Optical Baseplates
Optical Rails and Carriers
Bases
Rod Mounting Systems
Post, Post Holders, Clamps

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\&
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- Full 360 degree gimballed rotation about mirror surface
- For one inch, two inch and 30 mm diameter mirrors
- Micrometers for precise angular positioning
- In-line or vertical adjusters
- Thinner version for beamsplitters
- May be post or base mounted
- Sensitivity <1arcmin

By maintaining an open architecture these mirror mounts permit full 360 degree rotation of the mirror about its surface. This is extremely useful when aligning laser systems as the beam can easily be directed over a wide angular range. Once roughly set, the mount may be locked and fine motion is then controlled by the micrometer adjusters. These provide rotation
 for both azimuth and elevation. They are normally mounted in line with the mirror but for situations where the adjusters need to be kept out of the optical path, vertical mounted versions are offered. For beamsplitters, normally used at 45 degrees, thinner mounts are offered. They accept 2 inch ( 50 mm ) or 30 mm beamsplitters and provide a clear aperture at 45 degrees of 1 inch and $1 / 2$ inch respectively. The base of these mirror mounts has an $8-32$ or M4 threaded hole which can be used for post, pedestal or base mounting.

## Specifications \& Tolerances

Dimensions: $\pm 0.2 \mathrm{~mm}$
Material: Aluminum
Finish: Black anodized

| Angular adjustment: Mirror diameter | 1inch | 30 mm | 2inch |
| :--- | :--- | :--- | :--- |
|  | Range (fine) | $\pm 4^{\circ}$ | $\pm 4^{\circ}$ |
| Azimuth per rotation | 43arcmin | 43arcmin | $\pm 4^{\circ}$ |
| 29arcmin |  |  |  |
| Elevation per rotation | 32arcmin | 32arcmin | 22arcmin |
| Sensitivity | 50arcsec | 50arcsec | 30arcsec |




BASEPLATE FOR GIMBALLED MIRROR MOUNT

| Product | Dimensions $(\mathrm{mm})$ |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | a | d | c | h | A | D | H |
| No. | a | a |  |  |  |  |  |
| $112-2830 / 2835$ | 64 | 39 | 25 | 45 | 22.0 | 25.4 | 66 |
| $112-2840 / 2845$ | 64 | 39 | 25 | 45 | 27.0 | 30.0 | 66 |
| $112-2850 / 2855$ | 86 | 39 | 25 | 60 | 47.0 | 50.8 | 92 |


| Gimballed Mirror and B | splitt | unt |  |  | INCH | METRIC |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | Adjuster Position |  | Hold Mirror ameter, D (mm) | Price | $\begin{gathered} \text { PART } \\ \text { NUMBER } \end{gathered}$ | PART NUMBER |
| Mirror Mount | In-line | 1.00 | 25 or 25.4 |  | 112-2830 | 112-2835 |
| Mirror Mount | Vertical | 1.00 | 25 or 25.4 |  | 112-2630 | 112-2635 |
| Mirror Mount | In-line | 1.18 | 30 |  | 112-2840 | 112-2845 |
| Mirror Mount | Vertical | 1.18 | 30 |  | 112-2640 | 112-2645 |
| Mirror Mount | In-line | 2.00 | 50 or 50.8 |  | 112-2850 | 112-2855 |
| Mirror Mount | Vertical | 2.00 | 50 or 50.8 |  | 112-2650 | 112-2655 |
| Beamsplitter Mount | In-line | 1.18 | 30 |  | 112-3430 | 112-3435 |
| Beamsplitter Mount | In-line | 1.97 | 50 |  | 112-3450 | 112-3455 |
| Base for Gimballed Mirror Mounts | - |  | - |  | 147-0610 | 147-0610 |



GIMBALLED MIRROR MOUNT WITH VERTICAL ADJUSTERS

## Mirror Mount Adapters

| To Hold Mirror Diameter, $\mathbf{d}$ <br> (inches) <br> (mm) | To Fit Mount Diameter, $\mathbf{D}$ <br> (inches) <br> (mm) | Price | PART <br> NUMBER | ORDERING <br>  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 0.39 | 10.0 | 1.18 | 30.0 |  | $\mathbf{1 1 2 - 0 4 6 0}$ | TECHNICAL SUPPORT |

