

## High Pressure Close-off Two-Way Flanged Iron Globe Valves

2-1/2 to 6-inch

Normally Open or Normally Closed



Flowrite Two-Way Flanged Iron High Pressure Close-off.

### Description

The Flowrite 599 Series high pressure close-off, two-way flanged iron body globe valves, are designed to work with either pneumatic or SK Series electro-hydraulic actuators with 3/4-inch (20 mm) or 1-1/2-inch (40 mm) stroke. They are available in both ANSI Class 125 and 250 for normally open or normally closed action.

### Features

- Universal bonnet, for direct-coupled actuators
- Equal percentage flow characteristic
- Stainless steel trim and stems
- Metal-to-metal seats
- 200 psi close-off for all line sizes
- ANSI Class IV leakage ( $\leq 0.01\%$  of Cv)
- Greater than 100:1 rangeability
- EPDM O-ring packing
- Cartridge-type packing for easy service
- Orderable as a valve only or as a complete valve/actuator assembly

### Applications

Typical applications include control of hot or chilled water; or water-glycol solutions up to 50%.

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Valves

# High Pressure Close-off, Two-way Flanged Iron Globe Valve Specifications

**Valve Size** .....2-1/2 to 6" (65 to 150 mm)  
**Body Style** .....Cast Iron ASTM A126 Class B  
**Seat Style** .....Metal to Metal  
**Action** .....Normally Open (NO) or Normally Closed (NC)  
**Valve Body Rating** .....ANSI Class 125 or 250  
**Stem Travel**  
 2-1/2 and 3" ..... 3/4" (20 mm) Stroke  
 4, 5 and 6" ..... 1-1/2" (40 mm) Stroke  
**Materials**  
 Body .....Cast Iron ASTM A126 Class B  
 Trim .....Stainless Steel  
 Stem .....Stainless Steel ASTM A582 Type 303  
**Packing**  
 Normal Duty Packing ..... EPDM O-ring  
**Operating**  
 Controlled Medium ..... Water, Glycol Solutions to 50%

**Medium Temperature Range** .....20°F to 250°F (-7 to 120°C)  
**Max. Inlet Pressure**  
 Water.....Refer to Flowrite Reference Section  
**Max. Recommended Differential Pressure for Modulating Service**  
 Stainless Steel Trim  
 Liquid..... 50 psig (345 kPa)  
**Rangeability** ..... >100:1  
**Close-off Ratings** ..... According to ANSI/FCI 70-2  
**Close-off Pressure** .....200 psig  
**Leakage Rate** ..... Class IV (≤ 0.01% of Cv)  
**Dimensions**  
 Face-to-Face..... ANSI/ISA S75.03

## High Pressure Close-off, Two-way Flanged Iron Globe Valve Body Product Ordering




Normally Open/Normally Closed, Equal Percentage 

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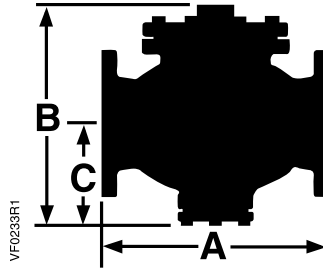
Valves

Valve Size in. (mm)	Flow Rate Cv (Kvs)	Stroke (in.)	ANSI Class 125		ANSI Class 250		
			Normally Open Part No.	Normally Closed Part No.	Normally Open Part No.	Normally Closed Part No.	
<b>Standard-Temperature Packing — 20 to 250°F (-7 to 120°C)</b>							
2-1/2 (65)	63 (54)	3/4	<b>599-06610</b>	<b>599-06615</b>	<b>599-06620</b>	<b>599-06625</b>	
3 (80)	100 (86)	3/4	<b>599-06611</b>	<b>599-06616</b>	<b>599-06621</b>	<b>599-06626</b>	
4 (100)	160 (140)	1-1/2	<b>599-06612</b>	<b>599-06617</b>	<b>599-06622</b>	<b>599-06627</b>	
5 (125)	250 (215)	1-1/2	<b>599-06613</b>	<b>599-06618</b>	<b>599-06623</b>	<b>599-06628</b>	
6 (150)	400 (340)	1-1/2	<b>599-06614</b>	<b>599-06619</b>	<b>599-06624</b>	<b>599-06629</b>	

## Flowrite Valve Actuator Product Ordering

Description		Part No.	Actuator Prefix Code
 8"	Pneumatic w/ Positioner 20 mm Stroke	<b>599-01050 + 599-00426</b>	<b>283</b>
 12"	Pneumatic w/ Positioner 40 mm Stroke	<b>599-01000 + 599-00423</b>	<b>287</b>
	24 V, 0-10 V, 4-20 mA, 3/4" Stroke Spring Return	<b>SKD62U</b>	<b>274</b>
	24 V, 0-10 V, 4-20 mA, 1-1/2" Stroke Spring Return	<b>SKC62U</b>	<b>294</b>

# Dimensions and Weights



Valve Size	ANSI Class 125				ANSI Class 250			
	Dimensions			Weight	Dimensions			Weight
	A	B	C		A	B	C	
<b>Normally Open</b>								
2-1/2" (65 mm)	10-7/8" (276 mm)	11" (281 mm)	4-7/8" (123 mm)	62 lb. (28 kg)	11-1/2" (292 mm)	11" (281 mm)	4-7/8" (123 mm)	78 lb. (36 kg)
3" (80 mm)	11-3/4" (299 mm)	12-1/4" (312 mm)	5-5/16" (135 mm)	79 lb. (36 kg)	12-1/2" (318 mm)	12-1/4" (312 mm)	5-5/16" (135 mm)	102 lb. (46 kg)
4" (100 mm)	13-7/8" (352 mm)	13-9/16" (345 mm)	6-5/16" (160 mm)	129 lb. (58 kg)	14-1/2" (368 mm)	13-5/8" (344.7 mm)	6-5/16" (160 mm)	165 lb. (75 kg)
5" (125 mm)	15-3/4" (400 mm)	15-3/16" (385 mm)	7" (177 mm)	172 lb. (73 kg)	16-5/8" (422 mm)	15-3/16" (385 mm)	7" (177 mm)	215 lb. (97 kg)
6" (150 mm)	17-3/4" (451 mm)	16-3/4" (426 mm)	7-7/8" (200 mm)	222 lb. (111 kg)	18-5/8" (473 mm)	16-3/4" (426 mm)	7-7/8" (200 mm)	312 lb. (142 kg)
<b>Normally Closed</b>								
2-1/2" (65 mm)	10-7/8" (276 mm)	10-5/8" (269 mm)	4-7/8" (125 mm)	60 lb. (27 kg)	11-1/2" (292 mm)	11" (279 mm)	5-3/8" (135 mm)	76 lb. (35 kg)
3" (80 mm)	11-3/4" (299 mm)	11-15/16" (303 mm)	5-5/8" (142 mm)	78 lb. (36 kg)	12-1/2" (318 mm)	12-7/16" (315 mm)	6" (154 mm)	101 lb. (46 kg)
4" (100 mm)	13-7/8" (352 mm)	13-15/16" (354 mm)	6-5/8" (168 mm)	128 lb. (58 kg)	14-1/2" (368 mm)	14-3/8" (364 mm)	7" (178 mm)	164 lb. (74 kg)
5" (125 mm)	15-3/4" (400 mm)	15-1/4" (338 mm)	7-1/2" (185 mm)	160 lb. (72 kg)	16-5/8" (422 mm)	15-3/4" (399 mm)	7-3/4" (196 mm)	214 lb. (97 kg)
6" (150 mm)	17-3/4" (451 mm)	17-1/16" (433 mm)	8-3/16" (207 mm)	219 lb. (100 kg)	18-5/8" (473 mm)	17-1/2" (444 mm)	8-5/8" (218 mm)	309 lb. (141 kg)

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