

Thin Wafer Swing Check Valves

Series C14

GENERAL INFORMATION

Series C14 thin wafer swing check valve opens when the opening force exceeds the closing force. The opening force depends on the pressure or the flow volume and the closing force on the closing weight, the installation position and the size of the check valve. The thin wafer design drastically reduces the weight in comparison with conventional valves. They have been widely used in Marine and offshore industry, Petrochemical industry, Pharmaceutical industry, Heating and cooling, Ventilation, Fire protection systems, Water industry, Beer and beverage industry, Nuclear power industry.

FEATURES

- Thin wafer short face-to-face dimension
- Self-centering
- Low pressure drops
- Easy to install and maintenance
- Dual safe retainer keeping the disc

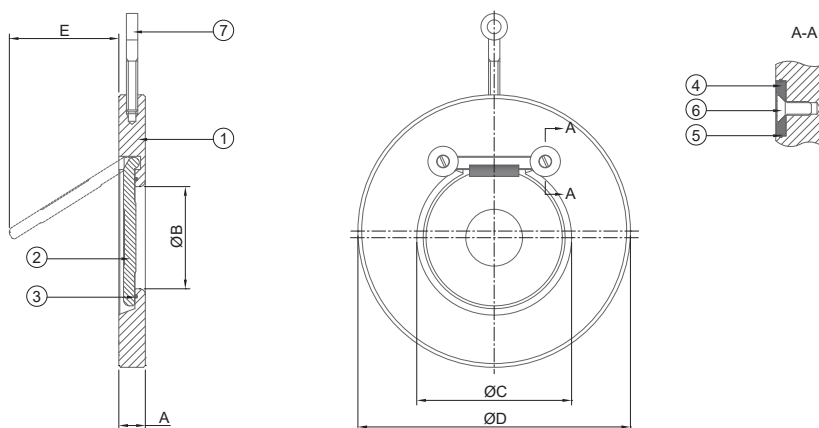
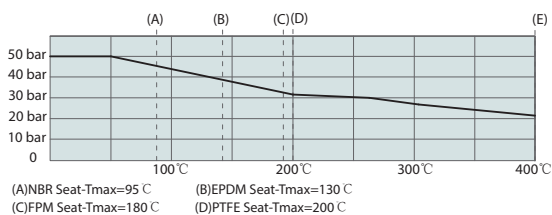
TECHNICAL DATA

Connection	Wafer
Nominal diameter	DN40-DN1000
Standard pressure rating	PN16
Maximum pressure rating	PN40 for DN40-DN100, PN20 for DN125-DN600
Face to face	PN10, PN16, PN25, PN40; ANSI CLASS150
Temperature range	-20°C to +85°C for NBR seat -20°C to +130°C for EPDM seat -20°C to +180°C for FPM seat -29°C to +400°C for metal to metal seat
Coating	Galvanization for steel

PARTS LIST AND MATERIAL SPECIFICATION

No.	Part name	Material
1	Body	Galvanized steel, SS316L
2	Disc	CF8, CF8M
3	Seat	NBR, EPDM, FPM, PTFE, Metal to metal
4	Washers	SS316L
5	Retainer rings	SS316L
6	Screws	SS316L
7	Eye bolt	SS304

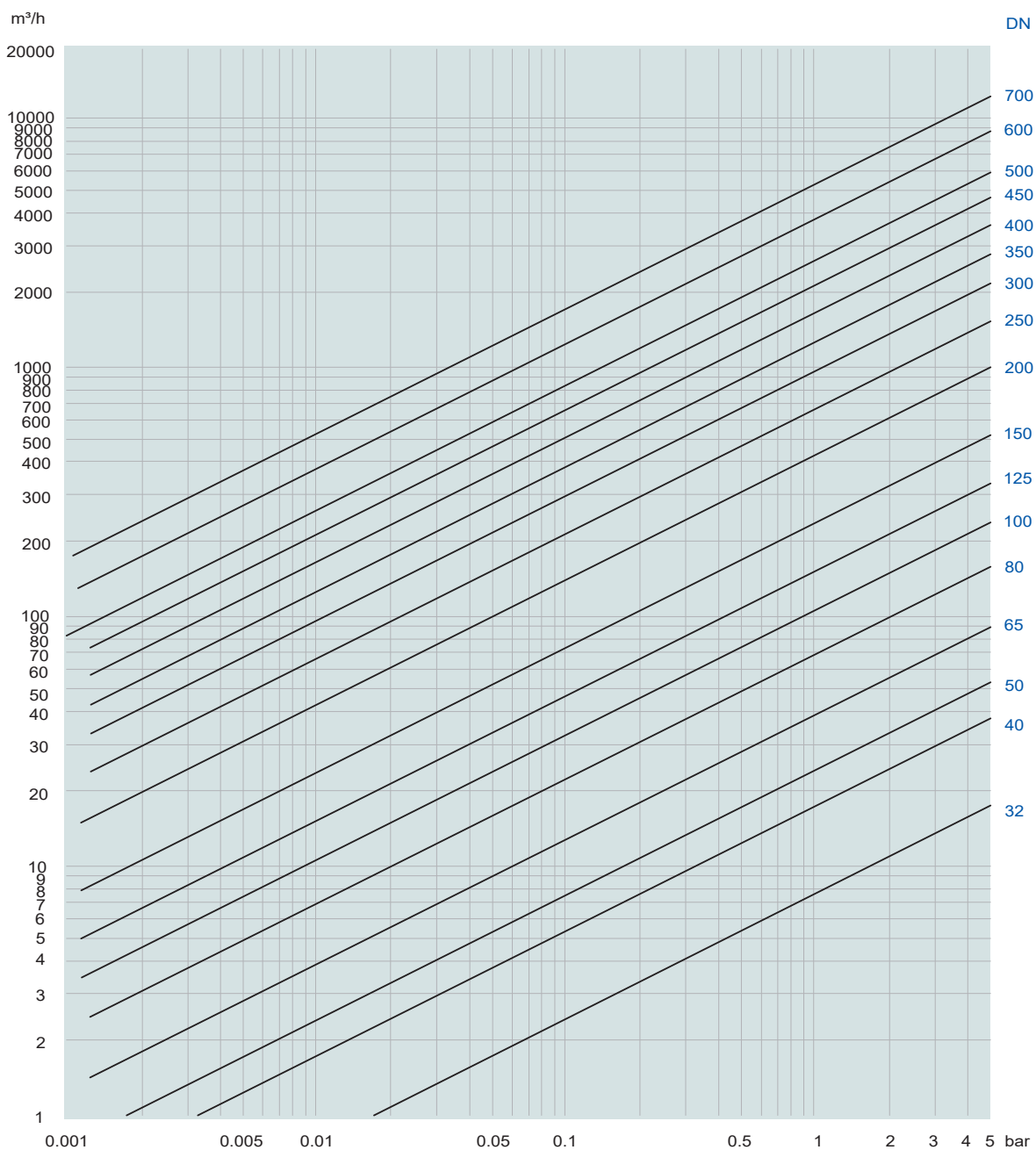
TEMPERATURE-PRESSURE DIAGRAM



DIMENSIONS (mm)

SIZE		A	B	C	D					E	WT (kg)
DN	INCH				PN10	PN16	PN25	PN40	CLASS150		
25	1	14	13	29	73	73	73	73	66.7	14	0.5
32	1 1/4"	14	13	29	84	84	84	84	76.2	16	0.6
40	1 1/2"	14	22	39	0	94	94	94	85.7	25	0.9
50	2"	14	32	48	109	109	109	109	104.8	37	1.1
65	2 1/2"	14	40	59	129	129	129	129	123.8	50	1.5
80	3"	14	54	76	144	144	144	144	136.5	61	1.8
100	4"	18	70	96	164	164	170	170	174.6	77	3.0
125	5"	18	92	115	194	194	196		196.8	94	3.4
150	6"	20	112	138	220	220	226		222.2	100	5.4
200	8"	22	154	183	275	275	286		279.4	152	7.7
250	10"	26	200	232	330	330	343		339.7	180	13
300	12"	32	240	272	380	386	403		409.5	215	23
350	14"	38	269	305	440	446	460		450.9	245	38
400	16"	44	308	349	491	498	517		514.4	285	53
450	18"	50	360	398.6	541	558	567		549.3	335	76
500	20"	56	405	445.4	596	620	627		606.4	398	99
600	24"	62	486	529	698	737	734		717.5	453	136
700	28"	67	588	636	813	807			831.8	512	171
800	32"	78	622	687	920	914			936.8	588	231
900	36"	95	720	794	1020	1014			1047.7	642	280
1000	40"	105	810	883	1127	1131			1162.1	723	354

WATER STANDARD CONDITIONS



Kv AND CRACKING PRESSURE

SIZE	DN	32	40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700
	INCH	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"
Kv	m³/h at 1bar ΔP	7.5	17	25	39	68	106	166	239	425	664	956	1302	1700	2152	2656	3825	5206
Cracking Pressure with spring	→ 10° mbar	3	3	3	3	3	3	4	4	4	4	5	5	5	6	6	6	6
	↑ mbar	17	17	17	17	17	17	19	19	22	23	24	27	29	33	33	33	33