



5
Year
Warranty

DS24-70-(A) — Submittal/Technical Data

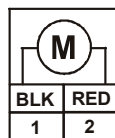
06/30/22

70 lb-in. — Spring Return — On/Off — Auxiliary Switch Option

Specifications:

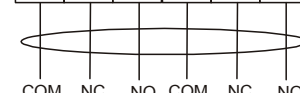
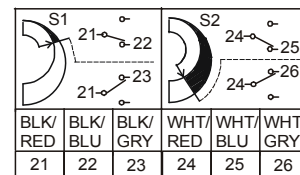
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|--------------------------|---|---|
| Power Supply | AC 24 V (AC 18 V to 30 V) at 50/60 Hz: Class 2 or SELV, 6.1 VA Running, 1.2 VA Holding Position DC 24 V (DC 21.6 V to 28.8 V): Class 2 or SELV, 3.5 W Running, 0.5 W Holding Position Minimum Transformer Size: 7 VA per Actuator | |
| Auxiliary Switch Rating | (-A) Models) Two Single-Pole, Double-Throw (SPDT), Double-Insulated Switches with Gold over Silver Contacts: AC 24 V, 50 VA Pilot Duty | |
| Spring Return | Direction is Selectable with Mounting Position of Actuator: Actuator Side A is away from damper or valve: CCW Spring Return Actuator Side B is away from damper or valve: CW Spring Return | |
| Equipment Rating | Class 2 or Safety Extra-Low Voltage (SELV) | |
| Rotation Range | Maximum Full Stroke: 95° Adjustable Stop: 35 to 95° Maximum Position | |
| Electric Stall Detection | Protects from overload at all angles of rotation | |
| Torque | 70 lb-in. (8 N-m) | |
| Time: 90° of Rotation | Power On (Running) 55 to 71 Seconds for 0 to 70 lb-in (8 N-m) Load, at All Operating Conditions 60 Seconds Nominal at Full Rated Load (0.25 rpm) Power Off (Spring Returning) 13 to 26 Seconds for 0 to 70 lb-in (8 N-m) Load, at Room Temperature 21 Seconds Nominal at Full Rated Load, 39 Seconds Maximum with 70 lb-in (8 N-m) Load at -4°F (-20°C) 108 Seconds Maximum with 53 lb-in (6 N-m) Load at -40°F (-40°C) | |
| Enclosure | NEMA 2 (IP54) for all mounting orientations | |
| Manual Override | Hex Head Screw | |
| Ambient Conditions | Standard Operating | -40 to 140°F (-40 to 60°C); 90% RH Maximum, Noncondensing |
| | Storage | -40 to 185°F (-40 to 85°C); 95% RH Maximum, Noncondensing |
| Electrical Connections | 48 in. UL 758 Type AWM Halogen-Free Cable with 18 AWG (0.85 mm ²) Conductors & 0.25 in. (6 mm) Ferrule Ends | |
| Conduit Connections | Integral Connectors for 3/8 in. (10 mm) Flexible Metal Conduit | |
| Mechanical Connections | Round Shafts | 5/16 to 5/8 in. (8 to 16 mm) |
| | Square Shafts | 1/4 to 1/2 in. (6 to 12 mm) |
| Life Cycle | 60,000 Full Stroke Cycles with 70 lb-in. (8 N-m) Load — 1,500,000 Repositions with 70 lb-in. (8 N-m) Load | |
| Noise Rating | Running | < 47 dBA at 70 lb-in (8 N-m) Load, at a Distance of 39-13/32 in. (1 m) |
| | Holding | < 20 dBA at a Distance of 39-13/32 in. (1 m) |
| | Spring Returning | <52 dBA at 70 lb-in. (8 N-m) Load - (All at a Distance of 39-13/32 in. (1 m)) |
| Dimensions | 6.33 (L) x 3.90 (W) x 2.26 (H) | |
| Weight | 3.43 lb. (3.8 lb w/ Aux. Switches) | |
| 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)



⊥ ~ AC 24 V 50/60
- + DC 24 V

(-A) Auxiliary Switches



COM NC NO COM NC NO

NOTE: WARNING: All DS-70 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.

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.