



Wafer Dual Check Valves Series C12

GENERAL INFORMATION

Series C12 wafer dual check valve is a self-operating check valve that is desirable to permit flow in one direction and prevent backflow in the opposite direction. The plate opens in case that the upstream pressure exceeds the downstream pressure and the spring elasticity. When the flow velocity upstream decreases or ceases, the spring will automatically close the dual plates prior to flow reversal. This creates a positive shutoff against flow reversal and eliminates system surges and water hammer.

FEATURES

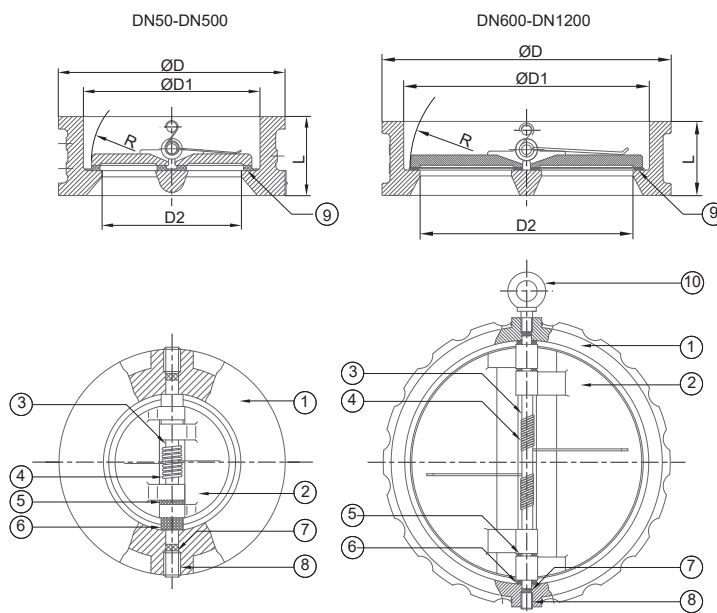
- Short face-to-face dimension
- Lighter weight than conventional full-body check valves
- Low cracking pressure because of double disc design
- The stop shaft stabilizes the plates under high flow rates
- Long leaf springs prevent rubbing of plates on seat

TECHNICAL DATA

Connection	Wafer
Nominal diameter	DN50-DN1200
Pressure rating	PN10, PN16, PN25, ANSI CLASS150
Face to face	EN558 Series 16
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
Coating	Fusion bonded epoxy
Spring:	SS316, Inconel

PARTS LIST AND MATERIAL SPECIFICATION

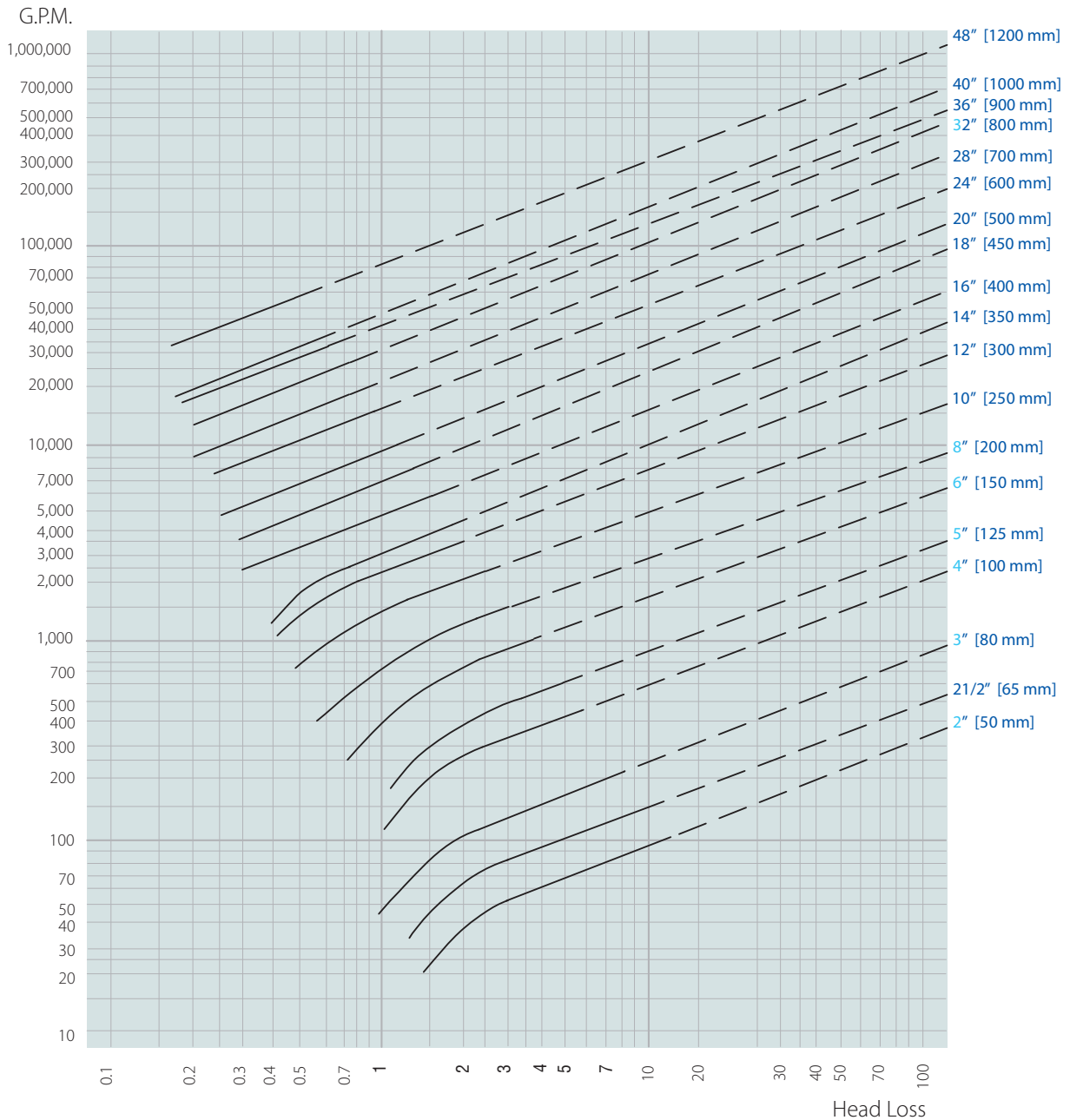
No.	Part name	Material
1	Body	Ductile Iron
2	Disc	CF8, CF8M
3	Stem	SS304, SS316
4	Spring	SS304, SS316
5	Bearing	PTFE
6	Bearing	PTFE
7	O-Ring	Same as seat
8	Hex Screw	SS304, SS316
9	Seat	NBR, EPDM, FPM
10	Eye Bolt	SS304, SS316



DIMENSIONS (mm)

SIZE		D				D1	D2	L	R	WT (kg)
DN	INCH	PN10	PN16	PN25	Class150					
50	2"	109	109	109	104	65	40	43	29	1.5
65	2 1/2"	129	129	129	123	80	60	46	36	2.4
80	3"	144	144	144	136	94	70	64	43	3.6
100	4"	164	164	164	174	117	88	64	53	5.7
125	5"	194	194	196	196	145	115	70	66	7.3
150	6"	220	220	226	222	170	134	76	79	9
200	8"	275	275	286	279	224	182	89	104	17.2
250	10"	330	330	343	339	265	220	114	127	26.3
300	12"	380	386	403	409	310	260	114	148	42.1
350	14"	440	446	460	450	360	298	127	172	55.2
400	16"	491	494	517	514	410	350	140	197	75.3
450	18"	541	558	567	549	450	385	152	218	101.2
500	20"	596	620	627	606	505	438	152	241	111.3
600	24"	698	737	734	717	624	538	178	295	172
700	28"	813	807	836	831	720	680	229	350	340
800	32"	920	914	945	939	825	770	241	400	520
900	36"	1020	1014	1045	1047	903	898	241	450	600
1000	40"	1127	1131	1158	1162	1055	1050	300	500	820
1200	48"	1344	1344		1384	1205	1200	350	600	1300

WATER STANDARD CONDITIONS



Cv AND CRACKING PRESSURE

SIZE	DN	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200
	INCH	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"	14"	16"	18"	20"	24"	28"	32"	36"	40"	48"
Cv	G.P.M.	49	80	132	269	445	722	1400	2590	3860	4950	7260	10010	12420	20390	30020	47800	60010	72800	123900
Cracking Pressure	PSI	0.21	0.18	0.09	0.18	0.19	0.21	0.15	0.23	0.24	0.23	0.22	0.15	0.12	0.09	0.09	0.09	0.09	0.08	0.08