

1201

Globe valves
Slanted seat type
PN 10-40 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
 T.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 series 1 (DIN 3202-F1)

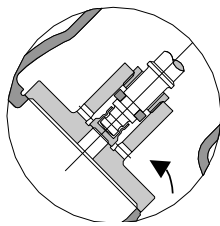
DN	15	20	25	32	40	50	65	80	100	125	150	200
L	130	150	160	180	200	230	290	310	350	400	480	600
H	155	195	195	195	230	250	325	345	385	425	500	585
H1	160	206	206	209	250	276	356	385	435	470	575	685
Ø d	100	120	120	120	140	160	180	180	200	225	250	320
PN	b											24
10	kg											use PN 16
PN	b											18
16	kg											20
												20
												22
												22
												24
												42
												51
												78
												133
PN	b											30
25	kg											use PN 40
PN	b	16	18	18	18	18	20	22	24	24	26	28
40	kg	4	5,5	6	7,5	10,5	15	19,5	31	48	58	81
155												155
k _{vs}		6	12	20	32	50	80	120	200	320	500	740
												1260

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

Relief plug / By-pass disk
 Heating jacket
 Soft seated disk
 Conical seat



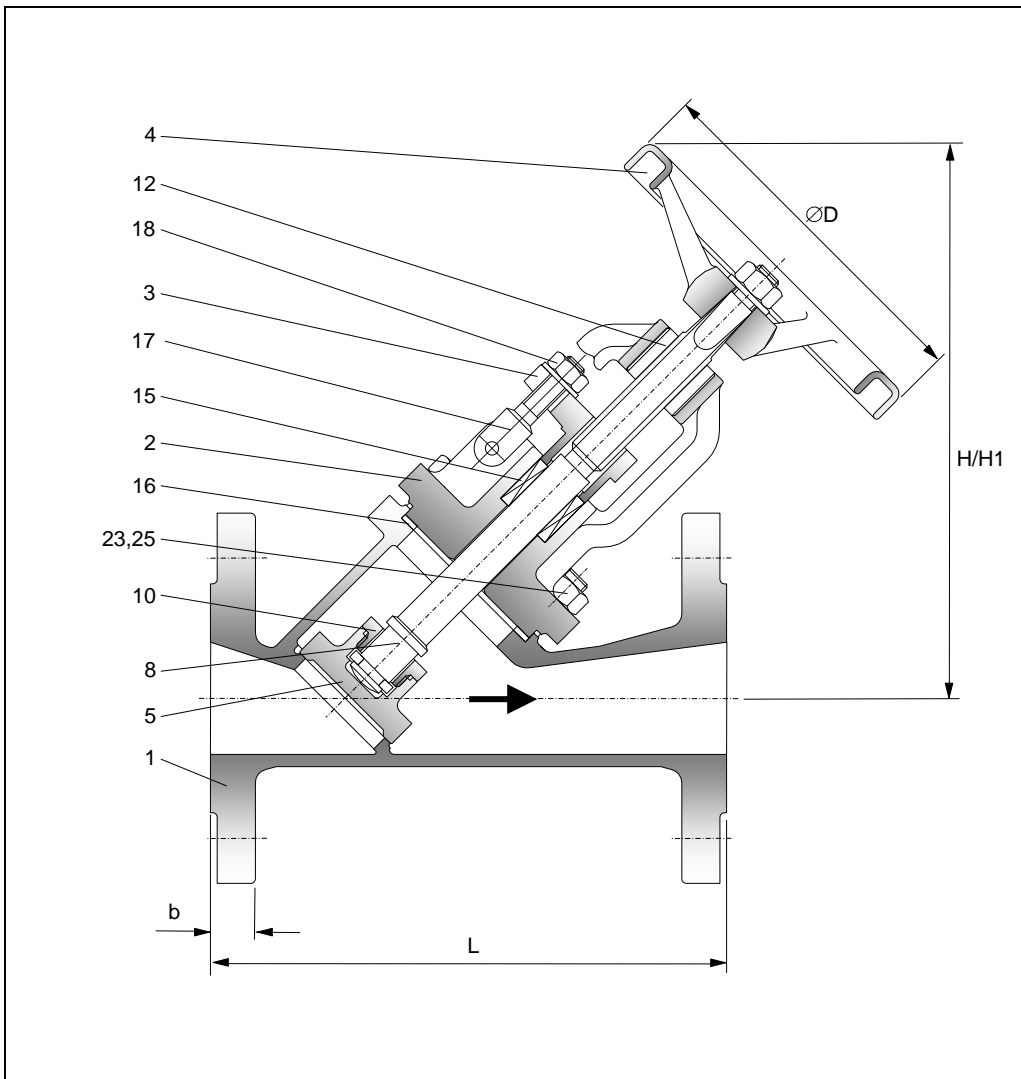
Relief plug / By-pass disk

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
Δp [bar]	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.



1201

Globe valves
Slanted 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
 T.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 series 2 (DIN 3202-F2)

DN	15	25	40	50	80	100	150	200
L	210	230	260	300	380	430	550	650
H	195	205	260	270	335	385	530	610
H1	205	220	285	300	380	435	610	705
Ø d	140	140	280	180	200	225	320	320
PN	b			26	28	30	36	42
63	kg			29	55	67	149	252
PN	b	use PN 160					---	---
100	kg				use PN 160		---	---
PN	b	20	24	28	30	36	40	---
160	kg	9	13	26	35	58	79	---
k _{vs}		6	20	50	80	200	320	740 1260



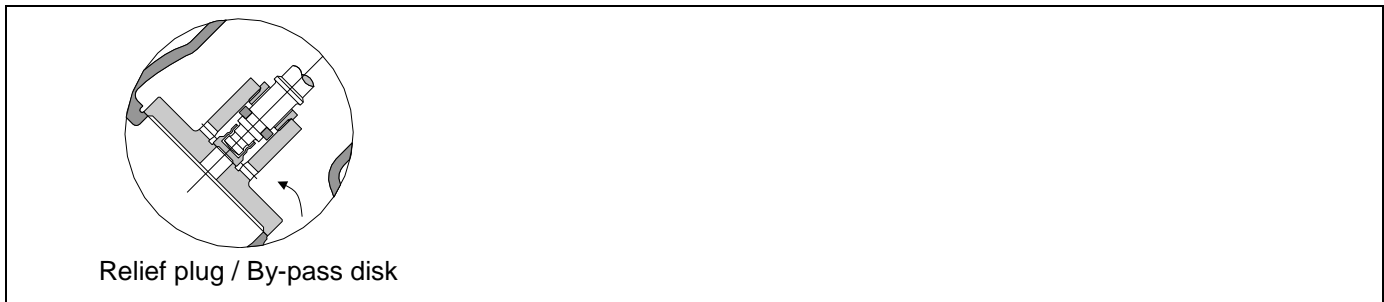
Pressure/Temperature ratings in bar g at Temperature in °C

Material	PN	50°C	100°C	120°C	150°C	200°C	250°C	300°C	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

- Relief plug / By-pass disk
- Heating jacket
- Soft seated disk
- Conical 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	80	100	150	200
Δp [bar]	70	44	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.