Modulating Control Actuator

Key Features

- Reliable Compact Low Profile Design
- Based on Proven Low Profile Actuator Designs with Qualification Pedigree
- Constructed of Lightweight Machined Aluminum
- Constant Position Feedback Control
- Industry Standard D38999 Electrical Connector



Product Overview

ITT Aerospace Controls' Modulating Control Actuator (MCA) is the next step in actuation from the leader in Aerospace Actuation. The MCA allows position control to any position from zero to ninety degrees. Using a non-back drivable gear system, the MCA efficiently moves loads up to 35 inch pounds (4.0 Nm) of torque and completes full travel from zero to ninety degrees in under ten seconds. The MCA can be configured to control system flow or mechanical position with a milliamp current loop or analog voltage input. The MCA provides analog voltage feedback between one and nine DC volts to positively identify the location of the actuator output shaft to +/- 1 degree. ITT's MCA meets RTCA-DO160 requirements and operates with temperatures from -65°F to 165°F (-55°C to 74°C). Weighing less than 1.5 lbs (.68kg), the MCA is the ideal choice to drive or control valve sizes from half inch to three-inch line sizes.



ITT **Aerospace Controls** | 28150 Industry Drive | Valencia, CA 91355, USA Phone: 661-295-4000 | Fax: 661-294-1750 Email: sales.aerospace@itt.com | Web: www.ittaerospace.com

Specifications

Design Actuator Type	Brushless DC, Control Actuator
Mounting Interface	V-Band Mount
Electrical Connector	D38999/21YC8PN
Supply Voltage	28 VDC
Supply Current	0.4 Amp Maximum 0.1 Amp Maximum Quiescent
Environmentally Sealed	14 psig (1.0 bar)
Control	
Position Control	4 to 20 Amp Proportional to Valve Position (4mA — Fully Open, 20mA Fully Closed)
	Greater than 20 mA (Fully Closed)
Feedback Signal	1-9 VDC Proportional to Valve Position (1 VDC — Open, 9 VDC Closed)
Shaft Rotation	90 degrees
Speed	12 degrees per second Less than 10 seconds full travel
Rated Torque	35 in-lbs. (4.0 Nm)
Ambient Temperature	-67° F to $+165^{\circ}$ F (-55 $^{\circ}$ C to $+74^{\circ}$ C)
Weight	1.5 lbs. Maximum (.68 Kg Maximum)
Bonding Resistance	5 milliohm maximum from electrical connector housing to mounting flange.
Duty Cycle	Intermittent. Two full travel cycles per minute.

Product Dimensions





ITT **Aerospace Controls** | 28150 Industry Drive | Valencia, CA 91355, USA Phone: 661-295-4000 | Fax: 661-294-1750 Email: sales.aerospace@itt.com | Web: www.ittaerospace.com