

BOTTOM MOUNT MANIFOLD

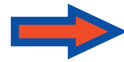
1/8" Bore Bottom Mount Manifold

The 1/8" bore bottom mount manifold is designed for transmitters having flanged bottom inlets with 2 1/8" spacing. The globe-style manifold affords maximum shut-off and is available in 2-valve, 3-valve, 5-valve gas and 5-valve power configurations in a variety of materials and a range of special tips. The manifold includes robust stems, pinned bonnets, and two mount holes for connecting to Phoenix's bracket mount.

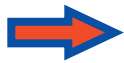


Standard Features

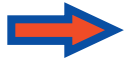
Hydrotested at 150% of rated pressure (shell test). Nitrogen gas tested to 2000 psi.



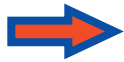
Seat tightness (zero leakage) verified to 110% of rated pressure. Nitrogen gas tested to 2000 psi.



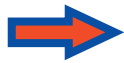
Packing below stem threads



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



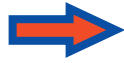
Stem threads are rolled, not cut



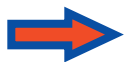
8 RMS stem finish



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 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 packing life

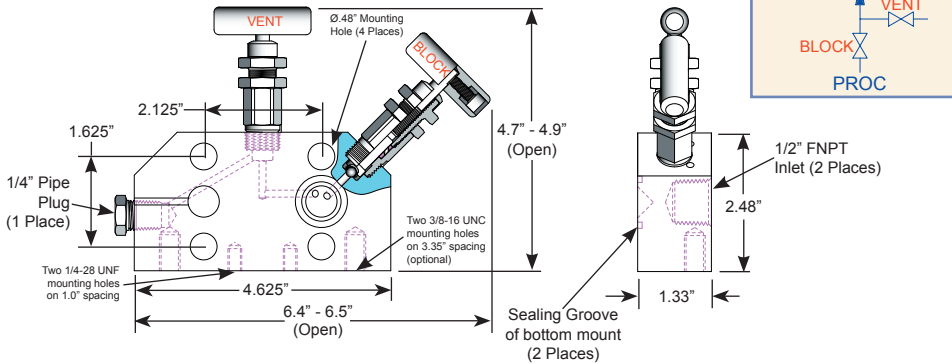
30-40% less operational torque and less frequent packing adjustments than traditional Teflon™ packed valves

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

P2MBM™ 2-, 3-, 5-Valve Manifold

Technical Specifications

2 - Valve Configuration

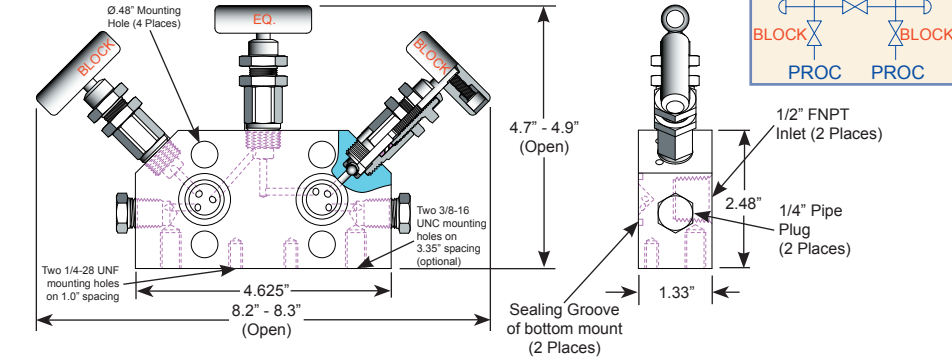


Specifications:

Type: **P2MBM2H** Valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip or Ball tip
 Packing: Aflas™, Viton™ O-ring, Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/2" FNPT
 Outlet Connections: Flange
 Vent Port: 1/4" FNPT (1 Place, includes 1/4" Pipe Plug)
 Bonnet Lock: Pin or Plate
 Body Stock: 4.625" x 2.48" x 1.33"
 Weight: 3.90 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available

3 - Valve Configuration

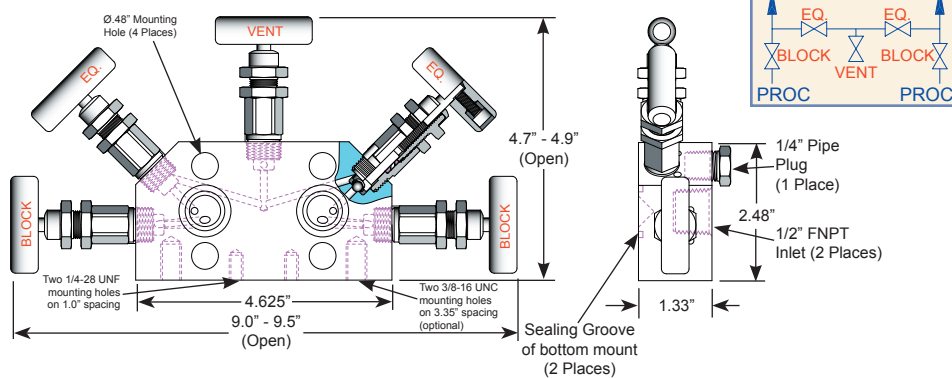


Specifications:

Type: **P2MBM3H** Valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip or Ball tip
 Packing: Aflas™, Viton™ O-ring, Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/2" FNPT
 Outlet Connections: Flange
 Vent Port: 1/4" FNPT (2 Places, includes 1/4" Pipe Plugs)
 Bonnet Lock: Pin or Plate
 Body Stock: 4.625" x 2.48" x 1.33"
 Weight: 4.18 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

5 - Valve Configuration (Gas)

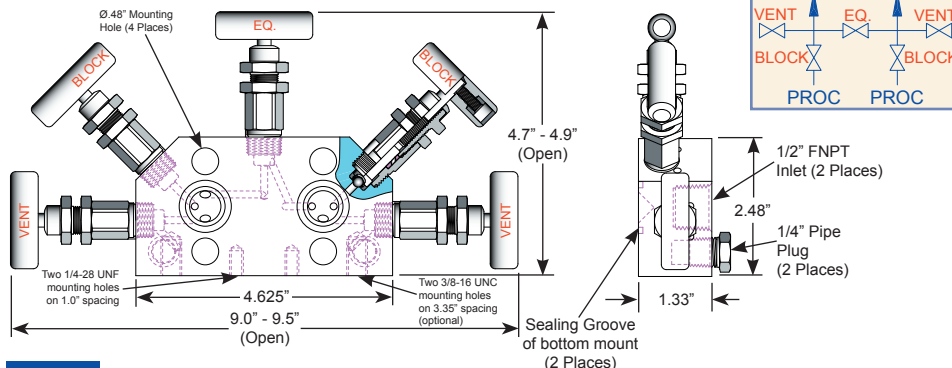


Specifications:

Type: **P2MBM5H** Valve, 1-Vent, 2-Equalize, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip and Ball tip
 Packing: Aflas™, Viton™ O-ring, Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/2" FNPT
 Outlet Connections: Flange
 Vent Port: 1/4" FNPT (1 Place, includes 1/4" Pipe Plug)
 Bonnet Lock: Pin or Plate
 Body Stock: 4.625" x 2.48" x 1.33"
 Weight: 4.72 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

5 - Valve Configuration (Power)



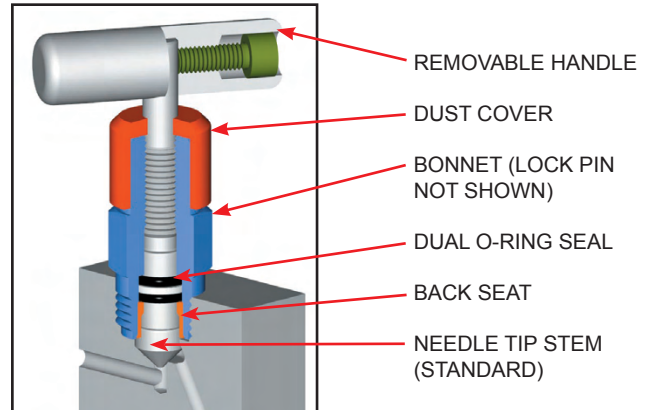
Specifications:

Type: **P2MPBM5H** Valve, 2-Vent, 1-Equalize, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip and Ball tip
 Packing: Aflas™, Viton™ O-ring, Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 1/8"
 Inlet Connections: 1/2" FNPT
 Outlet Connections: Flange
 Vent Port: 1/4" FNPT (2 Places, includes 1/4" Pipe Plugs)
 Bonnet Lock: Pin or Plate
 Body Stock: 4.625" x 2.48" x 1.33"
 Weight: 4.72 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

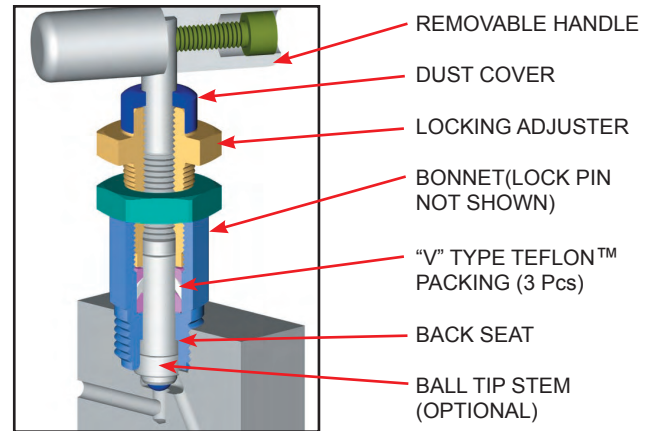
O-Ring Bonnet Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Ball	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	SEE OPTION CODES ON PAGE 4	Dual Viton™ O-ring with Teflon™ backup ring
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		




Packed Bonnet Assembly

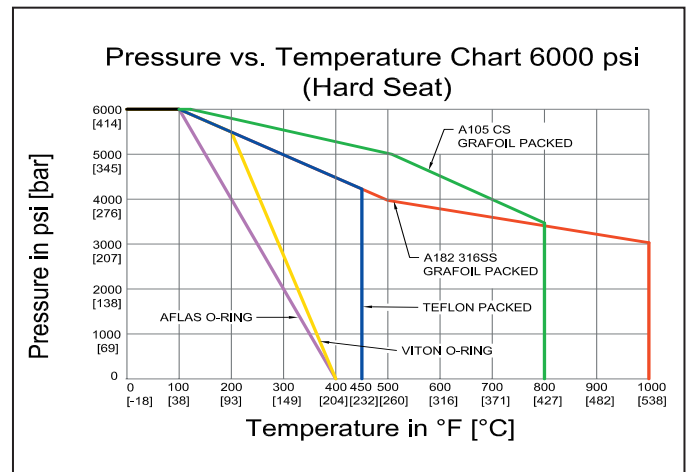
Standard Materials					
Valve	Body	Bonnet	Stem	Ball	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	SEE OPTION CODES ON PAGE 4	Teflon™ and Grafoil™
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		



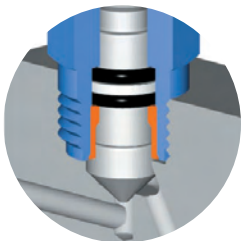
NOTE: Optional low torque Grafoil™ available (G4 Packing Code)

Pipe Plug for Vent

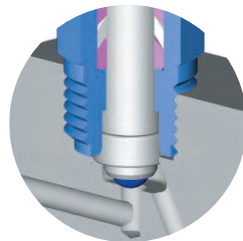
Standard Specifications	
	<p>1/4" Pipe Plug: PP4M Specifications: Rating: 10000 psi @ 100°F (68950 kpa @ 38°C) Hex Size: 5/8" Weight: 0.045 lbs (Length: 0.7")</p> <p>*Add SS for A182 316SS, CS for A108CS</p>



Stem and Seat Configurations



Mini Needle Tip
(Standard)



Mini Ball Tip
(Optional)

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.

P2MBM™ 2-, 3-, 5-Valve Manifold Model Numbering System

Phoenix	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip
P	2=1/8"	MBM2H (2-Valve Manifold)	8=1/2"	F=FNPT		FL=Flange	SS=ASTM A182 316/316L	A=Aflas™	Integral (leave blank)	Needle Tip Standard (leave blank)
		MBM3H (3-Valve Manifold)					SC=ASTM A105 CS*	V=Viton™ (FKM)		B=316SS Ball Tip
		MBM5H (5-Valve Manifold)					CS=ASTM A108 CS*	T=Teflon™ (PTFE)		BC=Ceramic Ball Tip
		MPBM5H (5-Valve, Power Style)					C5=ASTM A350 LF2	G=Grafoil™		BM=Monel™ Ball Tip
							N4=Monel™ 400	G4=Low Torque Grafoil™		
							N6=Inconel™ 625			
							N8=Inconel™ 825			
							N2=Hastelloy™ C276			
EXAMPLE: P2MBM3H8FFLSSTB = Phoenix, 1/8" Orifice, Bottom Mount, 3-Valve, 1/2" MNPT Inlet, Flange Outlet, 316 SS Body, Teflon™ Packing, Integral Seat, 316 SS Ball Tip Stem										
P	2	MBM3H	8	F		FL	SS	T		B
*For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves.										

Option Codes	Description
LB	Bonnet Lock
CC	Chlorine Clean
OC	Oxygen Clean
TG	SS Tag
SGI	Sour Gas ISO NACE Latest Rev.
RLR	Round Large Red Aluminum Handle for Bleed (Vent)
RC	Round Handle CS
RS	Round Handle SS
N4	Monel™ 400 Stem
N5	Monel™ 500 Stem
N6	Inconel™ 625 Stem
N8	Inconel™ 825 Stem
N2	Hastelloy™ C276 Stem

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

Seal and Seat Material 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)
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.

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