

4 mm Travel, Three-Axis MicroBlock™ Flexure Platform

The smooth, continuous motion provided by the MicroBlock™ 3-axis platform makes this device ideally suited for almost any micropositioning application. An innovative flexure design provides three orthogonal directions of linear travel without the severe limitations of kinetic or static friction that are found in traditional bearing based stages.

The use of nested flexure plates allows the platform to operate indefinitely without needing any lubricant, which is one of the primary sources of drift within positioning devices. In addition, the flexure spring design allows considerable tolerance to shock and vibration, even when fully loaded.

The central keyway that extends across the surface of the moving top plate allows rapid system reconfiguration while maintaining alignment. An extensive selection of accessories for the MicroBlock™ system can be found on pages 496-512.

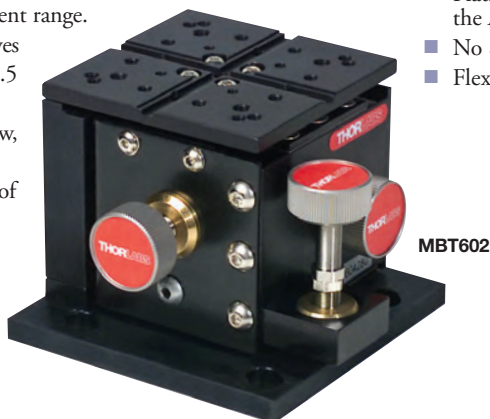
The platform is offered preconfigured with a choice of two actuator options. The differential adjusters (MBT616) provide 50 nm resolution over the 300 μ m fine adjustment range.

The thumbscrew drives (MBT602) provide 0.5 mm of travel per revolution of the screw, giving a calculated positional resolution of around 0.5 μ m.



Features

- Flexure Design Ensures Smooth, Continuous Motion
- Compact Design: 62.5 mm from the Table to the Moving Platform, and 75 mm from the Table to the Optical Axis of the Accessories
- No Sliding Parts to Minimize Friction
- Flexure Design Enhances Long-Term Stability



Specifications

- **XYZ Travel:** 4 mm
- **Deck Height:** 62.5 mm
- **Optical Height:** 75 mm
- **Crosstalk:** <20 μ m/mm
- **Thermal Stability:** 1 μ m/°C
- **Differential Adjusters:**
 - Coarse Adjust 0.5 mm/rev
 - Fine Adjust 50 μ m/rev
- **High Resolution Actuators:** 50 nm Over the 300 μ m Fine Adjustment Range – Provided by Our Patented Concentric Conical Drive Design
- **Thumbscrew Drives:** 0.5 mm/rev
- **Mechanical Stability:** Flexure Design Utilizes Nested Flexure Plates to Minimize Mechanical Drift
- **Load Capacity:** 2.2 lbs (1 kg)



RB13P1 Adapter Plate:

This replacement top plate has an array of both 1/4"-20 (M6 x 1.0) and #8-32 (M4 x 0.7)

mounting holes to adapt the stage for general purpose optical table applications.

See Page 507 for Details

MBT616 Shown
with RB13P1
Adaptor Plate



ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
MBT602	MBT602/M	\$ 745.00	£ 508.40	€ 661.50	¥ 6,290.80	MicroBlock™ 3-Axis Positioner with Fine Thread Thumbscrew
MBT616	MBT616/M	\$ 1,025.00	£ 699.50	€ 910.10	¥ 8,655.20	MicroBlock™ 3-Axis Stage with High Resolution Drives

Preconfigured Fiber Launch System

We offer numerous free-space to fiber launch systems which use bare fiber clamps, FC connector adapters, GRIN lens holders, and microscope objective holders.

See Page 910

