



# **P6M5S™ AND P6MA5S™**

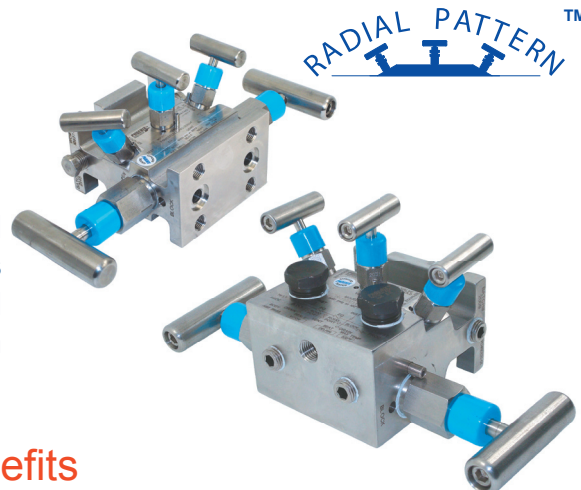
## **5-VALVE GAS MANIFOLD**

### **5-VALVE GAS MANIFOLD**

US PATENT NO.: US 7,225,832 B2

### **3/8" Bore 5-Valve Gas Style Manifold**

The 5-valve roddable manifold features two isolation valves, two equalizer valves and a 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 of the manifold 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.



#### **Standard Features**

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



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



Packing below stem threads



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



Stem threads are rolled, not cut



Non-rotating tapered tip stem



8 RMS stem finish



V-Style Teflon™ packing



Pressure component materials sourced from the US,  
Canada or Europe



#### **Benefits**

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

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

Prevents corrosion of critical stem threads

Mitigates risk of stress cracking

Higher quality stem for longer service life

Extended soft seat life and a reliable soft seat shut off

Extended packing life

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

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

**Solutions for Oil & Gas and Petrochemical Processing**

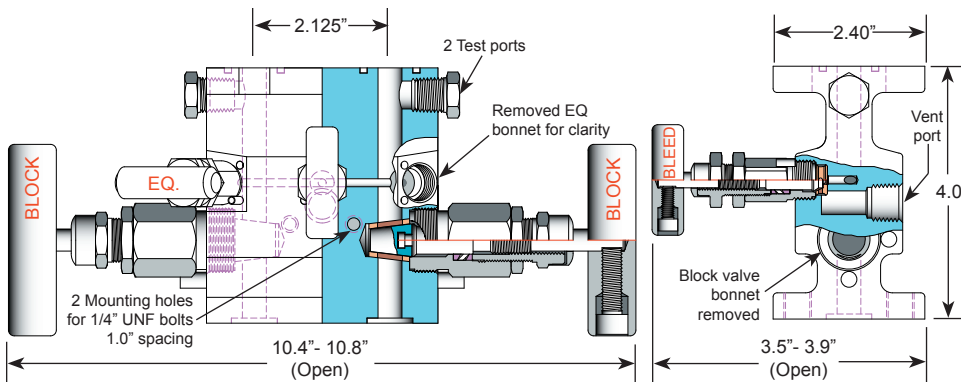




# P6M5S™ AND P6MA5S™ 5-Valve Manifold

## Technical Specifications

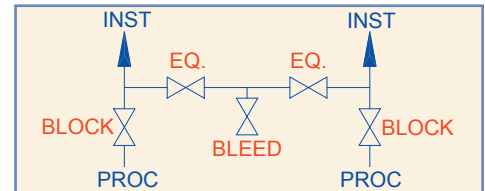
### P6M5S Straight Configuration



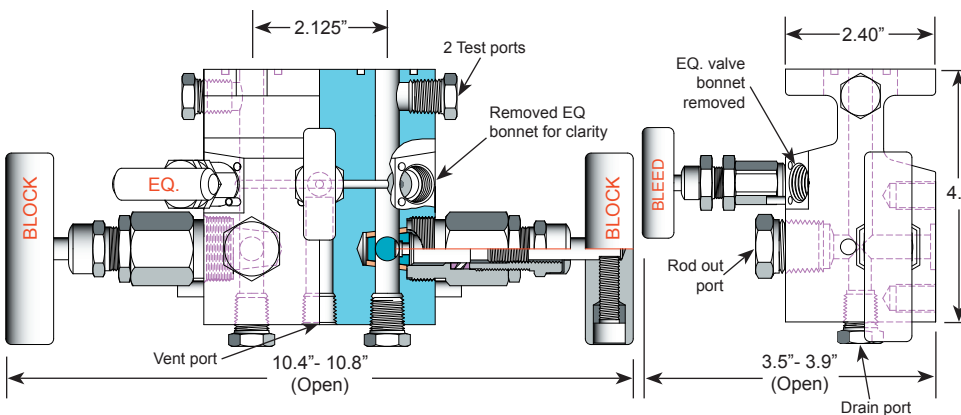
#### Specifications:

Type: **P6M5S** FxF Manifold, Roddable Pattern  
 Rating: Up to 6000 psi @ 100°F  
 (41370 kPa @ 38°C)  
 Stem: Non-Rotating Taper Tip, Flat Tip  
 Packing: Viton™ O-ring or Teflon™  
 Seat: Delrin™, Peek™ or Tefzel™ (for blocks)  
 Handle: Removable  
 Bore Size: 3/8" (Primary), 1/8" (EQ., Bleed)  
 Inlet Connections: 4-Bolt Flange  
 Outlet Connections: 4-Bolt Flange  
 Bonnet Lock: Pin or Plate  
 Body Stock: 3.625" x 4.0" x 1.7 x 2.4"  
 Weight: 7.6 - 7.8 lbs  
 Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available.



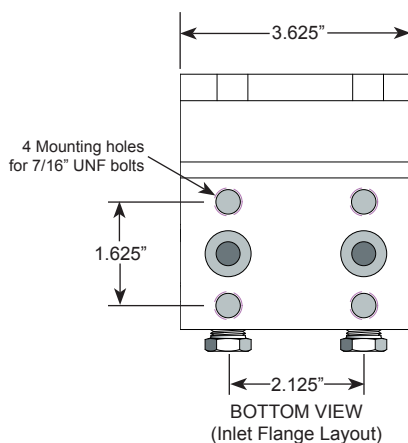
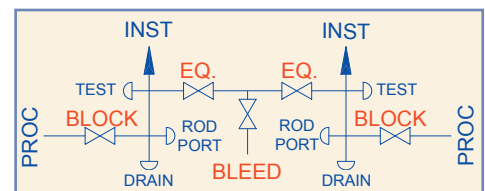
### P6MA5S 90° Angle Configuration



#### Specifications:

Type: **P6MA5S** Angle FxF Manifold, Roddable Pattern  
 Rating: Up to 6000 psi @ 100°F  
 (41370 kPa @ 38°C)  
 Stem: Non-Rotating Taper Tip, Flat Tip  
 Packing: Viton™ O-ring or Teflon™  
 Seat: Delrin™, Peek™ or Tefzel™ (for blocks)  
 Handle: Removable  
 Bore Size: 3/8" (Primary), 1/8" (EQ., Bleed)  
 Inlet Connections: 4-Bolt Flange  
 Outlet Connections: 4-Bolt Flange  
 Bonnet Lock: Pin or Plate  
 Body Stock: 3.625" x 4.0" x 2.4"  
 Weight: 9.4 - 9.6 lbs  
 Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available.

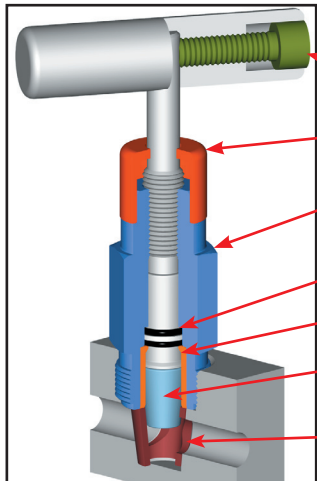


P6MA5S Application

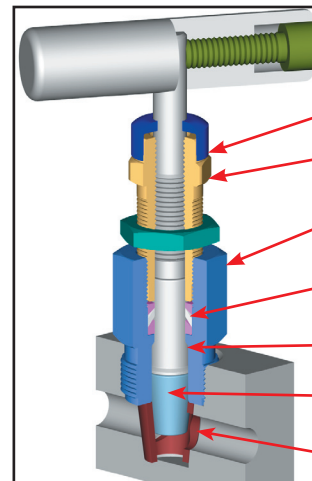


# P6M5S™ AND P6MA5S™ 5-Valve Manifold Bonnet, Stem and Seat Characteristics

## 3/8" Bore O-ring and Packed Bonnet Assembly

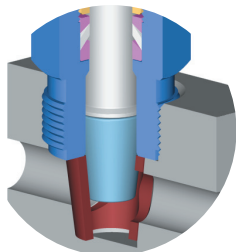


REMOVABLE HANDLE  
DUST COVER  
BONNET (LOCK PIN NOT SHOWN)  
DUAL O-RING SEAL  
BACK SEAT (INSERT)  
NON-ROTATING TAPER TIP STEM  
SOFT SEAT

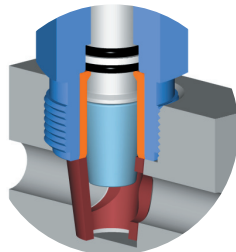


REMOVABLE HANDLE  
DUST COVER  
LOCKING ADJUSTER  
BONNET (LOCK PIN NOT SHOWN)  
"V" TYPE TEFLON™ (3 Pcs) PACKING  
BACK SEAT  
NON-ROTATING TAPER TIP STEM  
SOFT SEAT

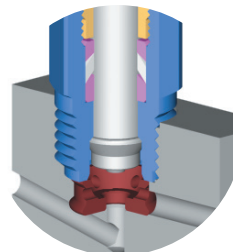
## Stem and Seat Configurations



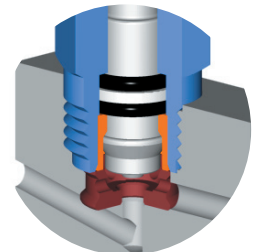
3/8" Bore  
Non-rotating Packed  
for Block



3/8" Bore  
Non-rotating O-ring  
for Block



1/8" Bore  
Packed  
for Equalize and Bleed



1/8" Bore  
O-ring  
for Equalize and Bleed

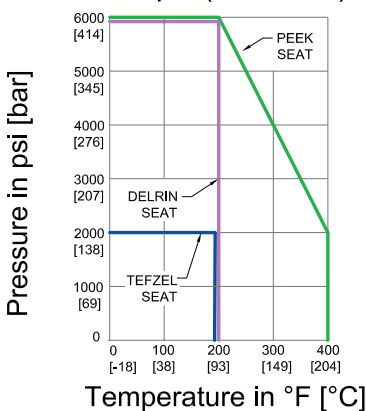
## Seal & Seat Temperature Rating

Code	Description	Min. Temp.	Max. Temp.
A	Aflas™	15°F (-10°C)	400°F (204°C)
V	Viton™	-20°F (-29°C)	400°F (204°C)
T	Teflon™	-65°F (-54°C)	450°F (232°C)
D	Delrin™	-40°F (-40°C)	200°F (93°C)
P	Peek™	-40°F (-40°C)	400°F (204°C)
Z	Tefzel™	-300°F (-185°C)	300°F (150°C)

## Materials of Construction

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

Pressure vs. Temperature Chart  
6000 psi (Soft Seat)



Note: 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.



# P6M5S™ AND P6MA5S™ 5-Valve Manifold Model Numbering System

Parker	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Option Code
P	6=3/8"	M5S		FL= Flange		FL= Flange	SS=ASTM A182 316/316L	A=Aflas™	D=Delrin™	DI=Dielectric
		MA5S					SC=ASTM A105 CS*	V=Viton™ (FKM)	P=Peek™	OR=Viton™ O-ring Flange Seal
							CS=ASTM A108 CS*	T=Teflon™ (PTFE)	Z=Tefzel™ **	See Bolt Options Below

EXAMPLE: P6MA5SFLFLSSVD = 3/8" Orifice, Angle Manifold, Flange Inlet, Flange Outlet, 316SS Body, Viton™ Packing, Delrin™ Seats, Non-rotating Tapered Tip Stem on Blocks, Flat Tip Stem on Bleed and EQs

P	6	MA5S		FL		FL	SS	V	D	
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\*For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves.

\*\*For block bonnet only.

Note: **Standard Bolting Options:** 1. **CS** - carbon steel, Gr.8, zinc plated bolts; **SS** - stainless steel, 18.8 (304SS) bolts.  
2. All manifolds are supplied with both 1" lg. and 2.5" lg. bolts.  
3. Manifolds with dielectric option are supplied with 1-1/4" lg. and 2-1/2" lg. bolts.

## BOLT OPTIONS

			BOLT MATERIAL DESIGNATION		
Application	Description	Length	CS	304 SS	316 SS
DP TRANSMITTER	Bi-planer Design: Rosemount™ 1151, Honeywell™ 900 etc.	1"	Blank: Standard for CS Manifolds	Blank: Standard for SS Manifolds	-S6
	Coplaner Design: Rosemount™ 3051, 3095, 2024 with coplaner flange.	2-1/2"	Blank: Standard for CS Manifolds	Blank: Standard for SS Manifolds	-250S6
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	2-1/2"	Blank: Standard for CS Manifolds	Blank: Standard for SS Manifolds	-250S6
DP Transmitter with DP to GP Adapter	DP Bi-planer design used in combination with DP to GP Adapter (DPG6S)	2"	-200CS	-200S4	-200S6
	DP Coplaner design used in combination with DP to GP Adapter (DPG6S)	3-1/4"	-325CS	325S4	-325S6

## 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)

## For further information please contact:



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