

X-NA08A50-E09 Datasheet



- 25 and 50 mm travel
- Up to 30 mm/s speed and up to 25 N thrust
- Hardened ball-tip (removable so you can use the built-in threaded tip or a flat tip)
- Designed to replace standard micrometer heads on manual translation stages
- Built-in, 250 CPR, motor encoder provides slip/stall detection and recovery
- Built-in controller; daisy-chains with other Zaber products

X-NA-E Series Overview

Please see our TSB linear slides for more information on compatible slides.

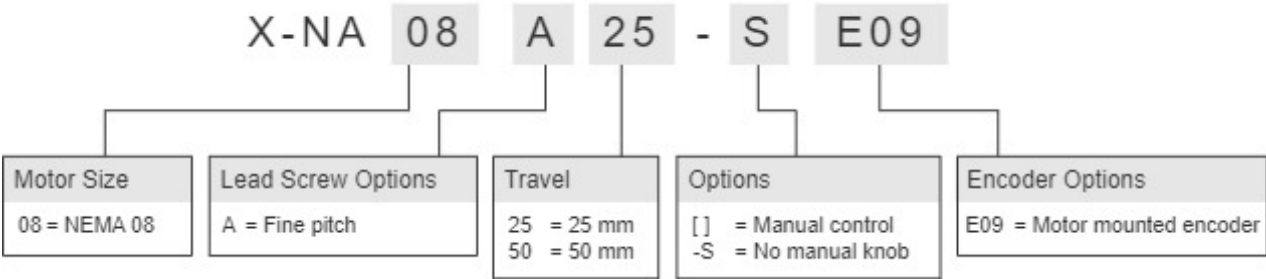
Zaber's X-NA-E Series devices are computer-controlled, motorized linear actuators with high thrust and speed capabilities and a compact size. They are stand-alone units requiring only a standard 24 V or 48 V power supply. The built-in motor encoder allows closed-loop operation and slip/stall recovery features. An optional indexed knob provides convenient manual control for versatile operation even without a computer.

These actuators connect to the RS-232 port or USB port of any computer, and they can be daisy-chained with any other Zaber products. The daisy-chain also shares power, making it possible for multiple X-Series products to share a single power supply. Convenient locking, 4-pin, M8 connectors on the unit allow for secure connection between units. At only 20 mm high, these miniature

actuators are excellent for applications where a small profile is required. Like all of Zaber's products, the X-NA-E Series is designed to be 'plug and play' and very easy to set up and operate.

For more information visit: <https://www.zaber.com/products/linear-actuators/X-NA-E>

X-NA-E Series Part Numbering



X-NA08A50-E09 Bundle Options

This device may be purchased stand-alone or bundled with one of the following accessory kits:

Products	Description
X-NA08A50-E09	Motorized linear actuator, 50 mm travel, integrated motor encoder and controller, plus manual control
with KX14A accessory kit Power supply: North America, 48 V. Powers multiple X-Series devices	<ul style="list-style-type: none">• 1 x PS14S-48V37: Power Supply, 48 V 3.75 A, Compatible with X-Series Products• 1 x X-DC02: Data Cable, 2 ft (0.6 m), for Use with all X-Series Products• 1 x X-USBDC: USB to Serial Converter Cable with M8 Female Plug for X-Series Products
with KX13A accessory kit Power supply: North America, 48 V. Powers one axis	<ul style="list-style-type: none">• 1 x PS13S-48V12: Power Supply, 48 V 1.25 A, Compatible with X-Series Products• 1 x X-DC02: Data Cable, 2 ft (0.6 m), for Use with all X-Series Products• 1 x X-USBDC: USB to Serial Converter Cable with M8 Female Plug for X-Series Products
with PTB2 accessory Power Supply Not Included	<ul style="list-style-type: none">• 1 x PTB2: Power Terminal Block, 2 Pin, 5 mm Pitch, for Use with X-Series Devices with Custom Power Supply

X-NA08A50-E09 Drawings

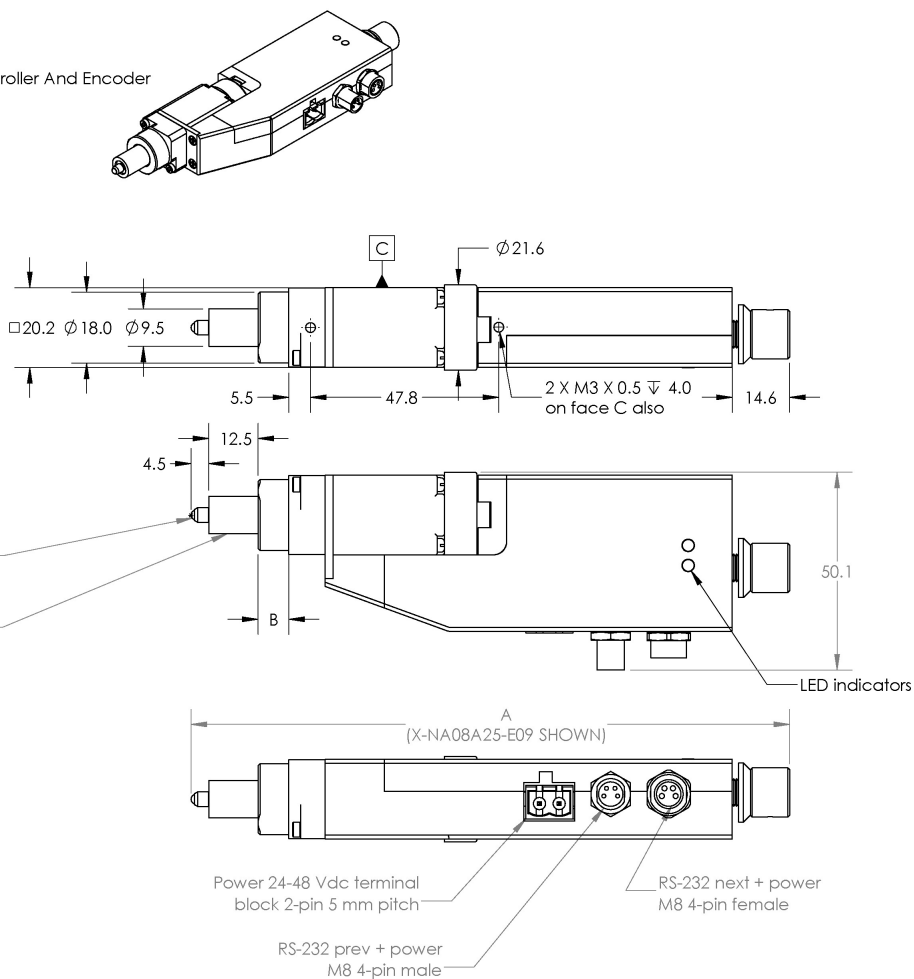
ZABER

X-NA-E Micro Linear Actuator With Built-In Controller And Encoder
dimensions in mm

Model Number*	Travel	A**	B
X-NA08A25-E09	25.4	151.9	7.8
X-NA08A50-E09	50.8	177.3	33.2

*See product page for complete list of available models at www.zaber.com

**Subtract 13.1mm knob length from 'A' for -S versions without manual control



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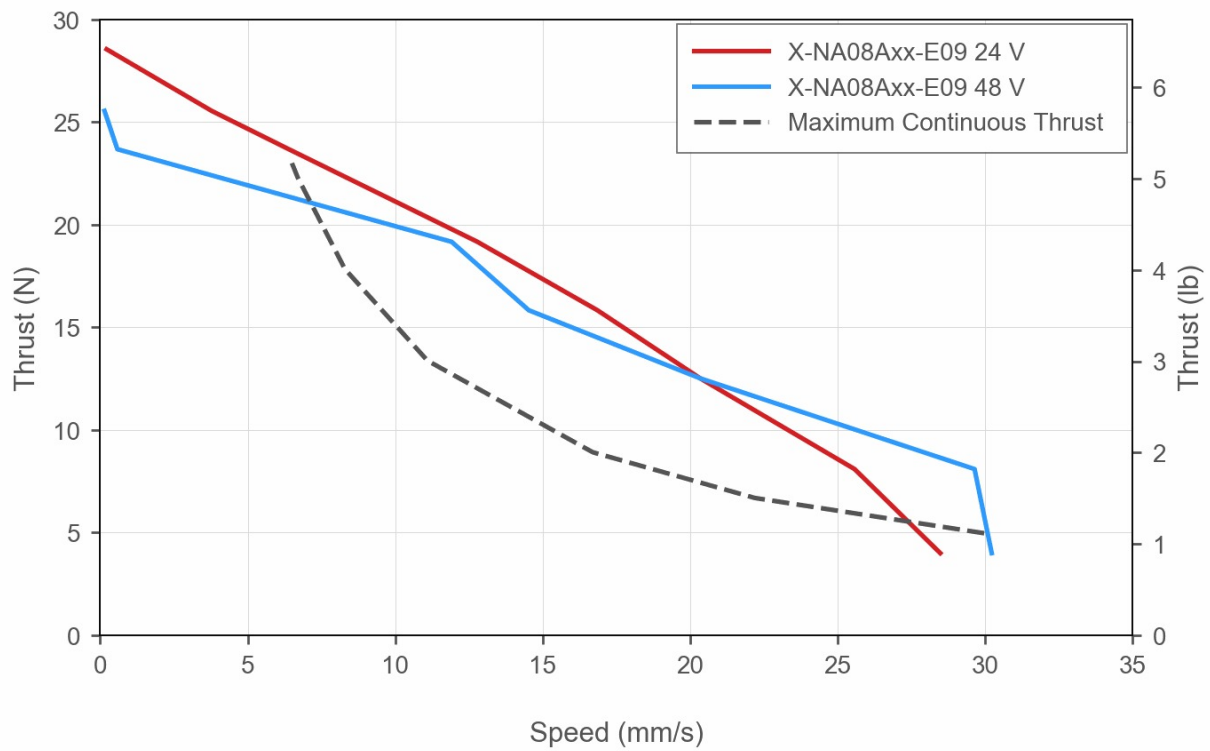
X-NA08A50-E09 Specifications

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.047625 μm	
Built-in Controller	Yes	
Travel Range	50.8 mm	2.000"
Accuracy (unidirectional)	55 μm	0.002165"
Repeatability	< 1 μm	< 0.000039"
Backlash	< 15 μm	< 0.000591"
Maximum Speed	30 mm/s	1.181"/s
Minimum Speed	0.000029 mm/s	0.000001"/s
Speed Resolution	0.000029 mm/s	0.000001"/s
Encoder Resolution	250 CPR	1000 states/rev
Encoder Type	Rotary quadrature encoder	
Peak Thrust	25 N	5.6 lb
Communication Interface	RS-232	
Communication Protocol	Zaber ASCII (Default), Zaber Binary	
Maximum Current Draw	180 mA	
Power Supply	24-48 VDC	
Power Plug	2-pin screw terminal	
Motor Steps Per Rev	200	
Motor Type	Stepper (2 phase)	
Motor Rated Current	240 mA/phase	
Inductance	1.5 mH/phase	
Default Resolution	1/64 of a step	
Data Cable Connection	Locking 4-pin M8	
Mechanical Drive System	Precision lead screw	
Limit or Home Sensing	Magnetic hall sensor	
Manual Control	Yes	
Axes of Motion	1	
LED Indicators	Yes	
Mounting Interface	3/8-32 nut, 3/8" shank, or M3 screws	
Operating Temperature Range	0 to 50 °C	

Specification	Value	Alternate Unit
Vacuum Compatible	No	
RoHS Compliant	Yes	
CE Compliant	Yes	
Weight	0.20 kg	0.441 lb

X-NA-E Series Charts

Thrust Speed Performance



Contact

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