

25mm Travel, Motorized Linear Actuator, Integrated Controller, Manual Control, Encoder

#25-176



Zaber™ High Accuracy Linear Actuators feature 50nm resolution with up to 50mm travel distance. These computer-controlled, self-contained linear actuators include a stepper motor and a built-in controller that can connect directly a computer's RS-232 port while requiring only the included 15V power supply. Encoder versions are available for all travel lengths and include 250 Counts per Revolution (CPR) rotary quadrature encoders integrated into the stepper motor. Zaber™ High Accuracy Linear Actuators also feature an industry standard 3/8" shank that fits most common stages. The actuator shaft does not rotate and will not transmit any torque to the translation stage. When used manually, the actuator can be monitored using a computer if needed.

Note: A 6ft. data cable, RS-232 adapter, and universal power supply are sold separately as accessories

General

Type:	Metric
Encoder:	Yes
Manual Control/ LED Indicators:	Yes
Manufacturer:	Zaber
Type of Motor:	Stepper (2 Phase)
Encoder Type:	Rotary Quadrature Encoder

Physical & Mechanical Properties

Type of Movement:	Linear (X)
Travel (mm):	25.4
Accuracy (μm):	40 (Unidirectional)
Backlash (μm):	<15
Dimensions (mm):	137.1 L x 49.4 W x 20.0 H
Repeatability (μm):	<1
Speed (mm/s):	0.000029 to 30
Thrust (N):	25
Weight (kg):	0.14
Encoder Resolution:	250 CPR

Optical Properties

Resolution (μm):	0.047625
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Electrical

Maximum Operating Current (mA):	180
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Hardware & Interface Connectivity

Type of Drive:	Precision Lead Screw
Power Supply:	24-48 VDC
Computer Interface:	RS-232

Threading & Mounting

Mount:	3/8-32 Nut, 3/8" Shank or M3 Screws
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Environmental & Durability Factors

Operating Temperature ($^{\circ}\text{C}$):	0 to 50
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May 31, 2025

To Whom It May Concern,

This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

Stock No.	Description
25-176	25mm Travel, Motorized Linear Actuator, Integrated Controller, Manual Control, Encoder

This item is EU RoHS (2015/863/EU) compliant without the use of exemptions.

This certification means that:

- EO's suppliers have confirmed the material composition of this product.
- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.



Jay Budd, Director of Corporate Compliance

May 31, 2025

Edmund Optics Inc. - 101 E Gloucester Pike, Barrington, NJ 08007 | 1-800-363-1992 | Compliance@edmundoptics.com



May 31, 2025

<i>Stock No.</i>	<i>Description</i>
25-176	25mm Travel, Motorized Linear Actuator, Integrated Controller, Manual Control, Encoder

Edmund Optics certifies that all articles included in this shipment are in compliance with the terms and conditions of this order. The company also certifies that the articles included in this shipment are in accordance to all agreed upon specifications and quality assurance provisions. Please call 1-800-363-1992 should any questions arise from this shipment.



Jeff Harvey- EVP of Operations



May 31, 2025

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This document certifies that the product stated below has been reviewed as requested by Edmund Optics:

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This item does not contain any of the substances listed on the Reach SVHC list as of 21 January 2025 in quantities exceeding 0.1% weight by weight.

Please note the following:

- Entry 11 of Annex V of the REACH regulation EC 1907/2006 as amended by regulation 987/2008, exempts "non-hazardous" glass components from registration.
- Items considered to be packing materials and which do not form part of, or are not required for the operation of, the product, are not considered to be within scope of this declaration.
- EO does not routinely analyze products for substances not purposely added or specified within the design specifications, drawings and assembly procedures.

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- EO has implemented rigorous procedures to document this compliance.
- The information provided may, or may not, be based upon actual test data, or on information from our Vendors, Raw Material Suppliers or Subcontractors.

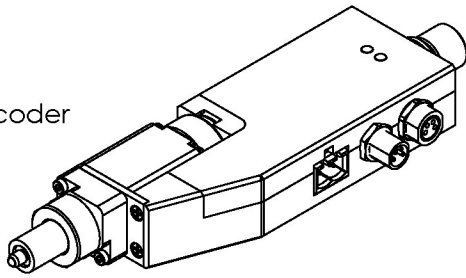


Jay Budd, Director of Corporate Compliance
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ZABER

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

