

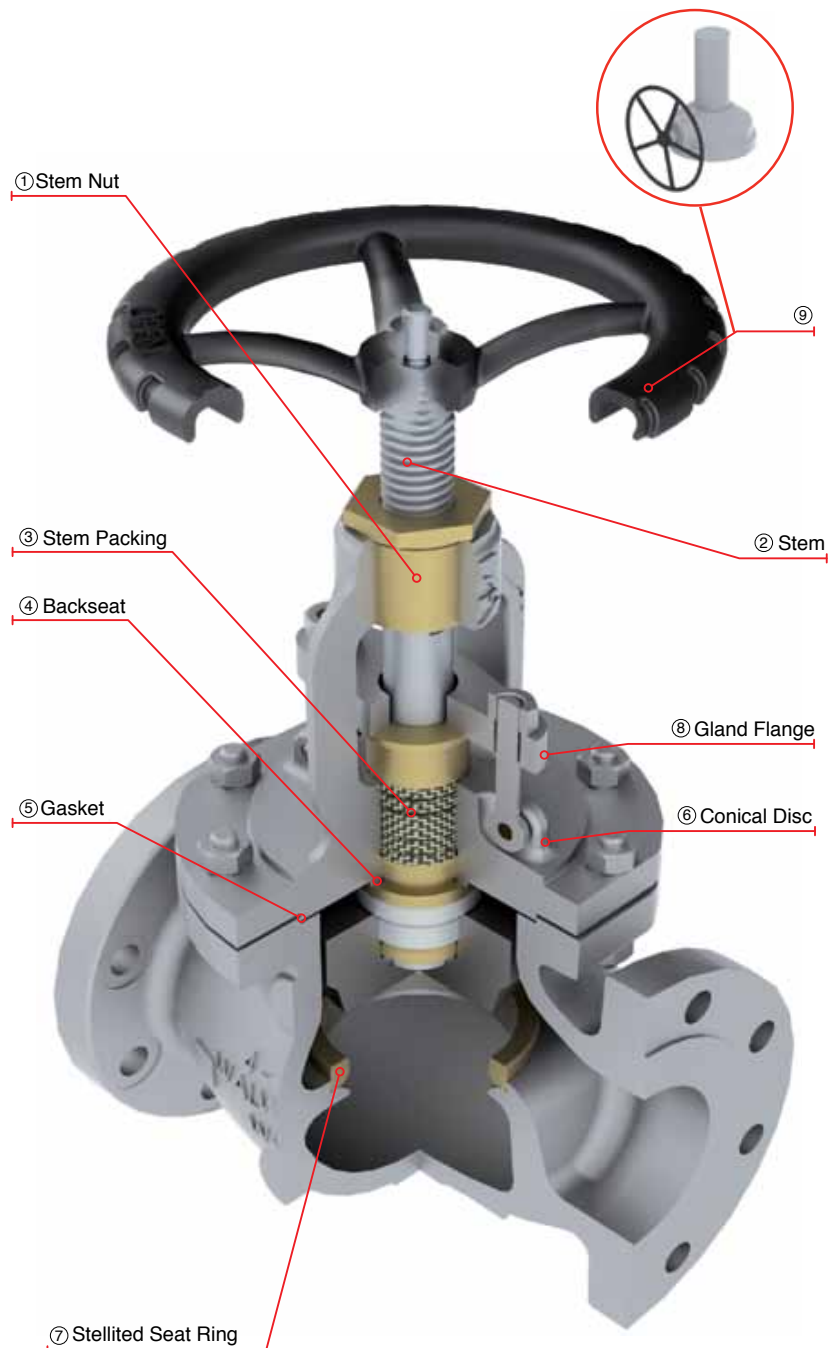
CAST STEEL GLOBE VALVES CLASS 300

CAST STEEL GLOBE VALVES WITH RISING HANDWHEEL AND STEM.

DESIGN FEATURES

- Globe valves design in accordance with API-623
- Globe valves option in accordance with API-603 only for stainless steel & nickel alloys.
- Globe valves for cryogenic service with gas column in accordance with BS-6364 upon request
- Flange dimensions in accordance with ASME B16.5 for valves up to 24" nominal diameter
- Handwheel, handwheel impact, chain wheel, gear operation, electric, pneumatic or hydraulic actuation as per customer requirements
- By-pass, lantern rings, grease injectors, special connections, etc.
- Low fugitive emissions control
- NACE service either MR-01-75 or MR-01-03.
- Test in accordance with API-598
- Stop check design option available

- ① Stem Nut, replaceable in line to avoid shut down of pipe line process.
- ② Revolving rising stem with precision ACME single or double thread for quick operation. Surface finish suitable to seal properly to get low fugitive emissions.
- ③ Stem Packing is designed for optimum control of fugitive emissions leakage to the atmosphere. The ultra low emission leakage rate is assured by the fine finish in the stem, the reduced diametrical clearances and the stem straightness control special designed packing. Live load packing arrangement available upon request.
- ④ Backseat either threaded or welded, designed to relieve back pressure on the stem packing when fully seated. Replacing stem packing under pressure is not recommended. Hard faced backseat available for severe service as customer requirements
- ⑤ Body to Bonnet Joint designed to apply a uniform load to the gasket to assure a leak proof seal.
- ⑥ Conical Plug type Disc, integrally guided to assure true alignment between disc and valve body. The loose disc design allows the disc and seat ring sealing surface to seat correctly without damage.
- ⑦ Stellite Seat Ring is seal welded to provide a increased resistance to wear, abrasion, and erosion of the sealing surfaces.
- ⑧ Two pieces arrangement gland flange and stem packing bushing for self-alignment to avoid stem damage.
- ⑨ Impact Handwheel, the mechanism is based on transmitting the momentum generated by the mass of the handwheel through the impact/impulse generated during the snap closure action of the handwheel. This type of handwheel is used when a standard handwheel cannot create enough closing force to effect a seal. Gear operated is also available.



CAST STEEL GLOBE VALVES, CLASS 300 (HANDWHEEL OPERATED)

Design Features

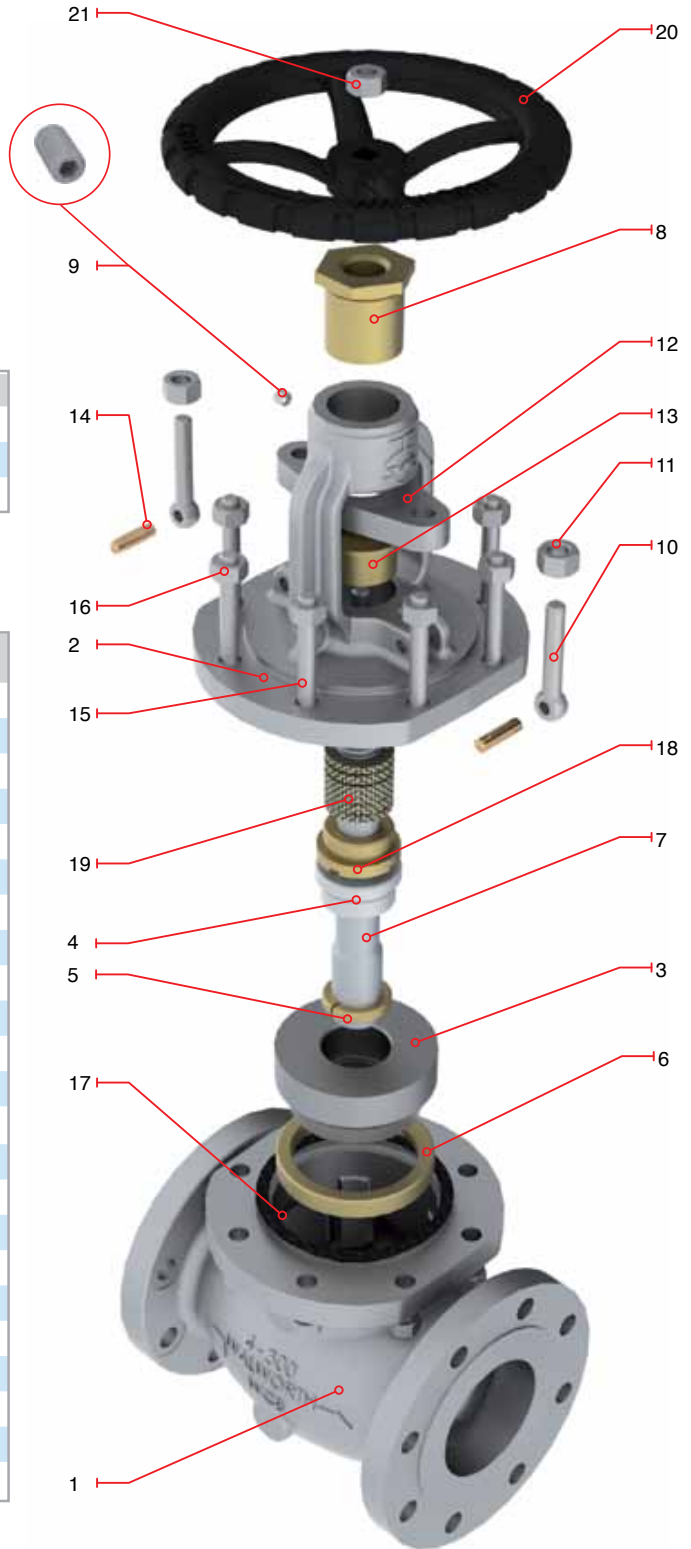
- Design in accordance with API-623
- Rising Stem and Handwheel: 6" and smaller
- Rising Stem and Fixed Handwheel: 8" and up
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B 16.25
- Bonnet with Bearings: 8" and larger
- Size 2" to 12" Handwheel operated as standard

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5281RF	5281F	Flanged Raised Face
5281RTJ	5281RJ	Flanged Ring Type Joint
5281WE	5281WE	Buttweld

Regular Bill of Materials

No.	Description	STANDARD MATERIAL
1	Body	ASTM A 216 GR WCB
2	Bonnet	ASTM A 216 GR WCB
3	Disc	ASTM A 276 Type 410
4	Disc Lock Nut	Alloy Steel
5	Disc Washer	ASTM A 276 Type 410
6	Seat Ring	ASTM A 515 GR 70 + ST6
7	Stem	ASTM A 276 Type 410
8	Stem Nut	ASTM B 148 UNS C95600
9	Screw	Alloy Steel
10	Eyebolt	Alloy Steel
11	Eyebolt Nut	ASTM A 307
12	Gland Flange	ASTM A 515 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	Spiral Stainless 304/Graphite
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



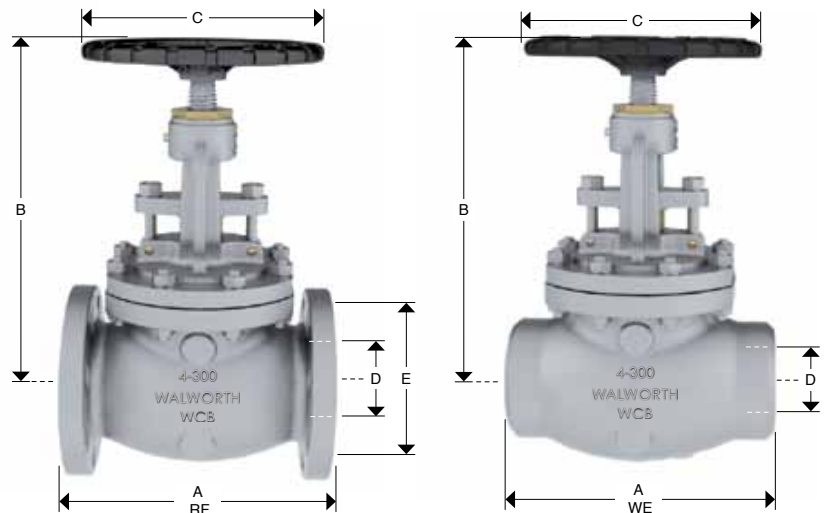
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Dimensions and Weights

D Nominal Diameter	mm	51	64	76	102	152	203	254	305
	in	2	2 1/2	3	4	6	8	10	12
A (RF and WE)	mm	267	292	318	356	445	559	622	711
	in	10 1/2	11 1/2	12 1/2	14	17 1/2	22	24 1/2	28
B	mm	360	505	418	511	621	854	1000	1180
	in	14 3/16	19 7/8	16 7/16	20 1/8	24 7/16	33 5/8	39 3/8	46 7/16
C	mm	203	254	254	356	457	610	762	965
	in	8	10	10	14	18	24	30	38
E	mm	165	191	210	254	318	381	445	521
	in	6 1/2	7 1/2	8 1/4	10	12 1/2	15	17 1/2	20 1/2
Weight 5281RF	Kg	26	43	50	78	154	294	461	675
	lb	57.2	94.6	110	171.6	338.8	646.8	1014.2	1485
Weight 5281WE	Kg	20	35	40	62	148	254	381	574
	lb	44	77	88	136	326	559	838	1262

For size and dimensions not shown, please contact our Sales Department.

CAST STEEL GLOBE VALVES, CLASS 300 (GEAR OPERATED)

Design Features

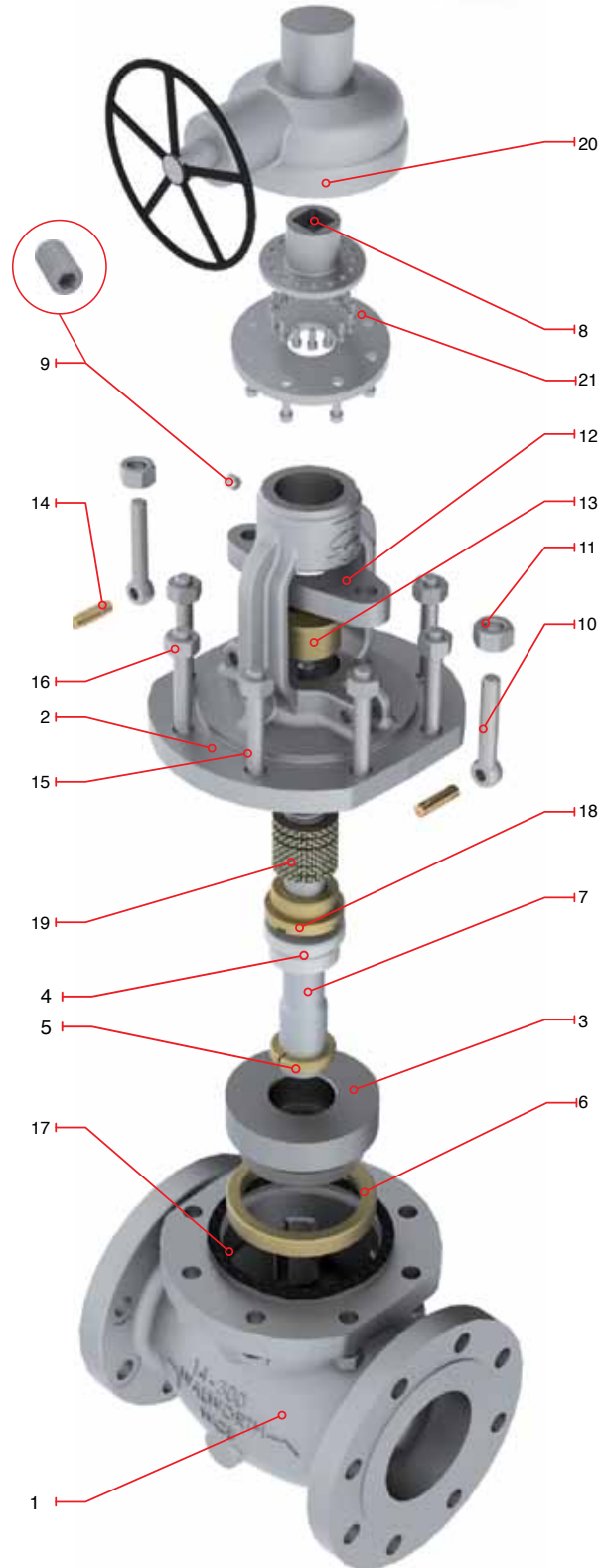
- Design in accordance with API-623
- Rising Stem
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B 16.25
- Bonnet with Bearings: 8" and larger
- Size 14" and up Gear operated as standard

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6	Seat Ring	ASTM A 515 GR 70 + ST6
7	Stem	ASTM A 276 Type 410
8	Stem Nut	ASTM B 148 UNS C95600
9	Set Screw	Alloy Steel
10	Eyebolt	Alloy Steel
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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	Spiral Stainless 304/Graphite
18	Bonnet Bushing	ASTM A 276 Type 410
19	Stem Packing	Graphite
20	Gear Operator	as customer requirements
21	Operator Bolts	Alloy Steel
*22	Identification Plate	Stainless Steel

*Not Shown

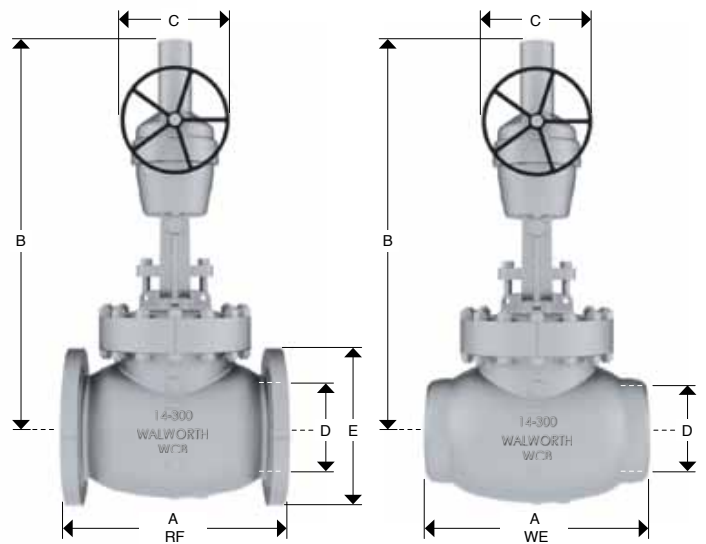


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Dimensions and Weights

D Nominal Diameter	mm	356	406	457	508	610
	in	14	16	18	20	24
A (RF and WE)	mm	838	864	977	1016	1346
	in	33	34	38 1/2	40	53
B	mm	1037	1173	1135	1500	1730
	in	40 7/8	46 1/8	44 5/8	59	68 1/8
C	mm	640	640	600	600	600
	in	25	25	23 5/8	23 5/8	23 5/8
E	mm	584	648	711	775	914
	in	23	25 1/2	28	30 1/2	36
Weight 5281RF	Kg	787	1097	1907	2119	2338
	lb	1731.4	2413.4	4195	4662	5144
Weight 5281WE	Kg	669	932	1678	1865	2057
	lb	1472	2051	3692	4102	4526

For size and dimensions not shown, please contact our Sales Department.