

# Series 10 Part Turn Electric Actuator Specification

## PART 1: SCOPE

All requirements are for Series 10 Part Turn Electric Actuators and accessories.

## PART 2: MATERIALS

- Die-cast aluminum – baked powder coat finish
- Stainless steel
- BUNA-N
- Oil-impregnated bronze
- Hardened alloy steel

## PART 3: SPECIFICATIONS

Model	Cycle Time / 90°	ISO 5211 Mounting	Output Torque (in-lbs)	Duty Cycle	Amp Draw
10-015P	21 seconds	F07/F10x17	1320	70%	2.5 Amps
10-020P	21 seconds	F07/F10x17	1740	70%	2.5 Amps
10-030P	26 seconds	F10/F12x27	2580	70%	2.9 Amps
10-050P	26 seconds	F10/F12x27	4320	30%	5.0 Amps
10-060P	26 seconds	F10/F12x27	5220	30%	5.0 Amps
10-080P	31 seconds	F12/F14x36	6960	30%	7.3 Amps
10-120P	31 seconds	F12/F14x36	10440	30%	7.3 Amps
10-200P	93 seconds	F14/F16x36	17400	30%	7.3 Amps
10-300P	93 seconds	F14/F16x46	26040	30%	7.3 Amps

- **Voltage:** 110 VAC 1PH 50/60Hz
- **Conduit Entry:** Two (2) ¼" NPT
- **Enclosure:** NEMA Type 4X & 6
- **Conduit Entry:** Two (2) ¼" NPT
- **Maximum Ambient Temperature:** 150° F
- **End of Travel Switches:** Two (2) single pole double throw (2SPDT) Form C rated at 16 Amps
- **Motor:** Capacitor run, reversing
- **Auxiliary Switches:** Two (2) single pole double throw (2SPDT) Form C rated at 16 Amps
- **Torque Switches:** Two (2) single pole double throw (2SPDT) Form C rated at 16 Amps
- **Stall Protection:** Thermal overload embedded in motor wings
- **Corrosion Resistance:** Thermally bonded polyester powder coat finish

### 3.1 Standard Features

- Reversing, brushless, capacitor run, 110 VAC 1PH 50/60Hz motor
- Integral thermal overload motor protection with automatic reset
- Permanently lubricated, Rockwell hardened alloy steel gearing
- ISO 5211 Mounting configuration
- Two (2) ¼" NPT conduit entries
- Visual position indication
- Declutchable worm gear manual override
- General purpose die-cast aluminum enclosure meeting NEMA Type 4X & 6

- Thermally bonded powder coat finish
- CE Compliant

### **3.2 Approved Manufacturer**

Series 10 Part Turn Electric Actuators shall be provided by Asahi/America, Inc. of Lawrence, MA. Manufacturer must be ISO-9001 certified.

## **PART 4: OPTIONS**

### **4.1 Voltages**

Voltages, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Voltages shall be installed inside the actuator enclosure, and allow the actuator to operate with the required voltage. Available voltage options include 220/1 VAC, 380/3 VAC, 440/3 VAC, and 24 VDC.

### **4.2 Feedback Potentiometer (P)**

Feedback Potentiometer, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Feedback Potentiometers shall be installed inside the actuator enclosure, and provide a constant resistive value in Ohms from zero to 1K. Resistive value shall be detectable at any point during actuator cycle.

### **4.3 Positioner (C1)**

Positioner, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Positioner shall be installed inside the actuator enclosure, and provide throttling/modulating capability. Positioner shall be responsive to a current (mA) or voltage (VDC) signal, be pushbutton calibrated, and accept transmitter cards via plug and socket.

### **4.4 Transmitter (C3)**

Transmitter, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Transmitter shall be installed inside the actuator enclosure via plug and socket, and provide a current (mA) or voltage (VDC) return signal. Transmitter shall be provided with 3-relay contacts for open position, closed position and a fault condition. Relay contacts shall be rated for 1.0 Amp at 24 VDC, or 0.5 Amp for 120 VAC.

### **4.5 Cycle Length Control Module (CLC)**

Cycle Length Control Module, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Cycle Length Control Module shall be installed inside the actuator enclosure, and allow the extension of cycle times up to 10 minutes for the open and closed cycles.

### **4.6 Two-wire Control (2WC)**

Two-wire Control, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Two-wire Control shall be installed inside the actuator enclosure, and provide contact closure for cycling actuator with a dedicated 120 VAC power supply.

### **4.7 Failsafe Battery Back-up (FS)**

Failsafe Battery Back-up, where required, shall be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Failsafe Battery Back-up shall be installed inside the actuator enclosure, and provide power from the internally mounted batteries to cycle the actuator to a pre-determined position (open or closed) upon loss of main power. As a standard feature, the Failsafe Battery Back-up option shall include local controls with a lockable selector switch and status LED's for position, power and fault.

### **4.8 Explosion Proof Enclosure (XW)**

Explosion Proof Enclosures, where required, shall be provided and factory installed by Asahi America, Inc. in accordance with manufacturer's requirements. Explosion Proof Enclosures shall be for use in Class 1, Division 1 Classified areas and be CSA/ATEX certified.

**PART 5: INSTALLATION PROCEDURES**

Installation practices should follow all electrical codes and regulations, plant/jobsite codes and regulations, and be performed by adequately trained or licensed personnel. Installation practices should also follow all manufacturers guidelines, standards, and requirements set forth in Series 10 installation, operation and maintenance manuals. All accessories should be installed in accordance with the manufacturers requirements as well as any facility requirements.