



125 - POUND CAST IRON GLOBE VALVES

MSS Specification Valves



Outside screw and yoke, rising stem, bolted bonnet, flanged ends.
Bronze trimmed (Fig. No. 400A)
Stainless steel trimmed (Fig. No. 510)

PRESSURE - TEMPERATURE RATINGS			
Service Temperature		Sizes 2" to 12"	
°F	°C	Psig	Bar
-20 to 150	-29 to 66	200	13.7
200	93	190	13.1
225	107	180	12.4
250	121	175	12.0
275	135	170	11.7
300	149	165	11.3
325	163	155	10.6
353 (5)	178	150	10.3
375	191	145	10.0
406 (6)	208	140	9.6
425	218	130	8.9
450	232	125	8.5
Hydrostatic test pressure	Shell	350	24.1
	Seat	200	13.7

1. Pressure - temperature ratings extracted from ANSI B-16.1-1975 apply to cast iron flanged end valves designed for primary working pressures in class 125.
2. Pressure ratings specified above are used for cast iron with metal-to-metal seating surfaces. Pressure temperature ratings for cast iron with non-metallic seat materials must be limited to reflect the physical characteristics of these materials at each temperature and may be lower, but in no case higher than values shown in the above table.
3. The temperature shown to a corresponding pressure rating shall be the metal temperature of pressure containing parts. It shall be assumed that the metal temperature will be the temperature of the contained fluid. Application of a pressure rating at a metal temperature other than that of the contained fluid is strictly limited to the responsibility of the user.
4. The pressure rating in serve shall be restricted to the minimum temperature of -20°F (-29°C) as shown above.
5. 353° F (Max.) to reflect the temperature of saturated steam at 125 psig.
6. 406° F (Max.) to reflect the temperature of saturated steam at 125 psig.

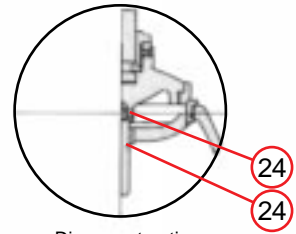
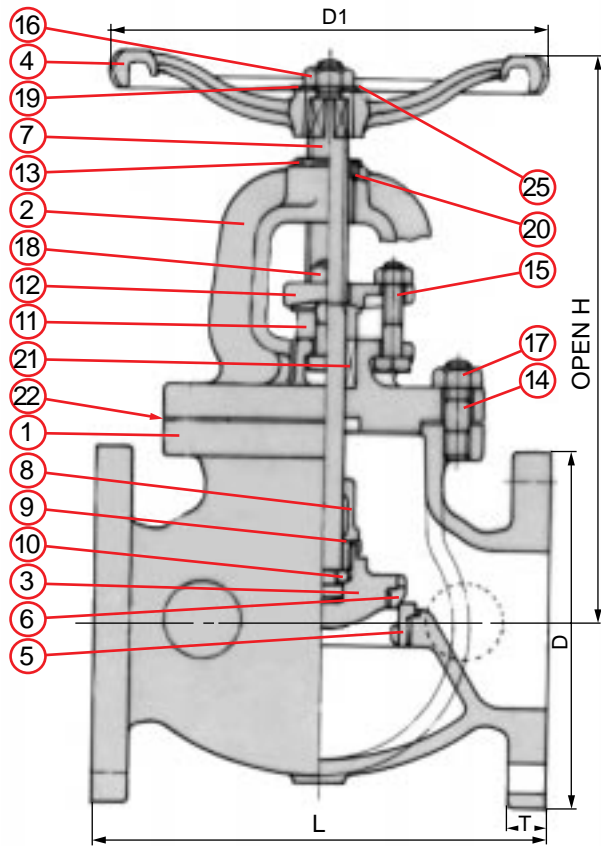
Figure No. 400A Bronze trimmed valves

M A T E R I A L			
No.	Name of parts	ASTM specification	
1	Body	Cast iron	A126 Class B
2	Bonnet	Cast iron	A126 Class B
3	Disc	2 - 4	Cast bronze
		5 - 12	Cast iron
4	Handwheel	2 - 4	Ductile iron
		5 - 12	Cast iron
5	Body seat ring	Cast bronze	B62-C83600
6	Disc seat ring	5 - 12	Cast bronze
7	Stem	Forged brass	B124-C37700
8	Lock nut	Cast bronze	B62-C83600
9	Lock washer	Brass plate	B36-C26000
10	Stem ring	Forged brass	B124-C37700
11	Gland	2 - 10	Brass
		12	Cast bronze
12	Gland flange	Ductile iron	A536 Grade 60-40-18
13	Yoke bush	Cast bronze	B62-C83600
14	Bonnet stud bolt	Steel*	A307 Grade B
15	Knock pin	Steel*	A307 Grade B
16	Wheel nut	Steel*	A563 Grade A
17	Bonnet stud nut	Steel*	A563 Grade A
18	Gland bolt nut	Steel*	A563 Grade A
19	Washer	Steel*	A36
20	Knock pin	Steel*	A36
21	Gland packing	Non-asbestos packings	
22	Gasket	Non-asbestos sheet	
23	Disc guide pin	Steel	A36
24	Spring pin	Stainless steel	AISI420
25	Name plate	Aluminum plate	B209-1100

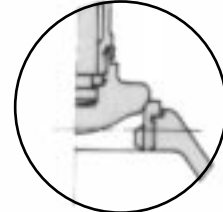
Figure No. 510 Stainless steel trimmed valves

M A T E R I A L			
No.	Name of parts	ASTM specification	
3	Disc	2 - 4	Stainless steel
		5 - 12	Cast iron
5	Body seat ring	Stainless steel	A182 Gr F6a
6	Disc seat ring	Stainless steel	A182 Gr F6a
7	Stem	Stainless steel	A182 Gr F6a
8	Lock nut	Stainless steel	A276 Type 403
9	Lock washer	Stainless steel	A167 Type 304
10	Stem ring	Stainless steel	A276 Type 403
11	Gland	Stainless steel	A276 Type 403
23	Disc guide pin	Stainless steel	A276-403

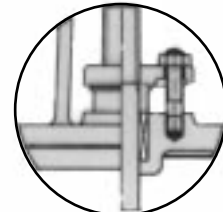
*Zinc plated



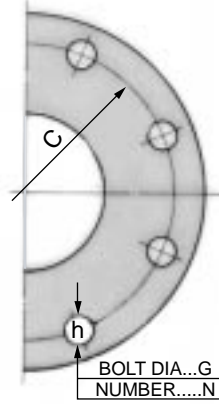
Disc construction for sizes 10" & 12"



Disc construction for sizes 2" to 4"



Stuffing box for sizes 10" & 12"



Marking on the body

6
125S
200WOG



One side

RED-WHITE



Other side

Note:

1. Face-to-face dimensions conform to ANSI B16.10.
2. End flange dimensions and drilling conform to ANSI B16.1. End flanges are fully flat faced and smooth finished in accordance with MSS SP-6.
3. Drain boss is provided in all sizes 4" to 12" valves at A, B, E & F positons in accordance with MSS SP-45.
4. Valves conform to MSS SP-85.

*Design & materials are subject to change without notice.

		D I M E N S I O N S								
size/in	2	2 1/2	3	4	5	6	8	10	12	
L	203	216	241	292	330	356	495	622	698	
mm/in	8	8.5	9.5	11.5	13	14	19.5	24.5	27.5	
H	294	316	354	406	485	531	634	671	757	
mm/in	11.57	12.44	13.94	15.98	18.03	20.91	24.96	26.42	29.80	
D ₁	180	180	230	280	300	360	400	400	450	
mm/in	7.09	7.09	9.06	11.02	11.81	14.17	15.75	15.75	17.72	
D	152	178	191	229	254	279	343	406	483	
mm/in	6.00	7.00	7.50	9.00	10.00	11.00	13.50	16.00	19.00	
C	121	140	152	191	216	241	299	362	432	
mm/in	4.75	5.50	6.00	7.50	8.50	9.50	11.75	14.25	17.00	
T	15.9	17.5	19.0	23.8	23.8	25.4	28.6	30.2	31.8	
mm/in	0.62	0.69	0.75	0.94	0.94	1.00	1.12	1.19	1.25	
N	4	4	4	8	8	8	8	12	12	
h	19.0	19.0	19.0	19.0	22.2	22.2	22.2	25.4	25.4	
mm/in	0.75	0.75	0.75	0.75	0.88	0.88	0.88	1.00	1.00	
G	15.9	15.9	15.9	15.9	19.0	19.0	19.0	22.2	22	
mm/in	0.62	0.62	0.62	0.62	0.75	0.75	0.75	0.88	0.88	
Weights	15.5	19.7	26.8	43.5	63.0	87.5	154.0	202.0	270.0	
kg/lb	34	43	59	60	139	193	350	445	596	