

## DISCO-check valve type TYP RV07



### 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.

### Product features:

- suitable for neutral and not neutral gaseous & liquid media
- high operational safety thanks to guided disc
- low opening pressure
- mounting position: any

### Connection

DN125, DN150, DN200

### Temperature

-20°C bis 200°C  
- depending on design

### Pressure

0,0 bar – 16,0 bar  
- depending on design

### Material: Type RV07

component	material RV0700
body	spheroidal graphite cast iron EN-GJS-400-18-LT (5.3103 / GGG40.3)
disc	stainless steel 1.4308
spring cross	stainless steel (A 351 CF8M)
spring	stainless steel 1.4571 (AISI 316Ti)
diameter	DN125-DN200

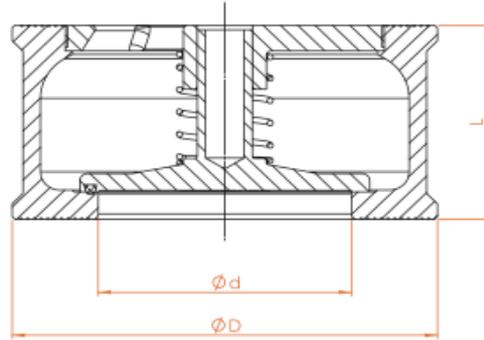
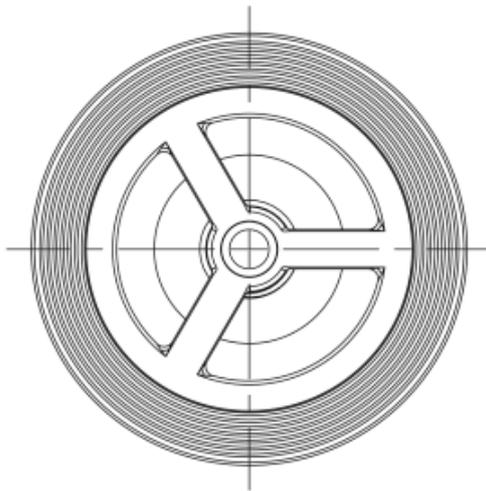
### RV0700 – Spheroidal graphite cast iron

seal	temperature range
Metal	-10°C - +200°C
NBR	-10°C - +100°C
EPDM	-10°C - +150°C
FKM	-10°C - +200°C
PTFE	-10°C - +200°C

### Seal standards with the following approvals:

seal	approvals
NBR	DIN EN 549, BAM, REACH, RoHS, etc.
EPDM	KTW UBA, DVGW W 270, WRAS, NSF, FDA, BfR XXI Kat. 4, ADI-frei, 3A, USP CI. 6, BAM, REACH, RoHS, etc.
FKM	DIN EN 549, ADI-frei, REACH, RoHS, etc.
PTFE	KTW UBA, DVGW W 270, WRAS, FDA, BfR, ADI-frei, EU 10/2011, 3A, USP CI. 6, REACH, RoHS, etc.

**Dimensions:**



DN	Zoll	d	D*		L
			PN 10 / 16	150 lbs	
125	5"	112	194	194	90
150	6"	131	220	220	106
200	8"	175	275	275	140

\*flange PN6 available on request

Length acc. to:

DIN EN 558 serie 49

Flange acc. to:

DIN EN 1092-1 B1, PN 10-16 as well as ASME B16.5 ANSI150

**Test meeting the requirement of PED acc. to DIN EN 12266-1:**

The tightness corresponds to the specified leakage rates\*:

type	soft seat**	metal seat
RV07	A	≥ G

\* acc. to EN 12266-1 / in order to achieve the specified leakage rate, a back pressure of at least 0.3 bar is required

\*\* Soft Seat: NBR, EPDM, FKM, PTFE

**Necessary counter pressure for the tightness of the check valve:**

NNBR/EPDM / FKM      ⇒ 0,3 bar  
 PTFE                            ⇒ 1,0 bar

**Maximal working pressure / opening pressure:**

DN		Kv-value	working pressure	Opening pressure at flow direction			Without spring	weight
SIZE		m3/h	In bar	←	↓	↑	↑	in kg
125	5"	222	0 – 16	30	21	39	9	7,2
150	6"	288	0 – 16	30	19	41	11	10,8
200	8"	530	0 – 16	30	18	42	12	18,9

\*weight may vary slightly, depending on the design

**Pressure-temperature:**

**Spheroidal graphite cast iron (EN-GJS-400-18-LT):**

	temperature in (°C)					pressure (bar)
	-10	20	100	150	200	
<b>DN100</b>	16	16	16	14,4	12,6	
<b>DN150</b>	16	16	15,1	13,5	11,8	
<b>DN200</b>	16	16	16	16	14,1	

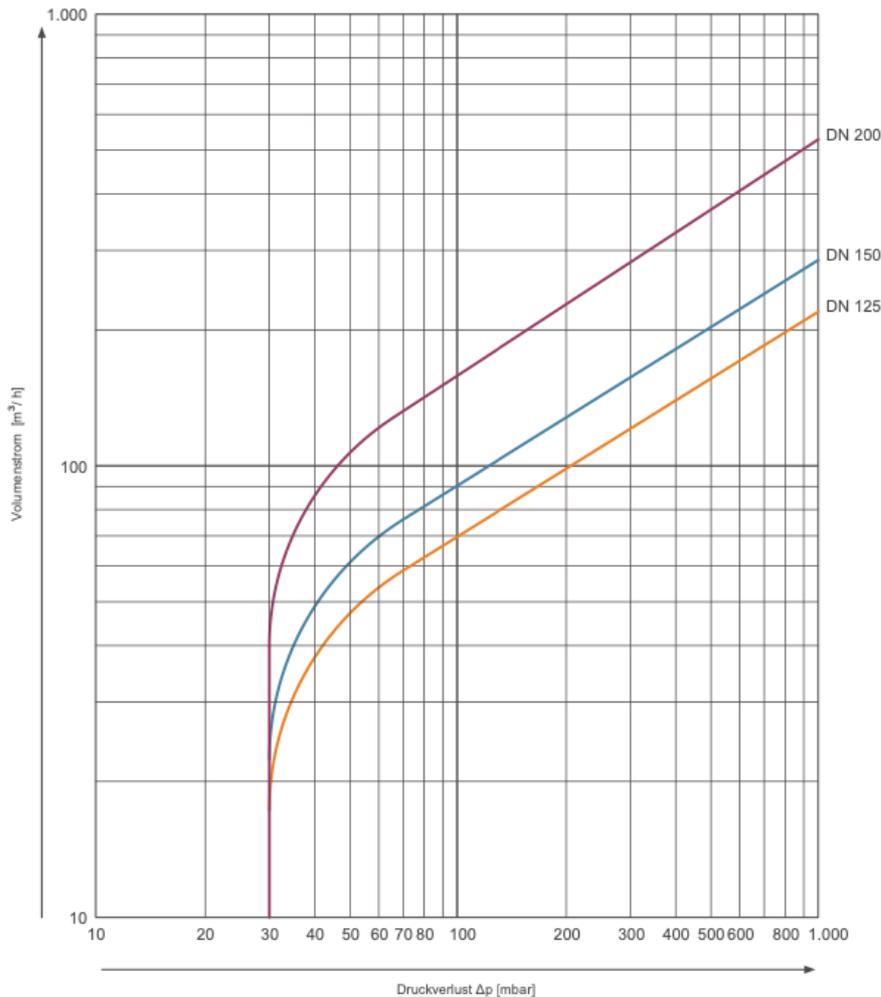
**Important information:** Please note the temperature limits for the seals.

Metallisch dichtend	temperature in (°C)					pressure (bar)
	-10	20	100	150	200	
<b>DN125</b>	16	16	16	16	16	
<b>DN150</b>	16	16	16	16	16	
<b>DN200</b>	16	16	16	16	16	

**Important information:** Please note the temperature limits for the seals.

**Pressure loss diagram DN15-DN100:**

The diagram values apply to water with a temperature of 20°C. In the area of the valve opening the characteristics for operation in horizontal pipelines apply. In case you miss calculations for other fluids or temperatures don't hesitate and contact us.



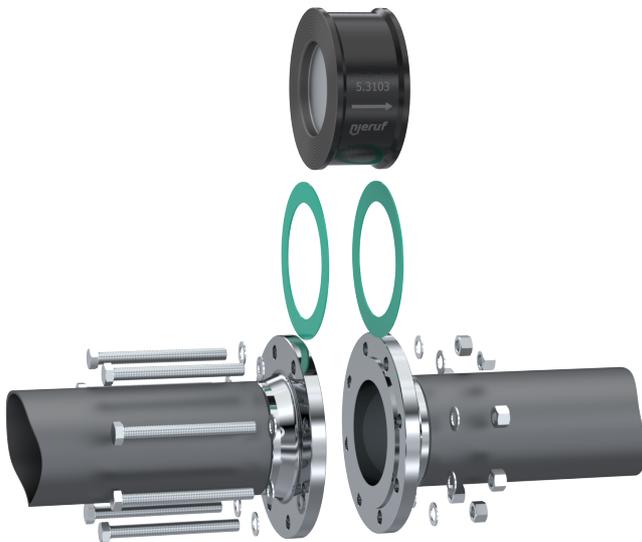
Druckverlust = pressure loss  
 Volumenstrom = volume flow

## Exploded drawing:



## 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 are 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 are 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

## Special options:

- cleaning: free of oil and grease,  
free of silicone  
free of PWIS
- leakage rate D for metal seated valves
- seals with additional approvals which go beyond the standard
- seal glued in for vacuum applications  
(recommended for absolute pressure < 0.1 bar)

## Article number:

type	material	seal	size
<b>RV07 – check valve</b> PN6/16 – ANSI150	<b>00 – spheroidal graphite cast iron</b>	<b>01 – EPDM</b> 02 – FPM 03 – PTFE 04 – NBR 05 – Metall	12 – DN125 13 – DN150 14 – DN200

### Example RV07000114:

**RV07** | **00** | **01** | **14**

Article no. RV07000114  
Check valve made of spheroidal graphite cast iron  
seal: EPDM  
size: DN200

Image similar, subject change without notice.