

Globe Valves

GL2 Series



- ❖ Working pressures Class 800, Class 1500
- ❖ Working temperature from -20°F to 1250°F (-28°C to 676°C)
- ❖ Three Bonnet designs: Bolted Bonnet, Outside Screw and Yoke (OS & Y)
Stronger, leakproof body-bonnet joint fully encased spiral wound gasket
- ❖ NPS size from 1/4 to 2"

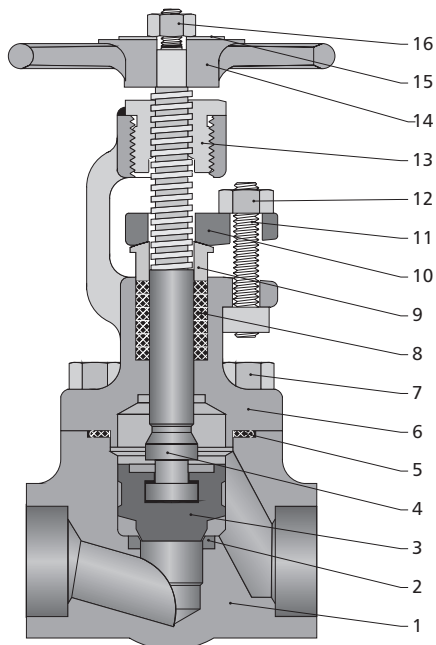
Features

- ❖ Three Bonnet designs: Bolted Bonnet, Outside Screw and Yoke (OS & Y)
Stronger, leakproof body-bonnet joint fully encased spiral wound gasket
- ❖ The top- and bottom-guided disc assures perfect seat and disc alignment in spite of side thrust caused by high velocity flow. This prevents stem from scoring and galling and provides longer disc seal and body life.
- ❖ Large clearance between stem and disc allows disc to move freely.
- ❖ Precision stem and packing chambers, Packing rings individually pre-stressed for tight seal
- ❖ Two-piece self-aligning gland.

Specifications

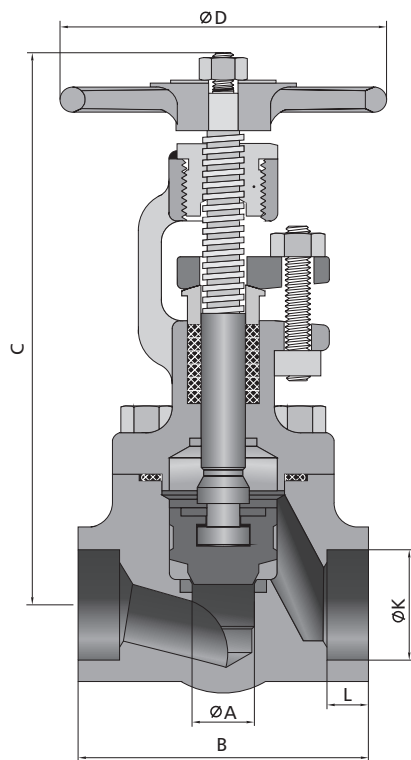
- ❖ Design: ANSI B16.34, API602
- ❖ Testing: ANSI B16.34, API598
- ❖ Marking: MSS-SP-25
- ❖ Socket weld ends: ASME B16.11
- ❖ Butt weld ends: ASME B16.25
- ❖ Threaded ends: ASME 1.20.1

Standard Materials of Construction



Item	Part	Valve Body Materials				
1	Body	A105	F11/A182	F22/A182	F91/A182	316 S.S./A182
2	Seat	410 S.S./A276				316 S.S./A182
3	Disc	410 S.S./A276				316 S.S./A276
4	Stem	410 S.S./A276				316 S.S./A276
5	Gasket	304 S.S. + Graphite				316S.S. + Graphite
6	Bonnet	A105N	F11/A182	F22/A182	F91/A182	316 S.S./A182
7	Bolt	B7				B8M2
8	Packing	Graphite				
9	Gland	410 SS/A276				316 S.S./A276
10	Gland Flange	A105				304 S.S./A182
11	Gland Bolt	B7				B8M
12	Hex Nut	2H				8M
13	Stem Nut	410 S.S.				
14	Handwheel	Malleable iron (painted)				
15	Name Plate	Aluminum				
16	Handwheel Nut	Steel				

Bolted Bonnet



Threaded or weld
ASME Class 800
ASME Class 1500

Bolted Bonnet Globe Dimensions and Weights

Size NPS DN	ØA ⁱⁿ _{mm}		B ⁱⁿ _{mm}		C ⁱⁿ _{mm}		ØD ⁱⁿ _{mm}		ØK ⁱⁿ _{mm}	L ⁱⁿ _{mm}	Weight lb kg	
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth		
	800	1500	800	1500	800	1500	800	1500			800	1500
1/4 8	0.31 8	0.50 13	3.00 76	4.00 102	4.80 122	8.10 206	2.50 64	6.0 152	0.555 14.10	0.38 10	3.00 1.4	8.00 3.6
3/8 10	0.31 8	0.50 13	3.00 76	4.00 102	4.80 122	8.10 206	2.50 64	6.0 152	0.690 17.53	0.38 10	3.00 1.4	8.00 3.6
1/2 15	0.31 8	0.50 13	3.00 76	4.00 102	4.80 122	8.10 206	2.50 64	6.0 152	0.855 21.72	0.38 10	3.00 1.4	8.00 3.6
3/4 20	0.50 13	0.50 13	3.25 83	5.00 127	7.10 180	8.40 213	4.0 102	6.0 152	1.065 27.05	0.50 13	5.00 2.3	11.00 5.0
1 25	0.75 19	0.75 19	3.50 89	6.00 152	7.30 185	10.0 254	4.0 102	8.0 203	1.330 33.78	0.50 13	6.00 2.7	21.00 9.5
1 1/4 32	1.25 32	1.25 32	5.00 127	7.00 178	8.90 226	11.0 279	6.0 152	8.0 203	1.675 42.55	0.50 13	14.00 6.4	31.00 14.0
1 1/2 40	1.25 32	1.25 32	5.00 127	7.00 178	8.90 226	11.0 279	6.0 152	8.0 203	1.915 48.64	0.50 13	14.00 6.4	31.00 14.0
2 50	1.5 38	1.5 38	8.00 203	9.00 229	11.2 285	12.3 312	8.0 203	12.0 305	2.406 61.11	0.63 16	27.00 12.2	49.00 22.2

Pressure - Temperature Ratings

ASME B16.34 - Class 1500, API Std 602 - Class 800

Materials	A105		F22	
Class	800	1500	800	1500
Temp. °F	Psig			
-20 to 100	1975	3705	2000	3750
200	1800	3375	2000	3750
300	1750	3280	1940	3640
400	1690	3170	1880	3530
500	1595	2995	1775	3325
600	1460	2735	1615	3025
650	1430	2685	1570	2940
700	1420	2665	1515	2840
750	1345	2520	1420	2660
800	1100	2060	1355	2540
850	715	1340	1300	2435
900	—	—	1200	2245
950	—	—	1005	1885
1000	—	—	695	1305
1050	—	—	465	875
1100	—	—	295	550
1150	—	—	180	345
1200	—	—	110	205

Materials	A625		F316	
Class	800	1500	800	1500
Temp. °F	Psig			
-20 to 100	2250	3750	1920	3600
200	2250	3750	1655	3095
300	2185	3640	1495	2795
400	2086	3490	1370	2570
500	1995	3325	1275	2390
600	1815	3025	1205	2255
650	1765	2940	1185	2220
700	1705	2840	1160	2170
750	1595	2660	1140	2135
800	1525	2540	1125	2110
850	1460	2435	1115	2090
900	1350	2245	1105	2075
950	1160	1930	1030	1930
1000	1090	1820	935	1750
1050	1080	1800	915	1720
1100	965	1610	815	1525
1150	825	1370	630	1185
1200	615	1030	495	925
1250	—	—	390	735

How to Order

GL2 — PBW8 — CL1500 — 316

Series	Type Of Connection	Size Of Connection	ASME Class	Body Material
GL2	FNPT Female NPT	6 3/8 in.	CL800 Class 800	316 316 S.S.
	FBT Female BSPT	8 1/2 in.	CL1500 Class 1500	316L 316L S.S.
	FSW Fractional Tube Socket Weld	12 3/4 in.		316H 316H S.S.
	MSW Metric Tube Socket Weld	16 1 in.		304 304 S.S.
	FBW Fractional Tube Butt Weld	20 1 1/4 in.		304L 304L S.S.
	MBW Metric Tube Butt Weld	24 1 1/2 in.		F91 F91
	PSW Pipe Socket Weld	32 2 in.		F92 F92
	PBW Pipe Butt Weld			A105 Alloy A105
				A625 Alloy 625
				F11 F11
				F22 F22
				WB36 WB36