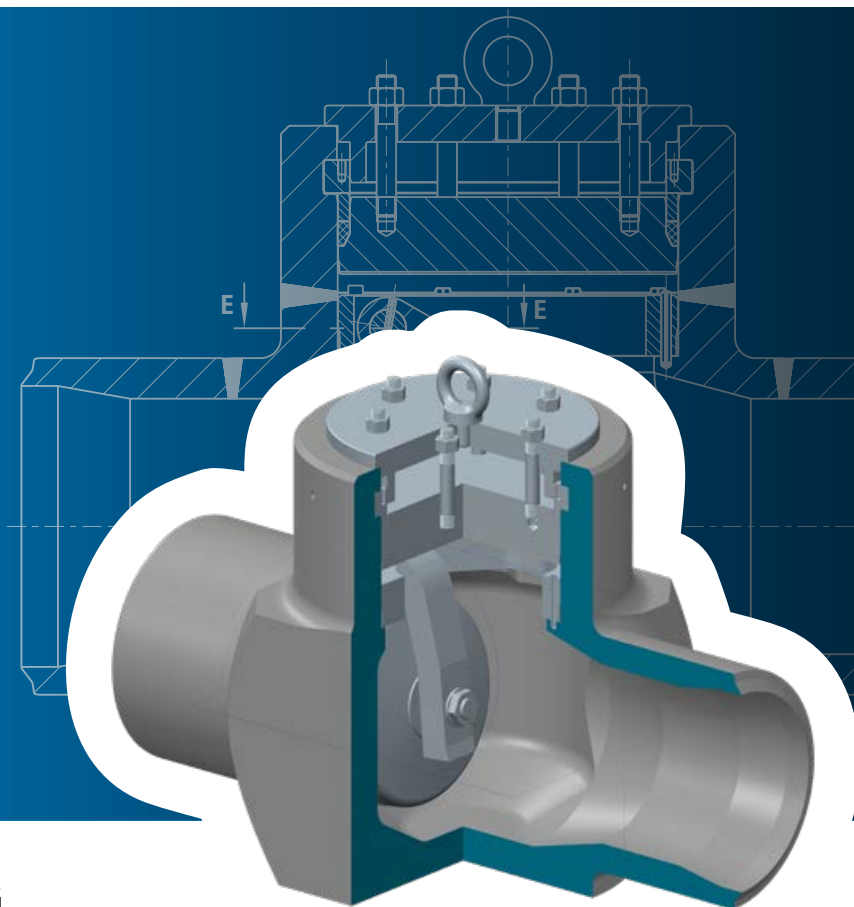


ASME

version
available

HIGH PRESSURE SWING CHECK VALVES

DRI 16-63 640 AB PD 16-63 DN 50-600



Design highlights

- Body and pressure sealing cover forged steel
- Seat generally armoured with Stellite
- Valve lever mounted in separate retaining ring
- Spherical pin on the swing check disc
- Pressure sealing cover

Advantages

- Free of pores and cavities compared to cast steel
- Long-lasting effective impermeability at closure
- The disc's contact pattern can be checked before the pressure sealing bonnet is inserted
- Better mobility and adjustment of the disc to the body seat
- Increasing external impermeability as operating pressure rises

Version

- Forged body
- Swing check valve with internal shaft
- Swing check disc attached to the body insert
- Butt-weld seat ring
- Pressure sealing cover as per VGB guidelines

Operating data

- Operating pressure up to 680 bar
 - Operating temperature up to 650 °C
- Versions with higher specifications available on request.

Materials

- 1.0460
 - 1.4901
 - 1.4903
 - 1.5415
 - 1.6368
 - 1.7335
 - 1.7383
- Other materials available on request.

Flow media

Depending on the choice of materials, the swing check valves can be used for water, steam, gas, oil or other non-aggressive media.

Applications

In chemical, industrial and power plants.

Area of application

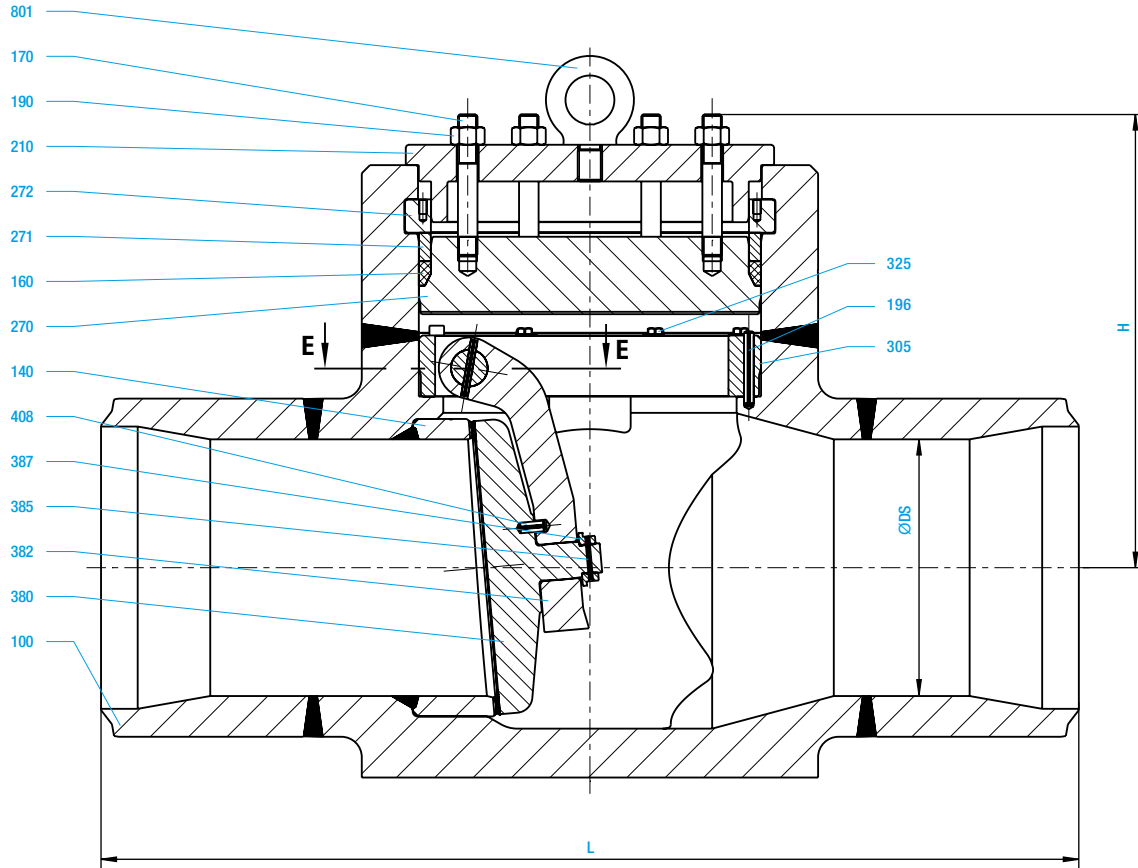
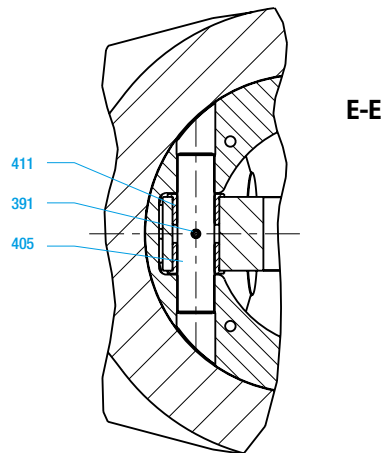
Permissible operating pressure [bar(g)] at calculation temperature [°C] ¹⁾

Material	PD	20	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	160	151	132	118	99	80	76	73	69	65	61	54	45	37																	
	25	250	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58																	
	32	320	320	320	302	264	236	198	160	153	145	138	130	123	109	91	75																	
	40	400	400	400	377	330	295	248	200	191	182	172	163	153	136	113	93																	
1.5415	16	192	192	192	179	165	141	137	132	131	130	129	128	127	126	125	124	109	85	64	51	41												
	25	300	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64												
	32	385	385	385	358	330	283	273	264	262	260	258	256	255	253	251	249	217	170	129	102	81												
	40	480	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	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	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	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	481	471	436	413	389	384	380	375	370	365	363	364	358	356	323	272	215	175	141	110	91	74								
1.7383 ²⁾	16	192	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	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	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	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																									
	25	410	410	410	410	410	410	410	410																									
	32	525	525	525	525	525	525	525	525																									
	40	657	657	657	657	627	657	657	657																									
1.4903 ²⁾	16	272	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	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	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	680	669	613	596	552	507	464	422	382	342	306	271	240	212	184	160	137	120	104
1.4901 ²⁾	16	272	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	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	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	680	680	677	635	592	552	512	475	440	404	369	334	298	265	235	204	176	152	131

1) Operating temperature = calculation temperature minus temperature surcharge according to the standard codes.

2) For temperatures > 570 °C, stem material 1.4980, seat armoured with Stellite, and high-temperature packing.

Design acc. to design conditions, PD 63 available on request.



Materials

Item	Designation	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
	Armoured with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
160	Gasket	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
170	Clamping screw	1.7709	1.7709	1.7709	1.7709	1.7709	1.7709	1.4923
190	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	Cover	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	Support ring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
272	Segment ring	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
305	Retaining ring	1.0460	1.5415	1.7335	1.7383	1.7383	1.4903	1.4903
325	Cylinder head bolt	A4	A4	A4	A4	A4	A4	A4
380	Swing check disc	1.0460	1.5415	1.7335	1.7383	1.6368	1.4903	1.4901
	Armoured with	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
382	Disc lever	1.0460	1.5415	1.7335	1.7383	1.7383	1.4903	1.4903
385	Tension pin	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310	1.4310
387	Round nut	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	Valve shaft	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 sleeve	5.3106	5.3106	5.3106	5.3106	5.3106	0.7660	0.7660
801	Ring bolt	1.0401	1.0401	1.0401	1.0401	1.0401	1.0401	1.0401

Spare parts

Dimensions/mm and weights/kg

DN	ØDS	DRI 16			DRI 25			DRI 32			DRI 40		
		L	H	kg	L	H	kg	L	H	kg	L	H	kg
65-200		Version DRI 26.25						Version DRI 26.40					
250	225							1150	515	1300			
300	270							1350	605	2300			
350	315	1200	540	1400	1550	580	2300	1550	785	4000			
400	360	1350	600	1950	1750	660	3600						
450	405	1500	690	2600	1950	750	5400						