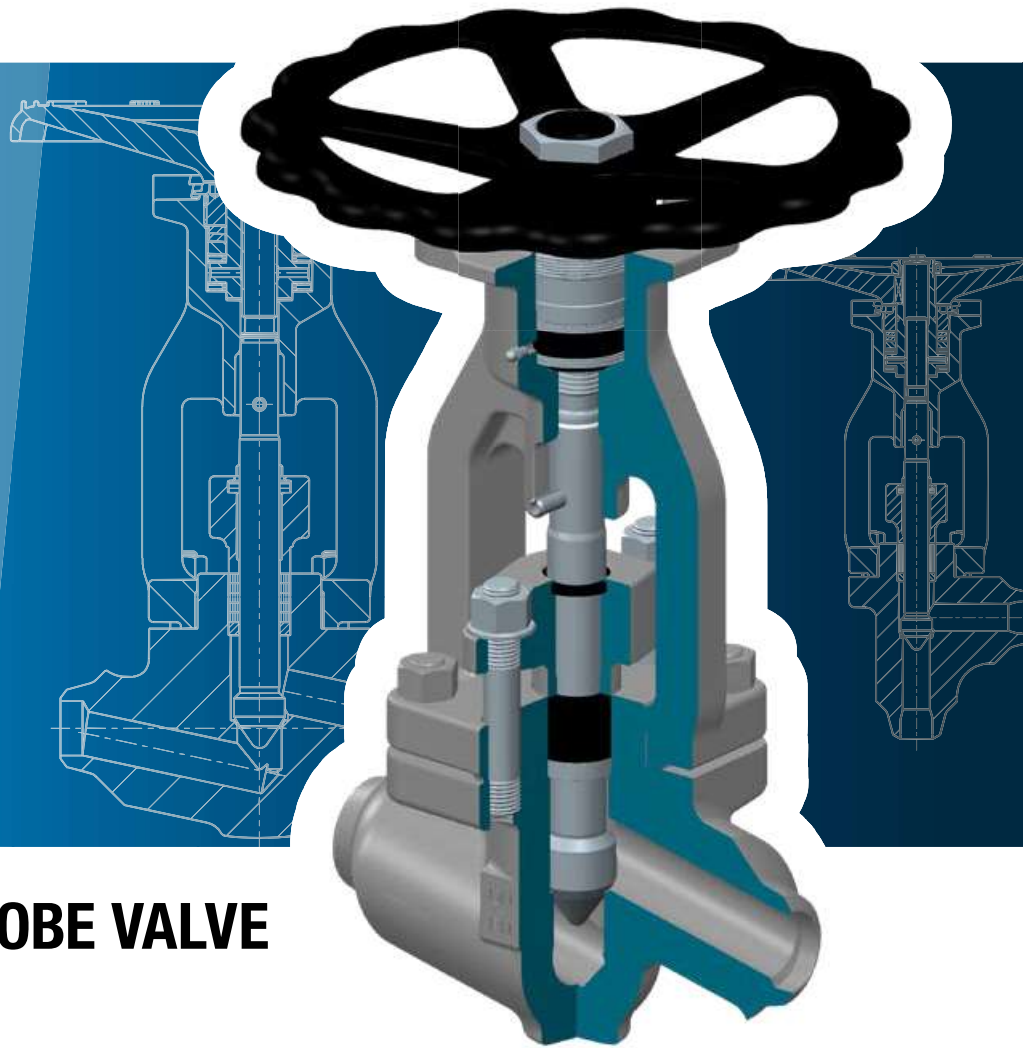


ASME

version
available



HIGH PRESSURE GLOBE VALVE

HD 2000 200 LM PN 500 DN 10-65

HIGH PRESSURE LIFT CHECK VALVE

HD 2000 240 MT PN 500 DN 10-65

Design highlights

- Body seat as integral edge seat, armoured with Stellite
- Stem with disc > 570 °C with armoured Stellite edge seat
- External seal only provided by gland packing
- Bolted bonnet
- Yoke sleeve in special brass
- Disc spring assembly effective in closing direction

Advantages

- No seat ring, therefore no gap corrosion or separation
- No damage between disc and stem due to high flow speed
- No cover gasket, therefore reduction of possible leakage
- Blow-out-proof seal to improve service options, e.g. when regrinding the body seat.
- Good emergency running characteristics
- Required closing forces maintained regardless of changes in length between the stem and bonnet, caused by temperature fluctuations

Version

- Flow passage with straight top part
- Forged body
- Non-rotating, rising stem
- Position indicator / anti-twist device
- Throttle disc
- Needle bearing yoke sleeve
- From DN 20 with integral actuator connection flange
- Version available with back seat (200 LS)
- Version available in angular design (202 LM)

Materials

- 1.0460
- 1.4550
- 1.4901
- 1.4903
- 1.5415
- 1.7335
- 1.7383

Other materials available on request.

Flow medium

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

Applications

In industrial plants, power stations, process engineering plants and in shipbuilding.

Operating data

- Operating pressure up to 550 bar
- Operating temperature from -10 °C to 650 °C (depending on material)

Area of application

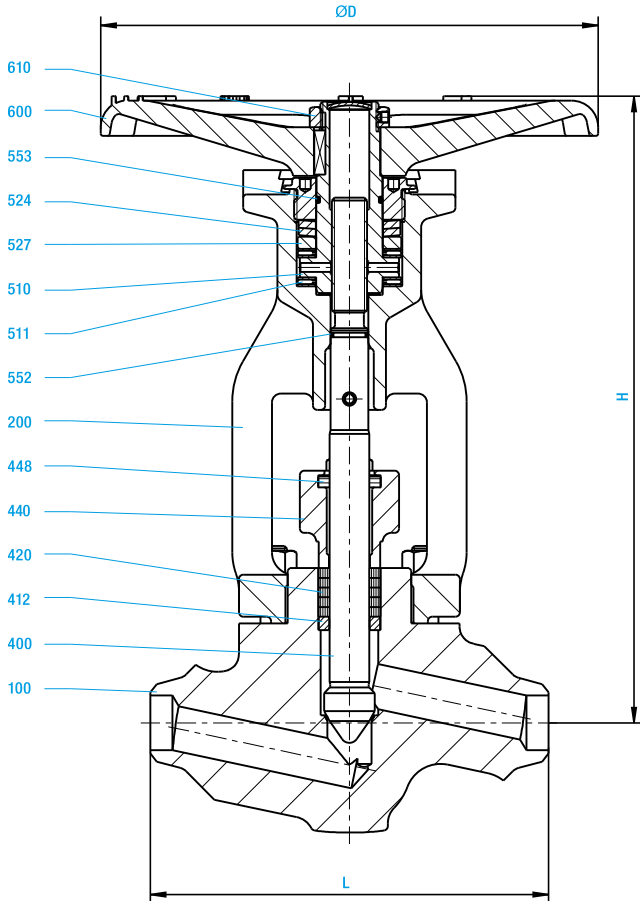
Permissible operating pressure [bar(g)] at calculation temperature [°C] ¹⁾

Material	PN	20	50	100	120	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	610	620	630	640	650					
1.0460	500	550	550	550	550	550	550	518	463	389	315	300	285	270	255	240	213	177	146																						
1.5415	500	550	550	550	550	550	550	550	550	537	518	514	510	507	503	500	496	493	489	426	333	253	200	160																	
1.7335	500	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	500	426	338	275	222	173	142	116													
1.7383 ²⁾	500	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	500	437	381	333	289	252	214	189	163	140	124										
1.4903 ²⁾	500	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	500	465	430	380	338	298	261	231	198	172				
1.4901 ²⁾	500	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550	550
1.4550	500	550	550	550	550	550	550	544	504	481	463	460	456	454	451	449	447	445	443	442	441	440	439	438	437	437	437	436	435	434	433	396	363	320	271	240	207				

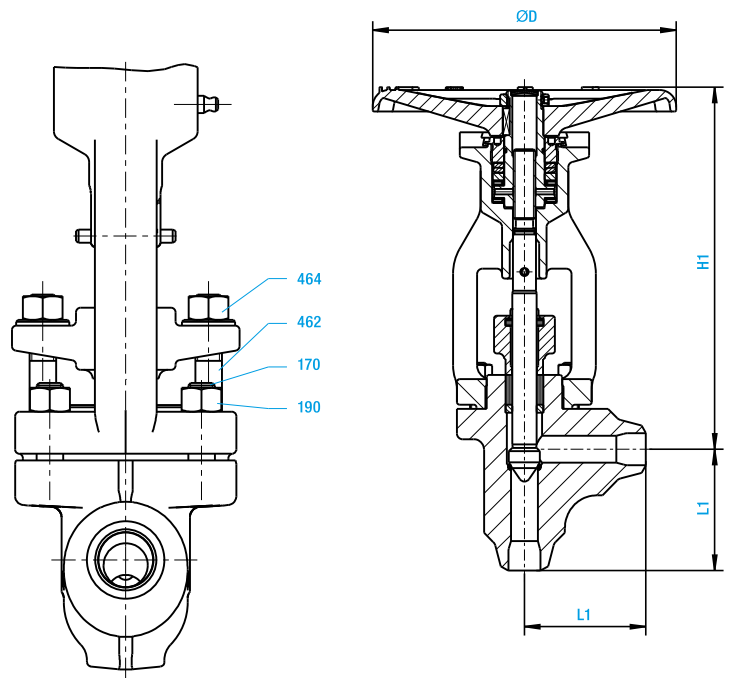
1) Operating temperature = calculation temperature minus temperature surcharge according to the standard codes.

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

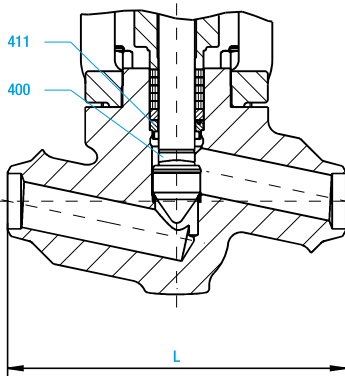
200 LM



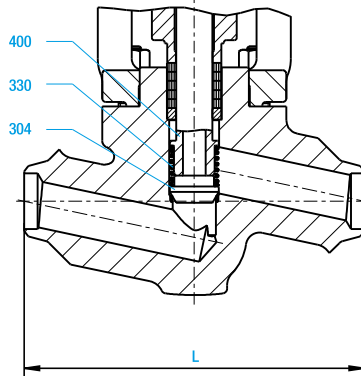
202 LM



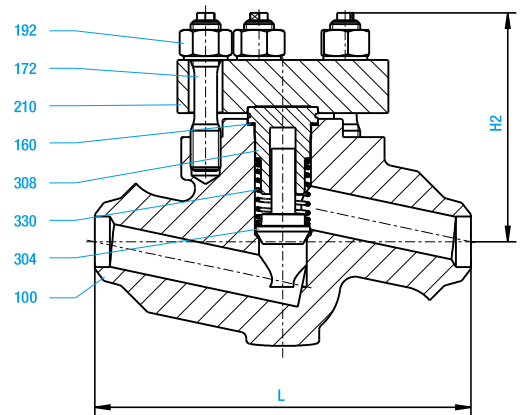
200 LS*



240 MM*



240 MT*



Materials

Item	Designation	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45) ²⁾	1.4903 (63) ²⁾	1.4901 (66) ²⁾	1.4550 (89)
100	Body	1.0460	1.5415	1.7335	1.7383	1.4903	1.4901	1.4550
	Body seat	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite	Stellite
160	Gasket	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite	Graphite
170	Bolt	1.7709	1.7709	1.7709	1.7709	1.4923	1.4923	1.4980
172	Bolt	1.4923	1.4923	1.4923	1.4923	1.4986	1.4986	1.4986
190	Hexagonal nut	1.7218	1.7709	1.7218	1.4986	1.4986	1.4923	1.4986
192	Hexagonal nut	1.4923	1.4923	1.4923	1.4923	1.4923	1.4986	1.4986
200	Bonnet	1.7379	1.7379	1.7379	1.7379	1.7379	1.7379	1.7379 ³⁾
210	Cover	1.7380	1.7380	1.7380	1.7380	1.4903	1.4901	1.4550
304	Check valve disc	1.4923	1.4923	1.4923	1.4923	1.4923	1.4923	1.4980
308	Guide	1.4923	1.4923	1.4923	1.4923	1.4980	1.4980	1.4980
330	Pressure spring	2.4667	2.4698	2.4698	2.4668	2.4699	2.4699	2.4669
400	Stem	1.4122 ¹⁾	1.4122 ¹⁾	1.4122 ¹⁾	1.4122 ^{1/2)}	1.4122 ^{1/2)}	1.4980	1.4980
411	Back seat ring	1.4980	1.4980	1.4980	1.4980	1.4980	1.4980	1.4980
412	Guide sleeve	0.7660	0.7660	0.7660	0.7660	0.7660	0.7660	0.7660
420	Packing	Pure graphite	Pure graphite	Pure graphite	Pure graphite	Pure graphite	Pure graphite	Pure graphite
440	Gland	1.7379	1.7379	1.7379	1.7379	1.7379	1.7379	1.7379 ³⁾
448	Packing ring	Graphite mesh	Graphite mesh	Graphite mesh	Graphite mesh	Graphite mesh	Graphite mesh	Graphite mesh
462	Bolt	1.7709	1.7709	1.7709	1.7709	1.4923	1.4980	1.4980
464	Hexagonal nut	1.7218	1.7218	1.7218	1.7218	1.4923	1.4923	1.4986
510	Yoke sleeve	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R	CW 713 R
511	Anti-friction bearing	WLS _t	WLS _t	WLS _t	WLS _t	WLS _t	WLS _t	WLS _t
524	Disc spring	1.8159	1.8159	1.8159	1.8159	1.8159	1.8159	1.8159
527	Supporting disc	1.4021	1.4021	1.4021	1.4021	1.4021	1.4021	1.4021
552	O-ring	Viton	Viton	Viton	Viton	Viton	Viton	Viton
553	O-ring	Viton	Viton	Viton	Viton	Viton	Viton	Viton
600	Handwheel	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106	5.3106
610	Hexagonal nut	St	St	St	St	St	St	St

Spare parts

- 1) Disc seat armoured with Stellite on request.
 2) For temperatures > 570 °C, stem material 1.4980, seat surface armoured with Stellite, and high-temperature packing.
 3) Chemically nickel-plated

Dimensions/mm

DN	L	L1	H	H1	H2	Stroke length	U/ stroke	ØD	DIN/ISO 5210
10	150	75	228	215	100	10	5	140	F10
15	150	75	228	215	100	10	5	140	F10
20	180	90	285	268	122	16	8	225	F10
25	180	90	285	268	122	16	8	225	F10
32	300	150	445	415	185	27	9	360	F10/F14
40	300	150	445	415	185	27	9	360	F10/F14
50	300	150	445	415	185	27	9	360	F10/F14
65	360	200	585	557	242	36	12	450	F14/F16

Weights/kg and Kvs value m³/h

DN	Butt-weld ends					Kvs [m ³ /h] * 200 LM / LS
	200 LM	202 LM	240 MM	200 LS	240 MT	
10	6	6	6	6	3.8	2.3
15	6	6	6	6	3.8	3.4
20	12	12	12	12	7.7	6.2
25	12	12	12	12	7.7	7.9
32	47.5	47.5	47.5	47.5	29	20
40	47	47	47	47	29	24.1
50	46.5	46.5	46.5	46.5	30	28.3
65	110	110	110	110	67	48.5

Attention: In the case of machined butt-weld ends, the permissible positive operating pressures and test pressures for the relevant pipe dimension apply.

* Deviations are possible due to changed connection dimensions.