

Dual-plate check valve DR03 metal seated



Description:

Dual-plate check valves allow the medium to flow just in one direction. Check valve will close automatically, if the flow of the medium changes the direction.

Product features:

- suitable for neutral and not neutral **gaseous & liquid media**
- short length acc to DIN EN or API
- low opening pressure
- direction of flow horizontal, vertical from below – up to DN80 also from above

connection:

DN 50, 65, 80, 100, 125, 200, 250, 300, 350, 400, 450, 500, 600

temperature:

-196°C to +400°C

pressure:

0,0 bar – 40,0 bar
- depending on design / temperature

Materials:

Components

Body

Plate

Stemm

Spring

Seal

Type DR03

Stainless steel 1.4408 / A351 CF8M

Stainless steel 1.4408 / A351 CF8M

Stainless steel 1.4401 / AISI 316

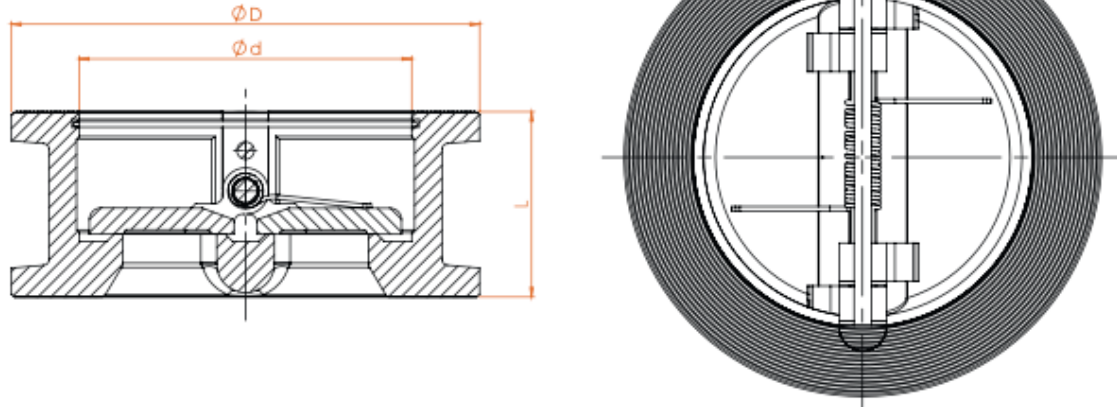
Inconel X-750

Metal seated

Pressure-temperature-rating:

	temperature						pressure (bar)
	-196°	20°C	100°C	200°C	300°C	400°C	
PN10/16	16	16	13	10,2	8,7	8	
PN25/40	40	40	32	25,7	21,9	20	
Class 150	20	20	16,2	13,7	10,2	6,5	

Dimensions:



Face-to-face acc. to DIN EN 558, flange EN 1092-1 B1:

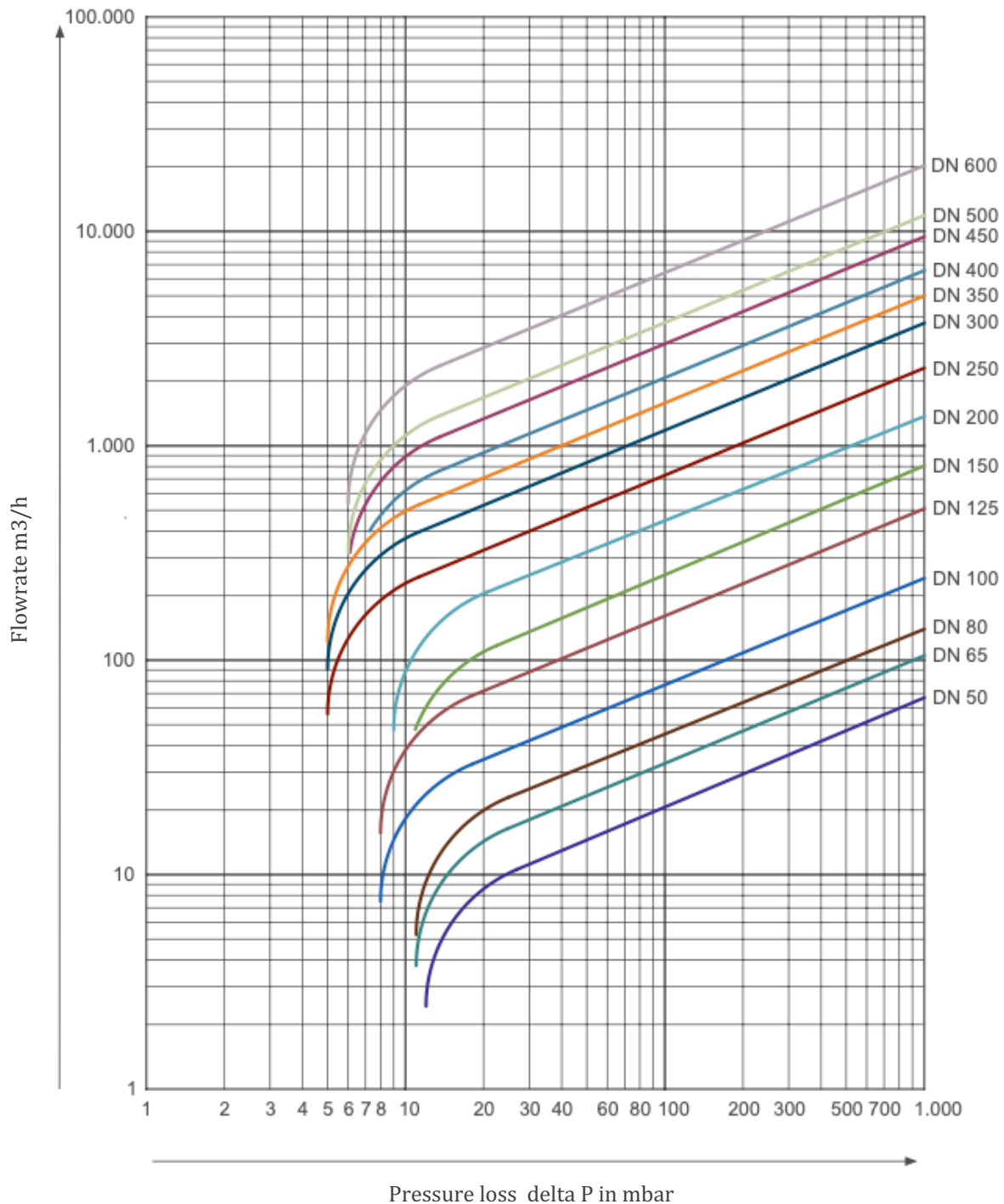
DN		pressure	Ø D			Ø d	L	Kv-value	Opening pressure mbar		
Size		bar	PN10/16	PN25	PN40	mm	mm	m3/h	↔	↑	↓
50	2"	0-40	107			62	43	67	~12	~21	~2
65	2,5"	0-40	127			75	46	107	~11	~17	~3
80	3"	0-40	142			90	64	148	~11	~21	~1
100	4"	0-16	162	-	-	115	64	246	~8	~20	-
125	5"	0-16	192	-	-	141	70	509	~8	~16	-
150	6"	0-16	218	-	-	170	76	807	~10	~20	-
200	8"	0-16	273	-	-	219	89	1454	~9	~19	-
250	10"	0-16	328	-	-	272	114	2348	~5	~17	-
300	12"	0-16	378	-	-	322	114	3760	~5	~18	-
350	14"	0-16	438	-	-	356	127	5003	~5	~17	-
400	16"	0-16	489	-	-	406	140	6585	~6	~20	-
450	18"	0-16	539	-	-	457	152	9456	~6	~20	-
500	20"	0-16	594	-	-	508	152	12468	~6	~22	-
600	24"	0-16	695	-	-	610	178	20322	~6	~24	-

Face-to-face acc. to API 594, flange ASME B16.05 / ANSI Class 150:

DN		pressure	Ø D	Ø d	L	Kv-value	Opening pressure mbar		
Size		bar	Class15	mm	mm	m3/h	↔	↑	↓
50	2"	0-20	105	62	60	57	~12	~34	~2
65	2,5"	0-20	124	75	67	88	~11	~33	~3
80	3"	0-20	137	90	73	139	~13	~42	~1
100	4"	0-20	175	115	73	231	~11	~39	-
125	5"	0-20	197	141	86	459	~9	~31	-
150	6"	0-20	222	170	98	711	~6	~29	-
200	8"	0-20	279	219	127	1217	~7	~34	-
250	10"	0-20	340	272	146	2075	~5	~31	-
300	12"	0-20	410	322	181	2984	~7	~37	-
350	14"	0-20	451	356	184	4156	~6	~30	-
400	16"	0-20	514	406	191	5178	~6	~35	-
450	18"	0-20	549	457	203	7852	~5	~33	-
500	20"	0-20	606	508	219	9969	~3	~32	-
600	24"	0-20	718	610	222	16138	~4	~42	-

Pressure loss:

The diagram values are valid for water at a temperature of 20 °C and for valves with construction lengths according to DIN EN 558. Within the opening range of the valve, the characteristic curves apply to operation in horizontal pipelines. For calculations involving different fluids or temperatures, please contact us..



Test meeting the requirement of PED acc. to DIN EN 12266:

The tightness corresponds to the specified leakage rates:

Type	Metal seated
DR03	G*

* acc. to EN12266-1 / in order to achieve the specified leakage rate, a back pressure of at least 0,3 bar is required

Installation:

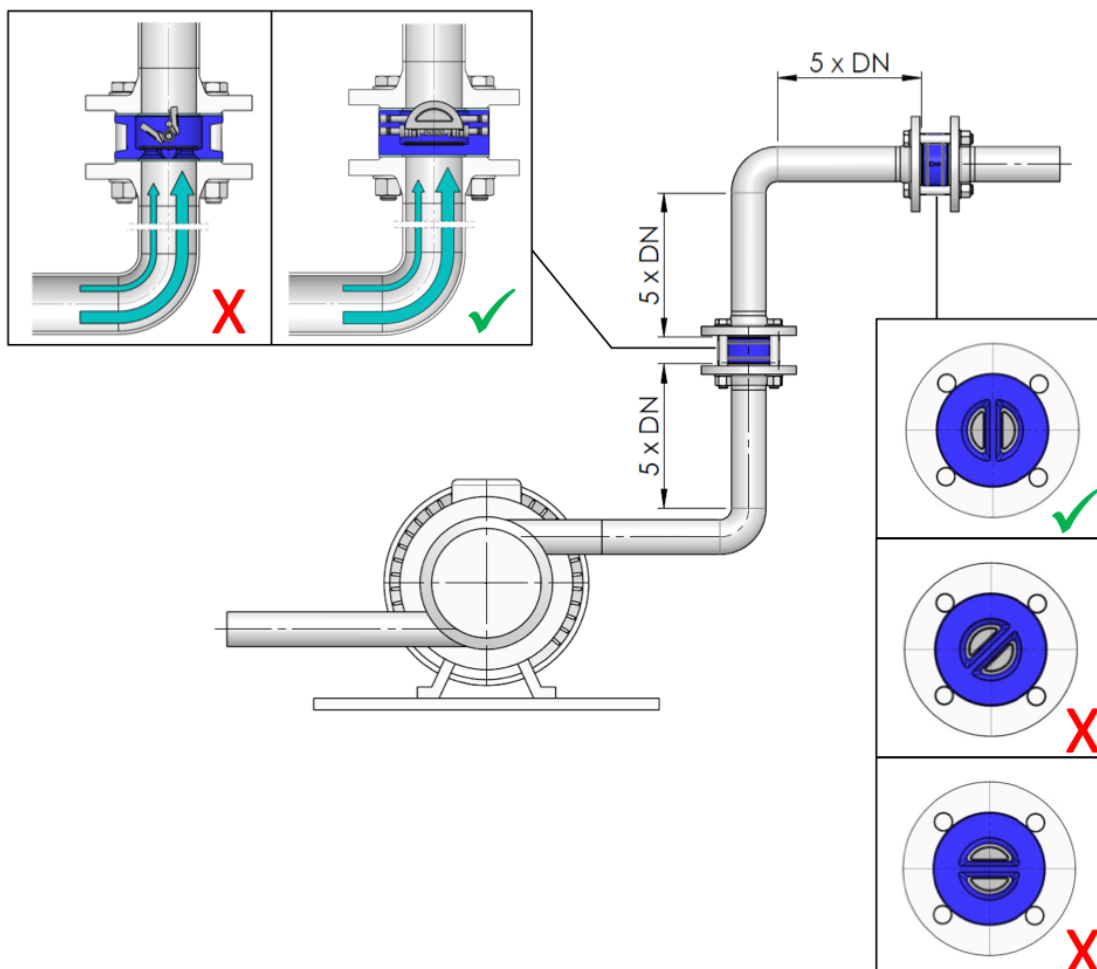
Please consider the operating manual. Shown here in abbreviated form only.

Dual plate check valves can be installed for flow directions in horizontal as well as vertical direction. To guarantee an optimal function, observe the following instruction which apply to horizontal and vertical flow directions. The correct installation position can be seen from the flow direction arrow on the type plate of the valve.

Horizontal flow direction: The valve must be installed in the correct installation position and properly centered between the two pipelines. The valve should be installed with the stems in a vertical position (see following illustration). If the valve has an eyebolt it should point upwards.

Vertical flow direction: The valve must be installed in the correct installation position and properly centered between the two pipelines. If there is a pipe bend in front of the valve, the valve must be installed in such a way that the stems of the valve are parallel to the horizontal pipeline in front of the pipe bend (see illustration). First check the suitability of the valve for flow direction from top to bottom.

The illustration shows options of how the valve should be installed in the piping system. The calming distance of 5 x DN is shown as well as the correct positioning. This is necessary to guarantee correct functioning of the valve.



Structure article number:

type	connection	seal	size
DR03	00 – DIN / PN 10 – ANSI 150 / API	05 – Metal	08 – DN50
			09 – DN65
			10 – DN80
			11 – DN100
			12 – DN125
			13 – DN150
			14 – DN200
			15 – DN250
			16 – DN300
			17 – DN350
			18 – DN400
			19 – DN450
			20 – DN500
			21 – DN600

Example no. DR03000512:

DR03	00	05	12
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Article no. DR03000512
Dual plate check valve
Body: Stainless steel 1.4408 / A351 CF8M
Plate: Stainless steel 1.4408 / A351 CF8M
Design: DIN EN 558
Seal: Metal seated
Size: DN125

Image similar, subject change without notice.