

Gate Valves for Boiler Applications Pressure Classes 150/300/600





Preface

Cast steel flex wedge gate valves for boiler applications. Body materials include A216-WCB and A217-WC9. Seating surfaces are Stellite.

The major components and assemblies for the valves listed in this catalog are globally sourced. The valves are inspected, final assembled and tested at Flowserve - Raleigh and include the Flowserve warranty.

Power-actuated valves include actuators selected and added to the final assemblies by Flowserve - Raleigh.

For futher information on these Flowserve products, please consult your Flowserve - Raleigh sales representative.

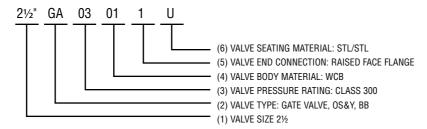
Valve Figure Description - How to Order

Figure numbers are designed to cover essential features. When ordering, please show figure numbers to preclude any misunderstanding of your requirements. A detailed description for specials must always accompany your order.

The following description may provide a basic giudeline in the specification of valves:

Size (1)	Type (2)	Pressure Rating (3)	Body Materials (4)	End Connection (5)	Seating Code (Disc/Body) (6)
2 ½"	GA-Gate Valve OS&Y, BB GP-Gate Valve OS&Y, Pressure Seal	01-CLASS 150 03-CLASS 300 06-CLASS 600 09-CLASS 900	01-WCB; A105 09-WC9; F22	1-Raised Face Flange 3-Butt Welding	U-STL/STL (STELLITE)
12"		15-CLASS 1500			

EXAMPLE: 2"GA03011XU



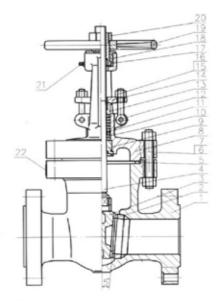
Notes:

- 1. All the cast steel gate valves are provided with flexible wedge gate.
- 2. Design and construction details are subject to change without notice.

Pressure Classes 150/300/600

Trim Material

Seating Code	Seat Ring Surface Part No. 2	Wedge Seat Surface Part No. 3	Stem Part No. 4	Backseat Bushing Part No. 9
U	Stellite	Stellite	F6	F6



Standard Material Specifications

Pari	t Name	Carbon Steel to ASTM	Alloy Steel to ASTM			
1	Body	A216WCB	A217WC9			
8	Bonnet	A216WCB	A217WC9			
6	Bolts	A193B7	A193B16			
7	Nuts	A1942H	A1944			
11	Lantern*	410	410			
12	Pins	Steel	Steel			
13	Gland	A182F6	A182F6			
14	Gland Flange	A105	A105			
15	Gland Eyebolts	A193B7	A193B7			
16	Nuts	A1942H	A1942H			
5	Gasket	SS Spiral Wound W/Graphite				
10	Packing	Braided Graphit	Braided Graphite or Dieformed Graphite Ring			
17	Stem Nut	A439-D2 or A27	or A276-410			
18	Lock Nut	Steel				
19	Handwheel	Ductile Iron				
20	Handwheel Nut	Steel				
21	Lubricator	Steel				
22	Nameplate	Stainless Steel or Aluminum				

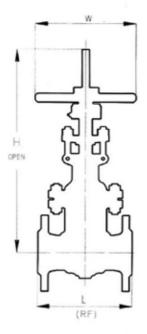
^{*} Class 150 gate valve is not provided with Lantern.

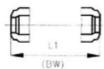


Pressure Class 150

Flgures:

GA01011U GA01091U GA01013U GA01093U





OS&Y, Rising Stem, Flexible Solid Wedge Bolted Bonnet, Welded Seat Ring

STANDARDS COMPLIANCE:

Basic Design: API 600 and ASME B16.34 Face-to-Face Dimension: ANSI B16.10 End-to-End Dimension: ANSI B16.10

End Flange Dimension: 2-1/2" - 12" to ANSI B16.5

B.W. Ends to ANSI B16.25 or Customer Requirement

Shell Wall Thickness:

2-1/2" - 12" to API 600 and ASME B16.34

Dimensions and Weights

NPS	in	2-1/2	3	4	6	8	10	12
DN	mm	65	80	100	150	200	250	300
L	in	7-1/2	8	9	10-1/2	11-1/2	13	14
(RF)	mm	190	203	229	267	292	330	356
L1	in	9-1/2	11-1/8	12	15-7/8	16-1/2	18	19-3/4
(BW)	mm	241	283	305	403	419	457	502
H	in	18-9/16	20-15/16	24-1/8	31-3/4	39	46-11/16	55-5/16
OPEN	mm	472	532	612	806	990	1186	1405
W	in	7-7/8	9-7/8	9-7/8	11-13/16	13-3/4	17-11/16	19-11/16
	mm	200	250	250	300	350	450	500
WT KG LB KG LB	RF BW	25 55 22 48	31 68 27 59	45 99 43 95	73 161 64 141	111 244 99 218	179 394 162 356	262 576 240 528
Cv		390	550	1025	2420	4860	7615	11,400

Pressure Class 300

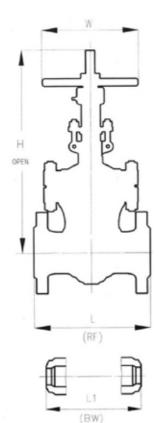
Flgures:

GA03011U

GA03091U

GA03013U

GA03093U



OS&Y, Rising Stem, Flexible Solid Wedge Bolted Bonnet, Welded Seat Ring

STANDARDS COMPLIANCE:

Basic Design: API 600 and ASME B16.34 Face-to-Face Dimension: ANSI B16.10 End-to-End Dimension: ANSI B16.10

End Flange Dimension: 2-1/2" - 12" to ANSI B16.5

B.W. Ends to ANSI B16.25 or Customer Requirement

Shell Wall Thickness:

2-1/2" - 12" to API 600 and ASME B16.34

Dimensions and Weights

NPS	in	2-1/2	3	4	6	8	10	12
DN	mm	65	80	100	150	200	250	300
L-L1	in	9-1/2	11-1/8	12	15-7/8	16-1/2	18	19-3/4
(RF-BW)	mm	241	283	305	403	419	457	502
H	in	18-3/4	21-3/8	25-5/8	34-5/8	40-13/16	50-3/16	56-5/8
OPEN	mm	477	543	650	880	1037	1275	1438
W	in	9-7/8	9-7/8	11-13/16	13-3/4	17-11/16	19-11/16	22-1/16
	mm	250	250	300	350	450	500	560
WT KG LB KG LB	RF BW	36 79 31 68	48 106 40 88	73 161 58 128	139 306 120 264	207 455 175 385	311 684 250 550	427 939 335 737
Cv		390	550	1025	2420	4860	7615	11,400



Pressure Class 600

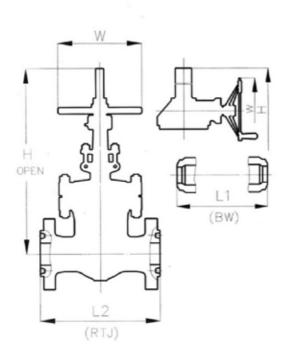
Flgures:

GA06011U

GA06091U

GA06013U

GA06093U



OS&Y, Rising Stem, Flexible Solid Wedge Bolted Bonnet, Threaded or Welded Seat Ring

STANDARDS COMPLIANCE:

Basic Design: API 600 and ASME B16.34 Face-to-Face Dimension: ANSI B16.10 End-to-End Dimension: ANSI B16.10

End Flange Dimension: 2-1/2" - 12" to ANSI B16.5

B.W. Ends to ANSI B16.25 or Customer Requirement

Shell Wall Thickness:

2-1/2" - 12" to API 600 and ASME B16.34

Dimensions and Weights

NPS	in	2-1/2	3	4	6	8	10	12
DN	mm	65	80	100	150	200	250	300
L-L1	in	13	14	17	22	26	31	33
(RF-BW)	mm	330	356	432	559	660	787	838
H	in	21-3/4	23-3/8	28-1/16	38-3/16	44-3/16	52-3/8	59-13/16
OPEN	mm	553	593	713	970	1122	1330	1519
W	in	9-7/8	11-13/16	13-3/4	19-11/16	22-1/16	26-3/8	24
	mm	250	300	350	500	560	720	610
WT KG LB KG LB	RF BW	51 112 43 95	68 150 53 117	122 268 105 231	255 561 210 462	400 880 415 913	638 1404 510 1122	852 1874 705 1551
Cv		390	550	1025	2420	4715	7255	10,875

Maintenance

FLOWSERVE EDWARD VALVES ON-SITE FIELD SERVICE REPAIR CAPABILITIES

Flowserve is totally committed to customer service satisfaction. Our entire manufacturing operation guarantees we will stand behind all field service repair work to maximize customer support.

OUR FACILITY OFFERS

- · Mobile machine shop trailer for on-site repairs
- After-hours plant-based service team for around-the-clock coverage
- Expertly trained field service personnel capable of handling any size field service job
- Special equipment for seat refinishing, body boring, welding and stress relieving
- In-house valve repair and return remanufacturing to original specifications with new valve warranty
- Experience in turnkey jobs to help the customer with onestop shopping
- 180,000-square-foot manufacturing facility with state-ofthe-art machining and engineering capability and ISO 9001 certification
- · Flowserve-Raleigh is ISO 9001 certified
- Flowserve-Raleigh is authorized by ASME to use the "NR" symbol

Staying online with Flowserve

We design and manufacture all our valves for 40 years' life in the field. That means not just building a reliable product, but ensuring it is easy to maintain and service. It also means providing a team of experienced, dedicated professionals to keep your Flowserve valves operating at peak performance.

Highly Experienced Technicians

Flowserve brings unmatched experience to the field. Our service technicians have an average of 20 years in the industry, and 15 years with Flowserve. Each has special skills, such as welding and machining, that we can target for the needs of the individual job.

Comprehensive Record-Keeping

Our files include original specifications for every Flowserve valve sold since 1908. All valves are coded for easy identification. On new and replacement orders, Flowserve stands ready to provide the complete lot-traceability required for nuclear and other critical services.

In-Line Service

We are dedicated to on-site service whenever possible. To this end, we not only provide highly experienced, expert personnel, but we also support those technicians with field equipment, including portable boring, lapping, welding and weld-cutting machines. Major parts, such as disks or bonnets, can be air-shipped back to the factory for service and repaired while service personnel perform other tasks.

Parts Replacement

Our comprehensive record-keeping system also facilitates replacement of parts. Our computer database can quickly tell us if we have the part in stock or on order, or how we can best coordinate raw materials and factory resources for the quickest possible turnaround time.

New 90-Day Warranty

On all valves repaired to Flowserve's standards, we will issue a new 90-day warranty.

Factory Repair & Upgrading

Our After-Hours Coverage Team (AHCT) specialists are on-call around the clock, seven days a week, to deliver on our commitment to provide immediate response to our customers' requirements. Whether your requirements are for a planned outage, preventive maintenance or an emergency demand, Flowserve will remanufacture or upgrade valves to the original or most current specification. Our in-house engineering and quality assurance support is committed to meet the required turnaround time.

Planned & Emergency Outages

Our service managers will coordinate scheduled maintenance and also get technical assistance to your facility quickly for emergency needs.

Phone Toll-Free 24 Hours a Day 365 Days a Year (Day) 1-800-225-6989 (Night) 1-800-543-3927







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