

ELECTROMECHANICAL LINEAR ACTUATORS

GUN/TURRET/RADAR DRIVES FOR LAND SYSTEMS



Moog's electromechanical linear actuators are designed to meet or exceed the demanding requirements of new and existing land system gun, turret, and radar applications through world-class stabilization and pointing accuracy. These actuators are used for modern main battle tanks, new combat vehicle platform control applications, howitzer gun laying systems, elevation of heavy payloads, and for the leveling of military ground vehicles such as trailers, light trucks, and palleted weapon systems.

Features include a brushless DC motor which can be integrated in a 28VDC system up to a 600VDC system. A roller screw, ball screw, or acme screw is used for linear output. The actuator features a failsafe clutch, manual drive, and no-back.

Moog is a worldwide designer, manufacturer, and integrator of custom precision motion control and stabilization systems for the defense industry. Our electromechanical rotary and linear actuators are ideal for new systems, upgrades to older hydraulic systems, and for sustainment service.

KEY FEATURES

- Brushless DC motor (28VDC to 600VDC options)
- Integrated brushless resolver or absolute encoder for motor commutation
- Roller screw, ballscrew, or acme screw options for linear output
- Integrated failsafe 18VDC to 32VDC clutch
- Integrated manual drive with custom input ratios
- No-back (optional)
- Single or tandem operational capability
- Design, tested, and qualified to MIL-STD 810E and MIL-STD 461E
- MIL-Spec electrical connectors
- Integrated accumulator and equilibrator compensates for high unbalance of weapon (optional)
- Integrated on-board force sensor and absolute load position sensor (optional)



Credit: U.S. Marine Corps/Cpl. Adam Henke



Credit: U.S. Army



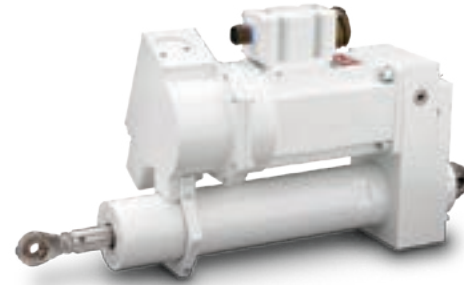
Credit: U.S. Marine Corps/Pvt. Robert Bliss

INFANTRY FIGHTING VEHICLE ELEVATION ACTUATOR

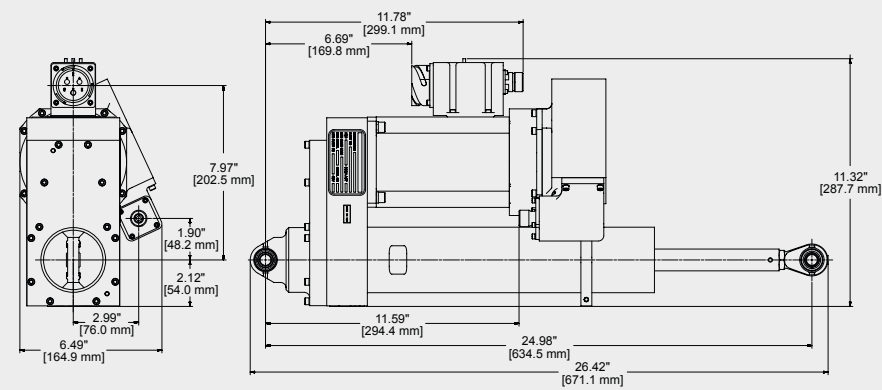
C6L265M

PERFORMANCE

Features	Specifications
Peak force	4000 lbf (17.8 kN)
Rated force	1350 lbf (6.0 kN)
Rated speed	4.6"/s (116 mm/s)
No load speed	5.8"/s (147 mm/s)
Clutch holding force	3360 lbf (14.9 kN)
Supply voltage	24VDC, 48VDC, 270VDC, or 650VDC
Stiffness	125 klbf/in. (21.9 kN/mm)
Backlash	0.007" (0.178 mm)
Weight	67 lbs (30.4 kg)
Retracted length	19.78" (502 mm)
Extended length	30.18" (767 mm)



ARCHITECTURAL AND DIMENSIONAL DRAWING



GUN ELEVATION ACTUATOR

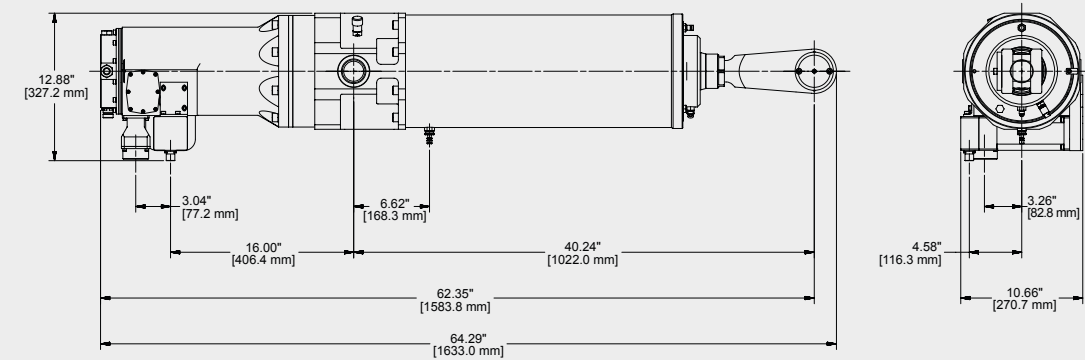
C116L422E

PERFORMANCE

Features	Specifications
Peak power	23.1 hp (17.3 kW)
Peak force	84,000 lbs (374 kN)
Rated force	26,000 lbs (116 kN)
No load speed	5.3"/s (135 mm/s)
Max. equilibrium force	26,000 lbs (116 kN)
Supply voltage	270VDC or 650VDC
Peak current	160A @ 270VDC
Weight	602 lbs (273 kg)
Retracted length	62.4" (1585 mm)
Stroke	16.6" (422 mm)



ARCHITECTURAL AND DIMENSIONAL DRAWING



PLATFORM ELEVATION ACTUATOR

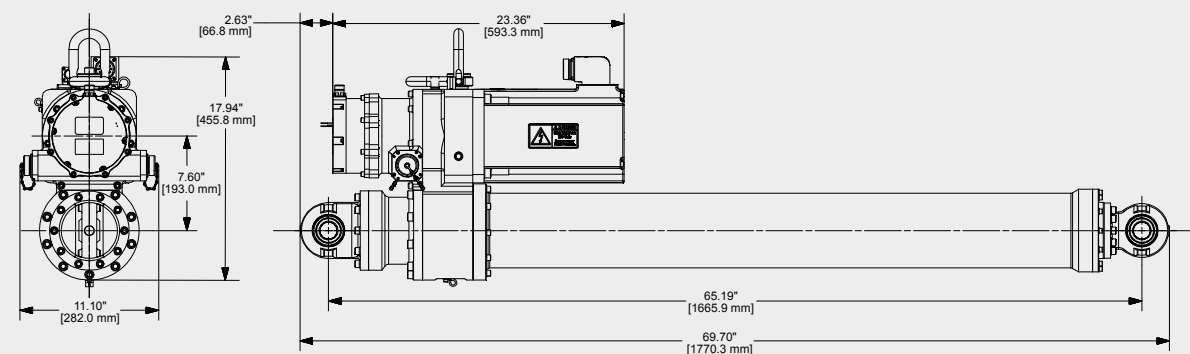
CC16471

PERFORMANCE

Features	Specifications
Peak force	23.3 klbf (103.6 kN)
Rated force	14.7 klbf (65.4 kN)
Rated speed	6.6"/s (167.6 mm/s)
No load speed	10.6"/s (269.2 mm/s)
Minimum static holding force (clutch engaged)	28.7 klbf (127.7 kN)
Supply voltage (nom.)	600VDC
Total stroke	43.6" (1107.4 mm)
Weight	465 lbs (1023 kg)



ARCHITECTURAL AND DIMENSIONAL DRAWING

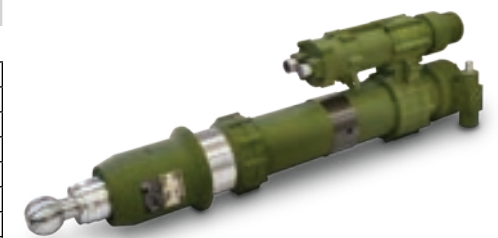


PLATFORM LEVELING ACTUATOR

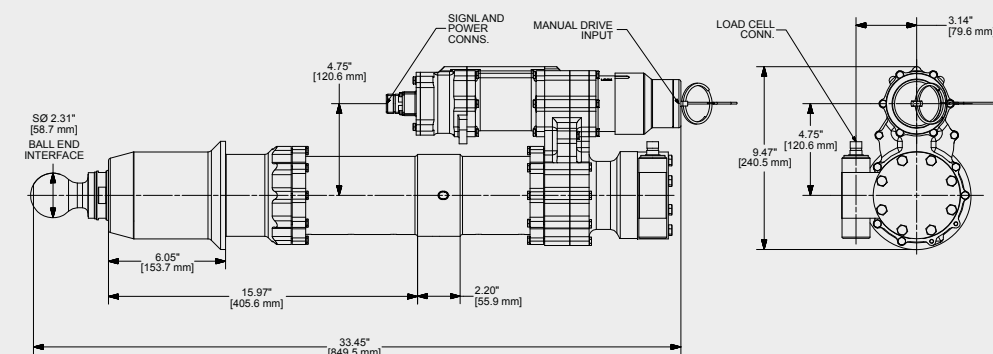
CA86754

PERFORMANCE

Features	Specifications
Peak force	4,580 lbf (20.4 kN)
Rated force	1,260 lbf (5.6 kN)
Rated speed	0.52"/s (13.2 mm/s)
No load speed	2.20"/s (55.9 mm/s)
Comprehensive structural capacity	13.7 klbf (70.0 kN)
Supply voltage (nom.)	600VDC
Total stroke	15.0" (381 mm)
Weight	95 lbs (209 kg)



ARCHITECTURAL AND DIMENSIONAL DRAWING



EQUIPPING THOSE WHO DEFEND FREEDOM

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