VA-720x Series

LIT-1924180

Electric Valve Actuator

Description

The VA-720x Series Electric Actuator provides incremental or proportional control of valves with up to a3/4 in. stroke in heating, ventilating, and air conditioning 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 aproportional DC control signal (up to 10 volts maximum). The VA-7203 also contains a 2000 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.

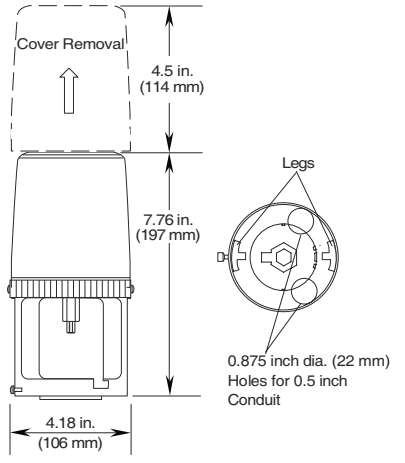
Selection Charts

VA-720x Series Actuators

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 for VA-720x Series

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 Adapter for VA7200 Series Electric Actuator on 1 to 2 in. VG7000 Series Valves



Dimensions in. (mm)

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

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 *VG7000 Series Brass Trim Globe Valves with VA720x Series Electric Actuators Catalog Page (LIT-1900085)* on Page 176 and *VG7000 Series Stainless Steel Trim Globe Valves with VA-720x Series Electric Actuators Catalog Page (LIT-1900091)* on Page 186. For field mounting options refer to *VG7000 Series Bronze Globe Valves for Assembly in the Field Catalog Page* on Page 215.

VA-720x Electric Valve Actuator

Repair Information

If the VA-720x Series Actuator fails to operate within its specifications, replace the unit. For a replacement valve, 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 2000 Ohm ± 25%, 1/4 Watt, 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 Non-Condensing 86°F (30°C) Maximum Dew Point Storage: -4 to 150°F (-20 to 65°C); 5 to 95% RH, 86°F (30°C) Max. Dew Point
Agency Listings	UL 873 Listed, File E27734 CSA C22.2 No. 139 Certified, File LR850853