

Application

Swing check valves are self-acting valves preventing the back flow of the fluid. It is used especially in power engineering, chemical industry as well as other industries depending on material selection. Swing check valves are not shut-off valves.

Working medium

- water
- steam
- gas
- other fluids

Working temperature

- -20 °C up to 650 °C

Technical description

The body is made of forged material. The disc is inserted into the valve body through the pressure seal cover joint or through the self-sealing body-cover joint. The seat ring is welded in the body and its seating surface and disc surface of the disc are hard faced. The cover is sealed by a special graphite gasket. Upon request, the valves may be equipped with a bypass.

Design configurations

- L10.1 - with bolted cover
- L10.2 - with pressure seal cover

Operation

- self-acting operation



Testing

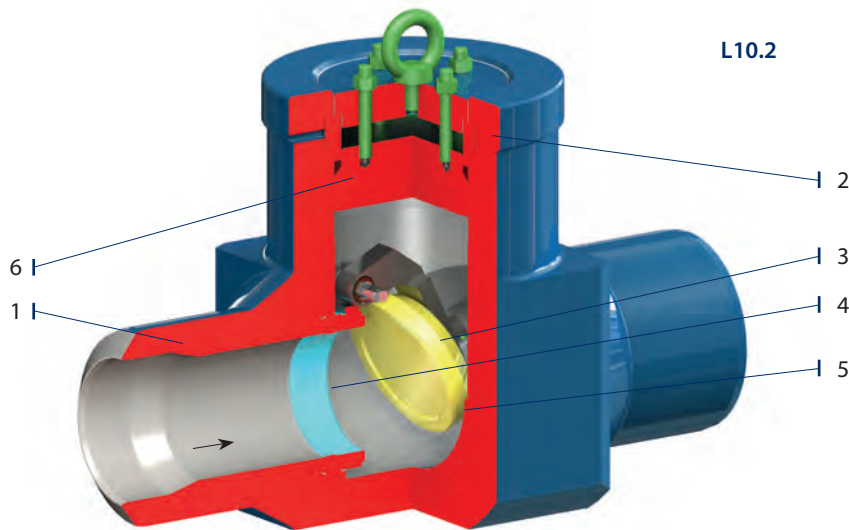
Valves are subject to shell strength test, shell tightness test, seat tightness test and functionality test according to EN 12266, API 598 with water as a standard. If required, other tests may be performed as well.

Connection to the piping

- flanged ends acc. to EN 1092-1, ISO 7005-1, GOST 12815-80
- welded ends acc. to EN 12627

Installation

Swing check valves may be installed into horizontal piping with the cover upwards or into vertical piping, but the flow direction is bottom up. The flow direction shall correspond to the arrow on the valve body.



Material acc. to EN

Position	Component	T _{max} 450 °C	T _{max} 450 °C	T _{max} 530 °C	T _{max} 560 °C	T _{max} 570 °C	T _{max} 600 °C	T _{max} 650 °C
1	Body	P250GH (1.0460)	15NiCuMoNb5-6-4 (1.6368)	16Mo3 (1.5415)	13CrMo4-5 (1.7335)	14MoV6-3 (1.7715)	11CrMo9-10 (1.7383)	X10CrMoVNb9-1 (1.4903)
2	Bonnet							
3	Disc							
4	Seat + overlay	1.0460 +Stellite	1.6368 +Stellite	1.5415 +Stellite	1.7335 +Stellite	1.7715 +Stellite	1.7383 +Stellite	1.4903 +Stellite
5	Disc + overlay	1.0460 +Stellite	1.6368 +Stellite	1.5415 +Stellite	1.7335 +Stellite	1.7715 +Stellite	1.7383 +Stellite	1.4903 +Stellite
6	Gasket	L10.1 PN 63, 100, 160, 250, - Graphite with stainless steel insert, L10.2 PN 160, 250, 320, 400, - Graphite						

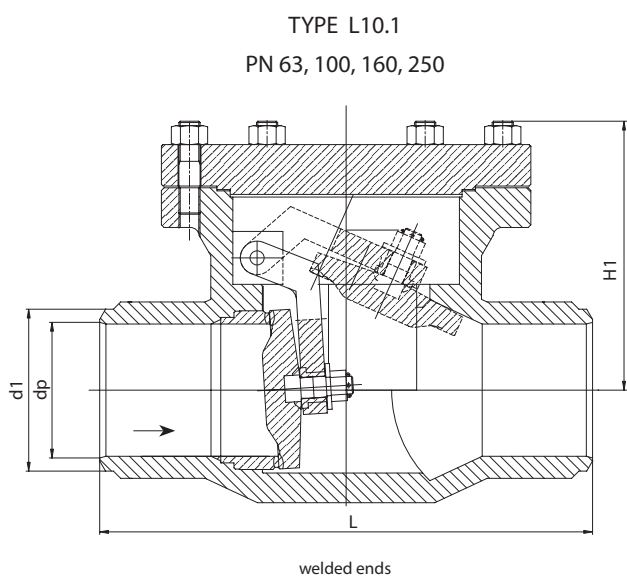


DN 50-400 • PN 63-400 • Tmax 650 °C (450 °C)

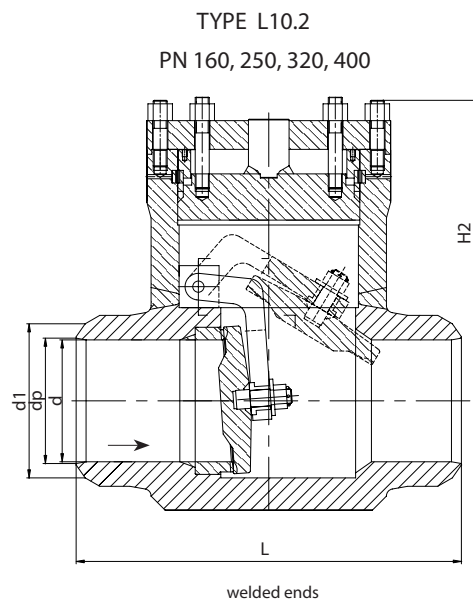
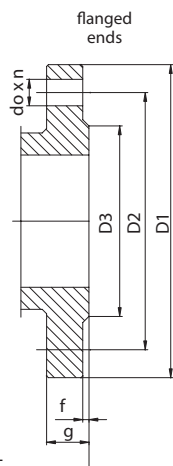
Body design: forged

Connection: ☉ EN 1092-1, ISO 7005-1, GOST 12815-80 FLANGED ENDS

☼ EN 12627 WELDED ENDS



TYPE L10.1
PN 63, 100, 160, 250



TYPE L10.2
PN 160, 250, 320, 400

L10.1 PN 63-100

PN	DN	Welded ends					Flanged ends									
		d1	dp	L	H1	kg	D1		D3		D2	do x n	L	g	f	kg
							GOST	EN	GOST	EN						
63	50	62	54	250	170	12	175	180	102		135	22 x 4	300	26	3	18
	65	77	69	290	190	17	200	205	122		160	22 x 8	340	26	3	25
	80	91	81	310	205	22	210	215	133	138	170	22 x 8	380	28	3	32
	100	117	104	350	220	33	250		158	162	200	26 x 8	430	30	3	45
	125	144	130,5	400	254	50	295		184	188	240	30 x 8	500	34	3	68
	150	172	156,5	450	305	80	340	345	212	218	280	33 x 8	550	36	3	100
	200	223	204,5	550	406	105	405	415	285		345	36 x 12	650	42	3	153
250	278	255	650	508	200	470		345		400	36 x 12	775	46	3	248	
100	50	62	54	250	170	13,2	195		102		145	26 x 4	300	28	3	20,7
	65	77	69	290	190	18,7	220		122		170	26 x 8	340	30	3	28,8
	80	91	81	310	205	24,2	230		133	138	180	26 x 8	380	32	3	36,8
	100	117	104	350	220	36,3	265		158	162	210	30 x 8	430	36	3	51,8
	125	144	127	400	254	55,0	310	315	184	188	250	33 x 8	500	40	3	78,2
	150	172	154	450	305	88,0	350	355	212	218	290	33 x 12	550	44	3	115,0
	200	223	199,5	550	406	115,5	430		285		360	36 x 12	650	52	3	176,0
250	278	248,5	650	508	220,0	500	505	345		430	39 x 12	775	60	3	285,2	

L10.2 PN 160-400

PN	DN/d	d1 *	dp	L *	Lmin*	H1	H2	kg
160-400**	65/50	77	Acc. to order	360	216	65	240	25
	80/75	90		450	305	85	255	47
	100/75	115		450	406	85	280	48
	125/110	141		500	483	115	315	107
	150/110	170		550	559	115	365	110
	175/125	180		650	559	145	405	285
	175/150	196		650	660	160	405	415
	200/150	222		650	660	160	485	445
	225/175	248		650	660	180	520	715
	250/200	276		800	787	200	590	930
	250/225	303		900	787	220	630	980
	300/225	325		900	914	220	700	1410
	300/250	325		1000	991	240	700	1520
	350/275	359		1000	991	270	760	1710
	400/300	411		1200	1092	310	825	1830

* dimensions d1 and L can be adjusted according to customer request, ** TYPE L10.1 is supplied only up to PN 250