

1101

Globe valves
Straight seat type
PN 10-40 DN 15-300

Design
 Acc. to DIN 3356

Top part
 Outside screw
 Rising Handwheel
 Rising stem

Stem sealing
 Stuffing box

Obturator
 Disk

Body seat
 Integral seat

Valve ends
 Flanges acc. to
 EN 1092-1 (DIN 2501
 Part 1)

Requirements and tests
 Acc. to DIN 3356 Part 1

Marking
 Nominal size DN
 Nominal pressure PN
 Body material
 Manufacturer brand
 Flow direction arrow

Pos.	Denomination	Material		Pos.	Denomination	Material	
1	Body	1.4308	1.4408	15	Packing	Graphite	Graphite
2	Yoke	1.4308	1.4408	16	Gasket	Graphite /	Graphite /
3	Gland	1.4541	1.4571			1.4401	1.4401
4	Hand wheel	GTS/GTW	GTS/GTW	17	Hasp screw	1.4541	1.4571
5	Disk	1.4541	1.4571	18	Hex. Nut	A2	A4
8	Stem	1.4541	1.4571	23	Stud bolt	A2-70	A4-70
10	Disk screwing	1.4541	1.4571	24	Hex. Nut	A2	A4
12	Sleeve	1.4021	1.4021				

¹ further materials are shown in the technical part

Face-to-face dimension acc. to EN 558-1 series 1 (DIN 3202-F1)

DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300		
L	130	150	160	180	200	230	290	310	350	400	480	600	730	850		
H	175	225	225	230	270	285	340	370	410	460	535	635	640	760		
H1	185	240	240	250	300	320	360	395	450	515	585	695	720	850		
$\varnothing d$	100	120	120	120	140	160	180	180	200	225	250	280	320	360		
PN	b											24	26	26		
10	kg								use PN 16			146				
PN	b								18	20	20	22	22	24	26	28
16	kg			use PN 40					21	35	48	57	90	146		
PN	b												30	32	39 ²	
25	kg								use PN 40				185			
PN	b	16	18	18	18	18	20	22	24	24	26	28	34	38	47 ²	
40	kg	5	6	7	10	12	17	23	37	53	64	98	192			
k_{vs}	4	6,3	10	16	25	40	63	100	160	250	360	630	1000	1400		

² reinforced against DIN / EN

Pressure/Temperature ratings in bar g at Temperature in °C

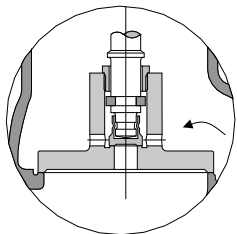
Material	PN	50°C	100°C	120°C	150°C	200°C	250°C	300°C					
»1.4308« GX5CrNi19-10 EN 10213	10	10,0	7,7	7,7	6,7	5,7	5,2	4,8					
	16	16,0	12,3	12,3	10,7	9,1	8,4	7,7					
	25	25,0	19,2	19,2	16,7	14,2	13,1	12,1					
	40	40,0	30,8	30,8	26,8	22,8	21,0	19,4					
»1.4408« GX6CrNiMo18-10-2 EN 10213	10	10,0	8,2	8,2	7,2	6,2	5,7	5,1					
	16	16,0	13,2	13,2	11,6	10,0	9,1	8,2					
	25	25,0	20,7	20,7	18,1	15,7	14,2	12,8					
	40	40,0	33,1	33,1	29,0	25,1	22,8	20,5					

Modifications

Indicator
Relief plug / By-pass disk
Heating jacket
Extended bonnet
Soft seated disk
Conical seat
Throttle plug / Regulating disk

Additional equipment

Chain wheel
Stem extension
Gear
Electric actuator
Pneumatic actuator



Relief plug / By-pass disk

Installation

Piping is to be in such a manner that injurious thrust and bending forces are kept away from the valve casings. Globe valves are usually installed thus allowing the liquid to enter below the plug and to leave above it. Globe valves can also be installed in pipelines with changing flow directions up to the under mentioned differential pressures between the working pressure before the closing plug and the back pressure behind it. As soon as these differential pressures will be exceeded, relief plugs have to be provided for. These have to be installed in such a way that the pressure to be sealed has to be above the plug.

Nominal size DN	125	150	200	250	300
Δp [bar]	33	21	14	9	6

The relief plug has the function of a by-pass and can only serve its purpose when after opening a back pressure is built up so that the differential pressure becomes smaller than the figures in the above table. If this is not possible, special designs are necessary. In this case we need the exact working conditions. When turning the handwheel it is not allowed to use additional levers.