Flipping Mirror/Beamsplitter Mounts

Optical Positioners

Use the Flipping Mount 5F21-1 to place optics in and out of the optical scheme. Flip the platform out and back again – it sits on the adjustment screws in a repeated position.

Precise alignment of various optical elements to desired angles is done by 2 adjustment screws.

3 seats form 3 kinematic points for definite position of the platform. The seats are of hardened steel. This increases the service life, as they counter the hardened steel tips of adjustment screws and pivot balls.

Mount 5F21-1 has a 1" mounting hole with Ø 24 mm clear aperture. A fixing screw secures the optics against 2 contact lines, which make 2 contact points. To prevent damage to the optics, the tip of the fixing screw is made of plastic.

On one side the edge of the optics stays clear. So you can use the optics close to the edge in schemes where you work with a beam very closely situated to another beam.

Fine Screws 9S127 or 9SH127 come as standard (one screw has its tip modified to form a kinematic point).

Depending on which side you mount the unit, you flip the platform either vertically or horizontally. By flipping out vertically the optics goes beneath the common level of the optical scheme. Still one leg of the base, with a adjustment screw on it, stays up. Yet this wouldn’t obstruct the optical path, as it wouldn’t when the optics was flipped in. Legs protruding upwards ease your access to the adjustment screws, with less risk of obscuring the beam. No need to design the legs extended down, as to clear the space totally, like in some flippers from other manufacturers.

Note: “Mirror” version is a right hand version of the standard model.
Flipping Mirror/Beamsplitter Mount

5F21-2

- Flip optics in and out of the optical scheme
- Tilt/tip range 8°, sensitivity 3 arcsec
- Kinematic design
- For Ø50.8 mm optics (2 inch)
- 49 mm clear aperture
- Repeatability 20 µrad
- Clear edge design
- Hex key drive optional
- Material: black anodized aluminium
- 5F21M-2 “Mirror” version

Miniature Flipping Mirror/Beamsplitter Mounts

5F23-05-SH

- Flip optics in and out of the optical scheme
- Repeatability 20 µrad
- Tilt/tip range 9°
- Sensitivity 8 arcsec
- For Ø12.7 and Ø25.4 mm (0.5” and 1”) optics
- Clear edge design suits schemes where beam passes close to optics’ edge
- Kinematic design
- High stability
- Hex key drive
- Material: black anodized aluminium
- Weight 0.02 kg
- “Mirror” versions available 5F23M-1-SH, 5F23M-05-SH

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Accepts optics</th>
<th>Clear aperture</th>
</tr>
</thead>
<tbody>
<tr>
<td>5F23-05-SH</td>
<td></td>
<td>Ø12.7 mm (0.5 inch)</td>
<td>Ø10.2 mm</td>
</tr>
<tr>
<td>5F23M-05-SH</td>
<td>“Mirror”</td>
<td>Ø12.7 mm (0.5 inch)</td>
<td>Ø10.2 mm</td>
</tr>
<tr>
<td>5F23-1-SH</td>
<td></td>
<td>Ø25.4 mm (1 inch)</td>
<td>Ø24 mm</td>
</tr>
<tr>
<td>5F23M-1-SH</td>
<td>“Mirror”</td>
<td>Ø25.4 mm (1 inch)</td>
<td>Ø24 mm</td>
</tr>
</tbody>
</table>

Note: “Mirror” version is a right hand version of the standard model.
Kinematic Mirror/Beamsplitter Mounts

5MBM21-1 are designed for precise alignment of various optical elements to desired angular and linear orientation. Models with 2 or 3 screws are available (see ordering).

The base of the mount has holes Ø8.7 mm for adjustment screws of your choice. As standard, we fit Fine Screws 9S127 or 9SH127. Each screw has a hardened steel ball tip.

The mounts have a one inch mounting hole with Ø24 mm clear aperture.

5MBM21-1 may be mounted on one side or another, e.g. to swap left/right hand side of access to the drive relative to the beam. It mounts to an M6 screw or directly to Mounting Posts on their M6 tips. Put an M4 screw through the combined Ø7/M6 hole to fasten the mount to units with M4 holes.

Ordering

To specify how many screws you want in a mount, append the number to the code. Suffix “SH” specifies hex screws.

Examples:
- 5MBM21-1-3: 3 screws
- 5MBM21-1-2: 2 screws
- 5MBM21-1-2SH: 2 hex screws

Miniature Kinematic Mirror/Beamsplitter Mount

- For Ø12.7 mm optics (0.5 inch)
- Kinematic
- Clear edge design
- Hex key drive
- Tilt/tip range 14°
- Sensitivity 8 arcsec
- Black anodized aluminium
- Weight 0.03 kg
- “Mirror” version available 5MBM23M-05-3SH

Note: “Mirror” version is a right hand version of the standard model.
Kinematic Mirror/Beamsplitter Mounts 5MBM24 are used for precise angular and linear alignment of optical elements.

There are two series: one for round (5MBM24-1, 5MBM24-2, 5MBM24-3) and one for square (5MBM24-1SQ, 5MBM24-2SQ, 5MBM24-3SQ) optical elements. 5MBM24 has a resting flange to stop the optics. One fixing screw (two in “square” mounts) secures the optics against 2 contact lines, which make 2 contact points. To prevent damage to the optics, the tip of the fixing screw is made of plastic.

Square mount additionally has 4 fixing screws for thin optics. They have conic tips to work as wedges to clutch a thin plate of optics to the resting flange. For thick optics it has 2 screws rather than one. A platform is preloaded by two strong coil springs, ensuring tight kinematic fit. A thick base adds to stability.

This allowed us to eliminate part of the mount, keeping clear one edge of the optics. Useful in schemes where beams go very close to each other.

As standard, we fit screws 9S127. You may order the mounts with 2 or 3 adjustment screws. Choose any screw and removable knob found in section 9.
Optical Positioners

Mounts with hard seats

Mounts 5MBM22S, 5MBM22SP have a 1” and 2” mounting hole. A fixing screw secures the optics against 2 contact lines, which make 2 contact points. To prevent damage to the optics, the tip of the fixing screw is made of plastic.

On one side the edge of the optics stays clear. So you can use the optics close to the edge in schemes where beams are very closely situated to one another.

You may order mounts with 2 and 3 adjustment screws.

SPECIFICATIONS 5MBM22S(P)-1 5MBM22S(P)-2
Tilt/tip range 5° 5°
Sensitivity 5(3) arcsec 5(3) arcsec
Travel range 4 mm 4 mm
Sensitivity 1(0.5) µm 1(0.5) µm
Optics diameter ≤ Ø25.4 mm ≤ Ø50.8 mm
Clear aperture 24 mm 45 mm
Weight 0.09 kg 0.14 kg

Examples of codes:

5MBM22S-1-3 = 3
5MBM22S-1-2 = 2
5MBM22S-2-2SH = 2 hex
5MBM22SPM-1-3SH = 3 hex

“S” – a screw pushes via a seat of hardened stainless steel
“SP” – a screw pushes via a seat of sapphire
“M” – “Mirror” version
“-1” – for 1” optics
“-2” – for 2” optics
“-2” or “-3” – number of screws
“SH” – hex screws. Removable hex knobs 9RK127 are available separately.

5MBM22S
Sapphire

5MBM22SP
Sapphire

M6 x 0.74
2 holes

Each screw has a hardened steel ball tip. It pushes the aluminium platform against a hard seat. This results in increased durability, stability, and fine motion.

M6/Ø7.4 mounting/clearance holes are centered against the center of the mounted optics.

The platform has an original L-shaped flat spring. It performs two functions: preloading the platform, and reducing its drift. The high tension spring and the thick base of the unit increase its stability. This allowed to eliminate a part of the mount, keeping clear one side of the optics.

*slide M4(8-32) screws through combined M6/Ø7.4 mounting/clearance holes to mount the unit immediately to M4(8-32) holes, or mount the unit directly on any M6 tip.
True Gimbal Mount

- True Gimbal design
- Adjustment knobs with engraved scale
- ± 2.5° angular range
- Hardened steel drive for stability
- Lightweight aluminium body
- Weight – 0.6 kg

Completely independent axis!

Two plastic padding rings and a retaining ring M27x1 to fix the optics are included.

A tightening key 3K-25 for the retaining ring is available on request.

Motorized version 8MGM25T-1

<table>
<thead>
<tr>
<th>SPECIFICATIONS</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optics diameter</td>
<td>25.4 mm</td>
</tr>
<tr>
<td>Clear aperture</td>
<td>23 mm</td>
</tr>
<tr>
<td>Angular range</td>
<td>±2.5°</td>
</tr>
<tr>
<td>Type of actuator</td>
<td>8CMA20-8/15</td>
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<tr>
<td>Resolution*</td>
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</tr>
<tr>
<td>in full step</td>
<td>1.25 μm</td>
</tr>
<tr>
<td>in 1/8 step</td>
<td>0.156 μm</td>
</tr>
<tr>
<td>Lead screw pitch</td>
<td>0.25 mm</td>
</tr>
<tr>
<td>Repeatability</td>
<td>1 μm</td>
</tr>
<tr>
<td>Maximum speed</td>
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<tr>
<td>Cable</td>
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</tr>
<tr>
<td>1.2 m length cable included</td>
<td></td>
</tr>
<tr>
<td>Motor connector</td>
<td>HDB15(M)</td>
</tr>
<tr>
<td>Weight</td>
<td>0.7 kg</td>
</tr>
</tbody>
</table>

*Actuator’s movement dependance of horizontal position is not linear.
Optical Positioners

Precision Kinematic Optical Mounts

- Precise and handy two orthogonal angular adjustments
- Stabile vertical mounting
- 9° adjustment range
- Various modifications with sensitivity from 10 arcsec to 3 arcsec
- M6 x 0.35 adjustment screws provide precise kinematic control
- Made of black anodized aluminium

Precision Kinematic Optical Mounts are designed for precise angular alignment of optical elements, in a range of 9° in both orthogonal axes.

The tilting element is always true-kinematic-registered.
The Mounts are produced of black anodized aluminium. Custom colors are available on request.

Objective Mount

Objective Mount 5OBM119 has W0.8-36 aperture and is used for precise adjustments of standard microscope objective lenses and allows low-cost positioning of a focus point. Applications - it can also be used in fiber optics.

Weight 0.08 kg

Beamsplitter/Optics Mount

Beamsplitters/Optics Mount 5BM121 is designed for beamsplitters of 25.4 mm (1 inch). Fixing screw with a plastic tip clutches a beam splitter against 2 contact lines. Mounting opening has a rest-flange designed to stop optics inside - its clear aperture is 24 mm.

Weight 0.09 kg

Universal Mirror Mount/Platform

Universal Mirror Mount/Platform 5UM122 is suited for precise adjustments of standard mirrors which can be directly bound to it. The mount may also be used in horizontal position as a tilt table. Then it can be used to align opto-mechanics around two axes. For such mounting the Mount has an M4 hole on its back.

Weight 0.11 kg

Large Aperture Optical Mount

Large Aperture Optical Mount 5LAM124 on its platform has 31.8 aperture and six M4 mounting holes. It is designed for precise orthogonal adjustment of mirrors.

Weight 0.08 kg

Large Aperture Optical Mount

Large Aperture Optical Mount 5LAM124-2 has 50 mm aperture and is designed for precise kinematic orthogonal adjustment of mirrors.

Weight 0.1 kg
Budget Kinematic Optical Mounts

- Handy two orthogonal angular adjustments
- 9° range
- Sensitivity 3 arcsec
- M6×0.25 adjustment screws provide precise kinematic control
- Made of black anodized aluminium

Budget Kinematic Optical Mounts are designed for angular alignment of optical elements, in a range of 9° in both orthogonal axes.

The tilting element is always true-kinematic-registered.
The Mounts are produced of black anodized aluminum. Custom colors are available on request.

Prism/Optics Mount

Prism Mount 5PM131 provides basic mounting for prisms, beamsplitter, cubes and etc. Spring clamps 4SC series should be ordered separately. This mount is metric compatible.

5PM131 Mounts are equipped with fine pitch M6x0.25 mm adjustment screws, which rest upon hardened steel seats to provide reliable and repeatable adjustment.

Weight 0.1 kg

Universal Platform Mount

Universal Platform Mount 5UM131 is designed for precise adjustments of various optical components which can be directly bound to it. The mount can be also used horizontally for tip/tilt adjustment.

Weight 0.11 kg

Ordering information on the next page.
Optical Positioners

Beamsplitter/Mirror Mounts

Beamsplitter/Mirror Mount

- for Ø25.4 mm (1 inch) optics
- Reset-flange inside the central aperture stops the optic
- Nylon-tipped fixing screw secures the optic
- M6×0.25 adjustment screws provide precise kinematic control
- Weight 0.08 kg

Mirror Optical Mount

- for Ø25.4 mm (1 inch) optics
- 2 contact points for optimum stability
- One edge of the optics stays clear, helpful in schemes where beams are very closely situated to one another
- M6×0.25 adjustment screws provide precise kinematic control
- Weight 0.08 kg

Ordering Information

for 5PM131, 5UM131, 5BM131 and 5BM141

To specify how many adjustment screws you want in a mount, append the number to the code.

Examples of codes:

5BM141 With “M4x11 deep” mounting holes
5BM141E With mounting through holes for M4(8-32) screws
5UM131-1-3 3 adjustment screws
5BM131E-1-2 2 adjustment screws
5BM141EM-1-2 “Right-hand” version with 2 screws
5PM131M-1-3 “Right-hand” version with 3 screws

Other modifications are available

more info on www.standa.lt
Precision and High Stability Optics Mounts

5OM60-3-9S67M  5OM61-2-9S67M

Precision and High Stability Optic Mounts 5OM60 and 5OM61 are universal, durable, and render very stable adjustment. Independent tilt about two horizontal axes – 6° with 3 arcsec sensitivity. Linear translation ~ 5 mm, sensitivity ~ 1 µm. For translation a third actuator replaces the removable socket and the pivot bearing.

To enhance stability: the platform is preloaded by three special spring blocks; actuators push against hardened steel seats.

The mounts have M6 mounting holes. Mount 5OM61 also has a Ø42 mm clear aperture.

The mounts can be fastened on any mounting post on its M6 tip. Additionally, mount 5OM60 has a hole on its back and can be mounted in horizontal position to be used as a tilt platform.

The base of the stage has three holes M10x1 for adjustment screws of your choice. Standard screws have a pitch of 0.5 mm. For greater sensitivity you may request actuators with 0.35 or 0.25 pitch.

Material: black anodized aluminium (default), black finished steel (on request). The codes for steel mounts are: 5OM60S, 5OM61S.

Weight 0.35 kg

See the next page

“Modifications and ordering 5OM60 and 5OM61”
Optical Positioners

Modifications and ordering 50M60 and 50M61

Examples of codes for 50M60 stages:
50M60-3 has three 9S65M adjustment screws
50M60-2 has two 9S65M adjustment screws and 1 ball
50M60S-3 made of steel, and has three 9S65M screws
50M60-2-9S127M-10 has two 9S127M-10 screws and 1 ball
50M60-2-9S127M-10-K15 has two 9S127M-10-K15 screws and 1 ball
50M60-2-9S7C-8 has two 9S7C-8 screws and 1 ball

The stage may be fitted with 2 or 3 screws. A variant with 2 adjustment screws has a ball Ø8 as a third base-point. The stage comes with 9S67M screw as standard. You don’t have to specify this screw in your order. If you order the stage with alternative screws, please specify this in order, by appending the screw code name to the stage code.

We supply stages with any type of STANDA adjustment screws (see section 9).
**Highly Stable Precision L-shaped Steel Optical Mounts**

- Special flat spring for improved stability, versatility and durability
- Kinematics, orthogonal angular adjustments
- 9° range, 5 arcsec sensitivity
- Left or right hand mountable
- Vertical and horizontal mounting

Highly Stable Precision L-shaped Optical Mounts are designed on the basis of two angular adjustment mount, and are produced of steel with black chemical finishing. Special figure spring is used in these Mounts for two purposes:

1. It provides pre-loading against the tips of two precise adjustment screws for elimination of backlash.
2. It ensures the absence of the roll coordinate.

The Highly Stable Precision L-shaped Optical Mounts have two M10x1 threaded holes for actuator mounting. This allows using all STANDA adjustment screws with these mounts. M6 tapped holes on the sides provide a wide variety of mounting configurations, either horizontal or vertical. A special L-shaped design of the Mounts allows for maximum clear aperture.

### Two Angular Fine Adjustment Mounts

Two models - for optical elements sized 0-28 mm and 22-52 mm - are available. Adjustment about two angular coordinates. A clamping bar is used to fix optical elements, ensuring gentle but firm clutch.

**5OM37M - “Mirror” version** is a right hand version of the standard.

### Polarization Optics Mount

The same functions as 5OM37, but additionally provides 360° rotation around the optical axis. Ideally suitable for positioning of polarization filters.

<table>
<thead>
<tr>
<th>Model</th>
<th>H, mm</th>
<th>Hmax, mm</th>
<th>Weight, kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>5OM38-20</td>
<td>0-26</td>
<td>108</td>
<td>0.43</td>
</tr>
<tr>
<td>5OM38-40</td>
<td>19-46</td>
<td>127</td>
<td>0.42</td>
</tr>
</tbody>
</table>

### Modified Optical Positioners with Motorized Actuators are available

[8MBM57-6](#), [8MBM21-1-2](#), [8MBM24-1-2](#)

More info at [www.standa.lt](http://www.standa.lt)
Optical Positioners

Multiple Filter Mount

Provides fixation and adjustments of up to 6 filters about two angular coordinates. Filter thickness can be from 2 mm to 6 mm.

Weight 0.27 kg

Prism/Optics Mount

Platform of this holder allows to hold wider optics. Clamps 4BC32 and 4VC41 (ordered separately) used for fastening optical elements like prisms, cubes and etc.

Weight 0.29 kg

Universal Prism/Optics Mount

The same as 5PM57 with filter holder as in 5FM57. Weight 0.31 kg

Modifications and ordering

We supply optical mounts with any of STANDA adjustment screws (see section 9).

Examples of codes for mounts:
- 5OM38-20 with 9S65M screws
- 5OM38-20-9S67M with 9S67M screws
- 5OM38-20-9S127M-K5 with 9S127M-K5 screws
- 5OM38-20-9S7C with 9S7C screws

Standard stages come with 9S65M adjustment screw. You don’t have to specify this screw in your order. If you order the stage with alternative screws, please specify this in order, by appending the screw code name to the stage code.

See section 9 for screws and their codes.
Stable Steel Mirror/Beamsplitter Mounts

- Special flat spring for improved stability versatility and durability
- Suitable for 1", 2", 3", 4", 6" optics
- 6° range

The mount comes with 9S65M screw as standard. You may choose different screws. If you order the mount with alternative screws, please specify this in order, by appending the screw code name to the mount code. See section 9 for screws and their codes.

A special holder with two contact lines for optics and plastic fixing screw.
Optical Positioners

Ordering Information

<table>
<thead>
<tr>
<th>Model</th>
<th>Weight, kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>5BM57-1</td>
<td>0.07</td>
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<tr>
<td>5BM57-2</td>
<td>0.18</td>
</tr>
<tr>
<td>5BM57-3</td>
<td>0.44</td>
</tr>
<tr>
<td>5BM57-4</td>
<td>1.04</td>
</tr>
<tr>
<td>5BM57-6</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Available motorized version

8MBM57-2
8MBM57-4
8MBM57-6
Miniature Precision Mirror Mounts

- Miniature mounts for small optical elements
- ±10° tilt adjustments about two orthogonal axes
- High degree of versatility
- Made of black anodized aluminium

Miniature Precision Mirror Mounts ensure precise angular adjustments of small optics about two orthogonal axes with 10 arcsec sensitivity. M4 and M6 tapped holes are provided for mounting. These black anodized aluminium mounts are ideal for holding 25 mm and smaller optics in tight spaces.

Mirror/Optics Mount 5OM111

Mirror/Optics Mount 5OM111 provides smooth and precise adjustment with sensitivity of 10 arcsec.

It can be used as a tilt platform – with Spring Clamp 4SC-28T and Mounting Post 3SMP4-47.

Platform of the mount has a clear aperture of 6.2 mm in diameter.

The mount has M6 x 0.35 mm holes on its base for adjustment screws. Alternatively, to order the mount with wrench driven screws, you append the code of that screw: 5OM111-9S127H.

Weight 0.04 kg

Modifications

Mirror/Optics Mount 5OM111 with adapters 5OM111A0 and 5OM111A45 are suitable for round (Ø25.4 (1”) and Ø12.7(0.5”)) and square (15x15 mm and 20x20 mm) optical elements.

ORDERING INFORMATION

Examples of codes:
- 5OM111 - standard mount.
- 5OM111-0 - Mount 5OM111 with adapter 5OM111A0.
- 5OM111-9S127H-45 - Mount 5OM111 with 9S127H screws and with adapter 5OM111A45.
Optical Positioners

Mirror/Optics Mount 5OM111-0
with round 0.5" high reflectivity mirror.

Mirror/Optics Mount 5OM111-0
with round 0.5" high reflectivity mirror.

Mirror/Optics Mount 5OM111-0
with a 20x20x20mm polarizing beamsplitter cube.

Mirror/Optics Mount 5OM111-0
with a 15x15x15mm polarizing beamsplitter cube.

Mirror/Optics Mount 5OM111
with adapter 5OM100A3 and with round 1" high reflectivity mirror.

For optical elements see page 14-1.

For coarse adjustments about horizontal or vertical axes compact Mirror mounts can be used with Mini Angle Brackets 2MAB111.
Mirror Adapter

Connecting cone facilitates adjustment of the adapter to the required position. The cut-off side clears the edge of the optics for working with a beam that is very closely situated to another beam. Optics is firmly held in place by a teflon set screw and rests against the two contact lines formed at the cut-off side. (See also adapters in articles 5OM10T, and 5OM122T.)

Weight 0.01 kg

Mirror Mounts with Locking Screws

Mirror Mount with Locking Screws 5LSM110 are provided with extended back for convenient mounting in horizontal or vertical position. Teflon locking screw tips ensure stability.

Compact Mirror Mount

The extremely small mount has small adjustment screws with a hexagonal head or a hexagonal keyhole.

A suffix to the unit code specifies adjustment screws of a desired type:

<table>
<thead>
<tr>
<th>Model</th>
<th>H, mm</th>
<th>Weight, kg</th>
</tr>
</thead>
<tbody>
<tr>
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<td>0.07</td>
</tr>
<tr>
<td>5LSM110-02</td>
<td>33</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Weight 0.04 kg
Optical Positioners

Mirror Mounts/Tilt Platforms of Side Drive

Mirror Mount of Side Regulation 5OM122T enables to greatly increase the thickness of optical elements as it has a convenient access to the regulation handles. L-shaped flat spring of original design renders the great stability of the mount’s platform. Angular range is ±2.5° about each of two orthogonal axes. Precision screws with pitch of 0.25 mm render sensitivity of 3 arcsec.

M4 tapped holes on the sides of the base allow a variety of mounting configurations, e.g. horizontal and vertical.

The mount is produced from black anodized aluminium. L-shaped spring is produced from high quality stainless spring steel.

Weight 0.09 kg

Mirror Mount of Side Regulation 5OM122T. Eccentric mounting holes Ø6.2 for connecting cone allow handy replacement and adjustment of Adapters to required place.

Mirror Mount of Side Regulation 5OM122TE. This variant has no clear aperture. This makes it an ideal tilt platform. The clear of holes flat surface allows to mount or paste mirrors on it.

Special Base Mounts 5OM122B allow 5OM122T to be mounted in different positions. 5OM122T may be mounted as a tilt platform using 5OM122B1.

Platform Adapter 5OM122A5

Allows to turn optics to a convenient position.
Round Optics Adapters 5OM122A1

5OM122A1 can be attached to the platform of 5OM122T mount on any side. Optics is firmly held by a stainless steel fixing screw, and it rests against two contact lines – the edges of the cut-off corner. The frame doesn’t obstruct the view. It allows to work with two beams going very close to each other.

5OM122A1-40 fixes thin optical elements Ø30-Ø40 mm in diameter.
5OM122A1-25 fixes elements Ø20 to Ø25 (1”) in diameter.

Miniature Clamp 5OM122A2

Ideal if a Mount is used as a Tilt platform. Plastic clutching pad clamps elements upto Ø40 mm (1.5”).

Mirror Adapter 5OM122A3

Connecting cone facilitates adjustment of the adapter. The cut-off side clears the edge of the optics for working with a beam very closely situated to another beam. Optics is firmly clutched by a stainless steel fixing screw and rests against the two contact lines formed at the cut-off side. The adapter is suitable for optical elements upto Ø50 mm (2 inch) in diameter.

Prism and Polarizing Cube Adapters 5OM100A4

Connecting cone allows to adjust the adapter to the required angle by hand. The adapter allows to work with two beams going close to each other. Stainless steel fixing screw clutches optics firmly. There are two models: 5OM100A4-13, and 5OM100A4-16 (apertures 13 and 16 mm).
Optical Positioners

Small Optical Mount of Side Drive

5OM10T is designed to hold optics in schemes of high density. Adapters are available for round and rectangular lenses, mirrors and beamsplitters or polarizing cubes (see below and next page).

The unit mounts on one M4 hole in its base. Special Base Mounts (see below) and standard ones are available in order to mount the unit in various orientations.

A platform has four M3 holes on its face for mounting of optics, and three M4 holes on the sides for adapters.

Adapters with connecting cones match the Ø6.2 mm hole, where a cone is clutched by the fixing screw.

A platform is preloaded against a base by coil springs. The mount is held together and stabilized by a flat spring.

Note: 5OM10T replaces the older mount 5OM100T.

The pictures on this and on the next page show how to combine bases and adapters with the old mount 5OM100T. These adapters combine in the same manner with the new mount 5OM10T.

Special Base Mounts 5OM100B allow 5OM10T to be mounted in different positions. 5OM10T may be mounted as a tilt platform.

5OM100B1 allows mounting with extremely low-profile

5OM100B2 attaches to 5OM10T both immediately and through the intermediate accessories.
**Round Optics Adapter 5OM100A1**

5OM100A1 may be attached to the platform of 5OM10T mount on any side. Optics is firmly held by a stainless steel fixing screw, and it rests against two contact lines – the edges of the cut-off corner. The frame doesn’t obstruct the view. It allows to work with two beams going very close to each other.

**Miniature Clamp 5OM100A2**

Ideal if the mount is used as a tilt platform. It has a fixing screw, and a plastic fastening pad. Allows fastening of optical elements upto 1”. The rod has a mounting thread M3. So the clamp combines with any units, which has M3 holes.

**Mirror Adapter 5OM100A3**

Connecting cone facilitates adjustment of the adapter to required position. The cut-off side clears the edge of the optics for working with a beam very closely situated to another beam. A fixing screw of stainless steel clutches optics firmly against two contact lines formed at the cut-off side.

**Prism and Polarizing Cube Adapters 5OM100A4**

Connecting cone allows to adjust the adapter to the required angle by hand. The adapter allows to work with two beams going close to each other. Stainless steel fixing screw clutches optics firmly. There are two models: 5OM100A4-13, and 5OM100A4-16 (apertures 13 and 16 mm).

**Platform Adapter 5OM100A5**

Allows to turn optics to a convenient position.
Budget Precision Optical Mounts of Side Control

- Original L-shaped flat spring
- Adjustment of both angles is controlled from one side
- Ideal for high density optical schemes
- Fine adjustment screws with 0.25 mm pitch
- Travel range ±2°
- Hardened inserts under adjusters

Budget Precision Optical Mounts of Side Control enable to greatly increase thickness of optical elements as it has a convenient access to the adjustment handles.

L-shaped flat spring of original design provides great stability of the mount’s platform. The spring performs two functions: that of a usual spring, and also eliminates polarizing rotation of the platform.

Angular range is ±2° about each of the two orthogonal axes. Precision screws with pitch of 0.25 mm provide sensitivity of 10 arcsec.

Three M4 tapped holes on the sides of the base and on its back allow a variety of mounting configurations, e.g. horizontal and vertical.

The mount is produced from black anodized aluminium. L-shaped spring is produced from high quality stainless steel.

Objective Mount

The Objective Mount of Side Control 5OBM119T has W0.8-36 aperture and is used for precise adjustments of standard microscope objective lenses and ensures low-cost positioning of a focus point. Also it can be used in the fiber optics.

Weight 0.1 kg

Beamsplitters/Optics Mount

The Beamsplitters/Optics Mount 5BM121T is designed to adjust beamsplitters measuring Ø25 mm. Fixing screw with a plastic tip clutches a beamsplitter against 2 contact lines. The aperture has a rest-blade around its edge designed to stop optics inside.

Weight 0.09 kg

Universal Mirror Mount/Platform

The Universal Mirror Mount/Platform 5UM122T is suited for precise adjustments of standard mirrors which can be directly bound to it. The Mount may also be used in horizontal position as a tilt table. Then it can be used to align opto-mechanics around two axes.

Weight 0.12 kg

Large Aperture Optical Mount

The Large Aperture Optical Mount 5LAM124T on its platform has Ø31.8 aperture and three M4 mounting holes. It is designed for precise orthogonal adjustment of mirrors.

Weight 0.09 kg
Miniature Tilt/Rotation Mount of Side Control 5OM101T

- 6° tilt and in-plane rotation
- Top side drive
- Compact design for dense optical schemes
- Stable design
- Material: black anodized aluminium

Miniature Tilt/Rotation Mount 5OM101T allows to tilt and rotate an optical component.

A flat spring preloads three main pieces of the mount which make it bend on two separate pivot axes. Mounts of other designs have a common pivot point for all adjustments. The design ensures that both adjustment movements are independent and do not cause mutual distortions, so the adjustment scheme is very close to an ideal kinematic model.

Mounting surface with two M4 holes in the platform is on the same side with the adjustment screws.

Base of the mount has an M4 hole for mounting to other positioners.

The adjustment screws have a pitch of 0.25 mm. Each screw can be driven with a 3 mm hex key.

**SPECIFICATIONS**

| Tilt range | 6° |
| Rotation range | 6° |
| Sensitivity | 10 arcsec |
| Weight | 0.06 kg |

Ultra-Stable Steel Tilt/Tip Stage 5SL-20

Produced for a custom OEM order for use in photonics devices (lasers), providing high stability in operation.

NEW

Produced for a custom OEM order for use in photonics devices (lasers), providing high stability in operation.
Optical Positioners

Beamsplitter Mount of Side Drive

- Original stabilized L-shaped flat spring
- Dimensions most compact among 1” optics mounts
- Both tilt and tip are controlled from aside the optical path
- Ideal for dense optical schemes
- Fine adjustment screws with 0.25 mm pitch

Adjustable Beamsplitter Mount 5BM59T-1 complements our range of Series T mounts with additional features, like pick-hollows yet more stabilized spring. The style of the mount relates to such units as 5APH9T-1 and 5MBM21-1.

The mount accepts optics 25.4 mm in diameter. Optics is stopped by a rest-flange inside the central aperture of the platform, and is secured by a steel hex fixing screw.

The fixing screw has a hard plastic tip to prevent damage to the optics. To allow an unimpeded access for your fingers there are two pick-hollows. Now you may forget about problems like: hassle and stains while picking the optics out, or dropping the optics before you secure it.

Pick-hollows form two lines of contact in the aperture. Clamped by the fixing screw, optics rests against these two lines, so its position stays definite.

Angular adjustment range of tilt/tip is ±2°.

Side control of tilt and tip is done by two stainless steel fine adjustment screws with pitch of 0.25 mm. The screws push rolling balls against hardened seats, ensuring smooth operation and sensitivity of 3 arcsec.

Large knobs ease the strain on your fingers that this tight and stable system might cause. Both screws protrude from the top. Control from one side allows easy access, and dense placement of surrounding instruments.

The platform is preloaded with L-shaped flat spring of our original design which renders the great stability and eliminates induced polarization.

Three M4 tapped holes on the sides of the base and on its back allow horizontal or vertical mounting. The holder easily mounts on posts and bases.

Material: black anodized aluminium. L-shaped spring is made of high quality stainless spring steel.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Tilt/tip range</th>
<th>±2°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>3 arcsec</td>
</tr>
<tr>
<td>Optics accepted</td>
<td>≤ 25.4 mm</td>
</tr>
<tr>
<td>Clear aperture</td>
<td>23 mm</td>
</tr>
<tr>
<td>Weight</td>
<td>0.1 kg</td>
</tr>
</tbody>
</table>
Adjustable Polarizer Holder of Side Drive

5APH59T-1

- Original stabilized L-shaped flat spring
- Dimensions most compact among 1" optics mounts
- Both tilt and tip are controlled from aside the optical path
- Ideal for dense optical schemes
- Fine adjustment screws with 0.25 mm pitch
- Hardened inserts under adjusters
- Accepts optics 25.4 mm (1") in diameter
- Accepts optics up to 10.5 mm thick
- Tilt/tip travel range ±2°
- Roller bearings
- Lockable
- Continuous 360° rotation
- Horizontal and Vertical mounting
- Mounting holes M4 on three sides

**Adjustable Polarizer Holder 5APH59T-1**

is a 1 inch polarizer with an integrated adjustment of tilt and tip about two orthogonal axes within ±2°. The design is the slimmest ever.

The polarizer platform is graduated in 2° on a 360° angular scale. The platform has a removable rod by which you rotate it continuously the whole 360°, without obscuring the aperture. You can use the rod on any of the 4 holes on the perimeter.

The holder accepts Ø25.4 mm optics. Optics is stopped by a rest-flange, and is secured by a threaded retaining ring with Ø23 mm clear aperture. A tightening key 3K-25 for the retaining ring is available on request.

Tilt and tip is done by two stainless steel fine adjustment screws with pitch of 0.25 mm. The screws push rolling balls against hardened seats, ensuring smooth operation and sensitivity of 3 arcsec.

Large knobs ease the strain on your fingers. Both screws protrude from the top side, allowing easy access in dense schemes.

For tilting, the platform is preloaded against the base with L-shaped flat spring of our original design which renders great stability and eliminates induced polarization.

**Three M4** tapped holes on the sides of the base and on its back allow horizontal or vertical mounting. The holder easily mounts on posts and bases.

Material: black anodized aluminium.

L-shaped spring is made of high quality stainless spring steel.

SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tilt/tip range</td>
<td>±2°</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>3 arcsec</td>
</tr>
<tr>
<td>Rotation range</td>
<td>360°</td>
</tr>
<tr>
<td>Scale gradation</td>
<td>2°</td>
</tr>
<tr>
<td>Optics accepted</td>
<td>Diameter ≤ Ø25.4 mm</td>
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<tr>
<td></td>
<td>Thickness ≤ 10.5 mm</td>
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<tr>
<td></td>
<td>Clear aperture 23 mm</td>
</tr>
<tr>
<td></td>
<td>Weight 0.15 kg</td>
</tr>
</tbody>
</table>
Optical Positioners

Kinematic Optical Mount of Side Drive

- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range ±2°
- Sensitivity 3 arcsec

- Both tilt and tip controlled from aside the optical path
- Ideal for dense optical schemes
- Fine adjustment screws with 0.25 mm pitch
- Hardened seats under adjustment screws
- Weight 0.12 kg

<table>
<thead>
<tr>
<th>Model</th>
<th>Accepts optics, diameter</th>
<th>Places for optics</th>
<th>Weight, kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>5BM69T-1</td>
<td>25.4 mm (1 inch)</td>
<td>1</td>
<td>0.13</td>
</tr>
</tbody>
</table>

To prevent damage to the optics the fixing screw has a plastic tip.

Kinematic Adjustable Polarizer Holder of Side Drive

- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range ±2°
- Sensitivity 3 arcsec
- Both tilt and tip controlled from aside the optical path

- Ideal for dense optical schemes
- Fine adjustment screws with 0.25 mm pitch
- Hardened seats under adjustment screws
- Rotation range 360°
- Scale gradation 2°
- Weight 0.12 kg

A retaining ring M27x1 to fix the optics is included.
A tightening key 3K-25 for the retaining ring is available on request.

Five axis combination

Model | Accepts optics, diameter | Places for optics | Weight, kg |
------|--------------------------|-------------------|------------|
5APH69T-1 | 25.4 mm (1 inch) | 1 | 0.13 |
5APH79T-1 | 25.4 mm (1 inch) | 2 | 0.13 |
5BM69T-1 | 25.4 mm (1 inch) | 1 | 0.10 |
5BM79T-1 | 25.4 mm (1 inch) | 2 | 0.10 |

Phone: +370-5-2651474
Fax: +370-5-2651483
e-mail: sales@standa.lt
http://www.standa.lt
Kinematic Double Optical Mount of Side Drive

- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range ±2°
- Sensitivity 3 arcsec
- Both tilt and tip controlled from aside the optical path
- Ideal for dense optical schemes
- Fine adjustment screws with 0.25 mm pitch
- Hardened seats under adjustment screws
- Accepts two pieces of optics: on the platform (adjustable), and on the base (not adjustable)

The screw for fixing optics in the base has a plastic tip.
A retaining ring M27x1 to fix the optics is included. A tightening key 3K-25 for the retaining ring is available on request.

front and rear view – the base has an aperture for the second optics (not adjustable)

Kinematic Double Optical Mount of Side Drive with Adjustable Polarizer Holder

- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range ±2°
- Sensitivity 3 arcsec
- Both tilt and tip controlled from aside the optical path
- Ideal for dense optical schemes
- Fine adjustment screws with 0.25 mm pitch
- Hardened seats under adjustment screws
- Rotation range 360°
- Scale gradation 2°
- Accepts two pieces of optics: on the platform (adjustable), and on the base (not adjustable)

back view – the base has an aperture for the second optics (not adjustable)
Polarizer Holders 5PH50 are ideal for positioning rotation sensitive optics such as polarizers or waveplates. Holders are offered for optics 1”, 2” and 3” in diameter. Optics is placed inside central aperture, where it is securely held in place by a threaded retaining ring. The position is indicated on two 360° angular scales, with gradation of 2°. Where space doesn’t allow to read one scale, you always will be able to view another.

The base of a holder has threaded holes M6 and M4 for mounting on posts or bases. 5PH50 has a removable rod to rotate the platform by any of its 4 holes.

Material: black anodized aluminium.

### Polarizer Holders

<table>
<thead>
<tr>
<th>Model</th>
<th>D, mm</th>
<th>E, mm</th>
<th>H, mm</th>
<th>B, mm</th>
<th>d, mm</th>
<th>L, mm</th>
<th>M, mm</th>
<th>F, mm</th>
<th>m, mm</th>
<th>Weight, kg</th>
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<tbody>
<tr>
<td>5PH50-1</td>
<td>51</td>
<td>16.5</td>
<td>17.5</td>
<td>25.5</td>
<td>23</td>
<td>25</td>
<td>M27x1</td>
<td>7.5</td>
<td>2.5</td>
<td>0.08</td>
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<tr>
<td>5PH50-1-H</td>
<td>51</td>
<td>16.5</td>
<td>17.5</td>
<td>25.5</td>
<td>23</td>
<td>25</td>
<td>M27x1</td>
<td>7.5</td>
<td>2.5</td>
<td>0.08</td>
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<tr>
<td>5PH50-2</td>
<td>82</td>
<td>19</td>
<td>20</td>
<td>51.5</td>
<td>48</td>
<td>40.5</td>
<td>M53x1</td>
<td>9.5</td>
<td>2.5</td>
<td>0.18</td>
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<tr>
<td>5PH50-2-H</td>
<td>82</td>
<td>19</td>
<td>20</td>
<td>51.5</td>
<td>48</td>
<td>40.5</td>
<td>M53x1</td>
<td>9.5</td>
<td>2.5</td>
<td>0.17</td>
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<td>5PH50-3</td>
<td>115</td>
<td>24.5</td>
<td>26.5</td>
<td>76.9</td>
<td>72</td>
<td>57</td>
<td>M78x1</td>
<td>12</td>
<td>3.5</td>
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<tr>
<td>5PH50-3-H</td>
<td>115</td>
<td>24.5</td>
<td>26.5</td>
<td>76.9</td>
<td>72</td>
<td>57</td>
<td>M78x1</td>
<td>12</td>
<td>3.5</td>
<td>0.45</td>
</tr>
</tbody>
</table>

### Ordering Polarizer Holders

1” polarizer holders 5PH50-1, 5PH50-1-H, 5PH51-1, 5PH51-1, 5PHH50-1, are available from stock.

2” polarizer holders 5PH50-2, 5PH50-2-H, 5PH51-2, 5PH51-2, 5PHH50-2 are produced on demand.

A tightening key for the retaining ring is available on request: 3K-25 for 1”, or 3K-50 for 2” holders.
Polarizer Holders

Polarizer Holder 5PH51 is an original mount with **revolving** conical angular scale on the face of the holder. This enables the user to set the current position on the scale to any chosen angle independently of the position of the holder.

The optical element is secured inside central aperture of the platform of the holder by the threaded **retaining ring**. The **zero** on the revolving scale is **aligned** to the desired axis of transmission.

**For example** rotate the platform to choose the required orientation of polarization. **Lock** the platform with its fixing screw. Revolve the scale to reset its **zero origin**. **Lock** the platform by retightening its own two fixing screws. Now the scale moves simultaneously with the platform of the holder, so you measure angles relative to any initial position.

The holder accepts rotation sensitive optics 1” (25.4 mm) or 2” (50.8 mm) in diameter.

The scale is graduated into 2° increments. It is engraved on a conical surface. Angle of the cone is 60°.

So the scale is read from a wide angle.

The platform rotates a full 360°. It has a **knurled edge** for easy grip. Also it has 4 holes on its perimeter.

<table>
<thead>
<tr>
<th>Model</th>
<th>D, mm</th>
<th>E, mm</th>
<th>H, mm</th>
<th>B, mm</th>
<th>d, mm</th>
<th>M, mm</th>
<th>F, mm</th>
<th>Weight, kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>5PH51-1</td>
<td>50</td>
<td>23</td>
<td>24</td>
<td>25.5</td>
<td>23</td>
<td>M27x1</td>
<td>10</td>
<td>0.09</td>
</tr>
<tr>
<td>5PH51-2</td>
<td>81</td>
<td>26</td>
<td>27</td>
<td>51.5</td>
<td>48</td>
<td>M53x1</td>
<td>11</td>
<td>0.19</td>
</tr>
</tbody>
</table>

Use the same **1.5 mm hex-key** to rotate the platform by these holes, to lock the platform, and to lock the revolving conical scale.

To mount on posts or bases the holder has M6 and M4 holes in its base. Yet the design is compact. Material: black anodized aluminium.

Base of 5PHH50 has beveled sides for fingers to rotate the platform by its knurled edge.

You may transform a polarizer holder into a rotation stage. For this you’d need to order an insert platform 5PHH50-1A1 separately.

To mount components on it the platform has a pattern of M4 holes and a central Ø7-to-M6 hole. If you need to fasten to the central hole a unit with M4 mounting hole, you can slip an **M4 screw** through this Ø7-to-M6 **combined** hole (see the drawing for 5PHH50-1).
Y-Z Positioner for Lens, Pinholes, and Objectives

Y-Z Positioners for Lens, Pinholes and Objectives 5ZYP are compact mounts designed to precisely position optical components in the plane orthogonal to the optical axis. Ideal for microscope objectives, mounted pinholes, fiber optics chucks, and diode lasers.

The mounts provide 5 mm translation with sensitivity of 2 µm.

Two Standa adjustment screws are used for positioning. They can be replaced with any screw or micrometer with M10x1 mounting thread.

The stage comes with 9S65M screw as standard. You don’t have to specify this screw in your order. If you order the stage with alternative screws, please specify this in order, by appending the screw code name to the stage code. See section 9 for screws and their codes.

Two ways to fasten 5ZYP: by an M6 hole or on a connecting cone 3CC4, 3CC6 by a Ø7 hole.

Material: black anodized aluminium.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model</th>
<th>D.</th>
<th>d.</th>
<th>C.</th>
<th>L.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>5ZYP-1</td>
<td>58</td>
<td>25.5</td>
<td>24</td>
<td>102</td>
<td>0.26</td>
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<tr>
<td>5ZYP-2</td>
<td>63</td>
<td>51</td>
<td>48</td>
<td>127</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Insert rings for 5ZYP

- A1, A2
- B1, B2

Material: black anodized aluminium.

Y-Z Positioner for Lens, Pinholes and Objectives

Y-Z Positioner 5TLM-1 accepts optics of Ø25.4 mm. Optics is stopped by a rest-flange inside the central aperture of the platform and is secured by a hex fixing screw with hard plastic tip. 5TLM-1 is ideal for microscope objectives, mounted pinholes, fiber optics chucks and diode lasers.

Weight 0.12 kg

Y-Z Positioner for Lens, Pinholes and Objectives

Y-Z Positioner 5TLM-1TH

- Travel range 3 mm

Two plastic padding rings and a retaining ring M27x1 to fix the optics are included.

A tightening key 3K-25 for the retaining ring is available on request.

Weight 0.12 kg
Self-made Pinholes Y-Z Mount

5ZYPS has two screws to adjust the pinhole about two axes in 8 mm range. 5ZYPS has a pinhole holder mounted – 14 mm in diameter with 3 mm clear aperture, made of steel. On request we supply pinholes. Or you may insert a Ø7 disk of thin sheet of any material into this holder, and you will be able to make a hole at any desired position using any available method (e.g. with a needle).

5ZYPS has three M6 holes and it can be mounted on Mounting Posts 3MP6.

Weight 0.1 kg

Translating Post Holder

- Fine post height adjustment within 13 mm without rotation
- One rotation of adjustment ring adjusts height of post by 1 mm
- High stability position locking

Translation Post Holder 3TPH-13 is used for height adjustment of components mounted on 12 mm posts 3MP or equivalent. Range of coarse height setting is 50 mm. After coarsely setting position, post is locked inside the 12 mm round bore with stable two-line contact using upper thumbscrew with hex socket. Precise height adjustment is then done by a handy knurled adjustment ring. One rotation of the ring moves the post up or down 1 mm to a total of 13 mm. Precise position can be locked using the lower thumbscrew.

M6 threaded hole in the base can be used for attaching directly to optical table, to other positioners or to magnetic bases 3CMB.

Material: black anodized aluminum.

Weight: 0.15 kg

You may order lockable versions of our mounts.

There are different locking mechanisms. They lock a Fine Screw, while causing a slightest displacement possible. A lock at each Fine Screw is tightened with a hex key.

For lockable versions the code is formed by appending letter “L” to the code of the standard unit.

Some models of our Ultra Fine Screws (see Section 9) have locking mechanisms of their own. You may use them, just make sure a given unit has the appropriate mounting holes for these screws.
Optical Positioners

Kinematic Optical Mount
Translation Optical Mount

SPECIFICATIONS
Optics diameter Ø25.4 mm
Tilt/tip range ±2°
screw thread pitch 250 µm (100TPI)
Sensitivity 3 arcsec
XY translation range ±2 mm
screw thread pitch 250 µm (100TPI)
Sensitivity for XY translation 1 µm
Sensitivity for Z translation 1 µm
Z translation range 10 mm
Material black anodized aluminium
Weight 0.28 kg

ORDERING INFORMATION
5KOM5-1 Five Axis Kinematic Optical Mount: - Tilt/tip range; - XY translation range; - Z translation range
5KOM5F-1 Five Axis Kinematic Optical Mount with reinforced springs for mounting of heavy objects
5KOM4-1 Four Axis Kinematic Optical Mount: - Tilt/tip range; - XY translation range
5TOM3-1 Three Axis Translation Optical Mount: - XY translation range; - Z translation range
5TOM2-1 Two Axis Translation Optical Mount: - XY translation range

Five Axis Kinematic Optical Mount
5KOM5-1

Four Axis Kinematic Optical Mount
5KOM4-1
Three Axis Translation Optical Mount

5TOM3-1

Two Axis Translation Optical Mount

5TOM2-1

Adapter

5KOMA1

Material: aluminium with black finish.

Adapter 5KOMA1 is used with 5KOM5-1, 5KOM5F-1 and 5TOM3-1 for mounting objects that have M27x1 thread on the back side of the mount.

Telescopes mounted from both side of 5KOM5-1.
Kinematic Vertical Drive Optical Mounts

Vertical Drive Optical Mounts

- For 1”, 2” or 3” optics
- Stainless steel
- Compact/robust design
- Lockable adjustment screws
- Fine screws pitch 0.25 mm (101.6 TPI)
- Tilt/tip range ±2.5°
- Sensitivity 2 arcsec
- Vacuum compatible version is available on request

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5KVDOM-1</td>
<td>Ultra-stable Kinematic Mirror Mount for Ø25.4 mm (1 inch) optics</td>
</tr>
<tr>
<td>5VDOM-1</td>
<td>Ultra-stable Mirror Mount with L-shaped flat spring for Ø25.4 mm (1 inch) optics</td>
</tr>
<tr>
<td>5KVDOM-2</td>
<td>Ultra-stable Kinematic Mirror Mount for Ø50.8 mm (2 inch) optics</td>
</tr>
<tr>
<td>5KVDOM-3</td>
<td>Ultra-stable Kinematic Mirror Mount for Ø76.5 mm (3 inch) optics</td>
</tr>
</tbody>
</table>

Ultra-stable Mirror Mounts 5KVDOM and 5VDOM are designed to minimize mount-induced wavefront distortions. In conventional mounts, the mirror is tightened by a side screw. Radial forces acting on the mirror induces parasitic wavefront distortion, such as astigmatism.

Uniformly distributed axial forces eliminate wavefront distortion.

These mounts are ideal for industrial applications in different optical devices (laser cavities, optical sub-assemblies, limited space applications) because of their long-term stability.

5KVDOM and 5VDOM mirror mounts use secure 3-points mirror suspension in between the frontal flat spring and the back plate.

A fixing screw secures the optics against contact lines, which make 2 contact points. To prevent damage to the optics, the tip of the fixing screw is made of plastic.
Universal Base Plate

3BPVDOM

Available motor version

8MKVDOM-1

- Material of Optical Mount – Stainless steel
- Compact design
- Used actuator 8CMA20-8/15

Motorized Vertical drive optical mount 8MKVDOM-1 with 2 axis step motor Manual Controller in box 8SMMC2-B2-2
Optical Positioners

Kinematic Vertical Drive Optical Mount 5KVDOM-05

- For Ø12.7 mm (0.5 inch) optics
- Stainless steel
- Compact/robust design
- Lockable adjustment screws
- Fine screws pitch 0.25 mm (101.6 TPI)
- Tilt/tip range ±2.5°
- Sensitivity 2 arcsec
- Vacuum compatible version is available on request
- Weight 0.1 kg

Kinematic Vertical Drive Optical Mount 5KVDOM-05 is designed to minimize mount-induced wavefront distortions. In conventional mounts, the mirror is tightened by a side screw. Radial forces acting on the mirror induces parasitic wavefront distortion, such as astigmatism.

Uniformly distributed axial forces eliminate wavefront distortion.

This mount is ideal for industrial applications in different optical devices (laser cavities, optical sub-assemblies, limited space applications) because of their long-term stability.

A fixing screw secures the optics against contact lines, which make 2 contact points. To prevent damage to the optics, the tip of the fixing screw is made of plastic.

ORDERING INFORMATION

5KVDOM-05 Ultra-stable Kinematic Mirror Mount
5KVDOM-05.10 Frontal flat spring

*slide M3(4-40) screws through combined M4/Ø6 mounting/clearance holes to mount the unit immediately to M3(4-40) holes, or mount the unit directly on any M4 tip
We will gladly assist you in building your own system from scratch or adapting it to an existing setup. We design, test, and remodel custom gadgets till they work as you specify. Here are some examples.

Two custom profile slits overlap. Each sits on its own independent system designed to align it against a target seated on a 2 axis tilt optics mount 5OM122T. Each alignment system consists of:
- 7R129 – rotation stage,
- 7T264 – 2 axis translation stage.
The set also contains custom brackets and plates.

A custom slit, 7R7 – a rotation stage,
5OM122T – an optical mount (2 axis tilt),
7T164 – an ultra low profile translation stage, custom brackets and a plate.

Gimbal system, that contains:
8MR180-2 – two motorized rotation stages.
Two sets of custom brackets.

Fresnel Rhomb retarders

Open type Fresnel Rhomb adapted for use with a Mini Rotation Stage 7R7.

Closed type Fresnel Rhomb adapted for use with a Mini Rotation Stage 7R7.

Super stable L-shaped Optical Mount for optics of various types and dimensions

We modify our standard products according to your request even for one piece order

5OBM119T – 2 axis tilt optical mount,
three 8MT167-25 – motorized translation stages stacked in XYZ axes,
8MR180 – motorized rotation stage,
3MB6 – magnetic base.
The set also contains custom brackets and plates.

Examples of Custom Design

We modify our standard products according to your request even for one piece order

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Examples of Custom Design

Large Adjustable Kinematic Optical Mount

5AM-250

- 2 axis
- Tilt/tip travel range ±1.5°
- Optics diameter 115÷250 mm
- Optics thickness 52 mm
- Sensitivity 0.5 arcsec
- Load capacity 6 kg
- Weight 10.1 kg

Super fine and stable Kinematic Optical Mounts 5AM-250 and 5TAM-250 for large and heavy optics. Optionally universal element holder can be mounted from the backside of the holder to easily adapt the holder for test parts of various sizes and shapes.

5TAM-250

- 3 axis
- Tilt/tip travel range ±1.5°
- X axis translation range 30 mm
- Optics diameter 115÷250 mm
- Optics thickness 52 mm
- Sensitivity 0.5 arcsec.
- Load capacity 6 kg
- Weight 10.3 kg

See page 4-4 for details
Self-centring Large Aperture Optical Mount

**5AM-100**

- Tilt/tip range ±2.2°
- Linear adjustment of X axis is possible on request
- More linear axes are possible on request
- Great variety of optics diameters can be used with this mount

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
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<tr>
<td>Optics diameter range</td>
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<tr>
<td>Tilt/tip range</td>
<td>± 2.2°</td>
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**NEW**