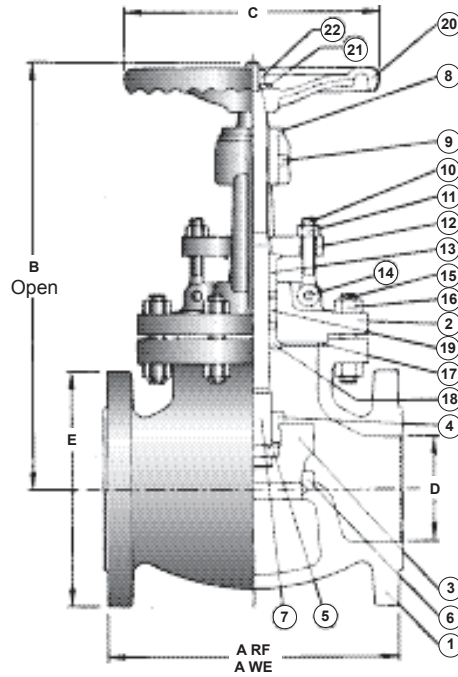


CAST STEEL GLOBE VALVES

CLASS 150



Figure No. Type of Ends
5275RF Flanged Raised Face



Standard Material Specifications

No.	Description	Materials
1	Body	ASTM A216 GR WCB
2	Bonnet	ASTM A216 GR WCB
3	Disc	ASTM A 276 Type 410
4	Disc Locknut	Alloy Steel
5	Disc Washer	ASTM A 276 Type 410
6	Seat Ring	ASTM A 515 GR 70 + ST6
7	Stem	ASTM A276 Type 410
8	Stem Nut	ASTM B 148 UNS C95600
9	Set Screw	Alloy Steel
10	Eyebolt	Alloy Steel
11	Eyebolt Nut	ASTM A 307
12	Gland Plate	ASTM A515 GR 70
13	Packing Bushing	ASTM A 108 GR 1020
14	Eyebolt Pin	Alloy Steel
15	Bonnet Stud	ASTM A 193 GR B7
16	Bonnet Stud Nut	ASTM A 194 GR 2H
17	Bonnet Gasket	Graphite/Stainless Steel 316
18	Bonnet Bushing	ASTM A 276 Type 410
19	Stem Packing	Graphite
20	Handwheel	ASTM A 197
21	Handwheel Washer	Commercial Steel
22	Handwheel Nut	ASTM A 307
*23	Identification Plate	Stainless Steel

* Not Shown

Dimensions

D Nominal Diameter	mm inch	50 2	65 2 1/2	80 3	100 4	150 6	200 8	250 10	300 12	350 14	400 16	500 20
A	mm.	203.2	215.9	241.3	292.1	406.4	495.3	622.3	698.5	787.4	914.4	977.9
B	mm.	329	386	354	432	513	643	669	830	1292	1378	1502
C	mm.	203.2	177.8	203.2	254	355.6	406.4	457	609.6	965	965	965
E	mm.	152.4	177.8	190.2	228.6	279.4	342.9	406.4	482.6	533.4	596.9	698.5
Weight	kg.	20	28	28	59	85	194	275	445	490	900	1500

Trim

Trim		Internal Parts		
API	Walworth	Seat Ring	Gate (Disc)	Stem Hanger Pin Bonnet Bushing
8	*UT	Stellite No. 6	13% Cr. (SS 410)	13% Cr. (SS 410)
5	HF	Stellite No. 6	Stellite No. 6	13% Cr. (SS 410)

*UT-Trim (Universal Trim)

Test Pressures

For valves having flanges or butt welding ends to ANSI Class 150 Standards.

	shell Hydrostatic	Seat* Hydrostatic	Seat*Air under Water
lb/in ²	450	315	100
MPa	3.1	2.2	.7

*Seat leakage rate: All valves meet BS 6755 Part 1 leakage rate A (No visible leakage for duration of test).

Pressure - Temperature Ratings

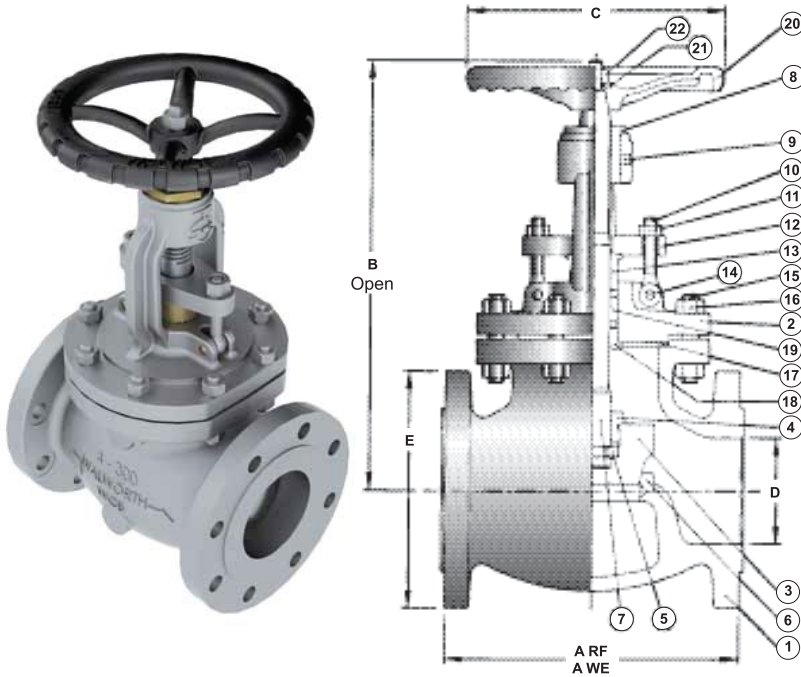
°F Temperature °C		MAXIMUM ALLOWABLE NON-SHOCK WORKING PRESSURE IN PSIG BY CLASS					
		150	300	400	600	900	1500
-20 to 100	-29 to 38	285	740	990	1,480	2,220	3,705
200	93	260	675	900	1,350	2,025	3,375
300	149	230	655	875	1,315	1,970	3,280
400	204	200	635	845	1,270	1,900	3,170
500	260	170	600	800	1,200	1,795	2,995
600	316	140	550	730	1,095	1,640	2,735
650	343	125	535	715	1,075	1,610	2,685
700	371	110	535	710	1,065	1,600	2,665
750	399	95	505	670	1,010	1,510	2,520
800	427	80	410	550	825	1,235	2,060
850	454	65	270	355	535	805	1,340
900	482	50	170	230	345	515	860
950	510	35	105	140	205	310	515
1000	538	20	50	70	105	155	260

For prolonged usage at temperatures above 800°F (427°C), consideration should be given to the possibility of graphite formation in Carbon Steel.

CAST STEEL GLOBE VALVES

CLASS 300

Figure No. Type of Ends
5281RF Flanged Raised Face



Standard Material Specifications

No.	Description	Materials
1	Body	ASTM A216 GR WCB
2	Bonnet	ASTM A216 GR WCB
3	Disc	ASTM A276 Type 410
4	Disc Locknut	Alloy Steel
5	Disc Washer	ASTM A276 Type 410
6	Seat Ring	ASTM A515 GR 70 + ST6
7	Stem	ASTM A276 Type 410
8	Stem Nut	ASTM B 148 UNS C95600
9	Screw	Alloy Steel
10	Eyebolt	Alloy Steel
11	Eyebolt Nut	ASTM A307
12	Gland Plate	ASTM A515 GR 70
13	Packing Bushing	ASTM A108 GR 1020
14	Eyebolt Pin	Alloy Steel
15	Bonnet Stud	ASTM A193 GR B7
16	Bonnet Stud Nut	ASTM A194 GR 2H
17	Bonnet Gasket	Spiral Stainless304/Graphite
18	Bonnet Bushing	ASTM A276 Type 410
19	Stem Packing	Graphite
20	Handwheel	ASTM A197
21	Handwheel Washer	Commercial Steel
22	Handwheel Nut	ASTM A307
*23	Identification Plate	Stainless Steel

* Not Shown

Dimensions

D Nominal Diameter	mm	50	65	80	100	150	200	250	300	350
	inch	2	2 1/2	3	4	6	8	10	12	14
A	mm.	266.7	292.1	317.5	355.6	444.5	558.8	622.3	711.2	838.2
B	mm.	360	505	418	511	621	854	1000	1180	1583
C	mm.	203.2	254	254	355.6	457	610	762	965	965
E	mm.	165.1	190.5	209.5	254	317.5	381	444.5	520.7	584
Weight	kg.	27	50	51	78	168	305	446	860	1100

Trim

Trim		Internal Parts		
API	Walworth	Seat Ring	Gate (Disc)	Stem Hanger Pin Bonnet Bushing
8	*UT	Stellite No. 6	13% Cr. (SS 410)	13% Cr. (SS 410)
5	HF	Stellite No. 6	Stellite No. 6	13% Cr. (SS 410)

*UT-Trim (Universal Trim)

Test Pressures

For valves having flanges or butt welding ends to ANSI Class 300 Standards.

	shell Hydrostatic	Seat* Hydrostatic	Seat*Air under Water
lbf/in ²	1125	825	100
MPa	7.7	5.7	.7

*Seat leakage rate: All valves meet BS 6755 Part 1 leakage rate A (No visible leakage for duration of test).

Pressure - Temperature Ratings

°F Temperature °C		MAXIMUM ALLOWABLE NON-SHOCK WORKING PRESSURE IN PSIG BYCLASS					
		150	300	400	600	900	1500
-20 to 100	-29 to 38	285	740	990	1,480	2,220	3,705
200	93	260	675	900	1,350	2,025	3,375
300	149	230	655	875	1,315	1,970	3,280
400	204	200	635	845	1,270	1,900	3,170
500	260	170	600	800	1,200	1,795	2,995
600	316	140	550	730	1,095	1,640	2,735
650	343	125	535	715	1,075	1,610	2,685
700	371	110	535	710	1,065	1,600	2,665
750	399	95	505	670	1,010	1,510	2,520
800	427	80	410	550	825	1,235	2,060
850	454	65	270	355	535	805	1,340
900	482	50	170	230	345	515	860
950	510	35	105	140	205	310	515
1000	538	20	50	70	105	155	260

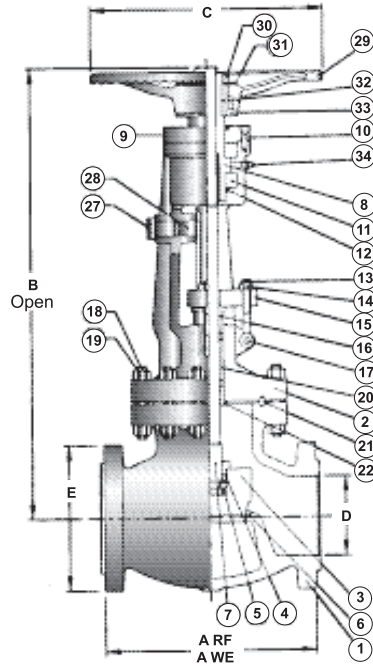
For prolonged usage at temperatures above 800°F (427°C), consideration should be given to the possibility of graphite formation in Carbon Steel.

CAST STEEL GLOBE VALVES

CLASS 600



Figure No. Type of Ends
5295RF Flanged Raised Face



Standard Material Specifications

No.	Description	Materials
1	Body	ASTM A216 GR WCB
2	Bonnet	ASTM A216 GR WCB
3	Disc	ASTM A276 Type 410
4	Disc Lock Nut	Alloy Steel
5	Disc Washer	ASTM A276 Type 410
6	Seat Ring	ASTM A515 GR 70+ST6
7	Stem	ASTM A276 Type 410
8	Stem Nut	ASTM B 148 UNS C95600
9	Yoke Cap	ASTM A36
10	Yoke Cap Screw	Alloy Steel
11	Bearing	Commercial Steel
12	Stem Nut Oil Sea	Rubber/Commercial Steel
13	Eyebolt	Alloy Steel
14	Eyebolt Nut	ASTM A307
15	Gland Plate	ASTM A515 GR 70
16	Packing Bushing	ASTM A108 GR 1020
17	Eyebolt Pin	Alloy Steel
18	Bonnet Stud	ASTM A193 GR B7
19	Bonnet Stud Nut	ASTM A194 GR 2H
20	Stem Packing	Graphite
21	Bonnet Gasket	ASTM A108 GR 1010
22	Bonnet Bushing	ASTM A276 Type 410
*23	Yoke	ASTM A216 GR WCB
*24	Yoke Bolt	Alloy Steel
*25	Yoke Bolt Nut	ASTM A307
*26	Torque Key	Alloy Steel
27	Torque Key Screw	Alloy Steel
28	Grease Fitting	Commercial Steel
29	Handwheel	ASTM A197
30	Handwheel Nut	ASTM A307
31	Clamp	Commercial Steel
32	Yoke Nut Key	Alloy Steel
33	Impact Bushing	ASTM A216 GR WCB
*34	Stem Nut Set Screw	Alloy Steel
*35	Identification Plate	Stainless Steel

* Not Shown

Dimensions

D Nominal Diameter	mm inch	50 2	65 2 1/2	80 3	100 4	150 6	200 8	250 10	300 12	350 14
A	mm.	292.1	330.2	355.6	431.8	558.8	660.4	787.4	838.2	889
B	mm.	470	533	565	508	902	1219	1486	1714	2015
C	mm.	254	356	356	406	610	762	965	762	965
E	mm.	165.1	190.5	209.5	273	355.6	419	508	559	603
Weight	kg.	30	47	64	130	265	510	730	1040	1390

Trim

Trim		Internal Parts		
API	Walworth	Seat Ring	Gate (Disc)	Stem Hanger Pin Bonnet Bushing
8	*UT	Stellite No. 6	13% Cr. (SS 410)	13% Cr. (SS 410)
5	HF	Stellite No. 6	Stellite No. 6	13% Cr. (SS 410)

*UT-Trim (Universal Trim)

Test Pressures

For valves having flanges or butt welding ends to ANSI Class 600 Standards.

	Shell Hydrostatic	Seat* Hydrostatic	Seat* Air under Water
lbf/in ²	1125	825	100
MPa	15.4	11.3	.7

*Seat leakage rate: All valves meet BS 6755 Part 1 leakage rate A (No visible leakage for duration of test).

Pressure - Temperature Ratings

°F Temperature °C		MAXIMUM ALLOWABLE NON-SHOCK WORKING PRESSURE IN PSIG BYCLASS					
		150	300	400	600	900	1500
-20 to 100	-29 to 38	285	740	990	1,480	2,220	3,705
200	93	260	675	900	1,350	2,025	3,375
300	149	230	655	875	1,315	1,970	3,280
400	204	200	635	845	1,270	1,900	3,170
500	260	170	600	800	1,200	1,795	2,995
600	316	140	550	730	1,095	1,640	2,735
650	343	125	535	715	1,075	1,610	2,685
700	371	110	535	710	1,065	1,600	2,665
750	399	95	505	670	1,010	1,510	2,520
800	427	80	410	550	825	1,235	2,060
850	454	65	270	355	535	805	1,340
900	482	50	170	230	345	515	860
950	510	35	105	140	205	310	515
1000	538	20	50	70	105	155	260

For prolonged usage at temperatures above 800°F (427°C), consideration should be given to the possibility of graphite formation in Carbon Steel.