

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:

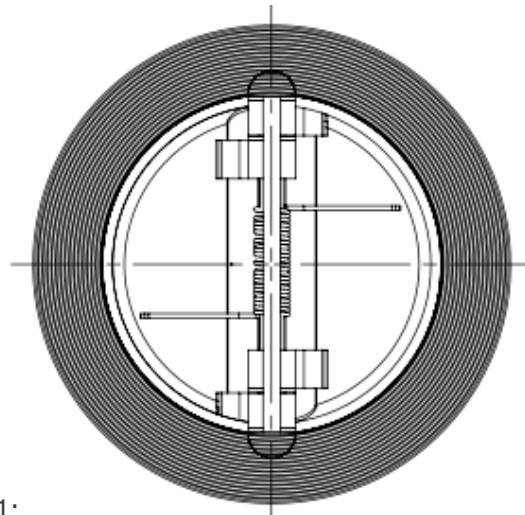
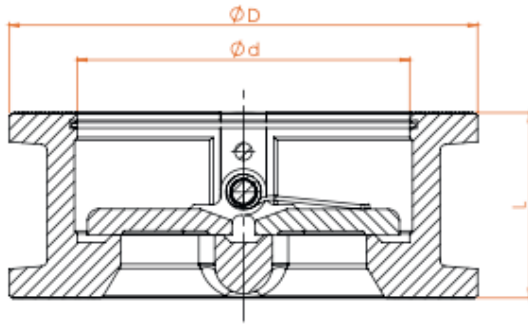
Components

Body	Type DR03 Stainless steel 1.4408 / A351 CF8M
Plate	Stainless steel 1.4408 / A351 CF8M
Stemm	Stainless steel 1.4401 / AISI 316
Spring	Inconel X-750
Seal	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:

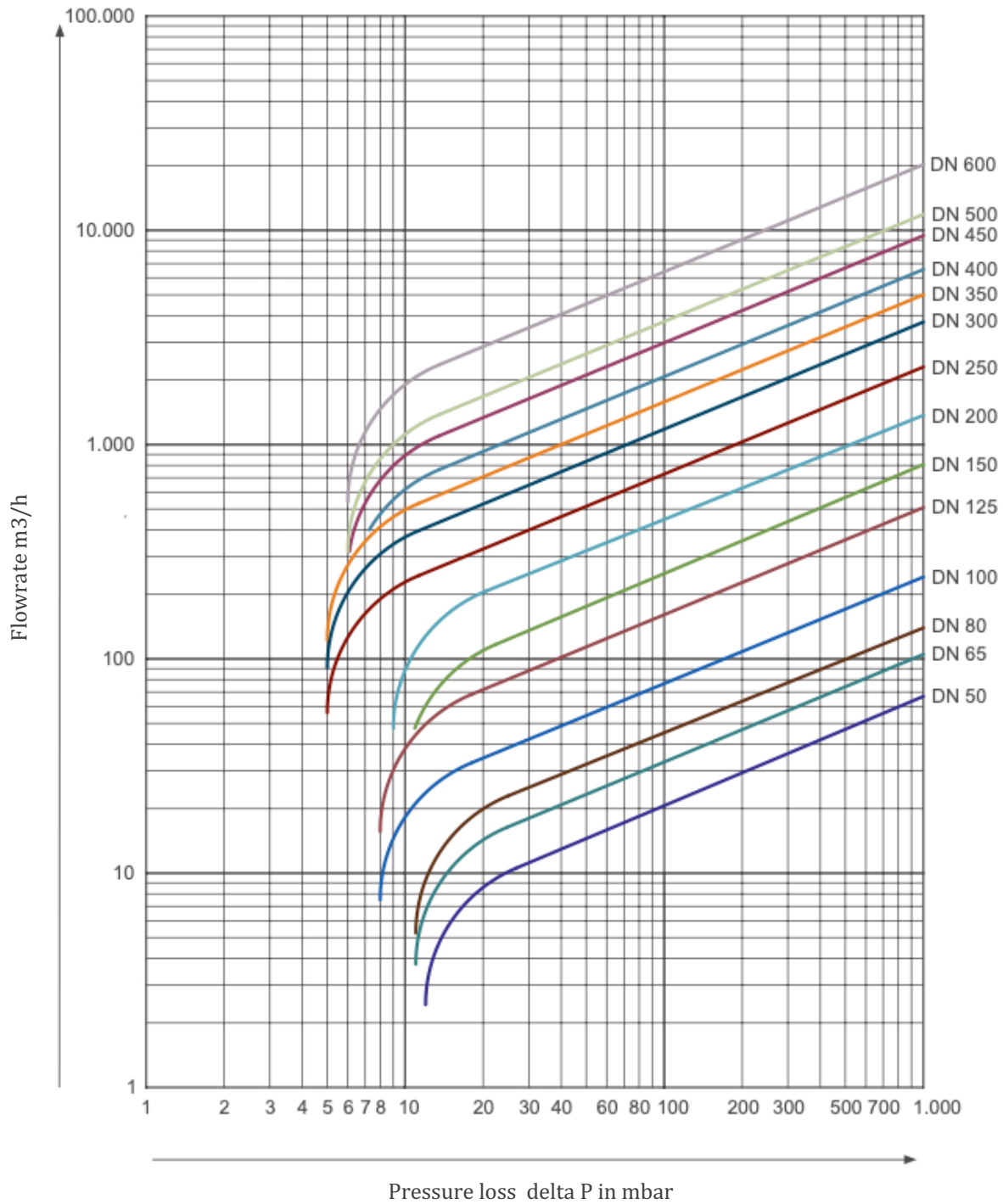
DN Size	pressure bar	Ø D			Ø d mm	L mm	Kv-value m3/h	Opening pressure mbar		
		PN10/16	PN25	PN40				←	↑	↓
50	2"	107			62	43	67	~12	~21	~2
65	2,5"	127			75	46	107	~11	~17	~3
80	3"	142			90	64	148	~11	~21	~1
100	4"	162	-	-	115	64	246	~8	~20	-
125	5"	192	-	-	141	70	509	~8	~16	-
150	6"	218	-	-	170	76	807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

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

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

General safety advices:

The safety advices for the pipe system, in which the valves are to be mounted, are to be followed. The same applies to the dual plate check valves.

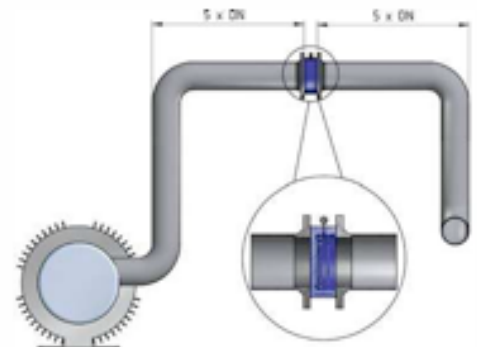
In pipe systems, where our dual plate check valves are to be used, the planning/installing person and the operator are responsible for the following issues:

- The dual plate check valves is to be used according to the regulation in p.1
- The pipe system is to be installed correctly and its operation is to be checked regularly
- The dual plate check valves is to be mounted, removed and repaired by qualified personnel only. The staff is to be regularly instructed according to all relevant regulations concerning working safety and environmental protection, especially in the field of pipes under pressure.
- These staff members have to be informed about the manual and the advices included.

Installation instruction:

The following aspects are to be considered during the installation of swing check valves:

- Possible damages to the dual check valves and O-rings are to be checked prior to installation. Check if the valve can be moved. Damaged parts must not be installed.
- Make sure that only those swing check valves are being installed, that meet the operational requirements regarding pressure category, chemical resistance, connection and dimensions.
- Make sure to install a minimum of 5 x nominal diameter of straight pipeline in front of and behind the swing check valve.
- in horizontal pipeline make sure that the stem of armature is in vertical position (see pic. 1)
- Do not install the valves directly onto a pump flange.
- Avoid pulsation and pressure impact.



After the installation is finished, check the tightness of the connections by a pressure check.

Structure article number:

Type	Design	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**

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.