

BLOCK AND BLEED VALVES

3/16" Bore Block and Bleed Valve

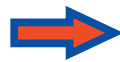
The block and bleed valve is designed for use with pressure gauges, pressure transmitters, or pressure switches. The BB6H features a two-valve block and bleed design complete with a 1/4" FNPT vent/calibration port. The BB6H is constructed from barstock and features robust stems. This design ensures a bubble tight seal. Bonnets are pinned for security. The globe pattern provides maximum shut-off with a variety of stem tips, materials, and configurations to meet specific requirements. All Phoenix valves are built and tested in accordance with MSS-SP 105.



Standard Features

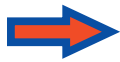
Benefits

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.



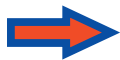
Complies with ASME B31.1 & B31.3 seat testing procedures as standard. Ensures zero leakage at seats for proper calibration.

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



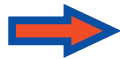
Higher quality stem for longer service life

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

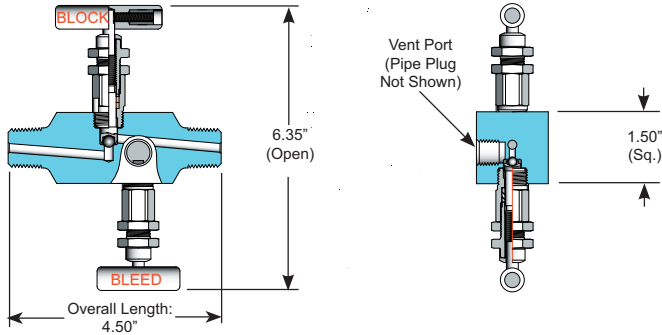
Pressure component materials sourced from the US, Canada or Europe



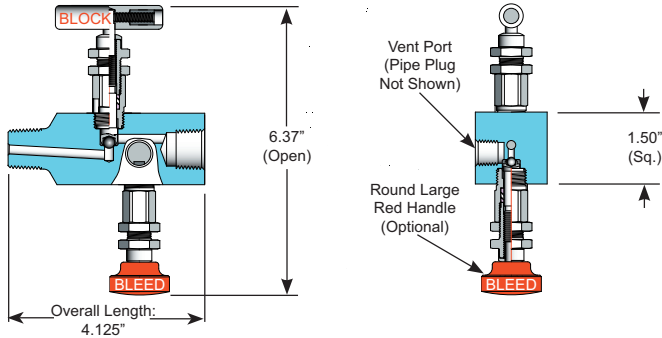
Reliable material traceability. MTR's provided with every order for pressure containing components.

P3BB6H™ Block and Bleed Valve Technical Specifications

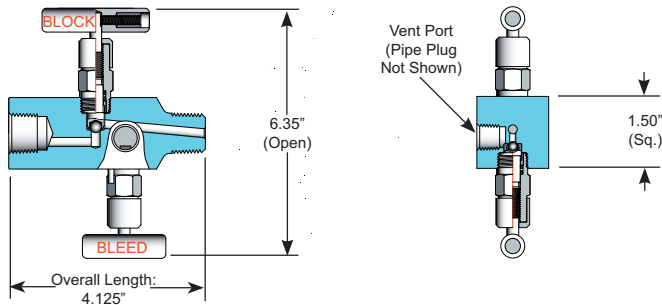
Male x Male Configuration



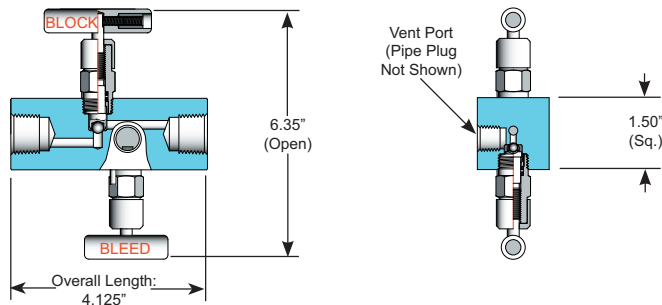
Male x Female Configuration



Female x Male Configuration



Female x Female Configuration



Specifications:

Type: P3BB6H Valve, Male x Male, 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: 3/16", 1/8" for Bleed
 Inlet Connections: 1/2" NPT to 3/4" NPT, SW or FT (1" for Male NPT, SW Only)
 Outlet Connections: Same as inlet
 Vent Port: 1/4" FNPT (includes 1/4" Pipe Plug)
 Bonnet Lock: Pin or Plate
 Body Stock: 1.50" sq
 Weight: 2.53 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available

Specifications:

Type: P3BB6H Valve, Male x Female, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
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 Stem: Needle tip or Ball tip
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 Seat: Integral
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 Bore Size: 3/16", 1/8" for Bleed
 Inlet Connections: 1/2" to 3/4" NPT, SW or FT (1" for Male NPT, SW Only)
 Outlet Connections: Same as inlet
 Vent Port: 1/4" FNPT (includes 1/4" Pipe Plug)
 Bonnet Lock: Pin or Plate
 Body Stock: 1.5" sq
 Weight: 2.45 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

Specifications:

Type: P3BB6H Valve, Female x Male, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
 (41370 kPa @ 38°C)
 Stem: Needle tip and Ball tip
 Packing: Viton™ O-ring, Teflon™ or Grafoil™
 Seat: Integral
 Handle: Removable
 Bore Size: 3/16", 1/8" for Bleed
 Inlet Connections: 1/2" to 3/4" NPT, SW or FT (1" for Male NPT, SW Only)
 Outlet Connections: Same as inlet
 Vent Port: 1/4" FNPT (includes 1/4" Pipe Plug)
 Bonnet Lock: Pin or Plate
 Body Stock: 1.5" sq
 Weight: 2.43 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.

Specifications:

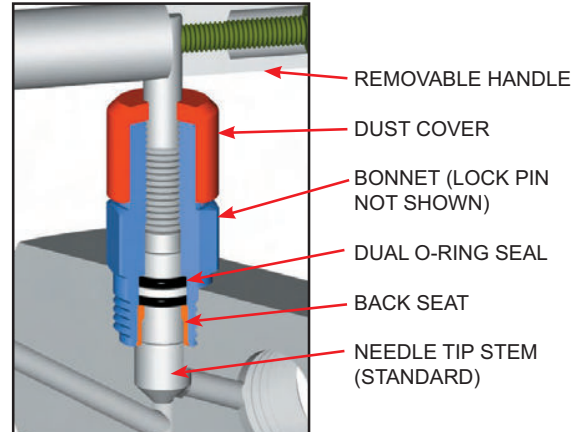
Type: P3BB6H Valve, Female x Female, Globe Pattern
 Rating: Up to 6000 psi @ 100°F
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 Outlet Connections: Same as inlet
 Vent Port: 1/4" FNPT (includes 1/4" Pipe Plug)
 Bonnet Lock: Pin or Plate
 Body Stock: 1.5" sq
 Weight: 2.50 lbs
 Special Service: O₂ or CL cleaning available*

*Other specifications or services may be available.



O-Ring Bonnet Assembly

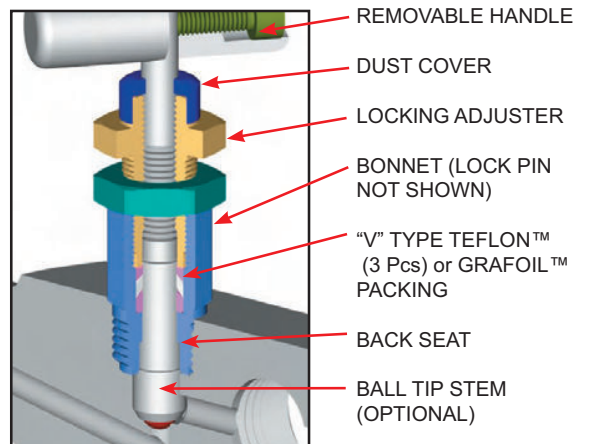
Standard Materials					
Valve	Body	Bonnet	Stem	Ball	Packing
CS	ASTM A108CS	ASTM A108CS	ASTM A582 303SS	SEE OPTION CODES ON PAGE 4	Dual Viton™ O-ring with Teflon™ backup ring
SC	ASTM A105CS	ASTM A182 316SS	ASTM A182 316SS		
316SS	ASTM A182 316SS	ASTM A182 316SS	ASTM A182 316SS		



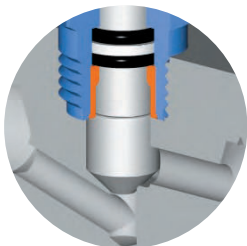
Teflon™ or Grafoil™ Bonnet Assembly

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

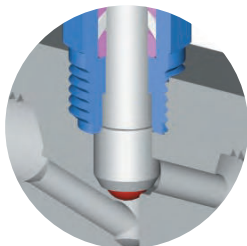
NOTE: Optional low torque Grafoil™ available (G4 Packing Code)



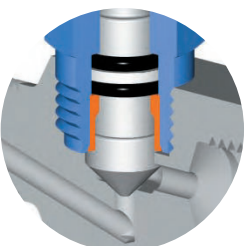
Stem and Seat Configurations



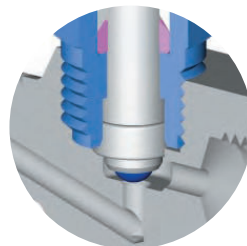
3/16" Bore Needle Tip (Standard)



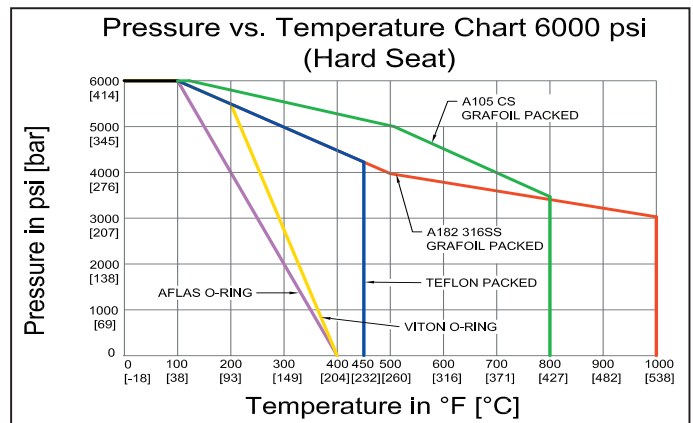
3/16" Bore Ball Tip (Optional)



Mini Needle Tip (Standard)



Mini 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.

P3BB6H™ Block and Bleed Valve Model Numbering System

Phoenix	Orifice Size	Type	Inlet Size	Inlet Type	Outlet Size	Outlet Type	Material	Packing	Seat	Stem Tip	Option Codes	Description
P	3=3/16"	BB6H (3/16" Bore)	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)	LB	Bonnet Lock
			12=3/4"	M=MNPT	12=3/4"	M=MNPT	SC=ASTM A105 CS**	V=Viton™ (FKM)		B=316SS Ball Tip	CC	Chlorine Clean
			16=1" (Male Only)	MS*=Male Socket weld	16=1" (Male Only)	MS*=Male Socket weld	CS=ASTM A108 CS**	T=Teflon™ (PTFE)		BC=Ceramic Ball Tip	OC	Oxygen Clean
				FS*=Female Socket weld		FS*=Female Socket weld	C5=ASTM A350 LF2	G=Grafoil™		BM=Monel™ Ball Tip	TG	SS Tag
				FT=Female Tube Fitting		FT=Female Tube Fitting	N4=Monel™ 400	G4=Low Torque Grafoil™			SGI	Sour Gas ISO NACE Latest Rev.
							N6=Inconel™ 625				RLR	Round Large Red Aluminum Handle for Bleed (Vent)
							N8=Inconel™ 825				RC	Round Handle C.S.
							N2=Hastelloy™ C276				RS	Round Handle S.S.
											N4	Monel™ 400 Stem
											N5	Monel™ 500 Stem
											N6	Inconel™ 625 Stem
											N8	Inconel™ 825 Stem
											N2	Hastelloy™ C276 Stem
EXAMPLE: P3BB6H8M8FSSV = Phoenix, 3/16" Orifice, Block & Bleed Valve, 1/2" MNPT Inlet, 1/2" FNPT Outlet, 316 SS Body, Viton™ O-ring Packing, Integral Seat, Needle Tip Stem												
P	3	BB6H	8	M	8	F	SS	V				
*For socket weld (SW) connections, specify MS or FS **For code applications, A108 CS is unacceptable, A105 CS must be selected for CS valves.												

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

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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)
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.

Distributor / Representative:

Haldatec

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