
**MODULATING DIGITAL CONTROL (MODEL 42-109)
GENERAL SPECIFICATIONS**

Output Thrust and Timing	1,000 lbs., 4.2 sec/in
Stroke Range	5 to 18 inches
Drive Power	120 V ac, single-phase, 50 or 60 Hz, 1.5 A 240 V ac, single-phase, 50 or 60 Hz, .75 A
Weight	Approx. 75–89 lbs., depending on selected options.
Operating Conditions	-40° to 85°C (-40° to 185°F) 0 to 99% relative humidity
Communication Interface	HART® protocol and local pushbutton/LED panel and RS-232 Serial commands.
Demand Input Signal Range	4–20 mA, 1–5 V dc
Minimum Step	0.1% of span
Hysteresis	0.25% of span at any point.
Demand Input Signal Linear Characterization	Linear: Drive output shaft moves proportionally to the input signal. Square: Drive output shaft moves proportionally to the square of the input signal. Custom: 20 segment configurable curve fit
Position Feedback Signal	4–20 mA
Isolation	Demand input and position Feedback signals are isolated from ground and the ac power line. Signal buffering provides 24 V dc isolation between the Demand and Feedback signals.
Action on Loss of Power	Output shaft stays in last position.
Action on Loss of Input Signal (Power on)	Stay in place or runs to any preset position (configurable).
Over-thrust Protection	If the output thrust of the drive exceeds 150% of the drive rating, the motor will shut off (feature can be enabled/disabled).
Stall Protection	If the motor tries to run in one direction for more than 300 seconds (configurable from 30 to 300 seconds), the motor will shut off.
Over-travel Limit Switches	Two Form C (Retract and Extend) provide over-travel protection.
Auxiliary Switches (Field adjustable)	Two Form C rated for 1 A, 250 V ac.
Handswitch	Permits local electrical operation, independent of Demand input signal.
Handwheel	Provides manual operation without electrical power.
Motor	120 V ac, single-phase, no burnout, non-coasting. Capable of 60 starts per minute.
Enclosure	Precision-machined aluminum alloy, painted with corrosion-resistant polyurethane paint, to provide a rugged, dust-tight, weatherproof enclosure designed to meet NEMA 4X standards.
Mounting Orientation	Can be mounted in any orientation.