

MacroMech™ End Driven Linear Stages

- 50 mm (2 inch) travel without top plate
- Precision pre-loaded ball bearing slides
- Interchangeable actuators
- One piece machined aluminum body
- Tracking accuracy 4 μm
- 1/4-20 (M6) hole pattern



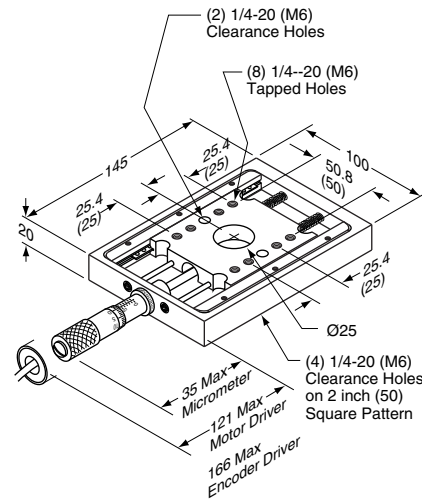
- Optics
- Lenses
- Mirrors & Beamsplitters
- Prisms & Polarizers
- Filters
- Pinholes

Ealing's MacroMech™ stages are designed for positioning medium weight loads with a high degree of accuracy and stability. Two- and three-axis positioning assemblies can be constructed by bolting stages together directly, and using one of the MacroMech right angle brackets to support a third stage where necessary. All MacroMech linear stages feature a positioner body machined from a single piece of aluminum alloy, providing exceptional rigidity at a light weight. Accuracy and smoothness of operation are achieved by the use of pre-loaded, high precision ball bearing slides, individually adjusted and tested during

assembly. Spring-loaded guides maintain contact between translation stage and actuator driving head, ensuring an absence of 'stiction' and backlash.

MacroMech 50 mm linear stages are supplied with a high quality micrometer which is clearly marked for 0.01 mm accuracy over the full 50 mm of travel (1/2 division is equal to 5 μm). The micrometer drive can be easily removed from the stage by releasing a small allen screw in the base of the stage body. It can then be replaced with either a MotorDriver™ Actuator or EncoderDriver™ Actuator for more accurate motorized positioning control.

MacroMech linear end driven stages are available with metric or inch hole patterns.



53-0329/61-0329

MacroMech™ End Driven Linear Stage,
50 mm Travel

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

Specifications

Range of Travel: 50 mm (2 inch)

Minimum Incremental Motion -

Micrometer Actuator: 1 μm

MotorDriver Actuator: 0.1 μm

EncoderDriver Actuator: 0.05 μm

Tracking Accuracy: 4 μm

Reading Accuracy: 1 division = 10 μm
(on micrometer version)

Load Capacity -

Horizontal: 12 kg

Vertical: 0.3 kg (4 kg with drive
below the stage)

Weight (with micrometer): 1 kg (2.2 lb)

Hole Pattern: M6 on 50 mm sq. or 1/4-20
on 2 inch sq.

Construction: One piece aluminum body,
steel precision ground slides and stage.

MacroMech™ End Driven Linear Stages (Metric)

Catalog Number	Description
53-0329	MacroMech End Driven Linear Stage, 50 mm Travel, Micrometer Drive, Metric Hole Patterns
37-0023	50 mm Travel MotorDriver Actuator

MacroMech™ End Driven Linear Stages (Inch)

Catalog Number	Description
61-0329	MacroMech End Driven Linear Stage, 2 inch Travel, Micrometer Drive, Inch Hole Patterns
37-0023	50 mm Travel MotorDriver Actuator