

▪ **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	25	23	22	20	17	16	13
	40	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

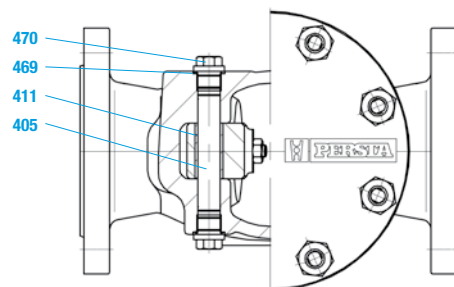
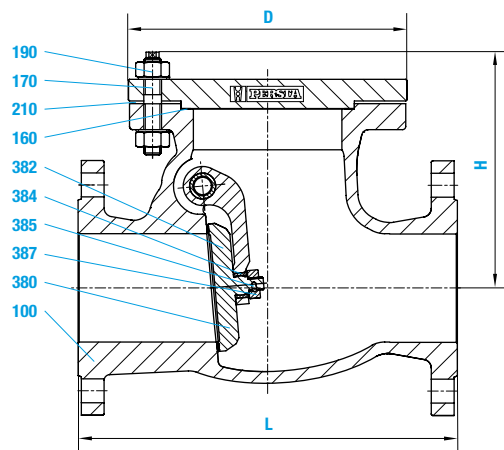
- Hard faced integral body seat with 13 % Cr-Steel or 17 % Cr-Steel layer
- Shut-off disc with curved journal within lever
- The lever rests on the hinge pin by means of a separate bearing bush

Benefits

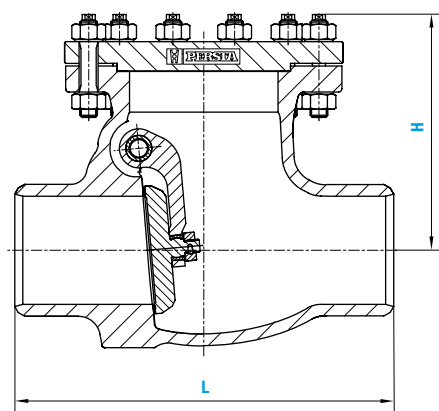
- Extremely resistant to wear
- To improve movability and therefore to improve the alignment of the disc to the body seat
- Improved resistance to wear by means of proper material selection

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

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

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** ▪ VALTRA Swing check valve ▪ 640 AA ▪ PN 10-40 ▪ DN 300-800



Range of application

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

Material	PN	-10	20	100	120	200	250	300	350	400
P265GH	10	10	10	10	10	9	8	7	6	5
	16	16	16	16	16	14	13	11	10	8
	25	25	25	25	25	22	20	17	16	13
	40	40	40	40	40	35	32	28	24	21

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

■ **Swing check valves** ■ VALTRA Swing check valve ■ 640 AA ■ PN 10-40 ■ DN 300-800

Standard features

- Disc with inside shaft
- Body pressed-plate welding construction
- Available with flange and buttweld ends

Pressure and temperature ratings

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

Material

- P265GH

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

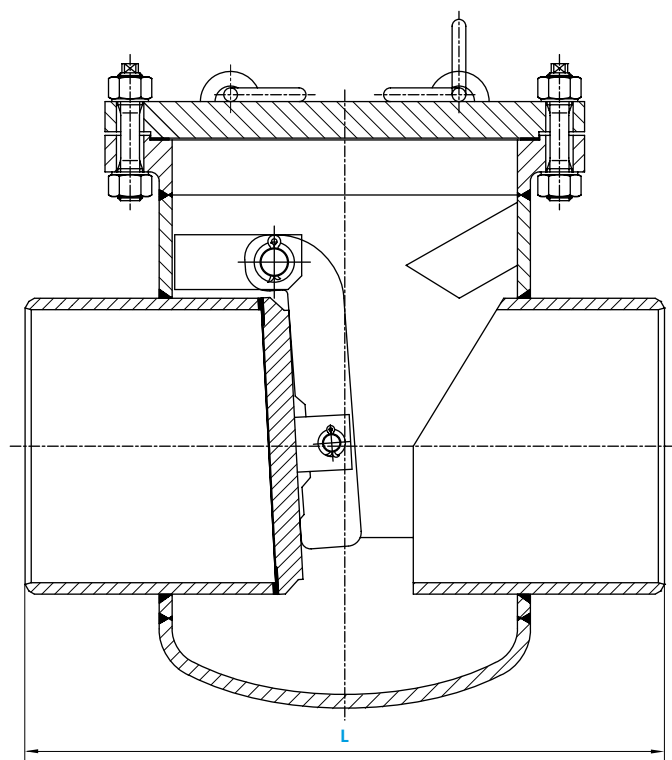
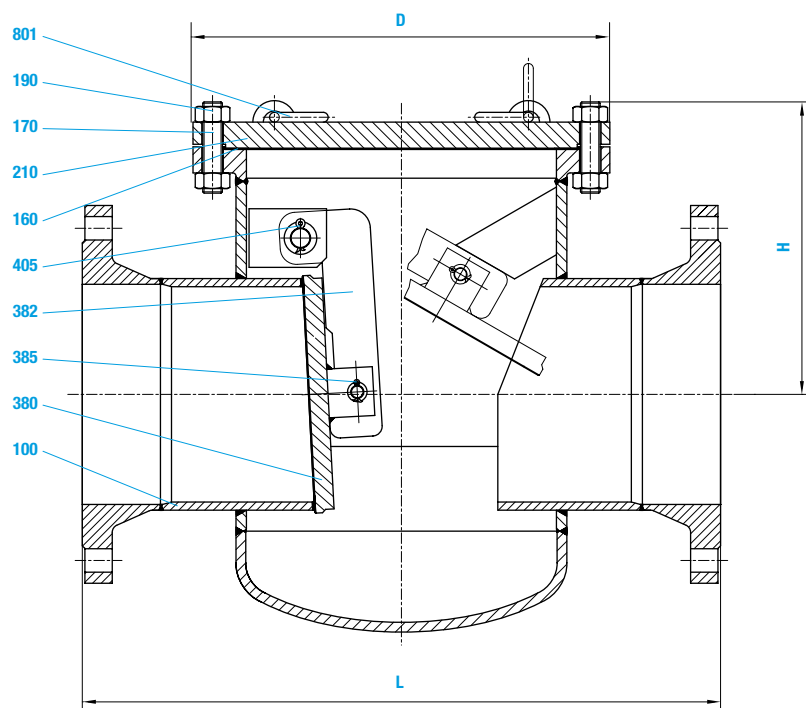
Design Highlights

- Body- and disc seat welded on
- Disc with flexible shaft at the hinge
- Lever rests on the hinge pin by means of a separate bushing
- Inside shaft

Benefits

- Extremely resistant to wear
- Optimum alignment of the disc to the body seat
- Improved resistance wear by means of an optimal material selection
- Limited leakage due to less sealings

■ **Swing check valves** ■ VALTRA Swing check valve ■ 640 AA ■ PN 10-40 ■ DN 300-800



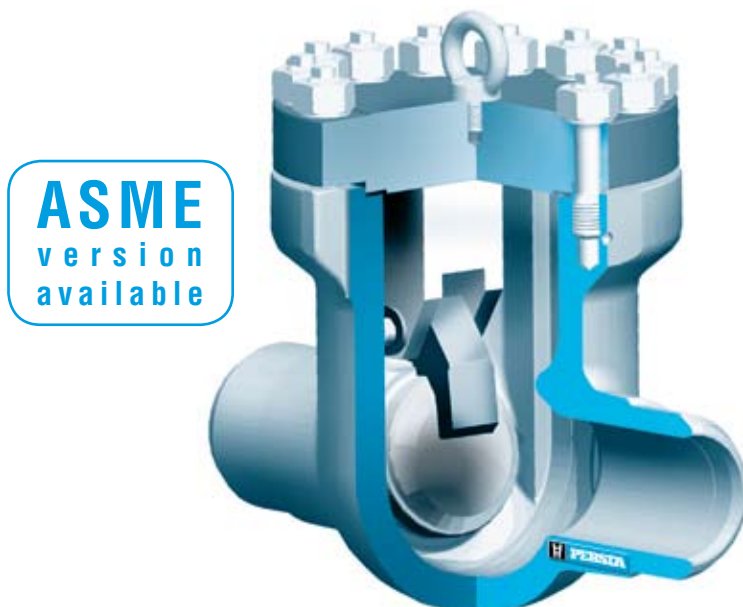
■ **Swing check valves** ■ **VALTRA Swing check valve** ■ **640 AA** ■ **PN 10-40** ■ **DN 300-800**

Materials			
Pos.	Component	P265GH (22)	
100	Body welded on with	P265GH	
160	▶ Gasket	X20CrMo171	
170	Tension screw	1.4541 / Graphite	
190	Hexagonal nut	1.7158	
210	Bonnet	P265GH	
380	▶ Disc welded on with	P265GH	
382	▶ Hinge	X8CrTi18	
385	▶ Pint	S235JRG2	
405	▶ Hinge pin	A2-70	
801	Lifting eye bolt	1.4021	
		S355J2G3	
	▶ Spare parts		
	Further materials on request.		

Dimensions/mm								
DN	PN 10-16 L	PN 25-40 L	PN 10-16 H	PN 25 H	PN 40 H	PN 10-16 D	PN 25 D	PN 40 D
300	700	850	385	415	435	525		525
350	800	980	430	450	485	630		640
400	900	1100	500	540	595	745		755
500	1100	1250	585	615	670	870	870	890
600	1300	1450				1040		1040
700	1500	1650						
800	1700	1850						

Weights/kg and Kvs-values									
DN	PN 10 FL	PN 16 FL	PN 25 FL	PN 40 FL	PN 10 BW	PN 16 BW	PN 25 BW	PN 40 BW	Kvs (m3/h)
300	275	285	350	430	255	255	305	355	3600
350	380	395	475	550	335	345	395	445	4900
400	560	575	735	895	525	525	365	745	6400
500	910	945	1180	1300	860	860	1040	1125	9996
600									14395
700									19593
800									25591

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



Range of application

FL- Version Material	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																
	PN	-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.

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FL- Version Material	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																
	PN	-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	100	95	91	87	74	62	49	38	31	24
1.7383	100	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.

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FL- Version Material	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																
	PN	-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.

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BW- Version Material	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																															
	PD	-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.

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

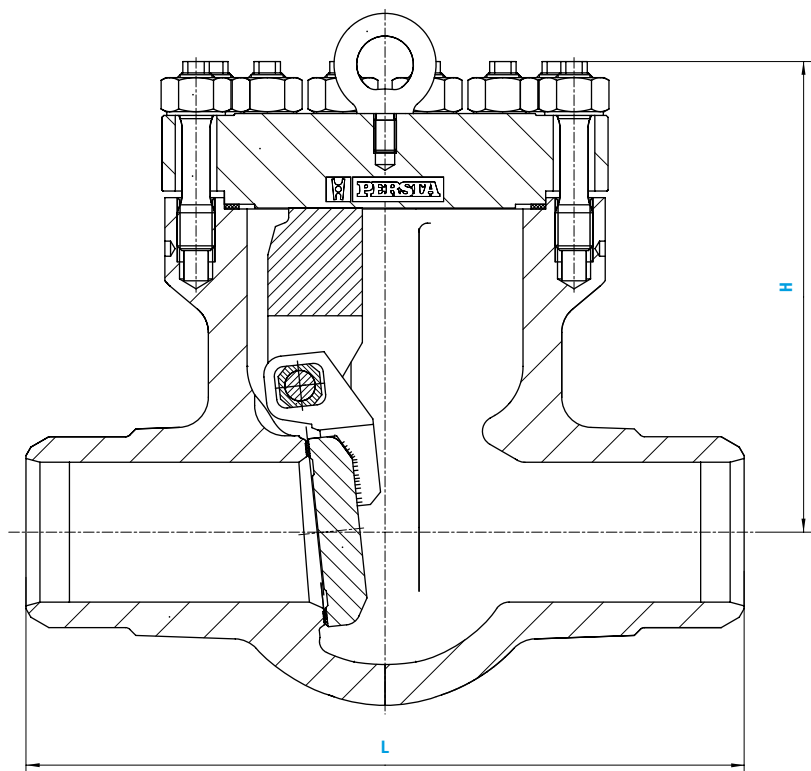
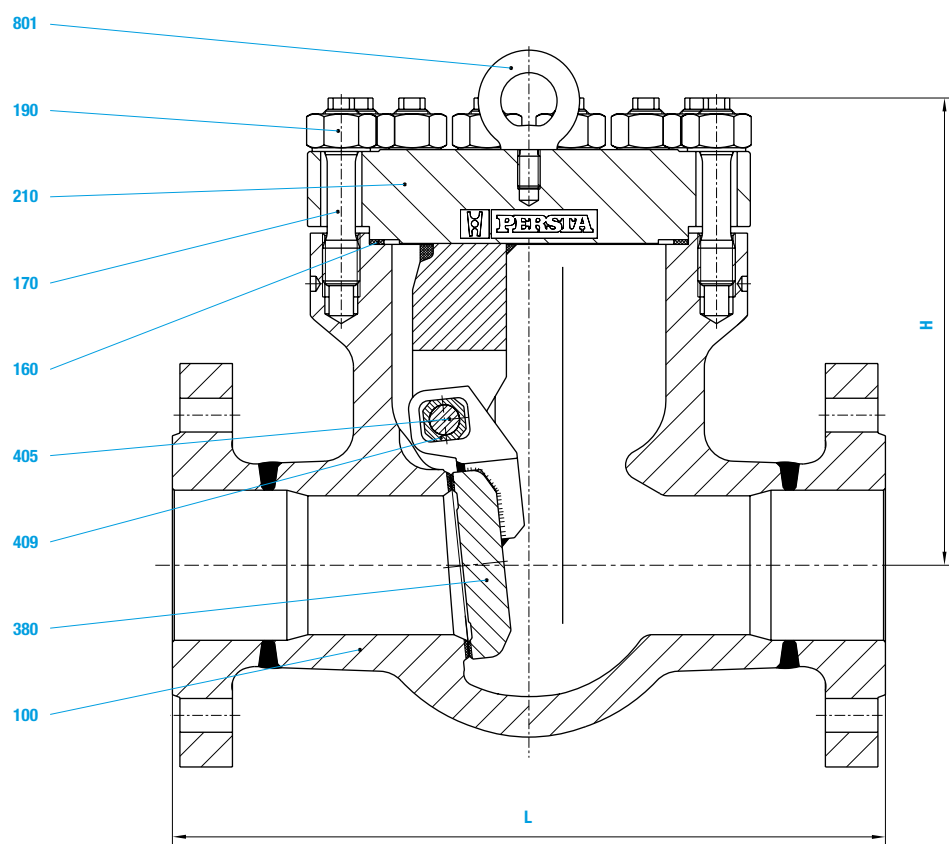
Design Highlights

- 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

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



■ **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	1.7383/1.7335	1.7383
160	▶ Gasket	Stellite	Stellite	Stellite
170	▶ Stud	Graphite	Graphite	Graphite
190	▶ Stud	1.7709	1.7709	1.7709
210	Hexagonal nut	1.7218	1.7218	1.7218
380	Bonnet	1.5415	1.7335	1.7383
405	▶ Disc welded on with	1.5415	1.7335	1.7383
409	▶ Hinge pin	Stellite	Stellite	Stellite
801	▶ Guide bush	1.4021	1.4021	1.4021
	Lifting eye bolt	5.3106	5.3106	5.3106
		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

■ High pressure swing check valves ■ DRI 26 ■ 640 AB ■ PD 25 / PD 40 ■ DN 65-300



Range of application																																						
BW- Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																				
		20	50	100	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650		
1.0460	25	250	250	250	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58																			
1.5415	25	300	300	300	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64														
1.7335	25	300	300	300	300	300	300	294	272	258	243	240	237	234	231	228	227	225	224	222	202	170	134	109	88	69	57	46										
1.7383	25	300	300	300	300	300	300	300	294	272	258	255	252	249	246	243	240	237	234	224	199	174	152	132	115	100	85	75	65	56	49							
1.6368	25	410	410	410	410	410	410	410	410	410	410	410	410	410	402	360	309	257	205	153	102																	
1.4903	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	418	383	372	344	316	290	263	238	213	191	169	150	132	115	100	85	75	64		
1.4901	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	423	397	370	345	320	297	275	252	230	208	186	166	147	127	110	95	82		
1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.																																						

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Range of application																																						
BW- Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																				
		20	50	100	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650		
1.0460	40	400	400	400	400	400	377	330	295	248	200	190	181	172	162	153	135	113	93																			
1.5415	40	480	480	480	480	480	447	412	353	341	330	327	325	322	320	318	315	313	311	271	212	161	127	101														
1.7335	40	481	481	481	481	481	481	471	436	412	388	384	379	374	370	365	363	360	358	355	322	271	215	175	141	110	90	73										
1.7383	40	480	480	480	480	480	480	480	471	436	412	407	403	398	393	388	384	379	374	358	318	278	242	212	183	160	136	120	103	89	79							
1.6368	40	657	657	657	657	657	657	657	657	657	657	657	657	657	643	577	495	412	328	245	163																	
1.4903	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	669	612	596	551	506	464	421	381	341	306	271	240	212	183	160	136	120	103		
1.4901	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	677	635	592	552	512	475	440	404	369	334	298	265	235	204	176	152	131		
1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.																																						

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

■ High pressure swing check valves ■ DRI 26 ■ 640 AB ■ PD 25 / PD 40 ■ DN 65-300

Standard features

- Valve body made of forged steel
- Swing check valve with internal hinge pin
- Lever rests in separate support ring
- Pressure sealing bonnet acc. VGB-guidelines

Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C

Materials

- 1.0460
- 1.4901
- 1.4903
- 1.5415
- 1.6368
- 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

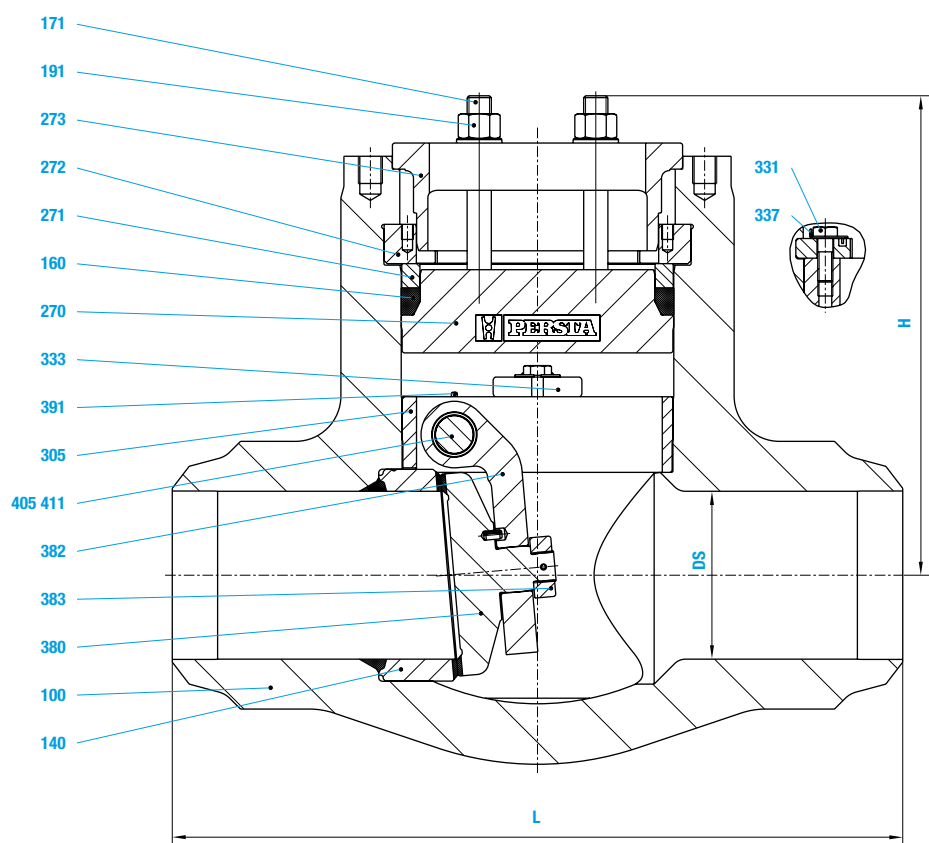
Design Highlights

- Valve body made of forged steel
- Tubular forged body
- Seats faced with stellite
- Lever rests in a separate support ring
- Shut-off disc with curved journal
- Pressure sealing bonnet
- Cover can be used for dismantling of the cover fastener

Benefits

- Free from porosity and shrink holes
- No pressure retaining weldseams
- Extremely resistant to wear
- The setting of the disc can be examined before installing the bonnet cover
- Optimum adjustment of the disc to the body seat
- Best possible sealing function
- No special tools are necessary for dismantling the disc fastener

■ High pressure swing check valves ■ DRI 26 ■ 640 AB ■ PD 25 / PD 40 ■ DN 65-300



■ **High pressure swing check valves** ■ **DRI 26** ■ **640 AB** ■ **PD 25 / PD 40** ■ **DN 65-300**

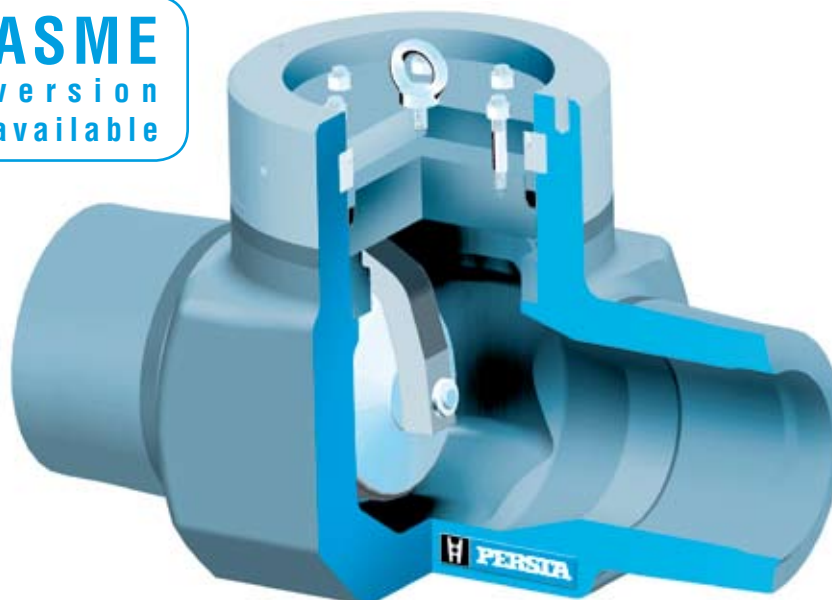
Materials								
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)	1.6368 (46)	1.4903 (63)	1.4901 (66)
100	Body	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
140	Seat ring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
	welded on with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
160	▶ Gasket	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
171	Stud	A 193 B7	A 193 B7	A 193 B7	A 193 B7	A 193 B7	A 193 B7	A 193 B7
191	Hexagonal nut	A 194 2H	A 194 2H	A 194 2H	A 194 2H	A 194 2H	A 194 2H	A 194 2H
270	Cover	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
271	Ring	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
272	Segmentring	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
273	Cover	1.0460	1.0460	1.0460	1.0460	1.0460	1.0460	1.0460
305	Supportring	1.7383	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903
331	Hexagonal screw	A4	A4	A4	A4	A4	A4	A4
333	▶ Flange	1.4903	1.4903	1.4903	1.4903	1.4903	1.4903	1.4903
337	▶ Retaining ring	1.4301	1.4301	1.4301	1.4301	1.4301	1.4301	1.4301
380	▶ Disc	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903	1.4901
	welded on with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
382	Hinge	1.7383	1.7383	1.7383	1.7383	1.7383	1.4903	1.4903
383	▶ Washer	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923
391	▶ Tension pin	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310
405	▶ Hinge pin	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923
411	▶ Guide bushing	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106
	▶ Spare parts							

Dimensions/mm and Weights/kg				
DRI 26.25 DN	DS	L	H	kg
80	70	305	230	49
100	90	406	257	83
125	111	483	317	137
150	136	559	357	265
200	178	711	445	401
250	222	864	530	744
300	263	991	603	1182

Dimensions/mm and Weights/kg				
DRI 26.40 DN	DS	L	H	kg
65	50	330	231	59
80	57	368	246	91
100	72	457	278	150
125	90	533	337	288
150	111	609	431	445
200	146	762	479	796
250	185	1270	587	1542

■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600

ASME
version
available



Range of application

BW- Version Material	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																					
	PD	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650					
1.0460	16	160	160	151	132	118	99	80	76	73	69	65	61	54	45	37																						
	25	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58																						
	32	320	320	302	264	236	198	160	153	145	138	130	123	109	91	75																						
	40	400	400	377	330	295	248	200	191	182	172	163	153	136	113	93																						
1.5415	16	192	192	179	165	141	137	132	131	130	129	128	127	126	125	124	109	85	64	51	41																	
	25	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64																	
	32	385	385	358	330	283	273	264	262	260	258	256	255	253	251	249	217	170	129	102	81																	
	40	480	480	448	413	354	342	330	328	325	323	321	318	316	314	311	272	212	161	127	102																	
1.7335	16	192	192	192	189	174	165	156	154	152	150	148	146	145	144	143	142	129	109	86	70	57	44	36	29													
	25	300	300	300	294	272	258	243	240	237	234	231	228	227	225	224	222	202	170	134	109	88	69	57	46													
	32	385	385	385	377	349	330	311	307	304	300	296	292	290	289	287	285	258	217	172	140	113	88	72	59													
	40	481	481	481	471	436	413	389	384	380	375	370	365	363	364	358	356	323	272	215	175	141	110	91	74													
1.7383	16	192	192	192	192	189	174	165	163	161	159	157	156	154	152	150	143	127	111	97	85	74	64	55	48	41	36	32										
	25	300	300	300	300	294	272	258	255	252	249	246	243	240	237	234	224	199	174	152	132	115	100	85	75	65	56	49										
	32	384	384	384	384	377	349	330	326	322	319	315	311	307	304	300	287	255	223	194	170	147	128	109	96	83	72	63										
	40	480	480	480	480	471	436	413	408	403	398	384	389	384	379	375	358	318	278	243	212	184	160	137	120	104	90	79										
1.6368	16	263	263	263	263	263	263	263	263	263	257	231	198	165	131	98	65																					
	25	410	410	410	410	410	410	410	410	410	402	360	309	257	205	153	102																					
	32	525	525	525	525	525	525	525	525	525	515	482	396	330	262	196	130																					
	40	657	657	657	627	657	657	657	657	657	657	643	577	495	412	328	245	163																				
1.4903	16	272	272	272	272	272	272	272	272	272	272	272	272	272	272	268	245	239	221	203	186	169	153	137	123	108	96	85	74	64	55	48	41					
	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	418	383	372	344	316	290	263	238	213	191	169	150	132	115	100	85	75	65					
	32	544	544	544	544	544	544	544	544	544	544	544	544	544	544	536	490	477	441	405	371	338	305	273	245	217	192	170	147	128	109	96	83					
	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	669	613	596	552	507	464	422	382	342	306	271	240	212	184	160	137	120	104					
1.4901	16	272	272	272	272	272	272	272	272	272	272	272	272	272	272	271	254	237	221	205	190	176	161	147	133	119	106	94	81	70	61	52						
	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	423	397	370	345	320	297	275	252	230	208	186	166	147	127	110	95	82						
	32	544	544	544	544	544	544	544	544	544	544	544	544	544	544	542	508	474	442	410	380	352	323	295	267	239	212	188	163	141	122	105						
	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	677	635	592	552	512	475	440	404	369	334	298	265	235	204	176	152	131						
1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.																																	Design according to working data			PD 63 on request		

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. Design according to working data PD 63 on request

■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600

Standard features

- Valve body made of forged steel
- Swing check valve with internal hinge pin
- Lever rests in a separate support ring
- Welded seat ring
- Pressure sealing bonnet acc. VGB-guidelines

Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C
- Higher ratings on request

Materials

- 1.0460
- 1.4901
- 1.4903
- 1.5415
- 1.6368
- 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

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries

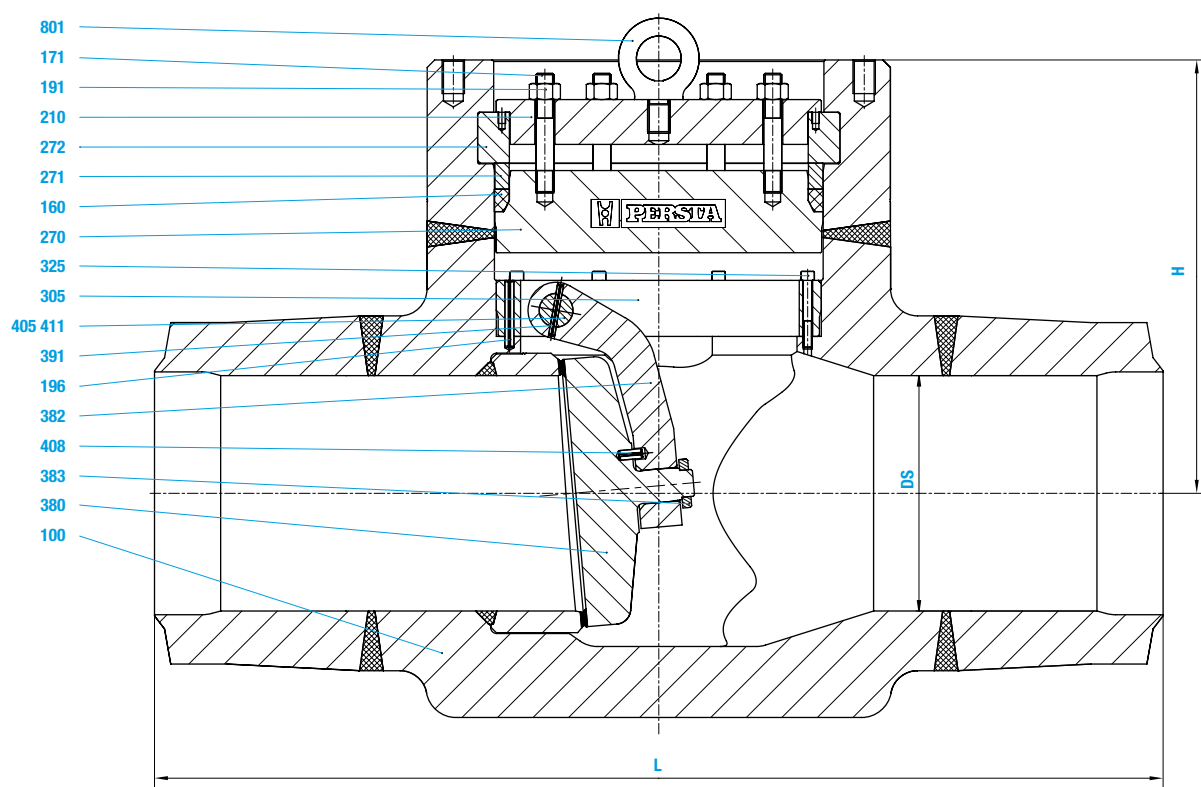
Design Highlights

- Valve body made of forged steel
- Seats faced with stellite
- Lever rests in a separate support ring
- Shut-off device with curved journal
- Pressure sealing bonnet

Benefits

- Free from porosity and shrink holes
- Extremely resistant to wear
- The setting of the disc can be examined before installing the bonnet cover
- Optimum alignment of the disc to the body seat
- Best possible sealing function

■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600



■ High pressure swing check valves ■ DRI 16-63 ■ 640 AB ■ PD 16-63 ■ DN 50-600

Materials								
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)	1.6368 (46)	1.4903 (63)	1.4901 (66)
100	Body	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
160	▶ Gasket	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
171	Stud	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709	1.4923
191	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.7218	1.7218	1.4923
196	▶ Tension pin	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310
210	Bonnet	1.7383	1.7383	1.7383	1.7383	1.7383	1.7383	1.4903
270	Cover	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
271	Ring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
272	Segmentring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
305	▶ Supportring	1.0460	1.5415	1.7335	1.7383	1.7383	1.4903	1.4901
325	Headcap screw	A4	A4	A4	A4	A4	A4	A4
380	▶ Disc	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
	welded on with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
382	▶ Hinge	1.0460	1.5415	1.7335	1.7383	1.7383	1.4903	1.4903
383	▶ Washer	1.0460	1.0460	1.7335	1.7383	1.6368	1.4923	1.4923
391	▶ Tension pin	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310
405	▶ Hinge pin	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923
408	▶ Tension pin	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310
411	▶ Guide bushing	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106
801	Lifting eye bolt	1.0401	1.0401	1.0401	1.0401	1.0401	1.0401	1.0401
	▶ Spare parts							

Dimensions/mm and Weights/kg																
DN	DS	DRI 16			DRI 25			DRI 32			DRI 40			DRI 63		
		L	H	kg	L	H	kg	L	H	kg	L	H	kg	L	H	kg
65-200								Version DRI 26.40			Version DRI 26.40					
225	202,5							1050	450	910						
250 / 225	202,5							1150	450							
250	225,0	Version DRI 26.25			Version DRI 26.25			1150	515	1300	On request			On request		
300 / 250	225,0							1350	515							
300	270,0							1350	605	2300						
350 / 300	270,0							1550	605							
350	315,0	1200	540	2300	1550	580	2300	1550	785	4000						
400 / 350	315,0	1200	540		1750	580		1750	785							
400	360,0	1350	600	3600	1750	660	3600									
450 / 400	360,0	1350	600		1950	660		On request								
450	405,0	1500	690	5400	1950	750	5400									
500 / 450	405,0	1500	692		2150	750										
500	450,0	1650														
600 / 500	540,0	1650			On request											
600	540,0	On request														

■ High pressure stop check valve ■ DRA 26 ■ 640 ST ■ PD 25 / 40 ■ DN 80-200



Range of application																																					
BW- Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																			
		20	50	100	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650	
1.0460	25	250	250	250	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58																		
1.5415	25	300	300	300	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64													
1.7335	25	300	300	300	300	300	300	294	272	258	243	240	237	234	231	228	227	225	224	222	202	170	134	109	88	69	57	46									
1.7383	25	300	300	300	300	300	300	300	294	272	258	255	252	249	246	243	240	237	234	224	199	174	152	132	115	100	85	75	65	56	49						
1.6368	25	410	410	410	410	410	410	410	410	410	410	410	410	410	402	360	309	257	205	153	102																
1.4903	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	418	383	372	344	316	290	263	238	213	191	169	150	132	115	100	85	75	64	
1.4901	25	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	425	423	397	370	345	320	297	275	252	230	208	186	166	147	127	110	95	82	
1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980																																					

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Range of application																																						
BW- Version Material	PD	Admissible operating pressure [bar] at design temperature [°C] ¹⁾																																				
		20	50	100	120	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600	610	620	630	640	650		
1.0460	40	400	400	400	400	400	377	330	295	248	200	190	181	172	162	153	135	113	93																			
1.5415	40	480	480	480	480	480	447	412	353	341	330	327	325	322	320	318	315	313	311	271	212	161	127	101														
1.7335	40	481	481	481	481	481	481	471	436	412	388	384	379	374	370	365	363	360	358	355	322	271	215	175	141	110	90	73										
1.7383	40	480	480	480	480	480	480	480	471	436	412	407	403	398	393	388	384	379	374	358	318	278	242	212	183	160	136	120	103	89	79							
1.6368	40	657	657	657	657	657	657	657	657	657	657	657	657	657	643	577	495	412	328	245	163																	
1.4903	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	669	612	596	551	506	464	421	381	341	306	271	240	212	183	160	136	120	103		
1.4901	40	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	680	677	635	592	552	512	475	440	404	369	334	298	265	235	204	176	152	131		
1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980																																						

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations. For temperatures > 570 °C stem in 1.4980

■ High pressure stop check valve ■ DRA 26 ■ 640 ST ■ PD 25 / 40 ■ DN 80-200

Standard features

- Body hollow-forged in a closed die
- Double-sided high-pressure shut-off system
 - Function of a check valve
 - Function of a gate valve
- Internal hinge pin, pivoted in a separate retaining ring
- Movable shut-off system guided in a groove
- Defined stop of the check disc
- Pressure sealing bonnet acc. to VGB-guidelines
- Generally stellited seats

Pressure and temperature ratings

- Pressure rating up to 680 bar
- Temperature rating up to 650 °C

Materials

- 1.0460 ■ 1.5415 ■ 1.7335 ■ 1.7383
- 1.6368 ■ 1.4903 ■ 1.4901

Further materials and nominal sizes on request

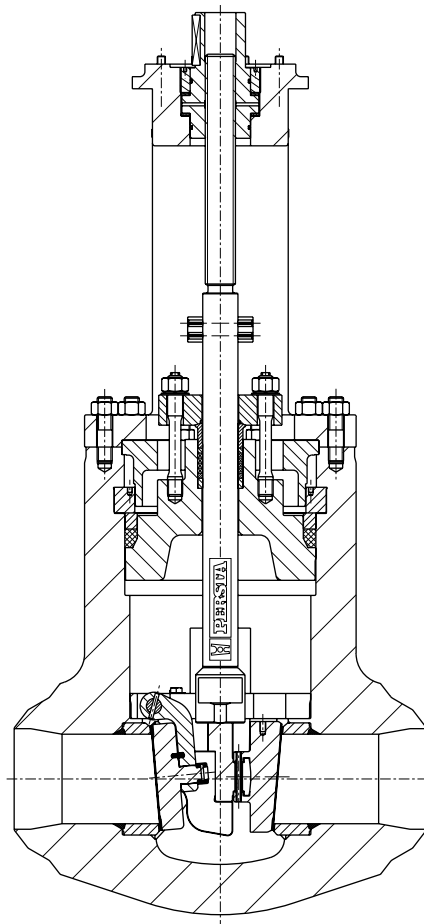
Media

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

Fields of application

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries

High pressure stop check valve



Design-Highlights

- Operating mode as a check valve and a gate valve
- Sealing in both flow directions
- Full straight seat passage
- Full opening angle of the check disk
- Flexible-mounted non-return and shut-off disc
- Shut-off system guided in a groove
- Shut-off discs with anti-twist safeguard

Benefits

- Possible savings:
 - One valve
 - Two welding seams in pipeline
 - Space and weights
 - Less insulation time and effort
 - Less maintenance and inspection requirements
- Secure protection of relevant and complex parts of the plant
- Better flow characteristics than non-return valves
- Minimizing pressure drop
- Better smoothness of running and adjustment of the valves in the body seats
- Prevention of positional deviations of the shut-off disc and protection against damage
- Effective adjustment to the body seats with constant repetitive contact

▪ **Swing check valves** ▪ Freewheel swing check valve ▪ 640 DJ ▪ PN 40-250 ▪ DN 50-800



Standard features: Die-forged valve body

Standard features

- Die-forged valve body, cast or as a welded steel design
- Available with flange and butt weld ends
- Bolted or pressure sealing bonnet
- Pneumatic or hydraulic actuator for safe closing

Pressure and temperature ratings

- Pressure rating up to 250 bar
- Temperature rating up to 600 °C

Materials

- 1.0619+N ▪ 1.0425 ▪ 1.5415 ▪ 1.7335 ▪ 1.7383

Further materials on request.

Media

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

Fields of application

Mainly in steam cycles for fast closing / protection applications

Design Highlights

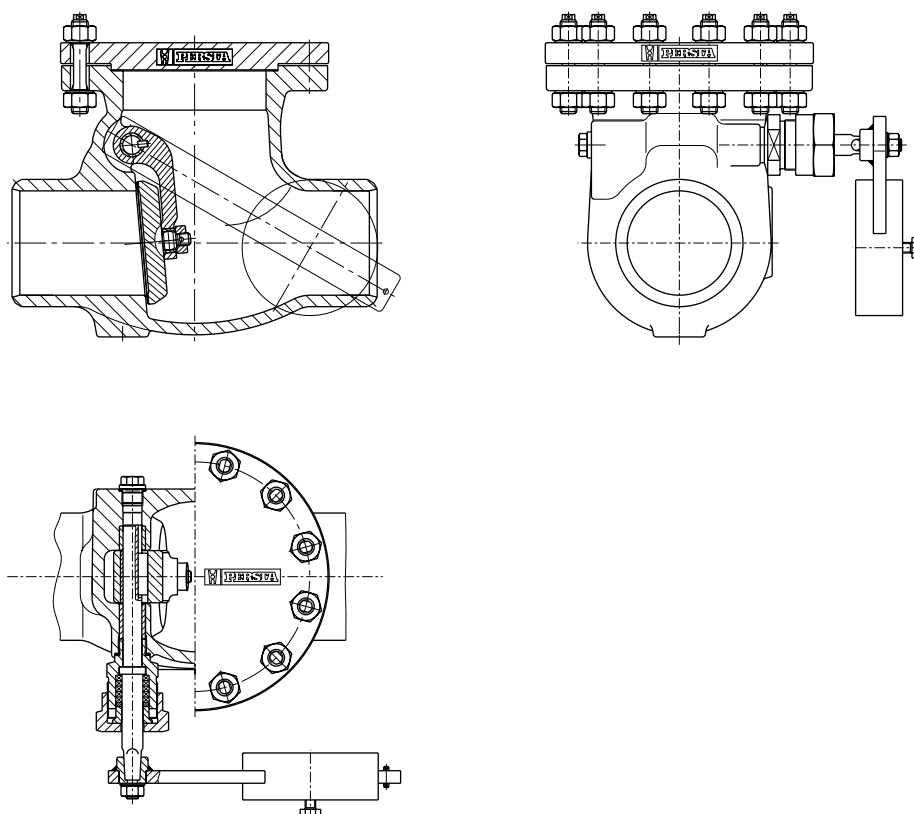
- Seats are welded on
- Shut-off device with convey pin within lever
- Freewheeling hinge pin
- Part turn actuator for safe closing
- Standard connection to ISO 5211
- Symmetric body design

Benefits

- Best possible sliding performance, minimum wear
- Optimum alignment of the disc to the body seat
- Low friction and less packing wear
- Safe and fast closing
- Easy installation of pneumatic or hydraulic part turn actuator
- Actuators can be installed on the left or on the right side without using new components

■ **Swing check valves** ■ **Swing check valve variants**

Swing check valve with lever and weight



Swing check valve with recuperating spring

