

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.
- 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.





## (HANDWHEEL OPERATED)

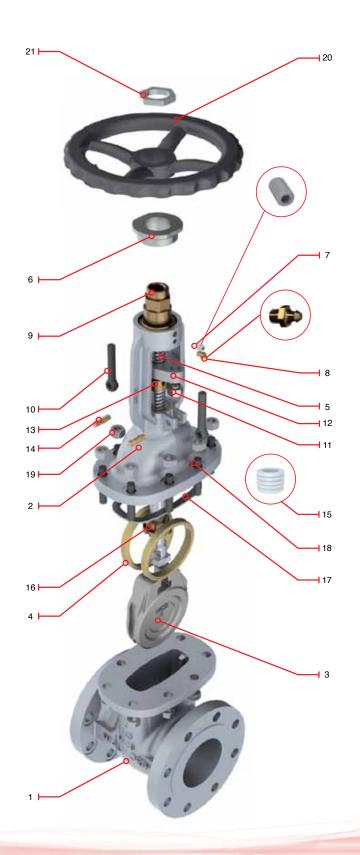
## **Design Features**

- 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

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







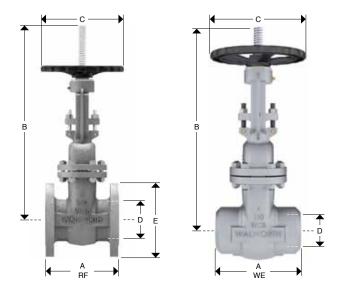
# CAST STEEL GATE VALVES, CLASS 150 (HANDWHEEL OPERATED)



## **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

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



D	mm	51	64	76	102	127	152	203	254	305	356	406	457	508	610
Nominal Diameter	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
Α	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
	mm	478	483	552	675	813	830	1,062	1,253	1,461	1,661	1,835	2,027	2,265	2,711
В	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
С	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



## (GEAR OPERATED)

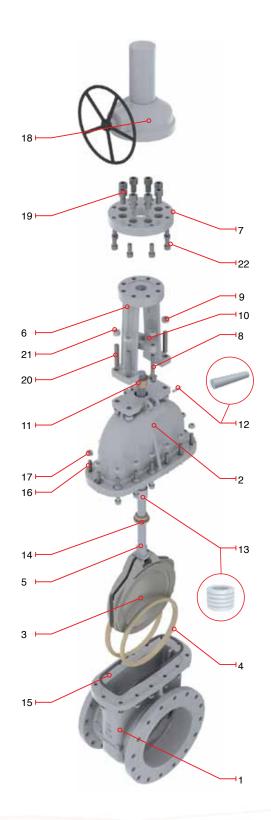
## **Design Features**

- Design in accordance with API-600
- · Outside Screw & Yoke (OS & Y)
- · Flexible wedge as standard
- · Solid wedge available upon request
- Size 30" up to 72", supplied with GEAR BOX as standard
- Flange dimensions as per ASME B16.47 Series A. Series B available upon request
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

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

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	Yoke	ASTM A 216 GR WCB
7	Stem Nut Retainer	ASTM A 36
8	Eyebolt / Gland Flange Studs	Alloy Steel
9	Eyebolt Nut	ASTM A 307
10	Gland	ASTM A 515 GR 70
11	Packing Bushing	ASTM A 108 GR 1020
12	Eyebolt Pin	Alloy Steel
13	Stem Packing	Graphite
14	Bonnet Bushing	ASTM A 276 Type 410
15	Bonnet Gasket	Graphite/Stainless 316
16	Bonnet Stud	ASTM A 193 GR B7
17	Bonnet Stud Nut	ASTM A 194 GR 2H
18	Gear Operator	as customer riquirements
19	Operator Bolts	Alloy Steel
20	Yoke Stud	Alloy Steel
21	Yoke Stud Nut	ASTM A 307
22	Retainer Bolt	Alloy Steel
*23	Identification Plate	Stainless Steel







(GEAR OPERATED)



## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- Flexible wedge as standard
- Solid wedge available upon request Size 30" up to 72", supplied with GEAR BOX as standard
- Flange dimensions as per ASME B16.47 Series A. Series B available upon request
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

5202RF 5202F Flanged Raised Face 5202RTJ 5202RJ Flanged Ring Type Joint 5202WE 5202WE Buttweld	Catalog Figure No.	ID Plant Figure No.	Type of Ends
5202WE 5202WE Buttweld	5202RF	5202F	Flanged Raised Face
	5202RTJ	5202RJ	Flanged Ring Type Joint
	5202WE	5202WE	Buttweld
A A WE		B	10 10 10 10 10 10 10 10 10 10 10 10 10 1

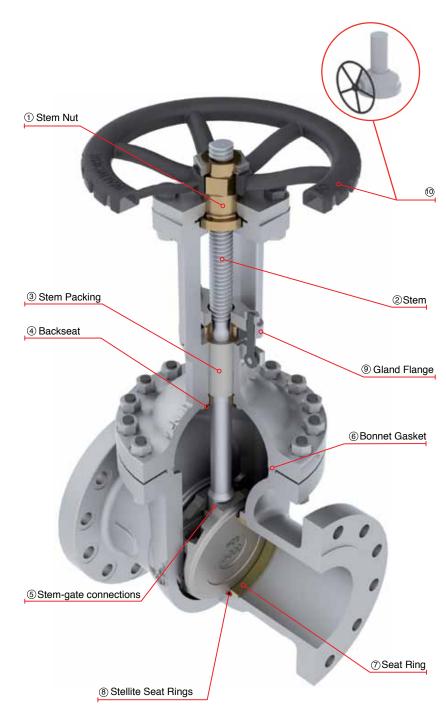
		0.90			I™ RF		V	VE 🗾
D Nominal	mm 762 9		914	1067	1219	1372	1524	1829
Diameter	in	30	36	42	48	54	60	72
Α	mm	610	711	787	864	965	1067	1397
(RF)	in	24	28	31	34	38	42	55
Α	mm	762	864	965	1016	1118	1219	1575
(WE)	in	30	34	38	40	44	48	62
В	mm	3,239	3,886	4,534	5,182	5,829	6,477	7,772
В	in	127 1/2	153	178 1/2	204	229 1/2	255	306
С	mm	610	610	610	610	762	762	762
C	in	24	24	24	24	30	30	30
Е	mm	984	1168	1346	1511	1676	1854	2184
	in	38 3/4	46	53	59 1/2	66	73	86
Weight	Kg	2242	3470	5300	7050	10310	14890	23200
5202RF	lb	4932	7634	11660	15510	22682	32758	51040
Weight	Kg	1910	3198	4880	6490	9490	13700	21350
5202WE	lb	4202	7035.6	10736	14278	20878	30140	46970



### 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.
- · Flexible wedge as standard
- · Solid wedge available upon request
- Gate 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.
- 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.
- (1) Gate valves supplied handwheel or gear operated.





## (HANDWHEEL OPERATED)

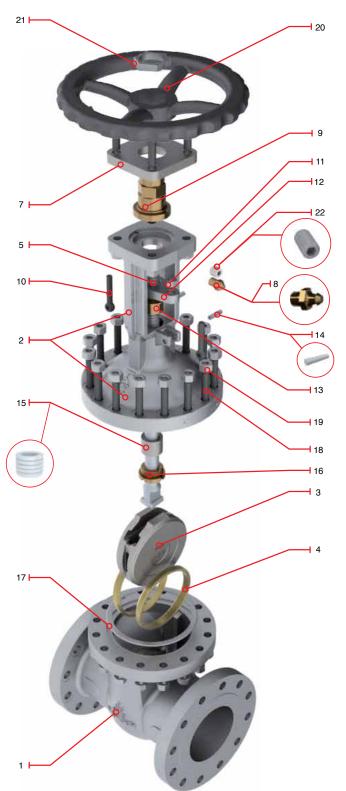
## **Design Features**

- 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 dimensions 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
5206RF	5206F	Flanged Raised Face
5206RTJ	5206RJ	Flanged Ring Type Joint
5206WE	5206WE	Buttweld

No.	Description	STANDARD MATERIAL
1	Body	ASTM A 216 GR WCB
2	Yoke/Bonnet	ASTM A 216 GR WCB
3	Wedge	ASTM A 216 GR WCB + 13% Cr.
4	Seat Ring	ASTM A 515 GR 70
5	Stem	ASTM A 276 Type 410
*6	Stem Nut Retainer	ASTM A 108 GR 1020
7	Stem Retainer	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	Spiral Stainless 304/Graphite
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







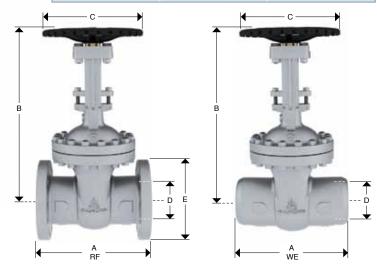
# CAST STEEL GATE VALVES, CLASS 300 (HANDWHEEL OPERATED)



## **Design Features**

- Design in accordance with API-600
- · 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 dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5206RF	5206F	Flanged Raised Face
5206RTJ	5206RJ	Flanged Ring Type Joint
5206WE	5206WE	Buttweld



D	mm	51	64	76	102	127	152	203	254	305	356	406	457	508	610
Nominal Diameter	in	2	2 1/2	3	4	5	6	8	10	12	14	16	18	20	24
А	mm	216	241	283	305	381	403	419	457	502	762	838	914	991	1143
(RF and WE)	in	8 1/2	9 1/2	11 1/8	12	15	15 7/8	16 1/2	18	19 3/4	30	33	36	39	45
В	mm	473	579	528	637	695	935	1083	1314	1594	1730	1924	2105	2334	2810
Б	in	18 5/8	22 13/16	20 25/32	25 1/16	27 3/8	36 13/16	42 5/8	51 3/4	62 3/4	68 1/8	75 3/4	82 7/8	91 7/8	110 5/8
С	mm	203	203	254	254	300	356	406	508	508	660	711	864	864	864
C	in	8	8	10	10	11 13/16	14	16	20	20	26	28	34	34	34
E	mm	165	191	210	254	279	318	381	445	521	584	648	711	775	914
E	in	6 1/2	7 1/2	8 1/4	10	11	12 1/2	15	17 1/2	20 1/2	23	25 1/2	28	30 1/2	36
Weight	Kg	25	39	43	70	92	137	222	322	470	760	1202	1633	2064	2268
5206RF	lb	55	86	95	154	202	301	488	708	1034	1672	2644	3593	4541	4990
Weight	Kg	20	38	33	51	78	129	194.6	299.9	407.3	669	1043	1383	1864	1950
5206WE	lb	44	83.6	72.6	112.2	172.04	283.8	428.12	659.78	896.06	1471.36	2294.6	3042.6	4100.8	4290



## (GEAR OPERATED)

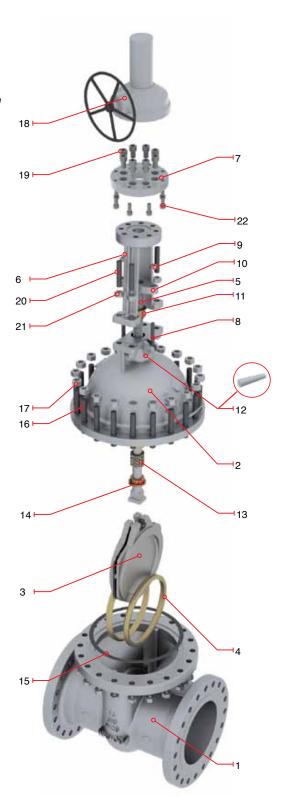
## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible wedge as standard
- · Solid wedge available upon request
- Size 30" and up to 42", supplied with GEAR operator as standard.
- Flange dimensions as per ASME B16.47 Series A. Series B available
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5206RF	5206F	Flanged Raised Face
5206RTJ	5206RJ	Flanged Ring Type Joint
5206WE	5206WE	Buttweld

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	Yoke	ASTM A 216 GR WCB	
7	Stem Nut Retainer	ASTM A 36	
8	Eyebolt / Gland Flange Studs	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	Stem Packing	Graphite	
14	Bonnet Bushing	ASTM A 276 Type 410	
15	Bonnet Gasket	Spiral Stainless 304/Graphite	
16	Bonnet Stud	ASTM A 193 GR B7	
17	Bonnet Stud Nut	ASTM A 194 GR 2H	
18	Gear Operator	as customer riquirements	
19	Operator Bolts	Alloy Steel	
20	Yoke Stud	Alloy Steel	
21	Yoke Stud Nut	ASTM A 307	
22	Retainer Bolt	Alloy Steel	
*23	Identification Plate	Stainless Steel	







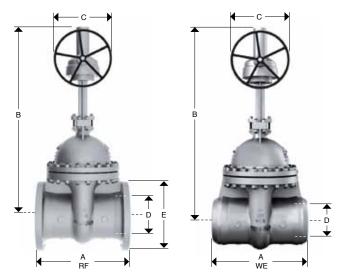
# CAST STEEL GATE VALVES, CLASS 300 (GEAR OPERATED)



## **Design Features**

- Design in accordance with API-600
- · Outside Screw & Yoke (OS & Y)
- · Flexible wedge as standard
- · Solid wedge available upon request
- Size 30" and up to 42", supplied with GEAR operator as standard.
- Flange dimensions as per ASME B16.47 Series A. Series B available upon request.
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5206RF	5206F	Flanged Raised Face
5206RTJ	5206RJ	Flanged Ring Type Joint
5206WE	5206WE	Buttweld

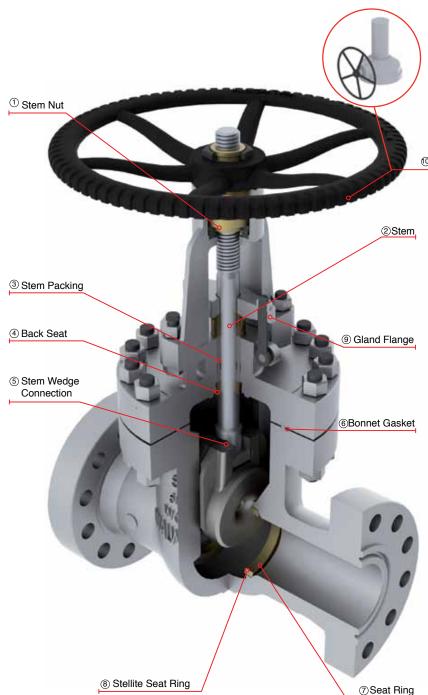


D Nominal	mm	762	914	1067
Diameter	in	30	36	42
Α	mm	1397	1727	2172
(RF and WE)	in	55	68	85 1/2
В	mm	3277	3932	4481
В	in	129	154 13/16	176 7/16
C	mm	762	762	762
C	in	30	30	30
E	mm	1092	1270	1291
	in	43	50	50 13/16
Weight	Kg	3680	6500	11405
5206RF	lb	8096	14300	25091
Weight	Kg	3128	5525	9494
5206WE	lb	6882	12155	20887



### 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.
- · Gate 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.
- · Standard manufacturing flexible wedge from 2" and up
- 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
- (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 ring type 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.





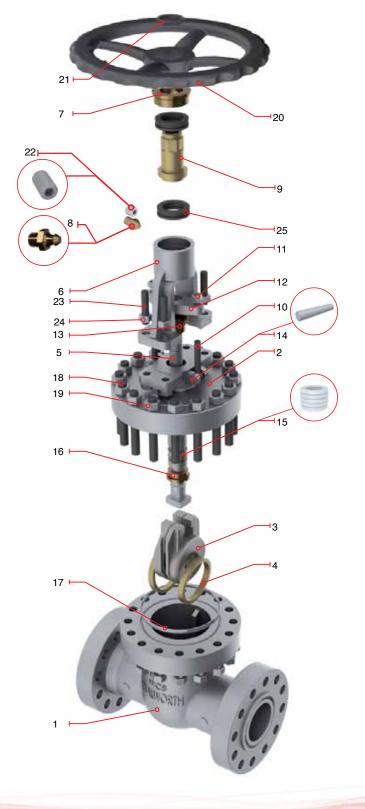
# CAST STEEL GATE VALVES, CLASS 600 (HANDWHEEL OPERATED)

## **Design Features**

- Design in accordance with API-600
- · Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- From 2" to 20" Handwheel operated as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- Flange dimensions larger than 24" according to ASME B16.47 Series A
- Flange dimensions as per ASME B16.47 Series B available upon request

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5232RF	5232F	Flanged Raised Face
5232RTJ	5232RJ	Flanged Ring Type Joint
5232WE	5232WE	Buttweld

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 + ST6
5	Stem	ASTM A 276 Type 410
6	Yoke	ASTM A 216 GR WCB
7	Stem Nut Retainer	ASTM A 36
8	Grease Fitting	Commercial Steel
9	Stem Nut	UNS C95600 or Ni-Resist
10	Eyebolt / Gland Flange Studs	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	Eye Lug Bolt / Eyebolt Pin	Alloy Steel
15	Stem Packing	Graphite
16	Bonnet Bushing	ASTM A 276 Type 410
17	Ring Type Joint Gasket	ASTM A 108 GR 1010
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	Yoke Bolt	Alloy Steel
24	Yoke Bolt Nut	ASTM A 307
25	Stem Nut Bearing	Commercial Steel
*26	Stem Nut Oil Seal	Rubber/Commercial Steel
*27	Identification Plate	Stainless Steel

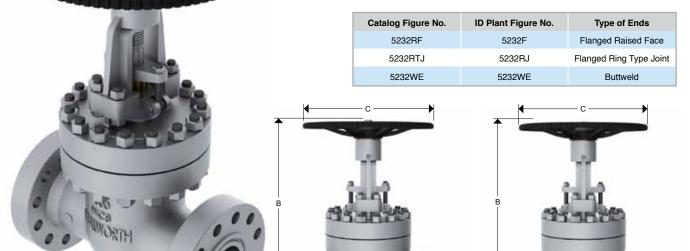




# CAST STEEL GATE VALVES, CLASS 600 (HANDWHEEL OPERATED)

## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- Flexible Wedge as standard
- From 2" to 20" Handwheel operated as Standard.
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25



D Namainal	mm	51	64	76	102	152	203	254	305	356	406	457
Nominal Diameter	in	2	2 1/2	3	4	6	8	10	12	14	16	18
Α	mm	292	330	356	432	559	660	787	838	889	991	1,092
(RF and WE)	in	11 1/2	13	14	17	22	26	31	33	35	39	43
Α	mm	295	333	359	435	562	663	790	841	892	994	1095
(RTJ)	in	11 5/8	13 1/8	14 1/8	17 1/8	22 1/8	26 1/8	31 1/8	33 1/8	35 1/8	39 1/8	43 1/8
В	mm	432	495	546	673	845	1105	1283	1461	1676	1803	1956
В	in	17	19 1/2	21 1/2	26 1/2	33 1/4	43 1/2	50 1/2	57 1/2	66	71	77
0	mm	254	254	254	305	457	508	660	660	711	711	914
С	in	10	10	10	12	18	20	26	26	28	28	36
-	mm	165	191	210	273	356	419	508	559	603	686	743
Е	in	6 1/2	7 1/2	8 1/4	10 3/4	14	16 1/2	20	22	23 3/4	27	29 1/4
Weight	Kg	37	53	65	115	224	440	653	863	1141	1565	2560
5232RF/RTJ	lb	80.3	116.6	143	253	492.8	968	1436.6	1898.6	2510.2	3443	5632
Weight	Kg	35	41	63	100	195	429	568	751	993	1362	2086
5232WE	lb	77	90.2	138.6	220.11	428.736	943.8	1249.842	1651.782	2183.874	2995.41	4589.2



# CAST STEEL GATE VALVES, CLASS 600 (GEAR OPERATED)

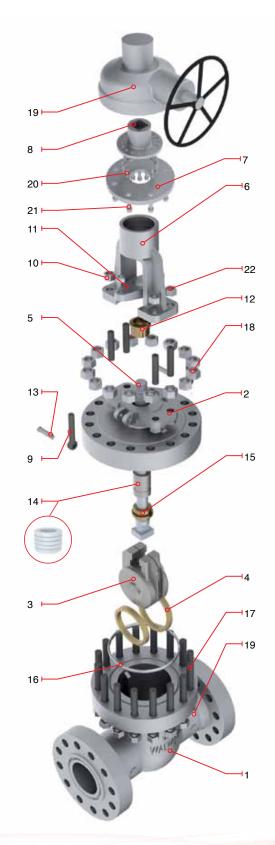
### **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- Size 24" and up to 36", supplied with gear operated as standard.
- · Stem Nut with bearings 6" and up
- Flange dimensions for 24" as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- Flange dimensions larger than 24" in accordance with ASME B16.47
- Flange dimensions as per ASME B16.47 Series B available upon request

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5232RF	5232F	Flanged Raised Face
5232RTJ	5232RJ	Flanged Ring Type Joint
5232WE	5232WE	Buttweld

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 + ST6
5	Stem	ASTM A 276 Type 410
6	Yoke	ASTM A 216 GR WCB
7	Stem Nut Retainer	ASTM A 36
8	Stem Nut	ASTM B 148 UNS C95600
9	Eyebolt / Gland Flange Studs	Alloy Steel
10	Eyebolt Nut	ASTM A 307
11	Gland Flange	ASTM A 515 GR 70
12	Packing Bushing	ASTM A 108 GR 1020
13	Eye Lug Bolt / Eye Bolt Pin	Alloy Steel
14	Stem Packing	Graphite
15	Bonnet Bushing	ASTM A 276 Type 410
16	Ring Type Joint Gasket	ASTM A 108 GR 1010
17	Bonnet Stud	ASTM A 193 GR B7
18	Bonnet Stud Nut	ASTM A 194 GR 2H
19	Gear Operator	as customer requirements
20	Operator Bolts	Alloy Steel
21	Yoke Bolts	Alloy Steel
*22	Yoke Bolt Nut	ASTM A 307
*23	Identification Plate	Stainless Steel





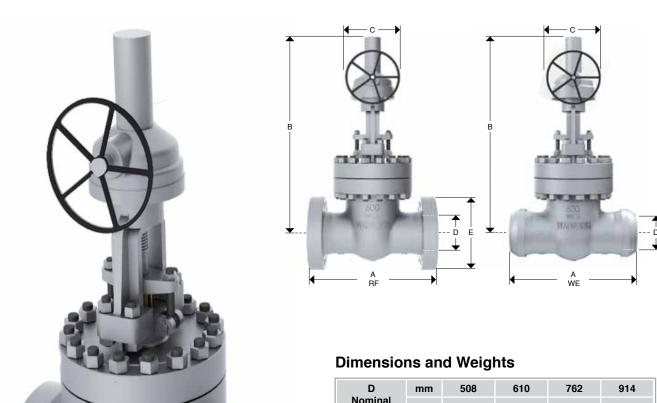


# CAST STEEL GATE VALVES, CLASS 600 (GEAR OPERATED)

## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- Size 24" and 36", supplied with gear operator as standard.
- Flange Dimensios for 24" as per ASME B16.5
- 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
5232RF	5232F	Flanged Raised Face
5232RTJ	5232RJ	Flanged Ring Type Joint
5232WE	5232WE	Buttweld



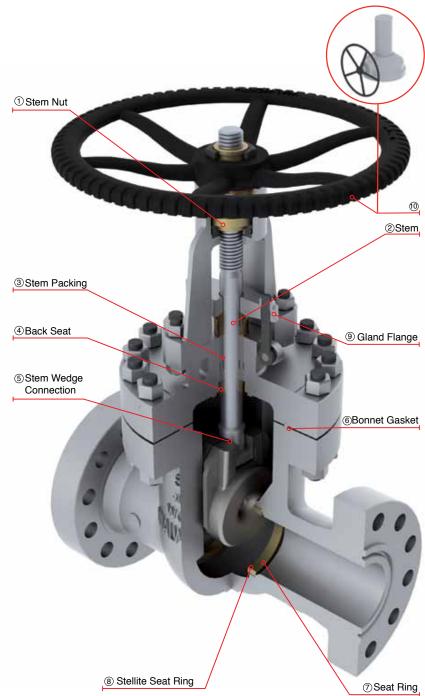
D	mm	508	610	762	914
Nominal Diameter	in	20	24	30	36
Α	mm	1,194	1,397	1,651	2,083
(RF and WE)	in	47	55	65	82
Α	mm	1200	1,407	1,664	2,099
(RTJ)	in	47 1/4	55 3/8	65 1/2	82 5/8
В	mm	2286	2743	3429	4115
Б	in	90	108	135	162
C	mm	914	762	762	762
	in	36	30	30	30
Е	mm	813	940	1130	1315
E	in	32	37	44 1/2	51 3/4
Weight	Kg	3000	4300	9890	14000
5232RF/RTJ	lb	6600	9460	21758	30800
Weight	Kg	2705	3901	8406	11900
5232WE	lb	5951	8582	18493	26180



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.
- Gate 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.
- · Standard manufacturing flexible wedge from 2" and up
- (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 ring type joint is designed to apply a uniform load to the gasket to assure a leak proof seal.
- 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.
- Gate valves supplied handwheel or gear operated.





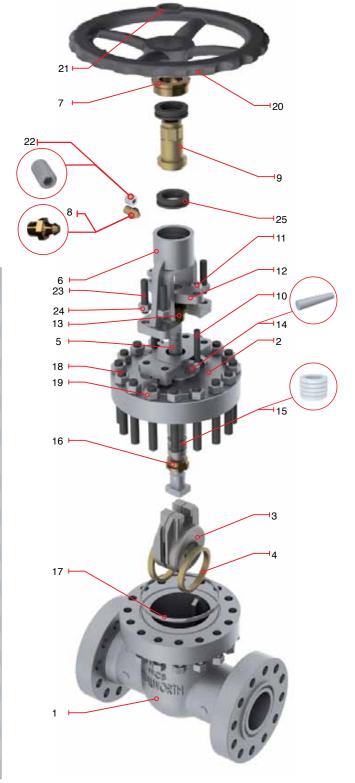
# CAST STEEL GATE VALVES, CLASS 900 (HANDWHEEL OPERATED)

## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- Flexible Wedge as standard
- Size 2" and 16" supplied with Handwheel as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- · Stem Nut with Bearing: 4" and larger

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5247RF	5247F	Flanged Raised Face
5247RTJ	5247RJ	Flanged Ring Type Joint
5247WE	5247WE	Buttweld

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 + ST6		
5	Stem	ASTM A 276 Type 410		
6	Yoke	ASTM A 216 GR WCB		
7	Stem Nut Retainer	ASTM A 36		
8	Grease Fitting	Commercial Steel		
9	Stem Nut	UNS C95600 or Ni-Resist		
10	Eyebolt / Gland Flange Studs	Alloy Steel		
11	Eyebolt Nut	ASTM A 307		
12	Gland Flange	ASTM A 515 GR 70		
13	Packing Bushing	ASTM A 108 GR 1020 Alloy Steel		
14	Eye Lug Bolt /Eyebolt pin			
15	Stem Packing	Graphite		
16	Bonnet Bushing	ASTM A 276 Type 410		
17	Ring Type Joint Gasket	ASTM A 108 GR 1010		
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	Yoke Bolt	Alloy Steel		
24	Yoke Bolt Nut	ASTM A 307		
25	Stem Nut Bearing	Commercial Steel		
*26	Stem Nut Oil Seal	Rubber/Commercial Steel		
*27	Identification Plate	Stainless Steel		





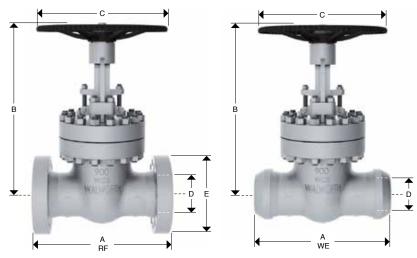
# CAST STEEL GATE VALVES, CLASS 900 (HANDWHEEL OPERATED)



## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- Size 2" to 16" supplied with Handwheel as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- · Stem Nut with Bearing: 4" and larger

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5247RF	5247F	Flanged Raised Face
5247RTJ	5247RJ	Flanged Ring Type Joint
5247WE	5247WE	Buttweld



D	mm	76	102	127	152	203	254	305
Nominal Diameter	in	3	4	5	6	8	10	12
A	mm	381	457	559	610	737	838	965
(RF and WE)	in	15	18	22	24	29	33	38
A	mm	384	460	562	613	740	841	968
(RTJ)	in	15 1/8	18 1/8	22 1/8	24 1/8	29 1/8	33 1/8	38 1/8
D	mm	578	641	829	970	1127	1365	1727
В	in	22 3/4	25 1/4	32 5/8	38 3/16	44 3/8	53 3/4	68
	mm	406	457	508	508	610	660	914
С	in	16	18	20	20	24	26	36
E	mm	241	292	349	381	470	546	610
E	in	9 1/2	11 1/2	13 3/4	15	18 1/2	21 1/2	24
Weight	Kg	106.5	153	367	352	542	905	1385
5247 RF/RTJ	lb	212	336.6	807.4	774.4	1192.4	1991	3047
Weight	Kg	95	136	327	313	482	805	1233
5247 WE	lb	209	300	719	689	1061	1772	2712



## (GEAR OPERATED)

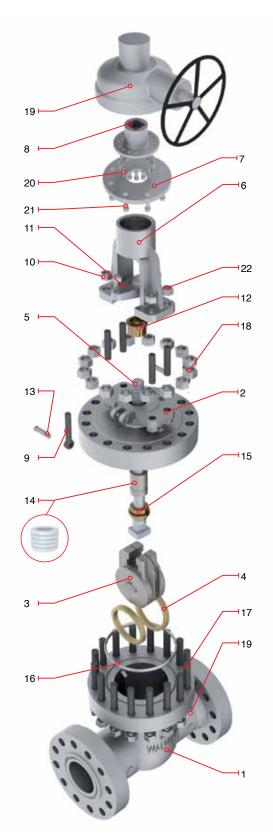
### **Design Features**

- Design in accordance with API-600
- · Outside Screw & Yoke (OS & Y)
- Flexible Wedge as standard
- Size 18" to 24" supplied with Gear operator as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- Stem Nut with Bearing: 4" and larger

Catalog Figure No.	ID Plant Figure No.	Type of Ends		
5247RF	5247F	Flanged Raised Face		
5247RTJ	5247RJ	Flanged Ring Type Joint		
5247WE	5247WE	Buttweld		

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 + ST6		
5	Stem	ASTM A 276 Type 410		
6	Yoke	ASTM A 216 GR WCB		
7	Stem Nut Retainer	ASTM A 36		
8	Stem Nut	ASTM B 148 UNS C95600		
9	Eyebolt / Gland Flange Studs	Alloy Steel		
10	Eyebolt Nut	ASTM A 307		
11	Gland Flange	ASTM A 515 GR 70		
12	Packing Bushing	ASTM A 108 GR 1020		
13	Eye Lug Bolt / Eye Bolt Pin	Alloy Steel		
14	Stem Packing	Graphite		
15	Bonnet Bushing	ASTM A 276 Type 410		
16	Ring Type Joint Gasket	ASTM A 108 GR 1010		
17	Bonnet Stud	ASTM A 193 GR B7		
18	Bonnet Stud Nut	ASTM A 194 GR 2H		
19	Gear Operator	as customer requirements		
20	Operator Bolts	Alloy Steel		
21	Yoke Bolts	Alloy Steel		
*22	Yoke Bolt Nut	ASTM A 307		
*23	Identification Plate	Stainless Steel		

Not Shown



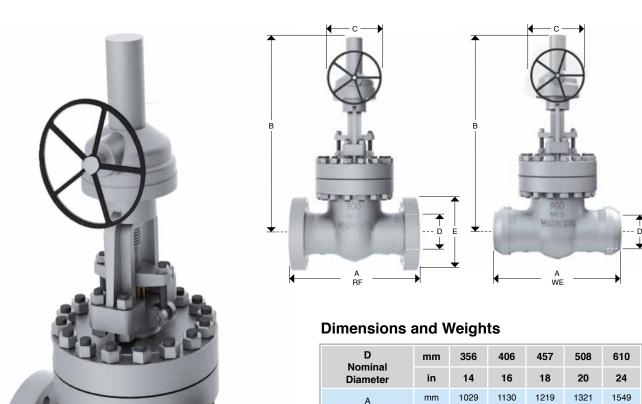


## (GEAR OPERATED)

## **Design Features**

- · Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- Flexible Wedge as standard
- Size 18" to 24" supplied with Gear operator as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- · Stem Nut with Bearing: 4" and larger

Catalog Figure No.	ID Plant Figure No.	Type of Ends	
5247RF	5247F	Flanged Raised Face	
5247RTJ	5247RJ	Flanged Ring Type Joint	
5247WE	5247WE	Buttweld	



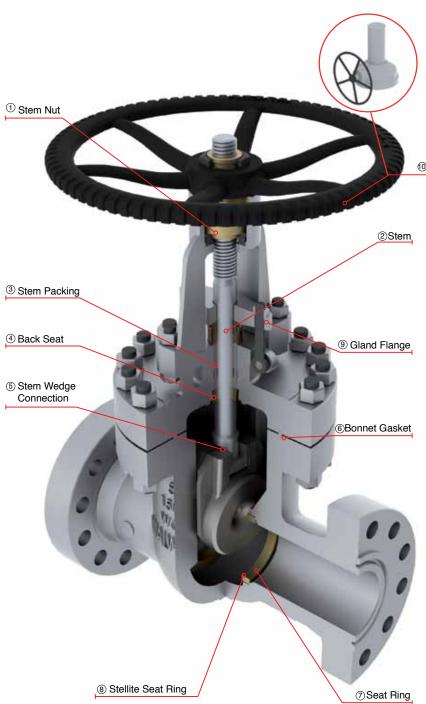
D Nominal	mm	356	406	457	508	610
Diameter	in	14	16	18	20	24
Α	mm	1029	1130	1219	1321	1549
(RF and WE)	in	40 1/2	44 1/2	48	52	61
A	mm	1038	1140	1232	1334	1568
(RTJ)	in	40 7/8	44 7/8	48.5	52.5	61.75
В	mm	1972	2197	2057	2286	2743
В	in	77 5/8	86 1/2	81	90	108
С	mm	914	914	762	762	762
	in	36	36	30	30	30
E	mm	641	705	787	857	1041
E	in	25 1/4	27 3/4	31	33 3/4	41
Weight	Kg	2778	3459	4370	6300	8410
5247RF/RTJ	lb	6111.6	7609.8	9614	13860	18502
Weight	Kg	2472	3079	3889	5607	7485
5247WE	lb	5439	6773	8556	12335	16467



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.
- · Gate 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.
- Standard manufacturing flexible wedge from 2" and up
- (1) Stem Nut, replaceable in line to avoid shut down 3 Stem Packing 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 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 ring type 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.





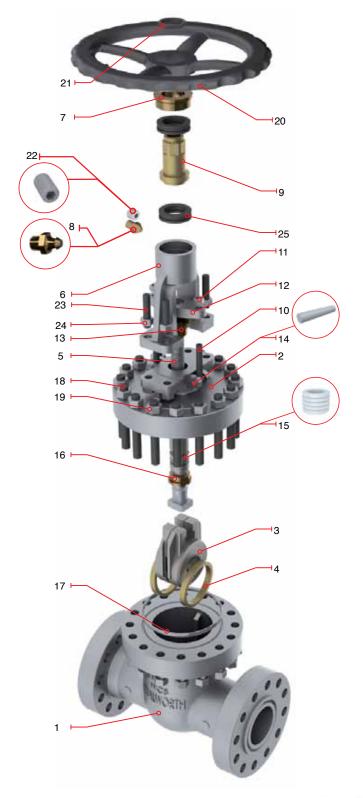
## (HANDWHEEL OPERATED)

## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- · Stem Nut with bearings -Size 4" and larger
- Size 2" to 16" Normally Supplied with Handwheel as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5262RF	5262F	Flanged Raised Face
5262RTJ	5262RJ	Flanged Ring Type Joint
5262WE	5262WE	Buttweld

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 + ST6		
5	Stem	ASTM A 276 Type 410		
6	Yoke	ASTM A 216 GR WCB		
7	Stem Nut Retainer	ASTM A 36		
8	Grease Fitting	Commercial Steel		
9	Stem Nut	UNS C95600 or Ni-Resist		
10	Eyebolt / Gland Flange Studs	e Alloy Steel		
11	Eyebolt Nut	age ASTM A 515 GR 70 ushing ASTM A 108 GR 1020		
12	Gland Flange			
13	Packing Bushing			
14	Eye Lug Bolt / Eye Bolt Pin			
15	Stem Packing	Graphite		
16	Bonnet Bushing	ASTM A 276 Type 410		
17	Ring Type Joint Gasket	ASTM A 108 GR 1010		
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	Yoke Bolt	Alloy Steel		
24	Yoke Bolt Nut	ASTM A 307		
25	Stem Nut Bearing	Commercial Steel		
*26	Stem Nut Oil Seal	Rubber/Commercial Steel		
*27	Identification Plate	Stainless Steel		



<sup>\*</sup>Not Shown



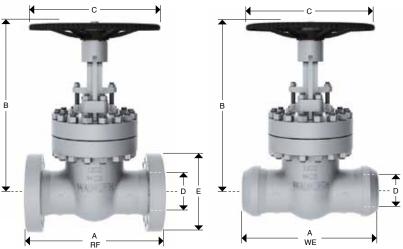
(HANDWHEEL OPERATED)



### **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- · Stem Nut with bearings: 4" and larger
- Size 2" to 16" Supplied with Handwheel as standard
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5262RF	5262F	Flanged Raised Face
5262RTJ	5262RJ	Flanged Ring Type Joint
5262WE	5262WE	Buttweld



D	mm	51	64	76	102	127	152	203	254	305
Nominal Diameter	in	2	2 1/2	3	4	5	6	8	10	12
Α	mm	368	419	470	546	673	705	832	991	1130
(RF and WE)	in	14 1/2	16 1/2	18 1/2	21 1/2	26 1/2	27 3/4	32 3/4	39	44 1/2
Α	mm	371	422	473	549	676	711	842	1000	1146
(RTJ)	in	14 5/8	16 5/8	18 5/8	21 5/8	26 5/8	28	33 1/8	39 3/8	45 1/8
	mm	591	699	876	994	1080	1191	1435	1740	2054
В	in	23 1/4	27 1/2	34 1/2	39 1/8	42 1/2	46 7/8	56 1/2	68 1/2	80 7/8
	mm	356	406	457	508	559	559	660	914	914
С	in	14	16	18	20	22	22	26	36	36
-	mm	216	244	267	311	375	394	483	584	673
E	in	8 1/2	9 5/8	10 1/2	12 1/4	14 3/4	15 1/2	19	23	26 1/2
Weight	Kg	78.5	99	140	209	510	523	893	2010	3080
5262RF/RTJ	lb	173	218	308	460	1122	1151	1965	4422	6776
Weight	Kg	56	67	97	141	383	402	700	1685	2600
5262WE	lb	123	148	214	311	844	886	1543	3714	5732



## (GEAR OPERATED)

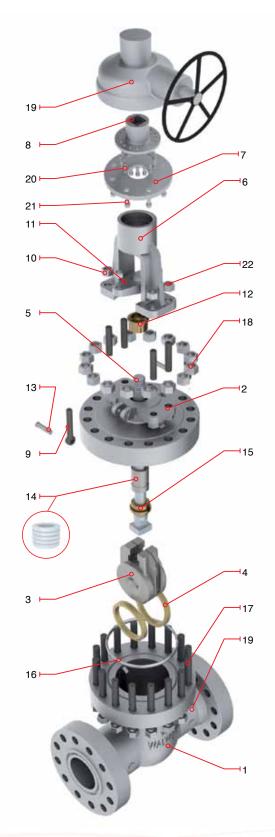
## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standard
- Size 18" to 24" Normally Supplied with gear box
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- · Stem Nut with bearings: Size 4" and larger

Catalog Figure No.	ID Plant Figure No.	Type of Ends
5262RF	5262F	Flanged Raised Face
5262RTJ	5262RJ	Flanged Ring Type Joint
5262WE	5262WE	Buttweld

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 + ST6		
5	Stem	ASTM A 276 Type 410		
6	Yoke	ASTM A 216 GR WCB		
7	Stem Nut Retainer	ASTM A 36		
8	Stem Nut	ASTM B 148 UNS C95600		
9	Eyebolt /Gland Flange Studs	Alloy Steel		
10	Eyebolt Nut	ASTM A 307		
11	Gland Flange	ASTM A 515 GR 70		
12	Packing Bushing	ASTM A 108 GR 1020		
13	Eye Lug Bolt / Eye Bolt Pin	Alloy Steel		
14	Stem Packing	Graphite		
15	Bonnet Bushing	ASTM A 276 Type 410		
16	Ring Type Joint Gasket	ASTM A 108 GR 1010		
17	Bonnet Stud	ASTM A 193 GR B7		
18	Bonnet Stud Nut	ASTM A 194 GR 2H		
19	Gear Operator	as customer requirements		
20	Operator Bolts	Alloy Steel		
21	Yoke Bolts	Alloy Steel		
*22	Yoke Bolt Nut	ASTM A 307		
*23	Identification Plate	Stainless Steel		





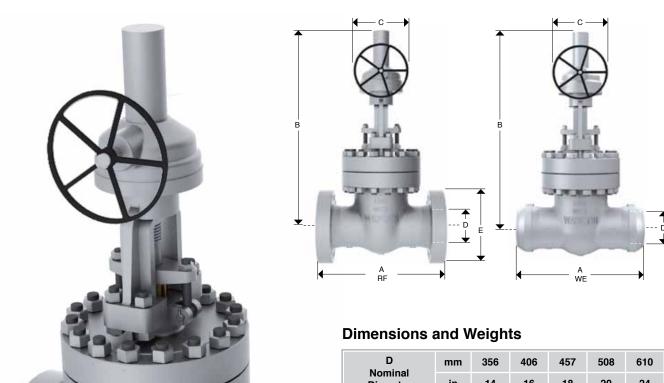


(GEAR OPERATED)

## **Design Features**

- Design in accordance with API-600
- Outside Screw & Yoke (OS & Y)
- · Flexible Wedge as standasrd
- Size 18" to 24" Normally Supplied with gear box
- Flange dimensions as per ASME B16.5
- End to end dimensions as per ASME B16.10
- WE dimensions as per ASME B16.25
- · Stem Nut with bearings: Size 4" and larger

Catalog Figure No.	ID Plant Figure No.	Type of Ends	
5262RF	5262F	Flanged Raised Face	
5262RTJ	5262RJ	Flanged Ring Type Joint	
5262WE	5262WE	Buttweld	



D Nominal	mm	356	406	457	508	610
Diameter	in	14	16	18	20	24
Α	mm	1257	1384	1537	1664	1943
(RF and WE)	in	49 1/2	54 1/2	60 1/2	65 1/2	76 1/2
A	mm	1276	1407	1559	1686	1972
(RTJ)	in	50 1/4	55 3/8	61 3/8	66 3/8	77 5/8
В	mm	2172	2254	2057	2286	2743
Ь	in	85 1/2	88 3/4	81	90	108
С	mm	914	914	762	762	762
	in	36	36	30	30	30
Е	mm	749	826	914	984	1168
	in	29 1/2	32 1/2	36	38 3/4	46
Weight	Kg	4480	5110	7105	9000	11500
5262RF	lb	9856	11242	15631	19800	25300
Weight	Kg	3823	4270	5969	8100	10350
5262WE	lb	8428	9413	13132	17820	22770