

Application

The check valves are self-acting valves which prevent a working medium from flowing back in a pipeline.

Working medium

Water, sea water, water steam, air, oil, oil products, other non-aggressive liquids group 1 and 2.

Working temperature

The working temperature is in dependence on material design in range from -50 °C to +595 °C.

Technical description

The check valves are made from cast steel with full port. The sealing surface of the disc bears on the overlay of seat (austenitic stainless steel). The disc with an arm rotates on hinge and is pushed to the seat by its own weight. Connection flanges are integral part of the body. The cover is connected with body by bolts with graphite gasket. They consist of a body, a cover, a seat, a disc and an arm. The allowed maximum working pressure in dependence on temperature is noted in pressure-temperature table.

Design configurations

- with lever
- with bypass
- with lever and bypass

Operation

- self-acting

Testing

The swing check valves are tested acc. to EN 12 266-1 for strength and leakage of body and leakage of a cover in leakage grade C.



Connection to piping

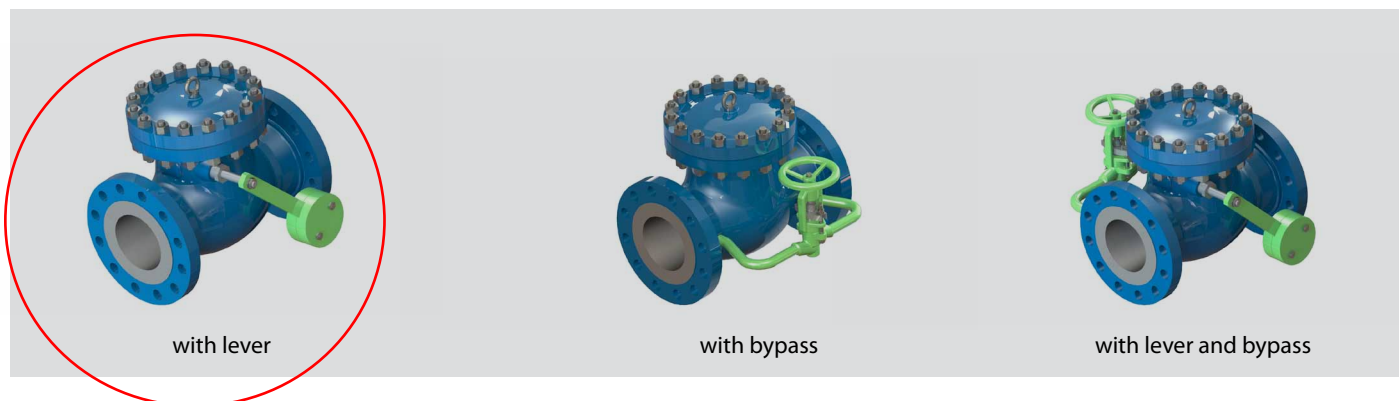
- **flanged ends** acc. to EN 1092-1 design B1 standard sealing surface (on customer's request DIN 2526 form C, form E). Face to face dimensions are acc. to EN 558.
- **welded ends** acc. to EN 12 627. Face to face dimensions are acc. to EN 12 982.

Installation

The check valves can be mounted into a horizontal and a vertical piping so that the arrow on the valve stamped in the valve body corresponds to the flow direction of the working medium.

Advantages

- wide range of working parameters
- possibility to repair sealing surfaces without uninstallation of swing check valves pipeline.

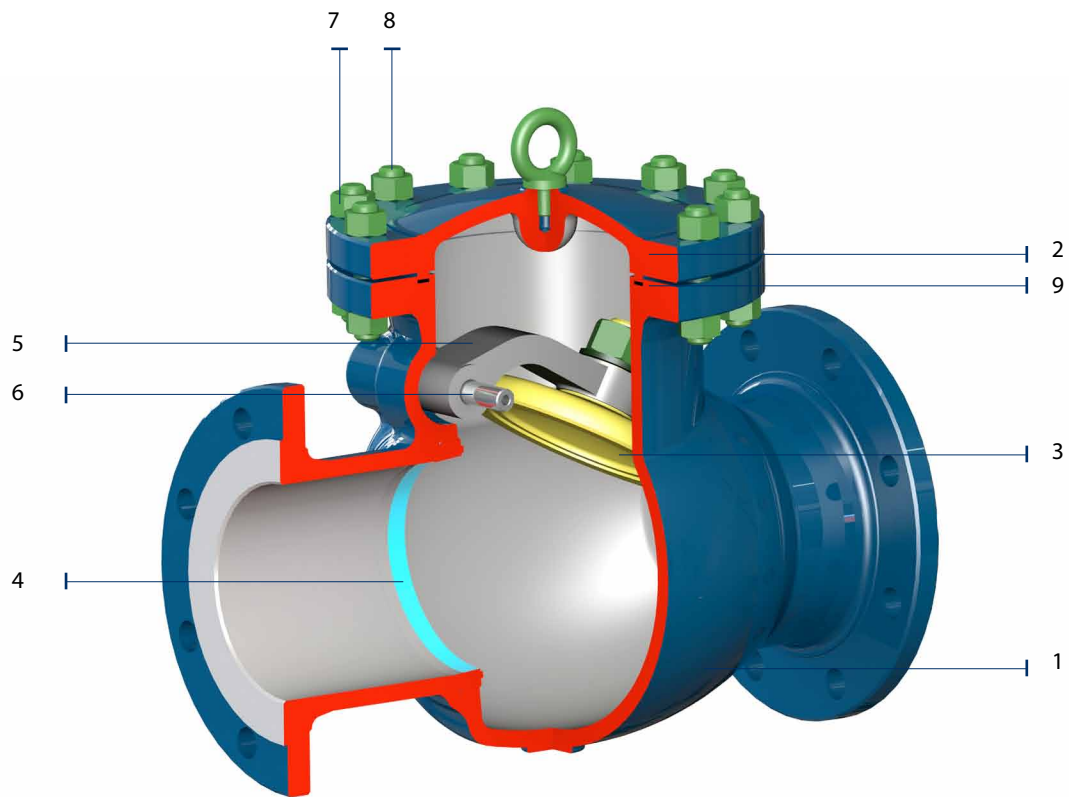


Production range

DN	PN				
	16	25	40	63	100
50	•	•	•	•	•
65	•	•	•	•	•
80	•	•	•	•	•
100	•	•	•	•	•
125	•	•	•	•	•
150	•	•	•	•	•
200	•	•	•	•	•
250	•	•	•	•	•
300	•	•	•	•	•
350	•	•	•	•	•
400	•	•	•	•	•
450	•	•	•	•	•
500	•	•	•	•	•
600	•	•	•	•	•

DN 50-600 • PN 16-100 • Tmax +595 °C
 Body design: cast

Connection:  EN 1092-1 FLANGED ENDS
 EN 12 627 WELDED ENDS



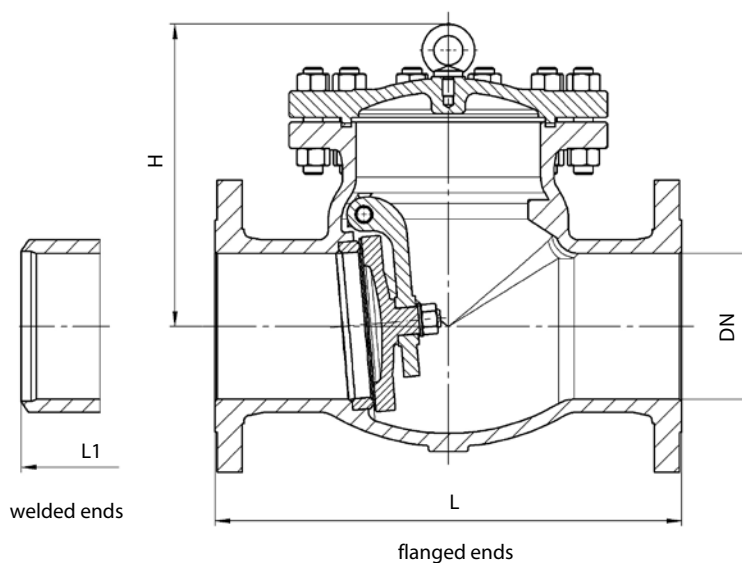
Material

Position	Component	EN			
		Carbon steel	Alloy steel	Carbon steel for low temperatures	Stainless steel
1	Body	1.0619	1.7357	1.6220	1.4408
2	Bonnet	1.0619	1.7357	1.6220	1.4408
3	Disc + overlay	1.0619 + 13Cr	1.7357 + STL6	1.6220+F304	1.4408
4	Seat ring + overlay	1.0460 + 13Cr	1.7335 + STL6	1.0566+STL6	1.4408
5	Arm	1.0619	1.7357	1.6220	1.4408
6	Arm pin	1.4006	1.4301	1.4401	1.4401
7	Bonnet nut	1.1191*	1.7709*	1.7225*	1.4401*
8	Bonnet bolt	1.7218*	1.7709*	1.7225*	1.4401*
9	Packing	Graphite with stainless steel insert			

* equivalent or acc. to customer's request

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 EN 12 627 WELDED ENDS



PN 16-25

DN	PN 16					PN 25				
	L	L1	H	kg	kg 1*	L	L1	H	kg	kg 1*
50	230	230	160	21	19	230	230	160	22	19,8
65	290	290	175	28	25,2	290	290	175	29	26
80	310	310	185	38	34,2	310	310	185	38	34,5
100	350	350	220	58	52	350	350	220	61	55
125	400	400	248	92	83	400	400	248	96	86
150	480	460	276	130	117	480	480	276	132	119
200	500	500	350	210	189	550	550	350	213	192
250	600	600	410	294	265	650	650	410	297	268
300	700	700	430	367	330	750	750	430	372	335
350	800	800	518	410	369	850	850	518	415	373,5
400	900	900	560	461	415	950	950	560	480	432
500	1100	1100	618	850	765	1150	1150	618	920	828
600	1300	1300	660	1456	1311	1350	1350	660	1576	1410

PN 40-100

DN	PN 40					PN 63					PN 100				
	L	L1	H	kg	kg 1*	L	L1	H	kg	kg 1*	L	L1	H	kg	kg 1*
50	230	230	160	25	22,5	300	300	117	27	24,3	300	300	210	30	27
65	290	290	175	33	29,7	340	340	197	37	33,3	340	340	230	40	36
80	310	310	185	48	43,2	380	380	212	57	51,3	380	380	255	65	58
100	350	350	220	75	67,5	430	430	248	89	80,1	430	430	295	95	85
125	400	400	248	116	105	500	500	296	135	122	500	500	330	150	135
150	480	480	276	158	142	550	550	330	184	166	550	550	365	203	183
200	550	550	350	240	216	650	650	385	266	240	650	650	420	180	190
250	650	650	410	297	267	775	775	445	396	356	775	775	505	420	378
300	750	750	430	508	457	900	900	474	643	579	900	900	585	660	594
350	850	850	518	615	553,5	1025	1025	514	815	731	1025	1025	623	950	855
400	950	950	560	857	771	1150	1150	616	1234	1110	1150	1150	720	1390	1251
500	1150	1150	618	1492	1343	-	-	-	-	-	-	-	-	-	-
600	1350	1350	740	1892	1703	-	-	-	-	-	-	-	-	-	-

*for welded ends