

CLASS 150 GLOBE VALVES

FIG. 1532/1533

DESCRIPTION

Cast carbon steel globe valves 150 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), according 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 0.062" (1.5 mm) 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 hand wheel; 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 in the bonnet, enabling the replacement of the stem packing when the valve is in the wide open position.



PRESSURE-TEMPERATURE RATINGS Table 1			
Temperature		Working Pressure	
(° F)	(° C)	(psi)	(bar)
100	38	285	19,6
200	93	260	17,9
300	149	230	15,9
400	204	200	13,8
500	260	170	11,7
600	316	140	9,6
650	343	125	8,6
700	371	110	7,6
750	399	95	6,6
800	427	80	5,5

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 Table 2					
Hydrostatic				Pneumatic	
Shell		Seat		Seat	
(psig)	(bar-gage)	(psig)	(bar-gage)	(psig)	(bar-gage)
450	31,0	325	21,7	80	5,5

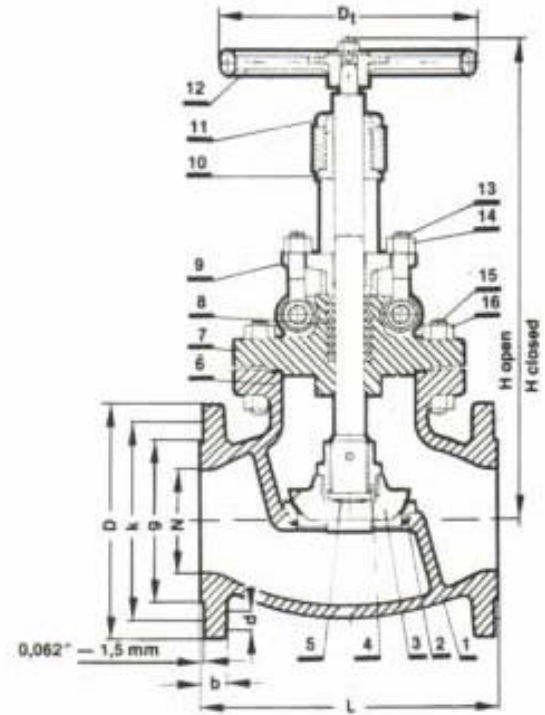


WITH UNIVERSAL TRIM

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	Gasket	Soft Iron, Corrugated
7	Bonnet	ASTM A216 Gr. WCB
8	Packing	Asbestos – Free
9	Gland	ASTM A216 Gr. WCB
10	Yoke Nut	ASTM A439 Type D2
11	Yoke Nut lock nut	ASTM A47 Gr. 32510
12	Handwheel	ASTM A47 Gr. 32510
13	Gland Eyebolt	Steel, Mild Carbon
14	Gland Eyebolt Nut	ASTM A307 Gr. B
15	Body – Bonnet Stud Bolt	ASTM A193 Gr. B7
16	Body – Bonnet Stud Bolt Nut	ASTM A194 Gr. 2H



GENERAL DIMENSIONS

Table 4

Valve Size	Line flange						Face to Face	Height		Stem Dia.	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		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	6.00 152,4	0.62 15,7	4.75 120,7	0.75 19,1	3.62 91,9	8.00 203,2	14.00 355,5	12.60 320,0	7/8 22,2	4	5/8 15,9	8.4	8.00 203,2	48 21,8
3	3.00 76,2	7.50 190,5	0.75 19,1	6.00 152,4	0.75 19,1	5.00 127,0	9.50 241,3	16.55 420,4	15.15 384,8	1 25,4	4	5/8 15,9	8.4	9.00 228,6	83 37,6
4	4.00 101,6	9.00 228,6	0.94 23,9	7.50 190,5	0.75 19,1	6.19 157,2	11.50 292,1	20.10 510,5	18.30 464,8	1 1/8 28,6	8	5/8 15,9	10.8	10.00 254,0	120 54,4
6	6.00 152,4	11.00 279,4	1.00 25,4	9.50 241,3	0.88 22,4	8.50 215,9	16.00 406,4	24.20 614,7	21.45 544,8	1 1/4 31,8	8	3/4 19,1	16.5	12.00 304,8	210 95,3