

#### P3M2H™ 2-VALVE PIPE x PIPE MANIFOLD

## **2-VALVE MANIFOLD**

#### 3/16" Bore 2-Valve Pipe x Pipe Manifold

The 2-valve block and bleed manifold is an efficient and economical choice for static pressure measurement due to its built-in vent/calibration port. The pipe-by-pipe design features a body manufactured from extruded solid bar, robust stems and bonnets pinned for safety. Parker's unique design assures a bubble tight seal. The manifold is offered in a variety of special tips, materials and configurations that meet most application requirements.



#### 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** 

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.

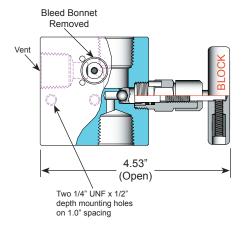
**Solutions for Oil & Gas and Petrochemical Processing** 

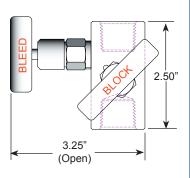




# P3M2H™ 2-Valve Pipe x Pipe Manifold Technical Specifications

# Pipe x Pipe Configuration





#### **Specifications:**

Type: **P3M2H**, Pipe x Pipe, Globe Pattern Rating: Up to 6000 psi @ 100°F

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" (Primary), 1/8" (Bleed)

Inlet Connections: 1/2" FNPT

Outlet Connections: 1/2"FNPT Bleed Port: 1/2"FNPT Bonnet Lock: Pin or Plate

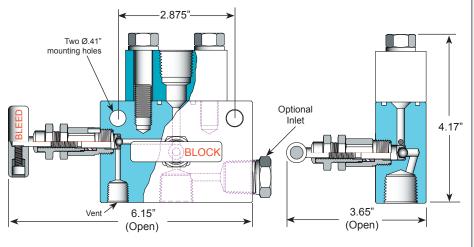
Body Stock: 2.5" x 2.5" x 1.25" Weight: 2.24 - 2.31 lbs

Mounting: 2 mounting holes included on

manifold for vertical mounting Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available.

# Pipe x Futbol Configuration



#### Specifications:

Type: **P3M2H**, Pipe x Futbol, 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"(Primary), 1/8" (Bleed)

Inlet Connections: 1/2" FNPT
Outlet Connections: 1/2" FNPT
Bleed Port: 1/4"FNPT
Bonnet Lock: Pin or Plate

Body Stock: 3.750" x 2.5" x 1.25"

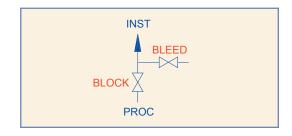
Weight: 4.56 - 4.71 lbs

Mounting: Integral 2-inch "U" bolt for pipe stand

mounting included

Special Service: O2 or CL cleaning available\*

\*Other specifications or services may be available.

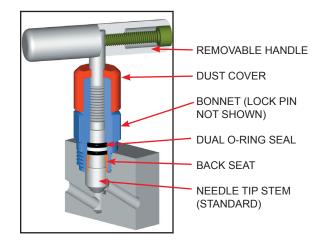




# P3M2H™ 2-Valve Pipe x Pipe Manifold Bonnet, Stem and Seat Characteristics

## O-Ring Bonnet Assembly

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



# Teflon™ or Grafoil™ Bonnet Assembly

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

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

# REMOVABLE HANDLE DUST COVER LOCKING ADJUSTER BONNET (LOCK PIN NOT SHOWN) "V" TYPE TEFLON™ (3 Pcs) or GRAFOIL™ PACKING BACK SEAT BALL TIP STEM (OPTIONAL)

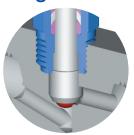
## **Stem and Seat Configurations**



3/16" Bore Needle Tip (Standard)



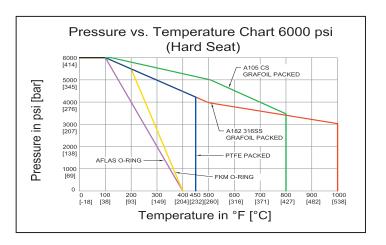
Mini Needle Tip (Standard)



3/16" Bore Ball Tip (Optional)



Mini Ball Tip (Optional)



Note: Body material specifications based on ASME B16.34 - 2009. 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.



# P3M2H™ 2-Valve Pipe x Pipe Manifold Model Numbering System

Parker	Orifice Size	Туре	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip
Р	3=3/16"	M2H	8=1/2"	F=FNPT	8=1/2"	F=FNPT	SS=ASTM A182 316/316L	A=Aflas™	Integral (leave blank)	Needle Tip Standard (leave blank)
						FB=Futbol	SC=ASTM A105 CS*	V=Viton™ (FKM)		B=316SS Ball Tip
							CS=ASTM A108 CS*	T=Teflon™ (PTFE)		BC=Ceramic Ball Tip
							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: P3M2H8FFBSSTB = 3/16" Orifice, 2-Valve Manifold, 1/2" FNPT Inlet, Futbol Outlet, 316 SS Body, Teflon™ Packing, Integral Seat, 316 SS Ball Tip Stem										
Р	3	M2H	8	F		FB	ss	Т		В
* For code applications, A105 CS must be selected for CS valves. Code grade bolts must be specified for code applications.  ** Used for pipe x pipe manifolds only (See Option Codes)										

#### **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)

#### Code Bolting Information

SH-Strain Hardened

- 1. B7, B8C1, B8MC1, B8C2, B8MC2 are code grades to ASTM A193:
- 2. To specify code grade bolting, example: 225B7 indicates 2.25" bolt length; B7 grade, alloy steel, AISI 4140/4142 3. QT-Quenched & Tempered; ST-Carbide Solution Treated;
- 225S6 2.25" 316 SS Bolts TB 1/4" FNPT Test Ports Bottom PB 1/4" FNPT Purge Ports Bottom В7 AISI 4140/4142 QT B8C1 Class 1, 304SS, ST B8MC1 Class 1, 316SS, ST B8C2 Class 2, 304SS, ST, SH Class 2, 316SS, ST, SH

Option

LB

CC

OC

TG

SGI

N4

N5 N6

N8

N2

VMR\*\*

VMBS\*\*

S6

225CS

225S4

Description

Bonnet Lock

Chlorine Clean

Oxygen Clean

Sour Gas ISO NACE Latest Rev. Monel<sup>™</sup> 400 Stem

Monel™ 500 Stem

Inconel<sup>™</sup>625 Stem

Inconel<sup>™</sup>825 Stem Hastelloy™ C276

SS Tag

Stem

Vertical Mounting Bracket

SS Vertical Mounting Bracket

316 SS Bolts

2.25" CS Bolts

2.25" 304 SS Bolts

#### **Seal and Seat Material 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) (CS Body)	-70°F (-56°C) -70°F (-56°C)	1000°F (537°C) 800°F (427°C)

Note: Grafoil™ is suitable for services in excess of 1000°F in a non-oxidizing environment.

**Distributor / Representative:** 

#### For further information please contact:



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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Note: Standard Bolting Options, CS - carbon steel, Gr.8, zinc plated bolts; SS - stainless steel, 18.8 (304SS) bolts.