

X-NA08A50-E09 Datasheet



- 25 and 50 mm travel
- Up to 25 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

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.

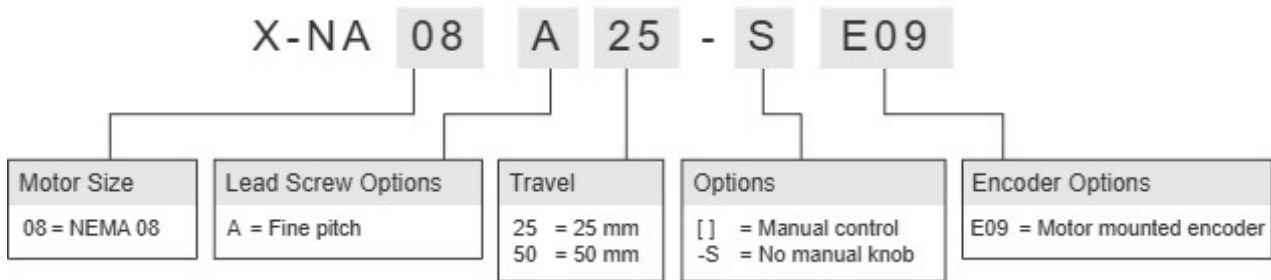
These actuators connect to the RS-232 port or USB port of any computer, and they can be daisy-chained with any other Zaber products. The daisy-chain also shares power, making it possible for multiple X-Series products to share a single power supply. Convenient locking, 4-pin, M8 connectors on the unit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

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

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

X-NA-E Series Part Numbering & Options



X-NA08A50-E09 Drawings

- [X-NA-E.png \(Drawing for the X-NA-E\)](#)

X-NA08A50-E09 Specifications

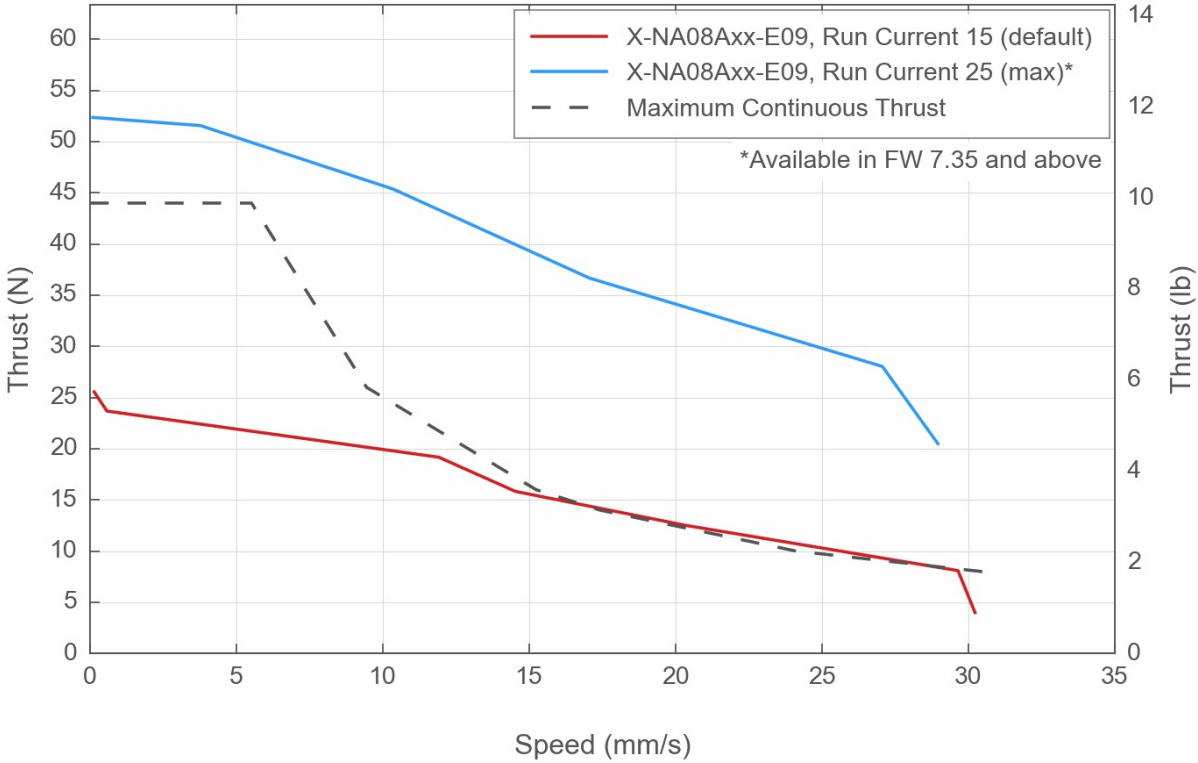
Microstep Size (Default Resolution)	0.047625 μm
Built-in Controller	Yes
Travel Range	50.8 mm (2.000")
Accuracy (unidirectional)	55 μm (0.002165")
Repeatability	< 1 μm (< 0.000039")
Backlash	< 15 μm (< 0.000591")
Maximum Speed	25 mm/s (0.984"/s)
Minimum Speed	0.000029 mm/s (0.000001"/s)
Speed Resolution	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
Data Cable Connection	Locking 4-pin M8
Power Supply	24-48 VDC
Power Plug	2-pin screw terminal
Maximum Current Draw	180 mA
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
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
CE Compliant	Yes

Microstep Size (Default Resolution)	0.047625 μm
Vacuum Compatible	No
Weight	0.20 kg (0.441 lb)

X-NA-E Series Charts

Thrust Speed Performance

48V



Contact

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