

VA-720x Series Electric Valve Actuator

Description

The VA-720x Series Electric Actuator provides incremental or proportional control of valves with up to a 3/4 in. (19.05 mm) stroke in HVAC applications.

The VA-720x is a non-spring-return, synchronous, motor-driven electric actuator featuring a 180 lb (800 N) minimum seating force in a compact, easy-to-install package. It accepts incremental control from a three-wire 24 VAC control signal or a proportional DC control signal (up to 10 V maximum). The VA-7203 also contains a 2,000 ohm position feedback potentiometer.

The VA-720x Series can be easily field mounted to VBC Series Bronze Cage Trim Valves and factory or field mounted to VG7000 Series Bronze Control Valves.

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

Features

- compact unit provides 180 lb force (800 N) output covering a wide range of applications with just one actuator
- magnetic clutch provides constant output force for positive closeoff of valves and protects motor in stall conditions
- durable construction provides longer cycle life
- unique yoke design enables easy field mounting to valves, reducing installation and stroke adjustment time
- selectable direct and reverse action simplifies setup and installation
- built-in resistor for current control provides greater application flexibility



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Selection Chart

Code Number	Description
VA-7200-1001	Three-Wire Incremental
VA-7203-1001	Three-Wire Incremental with Position Feedback
VA-7202-1001	Proportional: 0 to 10 VDC; 0 to 20 mA

Accessories

Code Number	Description
V-9999-HW1	Mounting Kit to Mount VA-715x or VA-720x Series Electric Actuators to Honeywell® V75011A, F, G, 1/2 through 3 in. Single-Seated and V5013F Three-Way Valves
V-9999-BC1	Mounting Kit to Mount VA-715x or VA-720x Series Electric Actuators to Barber-Colman® 1/2 through 1-1/4 in. VB-9xxx Valve Bodies
VG7000-1016	Bonnet Adaptor for VA7200 Series Electric Actuator on 1 to 2 in. VG7000 Series Valves

Applications

The VA-720x Series Actuator is used in conjunction with VG7000, VT, Flare, and Bronze Cage Trim Valves for hot-water and chilled-water systems. For VG7000 Series Valve factory mounted options, refer to the *VG7000 Series Brass Trim Globe Valves with VA720x Series Electric Actuators Catalog Page (LIT-1900085)* and the *VG7000 Series Stainless Steel Trim Globe Valves with VA-720x Series Electric Actuators Catalog Page (LIT-1900091)*.

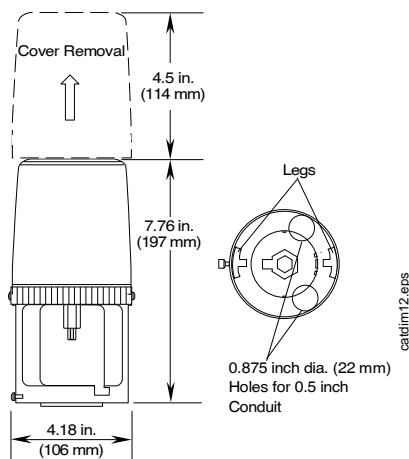
For field mounting options, refer to the *VG7000 Series Bronze Globe Valves for Assembly in the Field Catalog Page (LIT-1924005)*.

Repair Information

If the VA-720x Series Electric Actuator fails to operate within its specifications, replace the unit. For a replacement actuator, contact the nearest Johnson Controls® representative.

Technical Specifications

VA-720x Series Electric Valve Actuator	
Power Requirements	24 VAC (20 to 30 VAC), 50/60 Hz
Input Signal	Incremental: 24 VAC, 50/60 Hz Proportional: 0 to 10 VDC or 0 to 20 mA (Jumper Selectable)
Input Signal Adjustments (Proportional)	Offset: Adjustable 0 to 8 VDC / 0 to 16 mA Span: 2 to 10 VDC or 4 to 20 mA Action: Drive Up (DA) or Drive Down (DA) on Signal Increase Factory Setting: 0 to 10 VDC, Drive Up (DA), 3/4 in. (19 mm) Stroke
Input Impedance (Proportional)	Voltage: 100,000 Ohms Current: 500 Ohms
Feedback Signal	Proportional: 0 to 2,000 Ohms ± 25%, 1/4 W, Over 25/32 in. (20 mm) Stroke
Mechanical Output	180 lb Force (800 N) Minimum
Stroke Range	25/32 in. (20 mm) Maximum
Nominal Stroke Timing	50 Hz: 50 Seconds 1/2 in. (13 mm) Stroke 74 Seconds 3/4 in. (19 mm) Stroke 60 Hz: 42 Seconds 1/2 in. (13 mm) Stroke 62 Seconds 3/4 in. (19 mm) Stroke
Media Temperature	280°F (138°C) Maximum
Electrical Connection	Screw Terminals: VA-7200: 24 to 14 AWG VA-7203: 24 to 16 AWG VA-7202: 24 to 16 AWG
Mechanical Connection	For 1/4 - 28 UNF-2B Thread for Valve Stem Connection
Enclosure	NEMA 2, IP42
Ambient Conditions	Operating: 23 to 131°F (-5 to 55°C), 5 to 90% RH Noncondensing 86°F (30°C) Maximum Dew Point Storage: -4 to 150°F (-20 to 65°C); 5 to 95% RH, 86°F (30°C) Maximum Dew Point
Agency Listings	UL 873 Listed, File E27734 CSA C22.2 No. 139 Certified, File LR850853



Dimensions, in. (mm)