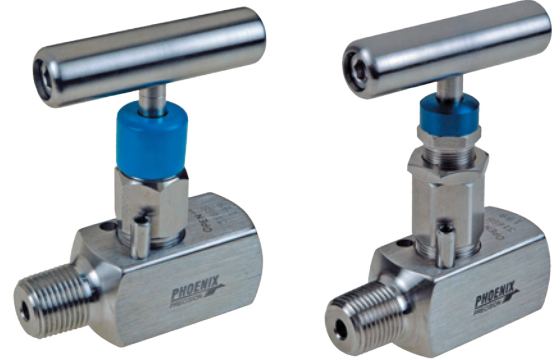


**10,000 PSI NEEDLE VALVE**

**3/16" Bore 10,000 psi Needle Valve**

Phoenix's certified 10,000 psi needle valve is proof tested to 20,000 psi and burst tested to 53,000 psi without yield, as per ASME Section VIII, MSS SP-99 and MSS SP-105. These valves feature packing below the threads, back seating capability, blowout proof stems and large 'T' handles for comfort and easy operation.



**Special Features**

Proof tested to 20,000 psi, burst tested to 53,000 psi without yeild



**Benefits**

Certified 10,000 psi valve rating, CRN No. 0C06740.2

**Standard Features**

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



**Benefits**

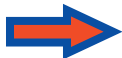
Complies with ASME B31.1 & B31.3 shell testing procedures as standard. Ensures structural integrity of valve.

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



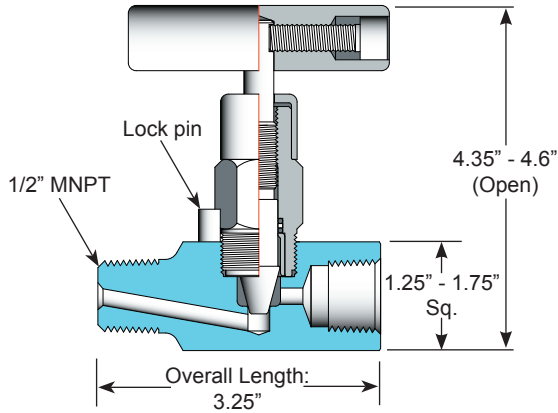
30-40% less operational torque and less frequent packing adjustments than traditional Teflon™ packed valves

Pressure component materials sourced from the US, Canada or Europe



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

### O-Ring Bonnet Assembly

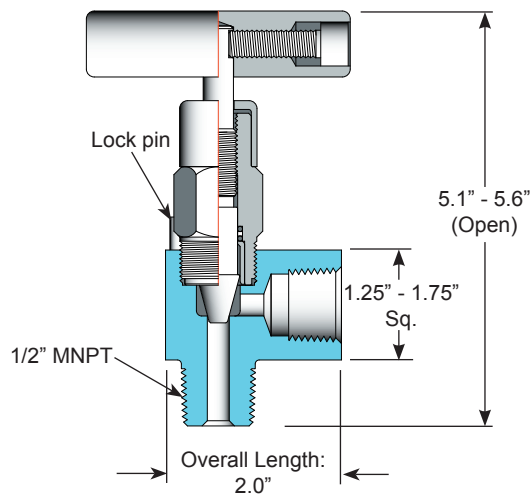


#### Specifications:

Type: **P3N10H** Valve, Globe Pattern  
 Rating: Up to 10,000 psi @ 100°F (68950 kPa @ 38°C)  
 Stem: Needle tip (Standard), Ball tip (Optional)  
 Packing: Viton™, Aflas™ O-ring or Teflon™  
 Seat: Integral  
 Handle: Removable  
 Bore Size: 3/16"  
 Inlet Connections: 1/4" to 3/4"NPT, 1" for male only  
 Outlet Connections: 1/4" to 3/4"NPT  
 Bonnet Lock: Pin or Plate  
 Body Stock: 1.25" - 1.75" sq  
 Weight: 1.1 - 3.3 lbs  
 Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available.

### Angle Body Assembly

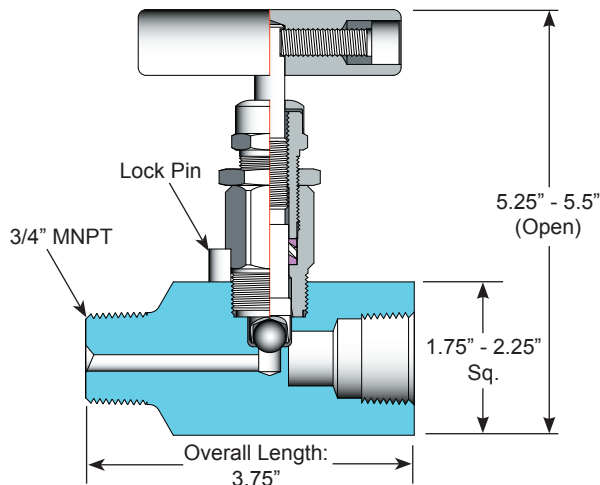


#### Specifications:

Type: **P3NA10H** Valve, Globe Pattern  
 Rating: Up to 10,000 psi @ 100°F (68950 kPa @ 38°C)  
 Stem: Needle tip (Standard), Ball tip (Optional)  
 Packing: Viton™, Aflas™ O-ring or Teflon™  
 Seat: Integral  
 Handle: Removable  
 Bore Size: 3/16"  
 Inlet Connections: 1/4" to 3/4"NPT  
 Outlet Connections: 1/4" to 3/4"NPT  
 Bonnet Lock: Pin or Plate  
 Body Stock: 2.0" - 2.5" Flat bar  
 Weight: 1.1 - 2.1 lbs  
 Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available.

### Packed Bonnet Assembly



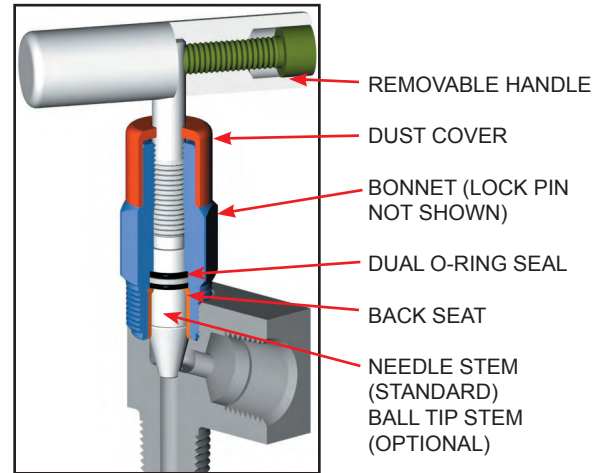
#### Specifications:

Type: **P3N10H** Valve, Globe Pattern  
 Rating: Up to 10,000 psi @ 100°F (68950 kPa @ 38°C)  
 Stem: Needle tip (Standard), Ball tip (Optional)  
 Packing: Viton™, Aflas™ O-ring or Teflon™  
 Seat: Integral  
 Handle: Removable  
 Bore Size: 3/16"  
 Inlet Connections: 1/4" to 1" NPT  
 Outlet Connections: 1/4" to 1" NPT  
 Bonnet Lock: Pin or Plate  
 Body Stock: 1.75" - 2.25" sq  
 Weight: 1.1 - 3.9 lbs  
 Special Service: O<sub>2</sub> or CL cleaning available\*

\*Other specifications or services may be available.

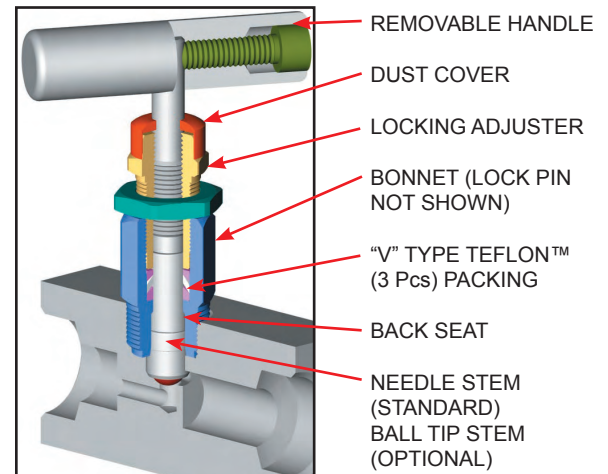
## O-Ring Bonnet Assembly

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		

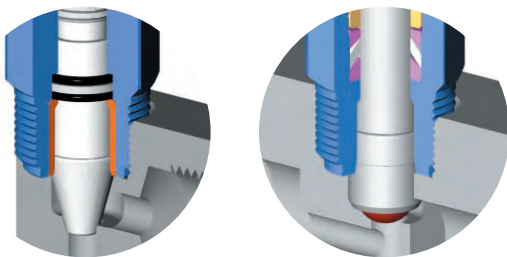


## Packed Bonnet Assembly

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

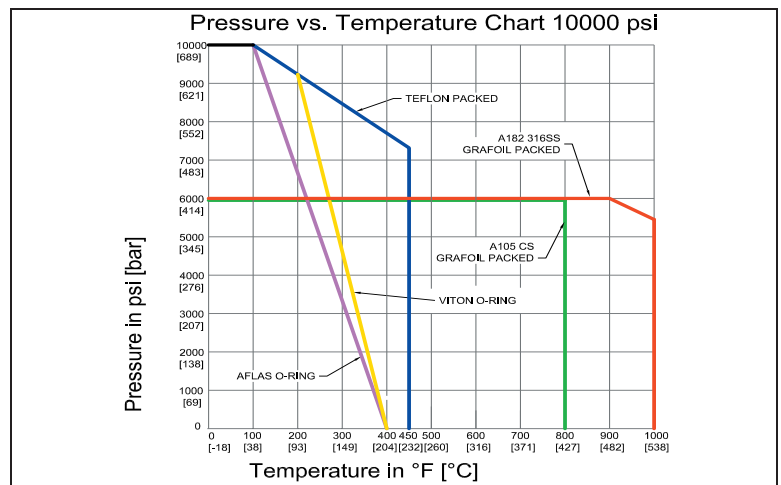


## Stem and Seat Configurations



Needle Tip (Standard)

Ball Tip (Optional)



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.

Phoenix	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip	Option Codes	Description
P	3=3/16"	N10H	4=1/4"	F=FNPT	4=1/4"	F=FNPT	SS=ASTM A182 316/316L	A=Aflas™	Integral (leave blank)	Needle Tip Standard (leave blank)	LB	Bonnet Lock
		NL10H**	6=3/8"	M=MNPT	6=3/8"	M=MNPT	SC=ASTM A105 CS*	V=Viton™ (FKM)		B=316SS Ball Tip	CC	Chlorine Clean
		NXL10H**	8=1/2"		8=1/2"		CS=ASTM A108 CS*	T=Teflon™ (PTFE)		BC=Ceramic Ball Tip	OC	Oxygen Clean
		NA10H= Angle Body	12=3/4"		12=3/4"		C5=ASTM A350 LF2			BM=Monel™ Ball Tip	TG	SS Tag
		N10HD= Heavy Duty	16=1"		16=1"		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: P3N10H8M8FCSV = Phoenix, 3/16" Orifice, N10H, 1/2" MNPT Inlet, 1/2" FNPT Outlet, A108 CS Body, FKM Packing, Integral Seat, Needle Tip Stem												
<b>P</b>	<b>3</b>	<b>N10H</b>	<b>8</b>	<b>M</b>	<b>8</b>	<b>F</b>	<b>CS</b>	<b>V</b>				
*For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves. **NL10H for extended length valve body, NXL10H for extra extended length valve body, consult Phoenix Precision for details.												
<b>Note: This model is available in Grafoil™ packing at a 6000 psi rating.</b>												

## 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

## For further information please contact:



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email: phoenix@phoenixprecision.ca  
www.phoenixprecisionvalves.com

## 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)

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