

High Rigidity Mirror Holders | MHL

RoHS

Catalog
Code

W4145

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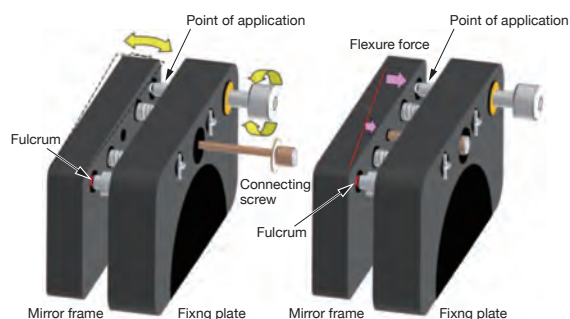
The MHL kinematic mirror holder incorporates a steel flexure spring for high rigidity and suppression of positional shifts due to shocks or vibrations.

- 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, Virtual Control Gimbal Beamsplitter Holders (BSHL-2) or Gimballed Mirror Mounts (MHAN) are available. [Reference](#) C022, [Reference](#) C024

Specifications

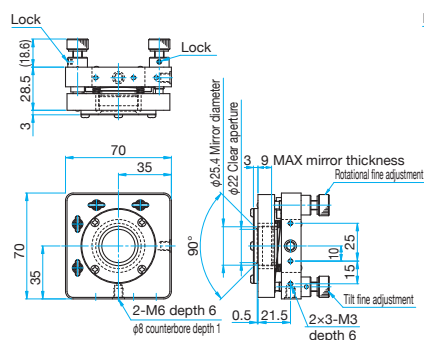
Primary material: Aluminum
Finish: Black Anodized

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

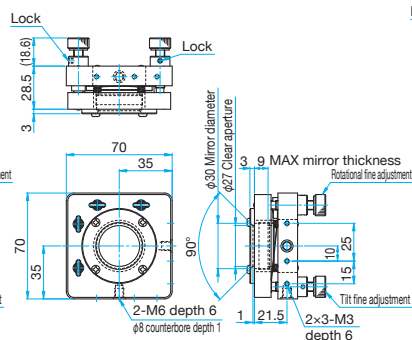


Outline Drawing

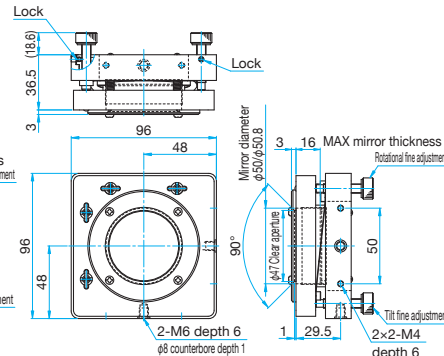
MHL-25.4S



MHL-30S



MHL-50S/50.8S



Option Base Plate for MHL | MHL-BP

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



Example of use

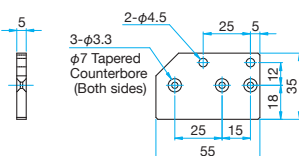
By reversing the base plates and also changing the mounting surface, it is possible to mount MHL in a symmetric orientation.



Outline Drawing

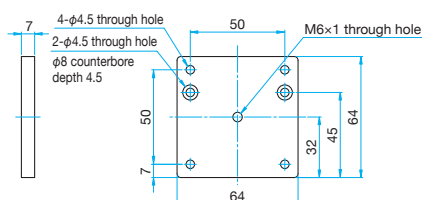
MHL-30BP

Countersunk head screw M3×10...3 screws
Pan head screw M4×10...2 screws



MHL-50BP

Pan head screw M4×8...2 screws
Pan head screw M4×12...4 screws



Specifications

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

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