



Application

The swing check valves are industrial valves designed so that the working medium directly flows in one direction. They are used in order to prevent from backflow the pumps, fans etc. The check valves are not the shut-off valves.

Working medium

Water, drink water, steam, air and other non-aggressive liquids. In case potable water the gasket ring has to be made from EPDM or a sealing area of metal-metal.

Working temperature

The working temperature affects the sealing surfaces and materials of packing in the body:

- for gasket rings NBR: -20 °C ÷ +100 °C
- for gasket rings VITON: -10 °C ÷ +160 °C
- for gasket rings EPDM: -20 °C ÷ +150 °C
- for gasket rings metal-metal: -20 °C ÷ +350 °C

Technical description

The swing check valve is designed so that a disc with a pivot is swing-pivoted in the valve body. The disc movement is controlled by the flow of the working medium. If the medium flows in the direction of the arrow, the disc will open. The flow in return direction is not possible. The disc is closed and bears on sealing surfaces with O-rings of the seat in the body. The valves are delivered without pressure spring (type 107) and with pressure spring (type 109).

Operation

- self-acting

Testing

The valves are tested acc. to EN 12 266-1 / ISO 5208, for strength and leakage, functionality and tightness, leakage grade D. The check valves are delivered to full differential pressure on the closed disc in back flow direction for strength.

Connection to piping

- wafer type
- face to face dimensions are determined by the manufacturer



Installation

The check valves can be mounted into a horizontal, a vertical and an inclined piping so that the arrow on the valve stamped in the valve body corresponds to the flow direction of the working medium. If the valve is to be mounted into a horizontal and inclined pipeline, the lifting eye will have to be above the valve and its axis together with the pipeline axis will have to lie in a vertical plane. If the valve is to be mounted in a vertical and inclined pipeline, the working medium will have to flow upwards.

Advantages

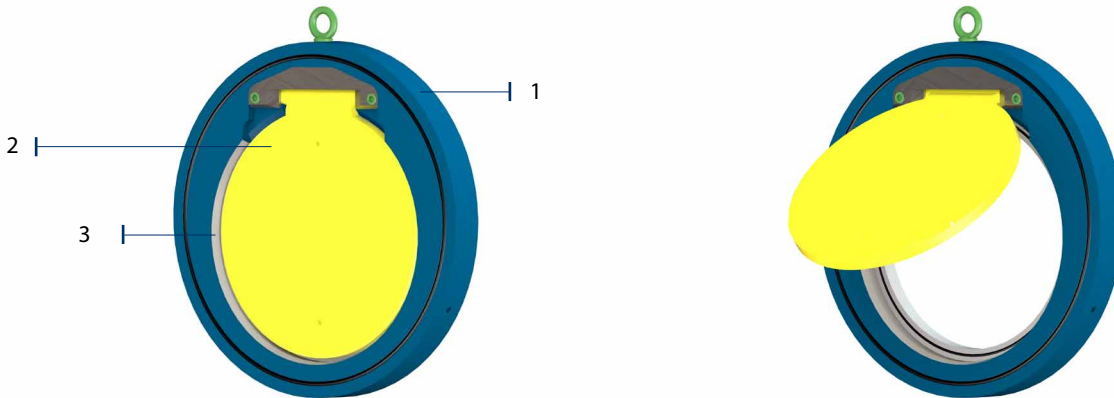
- simple design
- minimal dimensions
- maintenance free

Production range

DN	PN				
	6	10	16	25	40
40	•	•	•	•	•
50	•	•	•	•	•
80	•	•	•	•	•
100	•	•	•	•	•
150	•	•	•	•	•
200	•	•	•	•	•
250	•	•	•	•	•
300	•	•	•	•	•
350	•	•	•	•	•
400	•	•	•	•	•
450	•	•	•	•	•
500	•	•	•	•	•
600	•	•	•	•	
700	•	•	•	•	
750	•	•	•	•	
800	•	•	•	•	

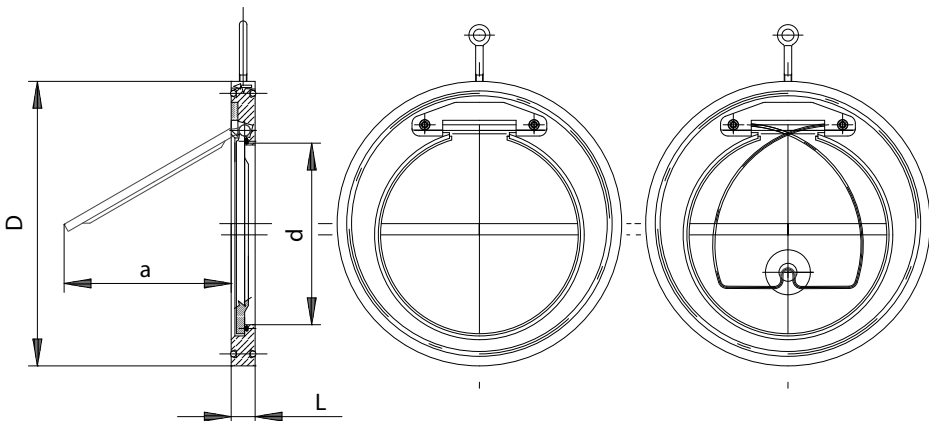
DN 40-800 • PN 6-40 • Tmax +450 °C
 Body design: forged

Connection: WAFER TYPE



Material

Position	Component	EN	
		Carbon steel	Stainless steel
1	Body	1.0425, 1.0577	1.4541
2	Disc		
3	Seal	NBR, EPDM, VITON	



PN 6-40

DN	L	a	d	D					Kv 100 %	kg (PN 6)
				PN 6	PN 10	PN 16	PN 25	PN 40		
40	16	30	22	88	95	95	95	95	38	0,8
50	16	36	32	98	109	109	109	109	53	1
65	16	48	40	118	129	129	129	129	63	1,3
80	16	60	54	134	144	144	144	144	146	1,7
100	16	78	70	154	164	164	170	170	242	2,2
125	20	98	92	184	195	195	198	198	584	3,2
150	22	117	112	209	220	220	226	226	877	5,3
200	24	160	154	264	275	275	288	293	1420	11,5
250	26	200	200	319	330	330	343	355	2130	15
300	32	235	240	375	380	386	403	420	3215	25
350	38	258	270	425	440	446	460	477	4928	37
400	44	300	310	475	490	495	517	549	6055	55
450	50	331	360	530	540	557	567	574	8352	65
500	56	368	405	580	595	619	627	631	10440	105
600	62	435	486	681	698	737	734	x	15660	147
800	89	580	622	893	920	914	945	x	28519	338

Kv 100 % [m³/h] – a coefficient of flow Kv expresses the rate of flow with pressure drop 1 bar across the full open valve in one hour