

Range DN: 65 ~ 550



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



TR TS 10/11,
32/11



Range PN: 63 ~ 400



NUCLEAR
VERSION



HIGH-PRESSURE
EXECUTION

Operating temperature : -196 °C ~ 550 °C

Connection into piping : Flanged, welded ends, combined execution



DESCRIPTION

High-pressure gate valves S43K/JE are shut-off valves with narrowed flow, specially designed for use in energy and in industries working with high media pressure. The medium can flow in both directions. These gate valves excel in seismic resistance, are designed and manufactured to ensure maximum service life and reliability.

MATERIAL SPECIFICATION

S43 gate valves are made from forged carbon, alloy and corrosion resistant steels. The material type can be adjusted according to the customer's request to maximal suit the operating conditions.

APPLICATION

S43/JE and S43K/JE gate valves can be used for a wide range of liquids, steams and gases. 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.

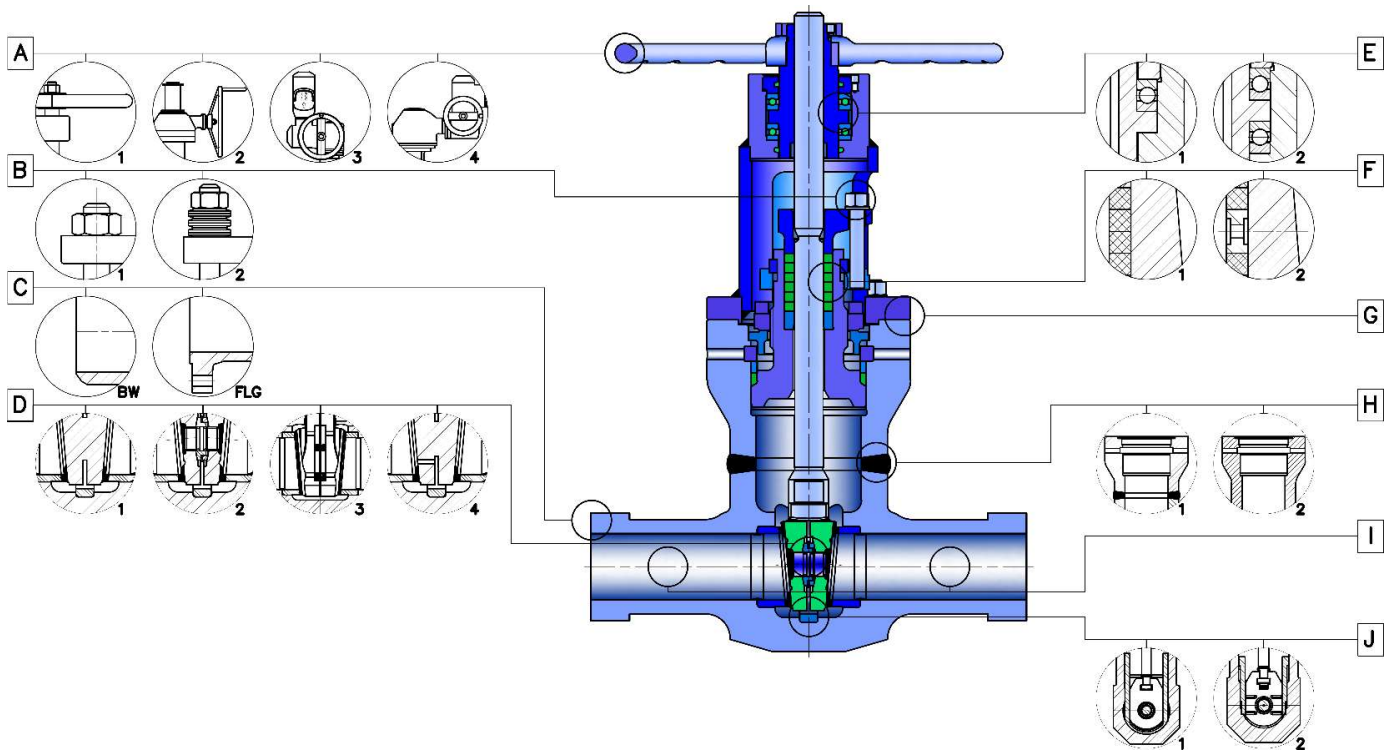
Testing

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 – One-piece gland compression

- in case of valve operation with cyclic changes in pressure or at high pressures and temperatures, the gland compression by means of disc springs, which secure a constant pre-stress in packing, is preferred

C — Connection into piping

- flanged - FLG
- welded - BW
- welding ends as specified by the customer

D – Wedge execution

- flexible
- split with a stud bolt
- split with feathers

E- Bedding of stem nut

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

F — Execution of gland packing

- standard
- double gland packing with lantern ring-shall be chosen in dependence on working conditions

G — Yoke

- cast
- welded

H – Body execution

- welded
- unwelded

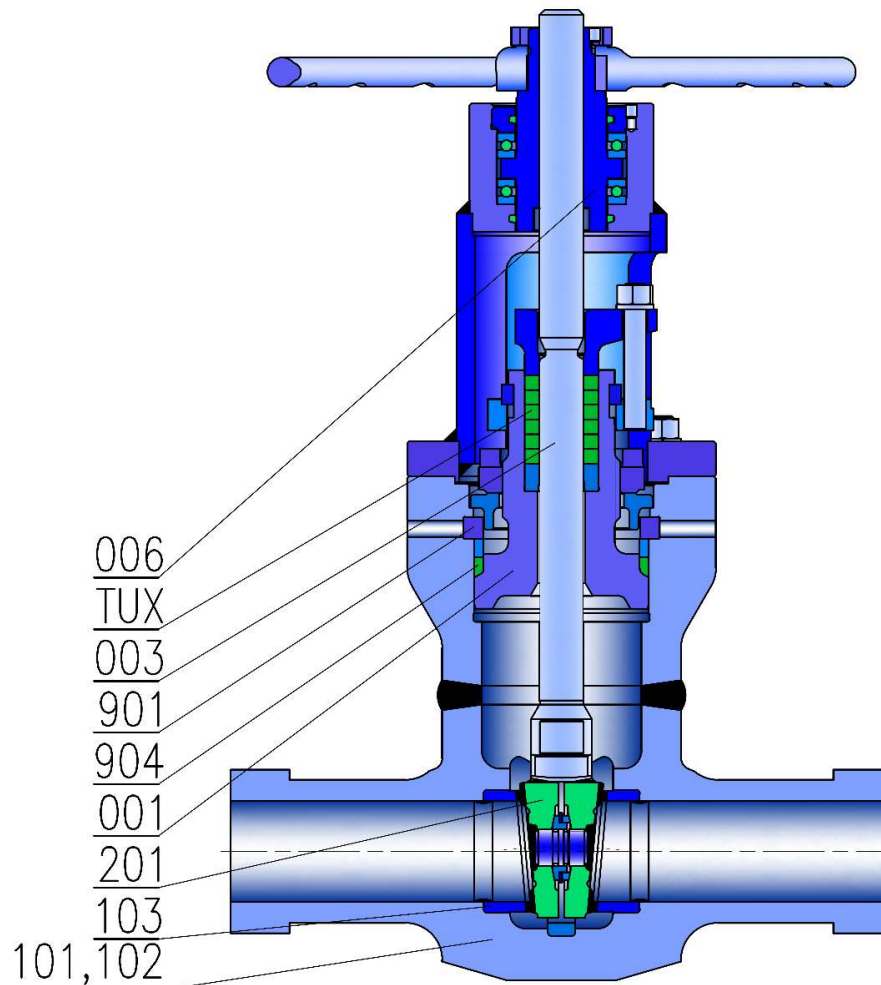
I — Bypass

- bypass option

J — Wedge guidance

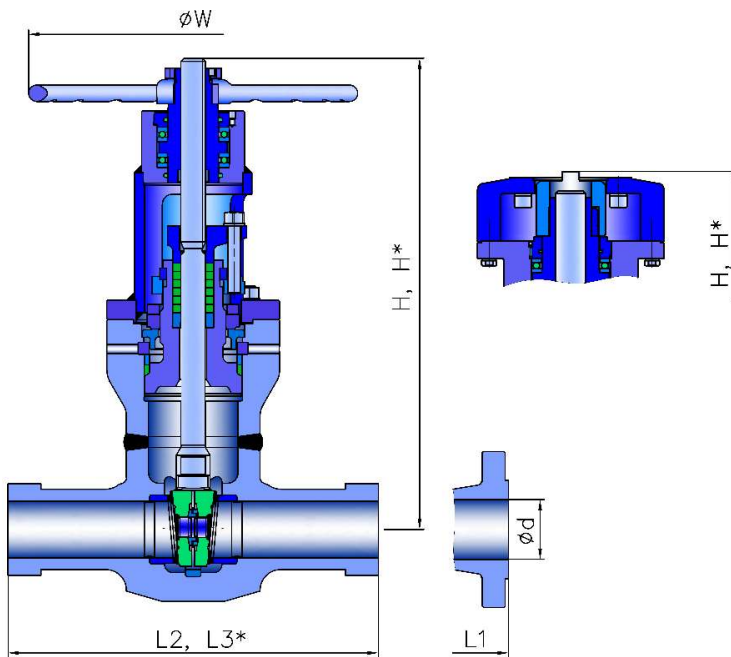
- U-profile
- 2x square profile

MATERIAL SPECIFICATION



POS.	Designation	CARBON STEEL	ALLOY STEEL	STAINLESS STEEL
101,102	BODY+EXTENSION	11 416 P265GH(1.0425) P285NH (1.0477)	13CrMo4-5 (1.7335) 10CrMo9-10 (1.7380) 15 128	08Ch18N10T 1.4541 (X6CrNiTi18-10) 1.4571 (X6CrNiMoTi17-12) A182 F316L 1.4435 (X2CrNiMo18-14-3)
103	BONNET + OVERLAY			
001	PRESSURE SEALING			
201	WEDGE + OVERLAY			
901	SPLIT RING			
006	STEM NUT	Bronze		
003	STEM	X22CrMoV12-1 (1.4923), X39CrMo17-1 (1.4122), 1.4057, 14Ch17N2, A564 Gr.630		
904	GASKET	Graphite		
TUX	GLAND PACKING	Graphite		
	OVERLAY	Hard cobalt-free alloy		

DIMENSIONS



DN	PN 320					PN 400				
	L 2	d	H	W	kg	L 2	d	H	W	kg
50/40	320	40	452	320	81	320	40	452	320	87
50/50	360	50	458	320	90	360	50	458	320	98
65/50	360	50	458	320	96	360	50	458	320	105
65/55	360	55	458	320	95	360	55	458	320	104
80/75	450	75	666	400	206	450	75	666	400	220
100/75	450	75	666	400	202	450	75	666	400	217
125/110	500	110	746	500	255	500	110	746	500	269
150/110	550	110	746	500	258	550	110	746	500	274
175/125	650	125	950	630	552	650	125	950	630	588
175/150	650	150	1083	630	841	650	150	1083	630	873
200/150	650	150	1083	710	850	650	150	1083	710	882
225/175	700	175	1332	710	1603	700	175	1332	710	1724
250/200	800	200	1450	710	2020	800	200	1450	710	2145
275/200	850	200	1450	710	2034	850	200	1450	710	2160
250/225	800	225	1600	710	2705	800	225	1600	710	2904
275/225	850	225	1600	800	2717	850	225	1600	800	2925
300/225	900	225	1600	800	2730	900	225	1600	800	2946
300/250	1000	250	1694	-	3152	1000	250	1694	-	3498
350/275	1000	275	1850	-	4426	1000	275	1850	-	4761
400/275	1000	275	1850	-	4460	1000	275	1850	-	4795

DN	PN 63, 100, 160, 250								
	L			d	H	H*	W	Kg	Kg*
	1	2	3*						
65/50	360	360	200	50	481	445	300	63	45
65/55	-	360	200	55	460	445	300	63	45
80/75	390	450	300	75	619	540	400	108	80
100/75	450	450	300	75	619	540	400	110	80
125/110	525	550	400	110	803	660	500	262	170
150/110	600	550	400	110	803	660	500	283	170
125/125	-	550	500	125	892	740	500	435	255
150/125	-	550	500	125	892	740	500	435	255
175/125	-	650	500	125	892	740	630	455	255
150/150	-	550	550	150	932	825	630	432	330
175/150	-	650	550	150	932	825	630	450	335
200/150	750	650	550	150	951	825	630	519	340
175/175	-	650	600	175	1117	990	710	654	535
200/175	-	650	600	175	1117	990	710	654	540
225/175	-	700	600	175	1117	990	710	672	545
200/200	-	650	700	200	1199	1065	710	955	690
225/200	-	700	700	200	1199	1065	710	985	695
250/200	900	800	700	200	1199	1065	710	1017	700
275/200	-	850	750	200	1199	1065	710	1032	750
225/225	-	700	700	225	1329	1215	-	1285	940
250/225	-	800	700	225	1329	1215	-	1301	945
275/225	-	850	700	225	1329	1215	-	1315	950
300/225	-	900	750	225	1329	1215	-	1334	1000
250/250	-	1000	800	250	1344	1335	-	3443	1370
275/250	-	1000	800	250	1344	1335	-	3443	1375
300/250	1050	1000	800	250	1344	1335	800	3443	1380
275/275	-	1000	950	275	1756	1460	-	3443	2050
300/275	-	1100	950	275	1756	1460	-	3244	2055
350/275	-	1100	950	275	1756	1460	-	3244	2060
400/275	-	1100	950	275	1756	1460	-	3244	2065
400/300	-	-	1150	-	-	1650	-	-	3820
500/350	-	1350	1350	350	-	1785	-	-	4100
550/350	-	1350	1350	350	-	1785	-	-	4150

- applies to the S43K design.
- Face to face L1 – flanged can be adjusted to the customer's request.