

Description and Application

These KMC ControlSet® actuators are designed to control small dampers, such as air terminal unit dampers, or certain KMC VEB/VEP/VEG/VEV series valves. A minimum of 50 in-lbs. of torque is provided over the maximum angular rotation of 95°. The actuators mount directly to a 1/2" or 3/8" diameter shaft, eliminating the need for expensive and complicated linkages. Mounting to a 3/8" diameter shaft requires the HFO-0011 shaft adaptor (ordered separately). Capacitor-driven fail-safe provides efficient operation with switch-selectable fail direction.

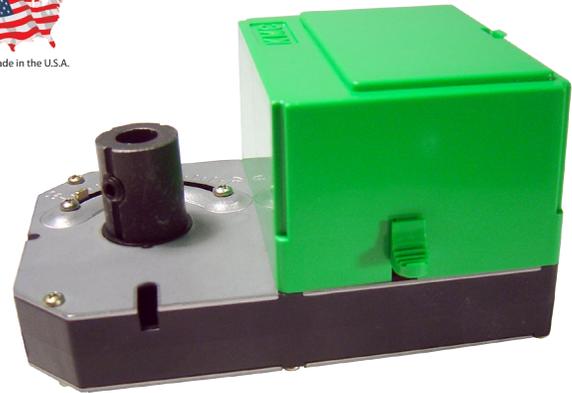
MEP-5372 **proportional** actuators may be controlled via a 2–10 VDC control signal from a thermostat, controller, or building automation system. Actuators are factory-calibrated for a 2–10 VDC input signal (or 4–20 mA with an external 500 ohm resistor) and 95° clockwise rotation. Counterclockwise rotation is obtained by simply toggling a switch. A 1–5 VDC feedback voltage output, proportional to the control signal, is provided. This feedback can be used for remote indication of damper position. An 18 VDC auxiliary power supply output is provided to power CTE-5100 series thermostats or other control devices.

MEP-5373/5374 **tri-state** models are for use with **floating** thermostats, controllers, or building automation systems. (They can also be wired for 2-position operation.) The MEP-5374 features a 10K ohm ($\pm 10\%$), three-wire potentiometer feedback output.

Minimum and maximum end stops are standard to limit rotation. An HMO-1003 non-rotation bracket, to prevent actuator lateral movement, is included. A gear disengagement button allows manual positioning of the damper and/or gear train without energizing the actuator. An optional single or double auxiliary switch can be field-installed.

Models

MEP-5372	2–10 VDC proportional with 1–5 VDC feedback and 18 VDC auxiliary power supply output
MEP-5373	Tri-state (no feedback)
MEP-5374	Tri-state with 10,000 ohm feedback potentiometer

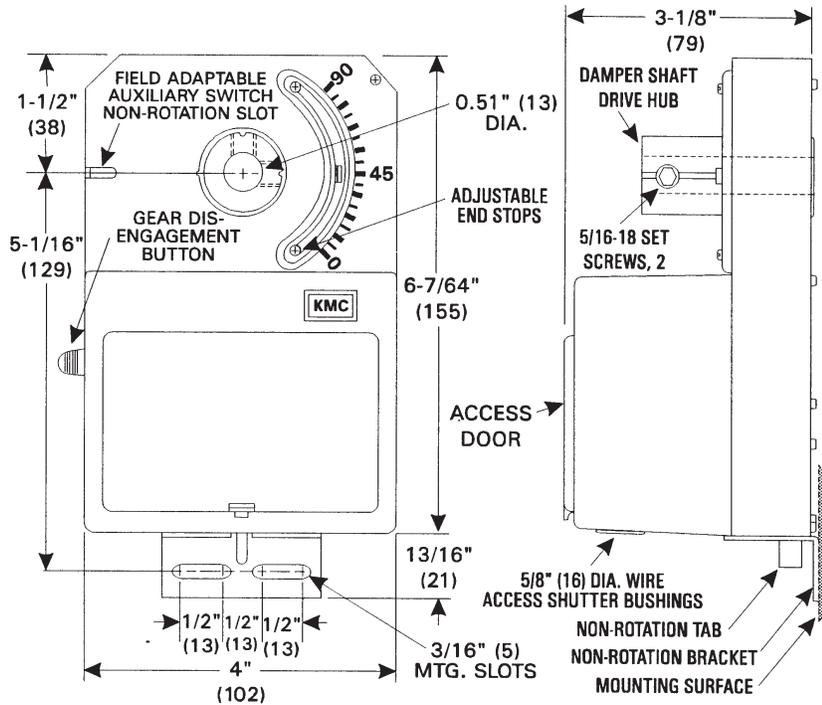


Features

- ◆ Proportional or tri-state inputs
- ◆ Efficient, durable, capacitor-driven fail-safe option with switch-selectable direction provides consistent torque in both powered and fail-safe modes
- ◆ Direct mounting to standard shaft sizes
- ◆ Adjustable end stops
- ◆ Gear disengagement button to enable manual positioning
- ◆ Potentiometer or voltage feedback options
- ◆ Built-in 18 VDC auxiliary power supply (MEP-5372 only) for CTE-5100 series thermostats or other system control devices

Accessories

CME-1002	Single auxiliary switch
CME-1004	Double auxiliary switch
HCO-1151	Weather enclosure
HFO-0011	3/8" shaft adaptor
HMO-1003	Replacement non-rotation bracket
HMO-4531	Wide non-rotation bracket
HMO-4518	Snap-in connector for 1/2" flexible metal conduit
HMO-4520	Compression connector for plenum cable
HMO-4526	Female connector for 1/2" conduit



DAMPER TYPE	Up to 1000 FPM	1000 to 2500 FPM	2500 to 3000 FPM
Opposed Blade without seals	3 in.-lb. / sq.-ft	4.5 in.-lb. / sq.-ft	6 in.-lb. / sq.-ft
Parallel Blade without seals	4 in.-lb. / sq.-ft	6.0 in.-lb. / sq.-ft	8 in.-lb. / sq.-ft
Opposed Blade with seals	5 in.-lb. / sq.-ft	7.5 in.-lb. / sq.-ft	10 in.-lb. / sq.-ft
Parallel Blade with seals	7 in.-lb. / sq.-ft	10.5 in.-lb. / sq.-ft	14 in.-lb. / sq.-ft

Specifications

Supply Voltage Class 2, 24 VAC (+20/-15%)
50/60 Hz, or 22-35 VDC

Supply Power 6 VA, 19 VA peak inrush

Control Input
Tri-state (See Supply Voltage)*
Proportional 2-10 VDC

Feedback 1-5 VDC in MEP-5372, 10K ohm, 1/3 W, pot. in MEP-5374

Auxiliary Power Supply
MEP-5372 Only 18 VDC @ 10 mA

Fail Safe
Direction Switch selectable
Charge/Delay One minute delay allows full charge before normal operation

Timing 35-50 seconds, load dependent, for 95° rotation

Torque 50 in.-lbs. (5.7 N•m) minimum

Angular Rotation 0-95°, stop adjustable, both ends

Motor Timing 45-60 seconds, load dependent for 95° rotation

Connections Wire clamp type; 14-22 AWG, copper

Weight 2.5 lbs. (1.1 kg)

Enclosure Flame-retardant plastic

Approvals UL Recognized

Temperature
Operating 0 to 120° F (-18 to 49° C)
Shipping -40 to 140° F (-40 to 60° C)

*NOTE: Tri-state MEP-5373/5374 models can also be wired for 2-position operation.

KMC Controls, Inc.

19476 Industrial Drive, New Paris, IN 46553
574.831.5250

www.kmcccontrols.com; info@kmcccontrols.com