

SERIE 11
 11551

Swing Check valves

Nominal diameter options (DN) 32-800
 Nominal pressure options (PN) 6-10-16-25

Maximum working temperature (°C) Depends on the material



FEATURES

- Wafer design
- Self-centering
- Light weight and small face to face
- Low pressure drop

Standard materials: zinc plated carbon steel, stainless steel 316, alu-bronze
 Metal/Metal seat or soft seat (NBR, EPDM, PTFE, FKM)

Suitable for flange UNI PN 6, 10, 16, 25 and ANSI 150 RF
 Further materials and special execution upon request:
 – series ANSI 300 – ANSI 1500 RF
 – series PN 40 – PN 250

APPLICATIONS

Marine and offshore, chemical industry, pharmaceutical industry, heating, ventilation, fire protection systems, water industry

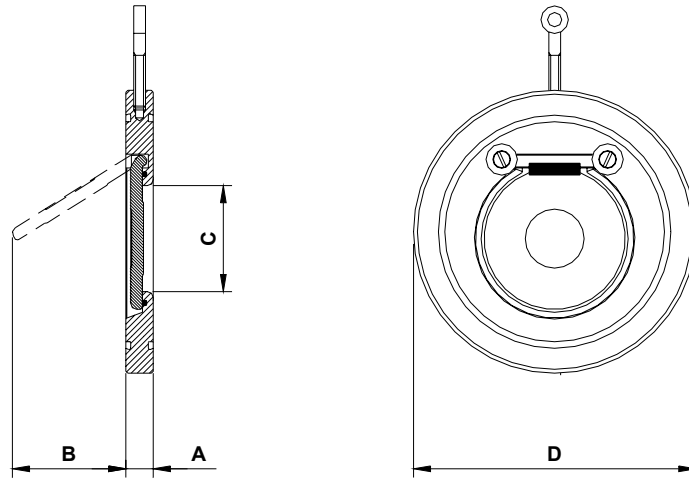
Working pressure:

• PN 6	6 Kg/cm ²	85 Psi
• PN 10	10 Kg/cm ²	142 Psi
• PN 16	16 Kg/cm ²	227 Psi
• PN 25	25 Kg/cm ²	355 Psi
• ANSI 150	20 Kg/cm ²	284 Psi

MINIMUM OPENING PRESSURE (mbar)

DN		DN 32 : DN 150	DN 200 : DN 400	DN 400 : DN 600
<i>Flow direction</i>				
Horizz. open 10°	→	3	3	6
Horizz. open 30°	→	9	12	16
Horizz. open 60°	→	13	19	26
Vertical uphill	↑	16	22	32
Vertical downhill	↓	non it is not possible to use the valve mounted in this position		

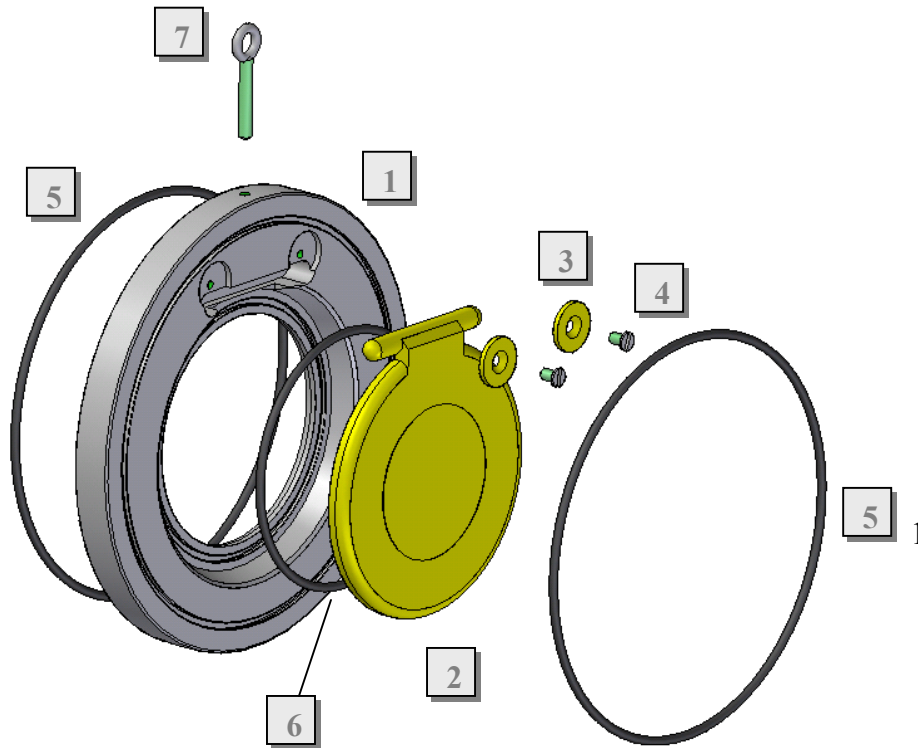
DIMENSIONS



DN		A	B	C	D					WT PN10 Kg
mm	inch				PN 6	PN10	PN16	PN25	ANSI 150	
32	1¼"	14	20	17	78	84	84	84	76	0,6
40	1½"	14	30	22	88	95	95	95	86	0,7
50	2"	14	35	32	98	109	109	109	105	0,9
65	2½"	14	48	40	118	129	129	129	124	1,2
80	3"	14	60	54	134	144	144	144	137	1,5
100	4"	18	78	70	154	164	164	170	175	2,4
125	5"	18	98	92	184	195	195	198	195	3,4
150	6"	20	117	112	209	220	220	228	220	4,6
200	8"	22	160	154	264	275	275	285	279	7,5
250	10"	26	200	200	319	330	330	340	340	13,1
300	12"	32	235	240	375	380	387	403	410	20,4
350	14"	38	258	270	425	440	448	460	448	32,0
400	16"	44	300	310	475	490	495	514	514	48,0
450	18"	50	331	360	530	540	557	567	548	63,0
500	20"	56	268	405	580	595	617	624	605	87,0
600	24"	62	435	486	680	695	734	731	715	130,0
700	28"	68	530	580	785	810	805	833	830*	215,0
800	32"	80	620	670	890	917	911	942	937*	280,0

* SUITABLE FOR FLANGES MSS SP-44 150 LBS

MATERIALS AND PARTS

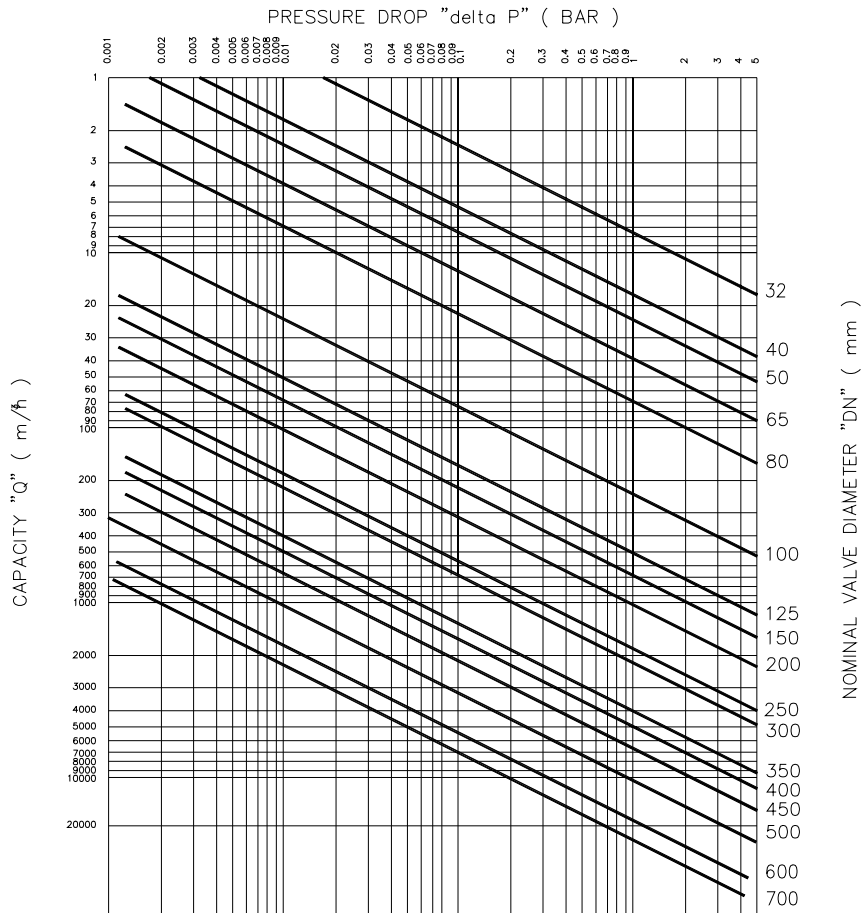


Pos	Component	Q.ty	Material	T max °C	T min °C
1	body	1	Carb. steel	+ 250	- 10
			AISI 316L	+ 510	- 50
			Alu-bronze	+ 260	- 10
2	disc	1	Carb. steel	+ 250	- 10
			AISI 316L	+ 510	- 50
			Alu-bronze	+ 260	- 10
3	washer	1	AISI 316	+ 510	- 50
4	screw	2	AISI 316	+ 510	- 50
5	Ext. O-ring	2	NBR	+ 120	- 20
			EPDM	+ 130	- 30
			FKM	+ 260	- 50
			PTFE	+ 260	- 50
6	Int. O-ring	1	As external o.ring	-	-
7	eyebolt	1	AISI 316	-	-

TECHNICAL INFORMATION

PRESSURE DROP DIAGRAM "delta P"

TEST CONDITIONS: Water (H2O)
 Specific weight : 1 Kg/dm³
 Temperature : 15°C



The curves shown on the diagram represent pressure drop related to water at 15°C. Pressure drop related to fluids other than water (air or gas) is obtained by calculating the equivalent water flow (Q_e) and including this new value on the diagram.
 To obtain the value of the equivalent water flow (Q_e) the following formula should be applied:

$$Q_e = \sqrt{\frac{\gamma}{1000}} \times Q$$

Q_e = Equivalent water flow in m³/h
 Q = Fluid flow (air or gas) at operating conditions in m³/h
 γ = Fluid density measured in operating conditions in Kg/m³

The pressure drops shown on the diagram and those obtained from the formula refer to valves fitted on horizontal pipelines. The valves indicated on the diagram are also applicable to valves fitted on vertical pipelines, only in case of partial valve opening. The resulting differences are unimportant.

COEFFICIENT VALUES "CV"

DN	CV	DN	CV
32 1 ¼	8.7	200	8
40 1 ½	20	250	10
50 2	29.5	300	12
65 2 ½	49	350	14
80 3	78	400	16
100 4	286	450	18
125 5	635	500	20
150 6	840	600	24
		1205	
		2200	
		2560	
		4820	
		6050	
		7740	
		11825	
		18800	