

DISCO-check valve type RV02



description:

DISCO-check valves allow the medium to flow just in one direction. If the flow of the medium changes the direction the check valve will close automatically. Available in stainless steel, cast steel and DUPLEX.

product features:

- suitable for neutral and not neutral **gaseous & liquid media**
- short length
- low opening pressure
- mounting position: any

connection:

DN15, DN20, DN25, DN32, DN40, DN50, DN65, DN80, DN100, DN125, DN150, DN200, DN250, DN300

temperature:

-196°C up to 400°C
- depending on design

pressure:

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

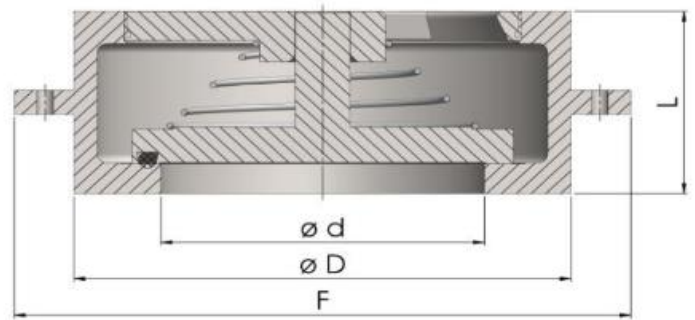
material: type RV02

component	material RV0200	material RV0210	material RV0220
body	stainless steel 1.4408 (CF8M)	cast steel 1.0619	Duplex 1.4469
disc	stainless steel 1.4408 (CF8M)	stainless steel 1.4408 (CF8M)	Duplex 1.4469
spring	stainless steel 1.4436 (AISI316)	Stainless steel 1.4571 (AISI 316)	Hastelloy C4
Diameter	DN15-DN300	DN15-DN300	DN15-DN100

type	seal	temperature range
RV0200 – stainless steel		
	metal	-196°C - +300°C*
	NBR	-30°C - +90°C
	EPDM	-45°C - +120°C
	FKM	-15°C - +200°C
	PTFE	-196°C - +250°C
RV0210 – cast steel		
	metal	-10°C - +300°C*
	NBR	-10°C - +90°C
	EPDM	-10°C - +120°C
	FKM	-10°C - +200°C
	PTFE	-10°C - +250°C
RV0220 - Duplex		
	metal	-10°C - +250°C
	NBR	-10°C - +90°C
	EPDM	-10°C - +120°C
	FKM	-10°C - +200°C
	PTFE	-10°C - +250°C

*optional with Hastelloy C4 spring for temperatures up to 400°C! (Attention: low temperature limit is -100°C). Please contact our sales team, when needed.

Up to DN100:



DN	Inch	d	D	F	L
15	1/2"	15	43	56	16
20	3/4"	19	53	69	19
25	1"	25	63	76	22
32	1 1/4"	32	75	87	28
40	1 1/2"	38	80	101	31,5
50	2"	47	95	114	40
65	2 1/2"	63	115	136	46
80	3"	77	131	154	50
100	4"	97,5	150	178	60

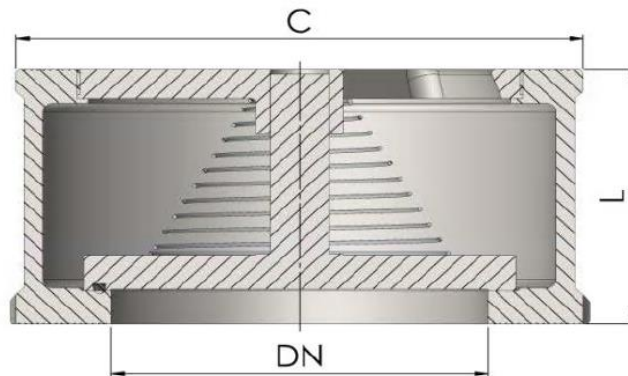
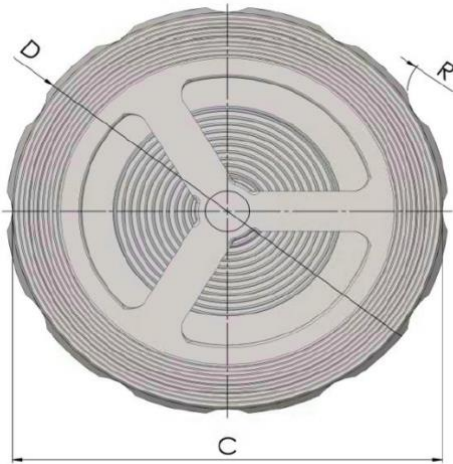
length acc. to:

DIN EN 558-1 serie 49

flange acc. to:

DIN EN 1092-1 PN6/10/16/25/40 as well as ASME B16.5 ANSI150 / ANSI300

From DN125:



length acc. to:

DIN EN 558-1 serie 49, from DN250 on factory f-t-f dimension

flange acc. to:

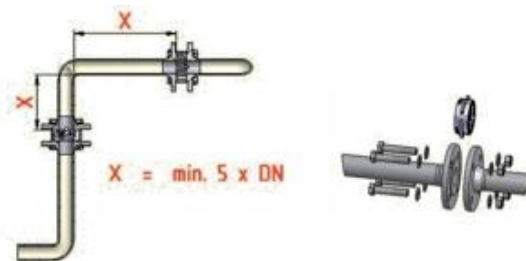
DIN EN 1092-1 as well as ASME B16.5, PN and class acc. to table

DN	Inch	C	D	D	C	D	R	R	L	DN
		PN10/16	PN10/16	ANSI150	PN25	PN40	PN10/16	PN25		
125	5"	194	194	194	194	194	-	-	90	118,5
150	6"	220	220	220	220	220	-	-	106	141
200	8"	275	280	280	*)	*)	11	30	140	190
250	10"	331	340	340	*)	*)	11	33	145	229
300	12"	380	386	*)	*)	*)	11	33	160	280

*) connections acc. to PN25/40 and ANSI 150 on request

Installation instructions:

Possible damages to the disco check valves and O-rings have to be checked prior to installation. Check if the valve can be moved. Damaged parts must not be installed. Make sure that only those disco check valves are 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. Do not install the valves directly onto a pump flange. Avoid pulsation and pressure impact. Watch throughput direction (see arrow on the plate)! They are put in their central position according to the outer diameter of the body and the flange screw inner side. Tighten the flange screws crosswise regarding the torque 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 check valves.

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

- The 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 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.

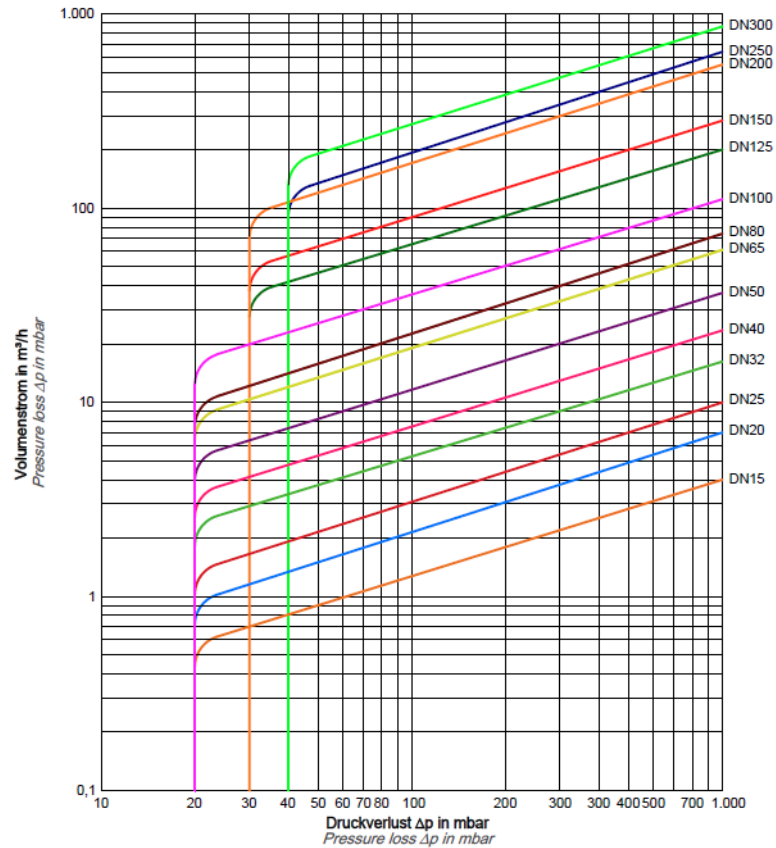
maximal working pressure / opening pressure:

DN		Kv-value	working pressure	Opening pressure at flow direction mbar		
SIZE		m3/h	bar	←	↓	↑
15	1/2"	4	0 - 40	20	16	24
20	3/4"	7	0 - 40	20	15	25
25	1"	10	0 - 40	20	15	25
32	1 1/4"	17	0 - 40	20	14	26
40	1 1/2"	24	0 - 40	20	13	27
50	2"	37	0 - 40	20	12	28
65	2 1/2"	61	0 - 40	20	11	29
80	3"	74	0 - 40	20	10	30
100	4"	115	0 - 40	20	7	33
125	5"	201	0 - 40	30	14	46
150	6"	286	0 - 40	30	13	47
200	8"	553	0 - 40	30	9	51
250	10"	643	0 - 40	40	16	64
300	12"	867	0 - 40	40	12	68

Additional extra-opening pressures (on request):

0,01	0,02	0,1	0,2	0,3	0,4	0,5	0,7	1	1,5	2	2,5	3
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pressure loss diagram:



1.4408 1.4469	Temperature in (°C)								
	20	100	150	200	250	300	350	400	
DN15	40	37,1	32,5	28,1	25,5	23	21,5	20,5	pressure (bar)
DN20	40	37,1	32,5	28,1	25,5	23	21,5	20,5	
DN25	40	37,1	32,5	28,1	25,5	23	21,5	20,5	
DN32	40	37,1	32,5	28,1	25,5	23	21,5	20,5	
DN40	40	37	32,4	28	25,5	22,9	21,4	20,4	
DN50	40	36,3	31,8	27,6	25,1	22,5	21	20	
DN65	40	34,7	30,4	26,3	23,9	21,5	20,1	19,1	
DN80	40	39	34,4	29,8	27,1	24,4	22,6	21,6	
DN100	40	34,7	30,4	26,3	23,9	21,5	20,1	19,1	
DN125	40	36	32,7	29,7	27,5	25,6	20,9	19,9	
DN150	40	33,1	30,2	27,3	25,3	23,2	19,2	18,3	
DN200	40	29	26,5	23,9	22,2	20,7	16,8	16	
DN250	40	28,9	26,1	23,8	21,8	20,5	16,7	15,9	
DN300	40	28,1	25,7	23,1	21,5	20	16,3	15,5	

*Duplex max. 250°C

1.0619	Temperature in (°C)								
	20	100	150	200	250	300	350	400	
DN15	40	37,1	32,5	28,1	25,5	23	21,5	20,5	pressure (bar)
DN20	40	37,1	32,5	28,1	25,5	23	21,5	20,5	
DN25	40	37,1	32,5	28,1	25,5	23	21,5	20,5	
DN32	40	37,1	32,5	28,1	25,5	23	21,5	20,5	
DN40	40	37	32,4	28	25,5	22,9	21,4	20,4	
DN50	40	36,3	31,8	27,6	25,1	22,5	21	20	
DN65	40	34,7	30,4	26,3	23,9	21,5	20,1	19,1	
DN80	40	39	34,4	29,8	27,1	24,4	22,6	21,6	
DN100	40	34,7	30,4	26,3	23,9	21,5	20,1	19,1	
DN125	40	36	32,7	29,7	27,5	25,6	20,9	19,9	
DN150	40	33,1	30,2	27,3	25,3	23,2	19,2	18,3	
DN200	40	29	26,5	23,9	22,2	20,7	16,8	16	
DN250	40	28,9	26,1	23,8	21,8	20,5	16,7	15,9	
DN300	40	28,8	26,5	23,8	22,1	20,6	16,3	15,5	

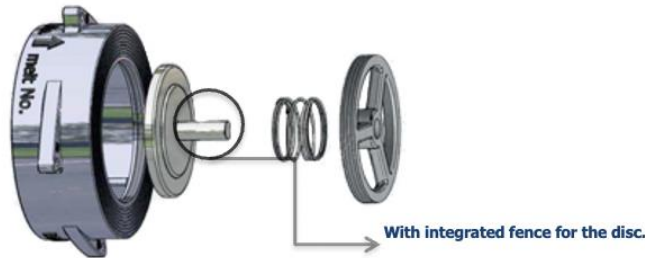
Test meeting the requirement of PED acc. to DIN EN 12266:

The tightness corresponds to the specified leakage rates:

Type	Soft seat*	Metal seat
RV02	A	≥ G

* Soft seat: EPDM, FPM/FKM/Viton, PTFE, NBR

Media phase: gasoous or liquid, if pD > 0,5 bar (steam pressure)



article number:

type	material	seal	size
RV02 – check valve PN6-40 – ANSI150/300*	00 – stainless steel 10 – cast steel 20 – DUPLEX	01 – EPDM 02 – FPM 03 – PTFE 04 – NBR 05 – Metall 06 – EPDM (DVGW)***	03 – DN15 04 – DN20 05 – DN25 06 – DN32 07 – DN40 08 – DN50 09 – DN65 10 – DN80 11 – DN100 12 – DN125** 13 – DN150 14 – DN200 15 – DN250 16 – DN300

example no. RV02000106:

RV02 | **00** | **01** | **06**

article no. RV02000106
check valve made of stainless steel
seal: EPDM
size: DN32

*) From diameter DN125 PN10/16/25/40 – ANSI 150
From diameter DN200 PN10/16 – ANSI 150
From diameter DN300 PN10/16

**) diameter DN125 – DN300 only available as stainless steel and cast steel

**) seal acc to. EU 65/2011 (RoHS); EC 95/2002 (RoHS); EC 11/2003; FDA; EC 2023/2006; EC 1935/2004 article 3; BfR XXI Category 4; ADI free; ACS; WRAS; USP CLASS VI; UBA; ÖNORM; NSF 61; NSF 51; KIWA; DVGW W534; DVGW W270; EN 681-1; AS/NZS 4020; 3-A Sanitary Standard; GB 4806.11-2016

Image similar, subject change without notice.