

Electric Actuator

ALN SERIES

GAC's ALN linear actuators provide highly accurate precise positioning for closed loop control with a minimum number of moving parts, prolonging the life of the actuator. With no sliding parts and totally sealed, reliability is outstanding and no maintenance is necessary. Engine applications include large block pumps, dual medium carburetors, and some large carburetors.

The linear actuator provides pushing force from its output shaft to control engine fuel in an electric engine governor system. The ALN is a proportional solenoid actuator where the output shaft position varies proportionally with current strength. An integral return spring provides a fail-safe feature, setting the output shaft to the zero fuel position when power is turned off.



FEATURES

- Low Cost, Compact Design
- Fast Response
- Precise Repeatability
- Provide a quick response time and can be used for many different applications
- Completely self-contained
- Integral return spring returns output shaft to zero fuel position if battery power is lost
- Operate in any position, are not gravity sensitive
- Compatible with GAC's standard speed control units
- Maintenance Free
- Requires only a firm mounting surface, appropriate linkage to the fuel control and electrical connection to the speed control unit

OPTIONAL HARDWARE

KT130 Linkage Installation Kit



BR400 Rod End Bearings
BR200 • 6mm Thread
• 1/4"-28 Thread



AMP P/N 2-520184-2
Mating Connector



SPECIFICATIONS

PERFORMANCE

	ALN025	ALN050
Operating Work	0.25 ft·lb (0.34 Nm)	0.50 ft·lb (0.34 Nm)
Maximum Force	6.5 lbF (28.9 N)	13.0 lbF (57.8 N)
Operating Stroke	0.9 in. (22.86 mm)	
Response Time	35 msec	

ENVIRONMENTAL

Operating Temperature	-40 to 200 °F (-40 to 95 °C)
Relative Humidity	Up to 100%
Vibration	20 g @ 20 to 500 Hz
Shock	20 g @ 11 msec
All Surface Finishes	Fungus Proof and Corrosion Resistant
Sealing	Oil, Water, and Dust Resistant

PHYSICAL

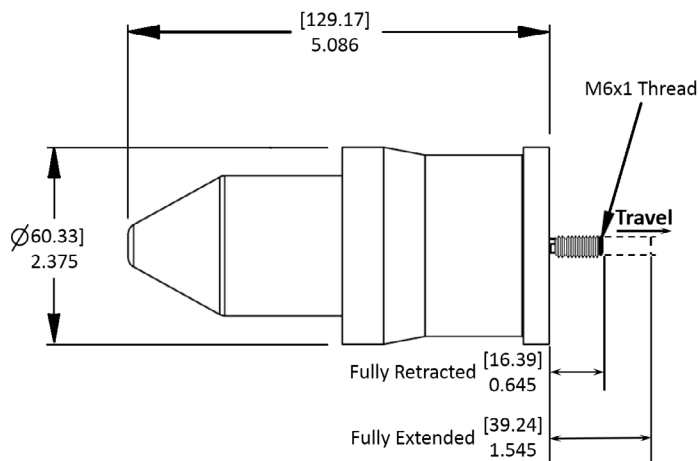
Dimensions	See DIMENSIONS below	
Weight	ALN025	2.5lb (1.1 kg)
	ALN050	4.3lb (2.0 kg)

ELECTRICAL

Operating Voltage (Dedicated Coil)	12 or 24 VDC ±20%	
Nominal Operating Current	1.6 A @ 12 VDC	
	0.8 A @ 24 VDC	
Maximum Continuous Current	3.8 A @ 12 VDC	
	1.8 A @ 24 VDC	
Coil Resistance	ALN025-12	1.8 ± 0.2 Ohms
	ALN025-24	7.3 ± 0.2 Ohms
	ALN050-12	1.9 ± 0.2 Ohms
	ALN050-24	7.7 ± 0.2 Ohms
Connection	18 AWG (0.8 mm ²) leads with length of 4 in. (102 mm) and insulated tab terminals	

DIMENSIONS

ALN025



ALN050

