

P6PM4H™ AND P6PM2H™ PURGE MANIFOLDS AND ASSEMBLIES

PURGE MANIFOLD

PATENT PENDING

4-Valve and 2-Valve Purge Manifold

Phoenix Precision's constant purge system is designed to protect instruments and connecting tubing from corrosive or toxic process media. This innovative system also prevents plugging of sensing points between instruments and process connections. The constant purge of the system eliminates the need for rotometers, back pressure regulators, multiple threaded connections and individual valves. The system is offered in a differential FLOW, LEVEL application design and a gauge pressure application design. A complete purge system can be ordered with one part number.



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

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

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 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.







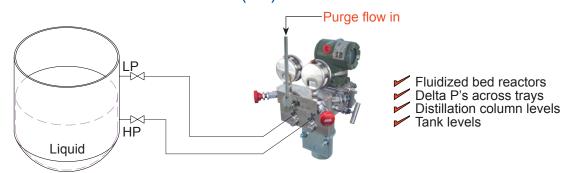
P6PM4H[™] and P6PM2H[™] Purge Manifolds Special Features and Applications

Special Features

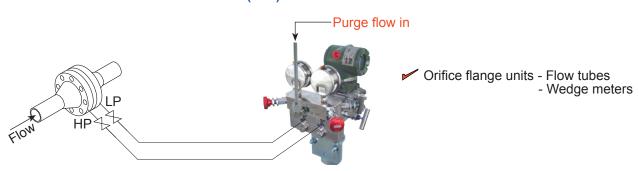
- Fixed constant purge for liquids and gases
- Ordering a complete purge system with one part number
- Built-in test valves
- ✓ Built-in bypass valves to allow for high flow purge
- Reduces maintenance and tampering

- ✓ Built-in 316SS sintered purge filter
- ✓ High temperature option, allows temperatures to 1000°F
- Makes change of one piece flow metering element easy
- ✓ Variety of flow rates available both liquids and gases
- Optional built-in check valves to prevent process backing into purge system

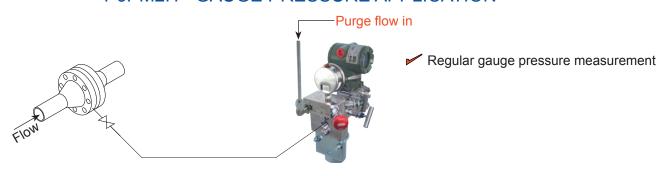
P6PM4H - LEVEL(△P) APPLICATION



P6PM4H - FLOW(△P) APPLICATION



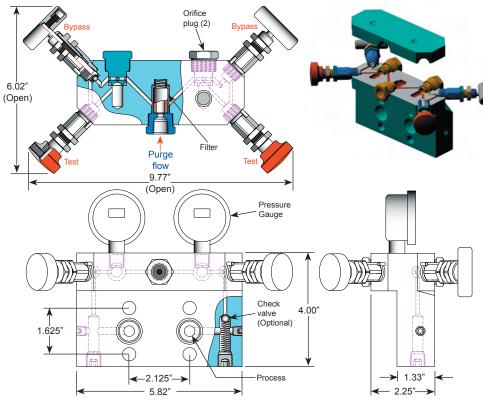
P6PM2H - GAUGE PRESSURE APPLICATION





P6PM4H™ and P6PM2H™ Purge Manifolds Technical Specifications

P6PM4H Differential Pressure Purge Manifold



Specifications:

Type: P6PM4H Purge Manifold, Globle Pattern

Rating: Up to 6000 psi @ 100°F

(41370 kPa @ 38°C)

Stem: Ball Tip

Packing: Teflon™ or Grafoil™

Seat: Integral

Handle: Removable

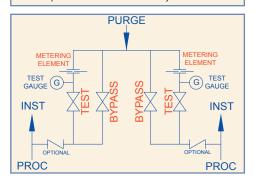
Bore Size: 3/8" (Process), 1/8" (Purge) Inlet Connections: 1/2" FNPT x 2 Outlet Connections: 4-bolt Flange

Bonnet Lock: Pin or Plate

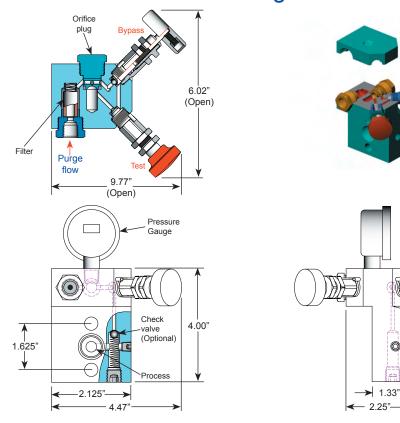
Weight: 11.8 lbs

Special Service: O2 or CL cleaning available*

*Other specifications or services may be available.



P6PM2H Gauge Pressure Purge Manifold



Specifications:

Type: **P6PM2H** Purge Manifold, Globle Pattern

Rating: Up to 6000 psi @ 100°F

(41370 kPa @ 38°C)

Stem: Ball Tip

Packing: Teflon™ or Grafoil™

Seat: Integral

Handle: Removable

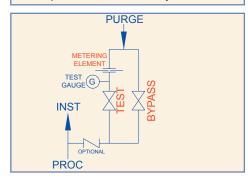
Bore Size: 3/8" (Process), 1/8" (Purge) Inlet Connections: 1/2" FNPT x 1 Outlet Connections: 2-Bolt Flange

Bonnet Lock: Pin or Plate

Weight: 5.8 lbs

Special Service: O2 or CL cleaning available*

*Other specifications or services may be available.





P6PM4H™ and P6PM2H™ Purge Manifolds Model Numbering System

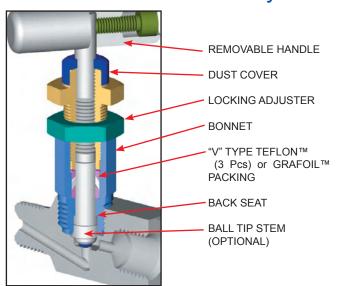
Phoenix	Orifice Size	Туре	Inlet Size	Inlet Type	Outlet Type	Material	Packing	Seat	Stem	Orifice Size
Р	6=3/8"	PM4H (4 valves)	8=1/2"	F=FNPT	FL=Flange	SS=ASTM A182 316 /316L	T=Teflon™	Integral (Blank)	Needle (Blank)	See chart
		PM2H (2 valves)					G=Grafoil™		B=Ball tip	on the right
Example: P6PM4H8FFLSSTB = 3/8" Bore,1/2" FNPT Inlet, Flange Outlet, 316SS, Teflon™ packing, Integral Seat, Ball Tip Stem										
Р	6	PM4H	8	F	FL	ss	Т		В	- 012

Note: 1. PM4H: a complete purge manifold assembly includes 4-valve purge manifold, 3-valve flange x flange manifold, and horizontal
mounting bracket. Packing and prifice size must be specified

^{2.} PM2H: a complete purge manifold assembly includes 2-valve purge manifold, 2-valve flange x flange manifold, and horizontal mounting bracket. Packing and orifice size must be specified.

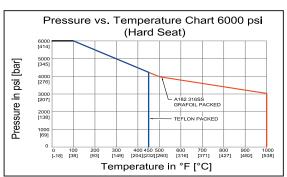
Metering Element Orifice Flow Rates					
Orifice Size	SCFH (10 psi Air)	GPH (25 psi H₂O)			
.012"	2	1			
.016"	4	2			
.031"	19	6			
.047"	36	16			
.063	55	28			
.078	85	42			

Packed Bonnet Assembly



Standard Materials								
Valve	Body	Bonnet	Stem	Ball	Packing			
ASTM A182 316SS	Teflon™ and Grafoil™							

NOTE: Low torque Grafoil™ available (G4 Packing Code)



Note: Body material specifications based on ASME B16.34 - 2009. Packing material ratings based on manufacturer's specifications. Approximations only. Phoenix does not represent these values as finite. They are provided only as representative values.

Use with Confidence, Phoenix Precision 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/ISO15156 for all 316SS valves and A105CS body/316SS bonnet (SC-Material Code) when in service with less than 50 PPM of chlorides

For further information please contact:



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