

VG7000 Series

Brass Trim Globe Valves with VA-720x Series Electric Actuators

Description

VG7000 Brass Trim Globe Valves with VA-720x Series Electric Actuator control hot or chilled water, or steam.

- valve body static pressure rating: ANSI Class 250
- factory or field assembly
- voltage: 24 VAC, 50/60 Hz, 8.7 VA

Features

- 180 lb force – provides tight closeoff
- direct coupled – no linkage required
- magnetic clutch – protects gearing, ensures tight closeoff
- controls – hot water, chilled water, or steam
- fits VG7000 valves 1/2 through 2 in.

Repair Information

If the VG7000 Brass Trim Globe Valve with VA-720x Series Non-Spring Return Electric Actuator fails to operate within its specifications, replace the unit. For a replacement valve or actuator, contact the nearest Johnson Controls® representative.



VA-720x Series Electric Actuator mounted on VG7842 Brass Globe Valve

Selection Chart

VG7000 Brass Trim Globe Valve with VA-720x Series Non-Spring Return Electric Actuator

Actuator Code				VA-7200-1001	VA-7203-1001	VA-7202-1001
Actuator Input				On/Off (Floating)	On/Off (Floating) with Feedback	0 to 10 VDC Proportional
Temperature Range				35 to 284°F Fluid Temperature, 38 psig Saturated Steam		
Valve	Size	Cv	Closeoff	Non-Spring Return		
Two-Way Push-Down-to-Close – NPT End Connections						
VG7241NT	1"	11.6	179	VG7241NT+7200G	VG7241NT+7203G	VG7241NT+7202G
VG7241PT	1-1/4"	18.5	109	VG7241PT+7200G	VG7241PT+7203G	VG7241PT+7202G
VG7241RT	1-1/2"	28.9	70	VG7241RT+7200G	VG7241RT+7203G	VG7241RT+7202G
VG7241ST	2"	46.2	45	VG7241ST+7200G	VG7241ST+7203G	VG7241ST+7202G
Three-Way Mixing – NPT End Connections						
VG7842NT	1"	11.6	179 / 209	VG7842NT+7200G	VG7842NT+7203G	VG7842NT+7202G
VG7842PT	1-1/4"	18.5	109 / 120	VG7842PT+7200G	VG7842PT+7203G	VG7842PT+7202G
VG7842RT	1-1/2"	28.9	70 / 74	VG7842RT+7200G	VG7842RT+7203G	VG7842RT+7202G
VG7842ST	2"	46.2	45 / 46	VG7842ST+7200G	VG7842ST+7203G	VG7842ST+7202G
Two-Way Push-Down-to-Close – Union Sweat End Connections						
VG7281NT	1"	11.6	179	VG7281NT+7200G	VG7281NT+7203G	VG7281NT+7202G
VG7281PT	1-1/4"	18.5	109	VG7281PT+7200G	VG7281PT+7203G	VG7281PT+7202G
VG7281RT	1-1/2"	28.9	70	VG7281RT+7200G	VG7281RT+7203G	VG7281RT+7202G
VG7281ST	2"	46.2	45	VG7281ST+7200G	VG7281ST+7203G	VG7281ST+7202G
Three-Way Mixing – Union Sweat End Connections						
VG7882NT	1"	11.6	179 / 209	VG7882NT+7200G	VG7882NT+7203G	VG7882NT+7202G
VG7882PT	1-1/4"	18.5	109 / 120	VG7882PT+7200G	VG7882PT+7203G	VG7882PT+7202G
VG7882RT	1-1/2"	28.9	70 / 74	VG7882RT+7200G	VG7882RT+7203G	VG7882RT+7202G
VG7882ST	2"	46.2	45 / 46	VG7882ST+7200G	VG7882ST+7203G	VG7882ST+7202G
Two-Way Push-Down-to-Close – Union Globe End Connections						
VG7251NT	1"	11.6	179	VG7251NT+7200G	VG7251NT+7203G	VG7251NT+7202G
VG7251PT	1-1/4"	18.5	109	VG7251PT+7200G	VG7251PT+7203G	VG7251PT+7202G
VG7251RT	1-1/2"	28.9	70	VG7251RT+7200G	VG7251RT+7203G	VG7251RT+7202G
Two-Way Push-Down-to-Close – Union Angle End Connections						
VG7551NT	1"	11.6	179	VG7551NT+7200G	VG7551NT+7203G	VG7551NT+7202G
VG7551PT	1-1/4"	18.5	109	VG7551PT+7200G	VG7551PT+7203G	VG7551PT+7202G
VG7551RT	1-1/2"	28.9	70	VG7551RT+7200G	VG7551RT+7203G	VG7551RT+7202G

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls shall not be liable for damages resulting from misapplication or misuse of its products. © 2019 Johnson Controls. www.johnsoncontrols.com

Brass Trim Globe Valves with VA-720x Series Electric Actuators (Continued)

Technical Specifications

VG7000 Brass Trim Globe Valves with VA-720x Series Non-Spring Return Electric Actuators		
Service¹		Hot Water, Chill Water, 50/50 Glycol Solutions and Steam for HVAC Systems
Fluid Temperature Limits	Water	35 to 284°F (2 to 140°C)
	Steam	38 psig (262 kPa) Saturated Steam
Maximum Allowable Pressure Temperature	Water	400 psig (2,756 kPa) Up to 150°F (66°C) decreasing to 365 psig (2,515 kPa) at 248°F (120°C)
	Steam	38 psig (262 kPa) Saturated Steam at 284°F (140°C)
Valve Body Pressure/ Temperature Rating		Meets Requirements of ANSI B16.15, Class 250
Maximum Recommended Operating Pressure Drop	Water	35 psig (241 kPa) for ½ through 1-1/4 in. valves 30 psig (207 kPa) for 1-1/2 and 2 in. valves
	Steam	15 psig (103 kPa)
Flow Characteristics	Two-Way Valves	Equal Percentage
	Three-Way Valves	Linear Flow Characteristics
Rangeability²		25:1
Leakage		0.01% of Maximum Flow per ANSI/FCI 70-2, Class 4
Actuator Ambient Operating Temperature Limits		23 to 131°F (-5 to 55°C)
Actuator Input Signal	VA-7200-1001	24 VAC Three-Wire Floating Control
	VA-7202-1001	0 to 10 VDC Proportional Control
	VA-703-1001	24 VAC Three-Wire Floating Control with 0 to 2000 ohm feedback potentiometer for 25/32 in. valve stroke
Actuator Power Requirements	VA-7200-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 6.7 VA Nominal
	VA-7202-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 8.7 VA Nominal
	VA-703-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 6.7 VA Nominal
Materials	Body	Cast Bronze
	Bonnet	Brass
	Stem	Stainless Steel
	Plug	Brass
	Seat	Brass Against Molded Elastomeric Disk
	Packing	Self Adjusting Ethylene Propylene Rubber (EPR) Ring Pack U-Cups

1. Refer to VDI 2035 Standard 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: 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