

# APPLICATION

The 20-0042 actuator is used for AccuValve® applications that require normal-speed response over a control range of 2 to 10 volts and will “fail in place” when power is removed.

# DIMENSIONS

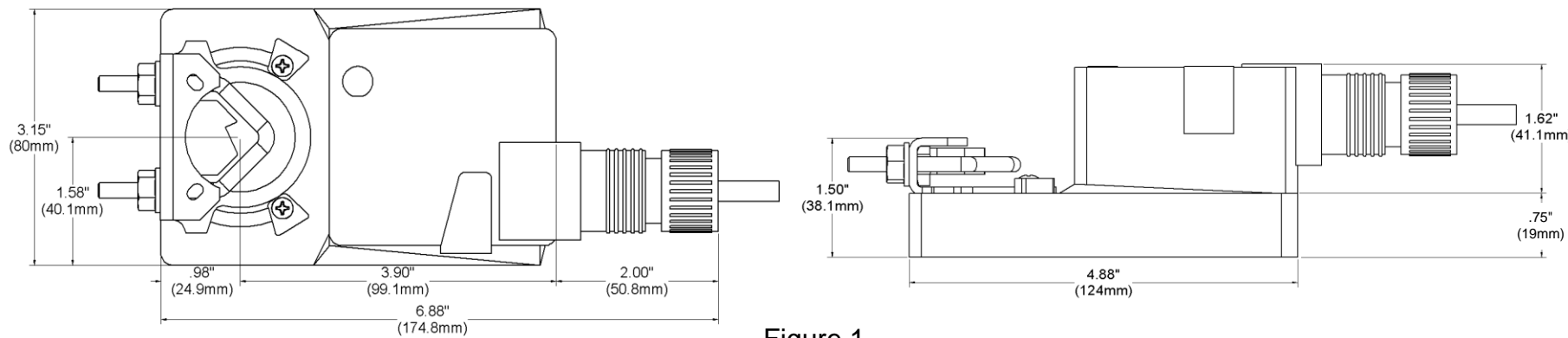


Figure 1

# INSTALLATION

Each actuator is installed, configured and tested on the AccuValve® prior to shipping from the Accutrol factory. The following instructions are provided as a reference for replacing an actuator in the field.

Parts Required	Tools Required
(1) Actuator, PN 20-0042	10mm wrench
(2) Screws, PN 17-0246 (#8-32 x 5/16)	#2 Phillips Head Screw Driver

## Reference Figure 2

- Slide actuator V-clamp over the AccuValve drive shaft.
- Align the flat of the drive shaft with the flat of the shaft coupling.
- Slide the slot on the back of the actuator over the vertical tab on the anti-rotation bracket so the tab is captured in the slot.
- Secure the actuator coupling to the AccuValve drive shaft by tightening the (2) 10mm nuts on the v-clamp. Secure each nut evenly and torque each nut to 6 to 7 ft-lbs.

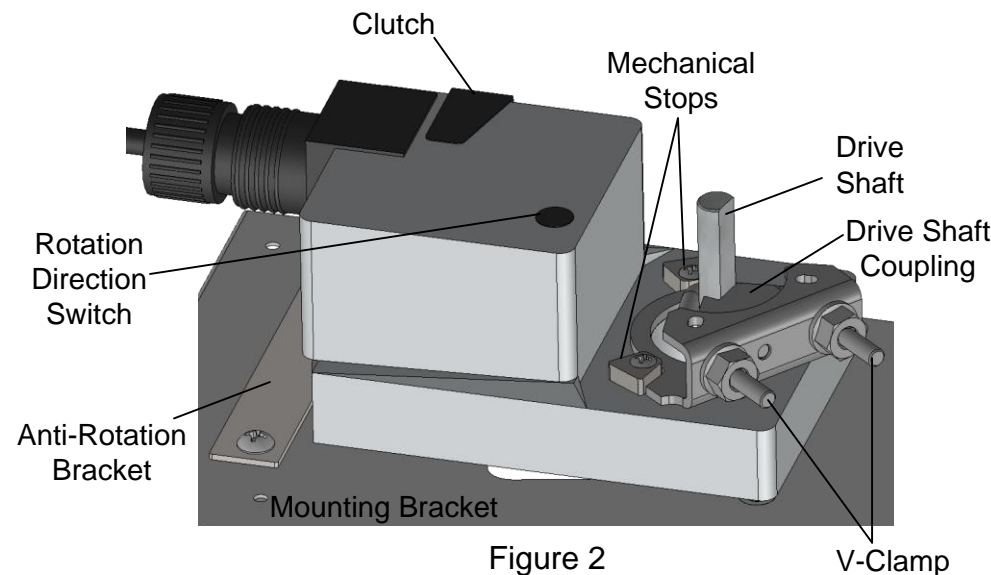


Figure 2

# TECHNICAL DATA

## ELECTRICAL

Power Supply	24 VAC +/- 20% 50/60 Hz, or 24 VDC +/- 10%
Power Consumption:	0.4 W nominal, 2.5 W max
Transformer Sizing:	5 VA (Class 2 power source)
Electrical Connection:	Cable, 3' Plenum, NEMA 2 (IP 54), 4-Conductor, 18 GA
Overload Protection:	Electronic, throughout range of rotation
Control Signal:	2 to 10V
Feedback Signal:	2 to 10V
Input Impedance:	100K ohm
Resolution:	45mV response to control signal 89mV response to control signal change of direction

## MECHANICAL

Angle of Rotation:	Factory-set with mechanical stops (approximately 45°)
Running Time:	22 seconds full stroke
Torque:	90 in-lb (8Nm)
Direction of Rotation:	Reversible with switch
Manual Override:	External push button
Weight:	1.7 lbs. (0.75 kg)
Noise Level:	< 45 dBA
Housing Material:	UL94-5VA

## ENVIRONMENTAL

Humidity:	5 to 95% RH non-condensing (EN 60730)
Operating Temperature:	-22°F to 122°F (-30°C to 50°C)
Storage Temperature:	-40°F to 176°F (-40°C to 80°C)
Housing:	NEMA 2, IP54, UL enclosure type 2

## AGENCY LISTINGS & QUALITY STANDARDS

cULus acc. To UL 60730-1A/-2-14  
CAN/CSA E60730-1:02  
CE acc. To 2004/108/EEC and 2006/95/EC  
QS ISO 9001

## SERVICE

No Maintenance Required

# WIRING

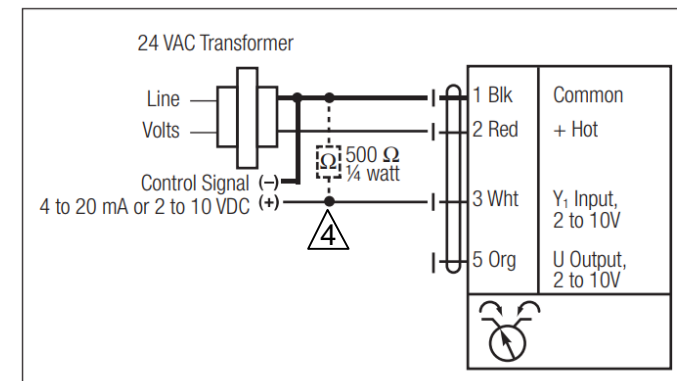


Figure 3

- Provide overload protection and disconnect as required.
- Actuators may be connected in parallel if not mechanically mounted to the same shaft. Power consumption and input impedance must be observed.
- Actuators may also be powered by 24 VDC.

⚠ 500Ω resistor is only required when using current control signal.