

High-Stability Mirror Mount MHX RoHS

Higher moment of inertia to maximize stiffness and faster to reach thermal equilibrium characteristics are achieved by a hollow-frame design. Ideal for interference measurement or precision measurement.

- The mirror can be inserted from the back of the holder and fixed so that the reflecting surface of the mirror stops at the butt of the mirror frame with HX-25.4F-R. This ensures that the reflecting surface of the mirror is always aligned with the mounting center of the rod, even if the thickness of the mirror changes. (For MHX-***F/A, the mirror is inserted from the front of the holder; for MHX-12.7F-R, the mirror is inserted from the back, but the rod cannot be attached.)
- MHX-***F/F-R has three adjustment axes screws that allow the reflecting surface to be moved back and forth in addition to the adjustment of tilt and rotation. (MHX-***A has only 2 axes of adjustment screws, so it can only be used for adjustment of tilt and rotation.)
- Adhesive holes for mirror adhesion and pin holes for anti-rotation and positioning are equipped.
- High-density stainless steel is used for the material, but the weight has been reduced by reducing the thickness.
- The thickness of the frame is made thinner and follows immediately even if the temperature changes, and the distortion of the frame due to the temperature distribution is kept low.

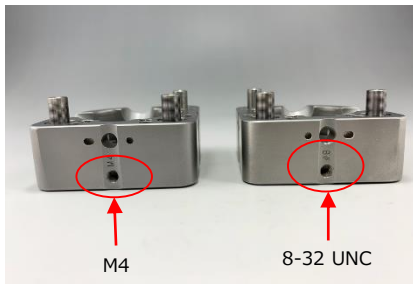


Guide

- ▶ Please use a hexagonal wrench to adjust the tilt and rotation. Do not use bare hands to turn the tilt or rotation screws.
Hexagonal wrench with knob for MHX-12.7 (KCL-1513) is also available.
We also offer a screw-in knob (MHX-K-M6) specifically for MHX-25.4 instead of a hexagonal wrench.
- ▶ A special lock (MHK-L-M*) is also available to hold the adjusted angle.

Attention

- ▶ MHX-25.4 cannot be attached to M6 rods (RO). Use M4 or 8-32 UNC rods (ROC, RO-UU) when using a rod. MHX-12.7 is not compatible with tip threads rods. Both MHXs can be secured to post stands (PST) or M4 tapped hole spacers with M4 or 8-32 UNC threads. (For MHX-12.7, use the supplied small head bolts.)
- ▶ When using a rod, it is not possible to change the beam transmission direction of the mirror holder. Use a post stand (PST) to change the direction.
- ▶ When used with a cross beam (optical system such as a Michelson interferometer), the effective diameter of the beam becomes smaller.



Specifications

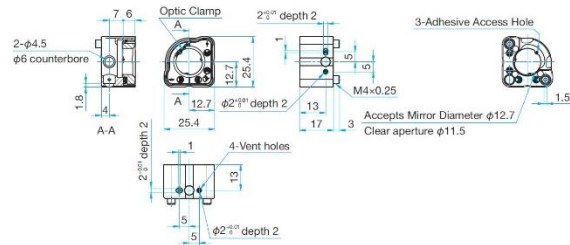
Primary material : Stainless steel
Finish : None

Part number	Price [\$]	Compatible optics diameter ϕA [mm]	Compatible optics thickness [mm]	Effective diameter [mm]	Number of adjustment axes	Mounting direction	Adjustment range		Resolution		Weight [kg]
							Tilt [°]	Rotation [°]	Tilt [°/rotation]	Rotation [°/rotation]	
MHX-12.7A	114	$\phi 12.7$	2 - 6	$\phi 11.5$	2	Front	± 3	± 3	Approx. 0.8	Approx. 0.8	0.036
MHX-12.7F	118	$\phi 12.7$	2 - 6	$\phi 11.5$	3	Front	± 3	± 3	Approx. 0.8	Approx. 0.8	0.037
MHX-12.7F-R	118	$\phi 12.7$	2 - 6	$\phi 11.5$	3	Back	± 3	± 3	Approx. 0.8	Approx. 0.8	0.037
MHX-25.4A	115	$\phi 25.4$	3 - 7	$\phi 23$	2	Front	± 3	± 3	Approx. 0.41	Approx. 0.41	0.16
MHX-25.4F	119	$\phi 25.4$	3 - 7	$\phi 23$	3	Front	± 3	± 3	Approx. 0.41	Approx. 0.41	0.17
MHX-25.4F-R	119	$\phi 25.4$	3 - 7	$\phi 23$	3	Back	± 3	± 3	Approx. 0.41	Approx. 0.41	0.17

Outline Drawing

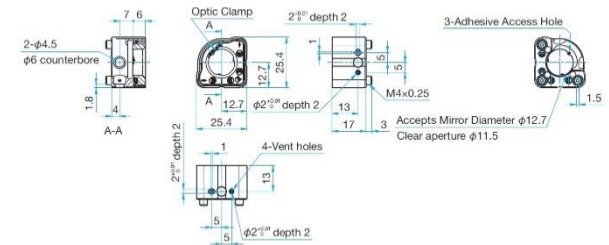
MHX-12.7A

- Hexagonal socket head cap screw M4x6...1 screw
- Hexagonal socket head cap screw 8-32UNCx1/4...1 screw



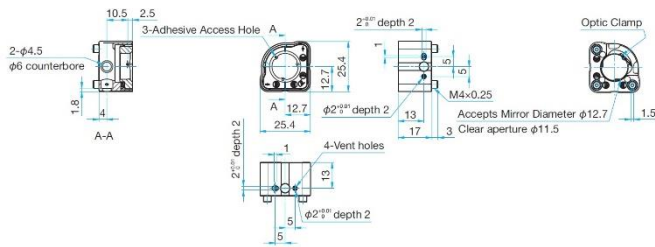
MHX-12.7F

- Hexagonal socket head cap screw M4x6...1 screw
- Hexagonal socket head cap screw 8-32UNCx1/4...1 screw



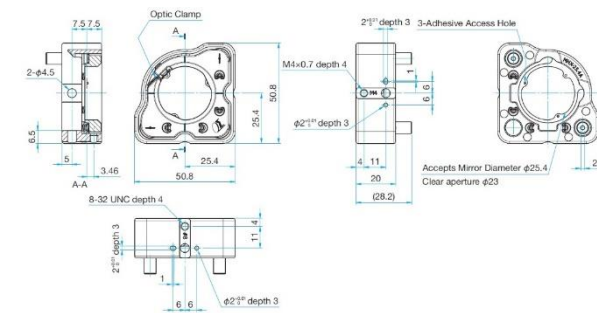
MHX-12.7F-R

- Hexagonal socket head cap screw M4x6...1 screw
- Hexagonal socket head cap screw 8-32UNCx1/4...1 screw



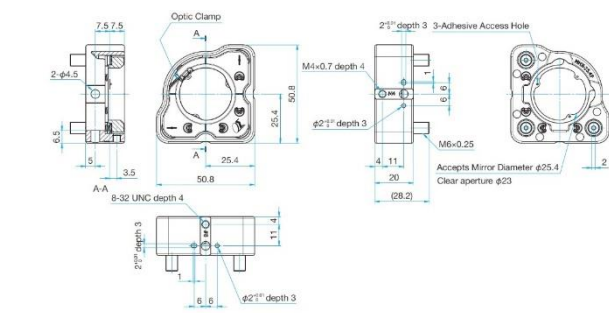
MHX-25.4A

- Hexagonal socket head cap screw M4x12...1 screw
- Hexagonal socket head cap screw 8-32UNCx1/1...1 screw



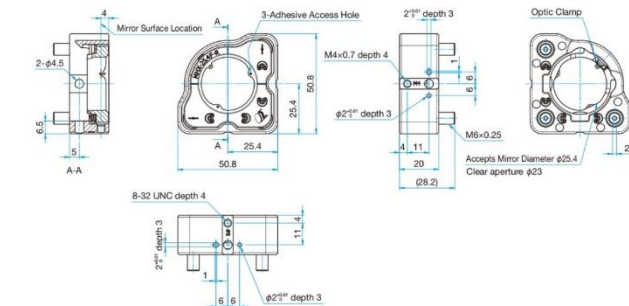
MHX-25.4F

- Hexagonal socket head cap screw M4x12...1 screw
- Hexagonal socket head cap screw 8-32UNCx1/1...1 screw

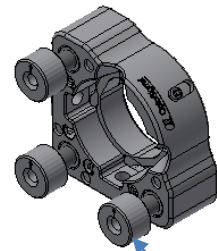


MHX-25.4F-R

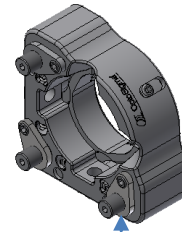
- Hexagonal socket head cap screw M4x12...1 screw
- Hexagonal socket head cap screw 8-32UNCx1/1...1 screw



Options



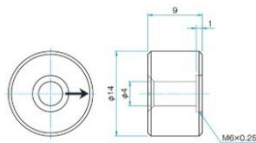
MHX-K-M6



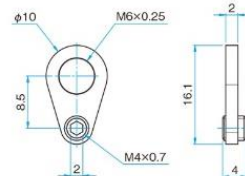
MHX-L-M6

Specifications			Primary material : Stainless steel Finish : Non		
Part number	Price [\$]	Product name	Compatible holder	Qty [pcs]	Weight [kg]
MXH-K-M6	15	Knob	MXH-25.4	3	0.030
MXH-L-M6	25	Lock			0.006
MXH-L-M4	28	Lock	MXH-12.7	3	0.003

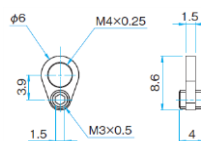
MHX-K-M6



MHX-L-M6



MHX-L-M4



3-cycle thermal deflection test graph MHX-25.4

