

VG7000 Series Stainless Steel Trim Globe Valves with VA-715x Series Electric Actuators

Description

VG7000 Series Stainless Steel Trim Globe Valves with VA-715x Series Pneumatic Actuators control hot or chilled water, or steam.

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

Features

- 90 lb force provides tight closeoff
- direct coupled; no linkage required
- packing: spring-loaded PTFE and elastomer V-rings
- magnetic clutch protects gearing, ensures tight closeoff
- controls hot water, chilled water, or steam

- fits VG7000 Series valves 1/2 through 2 in.
- valve body static pressure rating: ANSI Class 250
- factory or field assembly
- voltage: 24 VAC, 50/60 Hz, 4.7 VA

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.



VA-715x Series Electric Actuator Mounted on VG7844 Brass Globe Valve

Selection Chart

Actuator Code Number				VA-7150-1001	VA-7153-1001	VA-7152-1001
Actuator Input				On/Off (Floating)	On/Off (Floating) with Feedback	0 VDC to 10 VDC Proportional
Temperature Range				35°F to 338°F Fluid Temperature, 100 psig Saturated Steam		
Valve Code Number	Size, in.	Cv	Closeoff psig	Non-Spring Return		
Two-Way Push-Down-to-Close — NPT End Connections						
VG7243CT	1/2	0.73	239	VG7243CT+7150G	VG7243CT+7153G	VG7243CT+7152G
VG7243ET	1/2	1.8	239	VG7243ET+7150G	VG7243ET+7153G	VG7243ET+7152G
VG7243GT	1/2	4.6	135	VG7243GT+7150G	VG7243GT+7153G	VG7243GT+7152G
VG7243LT	3/4	7.3	86	VG7243LT+7150G	VG7243LT+7153G	VG7243LT+7152G
VG7243NT	1	11.6	54	VG7243NT+7150G	VG7243NT+7153G	VG7243NT+7152G
VG7243PT	1-1/4	18.5	33	VG7243PT+7150G	VG7243PT+7153G	VG7243PT+7152G
VG7243RT	1-1/2	28.9	21	VG7243RT+7150G	VG7243RT+7153G	VG7243RT+7152G
VG7243ST	2	46.2	13	VG7243ST+7150G	VG7243ST+7153G	VG7243ST+7152G
Three-Way Mixing — NPT End Connections						
VG7844CT	1/2	0.73	239/308	VG7844CT+7150G	VG7844CT+7153G	VG7844CT+7152G
VG7844ET	1/2	1.8	239/308	VG7844ET+7150G	VG7844ET+7153G	VG7844ET+7152G
VG7844GT	1/2	4.6	135/161	VG7844GT+7150G	VG7844GT+7153G	VG7844GT+7152G
VG7844LT	3/4	7.3	86/96	VG7844LT+7150G	VG7844LT+7153G	VG7844LT+7152G
VG7844NT	1	11.6	54/63	VG7844NT+7150G	VG7844NT+7153G	VG7844NT+7152G
VG7844PT	1-1/4	18.5	33/36	VG7844PT+7150G	VG7844PT+7153G	VG7844PT+7152G
VG7844RT	1-1/2	28.9	21/22	VG7844RT+7150G	VG7844RT+7153G	VG7844RT+7152G
VG7844ST	2	46.2	13/14	VG7844ST+7150G	VG7844ST+7153G	VG7844ST+7152G

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: 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

VG7000 Series Stainless Steel Trim Globe Valves with VA-715x Series Electric Actuators (Continued)

Technical Specifications

VG7000 Series Stainless Steel Trim Globe Valves with VA-715x Series Electric Actuators		
Service¹		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
Rangeability²		> 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 per ANSI/FCI 70-2, Class 4
Actuator Ambient Operating Temperature Limits		0°F to 140°F (-18°C to 60°C)
Actuator Input Signal	VA-7150-1001	24 VAC Three-Wire Floating Control
	VA-7152-1001	0 VDC to 10 VDC Proportional Control
	VA-7153-1001	24 VAC Three-Wire Floating Control with 0 Ohm to 2,000 Ohm Feedback Potentiometer for 25/32 in. Valve Stroke
Actuator Power Requirements	VA-7150-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 2.7 VA Nominal
	VA-7152-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 4.7 VA Nominal
	VA-7153-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 2.7 VA Nominal
Materials	Body	Cast Bronze
	Bonnet	Brass
	Stem	Stainless Steel
	Plug	Stainless Steel
	Seat	Stainless Steel
	Packing	Spring-Loaded PTFE and Elastomer V-Rings
Compliance	Canada	CRN: 0C1099.9087YTN

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.