

APPLICATION

The 20-0052 actuator is used for AccuValve® applications that require standard-speed response over a control range of 0 to 10 or 2 to 10 volts and will “fail in place” when power is removed.

DIMENSIONS

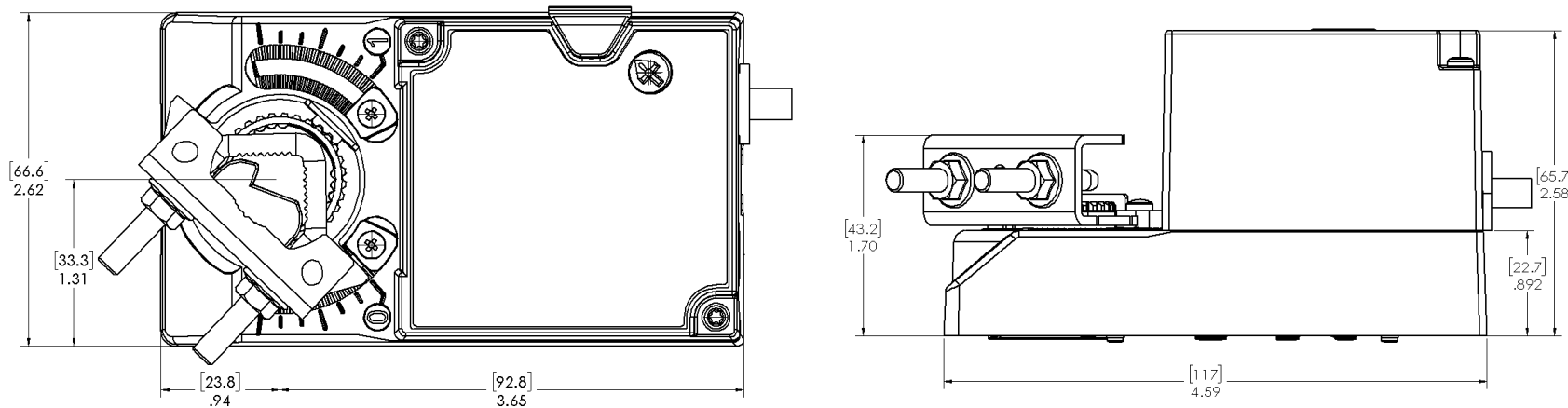


Figure 1

INSTALLATION

Each factory installed actuator is 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 20-0052	8mm 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) 8mm nuts on the v-clamp. Secure each nut evenly and torque each nut to 6 to 7 ft-lbs.
- Mechanical stops must be set to proper locations after the actuator is installed on the AccuValve. Depress manual override button and turn shaft until blades are fully closed, set stop. Depress manual override button and turn shaft until blades are fully open, set second stop.
- Apply power to the actuator, adapt by turning the “Mode Switch” arrow to point to Adp. After the Actuator completes a full cycle turn the arrow to factory position of 2-10R.

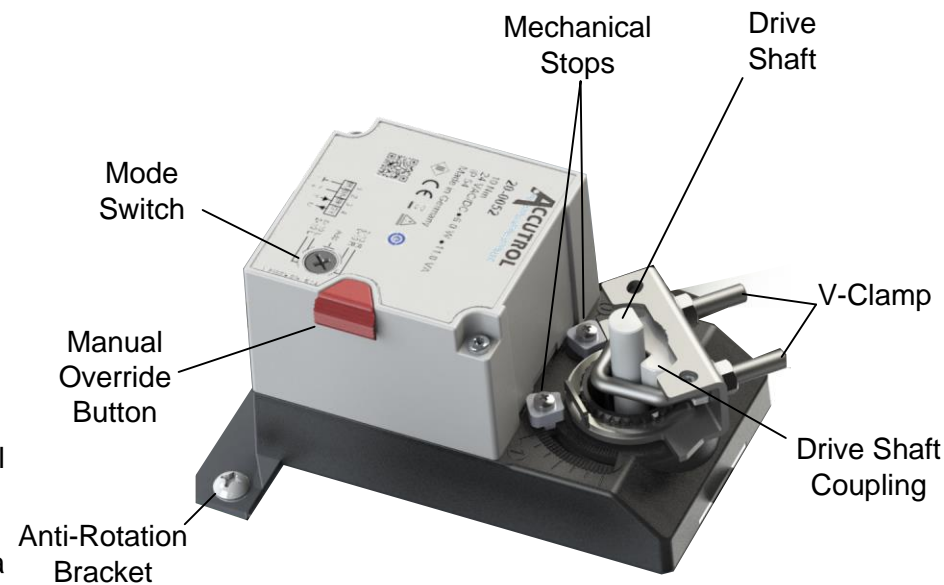


Figure 2

TECHNICAL DATA

ELECTRICAL

Power Supply	24 VAC +/- 20% 50/60 Hz, or 24 VDC +/- 20%
Power Consumption:	6W Max, 2W Standby
Transformer Sizing:	11 VA (Class 2 power source)
Electrical Connection:	Cable, 3' Halogen Free, NEMA 2 (IP 54), 4-Conductor, 18 GA
Overload Protection:	Electronic, throughout range of rotation
Control Signal:	0 to 10V or 2 to 10V (selectable)
Feedback Signal:	0 to 10V or 2 to 10V (matches control signal) 0.5mA Max
Input Impedance:	100K ohm
Resolution:	45mV response to control signal 89mV response to control signal change of direction

MECHANICAL

Angle of Rotation:	Limited by mechanical stops (approximately 45°)
Running Time:	10 seconds full stroke
Torque:	90 in-lb (10Nm)
Direction of Rotation:	Reversible with switch
Manual Override:	External push button
Weight:	1.2 lbs. (0.54 kg)
Noise Level:	< 45 dBA
Housing Material:	UL94-5V

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

SAFETY

Protection Class:	III (safety extra-low voltage)
Degree of Protection:	IP 54 (cable downwards)
EMC:	CE (2014/30/EU)
LVD:	CE (2014/35/EU)
RoHS:	CE (2014/65/EU)
Mode of Operation:	Typ 1 (EN 60730-1)
Rated Impulse Voltage:	0.8kV (EN 60730-1)
Control Pollution Degree:	3 (EN 60730-1)

SERVICE

No Maintenance Required

WIRING

Common	BLACK	BLUE
24V Power	RED	BROWN
Control Signal	WHITE OR	BLACK
Feedback Signal	ORANGE	GRAY

Actuator comes in two wiring color configurations based on manufacture date



Figure 3