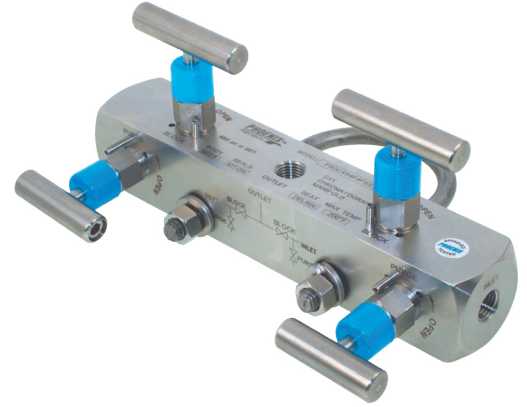


## GAS CHROMATOGRAPH MANIFOLD

### 3/16" Bore Gas Chromatograph Manifold

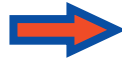
The P3GC4S™ gas chromatograph manifold is designed to facilitate the easy installation of dual carrier gas bottles on a single gas chromatograph installation and to eliminate leak points in the process. The manifold features two purge valves, two block valves and a built-in 2" mounting bracket.



### Standard Features

### Benefits

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.



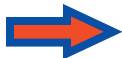
Complies with ASME B31.1 & B31.3 seat testing procedures as standard. Ensures zero leakage at seats for proper calibration.

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

V-Style Teflon™ packing

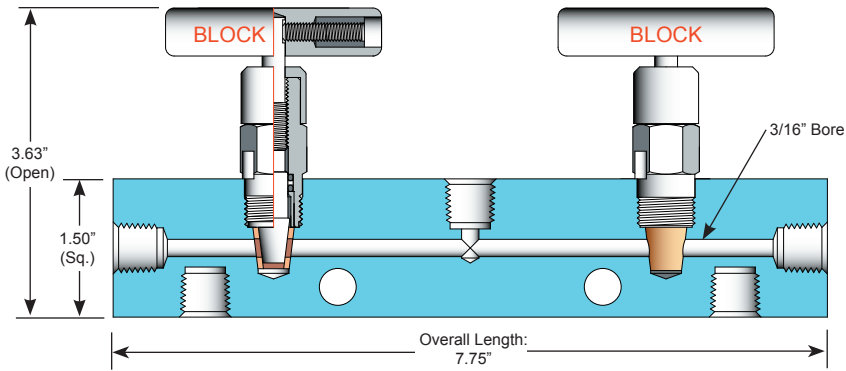


30-40% less operational torque and less frequent packing adjustments than traditional Teflon™ packed valves

Pressure component materials sourced from the US, Canada or Europe



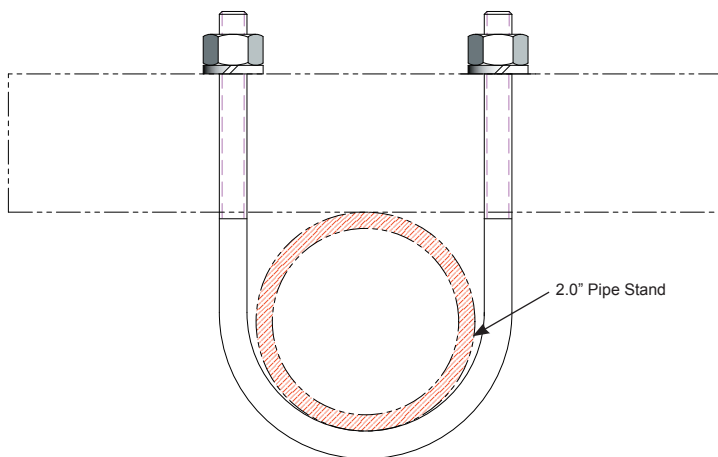
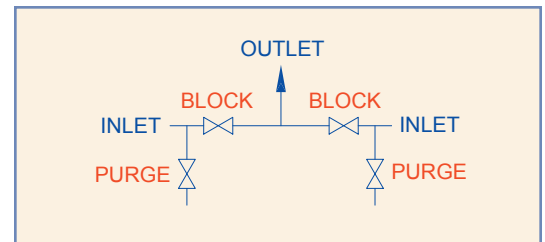
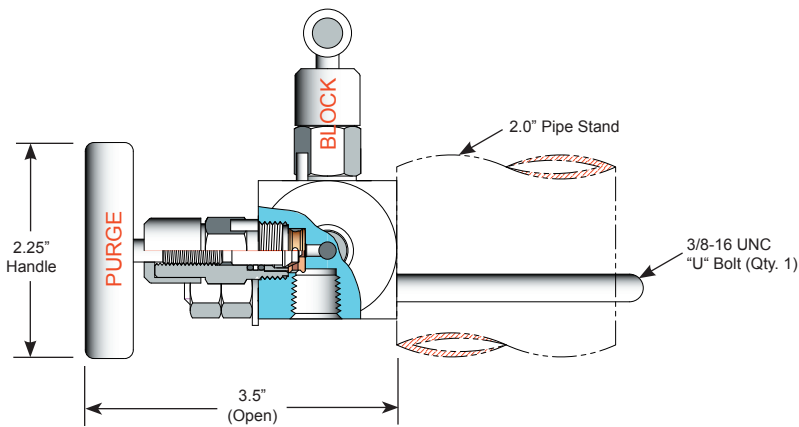
Reliable material traceability. MTR's provided with every order for pressure containing components.



**Specifications:**

Type: **P3GC4S** Manifold, Roddable Pattern for Blocks, Globe Pattern for Purges  
 Rating: Up to 6000 psi @ 100°F  
 (41370 kPa @ 38°C)  
 Stem: Tapered Plug Tip and Flat Tip  
 Packing: Aflas™, Viton™ O-ring or Teflon™  
 Seat: Delrin™  
 Handle: Removable  
 Bore Size: 3/16" for Blocks, 1/8" for Purges  
 Inlet Connections: 1/4" FNPT  
 Outlet Connections: 1/4" FNPT  
 Purge Port: 1/4" FNPT (includes 1/4" Pipe Plug)  
 Bonnet Lock: Pin or Plate  
 Body Stock: 7.75" x 1.5" x 1.5"  
 Weight: 5.65 lbs  
 Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available

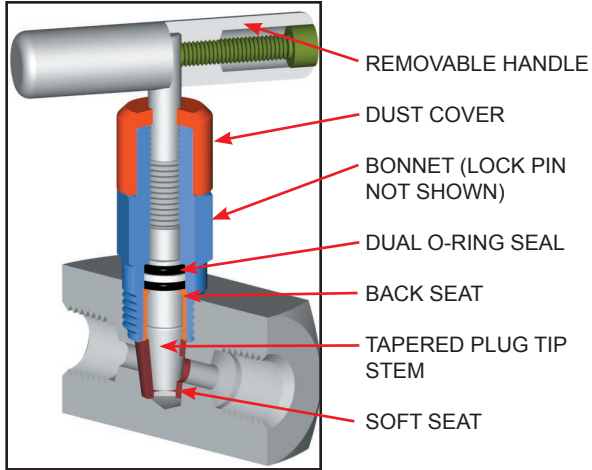


P3GC4S Application

NOTE: "U" Bolt, Nuts and washers are included (See Numbering System on Page 4)

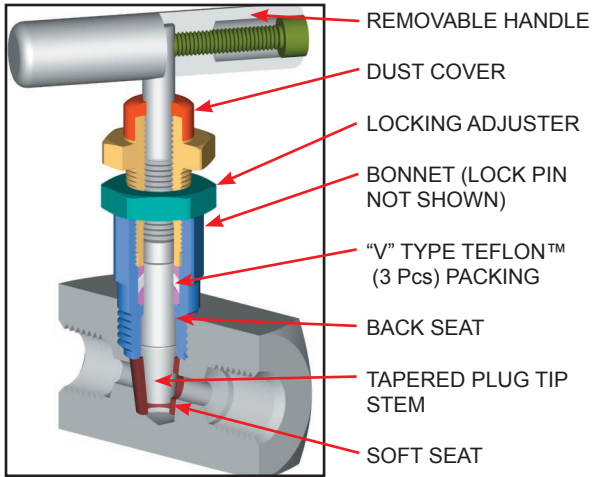
## O-Ring Bonnet Assembly

Standard Materials					
Valve	Body	Bonnet	Stem	Insert	Handle
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	ASTM A108CS	ASTM A108CS
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A582 303SS
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A582 303SS

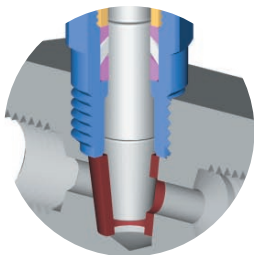


## Teflon™ Bonnet Assembly

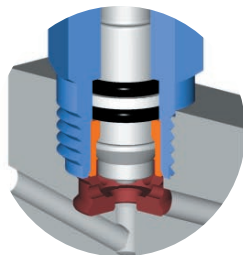
Standard Materials					
Valve	Body	Bonnet	Stem	Insert	Handle
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	ASTM A108CS	ASTM A108CS
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A582 303SS
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A582 303SS



## Stem and Seat Configurations

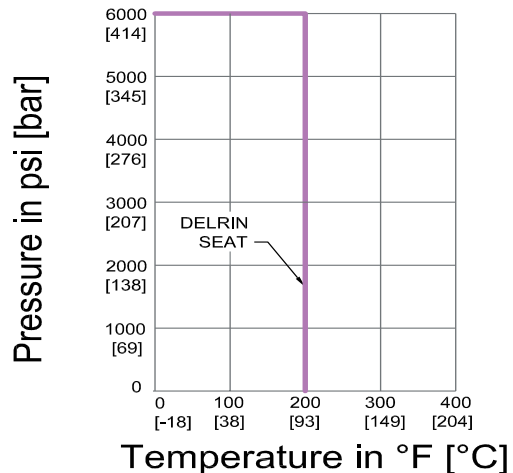


Tapered plug stem for block valve



Flat tip stem for purge valve

## Pressure vs. Temperature Chart 6000 psi (Soft Seat)



Note: 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.

Phoenix	Orifice Size	Type	Inlet Type	Outlet Type	Material	Packing	Seat
P	3=3/16"	GC4S	4F= 1/4" FNPT	4F= 1/4" FNPT	SS=ASTM A182 316/316L	A=Aflas™	D=Delrin™
					SC=ASTM A105 CS	V=Viton™ (FKM)	
					CS=ASTM A108 CS	T=Teflon™ (PTFE)	
EXAMPLE: <b>P3GC4S4F4FSSVD</b> = Phoenix, 3/16" Orifice, Gas Chromatograph, 1/4"FNPT x 1/4"FNPT, 316SS material, FKM O-ring Bonnet, Delrin™ Seat							
<b>P</b>	<b>3</b>	<b>GC4S</b>	<b>4F</b>	<b>4F</b>	<b>SS</b>	<b>V</b>	<b>D</b>
Includes Mounting Kit: <i>Option 1:</i> 3/8-16 UNF "U" Bolt, 18.8SS, Qty. 1 3/8-16 Hex Nut, 18.8SS, Qty. 4 3/8-16 Stainless Steel Flat Washer, Qty. 2 <i>Option 2:</i> 3/8-16 UNF "U" Bolt, 18.8SS, Qty. 1 3/8-16 Hex Nut, 18.8SS, Qty. 2 3/8-16 Stainless Steel Lock Washer, Qty. 2							

Option Codes	Description
CC	Chlorine Clean
OC	Oxygen Clean
LB	Bonnet Lock
RL (R)(B)	Round Large Handle Aluminum (Red)(Blue)
RC	Round Handle CS
RS	Round Handle SS

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

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