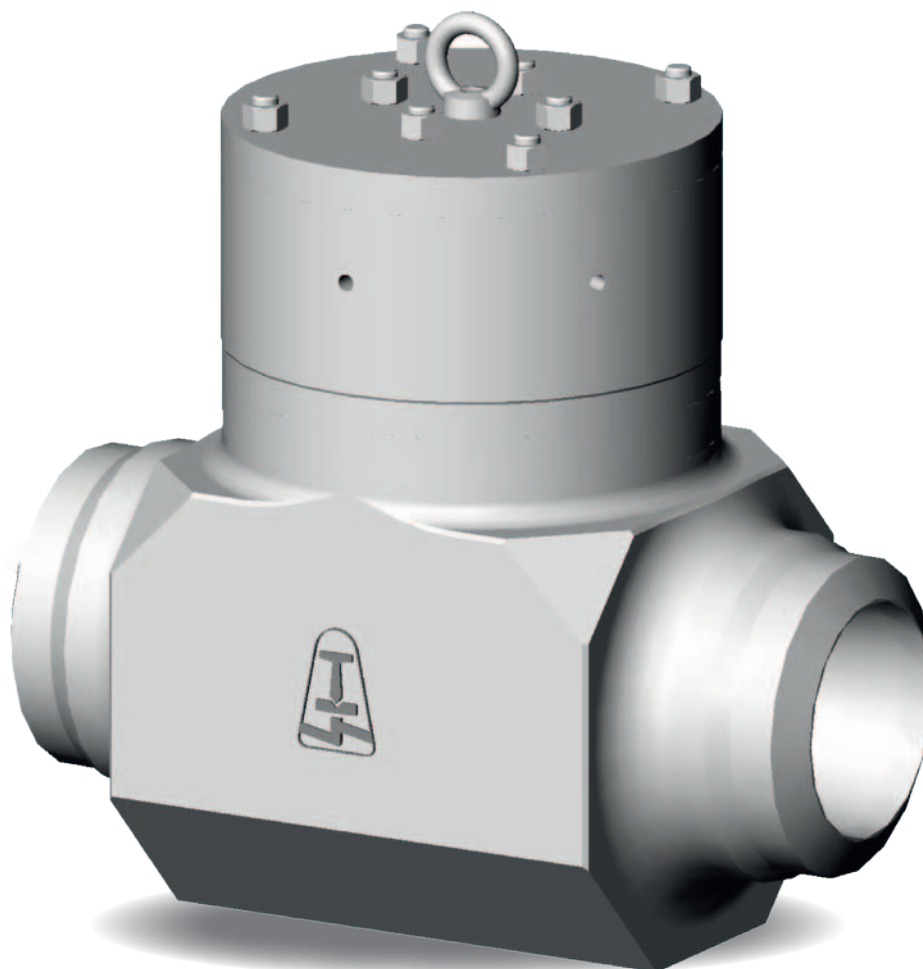


SWING CHECK VALVE L43

PN 160–320; DN 50/50–350/275; T_{MAX}: 600 °C



SWING CHECK VALVE L43

APPLICATION

- water, steam, gas and other substances used in power engineering, chemical industry and other industries

CONNECTION

- flanged, weld ends

OPERATION

- self-acting control

DESCRIPTION

- self-sealing bonnet
- sealing surface is welded by hard facing Stellite 6
- complies with the requirements of directive 2014/68/EU
- testing is carried out according to standard EN 12266-1, part 2

BASIC DESIGN OPTIONS

- with by-pass

PRESSURE-TEMPERATURE-RATINGS

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]																				
		-10	20	100	150	200	250	300	350	400	450	480	500	520	530	540	550	560	570	580	590	600
1.0460 (P250GH)	160	160	160	160	148	135	120	105	88	70	51	-	-	-	-	-	-	-	-	-	-	-
	250	250	250	250	230	211	188	164	137	109	80	-	-	-	-	-	-	-	-	-	-	-
	320	320	320	320	295	270	240	210	175	140	102	-	-	-	-	-	-	-	-	-	-	-

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]																				
		-10	20	100	150	200	250	300	350	400	450	480	500	520	530	540	550	560	570	580	590	600
1.7383 (11CrMo9-10)	160	160	160	160	160	160	160	160	160	145	123	109	100	80	70	60	50	45	40	35	30	25
	250	250	250	250	250	250	250	250	250	227	191	170	156	125	109	94	78	70	63	55	47	39
	320	320	320	320	320	320	320	320	320	290	245	218	200	160	140	120	100	90	80	70	60	50

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]																				
		-10	20	100	150	200	250	300	350	400	450	480	500	520	530	540	550	560	570	580	590	600
1.7715 (14MoV6-3)	160	160	160	160	160	160	160	160	160	160	154	150	147	117	101	86	76	66	56	-	-	-
	250	250	250	250	250	250	250	250	250	250	240	234	230	182	158	134	119	103	87	-	-	-
	320	320	320	320	320	320	320	320	320	320	307	299	294	233	202	172	152	132	111	-	-	-

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]																				
		-10	20	100	150	200	250	300	350	400	450	480	500	520	530	540	550	560	570	580	590	600
1.5415 (16Mo3)	160	160	160	160	160	145	130	115	111	107	89	78	71	48	36	-	-	-	-	-	-	-
	250	250	250	250	250	227	203	179	173	166	139	122	111	74	56	-	-	-	-	-	-	-
	320	320	320	320	320	290	260	229	221	213	178	156	142	95	72	-	-	-	-	-	-	-

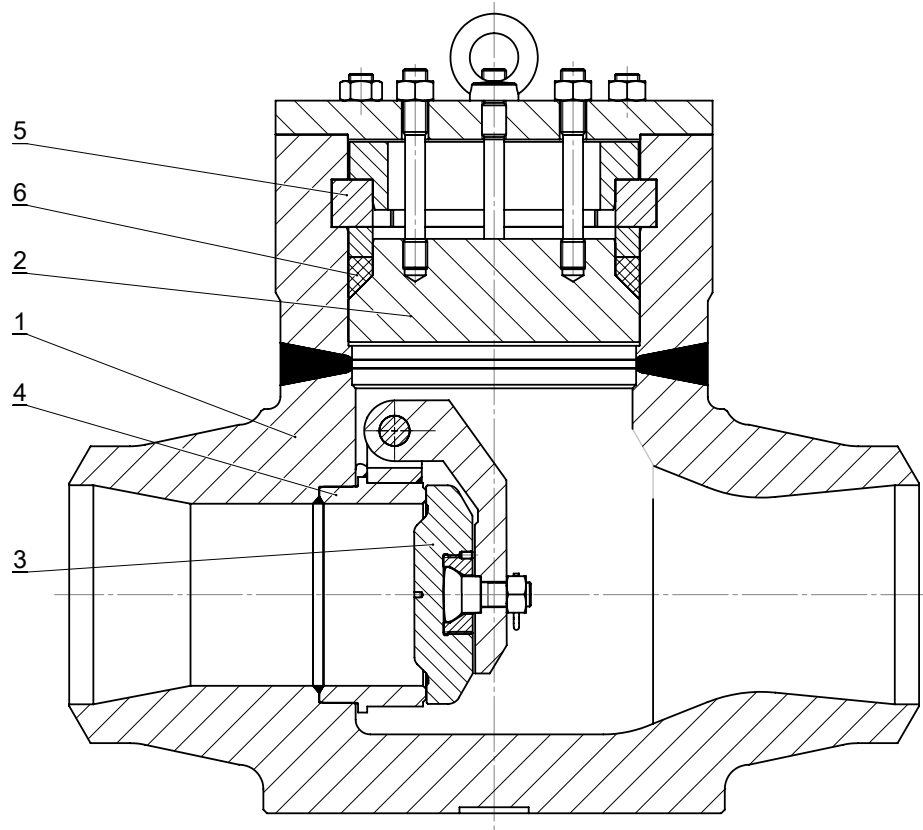
Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]																				
		-10	20	100	150	200	250	300	350	400	450	480	500	520	530	540	550	560	570	580	590	600
1.7335 (13CrMo4-5)	160	160	160	160	160	160	151	141	133	126	115	109	105	76	61	47	40	33	25	-	-	-
	250	250	250	250	250	250	235	220	208	196	180	170	163	118	95	73	62	51	39	-	-	-
	320	320	320	320	320	320	301	282	266	251	230	217	209	151	122	93	79	65	50	-	-	-

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-10	50	100	150	200	250	300	350	400	450	500	530	550	570	590	600
1.6368 (155NiCuMoNb 5-6-4)	160	160	160	160	160	160	160	154	151	148	145	-	-	-	-	-	-
	250	250	250	250	250	250	250	241	236	231	227	-	-	-	-	-	-
	320	320	320	320	320	320	320	308	302	296	290	-	-	-	-	-	-

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-10	50	100	150	200	250	300	350	400	450	500	530	550	570	590	600
1.4903 (X10CrMoVNb 9-1)	160	160	160	160	160	160	160	160	160	160	160	144	118	100	82	65	56
	250	250	250	250	250	250	250	250	250	250	250	225	184	156	129	101	88
	320	320	320	320	320	320	320	320	320	320	320	288	235	200	165	130	112

Others materials on request

USED MATERIALS



Pos.	Part	Material				
		T _{max.} 450°C	T _{max.} 600°C	T _{max.} 570°C	T _{max.} 530°C	T _{max.} 570°C
1	Body	1.0460 (P250GH)	1.7383 (11CrMo9-10)	1.7715 (14MoV6-3)	1.5415 (16Mo3)	1.7335 (13CrMo4-5)
2	Pressure seal bonnet	1.0460 (P250GH)	1.7383 (11CrMo9-10)	1.7715 (14MoV6-3)	1.5415 (16Mo3)	1.7335 (13CrMo4-5)
3	Disc + weld-on	1.0460, 1.0425 (P250GH) + Stellite 6	1.7383 (11CrMo9-10) + Stellite 6	1.7715 (14MoV6-3) + Stellite 6	1.5415 (16Mo3) + Stellite 6	1.7335 (13CrMo4-5) + Stellite 6
4	Seat + weld-on	1.0460 + Stellite 6	1.7383 (11CrMo9-10) + Stellite 6	1.7715 (14MoV6-3) + Stellite 6	1.5415 (16Mo3) + Stellite 6	1.7335 (13CrMo4-5) + Stellite 6
5	Divided ring	1.7715	1.7383 (11CrMo9-10)	1.7715 (14MoV6-3)	1.5415 (16Mo3)	1.7335 (13CrMo4-5)
6	Bonnet sealing	Pressed graphite	Pressed graphite	Pressed graphite	Pressed graphite	Pressed graphite

Material upon request 1.6368, 1.4903

VALVE DIMENSIONS

Weld ends

Face-to-face dimensions:

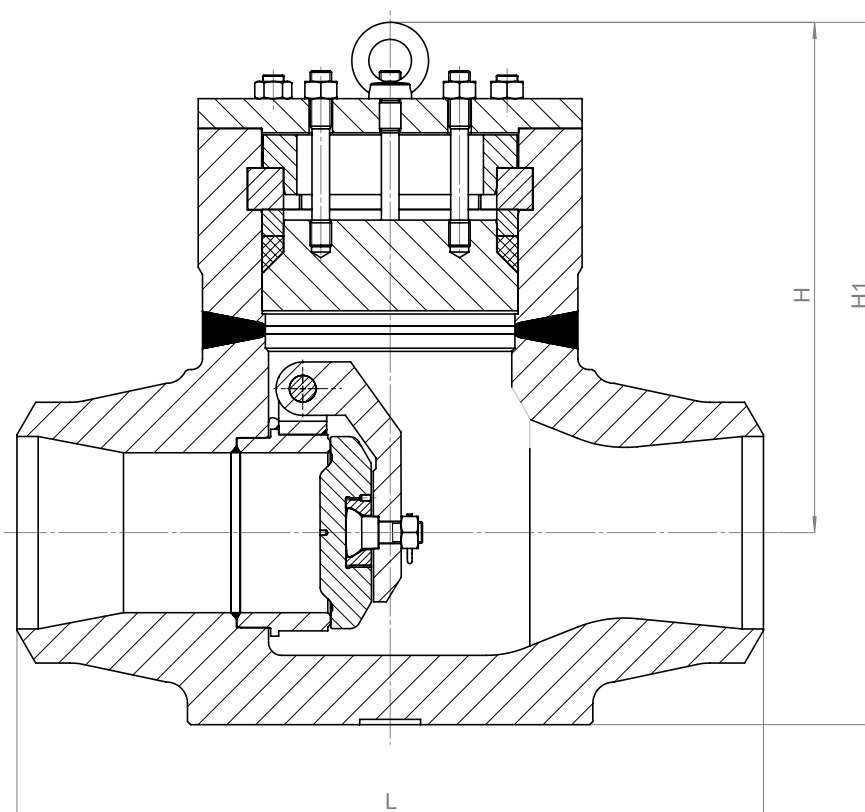
as per table (possible adjustments according to the customer's requirements)

Weld ends:

as per table (d2, d0 comply with the pressure-temperature system L43)

Groove form:

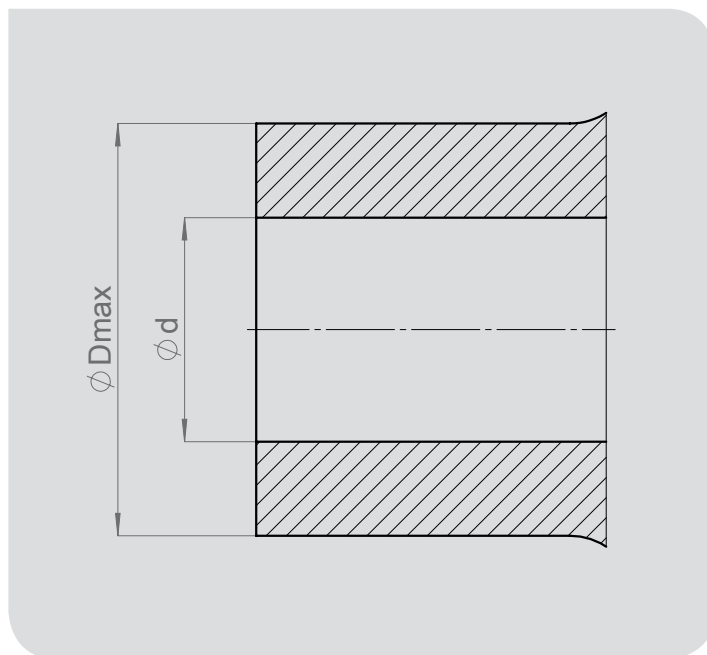
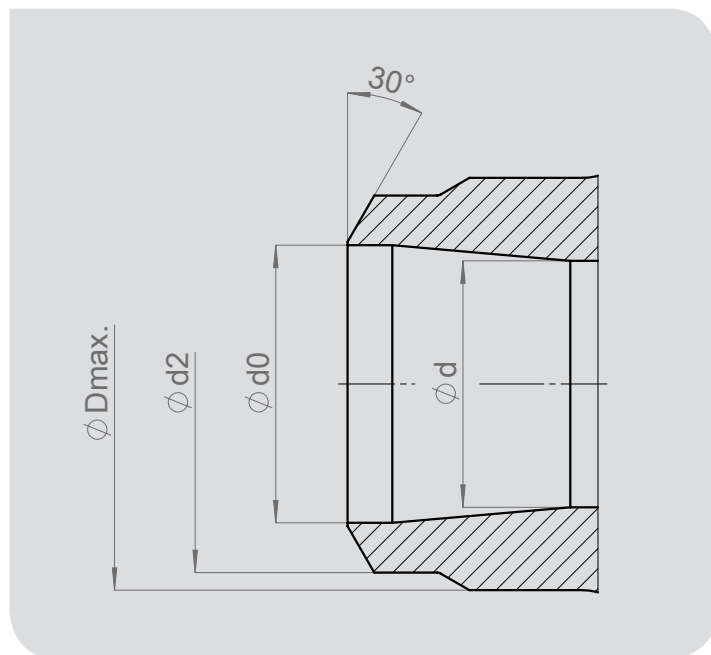
DIN 2559 – sheet 1 – form 22



DN/d	L [mm]	H [mm]	H1 [mm]	ζ	Weight [kg]
50/50	300	220	280	0,41	38
65/50	340	220	280	0,94	40
80/65	390				
100/80	450	297	393	1,27	94
125/110	550	360	490	0,65	186
150/125	550	400	555	0,62	255
200/150	700	480	660	0,87	450
250/200	850	530	745	0,67	725
300/250	1000				
350/275	1200				

Total loss coefficient ζ of the gate valves is calculated for the DN/d dimensions

L can be adjusted according to the customer's requirements

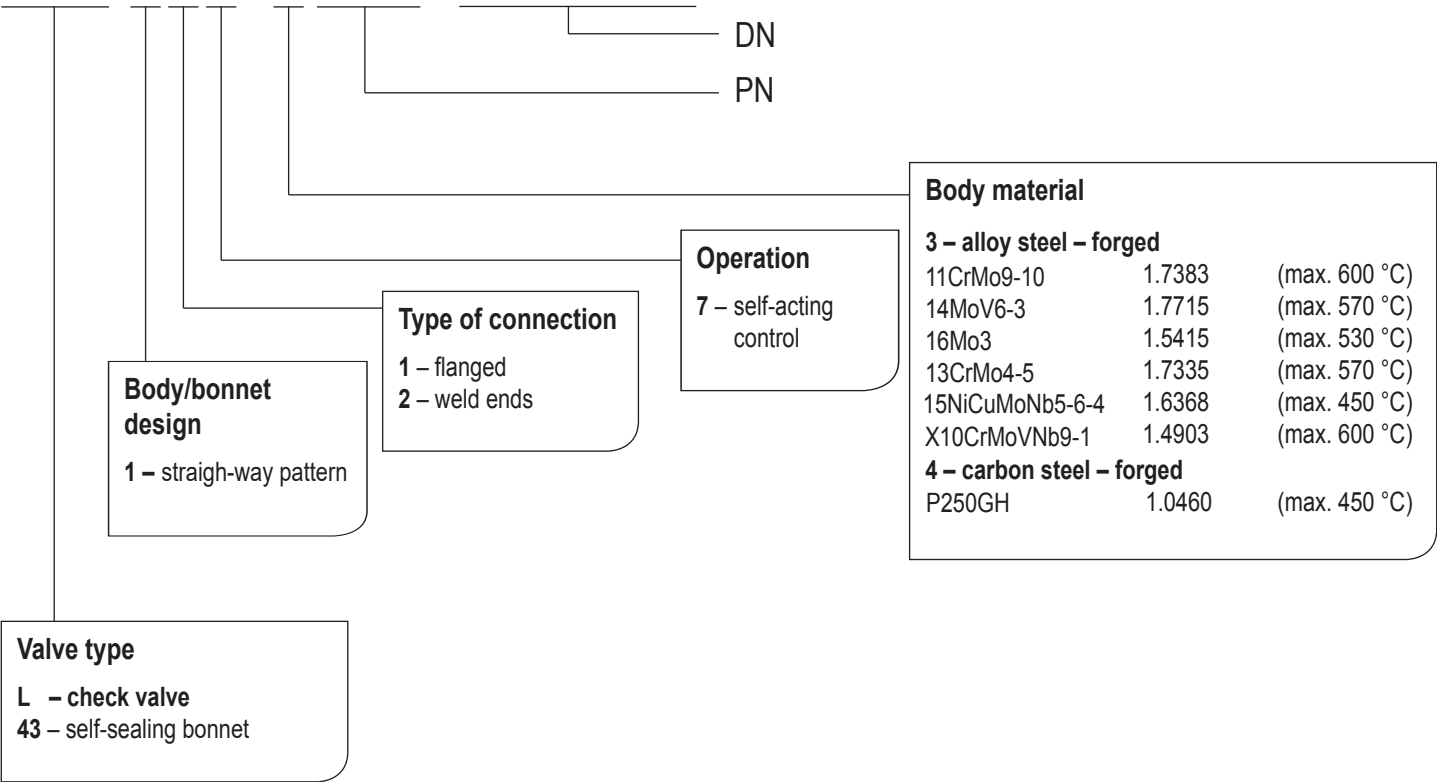
WELD ENDS


DN/d	PN	D_{max}/d	d_2	d_0
50/50	160	92/50	60,3	50,3
	250		63,5	47,5
	320		70	50
65/50	160	92/50	76,1	63,5
	250		76,1	58,5
	320		88,9	63,9
80/65	160	110/65	88,9	74,7
	250		101,6	76,6
	320		101,6	73,2
100/80	160	136/80	114,3	96,7
	250		127	98,6
	320		133	98
125/110	160	184/110	139,7	117,7
	250		152,4	117,4
	320		168,3	123,9

DN/d	PN	D_{max}/d	d_2	d_0
150/125	160	210/125	168,3	143,3
	250		177,8	137,8
	320		193,7	143,7
200/150	160	245/150	219,1	183,1
	250		244,5	188,5
	320		244,5	180,5
250/200	160	325/200	273	229
	250		298,5	234,5
	320		323,9	233,9
300/250	160	372/250	323,9	273,9
	250		355,6	283,6
	320		355,6	265,6
350/275	160	420/275	355,6	299,6
	250		406,4	316,4
	320		406,4	296,4

VALVE DESCRIPTION CODE

L43 127–3320–150/125



VALVE INSTALLATION

Swing check valve must be installed horizontally – by cover perpendicular up. Vertical pipe mounting is only possible if the medium is flowing from the bottom up. The swing check valves are mounted in straight pipe sections with undisturbed working fluid flow. Pipe mounting and mounting must eliminate forces, torques and vibration on the valves.

It is necessary to consider the following points during assembly and operation:

- operating conditions must comply with operating parameters of the valve
- proper function of the valve is affected by the presence of impurities in the pipeline and flowing medium, therefore it is necessary keep working environment a pipeline clean, for example with using filters
- the medium used must be comply with the corrosion resistance of the valve material
- use of mechanically damaged valves during the operation is prohibited

The service life of valves significantly extends regular maintenance and minor repairs carried out by trained personnel.