

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motorized Stages

Light Sources & Laser Safety

Index

Guide

Mirrors

Lenses

Prisms

Polarizers

Lasers

Beam Shaping Diffusers

Filters

Shutter

Others

Fiber

The MHL kinematic mirror holder incorporates a steel flexure spring for high rigidity and suppression of positional shifts due to shocks or vibrations.

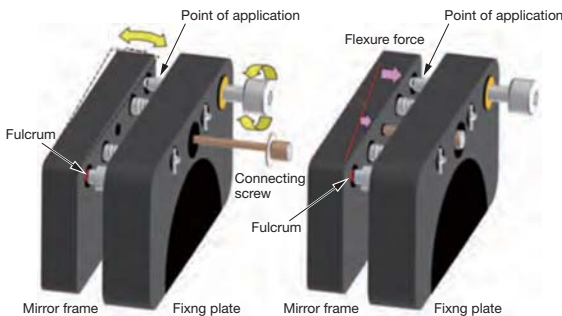
- Includes provisions for post mounting (M6 tapped hole with counterbore for M4 or 8-32 thread inserts).
- Baseplates (MHL-BP) available for mounting directly to breadboards.
- Mirror holder cell is removable and can be replaced by custom cells or adapters.
- Setscrew locking mechanism for preventing accidental changes after adjusting mirror angle.



Mirror frame with locking mechanism

① By loosening the connecting screw, angle can be adjusted.

② By tightening the connecting screw, flexure force will act on point of application. Then mirror frame and fixing plate can be fixed. \*Lock will be released when adjusting screw is moved.



Guide

- ▶ Manual adjustment screws can be replaced by motorized actuators. Please contact Sales Division for more information.
- ▶ Remove mirror cell using four Philips head screws on front of mount.
  - Unscrew retaining ring and remove Resin washer.
  - Insert mirror with reflective surface facing the flange.
  - Tight against Resin washer.
  - Insert mirror cell into body and reattach using four Philips head screws.

Attention

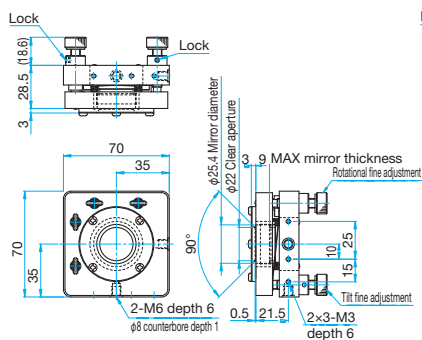
- ▶ MHL has different design from MHB. Please confirm the dimension by CAD drawings.
- ▶ Posts and base plates are not included. Please purchase separately.
- ▶ Depending on the angle of incidence, the beam will be shaded by the frame of mirror mount. For the usage of 45 degrees transmittance, Kinematic Mirror Holder (MHG) or Gimbal Beamsplitter Holders (BHAN) is available. [Reference](#) C014, [Reference](#) C026
- ▶ Rotation center of MHL doesn't match the center of mirror surface. If the rotation center is needed to match the center of mirror surface, Vertical Control Gimbal Beamsplitter Holders (BSHL-2) or Gimballed Mirror Mounts (MHAN) are available. [Reference](#) C022, [Reference](#) C024

Specifications								Primary material: Aluminum Finish: Black Anodized
Part Number	Compatible Optics		Number of Adjustment Axis	Adjustment Range		Resolution		Weight [kg]
	Diameter [mm]	Thickness [mm]		Tilt [°]	Rotation [°]	Tilt [°/Rotation]	Rotation [°/Rotation]	
MHL-25.4S	φ25, φ25.4	3 - 9	2	±2	±2	±0.3	±0.3	0.28
MHL-30S	φ30	3 - 9	2	±2	±2	±0.3	±0.3	0.29
MHL-50S	φ50	4 - 16	2	±3	±3	±0.2	±0.2	0.56
MHL-50.8S	φ50.8	4 - 16	2	±3	±3	±0.2	±0.2	0.56

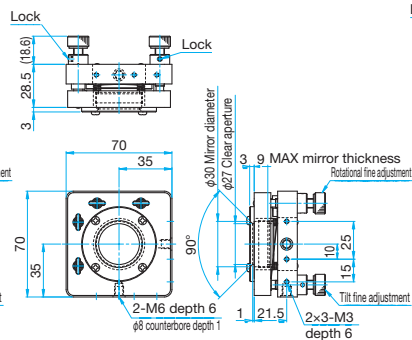


### Outline Drawing

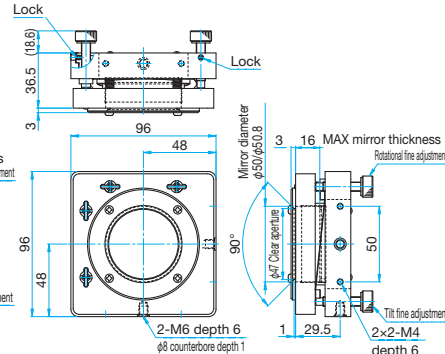
#### MHL-25.4S



#### MHL-30S



#### MHL-50S/50.8S



### Option Base Plate for MHL | MHL-BP

RoHS Catalog Code W4146

Base plates for MHL series mirror holders to mount holder directly to baseplate or breadboards.



#### Example of use

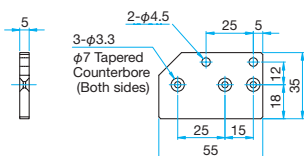
By reversing the base plates and also changing the mounting surface, it is possible to mount MHL in a symmetric orientation.



### Outline Drawing

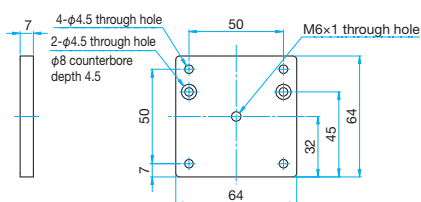
#### MHL-30BP

- Countersunk head screw M3x10...3 screws
- Pan head screw M4x10...2 screws



#### MHL-50BP

- Pan head screw M4x8...2 screws
- Pan head screw M4x12...4 screws



### Specifications

Part Number	Compatible Holders	Primary material: Aluminum Finish: Black Anodized	Weight [kg]
MHL-30BP	MHL-25.4S, MHL-30S, KLH-BE-M22H		0.03
MHL-50BP	MHL-50S, MHL-50.8S, KLH-BE-M34H LAH-4TS-32, LAH-4TS-35, LAH-4TS-45		0.08