

Options for Kinematic Mirror Holders

MHG-BPRO/MHG-KAD

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual **Stages**

Actuators & Adjusters

Motoeized **Stages**

Light Sources & Laser Safety

Index

Guide Mirrors

Lenses

Prisms

Polarizers

Lasers

Beam Shaping Diffusers

Filters

Shutter

Others Fiber

Post Adapter Plates | MHG-BPRO

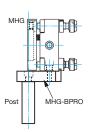
RoHS Code W4002

These plates correct the distance offset between the center of the mirror and the mounting hole.

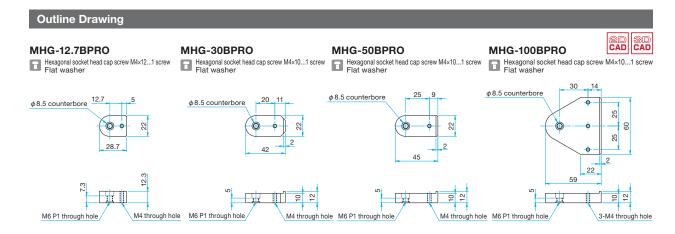
- When post adapter plates are used, the optical axis will move 10mm upward. (12.3mm only for MHG-12 and 7BPRO.)
- Post adapter plates can be fixed not only on posts but also on stages or baseplates using M4 screws.
- The adapters are designed for use with a mirror of 5mm thickness. Offset remains if a mirror of thickness other than 5mm is used.







Specifications		Primary material: Aluminum Finish: Black Anodized
Part Number	Compatible Holders	Weight [kg]
MHG-12.7BPRO	MHG-MP12.7 0.02	
MHG-30BPRO	MHG-MP20-NL/MHG-HS20-NL MHG-MP25/-HS25 0.0 MHG-MP30/-HS30	
MHG-50BPRO	MHG-MP50/-MP50.8	0.025
MHG-100BPRO	MHG-100	0.075



45° Optics Adapters | MHG-KAD

RoHS Catalog W4003

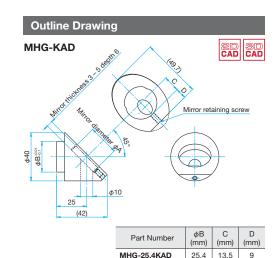
Used in a MHG kinematic mirror holder to direct a beam upwards or downwards on optical benches.

- The adustment range and resolution or mirror holders are changed using this adapters.
- Mirrors are mounted at three points on the side.
- Since adapters are fitted in the mirror frame of the mirror holder, the orientation of the tilted surface of the mirror can be rotated about the central axis of the adapter cylinder.





Specifications			Primary material: Aluminum Finish: Black Anodized	
Part Number	Compatible Holders	Compatible Optics Diameter ϕ A [mm]	Compatible Optics Thickness [mm]	Weight [kg]
MHG-25.4KAD	MHG-MP25.4/-HS25.4	φ25.4	3 – 5	0.07
MHG-30KAD	MHG-MP30/-HS30	φ30	3 – 5	0.07



MHG-30KAD

Options for Kinematic Mirror Holders

MHG-MAD/MHG-PAD

Mirror Mount Adapters | MHG-MAD





Adapters for mounting smaller diameter mirrors.



- Adapters are designed so that the end faces of mirror frames are aligned with the end faces of adapters when adapters are attached to kinematic mirror holders (MHG). However, the reflective surface of a mirror is positioned 1mm inside the end face of adapter.
- Mirrors are fixed at three points on the lateral side.
- Before mounting adapters to mirror holders, fix mirrors to the adapters. Mirrors cannot mounted once the adapter is mounted in a mirror holder.
- The reflective surface position is dependant on the mirror thickness.

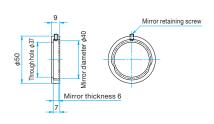
Example of Use



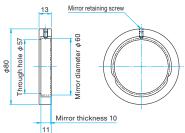
Specifications Primary material: A Finish: Black Anod				
Part Number	Compatible Holders	Compatible Optics Diameter [mm]	Compatible Optics Thickness [mm]	Weight [kg]
MHG-40MAD	MHG-MP50	φ40	4 – 6	0.015
MHG-60MAD	MHG-80	ϕ 60	6 – 10	0.06
MHG-25.4SMAD	MHG-MP25/-HS25	□25, □25.4	3 – 5	0.018

Outline Drawing

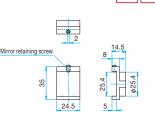
MHG-40MAD



MHG-60MAD



MHG-25.4SMAD



Prism Adapters MHG-PAD



Adapters for holding cube optics such as beamsplitters or prisms. Provide extended stability with NOMI LOCK™.

- ullet Rotation (heta or yaw) and tilt (au or pitch) of prisms and cube optics can be fine adjusted with this adapter.
 - To adjust yaw tilt (β) , fit the prism adapters in kinematic mirror holders after adjusting the orientation.
- There is a through hole on the moun so that prisms can be used on all four faces
- There is an offset of 40mm from the baseplate mounting hole of the kinematic mirror holder to the center of cube.
- The clamp allows for different sized cubes to be mounted.

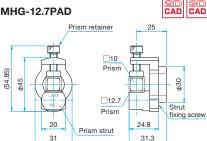




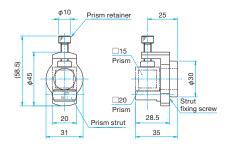
Specifications Primary material: Aluminum Finish: Black Anodized			
Part Number	Compatible Holders	ers Compatible Optics Diameter W [mm]	
MHG-12.7PAD	MHG-MP30/-HS30	□10•□12.7	0.06
MHG-20PAD	MHG-MP30/-HS30	□15•□20	0.055

Outline Drawing

MHG-12.7PAD



MHG-20PAD





Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motoeized Stages

Light Sources & Laser Safety

Index

Guide

Mirrors

Lenses Prisms

Polarizers

Lasers

Beam Shaping Diffusers

Filters

Shutter Others

Fiber

Application Systems

Optics & Optical Coatings

Mechanics

Opto-

Bases

Manual **Stages**

Actuators & Adjusters

Motoeized

Light Sources & Laser Safety

Stages

Index

Guide

Mirrors

Lenses Prisms

Polarizers Lasers Beam Shaping Diffusers

Filters Shutter Others Fiber

Options for Kinematic Mirror Holders

FMB / MHG-20LDU

Optical Path Flip Mounts | FMB



Flip mounts remove and insert mirrors/lenses from an optical paths.



- A 3 mm thick mirror and MHG-MP20-NL can be used to for a mirror at the center with 45 degrees incident light. FMB-25 can be used in combination with a mirror mount (MHI or BSHL).
- These flip mounts have 5" repeatability. NOMI LOCK™ mounts used with these flip mounts will have excellent repeatability
- To mount the high precision mirror holder (MHG-HS**-NL), use the accessory spacer for adjusting height in order to avoid interference with adjustment screws.

Outline Drawing

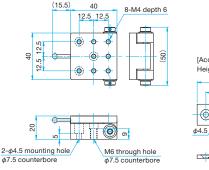
FMB-25 Hexagonal socket head cap screw M4×12...1 screw

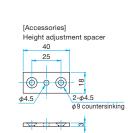
5-M2 depth 4 M4 through hole 2-φ2.4 mounting hole 4-φ2.2 Backing $\phi 4$ counterbore PCD $\phi 20$ 1 0 M6 P1 through hole φ7.5 counterbore

Hexagonal socket head cap screw M4×12...1 screw Countersunk head screw M4×8...2 screws









Part Number Repeatability ["] Weight [kg] FMB-25 5 (25μrad) 0.04 FMB-40 5 (25μrad) 0.1	Specifications		Primary material: Aluminum Finish: Black Anodized
C (ESpirate)	Part Number		
FMB-40 5 (25urad) 0.1	FMB-25	5 (25µrad)	0.04
(C-F-111)	FMB-40	5 (25µrad)	0.1

For specifying options, please refer to "Conversion of Posts, Post Holders and Pedestal Bases of C007

Example of Use

Laser Mounts | MHG-20LDU



Adapter for mounting laser diodes (LDU33) or other \$\phi 20\$ mm laser diodes with kinematic mirror holders.



- Split clamp structure of the laser mounts fix laser diodes securely. Caution: excessive clamping might damage laser diodes.
- Mounts can be used as fixed LD holders when a post is attached to the bottom of the
- Laser diodes (LDU33) are sold seperately. Refer to the light sources section for details of the specifications.

 WEB Reference Catalog Code W5001

Specifications			Primary material: Aluminum Finish: Black Anodized	
Part Number	Compatible Holders	Compatible Laser	Compatible Diameter [mm]	Weight [kg]
MHG-20LDU	MHG-HS30/-MP30	LDU33 series	φ20	0.02

