



SERIES 31 ELECTRIC ACTUATOR Installation & Operation Manual

INSTALLATION LOCATIONS

The Series 31 Electric actuator is rated Nema 4, 4X (IP67) and is intended for indoor and outdoor use including temporary submersion. It is not intended for explosion rated Hazardous Locations. The ambient temperature rating is -22°F to +140°F (-30°C to +60°C).

VALVE & MEDIUM TEMPERATURE

The Series 31 Electric actuator features ISO 5211 mounting patterns for 'direct mounting' to ball and butterfly valves without the need for brackets and couplings. Caution must be used when direct mounting actuators on valves with media temperatures exceeding 176°F (80°C). In these cases, brackets with couplers may be required to prevent the actuator temperature exceeding its rated limits.

INSTALLATION ON VALVE

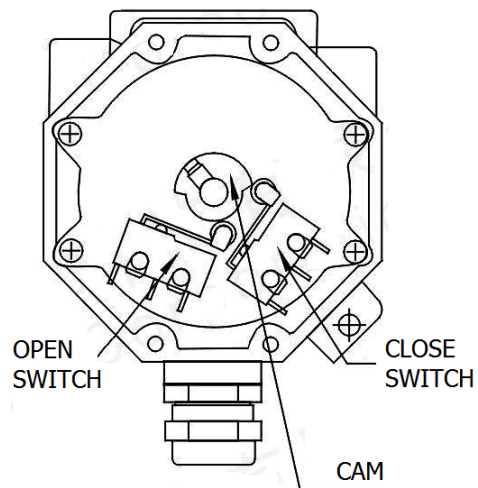
The Series 31 Electric actuator conforms to ISO 5211 valve mounting dimensions and is drilled & tapped F03, F04 and F05 and is equipped with an 11mm x 11mm female drive square. An 11mm x 9mm ISO adapter bushing is available to reduce the drive from 11mm to 9mm.

Mounting:

1. Manually close the valve.
 2. Manually crank the actuator to the closed position using the hex wrench provided.
 3. Mount the actuator on the valve.
 4. Manually crank the actuator to the valve full open then closed position while observing the valve and actuator making sure there are no obstructions during rotation and the valve and actuator maintain alignment. The open and close indicator on the top of the actuator indicates the valve's position.
 5. Refer to Flow Line Controls wiring diagrams FLCW3102 or FLCW3103. Connect the actuator to appropriate electric power and cycle it several times. The actuator's internal limit switches will stop the actuator when the valve is in the full open and full closed positions (adjust switch CAM if necessary).
- The actuator/valve assembly is ready for use.

ADJUSTING THE LIMIT SWITCHES

1. Remove the end cap screws and cap.
2. Manually crank the actuator to the full close position.
2. Loosen the set screw in the CAM and rotate it until CLOSE SWITCH trips (valve closed). The switch will click when it trips.
3. Tighten the set screw in the CAM.
4. Replace cap and tighten screws.



Maintenance

The Series 31 Electric actuator is factory lubricated with molybdenum-based grease and no additional lubrication is required. There are no maintenance requirements.

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