

**NOMI LOCK™ is the new locking mechanism from OptoSigma. It can adjust the torque of the adjustment screws and lock down the screws with negligible shift. It is best suited for use in interferometers or laser processing devices where beam displacement can cause issues. NOMI LOCK™ is a registered trademark of SIGMA KOKI CO., Ltd.**

- Kinematic mirror holders have excellent rigidity and stability. These qualities make them perfect for use in interferometers and laser resonators.
- There are two types of mirror holders, a high stability model (MHG-HS) and a production model (MHG-MP).
- The MHG-HS high stability model is fitted with large adjustment knobs. These knobs allow for movement in the vertical direction as well making it a 3 axis mount.
- NOMI LOCK™ will have a single fringe displaced in the optical axis when used in interferometers. (There are individual differences in the operation of the lock.)
- Three point fixation of the mirrors reduce the stress caused by mounting greatly.
- These holders have a large aperture for reflective or transmitted light. The retaining rings to not reduce the clear aperture.



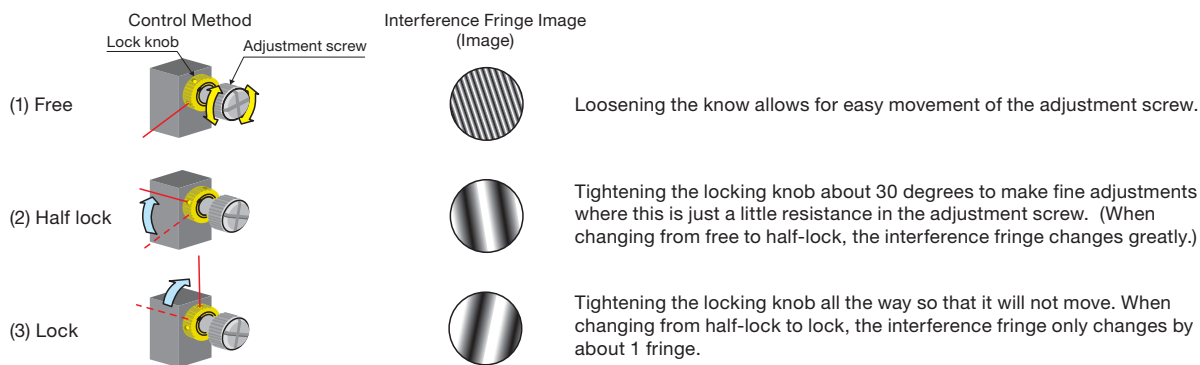
### Guide

- ▶ This product can be mounted on pedestal stands (PST: optional) or posts with an M6 external thread (RO: optional).
- ▶ Production model (MHG-MP) can be fixed directly on plates or stages with M4 screws.
- ▶ Production model (MHG-MP) comes with a special wrench for NOMI LOCK™.

### Attention

- ▶ The rotation center of the production model (MHG-MP) is outside the mirror (fulcrum of holder).
- ▶ To mount the high stability model (MHG-HS) on a flat surface, use the plates for mounting posts (MHG-\*\*BPRO). [Reference](#) C016
- ▶ When the plates for mounting posts (MHG-\*\*BPRO) are used, the optical axis will move 10mm upward.
- ▶ The back surface of the mirror is the reference surface when the mirror is mounted in the holder. Due to this condition, the location of the front surface will vary with the thickness of the mirror.

### NOMI LOCK™ Adjustment Method



### Specifications

Part Number	Options specified*	Compatible Optics Diameter [mm]	Compatible Optics Thickness [mm]	Number of Adjustment Axes [mm]	Adjustment Range		Resolution Rotation [°/rotation]	Resolution Tilt [°/rotation]	Weight [kg]
					Tilt [°]	Rotation [°]			
MHG-MP12.7-NL	—	φ12.7	3 – 5	3	±3	±3	about 0.74	about 0.74	0.04
MHG-MP20-NL	UU	φ20	3 – 5	2	±3	±3	about 0.39	about 0.39	0.12
MHG-HS20-NL	UU	φ20	3 – 5	3	±3	±3	about 0.39	about 0.39	0.12
MHG-MP25-NL	UU	φ25, φ25.4	3 – 5	2	±3	±3	about 0.39	about 0.39	0.12
MHG-HS25-NL	UU	φ25, φ25.4	3 – 5	3	±3	±3	about 0.39	about 0.39	0.12
MHG-MP30-NL	UU	φ30	3 – 5	2	±3	±3	about 0.39	about 0.39	0.12
MHG-HS30-NL	UU	φ30	3 – 5	3	±3	±3	about 0.39	about 0.39	0.12
MHG-MP50-NL	UU	φ50	5 – 8	2	±2	±2	about 0.26	about 0.26	0.24
MHG-MP50.8-NL	UU	φ50.8	5 – 8	2	±2	±2	about 0.26	about 0.26	0.24
MHG-MP80-NL	UU	φ80	7 – 12	2	±2	±2	about 0.18	about 0.18	0.38
MHG-MP100-NL	UU	φ100, φ101.6	10 – 15	2	±2	±2	about 0.13	about 0.13	0.56

\* For specifying options, please refer to "Conversion of Posts, Post Holders and Pedestal Bases of Holders". [Reference](#) C007

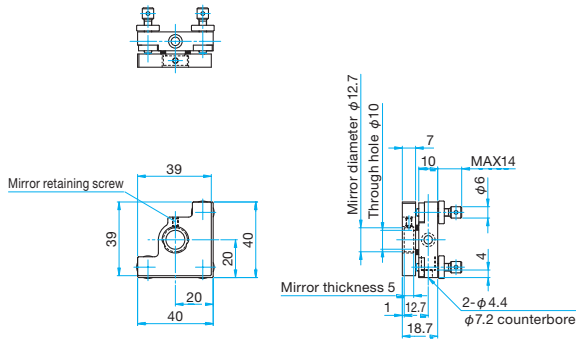


**Outline Drawing**

**MHG-MP12.7-NL**

Hexagonal socket head cap screw M4x8...1 screw  
Spanner for lock knob...1 screw

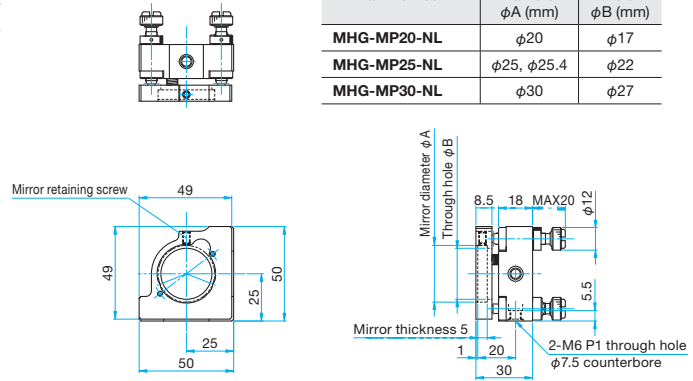
Part Number	Mirror Diameter (mm)
MHG-MP12.7-NL	φ12.7



**MHG-MP20-NL/25-NL/30-NL**

Hexagonal socket head cap screw M4x10...1 screw  
Spanner for lock knob...1 screw

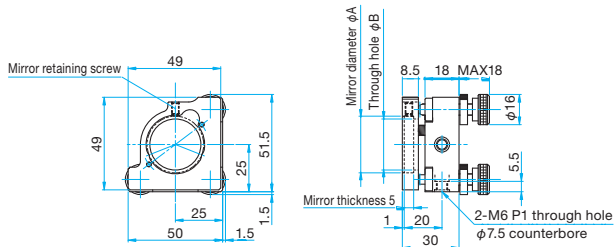
Part Number	Mirror Diameter φA (mm)	Through hole φB (mm)
MHG-MP20-NL	φ20	φ17
MHG-MP25-NL	φ25, φ25.4	φ22
MHG-MP30-NL	φ30	φ27



**MHG-HS20-NL/25-NL/30-NL**

Hexagonal socket head cap screw M4x10...1 screw  
Spanner for lock knob...1 screw

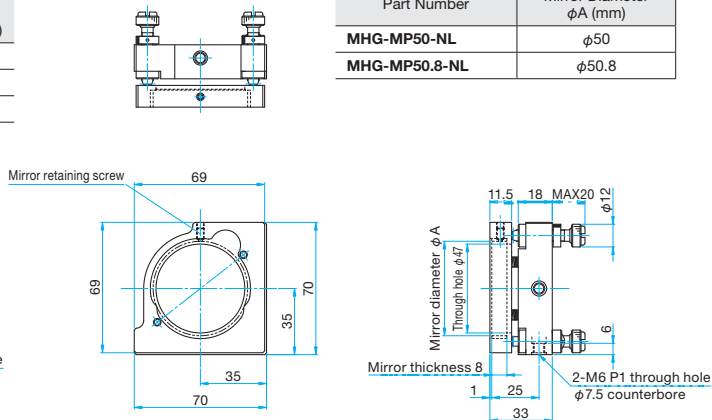
Part Number	Mirror Diameter φA (mm)	Through hole φB (mm)
MHG-HS20-NL	φ20	φ17
MHG-HS25-NL	φ25, φ25.4	φ22
MHG-HS30-NL	φ30	φ27



**MHG-MP50-NL/50.8-NL**

Hexagonal socket head cap screw M4x10...1 screw  
Spanner for lock knob...1 screw

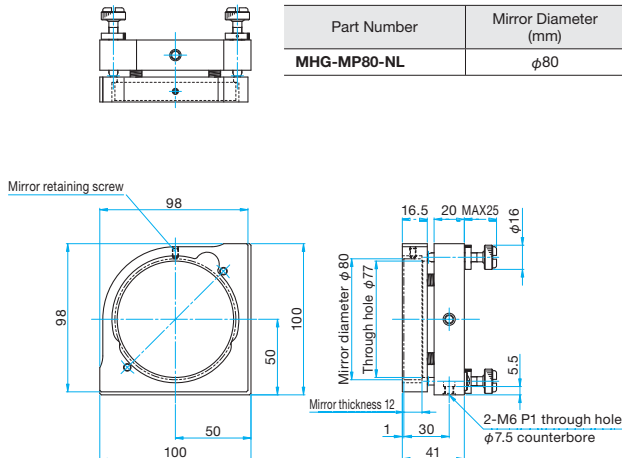
Part Number	Mirror Diameter φA (mm)
MHG-MP50-NL	φ50
MHG-MP50.8-NL	φ50.8



**MHG-MP80-NL**

Hexagonal socket head cap screw M4x10...1 screw  
Spanner for lock knob...1 screw

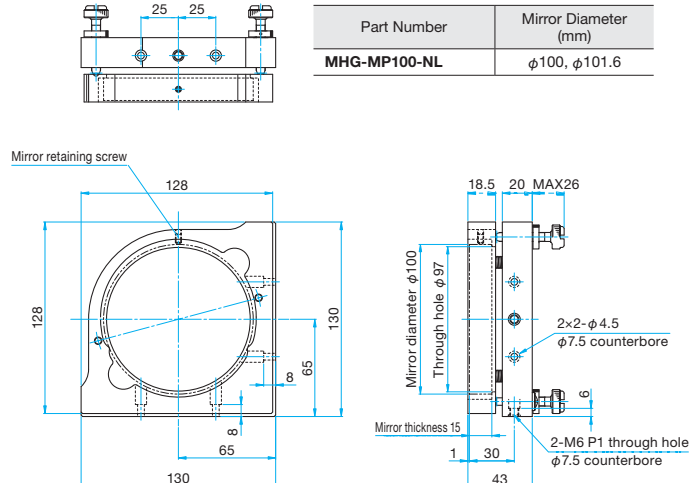
Part Number	Mirror Diameter (mm)
MHG-MP80-NL	φ80



**MHG-MP100-NL**

Hexagonal socket head cap screw M4x12...3 screws  
Spanner for lock knob...1 screw

Part Number	Mirror Diameter (mm)
MHG-MP100-NL	φ100, φ101.6



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