

BRAY RECOMMENDED SPECIFICATIONS

Series 70 Electric Actuators



The Electric Actuator shall be Bray Series 70 or approved equal.

The actuator shall be designed for 90° operation, provide easy access for field wiring and built to withstand line vibration and shock without failure. The enclosure shall be die-cast aluminum with polyester or Seacorr coating (as specified), provided with captive cover bolts, have two (2) conduit connections (one for power, one for control) and provided with a high visibility valve position display indication valve position throughout the full range of travel.

The motor shall be single phase, permanent split capacitor reversible induction type with Class "F" insulation, contain a built-in UL approved automatic reset thermal overload protector set at 275° F (135°C) and shall be 24 VAC, 120 VAC or 240 VAC, 50/60 Hz as specified. Additional DC motor and 3-phase 50/60 Hz AC motors shall be available upon request. Duty cycle shall be 25% for intermittent operation and 100% for continuous operation.

The actuator shall have a self-locking gear train system consisting of a worm and worm gear output drive mechanism which will hold the valve in position without the need for electro-mechanical braking system. Mechanical stainless steel travel stops and lock nuts shall be provided outside the actuator enclosure for ease of adjustment and shall limit travel of the actuator in either direction. A manual override hand wheel shall be provided to rotate the valve without electrical power and shall be operated without the use of extra tools or levers. An automatic power cut-out switch shall be provided to cut power to the actuator when the manual override is engaged.

Travel switches shall be SPDT Form C type, UL listed and CSA approved, 10A at 125/250 VAC and 1/2A at 125 VDC, pre-wired to a terminal block for ease of access and limit actuator travel in both directions. The cams for the travel switches shall be infinitely adjustable by finger touch or screw driver.

All actuators shall mount directly to the valve mounting flange and stem without the need for any brackets or couplings. Torque Limiting System, heater, Microprocessor Servo or Local Control Station shall be available if specified.

The Actuator shall have the following approvals and certifications: CE 98/37/EC, IEC IP65 Test Certification, ABS, Bureau Veritas, CSA, TUV IP 65. Waterproof enclosures shall be certified to UL, CSA and CE (NEMA 4, 4X, IP64) waterproof standards. Waterproof/explosion proof enclosures shall be certified to UL (NEMA 4, 4X, 7 & 9) hazardous locations.