

Cast Iron Check Valve: Model 435AE

Swing type, bolted cover, flanged ends.



Material

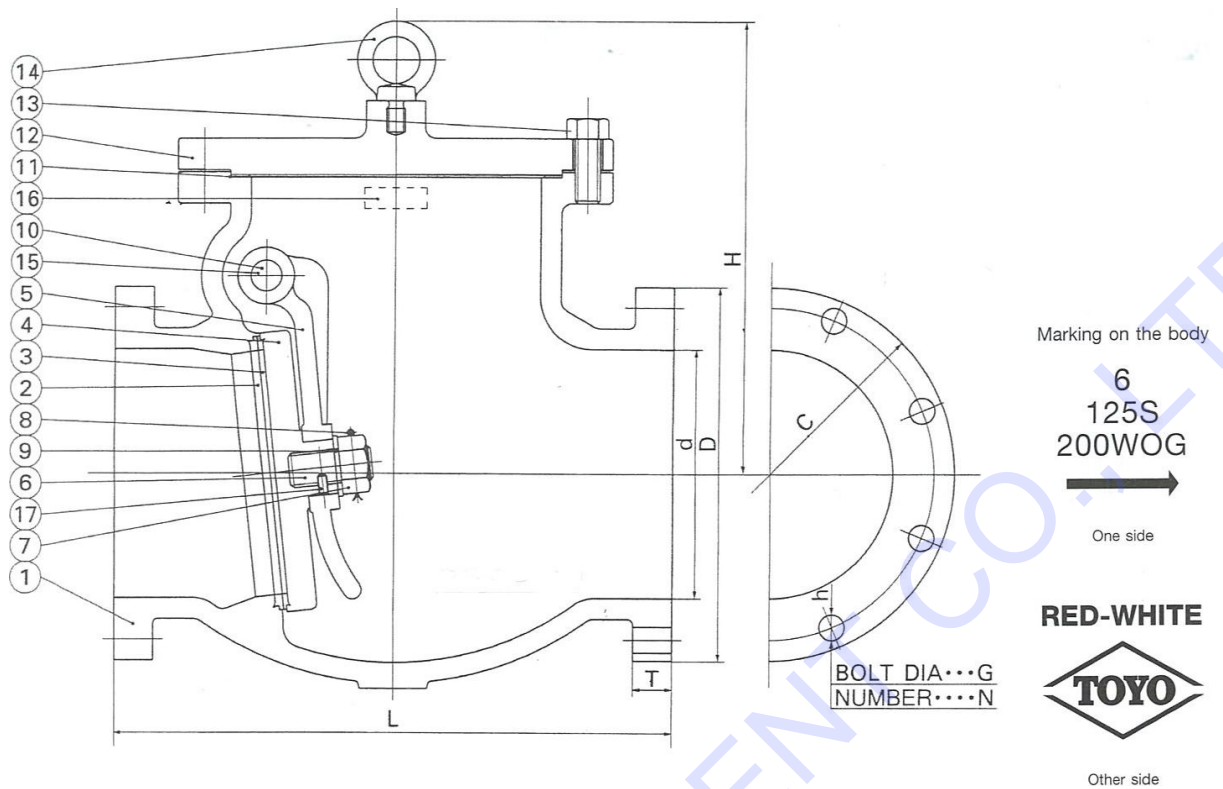
No.	Name of parts	ASTM Specification	
1	Body	Cast iron	A126 Class B
2	Body seat ring	Cast Bronze	B62-C83600
3	Disc seat ring	Cast Bronze	B62-C83600
4	Disc	Cast iron	A126 Class B
5	Hanger	Cast steel	A216 Grade WCB
6	Stud	Steel*	A307 Grade B
7	Nut	Steel*	A307 Grade B
8	Pin	Steel*	A307 Grade B
9	Washer	Steel*	A307 Grade B
10	Hanger pin	Stainless steel	A276 Type 403
11	Gasket	Non-asbestos joint sheet	
12	Cover	Cast iron	A126 Class B
13	Bolt	Steel*	A307 Grade B
14	Eye bolt	Steel*	A307 Grade B
15	Plug	KTM300-06	
16	Name plate	Aluminum	
17	Pin	Steel*	A307 Grade B

*Zinc plated

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 ASME B16. 1 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 valves with metal-to-metal seating surfaces. Pressure-temperature ratings for cast iron valves 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 service 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 psi.
6. 406°F (Max.) to reflect the temperature of saturated steam at 250 psi.



Note :

1. Face-to-face dimensions conform to ASME B16. 10.
2. End flange dimensions and drillings conform to ASME B 16.1 End flanges are fully flat faced and smoothly finished in accordance with MSS SP-6.
3. JIS10K and BS/DIN PN16 flanged ends are available upon request.
4. Drain boss and by-pass bosses are available upon request.
5. Valves conform to MSS SP-71.

Dimension

Size	Mark	L	H	Flanges						Weight	
				D	C	T	N	h	G	lb	Kg.
2	in.	8	6.02	6.00	4.75	0.62	4	0.75	0.62	31	14
	mm.	203	153	152	121	15.9		19.0	15.9		
2 ½	in.	8.5	6.34	7.00	5.50	0.69	4	0.75	0.62	44	20
	mm.	216	161	178	140	17.5		19.0	15.9		
3	in.	9.5	6.89	7.50	6.00	0.75	4	0.75	0.62	55	25
	mm.	241	175	191	152	19.0		19.0	15.9		
4	in.	11.5	8.62	9.00	7.50	0.94	8	0.75	0.62	86	39
	mm.	292	219	229	191	23.8		19.0	15.9		
5	in.	13	8.86	10.00	8.50	0.94	8	0.88	0.75	130	59
	mm.	330	225	254	216	23.8		22.0	19.0		
6	in.	14	10.08	11.00	9.50	1.00	8	0.88	0.75	154	70
	mm.	356	256	279	241	25.4		22.0	19.0		
8	in.	19.5	11.73	13.50	11.75	1.12	8	0.88	0.75	280	127
	mm.	495	298	343	299	28.6		22.0	19.0		
10	in.	24.5	14.8	16.00	14.25	1.19	12	1.00	0.88	408	185
	mm.	622	376	406	362	30.2		25.4	22.2		
12	in.	27.5	16.14	19.00	17.00	1.25	12	1.00	0.88	595	270
	mm.	698	410	483	432	31.8		25.4	22.2		

*Design and materials are subject to change without notice.