

General Description

Series CM check valves provide an integral, full flow check valve in the pressure 'P' port, 'A' port, 'B' port, or the tank 'T' port of the directional valve. Reverse flow is blocked. The CM2 and CM3 sizes offer a combination P&T check version.

B

Features

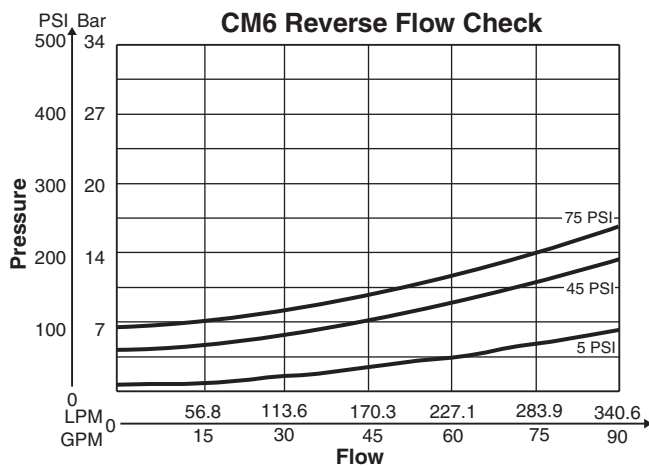
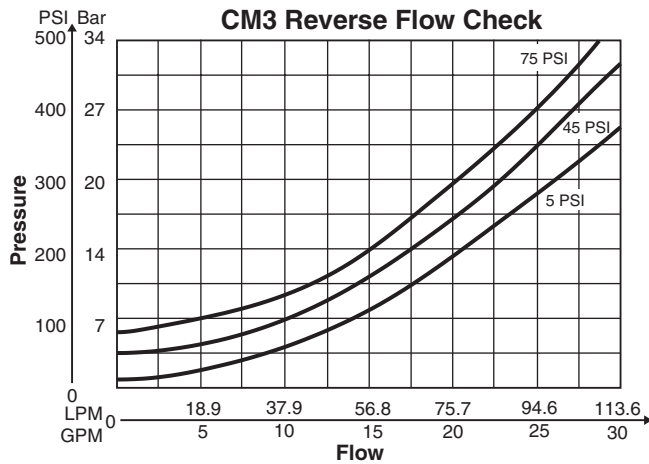
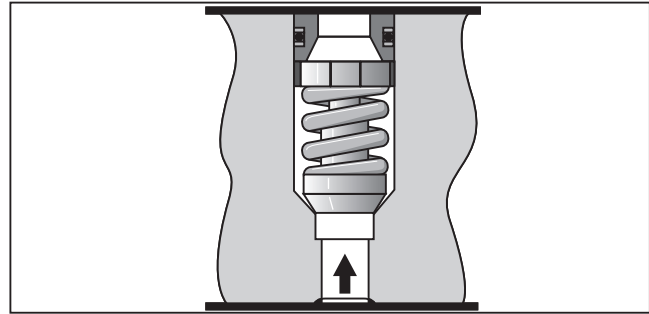
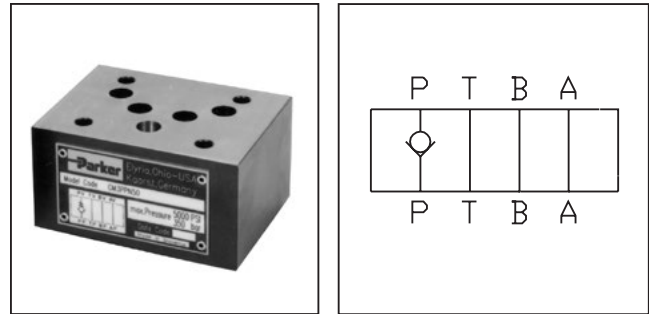
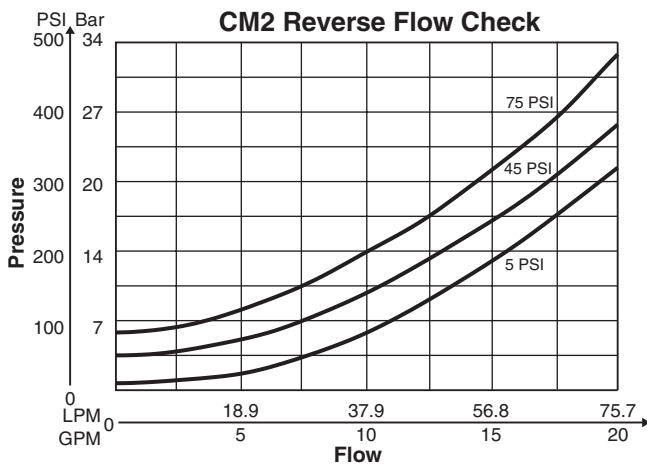
- Valve bodies are manufactured from steel which provides extra strength and durability for longer life. Internal hardened steel components also provide longer life.
- Positive shut-off is provided by a fully guided poppet and allows full flow in the unchecked position.
- Parker CM sandwich style check valves can be used either on the 'P', 'A', 'B', 'T' ports, or combinations.
- Large internal flow paths allow high flow at low pressure drop.

Specifications

	CM2	CM3	CM6
Mounting Pattern	NFPA D03, CETOP 3, NG6	NFPA D05, CETOP 5, NG10	NFPA D08, CETOP 8, NG25
Maximum Pressure	345 Bar (5000 PSI)	345 Bar (5000 PSI)	345 Bar (5000 PSI)
Maximum Flow	76 LPM (20 GPM)	113 LPM (30 GPM)	340 LPM (90 GPM)
Cracking Pressure	0.3 Bar (5 PSI), 3 Bar* (45 PSI), 5 Bar* (75 PSI)	0.3 Bar (5 PSI), 3 Bar* (45 PSI), 5 Bar* (75 PSI)	0.3 Bar (5 PSI)

* Optional

Performance Curves



VISCOSITY CORRECTION FACTOR							
Viscosity (SSU)	75	150	200	250	300	350	400
% of ΔP (Approx.)	93	111	119	126	132	137	141

Curves were generated using 100 SSU hydraulic oil. For any other viscosity, pressure drop will change per chart.

WARNING: This product can expose you to chemicals including Lead, Nickel (Metallic), or 1,3-Butadiene which are known to the State of California to cause cancer, and Lead or 1,3-Butadiene which is known to the State of California to cause birth defects and other reproductive harm. For more information go to www.P65Warnings.ca.gov.

<div style="border: 1px solid black; padding: 2px; width: 30px; margin: 0 auto;">CM</div> <p>Check Valve</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Size</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Port</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Cracking Pressure</p>	<div style="border: 1px solid black; width: 30px; height: 30px; margin: 0 auto;"></div> <p>Seal</p>	<div style="border: 1px dashed black; padding: 2px; width: 30px; height: 30px; margin: 0 auto;">*</div> <p>Design Series NOTE: Not required when ordering.</p>																																								
<table border="0" style="width: 100%;"> <tr><th>Code</th><th>Description</th></tr> <tr><td>2</td><td>NFPA D03 Subplate Mounting</td></tr> <tr><td>3</td><td>NFPA D05 Subplate Mounting</td></tr> <tr><td>6</td><td>NFPA D08 Subplate Mounting</td></tr> </table>	Code	Description	2	NFPA D03 Subplate Mounting	3	NFPA D05 Subplate Mounting	6	NFPA D08 Subplate Mounting	<table border="0" style="width: 100%;"> <tr><th>Code</th><th>Description</th></tr> <tr><td>PP*</td><td>P Port Check</td></tr> <tr><td>PT*</td><td>P and T Port Checks</td></tr> <tr><td>TT*</td><td>T Port Check</td></tr> <tr><td>DD</td><td>A and B Port Checks</td></tr> <tr><td>AA</td><td>A Port Check</td></tr> <tr><td>BB</td><td>B Port Check</td></tr> <tr><td>AAF</td><td>A Port Inverted</td></tr> <tr><td>BBF</td><td>B Port Inverted</td></tr> <tr><td>DDF</td><td>A and B Ports Inverted</td></tr> </table>	Code	Description	PP*	P Port Check	PT*	P and T Port Checks	TT*	T Port Check	DD	A and B Port Checks	AA	A Port Check	BB	B Port Check	AAF	A Port Inverted	BBF	B Port Inverted	DDF	A and B Ports Inverted	<table border="0" style="width: 100%;"> <tr><th>Code</th><th>Type</th></tr> <tr><td>Omit</td><td>5 PSI</td></tr> <tr><td>Y</td><td>45 PSI*</td></tr> <tr><td>Z</td><td>75 PSI*</td></tr> </table> <p>* Not available on 6 size.</p>	Code	Type	Omit	5 PSI	Y	45 PSI*	Z	75 PSI*	<table border="0" style="width: 100%;"> <tr><th>Code</th><th>Type</th></tr> <tr><td>V</td><td>Fluorocarbon</td></tr> <tr><td>N</td><td>Nitrile</td></tr> </table>	Code	Type	V	Fluorocarbon	N	Nitrile
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Bold: Designates Tier I products and options.

Non-Bold: Designates Tier II products and options. These products will have longer lead times.

Manapak Bolt Kits

Size "2"				Size "3"			
No. of Sandwich	Sandwich & Valve Combination	Bolt Kit	Bolt Length mm (in)	No. of Sandwich	Sandwich & Valve Combination	D3W-30 D3DW & D31*W*	Bolt Length mm (in)
1	Sandwich & D1	BK243	73.2 (2.88)	1	Sandwich & D3	BK141	88.9 (3.50)
2	Sandwich & D1	BK225	111.3 (4.38)	2	Sandwich & D3	BK142	139.7 (5.50)
3	Sandwich & D1	BK244	152.4 (6.00)	3	Sandwich & D3	BK143	190.5 (7.50)
4	Sandwich & D1	BK245	190.5 (7.50)				

Bolt Kits must be ordered separately. *D31VW with internal pilot and internal drain only.

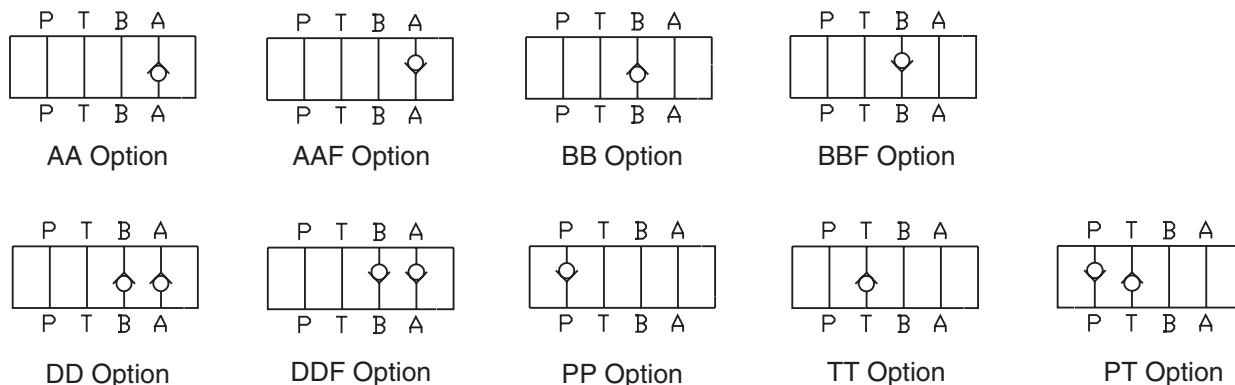
Size "6"				
Sandwich & Valve Combination	Bolt Kit	Description	Qty/Kit	Torque IN-LBS
1 Sandwich & D6*VW Valve	BK121	1/2 - 13 x 5.25	6	80
2 Sandwich & D6*VW Valve	BK122	1/2 - 13 x 8.00	6	80
3 Sandwich & D6*VW Valve	BK123	1/2 - 13 x 10.75	6	80
4 Sandwich & D6*VW Valve	BK124	1/2 - 13 x 13.50	6	80

Unit Weight:

- CM2 0.8 kg (1.7 lbs.)
- CM3 1.8 kg (3.9 lbs.)
- CM6 7.7 kg (17 lbs.)

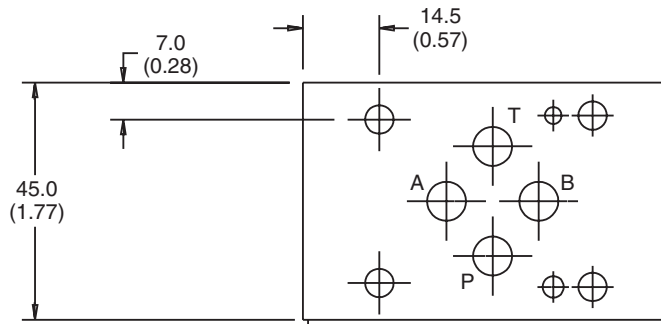
Note: Bolt Kits must be ordered separately.

Schematics

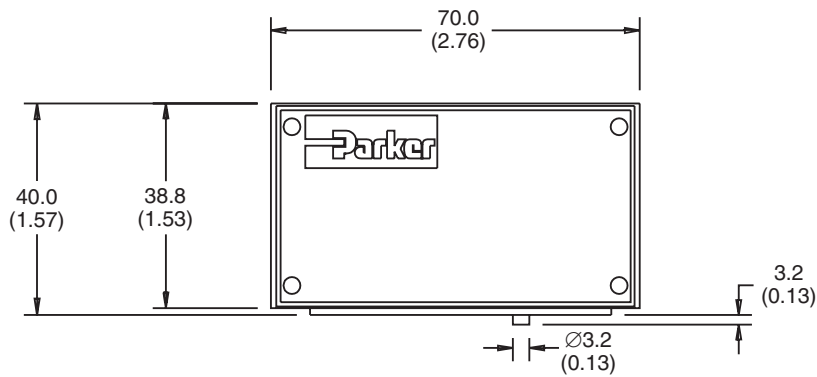


Inch equivalents for millimeter dimensions are shown in (**)

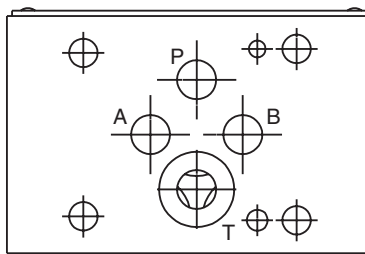
B



Top View



Face View



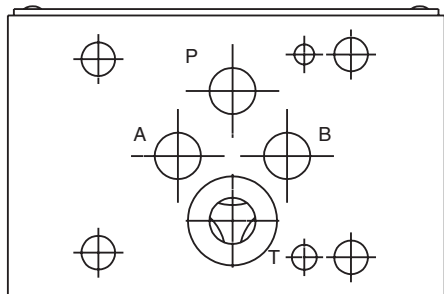
SHOWN WITHOUT O-RING PLATE

Bottom View



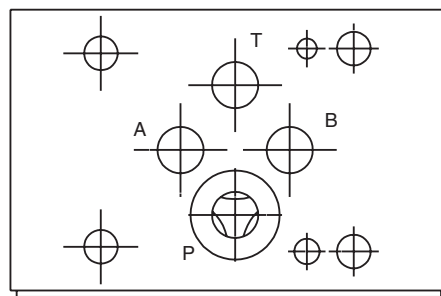
Note: Transfer the locating pin to the hole on the opposite side of the valve body for 'T' port option.
(Invert body 180°)

Bottom Views

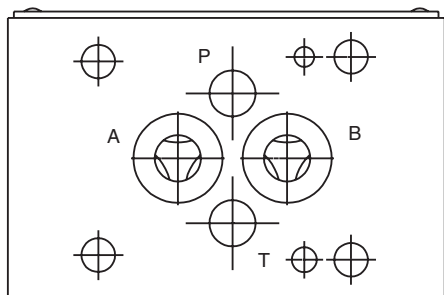


TT

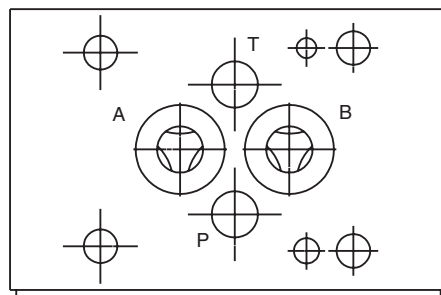
Top Views



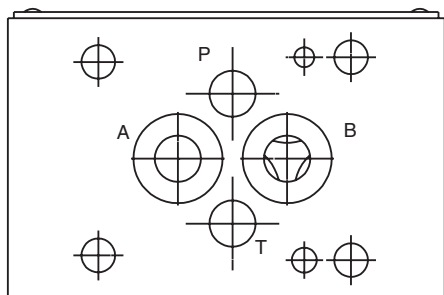
PP/PT



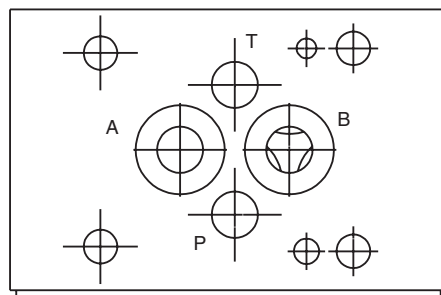
DD



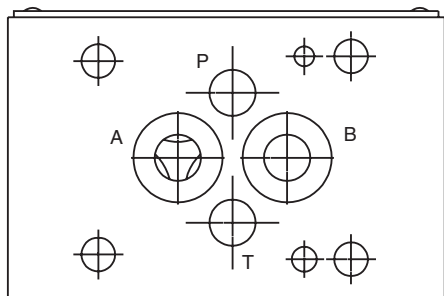
DDF



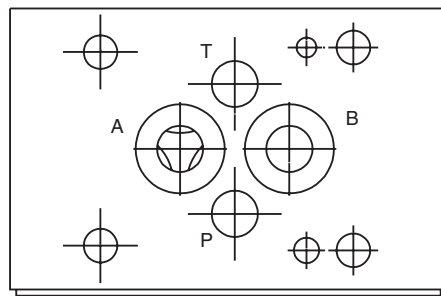
BB



BBF



AA

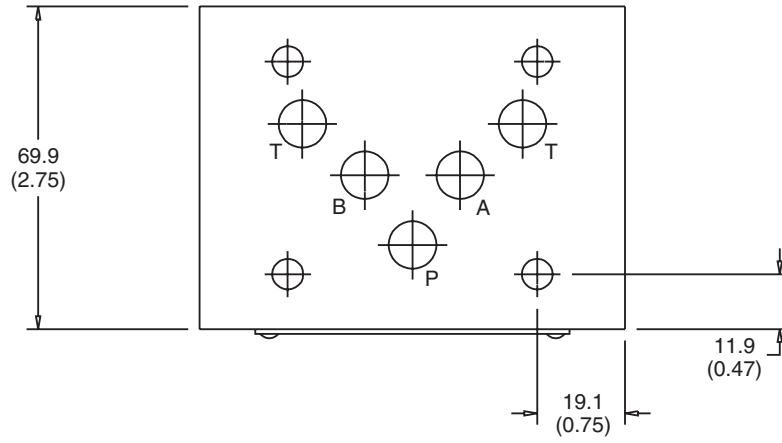


AAF

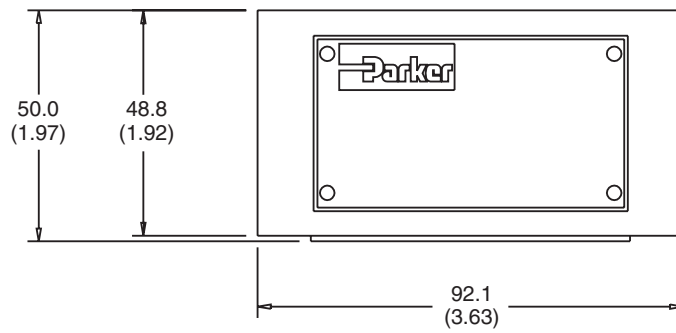
B

Inch equivalents for millimeter dimensions are shown in (**)

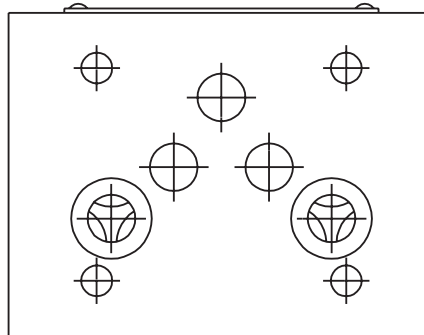
B



Top View



Face View



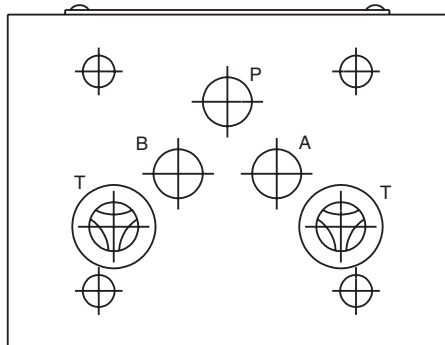
SHOWN WITHOUT O-RING PLATE

Bottom View

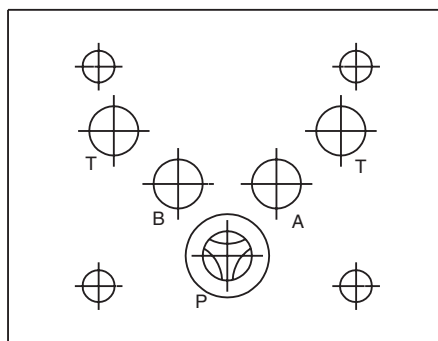


Bottom Views

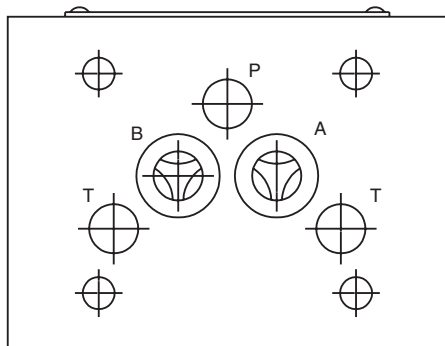
Top Views



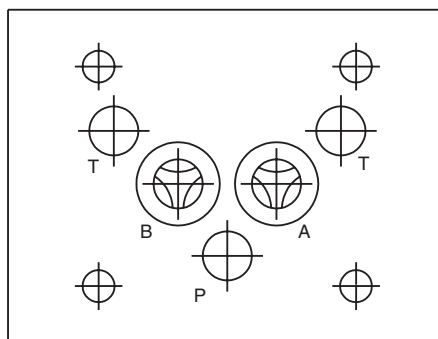
TT



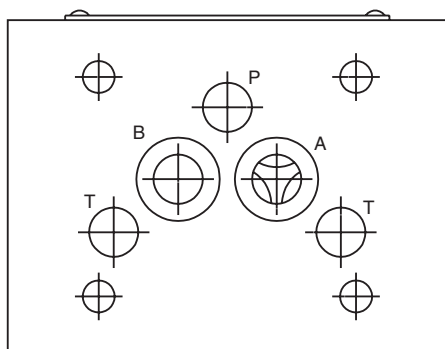
PP/PT



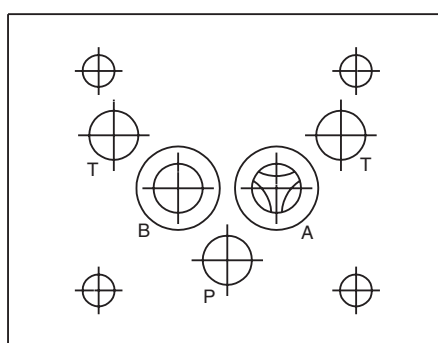
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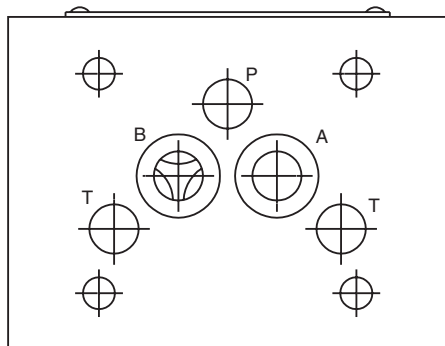
DDF



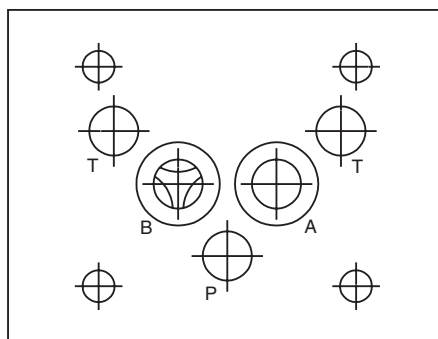
AA



AAF



BB

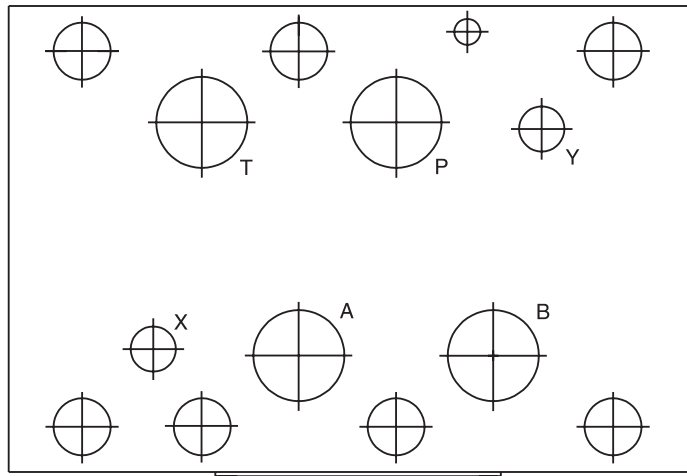


BBF

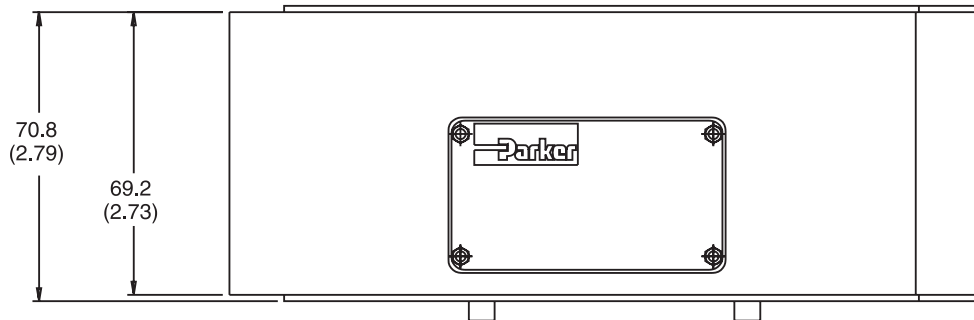
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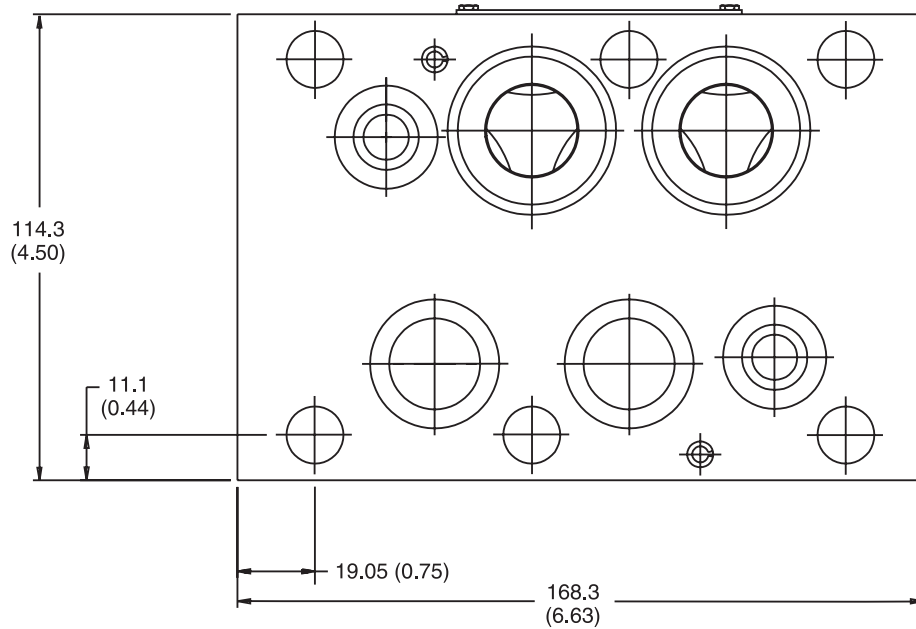
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Top View



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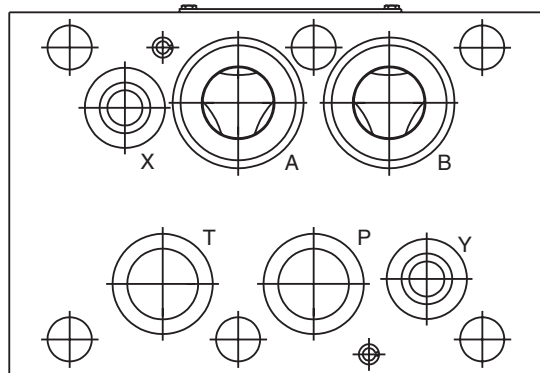


Bottom View

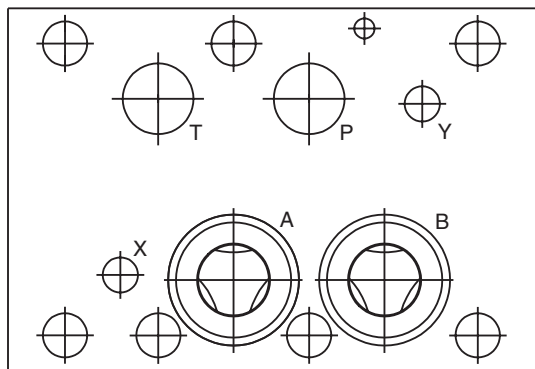


Bottom Views

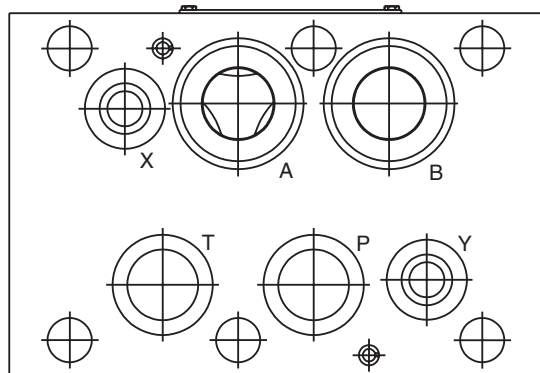
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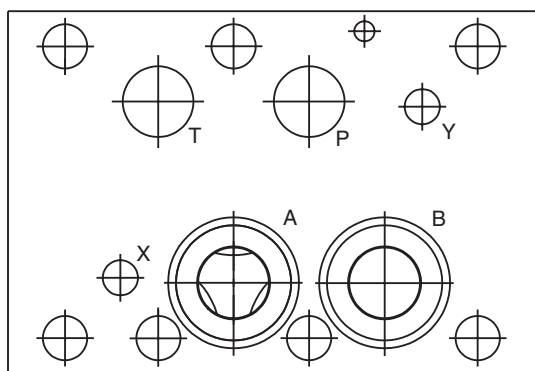
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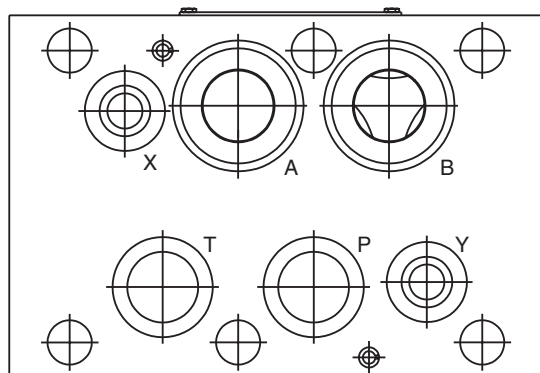
DDF



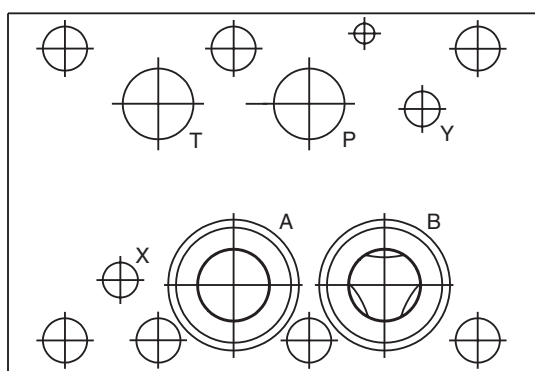
AA



AAF



BB



BBF

B