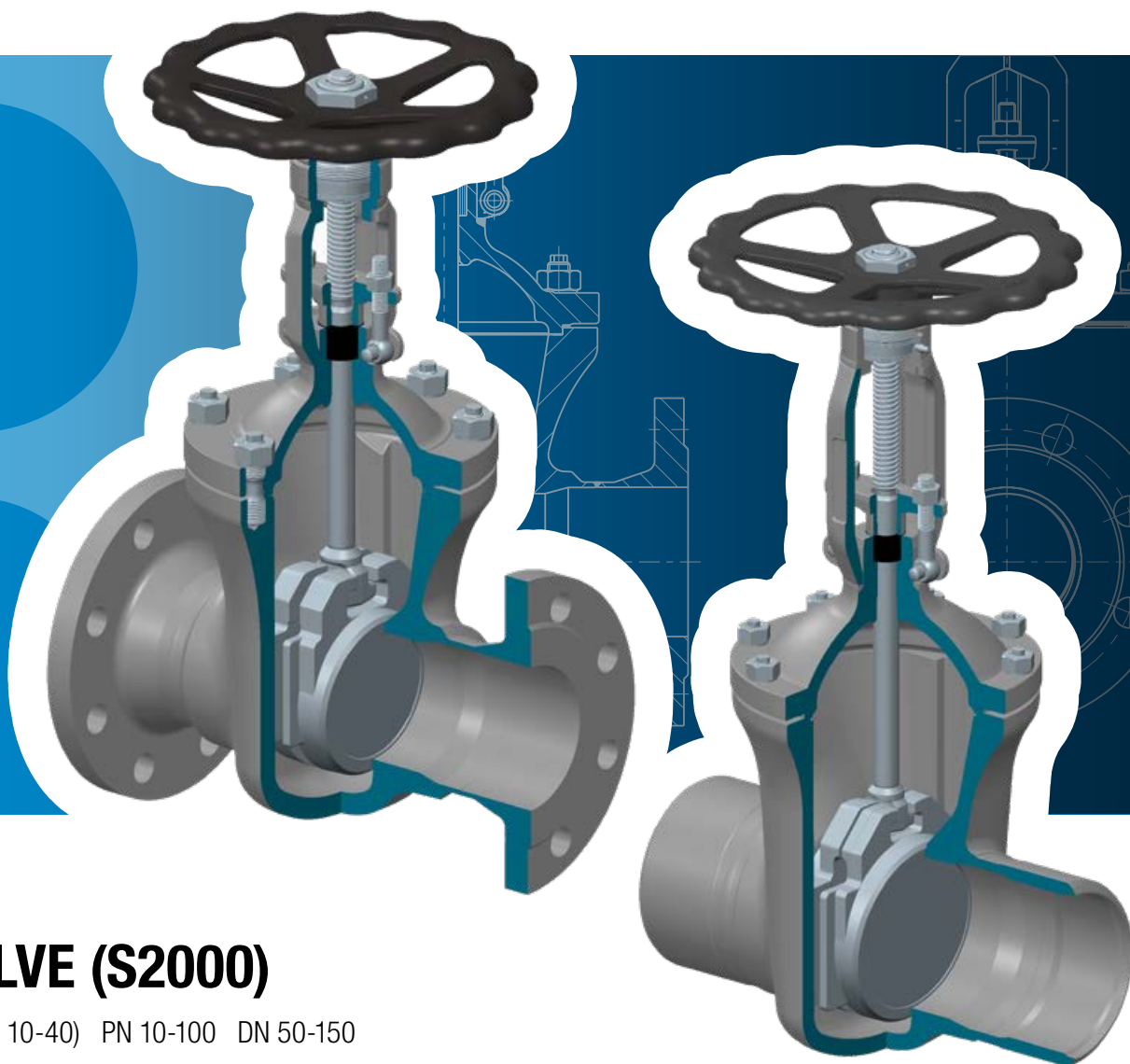


ASME

version
available


GATE VALVE (S2000)

700 HJ/JJ (GA PN 10-40) PN 10-100 DN 50-150

Design highlights

- Forged body centre with integral cover flange and integral guide rails
- Integral seat, body seat a hardness of approx. 35–37 HRC
- Bolted bonnet with expansion bolts
- Full bore
- Non-rotating, rising, roll-polished stem
- GA version: rotating non-rising stem

Advantages

- Homogeneous joining, free of pores and cavities compared to cast steel, sturdy and heavy duty
- High wear resistance, long-term seat impermeability
- Improved flow characteristics and low pressure drop
- No constriction in seat
- Blow-out-proof seal
- Minimum packing wear
- Advantageous in small spaces

Version

- Split wedge design = version JJ
- Flexible wedge design = version HJ
- Body and bonnet forged
- Body with full bore
- External stem thread
- Non-rotating, rising stem
- Needle bearing yoke sleeve
- Available with flanged and butt-weld connections

GA version option

- Flexible disc design
- Internal stem thread
- Rotating, non-rising stem

Operating data

- Operating pressure, welded ends, up to 120 bar (DIN 2401; DIN EN 1092-1 or DIN EN 12516-1)
- Operating pressure, flange ends, up to 100 bar (DIN 2401 or DIN EN 1092-1)
- Operating temperature up to 600 °C

Materials

- 1.0460
- 1.0619
only flange version PN 10-40
- 1.0571
- 1.5415
- 1.7335
- 1.7383

Other materials available on request.

Flow medium

Depending on the choice of materials, the gate valves can be used for water, steam, gas, oil or other non-aggressive media.

Applications

In chemical, industrial and power plants, and in shipbuilding.

Max. area of application for butt-weld ends³⁾

Permissible operating pressure [bar(g)] at calculation temperature [°C] ¹⁾

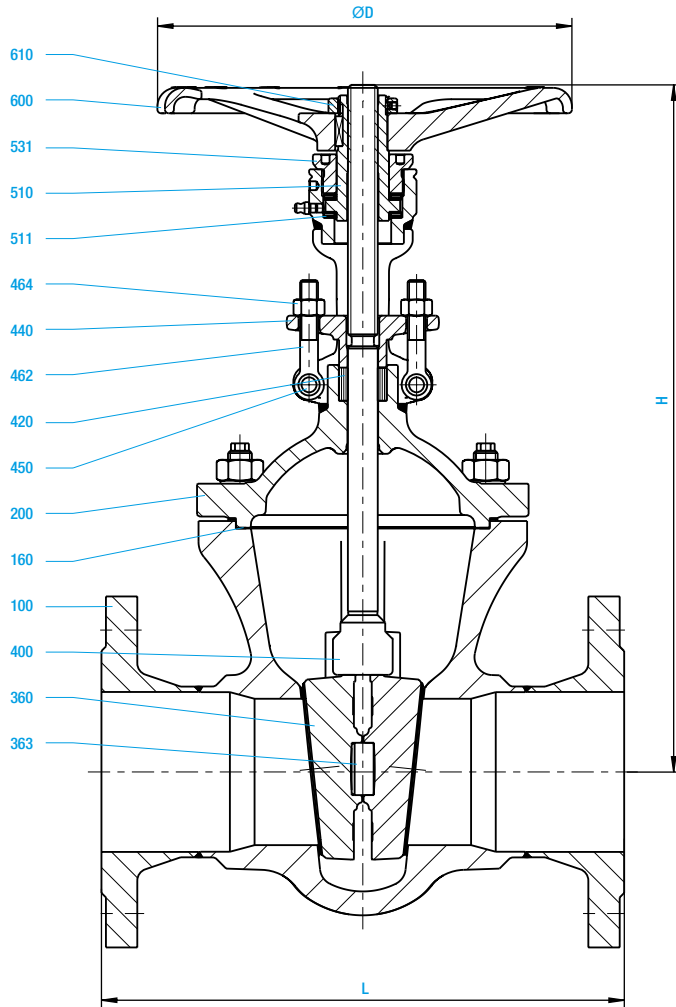
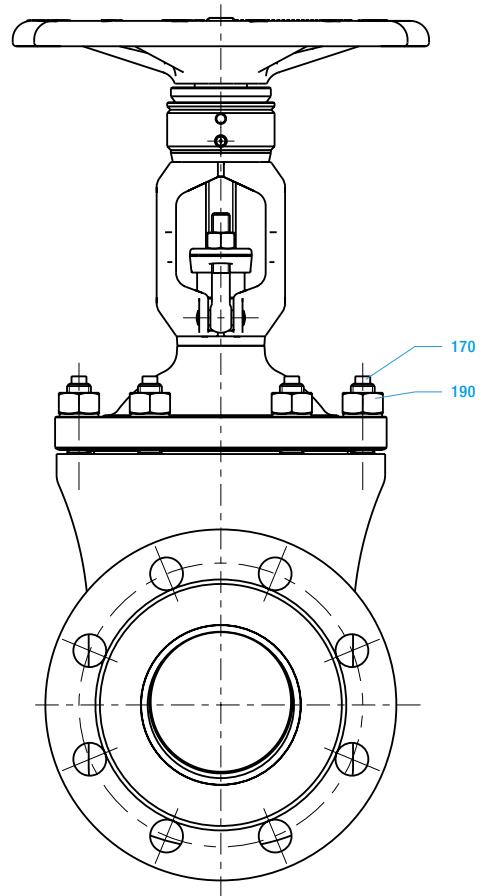
Material	PN	-60	-10	20	50	100	150	200	250	300	350	400	410	420	430	440	450	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600
1.0460	40		40	40	40	40	40	39.5	34.6	30.9	27.6	24	23	22	19.9	17.2	16.1	14.2	11.9	9.8												
	100		100	100	100	100	100	94	82	74	64.8	60	57.5	54.9	48.9	42.9	38	34	28	23												
1.5415	40		48	48	48	48	48	47	43.2	37.1	35.8	34.6	34.4	34.1	33.9	33.6	33.4	33.1	32.9	32.6	28.5	22.2	16.9	13.3	10.7							
	100		120	120	120	120	120	112	103	88	85	82	82	81	81	80	79	79	78	78	68	53	40	32	25.1							
1.7335	40		48	48	48	48	48	48	48	45.7	43.3	40.8	40.3	39.8	39.3	38.8	38.3	38.1	37.8	37.6	37.3	33.9	28.5	22.5	18.4	14.8	11.6	9.5	7.7			
	100		120	120	120	120	120	120	118	109	103	97	96	95	94	92	91	91	90	89	89	81	68	54	44	35	28	23	18			
1.7383 ²⁾	40		48	48	48	48	48	48	48	48	46	43	43	42	42	41	41	40	40	39	38	33.9	29	25	22	19	17	14	13	11	9	8
	100		120	120	120	120	120	120	120	118	109	103	102	101	99	98	97	96	95	94	89	81	69	61	53	46	40	34	30	26	22	20
1.0571	40	40	40	40	40	40	40	40	40	40	37.5																					
	100	100	100	100	100	100	100	100	100	100	93.8																					

1) Operating temperature = calculation temperature minus temperature surcharge according to the standard codes.

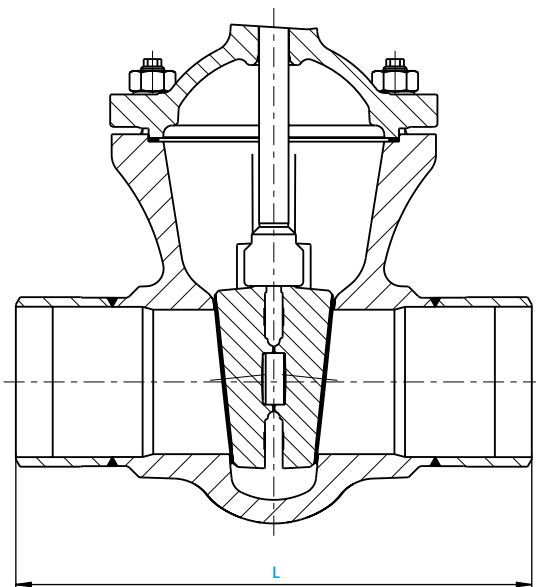
2) For temperatures > 570 °C, stem material 1.4980, seat armoured with Stellite, and high-temperature packing.

3) Max. area of application for flange ends or pressure ratings; see technical appendix from page 138.

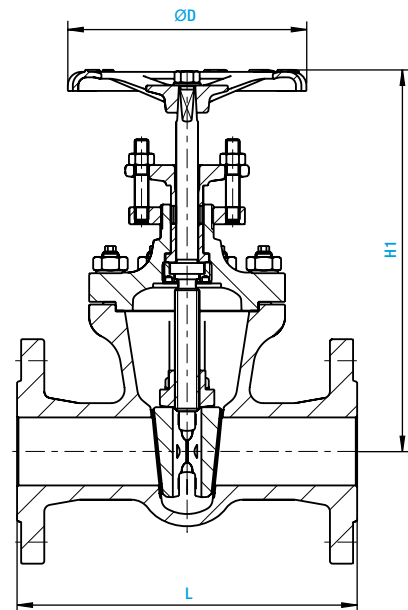
Flange version



Butt-weld end version



700 GA



Materials

Item	Designation	1.0619 (11) PN 10-40	1.0460 (21)	1.0571 (25)	1.5415 (42)	1.7335 (44)	1.7383 (45)
100	Body	1.0619 ¹⁾	1.0460 ¹⁾	1.0566 ¹⁾	1.5415 ²⁾	1.7335 ²⁾	1.7383 ²⁾
160	Gasket	Graphite ⁴⁾	Graphite ⁴⁾	Graphite ⁴⁾	Graphite ⁴⁾	Graphite ⁴⁾	Graphite ⁴⁾
170	Bolt	1.7225	1.7225	1.7225	1.7225	1.4923	1.4923
190	Hexagonal nut	1.7218	1.1181	1.7218	1.7218	1.4923	1.4923
200	Bonnet	1.0460	1.0460	1.0566	1.5415	1.7335	1.7383
360	Disc	1.0460 ³⁾	1.0460 ³⁾	1.0566 ³⁾	1.5415 ²⁾	1.7335 ²⁾	1.7383 ²⁾
363	Pressure piece	1.4021	1.4021	1.4021	1.4021	1.4021	1.4021
400	Stem	1.4021	1.4021	1.4571	1.4122	1.4122	1.4122
420	Packing	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
440	Gland flange	1.0460	1.0460	1.4571	1.0460	1.0460	1.0460
450	Pin	St	St	1.4571	St	St	St
462	Bolt	1.1181	1.1181	A4-50	1.1181	1.1181	1.1181
464	Hexagonal nut	1.1181	1.1181	A4-70	1.1181	1.1181	1.1181
510	Yoke sleeve	1.0718	1.0718	1.0718	1.0718	1.0718	1.0718
511	Anti-friction bearing	WLSt	WLSt	WLSt	WLSt	WLSt	WLSt
531	Threaded connection	1.0718	1.0718	1.0718	1.0718	1.0718	1.0718
600	Handwheel	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106
610	Hexagonal nut	St	St	St	St	St	St

Spare parts

1) Armoured with Cr17

2) Armoured with Stellite

3) Armoured with 18/8

4) DN 150 Grooved profile with graphite layer

Note: Only material 1.0460/1.0619 available for KI gate valve 700 GA

Dimensions/mm

PN DN	ØDS	10-25 L	40-100 L	10-40 H	63-100 H	H1	Stroke length	Rev/ stroke	10-40 ØD	63-100 ØD
50	50	250	250	340	340	280	63	16	180	180
80	78	280	310	415	415	345	90	23	225	225
100	98	300	350	460	505	405	110	28	280	360
150	150	350	450	655	685	525	165	28	360	450

Weights/kg and Kvs value m³/h

PN DN	10-25	40	63	100	10-40 Butt-weld ends	63-100 Butt-weld ends	700 GA Flange/butt-weld ends			Kvs [m³/h]
50	19	19	23.5	26.5	21.5	15.5	19	19	15	258
80	35	35	40.5	45	28	31	35	1	28	6285
100	50	54	63	71	43	47	51	54	43	991
150	92	98	138	155	80	100	92	98	80	2323