Zaber Technologies Inc.
#2 - 605 West Kent Ave.
Vancouver, BC

1-604-569-3780 *Direct*
1-888-276-8033 *Toll Free*
1-604-648-8033 *Fax*

LAC10A-T4A Datasheet



• 10 mm travel
• Resolution down to 0.024 µm
• Multiple tip options included
• Compact size: great for applications with limited space
• Designed for use with an X-MCC Series stepper motor controller or any 2-phase stepper motor controller
• With AutoDetect, the X-MCC controller configures its settings automatically for the connected peripheral

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LAC10A-T4A Overview

Zaber's LAC Series actuators are our most compact actuators and with a 0.024 µm microstep size, they offer the finest resolution as well. The LAC actuators are designed to interface with our X-MCC Series universal motor controllers, offering high resolution daisy-chainable operation. Set up is easy with AutoDetect. Once connected, the X-MCC controller will automatically detect and configure the LAC.

The compact design makes the LAC actuators suitable for OEM or lab applications involving tight spaces and ultra-high precision. The LAC actuators have improved accuracy, backlash and repeatability when compared to our NA products, without sacrificing thrust and speed performance. The shank of the actuator is designed to replace most micrometer heads in manual stages and the hardened ball-tip is removable for increased versatility.

For more information visit: https://www.zaber.com/products/linear-actuators/LAC?part=LAC10A-T4A

LAC10A-T4A Part Numbering & Options

Part number: LAC10A-T4A

LAC 10 A - T4A

Travel	Lead Screw Options	Connector
10 — **10 mm (this part)**	**A** — **Fine pitch (this part)**	**T4A** — **D-sub 15 inline connector with Auto Detect (this part)**

LAC10A-T4A Drawings

- LAC.png (Drawing for the LAC)
- View all drawings and documents at zaber.com

LAC10A-T4A Specifications

Overview

Specification	Value
Built-in Controller	No
Recommended Controller	MCC (48 V) Recommended
AutoDetect	Yes
Travel Range	10 mm (0.394 ")
Axes of Motion	1

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Weight	0.076 kg (0.168 lb)

Positioning Performance

Specification	Value
Accuracy (unidirectional)	10 µm (0.000394 ")
Repeatability	<1.5 µm (<0.000059 ")
Backlash	<2 µm (<0.000079 ")
Microstep Size (Default Resolution)	0.0238125 µm
Default Resolution	1/64 of a step

Load Performance

Specification	Value
Peak Thrust	40 N (9 lb)

Speed

Specification	Value
Maximum Speed	14 mm/s (0.551 "/s)
Minimum Speed	0.000015 mm/s (0.000001 "/s)
Speed Resolution	0.000015 mm/s (0.000001 "/s)

Encoder & Sensing

Specification	Value
Encoder Type	None
Limit or Home Sensing	Magnetic Home Sensor

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Motor

Specification	Value
Linear Motion Per Motor Rev	0.3048 mm (0.012 ")
Motor Type	Stepper (2 phase)
Motor Rated Current	240 mA/phase
Motor Winding Resistance	20.4 ohms/phase
Motor Winding Inductance	5 mH/phase
Motor Connection	D-sub 15
Motor Frame Size	8

Mechanical

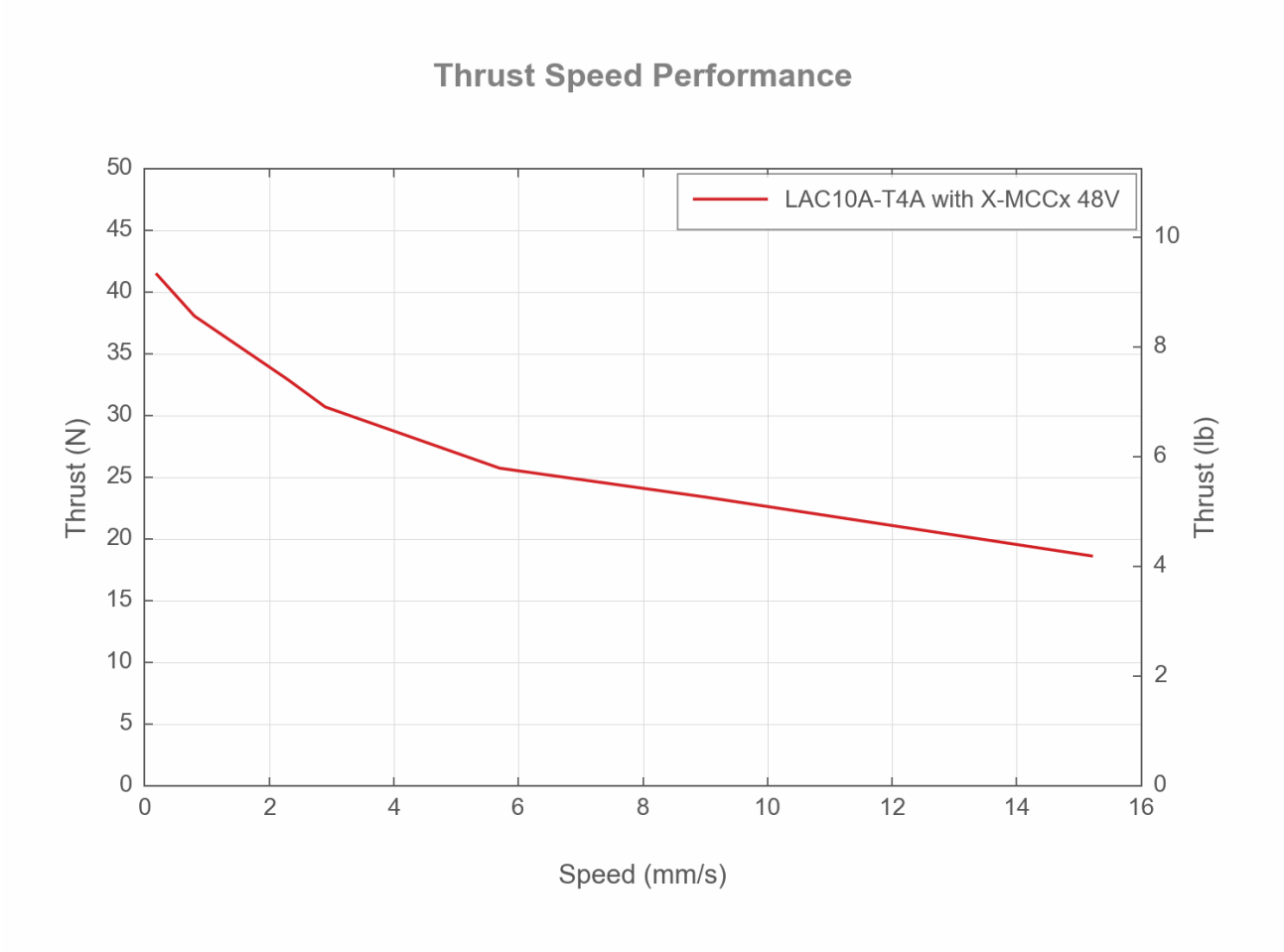
Specification	Value
Mechanical Drive System	Precision lead screw
Mounting Interface	3/8-32 nut or 3/8"(9.5mm) shank

Environmental & Compliance

Specification	Value
Operating Temperature Range	0 to 50 °C
CE Compliant	Yes
Vacuum Compatible	No

LAC10A-T4A Charts

LAC10A T4A THRUST SPEED



Contact

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