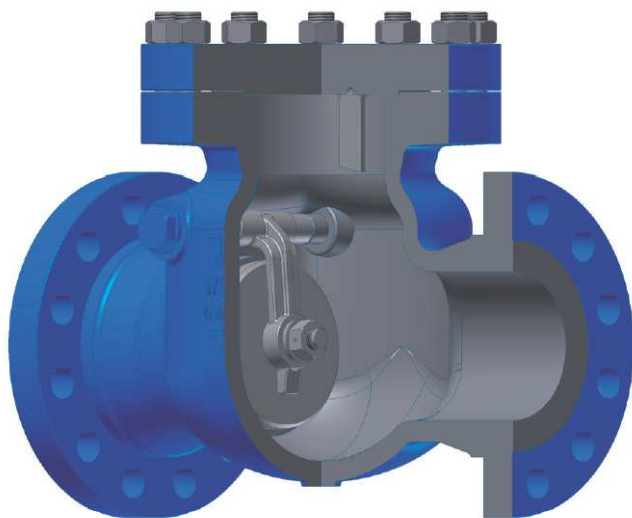


## L10 117 540 - CHECK FLAP



## Swing Check Valves [CSEN]

Standard: EN 14341

DN 50 ÷ DN 250

PN 16 ÷ PN 100

### Design

- Forged or casted body and cover
- Bolted cover (BC)
- Anti-blowout design
- The disc can rotate on its axis and thereby prevented the local wear
- Seats are integral or welded on

### Applications

- Power plant, Chemical, Petrochemical, Refining, water supply and other

### Media

- Depending on the valve materials: water, steam, gas, oil and oil derivatives and other non aggressive media

### Pressure and temperature (table B.2.7)

- Pressure up to 100 bar
- Temperature up to 600 °C

### Materials (table B.2.1)

- Carbon, heat resistant alloy and stainless steel

### Advantages

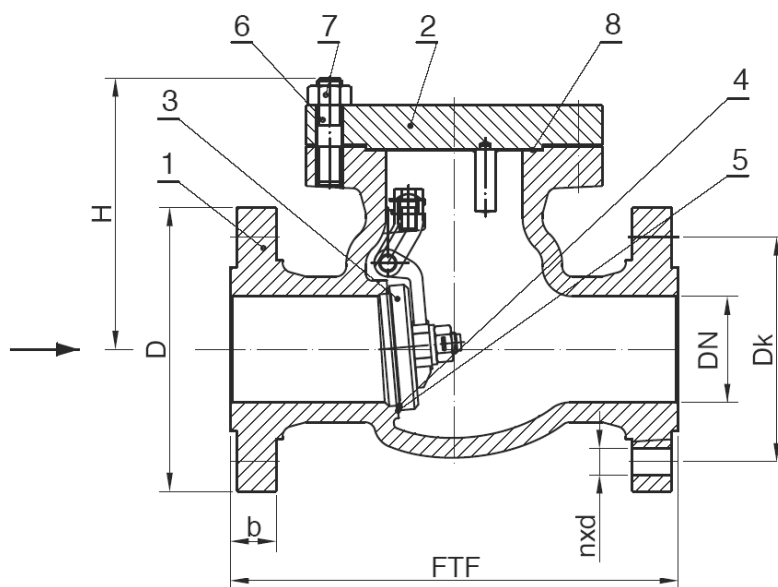
- Long service life
- Respect to emission standards
- Easy handling and maintenance

### Options

- Seats and sealing made of elastic materials
- Flanges and welding ends according to : GOST, DIN, ANSI.
- Other paint finishes are available upon customer's request
- Valve complete with counter flanges, bolting and gaskets

### Testing

- Every produced valve was tested according to EN 12266, Part 1 and Part 2



Drawing B.2.1 Parts and dimensions

### List of materials

Table B.2.1

Item	Part	Material Group acc. to EN 12516-1					
		3E0	4E0	5E0	6E0	11E0	14E0
		Application					
		up to 400°C	up to 500°C	up to 550°C	up to 575°C	-196°C÷500°C	-196°C÷600°C
		Material Code					
		11	21	23	25	41	43
1	Body	1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
2	Cover	1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
3	Disc	1.0619	1.5419	1.7357	1.7379	1.4308	1.4408
4	Trim	Body Seat	13Cr	17Cr (up to 450°C) or Stellite 6		Basic Material or Stellite 6	
5		Disc Seat	13Cr	17Cr (up to 450°C) or Stellite 6		Basic Material or Stellite 6	
6	Stud Bolts	1.7225	1.7709		1.4301	1.4401	
7	Nuts	1.1191	1.7709		1.4301	1.4401	
8	Covert Gasket	reinforced pure graphite					

### Standards

Table B.2.2

Swing Check Valves according to EN 14341	PN 16	PN 25 / PN 40 / PN 63	PN 100
Face-to-face dimensions according to	EN 558-1, Serie 10	EN 558-1, Serie 21	EN 558-1, Serie 5
Flanged ends according to	EN 1092-1, Type B1 and Type B2 (PN 63)		EN 1092-1, Type B2
End-to-end dimensions according to	EN 12982, Serie 10	EN 12982, Serie 21	EN 12982, Serie 5
Welding ends according to	EN 12627		

[CSEN] Dimensions PN 16

Table B.2.3

DN	FTF	D	b	Dk	d	n	H	Ⓜ (kg)
50	203	165	18	125	18	4	156	17
65	330	185	18	145	18	8	208	25
80	241	200	20	160	18	8	185	31
100	292	220	20	180	18	8	213	48
125	330	250	22	210	18	8	238	65
150	356	285	22	240	22	8	266	85
200	495/600	340	24	295	22	12	346	137/164
250	622	405	26	355	26	12	404	207

[CSEN] Dimensions PN 25 and PN 40

Table B.2.4

DN	FTF	D	b	Dk	d	n	H	Ⓜ (kg)
50	267	165	20	125	18	4	181	21
65	330	185	22	145	18	8	208	29
80	318	200	24	160	18	8	216	38
100	356	235	24	190	22	8	260	72
150	444	300	28	250	26	8	296	135
200	533/600	375	34	320	30	12	374	190/164
250	622	450	38	385	33	12	435	309

[CSEN] Dimensions PN 63

Table B.2.5

DN	FTF	D	b	Dk	d	n	H	Ⓜ (kg)
50	267	180	26	135	22	4	181	22
65	330	205	26	160	22	8	208	38
80	318	215	28	170	22	8	216	39
100	356	250	30	200	26	8	260	70
150	444	345	36	280	33	8	296	130
200	533	415	42	345	36	12	374	188

[CSEN] Dimensions PN 100

Table B.2.6

DN	FTF	D	b	Dk	d	n	H	Ⓜ (kg)
50	292	195	30	145	26	4	181	32
65	330	220	34	170	26	8	208	45
80	356	230	36	180	26	8	216	54
100	432	265	40	210	30	8	260	102
150	559	355	44	290	33	12	341	245
200	660	430	52	360	36	12	411	398

Range of application for valves with flanged ends

Table B.2.7

Material Group (Code)	Materials	PN	Pressure (bar) / temperature (° C) ratings according to EN 12516-1																				
			RT	50	100	150	200	250	300	350	375	400	425	450	475	500	510	520	530	550	575	600	
3E0 (11)	1.0619	16	16	15	14	13	11	10	9	9	9	8											
		25	24	23	21	20	18	16	15	14	14	13											
		40	39	37	34	32	28	26	24	22	22	21											
		63	61	59	54	50	45	41	37	35	34	33											
		100	97	93	85	79	71	65	59	55	54	53											
4E0 (21)	1.5419	16	16	16	15	14	13	11	10	10	10	10	9	9	7								
		25	26	26	25	24	22	20	17	16	16	15	15	15	11								
		40	41	41	40	38	35	32	28	26	25	24	24	24	23	18							
		63	64	64	63	60	55	51	43	41	40	38	38	37	37	29							
		100	102	102	100	95	87	81	69	65	63	61	60	59	58	46							
5E0 (23)	1.7357	16	16	16	16	15	14	13	12	12	12	11	11	10	9	8	7	6	4				
		25	26	26	25	25	23	22	21	19	19	18	17	17	16	14	13	11	9	6			
		40	41	41	41	40	37	36	33	31	30	29	28	27	25	22	21	17	14	9			
		63	64	64	64	62	59	56	52	49	47	45	44	42	39	35	33	27	22	14			
		100	102	102	102	99	93	89	83	77	75	72	69	67	62	56	52	42	35	22			
6E0 (25)	1.7379	16	16	16	16	15	15	14	13	12	12	11	11	10	9	8	7	6	5	3			
		25	26	26	25	24	23	21	20	19	18	17	17	16	14	13	12	10	8	5			
		40	41	41	41	40	39	37	34	32	31	29	28	27	25	22	21	19	16	12	9		
		63	64	64	64	62	61	58	53	50	48	45	44	42	39	35	33	29	26	19	14		
		100	102	102	102	99	96	91	85	79	77	72	69	67	62	56	53	46	41	31	21		
11E0 (41)	1.4308	16	15	13	12	11	10	9	8	8	8	7	7	7	7								
		25	24	21	18	17	15	14	13	12	12	12	11	11	11	11							
		40	38	33	29	27	24	22	21	20	19	19	18	18	18	17							
		63	60	52	46	42	38	35	33	31	30	29	29	28	28	27							
		100	95	83	73	66	60	56	52	49	48	46	46	45	45	44							
14E0 (43)	1.4408	16	16	15	13	12	11	10	10	9	9	9	9	8	8	8	7	7	7	7	6		
		25	24	23	21	19	17	16	15	14	14	14	14	13	13	13	12	11	11	11	11	10	
		40	39	37	33	30	27	26	24	23	22	22	22	21	21	21	20	18	17	17	17	16	
		63	61	58	52	47	43	40	38	36	35	34	34	34	33	33	31	29	27	27	26	26	
		100	97	92	83	75	69	64	60	57	56	54	54	54	53	52	49	45	44	43	42	41	