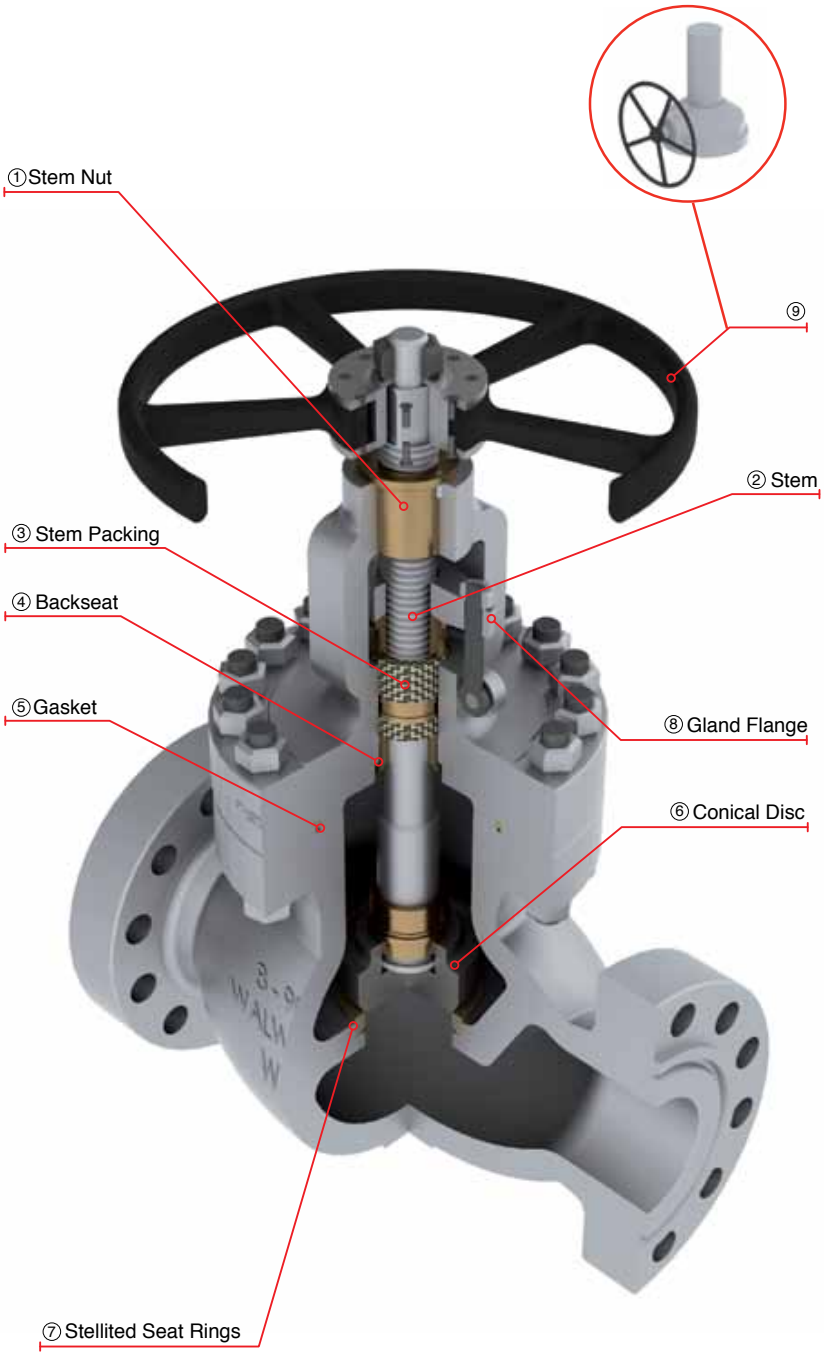
CAST STEEL GLOBE VALVES CLASS 900

CAST STEEL GLOBE VALVES WITH RISING HANDWHEEL AND STEM.

DESIGN FEATURES

- Globe valves design in accordance with 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 hyydraulic 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 Ring Type 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 Stellited 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 900
(HANDWHEEL OPERATED)

Design Features

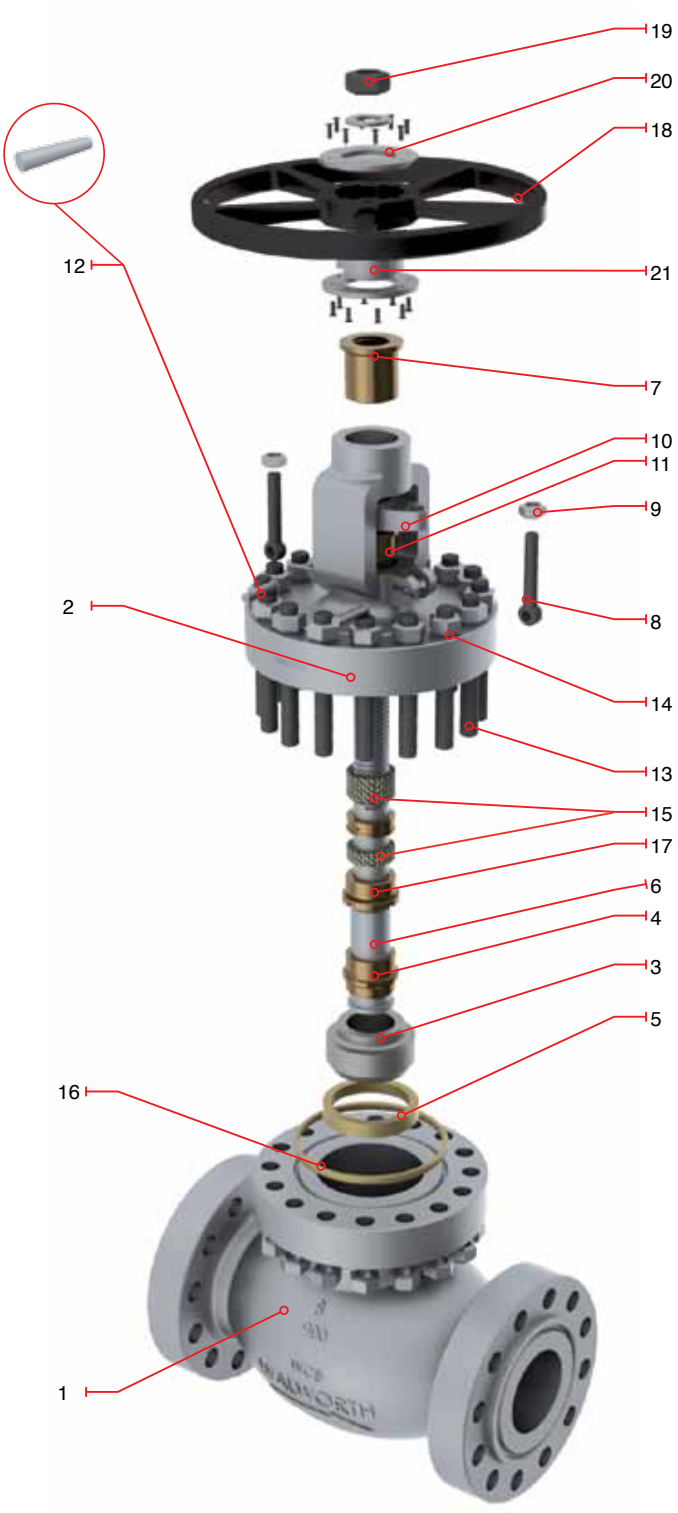
- Design in accordance with API-623
- Rising Stem and Handwheel: 2” to 3”
- Rising Stem and Fixed Handwheel: 4” and up
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B 16.25
- Bonnet with bearings 4” and larger
- Size 2” to 6” Handwheel operated as standard

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5301RF	5301F	Flanged Raised Face
5301RTJ	5301RJ	Flanged Ring Type Joint
5301WE	5301WE	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	Seat Ring	ASTM A 515 GR 70 + ST6
6	Stem	ASTM A 276 Type 410
7	Stem Nut	ASTM B 148 UNS C95600
8	Eyebolt	Alloy Steel
9	Eyebolt Nut	ASTM A 307
10	Gland Flange	ASTM A 515 GR 70
11	Packing Bushing	ASTM A 108 GR 1020
12	Eyebolt Pin	Alloy Steel
13	Bonnet Stud	ASTM A 193 GR B7
14	Bonnet Stud Nut	ASTM A 194 GR 2H
15	Stem Packing	Graphite
16	Ring type Joint Gasket	ASTM A 108 GR 1010
17	Bonnet Bushing	ASTM A 276 Type 410
18	Handwheel	ASTM A 197
19	Handwheel Nut	ASTM A 307
20	Clamp	Commercial Steel
21	Impact Bushing	ASTM A 216 GR WCB
22*	Stem Nut Set Screw	Alloy Steel
23*	Identification Plate	Stainless Steel

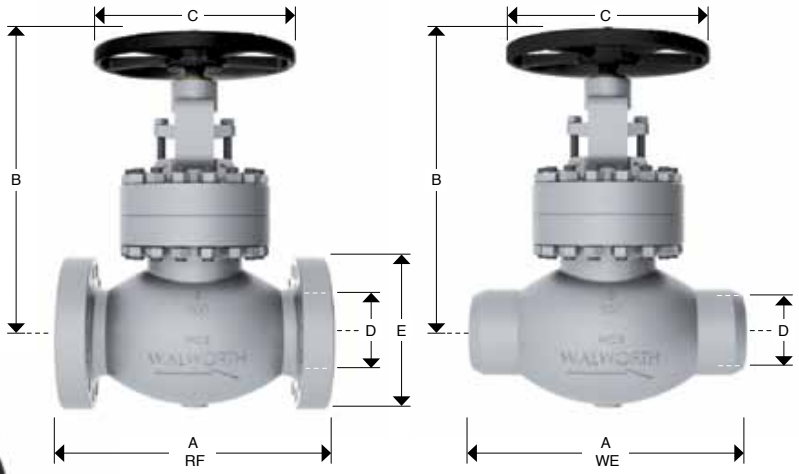
*Not Shown



CAST STEEL GLOBE VALVES, CLASS 900
(HANDWHEEL OPERATED)

Design Features
- Design in accordance with API-623
- Rising Stem and Handwheel: 2” to 3”
- Rising Stem and Fixed Handwheel: 4” 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 4” and larger
- Size 2” to 6” Handwheel operated as standard

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5301RF	5301F	Flanged Raised Face
5301RTJ	5301RJ	Flanged Ring Type Joint
5301WE	5301WE	Buttweld



Dimensions and Weights

D Nominal Diameter	mm	76	102	152
	in	3	4	6
A (RF and WE)	mm	381	457	610
	in	15	18	24
A* (RTJ)	mm	384	460	613
	in	15 1/8	18 1/8	24 1/8
B	mm	573	738	854
	in	22 1/2	29	33 5/8
C	mm	400	450	560
	in	16	18	22
E	mm	241	292	381
	in	9 1/2	11 1/2	15
Weight 5301RF	Kg	113	206	328
	lb	249	453	722
Weight 5301WE	Kg	94	175	279
	lb	206	385	613

CAST STEEL GLOBE VALVES, CLASS 900
(GEAR OPERATED)

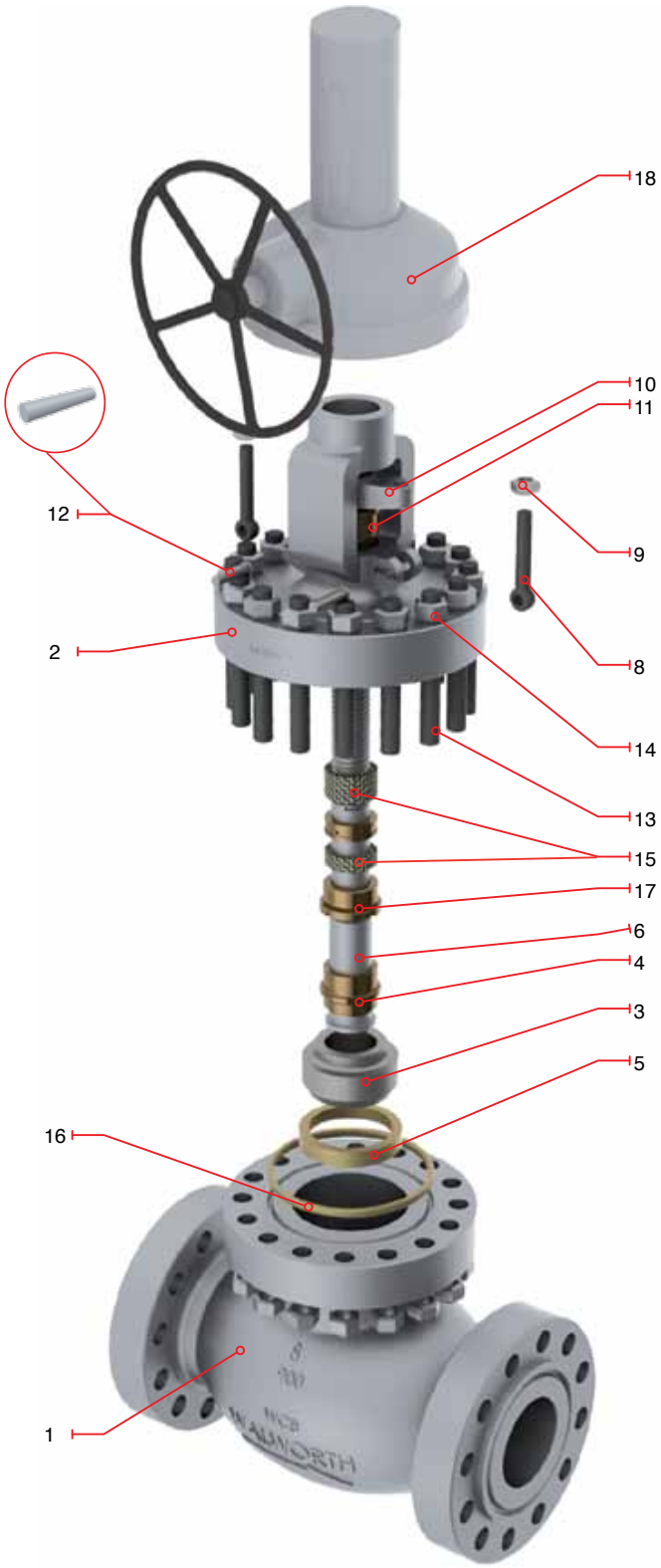
Design Features
- Design in accordance with API-623
- Rising stem
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B 16.25
- Size 8” and up Gear operated as standard

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5301RF	5301F	Flanged Raised Face
5301RTJ	5301RJ	Flanged Ring Type Joint
5301WE	5301WE	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	Seat Ring	ASTM A 515 GR 70 + ST6
6	Stem	ASTM A 276 Type 410
*7	Stem Nut	ASTM B 148 UNS C95600
8	Eyebolt	Alloy Steel
9	Eyebolt Nut	ASTM A 307
10	Gland Flange	ASTM A 515 GR 70
11	Packing Bushing	ASTM A 108 GR 1020
12	Eyebolt Pin	Alloy Steel
13	Bonnet Stud	ASTM A 193 GR B7
14	Bonnet Stud Nut	ASTM A 194 GR 2H
15	Stem Packing	Graphite
16	Ring type Joint Gasket	ASTM A 108 GR 1010
17	Bonnet Bushing	ASTM A 276 Type 410
18	Gear Operator	as customer requirements
*19	Operator Bolts	Alloy Steel
*20	Identification Plate	Stainless Steel

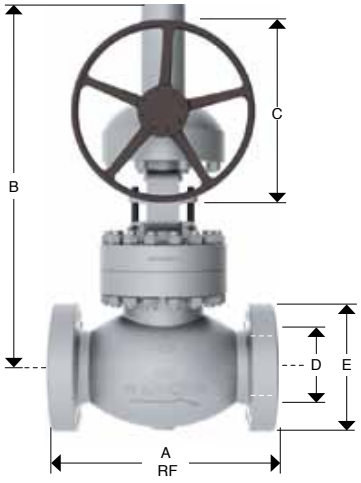
*Not Shown

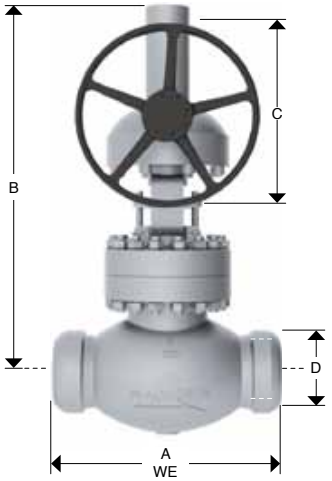


CAST STEEL GLOBE VALVES, CLASS 900
(GEAR OPERATED)

Design Features
- Design in accordance with API-623
- Rising stem
- Size 8” and up Gear operated as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B 16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5301RF	5301F	Flanged Raised Face
5301RTJ	5301RJ	Flanged Ring Type Joint
5301WE	5301WE	Buttweld





Dimensions and Weights

D Nominal Diameter	mm	203	254	305	356	406	457	508	610
	in	8	10	12	14	16	18	20	24
A (RF and WE)	mm	737	838	965	1029	PCR	PCR	PCR	PCR
	in	29	33	38	40 1/2	PCR	PCR	PCR	PCR
A* (RTJ)	mm	740	841	968	1038	PCR	PCR	PCR	PCR
	in	29 1/8	33 1/8	38 1/8	40 7/8	PCR	PCR	PCR	PCR
B	mm	907	980	1286	2083	PCR	PCR	PCR	PCR
	in	35 3/4	38 5/8	50 5/8	82	PCR	PCR	PCR	PCR
C	mm	640	530	600	956	PCR	PCR	PCR	PCR
	in	25	20 7/8	23 5/8	38	PCR	PCR	PCR	PCR
E	mm	470	545	610	640	705	785	855	1040
	in	18 1/2	21 1/2	24	25 1/4	27 3/4	31	33 3/4	41
Weight 5301RF	Kg	593	1850	2998	2900	PCR	PCR	PCR	PCR
	lb	1305	4070	6596	6380	PCR	PCR	PCR	PCR
Weight 5301WE	Kg	504	1721	2788	2697	PCR	PCR	PCR	PCR
	lb	1109	3785	6134	5933	PCR	PCR	PCR	PCR

PCR = Per customer request