



Series GV Globe Control Valves

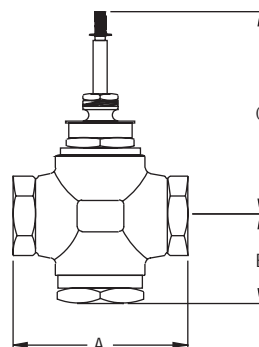
Specifications - Installation and Operating Instructions



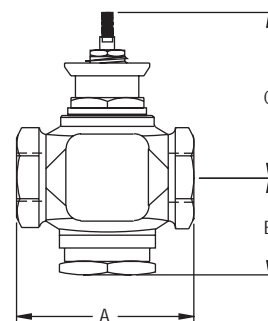
GV1



GV2/GV3



GV1



GV2 & GV3

The Series GV globe valves provide excellent throttling control in a wide variety of applications. The forged brass body construction is designed to withstand the harsh working conditions associated with many flow control systems, with high temperature models available to fully encompass the spectrum of these environments. 2 and 3-way body styles and a variety of valve sizes are offered for various application needs.

INSTALLATION

1. Before mounting the valve, make sure that the pipe is clean and free from any soldering scraps, sheet metal, sand, stone, or other sundries.
2. The pipe and valve body must be connected perfectly, with minimal vibration at the installation point. The direction of the flow media should be the same as marked on the valve body.
3. The actuator should be mounted vertically on the valve body. Do not mount the actuator below the valve body.
4. Power to the actuator must be shut off before attempting valve maintenance. Depressurize the piping system prior to valve servicing.
5. For other installation requirements, please refer to the Installation and Operating Instructions for the Series EVA electric actuator, Bulletin V-7 for EVA1 models, V-8 for EVA2 and EVA3 models.

DIMENSIONS

Model	A	B	C
GV121	4-11/32" (110 mm)	2-3/8" (60 mm)	4-3/8" (111 mm)
GV122	4-47/64" (120 mm)	2-39/64" (66 mm)	4-3/8" (111 mm)
GV123	5-1/8" (130 mm)	2-11/16" (68 mm)	4-1/2" (114 mm)
GV124	5-23/32" (145 mm)	2-27/32" (72 mm)	4-31/32" (126 mm)
GV131	4-11/32" (110 mm)	3-5/64" (78 mm)	4-3/8" (111 mm)
GV132	4-47/64" (120 mm)	3-15/64" (82 mm)	4-3/8" (111 mm)
GV133	5-1/8" (130 mm)	3-15/64" (82 mm)	4-1/2" (114 mm)
GV134	5-23/32" (145 mm)	3-19/32" (91 mm)	4-31/32" (126 mm)

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)

SPECIFICATIONS

GV1

Service: Compatible liquids and gases.

Line Size: 1" to 2".

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

End Connections: 1" to 2" female NPT.

Pressure Limit: 232 psi (16 bar).

Wetted Materials:

Body Material: Brass.

Stem: 302 SS.

Disc: Brass with Nitrile gasket.

Packing: Fluon® filler with Nitrile O-ring.

Temperature Limits: 35 to 201°F (2 to 94°C).

Flow Characteristic: Equal percentage.

Flow Leakage: Less than 0.05% of Cv factor.

Stem Connection: M8 thread.

GV2/GV3

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: 1" to 2-1/2" female NPT.

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

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.

Fluon® is a registered trademark of AGC Chemicals Americas, Inc.

SERIES GV1

Model	Type	Pipe Size	Cv	Max. Diff. Pres.		Stroke in. (mm)
				Fit with EVA1-		
GV121	2-Way	1"	9.3	87 psi (6 bar)		19/32" (15)
GV122		1-1/4"	17.4	58 psi (4 bar)		3/4" (19)
GV123		1-1/2"	25.5	43 psi (3 bar)		3/4" (19)
GV124		2"	40.6	29 psi (2 bar)		3/4" (19)
GV131	3-Way	1"	9.3	87 psi (6 bar)		19/32" (15)
GV132		1-1/4"	17.4	58 psi (4 bar)		3/4" (19)
GV133		1-1/2"	25.5	43 psi (3 bar)		3/4" (19)
GV134		2"	40.6	29 psi (2 bar)		3/4" (19)

SERIES GV2

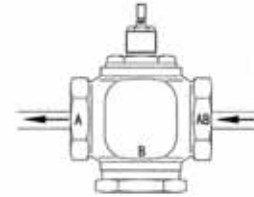
Model	Type	Pipe Size	Cv	Max. Diff. Pres.		Stroke in. (mm)
				Fit with EVA2-	Fit with EVA3-	
GV221	2-Way	1"	9.3	145 psi (10 bar)	203 psi (14 bar)	19/32" (15)
GV222		1-1/4"	18.6	109 psi (7.5 bar)	160 psi (11 bar)	3/4" (19)
GV223		1-1/2"	29.0	72 psi (5 bar)	116 psi (8 bar)	3/4" (19)
GV224		2"	46.4	43 psi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

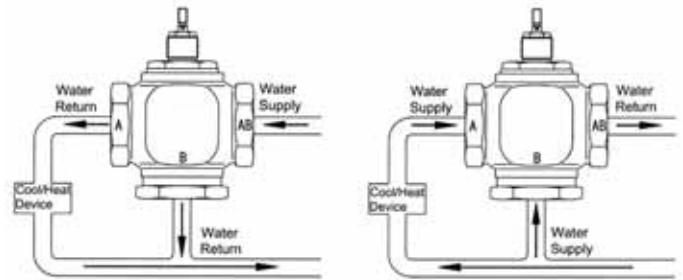
Model	Type	Pipe Size	Cv	Max. Diff. Pres.		Stroke in. (mm)
				Fit with EVA2-	Fit with EVA3-	
GV321	2-Way	1"	9.3	116 psi (8 bar)	174 psi (12 bar)	19/32" (15)
GV322		1-1/4"	18.6	87 psi (6 bar)	145 psi (10 bar)	3/4" (19)
GV323		1-1/2"	29.0	58 psi (4 bar)	102 psi (7 bar)	3/4" (19)
GV324		2"	46.4	29 psi (2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

FLOW DIRECTION DIAGRAM

TWO-WAY VALVE



THREE-WAY VALVE



Diverting 3-way

Mixing 3-way

MAINTENANCE

The Series GV Globe Control Valves are not field serviceable and should be returned if repair is needed (field repair should not be attempted and may void warranty). Be sure to include a brief description of the problem plus any relevant application notes. Contact customer service to receive a return goods authorization number before shipping.