



# 125-POUND CAST IRON CHECK VALVES

MSS Specification Valves



Swing type, bolted cover, flanged ends.  
Bronze trimmed (Fig. No.435A)  
Stainless steel trimmed (Fig. No. 512)

### 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. 435A Bronze trimmed valves

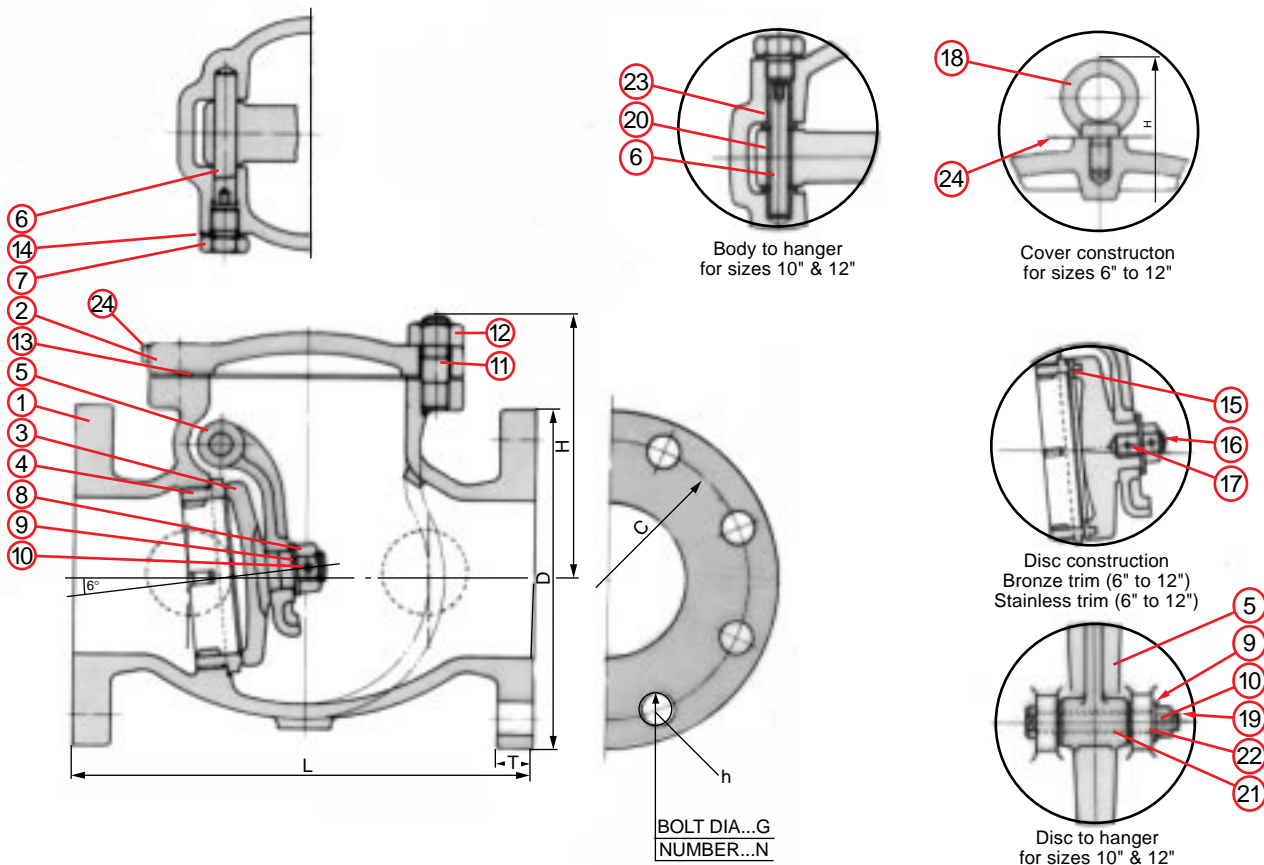
M A T E R I A L			
No.	Name of parts	ASTM specification	
1	Body	Cast iron	A126 Class B
2	Cover	Cast iron	A126 Class B
3	Disc	2 - 5	Cast bronze
		6 - 12	Cast iron
4	Body seat ring	Cast bronze	B62-C83600
5	Hanger	2 - 8	Cast bronze
		10 & 12	Ductile iron
6	Hanger pin	2 - 8	High tensile brass
		10 & 12	Stainless steel
7	Plug	Brass	B16-C36000
8	Disc nut	Stainless steel	A276 Type 304
9	Washer	Stainless steel	A276 Type 304
10	Split pin	Stainless steel	A276 Type 304
11	Cover stud bolt	Steel*	A307 Grade B
12	Cover stud nut	Steel*	A563 Grade A
13	Gasket	Non-asbestos sheet	
14	DGasket	Non-asbestos sheet	
15	Disc seat ring	Cast bronze	B62-C83600
16	Disc stud bolt	Stainless steel	A276 Type 304
17	Knock pin	Stainless steel	A276 Type 304
18	Eye bolt	Steel	A36
19	Disc pin	Stainless steel	A276 Type 403
20	Hanger bush (A)	Stainless steel	A276 Type 403
21	Hanger bush (B)	Stainless steel	A276 Type 403
22	Disc pin bush	Stainless steel	A276 Type 403
23	Hanger pin bush	Stainless steel	A276 Type 403
24	Name plate	Aluminum plate	B209-1100

Figure No. 513 Stainless steel trimmed valves

M A T E R I A L			
No.	Name of parts	ASTM specification	
3	Disc	2 - 5	Cast bronze
		6 - 12	Cast iron
4	Body seat ring	Stainless steel	
5	Hanger	2 - 8	Stainless steel casting
		10 & 12	Ductile iron
6	Hanger pin	Stainless steel	A276 Type 403
7	Plug	Steel	A307 Grade B
15	Disc seat ring	Stainless steel	A182 Grade F6

\* Zinc plated

FIG. NO. 435A, 512



Marking on the body

6  
125S  
200WOG



One side

RED-WHITE



Other side

DIMENSIONS									
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	115	125	146	163	194	281	323	362	417
mm/in	4.53	4.92	5.75	6.42	7.64	11.06	12.72	14.25	16.42
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
mm/in	4	4	4	8	8	8	8	12	12
H	19	19	19	19	22	22	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	22.2
mm/in	0.62	0.62	0.62	0.62	0.75	0.75	0.75	0.88	0.88
Weight	9.7	13.1	18.5	30.8	46.0	60.8	116.0	161.8	252.0
kg/lb	21	29	41	68	101	134	256	357	556

\*Design and materials are subject to change without notice.

**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. For bronze trimmed valves, discs in sizes 2" to 5" are constructed of solid cast bronze, and disc seat rings are pressed into discs in sizes 6" to 12" valves.
4. For stainless steel trimmed valves, discs in sizes 2" to 5" are made of solid steel, and disc seat rings are screwed into discs in sizes 6" to 12" valves.
5. Drain boss is provided in all sizes and by-pass bosses are provided in sizes 4" to 12" valves at A, B, E & F positions in accordance with MSS SP-45.
6. Valves conform to MSS SP-71.

**Toyo Valve Co., Ltd.**