

Direct Coupled, Non-Spring Return Actuators, 70 in-lb



GA-T70-024

Tri-state or On/Off

DESCRIPTION

Electronic, motor-driven, reversible, noiseless, direct coupled actuators.

APPLICATION

Actuators to be easily installed by direct shaft mounting on air dampers and shutters for standard or fast rotation in ventilation and air conditioning systems. Can be controlled by any compatible electric or electronic analog controller, DDC/PLC control or automation system.

FEATURES

- *Direct coupled, easy to install*
- *Ridged V-clamp connector for better shaft gripping*
- *Plenum rated cable or terminal block connections*
- *Tested for 60,000+ full operations*
- *Manual override*
- *Overload protected*
- *Maintenance-free*
- *Five-year warranty*



ISO 9001



SPECIFICATIONS

<p>Control Input signal</p> <p>Electrical Power supply Over voltage Power consumption</p> <p>Performance Torque Damper size Angle of rotation - CCW(L) and CW(R)</p> <p>Rotation time Power failure Position indicator</p> <p>Synchronization Overload protection Manual override Motor type Noise level</p> <p>Environmental Permissible ambient - working temperature - storage temperature - humidity</p> <p>Physical Enclosure - cover - base - color - protection</p>	<p>Tri-state (3-pt. floating) or On/Off, 24 VAC/DC</p> <p>24 VAC/VDC \pm 20%, 50/60 Hz Up to 40 V, max. 5 sec. 2.0 W (3.0 VA)</p> <p>70 in-lb (8 Nm) Up to 18 sq. ft. (1.6 m²) 0-95°/95-0°, selectable, adj. angle with integral stops L/R selector, built-in actuator cover (Terminal version is w/o L/R selector)</p> <p>60 to 120 sec/0-90° Stays in last position of operation 0-10 divisions, and adj. visual indicator (Terminal version is w/o visual indicator)</p> <p>\pm 1%</p> <p>Electronic throughout rotation Built-in disengage button DC motor Max. 35 dB(A)</p> <p>-22°F to 122°F (-30°C to 50°C) -40°F to 176°F (-40°C to 80°C) 5-95% RH, non-condensing</p> <p>ABS, UL 94-5V PA 6.6 Gray and black NEMA 2, NEMA 1 for Terminal version</p>	<p>Mounting position Anti-rotation bracket Stacking/paralleling</p> <p>Clamp connection to - round shaft - square shaft Wire connection</p> <p>Wire size Terminal version - wire connection</p> <p>Dimensions</p> <p>Weight</p> <p>Manufacturing Listings/Approvals</p> <p>Warranty</p>	<p>Any position Included w/actuator Refer to table "Multiple Actuators"</p> <p>\varnothing 5/16" to 5/8" (8 to 16 mm) \square 5/16" to 15/32" (8 to 12 mm) 3 ft. (0.9 m) cable, color coded, plenum rated 18 AWG (0.75 mm²)</p> <p>Terminal block, outside of cover, screw type for lead wire, min. 26 AWG (0.14 mm²) max. 14 AWG (2.5 mm²)</p> <p>4.53 x 2.56 x 2.40 in. (115 x 65 x 61 mm) 1.2 lbs. (0.53 kg) ISO 9001 certified CE UL and CSA Five-year material and workmanship (Two-year standard, three-year conditional)</p>
		<p>OPTIONS</p> <p>- S1 (1) Aux. switch built-in</p> <p>- P1 (1) Feedback pot</p>	<p>SPDT 24 VAC, 5 (2.5) A, adj. at any position, incl. 3 ft. (0.9 m) cable, number coded, plenum rated, or terminal block 1 kΩ pot, incl. 3 ft. (0.9 m) cable, number coded, plenum rated, or terminal block</p>

ORDERING INFORMATION

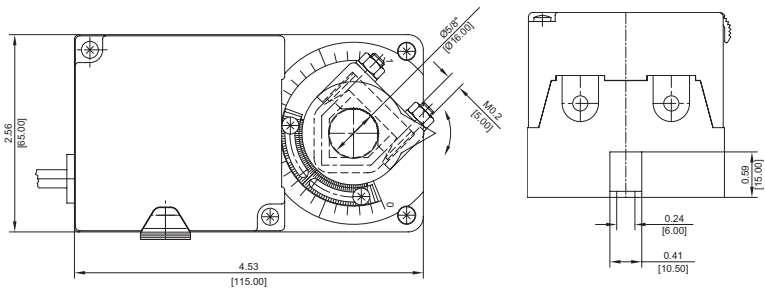
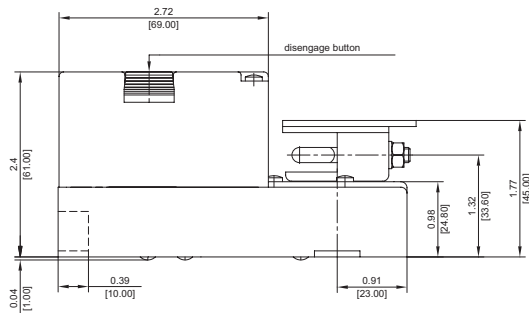
GA-T70-024 w/ Plenum rated cable
GA-T70-024-S1 w/ Plenum rated cable, and (1) aux. switch
GA-T70-024-P1 w/ Plenum rated cable, and (1) 1 kΩ Pot

GA-T70-024T w/ Terminal block
GA-T70-024T-P1 w/ Terminal block, and (1) 1 kΩ Pot

Note: Terminal version actuator comes without L/R selector and adj. visual position indicator

DIMENSIONS

inches (mm)

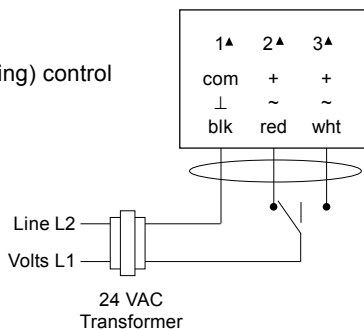


Note: Anti-rotation mounting bracket supplied w/actuator

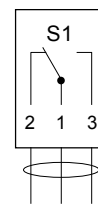
WIRING CONFIGURATION

GA-T70-024

Tri-state
(3-point floating) control



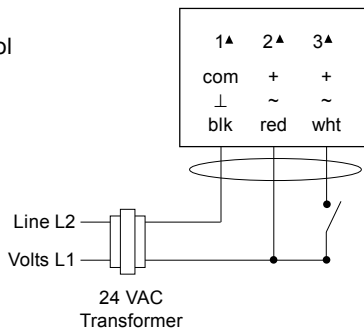
Option S1



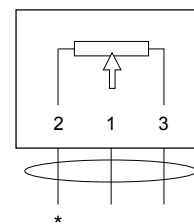
(1) Auxiliary switch, SPDT, 24 VAC, 5 (2.5) A, w/ adjustable cam for any position setting

GA-T70-024

On/Off control



Option P1



(1) Feedback pot, 1 kΩ, * = 0 Ω at 0° angle of rotation

L/R selector (built-in actuator cover)

Select	Angle of rotation
R	CW/0-90° w/red connect
R	CCW/90-0° w/white connect
L	CW/0-90° w/white connect
L	CCW/90-0° w/red connect

* Terminal version, wiring connection:

1= com 2= + (CW/0-90°) 3= + (CCW/90-0°)

Multiple Actuators (maximum quantities)	GA-T70-024 Tri-state or On/Off
Stacking (torque is additive)	4*
Parallel connection	20

* Stacking options for continuous control

Sum of total torque:

2 actuators = (2 x 100%)

3 actuators = (2 x 100%) + (1 x 80%)

4 actuators = (2 x 100%) + (1 x 80%) + (1 x 50%)

- Notes:
- Actuators are provided with color coded wires. Wires for optional switches and feedback pot are number coded.
 - Observe polarity on secondary transformers. Incorrect polarity can cause controller damage or operation error.
 - Provide overload protection for line voltage and disconnect as required.