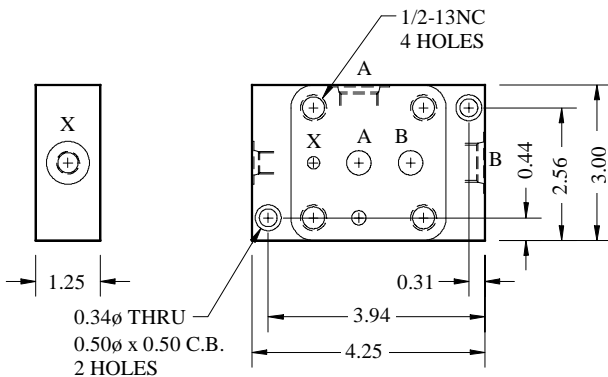
PART NO: **MB998-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
1, 2, 3, 4: **#12 SAE ORB**
5: **#4 SAE ORB**

1 1/4" THICK



R06/ VICKERS CG03 - SIDE PORT

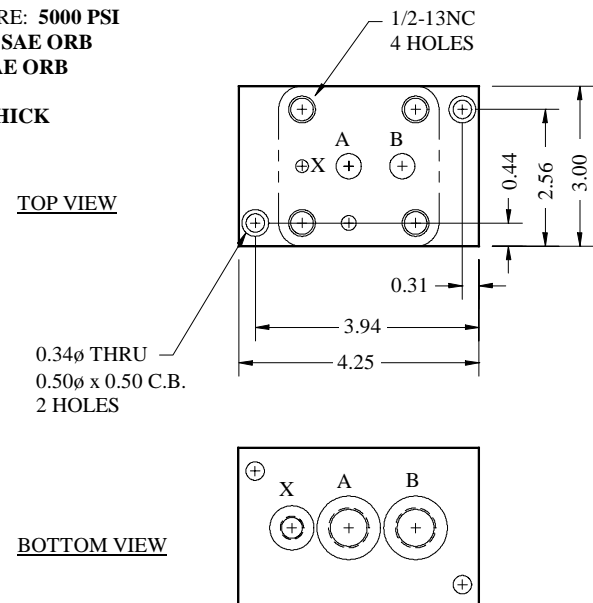
PART NO: **MB2049-8S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#8 SAE ORB**
X: **#4 SAE ORB**



R06/ VICKERS CG03 - BOTTOM

PART NO: **MB1043-8S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#8 SAE ORB**
X: **#4 SAE ORB**

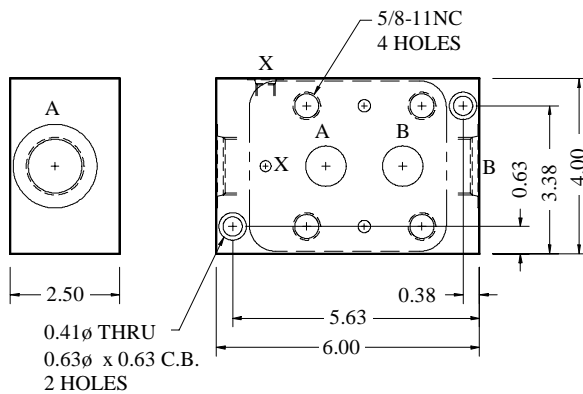
1 1/4" THICK



Surface Mounted Valve Subplate – SAE ORB Ports

R08 - SIDE PORT

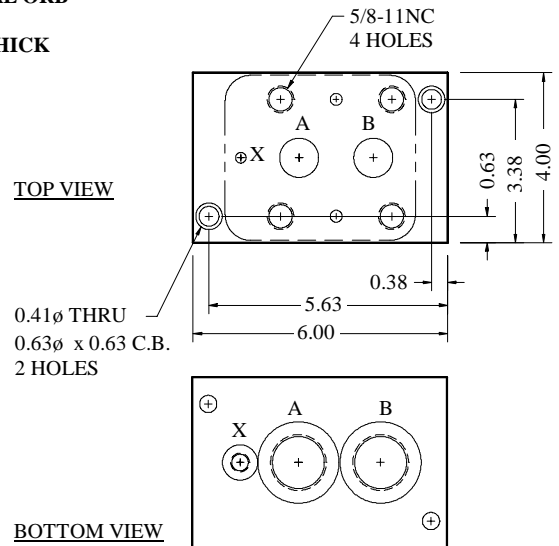
PART NO: **MB1849-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**
X: **#4 SAE ORB**



R08 - BOTTOM PORT

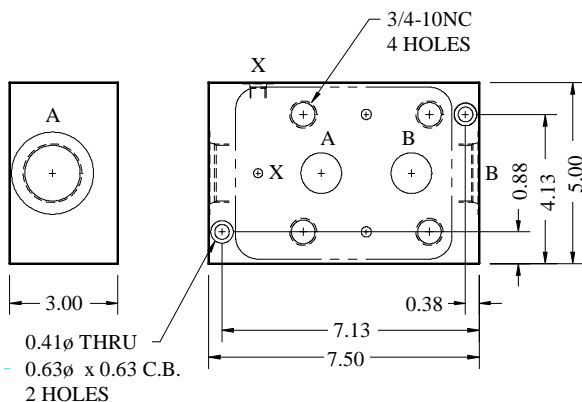
PART NO: **MB1046-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**
X: **#4 SAE ORB**

1 1/2" THICK



R10 - SIDE PORT

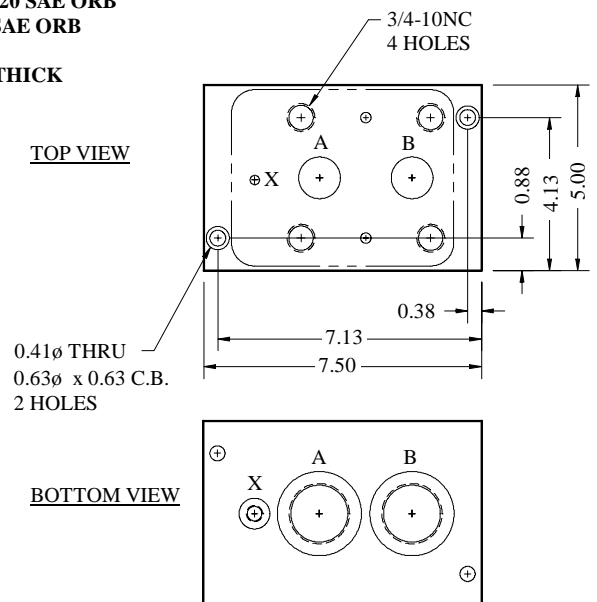
PART NO: **MB2052-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**
X: **#4 SAE ORB**



R10 - BOTTOM PORT

PART NO: **MB1049-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**
X: **#4 SAE ORB**

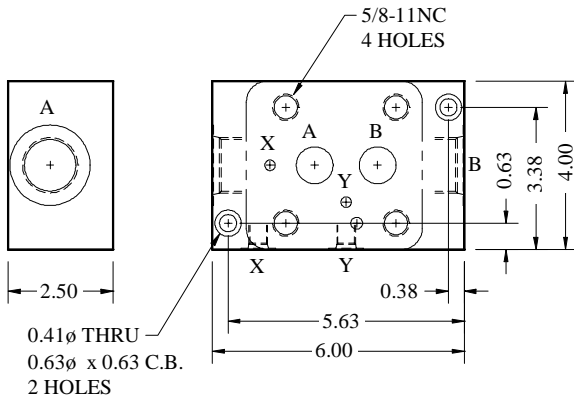
1 1/2" THICK



Surface Mounted Valve Subplate – SAE ORB Ports

VICKERS CG06 - SIDE PORT

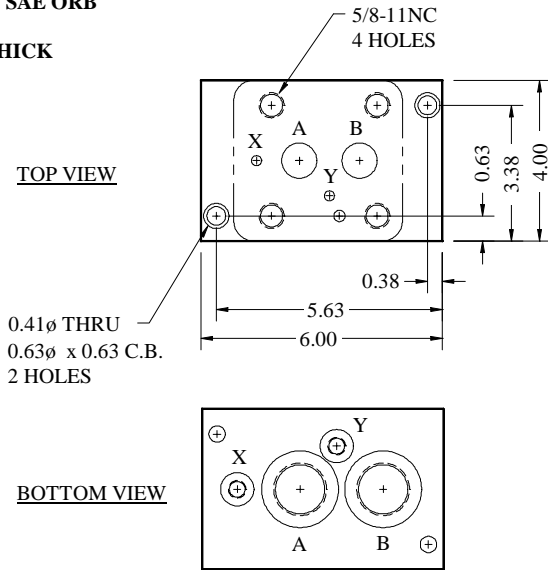
PART NO: **MB2053-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**
X, Y: **#4 SAE ORB**



VICKERS CG06 - BOTTOM PORT

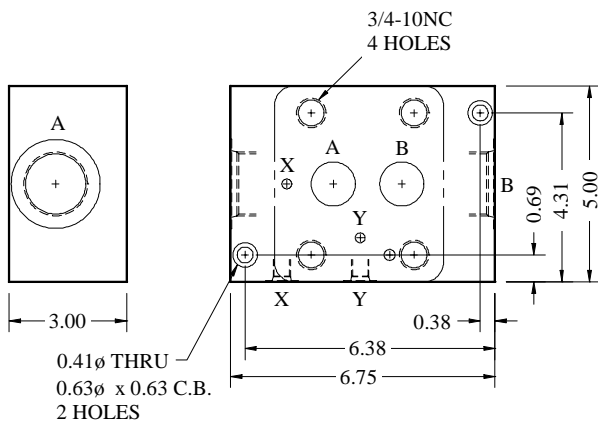
PART NO: **MB1045-16S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#16 SAE ORB**
X, Y: **#4 SAE ORB**

1 1/2" THICK



VICKERS CG10 - SIDE PORT

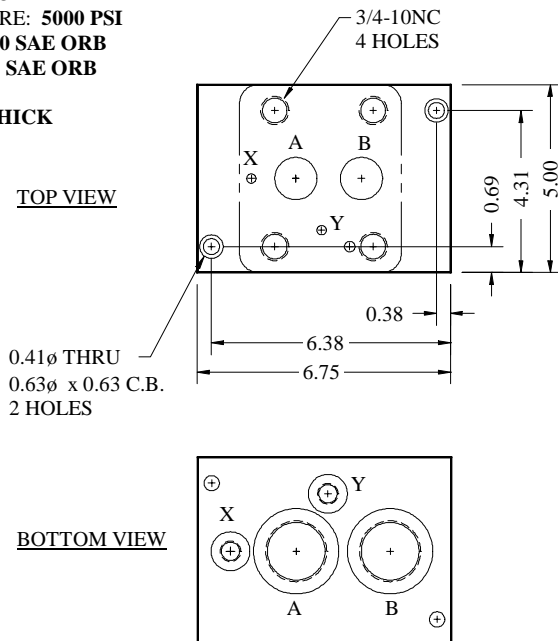
PART NO: **MB2057-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**
X, Y: **#4 SAE ORB**



VICKERS CG10 - BOTTOM PORT

PART NO: **MB1048-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
A, B: **#20 SAE ORB**
X, Y: **#4 SAE ORB**

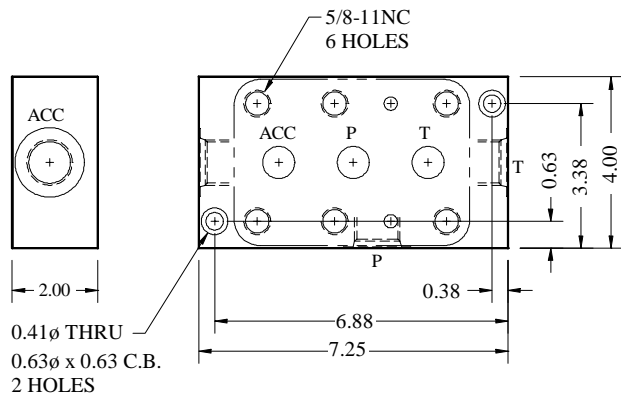
1 1/2" THICK



Surface Mounted Valve Subplate – SAE ORB Ports

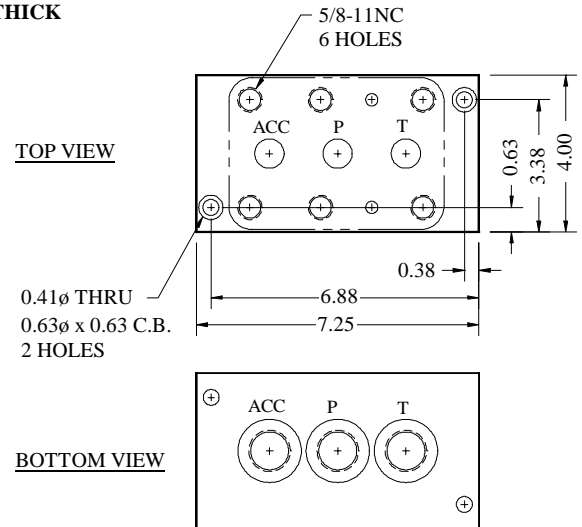
VICKERS URG06 - SIDE PORT

PART NO: **MB2054-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
PORTS: **#12 SAE ORB**



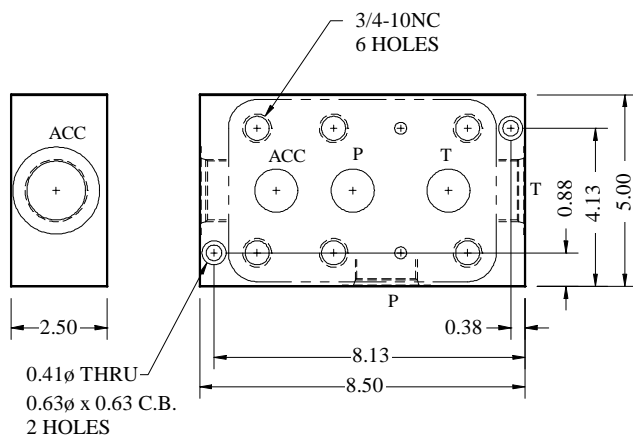
VICKERS URG06 - BOTTOM PORT

PART NO: **MB1044-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
PORTS: **#12 SAE ORB**
1 1/4" THICK



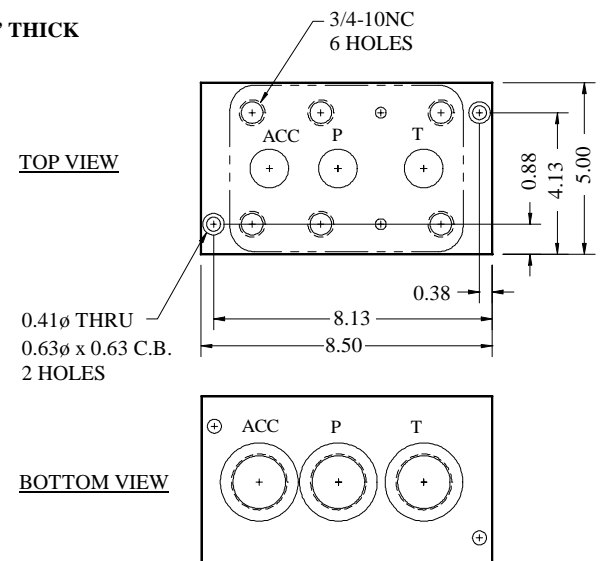
VICKERS URG10 - SIDE PORT

PART NO: **MB2058-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
PORTS: **#20 SAE ORB**



VICKERS URG10 - BOTTOM PORT

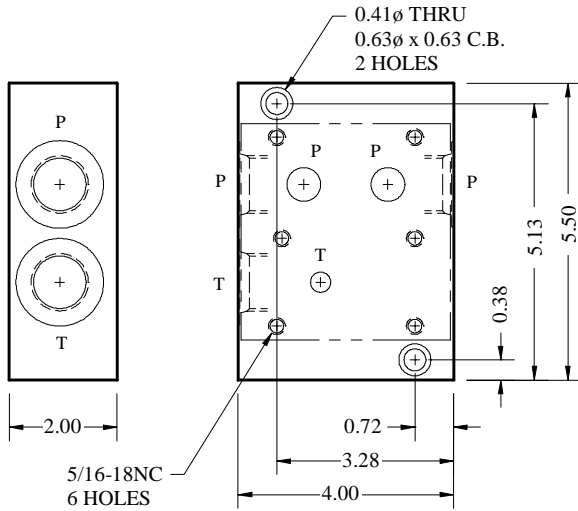
PART NO: **MB1047-20S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
PORTS: **#20 SAE ORB**
1 1/2" THICK



Surface Mounted Valve Subplate – SAE ORB Ports

SUNDSTRAND 9510648 SIDE PORT - HOT OIL SHUTTLE

PART NO: **MB348-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
P, T: **#12 SAE ORB**

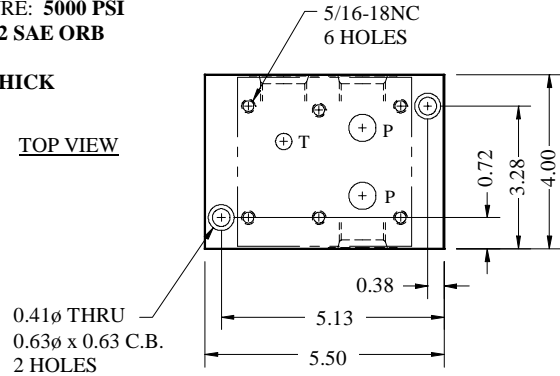


SUNDSTRAND 9510648 BOTTOM PORT - HOT OIL SHUTTLE

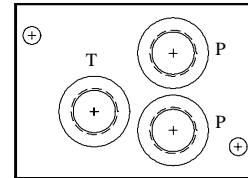
PART NO: **MB2050-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
P, T: **#12 SAE ORB**

1 1/2" THICK

TOP VIEW



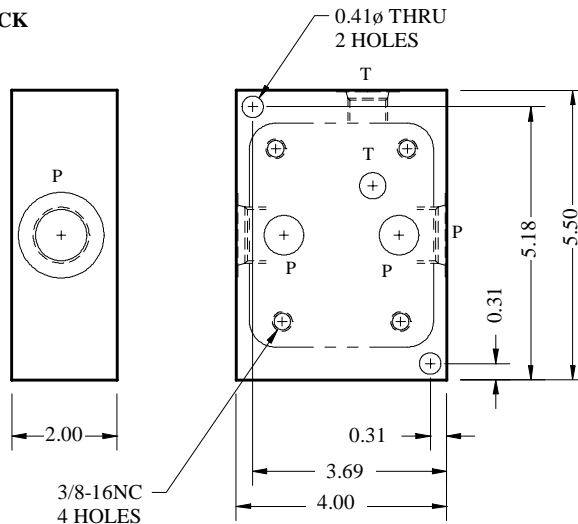
BOTTOM VIEW



EATON SIDE PORT - HOT OIL SHUTTLE

PART NO: **MB361-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
P, T: **#12 SAE ORB**

2" THICK

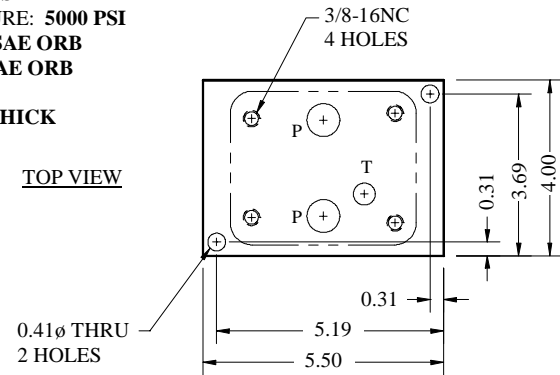


EATON BOTTOM PORT - HOT OIL SHUTTLE

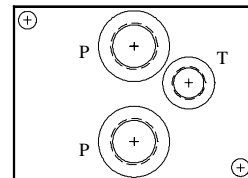
PART NO: **MB2055-12S**
MATL: **STEEL**
PRESSURE: **5000 PSI**
P: **#12 SAE ORB**
T: **#8 SAE ORB**

1 1/2" THICK

TOP VIEW



BOTTOM VIEW

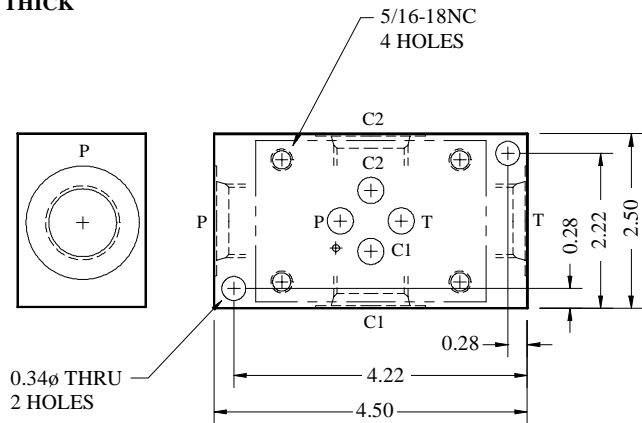


Servo Subplate - SAE ORB Side Port

ATCHLEY 215A
MOOG 62-100 SERIES
VICKERS SM4-20

PART NO: **MB139-12A**
MATL: ALUMINUM
PRESSURE: **3000 PSI**
PORTS: #12 SAE ORB

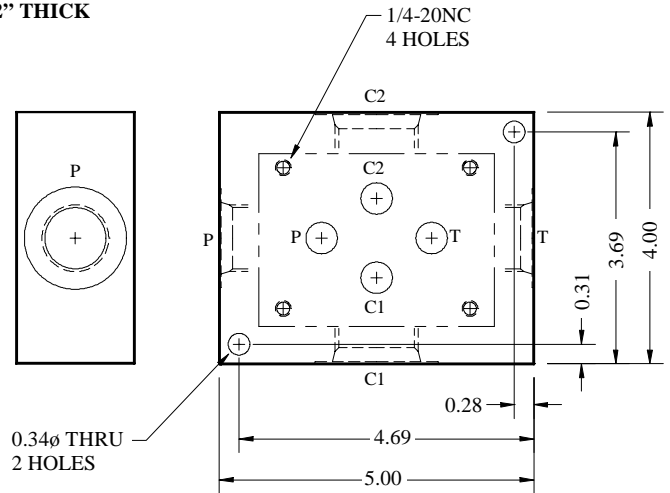
2" THICK



ATCHLEY 241
MOOG 62-300 SERIES
VICKERS SM4-30

PART NO: **MB138-12A**
MATL: ALUMINUM
PRESSURE: **3000 PSI**
PORTS: #12 SAE ORB

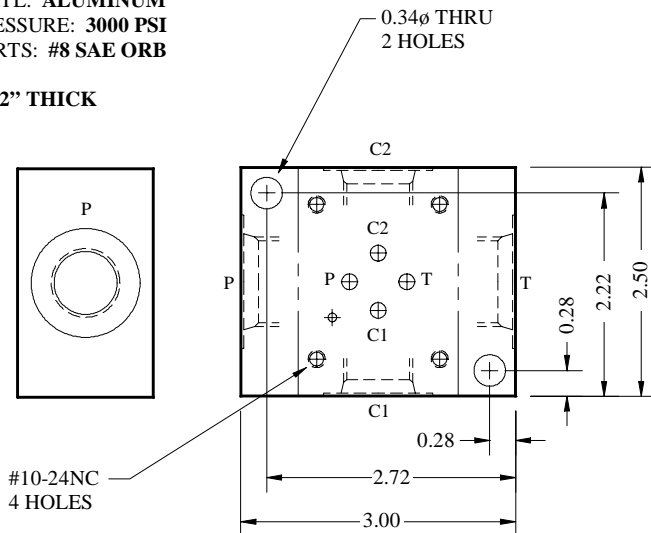
2" THICK



ATCHLEY 206/ 208A
MOOG 771
VICKERS SM4-10

PART NO: **MB410-8A**
MATL: ALUMINUM
PRESSURE: **3000 PSI**
PORTS: #8 SAE ORB

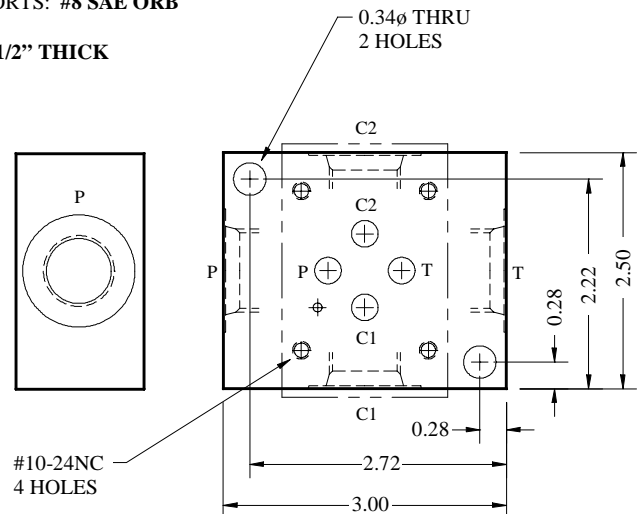
1 1/2" THICK



ATCHLEY 211A
MOOG 772

PART NO: **MB444-8A**
MATL: ALUMINUM
PRESSURE: **3000 PSI**
PORTS: #8 SAE ORB

1 1/2" THICK

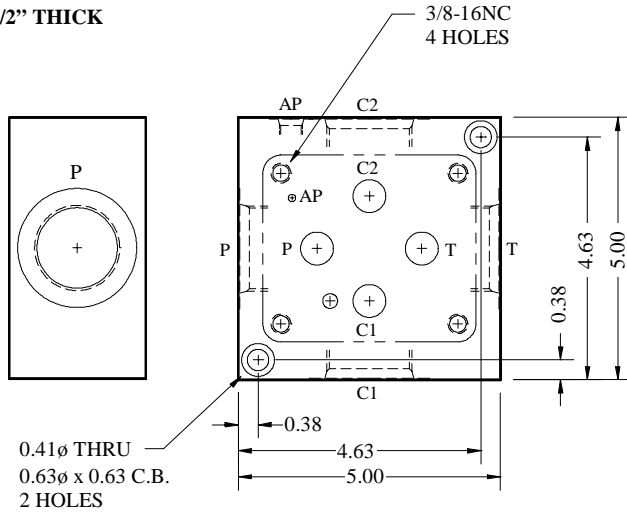


Servo Subplate – SAE ORB Side Port

MOOG 72 ATCHLEY 261

PART NO: **MB739-20A**
MATL: ALUMINUM
PRESSURE: 3000 PSI
PORTS: #20 SAE ORB
AP: #4 SAE ORB

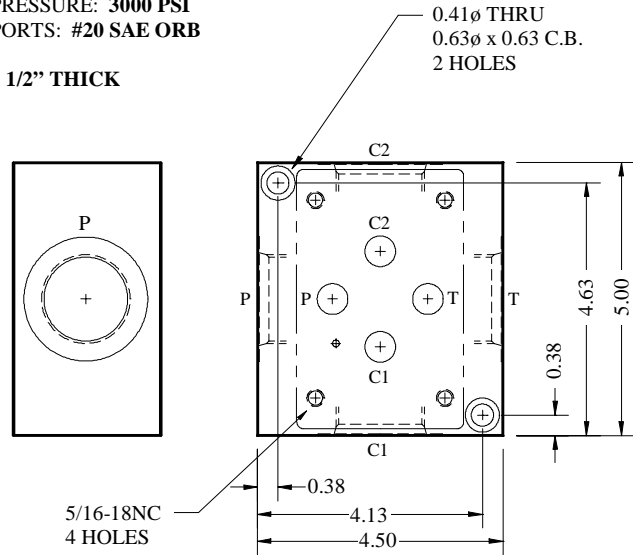
2 1/2" THICK



MOOG 78-100 SERIES ATCHLEY 240 VICKERS SM4-40

PART NO: **MB837-20A**
MATL: ALUMINUM
PRESSURE: 3000 PSI
PORTS: #20 SAE ORB

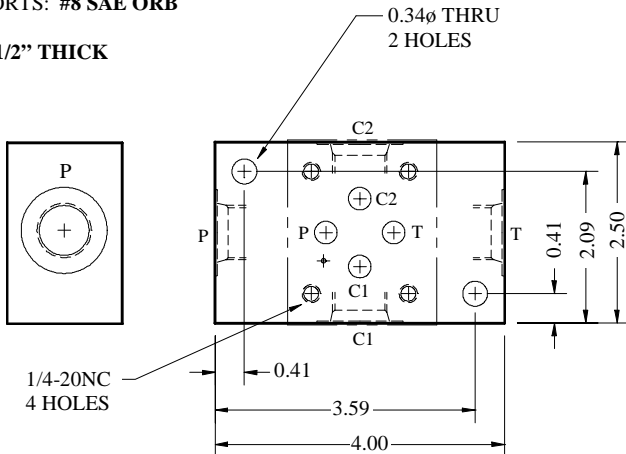
2 1/2" THICK



MOOG 773 ATCHLEY 218 VICKERS SM4-15

PART NO: **MB984-8A**
MATL: ALUMINUM
PRESSURE: 3000 PSI
PORTS: #8 SAE ORB

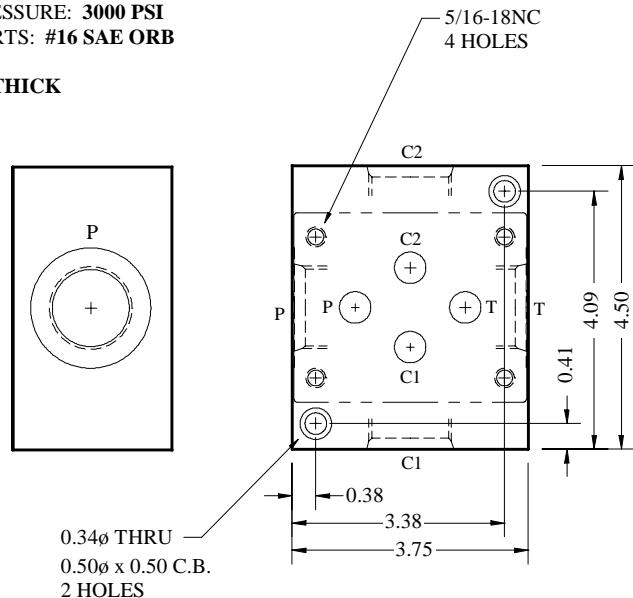
1 1/2" THICK



ATCHLEY 242

PART NO: **MB990-16A**
MATL: ALUMINUM
PRESSURE: 3000 PSI
PORTS: #16 SAE ORB

2" THICK





Bar Manifold - Parallel and Series

D03

D05

D05H

D05HE

D07

D08



Parallel Bar

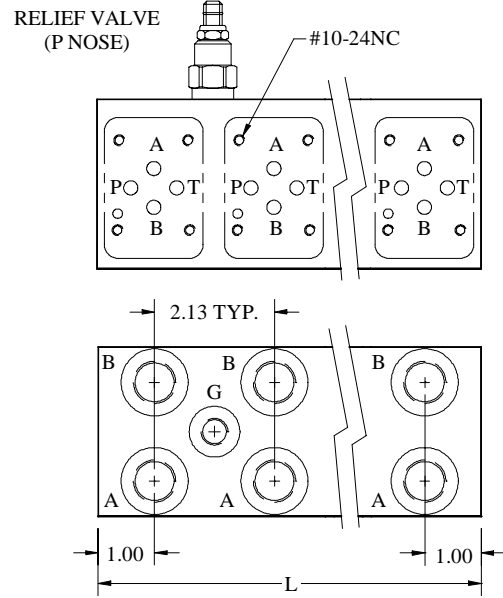
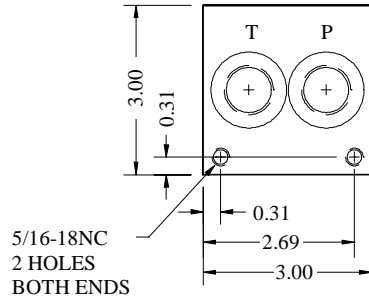
D03 PARALLEL - STANDARD FLOW

MC391-0-10-10-8A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #8 SAE ORB
- P AND T #10 SAE ORB BOTH END
- NO. OF STATIONS: 10 MAX.
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	2.00	6	12.63
2	4.13	7	14.75
3	6.25	8	16.88
4	8.38	9	19.00
5	10.50	10	21.13

G (GAGE ON P): #4 SAE ORB



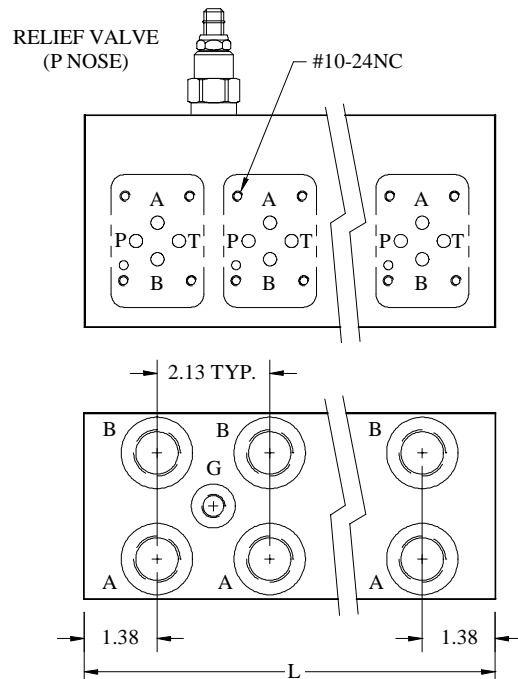
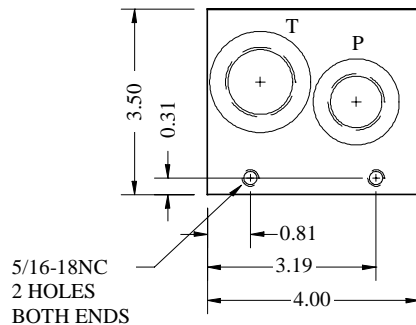
D03 PARALLEL - HIGH FLOW

MC1346-0-14-16-10A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #10 SAE ORB
- P #12 SAE ORB BOTH END
- T #16 SAE ORB BOTH END
- NO. OF STATIONS: 14 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY

No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	2.63	8	17.63
2	4.88	9	19.75
3	7.00	10	21.88
4	9.13	11	24.00
5	11.25	12	26.13
6	13.38	13	28.25
7	15.50	14	30.38

G (GAGE ON P): #4 SAE ORB

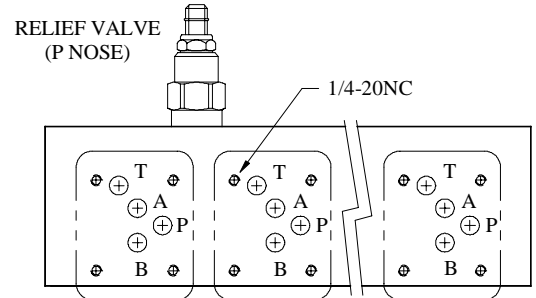


Parallel Bar

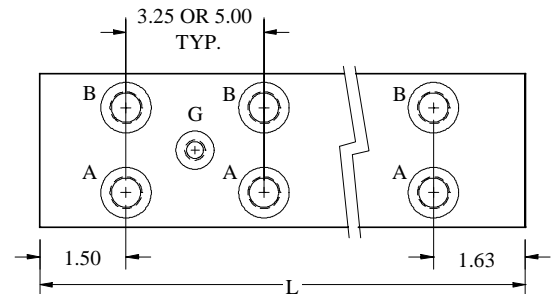
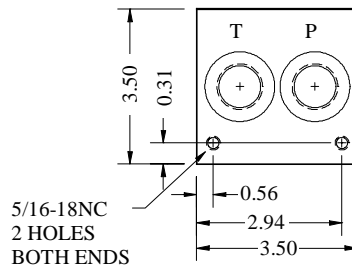
D05 PARALLEL - STANDARD FLOW

MC520-0-8-12-8A-5

- 5 - WITH 5" SPACING
- OMIT - WITH 3 1/4" SPACING
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #8 SAE ORB
- P AND T #12 SAE ORB BOTH END
- NO. OF STATIONS: 8 MAX.
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY



No. of Valves	Valve Spacing	
	Std L (Inch)	Wide L (Inch)
1	3.13	—
2	6.38	8.13
3	9.63	13.13
4	12.88	18.13
5	16.13	23.13
6	19.38	28.13
7	22.63	33.13
8	25.88	38.13

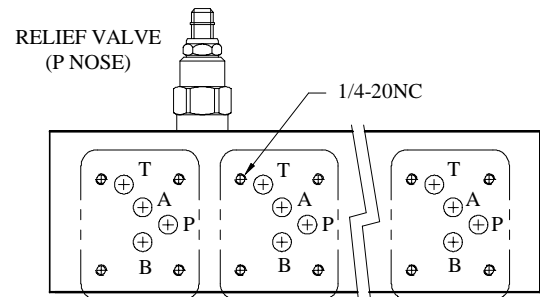


G (GAGE ON P): #4 SAE ORB

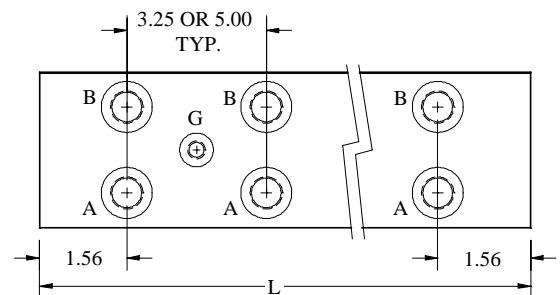
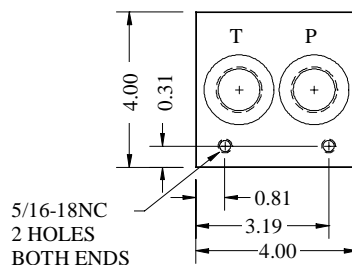
D05 PARALLEL - HIGH FLOW

MC1198-0-10-16-12A-5

- 5 - WITH 5" SPACING
- OMIT - WITH 3 1/4" SPACING
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #12 SAE ORB
- P AND T #16 SAE ORB BOTH END
- NO. OF STATIONS: 10 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY



No. of Valves	Valve Spacing	
	Std L (Inch)	Wide L (Inch)
1	3.13	—
2	6.38	8.13
3	9.63	13.13
4	12.88	18.13
5	16.13	23.13
6	19.38	28.13
7	22.63	33.13
8	25.88	38.13
9	29.13	43.13
10	32.38	48.13



G (GAGE ON P): #4 SAE ORB

Parallel Bar

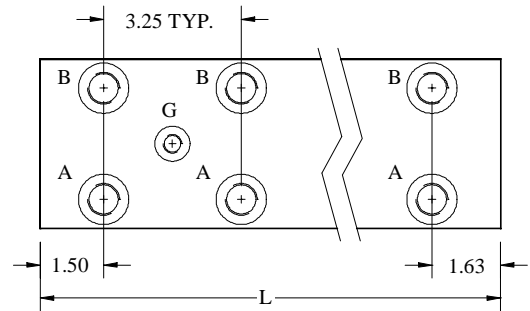
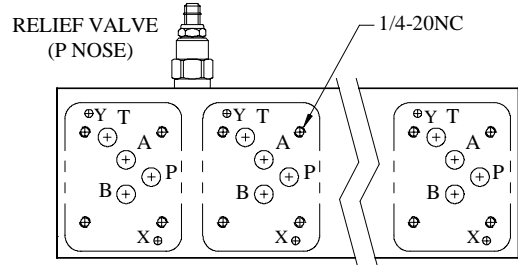
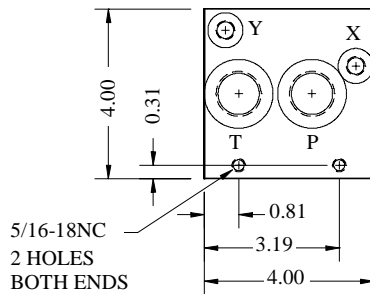
D05H PARALLEL - STANDARD FLOW

MC580-0-8-12-8A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #8 SAE ORB
- P AND T #12 SAE ORB BOTH END
- NO. OF STATIONS: 8 MAX.
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	3.13	5	16.13
2	6.38	6	19.38
3	9.63	7	22.63
4	12.88	8	25.88

X, Y, G (GAGE ON P): #4 SAE ORB



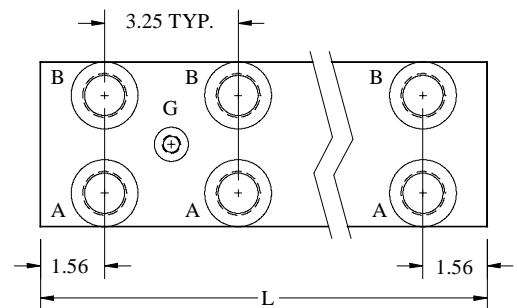
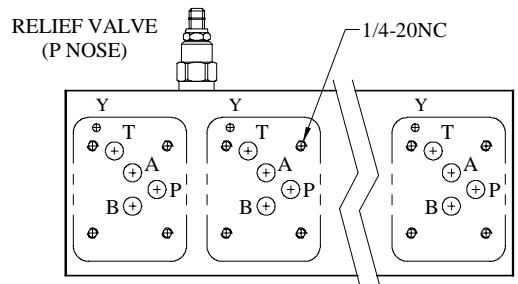
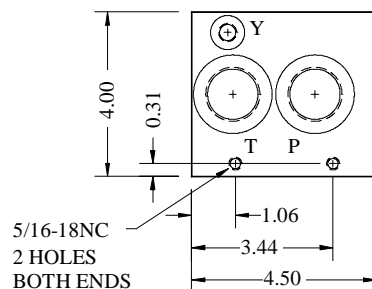
D05H PARALLEL - HIGH FLOW

MC1208-0-10-16-12A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #12 SAE ORB
- P AND T #16 SAE ORB BOTH END
- NO. OF STATIONS: 10 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY

No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	3.13	6	19.38
2	6.38	7	22.63
3	9.63	8	25.88
4	12.88	9	29.13
5	16.13	10	32.28

Y, G (GAGE ON P): #4 SAE ORB
NO 'X' PORT

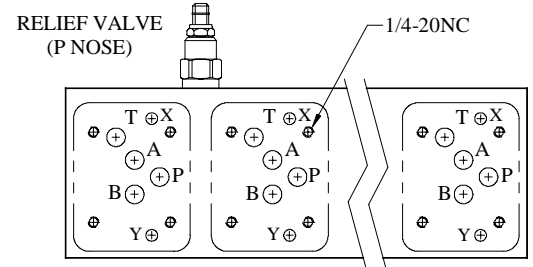


Parallel Bar

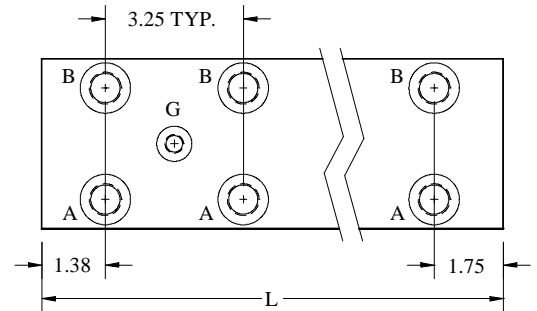
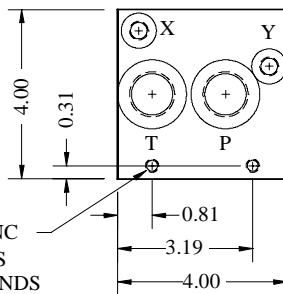
D05HE PARALLEL - STANDARD FLOW

MC912-0-8-12-8A

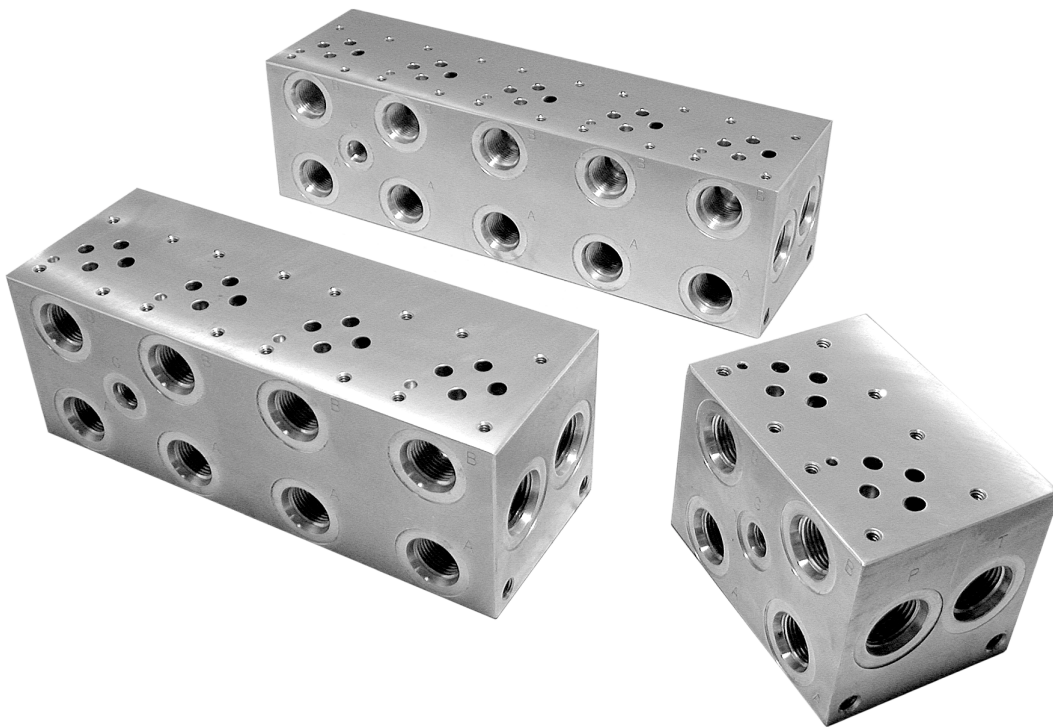
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #8 SAE ORB
- P AND T #12 SAE ORB BOTH END
- NO. OF STATIONS: 8 MAX.
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY



No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	3.13	5	16.13
2	6.38	6	19.38
3	9.63	7	22.63
4	12.88	8	25.88



X, Y, G (GAGE ON P): #4 SAE ORB



Parallel Bar

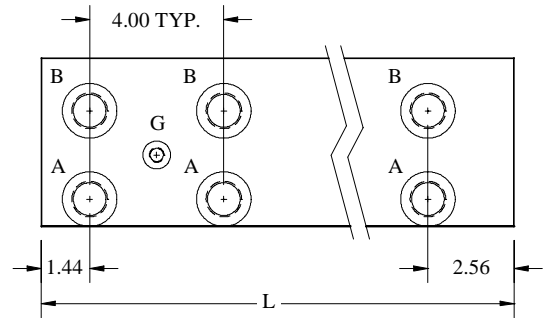
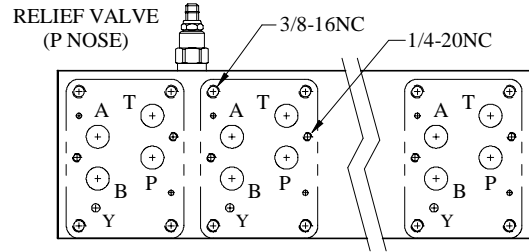
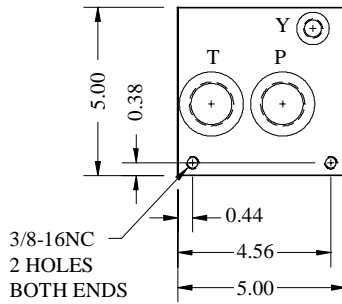
D07 PARALLEL - STANDARD FLOW

MC602-0-8-16-12A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #12 SAE ORB
- P AND T #16 SAE ORB BOTH END
- NO. OF STATIONS: 8 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY

No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	4.00	5	20.00
2	8.00	6	24.00
3	12.00	7	28.00
4	16.00	8	32.00

Y, G (GAGE ON P): #4 SAE ORB
NO 'X' PORT



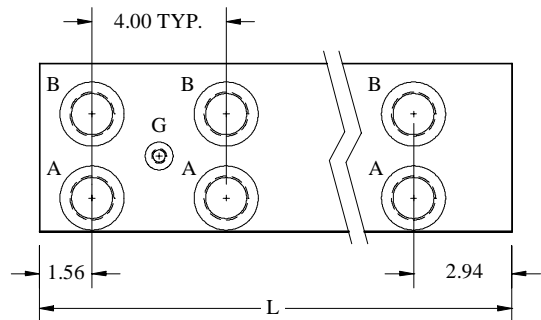
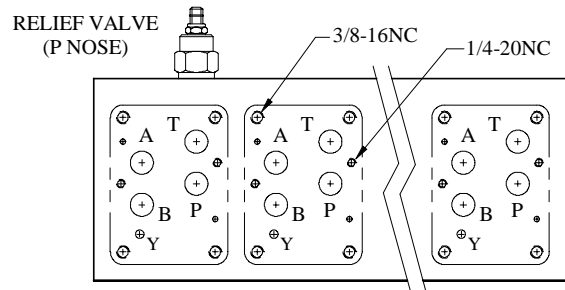
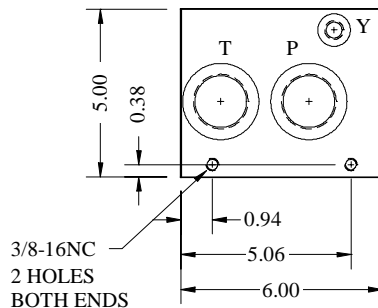
D07 PARALLEL - HIGH FLOW

MC1210-0-8-20-16A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #16 SAE ORB
- P AND T #20 SAE ORB BOTH END
- NO. OF STATIONS: 8 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-16A CAVITY

No. Of Valves	L (Inch)	No. Of Valves	L (Inch)
1	4.50	5	20.50
2	8.50	6	24.50
3	12.50	7	28.50
4	16.50	8	32.50

G (GAGE ON P): #4 SAE ORB
Y: #6 SAE ORB
NO 'X' PORT



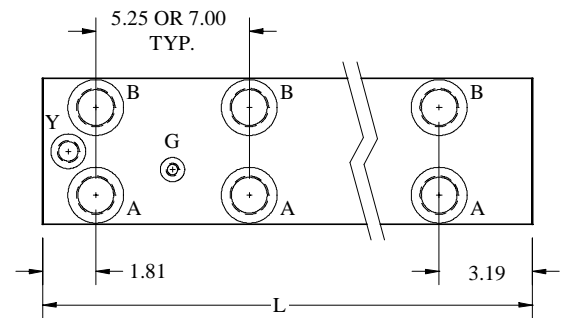
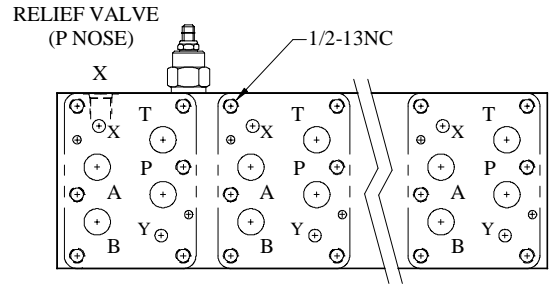
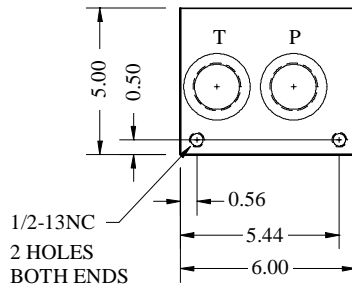
Parallel Bar

D08 PARALLEL - STANDARD FLOW

MC604-0-7-20-16A-7

- 7 - WITH 7" SPACING
- OMIT - WITH 5 1/4" SPACING
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #16 SAE ORB
- P AND T #20 SAE ORB BOTH END
- NO. OF STATIONS: 7 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY
- S1 - SUN T-16A CAVITY

No. of Valves	Valve Spacing	
	Std L (Inch)	Wide L (Inch)
1	5.00	
2	10.25	12.00
3	15.50	19.00
4	20.75	26.00
5	26.00	33.00
6	31.25	40.00
7	36.50	47.00



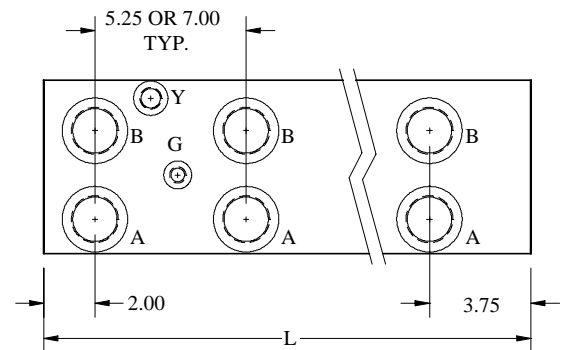
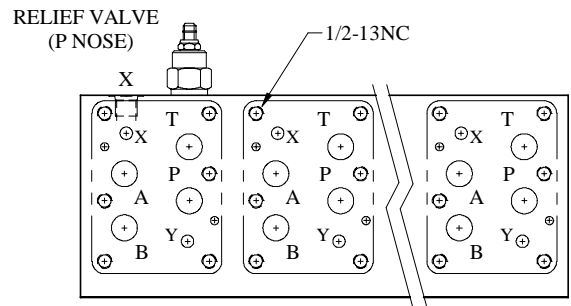
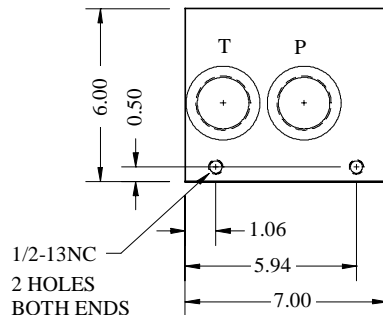
G (GAGE ON P): #4 SAE ORB
X, Y: #8 SAE ORB

D08 PARALLEL - HIGH FLOW

MC1205-0-7-24-20A-7

- 7 - WITH 7" SPACING
- OMIT - WITH 5 1/4" SPACING
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #20 SAE ORB
- P AND T #24 SAE ORB BOTH END
- NO. OF STATIONS: 7 MAX.
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-16A CAVITY

No. of Valves	Valve Spacing	
	Std L (Inch)	Wide L (Inch)
1	5.75	
2	11.00	12.75
3	16.25	19.75
4	21.50	26.75
5	26.75	33.75
6	32.00	40.75
7	37.25	47.75



G (GAGE ON P): #6 SAE ORB
X, Y: #8 SAE ORB

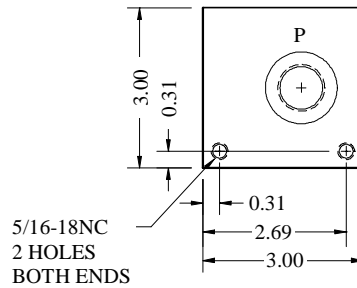
Series Bar

D03 SERIES - STANDARD FLOW

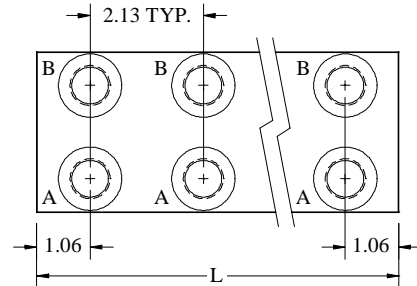
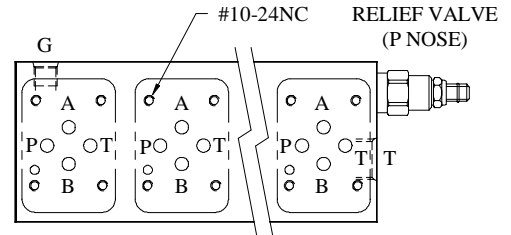
MC590-0-5-10-8A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #8 SAE ORB
- P AND T #10 SAE ORB
- NO. OF STATIONS: 2 TO 5
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

No. Of Valves	L (Inch)
2	4.25
3	6.38
4	8.50
5	10.63



G (GAGE ON P): #4 SAE ORB

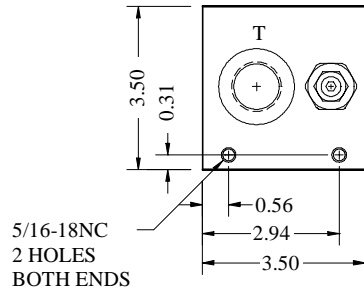


D05 SERIES - STANDARD FLOW

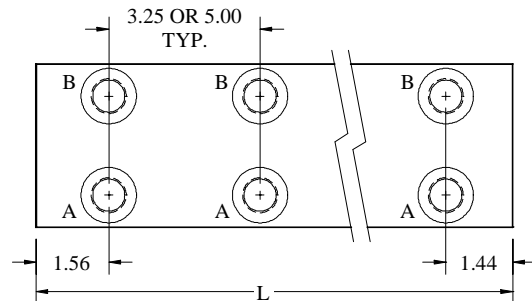
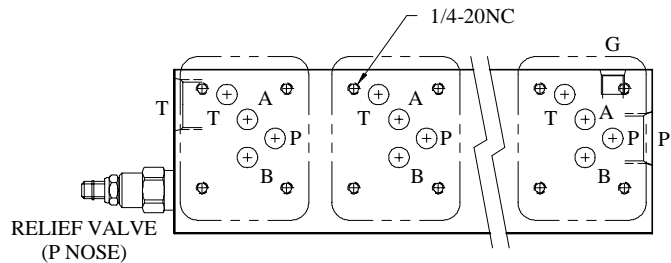
MC592-0-4-12-8A-5

- 5 - WITH 5" SPACING
- OMIT - WITH 3 1/4" SPACING
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #8 SAE ORB
- P AND T #12 SAE ORB
- NO. OF STATIONS: 2 TO 4
- 0 - NO CAVITY
- M - C-10-2 CAVITY
- S - SUN T-10A CAVITY

No. Of Valves	Valve Spacing	
	Std L(Inch)	Wide L(Inch)
2	6.25	8.00
3	9.50	13.00
4	12.75	18.00



G (GAGE ON P): #6 SAE ORB



Series Bar

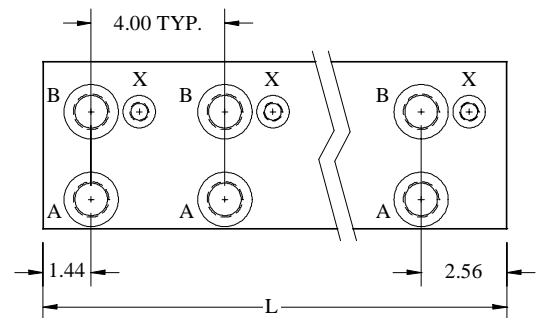
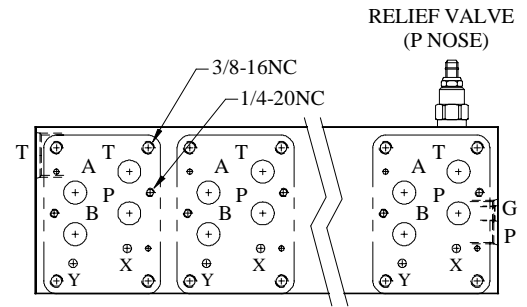
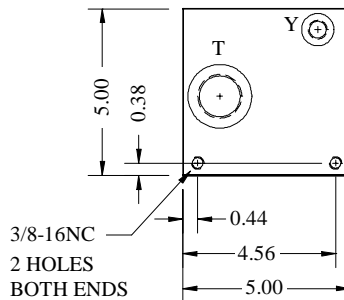
D07 SERIES - STANDARD FLOW

MC856-0-3-16-12A

- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #12 SAE ORB
- P AND T #16 SAE ORB
- NO. OF STATIONS: 2 AND 3
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY

No. Of Valves	L (Inch)
2	8.00
3	12.00

G (GAGE ON P): #4 SAE ORB
X (ON EACH VALVE): #6 SAE ORB
Y: #6 SAE ORB



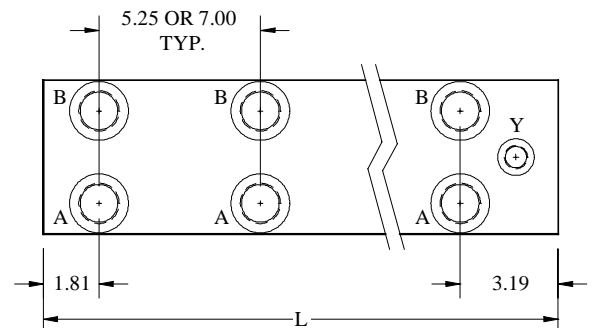
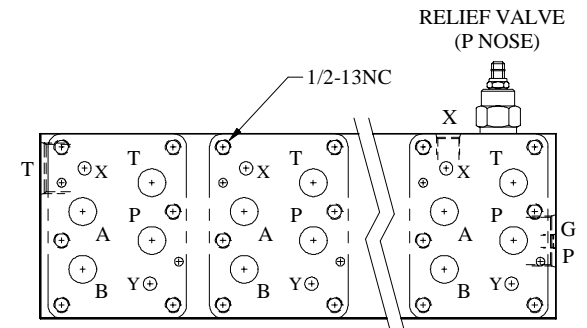
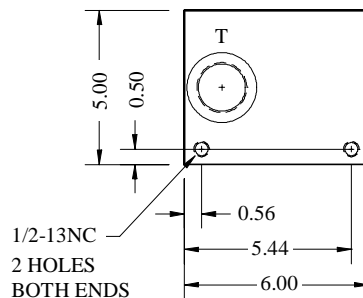
D08 SERIES - STANDARD FLOW

MC858-0-3-20-16A-7

- 7 - WITH 7" SPACING
- OMIT - WITH 5 1/4" SPACING
- A - 6061T6 ALUMINUM 3000 PSI
- S - C1018 STEEL 5000 PSI
- A AND B #16 SAE ORB
- P AND T #20 SAE ORB
- NO. OF STATIONS: 2 AND 3
- 0 - NO CAVITY
- M - C-16-2 CAVITY
- S - SUN T-3A CAVITY
- S1 - SUN T-16A CAVITY

No. Of Valves	Valve Spacing	
	Std L(Inch)	Wide L(Inch)
2	10.25	12.00
3	15.50	19.00

G (GAGE ON P): #4 SAE ORB
X, Y: #8 SAE ORB



Cover and Transition Plates

Directional Valves

Servo Valves

Surface Mounted Valves

Poppet Covers - DIN 24342

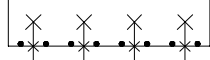
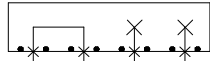




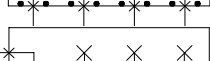
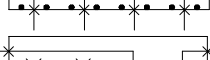

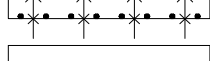
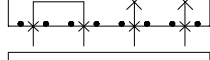
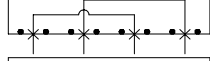
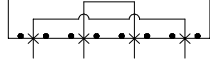
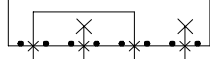
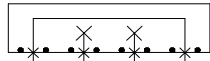

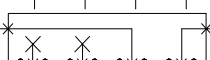



Cover Plate

Directional Valve

MATL: STEEL
 PRESSURE: 5000 PSI

THE COVER PLATE COMES COMPLETE WITH O' RINGS AND BOLT KIT.
 THE COVER PLATE SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function						
				P	T	A	B	X	Y	
MB196S	D03	ALL PORTS BLOCKED	1/2							
MB736S	D03	SERIES P TO T	3/4							
MB148S	D03	P TO A, B TO T	3/4							
MB712S	D03	P TO B, A TO T	3/4							
MB773S	D03	P TO A	3/4							
MB1028S	D03	P TO B	3/4							
MB870S	D03	#4 ORB ON P	3/4							
MB862S	D03	#4 ORB ON A AND B	3/4							
MB197S	D05	ALL PORTS BLOCKED	1/2							
MB642S	D05	SERIES P TO T	3/4							
MB816S	D05	P TO A, B TO T	3/4							
MB738S	D05	P TO B, A TO T	3/4							
MB772S	D05	P TO A	3/4							
MB1029S	D05	P TO B	3/4							
MB759S	D05	#4 ORB ON P	3/4							
MB760S	D05	#4 ORB ON A AND B	3/4							
MB195S	D05H	ALL PORTS BLOCKED	3/4							
MB734S	D05H	SERIES P TO T	3/4							

Cover Plate

Directional Valve

MATL: STEEL
PRESSURE: 5000 PSI

THE COVER PLATE COMES COMPLETE WITH O' RINGS AND BOLT KIT.
THE COVER PLATE SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function
				P T A B X Y
MB1050S	D05H	#4 ORB ON P	3/4	
MB1051S	D05H	#4 ORB ON A AND B	3/4	
MB1052S	D05HE	ALL PORTS BLOCKED	3/4	
MB1053S	D05HE	SERIES P TO T	3/4	
MB1054S	D05HE	#4 ORB ON P	3/4	
MB1055S	D05HE	#4 ORB ON A AND B	3/4	
MB110S	D07	ALL PORTS BLOCKED	3/4	
MB499S	D07	SERIES P TO T	1 1/2	
MB740S	D07	P TO B, A TO T	1 1/2	
MB1056S	D07	#6 ORB ON P	1 1/2	
MB1057S	D07	#6 ORB ON A AND B	1 1/2	
MB111S	D08	ALL PORTS BLOCKED	3/4	
MB742S	D08	SERIES P TO T	1 1/2	
MB540S	D08	P TO B, A TO T	1 1/2	
MB1058S	D08	#6 ORB ON P	1 1/2	
MB1059S	D08	#6 ORB ON A AND B	1 1/2	
MB472S	D10	ALL PORTS BLOCKED	1 1/4	
MB1060S	D10	SERIES P TO T	1 3/4	

Cover Plate

Surface Mounted Valve

MATL: STEEL
PRESSURE: 5000 PSI

THE COVER PLATE COMES COMPLETE WITH O' RINGS AND BOLT KIT.
THE COVER PLATE SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function			
				A	B	X	Y
MB2079S	C03	ALL PORTS BLOCKED	3/4				
MB2080S	C03	SERIES A TO B	3/4				
MB2081S	C06	ALL PORTS BLOCKED	3/4				
MB2082S	C06	SERIES A TO B	3/4				
MB2083S	C10	ALL PORTS BLOCKED	3/4				
MB2084S	C10	SERIES A TO B	3/4				
MB1191S	P06	ALL PORTS BLOCKED	3/4				
MB1874S	P06	SERIES A TO B	1 1/2				
MB1192S	P08	ALL PORTS BLOCKED	1 1/2				
MB815S	P08	SERIES A TO B	1 1/2				
MB1193S	P10	ALL PORTS BLOCKED	1 1/2				
MB1875S	P10	SERIES A TO B	3/4				
MB1678S	R06 VICKERS CG03	ALL PORTS BLOCKED	1 1/2				
MB2085S	R06 VICKERS CG03	SERIES A TO B	1 1/2				
MB1214S	R08	ALL PORTS BLOCKED	1 1/2				
MB2086S	R08	SERIES A TO B	1 1/2				
MB1215S	R10	ALL PORTS BLOCKED	1 1/2				
MB2087S	R10	SERIES A TO B	1 1/2				
MB1674S	VICKERS CG06	ALL PORTS BLOCKED	1 1/4				
MB2088S	VICKERS CG06	SERIES A TO B	1 3/4				

Cover Plate

Surface Mounted Valve

MATL: STEEL
PRESSURE: 5000 PSI

THE COVER PLATE COMES COMPLETE WITH O' RINGS AND BOLT KIT.
THE COVER PLATE SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.


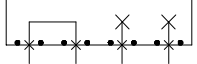
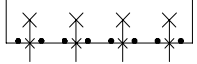
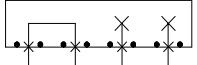
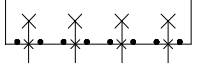
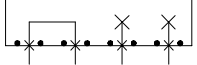
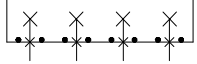
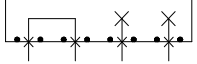
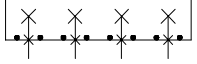
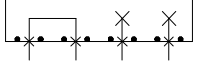
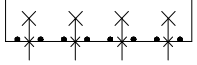
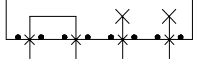
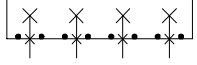
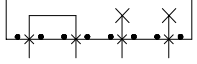
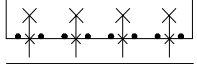
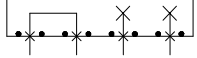
Part No.	Valve	Description	Thickness	Function				
				1	2	3	4	5
MB1676S	VICKERS CG10	ALL PORTS BLOCKED	3/4					
MB2089S	VICKERS CG10	SERIES 1 TO 2	3/4					
MB2090S	VICKERS URG06	ALL PORTS BLOCKED	3/4					
MB2091S	VICKERS URG06	SERIES 1 TO 2	3/4					
MB2120S	VICKERS URG10	ALL PORTS BLOCKED	3/4					
MB2186S	VICKERS URG10	SERIES 1 TO 2	3/4					
MB2121S	2F02	ALL PORTS BLOCKED	3/4					
MB2187S	2F03	ALL PORTS BLOCKED	1 1/2					
MB2188S	2F06	ALL PORTS BLOCKED	1 1/2					
MB2189S	2F10	ALL PORTS BLOCKED	1 1/2					
MB2190S	3F02	ALL PORTS BLOCKED	1 1/2					
MB2191S	3F03	ALL PORTS BLOCKED	3/4					
MB2192S	3F06	ALL PORTS BLOCKED	1 1/2					
MB2092S	3F10	ALL PORTS BLOCKED	1 1/2					
MB1291S	SUNDSTRAND HOT OIL SHUTTLE	ALL PORTS BLOCKED	1 1/2					
MB1200S	EATON HOT OIL SHUTTLE	ALL PORTS BLOCKED	1 1/4					

Cover Plate

Servo Valve

MATL: STEEL
 PRESSURE: 5000 PSI

THE COVER PLATE COMES COMPLETE WITH O' RINGS AND BOLT KIT.
 THE COVER PLATE SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function			
				P	T	C1	C2
MB262S	MOOG62-100 SERIES	ALL PORTS BLOCKED	3/4				
MB1066S	MOOG62-100 SERIES	SERIES P TO T	3/4				
MB1001S	MOOG62-300 SERIES	ALL PORTS BLOCKED	3/4				
MB498S	MOOG62-300 SERIES	SERIES P TO T	1				
MB1003S	MOOG771	ALL PORTS BLOCKED	3/4				
MB1068S	MOOG771	SERIES P TO T	3/4				
MB747S	MOOG772	ALL PORTS BLOCKED	3/4				
MB1069S	MOOG772	SERIES P TO T	3/4				
MB1062S	MOOG773	ALL PORTS BLOCKED	1/2				
MB1070S	MOOG773	SERIES P TO T	3/4				
MB1063S	MOOG72	ALL PORTS BLOCKED	3/4				
MB1071S	MOOG72	SERIES P TO T	1 1/4				
MB1064S	MOOG78-100 SERIES	ALL PORTS BLOCKED	3/4				
MB1072S	MOOG78-100 SERIES	SERIES P TO T	1				
MB1065S	ATCHLEY 242	ALL PORTS BLOCKED	3/4				
MB1073S	ATCHLEY 242	SERIES P TO T	1				

Transition Plate

MATL: STEEL (5000 PSI)

THE TRANSITION PLATE COMES COMPLETE WITH O' RINGS AND BOLT KIT.

Part No.	Valve Side	O' Ring Side	Length	Width	Thickness	Remarks
MB244S	D03	D05	3	2 1/2	1	A AND B REVERSED
MB313S	D03	D05	3	2 1/2	1 1/2	A AND B ORIENTED
MB468S	D03	D05H	3 1/2	2 1/2	1	A AND B REVERSED
MB470S	D03	D05H	3 1/2	2 1/2	1 1/2	A AND B ORIENTED
MB310S	D05	D06	4 1/2	3 1/2	1 1/2	
MB329S	D07	D06	4 3/4	3 1/2	1 1/2	NO X AND Y ON D07
MB246S	D05	D07	4 3/4	3 1/2	1 1/2	
MB248S	D05H	D07	4 3/4	3 1/2	1 1/2	
MB2015S	D05HE	D07	4 3/4	3 1/2	2	
MB250S	D03	D08	6	4 1/2	1 1/2	
MB252S	D05	D08	6	4 1/2	1 1/2	
MB254S	D07	D08	6	4 1/2	2	
MB256S	D08	D10	9	7 3/4	2	
MB812S	MOOG62-100 SERIES	D05	3 1/2	3	1 1/2	
MB275S	MOOG62-100 SERIES	D05H	3 1/2	3 1/2	1 1/4	
MB1635S	MOOG78-100 SERIES	D05HE	4 1/2	3 1/2	1 1/2	
MB2319S	MOOG78-100 SERIES	D08	6	4 1/2	2	
MB1639S	P06	P08	4	3 5/8	2	
MB2250S	D05	ATCHLEY 225	4 1/8	2 1/2	2	
MB1082S	D05HE	ATCHLEY 242	4	3 11/16	1 1/2	EXTERNAL #4 ORB ON X AND Y
MB2177S	MOOG78-100 SERIES	ATCHLEY 242	5	3 3/4	1	
MB326S	D05	MOOG773	4	3	2	
MB797S	D03	MOOG62-100 SERIES	3 1/4	2 1/2	3/4	
MB123S	D05	MOOG62-100 SERIES	3 1/2	3	1 1/2	
MB2219S	D05	MOOG62-300 SERIES	3 3/4	3 1/2	1 1/2	
MB2098S	D05	MOOG72	4 1/8	4	1 1/2	
MB1439S	D03	MOOG78-100 SERIES	4 1/4	3	1	
MB1712S	D05	MOOG78-100 SERIES	4 1/4	3	1 1/2	
MB2201S	MOOG62-100 SERIES	MOOG78-100 SERES	4 1/2	3 1/4	1	
MB1976S	MOOG772	MOOG771	2 1/2	2	3/4	
MB1948S	MOOG772	MOOG62-100 SERIES	3 1/4	2 1/2	1	
MB1733S	MOOG773	MOOG62-100 SERIES	3 1/4	2 1/2	1	
MB291S	MOOG78-100 SERIES	MOOG62-100 SERIES	4 1/2	3 1/4	1	
MB589S	MOOG78-100 SERIES	MOOG62-300 SERIES	4 1/2	3 1/2	1	

DIN / Poppet Cover

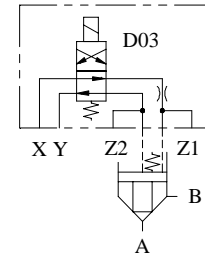
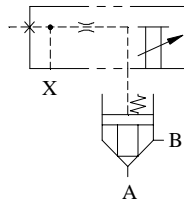
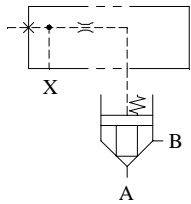
MATL: STEEL

COVER DIMENSIONS MADE TO DIN 24342 / ISO 7368 / NFPA T3.5.45 STANDARDS.

COVER PLATES ARE SUITABLE FOR BOSCH, DENISON, PARKER, REXROTH, WANDFLUH AND OTHERS.

COVER PLATES COME COMPLETE WITH O'RINGS AND BOLT KIT.

FOR DIN / POPPET BODY, SEE PAGE 25-8



Remote Pilot

Part No.	Cover Size
MB1155S	NG16 / 16mm
MB1156S	NG25 / 25mm
MB1157S	NG32 / 32mm
MB1158S	NG40 / 40mm
MB1159S	NG50 / 50mm

Stroke Limiter

Part No.	Cover Size
MB1165S	NG16 / 16mm
MB1166S	NG25 / 25mm
MB1167S	NG32 / 32mm
MB1168S	NG40 / 40mm
MB1169S	NG50 / 50mm

Directional Control

Part No.	Cover Size
MB1175S	NG16 / 16mm
MB1176S	NG25 / 25mm
MB1177S	NG32 / 32mm
MB1178S	NG40 / 40mm
MB1179S	NG50 / 50mm



Single Cartridge

Compact

Danfoss

Delta

Hydraforce

Integrated Hydraulics

Parker

Sterling

Vickers

Waterman

Poppet Body - DIN 24342

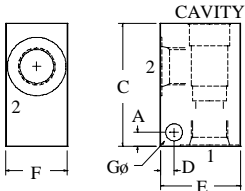


Single Cartridge Body – SAE ORB Ports

Two Port Bodies – SUN

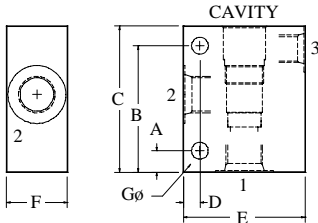
MATL: STEEL (5000 PSI)

THESE SINGLE CARTRIDGE BODIES ARE SIMILAR IN FUNCTION TO THE SUN BODIES, BUT MAY DIFFER IN DIMENSION.

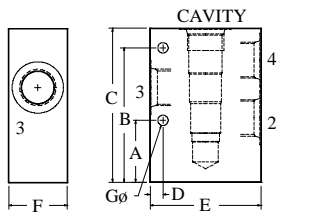


Part No.	Cavity	Ports SAE ORB	SUN No.	A	C	D	E	F	G
MB629S	SUN T-10A	#8 (3/4-16)	FAJ	0.28	2.50	0.28	1.63	1.25	0.34
MB630S	SUN T-13A	#8 (3/4-16)	GAJ	0.28	2.50	0.25	1.63	1.25	0.34
MB632S	SUN T-5A	#8 (3/4-16)	DAJ	0.38	2.63	0.38	2.00	1.50	0.41
MB631S	SUN T-3A	#12 (1 1/16-12)	CAL	0.38	3.00	0.38	2.00	1.50	0.41
MB569S	SUN T-16A	#16 (1 5/16-12)	IAM	1.00	4.00	0.50	3.00	2.00	0.41
MB633S	SUN T-18A	#20 (1 5/8-12)	LAN	0.94	4.50	0.63	3.50	2.50	0.41

Three Port Bodies – SUN

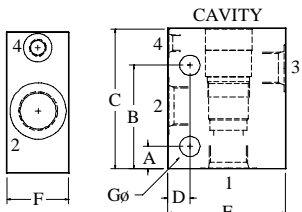


Part No.	Cavity	Ports 1 & 2 SAE ORB	Port 3 SAE ORB	SUN No.	A	B	C	D	E	F	G
MB493S	SUN T-11A	#8 (3/4-16)	#6 (9/16-18)	ECJ	0.44	2.56	3.00	0.38	2.50	1.25	0.34
MB483S	SUN T-2A	#12 (1 1/16-12)	#6 (9/16-18)	BCL	0.50	2.75	3.25	0.50	3.00	1.50	0.34
MB584S	SUN T-17A	#16 (1 5/16-12)	#6 (9/16-18)	HCM	0.75	3.50	4.00	0.75	3.50	2.50	0.41
MB634S	SUN T-19A	#20 (1 5/8-12)	#6 (9/16-18)	KCN	0.50	4.50	5.00	0.50	4.00	3.00	0.41

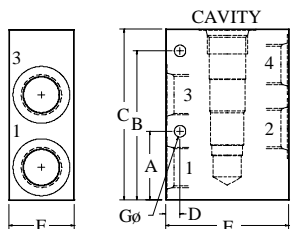


Part No.	Cavity	Ports 2 & 4 SAE ORB	Port 3 SAE ORB	SUN No.	A	B	C	D	E	F	G
MB636S	SUN T-31A	#8 (3/4-16)	#8 (3/4-16)	MMJ	1.50	3.63	4.44	0.38	2.50	1.25	0.34
MB637S	SUN T-32A	#12 (1 1/16-12)	#12 (1 1/16-12)	NML	1.94	4.19	5.00	0.50	3.00	1.50	0.34
MB639S	SUN T-33A	#16 (1 5/16-12)	#16 (1 5/16-12)	PMM	2.25	5.25	6.19	0.62	4.00	2.50	0.41
MB640S	SUN T-34A	#20 (1 5/8-12)	#20 (1 5/8-12)	QMN	2.44	6.44	7.50	0.75	5.00	3.00	0.41

Four Port Bodies – SUN



Part No.	Cavity	Ports 1 & 2 SAE ORB	Port 3 SAE ORB	Port 4 SAE ORB	SUN No.	A	B	C	D	E	F	G
MB635S	T-21A	#8 (3/4-16)	#8 (3/4-16)	#6 (9/16-18)	MAJ	0.44	2.56	3.56	0.38	2.50	1.25	0.34
MB454S	T-22A	#12 (1 1/16-12)	#10 (7/8-14)	#6 (9/16-18)	NAL	0.50	2.75	3.75	0.50	3.00	1.50	0.41
MB638S	T-23A	#16 (1 5/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	PAM	0.75	3.50	4.75	0.75	4.00	2.50	0.41
MB583S	T-24A	#16 (1 5/16-12)	#16 (1 5/16-12)	#6 (9/16-18)	QCM	0.50	4.50	6.00	0.50	4.00	3.00	0.41



Part No.	Cavity	Ports SAE ORB	SUN No.	A	B	C	D	E	F	G
MB2444S	SUN T-31A	#8 (3/4-16)	MNJ	1.50	3.63	4.44	0.38	2.50	1.25	0.34
MB2449S	SUN T-32A	#12 (1 1/16-12)	NNL	1.94	4.19	5.00	0.50	3.00	1.50	0.34
MB2452S	SUN T-33A	#16 (1 5/16-12)	PNM	2.25	5.25	6.19	0.63	4.00	2.50	0.41
MB2447S	SUN T-34A	#20 (1 5/8-12)	QNN	2.44	6.44	7.50	0.75	5.00	3.00	0.41

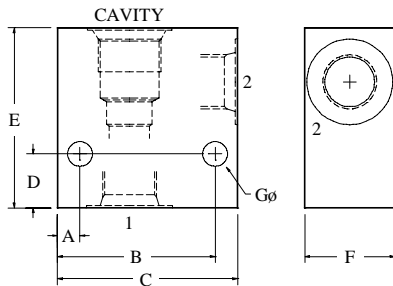
Single Cartridge Body – SAE ORB Ports

Two Port Bodies

MATL: STEEL

PRESSURE: 5000 PSI

C - STANDARD CAVITY FOR:
COMPACT
DANFOSS
DELTA
HYDRAFORCE
INTERGRATED. HYD.
PARKER
STERLING
VICKERS
WATERMAN



Part No.	Cavity	Ports	A	B	C	D	E	F	G
MB2328S	STANDARD C-8-2	#8 (3/4-16)	0.31	2.06	2.38	0.75	2.50	1.25	0.34
MB680S	STANDARD C-10-2	#8 (3/4-16)	0.31	2.19	2.50	0.75	2.50	1.25	0.34
MB2332S	STANDARD C-10-2	#12 (1 1/16-12)	0.31	2.44	2.75	0.75	2.50	1.50	0.34
MB686S	STANDARD C-16-2	#16 (1 5/16-12)	0.25	2.75	3.00	1.00	3.00	2.00	0.34
MB690S	STANDARD C-20-2	#20 (1 5/8-12)	0.31	3.19	3.50	1.00	3.50	2.50	0.41
MB900S	COMPACT CP12-2	#12 (1 1/16-12)	0.25	2.75	3.00	0.75	3.00	1.50	0.34
MB2388S	DANFOSS FC-10	#16 (1 5/16-12)	0.31	2.44	2.75	0.75	3.50	2.00	0.34
MB2395S	DANFOSS FC-76	#16 (1 5/16-12)	0.31	2.56	2.88	0.75	3.00	2.00	0.34
MB2392S	DANFOSS FC-153	#24 (1 7/8-12)	0.38	3.38	3.75	1.25	4.50	2.50	0.41
MB2397S	DANFOSS FC-178A	#24 (1 7/8-12)	0.38	3.38	3.75	1.00	4.00	2.50	0.41
MB2391S	DELTA 40200028	#16 (1 5/16-12)	0.31	2.69	3.00	0.75	3.13	2.00	0.34
MB900S	DELTA 40200032	#12 (1 1/16-12)	0.25	2.75	3.00	0.75	3.00	1.50	0.34
MB900S	HYDRAFORCE VC12-2	#12 (1 1/16-12)	0.25	2.75	3.00	0.75	3.00	1.50	0.34
MB2395S	INTEGRATED A878	#16 (1 5/16-12)	0.31	2.56	2.88	0.75	3.00	2.00	0.34
MB2388S	INTEGRATED A881	#16 (1 5/16-12)	0.31	2.44	2.75	0.75	3.50	2.00	0.34
MB2408S	INTEGRATED A890	#6 (9/16-18)	0.31	1.69	2.00	0.50	2.88	1.25	0.34
MB2413S	INTEGRATED A892	#8 (3/4-16)	0.31	2.19	2.50	0.63	2.75	1.25	0.34
MB2392S	INTEGRATED A1126	#24 (1 7/8-12)	0.31	3.44	3.75	1.25	4.50	2.50	0.41
MB2416S	INTEGRATED A2791	#12 (1 1/16-12)	0.31	2.44	2.75	0.75	3.50	2.00	0.34
MB2389S	INTEGRATED A3377	#12 (1 1/16-12)	0.31	2.44	2.75	0.75	2.50	1.50	0.34
MB2418S	INTEGRATED A3973	#8 (3/4-16)	0.31	2.06	2.38	0.63	2.50	1.25	0.34
MB2331S	INTEGRATED A6701	#8 (3/4-16)	0.31	2.06	2.38	0.75	2.50	1.25	0.34
MB2421S	INTEGRATED A6835	#12 (1 1/16-12)	0.38	2.63	3.00	0.75	4.13	2.00	0.41
MB2438S	INTEGRATED A7447	#12 (1 1/16-12)	0.31	2.44	2.75	0.63	3.00	2.00	0.34
MB2435S	INTEGRATED CVA-20-01-0	#8 (3/4-16)	0.31	2.19	2.50	0.50	2.25	1.25	0.34
MB2331S	PARKER C09-2	#8 (3/4-16)	0.31	2.06	2.38	0.75	2.50	1.25	0.34
MB2333S	PARKER C12-2	#12 (1 1/16-12)	0.31	2.44	2.75	0.75	3.00	1.50	0.34
MB2391S	STERLING 2B	#16 (1 5/16-12)	0.31	2.69	3.00	0.75	3.13	2.00	0.34
MB2397S	STERLING 2K	#24 (1 7/8-12)	0.31	3.44	3.75	1.00	4.00	2.50	0.41
MB2394S	STERLING 2M	#16 (1 5/16-12)	0.31	2.69	3.00	0.88	3.00	2.00	0.34
MB2389S	STERLING 2R	#12 (1 1/16-12)	0.31	2.44	2.75	0.75	2.50	1.50	0.34
MB2331S	STERLING 2X	#8 (3/4-16)	0.31	2.06	2.38	0.75	2.50	1.25	0.34
MB683S	VICKERS C-12-2	#12 (1 1/16-12)	0.25	2.75	3.00	0.75	3.00	1.50	0.34
MB2331S	WATERMAN 12-2A	#8 (3/4-16)	0.31	2.06	2.38	0.75	2.50	1.25	0.34
MB2389S	WATERMAN 14-2	#12 (1 1/16-12)	0.31	2.44	2.75	0.75	2.50	1.50	0.34

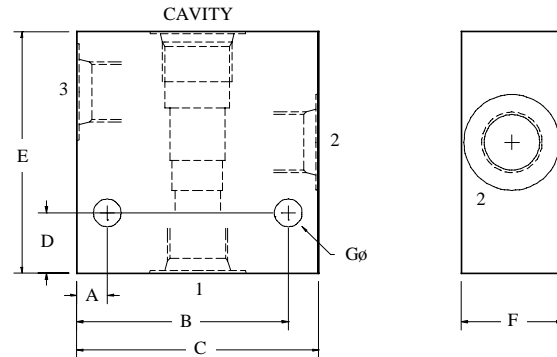
Single Cartridge Body – SAE ORB Ports

Three Port Bodies

MATL: STEEL

PRESSURE: 5000 PSI

'C' - STANDARD CAVITY FOR:
COMPACT
DANFOSS
DELTA
HYDRAFORCE,
INTEGRATED HYD.
PARKER
STERLING
VICKERS
WATERMAN



Part No.	Cavity	Port 1	Port 2	Port 3	A	B	C	D	E	F	G
MB2390S	STANDARD C-8-3	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.69	3.00	0.50	2.63	1.25	0.34
MB681S	STANDARD C-10-3	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	3.00	1.25	0.34
MB682S	STANDARD C-10-3S	#8 (3/4-16)	#8 (3/4-16)	#6 (9/16-18)	0.38	2.13	2.50	0.75	3.00	1.25	0.34
MB687S	STANDARD C-16-3	#16 (1 5/8-12)	#16 (1 5/8-12)	#16 (1 5/8-12)	0.38	3.63	4.00	0.75	4.13	2.00	0.41
MB688S	STANDARD C-16-3S	#16 (1 5/8-12)	#16 (1 5/8-12)	#6 (9/16-18)	0.38	3.13	3.50	0.75	3.50	2.00	0.41
MB691S	STANDARD C-20-3	#20 (1 5/8-12)	#20 (1 5/8-12)	#20 (1 5/8-12)	0.38	3.63	4.00	0.75	5.50	2.50	0.41
MB692S	STANDARD C-20-3S	#20 (1 5/8-12)	#20 (1 5/8-12)	#6 (9/16-18)	0.38	3.63	4.00	0.75	4.50	2.50	0.41
MB2396S	COMPACT CP8-3L	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.56	2.88	0.75	3.00	1.25	0.34
MB985S	COMPACT CP10-3L	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	3.25	1.25	0.34
MB987S	COMPACT CP12-3	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	3.13	3.50	0.75	4.00	2.00	0.41
MB986S	COMPACT CP12-3S	#12 (1 1/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	0.38	2.63	3.00	0.75	3.50	2.00	0.41
MB1856S	COMPACT CP20-3S	#20 (1 5/8-12)	#20 (1 5/8-12)	#6 (9/16-18)	0.38	3.63	4.00	0.75	4.50	2.50	0.41
MB2412S	DANFOSS FC-13	#16 (1 5/8-12)	#16 (1 5/8-12)	#6 (9/16-8)	0.38	2.63	3.00	0.75	4.13	2.00	0.41
MB2424S	DANFOSS FC-60	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	4.50	1.50	0.41
MB2409S	DANFOSS FC-109A	#6 (9/16-18)	#6 (9/16-18)	#6 (9/16-18)	0.31	1.69	2.00	0.50	2.63	1.00	0.34
MB2410S	DANFOSS FC-173	#16 (1 5/8-12)	#16 (1 5/8-12)	#6 (9/16-18)	0.38	2.75	3.13	1.00	4.00	2.00	0.41
MB2429S	DANFOSS FC-173A	#6 (9/16-18)	#16 (1 5/8-12)	#16 (1 5/8-12)	0.38	3.13	3.50	0.63	3.88	2.00	0.41
MB986S	DELTA 40200033	#12 (1 1/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	0.38	2.63	3.00	0.75	3.50	2.00	0.41
MB2393S	DELTA 40200034	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.88	3.25	0.75	4.00	2.00	0.41
MB2393S	HYDRAFORCE VC12-3	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.88	3.25	0.75	4.00	2.00	0.41

CONTINUED ON NEXT PAGE

Single Cartridge Body – SAE ORB Ports

 THREE PORT
BODIES
CONT'D

Part No.	Cavity	Port 1	Port 2	Port 3	A	B	C	D	E	F	G
MB2410S	INTEGRATED A877	#16 (1 5/16-12)	#16 (1 5/16-12)	#6 (9/16-18)	0.38	2.75	3.13	1.00	4.00	2.00	0.41
MB2412S	INTEGRATED A880	#16 (1 5/16-12)	#16 (1 5/16-12)	#6 (9/16-8)	0.38	2.63	3.00	0.75	4.13	2.00	0.41
MB2419S	INTEGRATED A893	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.69	3.00	0.50	3.25	1.25	0.34
MB2422S	INTEGRATED A2976	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.56	2.88	0.63	3.00	1.50	0.34
MB2439S	INTEGRATED A3146	#12 (1 1/16-12)	#12 (1 1/16-12)	#4 (7/16-20)	0.31	2.44	2.75	0.75	3.50	2.00	0.34
MB2414S	INTEGRATED A5572	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.56	2.88	0.75	3.50	1.50	0.34
MB2425S	INTEGRATED A6610	#8 (3/4-16)	#8 (3/4-16)	#4 (7/16-20)	0.31	2.19	2.50	0.75	2.63	1.25	0.34
MB2436S	INTEGRATED A6935	#20 (1 5/8-12)	#20 (1 5/8-12)	#4 (7/16-20)	0.38	3.25	3.63	0.50	4.00	2.50	0.41
MB2440S	INTEGRATED A12336	#12 (1 1/16-12)	#12 (1 1/16-12)	#4 (7/16-20)	0.31	2.56	2.88	0.63	3.00	1.50	0.34
MB2426S	INTEGRATED CVA-22-06-0	#8 (3/4-16)	#8 (3/4-16)	#6 (9/16-18)	0.31	2.19	2.50	0.75	3.25	1.25	0.34
MB2431S	INTEGRATED CVA-27-04-0	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.75	3.13	0.75	4.00	1.50	0.41
MB2426S	INTEGRATED CVB-22-06-0	#8 (3/4-16)	#8 (3/4-16)	#6 (9/16-18)	0.31	2.19	2.50	0.75	3.25	1.25	0.34
MB2442S	INTEGRATED CVB-42-04-0	#20 (1 5/8-12)	#24 (1 7/8-12)	#20 (1 5/8-12)	0.38	4.13	4.50	1.00	7.00	2.50	0.41
MB2387S	PARKER C12-3	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.88	3.25	0.75	3.50	2.00	0.41
MB2427S	STERLING 3A	#16 (1 5/16-12)	#16 (1 5/16-12)	#16 (1 5/16-12)	0.38	3.13	3.50	0.75	4.25	2.00	0.41
MB2432S	STERLING 3C	#16 (1 5/16-12)	#16 (1 5/16-12)	#4 (7/16-20)	0.38	2.63	3.00	1.00	4.25	2.00	0.41
MB2414S	STERLING 3G	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.56	2.88	0.75	3.50	1.50	0.34
MB2441S	STERLING 3M	#12 (1 1/16-12)	#12 (1 1/16-12)	#4 (7/16-20)	0.38	2.63	3.00	1.00	4.00	2.00	0.41
MB2417S	STERLING 3U	#16 (1 5/16-12)	#16 (1 5/16-12)	#16 (1 5/16-12)	0.38	3.00	3.38	1.00	4.50	2.00	0.41
MB2422S	STERLING 3X	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.56	2.88	0.63	3.00	1.50	0.34
MB2428S	STERLING 53-1	#6 (9/16-18)	#6 (9/16-18)	#4 (7/16-20)	0.31	1.69	2.00	0.50	2.19	1.00	0.34
MB2433S	STERLING 68-1	#8 (3/4-16)	#8 (3/4-16)	#4 (7/16-20)	0.38	2.19	2.56	0.75	3.50	1.25	0.41
MB2437S	STERLING 78-1	#12 (1 1/16-12)	#12 (1 1/16-12)	#4 (7/16-20)	0.38	2.50	2.88	1.00	3.50	2.00	0.41
MB2442S	STERLING 91-1	#20 (1 5/8-12)	#24 (1 7/8-12)	#20 (1 5/8-12)	0.38	4.13	4.50	1.00	7.00	2.50	0.41
MB684S	VICKERS C-12-3	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	3.13	3.50	0.75	4.00	2.00	0.41
MB685S	VICKERS C-12-3S	#12 (1 1/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	0.38	2.63	3.00	0.75	3.50	2.00	0.41
MB2390S	WATERMAN 12-3	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.69	3.00	0.50	2.63	1.25	0.34
MB2422S	WATERMAN 14-3	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.31	2.56	2.88	0.63	3.00	1.50	0.34

Single Cartridge Body – SAE ORB Ports

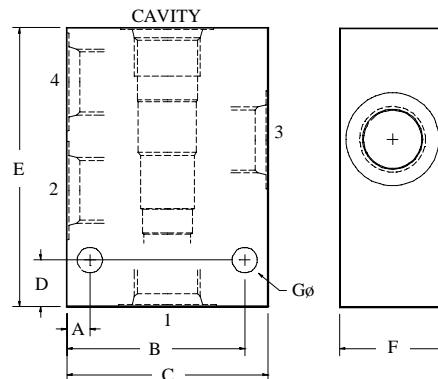
Four Port Bodies

MATL: STEEL

PRESSURE: 5000 PSI

'C' - STANDARD CAVITY FOR:

COMPACT
 DANFOSS
 DELTA
 HYDRAFORCE,
 INTEGRATED HYD.
 PARKER
 STERLING
 VICKERS
 WATERMAN



Part No.	Cavity	Port 1	Port 2	Port 3	Port 4	A	B	C	D	E	F	G
MB2398S	STANDARD C-8-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB961S	STANDARD C-10-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	3.50	1.25	0.34
MB689S	STANDARD C-16-4	#16 (1 5/16-12)	#16 (1 5/16-12)	#16 (1 5/16-12)	#16 (1 5/16-12)	0.31	3.69	4.00	0.75	5.25	2.00	0.41
MB693S	STANDARD C-20-4	#20 (1 5/8-12)	#20 (1 5/8-12)	#20 (1 5/8-12)	#20 (1 5/8-12)	0.38	3.63	4.00	0.75	6.75	2.50	0.41
MB2398S	COMPACT CP8-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB988S	COMPACT CP12-4	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.88	3.25	0.75	4.50	2.00	0.41
MB2411S	DANFOSS FC-314	#12 (1 1/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	#6 (9/16-18)	0.38	2.63	3.00	0.75	4.13	1.50	0.41
MB2398S	DELTA 40200029	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB2400S	DELTA 40200035	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.63	3.00	1.00	5.00	2.00	0.41
MB2398S	HYDRAFORCE VC08-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB2400S	HYDRAFORCE VC12-4	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.63	3.00	1.00	5.00	2.00	0.41
MB2415S	INTEGRATED A5302	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	3.75	1.25	0.41
MB2398S	INTEGRATED A6951	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB2423S	INTEGRATED A12196	#8 (3/4-16)	#8 (3/4-16)	#4 (7/16-20)	#4 (7/16-20)	0.31	2.44	2.75	0.63	3.50	1.50	0.34
MB2434S	INTEGRATED A13098	#16 (1 5/16-12)	#16 (1 5/16-12)	#4 (7/16-20)	#4 (7/16-20)	0.38	2.88	3.25	0.75	4.50	2.00	0.41
MB2398S	PARKER C08-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB2399S	PARKER C12-4	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.63	3.00	0.75	4.25	2.00	0.41
MB2443S	STERLING 4A	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	0.38	3.13	3.50	1.00	5.25	2.00	0.41
MB2415S	STERLING 4C	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	3.75	1.25	0.41
MB2398S	VICKERS C-8-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB2401S	VICKERS C-12-4	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	#12 (1 1/16-12)	0.38	2.63	3.00	0.75	4.63	2.00	0.41
MB2398S	WATERMAN 12-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.63	3.13	1.25	0.41
MB2415S	WATERMAN 14-4	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	#8 (3/4-16)	0.38	2.63	3.00	0.75	3.75	1.25	0.41

Cylinder Mount – Single

SAE ORB Ports

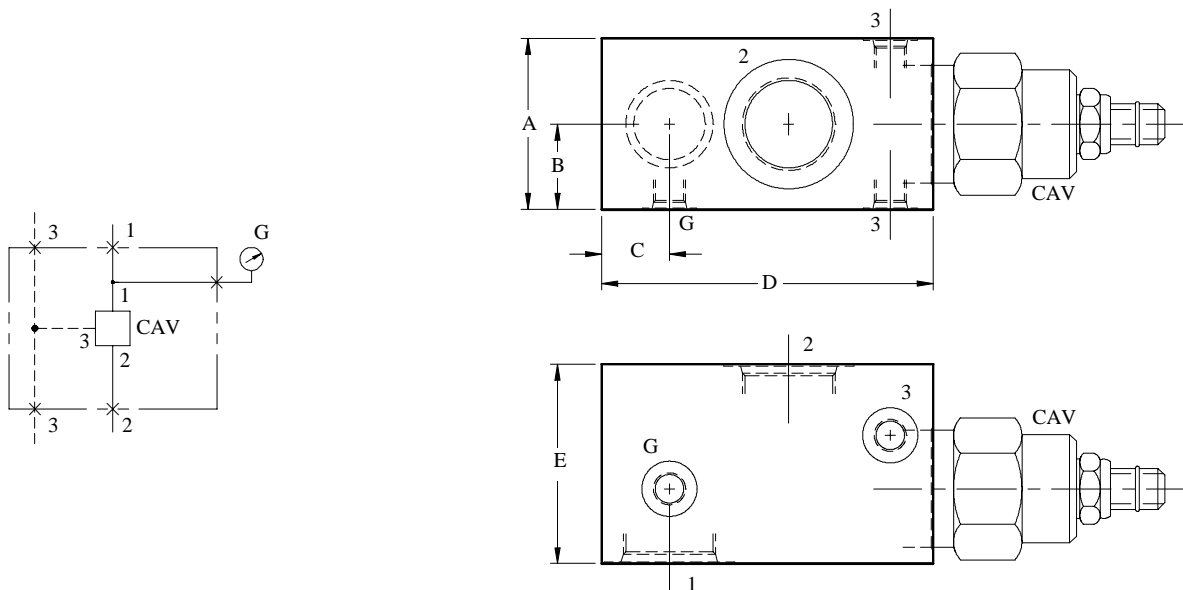
MATL: STEEL

CARTRIDGES: SUN CAVITY (OR EQUIVALENT) '1' IS NOSE OF CARTRIDGE

G (GAGE): #4 SAE ORB.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

FOR 4-BOLT FLANGE MOUNT SEE PAGE 27-4 & 5.



Part No.	CAV Cavity	1 SAE ORB	2 SAE ORB	3 SAE ORB	A	B	C	D	E
MB2269S	SUN T-11A	#8 (3/4-16)	#8 (3/4-16)	#6 (9/16-18)	2.00	1.00	0.63	3.25	2.00
MB2271S	SUN T-2A	#12 (1 1/16-12)	#12 (1 1/16-12)	#6 (9/16-18)	2.00	1.00	0.81	3.63	2.50
MB2272S	SUN T-17A	#16 (1 5/16-12)	#16 (1 5/16-12)	#6 (9/16-18)	2.50	1.25	1.00	4.50	3.00
MB2273S	SUN T-19A	#20 (1 5/8-12)	#20 (1 5/8-12)	#6 (9/16-18)	3.00	1.50	1.19	5.81	3.50

Single DIN / Poppet Body

SAE ORB or SAE 4-Bolt Ports

MATL: STEEL

INSERT CAVITY DIMENSIONS MADE TO DIN 24342/ ISO 7368/ NFPA T3.5.45 STANDARDS.
POPPET BODIES ARE SUITABLE FOR ALL MAKES OF INSERT CARTRIDGES.

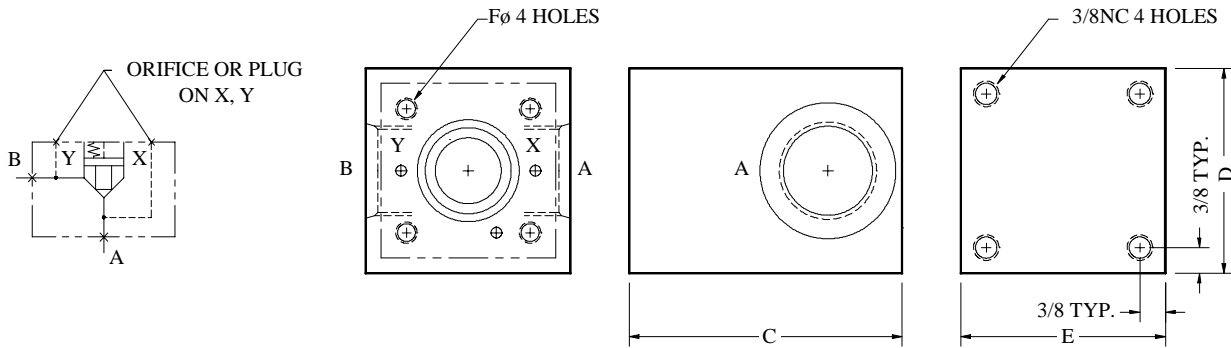
5000 PSI PRESSURE RATING FOR SAE ORB PORTS.

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

FOR DIN / POPPET COVER, SEE PAGE 24-8



Part No.	Poppet Size	A, B SAE ORB	C	D	E	F
MB1097S	NG16 / 16mm	#16 (1 5/6-12)	4.00	3.00	3.50	5/16-18NC
MB1098S	NG25 / 25mm	#20 (1 5/8-12)	5.00	4.00	4.00	1/2-13NC
MB1957S	NG32 / 32mm	#24 (1 7/8-12)	5.00	4.50	5.00	5/8-11NC

Part No.	Poppet Size	A, B SAE 4-Bolt	C	D	E	F
MB1958S	NG16 / 16mm	1 C61	4.38	3.00	3.00	5/16-18NC
MB1962S	NG16 / 16mm	1 C62	4.38	3.50	3.50	5/16-18NC
MB1959S	NG25 / 25mm	1 1/4 C61	5.00	4.00	4.00	1/2-13NC
MB1963S	NG25 / 25mm	1 1/4 C62	5.25	4.00	4.50	1/2-13NC
MB1099S	NG32 / 32mm	1 1/2 C61	5.50	4.50	5.00	5/8-11NC
MB1960S	NG32 / 32mm	1 1/2 C62	6.00	4.50	5.25	5/8-11NC
MB1100S	NG40 / 40mm	2 C61	6.88	5.00	6.00	3/4-10NC
MB1952S	NG40 / 40mm	2 C62	7.13	5.38	6.00	3/4-10NC
MB1101S	NG50 / 50mm	2 1/2 C61	8.00	6.00	6.50	3/4-10NC
MB1961S	NG50 / 50mm	2 1/2 C62	8.50	6.75	7.00	3/4-10NC



Multiple Valves

Cross Relief

Dual-Relief and Make-Up

Selector

Regenerative

Rectifier

Accumulator Dump

Hi-Low

Grapple Rotation

Pump

Hydrostatic Transmission

Thumb



Cross-Relief Manifold

SAE ORB Ports

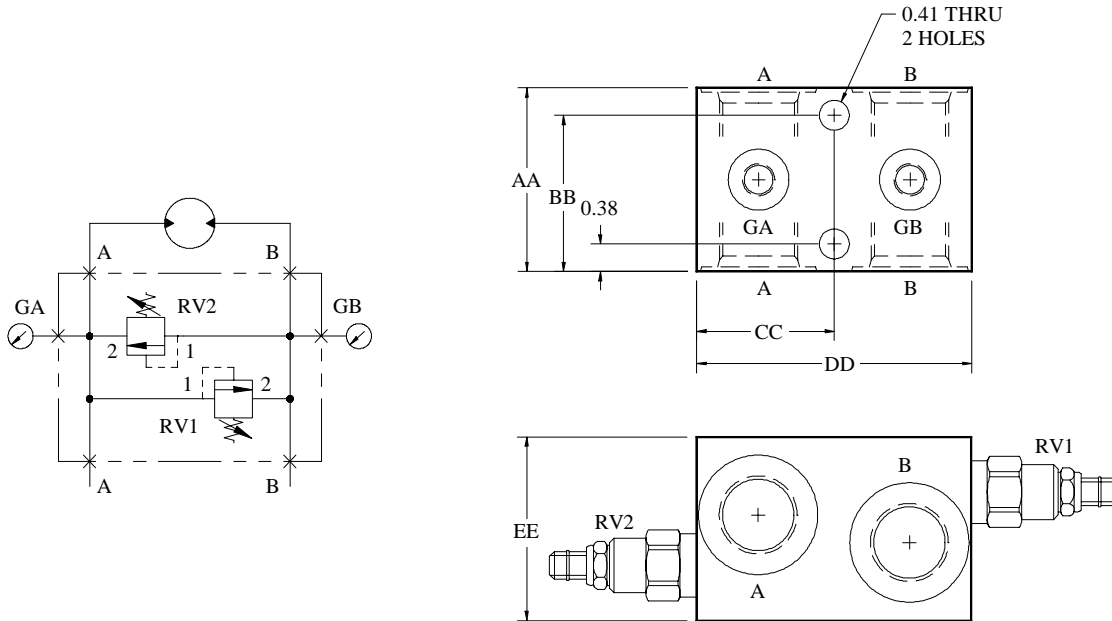
MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, OILGEAR, PARKER, STERLING, SUN, AND VICKERS
CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE

GA GB (GAGE): #4 SAE ORB

NOTE: COMPACT CP12-2 CAVITY IS EQUIVALENT TO HYDRAFORCE VC12-2 CAVITY.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	RV Relief Cavity	Flow (GPM)	A, B Ports SAE ORB	AA	BB	CC	DD	EE
MB2069S	COMPACT CP12-2	30	#12 (1 1/16-12)	3.00	0.38	2.13	4.25	3.00
MB2071S	VICKERS C-12-2	30	#12 (1 1/16-12)	3.00	0.38	2.13	4.25	3.00
MB2070S	PARKER C12-2	30	#12 (1 1/16-12)	3.00	2.63	2.13	4.25	3.00
MB1094S	STANDARD C-10-2	30	#12 (1 1/16-12)	2.50	2.13	1.88	3.75	2.50
MB1095S	STANDARD C-16-2	80	#20 (1 5/8-12)	3.50	3.13	2.63	5.25	3.50
MB1089S	SUN T-10A	25	#12 (1 1/16-12)	2.50	2.13	1.88	3.75	2.50
MB1090S	SUN T-3A	50	#16 (1 5/16-12)	3.00	2.62	2.25	4.50	3.00
MB1091S	SUN T-16A	100	#20 (1 5/8-12)	3.50	3.13	2.75	5.50	3.50

Cross-Relief Manifold

SAE 4-Bolt Flange Ports

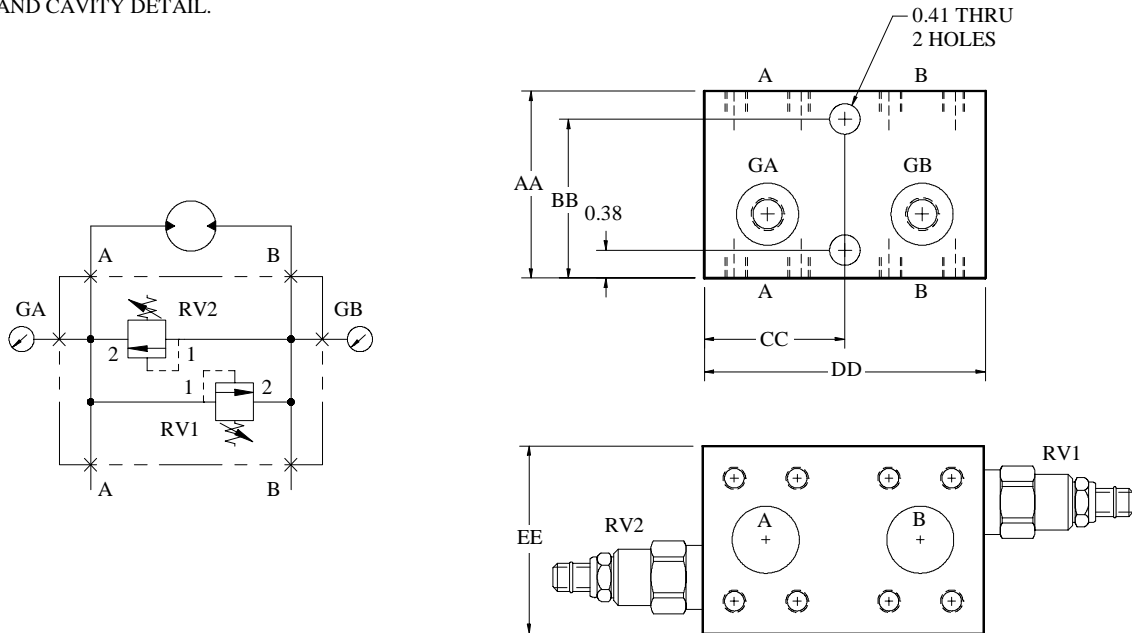
MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, PARKER, STERLING, SUN AND VICKERS CAVITY (OR EQUIVALENT)
1 IS NOSE OF CARTRIDGE

GA, GB (GAGE): #4 SAE ORB

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.
FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE,
FLOW RATE AND CAVITY DETAIL.



Part No.	RV Relief Cavity	Flow (GPM)	A, B Ports SAE 4-Bolt	AA	BB	CC	DD	EE
MB1096S	STANDARD C-16-2	80	1 1/4 C61	3.50	3.13	2.75	5.50	3.50
MB2127S	STANDARD C-16-2	80	1 1/2 C61	4.00	3.63	3.19	6.38	4.50
MB2128S	STANDARD C-16-2	80	1 1/4 C62	4.00	3.63	3.00	6.00	4.50
MB1092S	SUN T-16A	100	1 1/4 C61	3.50	3.13	2.75	5.50	3.50
MB2125S	SUN T-3A	50	1 1/4 C61	3.50	3.13	2.75	5.50	3.50
MB1093S	SUN T-18A	200	1 1/2 C61	5.50	5.13	3.63	7.25	4.00
MB2129S	SUN T-16A	100	1 1/2 C61	4.00	3.63	3.19	6.38	4.00
MB2130S	SUN T-18A	200	2 C61	5.00	4.63	4.00	8.00	5.00
MB2132S	SUN T-16A	100	1 C62	3.50	3.13	2.88	5.75	3.50
MB2126S	SUN T-3A	50	1 1/4 C62	3.50	3.13	3.00	6.00	4.00
MB2131S	SUN T-16A	100	1 1/4 C62	4.00	3.63	3.00	6.00	4.00
MB2134S	SUN T-18A	200	1 1/4 C62	4.50	4.13	3.50	7.00	4.50
MB2133S	SUN T-18A	200	1 1/2 C62	5.00	4.63	4.00	8.00	5.00

Dual-Relief and Make-Up Manifold

SAE ORB Ports

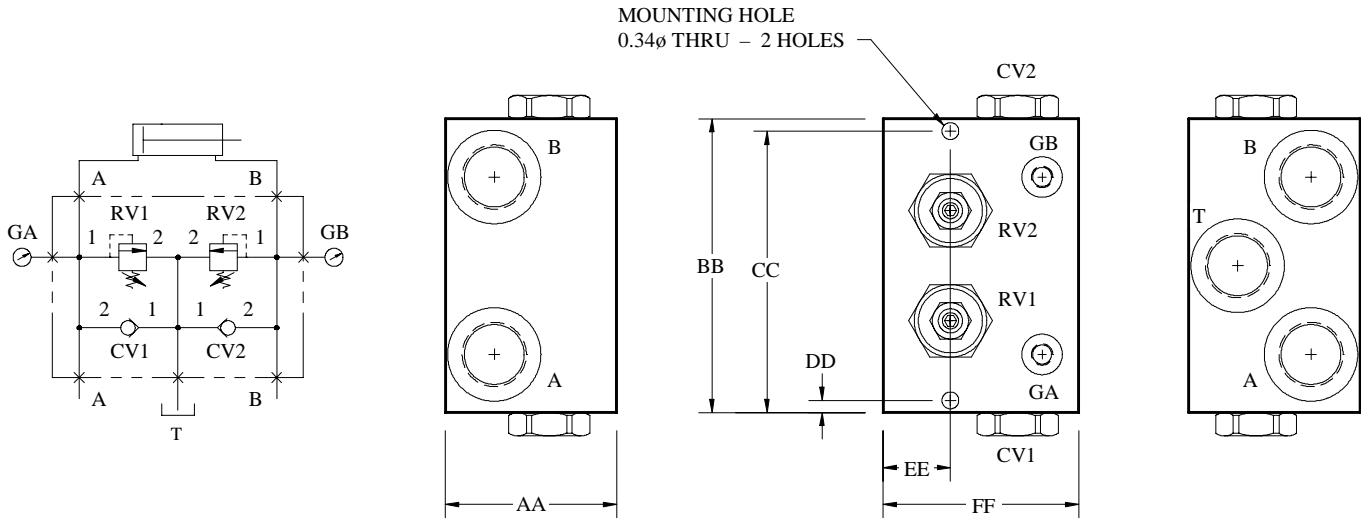
MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, OILGEAR, PARKER, STERLING, SUN AND VICKERS
CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

GA, GB (GAGE): #4 SAE ORB

NOTE: COMPACT CP12-2 CAVITY IS EQUIVALENT TO HYDRAFORCE VC12-2 CAVITY
AND PARKER C12-2 CAVITY IS EQUIVALENT TO OILGEAR HS800-2 CAVITY.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CV Check Cavity	Flow (GPM)	RV Relief Cavity	Flow (GPM)	A, B, T SAE ORB Ports	AA	BB	CC	DD	EE	FF
MC1419S	STANDARD C-10-2	42	STANDARD C-10-2	35	#12 (1 1/16-12)	3.00	4.50	4.25	0.25	1.00	3.00
MC1412S	COMPACT CP12-2	37	COMPACT CP12-2	50	#12 (1 1/16-12)	3.50	4.88	4.63	0.25	1.13	3.50
MC1413S	VICKERS C-12-2	30	VICKERS C-12-2	30	#12 (1 1/16-12)	3.50	4.88	4.63	0.25	1.13	3.50
MC1410S	PARKER C12-2	32	PARKER C12-2	50	#12 (1 1/16-12)	3.50	4.88	4.63	0.25	1.19	3.50
MC1417S	STANDARD C-16-2	132	STANDARD C-16-2	106	#16 (1 5/16-12)	3.50	6.00	5.75	0.25	1.06	4.00
MC1420S	SUN T-13A	20	SUN T-10A	25	#12 (1 1/16-12)	3.00	4.63	4.38	0.25	1.00	3.00
MC1421S	SUN T-5A	40	SUN T-3A	50	#12 (1 1/16-12)	3.50	5.00	4.63	0.38	1.19	3.50
MC1422S	SUN T-16A	80	SUN T-3A	50	#16 (1 5/16-12)	4.00	6.25	5.88	0.38	1.13	4.00
MC1450S	SUN T-16A	80	SUN T-16A	100	#20 (1 5/8-12)	4.50	6.88	6.38	0.38	1.13	4.00

Dual-Relief and Make-Up Manifold

SAE 4-Bolt Flange Ports

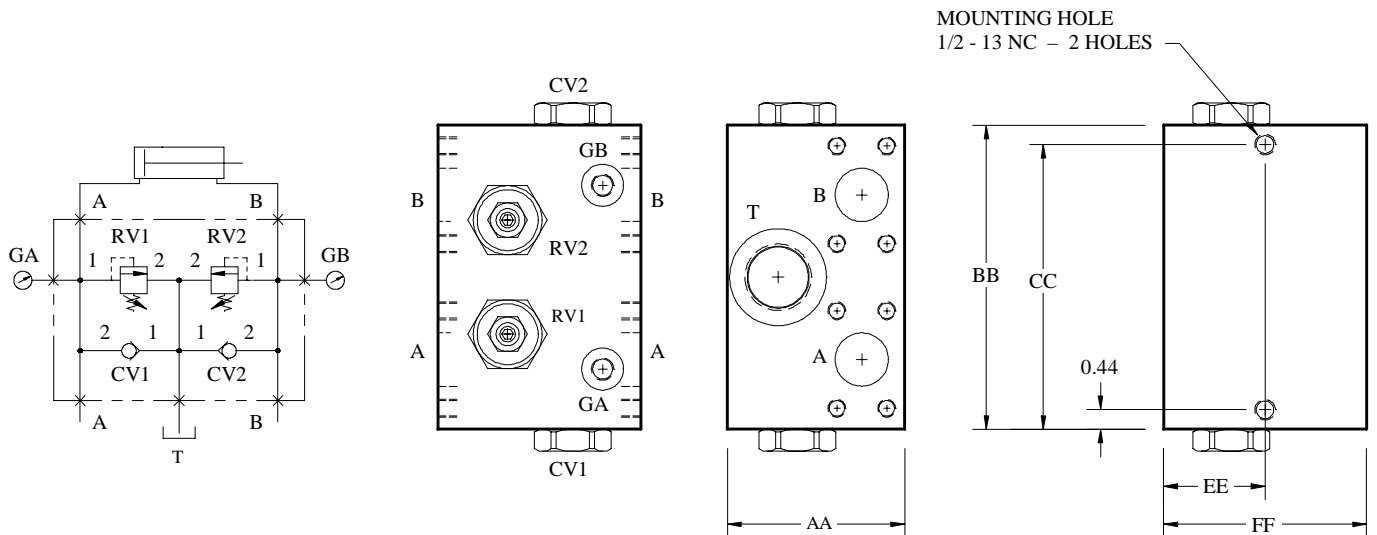
MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, OILGEAR, PARKER, STERLING, SUN AND VICKERS CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE

GA, GB (GAGE): #4 SAE ORB

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-22.
FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE FLOW RATE AND CAVITY DETAIL.



Part No.	CV Check Cavity	Flow (GPM)	RV Relief Cavity	Flow (GPM)	A, B Ports	T Port SAE ORB	AA	BB	CC	EE	FF
MC1418	STANDARD C-16-2	132	STANDARD C-16-2	106	1 1/4 C61	#20 (1 5/8-12)	4.50	7.00	6.56	2.25	4.50
MC1437	STANDARD C-20-2	80	STANDARD C-16-2	106	1 1/2 C61	#24 (1 7/8-12)	5.00	8.75	8.31	2.50	5.00
MC1443	STANDARD C-20-2	80	STANDARD C-16-2	106	1 1/2 C62	#24 (1 7/8-12)	5.00	11.00	10.56	2.75	5.50
MC1442	STANDARD C-16-2	132	STANDARD C-16-2	106	1 1/4 C62	#20 (1 5/8-12)	4.00	10.00	9.56	2.25	4.50
MC1438	SUN T-16A	80	SUN T-3A	50	1 1/4 C61	#20 (1 5/8-12)	4.00	8.25	7.81	2.00	4.00
MC1439	SUN T-16A	80	SUN T-16A	100	1 1/2 C61	#24 (1 7/8-12)	5.00	8.75	8.31	2.50	5.00
MC1440	SUN T-18A	160	SUN T-16A	100	1 1/2 C61	#24 (1 7/8-12)	5.00	8.75	8.31	2.50	5.00
MC1441	SUN T-18A	160	SUN T-18A	200	2 C61	#24 (1 7/8-12)	6.00	9.50	9.06	3.00	6.00
MC1444	SUN T-16A	80	SUN T-16A	100	1 1/2 C62	#24 (1 7/8-12)	5.00	11.00	10.56	2.50	5.00
MC1445	SUN T-18A	160	SUN T-18A	200	2 C62	#24 (1 7/8-12)	6.00	12.25	11.81	3.00	6.00

Single Selector Manifold

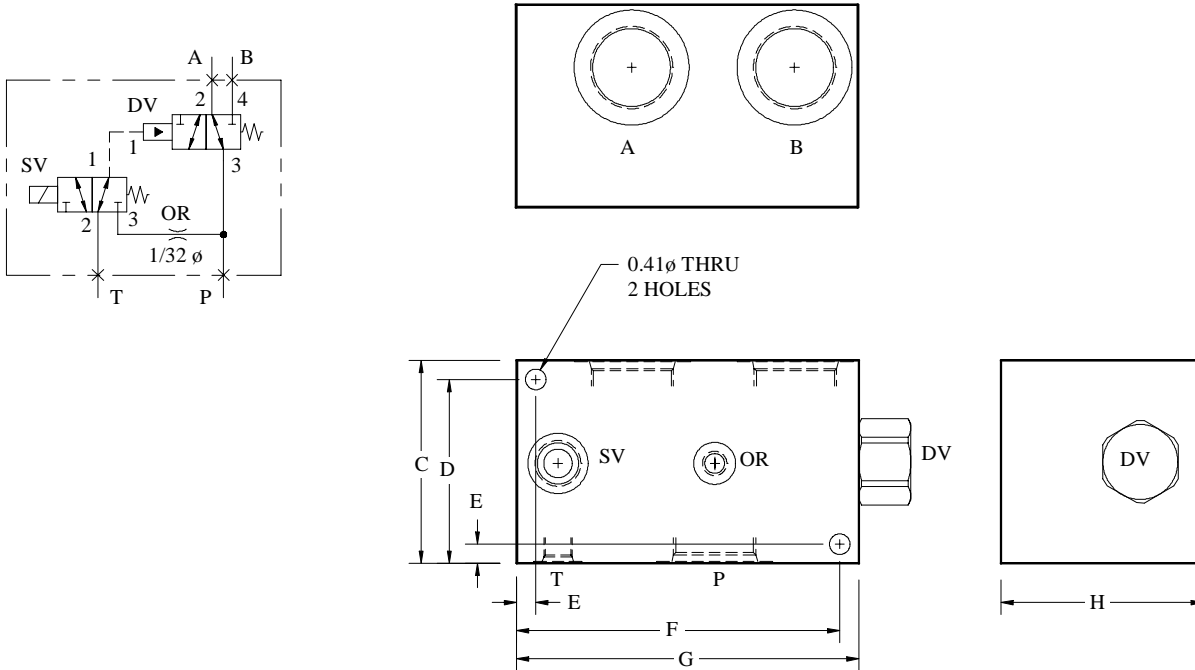
SAE ORB Ports

MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, PARKER, STERLING, AND VICKERS CAVITY (OR EQUIVALENT)
 '1' IS NOSE OF CARTRIDGE
 VC12-4 CAVITY FOR HYDRAFORCE ONLY

'OR': #4 SAE ORB PLUG ACCESS TO 1/32 DIA. ORIFICE PLUG

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	DV Cavity	DV Flow	SV Cavity	P, A, B SAE ORB	T SAE ORB	C	D	E	F	G	H
MB1626S	C-10-4	8 GPM	C-10-3	#8 (3/4-16)	#6 (9/16-18)	3.00	2.63	0.38	3.13	3.50	3.00
MB2072S	VC12-4	30 GPM	C-10-3	#12 (1 1/16-12)	#6 (9/16-18)	3.50	3.13	0.38	4.63	5.00	3.50
MB604S	C-16-4	35 GPM	C-10-3	#16 (1 5/16-12)	#6 (9/16-18)	3.50	3.13	0.38	4.88	5.25	3.50
MB491S	C-20-4	70 GPM	C-10-3	#20 (1 5/8-12)	#6 (9/16-18)	4.00	3.63	0.38	6.38	6.75	4.00

Dual Selector Manifold

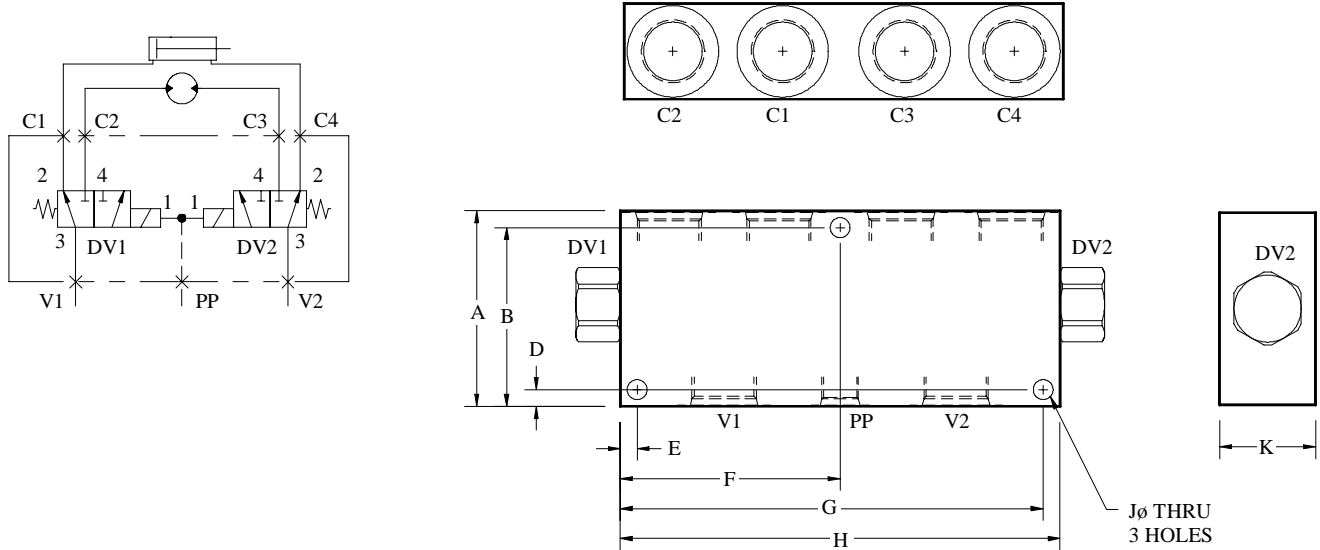
External Pilot, SAE ORB & SAE 4-Bolt Flange Ports

MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, HYDRAFORCE, PARKER, STERLING, AND VICKERS CAVITY (OR EQUIVALENT)
 '1' IS NOSE OF CARTRIDGE
 VC12-4 CAVITY FOR HYDRAFORCE ONLY

FOR DIMENSION OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.
 FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	DV1, DV2		C, V SAE ORB or SAE 4-Bolt	PP SAE ORB	A	B	D	E	F	G	H	J	K
	Cavity	Flow											
MC709S	C-10-4	8 GPM	#8 (3/4-16)	#4 (7/16-20)	3.00	2.69	0.31	0.31	2.75	5.19	5.50	0.34	1.50
MC1409S	VC12-4	30 GPM	#12 (1 1/16-12)	#6 (9/16-18)	3.50	3.16	0.34	0.34	4.13	7.91	8.25	0.41	2.00
MC688S	C-16-4	35 GPM	#16 (1 5/16-12)	#8 (3/4-16)	4.00	3.66	0.34	0.34	4.50	8.66	9.00	0.41	2.00
MC716S	C-20-4	70 GPM	1 1/4 C61	#8 (3/4-16)	3.50	3.13	0.38	0.38	6.00	11.63	12.00	0.41	3.50
MC1154S	C-20-4	70 GPM	1 1/4 C62	#8 (3/4-16)	4.00	3.63	0.38	0.38	6.13	11.88	12.25	0.41	4.00

Dual Selector Manifold

Internal Pilot, SAE ORB Ports

MATL: STEEL

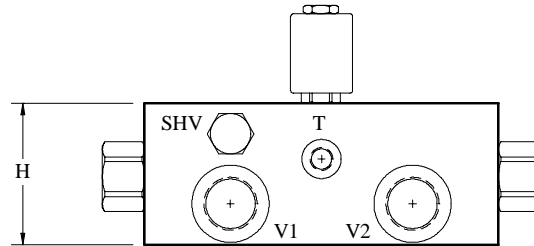
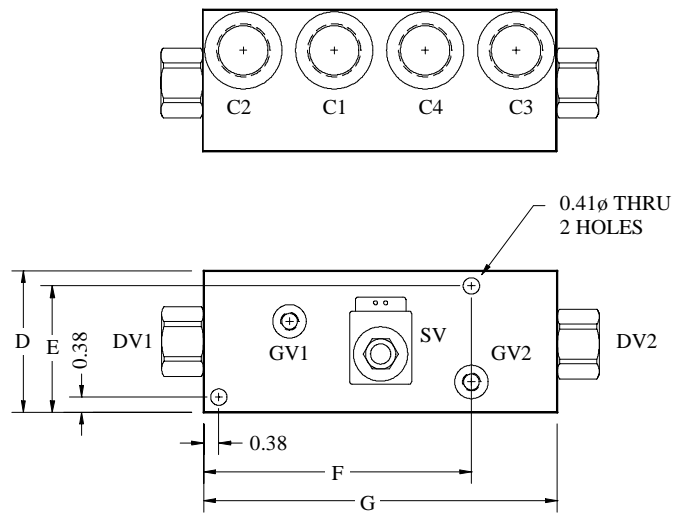
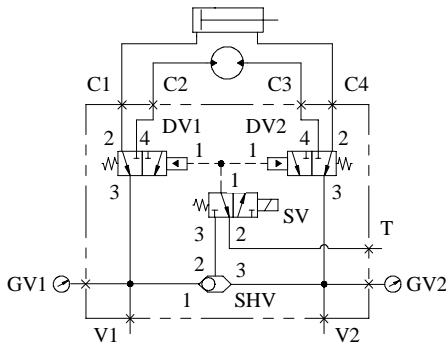
CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, PARKER, STERLING, AND VICKERS CAVITY (OR EQUIVALENT)

'1' IS NOSE OF CARTRIDGE

VC12-4 CAVITY FOR HYDRAFORCE ONLY

'GV1', 'GV2' (GAGE): #4 SAE ORB

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	DV1, DV2		SV, SHV Cavity	C, V SAE ORB	T SAE ORB	D	E	F	G	H
	Cavity	Flow								
MB1630S	C-10-4	8 GPM	C-10-3	#8 (3/4-16)	#6 (9/16-18)	3.00	2.63	2.88	5.75	3.00
MC1407S	VC12-4	30 GPM	C-10-3	#12 (1 1/16-12)	#6 (9/16-18)	3.00	2.63	6.13	8.25	3.50
MC616S	C-16-4	35 GPM	C-10-3	#16 (1 5/16-12)	#6 (9/16-18)	3.50	3.13	6.63	8.75	3.50

Dual Selector Manifold

Internal Pilot, SAE 4-Bolt Flange Ports

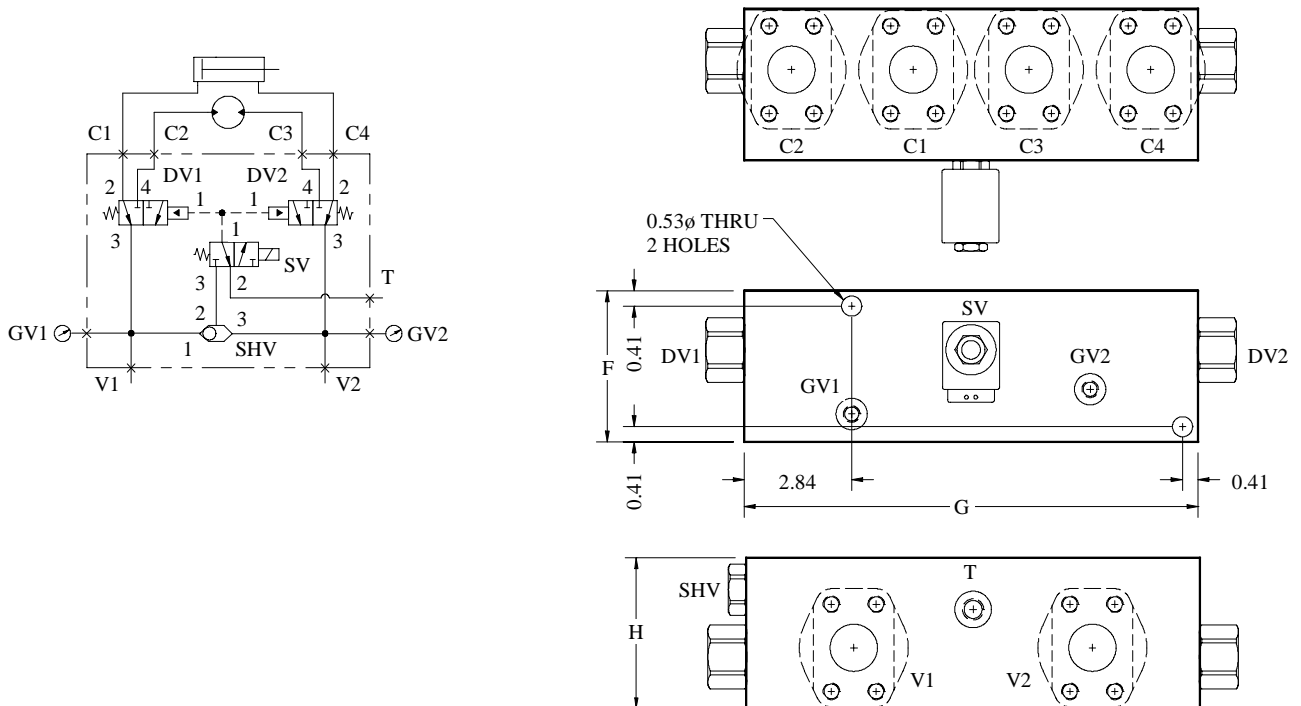
MATL: STEEL

CARTRIDGES: COMPACT, DANFOSS, DELTA, HYDRAFORCE, PARKER, STERLING, AND VICKERS CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

'GV1', 'GV2' (GAGE): #4 SAE ORB

FOR DIMENSION OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.
FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	DV1, DV2		SV, SHV Cavity	C, V SAE 4-Bolt	T SAE ORB	F	G	H
	Cavity	Flow						
MC607S	C-20-4	70 GPM	C-10-3	1 1/4 C61	#8 (3/4-16)	4.00	12.00	4.00
MC1157S	C-20-4	70 GPM	C-10-3	1 1/4 C62	#8 (3/4-16)	4.50	12.25	4.50

Regenerative Manifold

D03 – SAE ORB Ports

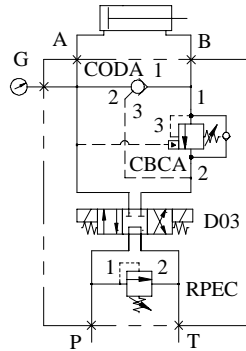
PART NO: MC1001S

MATL: STEEL
PRESSURE: 5000 PSI
FLOW RATE: 15 GPM
CARTRIDGES: SUN CBCA C'BALANCE
SUN CODA PILOT CHECK
SUN RPEC RELIEF
(OR EQUIVALENT)

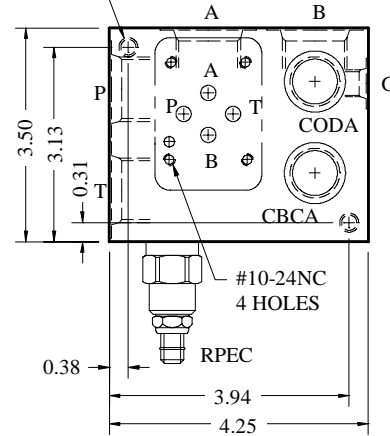
PORTS: #12 SAE ORB
G (GAGE): #4 SAE ORB

3 1/2" THICK

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



5/16-18NC 2 HOLES
FAR SIDE



D05 – SAE ORB Ports

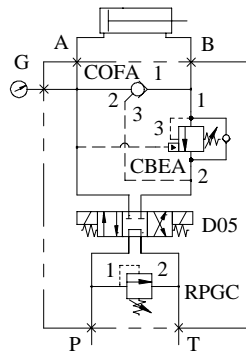
PART NO: MC1002S

MATL: STEEL
PRESSURE: 5000 PSI
FLOW RATE: 30 GPM
CARTRIDGES: SUN CBEA C'BALANCE
SUN COFA PILOT CHECK
SUN RPGC RELIEF
(OR EQUIVALENT)

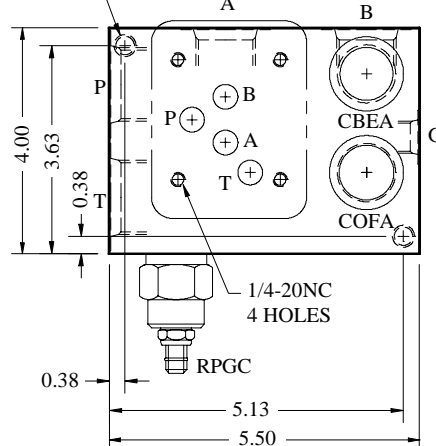
PORTS: #16 SAE ORB
G (GAGE): #6 SAE ORB

4" THICK

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



3/8-16NC 2 HOLES
FAR SIDE



D08 – SAE ORB Ports

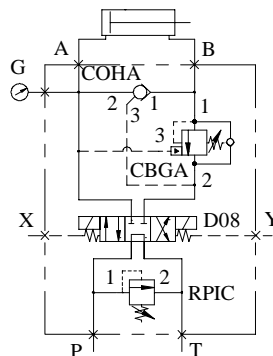
PART NO: MC1003S

MATL: STEEL
PRESSURE: 5000 PSI
FLOW RATE: 60 GPM
CARTRIDGES: SUN CBGA C'BALANCE
SUN COHA PILOT CHECK
SUN RPIC RELIEF
(OR EQUIVALENT)

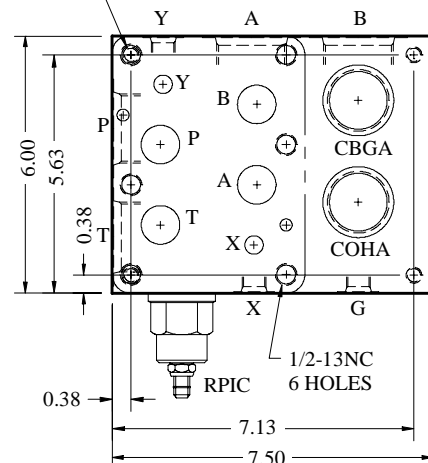
PORTS: #20 SAE ORB
X, Y, G (GAGE): #6 SAE ORB

5" THICK

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



3/8-16NC 4 HOLES
FAR SIDE



Regenerative Manifold

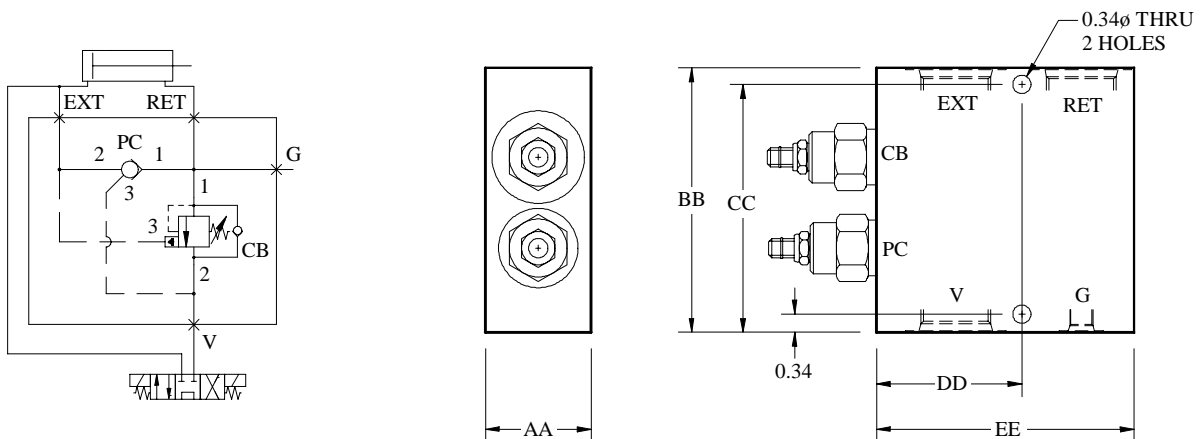
Without Directional Valve, SAE ORB Ports

MATL: STEEL

CARTRIDGES: COMPACT AND SUN CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

G (GAGE): # 4 SAE ORB

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CB Cavity	PC Cavity	EXT, RET, V SAE ORB	AA	BB	CC	DD	EE
MC1506S	SUN T-11A	SUN T-11A	#8 (3/4-16)	1.25	3.50	3.19	2.13	3.50
MC1507S	SUN T-2A	SUN T-2A	#12 (1 1/16-12)	1.50	4.75	4.44	2.50	4.50
MC1508S	COMPACT CP12-3S	COMPACT CP16-3S	#16 (1 5/16-12)	2.00	5.00	4.69	2.75	4.88
MC1509S	SUN T-17A	SUN T-17A	#20 (1 5/8-12)	2.50	6.00	5.69	3.25	5.75
MC1510S	SUN T-19A	SUN T-19A	#24 (1 7/8-12)	3.00	7.50	7.19	4.00	6.88

Rectifier Manifold

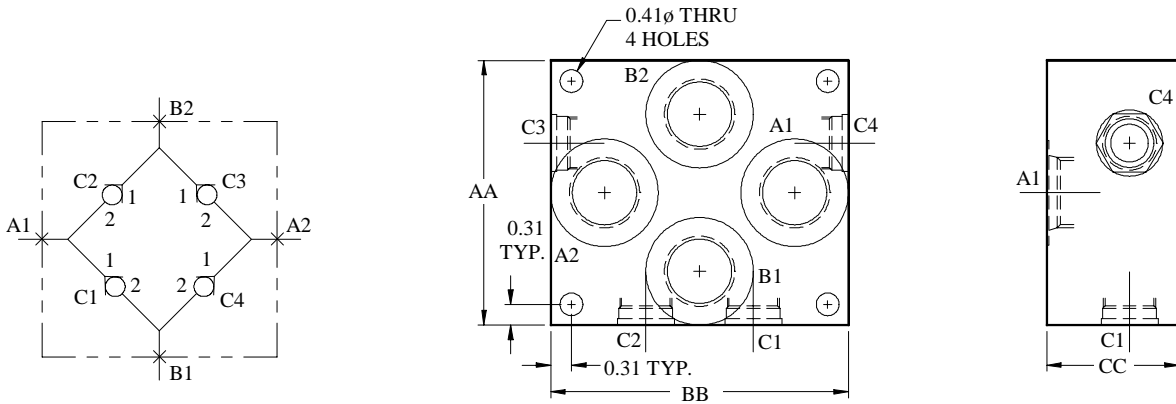
SAE ORB Ports

MATL: STEEL

CARTRIDGES: STD (STANDARD), COMPACT, PARKER, SUN, AND VICKERS (OR EQUIVALENT)
 '1' IS NOSE OF CARTRIDGE

NOTE: COMPACT CP12-2 CAVITY EQUIVALENT TO HYDRAFORCE VC12-2 CAVITY
 AND PARKER C12-2 CAVITY IS EQUIVALENT TO OILGEAR HS800-2 CAVITY

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	C Cavity	A1, A2, B1, B2 SAE ORB	AA	BB	CC
MB2274S	STD C-10-2	#12 (1 1/16-12)	4.00	4.50	2.00
MB2275S	COMPACT CP12-2	#16 (1 5/16-12)	5.00	5.00	2.00
MB2276S	VICKERS C-12-2	#16 (1 5/16-12)	5.00	5.00	2.00
MB2277S	PARKER C12-2	#16 (1 5/16-12)	5.00	5.00	2.00
MB2278S	STD C-16-2	#20 (1 5/8-12)	6.00	6.00	2.50
MB2279S	STD C-20-2	#24 (1 7/8-12)	7.25	7.75	3.00
MB2280S	SUN T-13A	#12 (1 1/16-12)	4.00	4.50	2.00
MB2281S	SUN T-5A	#16 (1 5/16-12)	5.00	5.00	2.00
MB2282S	SUN T-16A	#20 (1 5/8-12)	6.00	6.75	2.50
MB2283S	SUN T-18A	#24 (1 7/8-12)	8.25	8.50	3.00

Rectifier Manifold

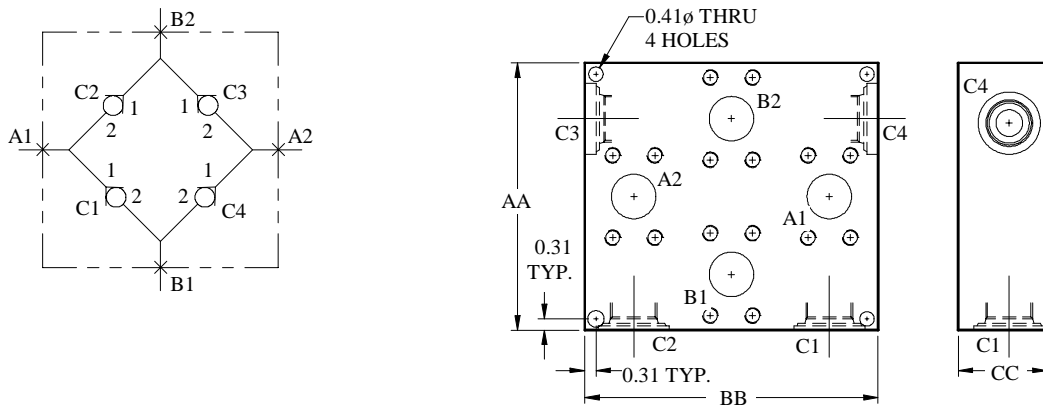
SAE 4-Bolt Flange Ports

MATL: STEEL

CARTRIDGES: STD (STANDARD), AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.
FLANGE MOUNTING HOLES ARE IN INCHES.



Part No.	C Cavity	A1, A2, B1, B2 SAE 4-BOLT	AA	BB	CC
MB2284S	STD C-16-2	1 1/4 C61	7.50	8.25	2.50
MB2285S	STD C-16-2	1 1/4 C62	9.00	9.25	3.00
MB2286S	STD C-20-2	1 1/2 C61	9.00	9.75	3.50
MB2287S	STD C-20-2	1 1/2 C62	11.00	11.00	3.50
MB2288S	SUN T-16A	1 1/4 C61	8.00	8.25	3.00
MB2289S	SUN T-16A	1 1/4 C62	9.25	9.25	3.00
MB2290S	SUN T-18A	1 1/2 C61	9.75	9.75	3.50
MB2291S	SUN T-18A	1 1/2 C62	11.00	10.75	4.00

Accumulator Dump Manifold

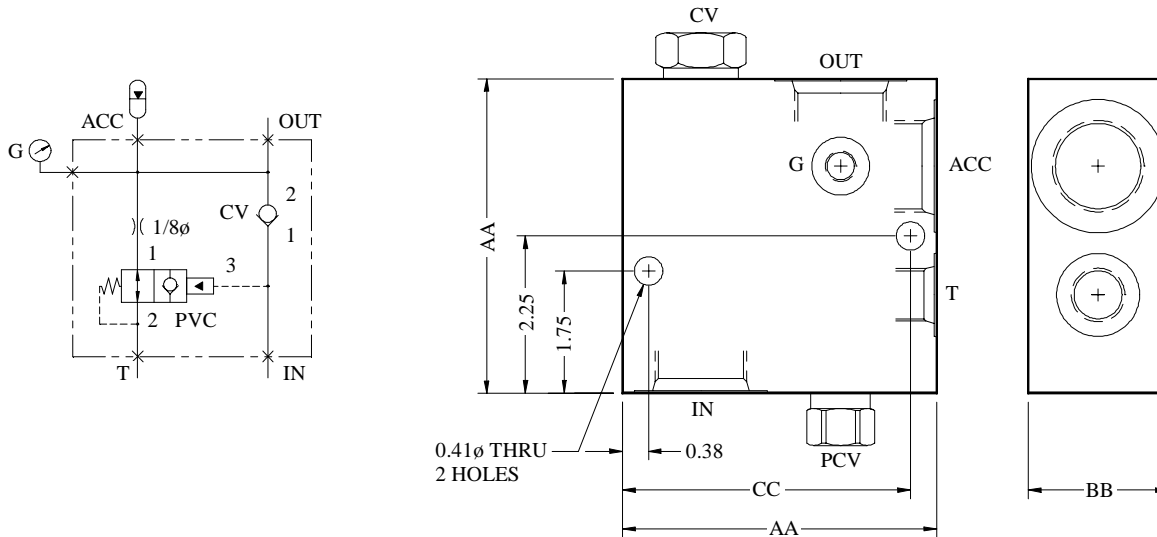
SAE ORB Ports

MATL: STEEL

CARTRIDGES: STD (STANDARD) AND SUN CAVITY (OR EQUIVALENT)
1 IS NOSE OF CARTRIDGE

G (GAGE): #4 SAE ORB

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CV Check Cavity	Check Flow Rate	PCV Pilot Check Cavity	IN, OUT, ACC SAE ORB	T SAE ORB	AA	BB	CC
MB1102S	SUN T-5A	40 GPM	SUN T-11A	#16 (1 5/16-12)	#8 (3/4-16)	4.50	2.00	4.13
MB1104S	STD C-16-2	40 GPM	STD C-10-3	#16 (1 5/16-12)	#8 (3/4-16)	4.50	2.00	4.13
MB1103S	SUN T-16A	80 GPM	SUN T-11A	#20 (1 5/8-12)	#8 (3/4-16)	5.00	2.50	4.63
MB1105S	STD C-20-2	60 GPM	STD C-10-3	#20 (1 5/8-12)	#8 (3/4-16)	5.00	2.50	4.63

Hi-Low Manifold

D05 – SAE ORB Ports

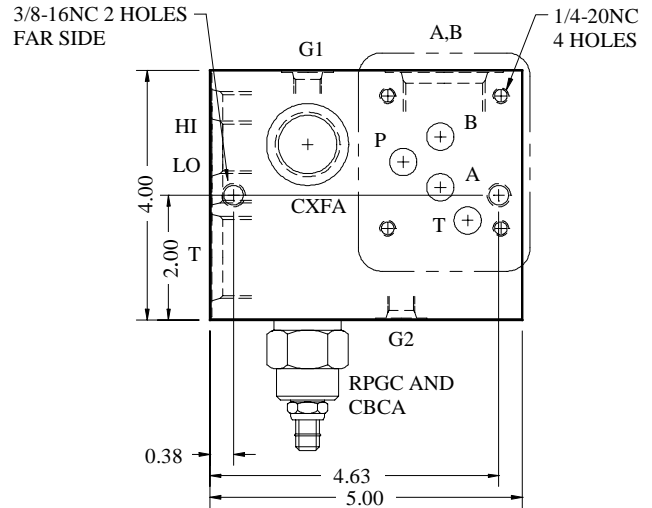
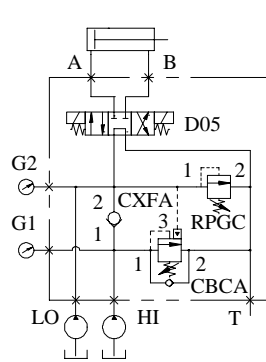
PART NO: MC1006S

MATL: STEEL
PRESSURE: 5000 PSI
FLOW RATE: 20 GPM
CARTRIDGES: SUN CBCA C' BALANCE
SUN CXFA CHECK
SUN RPGC RELIEF
(OR EQUIVALENT)

PORTS: #16 SAE ORB
G (GAGE): #4 SAE ORB

4" THICK

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



D08 – SAE ORB Ports

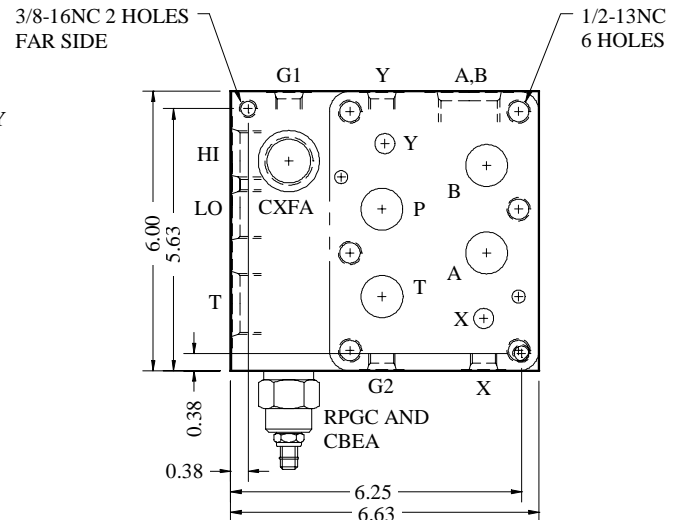
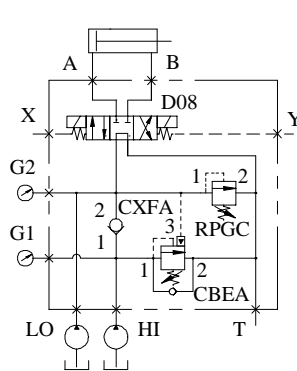
PART NO: MC1007S

MATL: STEEL
PRESSURE: 5000 PSI
FLOW RATE: 40 GPM
CARTRIDGES: SUN CBEA C' BALANCE
SUN CXFA CHECK
SUN RPGC RELIEF
(OR EQUIVALENT)

PORTS: #16 SAE ORB
X, Y, G (GAGE): #6 SAE ORB

4" THICK

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



D08 – SAE ORB Ports

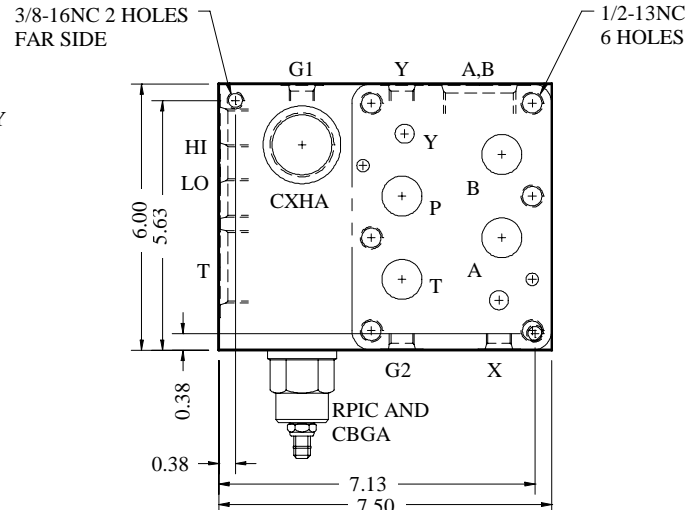
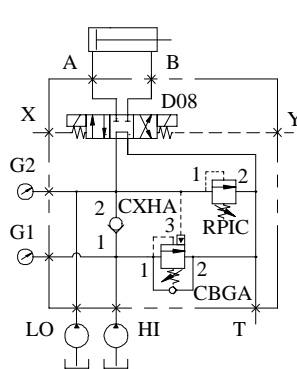
PART NO: MC1008S

MATL: STEEL
PRESSURE: 5000 PSI
FLOW RATE: 80 GPM
CARTRIDGES: SUN CBGA C' BALANCE
SUN CXHA CHECK
SUN RPIC RELIEF
(OR EQUIVALENT)

PORTS: #20 SAE ORB
X, Y, G (GAGE): #6 SAE ORB

5" THICK

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Grapple Rotation Manifold

Without Relief – SAE ORB Ports

PART NO: MC663S

MATL: STEEL

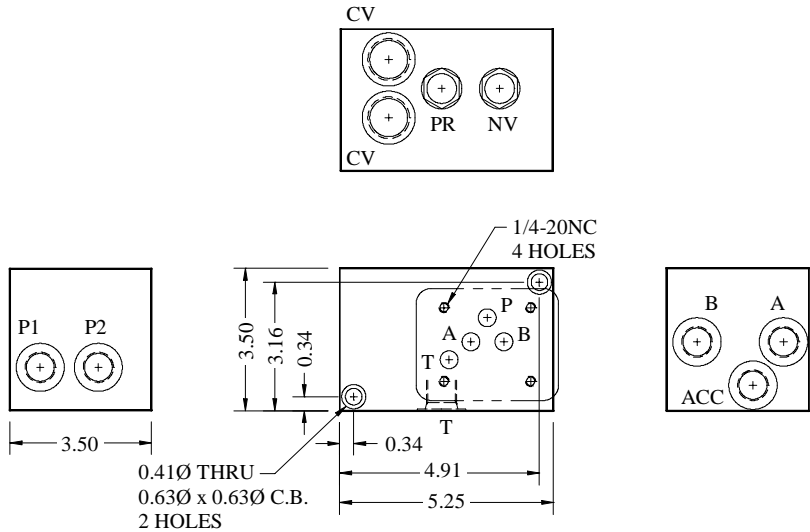
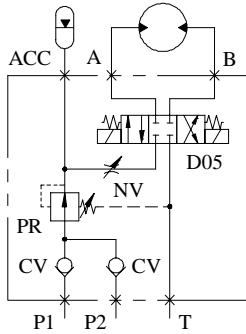
PRESSURE: 5000 PSI

DIRECTIONAL VALVE: (D05) YUKEN DSG-03-3C2-D24-5090
(OR EQUIVALENT)

CARTRIDGES: SUN CXFA-XCN CHECK
SUN PBDB-LAN PRESSURE REDUCING
SUN NFCC-LAN NEEDLE
(OR EQUIVALENT)

PORTS: #8 SAE ORB

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR
RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



With Relief – SAE ORB Ports

PART NO: MC429S

MATL: STEEL

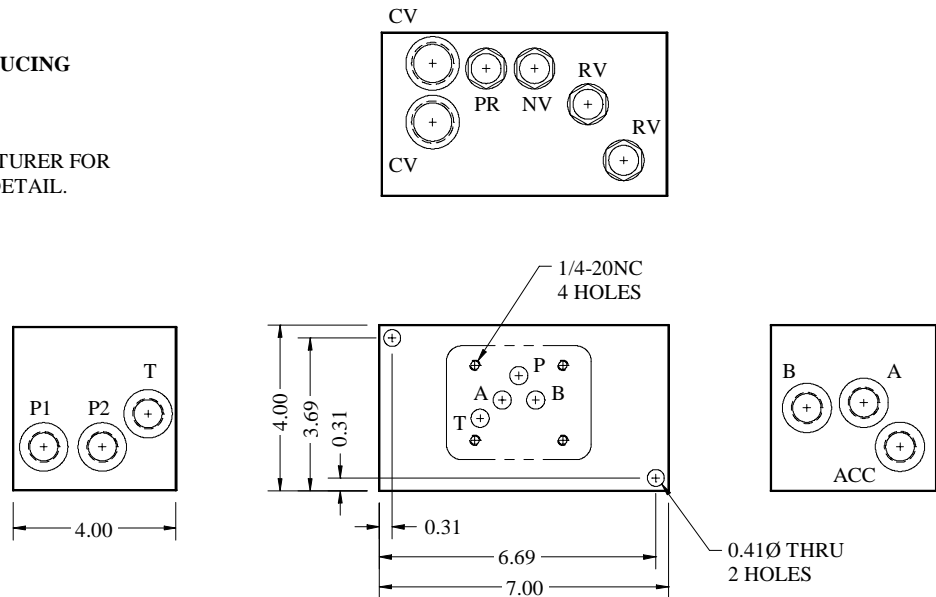
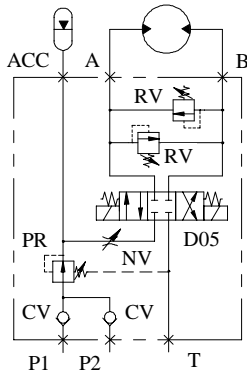
PRESSURE: 5000 PSI

DIRECTIONAL VALVE: (D05) YUKEN DSG-03-3C2-D24-5090
(OR EQUIVALENT)

CARTRIDGES: SUN CXFA-XCN CHECK
SUN RPEC-LAN RELIEF
SUN NFCC-LAN NEEDLE
SUN PBDB-LAN PRESSURE REDUCING
(OR EQUIVALENT)

PORTS: #8 SAE ORB

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR
RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Pump Manifold

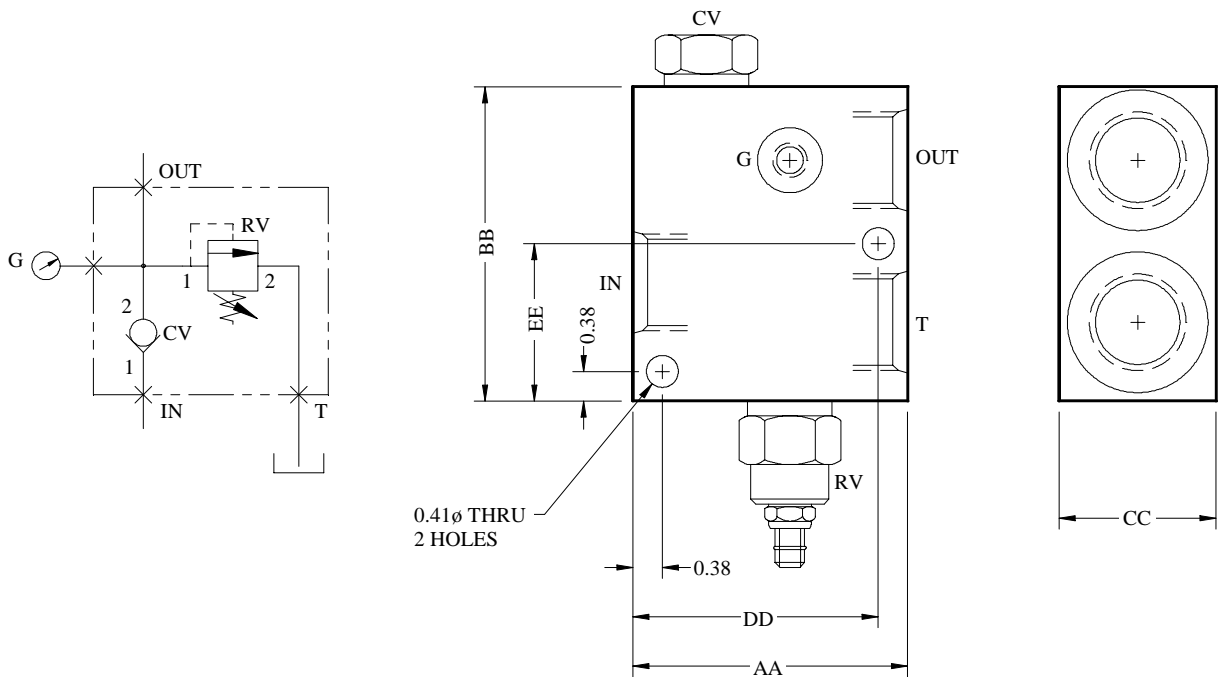
SAE ORB Ports

MATL: STEEL

CARTRIDGES: STD (STANDARD) AND SUN CAVITY (OR EQUIVALENT)
1 IS NOSE OF CARTRIDGE

G (GAGE): #4 SAE ORB

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CV Cavity	Check Flow Rate	RV Cavity	Relief Flow Rate	IN, OUT, T SAE ORB	AA	BB	CC	DD	EE
MB1020S	SUN T-13A	20 GPM	SUN T-10A	25 GPM	#12 (1 1/16-12)	3.00	3.50	2.00	2.63	1.75
MB1022S	SUN T-5A	40 GPM	SUN T-3A	50 GPM	#16 (1 5/16-12)	3.50	4.00	2.00	3.13	2.00
MB1024S	SUN T-16A	80 GPM	SUN T-3A	50 GPM	#20 (1 5/8-12)	4.00	5.00	2.50	3.63	2.50
MB1026S	SUN T-16A	80 GPM	SUN T-16A	100 GPM	#20 (1 5/8-12)	5.00	5.25	2.50	4.63	2.75
MB1021S	STD C-10-2	20 GPM	STD C-10-2	30 GPM	#12 (1 1/16-12)	3.00	3.50	2.00	2.63	1.75
MB1023S	STD C-16-2	40 GPM	STD C-16-2	80 GPM	#16 (1 5/16-12)	4.00	4.00	2.00	3.63	2.00
MB1025S	STD C-20-2	60 GPM	STD C-16-2	80 GPM	#20 (1 5/8-12)	4.75	5.00	2.50	4.38	2.50

Hydrostatic Transmission Manifold

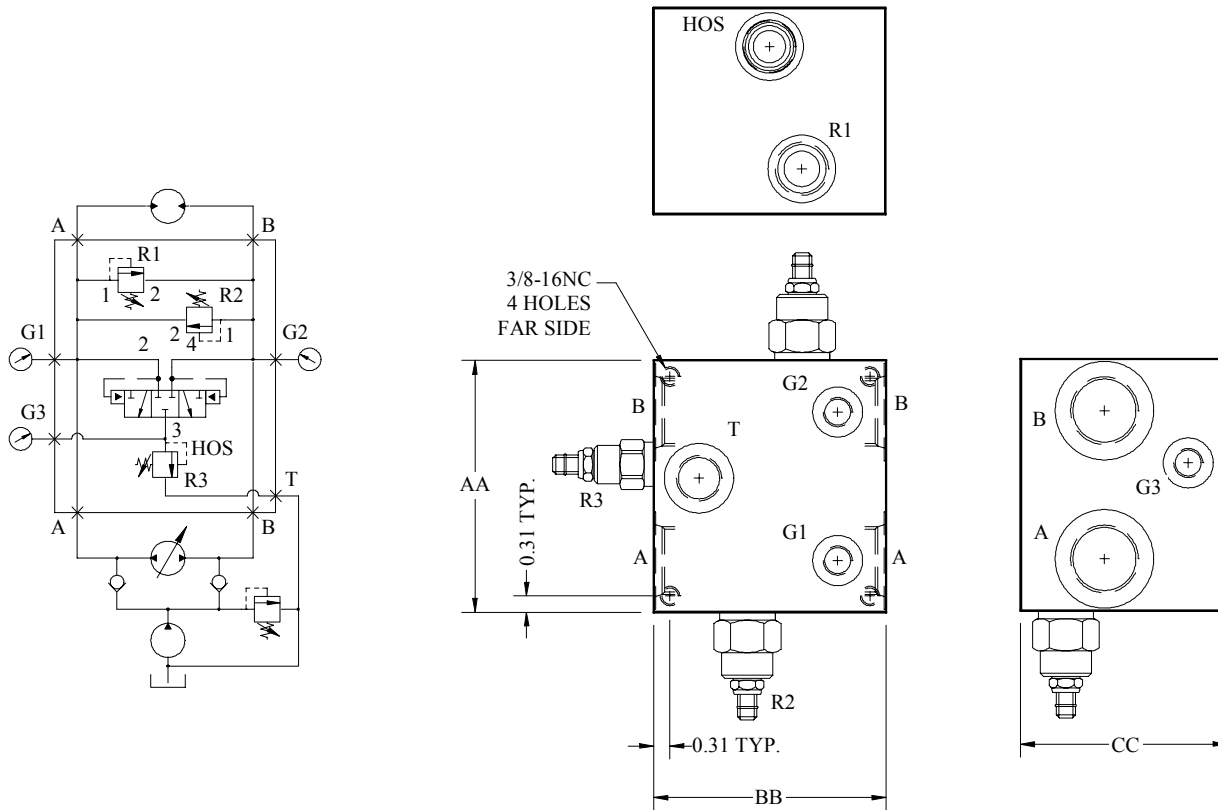
SAE ORB Ports

MATL: STEEL

CARTRIDGES: SUN CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTIGDE

G1, G2, G3 (GAGE): #6 SAE ORB

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	Hot Oil Shuttle	Cross Relief	Shuttle Relief	A, B SAE ORB	T SAE ORB	AA	BB	CC
MB2303S	SUN T-31A	SUN T-10A	SUN T-10A	#12 (1 1/16-12)	#8 (3/4-16)	4.50	4.00	3.00
MB2304S	SUN T-32A	SUN T-3A	SUN T-10A	#16 (1 5/16-12)	#10 (7/8-14)	4.88	4.50	4.00
MB2329S	SUN T-33A	SUN T-16A	SUN T-3A	#24 (1 7/8-12)	#12 (1 1/16-12)	6.19	6.00	4.50

Hydrostatic Transmission Manifold

SAE 4-Bolt Flange Ports

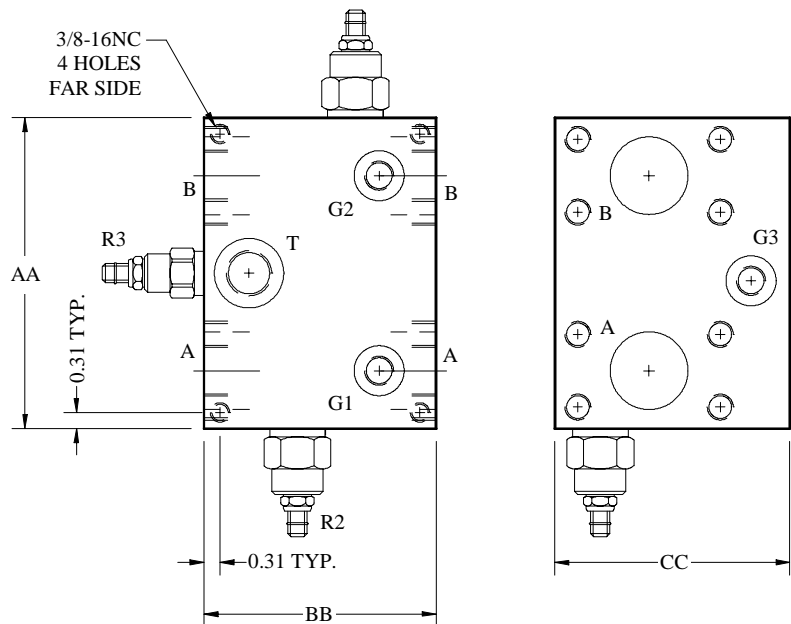
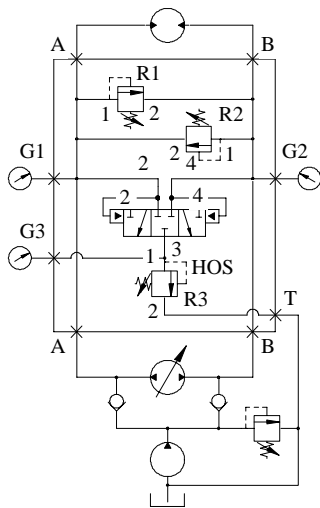
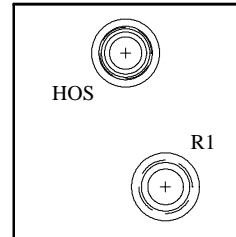
MATL: STEEL

CARTRIDGES: SUN CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

G1, G2, G3 (GAGE): #6 SAE ORB

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.
FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	Hot Oil Shuttle	Cross Relief	Shuttle Relief	A, B SAE 4-BOLT	T SAE ORB	AA	BB	CC
MC1492S	SUN T-33A	SUN T-16A	SUN T-3A	1 1/2 C61	#12 (1 1/16-12)	6.75	5.50	5.00
MC1493S	SUN T-33A	SUN T-16A	SUN T-3A	1 1/2 C62	#12 (1 1/16-12)	7.25	6.00	5.50
MC1494S	SUN T-34A	SUN T-18A	SUN T-16A	1 1/2 C61	#16 (1 5/16-12)	8.25	6.75	6.00
MC1495S	SUN T-34A	SUN T-18A	SUN T-16A	1 1/2 C62	#16 (1 5/16-12)	8.50	7.00	6.00
MC1496S	SUN T-34A	SUN T-18A	SUN T-16A	2 C61	#16 (1 5/16-12)	8.50	6.75	6.00
MC1497S	SUN T-34A	SUN T-18A	SUN T-16A	2 C62	#16 (1 5/16-12)	9.13	7.00	6.00

Thumb Manifold

D05 – SAE ORB Ports

MATL: STEEL

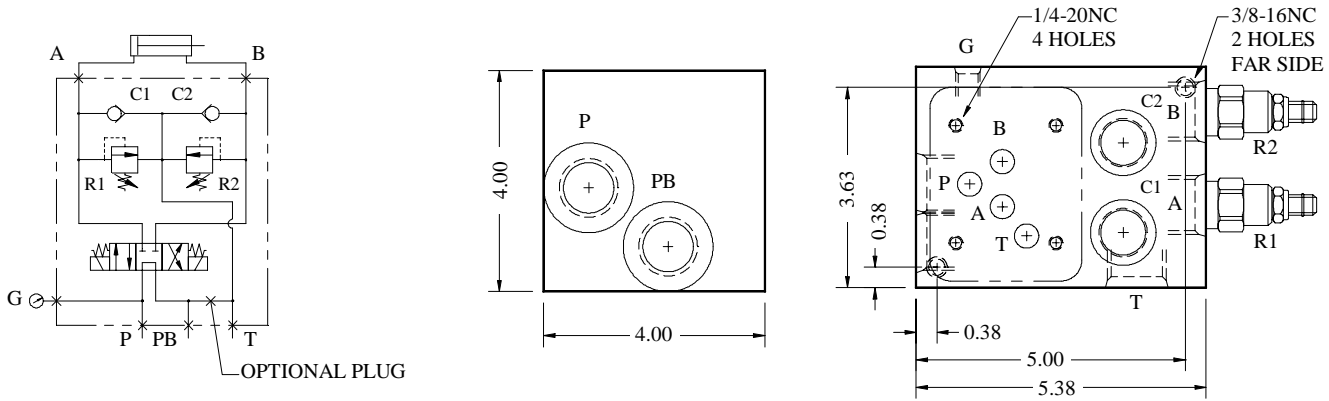
PRESSURE: 5000 PSI

CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
PRESSURE IN FROM NOSE, OUT TO SIDE

PORTS: #12 SAE ORB

G (GAGE): #4 SAE ORB

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED
PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	C1, C2 Check Cavity	Check Flow Rate	R1, R2 Relief Cavity	Relief Flow Rate
MB1074S	SUN T-5A	40 GPM	SUN T-10A	50 GPM
MB1078S	STANDARD C-10-2	20 GPM	STANDARD C-10-2	30 GPM

THIS MANIFOLD IS TO ALLOW AN EXCAVATION THUMB CYLINDER TO BE PUSHED BACK BY THE BUCKET CYLINDER. THE RELIEF VALVE SHOULD BE SET AT THE MINIMUM VALUE REQUIRED TO HOLD THE LOAD. THERE ARE TWO WAYS TO PLUMB THIS MANIFOLD, AS A STRAIGHT VALVE OR POWER BEYOND FUNCTION.

Thumb Manifold

D08 – SAE ORB Ports

MATL: STEEL

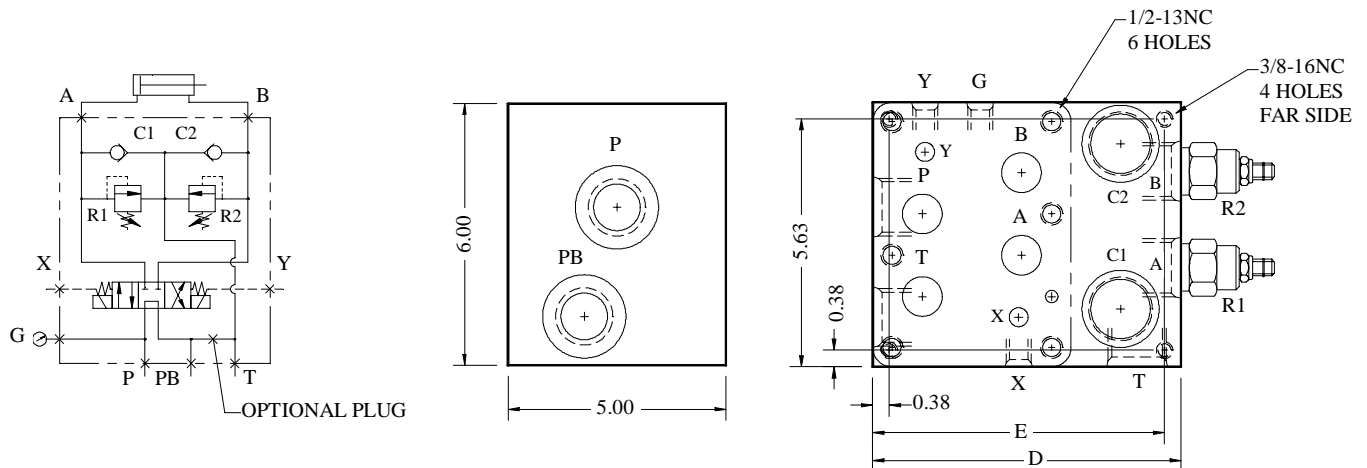
PRESSURE: 5000 PSI

CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
PRESSURE IN FROM NOSE, OUT TO SIDE

PORTS: #16 SAE ORB

X, Y, G (GAGE): #6 SAE ORB

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED
PRESSURE, FLOW RATE AND CAVITY DETAIL



Part No.	C1, C2 Check Cavity	Check Flow Rate	R1, R2 Relief Cavity	Relief Flow Rate	D	E
MC825S	SUN T-16A	80 GPM	SUN T-3A	50 GPM	7.00	6.63
MC999S	STANDARD C-20-2	60 GPM	STANDARD C-16-2	80 GPM	7.63	7.25

THIS MANIFOLD IS TO ALLOW AN EXCAVATION THUMB CYLINDER TO BE PUSHED BACK BY THE BUCKET CYLINDER. THE RELIEF VALVE SHOULD BE SET AT THE MINIMUM VALUE REQUIRED TO HOLD THE LOAD. THERE ARE TWO WAYS TO PLUMB THIS MANIFOLD, AS A STRAIGHT VALVE OR POWER BEYOND FUNCTION.

Two Cavity Manifold

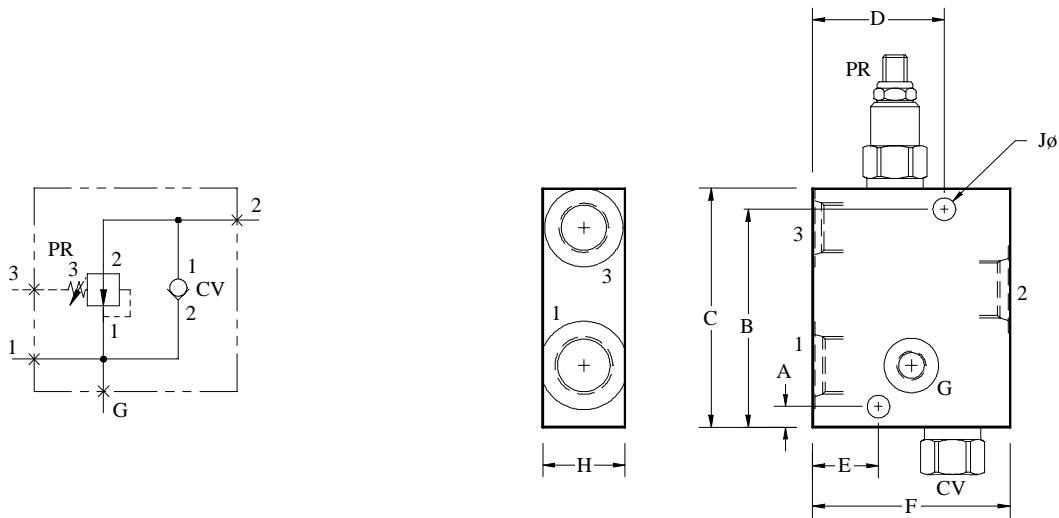
Pressure Reducing and Reducing Relieving with Reverse Free Flow Check SAE ORB Ports

MATL: STEEL

CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

G (GAGE): #4 SAE ORB

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	PR Cavity	CV Cavity	Ports 1, 2 SAE ORB	Port 3 SAE ORB	A	B	C	D	E	F	H	J
MB2495S	STANDARD C-10-3	STANDARD C-10-2	#8 (3/4-16)	#6 (9/16-18)	1.50	2.81	3.13	2.69	0.31	3.00	1.25	0.34
MB2499S	STANDARD C-16-3	STANDARD C-16-2	#20 (1 5/8-12)	#12 (1 1/16-12)	2.50	4.63	5.00	3.75	0.38	4.13	2.50	0.41

Part No.	PR Cavity	CV Cavity	SUN No.	Ports 1, 2 SAE ORB	Port 3 SAE ORB	A	B	C	D	E	F	H	J
MB2498S	SUN T-11A	SUN T-13A	E4K	#10 (7/8-14)	#8 (3/4-16)	0.31	3.31	3.63	2.00	1.00	3.00	1.25	0.34
MB2502S	SUN T-2A	SUN T-5A	B4L	#12 (1 1/16-12)	#10 (7/8-14)	0.38	3.63	4.00	2.38	1.25	3.50	1.50	0.41
MB2506S	SUN T-17A	SUN T-16A	H4N	#20 (1 5/8-12)	#12 (1 1/16-12)	0.38	5.13	5.50	3.50	1.50	4.50	2.50	0.41
MB2510S	SUN T-19A	SUN T-18A	—	#24 (1 7/8-12)	#12 (1 1/16-12)	0.44	6.44	6.88	4.50	2.00	6.00	3.00	0.41



Single Flange

SAE Code 61

SAE Code 62



Single Cavity SAE 4-Bolt Flange Sandwich Code 61

MATL: STEEL

CARTRIDGES: COMPACT, STANDARD, PARKER, SUN AND
VICKERS CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

- G (GAGE): #4 SAE ORB

- COME WITH O' RING AND ONE 'D' PORT PLUGGED

- NORMALLY USED FOR RELIEF,
ACCUMULATOR DRAIN AND FLOW CONTROL.

- FOR DIMENSION OF FLANGE PORTS AND PRESSURE
RATING SEE SPECIFICATIONS ON PAGE 41-12.

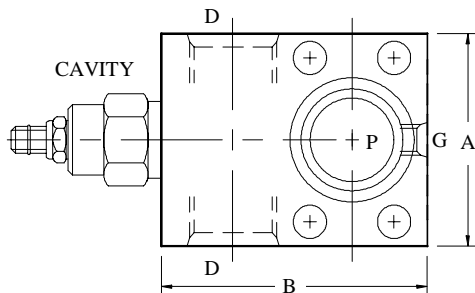
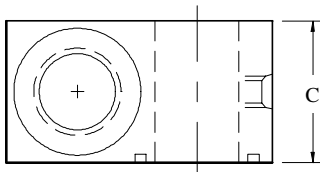
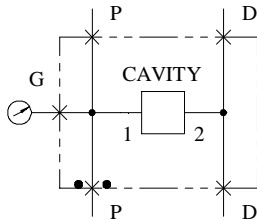
- CONSULT CARTRIDGE MANUFACTURER FOR
RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

- COMPACT CP12-2 CAVITY IS EQUIVALENT TO
HYDRAFORCE VC12-2 CAVITY

- PARKER C12-2 CAVITY IS EQUIVALENT TO
OILGEAR HS800-2 CAVITY

'C-' Standard Cavity For:

Compact
Danfoss
Delta
Hydraforce
Vickers
Parker
Sterling



Part No.	P Flange Code 61	Cavity	D SAE ORB	A	B	C
MB1477S	3/4	STANDARD C-10-2	#12 (1 1/16-12)	2.75	3.00	1.50
MB1476S	3/4	SUN T-10A	#12 (1 1/16-12)	2.75	3.00	1.50
MB1901S	3/4	SUN T-13A	#12 (1 1/16-12)	2.75	3.00	1.50
MB1837S	1	STANDARD C-10-2	#12 (1 1/16-12)	3.00	3.25	1.50
MB1902S	1	VICKERS C-12-2	#16 (1 5/16-12)	3.13	3.50	2.00
MB1906S	1	COMPACT CP12-2	#16 (1 5/16-12)	3.13	3.50	2.00
MB1910S	1	PARKER C12-2	#16 (1 5/16-12)	3.13	3.50	2.00
MB1031S	1	STANDARD C-16-2	#16 (1 5/16-12)	3.25	4.00	2.00
MB1795S	1	SUN T-13A	#8 (3/4-16)	2.75	3.00	1.25
MB1843S	1	SUN T-13A	#12 (1 1/16-12)	3.00	3.25	1.50
MB1829S	1	SUN T-5A	#12 (1 1/16-12)	3.00	3.25	1.50
MB1030S	1	SUN T-3A	#12 (1 1/16-12)	2.75	3.50	1.50
MB1838S	1 1/4	STANDARD C-10-2	#12 (1 1/16-12)	3.25	3.50	1.50
MB1903S	1 1/4	VICKERS C-12-2	#16 (1 5/16-12)	3.25	4.00	2.00
MB1907S	1 1/4	COMPACT CP12-2	#16 (1 5/16-12)	3.25	4.00	2.00
MB1911S	1 1/4	PARKER C12-2	#16 (1 5/16-12)	3.25	4.00	2.00
MB1033S	1 1/4	STANDARD C-16-2	#16 (1 5/16-12)	3.25	4.00	2.00
MB1914S	1 1/4	SUN T-13A	#12 (1 1/16-12)	3.00	3.50	1.50
MB1830S	1 1/4	SUN T-5A	#16 (1 5/16-12)	3.00	3.81	2.00
MB1032S	1 1/4	SUN T-3A	#16 (1 5/16-12)	3.00	3.75	2.00
MB1839S	1 1/2	STANDARD C-10-2	#12 (1 1/16-12)	3.75	4.00	1.50
MB1904S	1 1/2	VICKERS C-12-2	#16 (1 5/16-12)	4.00	4.13	2.00
MB1908S	1 1/2	COMPACT CP12-2	#16 (1 5/16-12)	4.00	4.13	2.00
MB1912S	1 1/2	PARKER C12-2	#16 (1 5/16-12)	4.00	4.13	2.00
MB1915S	1 1/2	STANDARD C-16-2	#16 (1 5/16-12)	4.00	4.13	2.00
MB1831S	1 1/2	SUN T-5A	#16 (1 5/16-12)	4.00	4.13	2.00
MB1916S	1 1/2	SUN T-3A	#16 (1 5/16-12)	4.00	4.13	2.00
MB1034S	1 1/2	SUN T-16A	#20 (1 5/8-12)	4.00	4.63	2.50
MB1840S	2	STANDARD C-10-2	#12 (1 1/16-12)	4.00	4.25	1.50
MB1905S	2	VICKERS C-12-2	#16 (1 5/16-12)	4.00	4.50	2.00
MB1909S	2	COMPACT CP12-2	#16 (1 5/16-12)	4.00	4.50	2.00
MB1913S	2	PARKER C12-2	#16 (1 5/16-12)	4.00	4.50	2.00
MB1524S	2	STANDARD C-16-2	#16 (1 1/16-12)	4.00	4.63	2.00
MB1832S	2	SUN T-5A	#16 (1 1/16-12)	4.00	4.50	2.00
MB1035S	2	SUN T-16A	#20 (1 5/8-12)	4.00	5.25	2.50

Single Cavity SAE 4-Bolt Flange Sandwich Code 62

MATL: STEEL

CARTRIDGES: COMPACT, STANDARD, PARKER, SUN AND
VICKERS CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

- G (GAGE): #4 SAE ORB

- COME WITH O' RING AND ONE 'D' PORT PLUGGED

- NORMALLY USED FOR RELIEF,
ACCUMULATOR DRAIN AND FLOW CONTROL.

- FOR DIMENSION OF FLANGE PORTS AND PRESSURE
RATING SEE SPECIFICATIONS ON PAGE 41-12.

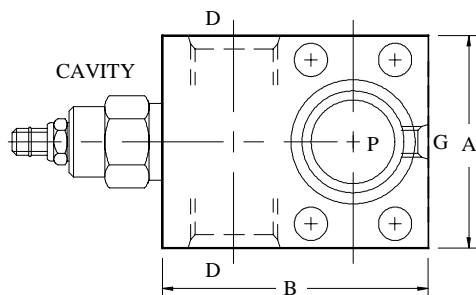
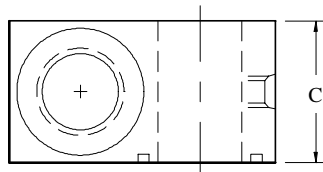
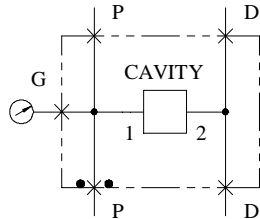
- CONSULT CARTRIDGE MANUFACTURER FOR
RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

- COMPACT CP12-2 CAVITY IS EQUIVALENT TO
HYDRAFORCE VC12-2 CAVITY

- PARKER C12-2 CAVITY IS EQUIVALENT TO
OILGEAR HS800-2 CAVITY

'C-' Standard Cavity For:

Compact
Danfoss
Delta
Hydraforce
Vickers
Parker
Sterling



Part No.	P Flange Code 62	Cavity	D SAE ORB	A	B	C
MB1479S	3/4	STANDARD C-10-2	#12 (1 1/16-12)	3.00	3.19	1.50
MB1478S	3/4	SUN T-10A	#12 (1 1/16-12)	3.00	3.19	1.50
MB1917S	3/4	SUN T-13A	#12 (1 1/16-12)	3.00	3.19	1.50
MB1841S	1	STANDARD C-10-2	#12 (1 1/16-12)	3.00	3.44	1.50
MB1920S	1	VICKERS C-12-2	#16 (1 5/16-12)	3.50	3.75	2.00
MB1924S	1	COMPACT CP12-2	#16 (1 5/16-12)	3.50	3.75	2.00
MB1928S	1	PARKER C12-2	#16 (1 5/16-12)	3.50	3.75	2.00
MB1037S	1	STANDARD C-16-2	#16 (1 5/16-12)	3.25	4.00	2.00
MB1791S	1	SUN T-13A	#8 (3/4-16)	3.00	3.25	1.25
MB1918S	1	SUN T-13A	#12 (1 1/16-12)	3.00	3.44	1.50
MB1833S	1	SUN T-5A	#12 (1 1/16-12)	3.00	3.50	1.50
MB1036S	1	SUN T-3A	#12 (1 1/16-12)	3.00	3.63	1.50
MB1932S	1 1/4	STANDARD C-10-2	#12 (1 1/16-12)	3.50	3.69	1.50
MB1921S	1 1/4	VICKERS C-12-2	#16 (1 5/16-12)	3.50	4.00	2.00
MB1925S	1 1/4	COMPACT CP12-2	#16 (1 5/16-12)	3.50	4.00	2.00
MB1929S	1 1/4	PARKER C12-2	#16 (1 5/16-12)	3.50	4.00	2.00
MB1039S	1 1/4	STANDARD C-16-2	#16 (1 5/16-12)	3.50	4.00	2.00
MB1919S	1 1/4	SUN T-13A	#12 (1 1/16-12)	3.50	3.69	1.50
MB1834S	1 1/4	SUN T-5A	#16 (1 5/16-12)	3.50	4.00	2.00
MB1038S	1 1/4	SUN T-3A	#16 (1 5/16-12)	3.50	4.00	2.00
MB1933S	1 1/2	STANDARD C-10-2	#12 (1 1/16-12)	4.25	4.00	1.50
MB1922S	1 1/2	VICKERS C-12-2	#16 (1 5/16-12)	4.25	4.50	2.00
MB1926S	1 1/2	COMPACT CP12-2	#16 (1 5/16-12)	4.25	4.50	2.00
MB1930S	1 1/2	PARKER C12-2	#16 (1 5/16-12)	4.25	4.50	2.00
MB1844S	1 1/2	STANDARD C-16-2	#16 (1 5/16-12)	4.25	4.50	2.00
MB1835S	1 1/2	SUN T-5A	#16 (1 5/16-12)	4.25	4.50	2.00
MB1934S	1 1/2	SUN T-3A	#16 (1 5/16-12)	4.25	4.50	2.00
MB1040S	1 1/2	SUN T-16A	#20 (1 5/8-12)	4.25	5.00	2.50
MB1842S	2	STANDARD C-10-2	#12 (1 1/16-12)	5.00	4.63	1.50
MB1923S	2	VICKERS C-12-2	#16 (1 5/16-12)	5.00	4.88	2.00
MB1927S	2	COMPACT CP12-2	#16 (1 5/16-12)	5.00	4.88	2.00
MB1931S	2	PARKER C12-2	#16 (1 5/16-12)	5.00	4.88	2.00
MB1845S	2	STANDARD C-16-2	#16 (1 1/16-12)	5.00	5.00	2.00
MB1836S	2	SUN T-5A	#16 (1 1/16-12)	5.00	5.00	2.00
MB1041S	2	SUN T-16A	#20 (1 5/8-12)	5.00	5.25	2.50

Two Port Cavity with Seal Plate

SAE 4-Bolt Flange In-line Mount

MATL: STEEL

CARTRIDGES: SUN CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTIDGE

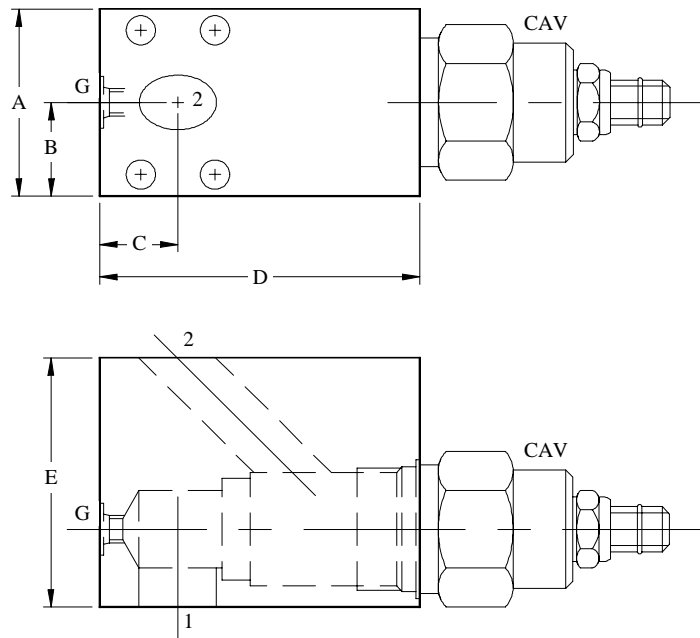
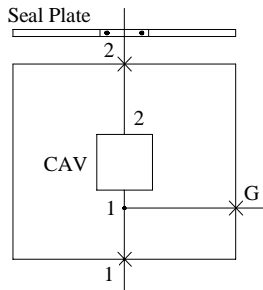
G (GAGE): #4 SAE ORB

COMPLETE WITH O'RING AND SEAL PLATE

SEAL PLATE TO BE PLACED ON FACE '1' OR FACE '2' DEPENDING ON FLOW DIRECTION.

FOR DIMENSIONS ON FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CAV Cavity	Ports 1 & 2 SAE 4-BOLT	A	B	C	D	E	Seal Plate Part No.
MB2537S	SUN T-13A	3/4 C61	2.50	1.25	0.94	2.75	2.00	MB2563-2
MB2538S	SUN T-5A	3/4 C61	2.50	1.25	0.88	3.00	2.25	MB2563-2
MB2539S	SUN T-16A	1 C61	2.75	1.38	1.06	4.13	3.00	MB2563-3
MB2540S	SUN T-18A	1 1/4 C61	3.00	1.50	1.25	5.00	4.00	MB2563-4
MB2541S	STANDARD C-10-2	3/4 C61	2.50	1.25	0.88	2.63	2.00	MB2563-2
MB2542S	STANDARD C-16-2	1 C61	2.75	1.38	1.13	3.50	3.00	MB2563-3
MB2543S	STANDARD C-20-2	1 1/4 C61	3.00	1.50	1.25	4.25	3.50	MB2563-4

Three-Port Cavity with Seal Plate

SAE 4-Bolt Flange In-line Mount

MATL: STEEL

CARTRIDGES: SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTIDGE

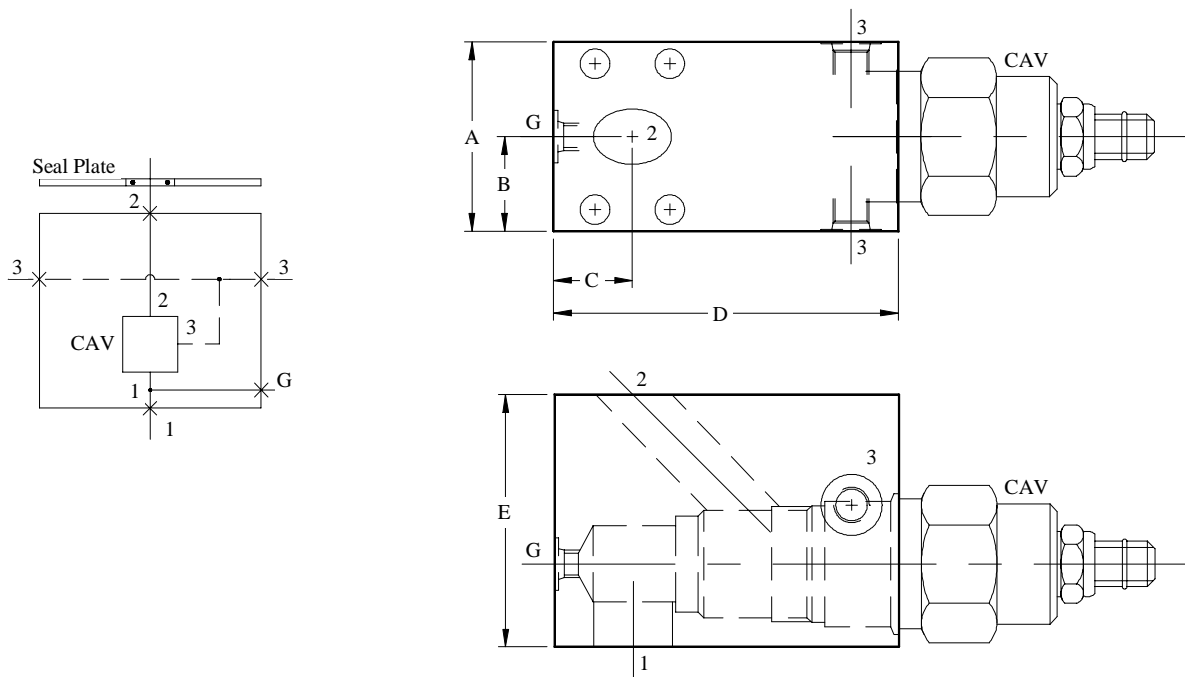
G (GAGE): #4 SAE ORB

COMPLETE WITH O’RING AND SEAL PLATE

SEAL PLATE TO BE PLACED ON FACE ‘1’ OR FACE ‘2’ DEPENDING ON FLOW DIRECTION.

FOR DIMENSIONS ON FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CAV Cavity	Port 1 SAE 4-BOLT	Port 2 SAE 4-BOLT	Port 3 SAE ORB	A	B	C	D	E	Seal Plate Part No.
MB2255S	SUN T-11A	1/2 C61	1/2 C61	# 6 (9/16-18)	2.00	1.00	0.75	3.13	2.00	MB2563-1
MB2256S	SUN T-2A	3/4 C61	3/4 C61	# 6 (9/16-18)	2.50	1.25	0.88	3.38	2.50	MB2563-2
MB2257S	SUN T-17A	1 C61	1 C61	# 6 (9/16-18)	2.75	1.38	1.13	4.38	3.00	MB2563-3
MB2258S	SUN T-19A	1 1/4 C61	1 1/4 C61	# 6 (9/16-18)	3.00	1.50	1.25	5.75	4.00	MB2563-4
MB2535S	STANDARD C-10-3	1/2 C61	1/2 C61	# 6 (9/16-18)	2.00	1.00	0.69	2.88	1.75	MB2563-1
MB2536S	STANDARD C-16-3	3/4 C61	3/4 C61	# 6 (9/16-18)	2.50	1.25	1.00	4.38	3.00	MB2563-2

Single Cavity

SAE 4-Bolt Flange Mount

MATL: STEEL

CARTRIDGES: SUN CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

THIS BODY IS TYPICALLY USED FOR COUNTER BALANCE, PILOT CHECK, VENTABLE RELIEF AND SEQUENCE.

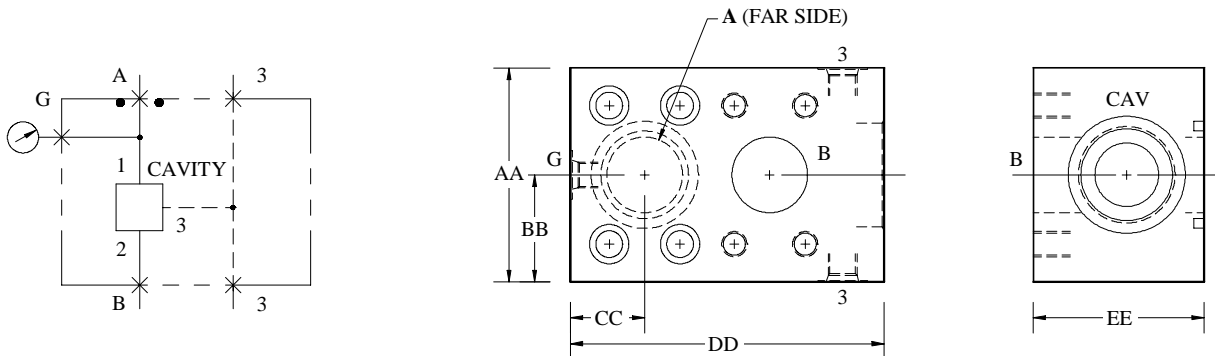
G (GAGE): #4 SAE ORB

PORT '3': #6 SAE ORB

COMPLETE WITH O' RING, BOLT KIT AND ONE 'PILOT/ DRAIN' PORT PLUGGED.

FOR DIMENSION OF FLANGE PORTS SEE SPECIFICATIONS ON PAGE 41-12.
FLANGE MOUNTING HOLES ARE IN INCHES.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOWRATE AND CAVITY DETAIL.



Part No.	'A' O' Ring	'B' Companion	CAV Cavity	AA	BB	CC	DD	EE
MB2139S	3/4 C61	3/4 C61	SUN T-17A	3.00	1.50	0.88	4.25	2.50
MB2140S	1 C61	1 C61	SUN T-17A	3.00	1.50	1.00	4.50	2.50
MB2141S	1 1/4 C61	1 1/4 C61	SUN T-17A	3.50	1.75	1.13	4.88	2.50
MB2142S	3/4 C62	3/4 C62	SUN T-17A	3.00	1.50	1.00	4.44	2.50
MB2143S	1 C62	1 C62	SUN T-17A	3.50	1.75	1.13	4.88	2.50
MB2144S	1 1/4 C62	1 1/4 C62	SUN T-17A	4.00	2.00	1.25	5.13	2.50
MB2145S	1 1/4 C61	1 1/4 C61	SUN T-19A	3.50	1.75	1.13	5.56	3.00
MB2146S	1 1/2 C61	1 1/2 C61	SUN T-19A	4.00	2.00	1.31	6.06	3.00
MB2147S	1 1/4 C62	1 1/4 C62	SUN T-19A	4.00	2.00	1.25	5.81	3.00
MB2148S	1 1/2 C62	1 1/2 C62	SUN T-19A	4.50	2.25	1.44	6.38	3.00

Cylinder Mount – Directional Valve

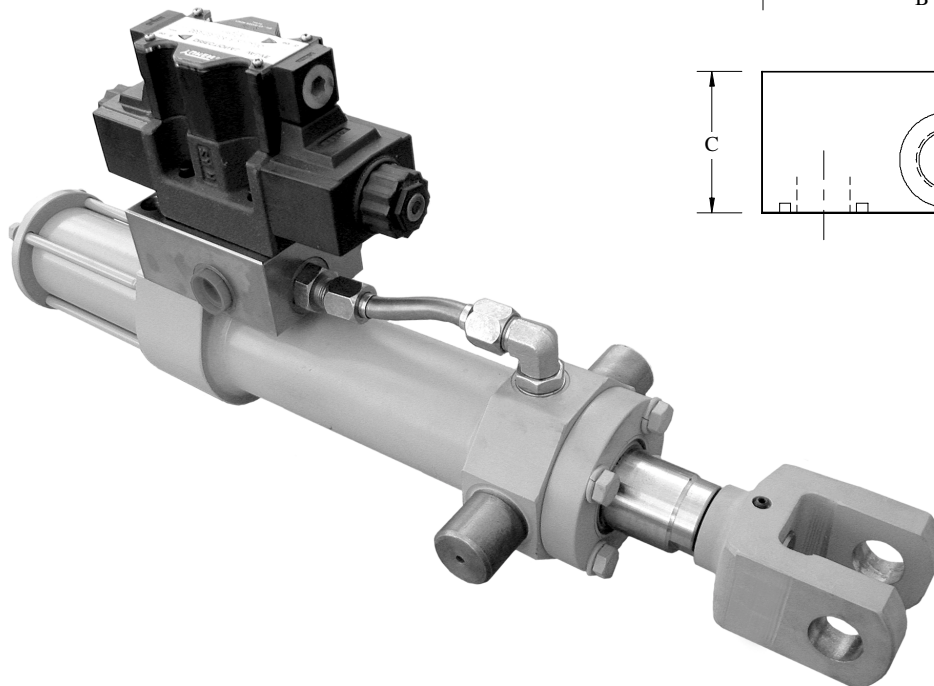
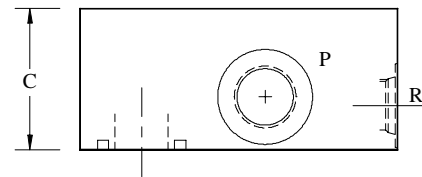
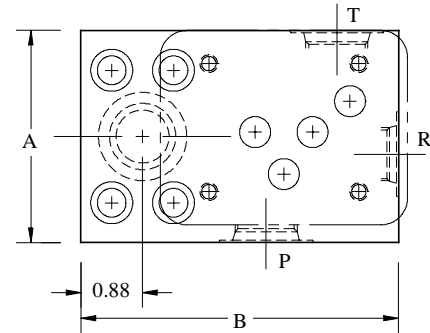
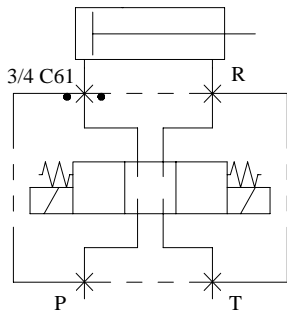
3/4 Code 61 SAE 4-Bolt Flange Mount

MATL: STEEL

COMPLETE WITH O'RING AND BOLT KIT

FOR DIMENSIONS OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

CONSULT CARTRIDGE AND VALVE MANUFACTURER FOR RATED PRESSURE, FLOWRATE AND CAVITY DETAIL.



Part No.	Directional Valve	Rod Port SAE ORB	P & T Ports SAE ORB	A	B	C
MB2402S	D05	#8 (3/4-16)	#10 (7/8-14)	3.00	4.50	2.00
MB2405S	MOOG 62-100	#8 (3/4-16)	#12 (1 1/16-12)	3.50	4.00	2.00
MB2403S	MOOG 62-300	#12 (1 1/16-12)	#16 (1 5/16-12)	3.63	4.00	2.00
MB2406S	MOOG 78	#16 (1 5/16-12)	#20 (1 5/8-12)	3.50	5.75	2.50
MB2404S	ATCHLEY 242	#16 (1 5/16-12)	#20 (1 5/8-12)	3.75	4.00	2.50

Cylinder Mount – Single Counter Balance

SAE Code 61 4-Bolt Flange Mount

MATL: STEEL

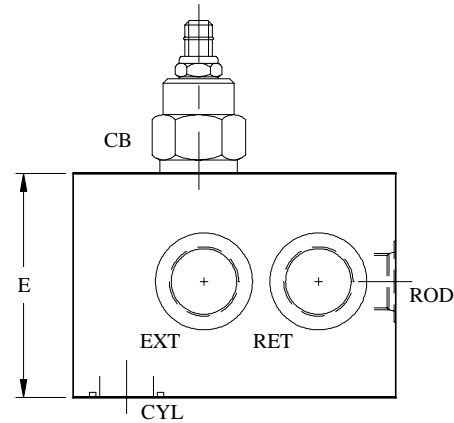
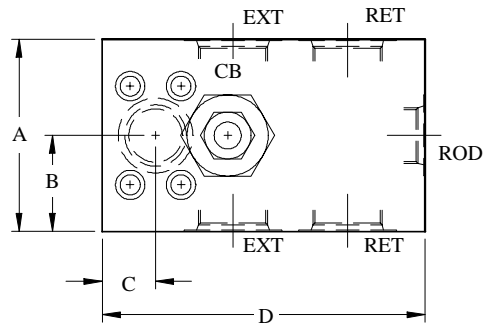
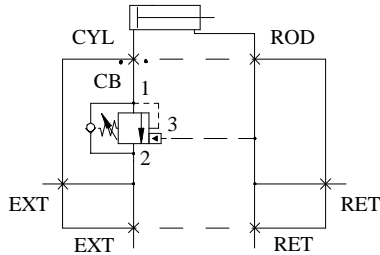
CARTRIDGES: SUN CAVITY (OR EQUIVALENT), '1' IS NOSE OF CARTRIDGE

COMPLETE WITH O' RING AND BOLT KIT.

FOR DIMENSION OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

REPLACE OLD MODEL, SAME FUNCTION BUT DIFFERENT PORT AND CARTRIDGE ORIENTATION. FOR DETAILS SEE PREVIOUS CATALOG.



New Model Part No.	Old Model Part No.	EXT & RET SAE ORB	ROD SAE ORB	CYL Port SAE 4-Bolt	CB Cavity	A	B	C	D	E
MB2381S	MB1012S	#8 (3/4-16)	#8 (3/4-16)	1/2 C61	SUN T-11A	2.00	1.00	0.72	4.00	3.00
MB2382S	MB1013S	#12 (1 1/16-12)	#8 (3/4-16)	3/4 C61	SUN T-2A	3.00	1.50	0.88	4.88	3.00
MB2383S	MB1014S	#16 (1 5/16-12)	#12 (1 1/16-12)	1 C61	SUN T-17A	3.50	1.75	1.06	6.00	4.00
MB2384S	MB1015S	#20 (1 5/8-12)	#16 (1 5/16-12)	1 1/4 C61	SUN T-19A	4.50	2.25	1.25	7.25	5.25

Cylinder Mount – Dual Counter Balance

SAE Code 61 4-Bolt Flange Mount

MATL: STEEL

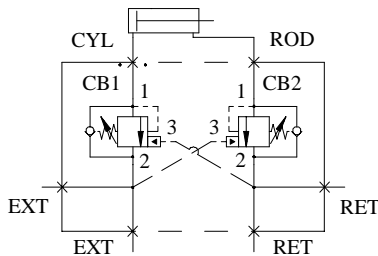
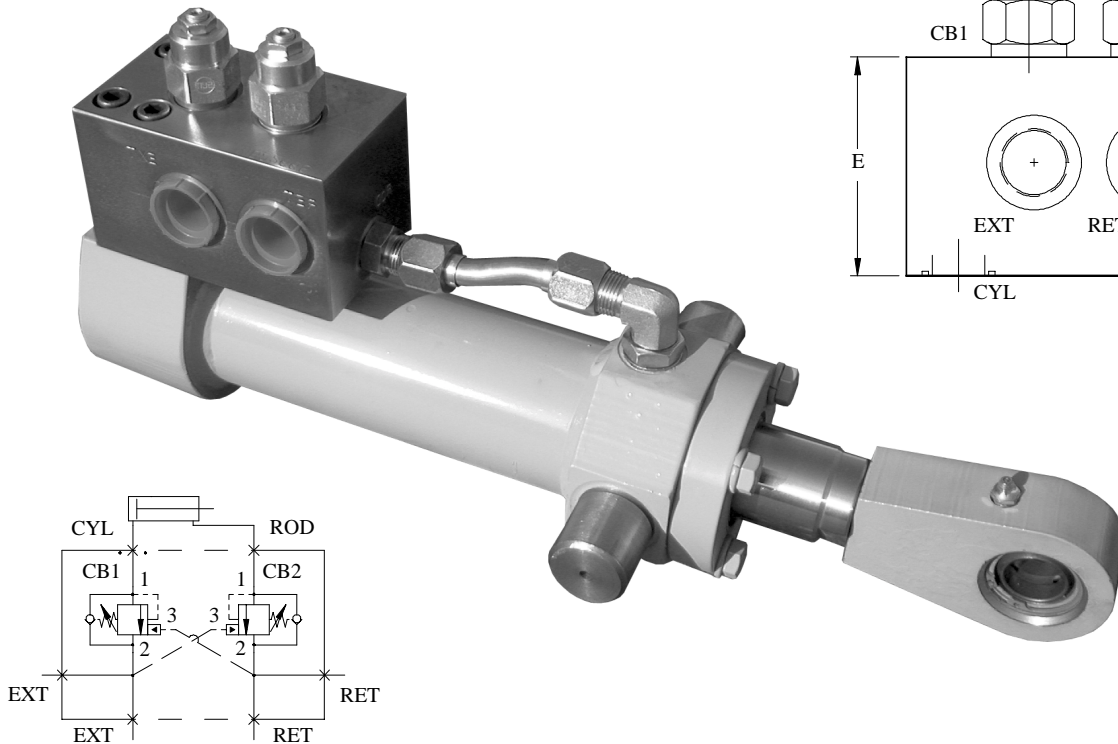
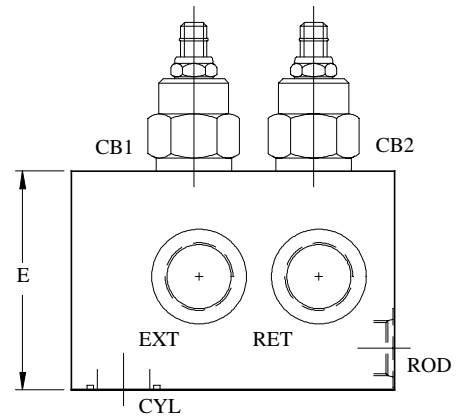
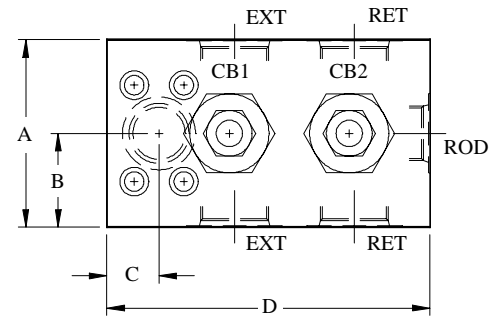
CARTRIDGES: SUN CAVITY (OR EQUIVALENT), '1' IS NOSE OF CARTRIDGE

COMPLETE WITH O' RING AND BOLT KIT.

FOR DIMENSION OF FLANGE PORTS AND PRESSURE RATING SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.

REPLACE OLD MODEL, SAME FUNCTION BUT DIFFERENT PORT AND CARTRIDGE ORIENTATION. FOR DETAILS SEE PREVIOUS CATALOG.



New Model Part No.	Old Model Part No.	EXT & RET SAE ORB	ROD SAE ORB	CYL Port SAE 4-Bolt	CB1, CB2 Cavity	A	B	C	D	E
MB2265S	MB1016S	#8 (3/4-16)	#8 (3/4-16)	1/2 C61	SUN T-11A	2.00	1.00	0.72	4.13	3.00
MB2266S	MB1017S	#12 (1 1/16-12)	#8 (3/4-16)	3/4 C61	SUN T-2A	3.00	1.50	0.88	5.00	3.00
MB2267S	MB1018S	#16 (1 5/16-12)	#12 (1 1/16-12)	1 C61	SUN T-17A	3.50	1.75	1.06	6.38	4.00
MB2268S	MB1019S	#20 (1 5/8-12)	#16 (1 5/16-12)	1 1/4 C61	SUN T-19A	4.50	2.25	1.25	7.75	5.25

Tank Mounted Manifold

SAE Code 61 4-Bolt Flange Mount

MATL: STEEL

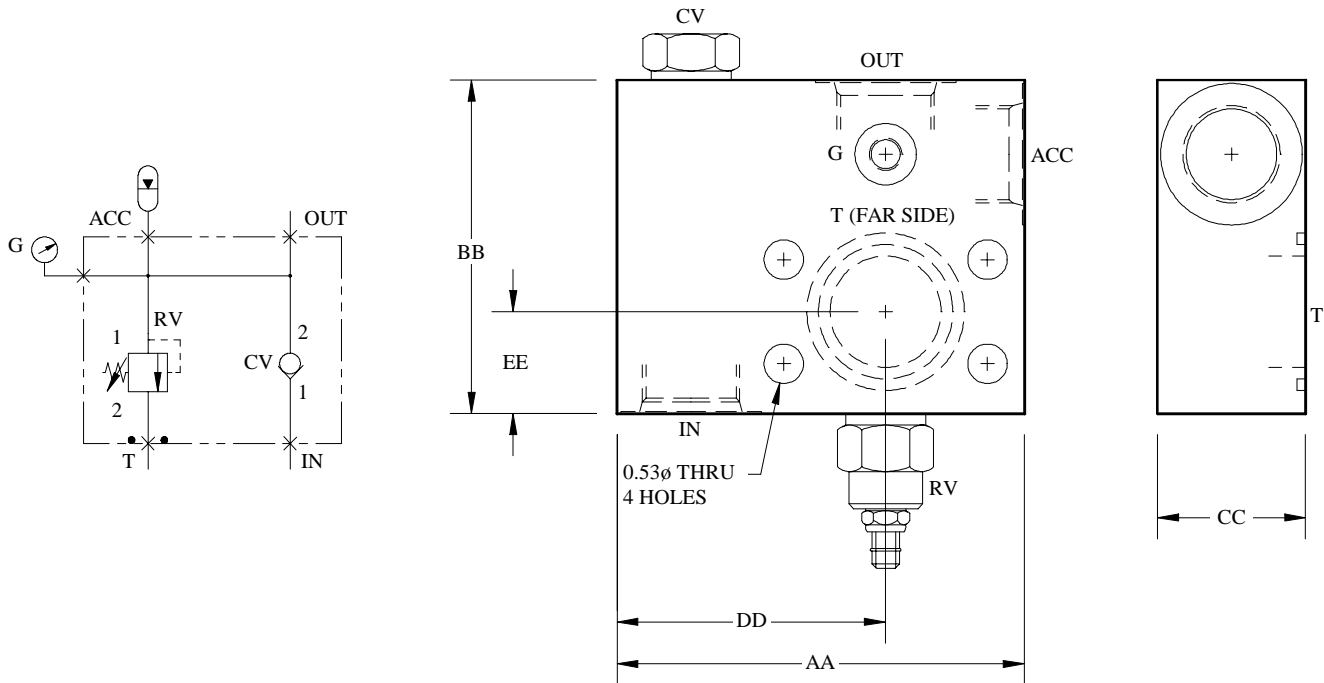
CARTRIGES: SUN AND STANDARD CAVITY (OR EQUIVALENT)
'1' IS NOSE OF CARTRIDGE

G (GAGE): #4 SAE ORB

COMPLETE WITH O' RING AND BOLT KIT.

FOR DIMENSIONS OF FLANGE PORTS SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CV Check	Check Flow	RV Relief	Relief Flow	T SAE 4-BOLT	IN, OUT, ACC	AA	BB	CC	DD	EE
MB1106S	SUN T-5A	40 GPM	SUN T-10A	25 GPM	1 1/2 C61	#16 (1 5/16-12)	5.50	4.50	2.00	3.63	1.38
MB1107S	STD C-16-2	40 GPM	STD C-10-2	20 GPM	1 1/2 C61	#16 (1 5/16-12)	5.50	4.50	2.00	3.63	1.38
MB1108S	SUN T-16A	80 GPM	SUN T-3A	50 GPM	2 C61	#20 (1 5/8-12)	6.00	5.00	2.50	4.00	1.56
MB1109S	STD C-20-2	80 GPM	STD C-16-2	40 GPM	2 C61	#20 (1 5/8-12)	6.00	5.00	2.50	4.00	1.56

Tank Mounted Manifold

SAE Code 61 4-Bolt Flange Mount With Accumulator Dump

MATL: STEEL

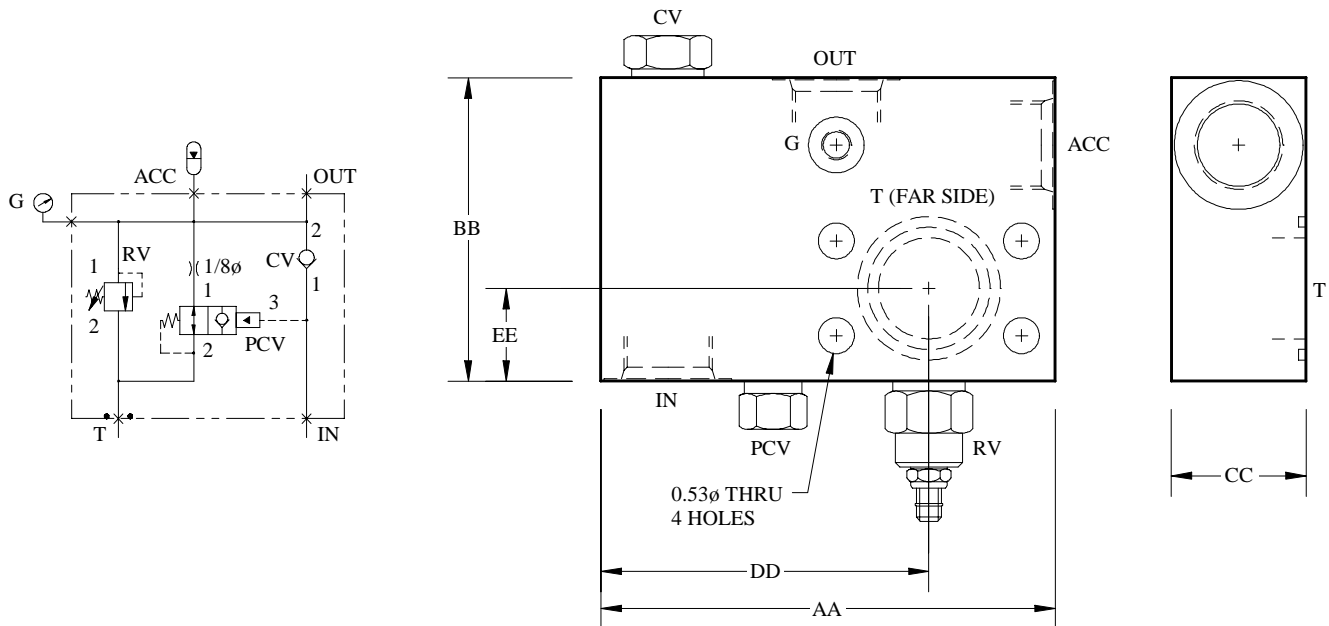
CARTRIGES: SUN AND STANDARD CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE

G (GAGE): #4 SAE ORB

COMPLETE WITH O’ RING AND BOLT KIT.

FOR DIMENSIONS OF FLANGE PORTS SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	CV Check	Check Flow	RV Relief	Relief Flow	PCV Pilot Check Cavity	T SAE 4-BOLT	IN, OUT, ACC SAE ORB	AA	BB	CC	DD	EE
MB1110S	SUN T-5A	40 GPM	SUN T-10A	25 GPM	SUN T-11A	1 1/2 C61	#16 (1 5/16-12)	6.75	4.50	2.00	4.88	1.38
MB1111S	STD C-16-2	40 GPM	STD C-10-2	20 GPM	STD C-10-3	1 1/2 C61	#16 (1 5/16-12)	6.75	4.50	2.00	4.88	1.38
MB1112S	SUN T-16A	80 GPM	SUN T-3A	50 GPM	SUN T-11A	2 C61	#20 (1 5/8-12)	7.50	5.00	2.50	5.50	1.56
MB1113S	STD C-20-2	80 GPM	STD C-16-2	40 GPM	STD C-10-3	2 C61	#20 (1 5/8-12)	7.50	5.00	2.50	5.50	1.56

Pump Manifold

SAE 4-Bolt Flange Mount

MATL: STEEL

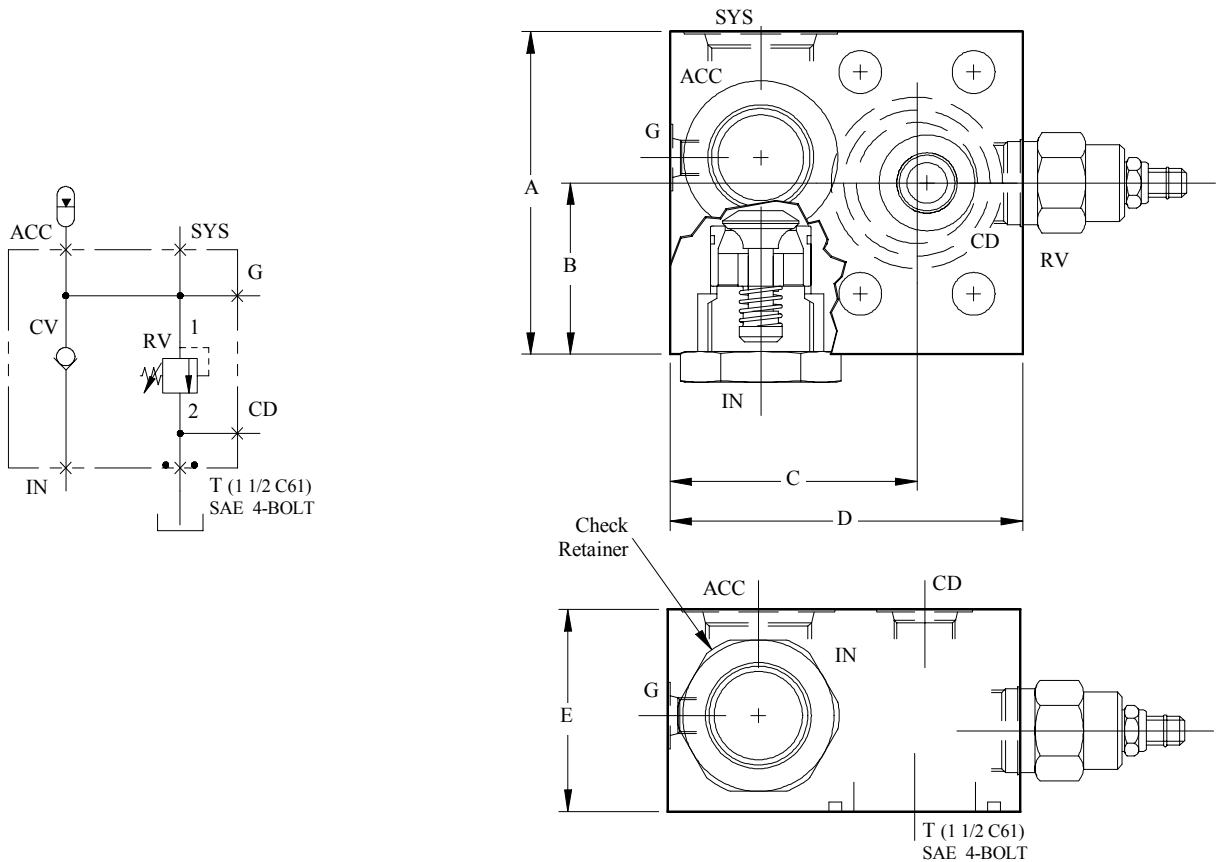
CARTRIDGES: COMPACT, PARKER, STANDARD, SUN AND VICKERS CAVITY (OR EQUIVALENT)
1 IS NOSE OF CARTRIDGE.

GAGE PORTS: #4 SAE ORB

COMPLETE WITH O-RING, BOLT KIT, AND SEALUM CHECK.

FOR DIMENSIONS OF FLANGES AND PRESSURE RATING SEE PAGE 41-12.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL.



Part No.	Sealum Check	RV Relief	In, Out Sys.	CD	A	B	C	D	E
MB2259S	1 1/4	SUN T-3A	#16 (1 5/16-12)	#8 (3/4-16)	4.00	2.13	3.06	4.38	2.50
MB2260S	1 1/4	PARKER C12-2	#16 (1 5/16-12)	#8 (3/4-16)	4.00	2.13	3.06	4.38	2.50
MB2261S	1 1/4	COMPACT CP12-2	#16 (1 5/16-12)	#8 (3/4-16)	4.00	2.13	3.06	4.38	2.50
MB2262S	1 1/4	VICKERS C-12-2	#16 (1 5/16-12)	#8 (3/4-16)	4.00	2.13	3.06	4.38	2.50
MB2263S	1 1/2	SUN T-3A	#20 (1 5/8-12)	#8 (3/4-16)	4.50	2.63	3.19	4.50	2.50
MB2264S	1 1/2	STANDARD C-16-2	#20 (1 5/8-12)	#8 (3/4-16)	4.50	2.63	3.19	4.50	2.50

Multiple Flange

Calzoni Motor - Cross Relief

Hydrostar KYB Motor - Cross Relief

Staffa Motor - Cross Relief



Hydrostar KYB Motor Manifold – Cross Relief

Direct Mount

MATL: STEEL

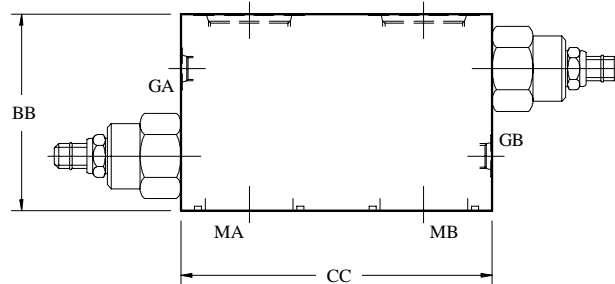
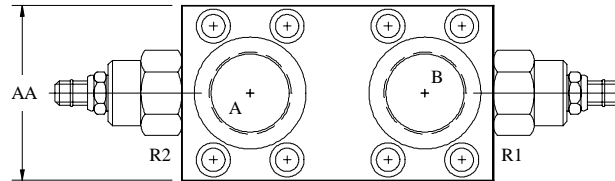
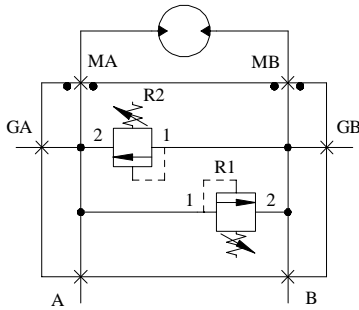
CARTRIDGES: COMPACT, PARKER, STANDARD, SUN AND VICKERS CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH O’RINGS AND BOLT KIT.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL



Part No.	Motor Model	R1, R2	A, B	AA	BB	CC
MB2461S	KYB MRH 12	COMPACT CP12-2	#12 (1 1/16-12)	3.00	3.50	4.19
MB2470S	KYB MRH 12	PARKER C12-2	#12 (1 1/16-12)	3.00	3.50	3.94
MB2478S	KYB MRH 12	VICKERS C-12-2	#12 (1 1/16-12)	3.00	3.50	4.19
MB212S	KYB MRH 12	SUN T-3A	#12 (1 1/16-12)	3.00	3.00	4.19
MB2474S	KYB MRH 30	COMPACT CP12-2	#12 (1 1/16-12)	3.00	3.50	4.31
MB2469S	KYB MRH 30	PARKER C12-2	#12 (1 1/16-12)	3.00	3.50	4.06
MB2476S	KYB MRH 30	VICKERS C-12-2	#12 (1 1/16-12)	3.00	3.50	4.31
MB213S	KYB MRH 30	SUN T-3A	#12 (1 1/16-12)	3.00	3.00	4.31
MB2466S	KYB MRH 45	STANDARD C-16-2	#16 (1 5/16-12)	3.00	4.00	5.25
MB343S	KYB MRH 45	SUN T-3A	#16 (1 5/16-12)	3.00	3.00	5.25
MB2457S	KYB MRH 60/270	STANDARD C-16-2	#20 (1 5/8-12)	3.50	4.00	5.50
MB346S	KYB MRH 60/270	SUN T-3A	#20 (1 5/8-12)	3.50	3.50	5.50
MB2473S	KYB MRHD 540	STANDARD C-16-2	#24 (1 7/8-12)	4.00	4.50	7.13
MB2468S	KYB MRHD 540	SUN T-16A	#24 (1 7/8-12)	4.00	4.50	7.13

Hydrostar KYB Motor Manifold – Cross Relief

Direct Mount – KYB MRH 375/525

MATL: STEEL

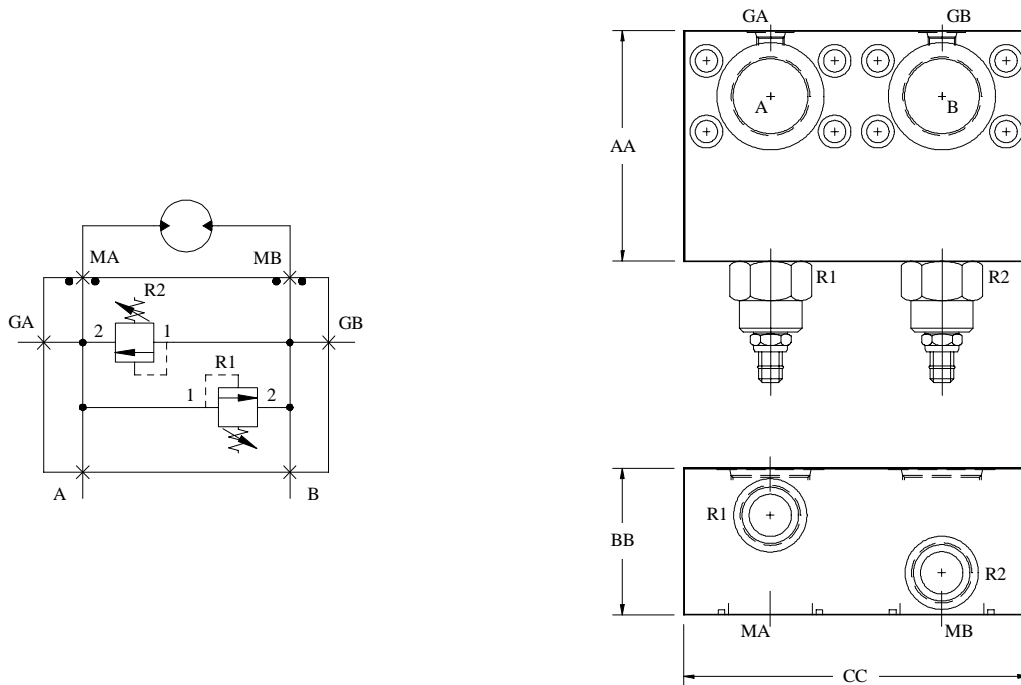
CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH O’RINGS AND BOLT KIT.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL



Part No.	Motor Model	R1, R2	A, B	AA	BB	CC
MB2475S	KYB MRH 375/525	STANDARD C-16-2	#24 (1 7/8-12)	4.50	3.50	8.22
MB2479S	KYB MRH 375/525	SUN T-16A	#24 (1 7/8-12)	5.50	3.50	8.22

Staffa Motor Manifold – Cross Relief

Direct Mount – HMB010

MATL: STEEL

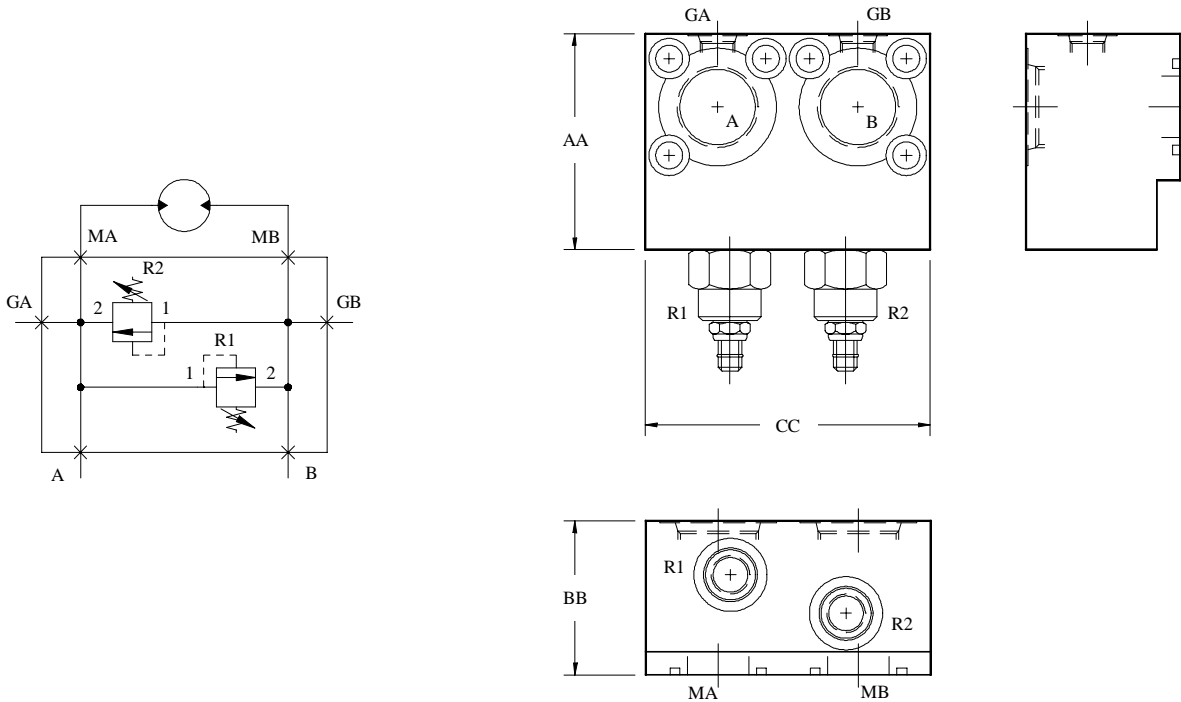
CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH O’RINGS AND BOLT KIT.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL



Part No.	Motor Model	R1, R2	A, B	AA	BB	CC
MB2296S	HMB010	STANDARD C-10-2	#16 (1 5/16-12)	3.50	2.50	4.63
MB2299S	HMB010	SUN T-10A	#16 (1 5/16-12)	3.50	2.50	4.63

Staffa Motor Manifold – Cross Relief

Direct Mount – HMB030

MATL: STEEL

CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

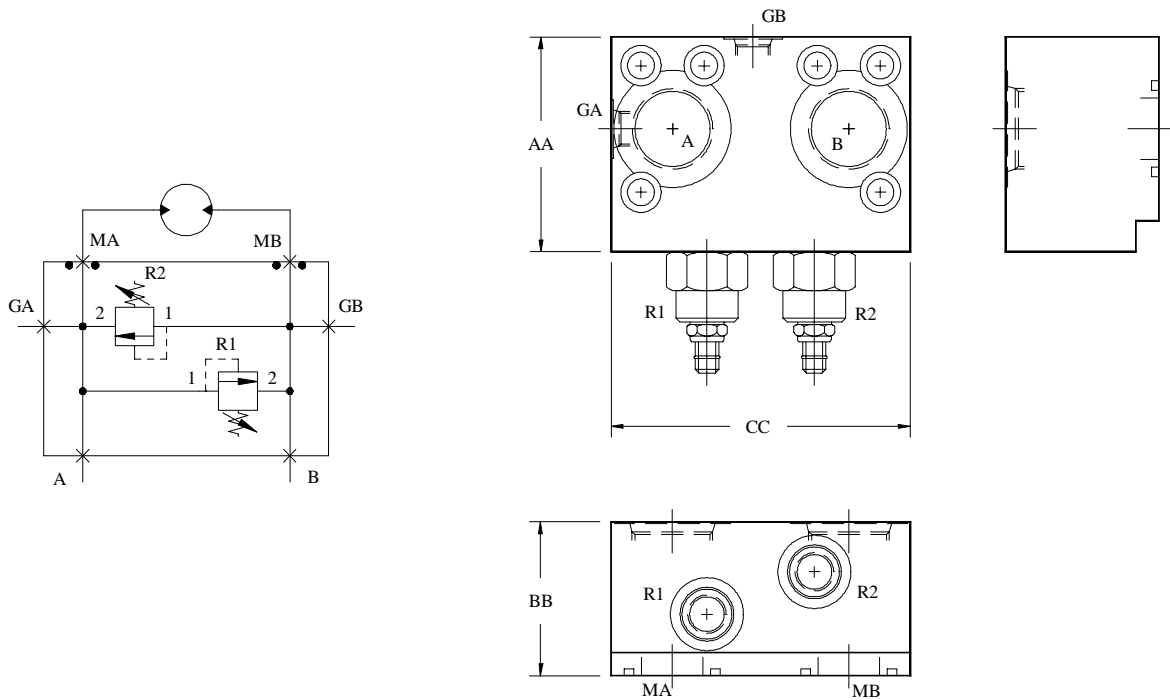
GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH O’RINGS AND BOLT KIT.

PLEASE SPECIFY MODEL ‘F’ FOR IMPERIAL BOLTS AND ‘FM’ FOR METRIC BOLTS.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL



Part No.	Motor Model	R1, R2	A, B	AA	BB	CC
MB2242S	HMB030 'F' or 'FM'	STANDARD C-10-2	#16 (1 5/16-12)	3.50	2.50	4.88
MB2300S	HMB030 'F' or 'FM'	SUN T-10A	#16 (1 5/16-12)	3.75	2.50	4.88

Staffa Motor Manifold – Cross Relief

Direct Mount – S03, S04 Port Connection

MATL: STEEL

CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

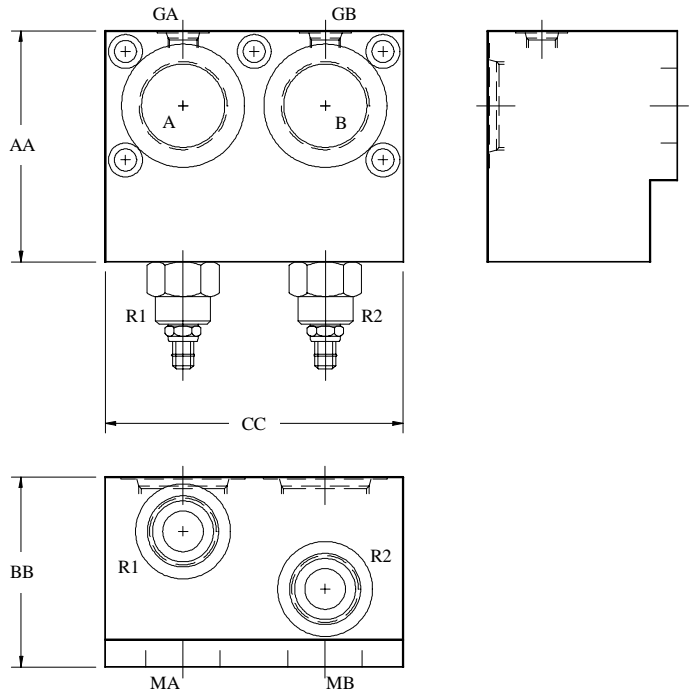
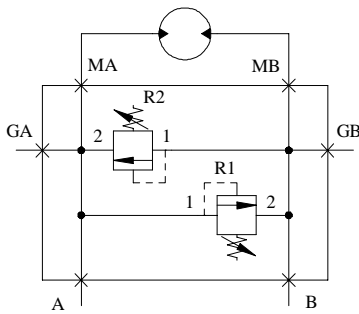
GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH BOLT KIT.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL

Staffa Motor Model		
Series 1 – ‘S03’ Port Connection	Series 2 – ‘S04’ Port Connection	Series 3 – ‘S04’ Port Connection
HMB060	HMB060	HM(HD)B270
HMB080	HMB080	HM(HD)B325
HMB100	HMB100	HMC270
HM(HD)B125	HM(HD)B125	HMC325
HM(HD)B150	HM(HD)B150	
HM(HD)B200	HM(HD)B200	
HMC030	HMC200	
HMC045		
HMC080		
HMC125		
HMC200		



Part No.	Motor Model (see above chart)	R1, R2	A, B	AA	BB	CC
MB1425S	Series 1	STANDARD C-16-2	#16 (1 5/16-12)	4.00	3.50	4.75
MB2214S	Series 1	SUN T-3A	#16 (1 5/16-12)	4.00	3.50	4.75
MB2215S	Series 2	STANDARD C-16-2	#16 (1 5/16-12)	4.00	3.50	4.50
MB2124S	Series 2	SUN T-3A	#16 (1 5/16-12)	4.00	3.50	4.50
MB2297S	Series 3	STANDARD C-16-2	#20 (1 5/8-12)	4.25	3.50	5.50
MB2301S	Series 3	SUN T-3A	#20 (1 5/8-12)	4.25	3.50	5.50

Staffa Motor Manifold – Cross Relief

Direct Mount – HMHDB400

MATL: STEEL

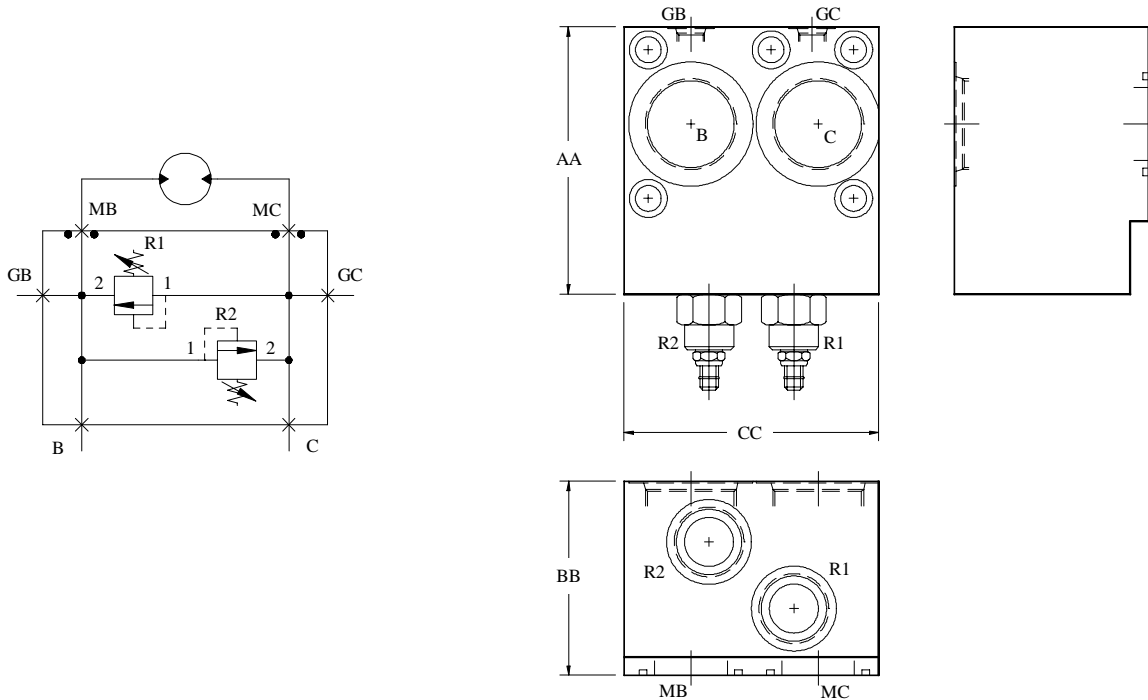
CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH O’RINGS AND BOLT KIT.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL



Part No.	Motor Model	R1, R2	B, C	AA	BB	CC
MB2298S	HMHDB400	STANDARD C-16-2	#24 (1 7/8-12)	5.00	4.00	5.25
MB2302S	HMHDB400	SUN T-16A	#24 (1 7/8-12)	5.50	4.00	5.25

Calzoni Motor Manifold – Cross Relief

Direct Mount

MATL: STEEL

CARTRIDGES: STANDARD AND SUN CAVITY (OR EQUIVALENT)
‘1’ IS NOSE OF CARTRIDGE.

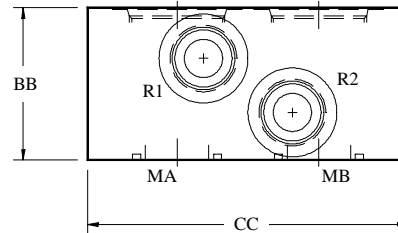
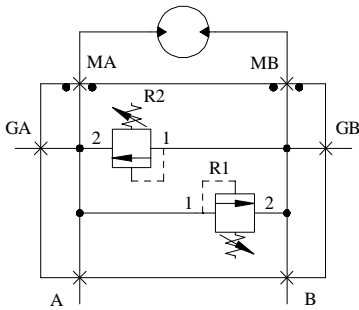
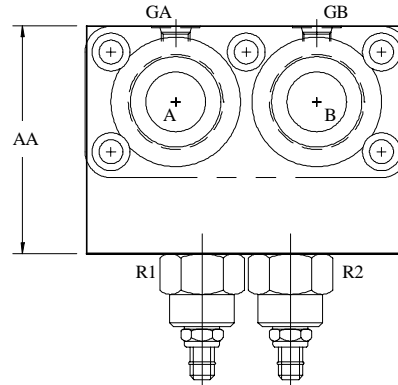
GA, GB (GAGE): #6 SAE ORB

COMPLETE WITH O’RINGS AND BOLT KIT.

FOR PORT BLOCK ONLY SEE PAGE 62-6.

CONSULT CARTRIDGE MANUFACTURER FOR RATED PRESSURE, FLOW RATE AND CAVITY DETAIL

Calzoni Motor Model				
Series 1	Series 2	Series 3	Series 4	Series 5
MR190	MR450	MR1100	MR2400	MR3600
MR300	MR700	MR1800	MR2800	MR4500
		MRE1400	MRE3100	MR7000
		MRE2100		MRE5400
				MRE8500



Part No.	Motor Model (see above chart)	R1, R2 Cavity	A, B SAE ORB	AA	BB	CC
MB2460S	Series 1	STANDARD C-10-2	#12 (1 1/16-12)	3.00	2.50	4.75
MB2464S	Series 2	STANDARD C-16-2	#20 (1 5/8-12)	4.00	3.00	5.63
MB2323S	Series 3	STANDARD C-16-2	#24 (1 7/8-12)	4.50	3.00	6.31
MB2471S	Series 4	STANDARD C-16-2	1 1/2 C61	5.00	4.00	8.13
MB2463S	Series 1	SUN T-10A	#12 (1 1/16-12)	3.25	2.50	4.75
MB2472S	Series 2	SUN T-3A	#20 (1 5/8-12)	4.00	3.00	5.63
MB2477S	Series 3	SUN T-16A	#24 (1 7/8-12)	5.00	3.50	6.31
MB2465S	Series 4	SUN T-16A	1 1/2 C61	5.25	4.00	8.13
MB2462S	Series 5	SUN T-18A	2 C61	6.38	5.00	9.13

Sandwich Manifolds

D03

D05

D05H

D05HE

D07

D08

Servo



Sandwich Spacer

MATL: STEEL
PRESSURE: 5000 PSI

THE SANDWICH SPACER COMES COMPLETE WITH O' RINGS AND BOLT KIT.
THE SANDWICH SPACER SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function
				P T A B X Y
MB1335S	D03	SPACER	3/4	
MB775S	D03	#4 ORB ON 'P'	3/4	
MB160S	D03	#4 ORB ON 'A'	3/4	
MB2245S	D03	#4 ORB ON 'B'	3/4	
MB590S	D03	#4 ORB ON 'P' AND 'T'	3/4	
MB588S	D03	# 4 ORB ON 'A' AND 'B'	3/4	
MB2334S	D03	'P' TO 'B', 'A' TO 'T'	3/4	
MB2340S	D03	'P' TO 'A', 'B' TO 'T'	3/4	
MB1233S	D03	'P' TO 'B'	3/4	
MB1258S	D03	'A' TO 'T'	3/4	
MB2343S	D03	'P' TO 'A'	3/4	
MB2350S	D03	'B' TO 'T'	3/4	
MB1337S	D05	SPACER	3/4	
MB644S	D05	# 4 ORB ON 'P'	3/4	
MB2353S	D05	#4 ORB ON 'A'	3/4	
MB905S	D05	#4 ORB ON 'B'	3/4	
MB2344S	D05	# 4 ORB ON 'P' AND 'T'	3/4	
MB648S	D05	# 4 ORB ON 'A' AND 'B'	3/4	

Sandwich Spacer

MATL: STEEL
PRESSURE: 5000 PSI

THE SANDWICH SPACER COMES COMPLETE WITH O' RINGS AND BOLT KIT.
THE SANDWICH SPACER SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function
				P T A B X Y
MB2355S	D05	'P' TO 'B', 'A' TO 'T'	3/4	
MB149S	D05	'P' TO 'A', 'B' TO 'T'	3/4	
MB2335S	D05	'P' TO 'B'	3/4	
MB1268S	D05	'A' TO 'T'	3/4	
MB2354S	D05	'P' TO 'A'	3/4	
MB1280S	D05	'B' TO 'T'	3/4	
MB2351S	D05H	SPACER	3/4	
MB2361S	D05H	# 4 ORB ON 'P'	3/4	
MB2371S	D05H	# 4 ORB ON 'A'	3/4	
MB2379S	D05H	# 4 ORB ON 'B'	3/4	
MB2364S	D05H	# 4 ORB ON 'P' AND 'T'	3/4	
MB1882S	D05H	# 4 ORB ON 'A' AND 'B'	3/4	
MB2372S	D05H	'P' TO 'B', 'A' TO 'T'	3/4	
MB2368S	D05H	'P' TO 'A', 'B' TO 'T'	3/4	
MB2373S	D05H	'P' TO 'B'	3/4	
MB2337S	D05H	'A' TO 'T'	3/4	
MB2357S	D05H	'P' TO 'A'	3/4	
MB2366S	D05H	'B' TO 'T'	3/4	

Sandwich Spacer

MATL: STEEL
 PRESSURE: 5000 PSI

THE SANDWICH SPACER COMES COMPLETE WITH O' RINGS AND BOLT KIT.
 THE SANDWICH SPACER SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function					
				P	T	A	B	X	Y
MB2346S	D05HE	SPACER	3/4						
MB2374S	D05HE	# 4 ORB ON 'P'	3/4						
MB2369S	D05HE	# 4 ORB ON 'A'	3/4						
MB2345S	D05HE	# 4 ORB ON 'B'	3/4						
MB2338S	D05HE	# 4 ORB ON 'P', 'T'	3/4						
MB2336S	D05HE	# 4 ORB ON 'A', 'B'	3/4						
MB2356S	D05HE	'P' TO 'B', 'A' TO 'T'	3/4						
MB2380S	D05HE	'P' TO 'A', 'B' TO 'T'	3/4						
MB2370S	D05HE	'P' TO 'B'	3/4						
MB2377S	D05HE	'A' TO 'T'	3/4						
MB2375S	D05HE	'P' TO 'A'	3/4						
MB2363S	D05HE	'B' TO 'T'	3/4						
MB2365S	D07	SPACER	1 1/4						
MB2348	D07	# 4 ORB ON 'P'	1 1/4						
MB1888S	D07	# 4 ORB ON 'A'	1 1/4						
MB2376S	D07	# 4 ORB ON 'B'	1 1/4						
MB2347S	D07	# 4 ORB ON 'P', 'T'	1 1/4						
MB1797S	D07	# 4 ORB ON 'A', 'B'	1 1/4						

Sandwich Spacer

MATL: STEEL
PRESSURE: 5000 PSI

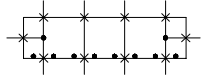
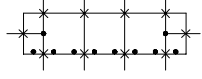
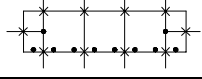
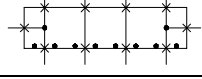
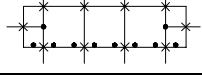
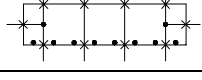

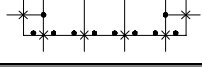
THE SANDWICH SPACER COMES COMPLETE WITH O' RINGS AND BOLT KIT.
THE SANDWICH SPACER SIZE IS APPROXIMATELY THE SAME AS THE FOOTPRINT OF THE VALVE.

Part No.	Valve	Description	Thickness	Function
				P T A B X Y
MB2378S	D07	'P' TO 'B', 'A' TO 'T'	1 1/4	
MB2359S	D07	'P' TO 'B'	1 1/4	
MB2339S	D07	'A' TO 'T'	1 1/4	
MB1894S	D08	SPACER	1 1/2	
MB2358S	D08	# 8 ORB ON 'P'	1 1/2	
MB2362S	D08	# 8 ORB ON 'A'	1 1/2	
MB2352S	D08	# 6 ORB ON 'B'	1 1/2	
MB2342S	D08	# 6 ORB ON 'P', 'T'	1 1/2	
MB906S	D08	# 6 ORB ON 'A', 'B'	1 1/2	
MB2349S	D08	'P' TO 'B', 'A' TO 'T'	1 1/2	
MB2341S	D08	'P' TO 'B'	1 1/2	
MB1415S	D08	'A' TO 'T'	1 1/2	

Servo Sandwich – Gage Plate

 MATL: STEEL
 PRESSURE: 5000 PSI

SIZE IS APPROX. – FOOTPRINT OF VALVE C/W O’RING

Part No.	Valve Pattern	Description	Thickness	SAE ORB Ports	Function C1 P T C2
MB2544S	MOOG 62-100 ATCHLEY 215A VICKERS SM4-20	GAGE PORTS ON C1 & C2	1 1/4	#6 (9/16-18)	
MB2545S	MOOG 62-300 ATCHLEY 241 VICKERS SM4-30	GAGE PORTS ON C1 & C2	1 1/4	#6 (9/16-18)	
MB2546S	MOOG 72 ATCHLEY 261	GAGE PORTS ON C1 & C2	1 1/4	#6 (9/16-18)	
MB2547S	MOOG 78-100 ATCHLEY 240 VICKERS SM4-40	GAGE PORTS ON C1 & C2	1 1/4	#6 (9/16-18)	
MB2548S	MOOG 771 ATCHLEY 206/208A VICKERS SM4-10	GAGE PORTS ON C1 & C2	1	#4 (7/16-20)	
MB2549S	MOOG 772 ATCHLEY 211A	GAGE PORTS ON C1 & C2	1	#4 (7/16-20)	
MB2550S	MOOG 773 ATCHLEY 218 VICKERS SM4-15	GAGE PORTS ON C1 & C2	1	#4 (7/16-20)	
MB2551S	ATCHLEY 242	GAGE PORTS ON C1 & C2	1	#4 (7/16-20)	



Stacking Manifolds

D03

D05

D05H

D05HE

D07

D08

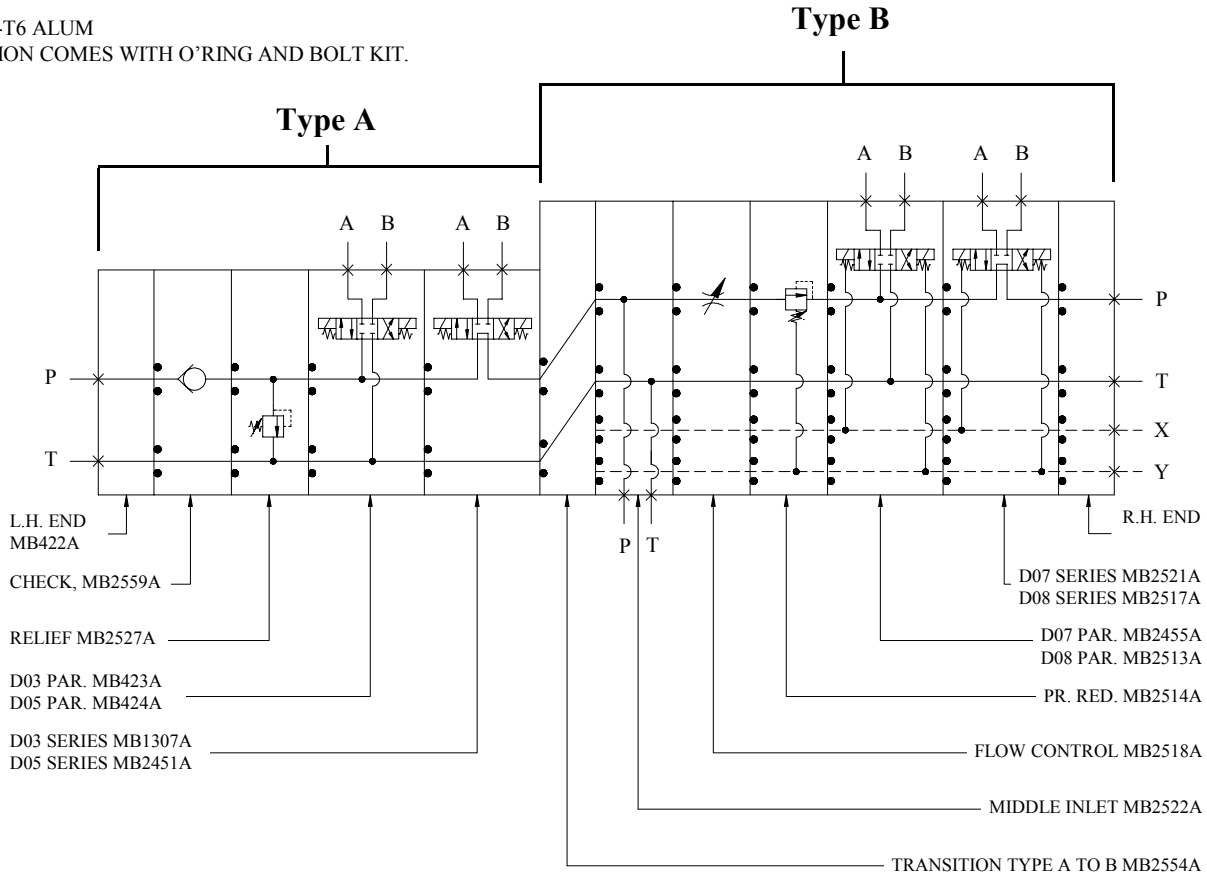


Stacking Manifold

Types A & B

MATL: 6061-T6 ALUM

EACH SECTION COMES WITH O'RING AND BOLT KIT.



Type A

- D03, D05, D05H AND D05HE

Part No.	Function	Length
MB423A	D03 PARALLEL	2.00
MB424A	D05 PARALLEL	3.00
MB425A	D05H PARALLEL	3.00
MB2448A	D05HE PARALLEL	3.00
MB1307A	D03 SERIES	2.00
MB2451A	D05 SERIES	3.00
MB2454A	D05H SERIES	3.00
MB2515A	D05HE SERIES	3.00
MB422A	LEFTHAND END	1.50
MB421A	RIGHTHAND END	1.50
MB2516A	MIDDLE INLET	2.00
MB2527A	RELIEF	1.50
MB2530A	PRESSURE REDUCING	2.50
MB2532A	FLOW CONTROL	2.50
MB2559A	CHECK	2.00

Type B

- D07 AND D08

Part No.	Function	Length
MB2455A	D07 PARALLEL	4.00
MB2513A	D08 PARALLEL	5.00
MB2521A	D07 SERIES	4.00
MB2517A	D08 SERIES	5.00
MB2524A	LEFTHAND END	2.00
MB2529A	RIGHTHAND END	2.00
MB2522A	MIDDLE INLET	3.00
MB2514A	RELIEF	2.00
MB2528A	PRESSURE REDUCING	3.00
MB2518A	FLOW CONTROL	3.00
MB2554A	TRANS; SERIES A & B	3.00
MB2560A	CHECK	2.50

Accessories

- Cavity Plug
- Orifice Plug
- Mounting Plate

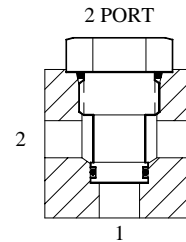


Cavity Plug

2 and 3 Port

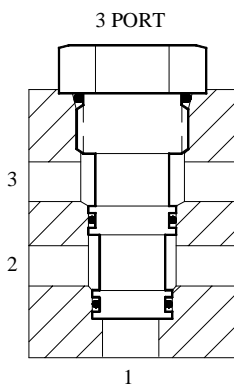
MATL: STEEL

CAVITY PLUG SUITABLE FOR: COMPACT, DELTA
HYDRAFORCE, INTEGRATED HYD, PARKER,
VICKERS AND WATERMAN (OR EQUIVALENT)



2 Port	All Ports Blocked	All Ports Open
Cavity	Part No.	Part No.
STANDARD C-8-2	MB1601-1	#8 SAE ORB Plug
STANDARD C-10-2	MB1135-1	#10 SAE ORB Plug
STANDARD C-16-2	MB1137-1	#16 SAE ORB Plug
STANDARD C-20-2	MB1138-1	#20 SAE ORB Plug
COMPACT CP12-2	MB1139-1	#12 SAE ORB Plug
DANFOSS FC-10	MB2045-1	MB2045-2
DANFOSS FC-76	MB1530-1	#10 SAE ORB Plug
DANFOSS FC-153	MB2453-1	#20 SAE ORB Plug
DANFOSS FC-178A	MB2445-1	MB2445-2
DELTA 40200028	MB2047-1	#10 SAE ORB Plug
DELTA 40200032	MB1139-1	#12 SAE ORB Plug
HYDRAFORCE VC12-12	MB1139-1	#12 SAE ORB Plug
INTEGRATED A878	MB1530-1	#10 SAE ORB Plug
INTEGRATED A881	MB2045-1	MB2045-2
INTEGRATED A1126	MB2453-1	#20 SAE ORB Plug
INTEGRATED A3377	MB2450-1	#10 SAE ORB Plug
INTEGRATED A6701	MB2446-1	#8 SAE ORB Plug

2 Port	All Ports Blocked	All Ports Open
Cavity	Part No.	Part No.
PARKER C09-2	MB2446-1	#8 SAE ORB Plug
PARKER C12-2	MB1872-1	#12 SAE ORB Plug
STERLING 2B	MB2047-1	#10 SAE ORB Plug
STERLING 2K	MB2445-1	MB2445-2
STERLING 2M	MB2456-1	#14 SAE ORB Plug
STERLING 2R	MB2450-1	#10 SAE ORB Plug
STERLING 2X	MB2446-1	#8 SAE ORB Plug
SUN T-3A	MB1117-1	MB1117-2
SUN T-5A	MB1118-1	MB1118-2
SUN T-10A	MB1119-1	MB1119-2
SUN T-13A	MB1120-1	MB1120-2
SUN T-16A	MB1121-1	MB1121-2
SUN T-18A	MB1122-1	MB1122-2
VICKERS C-12-2	MB1136-1	#12 SAE ORB Plug
WATERMAN 12-2A	MB2446-1	#8 SAE ORB Plug
WATERMAN 14-2	MB2450-1	#10 SAE ORB Plug



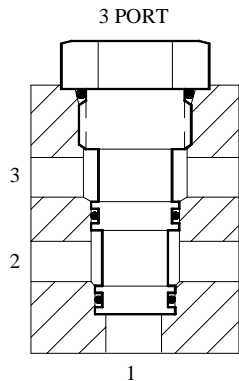
3 Port	All Ports Blocked	Ports 1 & 2 Open	Ports 2 & 3 Open	All Ports Open
Cavity	Part No.	Part No.	Part No.	Part No.
STANDARD C-8-3	MB2324-1	MB2324-2	MB2324-3	#8 SAE ORB Plug
STANDARD C-10-3	MB1140-1	MB1140-2	MB1140-3	#10 SAE ORB Plug
STANDARD C-10-3S	MB1141-1	MB1141-2	MB1141-3	#10 SAE ORB Plug
STANDARD C-16-3	MB1144-1	MB1144-2	MB1144-3	#16 SAE ORB Plug
STANDARD C-16-3S	MB1145-1	MB1145-2	MB1145-3	#16 SAE ORB Plug
STANDARD C-20-3	MB1146-1	MB1146-2	MB1146-3	#20 SAE ORB Plug
STANDARD C-20-3S	MB1147-1	MB1147-2	MB1147-3	#20 SAE ORB Plug
COMPACT CP8-3L	MB2480-1	MB2480-2	MB2480-3	#8 SAE ORB Plug
COMPACT CP10-3L	MB1148-1	MB1148-2	MB1148-3	#10 SAE ORB Plug
COMPACT CP12-3	MB1149-1	MB1149-2	MB1149-3	#12 SAE ORB Plug
COMPACT CP12-3S	MB1150-1	MB1150-2	MB1150-3	#12 SAE ORB Plug
COMPACT CP20-3S	MB2430-1	MB2430-2	MB2430-3	#20 SAE ORB Plug
DANFOSS FC-13	MB2481-1	MB2481-2	MB2481-3	—————
DANFOSS FC-60	MB2485-1	MB2485-2	MB2485-3	MB2485-4

Cavity Plug

3 Port

MATL: STEEL

CAVITY PLUG SUITABLE FOR:
COMPACT, DELTA
HYDRAFORCE, INTEGRATED
HYD, PARKER, VICKERS AND
WATERMAN (OR EQUIVALENT)

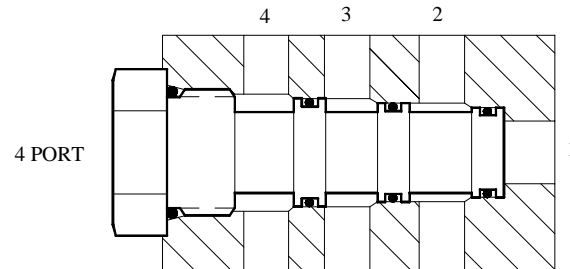


3 Port	All Ports Blocked	Ports 1 & 2 Open	Ports 2 & 3 Open	All Ports Open
Cavity	Part No.	Part No.	Part No.	Part No.
DANFOSS FC-109A	MB2489-1	MB2489-2	MB2489-3	#8 SAE ORB Plug
DANFOSS FC-173	MB2493-1	MB2493-2	MB2493-3	#16 SAE ORB Plug
DANFOSS FC-173A	MB2482-1	MB2482-2	MB2482-3	#16 SAE ORB Plug
DELTA 40200033	MB1150-1	MB1150-2	MB1150-3	#12 SAE ORB Plug
DELTA 40200034	MB2483-1	MB2483-2	MB2483-3	#12 SAE ORB Plug
HYDRAFORCE VC12-3	MB2483-1	MB2483-2	MB2483-3	#12 SAE ORB Plug
INTEGRATED A877	MB2493-1	MB2493-2	MB2493-3	#16 SAE ORB Plug
INTEGRATED A880	MB2481-1	MB2481-2	—————	—————
INTEGRATED A893	MB2486-1	MB2486-2	MB2486-3	#10 SAE ORB Plug
INTEGRATED A2976	MB2494-1	MB2494-2	MB2494-3	#10 SAE ORB Plug
INTEGRATED A3146	MB2500-1	MB2500-2	MB2500-3	MB2500-4
INTEGRATED A5572	MB2492-1	MB2492-2	MB2492-3	#10 SAE ORB Plug
INTEGRATED A6610	MB2503-1	MB2503-2	MB2503-3	MB2503-4
INTEGRATED A6935	MB2507-1	MB2507-2	MB2507-3	#20 SAE ORB Plug
INTEGRATED A12336	MB2487-1	MB2487-2	MB2487-3	MB2487-4
INTEGRATED CVA-22-06-0	MB2501-1	MB2501-2	MB2501-3	MB2501-4
INTEGRATED CVA-27-04-0	MB2508-1	MB2508-2	MB2508-3	MB2508-4
INTEGRATED CVB-22-06-0	MB2501-1	MB2501-2	MB2501-3	MB2501-4
INTEGRATED CVB-27-04-0	MB2508-1	MB2508-2	MB2508-3	MB2508-4
INTEGRATED CVB-42-04-0	MB2523-1	MB2523-2	MB2523-3	MB2523-4
PARKER C12-3	MB1143-1	MB1143-2	MB1143-3	#12 SAE ORB Plug
SUN T-2A	MB1123-1	MB1123-2	—————	—————
SUN T-11A	MB1124-1	MB1124-2	—————	—————
SUN T-17A	MB1125-1	MB1125-2	—————	—————
SUN T-19A	MB1126-1	MB1126-2	—————	—————
STERLING 3A	MB2484-1	MB2484-2	MB2484-3	#14 SAE ORB Plug
STERLING 3C	MB2488-1	MB2488-2	MB2488-3	#14 SAE ORB Plug
STERLING 3G	MB2492-1	MB2492-2	MB2492-3	#10 SAE ORB Plug
STERLING 3M	MB2511-1	MB2511-2	MB2511-3	#16 SAE ORB Plug
STERLING 3U	MB2490-1	MB2490-2	MB2490-3	#14 SAE ORB Plug
STERLING 3X	MB2494-1	MB2494-2	MB2494-3	#10 SAE ORB Plug
STERLING 53-1	MB2505-1	MB2505-2	MB2505-3	MB2505-4
STERLING 68-1	MB2509-1	MB2509-2	MB2509-3	MB2509-4
STERLING 78-1	MB2519-1	MB2519-2	MB2519-3	MB2519-4
STERLING 91-1	MB2523-1	MB2523-2	MB2523-3	MB2523-4
VICKERS C-12-3	MB1142-1	MB1142-2	MB1142-3	#12 SAE ORB Plug
VICKERS C-12-3S	MB1143-1	MB1143-2	MB1143-3	#12 SAE ORB Plug
WATERMAN 12-3	MB2324-1	MB2324-2	MB2324-3	#8 SAE ORB Plug
WATERMAN 14-3	MB2494-1	MB2494-2	MB2494-3	#10 SAE ORB Plug

Cavity Plug

4 Port

MATL: STEEL

 CAVITY PLUG SUITABLE FOR: COMPACT, DELTA
 HYDRAFORCE, INTEGRATED HYD, PARKER,
 VICKERS AND WATERMAN (OR EQUIVALENT)


4 Port	All Ports Blocked	Ports 1 & 2 Open	Ports 2 & 3 Open	Ports 3 & 4 Open	All Ports Open
Cavity	Part No.	Part No.	Part No.	Part No.	Part No.
STANDARD C-8-4	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
STANDARD C-10-4	MB1151-1	MB1151-2	MB1151-3	MB1151-4	#10 SAE ORB Plug
STANDARD C-16-4	MB1152-1	MB1152-2	MB1152-3	MB1152-4	#16 SAE ORB Plug
STANDARD C-20-4	MB1153-1	MB1153-2	MB1153-3	MB1153-4	#20 SAE ORB Plug
COMPACT CP8-4	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
COMPACT CP12-4	MB1154-1	MB1154-2	MB1154-3	MB1154-4	#12 SAE ORB Plug
DANFOSS FC-314	MB2496-1	MB2496-2	MB2496-3	—————	—————
DELTA 40200029	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
DELTA 40200035	MB2504-1	MB2504-2	MB2504-3	MB2504-4	#12 SAE ORB Plug
HYDRAFORCE VC12-4	MB2504-1	MB2504-2	MB2504-3	MB2504-4	#12 SAE ORB Plug
INTEGRATED A5302	MB2520-1	MB2520-2	MB2520-3	MB2520-4	#10 SAE ORB Plug
INTEGRATED A6951	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
INTEGRATED A12196	MB2526-1	MB2526-2	MB2526-3	MB2526-4	MB2526-5
INTEGRATED A13098	MB2531-1	MB2531-2	MB2531-3	—————	—————
PARKER C08-4	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
PARKER C12-4	MB2497-1	MB2497-2	MB2497-3	MB2497-4	#12 SAE ORB Plug
SUN T-21A	MB1127-1	MB1127-2	—————	—————	—————
SUN T-22A	MB1128-1	MB1128-2	—————	—————	—————
SUN T-23A	MB1129-1	MB1129-2	—————	—————	—————
SUN T-24A	MB1130-1	MB1130-2	—————	—————	—————
SUN T-31A	MB1131-1	MB1131-2	MB1131-3	MB1131-4	MB1131-5
SUN T-32A	MB1132-1	MB1132-2	MB1132-3	MB1132-4	MB1132-5
SUN T-33A	MB1133-1	MB1133-2	MB1133-3	MB1133-4	MB1133-5
SUN T-34A	MB1134-1	MB1134-2	MB1134-3	MB1134-4	MB1134-5
STERLING 4A	MB2512-1	MB2512-2	MB2512-3	MB2512-4	#14 SAE ORB Plug
STERLING 4C	MB2520-1	MB2520-2	MB2520-3	MB2520-4	#10 SAE ORB Plug
VICKERS C-8-4	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
VICKERS C-12-4	MB2525-1	MB2525-2	MB2525-3	MB2525-4	#12 SAE ORB Plug
WATERMAN 12-4	MB2491-1	MB2491-2	MB2491-3	MB2491-4	#8 SAE ORB Plug
WATERMAN 14-4	MB2520-1	MB2520-2	MB2520-3	MB2520-4	#10 SAE ORB Plug

Orifice Plug and Mounting Plate

Orifice Plug

MATL: STEEL 3/4 TAPER PIPE PLUG

1/16 PIPE PLUG		1/8 PIPE PLUG		1/4 PIPE PLUG	
Part No.	Orifice	Part No.	Orifice	Part No.	Orifice
MB1161-016	0.016	MB1162-031	0.031	MB1163-063	0.063
MB1161-031	0.031	MB1162-063	0.063	MB1163-094	0.094
MB1161-063	0.063	MB1162-094	0.094	MB1163-125	0.125
MB1161-094	0.094	MB1162-125	0.125	MB1163-156	0.156
MB1161-109	0.109	MB1162-156	0.156	MB1163-188	0.188
MB1161-125	0.125	MB1162-188	0.188	MB1163-250	0.250

3/8 PIPE PLUG		1/2 PIPE PLUG		3/4 PIPE PLUG	
Part No.	Orifice	Part No.	Orifice	Part No.	Orifice
MB2533-031	0.031	MB2552-062	0.062	MB2553-250	0.250
MB2533-062	0.062	MB2552-125	0.125	MB2553-313	0.313
MB2533-125	0.125	MB2552-188	0.188	MB2553-375	0.375
MB2533-188	0.188	MB2552-250	0.250	MB2553-438	0.438
MB2533-250	0.250	MB2552-313	0.313	MB2553-500	0.500
MB2533-313	0.313	MB2552-375	0.375	MB2553-562	0.562

Mounting Plate

FOR DIRECTIONAL SUBPLATES.

COMPLETE WITH BOLT KIT.

THE MOUNTING PLATE HAS THE SAME LENGTH AND WIDTH AS THE CORRESPONDING SIDE PORT SUBPLATE.

Part No.	Subplate Size	Reference	Thickness
MB581-3	D03	PAGE 22-3, 22-11	0.50
MB581-5	D05 / D05H / D05HE	PAGE 22-4, 22-5, 22-11	0.50
MB831-7	D07	PAGE 22-6, 22-11	0.50
MB831-8	D08	PAGE 22-8, 22-11	0.50