

LXAH1 - December 12, 2017

Item # LXAH1 was discontinued on December 12, 2017. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

25 MM TRAVEL COMPACT TRANSLATION STAGES, CROSSED ROLLER BEARINGS

- ▶ 25 mm Travel Provided by Metric Micrometers
- ▶ Crossed Roller Bearing for Superior Angular Deviation and Load Capacity
- ▶ Compact Design
- ▶ Each Stage Ships with Individual Test Data Certificate



LXAH1



The included locking bracket guards against accidental movement when secured and is engraved with the stage's

OVERVIEW

Features

- Crossed Roller Bearings for High-Load Capacity and Low Angular Deviation
- Compact 4.49" x 2.56" x 0.98" (L x W x H) Design
- Seven 1/4"-20 (M6) Tapped Mounting Holes
- Side-Mounted Metric Micrometer with 3/8" (9.5 mm) Barrel
- Each Stage Individually Tested and Shipped with Test Data Certificate
- Mounts to Optical Table Using Four 1/4" (M6) Counterbores



Click to Enlarge
 The stage can be secured to a breadboard using two counterbored holes on either end. The holes can be accessed by translating the platform.

Thorlabs' compact translation LXAH1 and LX10/M stages provide 25 mm of linear translation with less than 100 μ rad of deviation in pitch and yaw over the full range of the stage. They are constructed with a full aluminum body, crossed roller steel bearings for precision motion and high-load capacities, and a compact footprint.

The top translating surface includes an array of seven 1/4"-20 (M6) tapped holes to maximize the mounting options for components. This moving platform is lockable via a side-located 5/64" (2 mm) hex screw in a locking bracket to guard against accidental

Stage Specifications

Travel	25 mm
Angular Deviation	<100 μ rad
Maximum Horizontal Load Capacity	41 kg (90 lbs)
Maximum Vertical Load Capacity	4 kg (8.8 lbs)
Vertical Straightness	<10.0 μ m
Bearing Type	Crossed Roller Bearings
Dimensions (Including Micrometer)	4.49" x 2.56" x 0.98" (114.0 mm x 65.0 mm x 25.0 mm)

Micrometer Specifications

Micrometer Item #	150-801ME-H
Resolution	500 μ m Translation Per Revolution
Travel	25 mm
Micrometer Barrel Size	\varnothing 3/8" (\varnothing 9.5 mm)

movement. The stage can be bolted directly to the optical table using four counterbored 1/4" (M6) holes that are revealed by translating the top plate of the stage, as shown in the above image.

Each stage comes equipped with a micrometer head, graduated in millimeters, with 500 μm of travel per revolution. The micrometer can be translated using the knurled knob or, for finer translation, a 5/64" (2.0 mm) hex key. The micrometer can be removed and replaced at any time by loosening the side-located flexure clamp with a 5/64" (2 mm) hex key. This flexure clamp can hold any micrometer that has a 3/8" (9.5 mm) mounting barrel. Do not remove the actuator until the leadscrew is no longer engaged with the moving body of the stage or the locking bracket is fully tightened. Not doing so can damage the stage or require it to be recalibrated to meet its specified performance.

After each stage is manufactured, the pitch, yaw, and vertical straightness of the stage is tested. This ensures that each stage meets the stated specifications over the full translation range of the stage. They are shipped with an individualized data sheet providing a summary of these test results. [Click here for a sample data sheet for our LXA and LX/M series stages.](#)

Part Number	Description	Price	Availability
LX10/M	NEW! 25 mm Travel Self-Contained Translation Stage, M6 Taps	\$500.00	Lead Time
LXAH1	25 mm Travel Self-Contained Translation Stage, 1/4"-20 Taps	\$500.00	Lead Time