

- Swing check valves
- 640 AA
- PN 10-40
- DN 50-250



Range of application

Admissible operating pressure [bar] at design temperature [°C] ¹⁾

Material	PN	-10	20	120	150	200	250	300	350	400
1.0619	10-16	16	16	16	15	14	13	11	10	8
	25	25	25	23	22	20	17	16	13	
	40	40	40	37	35	32	28	24	21	

Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

▪ **Swing check valves** ▪ 640 AA ▪ PN 10-40 ▪ DN 50-250

Standard features

- Body cast steel
- Available with flange and buttweld ends

Pressure and temperature ratings

- Pressure rating up to 40 bar
- Temperature rating up to 400 °C

Materials

- 1.0619

Further materials on request.

Media

Depending on the material swing check valves are suitable for water, gas, oil and other non aggressive media

Fields of application

Chemical industries, power plants, ship building and other

Design Highlights

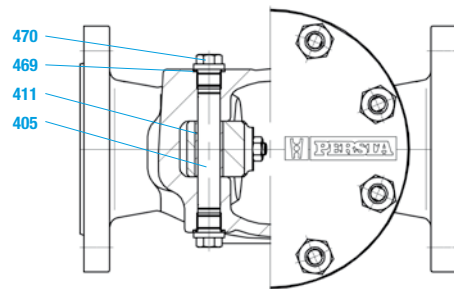
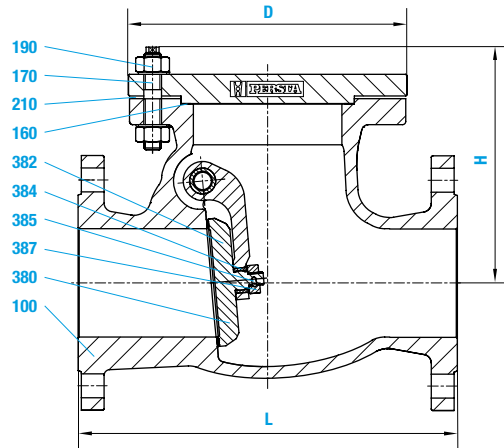
- Hard faced integral body seat with 13 % Cr-Steel or 17 % Cr-Steel layer
- Shut-off disc with curved journal within lever
- The lever rests on the hinge pin by means of a separate bearing bush

Benefits

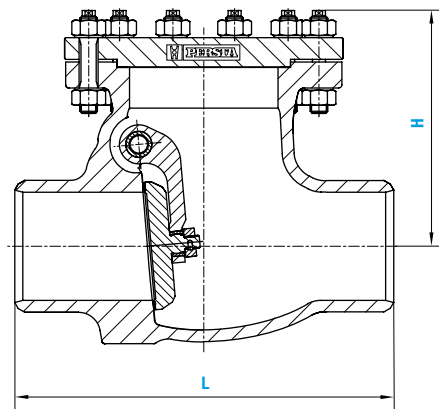
- Extremely resistant to wear
- To improve movability and therefore to improve the alignment of the disc to the body seat
- Improved resistance to wear by means of proper material selection

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FL-Version



EE-Version



■ **Swing check valves** ■ **640 AA** ■ **PN 10-40** ■ **DN 50-250**

Materials

Pos.	Component	1.0619 (11)
100	Body welded on with	1.0619 Cr17
160	▶ Gasket	Graphite ²⁾
170	▶ Stud	1.1181
190	Hexagonal nut	1.1181
210	Bonnet	1.0460
380	▶ Disc welded on with	1.4021 ¹⁾
382	▶ Hinge	1.0425
384	▶ Bushing	1.4006
385	▶ Pint	1.4370
387	Washer	1.4021
405	▶ Hinge pin	1.4021
411	▶ Guide bushing	1.4006
469	▶ Gasket	2.4066
470	Screw plug	1.7709
	▶ Spare parts	

Further materials on request.
 1) DN 125 1.0460 welded on with Cr17
 2) DN 150 grooved with graphite layer

Dimensions/mm

DN	L	H	D
50	230	165	172
65	290	185	212
80	310	210	227
100	350	225	257
125	400	255	292
150	480	310	327
200	600	370	412
250	730	435	462

Weights/kg and Kvs-values

DN	FL	BW	Kvs (m ³ /h)
50	19	13	
65	31	23	170
80	36	27	256
100	52	39	400
125	70	53	625
150	104	82	900
200	146	108	1600
250	289	249	2500

▪ **Swing check valves** ▪ **640 AA** ▪ **PN 63-160 (PD 18)** ▪ **DN 50-300/250**



Range of application

FL- Version Material	PN	Admissible operating pressure [bar] at design temperature [°C] ¹⁾															
		-10	20	120	150	200	250	300	350	400	450	500	510	520	530	540	550
1.5415	63	63	63	63	63	63	63	53	50	47	45	29	22	16	14		
1.7335	63	63	63	63	63	63	63	63	61	58	56	47	40	32	25	20	15
1.7383	63	63	63	63	63	63	63	63	61	58	56	47	40	32	28	24	20

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

FL- Version Material	PN	Admissible operating pressure [bar] at design temperature [°C] ¹⁾															
		-10	20	120	150	200	250	300	350	400	450	500	510	520	530	540	550
1.5415	100	100	100	100	100	100	100	87	78	74	70	45	34	27	22		
1.7335	100	100	100	100	100	100	100	95	91	87	74	62	49	38	31	24	
1.7383	100	100	100	100	100	100	100	95	91	87	74	62	49	43	37	31	

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

FL- Version Material	PN	Admissible operating pressure [bar] at design temperature [°C] ¹⁾															
		-10	20	120	150	200	250	300	350	400	450	500	510	520	530	540	550
1.5415	160	160	160	160	160	160	160	139	125	118	112	72	55	43	35		
1.7335	160	160	160	160	160	160	160	160	153	146	139	118	100	79	62	46	35
1.7383	160	160	160	160	160	160	160	160	153	146	139	118	100	79	70	61	52

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

BW- Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																													
		-10	20	50	100	120	150	200	250	300	350	400	420	430	440	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	
1.5415	18	258	258	246	229	219	204	185	170	146	141	136	134	133	132	130	129	128	112	88	67	53	42								
1.7335	18	258	258	249	234	228	219	205	194	180	170	161	156	155	153	150	149	148	147	133	112	89	72	58	46	37	30				
1.7383	18	258	258	250	239	233	224	210	205	194	180	170	166	164	262	159	156	155	153	131	115	100	88	76	66	56	50	43	37	33	

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

▪ **Swing check valves** ▪ 640 AA ▪ PN 63-160 (PD 18) ▪ DN 50-300/250

Standard features

- Die-forged body
- Disc with inside shaft
- Fastening of the disc at the cover
- Available with flange and buttweld ends

Pressure and temperature ratings

- Pressure rating BW-Ends 258 bar (PD 18)
- Pressure rating FL up to 160 bar
- Temperature rating up -10 °C to 600 °C

Materials

- 1.5415
- 1.7335
- 1.7383

Further materials on request.

Media

Depending on the material swing check valves are suitable for water, gas, oil and other non aggressive media

Fields of application

Chemical industries, power plants, ship building and other

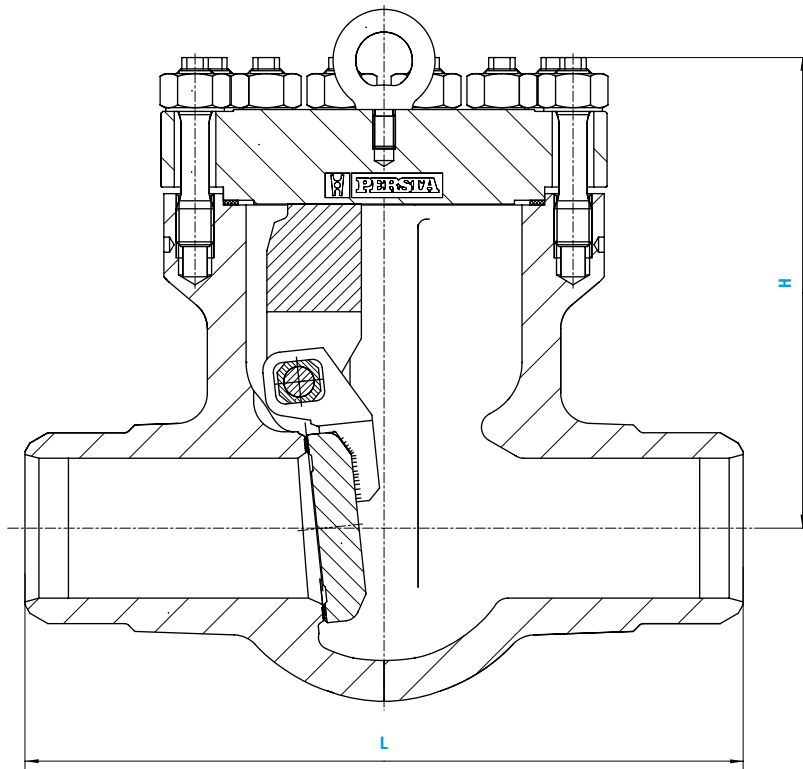
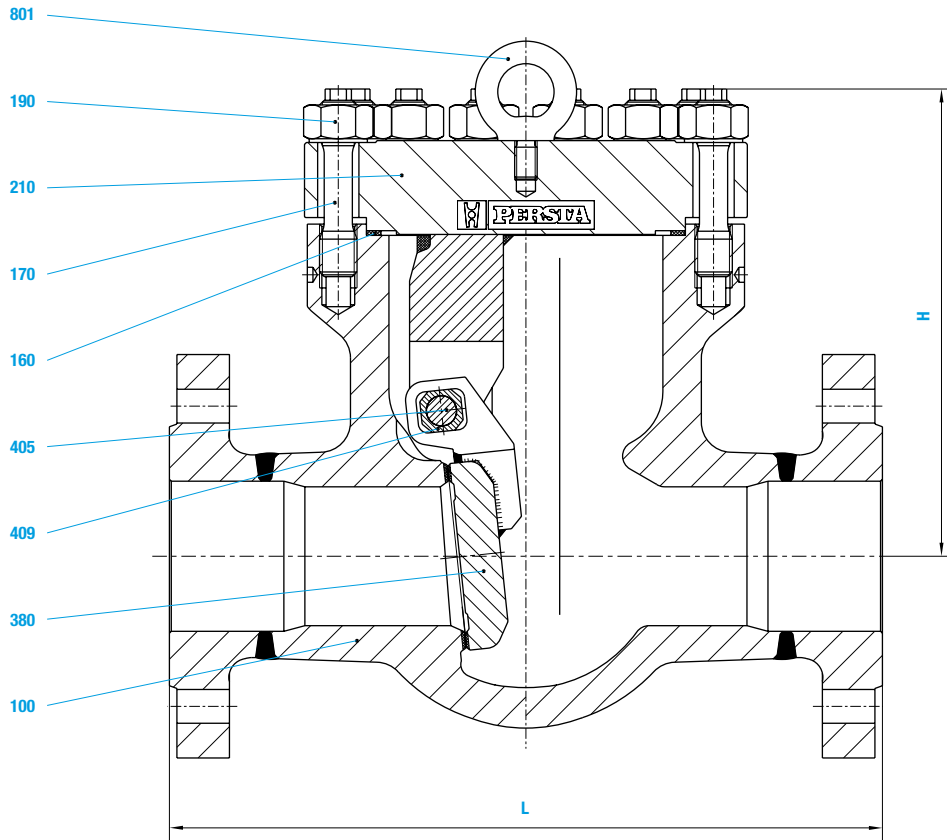
Design Highlights

- Die-forged body
- Integral seat
- Lever rests on the hinge pin by means of the guide bush
- Bolted bonnet with reduced-shaft bolts
- Fastening of the disc at the cover

Benefits

- Free from porosity and shrink holes
- No contact corrosion
- Optimum adjustment of the disc to the body seat by means of the movability the guide bushing
- To improve the stress capacity when temperature and pressure changes
- Easy to assemble and disassemble

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▪ **Swing check valves** ▪ **640 AA** ▪ **PN 63-160 (PD 18)** ▪ **DN 50-300/250**

Materials				
Pos.	Component	1.5415 (42)	1.7335 (44)	1.7383 (45)
100	Body welded on with	1.5415 Stellite	1.7383/1.7335 Stellite	1.7383 Stellite
160	▶ Gasket	Graphite	Graphite	Graphite
170	Stud	1.7709	1.7709	1.7709
190	Hexagonal nut	1.7218	1.7218	1.7218
210	Bonnet	1.5415	1.7335	1.7383
380	▶ Disc welded on with	1.5415 Stellite	1.7335 Stellite	1.7383 Stellite
405	▶ Hinge pin	1.4021	1.4021	1.4021
409	▶ Guide bush	5.3106	5.3106	5.3106
801	Lifting eye bolt	1.0401	1.0401	1.0401
	▶ Spare parts			

Dimensions/mm				
DN	PN 63-100 L	PN 160 L	H	D
50	250	300	220	192
65 / 50	340	360	220	192
80	380	390	280	236
100	430	450	320	265
125 / 100	500	525	320	265
150	550	600	410	350
200	650	750	510	440
250	775	900	595	550
300 / 250	900	1050	595	550

Weights/kg		
DN	FL	BW
50	45	35
65 / 50	53	43
80	83	63
100	105	100
125 / 100	111	106
150	270	220
200	425	365
250	525	750
300 / 250	610	800