

Series 94 Part Turn Electric Actuator Specification

PART 1: SCOPE

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

PART 2: MATERIALS

- Zytel FR50
- Stainless steel
- ABS
- BUNA-N
- PTFE

PART 3: SPECIFICATIONS

Model	Cycle Time / 90°	Output Torque (in-lbs)	Duty Cycle	Amp Draw
A94W	5 seconds	150	100%	0.5 Amps
B94W	5 seconds	300	75%	0.8 Amps

- **Voltage:** 120 VAC 1PH 50/60Hz
- **Conduit Entry:** Two (2) ½" NPT
- **Maximum Ambient Temperature:** 150° F
- **Switches:** Two (2) single pole double throw (2SPDT) Form C rated at 15 Amps

3.1 Standard Features

- Reversing, brushless, capacitor run, 120 VAC 1PH 50/60Hz motor
- Integral thermal overload motor protection with automatic reset
- Permanently lubricated gearing
- ISO mounting configuration (F05/14)
- Two (2) ½" NPT conduit entries
- Visual position indication
- Declutchable manual override
- General purpose Zytel FR50 enclosure meeting NEMA Type 4X (UL508)
- UL508 listed
- 120 VAC and 220 VAC motor bear the CE mark
- RoHS Compliant

3.2 Approved Manufacturer

Series 94 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 Mechanical Switches (M2)

V7 Mechanical switches, where required, should be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. V7 Mechanical switches shall be installed inside the actuator enclosure, and provide contact closure for the open position, the closed position, or both positions. V7 Mechanical switches are a SPDT Form C design and carry a 15 amp electrical rating at 250 VAC.

4.3 Heater and Thermostat (HT)

Heater and Thermostat, where required, should be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Heater and Thermostat shall be installed inside the actuator enclosure, and provide a constant heating source to minimize condensation.

4.4 RHM (RHM)

RHM (Relay Heater Module), where required, should be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Heater and Thermostat shall be installed inside the actuator enclosure, and provide two functions. First is to provide a constant heating source to minimize condensation. Second is to provide 2SPDT dry Form C contacts for the open position and closed position.

4.5 Feedback Potentiometer (P)

Feedback Potentiometer, where required, should 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.

4.6 Positioner (C1)

Positioner, where required, should 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.

4.7 Transmitter (C3)

Transmitter, where required, should 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.

4.8 Mechanical Brake (BR)

Mechanical Brake, where required, should be provided and factory installed by Asahi/America, Inc. in accordance with manufacturers requirements. Mechanical Brake shall be installed inside the actuator enclosure, and provide positive braking of the motor to eliminate oscillation.

4.9 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. This option is provided with 1SPDT Form C dry contact as a standard feature.

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 94 installation, operation and maintenance manuals. All accessories should be installed in accordance with the manufacturers requirements as well as any facility requirements.