VG7000 Series Stainless Steel Trim Globe Valves with MP82 Series Pneumatic Actuators Catalog Page

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Description

VG7000 Series Stainless Steel Trim Globe Valves with MP82 Series Pneumatic Actuators control hot or chilled water, or 100 psig saturated steam.

Refer to the *VG7000 Series Bronze Control Valves Product Bulletin (LIT-977140)* for important product application information.

Features

- Industrial-grade, drawn-steel actuator
- Corrosion-resistant, electro-painted finish
- Effective diaphragm area: 25 sq. in.
- Controls: hot or chilled water, 100 psig saturated steam
- Valve trim: stainless steel
- Packing: spring-loaded PTFE and elastomer V-rings
- Maximum supply air pressure: 25 psig (172 kPa)
- Fluid temperature: 35°F to 338°F (2°C to 170°C), 100 psig saturated steam
- Valve body static pressure rating: ANSI Class 250
- Factory or field assembly
- For optional V-9502-95 Positioner, change 00 at the end of the code number to 01

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Repair information

If the VG7000 Series Globe Valve fails to operate within its specifications, replace the valve body, actuator, or entire assembly. For replacement parts, contact the nearest Johnson Controls® representative.

Selection chart

Actuator code number			MP821C001B (1/2 and 3/4 in.) MP822C001A (1 and 1-1/4 in.) MP823C001A (1-1/2 and 2 in.)		MP821D001B (1/2 and 3/4 in.) MP822D001A (1 and 1-1/4 in.) MP823D001A (1-1/2 and 2 in.)		MP821E001B (1/2 and 3/4 in.) MP822E001A (1 and 1-1/4 in.) MP823E001A (1-1/2 and 2 in.)	
Spring range			3 psig to 7 psig		4 psig to 8 psig		9 psig to 13 psig	
Valve code number	Size, in.	Cv	Closeoff psig	Code number	Closeoff psig	Code number	Closeoff psig	Code number
Two-Way Normally Open — NPT End Connections (To specify a factory-mounted positioner, change 00 at the end of the code number to 01.)								
VG7243CT	1/2	0.73	308	VG7243CT+821C00	308	VG7243CT+821D00	308	VG7243CT+821E00
VG7243ET	1/2	1.8	308	VG7243ET+821C00	308	VG7243ET+821D00	308	VG7243ET+821E00
VG7243GT	1/2	4.6	308	VG7243GT+821C00	308	VG7243GT+821D00	275	VG7243GT+821E00
VG7243LT	3/4	7.3	308	VG7243LT+821C00	304	VG7243LT+821D00	175	VG7243LT+821E00
VG7243NT	1	11.6	209	VG7243NT+822C00	193	VG7243NT+822D00	111	VG7243NT+822E00
VG7243PT	1-1/4	18.5	128	VG7243PT+822C00	118	VG7243PT+822D00	68	VG7243PT+822E00
VG7243RT	1-1/2	28.9	82	VG7243RT+823C00	75	VG7243RT+823D00	43	VG7243RT+823E00
VG7243ST	2	46.2	52	VG7243ST+823C00	48	VG7243ST+823D00	28	VG7243ST+823E00
Two-Way Normally Closed — NPT End Connections (To specify a factory-mounted positioner, change 00 at the end of the code number to 01.)								
VG7443CT	1/2	0.73	280	VG7443CT+821C00	308	VG7443CT+821D00	308	VG7443CT+821E00
VG7443ET	1/2	1.8	280	VG7443ET+821C00	308	VG7443ET+821D00	308	VG7443ET+821E00
VG7443GT	1/2	4.6	135	VG7443GT+821C00	183	VG7443GT+821D00	308	VG7443GT+821E00
VG7443LT	3/4	7.3	81	VG7443LT+821C00	109	VG7443LT+821D00	252	VG7443LT+821E00
VG7443NT	1	11.6	53	VG7443NT+822C00	72	VG7443NT+822D00	168	VG7443NT+822E00
VG7443PT	1-1/4	18.5	30	VG7443PT+822C00	41	VG7443PT+822D00	96	VG7443PT+822E00
VG7443RT	1-1/2	28.9	19	VG7443RT+823C00	25	VG7443RT+823D00	59	VG7443RT+823E00
VG7443ST	2	46.2	12	VG7443ST+823C00	16	VG7443ST+823D00	37	VG7443ST+823E00
Three-Way Mixing — NPT End Connections (To specify a factory-mounted positioner, change 00 at the end of the code number to 01.)								
VG7844CT	1/2	0.73	308 / 280	VG7844CT+821C00	308 / 308	VG7844CT+821D00	308 / 308	VG7844CT+821E00
VG7844ET	1/2	1.8	308 / 280	VG7844ET+821C00	308 / 308	VG7844ET+821D00	308 / 308	VG7844ET+821E00
VG7844GT	1/2	4.6	308 / 135	VG7844GT+821C00	308 / 183	VG7844GT+821D00	275 / 308	VG7844GT+821E00
VG7844LT	3/4	7.3	308 / 81	VG7844LT+821C00	304 / 109	VG7844LT+821D00	175 / 252	VG7844LT+821E00
VG7844NT	1	11.6	209 / 53	VG7844NT+822C00	193 / 72	VG7844NT+822D00	111 / 168	VG7844NT+822E00
VG7844PT	1-1/4	18.5	128 / 30	VG7844PT+822C00	118 / 41	VG7844PT+822D00	68 / 96	VG7844PT+822E00
VG7844RT	1-1/2	28.9	82 / 19	VG7844RT+823C00	75 / 25	VG7844RT+823D00	43 / 59	VG7844RT+823E00
VG7844ST	2	46.2	52 / 12	VG7844ST+823C00	48 / 16	VG7844ST+823D00	28 / 37	VG7844ST+823E00

[1]

1 Note:For optional V-9502-95 Positioner, change 00 at the end of the code number to 01.

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Technical specifications

VG7000 Series Stainless Steel Trim Globe Valves with MP82 Series Pneumatic Actuators		
Service [1]		Hot water, chilled water, 50/50 glycol solutions, and steam for HVAC systems
Fluid temperature limits	Water	35°F to 338°F (2°C to 170°C)
	Steam	100 psig (690 kPa) saturated steam
Maximum allowable pressure temperature	Water	400 psig (2,756 kPa) up to 150°F (66°C) decreasing to 308 psig (2,122 kPa) at 338°F (170°C)
	Steam	100 psig (690 kPa) saturated steam
Valve body pressure/temperature rating		Meets requirements of ANSI B16.15, Class 250
Maximum recommended operating pressure drop	Water	35 psig (241 kPa) for 1/2 in. through 1-1/4 in. valves 30 psig (207 kPa) for 1-1/2 in. and 2 in. valves
	Steam	100 psig (690 kPa)
Flow characteristics	Two-way valves	Equal percentage
	Three-way valves	Linear flow characteristics
Rangeability[2]		> 25:1 according to EN60534-2-4 for the 1/2 in. size, Cv 0.73, valve bodies > 100:1 according to EN60534-2-4 for all other valves
Leakage		0.05% of maximum flow
Actuator ambient operating temperature limits		-20°F to 150°F (-29°C to 66°C)
Maximum actuator supply pressure		25 psig (172 kPa) maximum
Materials	Body	Cast bronze
	Bonnet	Brass
	Stem	Stainless steel
	Plug	Stainless steel
	Seat	Stainless steel
	Packing	Self-adjusting Ethylene Propylene Rubber (EPR) ring pack U-cups
Compliance	Canada	CRN: 0C22556.5

1 Refer to the VDI 2035 Guideline for recommended proper water treatment.
2 Rangeability is defined as the ratio of maximum controllable flow to minimum controllable flow.

WARNING

This product is made of copper alloy, which contains lead. The product is therefore not to be used on drinking water.

WARNING

This product can expose you to chemicals including lead, which is known to the State of California to cause cancer, birth defects, or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

WARNING

WARNING: BRASS MAY CONTAIN LEAD

To fulfill our obligations towards Article 33, in accordance to the European REACH Regulation No 1907/2006 EC, we hereby inform you that this article contains the following Substances of Very High Concern mentioned on the Candidate list: Lead

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

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Single point of contact

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