

NEW NOMI LOCK™ Model Kinematic Mirror Holder

KMH-MP-NL/KMH-HS-NL

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High stability Kinematic Mirror Holder with SIGMA KOKI's unique locking mechanism (NOMI LOCK™). NOMI LOCK™ is a new type of locking mechanism that enables adjustment of the torque of adjustment screws.

It is best suited for usage in interferometers or laser processing devices where beam displacement after adjustment is a problem.

NOMI LOCK™ is a registered trademark of SIGMA KOKI CO., Ltd. (Trademark Registration: 5313722)

- With their simple structure, excellent rigidity and stability, kinematic mirror holders are used in interferometers and laser resonators.
- There are two types of mirror holders, a high stability model (KMH-HS) and a production model (KMH-MP).
- The high stability model (KMH-HS) is fitted with large knobs, and allows adjustment of the point of support in addition to the two points of action as well as displacement of mirrors in the vertical direction.
- When NOMI LOCK™ is used in interferometers, the displacement in the optical axis will be within a single fringe. (There are individual differences in the operation of the lock.)
- Mirrors are fixed at three points on the lateral side so that the stress caused by fixing mirrors can be adjusted.
- Provide large clear aperture of reflected light or transmitted light since retaining rings and the like do not impose any constraints on clear aperture.



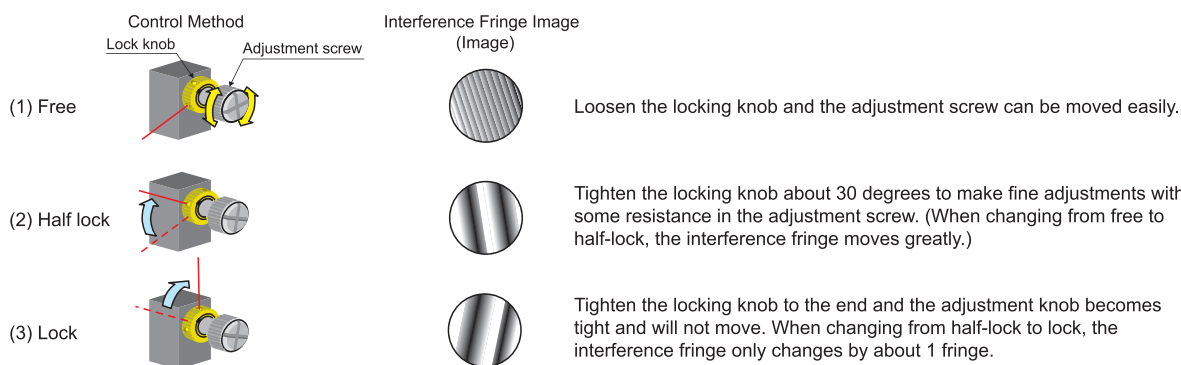
Guide

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

Attention

- ▶ The rotation center of the production model (KMH-MP) is outside the mirror (fulcrum of holder).
- ▶ To mount the high stability model (KMH-HS) on a fat surface, use the plates for mounting posts (KMH-**BPRO). [Reference](#) D012
- ▶ When the plates for mounting posts (KMH-**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

Primary material: Aluminum (Brass only for MHG-MP12.7-NL)
 Finish: Black Anodized (Super Black Chrome only for MHG-MP12.7-NL)

Part Number	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 [°]			
KMH-MP12.7-NL	φ 12.7	3 - 5	3	±3	±3	about 0.74	about 0.74	0.04
KMH-MP20-NL	φ 20	3 - 5	2	±3	±3	about 0.39	about 0.39	0.12
KMH-HS20-NL	φ 20	3 - 5	3	±3	±3	about 0.39	about 0.39	0.12
KMH-MP25-NL	φ 25, φ 25.4	3 - 5	2	±3	±3	about 0.39	about 0.39	0.12
KMH-HS25-NL	φ 25, φ 25.4	3 - 5	3	±3	±3	about 0.39	about 0.39	0.12
KMH-MP30-NL	φ 30	3 - 5	2	±3	±3	about 0.39	about 0.39	0.12
KMH-HS30-NL	φ 30	3 - 5	3	±3	±3	about 0.39	about 0.39	0.12
KMH-MP50-NL	φ 50	5 - 8	2	±2	±2	about 0.26	about 0.26	0.24
KMH-MP50.8-NL	φ 50.8	5 - 8	2	±2	±2	about 0.26	about 0.26	0.24
KMH-MP80-NL	φ 80	7 - 12	2	±2	±2	about 0.18	about 0.18	0.38
KMH-MP100-NL	φ 100	10 - 15	2	±2	±2	about 0.13	about 0.18	0.56

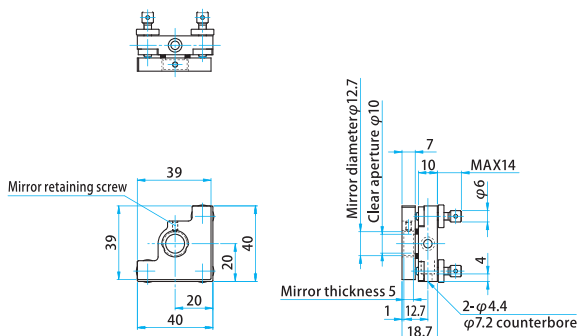


Outline Drawing

KMH-MP12.7-NL

Hexagonal socket head cap screw M4×6...1 screw

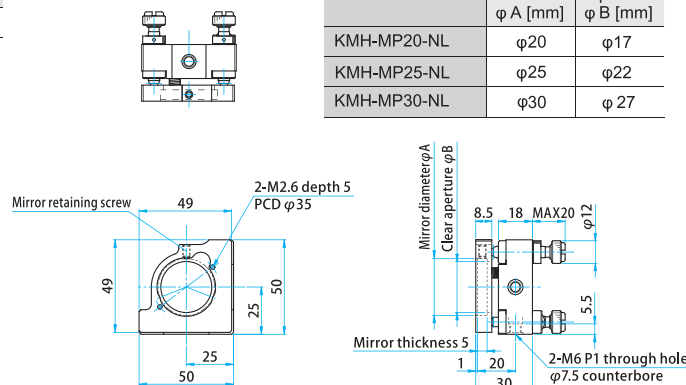
Part Number	Mirror Diameter [mm]
KMH-MP12.7-NL	φ12.7



KMH-MP20-NL/25-NL/30-NL

Hexagonal socket head cap screw M4×10...1 screw
Spanner for lock knob...1 screw

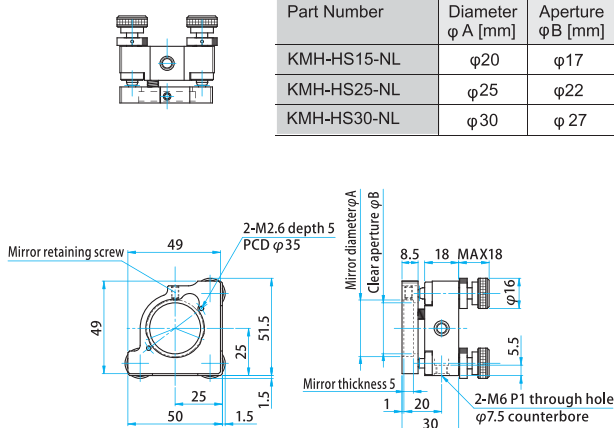
Part Number	Mirror Diameter φ A [mm]	Clear Aperture φ B [mm]
KMH-MP20-NL	φ20	φ17
KMH-MP25-NL	φ25	φ22
KMH-MP30-NL	φ30	φ27



KMH-HS20-NL/25-NL/30-NL

Hexagonal socket head cap screw M4×10...1 screw

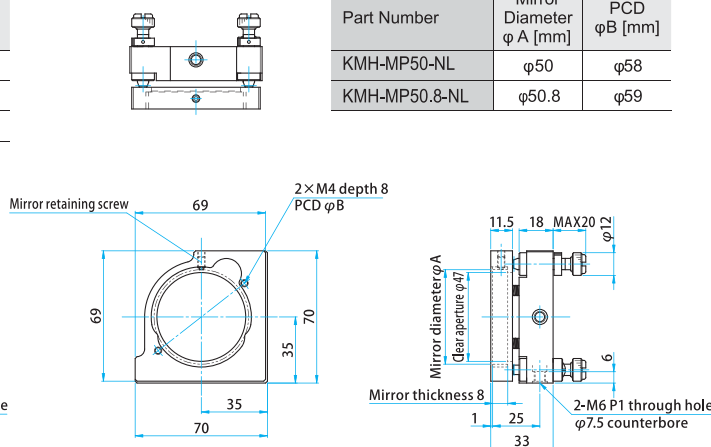
Part Number	Mirror Diameter φ A [mm]	Clear Aperture φ B [mm]
KMH-HS15-NL	φ20	φ17
KMH-HS25-NL	φ25	φ22
KMH-HS30-NL	φ30	φ27



KMH-MP50-NL/50.8-NL

Hexagonal socket head cap screw M4×10...1 screw
Spanner for lock knob...1 screw

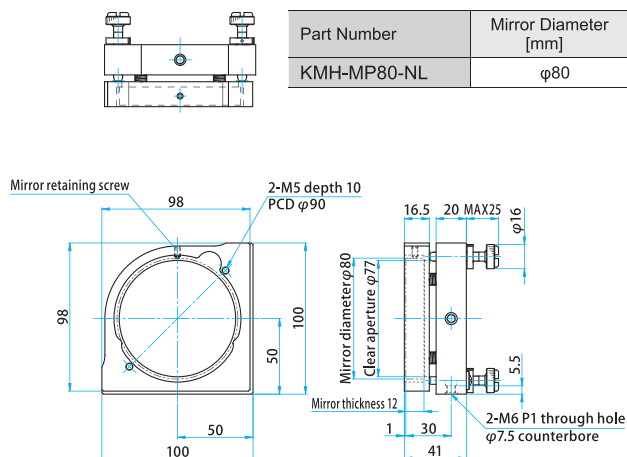
Part Number	Mirror Diameter φ A [mm]	PCD φ B [mm]
KMH-MP50-NL	φ50	φ58
KMH-MP50.8-NL	φ50.8	φ59



KMH-MP80-NL

Hexagonal socket head cap screw M4×10...1 screw
Spanner for lock knob...1 screw

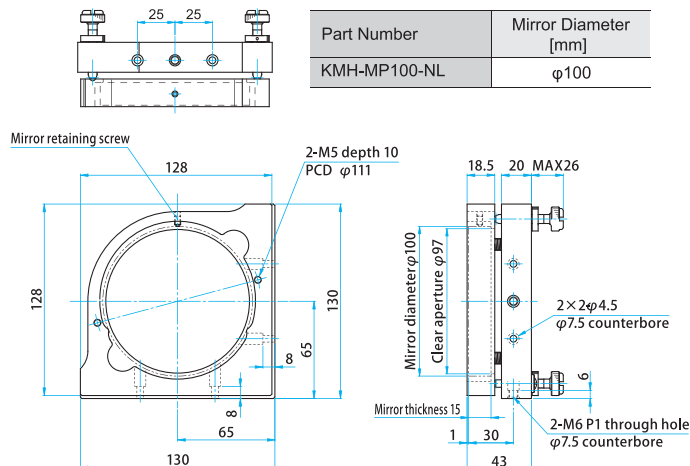
Part Number	Mirror Diameter [mm]
KMH-MP80-NL	φ80



KMH-MP100-NL

Hexagonal socket head cap screw M4×12...3 screws
Spanner for lock knob...1 screw

Part Number	Mirror Diameter [mm]
KMH-MP100-NL	φ100



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