



Series  
GV2  
&  
GV3

# Globe Control Valves

Low Cost, 1" to 2-1/2" Sizes, 2-Way or 3-Way

| Dimensions |                   |                  |                   |
|------------|-------------------|------------------|-------------------|
| Model      | A                 | B                | C                 |
| GV221/321  | 4-11/32" (110 mm) | 2-31/64" (63 mm) | 4-17/64" (108 mm) |
| GV222/322  | 4-47/64" (120 mm) | 2-23/32" (69 mm) | 4-17/64" (108 mm) |
| GV223/323  | 5-1/8" (130 mm)   | 2-13/16" (71 mm) | 4-3/8" (111 mm)   |
| GV224/324  | 5-23/32" (145 mm) | 3-3/64" (77 mm)  | 4-1/2" (114 mm)   |
| GV225/325  | 4-11/32" (110 mm) | 3-9/32" (83 mm)  | 4-25/32" (121 mm) |
| GV231/331  | 4-47/64" (120 mm) | 3-13/64" (81 mm) | 4-17/64" (108 mm) |
| GV232/332  | 5-1/8" (130 mm)   | 3-23/64" (85 mm) | 4-17/64" (108 mm) |
| GV233/333  | 5-23/32" (145 mm) | 3-23/64" (85 mm) | 4-3/8" (111 mm)   |
| GV234/334  | 5-1/8" (145 mm)   | 3-51/64" (96 mm) | 4-1/2" (114 mm)   |
| GV235/335  | 6-29/32" (175 mm) | 4-7/64" (104 mm) | 4-25/32" (121 mm) |

The Series GV2 and GV3 globe valves can be conveniently paired with the Series EVA2 and EVA3 electric actuators, creating a low cost and compact control valve package. The globe design allows for exceptional throttling control in a wide range of applications, including central heating and air conditioning, water handling, and industrial manufacturing systems. Valves are manufactured in a variety of sizes, and are available in either two-way or three-way body styles. The forged brass body and equal percentage flow characteristic are ideal for many flow control systems. Series GV3 models incorporate a high intensity body casting for high temperature applications, including steam service.

### FEATURES

- Low leakage rate (less than 0.05% of Cv)
- Equal percentage flow characteristic for excellent low flow control
- Forged brass construction
- Direct mounting actuator (Series EVA2 and EVA3) for compact control valve package
- GV3: Higher temperature rating, capable of steam service
- Control flow in heating or cooling processes

### SPECIFICATIONS

#### Service:

- GV2: Compatible liquids and gases;
- GV3: Compatible liquids, gases, and steam.

#### Line Size: 1" to 2-1/2".

#### Body Style: 2-way, push to open globe; 3-way globe.

#### End Connections: Female NPT.

#### Pressure Limit: 232 psi (16 bar) WOG; GV3: 130 psi SWP (9.0 bar).

#### Wetted Materials:

- Body material: Brass;
- Stem: SS (1Cr18Ni9);
- Disc: GV2: Brass with Nitrile gasket;  
GV3: Brass with Fluon® gasket;
- Packing: GV2: Fluon® filler with Nitrile O-ring;  
GV3: Fluon® filler with Fluorine O-ring.

#### Temperature Limits: GV2: 35 to 201°F (2 to 94°C); GV3: 35 to 356°F (2 to 180°C).

#### Flow Characteristic: Equal percentage.

#### Flow Leakage: Less than 0.05% of Cv factor.

#### Stem Connection: M8 thread.

### Series GV2

| Model | Type  | Pipe Size | Cv   | Max. Diff. Pres.  |                  | Stroke in (mm) |
|-------|-------|-----------|------|-------------------|------------------|----------------|
|       |       |           |      | Fit with EVA2-    | Fit with EVA3-   |                |
| GV221 | 2-Way | 1"        | 9.3  | 145 psi (10 bar)  | 203 psi (14 bar) | 19/32" (15)    |
| GV222 |       | 1-1/4"    | 18.6 | 109 psi (7.5 bar) | 160 psi (11 bar) | 3/4" (19)      |
| GV223 |       | 1-1/2"    | 29.0 | 72 psi (5 bar)    | 116 psi (8 bar)  | 3/4" (19)      |
| GV224 |       | 2"        | 46.4 | 43 psi (3 bar)    | 72 psi (5 bar)   | 7/8" (22)      |
| GV225 |       | 2-1/2"    | 73.1 | 29 psi (2 bar)    | 50 psi (3.5 bar) | 7/8" (22)      |
| GV231 | 3-Way | 1"        | 9.3  | 145 psi (10 bar)  | 203 psi (14 bar) | 19/32" (15)    |
| GV232 |       | 1-1/4"    | 18.6 | 109 psi (7.5 bar) | 160 psi (11 bar) | 3/4" (19)      |
| GV233 |       | 1-1/2"    | 29.0 | 72 psi (5 bar)    | 116 psi (8 bar)  | 3/4" (19)      |
| GV234 |       | 2"        | 46.4 | 43 psi (3 bar)    | 72 psi (5 bar)   | 7/8" (22)      |
| GV235 |       | 2-1/2"    | 73.1 | 29 psi (2 bar)    | 50 psi (3.5 bar) | 7/8" (22)      |

### Series GV3

| Model | Type  | Pipe Size | Cv   | Max. Diff. Pres. |                  | Stroke in (mm) |
|-------|-------|-----------|------|------------------|------------------|----------------|
|       |       |           |      | Fit with EVA2-   | Fit with EVA3-   |                |
| GV321 | 2-Way | 1"        | 9.3  | 116 psi (8 bar)  | 174 psi (12 bar) | 19/32" (15)    |
| GV322 |       | 1-1/4"    | 18.6 | 87 psi (6 bar)   | 145 psi (10 bar) | 3/4" (19)      |
| GV323 |       | 1-1/2"    | 29.0 | 58 psi (4 bar)   | 102 psi (7 bar)  | 3/4" (19)      |
| GV324 |       | 2"        | 46.4 | 29 psi (2 bar)   | 58 psi (4 bar)   | 7/8" (22)      |
| GV325 |       | 2-1/2"    | 73.1 | 29 psi (2 bar)   | 50 psi (3.5 bar) | 7/8" (22)      |
| GV331 | 3-Way | 1"        | 9.3  | 116 psi (8 bar)  | 174 psi (12 bar) | 19/32" (15)    |
| GV332 |       | 1-1/4"    | 18.6 | 87 psi (6 bar)   | 145 psi (10 bar) | 3/4" (19)      |
| GV333 |       | 1-1/2"    | 29.0 | 58 psi (4 bar)   | 102 psi (7 bar)  | 3/4" (19)      |
| GV334 |       | 2"        | 46.4 | 29 psi (2 bar)   | 58 psi (4 bar)   | 7/8" (22)      |
| GV335 |       | 2-1/2"    | 73.1 | 29 psi (2 bar)   | 50 psi (3.5 bar) | 7/8" (22)      |

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