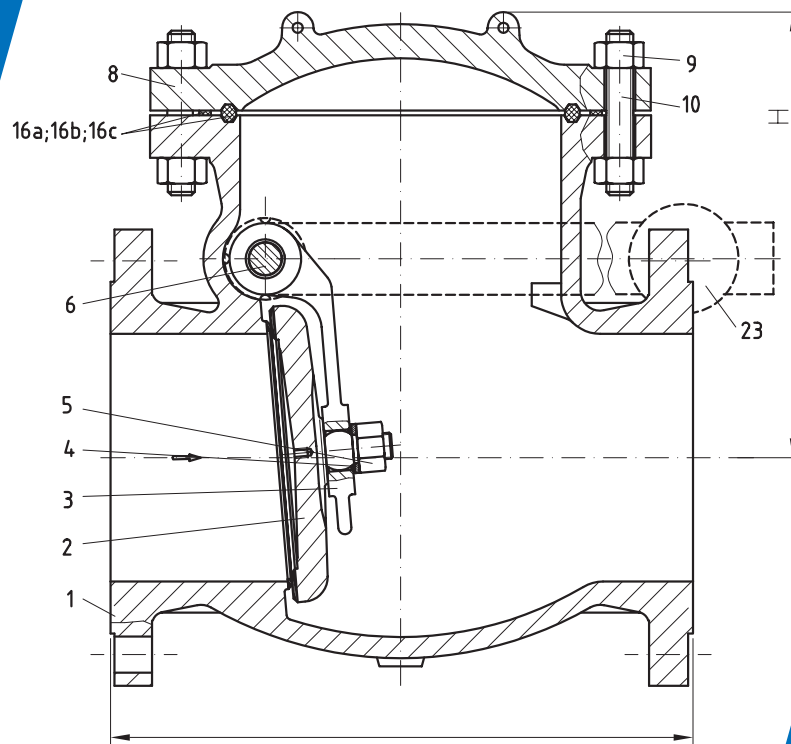
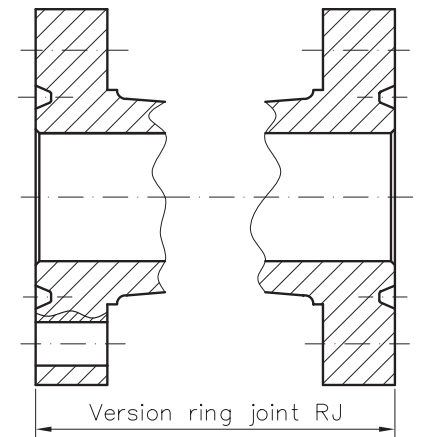
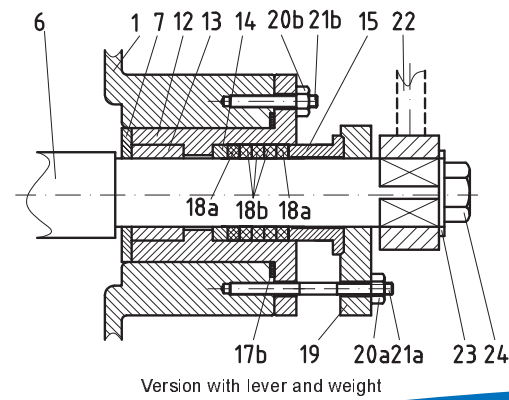
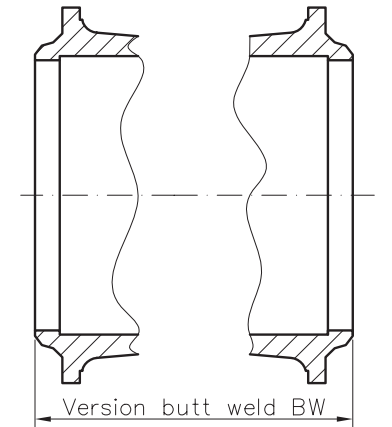
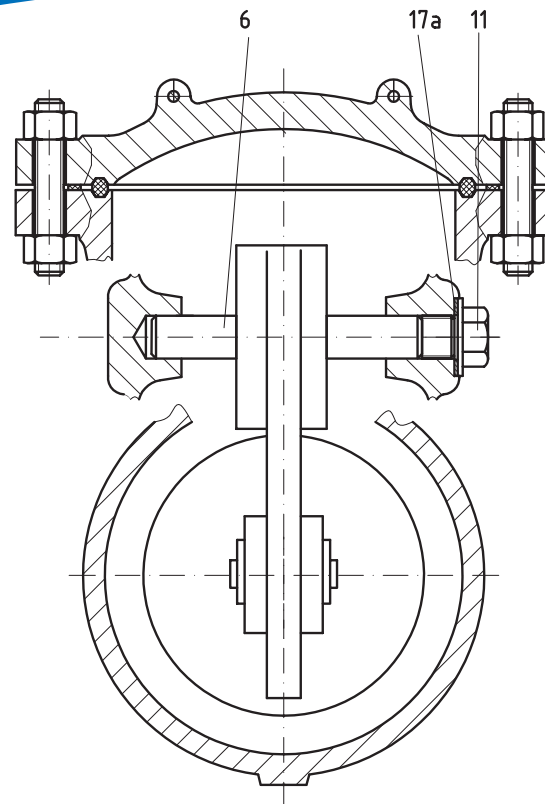
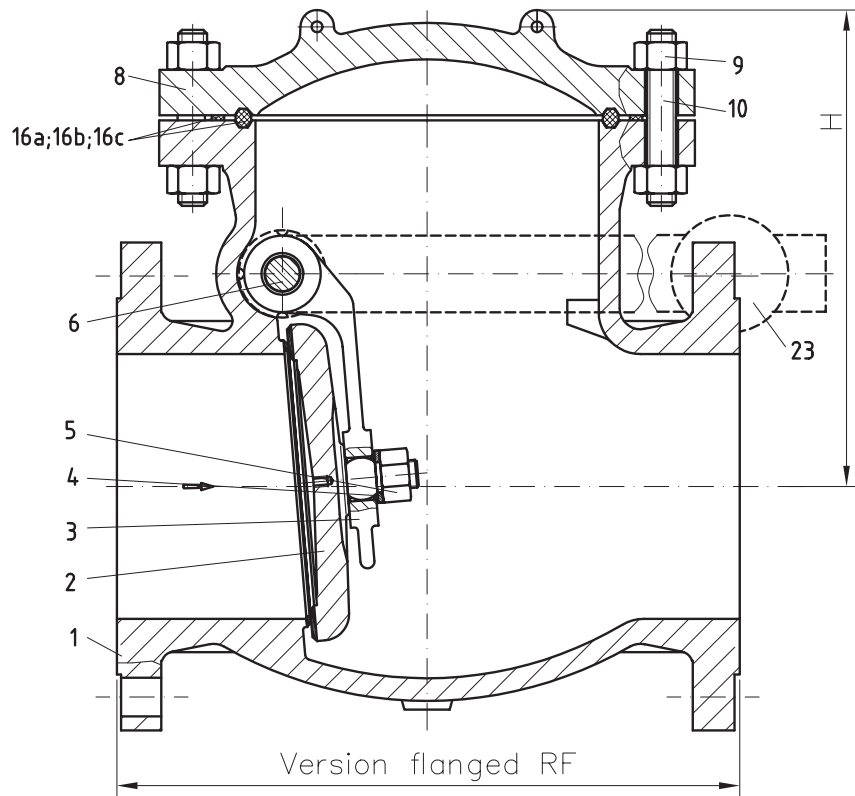


DIN SWING CHECK VALVE



The Science Of Detail



DIN SWING CHECK VALVE

ND		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
NP	RF	180	200	240	260	300	350	400	500	600	700	800	900	1000	1100	1300	1500	1700	1900	2100
	BW	180	200	240	260	300	350	400	500	600	700	800	900	1000	1100	1300	1500	1700	1900	2100
	H	125	135	165	175	190	225	240	370	405	465	505	520	635	670	755	815	945	1115	1295
Weight	RF	9	24	31	36	53	65	93	157	237	375	505	653	842	905	1340	2290	2885	3335	6180
	BW	8	22	25	28	35	58	73	127	207	304	441	594	715	845	1295	2235	2805	3220	6020
ND		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
NP	RF	200	230	290	310	350	400	480	600	730	850	980	1100	1200	1250	1450	1650	1850	2050	2250
	BW	200	230	290	310	350	400	480	600	730	850	980	1100	1200	1250	1450	1650	1850	2050	2250
	H	130	140	170	180	195	230	245	375	410	470	510	525	640	675	760	820	950	1120	1300
Weight	RF	15	28	37	45	72	100	142	232	358	522	666	869	1129	1185	1756	2756	4168	5218	7696
	BW	13	24	30	36	49	85	116	194	317	442	558	737	985	1057	1552	2598	3667	4542	6870
ND		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
NP	RF	200	230	290	310	350	400	480	600	730	850	980	1100	1200	1250	1450	1650	1850	2050	2250
	BW	200	230	290	310	350	400	480	600	730	850	980	1100	1200	1250	1450	1650	1850	2050	2250
	H	130	140	170	180	195	230	245	375	410	470	510	525	640	675	760	820	950	1120	1300
Weight	RF	20	32	43	54	90	136	191	306	479	668	826	1085	1415	1735	2173	3222	5451	7100	9213
	BW	18	26	36	45	62	112	159	260	427	579	675	880	1255	1270	1810	2931	4528	5863	7720
ND		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000
NP	RF	260	300	340	380	430	500	550	650	775	900	1025	1150	1275	1400	1650	1800	2050	2250	2450
	BW	210	250	340	380	430	500	550	650	775	900	1025	1150	1275	1400	1650	1800	2050	2250	2450
	H	150	160	190	200	215	250	265	395	430	490	530	545	660	695	780	840	970	1140	1320
Weight	RF	30	35	49	64	108	171	240	380	605	818	989	1302	1705	1885	2695	3690	6740	8950	10600
	BW	24	29	41	54	75	139	200	325	535	715	785	1015	1520	1475	2060	3320	5385	7180	8780
ND		40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700			
NP	RF	260	300	340	380	430	500	550	650	775	900	1025	1150	1275	1400	1650	1800			
	BW	210	250	340	380	430	500	550	650	775	900	1025	1150	1275	1400	1650	1800			
	H	160	170	200	210	225	260	275	405	440	500	540	555	670	705	790	850			
Weight	RF	32	38	54	71	117	190	276	420	615	905	1095	1435	1885	2092	2980	4080			
	BW	28	32	45	59	84	154	223	362	595	792	875	1133	1690	1640	2290	3490			
ND		40	50	65	80	100	125	150	200	250	300									
NP	RF	260	300	340	380	430	500	550	650	775	900									
	BW	210	250	340	380	430	500	550	650	775	900									
	H	190	200	230	240	255	290	305	435	470	530									
Weight	RF	40	66	110	135	198	287	375	645	1145	1445									
	BW	32	48	85	102	157	225	295	510	940	1170									
ND		40	50	65	80	100	125	150	200	250	300									
NP	RF	300	350	400	450	520	600	700	800	900	1050									
	BW	210	250	400	450	520	600	700	800	900	1050									
	H	230	240	270	280	295	330	345	475	510	570									
Weight	RF	45	69	118	167	295	495	690	1110	1840	2740									
	BW	40	50	87	130	240	395	555	960	1470	2170									

1. USE:

Extraction, transportation and distribution systems in: water, steam, gas and oil industry.

2. SERVICE CONDITIONS:

- 2.1. Ambient temperature: from - 35° C to + 40° C
- 2.2. Service temperature: from -45° C to +600° C

3. TECHNICAL CHARACTERISTICS:

3.1. End-to-end dimensions:

- NP 16 EN 558-1 48 series and DIN 3202
part 1 row 6 for RF
part 2 row 6 for BW
- NP 25 + NP 40 EN 558-1 1 series and DIN 3202
part 1 row 1 for RF
part 2 row 7 for BW
- NP 64 + NP 160 EN 558-1 2 series and DIN 3202
part 1 row 2 for RF
part 2 row 3 for BW
- NP 250 DIN 3202
DIN 3202
part 1 row 3 for RF
part 2 row 4 for BW

3.2. Connection flanges:

- General Standard: DIN 2501 and 2526; DIN 2512; DIN 2513
- Flanges Standard:
 - DIN 2543 for: NP 16
 - DIN 2544 for: NP 25
 - DIN 2545 for: NP 40
 - DIN 2546 for: NP 64
 - DIN 2547 for: NP 100
 - DIN 2548 for: NP 160
 - DIN 2549 for: NP 250

3.3. Weld ends: DIN 3239

3.4. Temperature pressure rating: DIN 2401

3.5. Testing: DIN 3230 and ISO 5208

- 3.6. Operation:
 - manual - handwheel
 - gear
 - electrical - actuator

DIN SWING CHECK VALVE

4. MATERIALS

No.	Name of Part	DIN SPECIFICATION							
		Standard	High Temperature				Low Temperature Service		
		-30°C 400°C	-30°C 450°C	-30°C 530°C	-30°C 550°C	30°C 600°C	-40°C 345°C	-45°C 345°C	
1	Body	GP 240 GH	G 20 Mo 5	G 18 Cr 5-5	G 17 Cr Mo 9-10	GX 15 Cr Mo 5	G 20 Mo 5	G 18 Mo 5	
2	Disc	Forged	CR 25	15 Mo 5	13 Cr Mo 4-4	10 Cr Mo 9.10	12 Cr Mo 19.5	TT StE 36 *	15 Mo 32
		Casting	GP 240 GH	G 20 Mo 5	G 17 Cr Mo 5-5	G 17 Cr Mo 9-10	GX 15 Cr Mo 5	G 20 Mo 5	G 18 Mo 5
3	Hinge	Forged	Ck 25	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9.10	12 Cr Mo 19.5	*	15 Mo 3
		Casting	GP 240 GH	G 20 Mo 5	G 18 Cr 5-5	G 17 Cr Mo 9-10	GX 15 Cr Mo 5	G 20 Mo 5	G 18 Mo 5
4	Spacer	ST 37 – 3N	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9-10	12 Cr Mo 19.5	*	15 Mo 3	
5	Disc Nut	Ck 25	Ck 35	24 Cr Mo 5	24 Cr Mo V-55	24 Cr Mo V-55	24 Cr Mo 5	24 Cr Mo 5	
6	Hinge Pin	X 10 Cr 13	X 10 Cr 13	X 10 Cr Ni Mo Ti 18.9	X 10 Cr Ni Mo Ti 18.9	X 10 Cr Ni Mo Ti 18.9	X 10 Cr Ni Ti 18.9	X 10 Cr Ni Ti 18.9	
7	Ring of Distance	ST 37 – 3N	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9-10	12 Cr Mo 19.5	*	15 Mo 3	
8	Bonnet	Forged	Ck 25	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9-10	12 Cr Mo 19.5	*	15 Mo 3
		Casting	GP 240 GH	G 20 Mo 5	G 18 Cr 5-5	G 17 Cr Mo 9-10	GX 15 Cr Mo 5	G 20 Mo 5	G 18 Mo 5
9	Bonnet Nuts	Ck 45	Ck 45	24 Mo 5	24 Cr Mo V-55	24 Cr Mo V-55	24 Cr Mo 5	24 Cr Mo 5	
10	Bonnet Studs	42 Cr Mo 4	42 Cr Mo 4	24 Cr Mo V-55	21 Cr Mo V-51.1	21 Cr Mo V-55.1	42 Cr Mo 4	42 Cr Mo 4	
11	Threaded Plug	Ck 35	Ck 45	24 Cr Mo 5	24 Cr Mo V-55	24 Cr Mo V-55	24 Cr Mo 5	24 Cr Mo 5	
12	Cover	Ck 25	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9-10	12 Cr Mo 19.5	*	15 Mo 3	
13	Bushing	A439-D2c	A439-D2c	A439-D2c	A439-D2c	A439-D2c	A439-D2c	A439-D2c	
14	Packing Washer	Ck 25	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9-10	12 Cr Mo 19.5	*	15 Mo 3	
15	Gland	Ck 25	15 Mo 3	13 Cr Mo 4-4	10 Cr Mo 9-10	12 Cr Mo 19.5	*	15 Mo 3	

5. BASIC TRIM MATERIALS

No.	Name of Part	
16a	Bonnet Gasket	Plane gasket – graphite with metal filler
16b		Spiral wound gasket – stainless steel with graphite filler
16c		Ring-Joint gasket – carbon steel or stainless steel, as required
17a	Packing Plug & Packing Cover	Plane gasket – graphite with metal filler
17b		Spiral wound gasket – stainless steel with graphite filler
18a	Packing	Graphite with metal filler and corrosion inhibitor
18b		Graphite with corrosion inhibitor
19	Gland Flange	Ck 2 ⁵
20a	Gland Nuts	Ck 45
20b	Cover Nuts	Ck 45
21a	Gland Lug Studs	42 Cr Mo 4
21b	Cover Studs	42 Cr Mo 4A193 ^{B7}
22	Lever with weight	Subassembly (Carbon Steel)
23	Plate	Carbon Steel
24	Cap Screw	Ck 35

TRIM Number	Nominal TRIM	Material Type	Seat Surface	Hinge
			Hardness [HB]	
1	F6	13 Cr	250 min 300 min	200 min-275 max
2	304	18 Cr – 8 Ni	Manufacturer's standard	
5	HF	Co – Cr A	350 min	200 min-275 max
5A		Ni – Cr		
8	F6 / HF	13 Cr	250 min	200 min-275 max
8A		Co – Cr A	350 min	
		13 Cr	250 min	
10	316	18 Cr – 8 Ni - Mo	Manufacturer's standard	
12	316 / HF	18 Cr – 8 Ni - Mo	Manufacturer's standard	
		Co – Cr A	350 min	Manufacturer's standard
12A	316 / HF	18 Cr – 8 Ni - Mo	Manufacturer's standard	
		Ni - Cr	350 min	Manufacturer's standard

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