

■ **Globe valves** ■ **High pressure globe valve HD 91** ■ **200 JM** ■ **PN 320** ■ **DN 10-65/50**



Range of application

Admissible operating pressure [bar] at design temperature [°C] ¹⁾

Material	PN	-10	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 ²⁾	590 ²⁾	600 ²⁾
1.0460	160	160	160	160	160	160	160	151	132	118	99	80	76	73	69	65	61	54	45	37												
	250	250	250	250	250	250	250	235	206	184	155	125	119	113	107	102	96	85	71	58												
	320	320	320	320	320	320	320	302	264	236	198	160	153	145	138	130	123	109	91	75												
1.5415	160	192	192	192	192	192	192	179	165	141	137	132	131	130	129	128	127	126	125	124	109	85	64	51	41							
	250	300	300	300	300	300	300	280	258	221	213	206	205	203	202	200	199	197	196	194	170	132	101	79	64							
	320	320	320	320	320	320	320	320	283	273	264	262	260	258	256	255	253	251	249	217	170	129	102	81								
1.7335	160	192	192	192	192	192	192	189	174	165	156	154	152	150	148	146	145	144	143	142	129	109	86	70	57	44	36	29				
	250	300	300	300	300	300	300	294	272	258	243	240	237	234	231	228	227	225	224	222	202	170	134	109	88	69	57	46				
	320	320	320	320	320	320	320	320	320	320	311	307	304	300	296	292	290	289	287	285	258	217	172	140	113	88	72	59				
1.7383 ²⁾	160	192	192	192	192	192	192	189	174	165	163	161	159	157	156	154	152	150	143	127	111	97	85	74	64	55	48	41	36	32		
	250	300	300	300	300	300	300	294	272	258	255	252	249	246	243	240	237	234	224	199	174	152	132	115	100	85	75	65	56	49		
	320	320	320	320	320	320	320	320	320	320	320	320	319	315	311	307	304	300	287	255	223	194	170	147	128	109	96	83	72	63		

1) Operating temperature = design temperature minus temperature surcharge acc. to DIN regulations.

2) For temperatures > 570 °C, stem in 1.4923 and high-temperature-packing.

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Standard features

- Disc and stem in one piece
- Die-forged valve body
- Non-turning, rising stem
- Position indicator
- Throttle disc
- Yoke sleeve supported by needle bearings
- Possibility to add an actuator-flange

Pressure and temperature ratings

- Pressure rating 320 bar
- Temperature rating from -10 °C up to 600 °C

Materials

- 1.0460
- 1.5415
- 1.7335
- 1.7383

Further materials on request.

Media

Depending on the material the globe valves are suitable for water, gas, oil and other non aggressive media

Fields of application

High temperature steam and water, refining (catalytic reformers and hydrocrackers), petrochemical and chemical industries, power plants

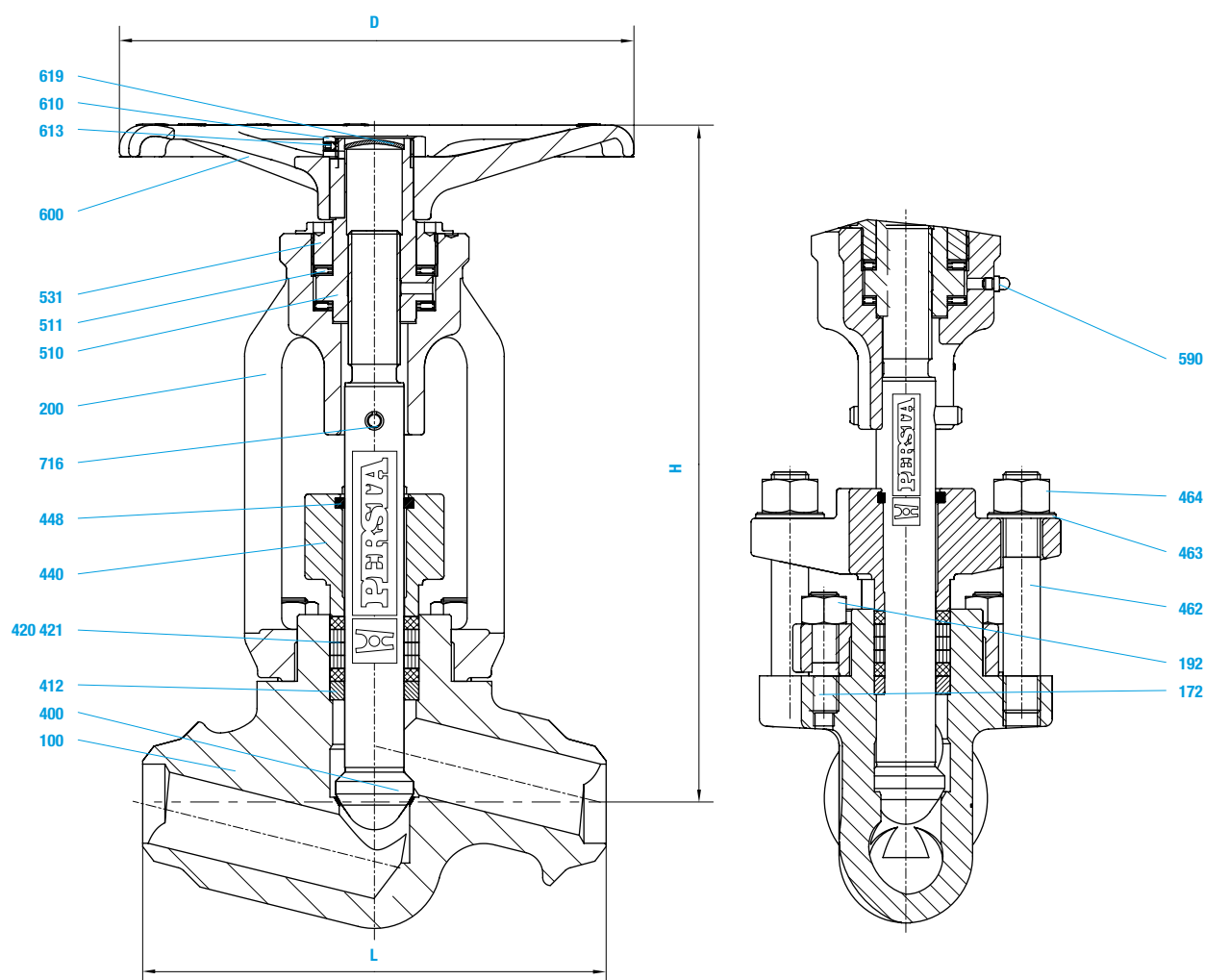
Design Highlights

- Body seat: edge seat welded on integrately with stellite
- Disc / stem single piece of material > 570 °C with stellite edge seat
- Sealing to the outside only means of the gland packing
- Body and bonnet in two separate pieces with bolted connection
- Yoke sleeve supported by needle bearings (axial type)
- Possibility to add an actuator-flange

Benefits

- No pressed in or screwed seat ring, therefore no crevice corrosion or loosening
- No damages between disc and stem because of high flow velocity
- No bonnet gaskets, therefore reduction of possible leakage areas
- To ease maintenance work, e.g. regrinding of the body seats
- To minimize the expenditure of effort when operating valve
- Simple retrofitting of an electric actuator possible

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Materials					
Pos.	Component	1.0460 (21)	1.5415 (42)	1.7335 (44)	1.7383 (45)
100	Body welded on with	1.0460	1.5415	1.7335	1.7383
172	Stud	Stellite	Stellite	Stellite	Stellite
192	Hexagonal nut	1.7709	1.7709	1.7709	1.7709
200	Bonnet	1.7218	1.7218	1.7218	1.7218
400	Stem	1.7379	1.7379	1.7379	1.7379
412	Guide sleeve	1.4122 ¹⁾	1.4122 ¹⁾	1.4122 ¹⁾	1.4122 ¹⁾²⁾
420 / 421	Packing	0.7660	0.7660	0.7660	0.7660
440	Gland flange	Pure graphite	Pure graphite	Pure graphite	Pure graphite ²⁾
448	Dirt scraper	1.7379	1.7379	1.7379	1.7379
462	Stud	Graphite plait	Graphite plait	Graphite plait	Graphite plait
463	Washer	1.7709	1.7709	1.7709	1.7709
464	Hexagonal nut	St	St	St	St
510	Yoke sleeve	1.7218	1.7218	1.7218	1.7218
511	Bearing	CW 713 R	CW 713 R	CW 713 R	CW 713 R
531	Screwing	WLS	WLS	WLS	WLS
590	Grease nipple	1.0460	1.0460	1.0460	1.0460
600	Handwheel	5.8	5.8	5.8	5.8
610	Hexagonal nut	5.3106	5.3106	5.3106	5.3106
613	Screw pin	St	St	St	St
619	Lock washer	45H	45H	45H	45H
716	Tension pin	ST	ST	ST	ST
	Spare parts	1.0904	1.0904	1.0904	1.0904

1) On request stem in 1.4923 with stellite seats
2) For temperatures > 570 °C stem with stellite seats in 1.4923 and hightemperature-packing

Dimensions/mm					
DN	L	H	Stroke	R/Stroke	DIN/ISO D 5210
10	150	208	10	5	140 F07/F10
15	150	208	10	5	140 F07/F10
20	160	250	16	8	180 F10
25	160	250	16	8	180 F10
32	250	415	27	9	280 F10/F14
40	250	415	27	9	280 F10/F14
50	250	415	27	9	280 F10/F14
65 / 50	250	415	27	9	280 F10/F14

Attention: In case of welding connections the permissible operating overpressure is valid for the corresponding tube dimension.

Weights/kg and Kvs-values		
DN	BW	Kvs (m ³ /h)
10	4	2,3
15	4	3,4
20	6,9	6,2
25	6,9	7,9
32	23	20,0
40	23	24,1
50	23	28,3
65 / 50	23	28,3