

SCJ type/ Cast Globe Valve

Cast globe valve is usually used for the pipelines require flow control but doesn't care too much for flow resistance, high temperature and pressure condition, especially for size below DN50. It is easy for maintain and repair.



Standard and Scope:

Size: NPS 1/2"~20" DN15~DN500

Pressure Rating: Class 150~1500 PN2.5~PN160

Connection: Raided face, Butt weld, Ring joint face, Socket weld and so on

Material: Carbon steel, Stainless steel, ALLOY and so on

Design and Manufacture: BS1873, ASME B16.34, API603 (cast stainless steel);

Test and Inspection: API600, API598, API6D; ISO5208, BS6755, DIN3230, BS EN12569

Face-to-Face: ASME B16.10, BS EN558, DIN 3202

End Connection: ASME B16.5 (for NPS≤24) ; ASME B16.47 series B, API

605 or ASME B16.47 series A, MSS SP-44 (for NPS>24) ; BS EN1092-1, DIN2543, DIN2544,

DIN2545, DIN2546

BW End connection: ASME B16.25

Design feature:

Bolted Bonnet; Outside Screw and Yoke; Rising stems; Metallic seating surfaces.

- **Actuation**

Hand wheel or gearbox are usually applied, if required, chain wheel, impact wheel is also available. Top flange dimension as per ISO 5211, electric, pneumatic is also available if required.

- **Back Seating**

All SGV globe valves have the back seat design. In most cases, the carbon steel globe valve is fitted with a renewable back seat. For stainless steel globe valve, the back seat is machined directly in the bonnet or is machined after welding. When the globe valve is at fully open position, the sealing of the back seat can be very reliable. However, as per the

requirement of API, the packing shall not be added or changed by the mean of back seating when the valve is Pressure containing.

- **Seat**

For carbon steel globe valve, the seat is usually forged steel. The sealing surface of the seat is spray welded with hard alloy specified by the customer. Renewable threaded seat is used for NPS ≤ 10 globe valve, and welded on seat can be also optional if required.

Welded on seat is used for NPS ≥ 12 carbon steel globe valves. For stainless steel globe valve, integral seat is usually adopted, or to weld hard alloy directly integrally. Threaded or welded on seat is also optional for stainless steel globe valve if required.

- **Stem**

Please refer to Wedge Gate Valve

- **Stem Nut**

Generally, the stem nut is copper alloy material. It is also can be made of ASTM A439 D2 if required. For large size cast globe valve, rolling bearing is fitted at the two sides of stem nut in order to minimize the open and close torque of the globe valve.

- **Gasket of Cover Flange**

Usually Carbon steel or stainless steel + flexible graphite wouded gasket is used for Class150 and Class300 Stainless steel + flexible graphite wounded gasket is used for Class600, and ring joint gasket is also optional for Class600. Ring joint gasket is used for Class900 globe valve. Pressurized seal design is used for Class 1500~Class2500 globe valve.

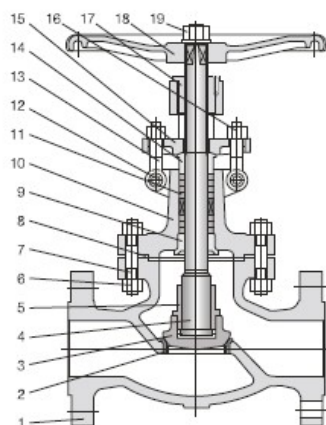
- **Body and Bonnet Connection, studs and nuts or pressure seal**

The body and bonnet of Class150~Class900 cast globe valves are usually connected with studs and nuts. And the body and bonnet of Class1500~Class2500 cast glove valves are usually of pressure seal design. But if required, pressure seal can be also available for class600 or class900.

- **Special Globe Valve**

Besides the common cast globe valves, Sangong also offer Extension Stem Globe Valve, cryogenic globe valve, bellow sealed globe valve, Y type globe valve, Angle type globe valve, Jacketed globe valve for kinds of application.

API Cast Globe Valve

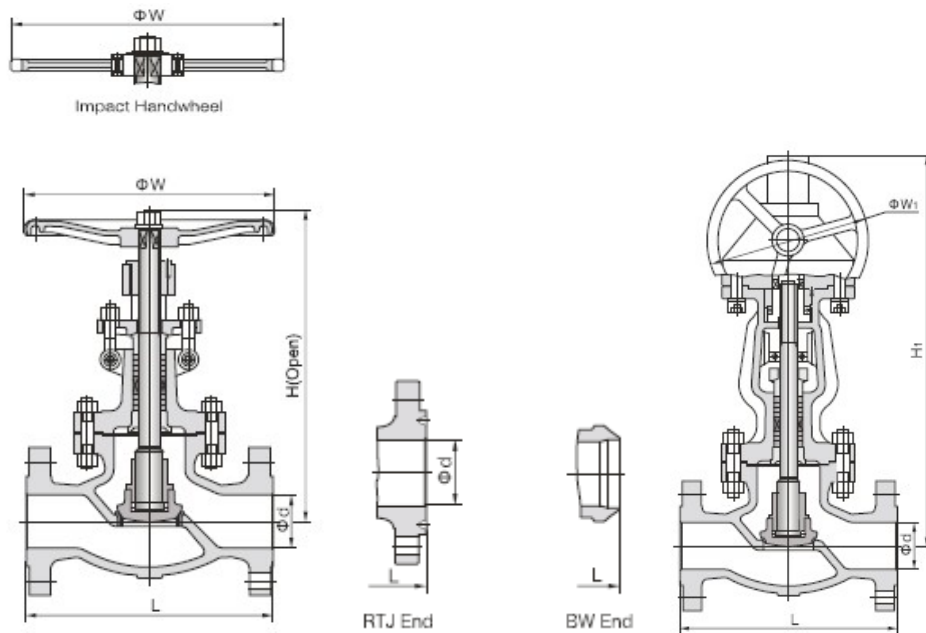


Major Parts List – API Standard

Parts No.	Part Name	Materials				
		WCB/Trim1	WCB/Trim5	WCB/Trim8	CF8/304	CF8M/316
1	Body	ASTM A126 WCB	ASTM A126 WCB	ASTM A126 WCB	ASTM A351 CF8	ASTM A351 CF8M
2	Seat Ring	A105+13Cr	A105+STL	A105+STL	ASTM A351 CF8	ASTM A351 CF8M
3	Disc	A126 WCB+13Cr	A126 WCB+STL	A126 WCB+13Cr	ASTM A351 CF8	ASTM A351 CF8M
4	Stem	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
5	Stem	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
6	Bonnet Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
7	Bonnet Bolt	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M
8	Gasket	304+graphite	304+graphite	304+graphite	304+graphite	316+graphite
9	Backseat bearing	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
10	Bonnet	ASTM A126 WCB	ASTM A126 WCB	ASTM A126 WCB	ASTM A351 CF8	ASTM A351 CF8M
11	Packing	Graphite	Graphite	Graphite	Graphite	Graphite
12	Eyebolt Pin	ASTM A36	ASTM A36	ASTM A36	304ss	316ss
13	Gland eyebolt	ASTM A193 B7	ASTM A193 B7	ASTM A193 B7	ASTM A193 B8	ASTM A193 B8M
14	Gland	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
15	Gland Flange	ASTM A126 WCB	ASTM A126 WCB	ASTM A126 WCB	ASTM A351 CF8	ASTM A351 CF8M
16	Eyebolt Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A194 8	ASTM A194 8M
17	Stem Nut	ASTM A439 D2				
18	Hand Wheel	Ductile Iron				
19	Hand Wheel Nut	Carbon steel				

Note: The charts above just only list common combination of gate valve. SGV able to offer other material if required.

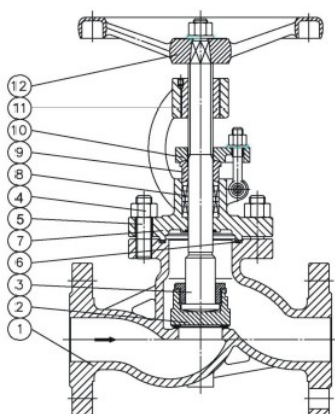
Class 150 300 600 900 1500 API Cast steel Globe Valve



Class	Nominal Size		F-t-F Dimension(mm)			Dimension(mm)					Weight(kg)	
	NPS	DN	RF-L	RTJ-L	BW-L	d	H	H1	W	W1	H.W	G.O
150lb 10k	1/2	15	108	119	108	13	185		100		4	
	3/4	20	117	130	117	19	190		100		4.5	
	1	25	127	140	127	25	211		100		5.5	
	1 1/4	32	140	153	140	32	220		135		8.5	
	1 1/2	40	165	178	165	38	240		135		12	
	2	50	203	216	203	51	328		200		18	
	2 1/2	65	216	229	216	64	360		250		26	
	3	80	241	254	241	76	373		280		43	
	4	100	292	305	292	102	400		300		54	
	5	125	356	368	356	127	435		350		71	
	6	150	406	419	406	152	528	556	350	310	95	114
	8	200	495	508	495	203	680	658	400	310	160	158
	10	250	622	635	622	254	775	805	450	460	299	259
	12	300	699	711	699	305	880	955	500	460	373	378
	14	350	787	800	787	337		1100		460		640
	16	400	914	927	914	387		1175		460		920
300lb 20k	1/2	15	152	162	152	13	184		120		5	
	3/4	20	178	191	178	19	226		160		6.5	
	1	25	203	216	203	25	233		160		9	
	1 1/4	32	216	229	216	32	253		160		12	
	1 1/2	40	229	242	229	38	273		160		16	
	2	50	267	283	267	51	346		200		29	
	2 1/2	65	292	308	292	64	390		250		44	
	3	80	318	333	318	76	403		280		59	
	4	100	356	371	356	102	474		350		87	
	5	125	400	416	400	127	540		350		181	
	6	150	445	460	445	152	635	690	450	310	162	177
	8	200	533	549	533	203	870	950	550	460	281	389
	10	250	622	638	622	254	950	990	600	460	355	409
	12	300	711	727	711	305	1030	1155	700	460	575	635
14	350	838			336		1155		600		880	
Class	Nominal Size		F-t-F Dimension(mm)			Dimension(mm)					Weight(kg)	
	NPS	DN	RF-L	RTJ-L	BW-L	d	H	H1	W	W1	H.W	G.O
600lb	2	50	292	295	292	51	360		250		35	
	2 1/2	65	330	333	330	64	410		280		42	
	3	80	356	359	356	76	465		280		66	
	4	100	432	435	432	102	545	575	400	310	117	148
	5	125	528	511	528	125	625	660	500	310	243	208
	6	150	559	562	559	152	785	975	550	460	263	334
	8	200	660	664	660	200	930	1120	650	460	469	544
	10	250	787	791	787	247		1219		600		875

	12	300	838	841	838	298		1570		600		1280
900lb	2	50	368	371	368	48	480		350		55	
	2 1/2	65	419	422	419	57	520		350		68	
	3	80	381	384	381	73	564	630	400		113	128
	4	100	457	460	457	98	685	720	450	310	179	210
	5	125	559	562	559	125	780	840	550	310	270	325
	6	150	610	613	610	146	950	1015	650	460	429	480
	8	200	737	740	737	190	1050		700	460	815	
1500lb	2	50	368	371	368	47	505		350		137	
	2 1/2	65	419	422	419	57	550		400		141	
	3	80	470	473	470	69	630	765	450	310	261	320
	4	100	546	549	546	92	808	890	460	310	336	397
	6	150	705	711	705	136	930	1020	610	530	966	1035
	8	200	832	841	832	177	1140	1230	610	530	1210	1280

DIN Cast Globe Valve



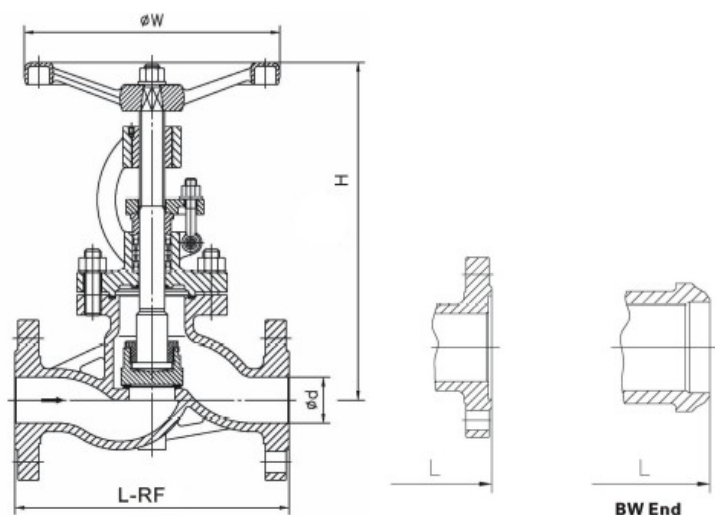
Major Parts List – DIN Standard

Parts Name		Materials				
		GS-C25 CR13/CR13	GS-C25 STL/CR13	GS-C25 STL/STL	1.4308 304/304	1.4408 316/316
1	Body	GS-C25+CR13	GS-C25+STL	GS-C25+STL	1.4308	1.4408
2	Disc	GS-C25+CR13	GS-C25+CR13	GS-C25+STL	1.4308	1.4408
3	Stem	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316
4	Nut	ASTM A194 2H	ASTM A194 2H	ASTM A194 2H	ASTM A182 F304	ASTM A182 F316
5	Bolt	ASTM A194 B7	ASTM A194 B7	ASTM A194 B7	ASTM A194 B8	ASTM A194 B8M
6	Gasket	SS+graphite				
7	Bonnet	GS-C25+CR13	GS-C25+CR13	GS-C25+STL	1.4308	1.4408
8	Packing	Graphite ,PTFE				
9	Gland	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F6a	ASTM A182 F304	ASTM A182 F316

10	Gland flange	GS-C25	GS-C25	GS-C25	1.4308	1.4408
11	Stem nut	Copper alloy or ASTM A439 D2				
12	Hand wheel	Ductile iron or carbon steel				
Note:		DIN17245:GS-C25;DIN17445:1.4308;DIN17445:1.4408				

Note: The charts above just only list common combination of gate valve. SGV able to offer other material if required.

PN16 25 40 63 100 DIN Cast steel Globe Valve



PN16 DIN3202-F1																
DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L	130	150	240	260	200	230	290	310	350	400	490	600	730	850	980	1100
H	190	210	235	235	285	310	340	370	420	480	510	610	770	890		
W	120	140	160	180	200	200	250	280	300	360	400	400	450	500		
PN25 DIN3202-F1																
DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L	130	150	160	180	200	230	290	310	350	400	490	600	730	850	980	1100
H	190	210	235	235	285	310	340	370	420	480	535	660	790	940		
W	120	140	160	180	200	200	250	280	300	360	400	400	450	500		
PN40 DIN3202-F1																
DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L	130	150	160	180	200	230	290	310	350	400	490	600	730	850	980	1100
H	190	210	235	235	285	310	340	370	420	480	560	725	815	945		
W	120	140	160	180	200	200	250	280	300	360	500	500				
PN63 PN100 DIN3202-F2																
DN	15	20	25	32	40	50	65	80	100	125	150	200	250	300	350	400
L	130	150	160	180	260	300	340	380	430	500	550	650	775	900		
W	210	248	275	355	395	450	494	531	588	650	715	813				

NOTE: The material in this catalog is for general information. For specific performance data, proper material selection and special design, consult us freely. Although every attempt has been made to ensure correct information, Sangong reserves the right to change designs, materials or specifications without notice.