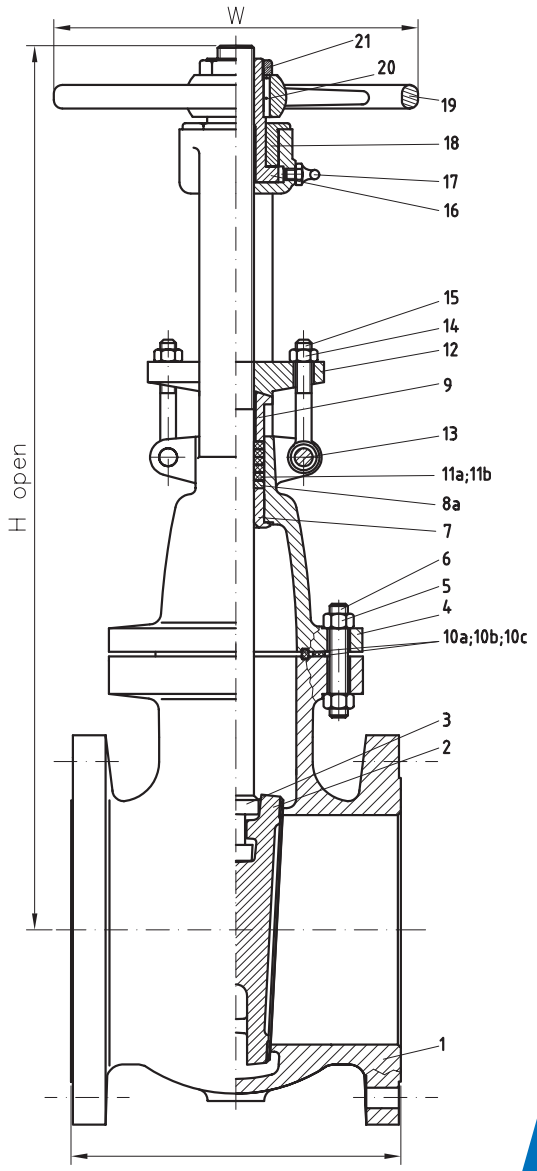
DIN GATE VALVE with rising stem



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GATE VALVE with rising stem

ND			40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400
NP 16	RF		240	250	270	280	300	325	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	1400	1600
	BW		240	250	270	280	300	325	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	1400	1600
	Ho		370	400	460	550	620	730	815	1030	1310	1460	1655	1865	2090	2240	2660	2995	3680	3900	4550	5500	6700
	W		178	229	229	254	254	305	356	356	406	508	559	559	660	660	762	838	838	838	1000	800	800
	Weight	RF	17	28	34	45	55	76	108	155	226	340	485	656	745	970	1350	3335	3880	4400	4880	7845	14580
		BW	16	26	30	41	51	70	101	144	211	318	454	616	690	909	1274	3255	3775	4278	4718	7600	14257
ND			40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	1400
NP 25	RF		240	250	270	280	300	325	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	1400	1600
	BW		240	250	270	280	300	325	350	400	450	500	550	600	650	700	800	900	1000	1100	1200	1400	1600
	Ho		370	400	460	550	620	730	815	1030	1310	1460	1675	1870	2090	2240	2660	2995	3680	3900	4550	5500	6700
	W		178	229	229	254	254	305	356	356	406	508	559	559	660	660	762	838	838	838	1000	800	800
	Weight	RF	18	30	36	47	63	98	119	183	282	432	617	939	1282	1535	2235	3750	4715	6075	7165	11232	15250
		BW	17	28	34	43	58	92	110	166	257	400	570	877	1161	1445	2131	3615	4529	5839	6858	10990	14925
ND			40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	
NP 40	RF		240	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	1550	1750	1950	2150	2215	
	BW		240	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	1550	1750	1950	2150	2215	
	Ho		370	400	500	550	620	730	815	1050	1350	1480	1675	1885	2180	2335	2695	3420	3730	3950	4845	5500	
	W		178	229	229	254	254	356	356	356	508	559	660	660	660	762	838	600	600	600	800	800	
	Weight	RF	20	32	38	49	72	110	130	212	339	525	750	1223	1820	2100	3120	3920	5550	7750	9450	14620	
		BW	18	29	35	45	65	101	118	191	304	475	682	1127	1555	1983	3016	3784	5364	7514	9143	14150	
ND			40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700	800	900	1000	1200	
NP 64	RF		240	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	1550	1750	1950	2150	2215	
	BW		240	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	1550	1750	1950	2150	2215	
	Ho		370	462	500	550	650	755	885	1075	1350	1550	1690	1985	2180	2440	2720	3420	3730	3950	4890	5600	
	W		220	220	220	254	305	356	356	508	559	559	660	660	762	838	838	600	600	600	800	800	
	Weight	RF	24	37	48	62	85	120	185	285	475	660	930	1345	2320	2570	4350	5800	7450	9250	12550	21800	
		BW	21	32	42	55	75	105	163	250	425	591	835	1221	1808	2395	4194	5596	7170	8900	12090	21310	
ND			40	50	65	80	100	125	150	200	250	300	350	400	450	500	600	700					
NP 100	RF		240	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	1550					
	BW		240	250	290	310	350	400	450	550	650	750	850	950	1050	1150	1350	1550					
	Ho		450	480	500	570	675	830	900	1075	1550	1560	1690	2030	2450	2530	2900	3590					
	W		229	229	229	305	356	356	356	509	559	559	660	838	838	838	1000	800					
	Weight	RF	33	42	70	80	133	211	271	513	743	1030	1540	1915	2759	3349	6054	7799					
		BW	29	36	62	71	120	188	241	460	662	908	1375	1729	2449	3169	5845	7527					
ND			40	50	65	80	100	125	150	200	250	300											
NP 160	RF		270	300	360	390	450	525	600	750	950	1050											
	BW		270	300	360	390	450	525	600	750	950	1050											
	Ho		570	590	725	750	750	1010	1050	1300	1560	1900											
	W		305	305	305	356	406	508	508	762	838	1000											
	Weight	RF	77	118	120	165	222	358	499	863	1051	1603											
		BW	72	112	113	155	207	335	466	805	956	1467											
ND			40	50	65	80	100	125	150	200	250	300											
NP 250	RF		310	350	425	470	550	650	750	950	1150	1350											
	BW		310	350	425	470	550	650	750	950	1150	1350											
	Ho		570	590	780	780	790	1060	1100	1300	1560	2100											
	W		305	305	356	356	406	508	660	762	838	1000											
	Weight	RF	87	98	117	195	342	555	770	1321	1937	3266											
		BW	80	90	105	179	315	517	712	1215	1755	3120											

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. Design standard: DIN 3352.
   3.2. End-to-end dimensions:
   NP 16 and NP 25 — EN-558-1 15 series and DIN 3202
   part 1 row F5 for RF
   part 2 row F8 for BW
   NP 40 NP 100 — EN-558-1 26 series and DIN 3202
   part 1 row F7 for RF
   part 2 row S9 for BW
   NP 160 — DIN 3202
   part 1 row F8 for RF
   part 2 row S10 for BW
   NP 250 — DIN 3202
   part 1 row F9 for RF
   part 2 row S9 for BW
   3.3. Connection flanges:
   General Standard: DIN 2501 and DIN 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
   3.4. Weld ends: DIN 3239
   3.5. Temperature pressure rating: DIN 2401.
   3.6. Testing: DIN 3230 and ISO 5208.
   3.7. Operation: manual - handwheel
   - gear
   electrical - actuator

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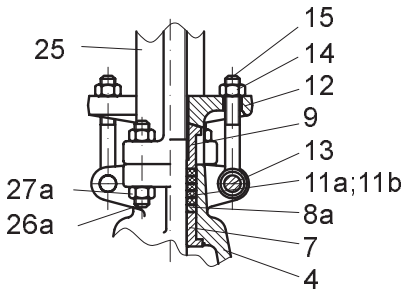
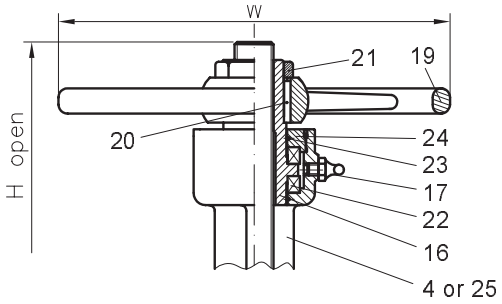
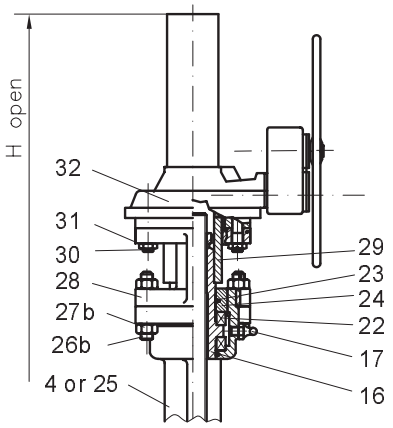


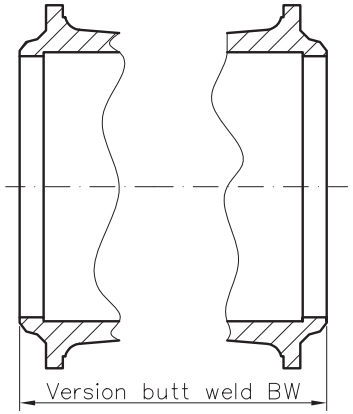
DN 300 ÷ 1400 PN 16 and PN 25
DN 300 ÷ 1200 PN 40 and PN 64
DN 200 ÷ 700 PN 100
DN 200 ÷ 300 PN 160 and PN 250
Version with yoke

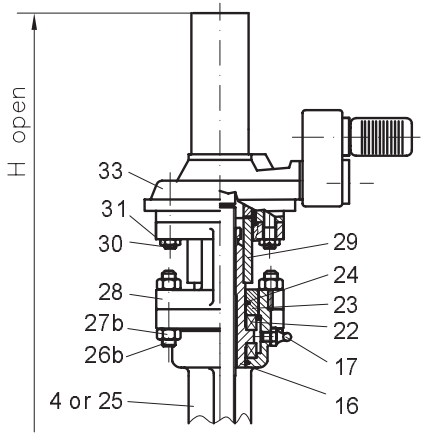


DN 300 ÷ 900 PN 16 and PN 40
DN 150 ÷ 900 PN 64
DN 150 ÷ 700 PN 100
DN 50 ÷ 300 PN 160 and PN 250

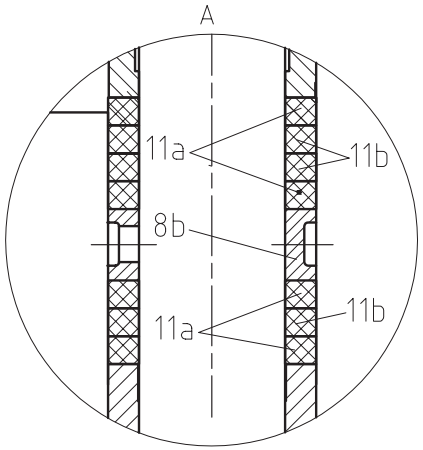


VALVE WITH MANUAL OPERATOR

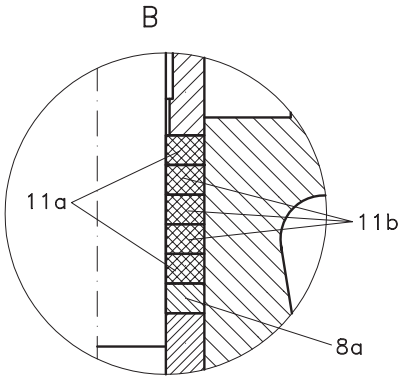




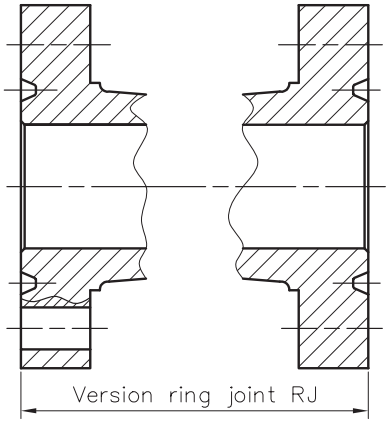
VALVE WITH ELECTRIC ACTUATOR



Version from execution with lantern



Version from execution standard



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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	G17 Cr Mo 5-5	G 17 Cr Mo 9-10	GX 15 Cr Mo 5	G 20 Mo 5	G 18 Mo 5
2	Gate	Forged	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
		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	Stem		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
4	Bonnet		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
5	Bonnet Nuts		Ck 45	Ck 45	24 Cr Mo 5	24 Cr Mo V-55	24 Cr Mo V-55	24 Cr Mo 5	24 Cr Mo 5
6	Bonnet Studs		42 Cr Mo 4	42 Cr Mo 4	24 Cr Mo V 51.1	21 Cr Mo V-51.1	21 Cr Mo V-51.1	42 Cr Mo 4	42 Cr Mo 4
7	Backseat Bushing		Ck 25	15 Mo 3	24 Cr Mo V-55	10 Cr Mo 9.10	12 Cr Mo 19.5	TT StE 36	15 Mo 3
8a	Packing Washer		Ck 25	15 Mo 3	24 Cr Mo V-55	10 Cr Mo 9.10	12 Cr Mo 19.5	TT StE 36	15 Mo 3
8b	Lantern		Ck 25	15 Mo 3	24 Cr Mo V-55	10 Cr Mo 9.10	12 Cr Mo 19.5	TT StE 36	15 Mo 3
9	Gland		Ck 25	15 Mo 3	24 Cr Mo V-55	10 Cr Mo 9.10	12 Cr Mo 19.5	TT StE 36	15 Mo 3

No.	Name of Part	
10a	Bonnet Gasket	Plane gasket – graphite with metal filler class 150
10b		Spiral wound gasket – stainless steel with graphite filler
10c		Ring-Joint gasket – carbon steel or stainless steel, as required
11a	Packing	Graphite with metal filler and corrosion inhibitor
11b		Graphite with corrosion inhibitor
12	Gland Flange	C 22.3 / ST 37 – 3N
13	Gland Lug Bolts	C 35
14	Gland Nuts	Ck 45
15	Gland Bolts	42 Cr Mo 4
16	Stem Bushing	A439-D2C
17	Lubricant Fitting	Commercial
18	Stem Bushing Locknut	Carbon Steel
19	Handwheel	GP 240 GH
20	Handwheel Key	Carbon Steel
21	Handwheel Nuts	Carbon Steel
22	Bearings	Commercial
23	Ring	Viton
24	Locknut	Carbon Steel
25	Yoke	GP 240 GH
26a;26b	Yoke Bolts	42 Cr Mo 4
27a;27b	Yoke Nuts	Ck 45
28	Linking Part	GP 240 GH
29	Actuator Bushing	Carbon Steel
30	Actuator Bolts	Commercial
31	Actuator Nuts	Commercial
32	Manual Actuator	Commercial
33	Electric Motor Actuator	Commercial

5. BASIC TRIM MATERIALS

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

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