

FIG. 3072-C/3073-C



DESCRIPTION

Cast carbon steel swing check valves 300 pound pressure class manufactured in accordance with ANSI B16.34.

APPLICATION

These swing check valves are used in pipelines and in facilities for water, steam, non-aggressive gases, naphtha, naphtha derivatives and in other power and process plants, in operating conditions up to 800°F (427°C), according to Table No. 1. Data included in this table meet the pressure-temperature ratings of ANSI B16.34. They function equally well when installed in either horizontal or vertical lines to prevent backward flow. (In vertical lines, the flow direction must be upwards.)

TECHNICAL DATA

The basic dimensions of the swing check valves are in accordance with

Table No. 4. Face to face dimensions of the swing check valves are in accordance with ANSI B16.10. The pipe flanges are regularly furnished faced and drilled with raised faces 0.062" (1.5mm) 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 face in the body and on the disc are made by welding on 13 chrome stainless steel to the basic material of the body and disc.

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

PRESSURE-TEMPERATURE RATINGS Table 1			
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

Cast on the swing check 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 swing check valves are hydrostatically 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 B 16.25, unless otherwise specified.

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

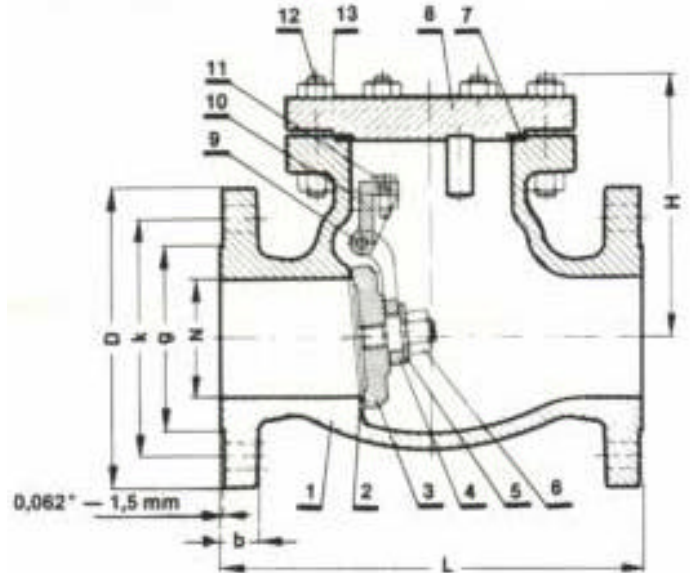


SWING CHECK VALVES

PARTS AND MATERIALS

Table 3

Key	Part	Material Specification
1	Body	ASTM A216 Gr. WCB
2	Seat	13 Cr Facing
3	Disc	ASTM A216 Gr. WCB w/13 Cr Facing
4	Strap	ASTM A217 Gr. CA 15
5	Disc Washer	ASTM A276 Type 420
6	Disc Nut	ASTM A194 Gr. 6
7	Gasket	Soft Iron, Corrugated
8	Cap	ASTM A515 Gr. 70
9	Hinge Pin	ASTM A276 Type 420
10	Strap Holder	ASTM A216 Gr. WCB
11	Cap Screw	ASTM A276 Type 316
12	Cap Stud Bolt	ASTM A193 Gr. B7
13	Cap Stud Bolt Nut	ASTM A194 Gr. 2H



GENERAL DIMENSIONS

Table 4

Valve Size	Line flange						Face to Face L (in.) (mm)	Height H (in.) (mm)	Line flange bolts		Weight Approx. (lbs.) (kg)
	Dia.	Dia.	Thick- ness min.	Bolt Circle Dia.	Hole Dia.	Raised Face Dia.			No.	Size	
	N (in.) (mm)	D (in.) (mm)	b (in.) (mm)	k (in.) (mm)	d (in.) (mm)	g (in.) (mm)				(in.) (mm)	
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	6.20 157,5	8	5/8 15,9	53 24,0
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	7.50 190,5	8	3/4 19,1	96 43,5
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	8.75 222,3	8	3/4 19,1	137 62,1
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	11.40 289,6	12	3/4 19,1	268 121,6
8	8.00 203,2	15.00 381,0	1.62 41,1	13.00 330,2	1.00 25,4	10.62 269,7	21.00 533,4	13.20 335,3	12	7/8 22,2	467 211,8
10	10.00 254,0	17.50 444,5	1.88 47,8	15.25 387,4	1.12 28,4	12.75 323,9	24.50 622,3	14.75 374,7	16	1 25,4	680 308,4