

## EV STYLE MANIFOLD

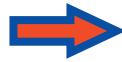
### 2-Equalizer and 1-Vent Manifold

The EV Style Manifold is designed for users who install primary block valves for isolation and calibration functions at the orifice taps. The manifold features two equalizer valves and one vent valve. It also features two 1/4" FNPT calibration ports, a 1/4" vent port and a 3/8" bore for optimal measurement accuracy. To maximize the utility of the EV Style Manifold, customer should utilize the valve in conjunction with a 3/8" full port primary block valve.



### Standard Features

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



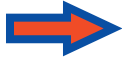
Complies with ASME B31.1 & B31.3 shell testing procedures as standard. Ensures structural integrity of valve.

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



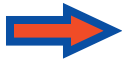
Complies with ASME B31.1 & B31.3 seat testing procedures as standard. Ensures zero leakage across seats for proper calibration.

Packing below stem threads



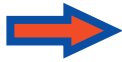
Prevents corrosion of critical stem threads

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



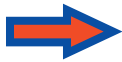
Mitigates risk of stress cracking

Stem threads are rolled, not cut



Higher quality stem for longer service life

8 RMS stem finish



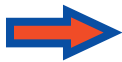
Extended packing life

V-Style Teflon™ packing



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

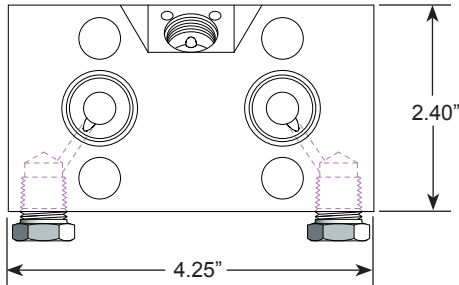
Pressure component materials sourced from the US, Canada or Europe



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

# P6MEV3S™ Manifold

## Technical Specifications



Inlet side

### Specifications:

Type: **P6MEV3S**, EV Manifold, Globe Pattern  
 Rating: Up to 6000 psi @ 100°F  
 (41370 kPa @ 38°C)

Stem: Flat tip

Packing: Aflas™ or Viton™ O-ring, Teflon™

Seat: Delrin™

Handle: Removable

Bore Size: 3/8" process, 1/8" bleed and eq.

Inlet Connections: FNPT

Outlet Connections: 4-bolt flange

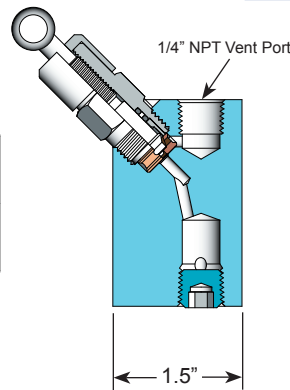
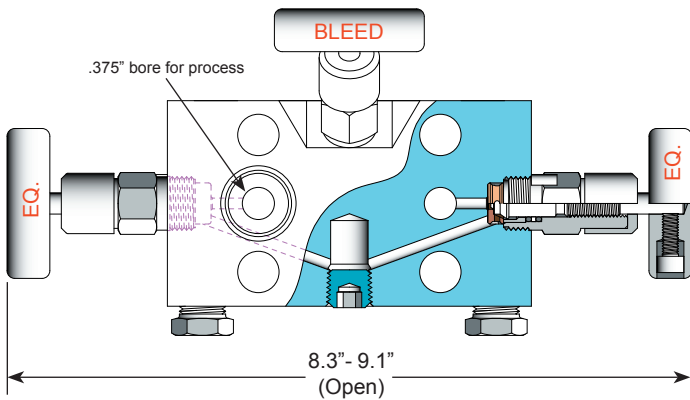
Bonnet Lock: Pin or Plate

Body Stock: 4.25" x 2.40" x 1.5"

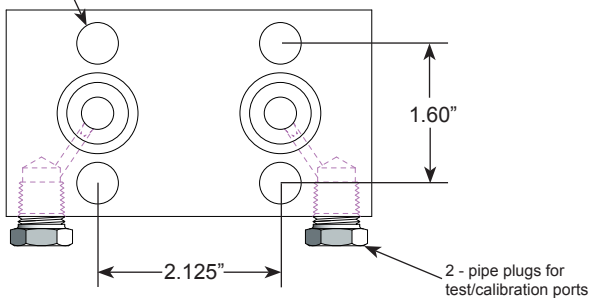
Weight: 4.2 - 4.5 lbs

Special Service: O<sub>2</sub> or CL cleaning available\*

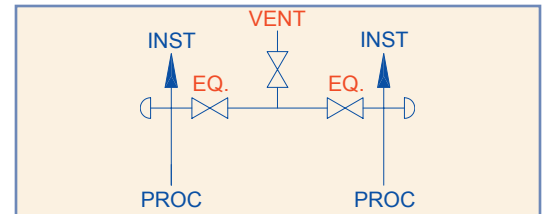
\*Other specifications or services may be available.



4 - Ø.48" mounting holes for 7/16" bolts

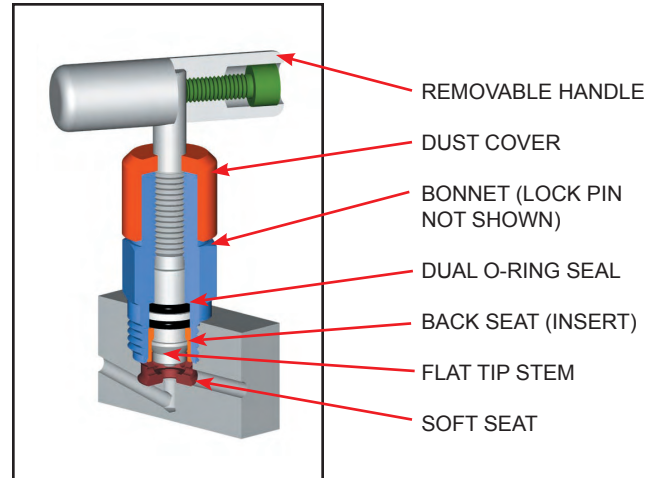


Outlet side



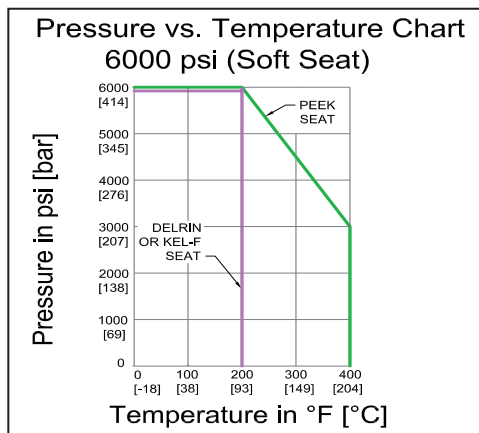
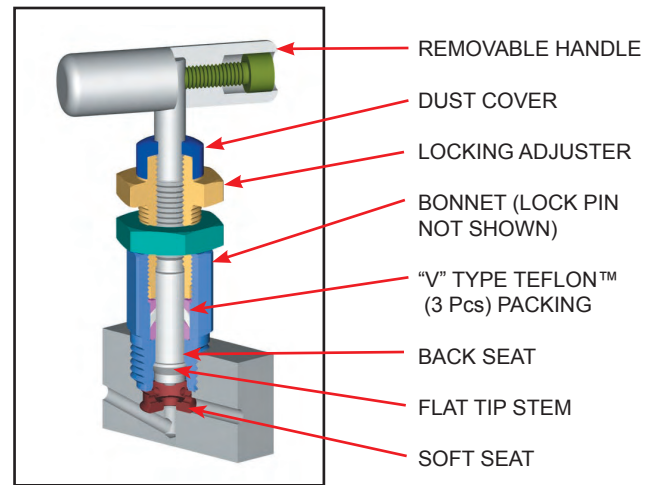
## O-Ring Bonnet Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Seat	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	Delrin™ or Peek™	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		



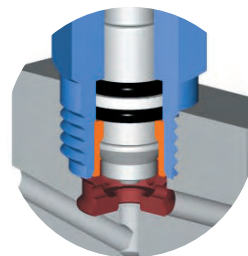
## Packed Bonnet Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Seat	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	Delrin™ or Peek™	Teflon™ and Grafoil™
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		

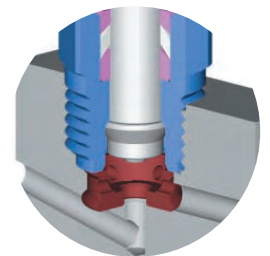


Note: Body material specifications based on ASME B16.34 - 2009. Packing material ratings based on manufacturer's specifications. Approximations only. Phoenix does not represent these values as finite. They are provided only as representative values.

## Stem and Seat Configurations



O-ring Seal with Flat Tip



Packed with Flat Tip

# P6MEV3S™ Manifold Model Numbering System

Phoenix	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip	Option Codes	Description
P	6=3/8"	MEV3S	8=1/2"	F=FNPT		FL=Flange	SS=ASTM A182 316/316L	A=Aflas™	D=Delrin™	Flat Tip Standard (leave blank)	LB	Bonnet Lock
							SC=ASTM A105 CS*	V=Viton™ (FKM)			CC	Chlorine Clean
							CS=ASTM A108 CS*	T=Teflon™ (PTFE)			OC	Oxygen Clean
							C5=ASTM A350 LF2				TG	SS Tag
							N4=Monel™ 400				SGI	Sour Gas ISO NACE Latest Rev.
							N6=Inconel™ 625				N4	Monel™ 400 Stem
							N8=Inconel™ 825				N5	Monel™ 500 Stem
							N2=Hastelloy™ C276				N6	Inconel™ 625 Stem
											N8	Inconel™ 825 Stem
											N2	Hastelloy™ C276 Stem
EXAMPLE: P3MEV3S8FFLSSVD = 3/8" Orifice, 3-Valve Manifold with 2 Equalize and 1 Bleed, 1/2" FNPT Inlet, 4-bolt Flange Outlet, 316 SS Body, Viton™ O-ring Seal, Delrin™ Seat												
P	6	MEV3S	8	F		FL	SS	V	D		S6	316 SS Bolts
											325CS	3.25" CS Bolts
											325S4	3.25" 304 SS Bolts
											325S6	3.25" 316 SS Bolts
											B7	AISI 4140/4142 QT
											B8C1	Class 1, 304SS, ST
											B8MC1	Class 1, 316SS, ST
											B8C2	Class 2, 304SS, ST, SH
											B8MC2	Class 2, 316SS, ST, SH

\*For code applications, A105 CS must be selected for CS valves. Code grade bolts must be specified for code applications.  
Note: **Standard Bolting**, 2.00" length, **CS** - carbon steel, Gr.8, zinc plated bolts; **SS** - stainless steel, 18.8 (304SS) bolts.  
See **Option Codes** for non-standard bolts.

#### Code Bolting Information

- B7, B8C1, B8MC1, B8C2, B8MC2 are code grades to ASTM A193;
- To specify code grade bolting, example: 225B7 indicates 2.25" bolt length; B7 grade, alloy steel, AISI 4140/4142
- QT**-Quenched & Tempered; **ST**-Carbide Solution Treated; **SH**-Strain Hardened

### 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)
D	Delrin™	-40°F (-40°C)	200°F (93°C)

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