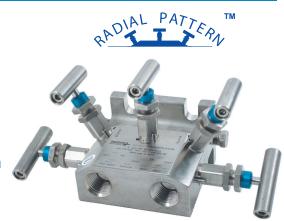


P3M5H™, P6M5H™ 5-VALVE HARD SEAT MANIFOLD

5-VALVE MANIFOLD

3/16" and 3/8" Bore 5-valve Manifold

The 5-valve manifold features 2 isolation valves, 2 equalizer valves and 1 vent valve in a single body for isolation and calibration of differential pressure transmitters. The RADIAL PATTERN™ manifold has an innovative angled bonnet configuration for easy operation. Additional features include a body manufactured from extruded solid bar, robust stems and Parker's innovative design which ensures a bubble tight seal in a variety of conditions. All Parker valves are manufactured and designed in accordance with MSS-SP105.



Standard Features

Hydrotested at 150% of rated pressure (shell test). Nitrogen gas tested to 2000 psi.



Complies with ASME B31.1 & B31.3 shell testing procedures as standard. Ensures structural integrity of valve.

Seat tightness (zero leakage) verified to 110% of rated pressure. Nitrogen gas tested to 2000 psi.



Complies with ASME B31.1 & B31.3 seat testing procedures as standard. Ensures zero leakage at seats for proper calibration.

Packing below stem threads



Prevents corrosion of critical stem threads

Metal body-to-bonnet seals are in compression, not tension



Mitigates risk of stress cracking

Stem threads are rolled, not cut



Higher quality stem for longer service life

8 RMS stem finish



Extended packing life

Benefits

True globe pattern valve



Extended packing life

V-Style Teflon™ packing



30-40% less operational torque and less frequent packing adjustments than traditional Teflon™ packed valves.

Pressure component materials sourced from the US, Canada or Europe



Reliable material traceability. MTR's provided with every order for pressure containing components.

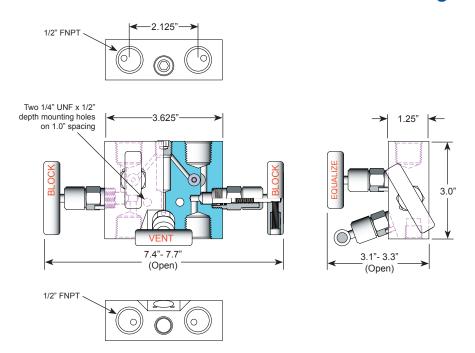
Solutions for Oil & Gas and Petrochemical Processing





*P3M5H™, P6M5H™*Pipe x Pipe Technical Specifications

3/16" Bore Configuration



Specifications:

Type: **P3M5H**, 5-valve Manifold, Globe Pattern

Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C)

Stem: Needle tip or Ball tip
Packing: Viton™ O-ring, Teflon™ or Grafoil™

Seat: Integral Handle: Removable Bore Size: 3/16"

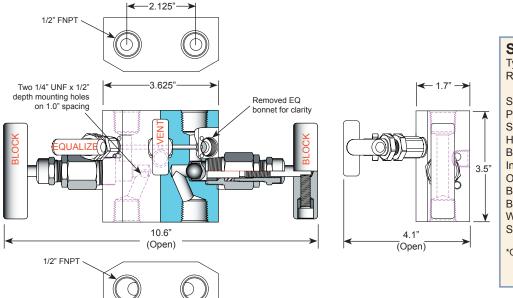
Inlet Connections: 1/2" FNPT Outlet Connections: 1/2" FNPT Bonnet Lock: Pin or Plate Body Stock: 3.625" x 3.00" x 1.25"

Weight: 4.5 - 5.1 lbs

Special Service: O2 or Cl cleaning available*

*Other specifications or services may be available.

3/8" Bore Configuration



Specifications:

Type: **P6M5H**, 5-valve Manifold, Globe Pattern

Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C) Stem: Needle tip or Ball tip

Packing: Viton™ O-ring, Teflon™ or Grafoil™

Seat: Integral Handle: Removable Bore Size: 3/8"

Inlet Connections: 1/2" FNPT Outlet Connections: 1/2" FNPT Bonnet Lock: Pin or Plate Body Stock: 3.625" x 3.5" x 1.7"

Weight: 7.0 - 7.2 lbs

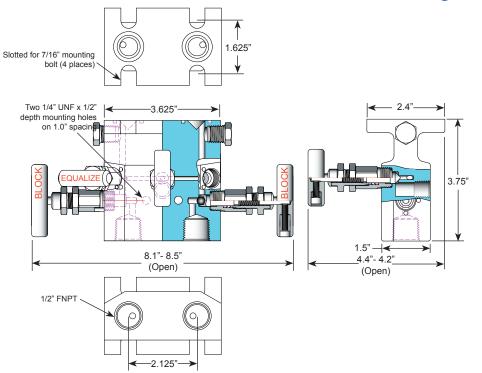
Special Service: O2 or Cl cleaning available*

*Other specifications or services may be available.



*P3M5H™, P6M5H™*Pipe x Flange Technical Specifications

3/16" Bore Configuration



Specifications:

Type: **P3M5H**, 5-valve Manifold, Globe Pattern

Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C) Stem: Needle tip or Ball tip

Packing: Viton™ O-ring, Teflon™ or Grafoil™

Seat: Integral Handle: Removable Bore Size: 3/16"

Inlet Connections: 1/2" FNPT Outlet Connections: Flange Bonnet Lock: Pin or Plate

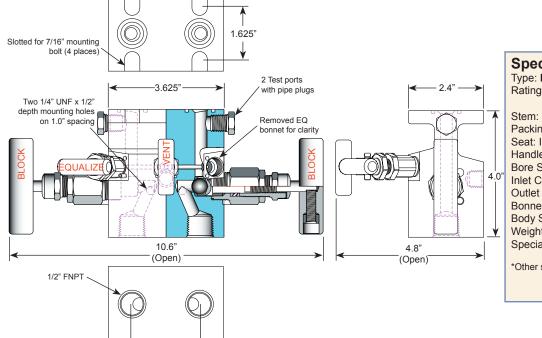
Body Stock: 3.625" x 3.75" x 2.4" x 1.5"

Weight: 4.5 - 5.1 lbs

Special Service: O_2 or CI cleaning available*

*Other specifications or services may be available.

3/8" Bore Configuration



←—2.125" →

Specifications:

Type: **P6M5H**, 5-valve Manifold, Globe Pattern

Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C)

Stem: Needle tip or Ball tip

Packing: Viton™ O-ring, Teflon™ or Grafoil™

Seat: Integral Handle: Removable Bore Size: 3/8"

Inlet Connections: 1/2" FNPT Outlet Connections: Flange Bonnet Lock: Pin or Plate Body Stock: 3.625" x 4.0" x 2.4"

Weight: 7.5 - 7.7 lbs

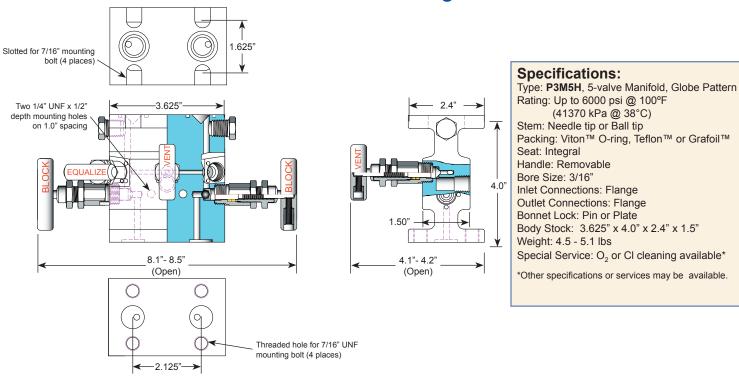
Special Service: O2 or Cl cleaning available*

*Other specifications or services may be available.

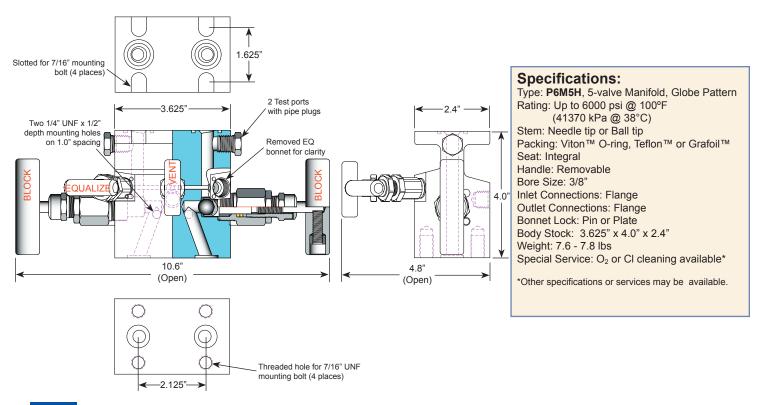


*P3M5H™, P6M5H™*Flange x Flange Technical Specifications

3/16" Bore Configuration



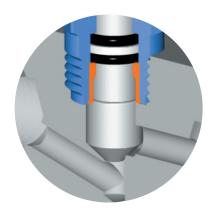
3/8" Bore Configuration



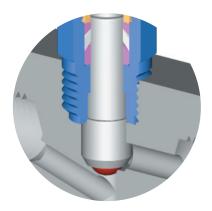


P3M5H™, P6M5H™ Stem and Seat Characteristics

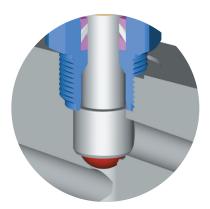
Stem and Seat Configurations



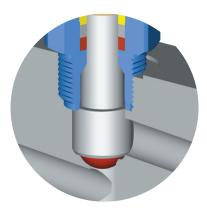
3/16" Bore O-ring Configuration



3/16" Bore Packed Configuration

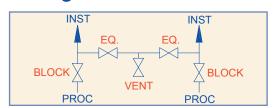


3/8" Bore Teflon™ Packed Configuration



3/8" Bore Grafoil™ Packed Configuration

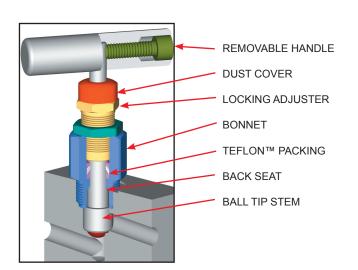
Flow Diagram for All Manifolds

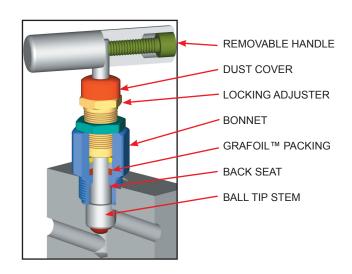




P3M5H™, P6M5H™ Block Bonnet Characteristics and Accessories

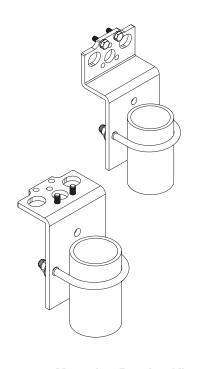
Teflon™ and Grafoil™ Packed Bonnet Assembly



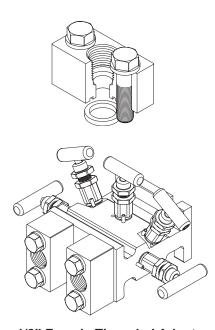


NOTE: BONNET LOCK PIN NOT SHOWN

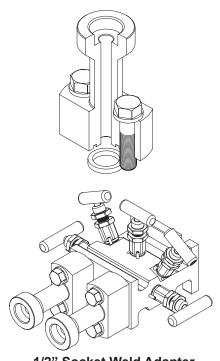
Optional Manifold Accessories



Mounting Bracket Kit



1/2" Female Threaded Adapter



1/2" Socket Weld Adapter



P3M5H™, *P6M5H™* Additional Technical Information

Use with Confidence, Parker Products Meet the Following **Specifications:**

- ASME B31.1 Power Piping
- ASME B31.3 Process Piping
- ASME B16.34 Valves Flanged, Thread, and Welding End
- API 598 Valve Inspection and Testing
- MSS SP-25 Standard Marking Systems for Valves, Fittings and Flange Unions
- MSS SP-99 Instrument Valves
- MSS SP-105 Instrument Valves for Code Applications
- NACE MR0175 for all 316SS valves and A105CS body/316SS bonnet (SC Material Code)

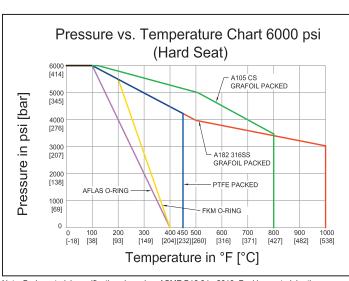
Materials of Construction

| Code | SS | SC | CS |
|----------|-----------|-----------|-----------|
| Body | ASTM A182 | ASTM A105 | ASTM A108 |
| | 316SS | CS | CS |
| Bonnet | ASTM A182 | ASTM A182 | ASTM A108 |
| | 316SS | 316SS | CS |
| Stem | ASTM A182 | ASTM A182 | ASTM A582 |
| | 316SS | 316SS | 303SS |
| Adjuster | ASTM A582 | ASTM A582 | ASTM A108 |
| | 303SS | 303SS | CS |
| Insert | ASTM A182 | ASTM A182 | ASTM A108 |
| | 316SS | 316SS | CS |
| Handle | ASTM A582 | ASTM A582 | ASTM A108 |
| | 303SS | 303SS | CS |

Seal & Seat Temperature Rating

| Code | Description | Min. Temp. | Max. Temp. | | |
|--|-----------------------|------------------|-------------------|--|--|
| Α | Aflas™ | 15°F (-10°C) | 400°F (204°C) | | |
| V | Viton™ | -20°F (-29°C) | 400°F (204°C) | | |
| Т | Teflon™ | -65°F (-54°C) | 450°F (232°C) | | |
| G | Grafoil™ (SS Body) | -70°F (-56°C) | 1000°F (537°C) | | |
| | (CS Body) | -70°F (-56°C) | 800°F (427°C) | | |
| Note: Grafoil™ is suitable for services in excess of 1000°F in | | | | | |

a non-oxidizing environment.



Note: Body material specifications based on ASME B16.34 - 2013. Packing material ratings based on manufacturer's specifications. Approximations only. Parker does not represent these values as finite. They are provided only as representative values.



*P3M5H™, P6M5H™*Model Numbering System

| Parker | Orifice Size | Туре | Inlet Size | Inlet Type | Outlet Size | Outlet Type | Material | Packing | Seat | Stem Tip | Option Codes | Description |
|--|---|------|---------------|-------------------|----------------|--------------|---|--------------------------------|----------|-----------------------|-----------------|---|
| Р | 3=3/16" | М5Н | 8=1/2" | F=FNPT | 8=1/2" | F=FNPT | SS=ASTM | A=Aflas™ | Integral | Needle Tip | LB | Bonnet Lock |
| | | | | | | | A182 | | (leave | Standard | СС | Chlorine Clean |
| | | | | | | | 316/316L | | blank) | (leave blank) | ОС | Oxygen Clean |
| | 6=3/8" | | | FL=Flange | | FL=Flange | SC=ASTM A105 CS* | V=Viton™ (FKM) | | B=316SS Ball Tip | TG | SS Tag |
| | | | | FT=Female | | FT=Female | CS=ASTM | T=Teflon™ | | BC=Ceramic | SGI | Sour Gas ISO NACE Latest Rev. |
| | - | | | Tube Fitting | - | Tube Fitting | A108 CS* | (PTFE) | | Ball Tip | N4 | Monel [™] 400 Stem |
| | | | | | | | C5=ASTM A350 LF2 | G=Grafoil™ | | BM=Monel™ Ball Tip | N5 | Monel [™] 500 Stem |
| | + | | | | | | N4=Monel™ | G4=Low | | Dan rip | N6 | Inconel [™] 625 Stem |
| | | | | | | | 400 | Torque | | | N8 | Inconel™825 Stem |
| | | | | | | | N6=Inconel™ | Grafoil™ | | | N2 | Hastelloy™ C276 Stem |
| | | | | | | | 625 | | | | H(V)MB | Horizontal (Vertical) Mounting Bracket |
| | | | | | | | N8=Inconel™ 825 | | | | H(V)MBS | SS Horizontal (Vertical) |
| | | | | | | | N2=Hastelloy™ | | | | | Mounting Bracket |
| | | | | | | | C276 | | | | S6 | 316 SS Bolts |
| EXAMPLE: P3M5H8F8FSSTB = 3/16" Orifice, 5-Valve Manifold, 1/2" FNPT Inlet, 1/2" FNPT Outlet, 316 SS Body, Teflon™ Packing, Integral Seat, Ball Tip Stem | | | | | | | 225CS | 2.25" CS Bolts | | | | |
| | T. | | | grai Seat, Bail i | | Τ_ | ss | Т | 1 | | 225S4 | 2.25" 304 SS Bolts |
| - | 3 | М5Н | | 1 - | 8 | F | 1 | 1 - | | В | 225S6 | 2.25" 316 SS Bolts |
| *For code applications, A105 CS must be selected for CS valves. Code grade bolts must be specified for code applications. Note: Standard Bolting Options , CS - carbon steel, Gr.8, zinc plated bolts; SS - stainless steel, 18.8 (304SS) bolts. | | | | | | | ТВ | 1/4" FNPT Test Ports Bottom | | | | |
| | | | | | | | | | | | РВ | 1/4" FNPT Purge Ports Bottom |
| | | | | | | | B7 | AISI 4140/4142 QT | | | | |
| Code Bolting Information | | | | | | | B8C1 | Class 1, 304SS, ST | | | | |
| 1. B7, B8C1, B8MC1, B8C2, B8MC2 are code grades to ASTM A193: | | | | | | B8MC1 | Class 1, 316SS, ST | | | | | |
| | 2. To specify code grade bolting, example: 225B7 indicates 2.25" bolt length; B7 grade, alloy steel, AlSI 4140/4142 | | | | | B8C2 | Class 2, 304SS, ST, SH | | | | | |
| | | | | | | | QT-Quenched & Tempered; ST-Carbide Solution Treated; SH-Strain Hardened | | | | B8MC2 | Class 2, 316SS, ST, SH |

| BOLT OPTIONS | OLT OPTIONS | | | BOLT MATERIAL DESIGNATION | | | |
|--------------------------------------|---|--------|----------------------------------|-------------------------------------|--------|--|--|
| Application | Description | Length | cs | 304 SS | 316 SS | | |
| | Bi-planar Design: Rosemount™ 1151, Honeywell™ 900 etc. | 1" | Blank: Standard for CS Manifolds | Blank: Standard for SS Manifolds | -S6 | | |
| DP Transmitter | Coplanar Design: Rosemount™ 3051, 3095, 2024 with coplanar flange. | 2 1/4" | -225CS | -225S4 | -225S6 | | |
| Flow Computer | ABB Total Flow, Thermo Fisher™ (with Honeywell™ Transducer Module), Barton Scanner, Bristol Teleflow & TeleTrans | 1" | Blank: Standard for CS Manifolds | Blank: Standard for SS Manifolds | -S6 | | |
| | Fisher™, Flow Automation™ (with Rosemount™ transducer module), Daniel, Dynamic Fluid | 2 1/4" | -225CS | -225S4 | -225S6 | | |
| | DP Bi-planar design used in combination with DP to GP Adapter (DPG6S) | 2" | -200CS | -200S4 | -200S6 | | |
| DP Transmitter with DP to GP Adapter | DP Coplanar design used in combination with DP to GP Adapter (DPG6S) | 3 1/4" | -325CS | 325S4 | -325S6 | | |
| Note: For manifolds with | dielectric option add 1/4" to bolt length. | | · | | | | |

For further information please contact:



Quality

Parker Hannifin Canada Instrumentation Group 2620 21st Street N.E. Calgary, Alberta T2E 7L3 Phone:(403) 291-3154 Fax: (403) 291-3292

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