

P6GDBB-NR™ SEVERE SERVICE DOUBLE BLOCK AND BLEED VALVE

DOUBLE BLOCK AND BLEED VALVE - SEVERE SERVICE

3/8" Bore Double Block and Bleed Valve

The double block and bleed valve (DBB) is designed for high temperature and severe service applications. This globe pattern provides maximum shut-off using a ceramic ball tip stem on the process valve and a needle tip stem on the bleed valve. Phoenix offers this valve in a variety of construction materials, end connections and configurations, including configurations with multiple cross ports. The DBB provides an excellent transition between process piping and instrumentation. The P6GDBB functions in applications that monoflange valves and DBB ball valves cannot due to plugging and/or high temperatures.



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.

High temperature/pressure qualification tests of design



Complies with the requirements of EEMUA Pub. 182

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. Bonnet design has additional top bonnet seal.



Mitigates risk of stress cracking

Integral block and bleed



Minimizes number of leak points in valve

Non-rotating stem design with 8 RMS finish



Extended packing life

Non-rotating stem design with ceramic ball tip



Provides best sealing ability on stem and valve seat and longer service life in abrasive processes

Grafoil™ packing (Teflon™ free)



Fire safe design to API 6FA

Top bonnet seal Grafoil™



Protects against corrosion attacks of bonnet threads from chlorides and other contaminants

Pressure component materials sourced from the US, Canada or Europe



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

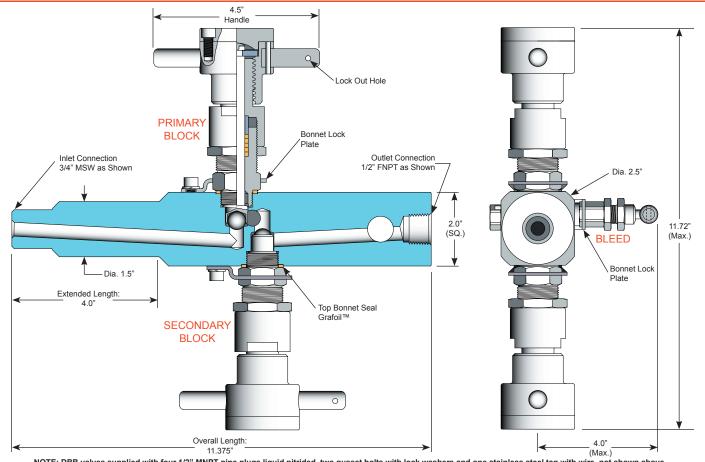
Solutions for Oil & Gas and Petrochemical Processing www.phoenixprecisionvalves.com



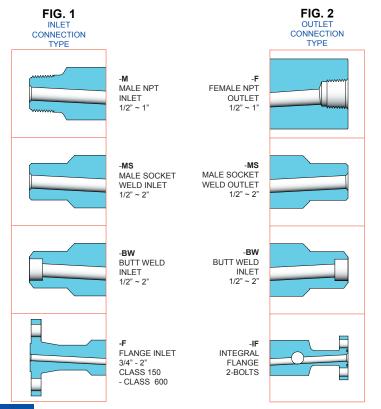


P6GDBB-NR™ SEVERE SERVICE VALVE

Technical Specifications



NOTE: DBB valves supplied with four 1/2" MNPT pipe plugs liquid nitrided, 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: Non-rotating Ceramic Ball Tip Stems for

both Blocks and Needle Tip for Bleed

Packing: Grafoil™

Seat: Integral

Handle: Non-removable

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

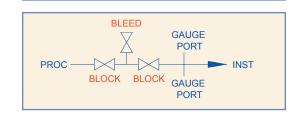
Inlet Connections: See Fig. 1 Outlet Connections: See Fig. 2

Vent Port: 1/2" FNPT (includes 1/2" Pipe Plug)

Bonnet Lock: Standard

Body Stock: 2.5" Round Bar

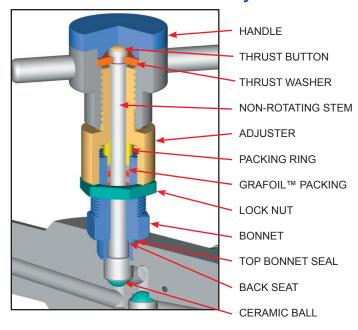
Weight: 14.5 lbs



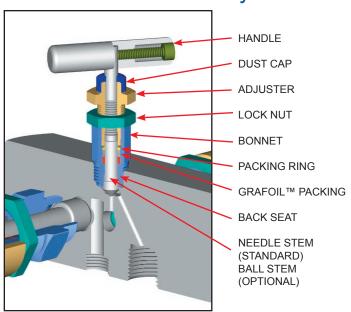


P6GDBB-NR™ SEVERE SERVICE VALVE Bonnet. Stem and Seat Characteristics

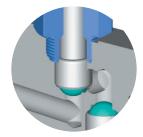
Block Bonnet Assembly



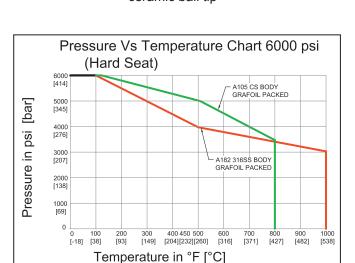
Bleed Bonnet Assembly



Stem and Seat Configurations



Non-rotating stem with ceramic ball tip



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.



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 for all 316SS valves and A105CS body/ 316SS bonnet (SC Material Code)



P6GDBB-NR™ SEVERE 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 40S	8=1/2"	F=Female NPT	SS=ASTM A182 F316/316L	same as body	G= Grafoil™	BC= Ceramic Ball	NR=Non -Rotating	
			12=3/4"	MS=Male socket weld	80S= SCH 80S	12=3/4"	MS=Male socket weld	S317=ASTM A182 F317/317L	same as body		B= 316SS Ball		
			16=1"	BW=Male Butt-weld	160S= SCH 160S	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=InconeI™ 625	same as body				
								N8=InconeI™ 825	same as body				
								N20=Alloy 20	same as body				
e.g.: P6GI	DBB6H12N	/IS8FSSGB(C-NR = 3/8" [Bore, 3/4" Male	Socket Weld	d Inlet, 1/2"	FNPT Outlet	t, 316SS Body, Gra	u afoil™ Packing	Ceramic E	Ball Tip, No	n-Rotating	Stem
Р	6	GDBB6H	12	MS		8	F	ss		G	вс	NR	
e.g.: P6G	DBB6H12	BWXXHIFF1	11GBC-NR =	3/8" Bore, 3/4	" BW(XXH) Ir	let, Integra	ıl 2 Bolt Flanç	ge Outlet, F11 Bod	ly, Grafoil™ Pa	cking, Cera	mic Ball T	ip, Non-Ro	tating sten
Р	6	GDBB6H	12	BW	ххн		IF	F11		G	вс	NR	
e.g.: P6G	DBB6H10	0R300F8FS	CGBC-NR =	3/8" Bore, 1" 3	800# RF Flan	ge Inlet, 1/2	2" FNPT Outl	et, A105CS Body,	Grafoil™ Pack	ng, Ceram	ic Ball Tip,	Non-Rota	ting Stem
Р	6	GDBB6H	100	R300F		8	F	sc		G	вс	NR	
* Only for	raised face	e flange inlet		<u> </u>								<u> </u>	

For further information please contact:



Quality

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