

Gate valve S38

PN 10, 16, 25, DN 40 – 500, T_{max}: 540°C

Shut off gate valve with outside screw, rising stem, non-rising hand wheel, with bolted bonnet, with flanges or with butt weld ends, flexible or split wedge, non-asbestos gland packing and gasket
Meets the requirements of **PED 97/23/EC**, DIN 3352 part 7, EN 1984



- **LONG SERVICE LIFE** - SEATS ARE HARD FACED WITH WEAR RESISTANT AND CORROSION PROOF METAL OR STELLITE EXCEPT OF STAINLESS STEEL
- **LEAK PROOF DESIGN** – SEATS ARE INTEGRAL WITH THE BODY
- **CUSTOMER RELATED SOLUTION** – DESIGN VARIANTS AND MATERIALS COMBINATION ON REQUEST, DIFFERENT CONNECTION TYPES
- **REDUCED ENCLOSURE** – NON-RISING HAND WHEEL
- **EASY OPERATION** – TREADED BUSH WITH BEARINGS

BASIC PARAMETERS

TYPE	S38 – gate valve						
PN	10, 16, 25						
DN	40 - 500						
APPLICATION	Water, steam, gas, oil, crude oil products, non-aggressive and aggressive substances						
OPERATING TEMPERATURE [°C]	-10 ÷ 400	-10 ÷ 540	-50 ÷ 300 3)	-105 ÷ 500 1),2)	-30 ÷ 300	-60 ÷ 450	-10 ÷ 500
BODY MATERIALS	GP240GH (1.0619)	G17CrMo5-5 (1.7357)	GX5CrNiMo 19-11-2 (1.4408)	GX5CrNiNb 19-11-2 (1.4552)	G21Mn5 (1.1138)	42 2707.6, .9 Alloy steel	G20Mo5 (1.5419)
OTHER MATERIALS ON REQUEST	1.7363, 1.4308 and other acc. to ČSN, DIN, EN						
CONNECTION	Flanges, Butt weld ends acc. to DIN, EN, ČSN						
FACE-TO-FACE DIMENSIONS	Flanges EN 558/15 (previously DIN 3202-1/F5) Butt weld ends EN 12 982/15 (previously DIN 3202-2/S8)						
OPERATION	Hand wheel, electric actuator, spur gear drive, bevel gear drive , spur gear drive with actuator, chain wheel and other						
DESIGN	Shut off gate valve with outside screw <ul style="list-style-type: none"> ▪ rising stem ▪ non-rising hand wheel ▪ with bolted bonnet ▪ drain stud or with butt weld ends 			<ul style="list-style-type: none"> ▪ with flanges or with butt weld ends ▪ flexible or split wedge ▪ non-asbestos gland packing and gasket ▪ Testing acc. EN 12266-1 			
BASIC DESIGN OPTIONS	<ul style="list-style-type: none"> ▪ Other designs of flanged and butt-weld ends on your request ▪ Electric actuator ▪ Chain wheel ▪ spur gear drive or bevel gear drive, spur gear drive with actuator ▪ Position indicator ▪ Position switch ▪ Gland packing and gasket acc. to TA-LUFT Type S38.2 ▪ Stem protection tube 			<ul style="list-style-type: none"> ▪ By-pass with shut off valve ▪ PTFE gland packing and gasket ▪ PTFE in body seat ▪ Gland packing with leakage suction ▪ Free from oil and grease ▪ Other testing requirements on request ▪ Delivery according to AD 2000 Merkblatt A4, TRD 110, TRD 201, GOST-R and other standards as required 			

We reserve the right to make design changes without any previous announcement. We reserve the right to change the technical details and to use materials of equivalent and higher quality.

- 1) For use at temperatures lower than -50 °C the notched bar impact test at expected working temperature must be done.
- 2) According to norm SDO for temperature -105 up to +400 °C
- 3) Use on low temperature up to -196 °C on your request.

PRESSURE-TEMPERATURE-RATINGS

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-10	50	100	150	200	250	300	350	400	450	475	500	510	520	530	540
GP240GH (1.0619)	10	10	10	9,3	8,7	7,8	7,1	6,4	6,0	5,8	-	-	-	-	-	-	-
	16	16	16	14,9	13,9	12,4	11,4	10,3	9,6	9,2	-	-	-	-	-	-	-
	25	25	25	23,3	21,7	19,4	17,8	16,1	15,0	14,4	-	-	-	-	-	-	-
G17CrMo5-5 (1.7357)	10	10	10	10	10	10	9,8	9,1	8,4	8,0	7,6	7,4	6,1	5,1	4,2	3,4	2,8
	16	16	16	16	16	16	15,6	14,6	13,5	12,8	12,1	11,9	9,7	8,2	6,7	5,5	4,5
	25	25	25	25	25	25	24,4	22,8	21,1	20,0	18,9	18,7	15,2	12,9	10,4	8,7	7,1

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]																
		-105	-50	-10	50	100	150	200	250	300	350	400	450	460	470	480	490	500
GX5CrNiMo19-11-2 (1.4408)	10	-	10	10	10	7,8	7,0	6,4	6,0	5,6	-	-	-	-	-	-	-	
	16	-	16	16	16	14,9	13,5	12,4	11,7	11	-	-	-	-	-	-	-	
	25	-	25	25	25	23,3	21,1	19,4	18,3	17,2	-	-	-	-	-	-	-	
GX5CrNiNb19-11 (1.4552)	16	16	16	16	16	13,8	12,7	11,6	11,0	10,4	10,0	9,6	9,3	9,1	9,0	8,9	8,8	
	25	25	25	25	25	21,5	19,8	18,1	17,2	16,3	15,6	15,0	14,5	14,3	14,1	14,0	13,9	13,8

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-50	-30	-10	50	100	150	200	250	300	350	400	450	475	500	510	520
G21Mn5 (1.1138)	10	-	10	10	10	9,3	8,8	8	7,4	6,8	-	-	-	-	-	-	-
	16	-	16	16	16	14,8	14	12,8	11,8	10,8	-	-	-	-	-	-	-
	25	-	25	25	25	23	21	19,2	18,2	17,2	-	-	-	-	-	-	-

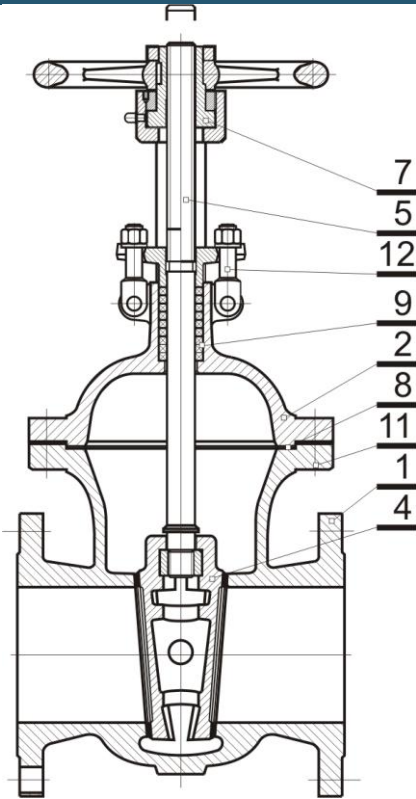
Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-60	-30	-10	50	100	150	200	250	300	350	400	450	475	500	510	520
422707.6, .9	16	16	16	16	16	16	10,1	9,6	9,3	9,1	7,7	7,5	7,2	-	-	-	-
	25	25	25	25	25	25	15,8	15	14,5	14,2	12,1	11,7	11,3	-	-	-	-

Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-10	20	50	100	150	200	250	300	350	400	450	460	470	480	490	500
G20Mo5 (1.5419)	16	16	16	16	16	16	16	14,8	13,7	12,9	11,9	11,0	10,2	9,4	8,6	7,8	7,0
	25	25	25	25	25	25	24,0	22,0	20,0	19,2	18,6	17,2	16,0	14,7	13,5	12,3	11,0

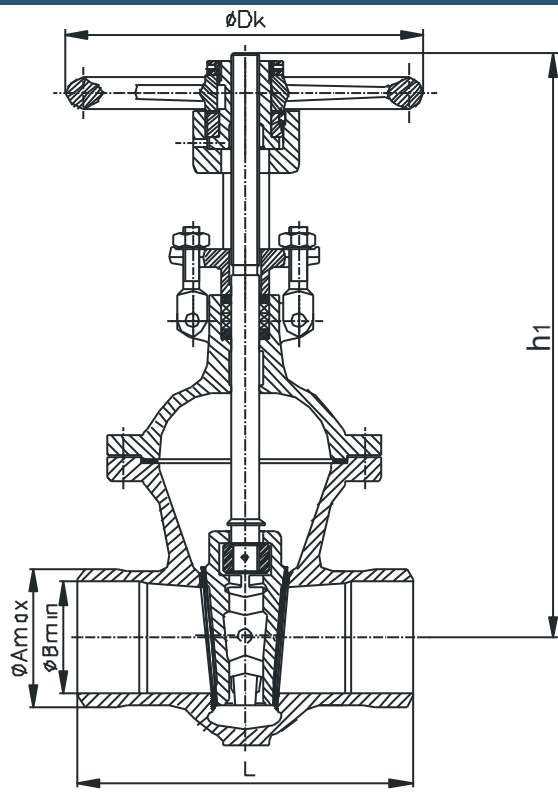
Material	PN	Admissible operating pressure PS [bar] at operating temperature TS [°C]															
		-105	-50	-10	50	100	150	200	250	300	350	400	450	460	470	480	490
GX5CrNi19-10 (1.4308)	10	-	10	10	9,6	7,5	6,7	6,1	5,8	5,4	-	-	-	-	-	-	-
	16	-	16	16	15,4	14,3	13,0	11,9	11,0	10,2	-	-	-	-	-	-	-
	25	-	25	25	24,0	22,4	20,3	18,6	17,2	16,0	-	-	-	-	-	-	-

MATERIALS:

Flanged



Weld ends



Pos.	Part	Material			
1	Body	GP240GH (1.0619)	G17CrMo5-5 (1.7357)	GX5CrNiMo19-11-2 (1.4408)	GX5CrNiNb19-11 (1.4552)
	Sealing surface - body	13Cr	Stellite 6	-	-
2	Bonnet	GP240GH (1.0619)	G17CrMo5-5 (1.7357)	GX5CrNiMo19-11-2 (1.4408)	GX5CrNiNb19-11 (1.4552)
4	Wedge	GP240GH (1.0619)	G17CrMo5-5 (1.7357)	GX5CrNiMo19-11-2 (1.4408)	GX5CrNiNb19-11 (1.4552)
	Sealing surface - wedge	13Cr	Stellite 6	X10CrNiMn18-8-6	X10CrNiMn18-8-6
5	Stem	X20Cr13 (1.4021)	X22CrMoV12-1 (1.4923)	X6CrNiMoTi17-12-2 (1.4571)	X6CrNiMoTi17-12-2 (1.4571)
7	Yoke nut	9S20K (1.0711)			
8	Gasket	Graphite – RGS3			
9	Stuffing-box packing	Graphite			
11	Bolt/Nut	25CrMo4/C35E+QT	21CrMoV5-7/25CrMo4	A2-70/A2-70	A2-70/A2-70
12	Bolt/Nut (Gland)	25CrMo4/C35E+QT	25CrMo4/C35E+QT	A4-80/A4-80	A4-80/A4-80

Notice to material 1.7357: Sealing surface with Stellite only up to DN350

Gate valve S38, PN10 - 25

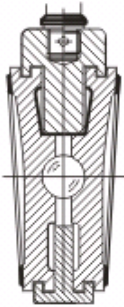
catalogue page 213
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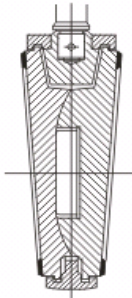
Pos.	Part	Material		
1	Body	G21Mn5 (1.1138)	42 2707.6, 42 2707.9	G20Mo5 (1.5419)
	Sealing surface - body	Cr13	Cr13	13Cr
2	Bonnet	G21Mn5 (1.1138)	42 2707.6, 42 2707.9	G20Mo5 (1.5419)
4	Wedge	G21Mn5 (1.1138)	42 2707.6, 42 2707.9	G20Mo5 (1.5419)
	Sealing surface - wedge	13Cr		
5	Stem	X20Cr13 (1.4021)	X6CrNiMoTi17-12-2 (1.4571)	X22CrMoV12-1 (1.4923)
7	Yoke nut	9S20K (1.0711)		
8	Gasket	Graphite – RGS3		
9	Stuffing-box packing	Graphite		
11	Bolt/Nut	A2-70/A2-70	A2-70/A2-70	21CrMoV5-7/25CrMo4
12	Bolt/Nut (Gland)	A4-80/A4-80	A4-80/A4-80	25CrMo4/C35E+QT

DESIGN VARIANTS:

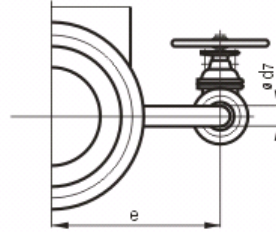
Split wedge DN
40...300



Split wedge DN
350-400



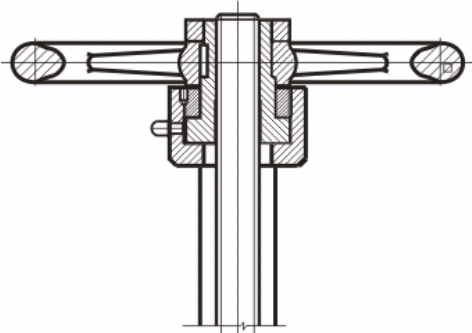
By - pass



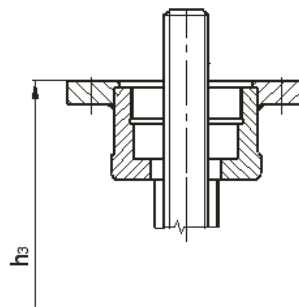
PTFE body seat ring



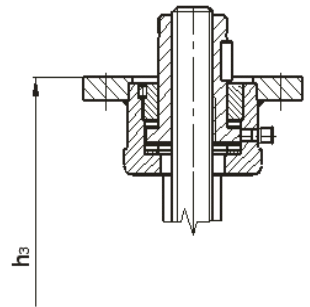
DN 40...150



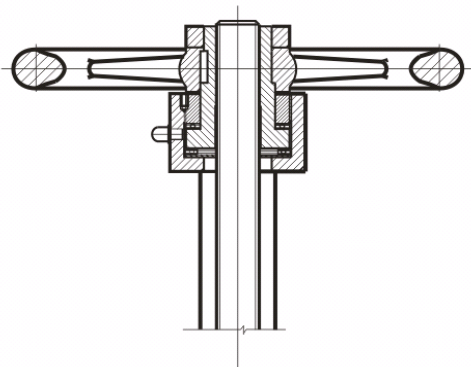
E-actuator, Form A



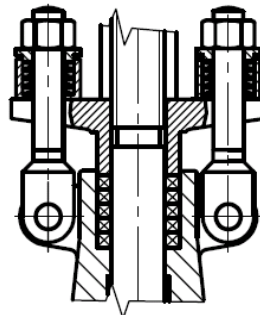
E-actuator, Form B



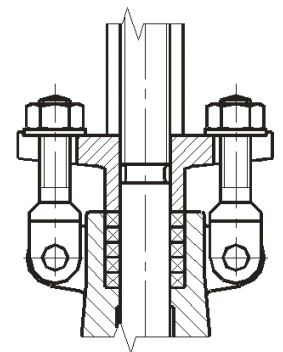
DN200...



TA – Luft design
spring loaded packing



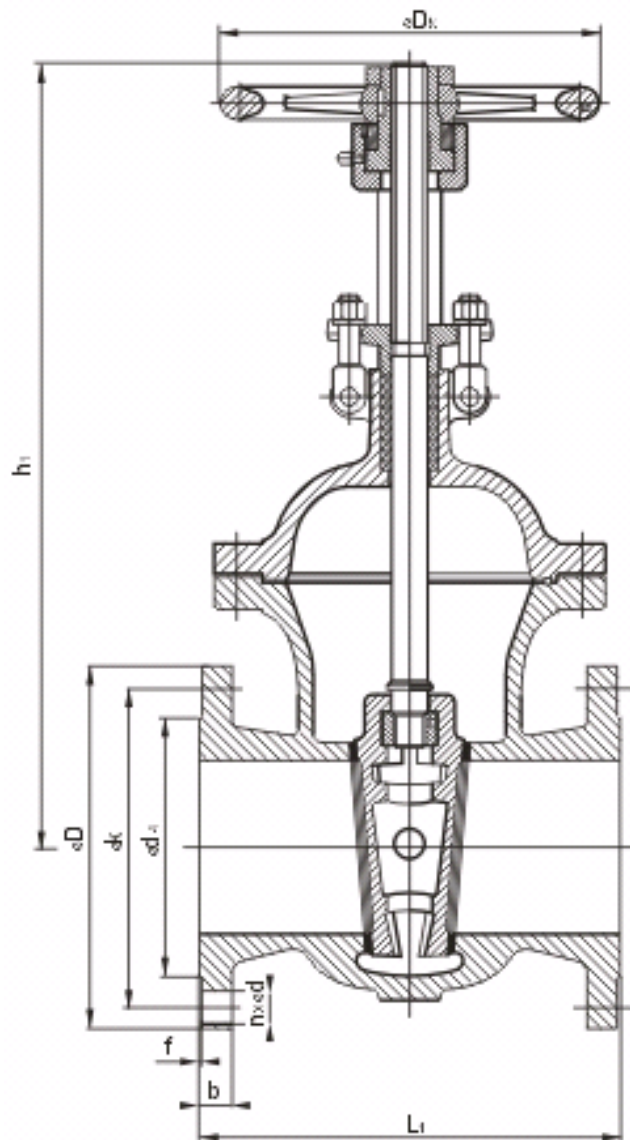
TA – Luft design – without
spring loaded packing



VALVE DIMENSIONS:

Flanged

- Face-to-face dimensions:** EN 558 – Line 15 (previously DIN 3202/1984 -Part 1 – Line F5)
- Flanges:** EN 1092-1 (DIN2501/1972)
- Raised face:** EN 1092-1 (previously DIN 2526/1975 – Form C)
- Design variants on request:** ČSN 13 1160 and other
- Other flanges design variants on your request.**





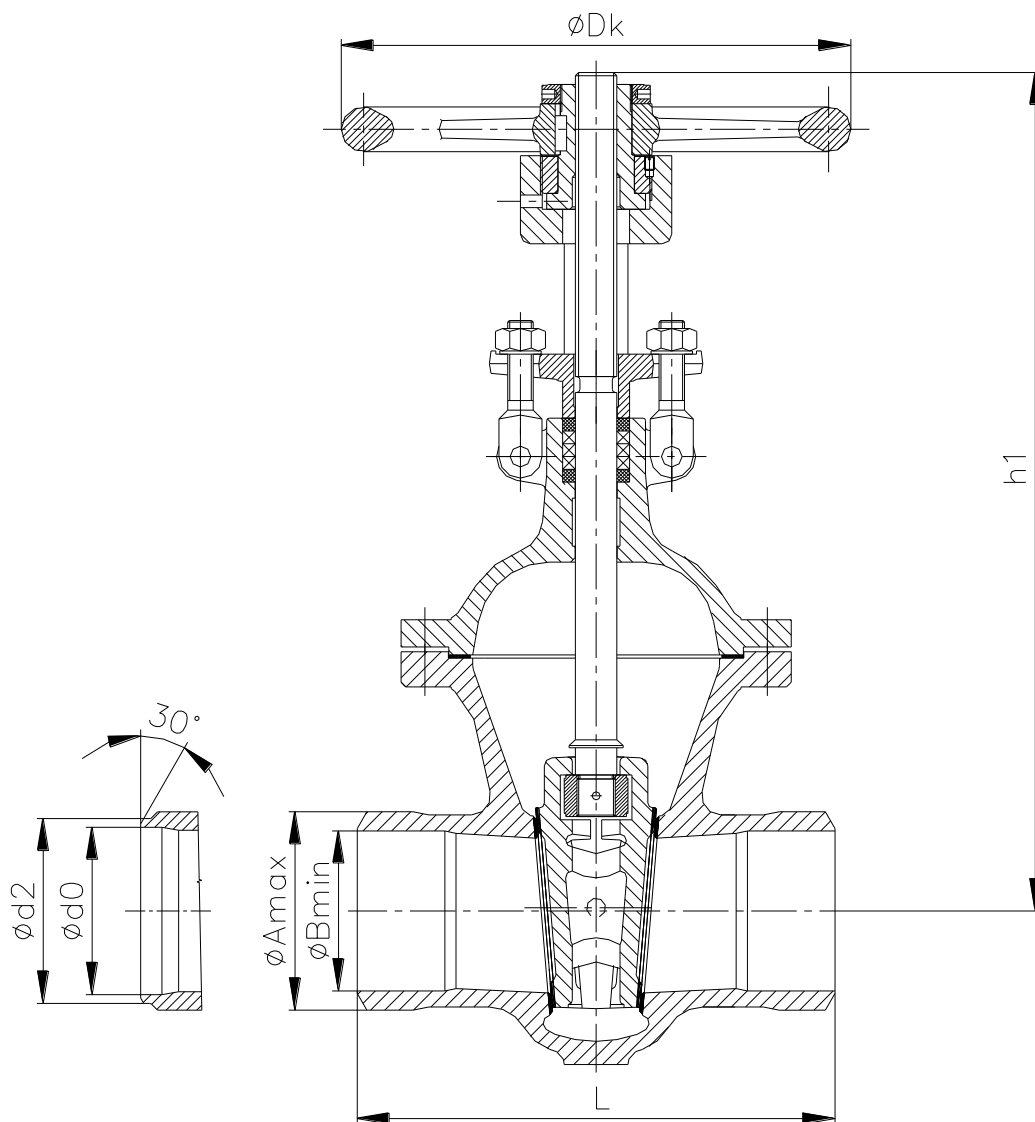
Nominal pressure	Nominal size	Face-to-face	Stroke	Hand wheel	Centre-to-top-height			Number of bolt holes	Bolt hole diameter	Bolt pitch circle	Flange	Flange thickness	Raised face	Weight appr.
					PN	DN	L ₁ (mm)							
16	40	240	58	200	360	418	311,5	4	18	110	150	18	88x3	26
	50	250	60	200	365	425	319,5	4	18	125	165	18	102x3	26
	65	270	92,5	250	467,5	560	417,5	8	18	145	185	18	122x3	39
	80	280	92,5	250	467,5	560	417,5	8	18	160	200	20	138x3	41
	100	300	115	315	522	637	471,5	8	18	180	220	20	158x3	53
	125	325	149	315	638	787	569,5	8	18	210	250	22	188x3	78
	150	350	168	315	654	822	604,5	8	22	240	285	22	212x3	85
	200	400	233	400	823	1056	773,5	12	22	295	340	24	268x3	145
	250	450	279	500	1033	1312	966	12	26	355	405	26	320x3	248
	300	500	342	500	1183	1525	1121,5	12	26	410	460	28	378x4	320
25	350	550	370	630	1346	1716	1258,5	16	26	470	520	30	438x4	430
	400	600	433	630	1503	1936	1418,5	16	30	525	580	32	490x4	550
	40	240	58	200	360	418	311,5	4	18	110	150	18	88x3	26
	50	250	60	200	365	425	319,5	4	18	125	165	20	102x3	26
	65	270	92,5	250	467,5	560	417,5	8	18	145	185	22	122x3	39
	80	280	92,5	250	467,5	560	417,5	8	18	160	200	24	138x3	41
	100	300	115	315	522	637	471,5	8	22	190	235	24	162x3	55
	125	325	153	315	633	786	567,5	8	26	220	270	26	188x3	82
	150	350	167	315	654	821	602,5	8	26	250	300	28	218x3	102
	200	400	226	400	823	1049	767,5	12	26	310	360	30	278x3	168
	250	450	275	500	1033	1308	959,5	12	30	370	425	32	335x3	260
	300	500	338	500	1183	1521	1117,5	16	30	430	485	34	395x4	370
	350	550	366	630	1346	1712	1257,5	16	33	490	555	38	450x4	445
	400	600	425	630	1500	1925	1414,5	16	36	550	620	40	505x4	740
	450	650	520	720	1870	2390	1797,5	20	36	600	670	46	555x4	1120
500	700	506	800	1780	2286	1653,5	20	36	660	730	48	615x4	1230	

Notice to PN16: DN 40 ÷ 100: Bonnet/body flange round with spigot and recess, DN 125 ÷ 400: Bonnet/body flange oval, PN25: Bonnet/body flange round with spigot and recess



Weld ends

Face-to-face dimensions: EN 12982 – Line 15 (previously DIN 3202 -Part 2 – Line S8)
Weld ends: DIN 3239–Part 1
Groove form: DIN 2559 – Sheet 1, Form 22
On your request: ČSN 13 1075, EN 12 627, and other





Nominal size	Face-to-face	Stroke	Hand wheel	Centre-to top CLOSED	Centre-to top OPEN	Butt-weld ends acc. to DIN 3239-1 Groove forms to DIN 2559 – Sheet 1, Form 22		Butt-weld ends unmachined				Weight appr.	
						PN 16, 25		PN16		PN25		PN16	PN25
DN	L	z	øDk	h1	h2	ød ₂	ød ₀	Amax	Bmin	Amax	Bmin	m ₁ (kg)	m ₁ (kg)
40	240	70	200	355	425	49	43	68	37	68	37	24	24
50	250	70	200	355	425	61	54	80	49	80	49	24	24
65	270	100	250	470	570	77	69	89	65	89	65	36	36
80	280	100	250	470	570	90	81	115	80	115	80	37	37
100	300	125	315	525	650	115	104	130	100	130	100	46	49
125	325	150	315	635	785	141	130,5	161	122	161	122	72	73
150	350	175	315	660	835	170	156,5	184	147	192	147	78	91
200	400	235	400	830	1065	222	204,5	236	197	246	197	134	151
250	450	285	500	990	1275	276	256,5	290	250	298	250	232	236
300	500	340	500	1140	1480	325	308,5	342	300	352	300	298	339
350	550	380	630	1360	1740	359	336,5	396	*)	408	*)	398	397
400	600	430	630	1535	1965	411	383	448	*)	460	*)	510	677
450	650	520	720	1870	2390	461	430,5	-	-	514	*)	-	1045
500	700	600	800	2270	2870	512	478	-	-	*)	*)	-	1133

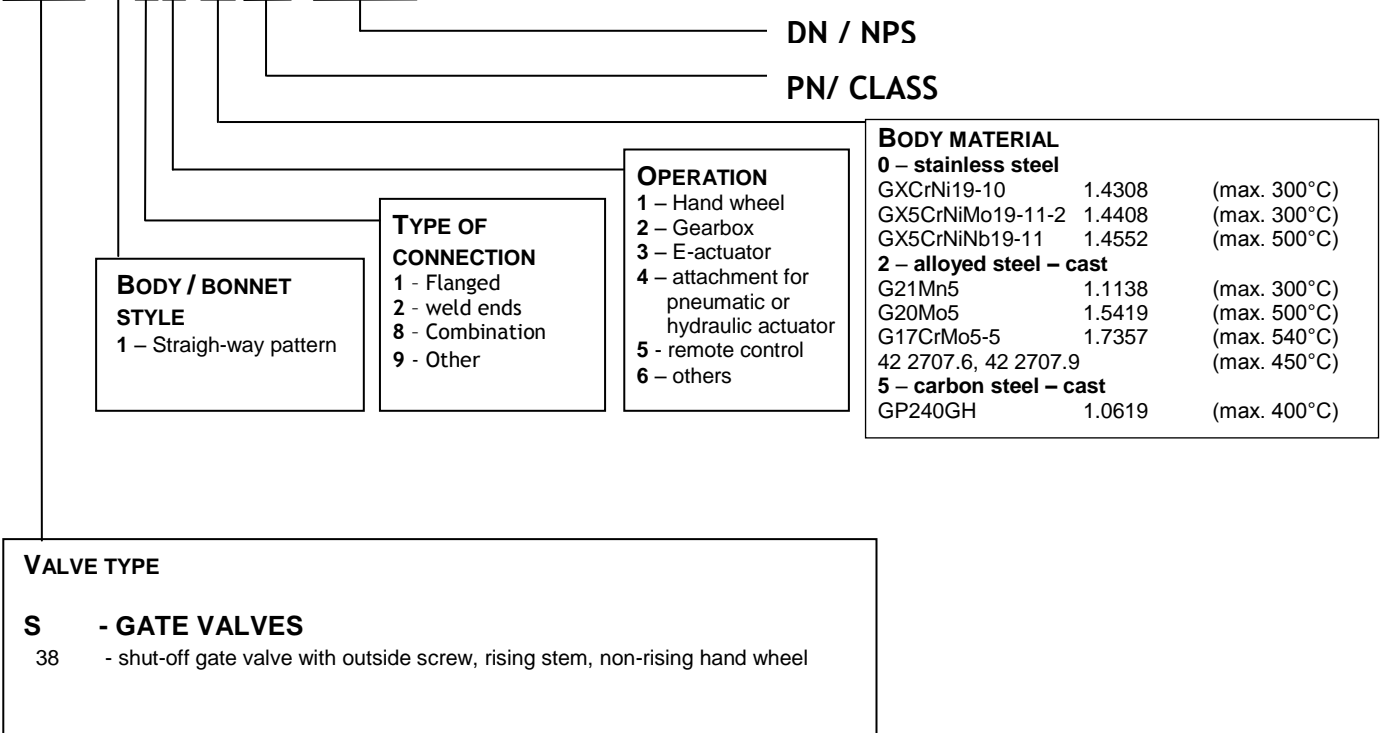
ød₀ = ød_p to DIN 3239
*) on your request

Nominal size	Pipe dimensions
DN	PN 16, 25
40	48,3x2,6
50	60,3x3,2
65	76,1x3,6
80	88,9x4,0
100	114,3x5,0
125	139,7x4,5
150	168,3x5,6
200	219,1x7,1
250	273x8,0
300	323,9x8,0
350	355,6x8,8
400	406,4x11,0
450	457x12,5
500	508x14,2



VALVE DESCRIPTION CODE

S38 111-016-150



VALVE INSTALLATION:

During the installation and use of the valve following points have to be respected

- Maximum working parameters mustn't exceed the maximum values from the table above.
- Right function and service life duration of the valve depends on presence of impurities in the medium. Keep the medium and piping clean by use of strainers
- Medium has to be in correspondence with the corrosive resistance of the valve
- The valve must not be mechanical damaged during its service life

Duration of service life depends on regular maintenance.