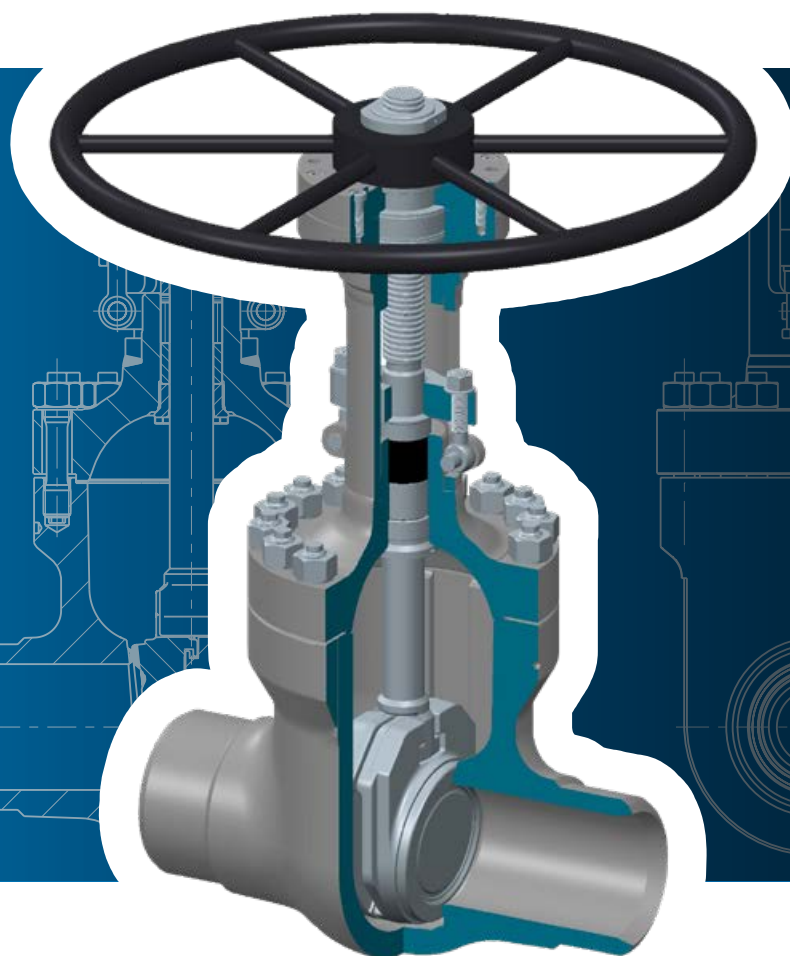


ASME

version
available

GATE VALVE

700 JJ PN 160 / PD 18 DN 50-300/250



Design highlights

- Integral seat
- Disc and body seat generally armoured in Stellite
- Non-rising handwheel
- Non-rotating stem with external stem thread and roll-polished shaft
- Discs and stem connected by hammer head
- Two piece gland
- Yoke sleeve in axial needle bearing
- Axial needle bearing protected by dirt scrapers

Advantages

- No gap corrosion
- Optimum guide pairing with minimum wear
- Advantageous in small spaces
- Minimum packing wear on polished surfaces
- Flexible connection between disc and stem allows discs to move freely within the guide rails of the body, which prevents bending strain on the stem
- Avoids stem damage due to uneven tightening of packing bolts
- Reduced force needed to open and close the valve
- Prevents dirt entering or lubricant escaping

Version

- Body forged
- Flexible wedge version
- Integral seat
- External stem thread
- Cover gasket chambered inside and outside
- Yoke sleeve mounted on anti-friction bearings
- Suitable for mounting actuators

Materials

- 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, oil or other non-aggressive media.

Applications

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

Operating data

- Operating pressure, welded ends, up to 254 bar (DIN 2401; DIN EN 1092-1 or DIN EN 12516-1)
- Operating pressure, flange ends, up to 160 bar (DIN 2401 or DIN EN 1092-1)
- Operating temperature up to 600 °C

Max. area of application for welded ends ³⁾

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

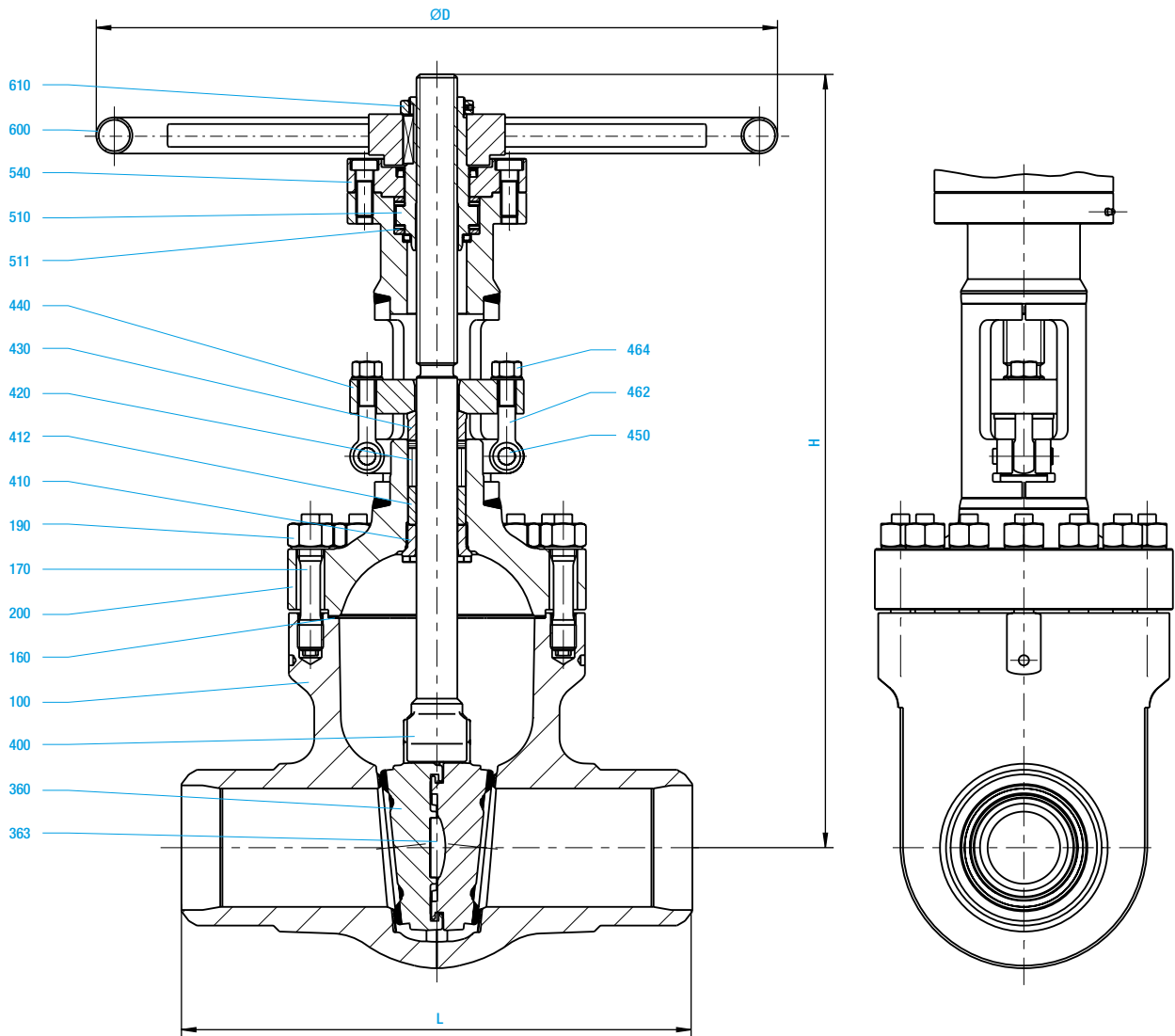
Material	PD	-10	20	50	100	120	150	200	250	300	350	400	420	430	440	460	470	480	490	500	510	520	530	540	550	560	570	580	590	600
1.5415	18	258	258	246	229	219	204	185	170	146	141	136	134	133	132	130	129	128	112	88	67	53	42							
1.7335	18	258	258	249	234	228	219	205	194	180	170	161	156	155	153	150	149	148	147	133	112	89	72	58	46	37	30			
1.7383 ²⁾	18	258	258	250	239	233	224	210	205	194	180	170	166	164	162	159	156	155	153	131	115	100	88	76	66	56	50	43	37	33

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

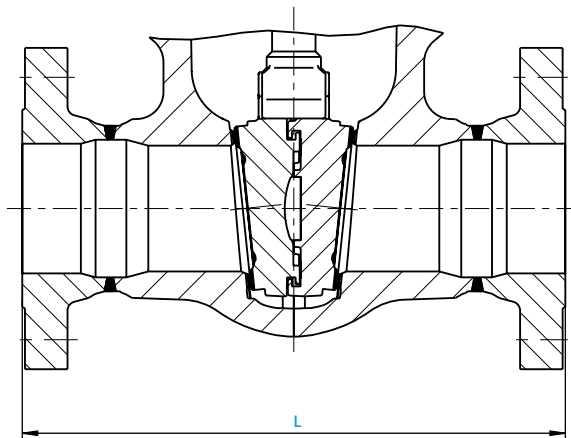
2) For temperatures > 570 °C, stem material 1.4980, seat armoured with Stellite, and high-temperature packing.

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

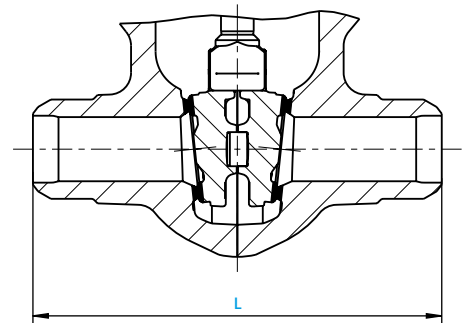
Butt-weld end version



Flange version



**Version
DN 50-80**



Materials

Item	Designation	1.5415 (42)	1.7335 (44)	1.7383 (45)
100	Body	1.5415 ¹⁾	1.7383/1.7335 ¹⁾	1.7383 ¹⁾
160	Gasket	Grooved profile with graphite layer	Grooved profile with graphite layer	Grooved profile with graphite layer
170	Bolt	1.7709 ²⁾	1.7709 ²⁾	1.7709 ²⁾
190	Hexagonal nut	1.7218	1.7218	1.7218
200	Bonnet	1.7383	1.7383	1.7383
360	Disc	1.7383 ¹⁾	1.7383 ¹⁾	1.7383 ¹⁾
363	Pressure piece	1.4122	1.4122	1.4122
400	Stem	1.4923	1.4923	1.4923
410	Back seat screw	1.4006	1.4006	1.4006
412	Guide sleeve	1.0718	1.0718	1.0718
420	Packing	Graphite	Graphite	Graphite
430	Gland	1.5415	1.5415	1.5415
440	Gland flange	1.5415	1.5415	1.5415
462	Bolt	1.7709	1.7709	1.7709
464	Hexagonal nut	1.7218	1.7218	1.7218
510	Yoke sleeve	CW 713 R	CW 713 R	CW 713 R
511	Anti-friction bearing	WLSt	WLSt	WLSt
540	Flange	1.0038	1.0038	1.0038
600	Handwheel	St	St	St
610	Hexagonal nut	St	St	St

Spare parts

1) Armoured with Stellite

2) Operating temperature > 550 °C = material 1.4923

Dimensions/mm

DN	ØDS	L	H	Stroke length	Rev/stroke	ØD
50	47	300	490	80	16	350
80	74	390	610	105	17.5	400
100	95	450	690	130	22	500
150	139	600	910	185	23.5	800
200	183	750	1120	235	26.5	1000
250	228	900	1240	270	30	1000

Weights/kg and Kvs value m³/h

DN	Flange	Butt-weld ends	Kvs [m³/h]
50	56	47	228
80	105	93	565
100	149	130	930
150	339	301	1995
200	651	576	3458
250	1077	969	5367