



## Miniature Linear Actuator

Patented Technology

<b>Model</b>	<b>DC165</b>	
<b>Lead (Nut)</b>	Available in: <b>Self-Locking</b> (not possible to back drive) or <b>Back-drivable</b>	
<b>Typical Applications</b>	Wide ranging applications including in the Automotive, Rail, Marine, Automation, Defence, and Aviation, etc. Typical applications include: <ul style="list-style-type: none"> <li>• Linear traction (forward or backwards) of loads up to 200N - for inaccessible locations or where inadequate space is available</li> <li>• Valve and vent control (open and close action)</li> <li>• Actuation of rotary arms or linear sliders</li> <li>• Block or lock action (Fuel Filler Cap Lock and other Locking and Latch mechanisms)</li> </ul>	
<b>Feature</b>	<b>Value</b>	<b>Notes</b>
<b>Linear Travel</b>	20mm max.	Forward (push) and return (Pull) – available also with longer travel (as may be required)
<b>Stall Current</b>	3 Amp (12VDC @ 25°C)	
	1.8 Amp (9VDC @ 85°C)	
	5.36 Amp (16VDC @ -40°C)	
<b>Current Draw</b>	2 Amp	100N Constant Load @ Maximum Load
<b>Nominal Operating Voltage</b>	12 Volt Direct Current	Also available in 24 Volt
<b>Operating Voltage Range</b>	6 to 16 V Direct Current	
<b>Continuous Load</b>	100N	
<b>Impulse</b>	up to 200N	Peak Load @ 12VDC (under nominal conditions)

<b>Average Operating Speed @ Full Load</b>	0.2mm/millisecond (400 millisecond/20mm @ 12VDC)	Driving 100N continuous load over 20mm Travel (under nominal conditions)
<b>Average Operating Speed @ No Load</b>	0.13 mm/millisecond (150 millisecond/20mm @ 12VDC)	Driving no load over 20mm Travel (at nominal conditions)
<b>Operating Temperature</b>	-40°C to +120°C	Available also for -50°C to +150°C
<b>Overload Protection</b>	PTC (Thermal cut off)	Available on request
<b>Performance Under Load</b>	100,000 cycles	100,000 cycle over 20mm Travel (at nominal conditions): <ul style="list-style-type: none"> <li>• Incremental load from 0N to 100N</li> <li>• Constant Load of 100N</li> <li>• Toggle Load of up to 300N</li> </ul>
<b>Performance @ No Load</b>	1 million cycles	For applications requiring no load such as in a Fuel Filler Cap
<b>IP Rating</b>	IP56	Also available to IP67 rating
<b>Motor Driver (MOSFET) Rating</b>	3A	Direct drive is possible without H-bridge
<b>Weight</b>	83 grams	Standard

**Chevalier Technologies  
Limited**

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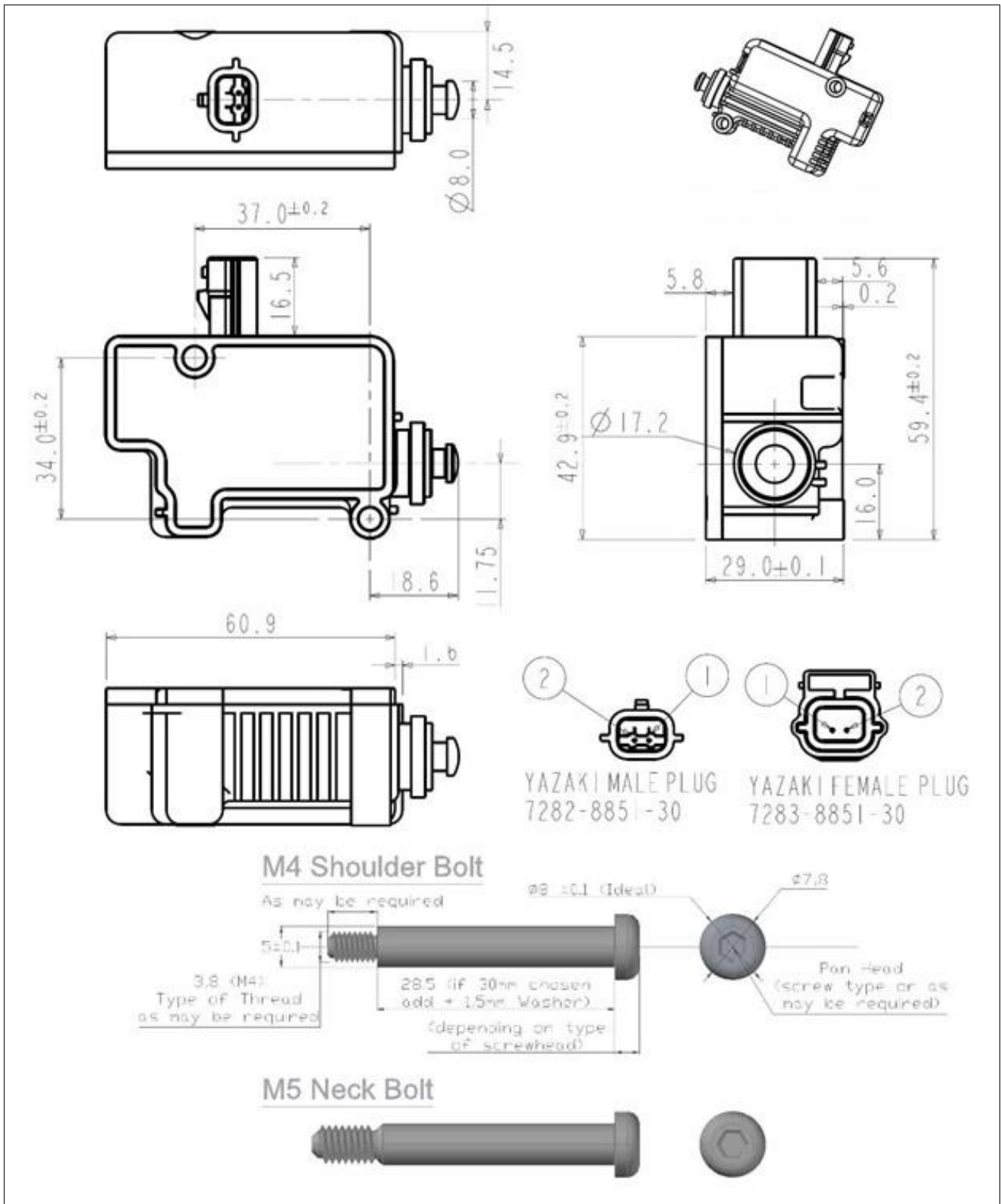
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