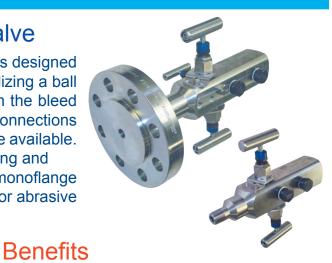


# P6GDBB™ REGULAR SERVICE DOUBLE BLOCK AND BLEED VALVE

#### **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

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

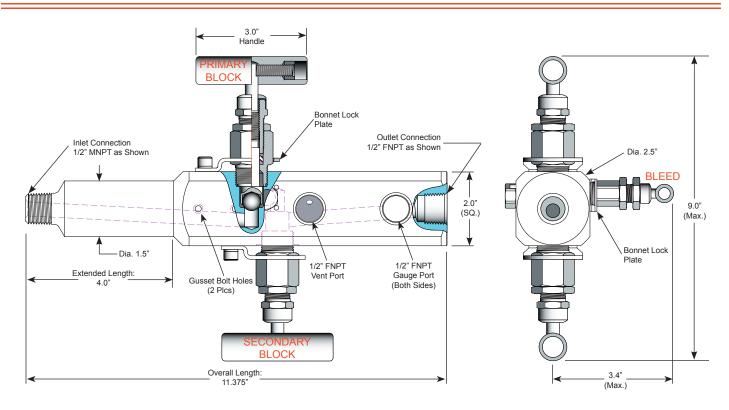


Reliable material traceability. MTR's provided with every order for pressure containing components.

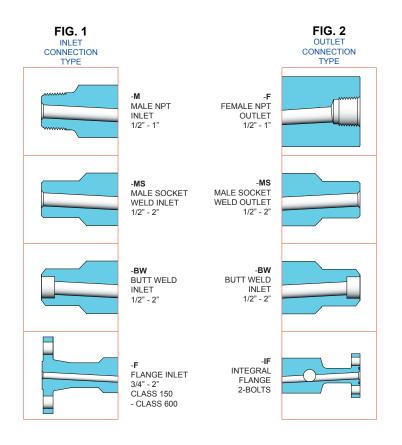




# P6GDBB™ REGULAR SERVICE VALVE Technical Specifications



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.



#### 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

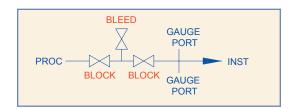
Bore Size: 3/8" for Primary, 1/8" for Bleed

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

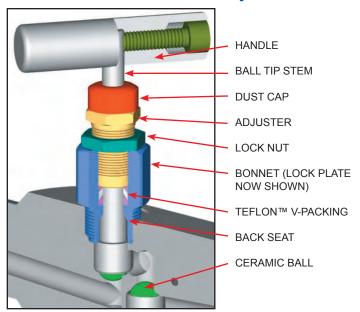
Weight: 10.3 lbs (varies with configurations)



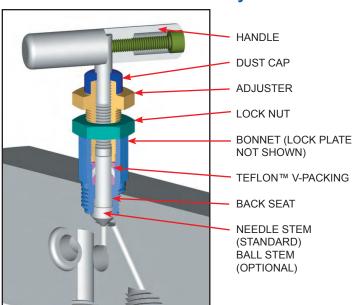


## P6GDBB™ REGULAR SERVICE VALVE Bonnet. Stem and Seat Characteristics

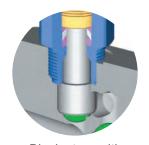
# **Block Bonnet Assembly**



## **Bleed Bonnet Assembly**



## **Stem and Seat Configurations**

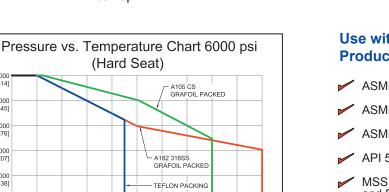


Block stem with ball tip

5000

[-18] [38]

Pressure in psi [bar]

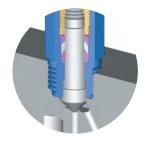


Note: Body material specifications based on ASME B16.34 - 2009. Packing material ratings based on manufacturer's specifications. Approximations only. Phoenix does not represent these values as finite. They are provided only as representative values.

[149] [204][232][260]

Temperature in °F [°C]

[371] [427]



Needle tip stem standard

#### **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



# 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
Р	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				
			İ			İ		N8=InconeI™ 825	same as body			İ	İ
						İ		N20=Alloy 20	same as body				
e.g.: P6GI	DBB6H12N	/IS8FSSGB	= 3/8" Bore,	3/4" Male Socl	ket Weld Inlet	, 1/2" FNP	T Outlet, 316	SS Body, Grafoil™	Packing, 316	SS Ball Tip,	Rotating	Stem	
P	6	GDBB6H	12	MS		8	F	ss		G	В		
e.g.: P6G	DBB6H12I	BWXXHIFF	11GBC = 3/8'	Bore, 3/4" BV	V(XXH) Inlet,	Integral 2 I	Bolt Flange C	outlet, F11 Body, G	rafoil™ Packin	g, Ceramic	Ball Tip, F	Rotating ste	em
Р	6	GDBB6H	12	BW	ххн		IF	F11		G	вс		
e.g.: P6G	DBB6H10	0R300F8FS	CGBC = 3/8"	Bore, 1" 300#	RF Flange Ir	nlet, 1/2" F	NPT Outlet, A	A105CS Body, Gra	foil™ Packing,	Ceramic B	all Tip, Ro	tating Sten	1
Р	6	GDBB6H	100	R300F		8	F	sc		G	вс		
* Only for	raised face	flange inlet	i.			•	•	•					

#### For further information please contact:



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

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