



# P2MDV™ 2-VALVE, 4-VALVE DOUBLE VENT MANIFOLD

## MANIFOLD

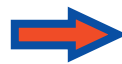
### 1/8" Bore Double Vent Manifold

The P2MDV provides a double block on the Vent/Calibrate connections for transmitters. Designed for superior control of fugitive emissions, it utilizes a double block for safety, and as preventative measure against accidental releases. The P2MDV's can be incorporated into a company's ISO 14001 Environmental Management System.

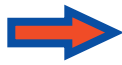


### Standard Features

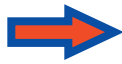
Hydrotested at 150% of rated pressure (shell test). Nitrogen gas tested to 2000 psi.



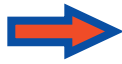
Seat tightness (zero leakage) verified to 110% of rated pressure. Nitrogen gas tested to 2000 psi.



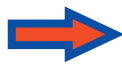
Packing below stem threads



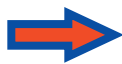
Metal body-to-bonnet seals are in compression, not tension



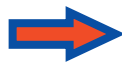
Stem threads are rolled, not cut



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.

Solutions for Oil & Gas and Petrochemical Processing

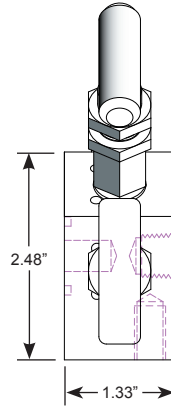
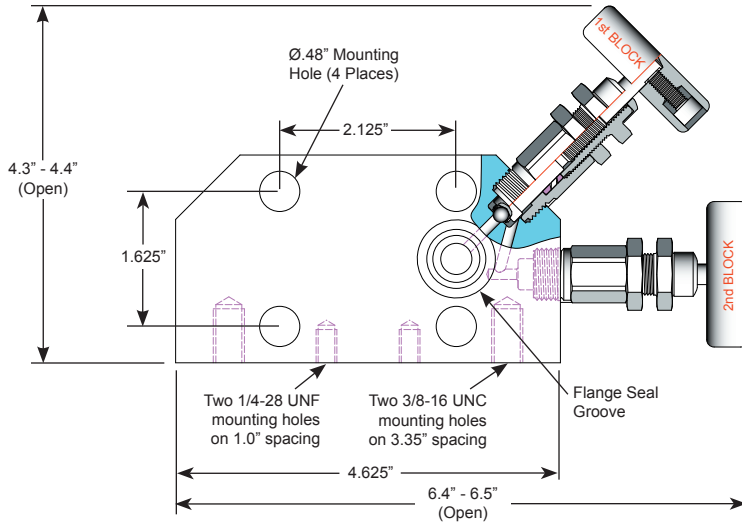




# P2MDV™ 2-, 4-Valve Manifold

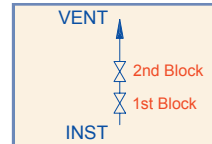
## Technical Specifications

### 2 - Valve Configuration (for Gauge Pressure Transmitter)

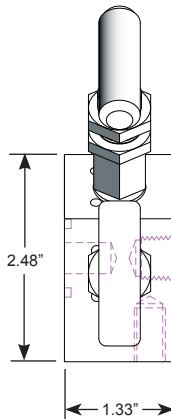
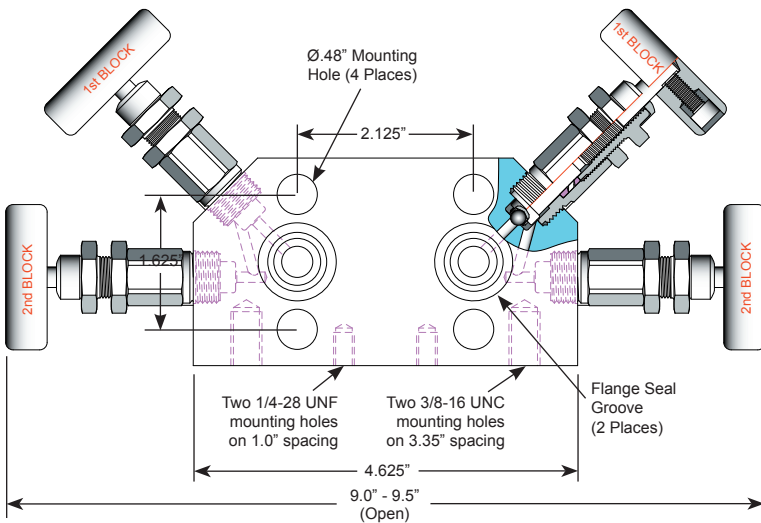


**Specifications:**  
 Type: P2MDV2H Valve, Globe Pattern  
 Rating: Up to 6000 psi @ 100°F  
 (41370 kPa @ 38°C)  
 Stem: Needle tip or Ball tip  
 Packing: Atlas™, Viton™ O-ring, Teflon™ or Grafoil™  
 Seat: Integral  
 Handle: Removable  
 Bore Size: 1/8"  
 Inlet Connections: Flange  
 Outlet Connections: 1/4" FNPT  
 Bonnet Lock: Pin or Plate  
 Body Stock: 4.625" x 2.48" x 1.33"  
 Weight: ~3.90 lbs  
 Special Service: O<sub>2</sub> or Cl cleaning available\*

\*Other specifications or services may be available

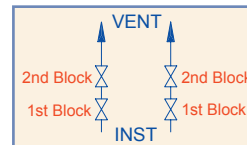


### 4 - Valve Configuration (for Differential Pressure Transmitter)

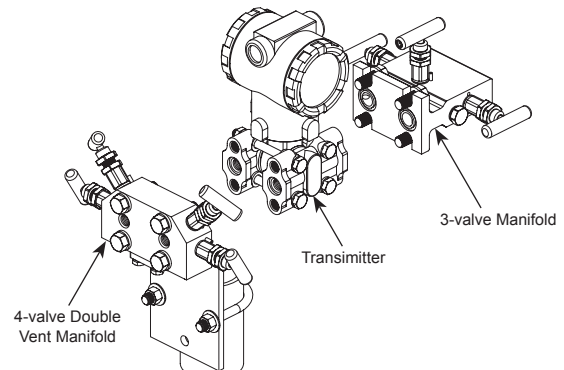
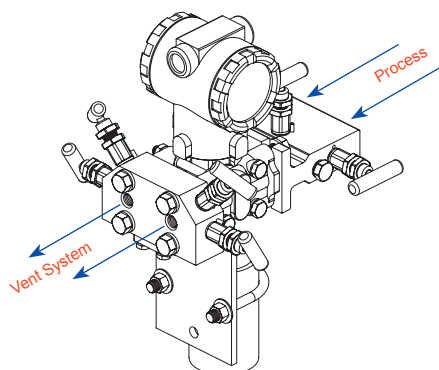


**Specifications:**  
 Type: P2MDV4H Valve, Globe Pattern  
 Rating: Up to 6000 psi @ 100°F  
 (41370 kPa @ 38°C)  
 Stem: Needle tip and Ball tip  
 Packing: Atlas™, Viton™ O-ring, Teflon™ or Grafoil™  
 Seat: Integral  
 Handle: Removable  
 Bore Size: 1/8"  
 Inlet Connections: Flange  
 Outlet Connections: 1/4" FNPT  
 Bonnet Lock: Pin or Plate  
 Body Stock: 4.625" x 2.48" x 1.33"  
 Weight: ~4.70 lbs  
 Special Service: O<sub>2</sub> or Cl cleaning available\*

\*Other specifications or services may be available.



### Illustrations of Application (4-valve configuration as shown)

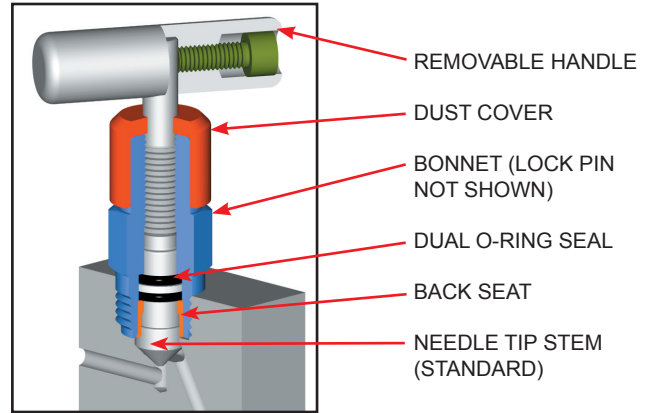




# P2MDV™ 2-, 4-Valve Manifold Bonnet, Stem and Seat Characteristics

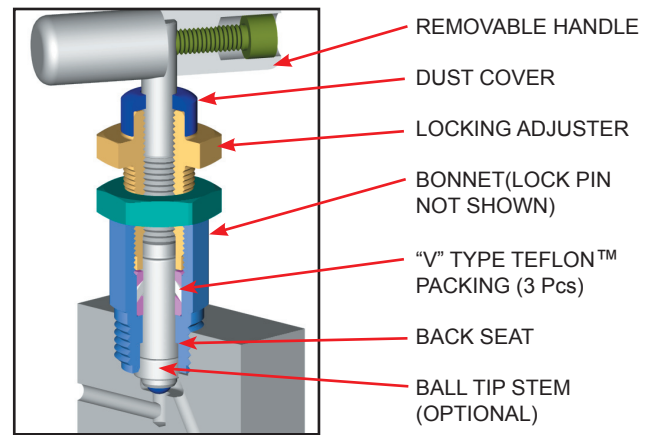
## O-Ring Bonnet Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Ball	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	SEE OPTION CODES 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		



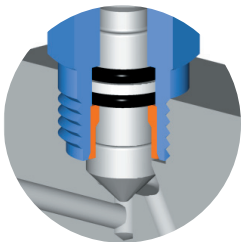
## Packed Bonnet Assembly

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		

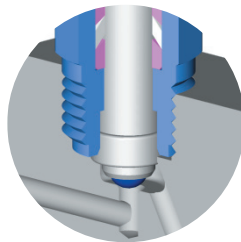


NOTE: Optional low torque Grafoil™ available (G4 Packing Code)

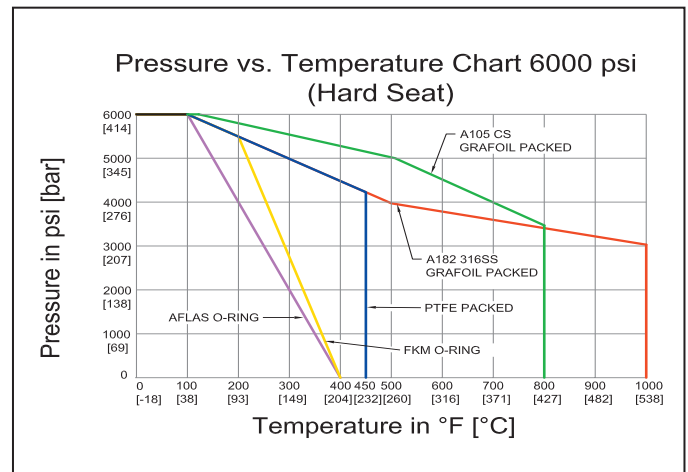
## Stem and Seat Configurations



Mini Needle Tip  
(Standard)



Mini Ball Tip  
(Optional)



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.



# P2MDV™ 2-, 4-Valve Manifold

## Model Numbering System

Parker	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip	Option Codes	Description
P	2=1/8"	MDV2H (2-Valve Manifold)		FL=Flange	4=1/4"	F=Female NPT	SS=ASTM A182 316/316L	A=Aflas™	Integral (leave blank)	Needle Tip Standard (leave blank)	LB	Bonnet Lock
		MDV4H (4-Valve Manifold)					SC=ASTM A105 CS*	V=Viton™ (FKM)		B=316SS Ball Tip	CC	Chlorine Clean
							CS=ASTM A108 CS*	T=Teflon™ (PTFE)		BC=Ceramic Ball Tip	OC	Oxygen Clean
							C5=ASTM A350 LF2	G=Grafoil™		BM=Monel™ Ball Tip	TG	SS Tag
							N4=Monel™ 400	G4=Low Torque Grafoil™			S	Sour Gas ISO NACE Latest Rev.
							N6=Inconel™ 625				RLR	Round Large Red Aluminum Handle for Bleed (Vent)
							N8=Inconel™ 825				RC	Round Handle CS
							N2=Hastelloy™ C276				RS	Round Handle SS
EXAMPLE: P2MDV2HFL4FSSTB = Parker, 1/8" Orifice, Double Vent, 2-Valve, Flange Inlet, 1/4" MNPT Outlet, 316 SS Body, Teflon™ Packing, Integral Seat, 316 SS Ball Tip Stem												
P	2	MDV2H		FL	4	F	SS	T		B	HMB	Horizontal Mounting Bracket
*For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves.												
											HMBS	SS Horizontal Mounting Bracket
											N4	Monel™ 400 Stem
											N5	Monel™ 500 Stem
											N6	Inconel™ 625 Stem
											N8	Inconel™ 825 Stem
											N2	Hastelloy™ C276 Stem

### 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)

### 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)
	Grafoil™ (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.

### For further information please contact:



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