Specifications:

Power Supply
- AC 24 V (19.2 to 30 V) at 50/60 Hz; Class 2, 24.6 VA Running, 7.7 VA Holding Position
- DC 24 V (21.6 to 26.4 V): Class 2, 17.6 W Running, 2.8 W Holding Position

Auxiliary Switch Rating
- Two Single-Pole, Double-Throw (SPDT), Double-Insulated Switches with Gold Flash Contacts:
  - AC 24 V, 50 VA Pilot Duty
  - Transformer Sizing 25 VA Minimum per Actuator

Spring Return
- Direction is Selectable with Mounting Position of Actuator:
  - Side A, Actuator Face Away for CCW Spring Return
  - Side B, Actuator Face Away for CW Spring Return

Rotation Range
- Adjustable from 30 to 90° CW or CCW with Optional Adjustable Stop Kit; Mechanically Limited to 90°

Electric Stall Detection
- Protects from overload at all angles of rotation

Torque
- 177 lb·in. (20 N·m)

Time: 90° of Rotation
- Power On (Running) 24 to 57 Seconds for 0 to 177 lb-in (0 to 20 N-m) at All Operating Conditions; 35 Seconds Nominal at Full Rated Load
- Power Off (Returning) 11 to 15 Seconds for 0 to 177 lb-in (0 to 20 N-m) at Room Temperature; 35 Seconds Maximum for 0 to 177 lb-in (0 to 20 N-m) at -22°F (-30°C)
- 130 Seconds Maximum for 0 to 177 lb-in (0 to 20 N-m) at -40°F (-40°C)

Enclosure
- NEMA 2, IP54 - for all mounting directions

Manual Override
- Hex Head Screw

Ambient Conditions
- Standard Operating: -40 to 131°F (-40 to 55°C); 90% RH Maximum, Noncondensing
- Storage: -85 to 185°F (-65 to 85°C); 95% RH Maximum, Noncondensing

Electrical Connections
- 48 in. (1.2 m) Halogen-Free Cable with 18 AWG (0.75 mm²) Wire Leads

Conduit Connections
- Integral Connectors for 3/8 in. Flexible Metal Conduit

Mechanical Connections
- Round Shafts: 1/2 to 3/4 in. or 12 to 19 mm
- Square Shafts: 3/8 and 1/2 in. or 10, 12, and 14 mm

Life Cycle
- 60,000 Full stroke cycles (1,500,000 repositions)

Noise Rating
- Running: < 66 dBA at 39-13/32 in. (1 m)
- Holding: < 18 dBA at 39-13/32 in. (1 m)
- Returning: < 66 dBA at 39-13/32 in. (1 m)

Dimensions
- 10” (L) x 4” (W) x 3-3/16” (H)

Weight
- 6.4 lb (2.9 kg)

Agency Certification
- UL Listed, CCN XAPX, File E27734; to UL 60730-1A: 2003-08, Ed. 3.1, Automatic Electrical Controls for Household and Similar Use; and UL 60730-2-14: 2002-02, Ed. 1, Part 2, Particular Requirements for Electric Actuators.

Wiring: (Cable)

On/Off

![Wiring Diagram]

NOTE: WARNING: All DS-180 Series actuators are designed for use only in conjunction with operating controls. Where an operating control failure would result in personal injury and/or loss of property, it is the responsibility of the installer to add safety devices or alarm systems that protect against, and/or warn of, control failure.

To avoid excessive wear or drive time on the motor, use a controller and/or software that provides a time-out function to remove the signal at the end of rotation (stall).

The performance specifications are nominal and conform to acceptable industry standards. For application at conditions beyond these specifications, consult the nearest Bray office. Bray controls shall not be liable for damages resulting from misapplication or misuse of its products.