



Flanged DG Series Globe Valves – Submittal/Technical Data

Flanged Globe Valves 2-Way & 3-Way – 2-1/2" - 6"

Flanged DG Series Globe Valves provide stable and accurate control of both water, 50/50 water Glycol solutions and steam heat exchangers on fan coil units, VAV reheat coils, and air handling units up to 900 GPM. These globe valves feature rangeability of greater than 100:1 to provide precise control.

Two way standard trim valves provide an equal percentage flow characteristic for use on hot water and chilled water.

Two way stainless trim valves - recommended for steam applications, and 3-way mixing valves provide a linear flow characteristic.

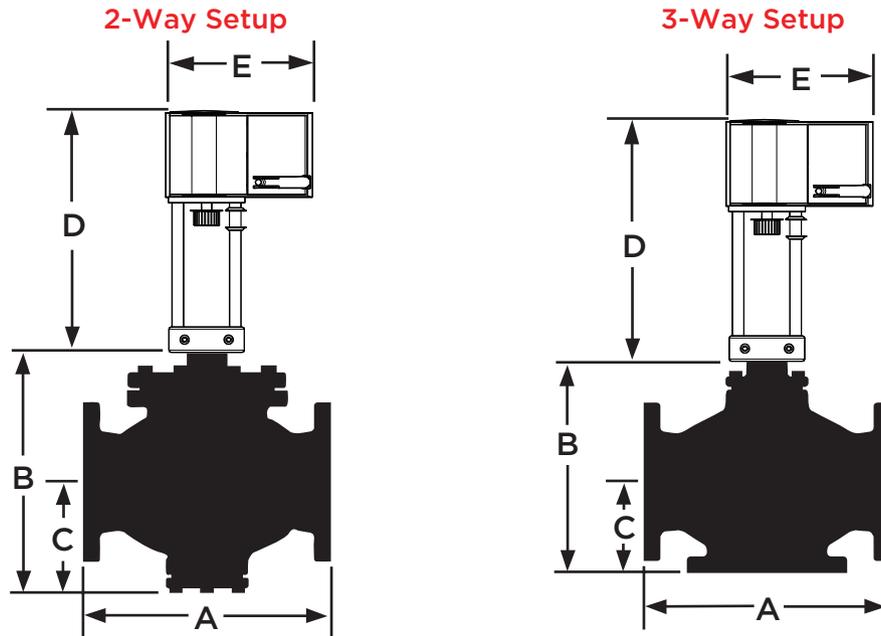
All Flanged DG Series Globe Valves feature a cartridge style packing, which is easily replaceable while the valve is in line. Constant plug guiding and precision-machined metal to metal seating assures ANSI Class IV shutoff (.01%) which provides low leakage and energy conservation.

| Technical Specifications - Flanged Globe Valve Body | | | | |
|---|---|--|---|-----|
| Service | Chilled/Hot Water | | Steam (0 to 50 PSI Max Inlet Pressure) | |
| | Chilled/Hot Water, 50/50 Glycol Solutions & Saturated Steam | | | |
| Size Range | 2-1/2" - 6", 2-Way Normally Open, 3-Way Universal Mixing or Diverting | | 2-1/2" - 6", 2-Way Normally Open | |
| Available Cv's | 63, 100, 160, 250, 400 | | | |
| Media Temperature Range | 20°F to 250°F (-7°C to 120°C) | | | |
| Max Inlet Temperature/Pressure | °F | PSI | °F | PSI |
| | -20° to 150° | 200 | 337° | 50 |
| | 200° | 190 | | |
| | 250° | 175 | | |
| Maximum Recommended Differential Pressure | 25 PSI Water | | 50 PSIG Steam | |
| Valve Body Pressure Rating | ANSI Class 125 | | | |
| Maximum Close-Off Pressure | Refer to Close-Off Charts | | | |
| Close-Off Ratings | According to ANSI/FCI 70-2 | | | |
| Flow Characteristic | Equal Percentage for 2-Way valves with standard trim. Linear for 2-Way valves with Stainless Steel trim. 3-Way is equal percentage NC port, and linear for NO port. | | | |
| Stem Lift | 2-1/2" and 3" – 3/4" (20 mm) 4", 5" and 6" – 1-1/2" (40 mm) | | | |
| Leakage Rate | Class IV (0.01% of Cv) | | | |
| Rangeability | > 100:1 | | | |
| Seat Style | Flanged - Metal to metal | | | |
| Materials | Body | Cast iron ASTM A 126 Class B | | |
| | Stem | Stainless Steel (ASTM A582 Type 303) | | |
| | Valve Trim Required | Bronze | Stainless Steel (noted by SS in the valve P/N) | |
| | Packing | Double Ethylene propylene (EPDM) O-Rings | | |
| Certifications | CRN - OC24303.5 | | | |
| Warranty | 5 Years limited from time of shipment. | | | |

Note - Normally closed available upon request.
When the valve is used for diverting applications, the max DP is restricted to 90% of the max DP that is specified for the valve when it is used in a mixing application

Disclaimer - The performance specifications are nominal and conform to acceptable industry standards.
For application at conditions beyond these specifications, consult the local Bray office.
Bray, Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

Flanged DG Series - 2 & 3-Way - GA(S) Series Actuator Dimensions



| 2-Way Dimensions for GA(S) Series Actuator with Flanged DG Valve | | | | | | | | | | | | |
|--|------|-----|------------------|-----|----------------|--------------|---------------|--------------|-------------------|------------------|---------------------|-----|
| Model Number | Size | | Flow Coefficient | | Stroke in.(mm) | A | B | C | D Actuator Height | E Actuator Width | Weight ¹ | |
| | In. | mm | Cv | Kv | | | | | | | lbs. | kg. |
| DG250-2-63 | 2.5 | 65 | 63 | 54 | 3/4 (20) | 10-7/8 (276) | 11 (281) | 4-7/8 (123) | 11-3/8 (289) | 9-1/16 (230) | 60 | 27 |
| DG3-2-100 | 3 | 80 | 100 | 85 | 3/4 (20) | 11-3/4 (299) | 12-1/4 (312) | 5-5/16 (135) | | | 76 | 34 |
| DG4-2-160 | 4 | 100 | 160 | 137 | 1-1/2 (40) | 13-7/8 (352) | 13-9/16 (345) | 6-5/16 (160) | 12-5/16 (313) | 9-1/16 (230) | 124 | 56 |
| DG5-2-250 | 5 | 125 | 250 | 214 | 1-1/2 (40) | 15-3/4 (400) | 15-3/16 (385) | 7 (177) | | | 155 | 70 |
| DG6-2-400 | 6 | 150 | 400 | 340 | 1-1/2 (40) | 17-3/4 (451) | 16-3/4 (426) | 7-7/8 (200) | | | 212 | 96 |

¹ Weights are for Valve Only.
Add 3.94 in. for optional High Media Temperature Height Extender

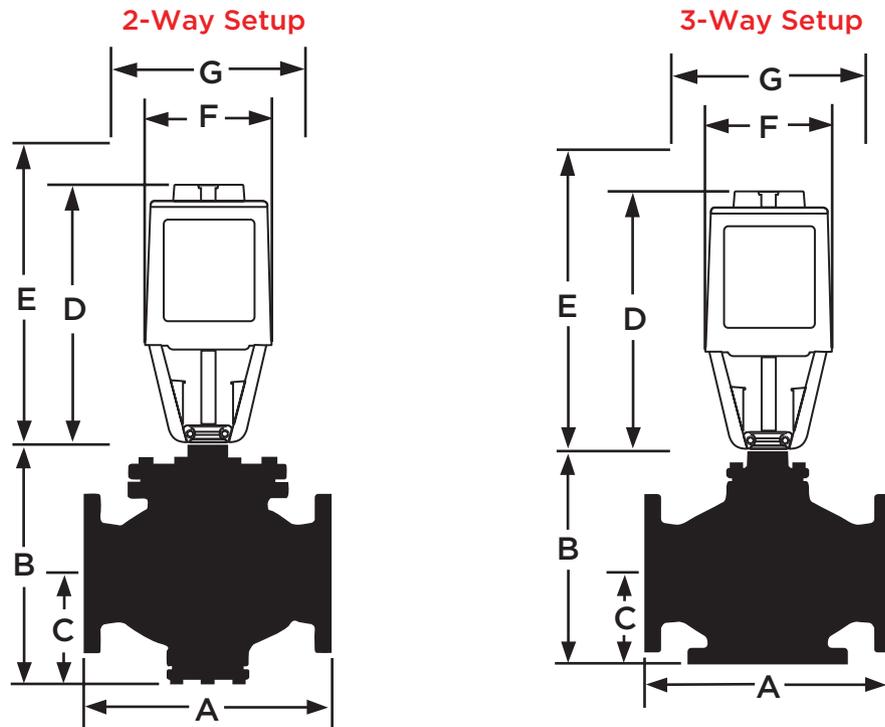
Non-Spring Return Actuator Weight 9.1 lb. (4.1 kg)
Spring Return Actuator Weight 12.3 lb. (5.6 kg)

| 3-Way Dimensions for GA(S) Series Actuator with Flanged DG Valve | | | | | | | | | | | | |
|--|------|-----|------------------|-----|----------------|--------------|--------------|-------------|-------------------|------------------|---------------------|-----|
| Model Number | Size | | Flow Coefficient | | Stroke in.(mm) | A | B | C | D Actuator Height | E Actuator Width | Weight ¹ | |
| | In. | mm | Cv | Kv | | | | | | | lbs. | kg. |
| DG250-3-63 | 2.5 | 65 | 63 | 54 | 3/4 (20) | 10-7/8 (276) | 9-3/8 (239) | 3-3/4 (95) | 11-3/8 (289) | 9-1/16 (230) | 50 | 23 |
| DG3-3-100 | 3 | 80 | 100 | 85 | 3/4 (20) | 11-3/4 (299) | 10-3/4 (272) | 4-3/8 (111) | | | 65 | 30 |
| DG4-3-160 | 4 | 100 | 160 | 137 | 1-1/2 (40) | 13-7/8 (352) | 12-1/2 (317) | 5-1/8 (132) | 12-5/16 (313) | 9-1/16 (230) | 110 | 50 |
| DG5-3-250 | 5 | 125 | 250 | 214 | 1-1/2 (40) | 15-3/4 (400) | 13-3/4 (349) | 5-3/4 (146) | | | 136 | 62 |
| DG6-3-400 | 6 | 150 | 400 | 340 | 1-1/2 (40) | 17-3/4 (451) | 15-1/2 (393) | 6-5/8 (167) | | | 141 | 64 |

¹ Weights are for Valve Only.
Add 3.94 in. for optional High Media Temperature Height Extender

Non-Spring Return Actuator Weight 9.1 lb. (4.1 kg)
Spring Return Actuator Weight 12.3 lb. (5.6 kg)

Flanged DG Series - 2 & 3-Way - VAL Series Actuator Dimensions



| 2-Way Dimensions for VAL Series Actuator with Flanged DG Valve | | | | | | | | | | | | | | |
|--|------|-----|------------------|-----|----------------|--------------|---------------|--------------|-------------------|------------------|------------------|-----------------|---------------------|-----|
| Model Number | Size | | Flow Coefficient | | Stroke in.(mm) | A | B | C | D Actuator Height | E Service Height | F Actuator Width | G Service Width | Weight ¹ | |
| | In. | mm | Cv | Kv | | | | | | | | | lbs. | kg. |
| DG250-2-63 | 2.5 | 65 | 63 | 54 | 3/4 (20) | 10-7/8 (276) | 11 (281) | 4-7/8 (123) | 14-3/4 (375) | 22-3/4 (578) | 8-15/16 (226) | 25 (635) | 60 | 27 |
| DG3-2-100 | 3 | 80 | 100 | 85 | 3/4 (20) | 11-3/4 (299) | 12-1/4 (312) | 5-5/16 (135) | | | | | 76 | 34 |
| DG4-2-160 | 4 | 100 | 160 | 137 | 1-1/2 (40) | 13-7/8 (352) | 13-9/16 (345) | 6-5/16 (160) | | | | | 124 | 56 |
| DG5-2-250 | 5 | 125 | 250 | 214 | 1-1/2 (40) | 15-3/4 (400) | 15-3/16 (385) | 7 (177) | | | | | 155 | 70 |
| DG6-2-400 | 6 | 150 | 400 | 340 | 1-1/2 (40) | 17-3/4 (451) | 16-3/4 (426) | 7-7/8 (200) | | | | | 212 | 96 |

¹ Weights are for Valve Only.

VAL-SRS07P Actuator Weight 18.9 lb. (8.6 kg)
VAL-SRS15P Actuator Weight 22.0 lb. (10.0 kg)

| 3-Way Dimensions for VAL Series Actuator with Flanged DG Valve | | | | | | | | | | | | | | |
|--|------|-----|------------------|-----|----------------|--------------|--------------|-------------|-------------------|------------------|------------------|-----------------|---------------------|-----|
| Model Number | Size | | Flow Coefficient | | Stroke in.(mm) | A | B | C | D Actuator Height | E Service Height | F Actuator Width | G Service Width | Weight ¹ | |
| | In. | mm | Cv | Kv | | | | | | | | | lbs. | kg. |
| DG250-3-63 | 2.5 | 65 | 63 | 54 | 3/4 (20) | 10-7/8 (276) | 9-3/8 (239) | 3-3/4 (95) | 14-3/4 (375) | 22-3/4 (578) | 8-15/16 (226) | 25 (635) | 50 | 23 |
| DG3-3-100 | 3 | 80 | 100 | 85 | 3/4 (20) | 11-3/4 (299) | 10-3/4 (272) | 4-3/8 (111) | | | | | 65 | 30 |
| DG4-3-160 | 4 | 100 | 160 | 137 | 1-1/2 (40) | 13-7/8 (352) | 12-1/2 (317) | 5-1/8 (132) | | | | | 110 | 50 |
| DG5-3-250 | 5 | 125 | 250 | 214 | 1-1/2 (40) | 15-3/4 (400) | 13-3/4 (349) | 5-3/4 (146) | | | | | 136 | 62 |
| DG6-3-400 | 6 | 150 | 400 | 340 | 1-1/2 (40) | 17-3/4 (451) | 15-1/2 (393) | 6-5/8 (167) | | | | | 141 | 64 |

¹ Weights are for Valve Only.

VAL-SRS07P Actuator Weight 18.9 lb. (8.6 kg)
VAL-SRS15P Actuator Weight 22.0 lb. (10.0 kg)