



5
Year
Warranty

DMS24-70-(A) — Submittal/Technical Data

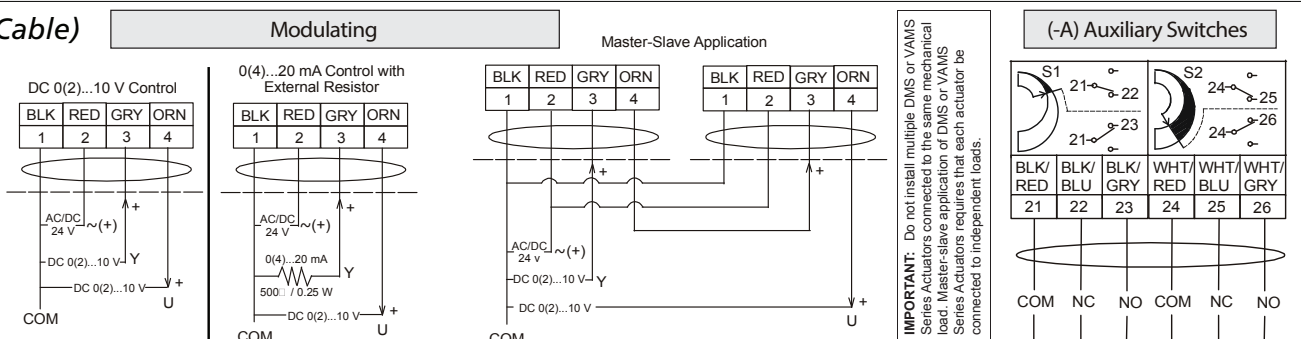
06/30/22

70 lb-in. — Spring Return — Modulating — Auxiliary Switch Option

Specifications:

Power Supply	AC 24 V (AC 19.2 V to 28.8 V) at 50/60 Hz: Class 2 or SELV, 7.9 VA Running, 5.5 VA Holding Position DC 24 V (DC 21.6 V to 28.8 V): Class 2 or SELV, 3.5 W Running, 1.9 W Holding Position Minimum Transformer Size: 8 VA per Actuator	
Input Signal	Factory Set at DC 0 to 10 V, CW Rotation with Signal Increase; Selectable DC 0 (2) to 10 V or 0 (4) to 20 mA with Field Furnished 500 Ohm, 0.25 W Minimum Resistor; Switch Selectable Direct or Reverse Action with Signal Increase	
Control Input Impedance	100k Ohms, Current Input: 500 Ohms with Field Furnished 500 Ohm Resistor	
Feedback Signal	DC 0 (2) to 10 V for Desired Rotation Range up to 95°, Corresponds to Rotation Limits, 0.5 mA at 10 V Maximum	
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) 150 Seconds Constant for 0 to 70 lb-in (8 N-m) Load, At All Operating Conditions Power Off (Spring Running) 17 to 25 Seconds for 0 to 70 lb-in (8 N-m) Load, at Room Temperature 22 Seconds Nominal at Full Rated Load, 94 Seconds Maximum with 70 lb-in (8 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	< 35 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)



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.