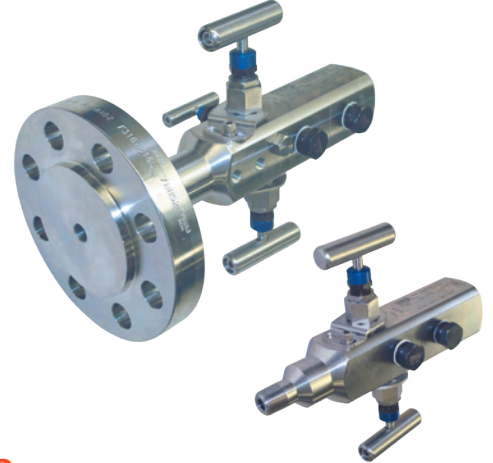


**DOUBLE BLOCK AND BLEED VALVE**


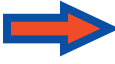





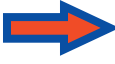


**3/8” Bore Double Block and Bleed Valve**

Phoenix’s integral double block and bleed valve (DBB) is designed with a globe pattern and provides maximum shut-off utilizing a ball tip stem on the process valve and a needle tip stem on the bleed valve. The DBB is available in various materials, end connections and configurations. Multiple cross port configurations are available. The DBB is an effective transition between process piping and instrumentation, and functions in applications in which monoflange valves and DBB ball valves do not due to plugging and/or abrasive process.



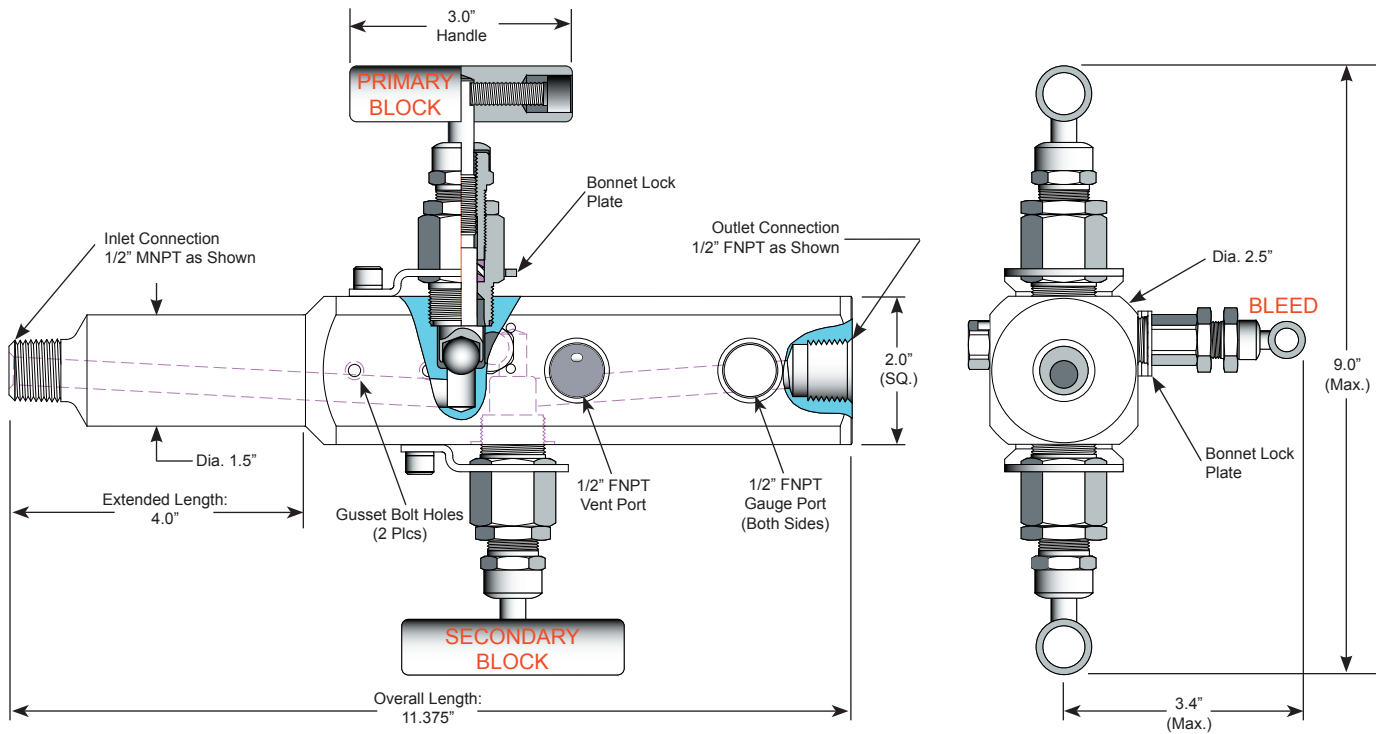
**Standard Features**

**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. |
| Bonnet lock plates and gusset mounting holes standard  |  | Tamper proof security and provides additional installation support  |
| Extended body and high temperature bonnets   |  | Allows for welded installation and localize PWHT without disassembling valve  |
| Metal body-to-bonnet seals are in compression, not tension.  |  | Mitigates risk of stress cracking   |
| Integral block and bleed   |  | Minimizes number of leak points in valve  |
| Stem with 8 RMS finish   |  | Extended packing life   |
| Stem with ceramic ball tip   |  | Provides optimal sealing on stem and valve seat and longer service life in abrasive processes                               |
| Grafoil™ packing (Teflon™ free)  |  | Fire safe design meets API 6FA  |
| Pressure component materials sourced from the US, Canada or Europe                                 |  | Reliable material traceability. MTR's provided with every order for pressure containing components.                         |

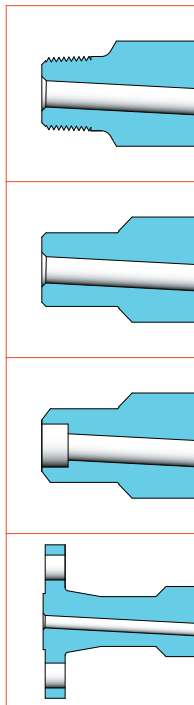
# P6GDBB™ REGULAR SERVICE VALVE

## Technical Specifications

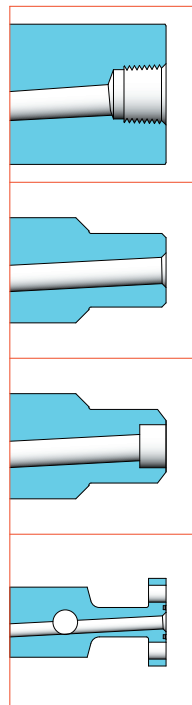


NOTE: DBB valves supplied with four 1/2" MNPT pipe plugs with liquid nitride treatment, two gusset bolts with lock washers and one stainless steel tag with wire, not shown above.

**FIG. 1**  
INLET  
CONNECTION  
TYPE

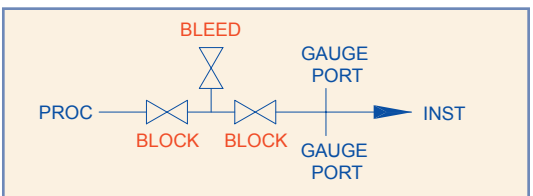


**FIG. 2**  
OUTLET  
CONNECTION  
TYPE

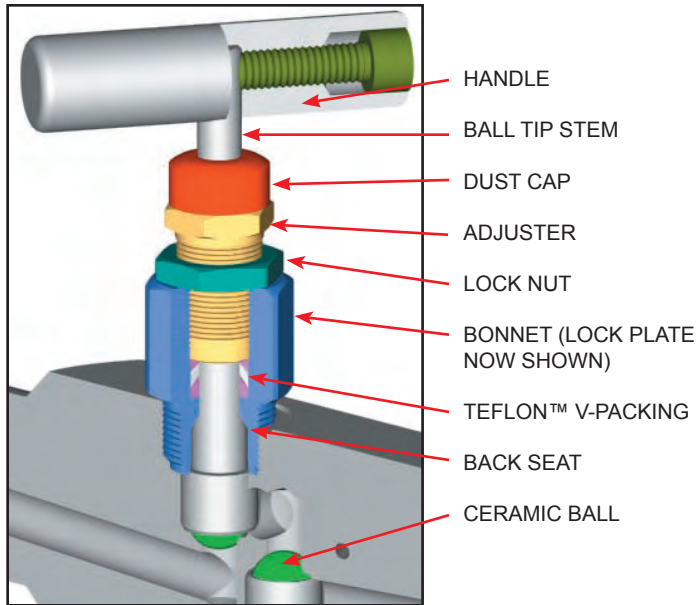


**Specifications:**

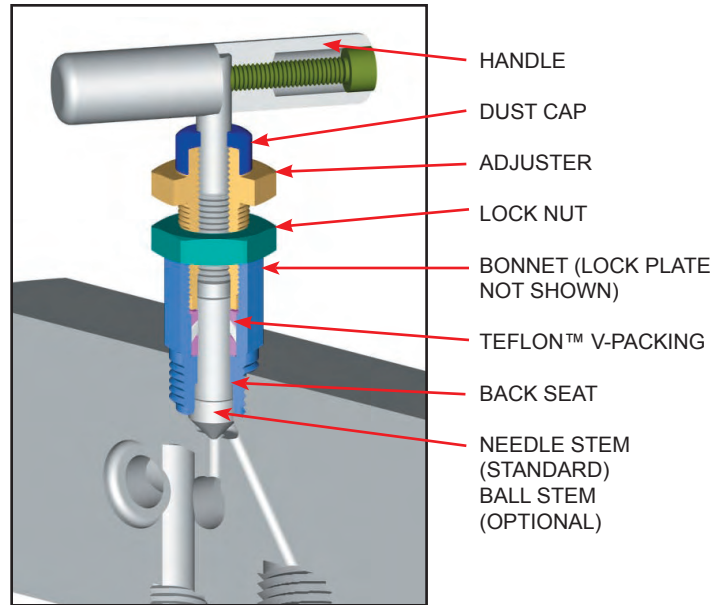
Type: **P6GDBB**, DBB Gauge Valve  
Globe Pattern  
Rating: Up to 6000 psi @ 100°F  
(41370 kPa @ 38°C)  
Stem: Ball Tip Stems for  
both Blocks and Needle Tip for Bleed  
Packing: Teflon™ or Grafoil™  
Seat: Integral  
Handle: Removable  
Bore Size: 3/8" for Primary, 1/8" for Bleed  
Inlet Connections: See Fig. 1  
Outlet Connections: See Fig. 2  
Vent Port: 1/2" FNPT (includes 1/2" Pipe Plug)  
Bonnet Lock: Standard Plate  
Body Stock: 2.5" Round Bar  
Weight: 10.3 lbs (varies with configurations)



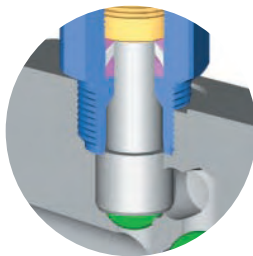
### Block Bonnet Assembly



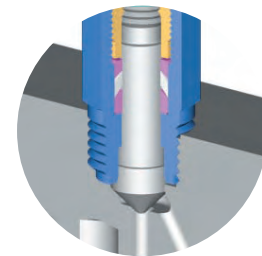
### Bleed Bonnet Assembly



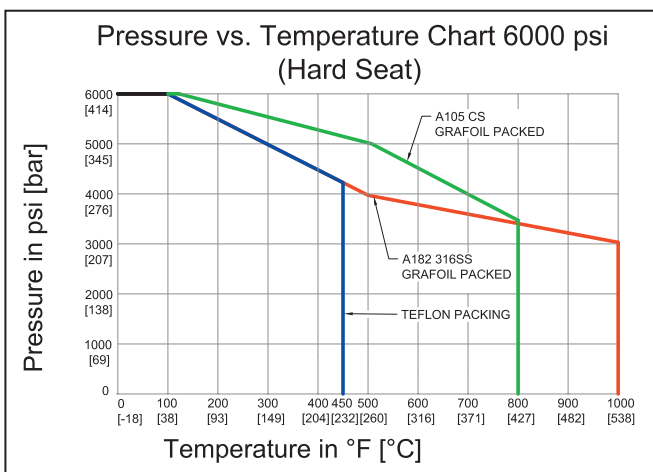
### Stem and Seat Configurations



Block stem with ball tip



Needle tip stem standard



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.

### 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)

# P6GDBB™ REGULAR SERVICE VALVE

## Model Numbering System

PHOENIX	ORIFICE SIZE	TYPE	INLET SIZE	INLET TYPE	SCHEDULE (for butt-weld inlet)	OUTLET SIZE	OUTLET TYPE	BODY MATERIAL	TRIM MATERIAL	PACKING	STEM TIP	STEM TYPE	OPTIONAL STEM MATERIAL
P	6=6/16" =3/8"	GDBB6H	8=1/2"	M=Male NPT	40S= SCH 40	8=1/2"	F=Female NPT	SS=ASTM A182 F316/316L	same as body	G= Grafoil™	BC= Ceramic Ball	Rotating (Leave Blank)	
			12=3/4"	MS=Male socket weld	80S= SCH 80	12=3/4"	MS=Male socket weld	S317=ASTM A182 F317/317L	same as body	T= Teflon™ (PTFE)	B= 316SS Ball		
			16=1"	BW=Male Butt weld	160S= SCH 160	16=1"	BW=Male Butt weld	S310=ASTM A182 F310H	same as body				
			*75=3/4"	R150F=150# Raised Face Flange	XXH= SCH XXH		IF=Integral 2 Bolt Flange	S321=ASTM A182 F321SS	same as body				
			*100=1"	R300F=300# Raised Face Flange				S347=ASTM A182 F347SS	same as body				
			*150=1.5"	R600F=600# Raised Face Flange				C5=ASTM A350 LF2	316SS				
			*200=2"					SC=ASTM A105	316SS				S410 =410SS
								C4=ASME SA105	316SS				
								S22=DUPLEX 2205	same as body				
								F5=A182 F5	Stem - 316SS Bonnet - same as body				
							F9=A182 F9						
							F11=A182 F11						
							F22=A182 F22						
								N6=Inconel™ 625	same as body				
								N8=Inconel™ 825	same as body				
								N20=Alloy 20	same as body				
e.g.: P6GDBB6H12MS8FSSGB = 3/8" Bore, 3/4" Male Socket Weld Inlet, 1/2" FNPT Outlet, 316SS Body, Grafoil™ Packing, 316SS Ball Tip, Rotating Stem													
<b>P</b>	<b>6</b>	<b>GDBB6H</b>	<b>12</b>	<b>MS</b>		<b>8</b>	<b>F</b>	<b>SS</b>		<b>G</b>	<b>B</b>		
e.g.: P6GDBB6H12BWXXHIF11GBC = 3/8" Bore, 3/4" BW(XXH) Inlet, Integral 2 Bolt Flange Outlet, F11 Body, Grafoil™ Packing, Ceramic Ball Tip, Rotating stem													
<b>P</b>	<b>6</b>	<b>GDBB6H</b>	<b>12</b>	<b>BW</b>	<b>XXH</b>		<b>IF</b>	<b>F11</b>		<b>G</b>	<b>BC</b>		
e.g.: P6GDBB6H100R300F8FSCGBC = 3/8" Bore, 1" 300# RF Flange Inlet, 1/2" FNPT Outlet, A105CS Body, Grafoil™ Packing, Ceramic Ball Tip, Rotating Stem													
<b>P</b>	<b>6</b>	<b>GDBB6H</b>	<b>100</b>	<b>R300F</b>		<b>8</b>	<b>F</b>	<b>SC</b>		<b>G</b>	<b>BC</b>		
* Only for raised face flange inlet.													

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