

# **PHOENIX** ™ P2B6M™ INTEGRAL BLEED VALVE

## **INTEGRAL BLEED VALVE**

## 1/8" Bore Integral Bleed Valve

The integral bleed valve is designed to use with pressure gauges and pressure switches. The valve is built using bar stock construction, a robust stem, and bonnets pinned for security. Phoenix's globe pattern design ensures a bubble-tight seal. Phoenix offers the 1/8" valve in a variety of stem tips, materials and configurations that meet most application requirements.



## 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 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

**Benefits** 

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



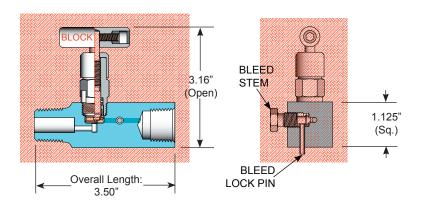
Reliable material traceability. MTR's provided with every order for pressure containing components.



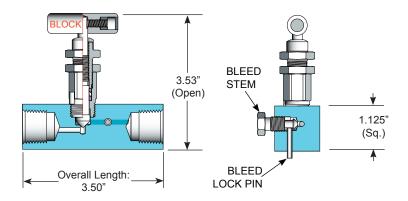


# P2B6M™ Integral Bleed Valve Technical Specifications

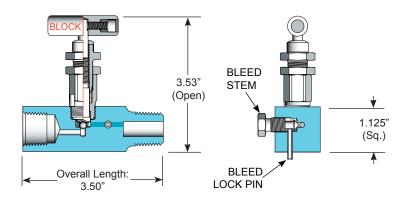
# O-Ring Bonnet Configuration



# Teflon™ Bonnet Configuration



## Grafoil™ Bonnet Configuration



#### Specifications:

Type: P2B6M Valve, Globe Pattern Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C) Stem: Needle tip or Flat tip

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

Seat: Integral or Soft seat Handle: Removable Bore Size: 1/8"

Inlet Connections: 1/2" NPT, SW or FT, (3/4" for male

NPT, SW Only)

Outlet Connections: 1/2" NPT, SW or FT

Bleed Port: 1/8" Pin Bonnet Lock: Pin or Plate Body Stock: 1.125" sq Weight: 1.10 lbs

Special Service: O2 or CL cleaning available\*

\*Other specifications or services may be available.

### Specifications:

Type: P2B6M Valve, Globe Pattern Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C)

Stem: Needle tip or Ball tip

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

Seat: Integral Handle: Removable Bore Size: 1/8"

Inlet Connections: 1/2" NPT, SW or FT, (3/4" for male

NPT, SW Only)

Outlet Connections: 1/2" NPT, SW or FT

Bleed Port: 1/8" Pin Bonnet Lock: Pin or Plate Body Stock: 1.125" sq Weight: 1.15 lbs

Special Service: O2 or CL cleaning available\*

\*Other specifications or services may be available.

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Type: P2B6M Valve, Globe Pattern Rating: Up to 6000 psi @ 100°F (41370 kPa @ 38°C) Stem: Needle tip or Ball tip

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

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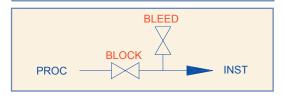
NPT, SW Only)

Outlet Connections: 1/2" NPT, SW or FT

Bleed Port: 1/8" Pin Bonnet Lock: Pin or Plate Body Stock: 1.125" sq Weight: 1.15 lbs

Special Service: O2 or CL cleaning available\*

\*Other specifications or services may be available.

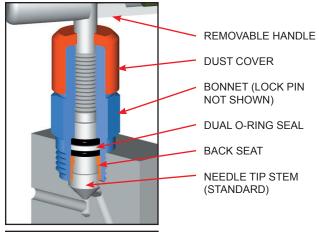




# P2B6M<sup>™</sup> Integral Bleed Valve Bonnet, Stem and Seat Characteristics

# O-Ring Bonnet Assembly

Standard Materials							
Valve	Body	Bonnet	Stem	Ball	Packing		
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	SEE OPTION CODES	Dual Viton™ O-ring with Teflon™ backup ring		
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS	ON PAGE 4			
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	Teflon™ and Grafoil™	
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS	ON PAGE 4		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS			

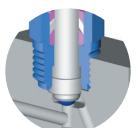
NOTE: Low torque Grafoil™ available (G4 Packing Code)

# REMOVABLE HANDLE DUST COVER LOCKING ADJUSTER BONNET (LOCK PIN NOT SHOWN) "V" TYPE TEFLON™ (3 Pcs) or GRAFOIL™ PACKING BACK SEAT BALL TIP STEM (OPTIONAL)

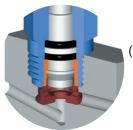
## Stem and Seat Configurations



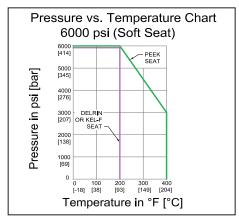
Needle Tip (Standard)



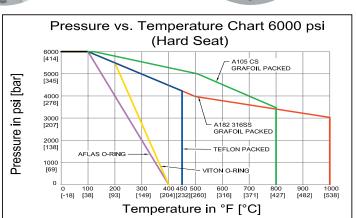
Ball Tip (Optional)



Flat Tip (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.



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.



# P2B6M™ Integral Bleed Valve Model Numbering System

Phoenix	Orifice Size	Туре	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip
Р	2=1/8"	В6М	8=1/2"	F=FNPT	8=1/2"	F=FNPT	SS=ASTM A182 316/316L	A=Aflas™	Integral (leave blank)	Needle Tip Standard (leave blank)
			12=3/4" (Male only)	M=MNPT	12=3/4" (Male only)	M=MNPT	SC=ASTM A105 CS**	V=Viton™ (FKM)	D= Delrin™	B=316SS Ball Tip
				MS*=Male Socket weld		MS*=Male Socket weld	CS=ASTM A108 CS**	T=Teflon™ (PTFE)	P= Peek™	BC=Ceramic Ball Tip
				FS*=Female Socket weld		FS*=Female Socket weld	C5=ASTM A350 LF2	G=Grafoil™		BM=Monel™ Ball Tip
				FT=Female Tube Fitting		FT=Female Tube Fitting	N4=Monel™ 400	G4=Low Torque Grafoil ™		
							N6=Inconel™ 625			
							N8=Inconel™ 825			
							N2=Hastelloy™ C276			
EXAMPL	E: P2B6N	M8M8FSSV		1/8" Orifice, D-ring Packing			2" MNPT Inlet,	1/2" FNPT O	utlet, 316 S	SS Body,
P	2	В6М	8	М	8	F	ss	V		

Option Codes	Description	
LB	Bonnet Lock	
СС	Chlorine Clean	
ОС	Oxygen Clean	
TG	SS Tag	
SGI	Sour Gas ISO NACE Latest Rev.	
RA (R)(B)	Round Handle Aluminum (Red)(Blue)	
RC	Round Handle CS	
RS	Round Handle SS	
N4	Monel <sup>™</sup> 400 Stem	
N5	Monel <sup>™</sup> 500 Stem	
N6	Inconel <sup>™</sup> 625 Stem	
N8	Inconel <sup>™</sup> 825 Stem	
N2	Hastelloy™ C276 Stem	

## **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
А	Aflas™	15°F (-10°C)	400°F (204°C)
V	Viton™	-20°F (-29°C)	400°F (204°C)
Т	Teflon™	-65°F (-54°C)	450°F (232°C)
D	Delrin™	-40°F (-40°C)	200°F (93°C)
Р	Peek™	-40°F (-40°C)	400°F (204°C)
G	Grafoil™ (SS Body) (CS Body)	-70°F (-56°C) -70°F (-56°C)	1000°F (537°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:



Phoenix Precision Ltd. 2620 21st Street N.E. Calgary, Alberta T2E 7L3 Phone: (403) 291-3154 Fax: (403) 291-3292

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

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<sup>\*\*</sup>For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves.