

# Motorized Large Precision Gimbal Mirror Holder

**MHDM** W9111

**Gimbal-type motorized mirror holder for mirrors of 150 mm dia. or larger.  
Tilt adjustment of large mirrors can be done by remote control.**

- The mirror is fixed at the tip by three plastic screws from the mirror insertion surface, making it possible to accommodate mirrors of various thicknesses.
- A coarse adjustment mechanism is provided on the axis in the direction of the tilt, allowing the mirror to be clamped at any 360° position.
- The mirror mount is compatible with both metric and inch standards with similar mirror sizes, and can be easily switched with the included pin.



## Guide

- Two D15D15A cables (D15D15A-CA-3) must be purchased separately for connection to the controller.
- Parts for fixing the cable are included. Use as necessary.
- If vertical mounting is desired, please contact our sales representative.
- Manual large precision gimbal mirror holders (MHD series) are also available.



- We can also manufacture automatic mirror holders in your specified size. Please contact our sales department.

## Attention

- When replacing a mirror, use a wrench to remove the mirror holder bracket, and then insert the mirror.
- Do not over-tighten the plastic screws on the mirror holder, as this may distort the mirror and reduce surface accuracy.
- When loosening the coarse clamp portion, hold the mirror mount firmly by hand.

## Motorized Large Precision Gimbal Mirror Holder MHDM Series Lineup List

Part Number	Compatible Optics Diameter	Compatible Optics Thickness	Optical Axis Height	Load Capacity	Primary material	Finish	Weight
MHDM-150	φ150mm、φ152.4mm	5 - 28mm	160mm	9.8N(1.0kgf)	Aluminum	Black anodized	11kg
MHDM-200	φ200mm、φ203.2mm	20 - 44mm	180mm	36.3N(3.7kgf)	Aluminum	Black anodized	13.5kg
MHDM-254	φ250mm、φ254mm	40 - 54mm	210mm	71.5N(7.3kgf)	Aluminum	Black anodized	15.5kg
MHDM-300	φ300mm、φ304.8mm	40 - 54mm	240mm	98.0N(10.0kgf)	Aluminum	Black anodized	17.5kg

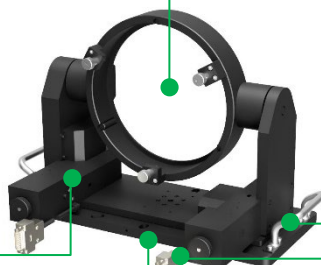
## MHDM Features at Glance

CE compliant

Compatible Optics Diameter can be selected from 4 types (Compatible with both metric and inch standards)

Part Number	Compatible Optics Diameter	Compatible Optics Thickness
MHDM-150	φ150mm、φ152.4mm	5 - 28mm
MHDM-200	φ200mm、φ203.2mm	20 - 44mm
MHDM-254	φ250mm、φ254mm	40 - 54mm
MHDM-300	φ300mm、φ304.8mm	40 - 54mm

5-phase stepping motor 0.75A/phase  
PK545-NBW (□42mm) adopt



Includes a handle for easy installation and carrying



Parts for fixing cables are included. Please use as needed.

Lower Plate 25mm, 1" (25.4mm) pitch for mounting



MHDM-150



MHDM-200



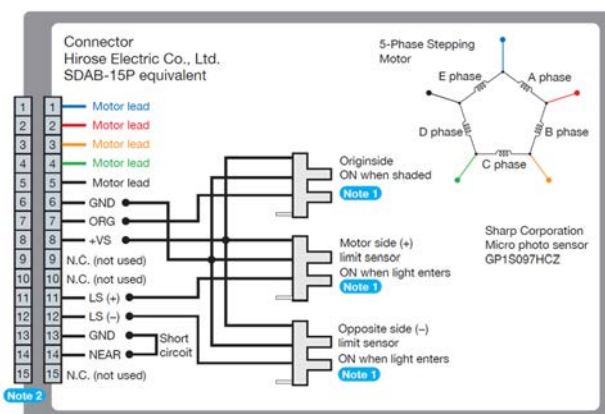
MHDM-254



MHDM-300

Specifications					
Part Number	MHDM-150	MHDM-200	MHDM-254	MHDM-300	
Compatible Optics Diameter [mm]	φ150、φ152.4	φ200、φ203.2	φ250、φ254	φ300、φ304.8	
Compatible Optics Thickness [mm]	5 - 28	20 - 44	40 - 54	40 - 54	
Optical Axis Height [mm]	160	180	210	240	
Adjustment Range Tilt [ ° ]	±4.5	±3.8	±3.1	±2.7	
Adjustment Range Rotation [ ° ]	±4.5	±3.8	±3.1	±2.7	
Primary material	Aluminum	Aluminum	Aluminum	Aluminum	
Finish	Black anodized	Black anodized	Black anodized	Black anodized	
Accuracy Specifications	Resolution (Full) [ " ]	3.6	3.1	2.5	2.2
	Resolution (Half) [ " ]	1.8	1.55	1.25	1.1
	MAX Speed [ °/sec ]	2	1.7	1.4	1.2
	Positional Repeatability [ ° ]	0.05	0.05	0.05	0.05
	Lost Motion [ ° ]	0.05	0.05	0.05	0.05
	Minimum Incremental Motion (reference) [mdeg]	0.5	0.5	0.5	0.5
	Load Capacity [N]	9.8 (1.0kgf)	36.3 (3.7kgf)	71.5 (7.3kgf)	98.0(10.0kgf)
Motor	Type	5-phase stepping motor 0.75 A/phase ( Oriental Motor Co., Ltd. )			
	Motor Part Number	PK545-NBW (□42mm)			
	Step Angle	0.72°			
Weight [kg]	11	13.5	15.5	17.5	

### ■ Connection Diagram



### ■ Compatible Controllers and Cables

Controller	Cable	Holder
SHOT-702H [2 Axis] SHRC-203 [3 Axis] HIT-MV・HIT-SA [8 Axis]	 D15D15A-CA G120	MHDM-150 MHDM-200 MHDM-254 MHDM-300



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