

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



**ASME**  
version  
available

**Range of application**

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

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		-10	20	120	150	200	250	300	350	400	450	500	510	520	530	540	550
<b>1.5415</b>	<b>100</b>	100	100	100	100	100	100	87	78	74	70	45	34	27	22		
<b>1.7335</b>	<b>100</b>	100	100	100	100	100	100	95	91	87	74	62	49	38	31	24	
<b>1.7383</b>	<b>100</b>	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.

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		-10	20	120	150	200	250	300	350	400	450	500	510	520	530	540	550
<b>1.5415</b>	<b>160</b>	160	160	160	160	160	160	139	125	118	112	72	55	43	35		
<b>1.7335</b>	<b>160</b>	160	160	160	160	160	160	160	153	146	139	118	100	79	62	46	35
<b>1.7383</b>	<b>160</b>	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] <sup>1)</sup>																													
		-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	
<b>1.5415</b>	<b>18</b>	258	258	246	229	219	204	185	170	146	141	136	134	133	132	130	129	128	112	88	67	53	42								
<b>1.7335</b>	<b>18</b>	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				
<b>1.7383</b>	<b>18</b>	258	258	250	239	233	224	210	205	194	180	170	166	164	162	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.

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**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

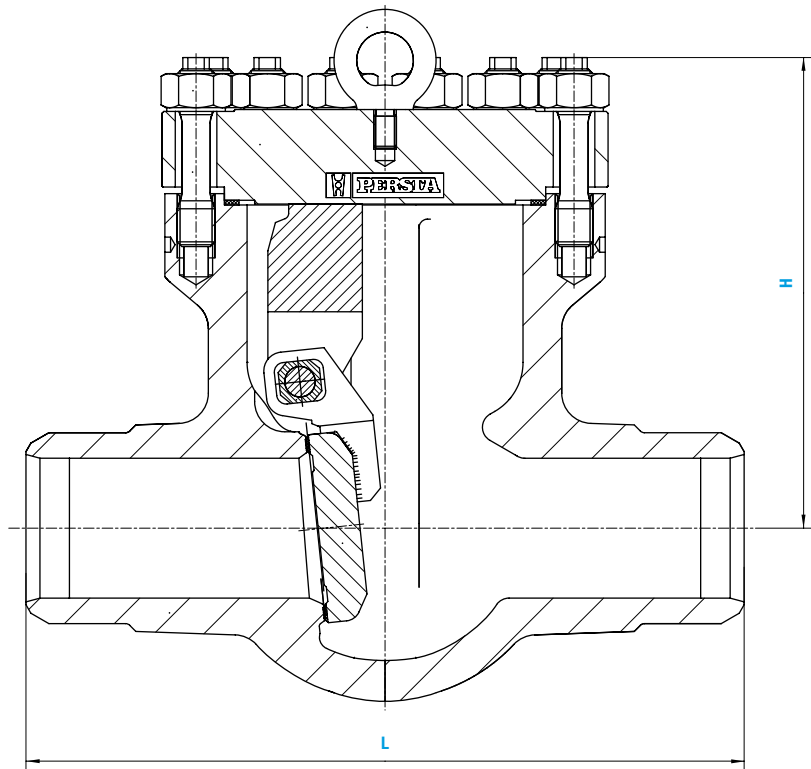
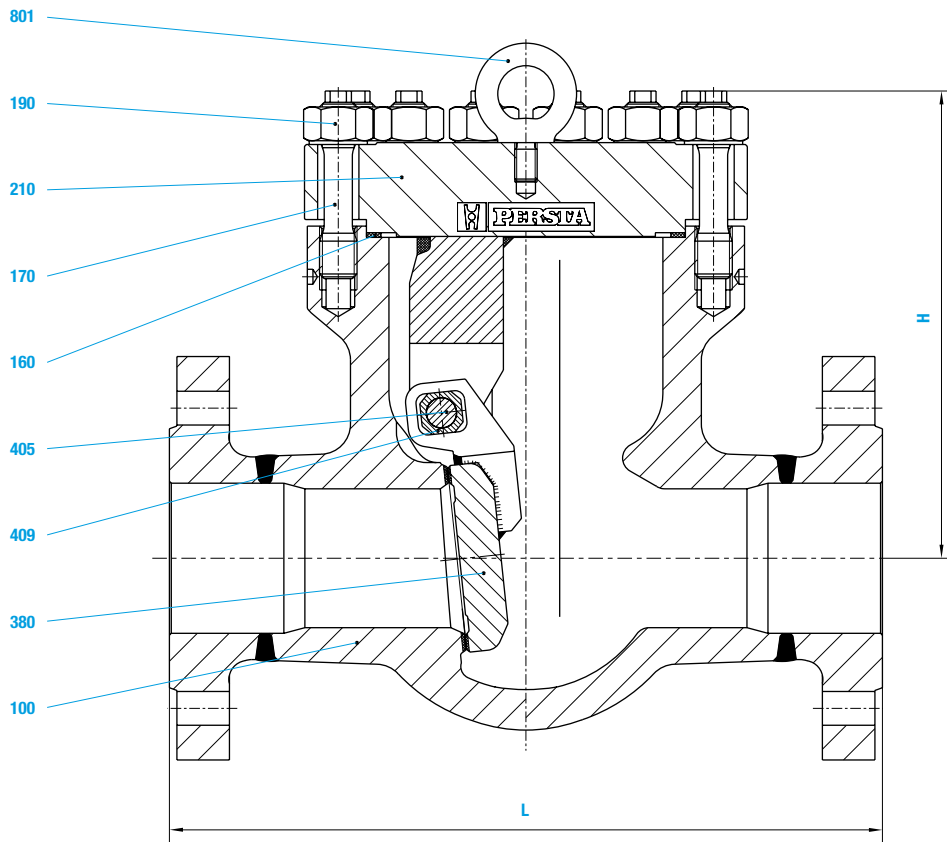
**Design Highlights**

- 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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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