

Stainless Steel Trim Globe Valves with VA-720x Series Electric Actuators

Description

VG7000 Series Stainless Steel Trim Globe Valves with VA-720x Series Pneumatic Actuator control hot or chilled water, or steam.

Features

- 180 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 valves 1/2 through 2 in.
- valve body static pressure rating: ANSI Class 250
- factory or field assembly
- voltage: 24 VAC, 50/60 Hz, 8.7 VA

Repair Information

If the VG7000 Stainless Steel Trim Globe Valve with VA-720x Series Non-Spring Return 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 VG7844 Brass Globe Valve

Selection Chart

VG7000 Stainless Steel Trim Globe Valve with VA-720x Series Non-Spring Return 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 338°F Fluid Temperature, 100 psig Saturated Steam		
Valve	Size	Cv	Closeoff	Non-Spring Return		
Two-Way Push-Down-to-Close – NPT End Connections						
VG7243CT	1/2"	0.73	308	VG7241CT+7200G	VG7241CT+7203G	VG7241CT+7202G
VG7243ET	1/2"	1.8	308	VG7241ET+7200G	VG7241ET+7203G	VG7241ET+7202G
VG7243GT	1/2"	4.6	278	VG7241GT+7200G	VG7241GT+7203G	VG7241GT+7202G
VG7243LT	3/4"	7.3	177	VG7241LT+7200G	VG7241LT+7203G	VG7241LT+7202G
VG7241NT	1"	11.6	112	VG7241NT+7200G	VG7241NT+7203G	VG7241NT+7202G
VG7241PT	1-1/4"	18.5	68	VG7241PT+7200G	VG7241PT+7203G	VG7241PT+7202G
VG7241RT	1-1/2"	28.9	44	VG7241RT+7200G	VG7241RT+7203G	VG7241RT+7202G
VG7241ST	2"	46.2	28	VG7241ST+7200G	VG7241ST+7203G	VG7241ST+7202G
Three-Way Mixing – NPT End Connections						
VG7844CT	1/2"	0.73	308 / 308	VG7842CT+7200G	VG7842CT+7203G	VG7842CT+7202G
VG7844ET	1/2"	1.8	308 / 308	VG7842ET+7200G	VG7842ET+7203G	VG7842ET+7202G
VG7844GT	1/2"	4.6	278 / 308	VG7842GT+7200G	VG7842GT+7203G	VG7842GT+7202G
VG7844LT	3/4"	7.3	177 / 197	VG7842LT+7200G	VG7842LT+7203G	VG7842LT+7202G
VG7842NT	1"	11.6	112 / 131	VG7842NT+7200G	VG7842NT+7203G	VG7842NT+7202G
VG7842PT	1-1/4"	18.5	68 / 75	VG7842PT+7200G	VG7842PT+7203G	VG7842PT+7202G
VG7842RT	1-1/2"	28.9	44 / 46	VG7842RT+7200G	VG7842RT+7203G	VG7842RT+7202G
VG7842ST	2"	46.2	28 / 29	VG7842ST+7200G	VG7842ST+7203G	VG7842ST+7202G

VG7000 Series Stainless Steel Trim Globe Valves with VA-720x Series Electric Actuators (Continued)

Technical Specifications

VG7000 Stainless Steel 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 338°F (2 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 248°F (120°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 ½ through 1-1/4 in. valves 30 psig (207 kPa) for 1-1/2 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
Leakage		0.05% 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-7203-1001	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-7203-1001	24 VAC (20 to 30 VAC), 50/60 Hz, 6.7 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

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.