

## DC(M)-310 Series — Submittal/Technical Data

310 lb-in. — Non-Spring Return — On/Off, Floating & Modulating — Auxiliary Switches

Technical Specifications - DC(M)24-310 Series Actuator			
Type	Actuator Models	DC24-310-T(-A)	DCM24-310-T(-A)
		Non-Spring Return - Floating, Time Out Features with optional Auxiliary Switches (-A)	Non-Spring Return - Modulating with optional Auxiliary Switches (-A)
Electrical	Torque	310 lb-in. (35 Nm)	
	Operating Voltage	24 VAC ±20% at 50/60 Hz	
	Power Consumption	7 VA, 7W	8 VA, 8W
	Control Signal	N/A	0 to 10 VDC
	Control Impedance	N/A	100k Ohm
	Input Signal	N/A	Y (wires 8-2) DC 0...10 V (Max. permissible input voltage DC 35 V)
	Feedback	Contact Bray	0 to 10 VDC
	Positioning Signal	N/A	DC 0...35 V at Offset $U_0 = 0...5$ V and Span $\Delta U = 2...30$ V
	Feedback Signal	N/A	DC 0 to 10 VDC
	Dual Auxiliary Switch	Standard Cable - AC, 6 A Resistive, AC 2 A General Purpose	
	Voltage	Standard Cable - 24 to 250 VAC	
	Switch Range	Switch A - 0 to 90° with 5° Intervals (Recommended Range Usage 0 to 45°) Factory Setting 5°	
		Switch B - 0 to 90° with 5° Intervals (Recommended Range Usage 45 to 90°) Factory Setting 85°	
	Stall Protection	Yes	
Operation	Electrical Connection	3 ft. (0.9 m) Pre-cabled - AWG 18	
	Equipment Rating	Class 2 According to UL, CSA - Class III per EN60730	
	Manual Override	External Push Button	
	Runtime for 90° of Rotation	90 seconds, constant for all operating conditions	
	Rotation Timing	150 sec. at 50 Hz (125 sec. at 60Hz)	
	Rotation Range	Nominal Angle of Rotation 90°, mechanically limited to 95° ± 2°	
	Cycle Life	Designed for 60,000 full stroke cycles	
Environmental	Mechanical Connections	Round Shafts - 3/8 to 1 in. (9.5 to 25.4 mm) diameter Square Shafts - 1/4 to 5/8 in. (6 to 18 mm) Minimum Shaft Length - 3/4 (20 mm)	
	Enclosure	IP54 as per EN 60 529	
	Ambient Conditions (Non-Condensing)	Operating — -25 to 130°F (-32 to 55°C); 0 to 95% RH, non-condensing Storage — -40 to 158°F (-40 to 70°C); 0 to 95% RH, non-condensing	
	Audible Noise Rating	<45 dBA at 1 m	
	Dimensions	(L) 11.8 x (W) 3.9 x (H) 2.9 in. (300 x 100 x 67.5 mm)	
Conditions	Weight	4.4 lb (2 kg)	
	Agency Certifications	UL listed to UL873-cUL certified to Canadian Standard C22.2 No. 24-93 CE conformity: Electromagnetic compatibility 2004/108/EC-Low-voltage directive 2006/95/EC	
	Warranty	5 Years limited from time of shipment.	

Warning - These 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.

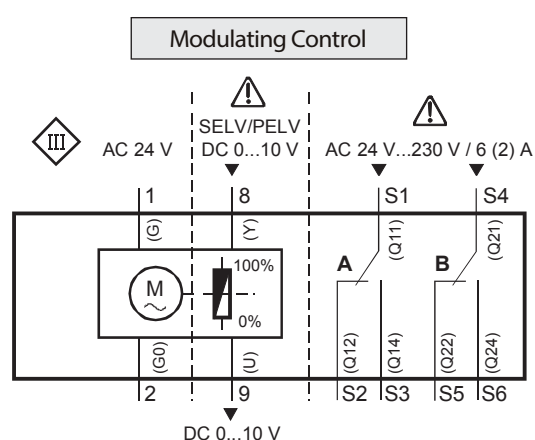
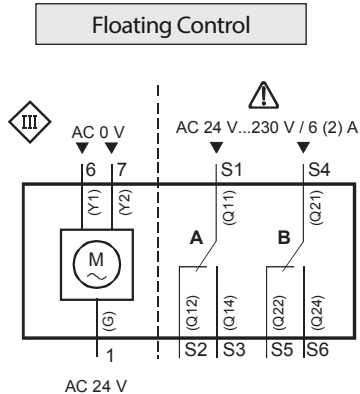
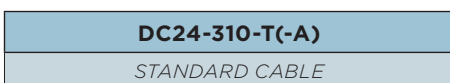
To avoid excessive wear or drive time on the motor, use a controller and/or software that provides a time-out function to remove the signal at the end of rotation (stall).

Disclaimer - 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.

## Wiring

KEY	Cable			Function
	No.	Code	Color	
	1	G	Red (RD)	AC 24 V Supply (SP)
	2	G0	Black (BK)	Neutral (SN)
	6	Y1	Violet (VT)	Control Signal Clockwise
	7	Y2	Orange (OG)	Control Signal Counterclockwise
	8	Y	Gray (GY)	0 to 10 VDC Input Signal
	9	U	Pink (PK)	Output for 0 to 10 VDC Position Indication
	P1	a	White/Red (WH RD)	Feedback 0 to 100% P1 – P2
	P2	b	White/Blue (WH BU)	Feedback Common
P3	c	White/Pink (WH PK)	Feedback 100 to 0% P3 – P2	

Auxiliary Switch - Factory Installed			
S1	Q11	Gray/Red (GY RD)	Switch A Common
S2	Q12	Gray/Blue (GY BU)	Switch A - N.C.
S3	Q14	Gray/Pink (GY PK)	Switch A - N.O.
S4	Q21	Black/Red (BK RD)	Switch B Common
S5	Q22	Black/Blue (BK BU)	Switch B - N.C.
S6	Q24	Black/Pink (BK PK)	Switch B - N.O.



## Dimensions

