CAST STEEL GATE VALVES CLASS 150

CAST STEEL GATE VALVES HANDWHEEL OR GEAR OPERATED, WITH RISING STEM AND OUT SIDE SCREW AND YOKE (OS&Y)

DESIGN FEATURES

- Gate valves design in accordance with API-600, solid, flexible or parallel slide wedge/Disc.
- Gate valves option in accordance with API-603 only for stainless steel & nickel alloys.
- Standard manufacturing flexible wedge
- Solid wedge available upon request.
- Gate and 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.
- Hand-wheel, impact Hand-wheel, 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.

① Stem Nut, replaceable in line to avoid shut down of pipe line process.

② Rising stem with precision ACME single or double thread for quick operation. Surface finish suitable to seal properly to obtain 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 polished finish stem sealing area, 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 per customer requirements.

⑤ Stem-Gate connection designed so that under severe applied loads (stuck gate), the stem will fail outside of the stuffing box pressure boundary.

⑥ Body to Bonnet joint is designed to apply a uniform load to the gasket to assure a leak proof seal.

⑦ Seat rings are seal welded to provide a bubble tight joint.

⑧ Stellited Seat Rings provide increased resistance to wear, abrasion and erosion of the sealing surfaces.

⑨ Two pieces arrangement gland flange and stem packing bushing for self-alignment to avoid stem damage.

⑩ Gate valves supplied handwheel or gear operated.

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(HANDWHEEL OPERATED)

Design Features

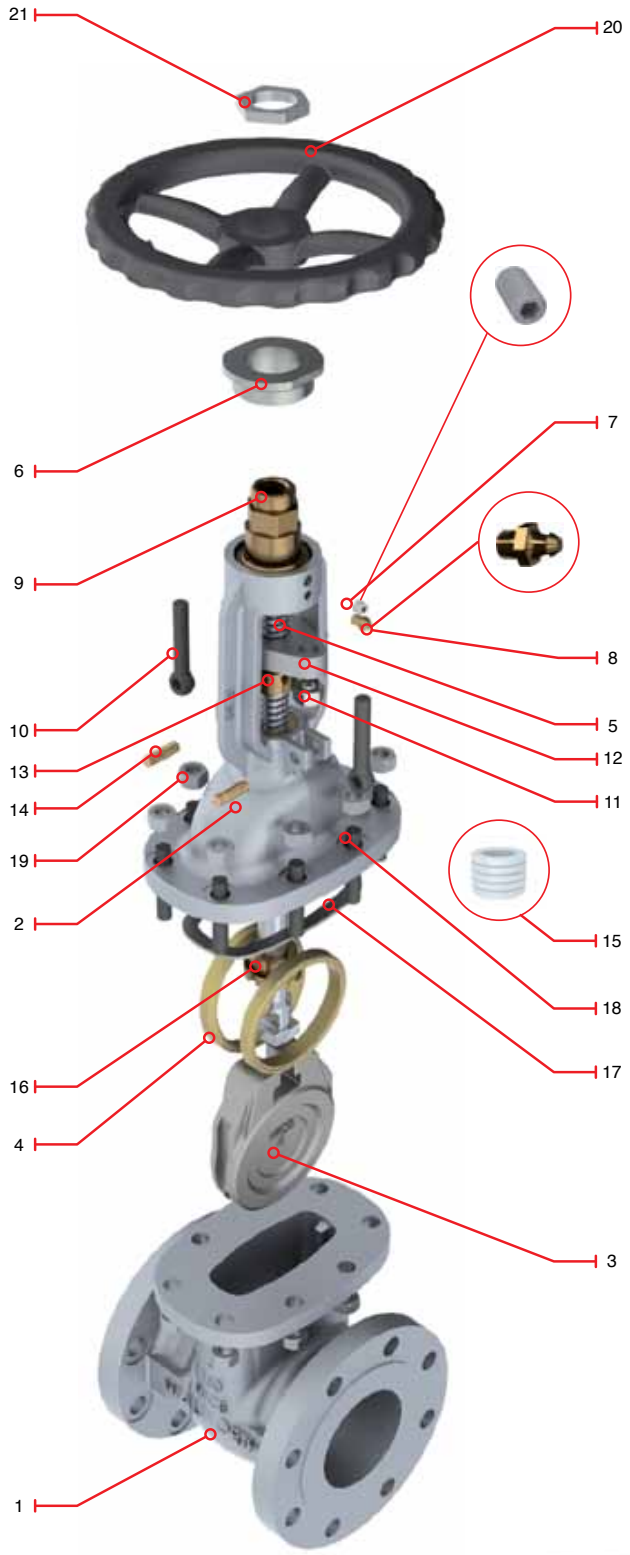
- Design in accordance with API - 600
- Outside Screw & Yoke (OS & Y)
- Flexible wedge as standard
- Solid wedge available upon request
- From 2" to 24" Handwheel operated as standard
- Flange dimensions as per ASME B16.5
- End to end dimension as per ASME B16.10
- WE dimensions as per ASME B16.25
- Flange dimensions larger than 24" according to ASME B16.47 Series A as standard
- Flange dimensions as per ASME B16.47 Series B available upon request

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5202RF	5202F	Flanged Raised Face
5202RTJ	5202RJ	Flanged Ring Type Joint
5202WE	5202WE	Buttweld

Regular Bill of Materials

No.	Description	WCB Trim UT
1	Body	ASTM A 216 GR WCB
2	Bonnet	ASTM A 216 GR WCB
3	Wedge	ASTM A 216 GR WCB + 13% Cr.
4	Seat Ring	ASTM A 515 GR 70 + ST 6
5	Stem	ASTM A 276 Type 410
6	Stem Nut Retainer	ASTM A 108 GR 1020
7	Set Screw	Alloy Steel
8	Grease Fitting	Commercial Steel
9	Stem Nut	UNS C95600 or Ni-Resist
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	Stem Packing	Graphite
16	Bonnet Bushing	ASTM A 276 Type 410
17	Bonnet Gasket	Graphite/Stainless 316
18	Bonnet Stud	ASTM A 193 GR B7
19	Bonnet Stud Nut	ASTM A 194 GR 2H
20	Handwheel	ASTM A 197
21	Handwheel Nut	ASTM A 108 GR 1020
*22	Set Screw	Alloy Steel
*23	Identification Plate	Stainless Steel

*Not shown



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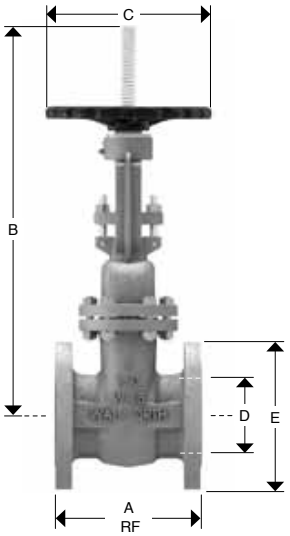

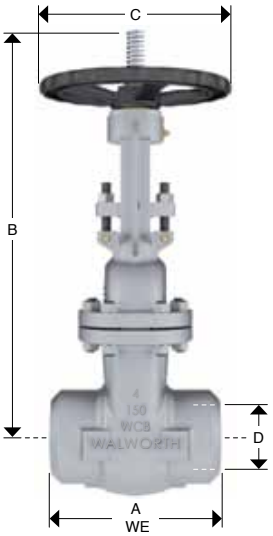

Dimensions and Weights

D Nominal Diameter	mm	51	64	76	102	127	152	203	254	305	356	406	457	508	610
	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
A	mm	178	191	203	229	254	267	292	330	356	381	406	432	457	508
(RF)	in	7	7 1/2	8	9	10	10 1/2	11 1/2	13	14	15	16	17	18	20
A	mm	216	241	283	305	381	403	419	457	502	572	610	660	711	813
(WE)	in	8 1/2	9 1/2	11 1/8	12	15	15 7/8	16 1/2	18	19 3/4	22 1/2	24	26	28	32
B	mm	478	483	552	675	813	830	1,062	1,253	1,461	1,661	1,835	2,027	2,265	2,711
	in	18 13/16	19	21 3/4	26 9/16	32	32 11/16	41 13/16	49 5/16	57 1/2	65 3/8	72 1/4	79 13/16	89 3/16	106 3/4
C	mm	203	178	254	254	305	305	356	406	508	559	660	711	762	864
	in	8	7	10	10	12	12	14	16	20	22	26	28	30	34
E	mm	152	178	191	229	254	279	343	406	483	533	597	635	699	813
	in	6	7	7 1/2	9	10	11	13 1/2	16	19	21	23 1/2	25	27 1/2	32
Weight	Kg	19	30	32	48	71	77	132	199	271	449	541	724	1004	1522
5202RF	lb	42	66	70	106	156	169	290	438	596	988	1190	1593	2209	3348
Weight	Kg	15	27	31	44	60	74	116	172	247	350	506	575	720	1130
5202WE	lb	33	59	68	97	132	163	255	378	543	770	1113	1265	1584	2486