



Miniature Linear Actuator

Patented Technology

Model	KD105	
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 600N – suitable for high inertial loads and mechanisms susceptible to ice condensations • 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	8.3 Amp (12VDC @ 25°C)	
	5.1 Amp (9VDC @ 85°C)	
	14.9 Amp (16VDC @ -40°C)	
Current Draw	3 Amp	200N Constant Load @ Maximum Load
Nominal Operating Voltage	12 Volt Direct Current	Also available in 24 Volt DC
Operating Voltage Range	6 to 16 V Direct Current	
Continuous Load	200N	
Impulse	up to 600N	Peak Load @ 12VDC (under nominal conditions)
Operating Speed @ Full Load	0.15mm/millisecond (300 millisecond/20mm @ 12VDC)	Driving 200N continuous load over 20mm Travel (under nominal conditions)
Operating Speed @ No Load	0.09 mm/millisecond (180 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 200N • Constant Load of 200N • Toggle Load of up to 500N
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	5A	
Weight	83 grams	Standard version

Chevalier Technologies Limited

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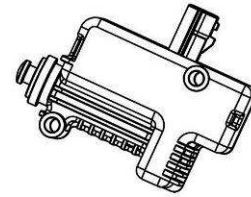
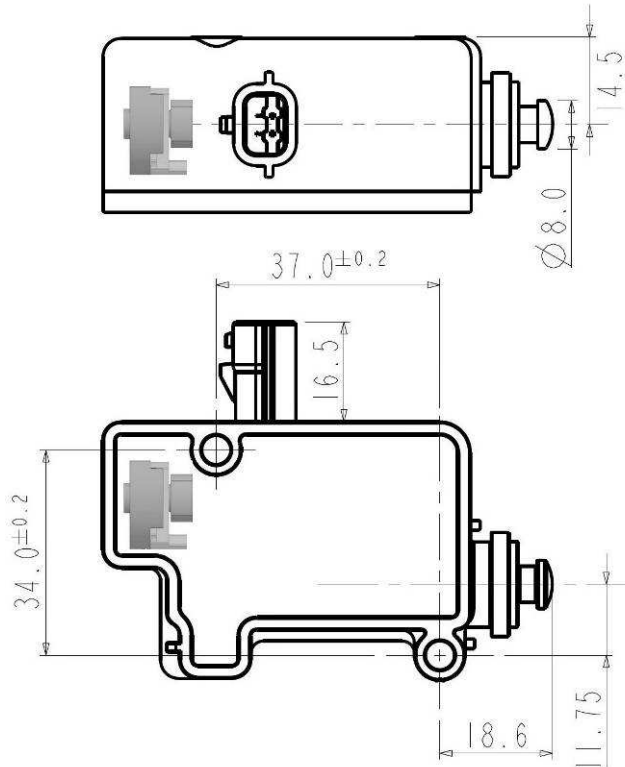
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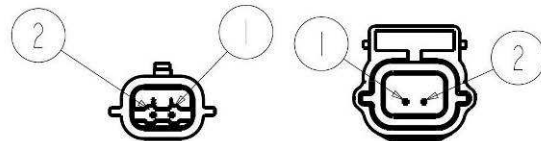
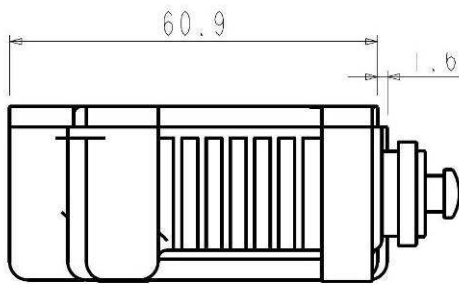
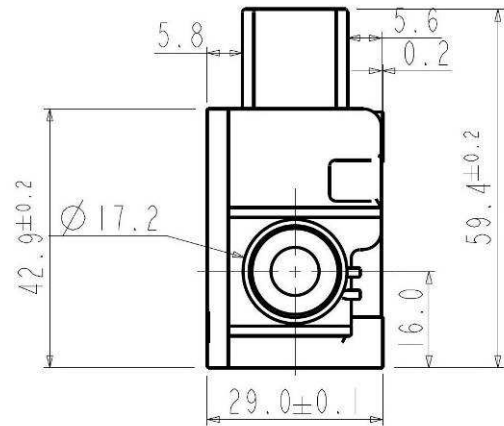
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Model

KD105



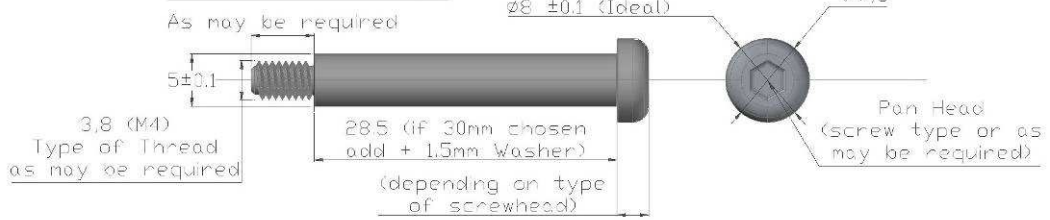
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YAZAKI MALE PLUG
7282-8851-30

YAZAKI FEMALE PLUG
7283-8851-30

M4 Shoulder Bolt



M5 Neck Bolt



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