

check valve series CH079

Features and Advantages

Little dimensions and low weights.

Face to face acc. to **DIN EN 558 Series 52 (DIN 3202 K5)**. Opening pressure from 20 to 500 mBar.

Leakage:

according to EN 12266-1 Rate A with soft seat

according to EN 12266-1 Rate E with metal seat / PTFE

Faces final quality: AARH 250/500. Low head losses.

Usable also as vacuum breaker, overpressure and bottom valve.

P max: **52 Bar**

Flange: DN 15÷100
DN 15÷80

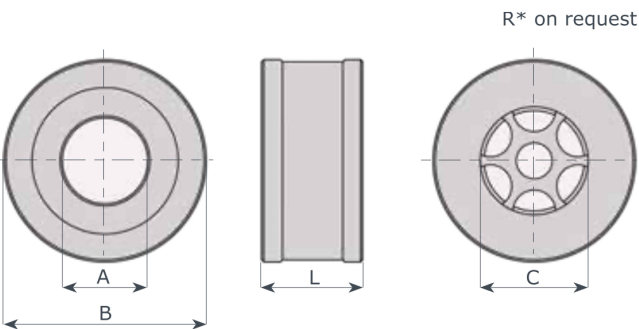
PN 10÷40, A150÷300

PN 10÷40, A150÷300 ÷40, A150÷300

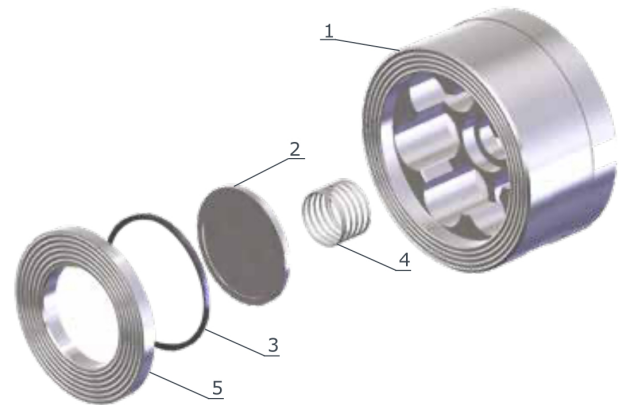
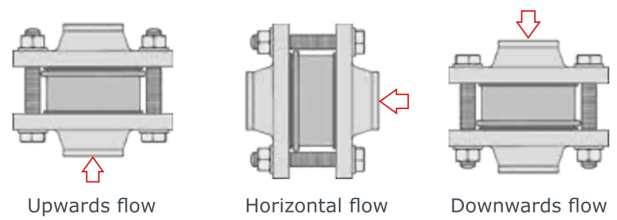
This type of valve cannot be used with spirometallic packing.

item	q.ty	part	material
1	1	body	• zinc plated steel ASTM
2	1	disc	• EN 1.4404 (A316L)
3	1	O Ring	• NBR • EPDM • FKM • PTFE
4	1	spring - standard on request	• EN 1.4401 (A316)
5	1	seat	• EN 1.4401 (A316)

DN	15	20	25	32	40	50	65	80	100
A	15	20	24	31	38	47	62	77	96
B	46	56	66	75	85	107	125	138	165
C	21	25	30	40	48	60	88	90	110
L	25	31.5	35.5	40	45	56	63	71	80
Kg	0.3	0.6	1	1.3	1.8	2.5	4	5.9	8

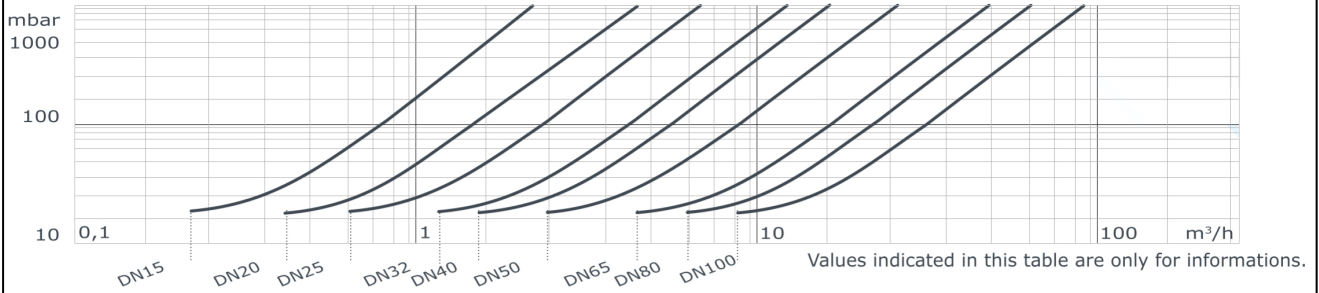


To be installed in any position



minimum opening pressure with standard springs										
flow	DN	15	20	25	32	40	50	65	80	100
△	mBar	25	25	v	27	29	29	31	32	33
▷	mBar	23	23	23	24	25	25	26	26	27
▽	mBar	21	21	21	21	21	21	21	21	21
△ without spring	mBar	2	2	2	3	4	4	5	5	6

Head losses (H2O - 20°C - horizontal flow, standard spring)



Formula for calculation of equivalent flow rate to H2O

$$Q_e = Q \sqrt{\frac{d}{1000}}$$

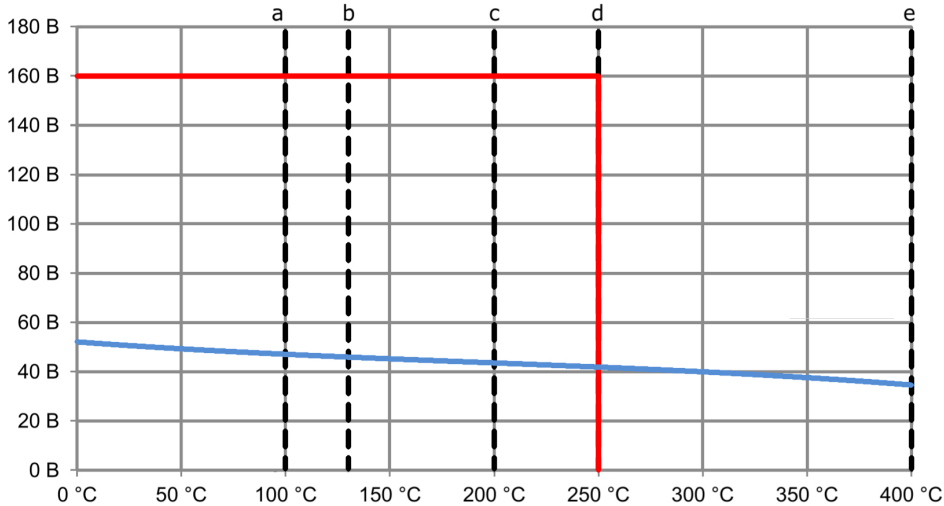
For different liquid, gas or steam head losses are determined by equivalent water flow rate, as follows:

Q_e equivalent water flow (m^3/h o l/s)

Q fluid flow (m^3/h o l/s)

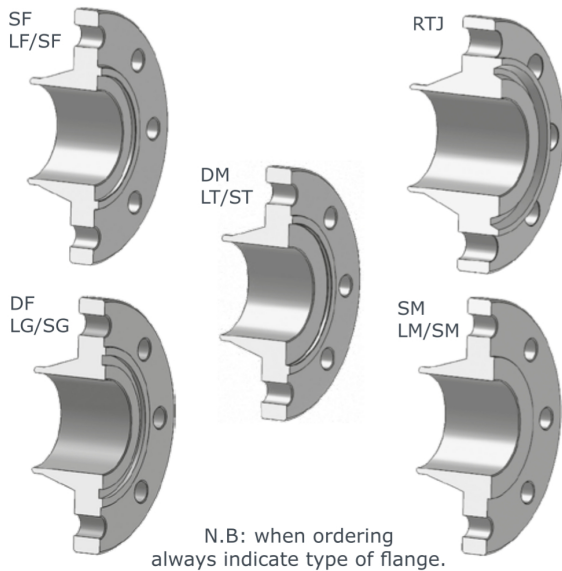
d fluid specific gravity (Kg/m^3)

Temperature - pressure diagram



- a NBR seat Tmax = 95°C
- b EPDM seat Tmax = 130°C
- c FKM/PTFE seat Tmax = 200°C
- d Metallic seat Tmax = 250°C with EN 1.4401 (A316) spring or GN95-GT95 version
- e Metallic seat Tmax = 400°C without spring or HASTELLOY C276 spring

valves can be inserted between following flanges:

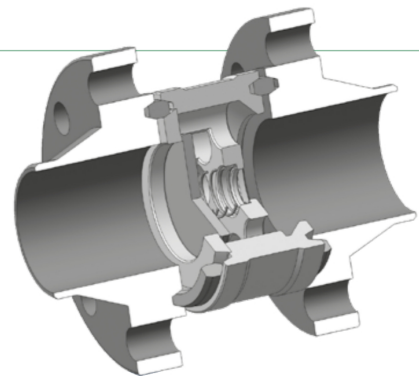


special spring table

DN	15	20	25	32	40	50	65	80	100
50 mBar	Y	Y	Y	Y	Y	Y	Y	Y	Y
100 mBar	Y	Y	Y	Y	Y	Y	Y	Y	Y
200 mBar	Y	Y	Y	Y	Y	Y	Y	Y	Y
300 mBar	Y	Y	Y	Y	Y	Y	Y	Y	Y
500 mBar	Y	Y	Y	Y	Y	Y	N	N	N

Y = available / N = not available
Opening values may vary $\pm 10\%$

Application of GT valves with ANSI RTJ flanges:



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all designs, configurations, measurements and materials are subject to change without prior notice