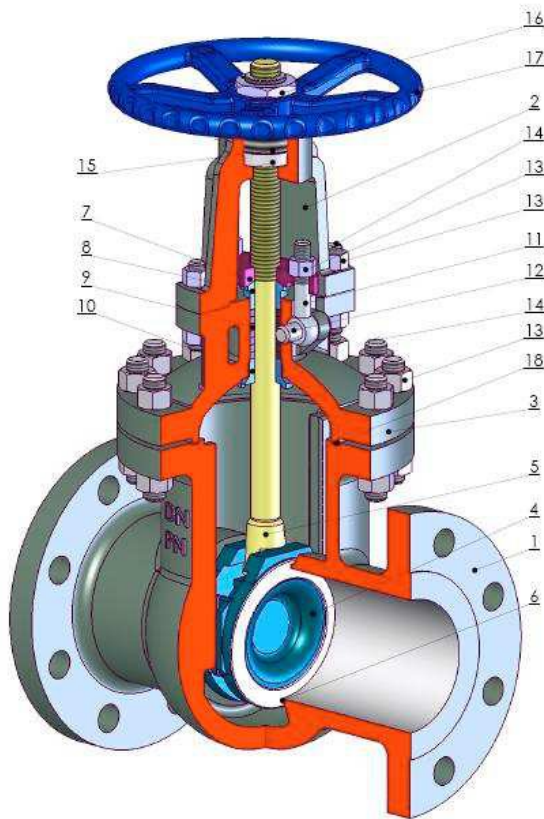


GATE VALVE

PN 25



TYPE	CHS38
Nominal pressure	PN 25
Nominal size	DN 40-600

Design	EN 1984
Flanges	EN 1092-1
Welding end	EN 12627
Face-to-face	EN 558-1
Testing	EN 12266-1
Pressure / Temperature	EN 12516-1

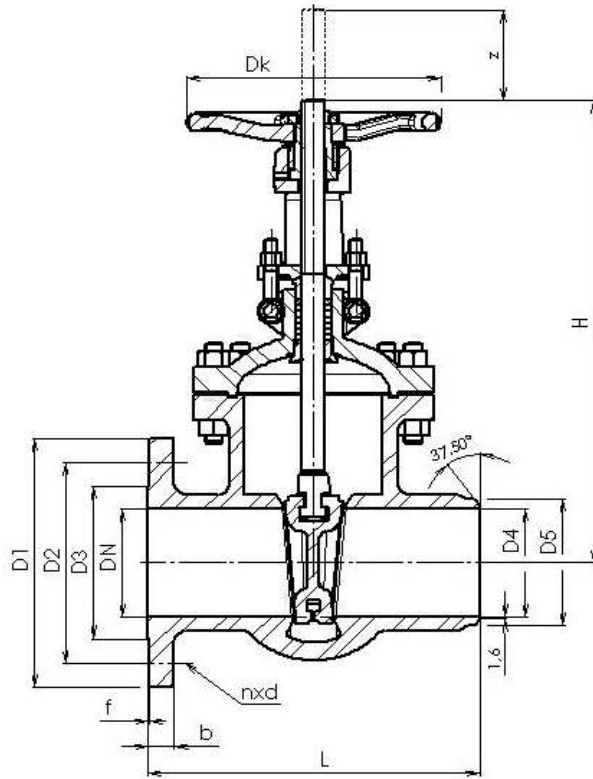
Operation	
1	Handwheel
2	Gearbox
3	Electric actuator

		Trim		
		1	5	8
4	Wedge facing	13 Cr	Stellite 6	13 Cr
6	Seat facing	13Cr	Stellite 6	Stellite 6

Pos	Part	Material			
		-29 - +400 °C	-20 - +593 °C	-47 - +340 °C	-70 - +350 °C
		EN - DIN (ASTM)	EN - DIN (ASTM)	EN - DIN (ASTM)	EN - DIN (ASTM)
1	Body	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
2	Yoke	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
3	Bonnet	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
4	Wedge	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
5	Stem	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	X15Cr13 (A182 F6)	X5CrNi 18.10 (F304)
6	Seat	C 22 (A105)+ weld-on	24CrMoV (F11)+weld-on	X15Cr13 (F6)+weld-on	X5CrNi 18.10 (F304)
7	Packing flange	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
8	Packing bush	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	TstE 355 (LF2)	X5CrNi 18.10 (F304)
9	Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
10	Backseat	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	X15Cr13 (A182 F6)	X5CrNi 18.10 (F304)
11	Eye bolt	42 CrMo4 (A193 B7)	42 CrMo4 (A193 B7)	24 CrMo5 (A182 L7)	42 CrMo4 (A193 B7)
12	Pin	St 37-2 (A105)	24CrMoV 5 5 (A182 F11)	TstE 355 (LF2)	X5CrNi 18.10 (F304)
13	Nut	C 45 (A194 2H)	C 45 (A194 2H)	24 CrMo5 (A194 4)	C 45 (A194 2H)
14	Bolt	42 CrMo4 (A193 B7)	42 CrMo4 (A193 B7)	24 CrMo5 (A182 L7)	42 CrMo4 (A193 B7)
15	Stem nut	ZQA19-4 (ZQA19-4)	ZQA19-4 (ZQA19-4)	ZQA19-4 (ZQA19-4)	ZQA19-4 (ZQA19-4)
16	Wheel nut	C 45 (A194 2H)	C 45 (A194 2H)	C 45 (A194 2H)	C 45 (A194 2H)
17	Hand Wheel	GGG-40 (A47)	A47 (A47)	GGG-40 (A47)	GGG-40 (A47)
18	Sealing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE

For DN 250 and higher - bonnet and yoke separated, stem nut with bearing / DN>250

Other material specification upon request



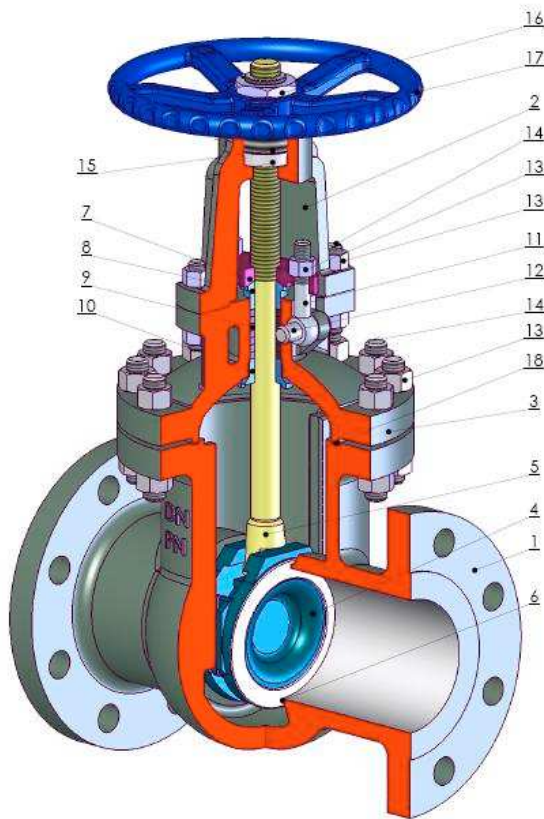
Size	Torque	ISO 5210
	PN 25	PN 25
DN40	14 Nm	F10
DN50	16 Nm	F10
DN65	18 Nm	F10
DN80	26 Nm	F10
DN100	40 Nm	F10/F14
DN125	60 Nm	F10/F14
DN150	88 Nm	F10/F14
DN200	138 Nm	F10/F14
DN250	248 Nm	F14
DN300	312 Nm	F14/F16
DN350	380 Nm	F14/F16
DN400	526 Nm	F14/F16
DN500	863 Nm	F14/F16/F25
DN600	1328 Nm	F16/F25

Main and connecting dimensions

DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
D1	150	165	185	200	235	270	300	360	425	485	555	620	730	845
D2	110	125	145	160	190	220	250	310	370	430	490	550	660	770
D3	88	102	122	138	162	188	218	278	335	395	450	505	615	720
D4	According to pipe dimensions													
D5	50	62	77	91	117	144	172	223	278	329	362	413	516	629
b	18	20	22	24	24	26	28	30	32	34	38	40	58	58
f	2	2	2	2	2	2	2	2	2	2	2	2	2	2
n	4	4	8	8	8	8	8	12	12	16	16	16	20	20
d	18	18	18	18	22	26	26	26	30	30	33	36	36	39
Bolt	M16	M16	M16	M16	M20	M24	M24	M24	M27	M27	M30	M33	M33	M36
z	60	72	85	92	117	150	170	225	280	330	365	420	520	625
Dk	200	200	250	250	280	300	300	350	400	450	500	550	650	800
H	350	358	373	435	500	614	674	818	969	1145	1280	1450	2676	2750
L	240	250	270	280	300	325	350	400	450	500	550	600	700	800
m (kg)	16	23	37	57	72	89	108	287	389	515	768	820	1127	2520
m weld/ .(kg)	12	19	32	52	65	82	98	276	369	484	734	780	1034	2425

GATE VALVE

PN 40



TYPE	CHS38
Nominal pressure	PN 40
Nominal size	DN 40-600

Design	EN 1984
Flanges	EN 1092-1
Welding end	EN 12627
Face-to-face	EN 558-1
Testing	EN 12266-1
Pressure / Temperature	EN 12516-1

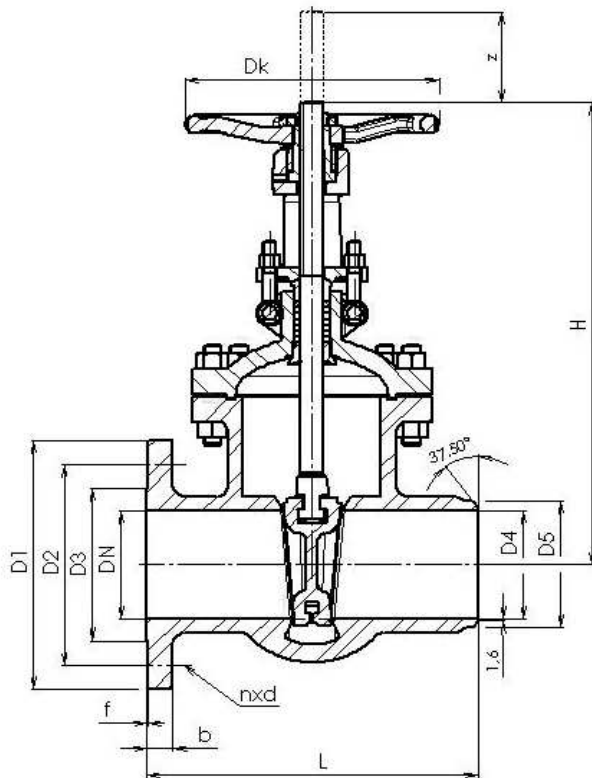
Operation	
1	Handwheel
2	Gearbox
3	Electric actuator

		Trim		
		1	5	8
4	Wedge facing	13 Cr	Stellite 6	13 Cr
6	Seat facing	13Cr	Stellite 6	Stellite 6

Pos	Part	Material			
		-29 - +450 °C	-20 - +593 °C	-47 - +340 °C	-70 - +450 °C
		EN - DIN (ASTM)	EN - DIN (ASTM)	EN - DIN (ASTM)	EN - DIN (ASTM)
1	Body	1.0619 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
2	Yoke	1.0619 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
3	Bonnet	1.0619 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
4	Wedge	1.0619 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
5	Stem	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	X15Cr13 (A182 F6)	X5CrNi 18.10 (F304)
6	Seat	C 22 (A105)+ weld-on	24CrMoV (F11)+weld-on	X15Cr13 (F6)+weld-on	X5CrNi 18.10 (F304)
7	Packing flange	1.0619 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
8	Packing bush	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	TstE 355 (LF2)	X5CrNi 18.10 (F304)
9	Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
10	Backseat	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	X15Cr13 (A182 F6)	X5CrNi 18.10 (F304)
11	Eye bolt	42 CrMo4 (A193 B7)	42 CrMo4 (A193 B7)	24 CrMo5 (A182 L7)	42 CrMo4 (A193 B7)
12	Pin	St 37-2 (A105)	24CrMoV 5 5 (A182 F11)	TstE 355 (LF2)	X5CrNi 18.10 (F304)
13	Nut	C 45 (A194 2H)	C 45 (A194 2H)	24 CrMo5 (A194 4)	C 45 (A194 2H)
14	Bolt	42 CrMo4 (A193 B7)	42 CrMo4 (A193 B7)	24 CrMo5 (A182 L7)	42 CrMo4 (A193 B7)
15	Stem nut	ZQAI9-4 (ZQAI9-4)	ZQAI9-4 (ZQAI9-4)	ZQAI9-4 (ZQAI9-4)	ZQAI9-4 (ZQAI9-4)
16	Wheel nut	C 45 (A194 2H)	C 45 (A194 2H)	C 45 (A194 2H)	C 45 (A194 2H)
17	Hand Wheel	GGG-40 (A47)	A47 (A47)	GGG-40 (A47)	GGG-40 (A47)
18	Sealing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE

For DN 250 and higher - bonnet and yoke separated, stem nut with bearing

Other material specification upon request

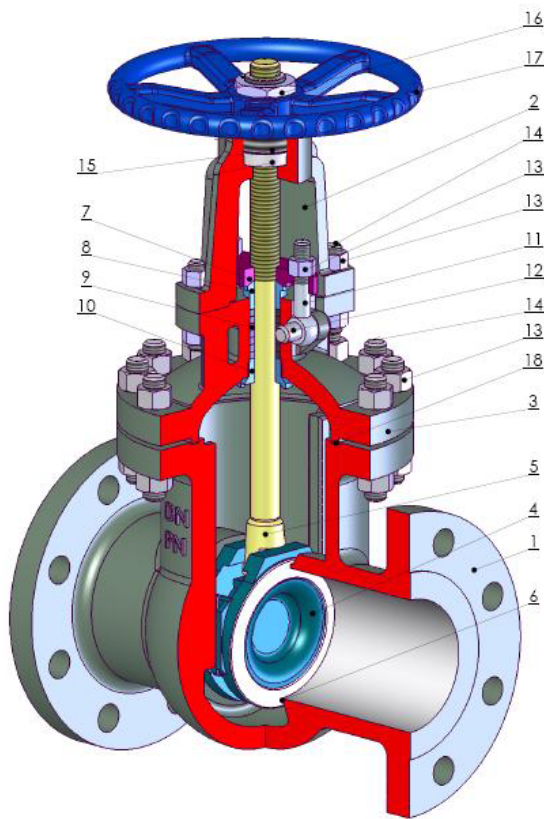


Size	Torque	ISO 5210
	PN 40	PN 40
DN40	20 Nm	F10
DN50	24 Nm	F10
DN65	28 Nm	F10
DN80	40 Nm	F10
DN100	60 Nm	F10
DN125	100 Nm	F10/F14
DN150	165 Nm	F14
DN200	310 Nm	F14
DN250	510 Nm	F14/F16
DN300	670 Nm	F14/F16
DN350	820 Nm	F14/F16/F25
DN400	1080 Nm	F14/F16/F25
DN500	1786 Nm	F16/F25
DN600	2856 Nm	F16/F25/F30

Main and connecting dimensions														
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
D1	150	165	185	200	235	270	300	375	450	515	580	660	755	890
D2	110	125	145	160	190	220	250	320	385	450	510	585	670	795
D3	88	102	122	138	162	188	218	285	345	410	465	535	615	735
D4	According to pipe dimensions													
D5	50	62	77	91	117	144	172	223	278	329	362	413	516	629
b	18	20	22	24	24	26	28	34	38	42	46	50	57	72
f	2	2	2	2	2	2	2	2	2	2	2	2	2	2
n	4	4	8	8	8	8	8	12	12	16	16	16	20	20
d	18	18	18	18	22	26	26	30	33	33	36	39	42	48
Bolt	M16	M16	M16	M16	M20	M24	M24	M27	M30	M30	M33	M36	M39	M45
z	60	72	85	92	117	150	170	225	280	330	365	420	520	625
Dk	200	200	250	250	280	300	300	350	400	450	500	550	650	800
H	350	358	373	435	500	614	674	818	969	1145	1280	1450	2676	2750
L	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
m (kg)	16	23	37	57	72	89	108	287	389	515	768	1125	1448	2600
m weld/(kg)	12	19	32	52	65	82	98	276	369	484	734	1085	1355	2505

GATE VALVE

PN 63



TYPE	CHS38
Nominal pressure	PN 63
Nominal size	DN 40 – 600

Design	EN 1984
Flanges	EN 1092-1
Welding end	EN 12627
Face-to-face	EN 558-1
Testing	EN 12266-1
Pressure/Temperature	EN 12516-1

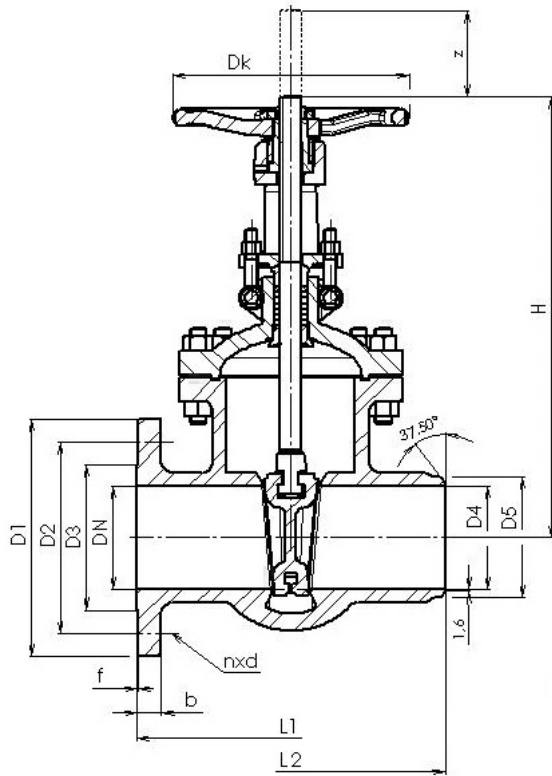
Operation	
1	Handwheel
2	Gearbox
3	Electric actuator

Pos.	Name	Trim		
		1	5	8
4	Wedge facing	13 Cr	Stellite 6	13 Cr
6	Seat facing	13 Cr	Stellite 6	Stellite 6

Pos.	Part	Material			
		-29 ÷ +400 °C	-20 ÷ +573 °C	-47 ÷ +340 °C	-70 ÷ +350 °C
		Wnr. / EN	Wnr. / EN	Wnr. / EN	Wnr. / EN
1	Body	1.0619/GP240GH	1.7357/G17CrMo5-5	1.6220/G20Mn5	1.4408/ GX5CrNiMo19-11-12
2	Yoke	1.0619/GP240GH	1.7357/G17CrMo5-5	1.6220/G20Mn5	1.4408/ GX5CrNiMo19-11-12
3	Bonnet	1.0619/GP240GH	1.7357/G17CrMo5-5	1.6220/G20Mn5	1.4408/ GX5CrNiMo19-11-12
4	Wedge	1.0619/GP240GH +weld-on	1.7357/G17CrMo5-5 +weld-on	1.6220/G20Mn5 +weld-on	1.4408/GX5CrNiMo19-11- 12+weld-on
5	Stem	1.4006/X12Cr13	1.4006/X12Cr13	1.4301/X5CrNi18-10	1.4401/ X5CrNiMo17-12-2
6	Seat	1.0460/P250GH + weld-on	1.7335/13CrMo4-5+weld-on	1.0566/P355NL1 +weld-on	1.4401/ X5CrNiMo17-12-2
7	Packing flange	1.0619/GP240GH	1.7357/G17CrMo5-5	1.6220/G20Mn5	1.4408/ GX5CrNiMo19-11-12
8	Packing bush	1.0619/GP240GH	1.7357/G17CrMo5-5	1.6220/G20Mn5	1.4401/ X5CrNiMo17-12-2
9	Packing	Graphite	Graphite	Graphite	Graphite
10	Backseat	1.4006/X12Cr13	1.4006/X12Cr13	1.4301/X5CrNi18-10	1.4401/ X5CrNiMo17-12-2
11	Eye bolt	42 CrMo4/A193 B7	42 CrMo4/A193 B7	24 CrMo5/A182 L7	42 CrMo4/A193 B7
12	Pin	1.0460/P250GH	24CrMoV 5 5/A182 F11	1.0566/PN355NL1	1.4301/X5CrNi18-10
13	Nut	C 45/A194 2H	C 45/A194 2H	24 CrMo5/A194 4	1.4301/A194 8
14	Bolt	42 CrMo4/A193 B7	42 CrMo4/A193 B7	24 CrMo5/A182 L7	1.4301/A193 B8
15	Stem nut	ZQA19-4/	ZQA19-4	ZQA19-4	ZQA19-4
16	Wheel nut	C 45/A194 2H	C 45/A194 2H	C 45/A194 2H	1.4301/A194 2H
17	Hand Wheel	GGG-40/A47	GGG-40/A47	GGG-40/A47	GGG-40/A47
18	Sealing	Graphite	Graphite	Graphite	Graphite

For DN 150 and higher - bonnet and yoke separated, stem nut with bearing /DN > 150

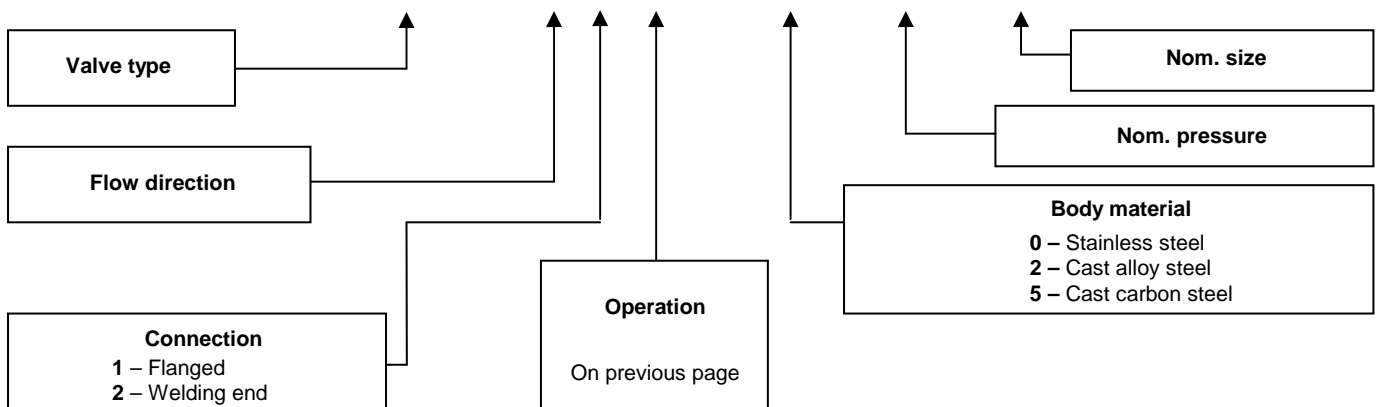
Other material specification upon request



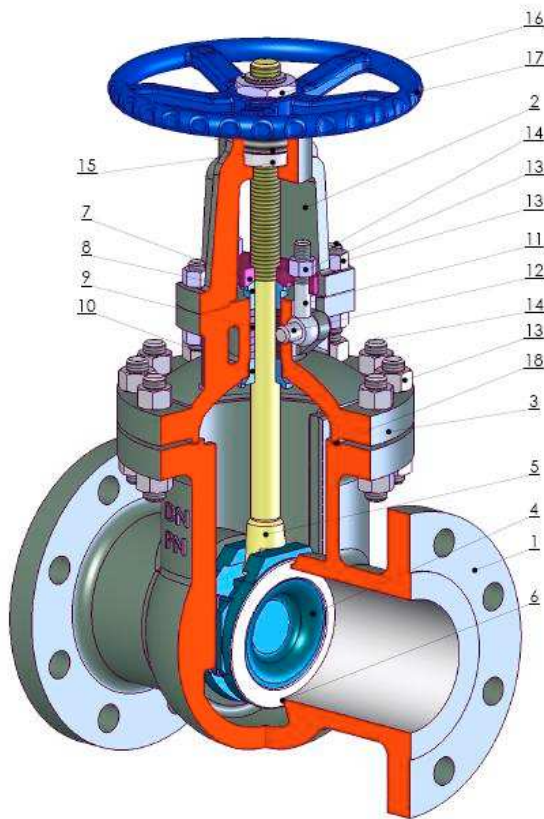
Size	Torque	ISO 5210
DN	PN 63	PN 63
40	30 Nm	F10
50	38 Nm	F10
65	46 Nm	F10
80	60 Nm	F10
100	110 Nm	F10/F14
125	210 Nm	F10/F14
150	360 Nm	F14/F16
200	530 Nm	F14/F16
250	767 Nm	F14/F16/F25
300	936 Nm	F14/F16/F25
350	1512 Nm	F16/F25
400	2117 Nm	F16/F25
500	3129 Nm	F25/F30
600	4479 Nm	F30

Main and connection dimensions PN 63														
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
D1	170	180	205	215	250	295	345	415	470	530	600	670	800	930
D2	125	135	160	170	200	240	280	345	400	460	525	585	705	820
D3	88	102	122	138	162	188	218	285	345	410	465	535	615	735
D4	According to pipe dimensions													
D5	According to pipe dimensions													
b	28	26	26	28	30	34	36	42	46	52	56	60	68	76
f	3	3	3	3	3	3	3	3	3	4	4	4	4	5
n	4	4	8	8	8	8	8	12	12	16	16	16	20	20
d	22	22	22	22	26	30	33	36	36	36	39	42	48	56
Bolt	M20	M20	M20	M20	M24	M27	M30	M33	M33	M33	M36	M39	M45	M52
Dk	280	280	280	320	360	400	450	560	640	640	720	720	800	1000
H+z	420	450	475	540	680	780	890	1100	1330	1540	1830	2035	2600	3100
L1	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
L2	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
m (kg)	20	27	38	49	66	110	145	320	433	687	917	1375	1606	2900
m weld / (kg)	16	21	30	38	56	93	123	272	368	584	780	1170	1365	1720

CHS38 1 1 1 0 63 100



GATE VALVE PN 100



TYPE	CHS38
Nominal pressure	PN 100
Nominal size	DN 40-600

Design	EN 1984
Flanges	EN 1092-1
Welding end	EN 12627
Face-to-face	EN 558-1
Testing	EN 12266-1
Pressure / Temperature	EN 12516-1

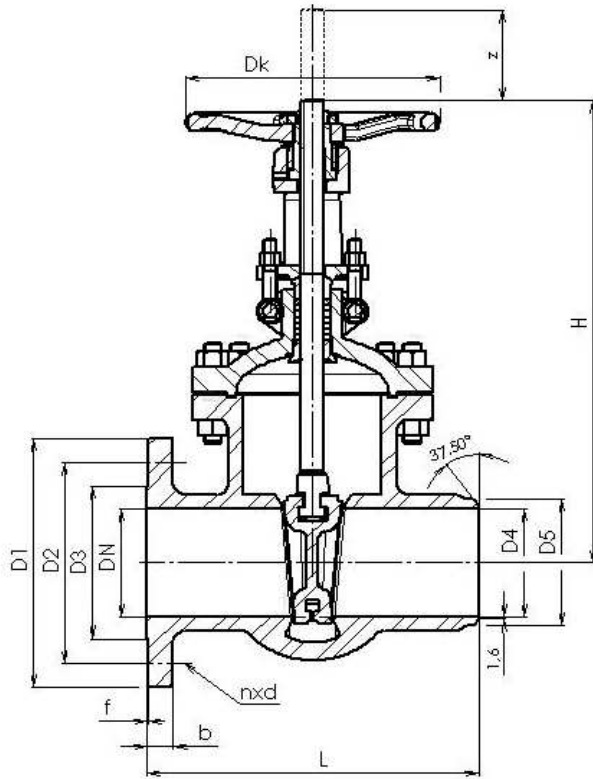
Operation	
1	Handwheel
2	Gearbox
3	Electric actuator

		Trim		
		1	5	8
4	Wedge facing	13 Cr	Stellite 6	13 Cr
6	Seat facing	13Cr	Stellite 6	Stellite 6

Pos	Part	Material			
		-29 - +400 °C	-20 - +593 °C	-47 - +340 °C	-70 - +350 °C
		EN - DIN (ASTM)	EN - DIN (ASTM)	EN - DIN (ASTM)	EN - DIN (ASTM)
1	Body	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
2	Yoke	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
3	Bonnet	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
4	Wedge	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
5	Stem	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	X15Cr13 (A182 F6)	X5CrNi 18.10 (F304)
6	Seat	C 22 (A105)+ weld-on	24CrMoV (F11)+weld-on	X15Cr13 (F6)+weld-on	X5CrNi 18.10 (F304)
7	Packing flange	GS-C25 (WCB)	GS-17CrMo5-5 (WC6)	GS-20Mn5 (LCB)	GX5CrNi 18-9 (CF8)
8	Packing bush	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	TstE 355 (LF2)	X5CrNi 18.10 (F304)
9	Packing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE
10	Backseat	X15Cr13 (A182 F6)	24CrMoV 5 5 (A182 F11)	X15Cr13 (A182 F6)	X5CrNi 18.10 (F304)
11	Eye bolt	42 CrMo4 (A193 B7)	42 CrMo4 (A193 B7)	24 CrMo5 (A182 L7)	42 CrMo4 (A193 B7)
12	Pin	St 37-2 (A105)	24CrMoV 5 5 (A182 F11)	TstE 355 (LF2)	X5CrNi 18.10 (F304)
13	Nut	C 45 (A194 2H)	C 45 (A194 2H)	24 CrMo5 (A194 4)	C 45 (A194 2H)
14	Bolt	42 CrMo4 (A193 B7)	42 CrMo4 (A193 B7)	24 CrMo5 (A182 L7)	42 CrMo4 (A193 B7)
15	Stem nut	ZQAI9-4 (ZQAI9-4)	ZQAI9-4 (ZQAI9-4)	ZQAI9-4 (ZQAI9-4)	ZQAI9-4 (ZQAI9-4)
16	Wheel nut	C 45 (A194 2H)	C 45 (A194 2H)	C 45 (A194 2H)	C 45 (A194 2H)
17	Hand Wheel	GGG-40 (A47)	A47 (A47)	GGG-40 (A47)	GGG-40 (A47)
18	Sealing	GRAPHITE	GRAPHITE	GRAPHITE	GRAPHITE

For DN 250 and higher - bonnet and yoke separated, stem nut with bearing / DN>250

Other material specification upon request



Size	Torque	ISO 5210
	PN 100	PN 100
DN40	30 Nm	F10
DN50	42 Nm	F10
DN65	53 Nm	F10
DN80	75 Nm	F10
DN100	127 Nm	F10/F14
DN125	326 Nm	F10/F14
DN150	477 Nm	F14/F16
DN200	653 Nm	F14/F16
DN250	1038 Nm	F14/F16/F25
DN300	1611 Nm	F14/F16/F25
DN350	2022 Nm	F16/F25
DN400	3000 Nm	F16/F25
DN500	4003 Nm	F25/F30
DN600	7000 Nm	F30

Main and connecting dimensions														
DN	40	50	65	80	100	125	150	200	250	300	350	400	500	600
D1	170	195	220	230	265	315	355	430	505	585	655	715	870	990
D2	125	145	170	180	210	250	290	360	430	500	560	620	760	875
D3	88	102	122	138	162	188	218	285	345	410	465	535	615	735
D5	According to pipe dimensions													
D5	50	62	77	91	117	144	172	223	278	329	362	413	516	629
b	26	28	30	32	36	40	44	52	60	68	74	78	94	104
f	2	2	2	2	2	2	2	2	2	2	2	2	2	2
n	4	4	8	8	8	8	12	12	12	16	16	16	20	20
d	22	26	26	26	30	33	33	36	39	42	48	48	56	62
Bolt	M20	M24	M24	M24	M27	M30	M30	M33	M36	M39	M45	M45	M52	M52
z	60	72	85	92	117	150	170	225	275	330	375	435	540	630
Dk	200	200	250	250	300	300	500	500	630	630	710	710	800	900
H	355	370	440	465	540	635	805	865	1060	1184	1400	1545	1870	2180
L	240	250	290	310	350	400	450	550	650	750	850	950	1150	1350
m (kg)	30	42	59	61	105	163	275	434	689	1000	1153	1435	2900	4010
m weld/(kg)	26	38	54	56	97	156	265	423	669	969	1119	1395	2807	3915