



5
Year
Warranty

DS120-70-(A) — Submittal/Technical Data

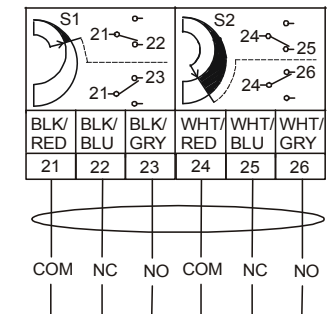
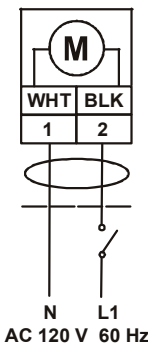
06/30/22

70 lb-in. — 120 V — Spring Return — On/Off — Auxiliary Switch Option

Specifications:

Power Supply	AC 120 V (AC 102 V to 132 V) at 60 Hz: 0.05 A Running, 0.03 A Holding Position	
Auxiliary Switch Rating	(-A) Models) Two Single-Pole, Double-Throw (SPDT), Double-Insulated Switches with Gold over Silver Contacts: AC 120 V, 5.8 A Resistive, 1/4 hp, 275 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	
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 (.85 mm ²) Conductors & .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	4.15 lb.	
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)



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.