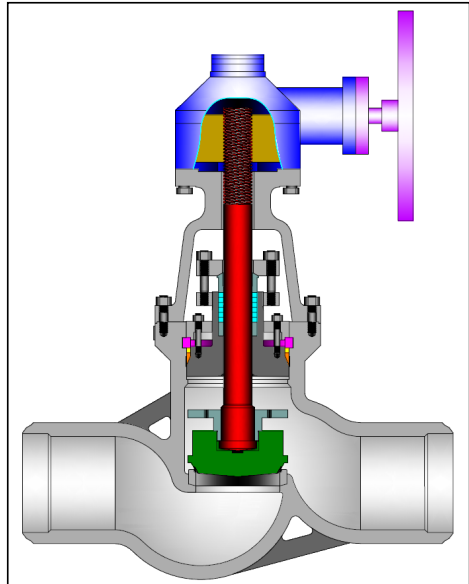


# PRESSURE SEAL GLOBE VALVES

CAST CARBON, STAINLESS STEEL OR ALLOY STEEL

2 - 24" (50 - 600 mm)

ASME CLASSES 600 - 2500



Class	Fig. No.
600	1631
900	1931
1500	1131
2500	1231

### STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
	A216 Gr. WCB (STANDARD)	A217 Gr. WC6	A217 Gr. WC9	A217 Gr. C12A
Body	A216 Gr. WCB (STANDARD)	A217 Gr. WC6	A217 Gr. WC9	A217 Gr. C12A
Bonnet	A105	A182 F11	A182 F22	A182 F91
Yokearm	A216 Gr. WCB			
Disc	A105 or A216 WCB + Stellite 6 Faced	A182 F11 or A217 WC6 + Stellite 6 Faced	A182 F22 or A217 WC9 + Stellite 6 Faced	A182 F91 or A217 Gr. C12A+ Stellite 6 Faced
Disc Nut	SST 410			
Seat Ring	Carbon Steel + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F91 + Stellite 6 Faced
Stem	A182 F6a			
Stem Bushing	A 439 Ductile NI-Resist Gr. D2			
Stem Bushing Set Screw	Steel			
Gland Flange	A216 Gr. WCB			
Eye Bolt	A193 Gr. B7			
Eye Bolt Nut	A194 Gr. 2H			
Groove Pin	Steel			
Gland	SST 410			
Packing	Graphite			
Packing Washer / Packing Spacer	SST 410			
Protective Ring	SST 410			
Segmental Thrust Ring	SST 410			
Support Plate	Steel			
Gasket	SST 304L			
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Steel			
Body / Bonnet / Yoke Stud	A193 Gr. B7	A193 Gr. B16		
Body / Bonnet / Yoke Nut	A194 Gr. 2H	A194 Gr. 7		

### DESIGN FEATURES:

- Standard trim is stellite faced seat and disc seat surfaces, and 13% chrome stem (API trim 5). Other trims available on request.
- Valves are full port design per ASME B16.34 Table A-1.
- Wall thickness per heavy wall API 600 requirements.
- Seat faces lapped for smooth finish and superior sealing.
- Swivel disc for optimal seating and longer seat life.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- Weld end valves are B16.10 short pattern design. Flanged end valves are available on request and are B16.10 long-pattern design. Weld end valve dimensions given in table on next page.
- Valve sizes 4" and smaller have bonnet take up ring design instead of support plate design.
- Each valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test, inspection result and certificate of conformance.
- Other available options as follows:
  - » Alternate valve materials such as chrome and stainless steel alloys
  - » Alternate trim materials

### Design Specifications

Item	Applicable Specification
Wall thickness	API 600
Pressure - temperature ratings	ASME B16.34
General valve design	B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Butt Weld design	ASME B16.25
Materials	ASTM

- » Bypass, drain and other auxiliary connections
- » Gear, motor, and cylinder actuators available
- » NACE service
- » Special cleaning for applications such as oxygen or chlorine
- » Other options available as Specified

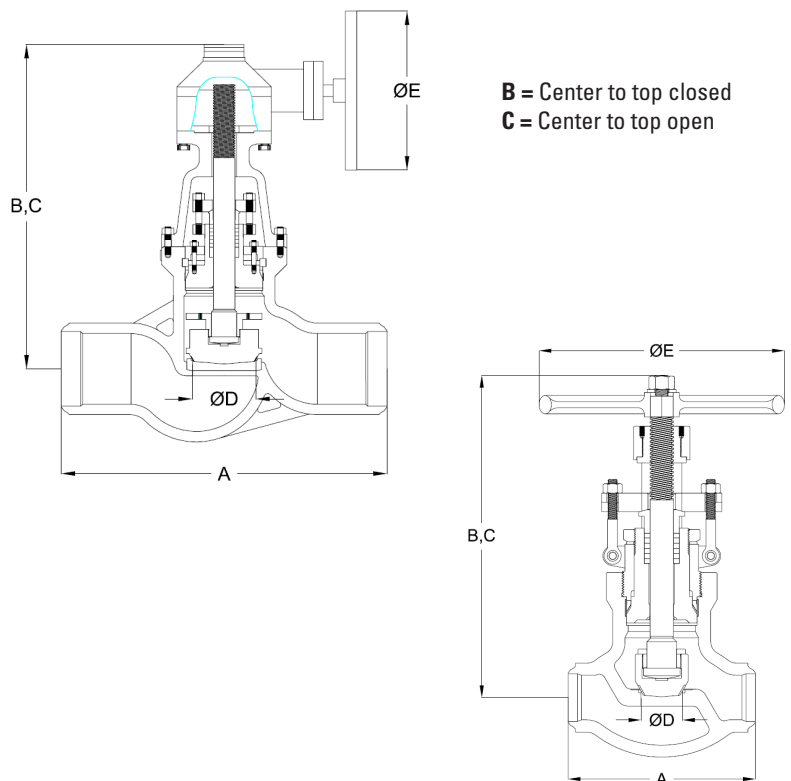
# GLOBE VALVE DIMENSIONS

CLASSES 600 - 2500

SIZE	ASME 600					ASME 900					ASME 1500				
	in mm	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D
2	7.0	15.9	16.5	2.00	10	8.5	15.9	16.5	1.87	12	8.5	18.0	18.8	1.87	12
50	178	405	420	51	250	216	405	420	48	300	216	460	475	48	300
2½	8.5	17.1	18.0	2.50	12	10.0	17.9	18.8	2.25	14	10.0	19.9	20.8	2.25	18
65	216	435	460	64	300	254	455	475	57	350	254	505	525	57	450
3	10.0	18.5	19.5	3.00	12	12.0	21.0	22.0	2.87	14	12.0	23.3	24.3	2.87	22
80	254	470	495	76	300	305	535	560	73	350	305	590	615	70	550
4	12.0	22.1	23.5	4.00	18	14.0	25.1	26.5	3.87	18	16.0	29.3		3.62	18
100	305	560	600	102	450	356	640	675	98	450	406	745		92	460
6	18.0	28.0	30.0	6.00	20	20.0	36.5		5.75	24	22.0	40.3		5.37	24
150	457	710	760	152	500	508	925		146	610	559	1025		136	610
8	23.0	40.0	42.8	7.87	24	26.0	52.5		7.50	24	28.0	55.0		7.00	24
200	584	1015	1085	200	610	660	1335		191	610	711	1400		178	610
10	28.0	50.0		9.75	24	31.0	56.5		9.37	24	34.0	62.5		8.75	24
250	711	1270		248	610	787	1435		238	610	864	1590		222	610
12	32.0	55.5		11.75	24	36.0	59.3		11.12	24	39.0	70.0		10.37	32
300	813	1410		298	610	914	1505		282	610	991	1780		263	800

(1) Gear operators standard for 10" and up for class 600, 6" and up for class 900, and 4" and up for class 1500 and 2500.

SIZE	ASME 2500				
	in mm	A	B(1)	C(1)	D
2	11.0	19.0	19.8	1.50	22
50	279	485	500	38	550
2½	13.0	22.0	22.8	1.87	24
65	330	560	580	48	600
3	14.5	23.8	24.8	2.25	24
80	368	605	630	57	600
4	18.0	31.0		2.87	18
100	457	790		73	460
6	24.0	47.3		4.37	24
150	610	1200		111	610
8	30.0	61.8		5.75	24
200	762	1570		146	610
10	36.0	69.5		7.25	24
250	914	1765		184	610
12	41.0	80.0		8.62	32
300	1041	2030		219	800



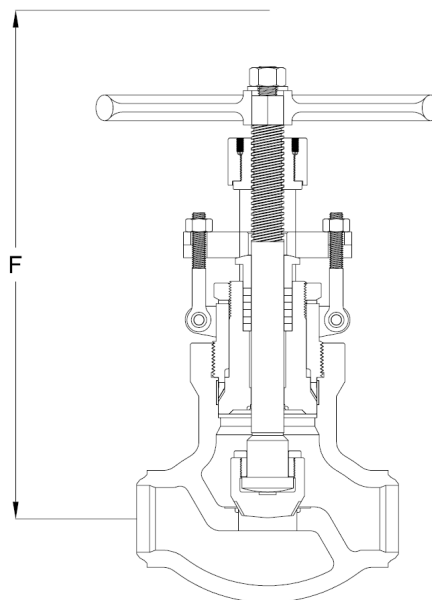
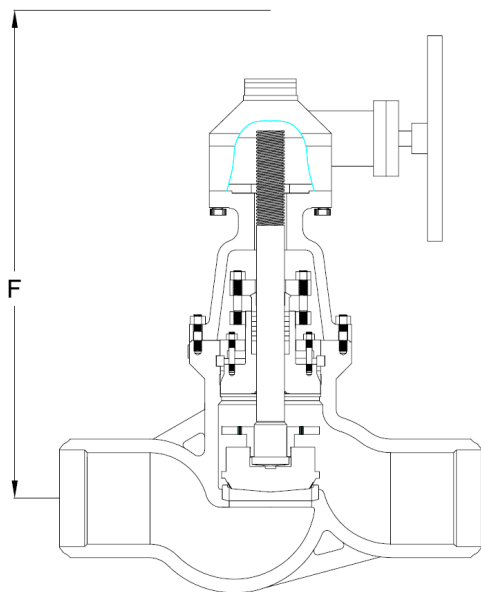
# PRESSURE SEAL GLOBE VALVES

CAST CARBON, STAINLESS STEEL OR ALLOY STEEL

2 - 24" (50 - 600 mm)

ASME CLASSES 600 - 2500

SIZE	ASME 600					ASME 900					ASME 1500					ASME 2500				
	in mm	F	in mm	WT kg	CV	F	in mm	WT kg	CV	F	in mm	WT kg	CV	F	in mm	WT kg	CV			
2	25.4	46	50	26.7	80	40	27.7	85	40	30.3	111	25								
50	645	21	678	36	700	39	770	50												
2½	25.4	83	75	26.7	120	60	29.6	136	60	31.0	169	40								
65	645	38	678	54	746	62	787	77												
3	27.7	106	110	30.9	187	100	32.3	199	90	33.8	261	60								
80	704	48	784	85	820	90	859	118												
4	32.0	182	200	36.0	288	190	40.0	430	160	41.5	567	100								
100	814	83	916	131	1017	195	1057	257												
6	38.9	359	480	45.9	624	440	49.1	922	380	59.9	1240	250								
150	987	163	1164	283	1248	418	1522	562												
8	51.5	581	850	62.6	1042	770	65.6	1521	670	70.8	2056	450								
200	1306	263	1592	473	1668	690	1799	932												
10	61.6	843	1300	67.8	1576	1200	72.9	2468	1000	88.2	3378	720								
250	1562	382	1722	715	1854	1119	2239	1532												
12	68.8	1144	2000	71.8	2210	1800	83.2	3613	1500	97.9	4056	1100								
300	1746	519	1824	1002	2114	1639	2487	1839												



**F** = Dismantling dimension

**WT** = Weight

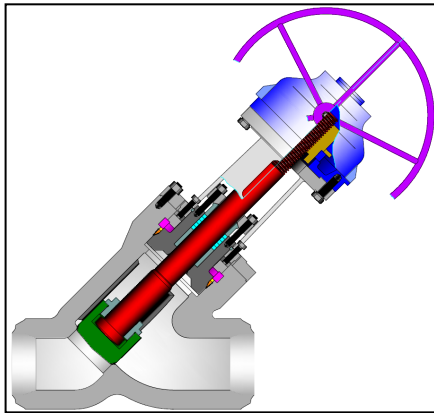
**CV** = Flow coefficient

# PRESSURE SEAL Y-PATTERN GLOBE VALVES

CAST CARBON, STAINLESS STEEL OR ALLOY STEEL

2 - 12" (50 - 300 mm)

ASME CLASSES 600 - 2500



Class	Fig. No. (1)
600	1631
900	1931
1500	1131
2500	1231

(1) An option code is needed to specify a y-pattern. See page 5 for more details.

## DESIGN FEATURES:

- Standard trim is stellite faced seat and disc seat surfaces, and 13% chrome stem (API trim 5). Other trims available on request.
- Valves are full port design per ASME B16.34 Table A-1.
- Wall thickness per heavy wall API 600 requirements.
- Seat faces lapped for smooth finish and superior sealing.
- Swivel disc for optimal seating and longer seat life.
- Each valve is shell, seat and backseat pressure tested per industry standard API 598.
- Gland is two piece gland / gland flange design for optimal alignment and uniform packing compression.
- Each valve has a unique certification number that is traceable to the valve certification sheet which includes MTR data, pressure test, inspection result and certificate of conformance.
- Valve sizes 4" and smaller have bonnet take up ring design instead of support plate design.
- Weld end valves are B16.10 short pattern design. Flanged end valves are available on request and are B16.10 long-pattern design. Weld end valve dimensions given in table on next page.

## STANDARD MATERIALS (Other materials available)

PART	MATERIALS			
Body	A216 Gr. WCB (STANDARD)	A217 Gr. WC6	A217 Gr. WC9	A217 Gr. C12A
Bonnet	A105	A182 F11	A182 F22	A182 F91
Yokearm	A216 Gr. WCB			
Disc	A105 or A216 WCB + Stellite 6 Faced	A182 F11 or A217 WC6 + Stellite 6 Faced	A182 F22 or A217 WC9 + Stellite 6 Faced	A182 F91 or A217 Gr. C12A + Stellite 6 Faced
Disc Nut	SST 410			
Seat Ring	Carbon Steel + Stellite 6 Faced	A182 F11 + Stellite 6 Faced	A182 F22 + Stellite 6 Faced	A182 F91 + Stellite 6 Faced
Stem	A182 F6a			
Stem Bushing	A 439 Ductile NI-Resist Gr. D2			
Stem Bushing Set Screw	Steel			
Gland Flange	A216 Gr. WCB			
Eye Bolt	A193 Gr. B7			
Eye Bolt Nut	A194 Gr. 2H			
Groove Pin	Steel			
Gland	SST 410			
Packing	Graphite			
Packing Washer / Packing Spacer	SST 410			
Protective Ring	SST 410			
Segmental Thrust Ring	SST 410			
Support Plate	Steel			
Gasket	SST 304L			
Hand Wheel	Malleable Iron or Steel			
Hand Wheel Nut	Steel			
Body / Bonnet / Yoke Stud	A193 Gr. B7	A193 Gr. B16		
Body / Bonnet / Yoke Nut	A194 Gr. 2H	A194 Gr. 7		

- Other available options as follows:
  - » Alternate valve materials such as chrome and stainless steel alloys
  - » Alternate trim materials
  - » Bypass, drain and other auxiliary connections
  - » Gear, motor, and cylinder actuators available
  - » NACE service
  - » Special cleaning for applications such as oxygen or chlorine
  - » Other options available as specified

## Design Specifications

Item	Applicable Specification
Wall thickness	API 600
Pressure - temperature ratings	ASME B16.34
General valve design	ASME B16.34
End to End dimensions	ASME B16.10
Flange design	ASME B16.5
Butt Weld design	ASME B16.25
Materials	ASTM

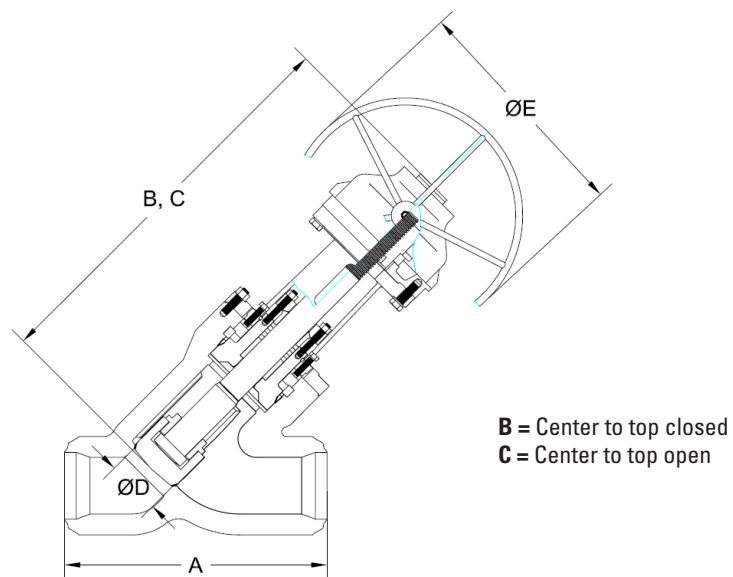
# GLOBE VALVE DIMENSIONS

(CLASSES 600 - 2500)

SIZE in mm	ASME 600					ASME 900					ASME 1500				
	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D	E	A	B(1)	C(1)	D	E
2	7.0	16.9	17.5	2.00	10	8.5	16.9	17.5	1.87	12	8.5	19.0	19.8	1.87	12
50	178	430	445	51	250	216	430	445	48	300	216	483	503	48	300
2½	8.5	18.1	19.0	2.50	12	10.0	18.9	19.8	2.25	14	10.0	21.9	21.8	2.25	18
65	216	460	485	64	300	254	480	503	57	350	254	556	554	57	450
3	10.0	19.5	20.5	3.00	12	12.0	22.0	23.0	2.87	14	12.0	24.3	25.3	2.75	22
80	254	495	520	76	300	305	559	584	73	350	305	617	643	70	550
4	12.0	24.1	25.5	4.00	18	14.0	27.1	28.5	3.87	18	16.0	31.3		3.62	18
100	305	611	651	102	450	356	688	724	98	450	406	795		92	460
6	18.0	30.0	32.0	6.00	20	20.0	38.5		5.75	24	22.0	42.3		5.37	24
150	457	762	813	152	500	508	978		146	610	559	1074		136	610
8	23.0	42.0	44.8	7.87	24	26.0	54.5		7.5	24	28.0	57.0		7.00	24
200	584	1067	1138	200	610	660	1384		191	610	711	1448		178	610
10	28.0	53		9.75	24	31.0	59.5		9.37	24	34.0	65.5		8.75	24
250	711	1346		248	610	787	1511		238	610	864	1664		222	610
12	32.0	58.5		11.75	24	36.0	62.3		11.12	24	39.0	73.0		10.37	32
300	813	1486		298	610	914	1582		282	610	991	1854		263	800

(1) Gear operators standard for 10" and up for class 600, 6" and up for class 900, and 4" and up for class 1500 and 2500.

SIZE in mm	ASME 2500				
	A	B(1)	C(1)	D	E
2	11	20	20.8	1.5	22
50	279	508	528	38	550
2½	13	53	53.8	1.87	24
65	330	584	1367	48	600
3	14.5	24.8	25.8	2.25	24
80	368	630	655	57	600
4	18	33		2.87	18
100	457	838		73	460
6	24	49.3		4.37	24
150	610	1252		111	610
8	30	63.8		5.75	24
200	762	1621		146	610
10	36	72.5		7.25	24
250	914	1842		184	610
12	41	83		8.62	32
300	1041	2108		219	800



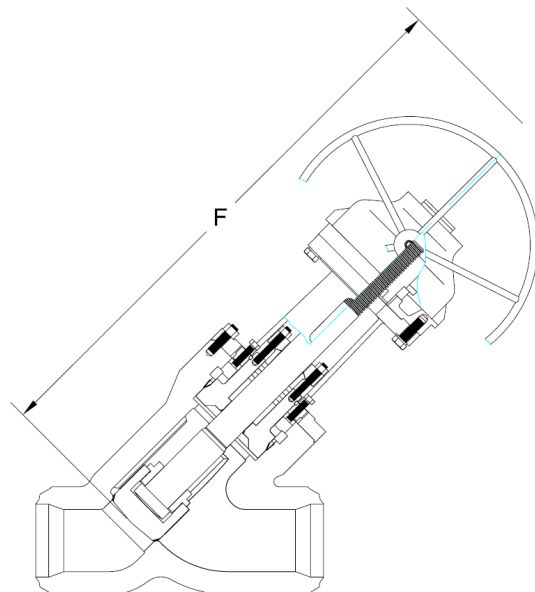
# PRESSURE SEAL Y-PATTERN GLOBE VALVES

CAST CARBON, STAINLESS STEEL OR ALLOY STEEL

2 - 12" (50 - 300 mm)

ASME CLASSES 600 - 2500

SIZE	ASME 600					ASME 900					ASME 1500					ASME 2500				
	in mm	F	in mm	WT	lb kg	CV	F	in mm	WT	lb kg	CV	F	in mm	WT	lb kg	CV	F	in mm	WT	lb kg
2	26.4	49	100	27.7	84	90	28.7	89	90	31.3	117	60								
50	671	22	704	38	729	40	795	53												
2½	26.4	87	170	27.7	126	130	30.6	143	130	32.0	177	95								
65	671	40	704	57	777	65	813	80												
3	28.7	111	240	31.9	197	220	33.3	211	200	34.8	277	130								
80	729	50	810	89	846	96	884	125												
4	34.0	191	440	38.0	305	410	42.0	456	360	43.5	601	230								
100	864	87	965	138	1067	207	1105	273												
6	40.9	381	1050	47.9	661	960	51.1	986	840	61.9	1327	560								
150	1039	173	1217	300	1298	447	1572	602												
8	53.5	616	1870	64.6	1105	1700	67.6	1628	1500	72.8	2200	1000								
200	1359	279	1641	501	1717	738	1949	998												
10	64.6	894	2900	70.8	1671	2700	75.9	2641	2300	91.2	3648	1600								
250	1641	405	1798	758	1928	1198	2316	1655												
12	71.8	1213	4300	74.8	2365	3900	86.2	3902	3400	100.9	4380	2300								
300	1824	550	1900	1072	2189	1770	2563	1987												



F = Dismantling dimension

WT = Weight

CV = Flow coefficient