Globe Valves

SY and SL Series

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FITOK
Valves and Fittings

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Forged Steel Y-pattern Bonnetless Globe Valves

SY Series

- Size: 1/2 ~ 4" (15 ~ 100 mm)
- Classes: 1500, 1690, 2500, 2680 and 4500

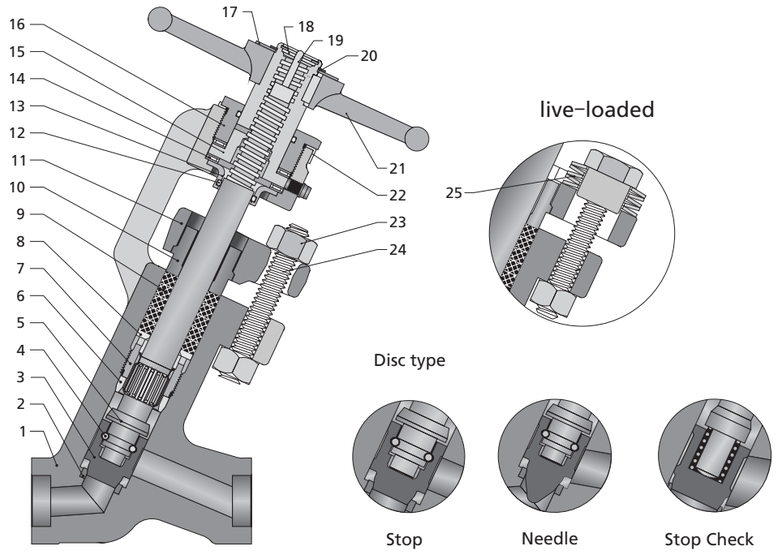
Specifications

- Design: ASME B16.34
- Testing: ASME B16.34 and API 598
- Marking: MSS-SP-25
- Socket weld ends: ASME B16.11
- Butt weld ends: ASME B16.25
- Threaded ends: ASME B1.20.1

Features

- One-piece, forged, bonnetless globe valves eliminate the potential for body-to-bonnet joint leakage, and not require cut or disassemble the bonnet for servicing.
- 65° inclined body reduces pressure drop compared with T-type.
- Splined bushing guides the stem allows quick and easy maintenance by removing all working parts at one time.
- The non-rotating stem hardened and polished to reduce operating torque.
- Linearly instead of helical movement of the non-rotating stem reduces the total friction area between the packing and stem.
- Packing chamber burnished and combination graphite rings individually pre-stressed for tight seal.
- Two-piece gland ensures gland and packing self-aligning.
- Stellite disc, seat and backseat provide excellent long service life even in severe services.
- Fully guided disc assures seat and disc precise alignment in spite of side thrust caused by high velocity flow, and prevents stem from scoring and galling, and provides longer disc seal and body life.
- Double orifice design Protects seating faces because part of the erosive flow energy dissipates through disc.
- Two flat slots design at the internal bottom of the disc prevent the disc from rotating, so avoid high-speed rotating disc and seat contact, damage to disc and seat.
- Backseat bevel on the stem, not on the disc, meet specifications API-602.
- Large clearance between stem and disc allows disc to move freely.
- Dust cover and sleeve protect stem threads from dirt, dust and sand.
- Fully enclosed stem driving lubrication system with two needle roller bearings ensures low operating torque.
- Upper stem position indicates if valve is open or closed.
- Optional live-loading packing, disc springs keep packing tight for long periods of time without maintenance.
- Stop, regulating, and stop check discs are available.
- Handwheel is rugged and knobbed to make sure the grip even when wearing gloves.
- Optional handwheel colors are available.

Standard Materials of Construction

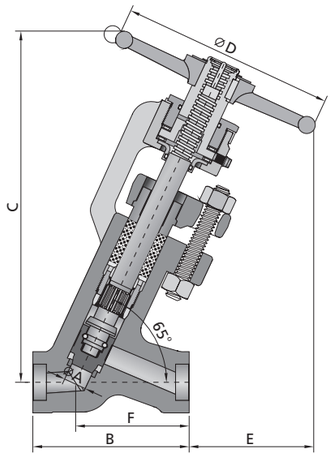


Item	Part	Valve Material				
		A105	F22	F91	F92	F316
1	Body	A105N	F22/A182	F91/A182	F92/A182	F316/A182
2	Seat	Stellite 6				
3	Disc	Stellite 6				
4	Holder	316 SS/A580				
5	Stem	410 SS/A276				316 SS/A276
6	Backseat	Stellite 6				
7	Spline bushing	630 SS				
8	Packing washer	304 SS				
9	Packing	Graphite				
10	Split gland bushing	CA15				
11	Packing flange	A105				F304/A182
12	O-Ring	Nitrile rubber				
13	Stem protector	Steel				Steel
14	Thrust bearing	Steel				
15	Stem nut	D-2C/A439				
16	Yoke bushing	1020/A108				1020/A108(nickel-plated)
17	Name plate	304 SS				
18	Dust cover	304 SS				
19	Indicator	410 SS/A276				316 SS/A276
20	Snap ring	Steel				
21	Handwheel	Malleable iron				
22	Tab washer	304 SS				
23	Gland nut	2H				8M
24	Gland stud	B7				B8M2
25	Springs	S17700				

Note:
Contact the authorized representative or FITOK Group for valves of other materials.

Dimensions

Size NPS DN	ØA in. mm		B in. mm		C in. mm		ØD in. mm		E in. mm		F in. mm	
	Port		End to End		Center to Top Open		Handwheel		Clearance Open		Center to End	
	1500~2680	4500	1500~2680	4500	1500~2680	4500	1500~2680	4500	1500~2680	4500	1500~2680	4500
1/2 15	0.559 14.2	0.375 9.5	4.88 124	5.75 146	9.63 245	11.75 298	6.00 152	6.00 152	3.63 92	3.25 83	3.20 81	4.19 106
3/4 20	0.559 14.2	0.559 14.2	4.88 124	7.00 178	9.63 245	14.20 361	6.00 152	8.00 203	3.63 92	6.00 152	3.20 81	3.88 99
1 25	0.833 21.2	0.559 14.2	5.75 146	7.00 178	13.19 335	14.20 361	8.00 203	8.00 203	5.13 130	6.00 152	4.19 106	3.88 99
1 1/4 32	1.125 28.6	0.833 21.2	7.25 184	10.13 257	16.63 422	18.88 480	12.00 305	12.00 305	7.57 192	7.00 178	4.94 125	6.57 167
1 1/2 40	1.125 28.6	1.125 28.6	7.25 184	12.00 305	16.63 422	20.75 527	12.00 305	18.00 457	7.57 192	8.00 203	4.94 125	8.00 203
2 50	1.688 42.9	1.50 38.1	10.13 257	12.00 305	19.86 505	20.75 527	12.00 305	18.00 457	7.50 190	8.00 203	6.57 167	8.00 203
2 1/2 65	1.688 42.9	1.50 38.1	12.00 305	12.00 305	20.69 526	20.75 527	16.00 406	16.00 406	7.25 184	7.25 184	8.00 203	8.00 203
3 80	1.688 42.9	1.50 38.1	12.00 305	12.00 305	20.69 526	20.75 527	16.00 406	16.00 406	7.25 184	7.25 184	8.00 203	8.00 203
4 100	1.688 42.9	1.50 38.1	12.00 305	12.00 305	20.69 526	20.75 527	16.00 406	16.00 406	7.25 184	7.25 184	8.00 203	8.00 203



1. Sizes and types listed are standard. Other sizes and types are available upon request.
2. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact the authorized representative or FITOK Group.

Temperature - Pressure Ratings

Acc. ANSI B16.34-2004
Working Pressure by Classes, psig

Material	A105					F22					F91					F316				
Class	1500	1690	2500	2680	4500	1500	1690	2500	2680	4500	1500	1690	2500	2680	4500	1500	1690	2500	2680	4500
Temp. °F	psig																			
-20 to 100	3705	4175	6170	6615	11110	3750	4225	6250	6700	11250	3750	4225	6250	6700	11250	3600	4055	6000	6430	10800
200	3375	3805	5625	6030	10120	3750	4225	6250	6700	11250	3750	4225	6250	6700	11250	3095	3485	5160	5530	9290
300	3280	3695	5470	5865	9845	3640	4100	6070	6505	10925	3640	4100	6070	6505	10925	2795	3150	4660	4995	8390
400	3170	3570	5280	5660	9505	3530	3975	5880	6300	10585	3530	3975	5880	6300	10585	2570	2895	4280	4585	7705
500	2995	3375	4990	5350	8980	3325	3745	5540	5935	9965	3325	3745	5540	5935	9965	2390	2690	3980	4265	7165
600	2735	3080	4560	4890	8210	3025	3405	5040	5400	9070	3025	3405	5040	5400	9070	2255	2540	3760	4030	6770
650	2685	3025	4475	4795	8055	2940	3310	4905	5255	8825	2940	3310	4905	5255	8825	2220	2500	3700	3965	6660
700	2665	3005	4440	4760	7990	2840	3200	4730	5070	8515	2840	3200	4730	5070	8515	2170	2445	3620	3880	6515
750	2520	2840	4200	4500	7560	2660	2995	4430	4745	7970	2660	2995	4430	4745	7970	2135	2405	3560	3815	6410
800	2060	2320	3430	3675	6170	2540	2860	4230	4530	7610	2540	2860	4230	4530	7610	2110	2375	3520	3770	6335
850	1340	1510	2230	2390	4010	2435	2740	4060	4350	7305	2435	2740	4060	4350	7305	2090	2350	3480	3730	6265
900	—	—	—	—	—	2245	2530	3745	4010	6740	2245	2530	3745	4010	6740	2075	2338	3460	3705	6230
950	—	—	—	—	—	1885	2125	3145	3370	5665	1930	2175	3220	3450	5795	1930	2175	3220	3450	5795
1000	—	—	—	—	—	1305	1470	2170	2325	3910	1820	2050	3030	3245	5450	1750	1970	2915	3125	5245
1050	—	—	—	—	—	875	985	1455	1550	2625	1800	2030	3000	3215	5400	1720	1935	2865	3070	5155
1100	—	—	—	—	—	550	620	915	980	1645	1510	1700	2515	2695	4525	1525	1715	2545	2725	4575
1150	—	—	—	—	—	—	—	—	—	—	1115	1255	1855	1990	3345	1185	1330	1970	2110	3550
1200	—	—	—	—	—	—	—	—	—	—	720	810	1200	1285	2160	925	1040	1545	1655	2775
1250	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	735	829	1230	1315	2210

1. A105 permissible but not recommended for prolonged usage above about 800°F (425°C).
2. Please contact the authorized representative or FITOK Group for Pressure - Temperature ratings of other valve material.

Ordering Information

SYSS – PS8G – M2TLLR

Series	Body Material	Type Of Connection	Size Of Connection	ANSI Class	Disc and Seat Material	Disc Type	Packing Material	Live-Loading	Handwheel Color
SY	CS A105	PS Pipe Socket Weld	8 1/2	F 1500 CL	Stellite	Stop	Graphite	No	Blue
	LF2 LF2	PB Pipe Butt Weld	12 3/4	J 1690 CL	M Monel (Alloy 400)	2 Needle	T PTFE	LL Yes	B Black
	LF3 LF3	FNS Female NPT	16 1	G 2500 CL	HC Hastelloy C 276	3 Stop Check			G Green
	22 F22	FRP Female BSPP	20 1 1/4	K 2680 CL	X Customer Specified				R Red
	D5 F51	FRT Female BSPT	24 1 1/2	H 4500 CL					Y Yellow
	91 F91		32 2						
	92 F92		40 2 1/2						
	SS F316		48 3						
	6H F316H		64 4						
	6L F316L								
	S4 F304								
	S1 F321								
	M Monel (Alloy 400)								
	WB36 WB36								

Forged Steel Globe Valves

SL Series

- Size：1/4 ~ 2" (8 ~ 50 mm)
- Class：150 ~ 4500

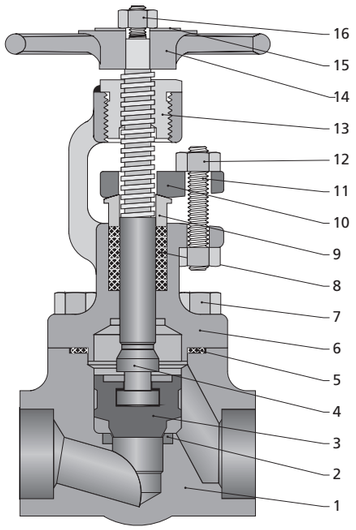
Specifications

- Design: ANSI B16.34, API 602
- Testing: ANSI B16.34 and API 598
- Marking: MSS-SP-25
- Socket weld ends: ASME B16.11
- Butt weld ends: ASME B16.25
- Threaded ends: ASME B1.20.1
- Flanged: ASME B16.5

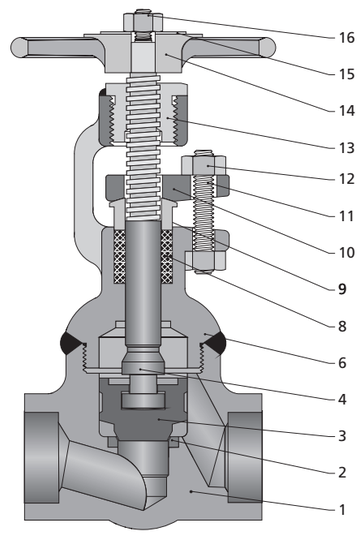
Features

- Three types of bonnet designs:
  - Bolted Bonnet, Outside Screw and Yoke (Class 150 to Class 1500)
    Stronger and leakproof body bonnet encases fully a spiral wound gasket.
  - Welded Bonnet, Outside Screw and Yoke (Class 150 to Class 1500)
    For welded bonnet valves, the bonnet is threaded in and torqued to an engineered torque value and the body bonnet joint is strength-welded, offering double protection against leakage. (body/bonnet threads and strength-weld).
  - Pressure Seal Bonnet, Outside Screw and Yoke (Class 1500 to Class 4500)
    Pressure seal bonnet, the body bonnet joint is threaded, packing rings are compressed to provide a high integrity seal by the drawing-in stud.
- Fully guided disc assures seat and disc precise alignment in spite of side thrust caused by high velocity flow, and prevents stem from scoring and galling, and provides longer disc seal and body life.
- Large clearance between stem and disc allows disc to move freely.
- Packing chamber burnished and combination graphite rings individually prestressed for tight seal.
- Two-piece gland ensures gland and packing self-aligning.
- Solid Stellite disc, seat ring (optional) ensures long service life even in severe services.
- Handwheel is rugged and knobbed to make sure the grip even when wearing gloves.
- Optional handwheel colors are available.

Standard Materials of Construction



Bolted Bonnet

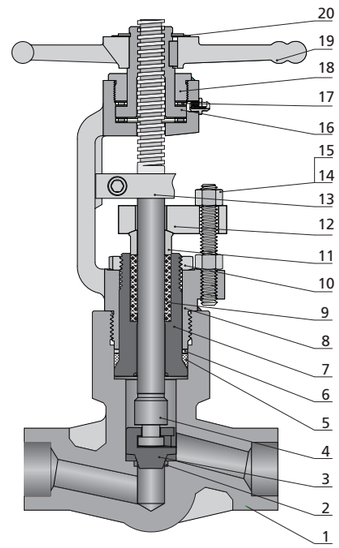


Welded Bonnet

Item	Part	Valve Materials				
		A105	F11	F22	F91	F316
1	Body	A105N	F11/A182	F22/A182	F91/A182	F316/A182
2	Seat	410 SS/A276				F316/A182
3	Disc	410 SS/A276				316 SS/276
4	Stem	410 SS/A276				316 SS/276
5	Gasket	304 SS + Graphite				316 SS + Graphite
6	Bonnet	A105N	F11/A182	F22/A182	F91/A182	F316/A182
7	Bolt	B7				B8M2
8	Packing	Graphite				
9	Gland	410 SS/A276				316 SS/276
10	Gland Flange	A105				F304/A182
11	Gland Bolt	B7				B8M
12	Hex Nut	2H				8M
13	Stem Nut	410 SS				
14	Handwheel	Malleable iron				
15	Name Plate	304 SS				
16	Handwheel Nut	Steel				

Contact the authorized representative or FITOK Group for valves of other materials.

Standard Materials of Construction

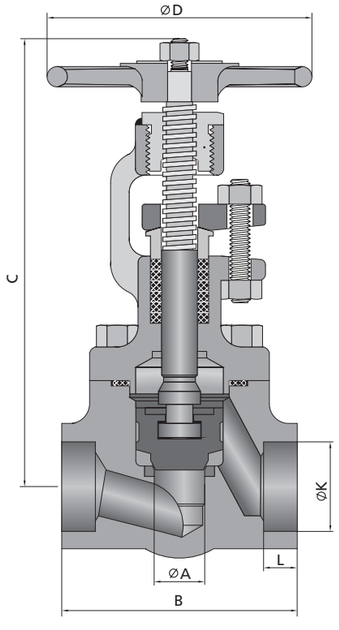


Pressure Sealing

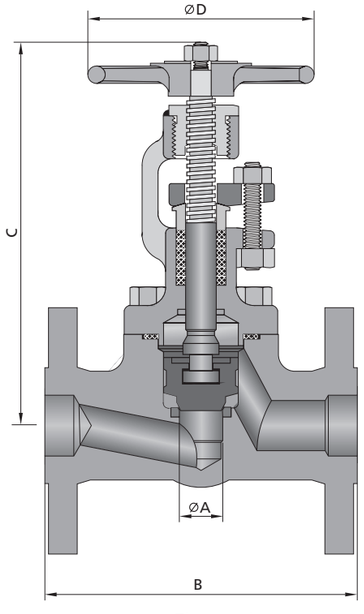
Item	Part	Valve Materials					
		A105	F11	F22	F91	F92	F316
1	Body	A105N	F11/A182	F22/A182	F91/A182	F92/A182	F316/A182
2	Seat	410 SS/A276					316 SS/276
3	Disc	410 SS/A276					316 SS/276
4	Stem	410 SS/A276					316 SS/276
5	P.S Ring	304 SS/A276					316 SS/276
6	Seal Ring Gasket	304 SS/A276					316 SS/276
7	P.S Seat	304 SS/A276					316 SS/276
8	Bonnet	A105N	F11/A182	F22/A182	F91/A182	F92/A182	F316/A182
9	Packing	Graphite					
10	Draw-in Stud	1018/A108					304 SS/276
11	Gland	410 SS/A276					316 SS/276
12	Packing Flange	A105					F304/A182
13	Anti Rotation	WCB					CF8/A351
14	Gland Bolt	B7					B8M
15	Gland Nut	2H					8H
16	Stem Nut	410 SS/A276					
17	Thrust Bearing	Steel					
18	Yoke Bushing	1020/A108					304SS/276
19	Handwheel	Malleable iron					
20	Name Plate	304 SS					

Contact the authorized representative or FITOK Group for valves of other materials.

Bolted Bonnet



Threaded or weld
ASME Class 800
ASME Class 1500



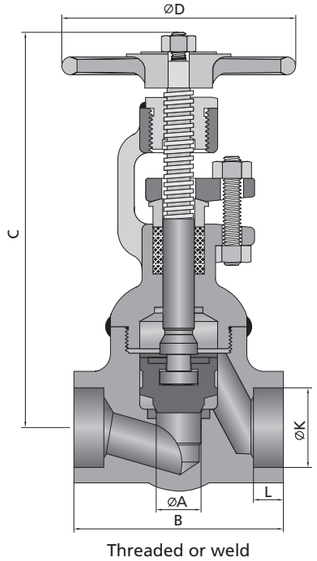
Flanged
ASME Classes
150,300,600,1500

Bolted Bonnet Globe Dimensions and Weights

Size NPS DN	ØA in mm		B in mm		C in mm		ØD in mm		ØK in mm	L in mm	Weight lb kg		B			
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth			Flanged Valves			
	800	1500	800	1500	800	1500	800	1500			800	1500	150	300	600	1500
1/4 8	0.31 8	0.50 13	3.00 76	4.00 102	4.80 122	8.10 206	2.50 64	6.0 152	0.555 14.10	0.38 10	3.00 1.4	8.00 3.6	4.00 102	6.00 152	6.50 165	8.50 216
3/8 10	0.31 8	0.50 13	3.00 76	4.00 102	4.80 122	8.10 206	2.50 64	6.0 152	0.690 17.53	0.38 10	3.00 1.4	8.00 3.6	4.00 102	6.00 152	6.50 165	8.50 216
1/2 15	0.31 8	0.50 13	3.00 76	4.00 102	4.80 122	8.10 206	2.50 64	6.0 152	0.855 21.72	0.38 10	3.00 1.4	8.00 3.6	4.25 108	6.00 152	6.50 165	8.50 216
3/4 20	0.50 13	0.50 13	3.25 83	5.00 127	7.10 180	8.40 213	4.0 102	6.0 152	1.065 27.05	0.50 13	5.00 2.3	11.00 5.0	4.62 117	7.00 178	7.50 190	9.00 229
1 25	0.75 19	0.75 19	3.50 89	6.00 152	7.30 185	10.0 254	4.0 102	8.0 203	1.330 33.78	0.50 13	6.00 2.7	21.00 9.5	5.00 127	8.00 203	8.50 216	10.00 254
1 1/4 32	1.25 32	1.25 32	5.00 127	7.00 178	8.90 226	11.0 279	6.0 152	8.0 203	1.675 42.55	0.50 13	14.00 6.4	31.00 14.0	5.50 140	8.50 216	9.00 229	11.00 279
1 1/2 40	1.25 32	1.25 32	5.00 127	7.00 178	8.90 226	11.0 279	6.0 152	8.0 203	1.915 48.64	0.50 13	14.00 6.4	31.00 14.0	6.50 165	9.00 229	9.50 241	12.00 305
2 50	1.5 38	1.5 38	8.00 203	9.00 229	11.2 285	12.3 312	8.0 203	12.0 305	2.406 61.11	0.63 16	27.00 12.2	49.00 22.2	8.00 203	10.50 266	11.50 292	14.50 368

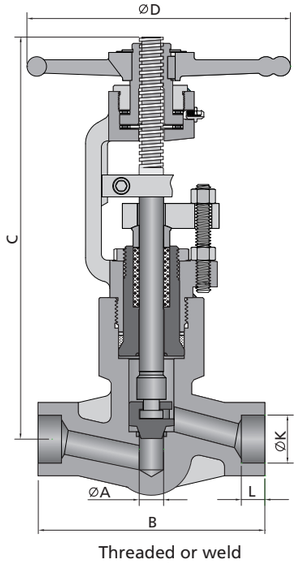
1. The constructions and dimensions of ASME Class 150, Class 300, Class 600 valves with threaded or welded ends are same with Class 800 valve.
2. The construction and dimension of Class 900 valve is same with Class 1500 valve.

Welded Bonnet



Threaded or weld
ASME Class 800
ASME Class 1500

Pressure Sealing



Threaded or weld
ASME Class 1500
ASME Class 2500

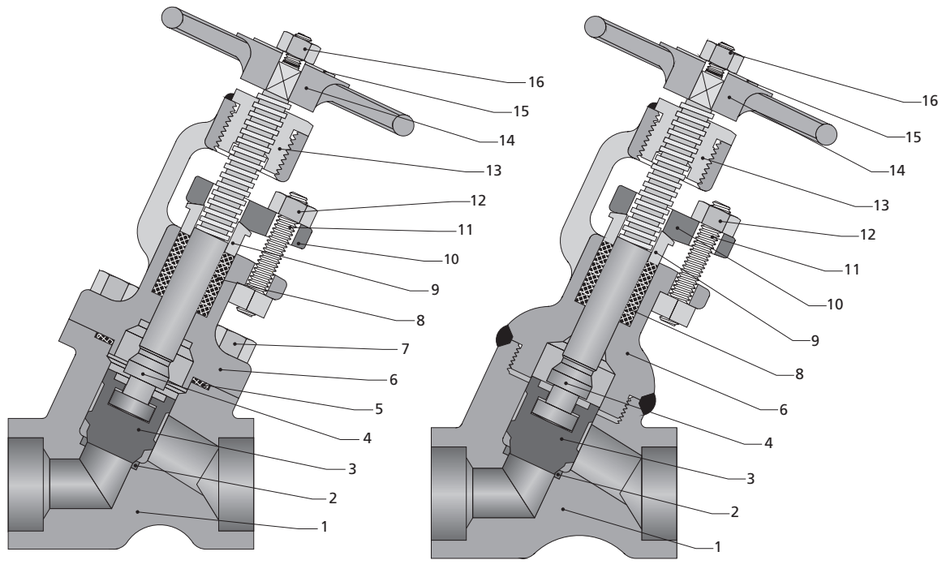
Welded Bonnet Globe Dimensions and Weights

Size NPS DN	ØA in mm		B in mm		C in mm		ØD in mm		ØK in mm	L in mm	Weight lb kg	
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth		
	800	1500	800	1500	800	1500	800	1500			800	1500
1/4 8	0.31 8	0.50 13	3.00 76	3.50 89	4.84 123	7.22 183	2.50 64	6.0 152	0.555 14.10	0.38 10	3.00 1.4	6.00 2.7
3/8 10	0.31 8	0.50 13	3.00 76	3.50 89	4.84 123	7.22 183	2.50 64	6.0 152	0.690 17.53	0.38 10	3.00 1.4	6.00 2.7
1/2 15	0.31 8	0.50 13	3.00 76	3.50 89	4.84 123	7.22 183	2.50 64	6.0 152	0.855 21.72	0.38 10	3.00 1.4	6.00 2.7
3/4 20	0.50 13	0.50 13	3.25 83	3.50 89	6.90 175	7.22 183	4.0 102	6.0 152	1.065 27.05	0.50 13	4.50 2.0	6.00 2.7
1 25	0.75 19	0.75 19	3.50 89	5.00 127	7.20 183	8.84 225	4.0 102	6.0 152	1.330 33.78	0.50 13	5.00 2.3	12.00 5.4
1 1/4 32	1.25 32	1.25 32	5.00 127	5.25 133	8.93 227	10.76 273	6.0 152	8.0 203	1.675 42.55	0.50 13	10.00 4.5	17.00 7.7
1 1/2 40	1.25 32	1.25 32	5.00 127	5.25 133	8.93 227	10.76 273	6.0 152	8.0 203	1.915 48.64	0.50 13	10.00 4.5	17.00 7.7
2 50	1.5 38	1.5 38	5.25 133	10.00 254	10.00 254	14.00 356	6.0 152	12.0 305	2.406 61.11	0.63 16	13.00 5.9	45.00 20.4

Pressure Sealing Globe Dimensions and Weights

Size NPS DN	ØA in mm		B in mm		C in mm		ØD in mm		ØK in mm	L in mm	Weight lb kg	
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth		
	1500	2500	1500	2500	1500	2500	1500	2500			1500	2500
1/2 15	0.50 13	0.43 11	5.50 140	7.25 185	12.6 320	14.8 375	8.0 203	8.0 203	0.855 21.72	0.38 10	25 11	8.00 3.6
3/4 20	0.55 14	0.55 14	5.50 140	7.25 185	12.6 320	14.8 375	8.0 203	8.0 203	1.065 27.05	0.50 13	24 11	24 11
1 25	0.75 19	0.75 19	5.50 140	7.25 185	12.6 320	15 380	8.0 203	8.0 203	1.330 33.78	0.50 13	24 11	24 11
1 1/4 32	1.1 28	1 25	7.00 178	9.25 235	17.3 440	19.3 490	11.0 279	11.0 279	1.675 42.55	0.50 13	44 20	57 26
1 1/2 40	1.38 35	1.1 28	7.00 178	9.25 235	17.3 440	19.3 490	11.0 279	11.0 279	1.915 48.64	0.50 13	44 20	62 28
2 50	1.5 38	1.38 35	8.50 216	11.00 279	19.3 490	21.3 540	12.0 305	12.0 305	2.406 61.11	0.63 16	122 55	132 60

Standard Materials of Construction



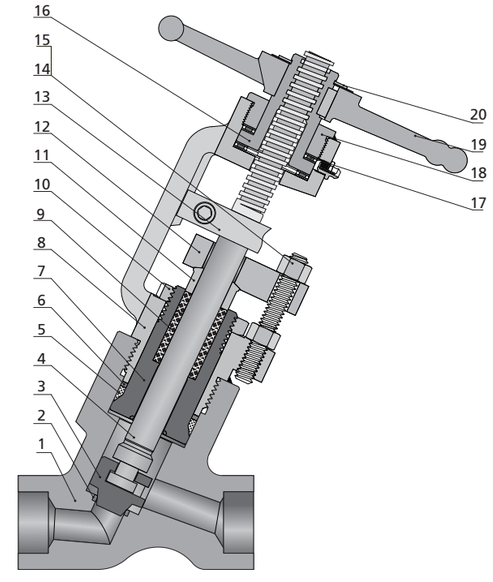
Y Type Bolted Bonnet

Y Type Welded Bonnet

Item	Part	Valve Materials					
		A105	F11	F22	F91	F92	F316
1	Body	A105N	F11/A182	F22/A182	F91/A182	F92/A182	F316/A182
2	Seat	410 SS/A276					F316/A182
3	Disc	410 SS/A276					316 SS/276
4	Stem	410 SS/A276					316 SS/276
5	Gasket	304 SS + Graphite					316 SS + Graphite
6	Bonnet	A105N	F11/A182	F22/A182	F91/A182	F92/A182	F316/A182
7	Bolt	B7					B8M2
8	Packing	Graphite					
9	Gland	410 SS/A276					316 SS/276
10	Gland Flange	A105					F304/A182
11	Gland Bolt	B7					B8M
12	Hex Nut	2H					8M
13	Stem Nut	410 SS					
14	Handwheel	Malleable iron					
15	Name Plate	304 SS					
16	Handwheel Nut	Steel					

Contact the authorized representative or FITOK Group for valves of other materials.

Standard Materials of Construction

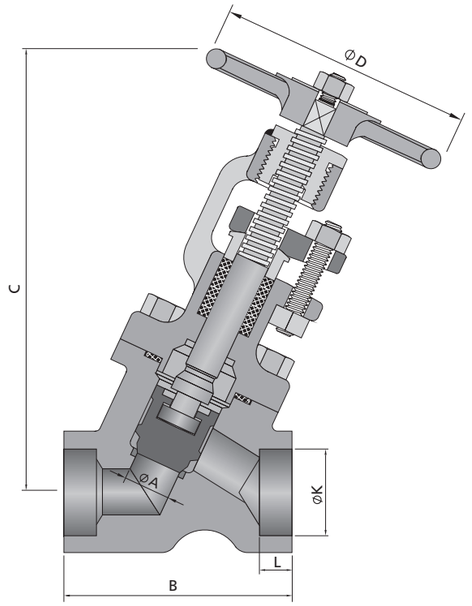


Y Type Pressure Sealing

Item	Part	Valve Material					
		A105	F11	F22	F91	F92	F316
1	Body	A105N	F11/A182	F22/A182	F91/A182	F92/A182	F316/A182
2	Seat	410 SS/A276					316 SS/276
3	Disc	410 SS/A276					316 SS/276
4	Stem	410 SS/A276					316 SS/276
5	P.S Ring	304 SS/A276					316 SS/276
6	Seal Ring Gasket	304 SS/A276					316 SS/276
7	P.S Seat	304 SS/A276					316 SS/276
8	Bonnet	A105N	F11/A182	F22/A182	F91/A182	F92/A182	F316/A182
9	Packing	Graphite					
10	Draw-in Stud	1018/A108					304 SS/276
11	Gland	410 SS/A276					316 SS/276
12	Packing Flange	A105					F304/A182
13	Anti Rotation	WCB					CF8/A351
14	Gland Bolt	B7					B8M
15	Gland Nut	2H					8H
16	Stem Nut	420 SS/A276					
17	Thrust Bearing	Steel					
18	Yoke Bushing	1020/A108					304 SS/276
19	Handwheel	Malleable iron					
20	Name Plate	304 SS					

Contact the authorized representative or FITOK Group for valves of other materials.

Y Type Bolted Bonnet



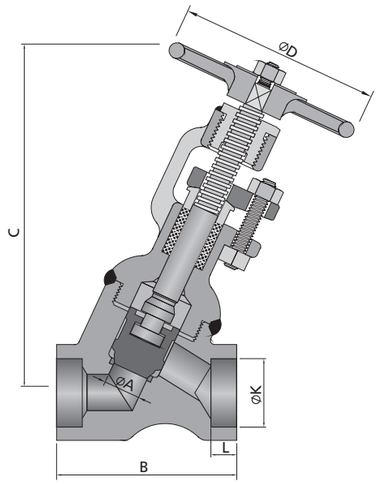
Threaded or weld
ASME Class 800
ASME Class 1500

Y Type Bolted Bonnet Globe Dimensions and Weights

Size NPS DN	ØA in. mm		B in. mm		C in. mm		ØD in. mm		ØK in. mm	L in. mm	Weight lb kg	
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth		
	800	1500	800	1500	800	1500	800	1500			800	1500
1/4 8	0.31 8	—	3.85 98	—	7.00 178	—	4.00 102	—	0.555 14.10	0.38 10	6.00 2.7	—
3/8 10	0.31 8	0.50 13	3.85 98	3.85 98	7.00 178	7.00 178	4.00 102	4.00 102	0.690 17.53	0.38 10	6.00 2.7	6.00 2.7
1/2 15	0.31 8	0.50 13	3.85 98	4.37 187	7.00 178	7.00 178	4.00 102	5.00 127	0.855 21.72	0.38 10	8.00 3.6	10.00 4.5
3/4 20	0.50 13	0.50 13	4.37 111	4.37 111	7.30 185	8.50 216	5.00 127	5.00 127	1.065 27.05	0.50 13	10.00 4.5	10.00 4.5
1 25	0.75 19	0.75 19	5.50 140	5.50 140	11.0 279	8.50 216	6.50 165	6.50 165	1.330 33.78	0.50 13	21.00 9.5	21.00 9.5
1 1/4 32	1.25 32	1.25 32	5.50 140	5.50 140	11.0 279	10.0 254	6.50 165	6.50 135	1.675 42.55	0.50 13	21.00 9.5	21.00 9.5
1 1/2 40	1.25 32	1.25 32	6.00 153	6.00 153	11.5 292	12.0 305	7.00 178	7.00 178	1.915 48.64	0.50 13	31.00 14.0	31.00 14.0
2 50	1.5 38	1.5 38	6.70 170	6.70 170	13.8 350	12.0 305	8.00 203	8.00 203	2.406 61.11	0.63 16	44.00 20.0	44.00 20.0

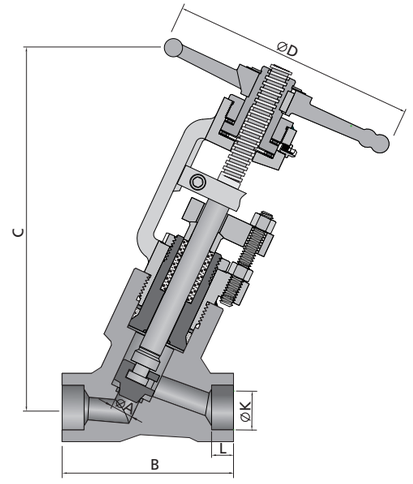
1. The constructions and dimensions of ASME Class 150, Class 300, Class 600 valves with threaded or welded ends are same with Class 800 valve.
2. The construction and dimension of Class 900 valve is same with Class 1500 valve.

Y Type Welded Bonnet



Threaded or weld
ASME Class 800
ASME Class 1500

Y Type Pressure Sealing



Threaded or weld
ASME Class 12500
ASME Class 2500

Y Type Welded Bonnet Globe Dimensions and Weights

Size NPS DN	ØA in. mm		B in. mm		C in. mm		ØD in. mm		ØK in. mm	L in. mm	Weight lb kg	
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth		
	800	1500	800	1500	800	1500	800	1500			800	1500
1/4 8	0.31 8	—	3.00 76	—	7.80 198	—	4.00 102	—	0.555 14.10	0.38 10	4.00 1.8	—
3/8 10	0.31 8	0.50 13	3.00 76	3.50 89	7.80 198	7.00 178	4.00 102	4.00 102	0.690 17.53	0.38 10	4.00 1.8	4.00 1.8
1/2 15	0.31 8	0.50 13	3.50 89	4.00 102	7.80 198	8.15 207	4.00 102	5.00 127	0.855 21.72	0.38 10	4.50 2.0	8.00 3.6
3/4 20	0.50 13	0.50 13	4.00 102	4.00 101	8.15 207	8.15 207	5.00 127	6.50 165	1.065 27.05	0.50 13	8.00 3.6	8.00 3.6
1 25	0.75 19	0.75 19	5.50 140	5.50 140	11.0 279	11.0 279	6.50 165	6.50 165	1.330 33.78	0.50 13	18.00 8.1	18.00 8.1
1 1/4 32	1.25 32	1.25 32	5.50 140	5.50 140	11.0 279	11.0 279	6.50 165	6.50 135	1.675 42.55	0.50 13	18.00 8.1	18.00 8.1
1 1/2 40	1.25 32	1.25 32	6.00 153	6.00 153	11.5 292	11.5 292	7.00 178	7.00 178	1.915 48.64	0.50 13	27.00 12.2	27.00 12.2
2 50	1.5 38	1.5 38	6.70 170	6.70 170	13.8 350	13.8 305	8.00 203	8.00 203	2.406 61.11	0.63 16	35.00 16.0	35.00 16.0

Y Type Pressure Sealing Globe Dimensions and Weights

Size NPS DN	ØA in. mm		B in. mm		C in. mm		ØD in. mm		ØK in. mm	L in. mm	Weight lb kg	
	Port		End to End		Center to Top Open		Handwheel		Socket Weld Bore	Socket Weld Depth		
	2500	4500	2500	4500	2500	4500	2500	4500			2500	4500
1/2 15	0.43 11	0.43 11	7.25 185	7.875 200	13.00 330	16.0 406	8.00 203	11.0 279	0.855 21.72	0.38 10	24.00 11	66.00 30.0
3/4 20	0.55 14	0.43 11	7.25 185	7.875 200	13.00 330	16.0 406	8.00 203	11.0 279	1.065 27.05	0.50 13	27.00 12.3	66.00 30.0
1 25	0.75 19	0.59 15	7.25 185	7.875 200	13.00 330	16.0 406	8.00 203	11.0 279	1.330 33.78	0.50 13	27.00 12.3	66.00 30.0
1 1/4 32	1.00 25	0.79 20	9.25 235	9.85 250	13.0 330	18.0 460	11.0 279	12.0 305	1.675 42.55	0.50 13	62.00 28.0	66.00 30.0
1 1/2 40	1.10 28	1.02 26	9.25 235	9.85 250	16.0 406	18.0 460	11.0 279	12.0 305	1.915 48.64	0.50 13	57.00 25.8	80.00 36.0
2 50	1.38 35	1.1 28	12.2 310	13.0 330	20.5 521	21.25 540	12.0 305	12.6 320	2.406 61.11	0.63 16	97.00 43.9	129.00 58.0

1. Sizes and types listed are standard. Other sizes and types are available upon request.
2. All dimensions are for reference only and are subject to change. For dimensions not shown above, please contact the authorized representative or FITOK Group.

Pressure - Temperature Ratings

ASME B16.34 - Class 150, 300, 600, 1500, 2500, 4500.
API Std 602 - Class 800

Materials	A105 & A350-LF2						F11						F22					
Class	150	300	600	800	1500	2500	4500	150	300	600	800	1500	2500	150	300	600	800	1500	2500	4500
Temp. °F	psig																			
-20 to 100	285	740	1480	1975	3705	6170	11110	290	750	1500	2000	3750	6250	290	750	1500	2000	3750	6250	11250
200	260	675	1350	1800	3375	5625	10120	260	750	1500	1900	3750	6250	260	750	1500	2000	3750	6250	11250
300	230	655	1315	1750	3280	5470	9845	230	720	1455	1795	3610	6015	230	730	1455	1940	3640	6070	10925
400	200	635	1270	1690	3170	5280	9505	200	695	1385	1755	3465	5775	200	705	1410	1880	3530	5880	10585
500	170	600	1200	1595	2995	4990	8980	170	665	1330	1710	3325	5540	170	665	1330	1775	3325	5540	9965
600	140	550	1095	1460	2735	4560	8210	140	605	1210	1615	3025	5040	140	605	1210	1615	3025	5040	9070
650	125	535	1075	1430	2685	4475	8055	125	590	1175	1570	2940	4905	125	590	1175	1570	2940	4905	8825
700	110	535	1065	1420	2665	4440	7990	110	570	1135	1515	2840	4730	110	570	1135	1515	2840	4730	8515
750	95	505	1010	1345	2520	4200	7560	95	530	1065	1420	2660	4430	95	505	1065	1420	2660	4430	7970
800	80	410	825	1100	2060	3430	6170	80	510	1015	1355	2540	4230	80	530	1015	1355	2540	4230	7610
850	65	270	535	715	1340	2230	4010	65	485	975	1300	2435	4060	65	510	975	1300	2435	4060	7305
900	—	—	—	—	—	—	—	50	450	900	1200	2245	3745	50	450	900	1200	2245	3745	6740
950	—	—	—	—	—	—	—	35	320	640	1005	1595	2655	35	375	755	1005	1885	3145	5665
1000	—	—	—	—	—	—	—	20	215	430	595	1080	1800	20	260	520	695	1305	2170	3910
1050	—	—	—	—	—	—	—	20	145	290	365	720	1200	20	175	350	465	875	1455	2625
1100	—	—	—	—	—	—	—	20	95	190	225	480	800	20	110	220	295	550	915	1645
1150	—	—	—	—	—	—	—	—	60	125	140	310	515	—	70	135	180	345	570	—
1200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	40	82	110	205	345	—

Materials	F51						F91						F316					
Class	150	300	600	800	1500	2500	150	300	600	800	1500	2500	4500	150	300	600	800	1500	2500	4500
Temp. °F	psig																			
-20 to 100	290	750	1500	2000	3750	6250	290	750	1500	2000	3750	6250	11250	275	720	1440	1920	3600	6000	10800
200	260	720	1440	1920	3600	6000	260	750	1500	2000	3750	6250	11250	235	620	1240	1655	3095	5160	9290
300	230	665	1330	1770	3325	5540	230	730	1455	1940	3640	6070	10925	215	560	1120	1495	2795	4660	8390
400	200	615	1230	1640	3070	5120	200	705	1410	1880	3530	5880	10585	195	515	1025	1370	2570	4280	7705
500	170	575	1150	1535	2880	4800	170	665	1330	1775	3325	5540	9965	170	480	955	1275	2390	3980	7165
600	140	555	1115	1480	2785	4640	140	605	1210	1615	3025	5040	9070	140	450	900	1205	2255	3760	6770
650	—	—	—	—	—	—	125	590	1175	1570	2940	4905	8825	125	445	890	1185	2220	3700	6660
700	—	—	—	—	—	—	110	570	1135	1515	2840	4730	8515	110	430	870	1160	2170	3620	6515
750	—	—	—	—	—	—	95	530	1065	1420	2660	4430	7970	95	425	855	1140	2135	3560	6410
800	—	—	—	—	—	—	80	510	1015	1355	2540	4230	7610	80	420	845	1125	2110	3520	6335
850	—	—	—	—	—	—	65	485	975	1300	2435	4060	7305	65	420	835	1115	2090	3480	6265
900	—	—	—	—	—	—	50	450	900	1200	2245	3745	6740	50	415	830	1105	2075	3460	6230
950	—	—	—	—	—	—	35	385	775	1030	1930	3220	5795	35	385	775	1030	1930	3220	5795
1000	—	—	—	—	—	—	20	365	725	970	1820	3030	5450	20	350	700	935	1750	2915	5245
1050	—	—	—	—	—	—	20	360	720	960	1800	3000	5400	20	345	685	915	1720	2865	5155
1100	—	—	—	—	—	—	20	300	605	805	1510	2515	4525	20	305	610	815	1525	2545	4575
1150	—	—	—	—	—	—	20	225	445	595	1115	1855	3345	20	235	475	630	1185	1970	3550
1200	—	—	—	—	—	—	20	145	290	385	720	1200	2160	20	185	370	495	925	1545	2775
1250	—	—	—	—	—	—	—	—	—	—	—	—	—	20	145	295	390	735	1230	2210

1. A105 permissible but not recommended for prolonged usage above about 800°F (425°C).
2. F11 and F22 permissible but not recommended for prolonged usage above about 1100°F (593°C).
3. Please contact the authorized representative or FITOK Group for Pressure - Temperature ratings of other valve material.

Part Number Description

SLSS – FNS8D – 16BWB

Series	Body Material		Type Of Connection		Size Of Connection		Class		Trim Material				Body and Bonnet Connection		Handwheel Color	
SL	CS	A105	PS	Pipe Socket Weld	4	1/4 (DN8)	A	150 CL	Symbol	Disc Surface	Seat Surface	Stem Material		Bolted Bonnet		Blue
	LF2	LF2	PB	Pipe Butt Weld	6	3/8 (DN10)	B	300 CL		Standard			BW	Welded Bonnet	B	Black
	LF3	LF3	MTS	Metric Tube Socket Weld	8	1/2 (DN15)	C	600 CL	1	13%Cr	13%Cr	F6a/A182	PS	Pressure Sealing	G	Green
	22	F22	MTB	Metric Tube Butt Weld	12	3/4 (DN20)	D	800 CL	2	18%Cr, 8%Ni	18%Cr, 8%Ni	F304/A182	YB	Y Type Bolted Bonnet	R	Red
	D5	F51	FNS	Female NPT	16	1 (DN25)	E	900 CL	5	Stellite	Stellite	F6a/A182	YW	Y Type Welded Bonnet	Y	Yellow
	91	F91	FRP	Female BSPP	20	1 1/4 (DN32)	F	1500 CL	8	13%Cr	Stellite	F6a/A182	YS	Y Type Pressure Sealing		
	92	F92	FRT	Female BSPT	24	1 1/2 (DN40)	G	2500 CL	9	Monel	Monel	Ni Cu Alloy Monel				
	SS	F316	FF	Smoth Finish Flat Face Flanged	32	2 (DN50)	H	4500 CL	10	18%Cr, 8%Ni	18%Cr, 8%Ni	F316/A182				
	6L	F316L	RF	Smoth Finish Raised Face Flanged			PN16	1.6 MPa	12	18%Cr, 8%Ni	Stellite	F316/A182				
	S4	F304	RFS	Spiral Finish Raised Face Flanged			PN20	2.0 MPa	13	Alloy 20 19%Cr, 29%Ni	Alloy 20 19%Cr, 29%Ni	ASTM B473				
	S1	F321	RJ	Ring TypeJoint Flanged			PN25	2.5 MPa	16	Stellite	Stellite	F316/A182				
	M	Monel (Alloy 400)					PN40	4.0 MPa								
	WB36	WB36					PN50	5.0 MPa								
							PN63	6.3 MPa								
							PN100	10 Mpa								
							PN110	11 MPa								
							PN150	15 MPa								
							PN260	26 MPa								
							PN420	42 MPa								
							X	Special								

1. Class800 should be selected for Class 150, Class 300, Class 600 Globe valves with threaded or welded ends.
2. Class1500 should be selected for Class 900 Globe valves.

Note: "Part Number Description" is used for composition rules of FITOK product model, Not suitable for specific product part number selection, not random combinations. If in doubt, please contact FITOK company or authorized agents.