

Range DN: 15 ~ 1200



PED 97/23/EC
PED 2014/68/EU



TR TS 10/11,
12/11, 32/11



Range PN: 16 ~ 160



NUCLEAR
VERSION

Operating temperature : -196 °C ~ 550 °C

Connection into piping : Flanged, welded ends, combined execution



DESCRIPTION

S38/JE gate valves are controlled, shut-off valves. They are designed to stop or allow the flow of the medium by external operation, either manually or via the installed drive. They are not intended to regulate the flow of the transported medium. The medium can flow in both directions. These gate valves are designed and manufactured to ensure maximum service life and reliability.

MATERIAL SPECIFICATION

S38/JE gate valves are made from carbon, alloyed and corrosion resistant steels. The material type can be adjusted according to the customer's request to maximal suit the operating conditions.

APPLICATION

Suitable for liquids, gases and steams.
In nuclear energy moderate environment, seismic resistance class 1b.

BASIC STANDARDS FOR DESIGN

Basic design

EN 1984, EN 12516 – 2,
NTD ASI

Face-to-face dimensions

EN 558, EN 12982

Flange dimensions

EN 1092-1

Pressure-temperature rating

EN 12516 - 1

Dimensions of the welded ends

EN 12627

Special

NP – 068-05, 329/2017 Sb.

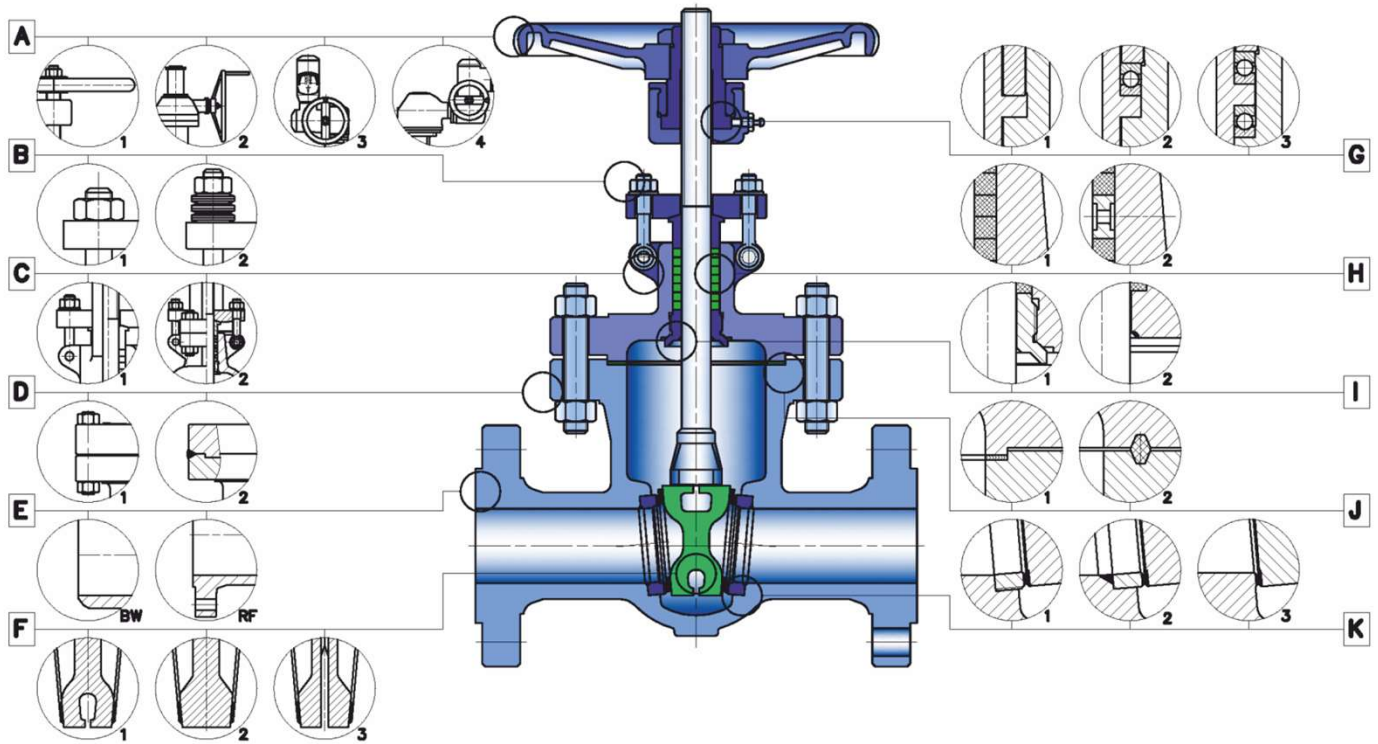
Testing

EN 12266 - 1, 2

Top Flange dimensions

EN ISO 5210

STRUCTURAL DESIGN



A — Control

- hand wheel
- hand wheel + gearbox
- electric actuator
- electric actuator with gearbox

B — Gland compression

- in cases of operation with cyclic pressure changes, or at high pressures and temperatures, it is preferred to compress the packing with the help of disc springs, which ensure a constant preload in the packing

C — Yoke execution

- the yoke is a separate piece bolted to the bonnet or is an integral part of the bonnet

D — Bonnet execution

- the bonnet is bolted to the body
- the bonnet is welded to the body

E — Connection to piping

- flanged - FLG
- rough or smooth sealing slat
- tongue/groove
- welded ends – BW
- welded ends according to customer's requirements

F — Wedge execution

- flexible
- solid
- split wedge

G — Bedding of stem nut

Depending on the control force is used:

- friction bedding
- combination of friction and rolling bedding
- bedding between two axial rolling bearings

H — Execution of gland packing

- standard
- double-stem packing with lantern ring - shall be chosen in accordance with working conditions

I - Back-seat execution

- screwed into the bonnet
- integral part of the bonnet

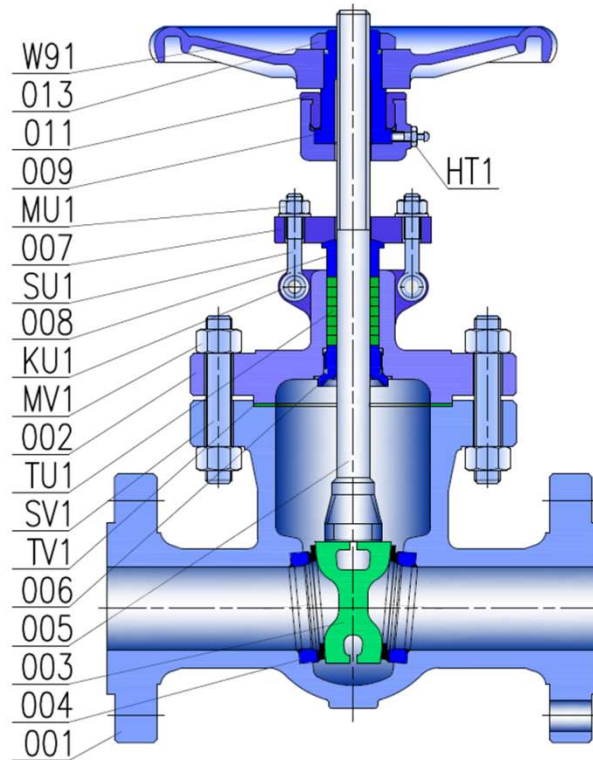
J - Bonnet sealing

- PN16 - PN63 male / female facing
- PN100-RTJ ring

K - Seats execution

- the seat is screwed into the body
- the seat is inserted into the body and welded on
- the seat is a welded layer on the body

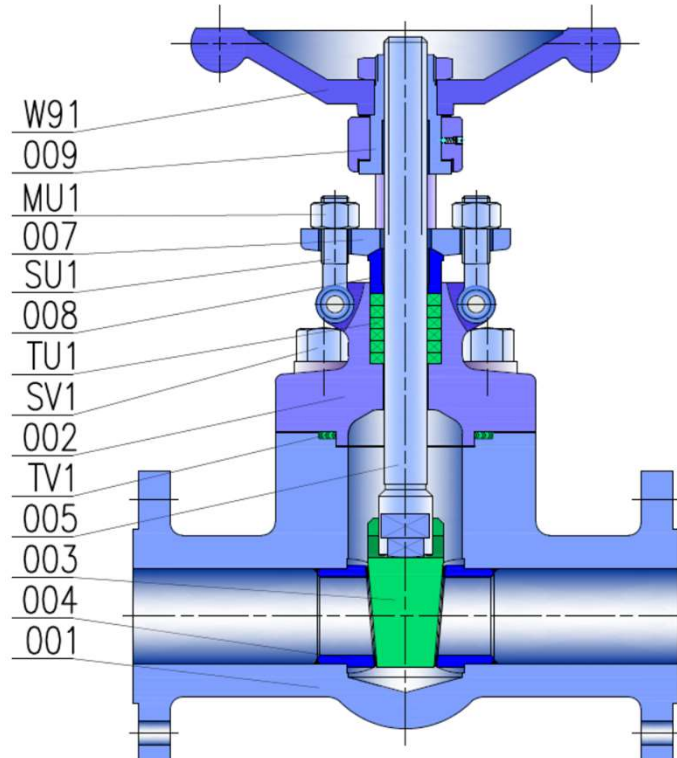
MATERIAL SPECIFICATION - CAST



Pos.	Designation	CARBON STEEL		ALLOY STEEL		STAINLESS STEEL	
001	Body	GP 240GH (1.0619)	42 2643	G17Mn5 (1.1131)	G20Mn5 (1.1133)	GX5CrNi19-10	GX5CrNiMo19-11-2
002	Bonnet	GP 240GH (1.0619)	42 2643	G17Mn5 (1.1131)	G20Mn5 (1.1133)	GX5CrNi19-10	GX5CrNiMo19-11-2
003	Wedge	GP 240GH (1.0619)	42 2643	G17Mn5 (1.1131) + overlay	G20Mn5 (1.1133) + overlay	GX5CrNi19-10 + overlay	GX5CrNiMo19-11-2 + overlay
004	Seat	P355GH + overlay		P355GH + overlay		X5CrNi18-10 + overlay	X5CrNiMo 17-12-2 + overlay
005	Stem	14Ch17N2, 1.4922, 1.4923, 1.4057					
006	Back Seat	X12Cr13		X12Cr13		X5CrNi18-10	X5CrNiMo 17-12-2
008	Pressure Ring	P355GH	13CrMo4-5	P355GH	P355 NL1	X5CrNi18-10	X5CrNiMo 17-12-2
007	Gland Flange	GP 240GH (1.0619)	42 2643	G17Mn5 (1.1131)	G20Mn5 (1.1133)	GX5CrNi19-10	GX5CrNiMo19-11-2
009	Stem Nut	bronze, Ad439 D2					
W91	Hand Wheel	cast iron					
TV1	Bonnet Gasket	graphite, 304 + graphite, 316 + graphite					
TU1	Gland Packing	graphite					
SU1	Eye Bolt	25CrMo4, 15 320, CLASS 8.8				A4-80, A4-70, 15 320	
MU1	Nut	25CrMo4, 15 236, CLASS 8				A194 8, A4 - 70	A194 8M, A4-70
KU1	Pin	X12Cr13				X12Cr13	X12Cr13
SV1	Bonnet Bolt	25CrMo4, 15 320, CLASS 8.8				A4-80, A4-70, 15 236	
MV1	Nut	25CrMo4, 15 236, CLASS 8				A194 8, A4 - 70	A194 8M, A4 - 70
HT1	Grease Nipple	carbon steel					
011	Threaded Ring	carbon steel					
013	Nut	carbon steel					

Note: The seat and disc sealing surfaces are welded with a hard cobalt-free alloy.

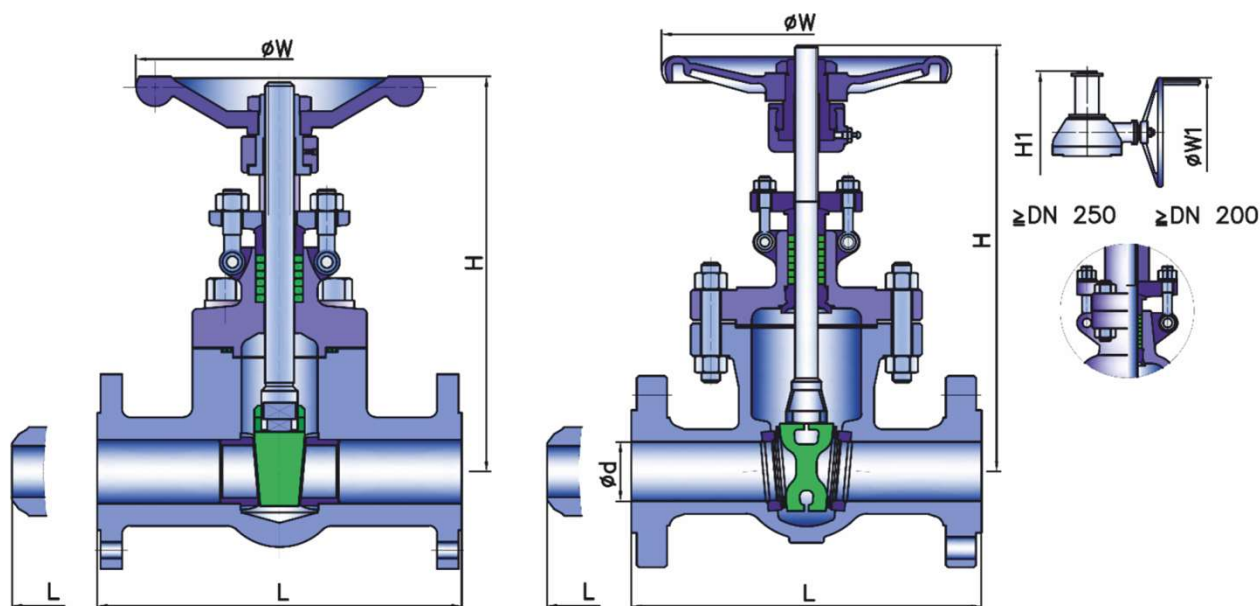
MATERIAL SPECIFICATION - FORGED



Pos.	Designation	CARBON STEEL	STAINLESS STEEL
001	Body	P265GH (11 416)	1.4571 (08Ch18N10T)
002	Bonnet	P265GH (11 416)	1.4571 (08Ch18N10T)
003	Wedge	P265GH (11 416) + overlay	1.4571 (08Ch18N10T) + overlay
004	Seat	P265GH (11 416) + overlay	1.4571 (08Ch18N10T) + overlay
005	Stem	P265GH (11 416)	1.4571 (08Ch18N10T)
007	Gland Flange	P265GH (11 416)	1.4571 (08Ch18N10T)
008	Pressure Ring	P265GH (11 416)	1.4571 (08Ch18N10T)
009	Stem Nut	bronze	
W91	Hand Wheel	cast iron	
TV1	Bonnet Gasket	graphite + stainless steel	
TU1	Gland Packing	graphite	
SV1	Bonnet Bolt	15 320	A4-80 (1.4923)
SU1	Eye Bolt	15 320	A4-80 (1.4923)
MU1	Nut	15 236	A4-80 (1.4923)

Note: The seat and disc sealing surfaces are welded with a hard cobalt-free alloy

DIMENSIONS



DN	PN 16									PN 25								
	L		d	H	H1	W	W1	kg		L		d	H	H1	W	W1	kg	
	1	2						H.W.	G.O.	1	2						H.W.	G.O.
15	130	130	14,0	170	-	120	-	5	-	130	130	14,0	170	-	120	-	5,5	-
20	150	150	19,0	190	-	140	-	6,5	-	150	150	19,0	190	-	140	-	7	-
25	160	160	25,0	205	-	160	-	9	-	160	160	25,0	205	-	160	-	11	-
32	180	180	32,0	270	-	180	-	12	-	180	180	32,0	270	-	180	-	14	-
40	240	240	43,1	310	-	200	-	20	-	240	240	43,1	310	-	200	-	26,5	-
50	250	250	54,5	358	-	240	-	29	-	250	250	54,5	358	-	240	-	34	-
65	270	270	70,3	373	-	240	-	33	-	270	270	70,3	373	-	240	-	36	-
80	280	280	82,5	435	-	280	-	46	-	280	280	82,5	435	-	280	-	50	-
100	300	300	107,1	500	-	320	-	63	-	300	300	107,1	500	-	320	-	69	-
125	325	325	131,7	614	-	360	-	108	-	325	325	131,7	614	-	360	-	116	-
150	350	350	159,3	674	994	360	310	134	199	350	350	161,5	674	994	360	310	141	206
200	400	400	206,5	818	1138	400	310	192	254	400	400	206,5	818	1138	400	310	192	257
250	450	450	260,4	969	1409	450	310	273	310	450	450	258,2	969	1409	450	310	207	317
300	500	500	309,7	1145	1588	560	310	379	391	500	500	307,9	1145	1588	560	310	400	412
350	550	550	339,6	1280	1755	640	310	590	729	550	550	337,6	1280	1750	640	310	631	750
400	600	600	390,0	1450	1902	640	460	849	992	600	600	388,8	1450	1902	640	460	900	1042
450	650	650	438,0	1563	2141	720	460	907	1168	650	650	438,0	1563	2141	720	460	1013	1274
500	700	700	492,0	1676	2276	720	460	958	1222	700	700	488,0	1676	2276	720	460	1166	1420
600	800	800	591,0	1810	2474	800	460	1112	1376	800	800	591,0	1810	2474	800	460	1258	1522
700	900	900	684,0	-	3046	-	600	-	-	900	900	684,0	-	3046	-	600	-	-
800	1000	1000	779,0	-	3250	-	600	-	-	1000	1000	779,0	-	6250	-	600	-	-
900	1100	1100	874,0	-	3509	-	600	-	-	1100	1100	874,0	-	3509	-	600	-	-

L1 – flange face to face
 L2 – welding face to face
 H.W. – hand wheel
 G.O. – gear operated

DIMENSIONS

DN	PN 40									PN 63								
	L		d	H	H1	W	W1	kg		L		d	H	H1	W	W1	kg	
	1	2						H.W.	G.O.	1	2						H.W.	G.O.
15	130	130	14,0	135	-	120	-	6	-	170	170	14,0	140	-	100	-	7	-
20	150	150	19,0	190	-	140	-	8	-	190	190	19,0	140	-	100	-	9	-
25	160	160	25,0	205	-	160	-	12	-	210	210	25,0	215	-	180	-	12	-
32	180	180	32,0	270	-	180	-	15	-	230	230	32,0	270	-	180	-	16	-
40	240	240	43,1	310	-	200	-	31	-	240	240	42,5	345	-	200	-	32	-
50	250	250	54,5	371	-	280	-	34	-	250	250	53,5	371	-	280	-	39	-
65	290	290	70,3	393	-	280	-	38	-	290	290	69,7	393	-	280	-	43	-
80	310	310	82,5	455	-	320	-	51	-	310	310	81,7	455	-	320	-	60	-
100	350	350	107,1	551	871	360	310	81	163	350	350	106,3	551	1020	360	310	89	154
125	400	400	131,7	634	948	400	310	128	190	400	400	130,7	638	1100	400	310	140	205
150	450	450	161,5	708	1028	400	310	155	219	450	450	158,3	718	1290	450	310	207	317
200	550	550	206,3	858	1325	450	310	265	373	550	550	204,9	873	1475	560	310	327	437
250	650	650	258,2	1015	1400	560	310	370	480	650	650	255,2	1050	1500	640	310	467	606
300	750	750	307,9	1201	1653	640	310	550	686	750	750	301,9	1215	1820	640	310	590	732
350	850	850	337,9	1308	1791	640	460	679	821	850	850	337,0	-	2216	-	460	-	1110
400	950	950	384,4	1483	2092	720	460	953	1214	950	950	387,0	-	2838	-	460	-	1540
500	1150	1150	479,6	-	2465	-	460	-	2150	1150	1150	489,0	-	3320	-	460	-	2460

DN	PN 100									PN 160								
	L		d	H	H1	W	W1	kg		L		d	H	H1	W	W1	kg	
	1	2						H.W.	G.O.	1	2						H.W.	G.O.
15	170	170	14,0	140	-	200	-	6	-	170	170	14,0	230	-	200	-	7	-
20	190	190	19,0	140	-	200	-	11	-	190	190	19,0	260	-	200	-	10	-
25	210	210	25,0	310	-	280	-	13	-	210	210	25,0	280	-	280	-	14	-
32	230	230	32,0	320	-	320	-	20	-	230	230	32,0	312	-	320	-	21	-
40	240	240	42,5	360	-	320	-	30	-	260	260	42,5	350	-	320	-	26	-
50	250	250	53,9	371	-	360	-	50	-	300	300	51,0	512	-	360	-	73	-
65	290	290	68,9	393	-	400	-	70	-	340	340	64,0	560	-	360	-	110	-
80	310	310	80,9	455	892	400	310	100	165	390	390	76,0	585	905	400	310	141	206
100	350	350	104,3	551	1013	400	310	110	220	450	450	102,0	631	1071	450	310	185	295
125	400	400	127,1	638	1184	560	310	186	292	525	525	127,0	723	1163	560	310	320	432
150	450	450	154,1	718	1250	560	310	250	389	600	600	152,0	820	1170	640	460	462	601
200	550	550	199,1	873	1250	560	310	360	502	750	750	203,0	990	1440	720	460	711	853
250	650	650	248,0	1050	1650	640	460	485	790	-	-	-	-	-	-	-	-	-
300	750	750	295,5	1215	1800	640	460	633	910	-	-	-	-	-	-	-	-	-
350	850	850	337,0	-	2030	-	460	-	1610	-	-	-	-	-	-	-	-	-
400	950	950	387,0	-	2250	-	460	-	2512	-	-	-	-	-	-	-	-	-

L1 – flange face to face
 L2 – welding face to face
 H.W. – hand wheel
 G.O. – gear operated