

Mirror Mounts

Flexure Mounts Introduction



IXF.50mb monolithic mounting block

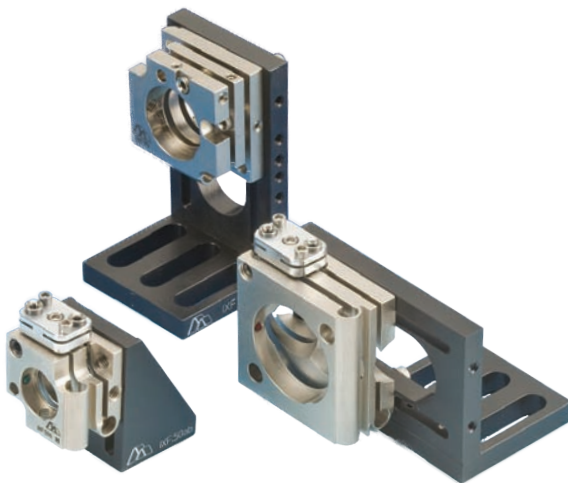
Siskiyou monolithic flexures are machined from a single piece of metal. Hex-adjust only, they are an ideal OEM component, not prone to accidental misalignment. Since they are not stamped, formed or welded, there are no built-in stresses. Rolled threads provide a silky-smooth adjustment feel to the #8 adjusters, which are swaged to prevent over-travel. They're available for 0.5", 0.75", 1.0" and 2.0" diameter optics, for both transmitted light and 45° beamsplitter applications.



IXF.50ti mounted to IXF.50mb

Top adjust versions have a patent-pending mechanism to eliminate rotational torque being applied to the axis under adjustment. Designed to be either panel or bracket-mounted; Siskiyou flexures provide the ultimate in stability, even in challenging environments. The monolithic construction results in substantially better heat conduction from one side of the component to the other, for quicker response to changes in temperature.

They have a hole pattern on the front to accommodate mounting objects other than standard sized optical elements. Aluminum versions are vacuum and UV-compatible out of the box at no extra charge. Nickel plated steel versions have greater mechanical stiffness — great if you're mounting something other than a typical optical element. Single-axis versions can be stacked to provide a wide variety of adjustment axis combinations. Custom / OEM versions available. The continually expanding line up of Siskiyou flexures — a robust choice for your OEM optical layout.

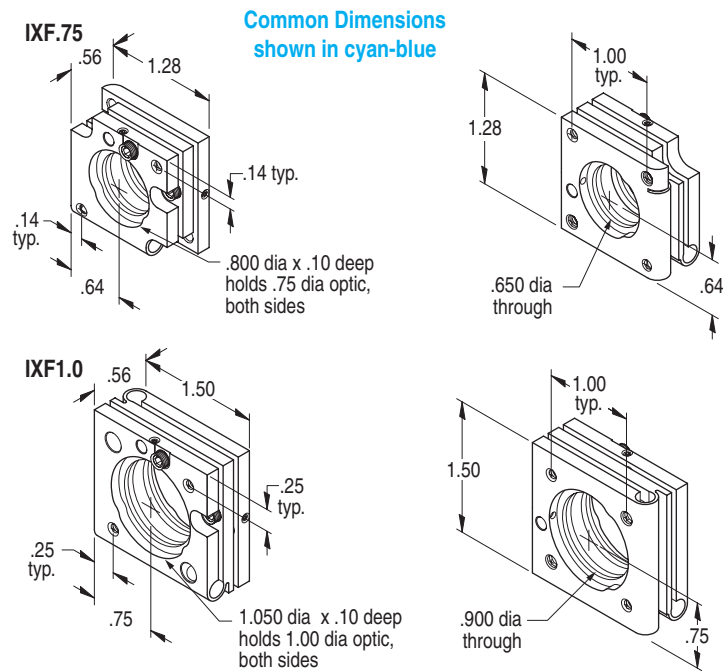
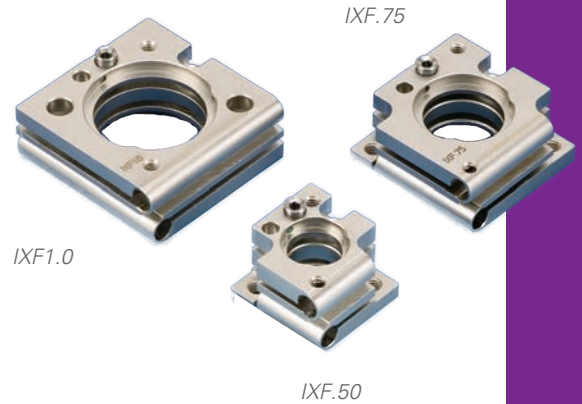
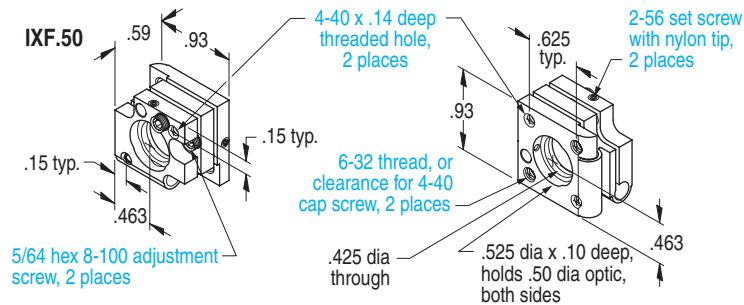


*IXF series flexure mounts,
mounted to related IXFab series
angle brackets*

Mirror Mounts

Flexure Mounts

0.5- to 1.0-inch optic / IXF Series



Flexure Mounts

IXF series monolithic flexure mounts are specifically designed for OEM applications. They have a wide variety of optic mounting options, including bulkhead mounting as either a front adjusted or through-the-bulkhead adjusted mount. They use our 100TPI rolled thread adjustment screws for low stiction fine adjustments and are swaged at the end to prevent over-travel of the mount. The IXF series mounts are manufactured from one solid piece of spring steel, then nickel plated so they will not corrode and can be used in UV laser environments.

Product Features

- 100TPI adjustment screws
- One-piece construction
- Nickel plated

Performance Specifications

Model	Pitch	Yaw	Minimum controllable motion
IXF.50	6°	6°	8.2 arc sec.
IXF.75	6°	6°	5.5 arc sec.
IXF1.0	5°	5°	4.5 arc sec.

Related Products

IXFmb series mounting blocks	242
IXFab series angle brackets	246

Order Information

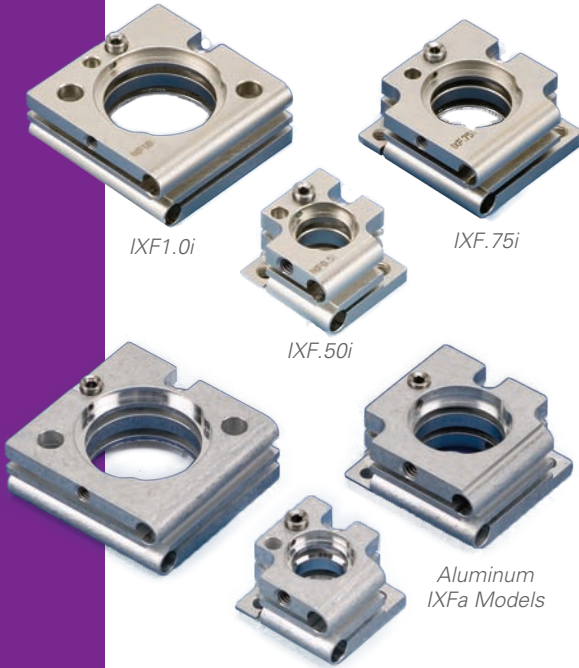
flexure mount, 0.5-inch optic	IXF.50
flexure mount, 0.75-inch optic	IXF.75
flexure mount, 1.0-inch optic	IXF1.0

Mirror Mounts

Flexure Mounts

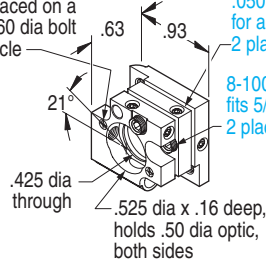
0.5- to 1.0-inch optic / IXFi Series

Note that dimensions in parentheses (mm) reflect metric assembly features



IXF.50i and IXF.50a

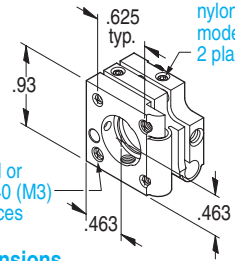
2-56 (M2.5) x .18 deep threaded hole, 2 places evenly spaced on a .660 dia bolt circle



.050 (1.5) hex lock for adjustment screws, 2 places
8-100 adjustment screw, fits 5/64 or 2.0mm hex, 2 places

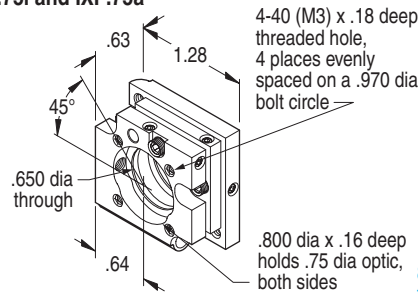
6-32 (M4) thread or clearance for 4-40 (M3) cap screw, 2 places

4-40 (M3) set screw [with nylon tip on *i* models only], 2 places

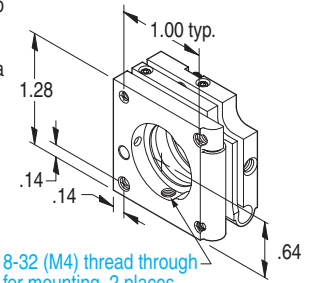


Common Dimensions shown in cyan-blue

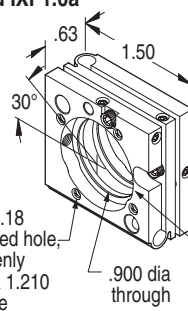
IXF.75i and IXF.75a



4-40 (M3) x .18 deep threaded hole, 4 places evenly spaced on a .970 dia bolt circle

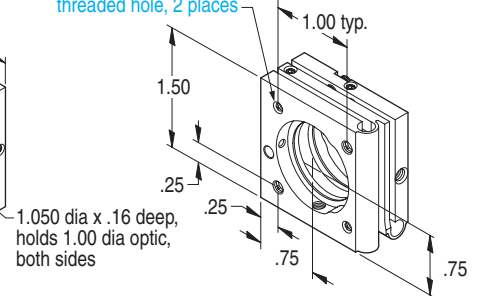


IXF1.0i and IXF1.0a



4-40 (M3) x .18 deep threaded hole, 4 places evenly spaced on a 1.210 dia bolt circle

4-40 (M3) x .18 deep threaded hole, 2 places



Product Features

- Lockable 100TPI adjustment screws
- One-piece construction
- Nickel plated
- UV and vacuum compatible versions available

Performance Specifications, also for *a* versions

Model	Pitch	Yaw	Minimum controllable motion
IXF.50i	6°	6°	8.2 arc sec.
IXF.75i	6°	6°	5.5 arc sec.
IXF1.0i	5°	5°	4.5 arc sec.

Related Products

IXFmb series mounting blocks	242
IXFab series angle brackets	246

Order Information

flexure mount, 0.5-inch optic	IXF.50i
flexure mount, 0.75-inch optic	IXF.75i
flexure mount, 1.0-inch optic	IXF1.0i
<i>Aluminum models</i>	
flexure mount, 0.5-inch optic	IXF.50a
flexure mount, 0.75-inch optic	IXF.75a
flexure mount, 1.0-inch optic	IXF1.0a

Metric Option — for metric assembly features on this product, add '-M' after model number.

Flexure Mounts

The IXFi series monolithic flexure mounts are a new line of mounts that are specifically designed for OEM applications. They have a wide variety of optic mounting options, including bulkhead mounting as either a front adjusted or through the bulkhead adjusted mount. In addition, these versions have 8-32 (M4) mounting holes on two edges for post mounting and locks on the adjustment screws.

These mounts use our 100TPI rolled thread adjustment screws for low stiction fine adjustments and are swaged at the end to prevent over-travel of the mount. The IXFi series mounts are manufactured from one solid piece of spring steel, then nickel plated so they will not corrode and can be used in ultraviolet laser environments.

These models are also available in aluminum versions as a lower cost option. Aluminum models exhibit the same performance specifications as the steel models. Custom OEM versions available in steel and aluminum.

Mirror Mounts

Flexure Mounts

2.0" Optics / IXF2.0i and IXF2.0a

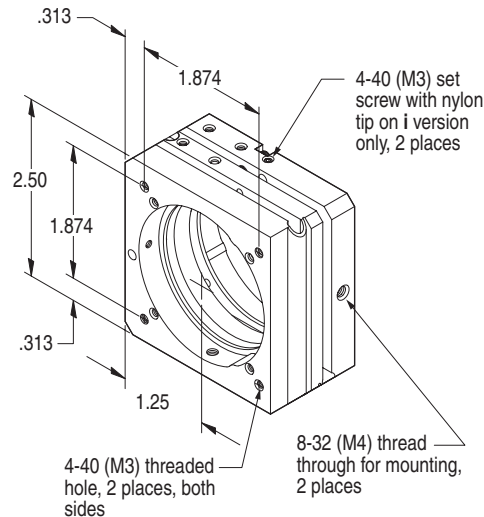
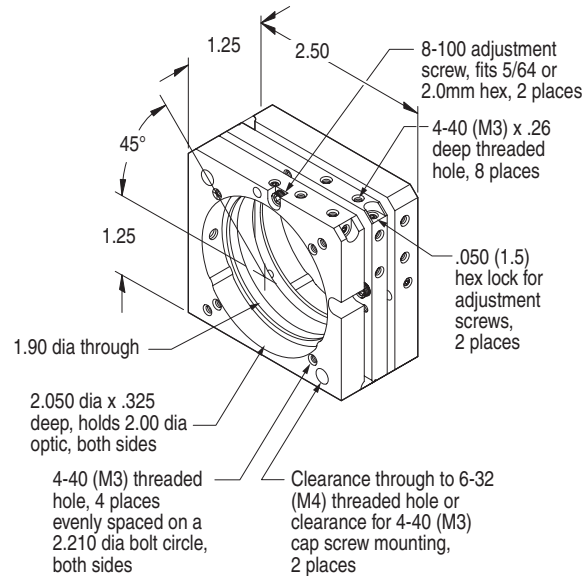
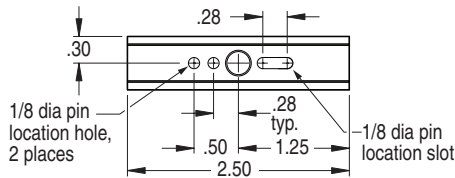
Note that dimensions in parentheses (mm) reflect metric assembly features



IXF2.0a



IXF2.0mb mounting block, page 242, with Bottom View shown below



Product Features

- Lockable 100TPI adjustment screws
- One-piece construction
- Nickel plated
- UV and vacuum compatible versions available

Performance Specifications

Model	Pitch	Yaw	Minimum controllable motion
IXF2.0i	5°	5°	2.4 arc sec.
IXF2.0a	5°	5°	2.4 arc sec.

Related Products

IXF2.0mb mounting block 242

Order Information

flexure mount, 2.0" optic IXF2.0i
 flexure mount, 2.0" optic, aluminum model IXF2.0a

Metric Option — for metric assembly features on this product, add '-M' after model number.

We now offer a 2.00" version of our popular IXF monolithic flexure mounts, available in front-adjust standard and beamsplitter configurations. The beamsplitter version has clear aperture cutouts to maximize beam clearance for beamsplitter applications. These cutouts are set at 45°, but are large enough to accommodate variations out to ±5°. These mounts use our 100TPI rolled thread adjustment screws for low stiction fine adjustments and are swaged at the end to prevent over-travel of the mount. Motorized actuators can be mounted for remote control applications. The aluminum version is vacuum compatible as a standard feature. Custom OEM versions available in steel and aluminum.