

CLASS 300 GLOBE VALVES

FIG. 3032/3033

DESCRIPTION

Cast carbon steel globe valves 300 pound pressure class with bolted bonnet, outside screw and yoke, rising handwheel and seal welded seat ring manufactured in accordance with ANSI B16.34.

APPLICATION

These globe valves are used in pipelines and in facilities for water, steam, non-aggressive gases, naphtha, naphtha derivatives and in other power and process installations, in operating conditions up to 800°F (427°C), in accordance with Table No. 1. Data included in this table meet the pressure-temperature ratings of ANSI B16.34.

TECHNICAL DATA

The basic dimensions of the globe valves are in accordance with Table No. 4. Face to face dimensions of the globe valves are in accordance with ANSI B16.10. The pipe flanges are regularly furnished faced and drilled with .062" (1.5mm) raised faces, in accordance with ANSI B16.5 (See Note). The raised faces of the pipe flanges are machined in accordance with MSS SP-6.

The seat faces on the discs are the spherical type. This type effects a tight seal with a minimum amount of pressure upon the disc. Operation is performed by a rising handwheel; the closing direction is to the right. Upon request, globe valves are made with enclosed bevel gearing. For remote control, these valves can be equipped with electric or air motor operating units.

A long swivel nut coupled with small clearances between the swivel nut and the stem is utilized to guide the disc accurately to its seat.

The seat ring is seal welded to the body and is made of carbon steel with hard faced seat surfaces.

The globe valves are provided with a back-seat bushing, enabling the replacement of the stem packing when the valve is in the wide open position.



PRESSURE-TEMPERATURE RATINGS			
Temperature		Working Pressure	
(° F)	(° C)	(psi)	(bar)
100	38	740	51,0
200	93	675	46,5
300	149	655	45,2
400	204	635	43,8
500	260	600	41,4
600	316	550	37,9
650	343	535	36,9
700	371	535	36,9
750	399	505	34,8
800	427	410	28,3

Asbestos free packing or flexible graphite as per request.

The globe valves are delivered protected against corrosion. The raised faces on the pipe flanges are protected against damage during shipment.

Cast on the globe valve bodies are the Lunkenheimer Trade Mark, nominal pressure class, nominal size, material designation and an indication of the flow direction, all in accordance with MSS SP-25.

TESTS

The globe valves are hydrostatically and pneumatically tested in accordance with Table No. 2, meeting the requirements of ANSI B16.34 and MSS SP-61.

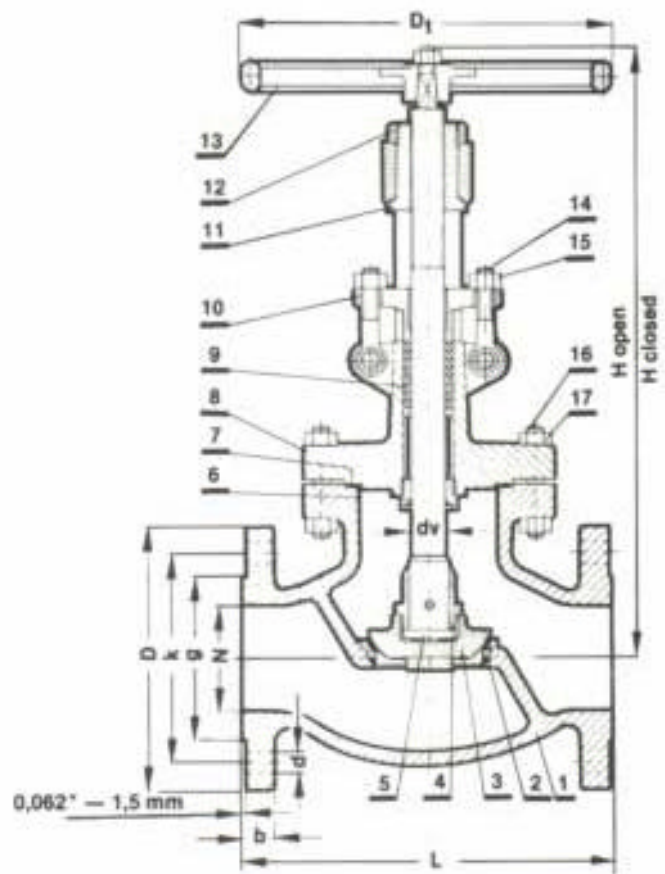
NOTE: Other flange facings and finishes in accordance with ANSI B16.5 are available on request. Butt weld ends will be furnished in accordance with ANSI B16.25, unless otherwise specified.

TEST PRESSURES					
Hydrostatic				Pneumatic	
Shell		Seat		Seat	
(psig)	(bar-gage)	(psig)	(bar-gage)	(psig)	(bar-gage)
1125	77,5	825	56,2	80	5,5



WITH UNIVERSAL TRIM

PARTS AND MATERIALS			Table 3
Key	Part	Material Specification	
1	Body	ASTM A216 Gr. WCB	
2	Seat Ring	ASTM A108 Gr. 1018-1020 w/Cr-Co-W Facing	
3	Disc	ASTM A182 Gr. F6	
4	Swivel Nut	ASTM A582 Type 416	
5	Stem	ASTM A582 Type 410	
6	Backseat Bushing	ASTM A276 Type 410	
7	Gasket	Soft Iron, Corrugated	
8	Bonnet	ASTM A216 Gr. WCB	
9	Packing	Asbestos - Free	
10	Gland	ASTM A216 Gr. WCB	
11	Yoke Nut	ASTM A439 Type D2	
12	Yoke Nut Lock Nut	ASTM A47 Gr. 32510	
13	Handwheel	ASTM A47 Gr. 32510	
14	Gland Eyebolt	Steel, Mild Carbon	
15	Gland Eyebolt Nut	ASTM A307 Gr. B	
16	Body-Bonnet Stud Bolt	ASTM A193 Gr. B7	
17	Body-Bonnet Stud Bolt Nut	ASTM A194 Gr. 2H	



GENERAL DIMENSIONS															Table 4
Valve Size	Line flange						Face to Face	Height			Line flange bolts		Turns to open	Hand-wheel Dia.	Weight Approx
	Dia.	Dia.	Thick-ness min.	Bolt Circle Dia.	Hole Dia.	Raised Face Dia.		Open	Closed	Stem Dia.	No.	Size			
	N (in.) (mm)	D (in.) (mm)	b (in.) (mm)	k (in.) (mm)	d (in.) (mm)	g (in.) (mm)	L (in.) (mm)	H (in.) (mm)	H (in.) (mm)	dv (in.) (mm)		(in.) (mm)	Dt (in.) (mm)	(lbs.) (kg)	
2	2.00 50,8	6.50 165,1	0.88 22,4	5.00 127,0	0.75 19,1	3.62 91,9	10.50 266,7	17.50 444,5	16.55 420,4	7/8 22,2	8	5/8 15,9	5.7	9.00 228,6	70 31,8
3	3.00 76,2	8.25 209,6	1.12 28,4	6.62 168,1	0.88 22,4	5.00 127,0	12.50 317,5	20.10 510,5	18.50 469,9	1 25,4	8	3/4 19,1	9.6	10.00 254,0	124 56,2
4	4.00 101,6	10.00 254,0	1.25 31,8	7.88 200,2	0.88 22,4	6.19 157,2	14.00 355,6	24.80 629,9	22.85 580,4	1 1/4 31,8	8	3/4 19,1	11.7	14.00 355,6	195 88,5
6	6.00 152,4	12.50 317,5	1.44 36,6	10.62 269,7	0.88 22,4	8.50 215,9	17.50 444,5	29.55 750,6	26.95 684,5	1 1/2 38,1	12	3/4 19,1	10.4	18.00 457,2	360 163,3