



Range DN: 15 ~ 1200



Range PN: 16 ~ 160



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



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



CERTIFICATE
EN 12 569

Operating temperature: -196 °C ~ 550 °C

Connection into piping: Flanged, welded ends, threaded ends, combined execution



DESCRIPTION

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

APPLICATION

S38 gate valves are mainly suitable for various chemicals and petrochemicals, liquids, gases and steam.

BASIC STANDARDS FOR DESIGN

Basic design

EN 1984, EN 12516 - 1

Face-to-face dimensions

EN 558, EN 12 982

Flange dimensions

EN 1092-1

Pressure-temperature rating

EN 12 516 - 1

Dimensions of the welded ends

EN 12 627

Special

NACE MR-0175

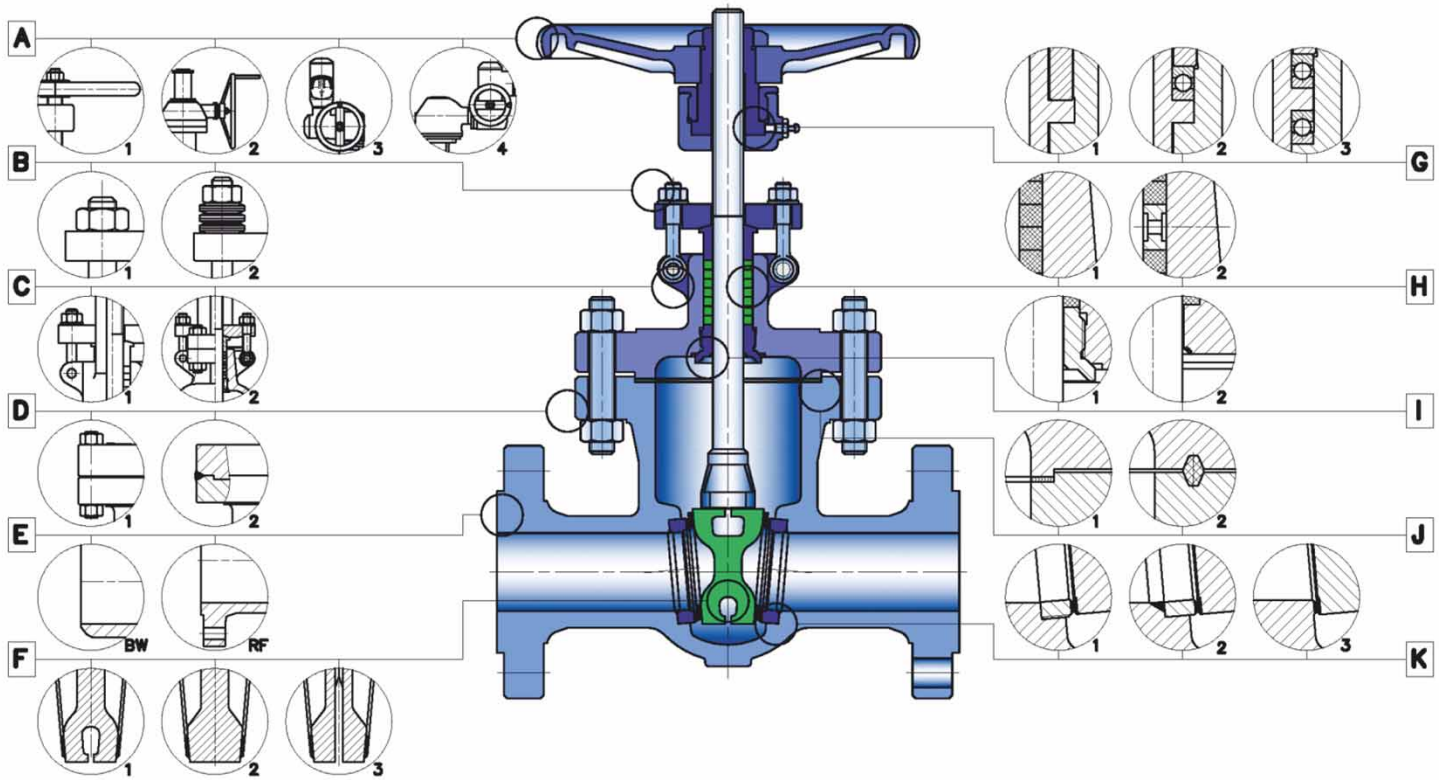
Testing

EN 12 266 - 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 case of valve operation with cyclic changes in pressure or at high pressures and temperatures, gland compression by means of Belleville springs, which ensure a constant pre-stress in packing, is preferred.

C — Yoke execution

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

D – Bonnet execution

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

E — Connection to piping

- flanged
 - welded ends
 - welded ends
- according to customer's requirements

F — Wedge execution

- solid
- flexible
- split wedge

G- Bedding of stem nut

- friction (sliding) type
- combination of sliding and rolling stem nut bedding
- bedding of stem nut 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

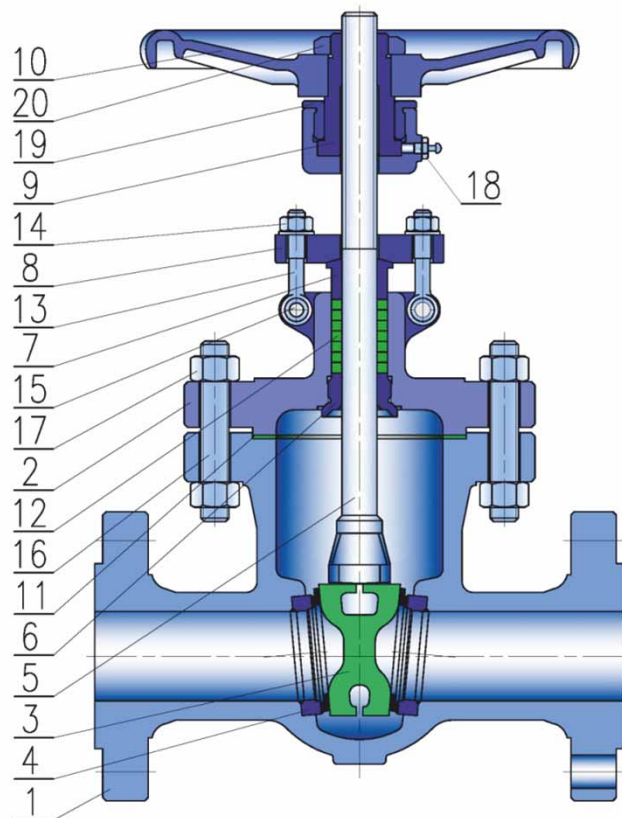
J - Bonnet sealing

- male / female facing

K - Seats execution

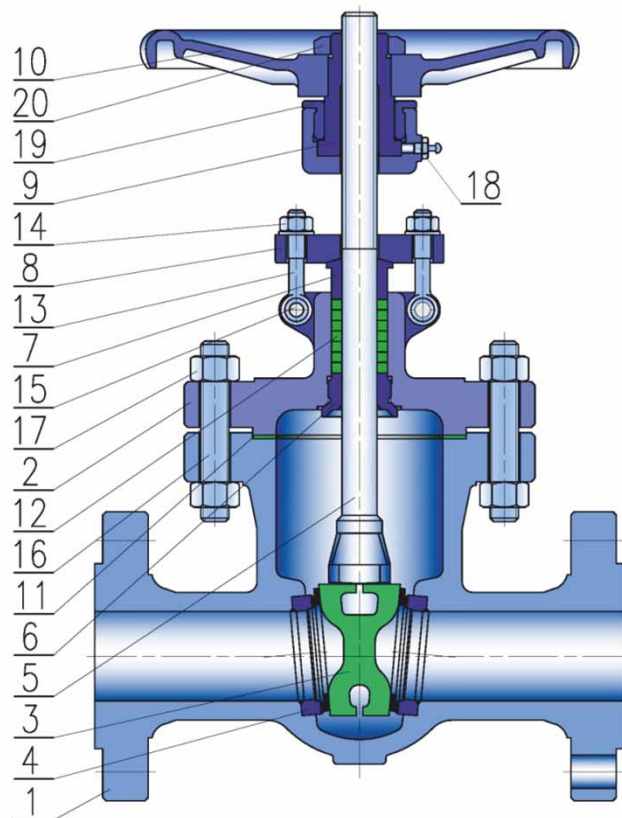
- the seats are screwed into the body
- the seats are inserted into the body and welded on
- the seats are a welded layer on the body

MATERIAL SPECIFICATION - CAST



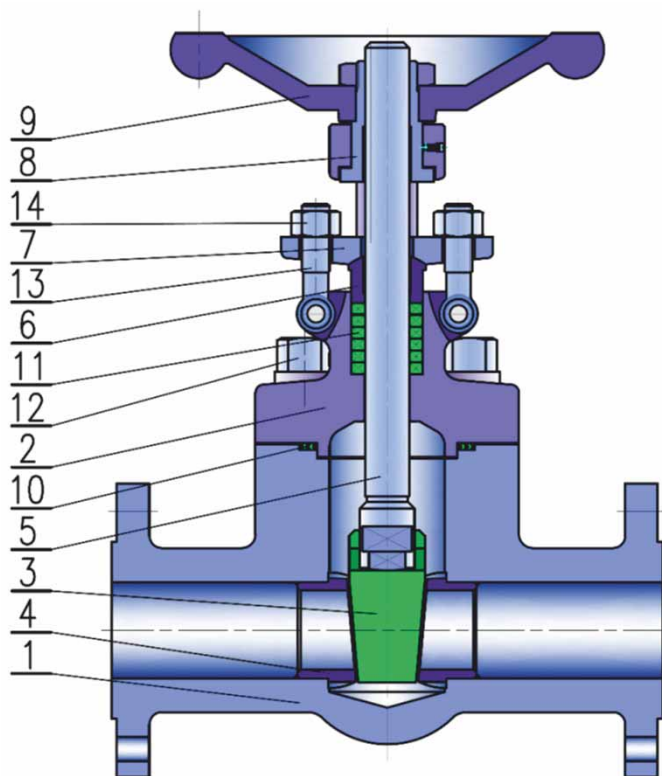
Pos.	Designation	GP 240GH (1.0619)	G17CrMo5-5 (1.7357)	GS12CrMo 19-5 (1.7363)	GX12CrMo 10-1 (1.7389)	G17Mn5 (1.1131)	G20Mn5 (1.6220)	GX5CrNi19-10 (1.4308)	GX5CrNiMo19-11-2 (1.4408)	
1	Body	GP 240GH	G17CrMo5-5	GS12CrMo 19-5	GX12CrMo 10-1	G17Mn5	G20Mn5	GX5CrNi19-10	GX5CrNiMo19-11-2	
2	Bonnet	GP 240GH	G17CrMo5-5	GS12CrMo 19-5	GX12CrMo 10-1	G17Mn5	G20Mn5	GX5CrNi19-10	GX5CrNiMo19-11-2	
3	Wedge	GP 240GH + overlay	G17CrMo5-5 + overlay	GS12CrMo 19-5 + overlay	GX12CrMo 10-1 + overlay	G17Mn5 + overlay	G20Mn5 + overlay	GX5CrNi19-10 + overlay	GX5CrNiMo19-11-2 + overlay	
4	Seat	P355NH + overlay	13CrMo4-5 + overlay	X11CrMo5 + overlay	X11CrMo 9-1 + overlay	P355NH + overlay	P355 NL1 + overlay	X5CrNi18-10 + overlay	X5CrNiMo 17-12-2 + overlay	
5	Stem	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X5CrNi18-10	X5CrNiMo 17-12-2	
6	Back Seat	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X5CrNi18-10	X5CrNiMo 17-12-2	
7	Stuffing Box Bushing	P355NH	13CrMo4-5	X11CrMo5	GX12CrMo 10-1	P355NH	P355 NL1	X5CrNi18-10	X5CrNiMo 17-12-2	
8	Gland Flange	GP 240GH	G17CrMo5-5	GS12CrMo 19-5	GX12CrMo 10-1	G17Mn5	G20Mn5	GX5CrNi19-10	GX5CrNiMo19-11-2	
9	Stem Nut	bronze, Ad439 D2								
10	Hand Wheel	cast iron								
11	Bonnet Gasket	graphite, 304 + graphite, 316 + graphite								
12	Gland Packing	graphite								
13	Eye Bolt	25CrMo4	25CrMo4	25CrMo4	25CrMo4	25CrMo4	25CrMo4	A193 B8, A4-70	A193 B8M, A4-70	
14	Nut	25CrMo4	25CrMo4	25CrMo4	25CrMo4	25CrMo4	25CrMo4	A194 8, A4 - 70	A194 8M, A4-70	
15	Pin	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	X12Cr13	
16	Bonnet Bolt	42CrMo4	A193 B16	A193 B16	A193 B16	42CrMo4	26CrMo4	A193 B8, A4-70	A193 B8M, A4-70	
17	Nut	25CrMo4	A194 7	A194 7	A194 7	25CrMo4	26CrMo4	A194 8, A4 - 70	A194 8M, A4 - 70	
18	Grease Nipple	carbon steel								
19	Threaded Bushing	carbon steel								
20	Nut	carbon steel								

MATERIAL SPECIFICATION - CAST



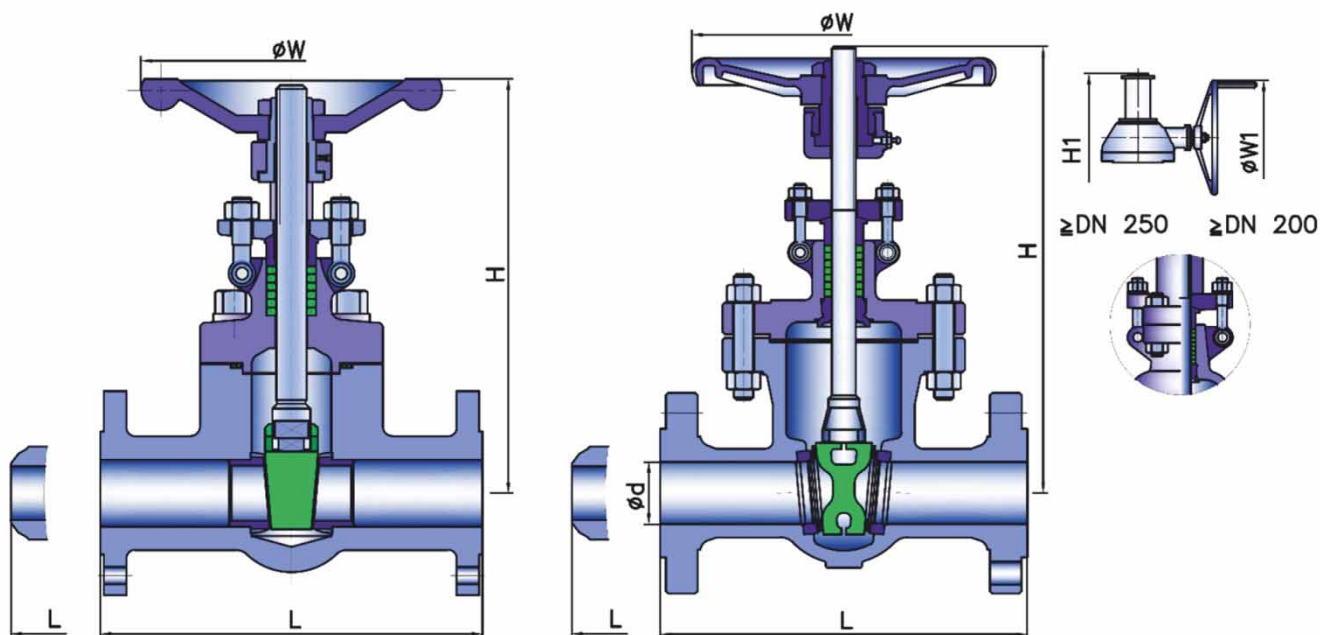
Pos.	Designation	WCB	LCC	LCB	WC6	WC9	C5	C12	CF8 / 304	CF8M / 316
1	Body	A216 WCB	A352 LCC	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8	A351 CF8M
2	Bonnet	A216 WCB	A352 LCC	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8	A351 CF8M
3	Wedge	A216 WCB + overlay	A352 LCC + overlay	A352 LCB + overlay	A217 WC6 + overlay	A217 WC9 + overlay	A217 C5 + overlay	A217 C12 + overlay	A351 CF8 + overlay	A351 CF8M + overlay
4	Seat	A105 + overlay	A350 LF2 + overlay	A350 LF2 + overlay	A182 F5 + overlay	A182 F5 + overlay	A182 F5 + overlay	A182 F5 + overlay	A351 CF8 + overlay	A351 CF8M + overlay
5	Stem	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A276 F304	A276 F316
6	Back Seat	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A351 CF8	A351 CF8M
7	Stuffing Box Bushing	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316
8	Gland Flange	A216 WCB	A352 LCC	A352 LCB	A217 WC6	A217 WC9	A217 C5	A217 C12	A351 CF8	A351 CF8M
9	Stem Nut	bronze, A439 D2								
10	Hand Wheel	cast iron								
11	Bonnet Gasket	graphite, 304 + graphite, 316 + graphite								
12	Gland Packing	graphite								
13	Eye Bolt	A193 B7	A320 L7	A320 L7	A193 B16	A193 B16	A193 B16	A193 B16	A193 B8	A193 B8M
14	Nut	A194 2H	A194 4	A194 4	A194 2H	A194 2H	A194 2H	A194 2H	A194 8	A194 8M
15	Pin	A276 410	A276 410	A276 410	A276 410	A276 410	A276 410	A276 410	304	316
16	Bonnet Bolt	A193 B7	A320 L7	A320 L7	A193 B16	A193 B16	A193 B16	A193 B16	A193 B8	A193 B8M
17	Nut	A194 2H	A194 4	A194 4	A194 2H	A194 2H	A194 2H	A194 2H	A194 8	A194 8M
18	Grease Nipple	carbon steel								
19	Threaded Bushing	carbon steel								
20	Nut	carbon steel								

MATERIAL SPECIFICATION - FORGED



Pos.	Designation	A350 LF2	A105	A182 F5	A182 F9	A182 F304	A182 F316
1	Body	A350 LF2	A105	A182 F5	A182 F9	A182 F304	A182 F316
2	Bonnet	A350 LF2	A105	A182 F5	A182 F9	A182 F304	A182 F316
3	Wedge	A350 LF2 + overlay	A105 + overlay	A182 F5 + overlay	A182 F9 + overlay	A182 F304 + overlay	A182 F316 + overlay
4	Seat	A350 LF2 + overlay	A105 + overlay	A182 F5 + overlay	A182 F9 + overlay	A182 F304 + overlay	A182 F316 + overlay
5	Stem	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A276 F304	A276 F316
6	Stuffing Box Bushing	A182 F6a	A182 F6a	A182 F6a	A182 F6a	A182 F304	A182 F316
7	Gland Flange	A350 LF2	A105	A182 F5	A182 F9	A182 F304	A182 F316
8	Stem Nut	bronze, A439 D2					
9	Hand Wheel	cast iron					
10	Bonnet Gasket	graphite, 304 + graphite, 316 + graphite					
11	Gland Packing	graphite					
12	Bonnet Bolt	A320 L7	A193 B7	A193 B16	A193 B16	A193 B8	A193 B8M
13	Eye Bolt	A320 L7	A193 B7	A193 B16	A193 B16	A193 B8	A193 B8M
14	Nut	A194 4	A194 2H	A194 2H	A194 2H	A194 8	A194 8M

DIMENSIONS - CAST



DN	PN 16										PN 25							
	L		d	H	H1	W	W1	(KG)		1	2	d	H	H1	W	W1	(KG)	
	1	2						H.W.	G.O.								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	-	-

DIMENSIONS - CAST

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	-	-	-	-	-	-	-	-	-

TYPE DESIGNATION

S38 C/D E M₁ PN/S

C

CONNECTION INTO PIPE

- 1 Flanged
- 2 Welded ends
- 8 Combined

M₁

BODY MATERIAL

- 0 Stainless steel
- 2 Cast alloy steel
- 3 Forged alloy steel
- 4 Forged carbon steel
- 5 Cast carbon steel
- LT Carbon steel for low temperatures

D

FLANGE FACING

EN 1092 - 1

- A Flat face
- B Raised face
- C Tongue face
- D Groove face
- E Spigot
- F Recess
- G O - ring recess
- H O - ring groove

E

CONTROL

- 1 Hand wheel
- 2 Gearbox + hand wheel
- 3 Electric actuators
- 4 Gearbox + electric actuators
- 9 Without control

S

SPECIAL EXECUTION

- As Antistatic execution
- B Bypass

