

Description

Figure 1: VA-715x Electric Valve Actuator



The VA-715x Series synchronous, motor-driven actuator provides incremental (three-wire), incremental with feedback, or proportional control of valves with up to 3/4 in. (19.05 mm) stroke in HVAC applications.

This compact, non-spring-return actuator has a 90 lb (400 N) force minimum, and responds to a variety of input signals.

The VA-715x Series can be easily field mounted or ordered factory coupled to VG7000 Series Bronze Control Valves.

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

Features

- Magnetic clutch provides constant output force for positive closeoff of valves, and protects the motor in stall conditions
- Selectable direct and reverse action simplifies setup and installation
- Durable construction provides a longer cycle life
- Compact unit provides 90 lb force output, covering a wide range of applications with just one actuator

- Unique yoke design enables easy field mounting to valves, reducing installation and stroke adjustment time

Applications

The VA-715x Series Actuator is used in conjunction with VG7000 Series Valves for hot water and chilled water systems. For VG7000 Series Valve options, refer to the *VG7000 Series Brass Trim Globe Valves with VA-715x Series Electric Actuators Catalog Page (LIT-1900084)* and the *VG7000 Series Stainless Steel Trim Globe Valves with VA-715x Series Electric Actuators Catalog Page (LIT-1900090)*. For field mounting options, refer to the *VG7000 Series Bronze Globe Valves for Assembly in the Field Catalog Page (LIT-1924005)*.

Selection chart

Table 1: Selection chart

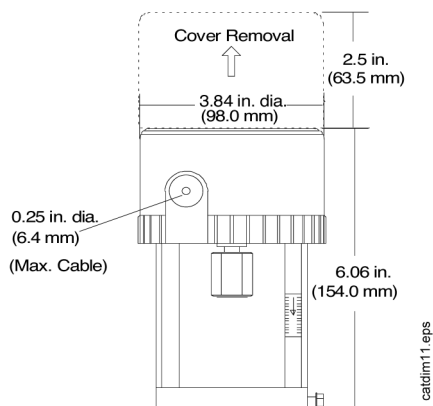
Code number	Description
VA-7150-1001	Three-wire incremental
VA-7153-1001	Three-wire incremental with position feedback
VA-7152-1001	Proportional, 0 VDC to 10 VDC

Accessories

Table 2: Accessories

Code number	Description
V-9999-670	Bonnet adaptor (used for field mounting to VT Series valve body with threaded stem)
Y20EBE-2	Adaptor kit (used for field mounting to VT Series valve body with slotted stem)
VA-7150-1900	Conduit adaptor kit
V-9999-HW1	Mounting kit to mount VA-715x or VA-720x Series Electric Actuators to Honeywell® V75011A, F, G, 1/2 in. 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 in. through 1-1/4 in. VB-9xxx valve bodies

Figure 2: Dimensions, in. (mm)



Repair information

If the VA-715x Series Electric Valve Actuator fails to operate within its specifications, replace the unit. For a replacement actuator, contact the nearest Johnson Controls® representative.

Technical specifications

Table 3: Technical specifications

VA-715x Series Electric Valve Actuator	
Power requirements	24 VAC (20 VAC to 30 VAC), 50/60 Hz
Input signal	Incremental: 24 VAC, 50/60 Hz Incremental with position feedback: 24 VAC, 50/60 Hz Proportional: 0 VDC to 10 VDC

Table 3: Technical specifications

VA-715x Series Electric Valve Actuator	
Input signal adjustments (proportional)	Input signal: 0 VDC to 5 VDC, 5 VDC to 10 VDC, 0 VDC to 10 VDC (jumper selectable) Action: Drive up (RA) or drive down (DA) on signal increase (jumper selectable) Factory setting: 0 VDC to 10 VDC over 3/4 in. (19 mm) stroke, DA
Input impedance (proportional)	100,000 ohms
Feedback signal	Proportional: 0 to 2,000 ohms $\pm$ 25%, 1/4 W, over 25/32 in. (20 mm) stroke
Mechanical output	90 lb force (400 N) minimum
Stroke range	5/16 in. to 25/32 in. (8 mm to 20 mm)
Nominal stroke timing	50 Hz: 85 seconds 5/16 in. (8 mm) stroke 135 seconds 1/2 in. (13 mm) stroke 200 seconds 3/4 in. (19 mm) stroke 60 Hz: 70 seconds 5/16 in. (8 mm) stroke 110 seconds 1/2 in. (13 mm) stroke 165 seconds 3/4 in. (19 mm) stroke
Media temperature	280°F (138°C) maximum
Electrical connection	Screw terminals for 16 AWG maximum
Mechanical connection	For 1/4 - 28 UNF valve stem
Enclosure	NEMA 2, IP42
Ambient conditions	Operating: 0°F to 140°F (-18°C to 60°C); 10% to 90% RH noncondensing 86°F (30°C) maximum dew point Storage: -4°F to 150°F (-20°C to 65°C); 5% to 90% RH, 86°F (30°C) maximum dew point
Agency listings	UL 873 Listed, File E27734 CSA C22.2 No. 139 Certified, File LR85083

Product warranty

This product is covered by a limited warranty, details of which can be found at www.johnsoncontrols.com/buildingswarranty.

Single point of contact

APAC	Europe	NA/SA
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