

1101

Globe valves
Straight seat type
PN 63-160 DN 15-200

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	1.4581	15	Packing	Graphite	Graphite
2	Yoke	1.4308	1.4581	16	Gasket	1.4541 /	1.4571 /
3	Gland	1.4541	1.4571		(grooved)	Graphite	Graphite
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 2 (DIN 3202-F2)

DN	15	20/25	25	32	40	50	65	80	100	125	150	200
L	210	230	230	260	260	300	340	380	430	500	550	650
H	280	285	285	300	345	345	405	445	430	550	500	565
H1	285	293	293	310	357	360	438	470	460	588	545	625
$\varnothing d$	140	140	140	160	200	200	200	250	250	320	320	360
PN 63	b					26	26	28	30	34	36	42
	kg					27	48	60	73	125	159	241
PN 100	b	use PN 160					use PN 160			---	---	---
	kg	use PN 160					use PN 160			---	---	---
PN 160	b	20	22	24	26	28	30	34	36	40	---	---
	kg	11	13	14	20	28	40	53	92	99	---	---
k_{VS}		4	6,3	10	16	25	40	63	100	160	250	360

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

Materials	PN	50°C	100°C	120°C	150°C	200°C	250°C	300°C	350°C	400°C	450°C	500°C	550°C
»1.4308« GX5CrNi19-10 EN 10213	63	63,0	48,6	48,6	42,3	36,0	33,1	30,6					
	100	100,0	77,1	77,1	67,1	57,1	52,5	48,5					
	160	160,0	123,4	123,4	107,4	91,4	84,1	77,7					
»1.4581« GX5CrNiMonB19-11-2 EN 10213	63	63,0	57,6	57,6	53,2	48,6	45,7	43,2	40,3	37,8	36,0	34,2	32,4
	100	100,0	91,4	91,4	84,5	77,1	72,5	68,5	64,0	60,0	57,1	54,2	51,4
	160	160,0	146,2	146,2	135,3	123,4	116,1	109,7	102,4	96,0	91,4	86,8	82,2

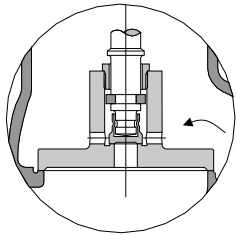
For temperatures > +400°C: Bolting material 1.7709

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	65	80	100	125	150	200
Δp [bar]	110	70	44	33	21	14

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.