

Holder Attached Surface Accuracy Guaranteed Mirrors

HTFM-MHG

RoHS

By bonding the coated surface to our Kinematic Mirror Holders, a $\lambda/10$ surface flatness is guaranteed!

This product is suitable for high accuracy wavefront optical systems and interferometer requirements.

- 2 types of performance mirror holders are offered: high stability mirror holder (MHG-HS) or production model (MHG-MP).



Specifications

Holder

Movable axis	HTFM-MHG-HS: 3 axes HTFM-MHG-MP: 2 axes (HTFM-12.7C08-MHG-MP: 3axes)
Main Material	Aluminum (Brass: MHG-MP12.7 only)
Finishing	Black anodized (Only MHG-MP12.7 is Super black chrome)

Mirror

Material	Synthetic fused silica
Coating	Dielectric multi-layer coating
Incident angle	$45^\circ \pm 3^\circ$
Surface Flatness	After holder is attached $\lambda/10$
Surface Quality (Scratch-Dig)	10-5
Clear aperture	80% of Actual Aperture
Rear Surface	Polished

Guide

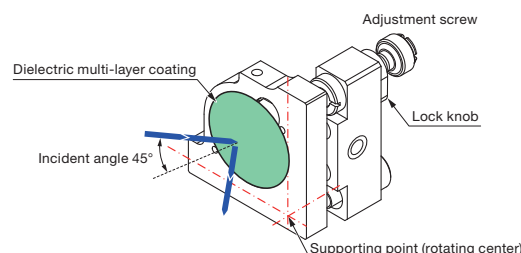
- ▶ The Production model (MHG-MP) is equipped with locking mechanisms on the adjustment screw.
- ▶ This product can be attached to a rod (RO-**-**): separately available or a post stand (PS- **): separately available.

- ▶ The mirror reflection wavelength characteristic are noted with the graph of the surface accuracy guaranteed mirror (HTFM).

Attention

- ▶ The mirror surface will protrude by 2mm beyond the front surface of the holder after attachment.
- ▶ Surface flatness data is not provided standard with the product. Please contact our Sales Division for this data at an additional charge.
- ▶ Surface flatness will not be guaranteed when the mirror is detached.
- ▶ Any impacted shock to the holder or mirror may result in poor surface flatness.
- ▶ For production model (MHG-MP), the rotation center is at the external side of the mirror (support point of the holder)
- ▶ When fixing the high stability model (MHG-HS) to a flat surface, please use supplied plate for attaching posts.
- ▶ The optical axis will be 10mm higher after attaching the supplied plates.

Schematic



248 – 308nm

Part Number	Wavelength Range [nm]	Compatible Optics Diameter ϕD [mm]	Reflectance [%]	Holder part number	Adjustment Range		Resolution		Weight [kg]
					Elevation [°]	Rotation [°]	Elevation [°/rotation]	Rotation [°/rotation]	
HTFM-12.7C08-248-MHG-MP	248	$\phi 12.7$	>99.2	MHG-MP12.7	± 3	± 3	about 0.74	about 0.74	0.04
HTFM-25.4C08-248-MHG-MP	248	$\phi 25.4$	>99.2	MHG-MP25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-25.4C08-248-MHG-HS	248	$\phi 25.4$	>99.2	MHG-HS25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-248-MHG-MP	248	$\phi 30$	>99.2	MHG-MP30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-248-MHG-HS	248	$\phi 30$	>99.2	MHG-HS30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-50C11-248-MHG-MP	248	$\phi 50$	>99.2	MHG-MP50	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-50.8C11-248-MHG-MP	248	$\phi 50.8$	>99.2	MHG-MP50.8	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-12.7C08-266-MHG-MP	266	$\phi 12.7$	>99.2	MHG-MP12.7	± 3	± 3	about 0.74	about 0.74	0.04
HTFM-25.4C08-266-MHG-MP	266	$\phi 25.4$	>99.2	MHG-MP25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-25.4C08-266-MHG-HS	266	$\phi 25.4$	>99.2	MHG-HS25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-266-MHG-MP	266	$\phi 30$	>99.2	MHG-MP30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-266-MHG-HS	266	$\phi 30$	>99.2	MHG-HS30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-50C11-266-MHG-MP	266	$\phi 50$	>99.2	MHG-MP50	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-50.8C11-266-MHG-MP	266	$\phi 50.8$	>99.2	MHG-MP50.8	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-12.7C08-308-MHG-MP	308	$\phi 12.7$	>99.5	MHG-MP12.7	± 3	± 3	about 0.74	about 0.74	0.04
HTFM-25.4C08-308-MHG-MP	308	$\phi 25.4$	>99.5	MHG-MP25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-25.4C08-308-MHG-HS	308	$\phi 25.4$	>99.5	MHG-HS25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-308-MHG-MP	308	$\phi 30$	>99.5	MHG-MP30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-308-MHG-HS	308	$\phi 30$	>99.5	MHG-HS30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-50C11-308-MHG-MP	308	$\phi 50$	>99.5	MHG-MP50	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-50.8C11-308-MHG-MP	308	$\phi 50.8$	>99.5	MHG-MP50.8	± 2	± 2	about 0.26	about 0.26	0.24

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Frameless

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High Power

Ultra Broadband

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Aluminum Coating

Gold Coating



355 – 1064nm

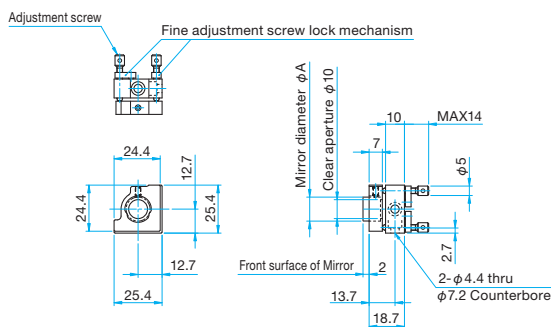
Part Number	Wavelength Range [nm]	Compatible Optics Diameter ϕD [mm]	Reflectance [%]	Holder part number	Adjustment Range		Resolution		Weight [kg]
					Elevation [°]	Rotation [°]	Elevation [°/rotation]	Rotation [°/rotation]	
HTFM-12.7C08-355-MHG-MP	355	$\phi 12.7$	>99.5	MHG-MP12.7	± 3	± 3	about 0.74	about 0.74	0.04
HTFM-25.4C08-355-MHG-MP	355	$\phi 25.4$	>99.5	MHG-MP25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-25.4C08-355-MHG-HS	355	$\phi 25.4$	>99.5	MHG-HS25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-355-MHG-MP	355	$\phi 30$	>99.5	MHG-MP30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-355-MHG-HS	355	$\phi 30$	>99.5	MHG-HS30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-50C11-355-MHG-MP	355	$\phi 50$	>99.5	MHG-MP50	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-50.8C11-355-MHG-MP	355	$\phi 50.8$	>99.5	MHG-MP50.8	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-12.7C08-532-MHG-MP	532	$\phi 12.7$	>99.5	MHG-MP12.7	± 3	± 3	about 0.74	about 0.74	0.04
HTFM-25.4C08-532-MHG-MP	532	$\phi 25.4$	>99.5	MHG-MP25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-25.4C08-532-MHG-HS	532	$\phi 25.4$	>99.5	MHG-HS25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-532-MHG-MP	532	$\phi 30$	>99.5	MHG-MP30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-532-MHG-HS	532	$\phi 30$	>99.5	MHG-HS30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-50C11-532-MHG-MP	532	$\phi 50$	>99.5	MHG-MP50	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-50.8C11-532-MHG-MP	532	$\phi 50.8$	>99.5	MHG-MP50.8	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-12.7C08-1064-MHG-MP	1064	$\phi 12.7$	>99.5	MHG-MP12.7	± 3	± 3	about 0.74	about 0.74	0.04
HTFM-25.4C08-1064-MHG-MP	1064	$\phi 25.4$	>99.5	MHG-MP25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-25.4C08-1064-MHG-HS	1064	$\phi 25.4$	>99.5	MHG-HS25	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-1064-MHG-MP	1064	$\phi 30$	>99.5	MHG-MP30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-30C08-1064-MHG-HS	1064	$\phi 30$	>99.5	MHG-HS30	± 3	± 3	about 0.39	about 0.39	0.12
HTFM-50C11-1064-MHG-MP	1064	$\phi 50$	>99.5	MHG-MP50	± 2	± 2	about 0.26	about 0.26	0.24
HTFM-50.8C11-1064-MHG-MP	1064	$\phi 50.8$	>99.5	MHG-MP50.8	± 2	± 2	about 0.26	about 0.26	0.24

Outline Drawing

(in mm)

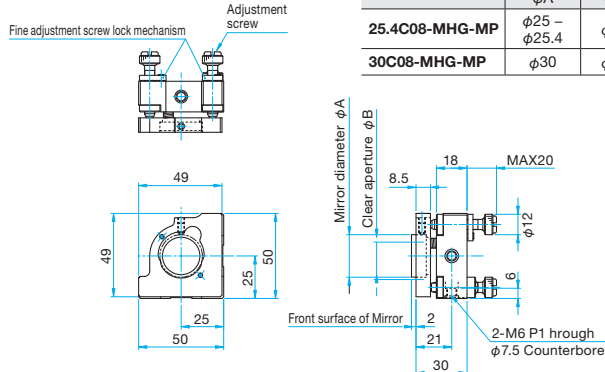
HTFM-12.7C08-MHG-MP

Hexagon socket head cap screw M4x6...1 screw



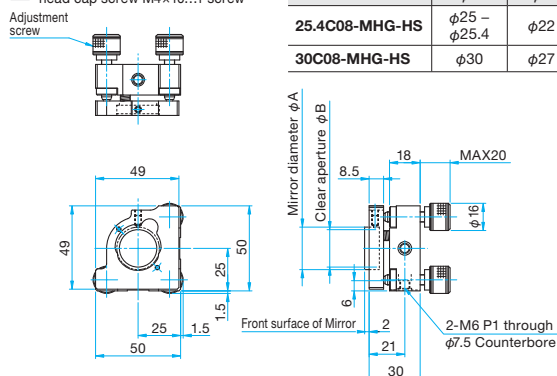
HTFM-25.4C08-MHG-MP HTFM-30C08-MHG-MP

Hexagon socket head cap screw M4x10...1 screw



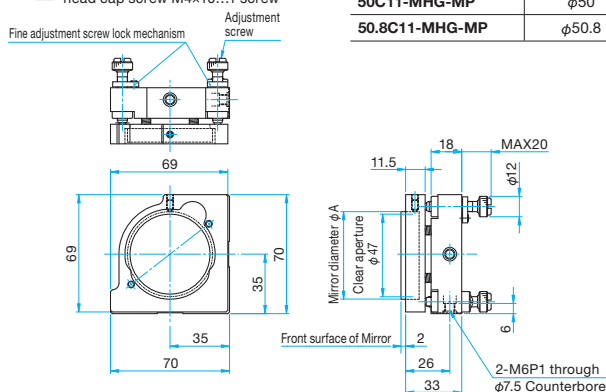
HTFM-25.4C08-MHG-HS HTFM-30C08-MHG-HS

Hexagon socket head cap screw M4x10...1 screw



HTFM-50C11-MHG-MP HTFM-50.8C11-MHG-MP

Hexagon socket head cap screw M4x10...1 screw



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