

# MiniMech™ Linear Stages

- **Lockable thumbscrew drive actuators or micrometers**
- **Upgradeable to motorized drive**
- **Precision pre-loaded steel ball bearing slides**
- **One piece machined aluminum body**
- **Low profile design**



- Optics
- Lenses
- Mirrors & Beamsplitters
- Prisms & Polarizers
- Filters
- Pinholes

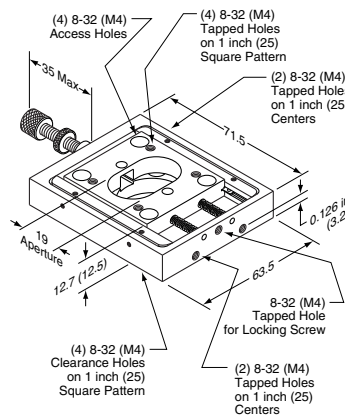
MiniMech™ Linear Stages are supplied with either thumbscrew or graduated micrometer actuators. The thumbscrew actuators provide 12.7 mm of travel and the micrometers provide 6.5 mm of travel. Both of these actuators provide a minimum incremental movement of 1 μm.

The actuators on these stages can be upgraded at any time to provide fully motorized drive using EncoderDriver™ or MotorDriver™ actuators. These actuators give full range travel of 10 mm and a minimum incremental movement of less than 1 μm.

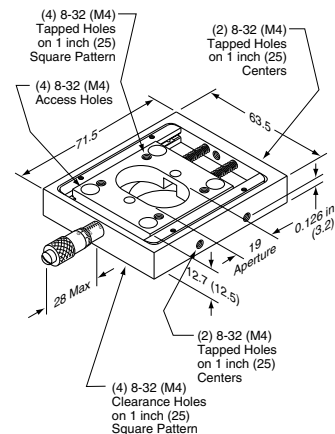
MiniMech Linear Stages feature a positioner body machined from a single piece of aluminum. This design produces an exceptionally rigid

minipositioner, ensuring accuracy and smoothness of operation. Precise linear motion is achieved by the use of pre-loaded, hardened steel ball bearing slides, individually adjusted and

tested during assembly. Spring-loaded guides maintain contact between the translation stage and driving head, ensuring minimal backlash.



**74-0006/61-0006**  
MiniMech™ Linear Stage  
with Thumbscrew Actuator



**74-0014/61-0014**  
MiniMech™ Linear Stage  
with Micrometer Actuator

- Opto-mechanics
- Breadboards & Rails
- Mounting Hardware
- Mirror & Component Mounts
- Manual Micro Positioners
- Motorized Positioners

## Specifications

### Range -

- Thumbscrew: 12.7 mm
- Micrometer: 6.5 mm

### Resolution -

- Thumbscrew Actuator: 1.0 μm
- Micrometer Actuator: 1.0 μm
- MotorDriver Actuator: 0.1 μm
- EncoderDriver Actuator: 0.05 μm

### Tracking Accuracy: 2 μm

### Reading Accuracy: 1 division = 10 μm (micrometer stages only)

### Load Capacity -

- Horizontal: 5.5 kg
- Vertical: 0.5 kg (1 kg with drive below the stage)

### Weight (with micrometer): 0.15 kg

## MiniMech™ Linear Stages

Catalog Number	Description	Travel	Price US
74-0006	MiniMech Linear Stage, 12.7 mm Travel, Thumbscrew Drive Actuator, Metric, without Top Plate	12.7 mm	\$194.00
74-0014	MiniMech Linear Stage, 6.5 mm Travel, Micrometer Drive, Metric, without Top Plate	6.5 mm	\$197.40
61-0006	MiniMech Linear Stage, 12.7 mm Travel, Thumbscrew Drive Actuator, Inch, without Top Plate	0.5 inch	\$203.70
61-0014	MiniMech Linear Stage, 6.5 mm Travel, Micrometer Drive, Inch, without Top Plate	0.25 inch	\$210.00
37-0221	10 mm MotorDriver Actuator		\$616.35
37-0494	10 mm EncoderDriver Actuator Package		\$1,268.40