



Miniature Linear Actuator

Patented Technology

Model	DC150	
Lead (Nut)	Available in: Self-Locking (not possible to back drive) or Back-drivable	
Typical Applications	<p>Wide ranging applications including in the Automotive, Rail, Marine, Automation, Defence, and Aviation, etc. Typical applications include:</p> <ul style="list-style-type: none"> • Linear traction (forward or backwards) of loads up to 300N - for inaccessible locations or where inadequate space envelope is available • Valve and vent control (open and close) • Actuation of rotary arms or linear sliders • Block or lock action (Fuel Filler Cap Lock and other Locking and Latch mechanisms) 	
Feature	Value	Notes
Linear Travel	20mm max.	Forward (push) and return (Pull) – available also with longer travel (as may be required)
Stall Current	3.9 Amp (12VDC @ 25°C)	
	2.4 Amp (9VDC @ 85°C)	
	6.9 Amp (16VDC @ -40°C)	
Current Draw	2 Amp	100N Constant Load @ Maximum Load
Nominal Operating Voltage	12 Volt Direct Current	Also available in 24 Volt
Operating Voltage Range	6 to 16 V Direct Current	
Continuous Load	100N	
Impulse	up to 300N	Peak Load @ 12VDC (under nominal conditions)
Operating Speed @ Full Load	0.2mm/millisecond (400 millisecond/20mm @ 12VDC)	Driving 100N continuous load over 20mm Travel (under nominal conditions)
Operating Speed @ No Load	0.13 mm/millisecond (150 millisecond/20mm @ 12VDC)	Driving no load over 20mm Travel (at nominal conditions)
Operating Temperature	-40°C to +120°C	Available also for -50°C to +150°C
Overload Protection	PTC (Thermal)	Cut off at Overload Conditions
Performance Under Load	100,000 cycles	<p>100,000 cycle over 20mm Travel (at nominal conditions):</p> <ul style="list-style-type: none"> • Incremental load from 0N to 100N • Constant Load of 100N • Toggle Load of up to 300N
Performance @ No Load	1 million cycles	For applications requiring no load such as in a Fuel Filler Cap
IP Rating	IP56	Also available to IP67
Motor Driver (MOSFIT) Rating	3A	Direct drive is possible without H-bridge
Weight	83 grams	Standard