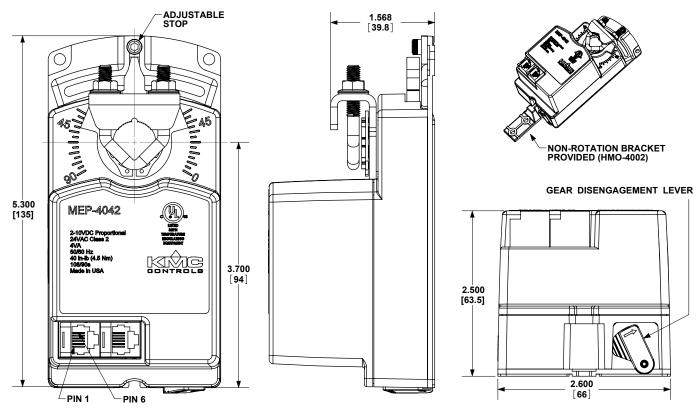


## Direct-Coupled ControlSet® Actuators (40/80 in-lb.)

MEP-4042/4842

# **Installation Guide**

Mounting



- 1. Ensure the damper can move freely through its entire range of motion, and fix any binding before installing the actuator. Turn the damper blade to its fully closed position.
- 2. Press (to the right) and hold the gear disengagement lever (see the illustration above), rotate the actuator to the fully closed position, and release the lever.
- NOTE: Depending on the damper-seal design, backing the actuator off its stop approximately 5° may provide tight damper shut-off.
- 3. Align the actuator and slide it onto the shaft.
- 4. Leaving a gap between the actuator and mounting surface to prevent any binding, finger-tighten the nuts on the V-bolt.
- 5. Insert the non-rotation bracket (HMO-4002 supplied or HMO-4001 "T" bracket available separately) into the slot at the base of the actuator. (See the illustration above).

- 6. Secure the non-rotation bracket with two (2) #8 or #10 self-tapping screws.
- 7. Evenly tighten the V-bolt nuts 30 to 35 in-lbs. on the MEP-4042, or 60 to 70 in-lbs. on the MEP-4842.
- 8. If desired, use a 7/64-inch hex key wrench to loosen and position the end-stop screw.
- NOTE: The two holes at the top of the actuator are NOT for use in direct-coupled applications. They are for remote mounting, such as with the optional HLO-4001 Crank Arm Kit (see the installation guide for the MEP-4000/4800 series actuators).

#### Connector Pin Voltage Reference

Connector Pins*	Function		
1 and 6	~ 24 VAC (phase side)		
2 and 5	Common		
3	17.4 VDC out @ 10 mA Max. (powers CTE-5201-16)		
4	Signal input (2–10 VDC)		
*See the pin designators in the lower left of the illustration above.			

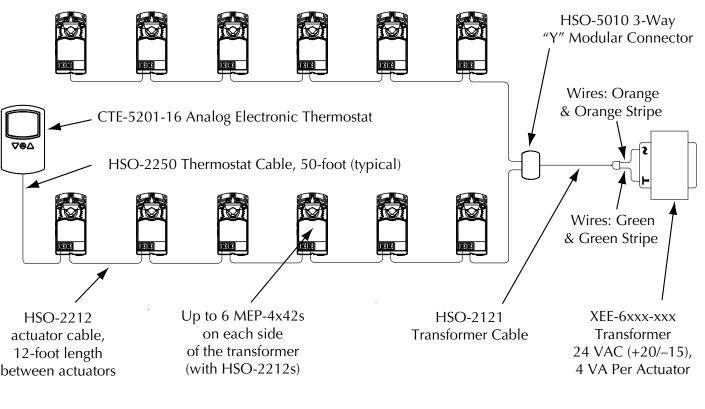
### Wiring

Use HSO-22**xx** cables to connect the actuators, using the modular connectors, as shown in the chart and sample application below.



Cable P/N	Cable Length	Max. # of Daisy-Chained MEP-4x42s		
		WithOUT HSO-5010	WITH HSO-5010	
HSO-2203	3 feet	6	12	
HSO-2206	6 feet	6	12	
HSO-2212	12 feet	6	12	
HSO-2220	20 feet	4	8	
HSO-2250	50 feet	2	4	

- NOTE: **The transformer must have an internal circuit breaker** such as the XEE-6311-050 **or** equivalent **2.25 A external fuse** in the secondary circuit!
- NOTE: See the table on the left for the maximum number of actuators that may be daisy chained for a given cable length. If an HSO-5010 "Y" connector is used (as shown below), the total number of actuators is doubled (with half on each side of the transformer). The example below shows 12 actuators with HSO-2212 cables and an HSO-5010.
- NOTE: For MEP-4042/4842 specifications, accessories, and additional important information, see the data sheet. See also the sample applications in the data sheets for the BAC-5841/5842 and BAC-5841-16/5842-16 of controllers.



#### Maintenance

No routine maintenance is required. The motors are permanently lubricated and all internal geartrain components are oil-impregnated. Careful installation will also ensure long term reliability and performance. KMC Controls, Inc. 19476 Industrial Drive New Paris, IN 46553 574.831.5250 www.kmccontrols.com; info@kmccontrols.com