Tri-State/Two-Position Actuators (25/45/90 in-lb.)

MEP-4201/4501/4901

Installation Guide

Mounting

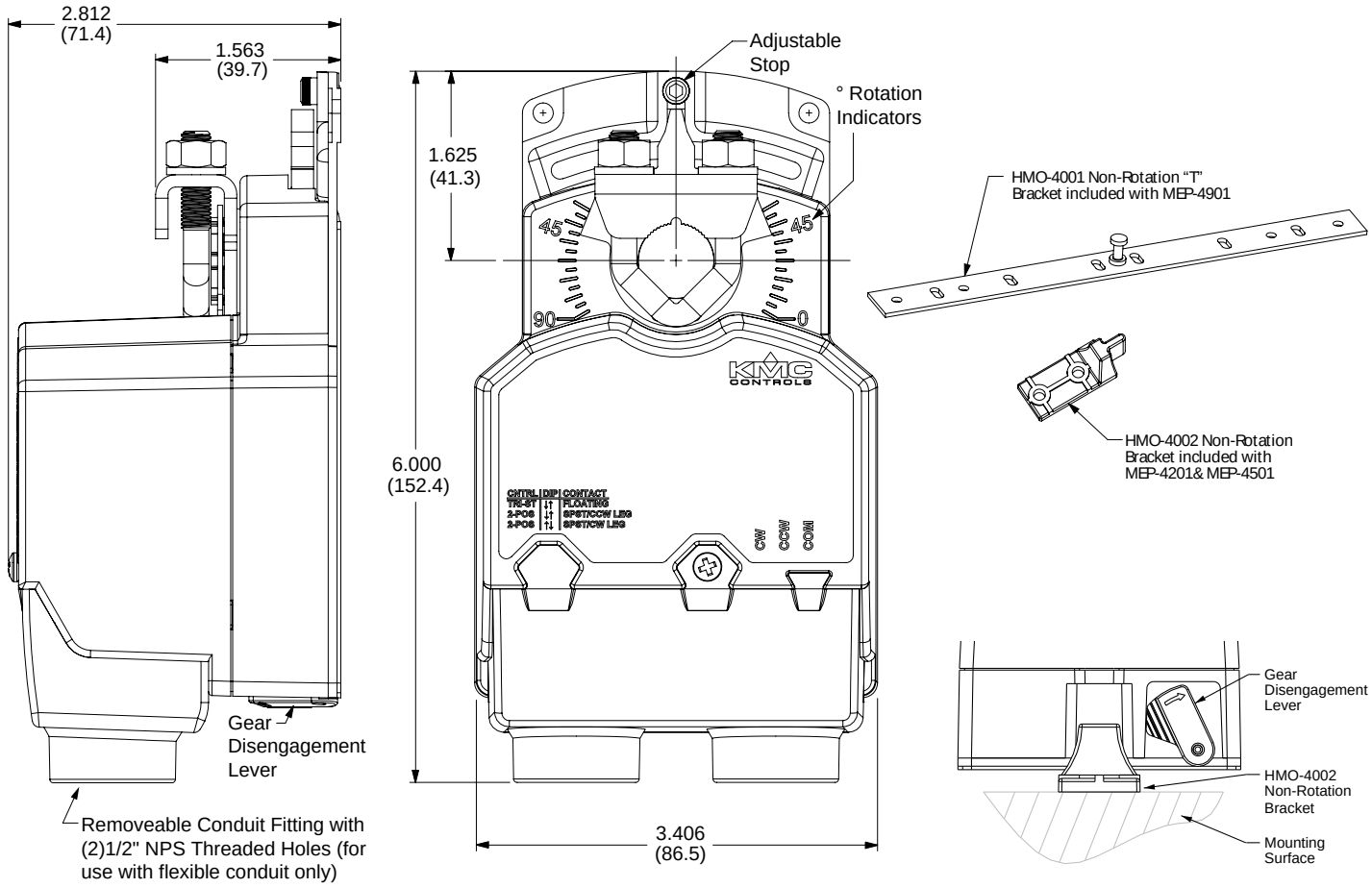

Illustration 1—Overview (Direct-Coupled Mounting)

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 Illustration 1), 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 provided (HMO-4001/4002, dependent on model) non-rotation bracket into the slot at the base of the actuator and secure the non-rotation bracket with two #8 or #10 self-tapping screws.
6. Evenly tighten the V-bolt nuts (30–35 in-lb. on MEP-4201 model or 60–70 in-lb. on MEP-4501/4901).
7. 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.) **For mounting to valves, see the appropriate valve installation guide.**

Wiring

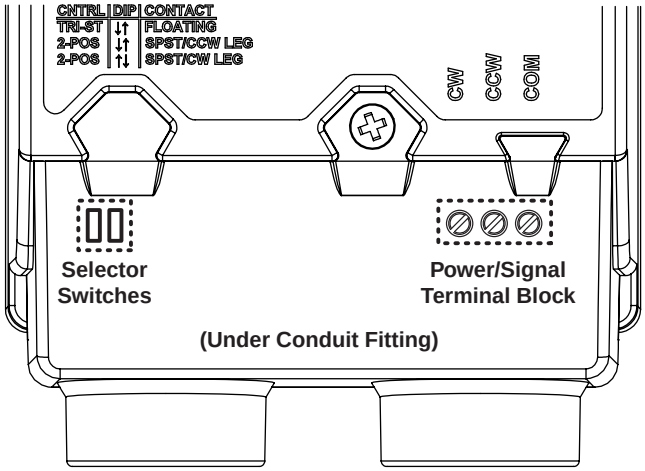

Illustration 2—Wiring Compartment

To wire the actuator:

1. Loosen the screw on the conduit fitting and lift up to remove the fitting.
2. Using a utility knife or drill, cut the hole plug to accept wiring or replace the plug with an application-specific fitting.

NOTE: The hole plugs (or similar fittings) protect internal components from debris. To guarantee an IP54 rating, install an HMO-4521 cord grip or HPO-4051 cable kit.

3. Thread wires through the plugged opening and connect to the terminal block according to the relevant application. (See Illustrations 3 through 5.) Adjust the selector switch as needed.
4. Reinstall the conduit fitting and tighten the screw.

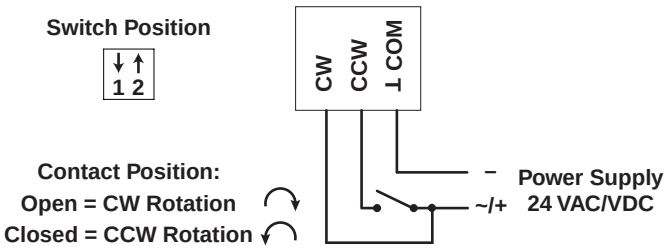

Illustration 3—Two-Position Control (3-Wire), CCW Leg

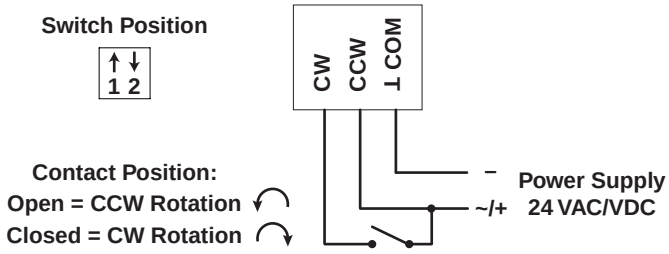

Illustration 4—Two-Position Control (3-Wire), CW Leg

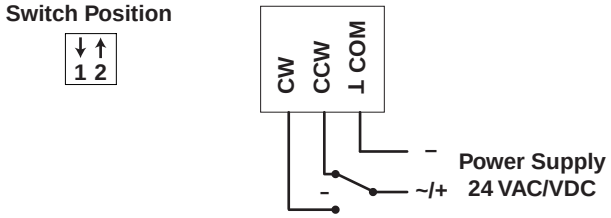

Illustration 5—Tri-State Floating Point Control

Maintenance

No routine maintenance is required. Careful installation will ensure long term reliability and performance.

More Information

For models, specifications, and additional information, see the MEP-4201/4501/4901 Series Data Sheet on the KMC web site.

For accessories, troubleshooting, torque selection, links to sample applications, and other information, see the MEP-4xxx Applications Guide on the KMC web site.

Important Notices

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