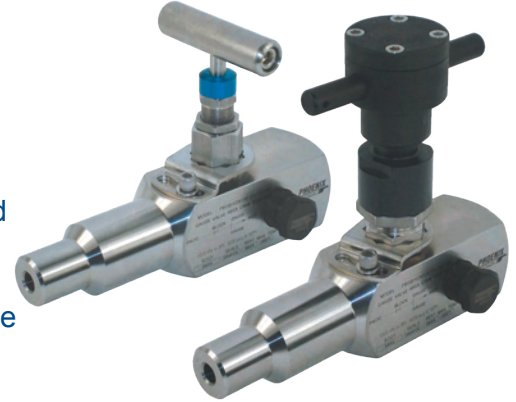


GAUGE VALVE

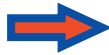
3/8" Bore Multiport Gauge Valve

Gauge valves are designed for use with various instrumentation equipment and can be installed to control, isolate, measure, calibrate, equalize, drain or vent the pressure of gases and liquids. Phoenix's large bore, multiport gauge valves are of bar stock construction and are available in various materials, sizes, sealing styles, end connections and stem types. The main features of our multiport gauge valves are robust stems, bubble tight seals, bonnet lock plates for safety, and flexible mounting for both vertical and horizontal applications. The severe service model with a non-rotating stem provides an effective transition between process piping and instrumentation equipment.



Special Features

High temperature/pressure qualification test of design



Non-rotating stem design with ceramic ball tip



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



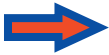
Metal body-to-bonnet seals are in compression, not tension



Stem threads are rolled, not cut



8 RMS stem finish on both rotating and non-rotating stems



V-Style Teflon™ packing



Pressure component materials sourced from the US, Canada or Europe.



Benefits

Complies with the requirements of EEMUA PUB. 182

Provides best seating ability on stem and valves seat and longer service life in abrasive processes

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

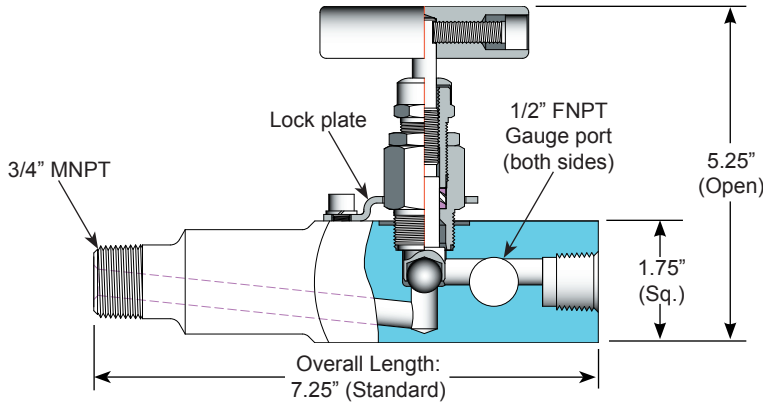
Higher quality stem for longer service life

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.

Teflon™ Packed Gauge Valve

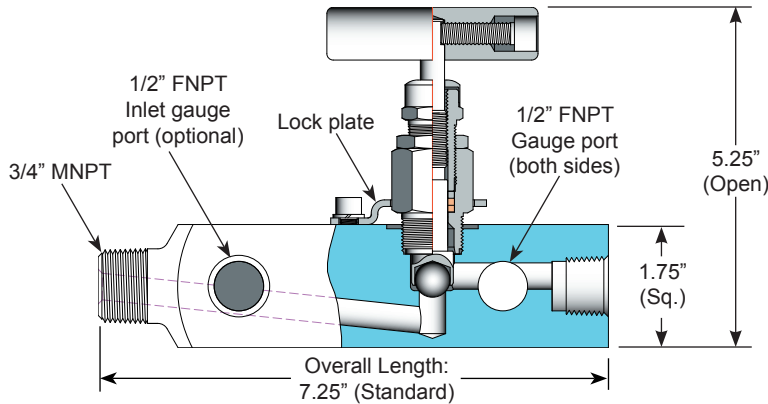


Specifications:

Type: **P6G6H** valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip or Ball tip
 Packing: Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 3/8"
 Inlet Connections: 1/2" to 1" NPT, SW
 Outlet Connections: 1/2" to 1" NPT, SW
 Gauge Ports: 1/2" FNPT (2 Pipe plugs included)
 Bonnet Lock: Plate
 Body Stock: 1.75" sq.
 Weight: 5.38 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

Grafoil™ Packed Gauge Valve

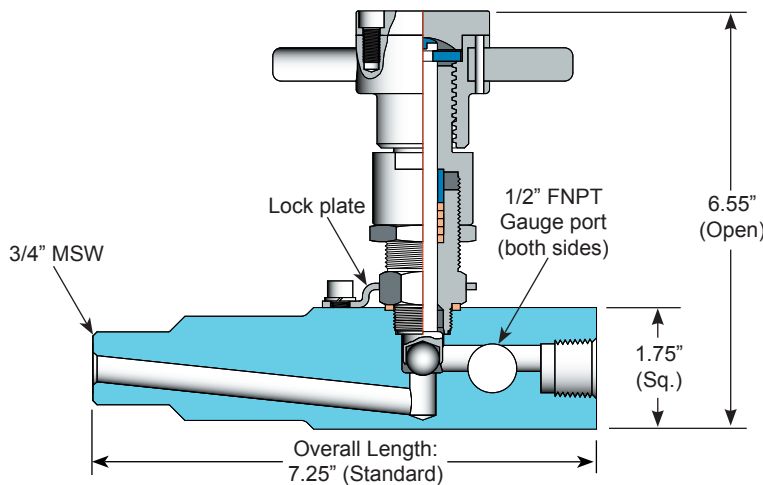


Specifications:

Type: **P6G6H** Valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip or Ball tip
 Packing: Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 3/8"
 Inlet Connections: 1/2" to 1" NPT, SW
 Outlet Connections: 1/2" to 1" NPT, SW
 Gauge Ports: 1/2" FNPT (2 Pipe plugs included)
 Bonnet Lock: Pin or Plate
 Body Stock: 1.75" sq.
 Weight: 5.38 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

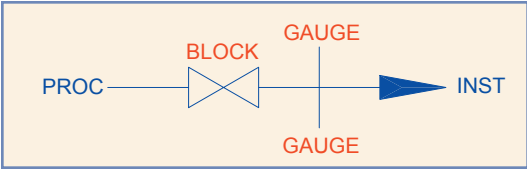
Severe Service Gauge Valve



Specifications:

Type: **P6G6H** Valve, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Non-rotating ball tip
 Packing: Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 3/8"
 Inlet Connections: 1/4" to 1" NPT, SW
 Outlet Connections: 1/2" to 1" NPT, SW
 Gauge Ports: 1/2" FNPT (2 Pipe plugs included)
 Bonnet Lock: Pin or Plate
 Body Stock: 1.75" sq.
 Weight: 6.68 lbs
 Special Service: O₂ or CL cleaning available*

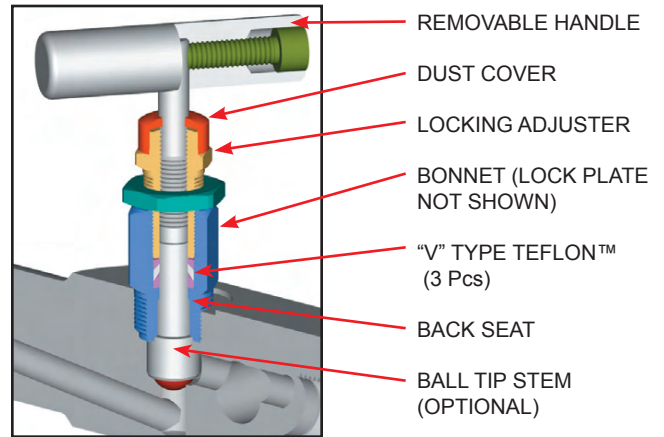
*Other specifications or services may be available.



P6G6H™ Multiport Gauge Valve Bonnet, Stem and Seat Characteristics

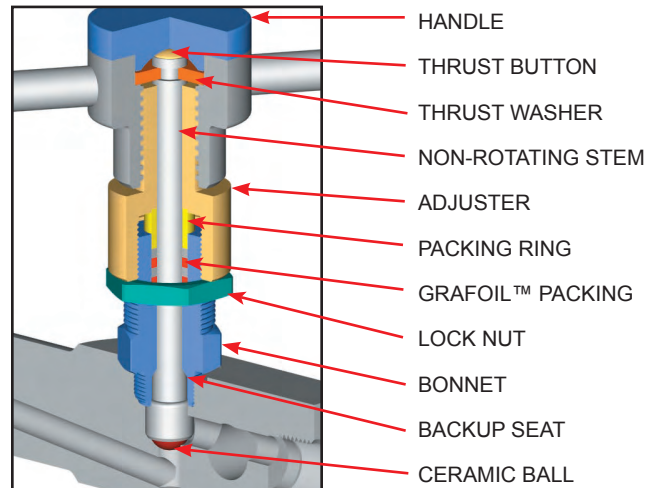
Rotating Stem Assembly

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

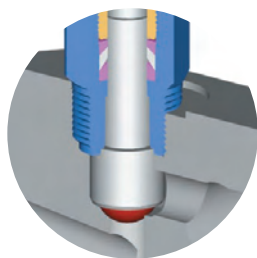


Non-rotating Stem Assembly

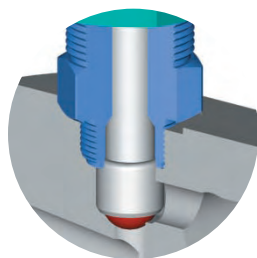
Standard Materials					
Valve	Body	Bonnet	Stem	Ball	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	SEE OPTION CODES ON PAGE 4	Grafoil™
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		





Stem and Seat Configurations

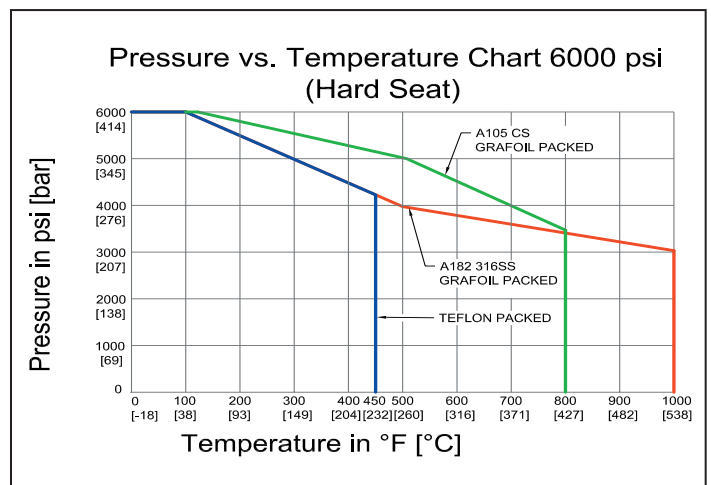


Rotating Ball Stem



Non-rotating Ball Stem

Gauge Valve Accessories	
	<p>Bleed Plug: P2BP8M Specifications: Rating: 6000 psi @ 100°F (41370 kpa @ 38°C) Stem: Needle Seat: Integral Handle: Removable Connections: 1/2" NPT Hex Size: 3/4" Weight: 0.31 lbs (Length: 2" open installed) *Add SS for A182 316SS, CS for A108CS</p>
	<p>Standard 1/2" Plug: PP8M Specifications: Rating: 10000 psi @ 100°F (68950 kpa @ 38°C) Hex Size: 3/4" Weight: 0.15 lbs (Length: 1") *Add SS for A182 316SS, CS for A108CS</p>



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.

P6G6H™ Multiport Gauge Valve

Model Numbering System

Phoenix	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip
P	6=3/8"	G6H	8=1/2"	F=FNPT	8=1/2"	F=FNPT	SS=ASTM A182 316/316L	T=Teflon™ (PTFE)	Integral (leave blank)	B=316SS Ball Tip
		GL6H**	12=3/4"	M=MNPT	12=3/4"	M=MNPT	SC=ASTM A105 CS*	G=Grafoil™		BC=Ceramic Ball Tip
			16=1" Male only		16=1" Male only		CS=ASTM A108 CS*			BM=Monel™ Ball Tip
							C5=ASTM A350 LF2			
							N4=Monel™ 400			
							N6=Inconel™ 625			
							N8=Inconel™ 825			
							N2=Hastelloy™ C276			
EXAMPLE: P6G6H12MS8FSSGBC-NR = Phoenix, 3/8" Orifice, G6H, 3/4" MSW Inlet, 1/2" FNPT Outlet, 316 SS Body, Grafoil™ Packing, Integral Seat, Ceramic Ball Tip Stem, Non-rotating Style										
P	6	G6H	12	MS	8	F	SS	G		BC
*For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves. **GL6H for extended length valve body, consult Phoenix Precision for details.										

Option Codes	Description
NR	Non-rotating Stem
LB	Bonnet Lock
PP	Pipe Plug
CC	Chlorine Clean
OC	Oxygen Clean
TG	SS Tag
SGI	Sour Gas ISO NACE Latest Rev.
N4	Monel™ 400 Stem
N5	Monel™ 500 Stem
N6	Inconel™ 625 Stem
N8	Inconel™ 825 Stem
N2	Hastelloy™ C276 Stem
IG	Inlet Gauge Port

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
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.			

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