

Flipping Mirror/Beamsplitter Mounts

5F21



5F21-1
(left hand version)



5F21M-1
(right hand "Mirror" version)

- Flip optics in and out of the experiment
- Repeatability 20 μ rad
- Kinematic design
- Precise and handy angular adjustment in two orthogonal planes
- Stable vertical mounting
- Adjustment range of 8°
- Sensitivity of 3 arcsec
- Made of black anodized aluminium
- Weight 0.09 kg
- 5F21M-1 "Mirror" version

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).

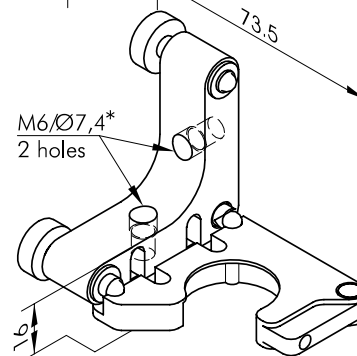
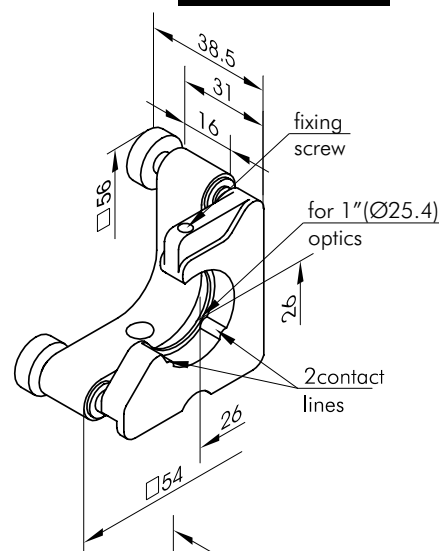
Depending on which side you mount the unit, you flip the platform either vertically or horizontally. By flipping out vertically the optics goes **beneath the common level** of the optical scheme. Still one leg of the base, with a **adjustment screw on it**, stays up. Yet this wouldn't obstruct the optical 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, so as to clear the space totally, like in some flippers from other manufacturers.

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.

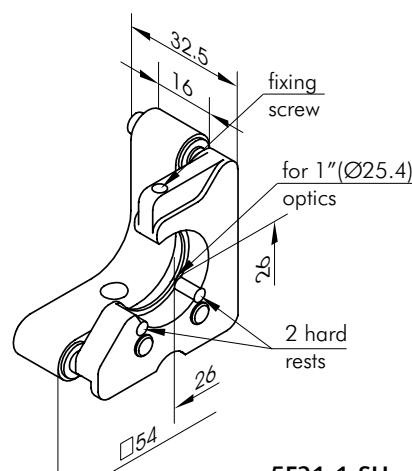
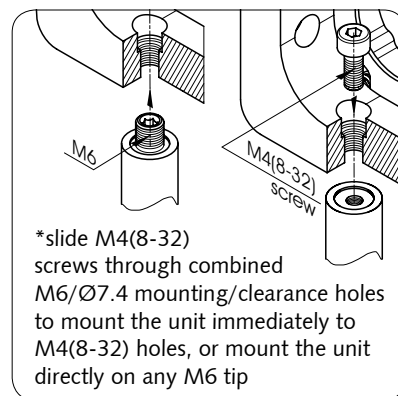
Precise alignment of various optical elements to desired **angles** is done by **2 adjustment screws**.

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 **Ø24 mm** clear aperture. A fixing screw secures the optics against **2 contact lines**,



5F21-1
uses Fine Screws 9S127 (with knobs)



5F21-1-SH
uses Fine Screws 9SH127
(without knobs) hex key included



optics stays in the
experiment



optics flipped down



optics flipped to the
side

Note: "Mirror" version is a right hand version of the standard model.

Flipping Mirror/Beamsplitter Mount

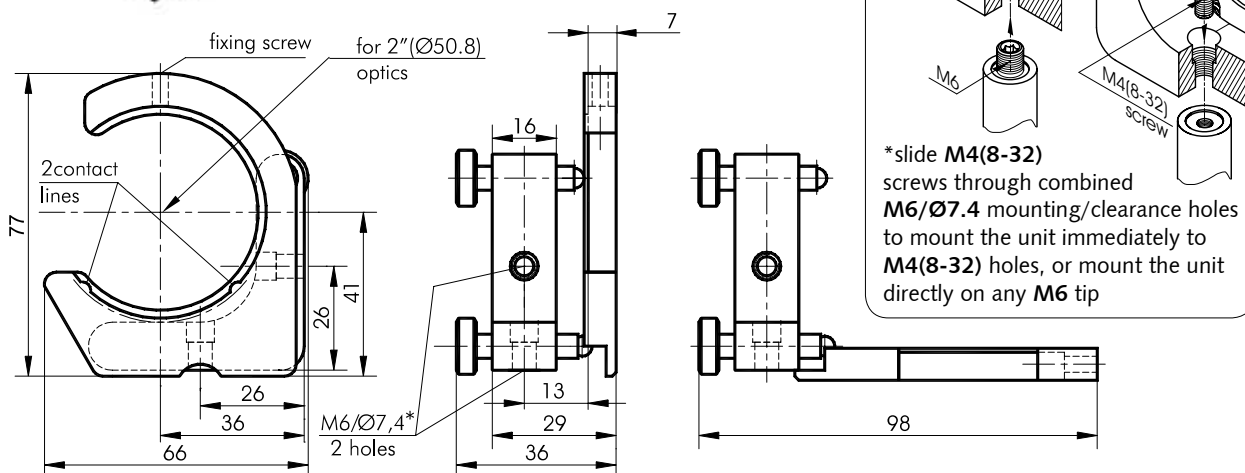
5F21-2



- 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



5F21M-2



Miniature Flipping Mirror/Beamsplitter Mounts

5F23-1-SH

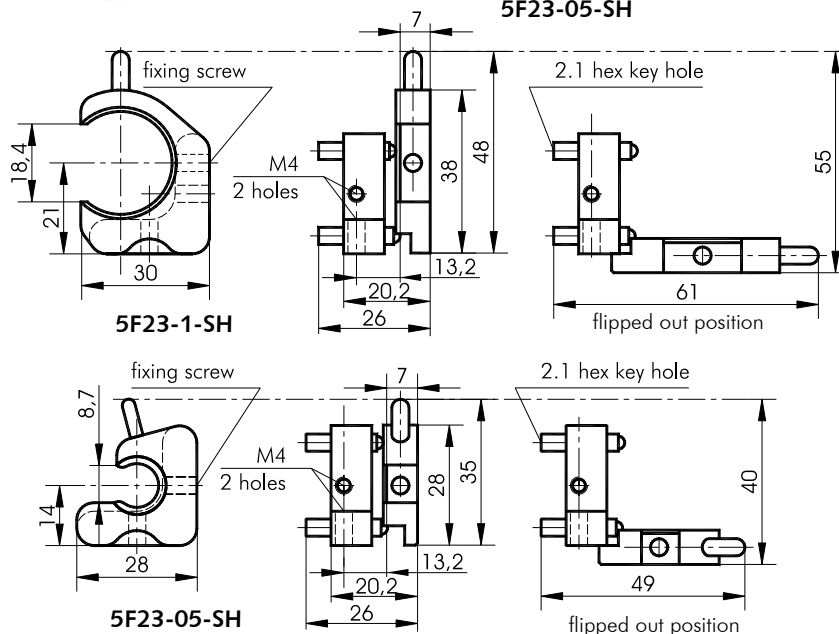
5F23-05-SH



5F23-1-SH

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



Model	Type	Accepts optics	Clear aperture
5F23-05-SH		Ø12.7 mm (0.5 inch)	Ø10.2 mm
5F23M-05-SH	“Mirror”	Ø12.7 mm (0.5 inch)	Ø10.2 mm
5F23-1-SH		Ø25.4 mm (1 inch)	Ø24 mm
5F23M-1-SH	“Mirror”	Ø25.4 mm (1 inch)	Ø24 mm

Note: “Mirror” version is a right hand version of the standard model.

Kinematic Mirror/Beamsplitter Mounts

5MBM21-1


5MBM21-1-3

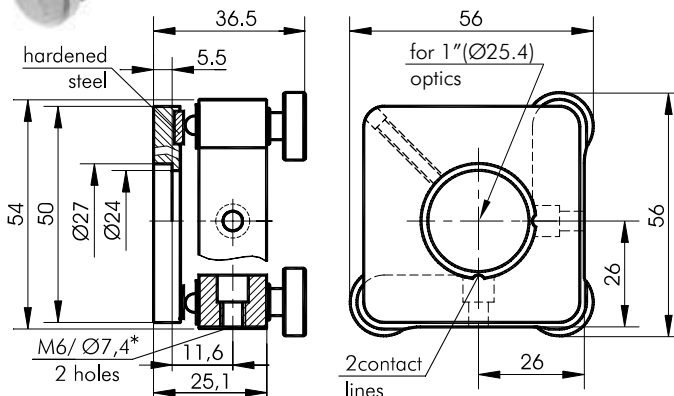
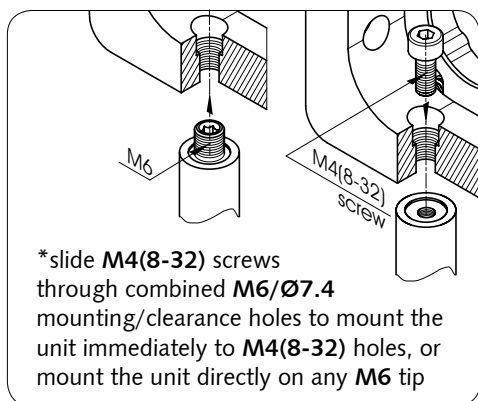
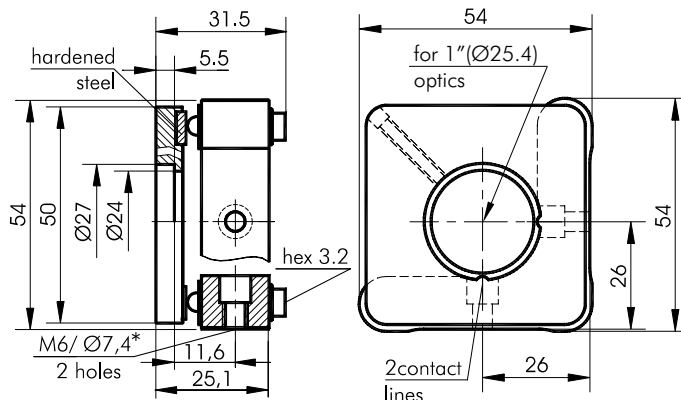
5MBM21-1-2

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 $\varnothing 8.7$ 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 $\varnothing 24$ 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 $\varnothing 7$ /M6 hole to fasten the mount to units with **M4** holes.


5MBM21-1-3 uses three Fine Screws **9S127**

5MBM21-1-3SH uses three Fine Screws **9SH127**

Ordering

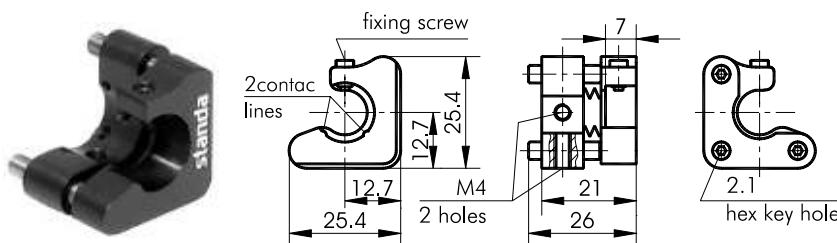
5MBM21-1

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

5MBM23-05-3SH


- For $\varnothing 12.7$ 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.

Model	Type	Accepts optics	Clear aperture
5MBM23-05-3SH		$\varnothing 12.7$ mm (0.5 inch)	$\varnothing 10.2$ mm
5MBM23M-05-3SH	"Mirror"	$\varnothing 12.7$ mm (0.5 inch)	$\varnothing 10.2$ mm

Kinematic Mirror/Beamsplitter Mounts

5MBM24



5MBM24-1-3

5MBM24-2-3SQ

- 1", 2", 3" optics mounts
- Tilt range 9° (about two axes)
- Travel range 4 mm
- Sensitivity of 3 arcsec and 1 μm
- Mounting on either of 2 sides
- Two models – round and square aperture
- Kinematic
- Clear edge design
- A screw pushes via seat of hardened stainless steel
- "Mirror" versions available
- Black anodized aluminium
- Available motorized version – 8MBM24

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**.

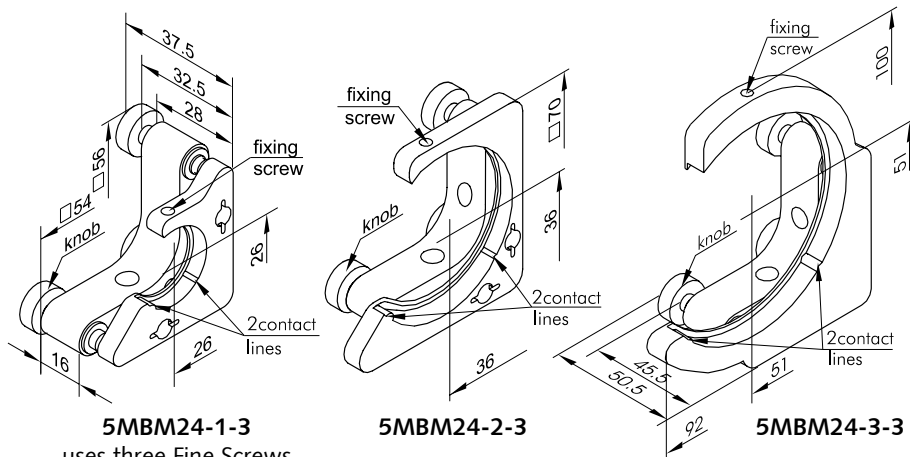
Square mount additionally has **4 fixing screws** for **thin optics**. They have conic tips to work as wedges to clutch a thin plate of optics to the resting flange. For thick optics it has **2 screws** rather than one.

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**.



5MBM24-1-3

uses three Fine Screws 9S127 (with knobs)

5MBM24-1-3SH

uses three Fine Screws 9SH127 (without knobs)
risk of tampering is reduced (hex key included)

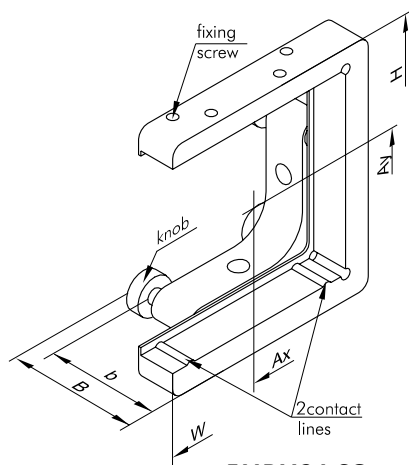
5MBM24-2-3

5MBM24-3-3

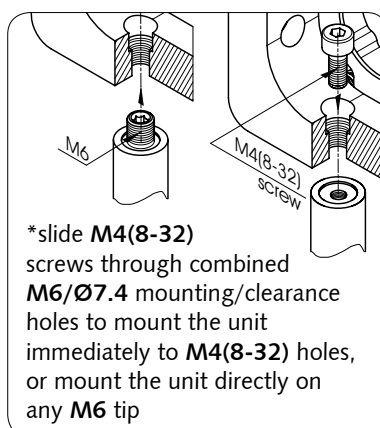


Available motorized version – 8MBM24

Model	H, mm	W, mm	B, mm	b, mm	Ax, mm	Ay, mm
5MBM24-1-3SQ	56	56	37.5	32.5	26	26
5MBM24-2-3SQ	72.5	64	37.5	32.5	37.4	38.2
5MBM24-3-3SQ	102.5	92.5	50.5	45.5	53.6	55.4



5MBM24-SQ



*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

Examples of codes: Screws:

5MBM24-1-3	3
5MBM24-1-2	2
5MBM24-1-2SH	2 hex
5MBM24-1-3SH	3 hex

"SH" – hex screws. Removable hex knobs 9RK127 are available separately.

5MBM24-1-3	for 1" optics
5MBM24-2-3	for 2" optics
5MBM24-3-3	for 3" optics
5MBM24-1-3SQ	square aperture
5MBM24-1-3	round aperture
5MBM24M-1-3	"Mirror" version

Mounts with hard seats

- Original stabilized L-shaped flat spring
- 1" and 2" optics mounts
- Precise (sensitivity of 3 arcsec and 1 μm)
- Stable, with hard steel or sapphire seats under adjustment screws
- Tilt range of 5° in two orthogonal planes
- Travel range 4 mm
- Vertical mounting on either of two sides
- "Mirror" versions available
- Material: black anodized aluminium



5MBM22S-1-3SH



5MBM22S-2-3

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.

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.

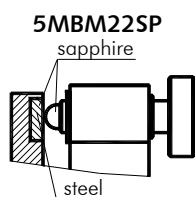
M6/Ø7,4 mounting/clearance holes are centered against the center of the mounted optics.

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.



5MBM22SM-1-2SH

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	$\leq \text{Ø}25.4 \text{ mm}$	$\leq \text{Ø}50.8 \text{ mm}$
Clear aperture	24 mm	45 mm
Weight	0.09 kg	0.14 kg



5MBM22S

A screw pushes via a seat of **hardened stainless steel** or **sapphire**.

Examples of codes:

Screws:

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

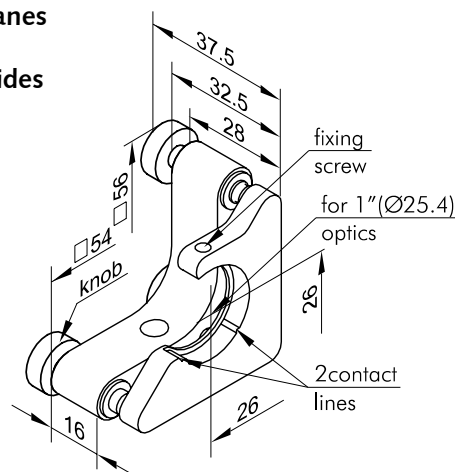
"SH" – hex screws. Removable hex knobs 9RK127 are available separately.

5MBM22S-1

5MBM22SP-1

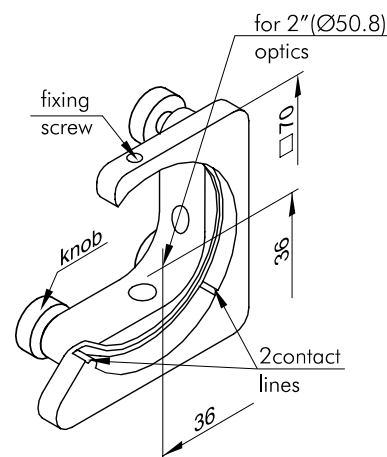
5MBM22S-2

5MBM22SP-2



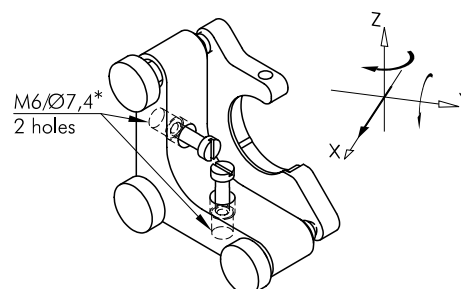
5MBM22S-1-3

uses three Fine Screws 9S127 (with knobs). **5MBM22S-1-3SH** uses three Fine Screws 9SH127 (without knobs) risk of tampering is reduced (hex key included)



5MBM22S-2-3

uses three Fine Screws 9S127 (with knobs). **5MBM22S-2-3SH** uses three Fine Screws 9SH127 (without knobs) risk of tampering is reduced (hex key included). Other dimensions are like in **5MBM22S-1**



*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

Optical
Tables

1

Brackets
& Rails

2

Base
Mounts &
Accessories

3

Optical
Mounts

4

Optical
Positioners

5

Base
Positioners

6

Translation &
Rotation
Stages

7

Motorised
Positioners &
Controllers

8

Fine
Adjustment
Screws

9

Opto-
Mechanics &
Sets

10

Light Test &
Measurement
Instruments

11

Lasers &
Accessories

12

5-5

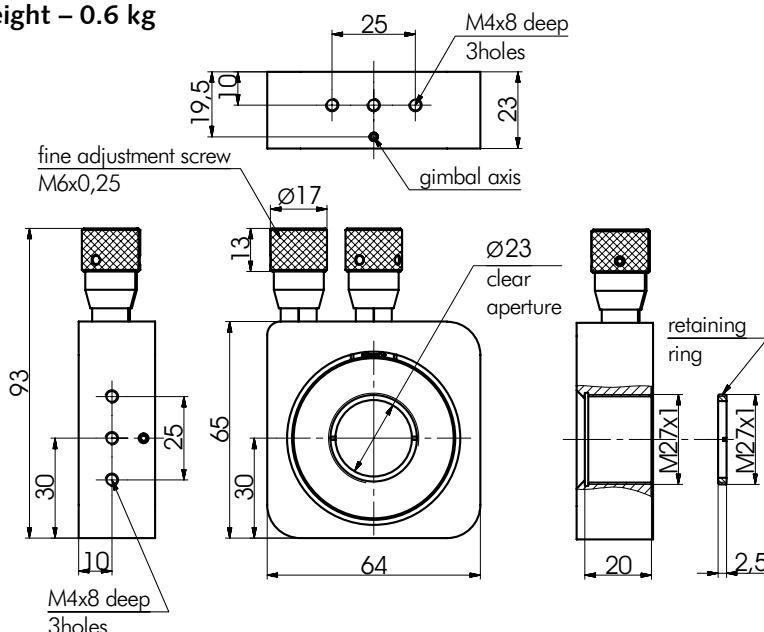
True Gimbal Mount

5GM25T-1

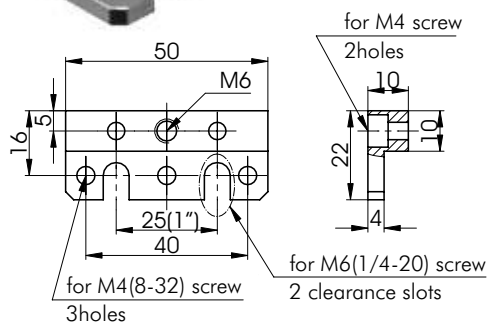


- True Gimbal design
- Adjustment knobs with engraved scale
- $\pm 2.5^\circ$ angular range
- Hardened steel drive for stability
- Lightweight aluminium body
- Weight - 0.6 kg

Completely independent axis!



3BPVDM
Base Plate



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

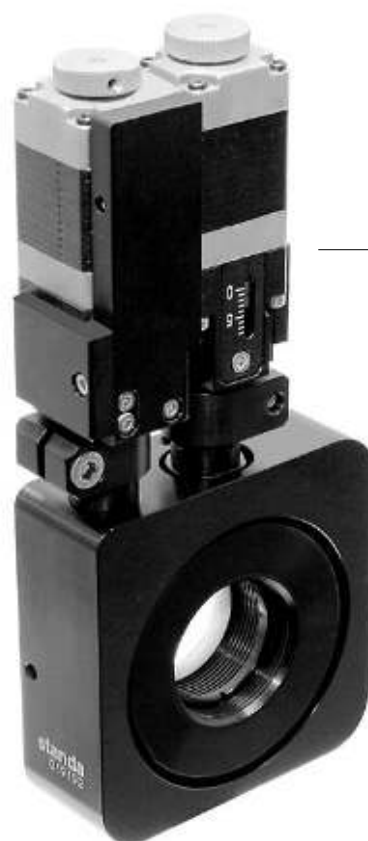
A tightening key **3K-25** for the retaining ring is available on request.

Motorized version 8MGM25T-1

SPECIFICATIONS

Optics diameter	25,4 mm
Clear aperture	23 mm
Angular range	$\pm 2,5^\circ$
Type of actuator	8CMA20-8/15
Resolution*	
in full step	1,25 μ m
in 1/8 step	0,156 μ m
Lead screw pitch	0.25 mm
Repeatability	1 μ m
Maximum speed	4 mm/s
Cable	1.2 m length cable included
Motor connector	HDB15(M)
Weight	0.7 kg

*Dependence between actuators' movement and angular displacement of optical element is not linear.



standa

e-mail: sales@standa.it

www.standa.it

Phone: +370-5-2651474

Fax: +370-5-2651483

Precision Kinematic Optical Mounts

- Precise and handy two orthogonal angular adjustments
- Stable vertical mounting
- 9° adjustment range
- Various modifications with sensitivity from 10 arcsec to 3 arcsec
- M6×0.35 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.

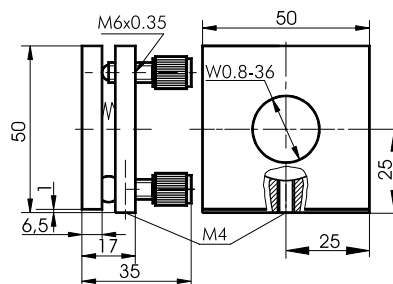
The Mounts are produced of **black anodized aluminium**. Custom colors are available on request.

Objective Mount

5OBM119


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**

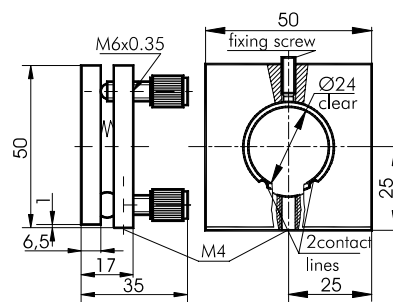


Beamsplitter/Optics Mount

5BM121


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

Weight **0.09 kg**

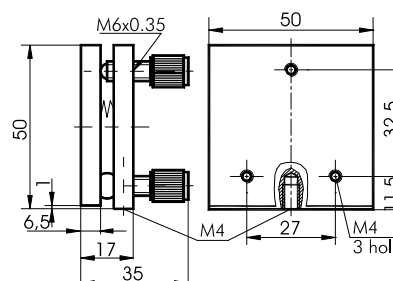


Universal Mirror Mount/Platform

5UM122


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**

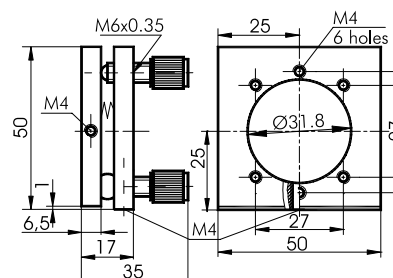


Large Aperture Optical Mount

5LAM124


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

Weight **0.08 kg**

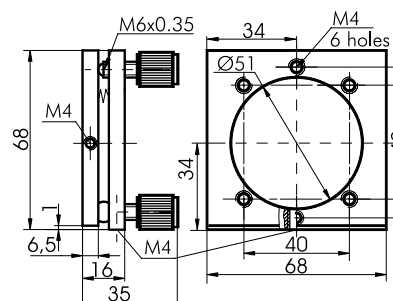


Large Aperture Optical Mount

5LAM124-2


Large Aperture Optical Mount 5LAM124-2 has $\varnothing 51$ 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

**LOW-COST
VERSION**

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 aluminium**. Custom colors are available on request.

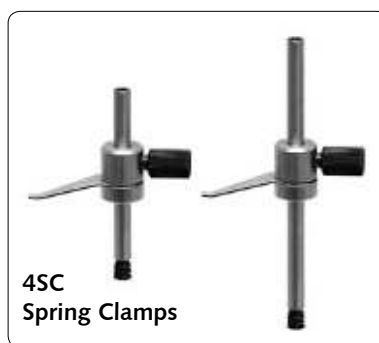
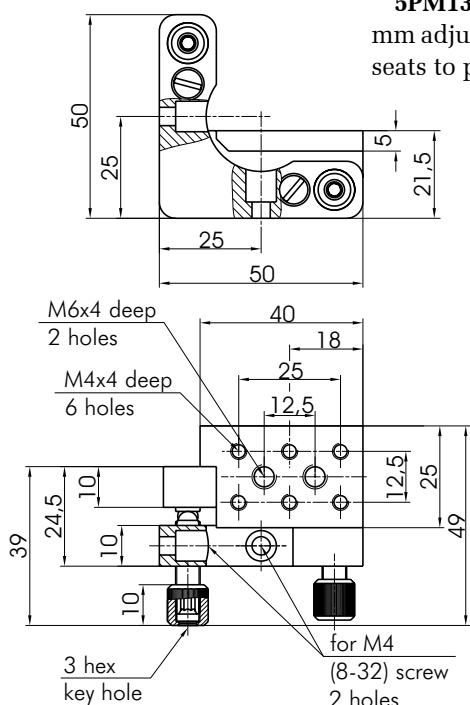
Prism/Optics Mount

5PM131

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**



"Right-hand" version available



Universal Platform Mount

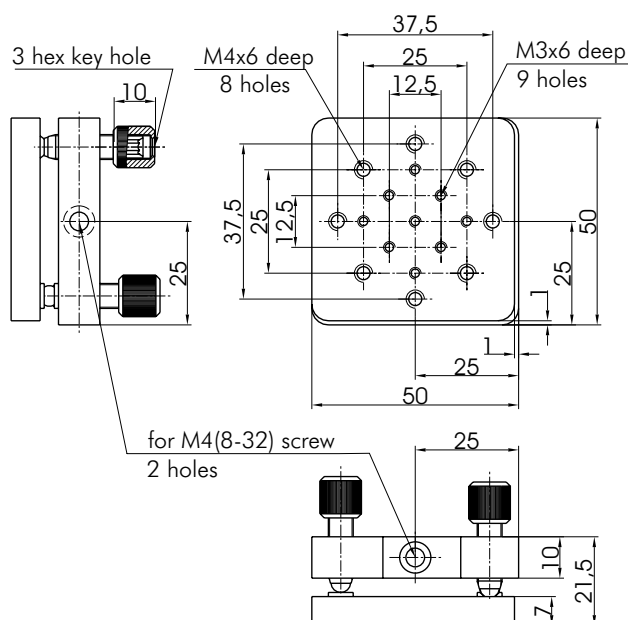
5UM131



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.



Beamsplitter/Mirror Mounts

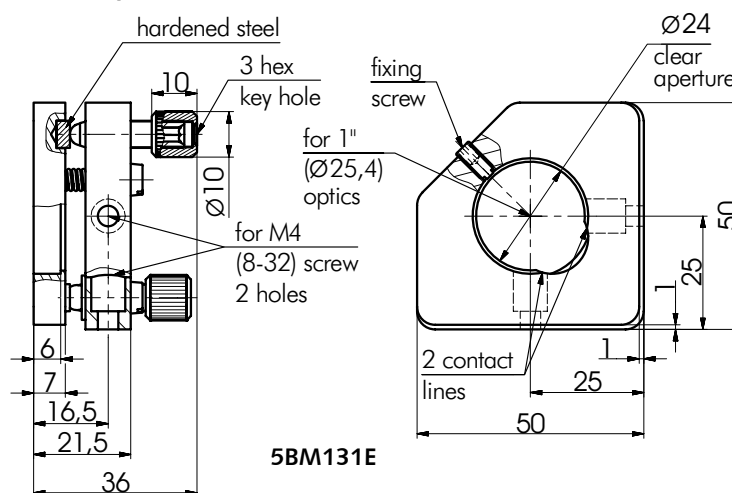
Beamsplitter/Mirror Mount

5BM131E

- 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



*“Right-hand”
version available*



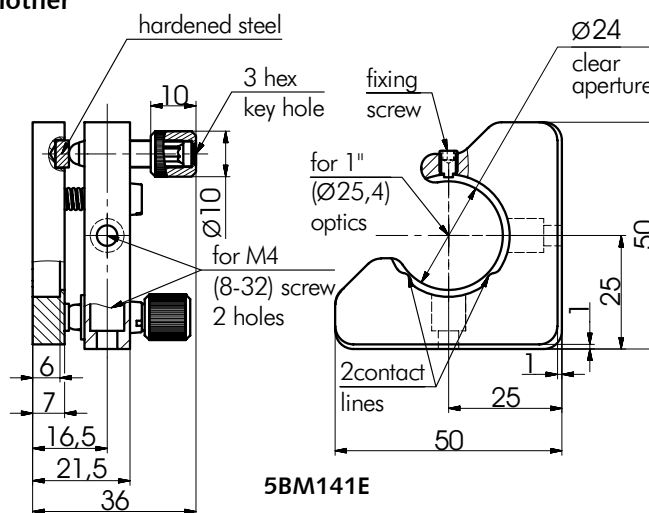
Mirror Optical Mount

5BM141E

- 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



*“Right-hand”
version available*



Ordering Information

for 5PM131, 5UM131, 5BM131E and 5BM141E

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

Examples of codes:

5UM131-3	3 adjustment screws
5BM131E-1-2	2 adjustment screws
5BM141EM-1-2	“Right-hand” version with 2 screws
5PM131M-3	“Right-hand” version with 3 screws

Other
modifications
are available



5BM141-1-3R

more info on
www.standa.it

Precision and High Stability Optics Mounts

50M60 • 50M61



50M60-3-9S67M

50M61-2-9S67M

Precision and High Stability Optic Mounts 50M60 and 50M61 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**.

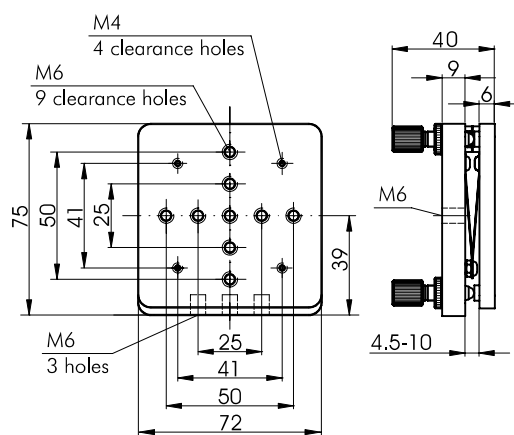
The mounts have **M6** mounting holes. Mount **50M61** also has a **Ø42 mm** clear aperture.

The mounts can be fastened on any mounting post on its **M6** tip. Additionally, mount **50M60** has a hole on its back and can be mounted in **horizontal** position to be used as a **tilt** platform.

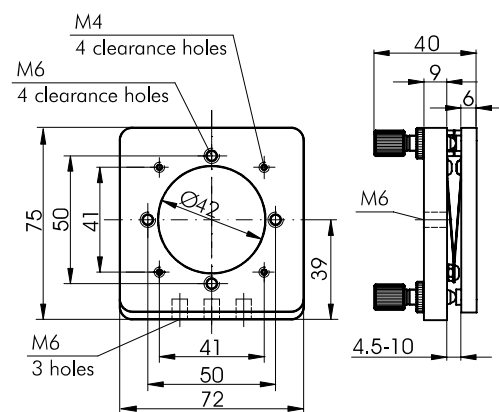
The base of the stage has three holes **M10x1** for adjustment screws of your choice. Standard screws have a pitch of **0.5 mm**. For greater **sensitivity** you may request actuators with **0.35** or **0.25** pitch.

Material: black anodized **aluminium** (default), black finished **steel** (on request). The codes for steel mounts are: **50M60S, 50M61S**.

Weight **0.35 kg**



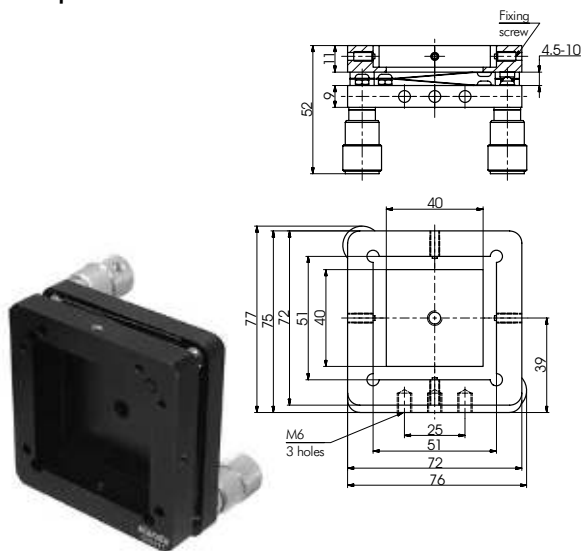
50M60-3-9S67M



50M61-3-9S67M

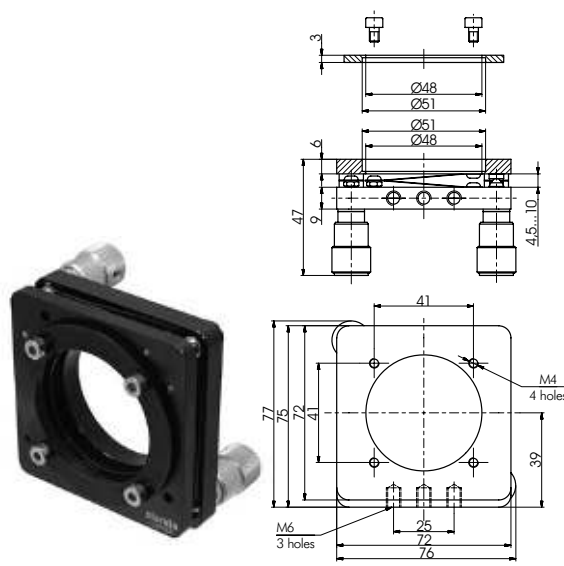
See the next page
"Modifications and ordering 50M60 and 50M61"

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



50M60-SQ2

With square type frame of 50.8 mm (2 inches)



50M61-RN2

With ring type frame of 50.8 mm (2 inches)

e-mail: sales@standa.it

www.standa.it

Phone: +370-5-2651474

Fax: +370-5-2651483

standa

Modifications and ordering

5OM60 and 5OM61



Examples of codes for 5OM60 stages:

5OM60-3

has three 9S65M adjustment screws

5OM60-2

has two 9S65M adjustment screws
and 1 ball

5OM60S-3

made of steel, and has three 9S65M screws

5OM60-3-9S67M

has three 9S67M adjustment screws

5OM60-2-9S127M-10

has two 9S127M-10 screws and 1 ball

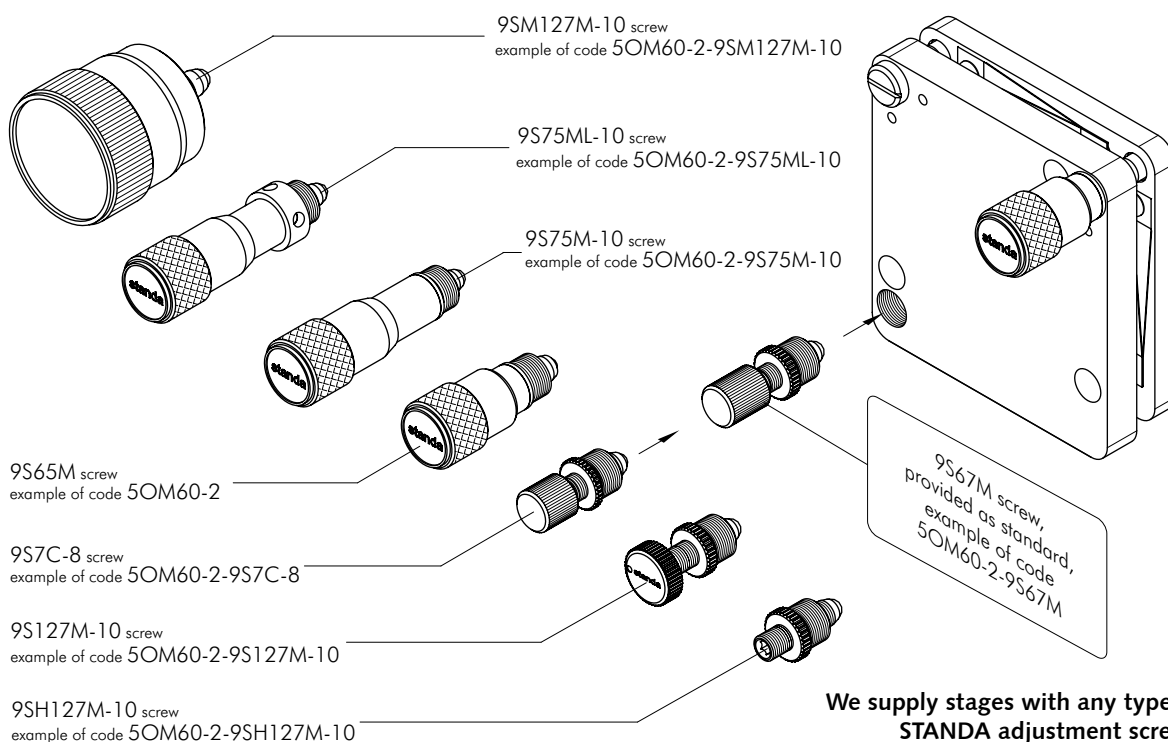
5OM60-2-9S127M-10-K15

has two 9S127M-10-K15 screws and 1 ball

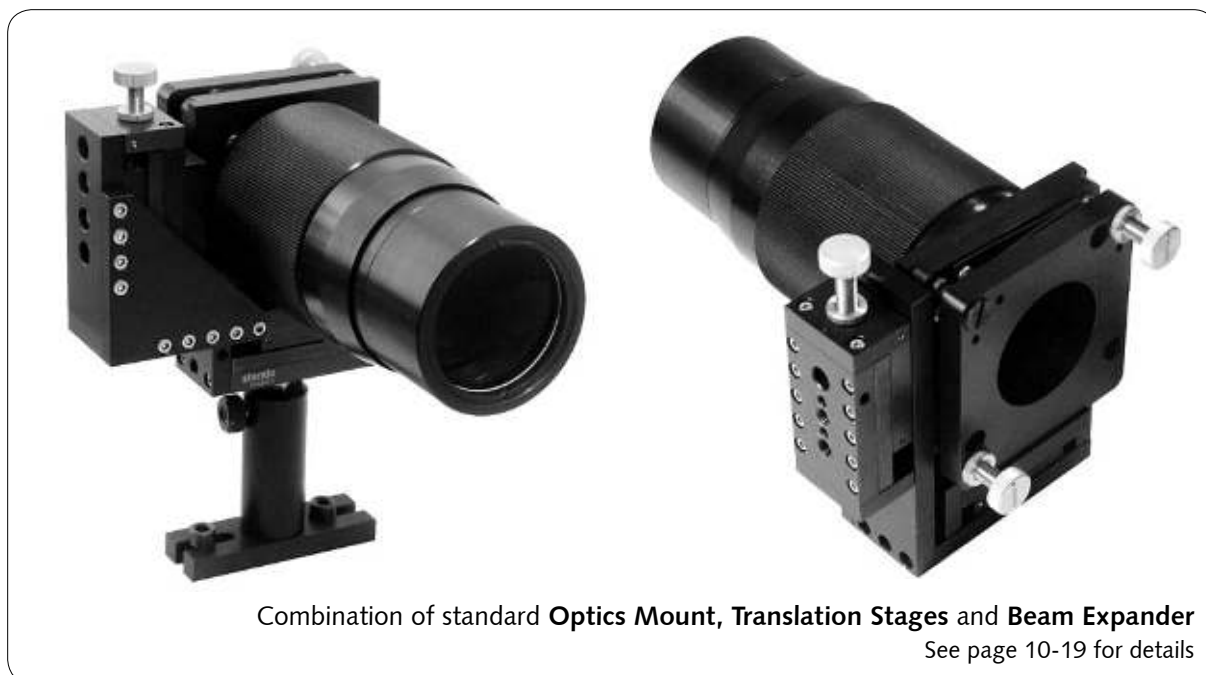
5OM60-2-9S7C-8

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 $\varnothing 8$ 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).



Combination of standard **Optics Mount**, **Translation Stages** and **Beam Expander**
See page 10-19 for details

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

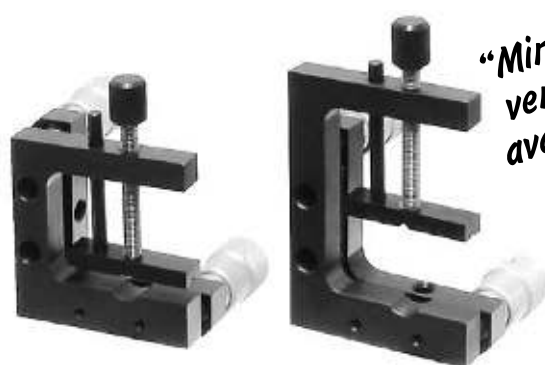
Highly Stable Precision L-shaped Optical Mounts are designed on the basis of two angular adjustment mount, and are produced of steel with black chemical finishing. Special figure spring is used in these Mounts for two purposes:

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.

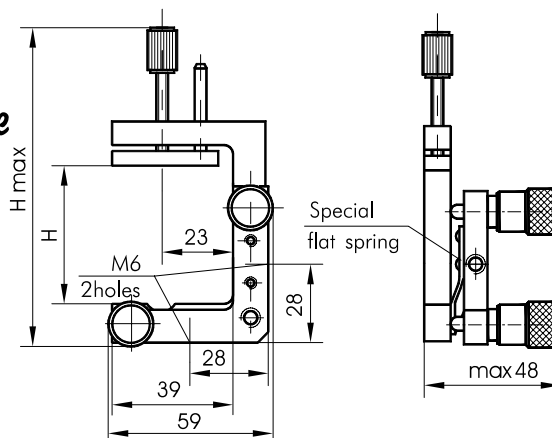
The Highly Stable Precision L-shaped Optical Mounts have two M10x1 threaded holes for actuator mounting. This allows using all STANDA adjustment screws with these mounts. M6 tapped holes on the sides provide a wide variety of mounting configurations, either horizontal or vertical. A special L-shaped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

Two Angular Fine Adjustment Mounts

50M37



"Mirror" version available



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.

50M37M - "Mirror" version is a right hand version of the standard.

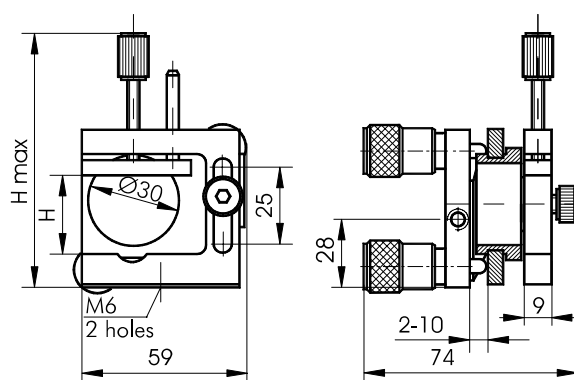
Model	H, mm	H _{max} , mm	Weight, kg
50M37-20	0-28	89	0.23
50M37-50	22-52	122	0.28
50M37M-20	0-28	89	0.23
50M37M-50	22-52	122	0.28

Polarization Optics Mount

50M38



The same functions as 50M37, but additionally provides 360° rotation around the optical axis. Ideally suitable for positioning of polarization filters.



Model	H, mm	H _{max} , mm	Weight, kg
50M38-20	0-26	108	0.43
50M38-40	18-46	127	0.42

Modified Optical Positioners with Motorized Actuators are available



8MBM57-6



8MBM21-1-2



8MBM24-1-2

more info at
www.standa.it

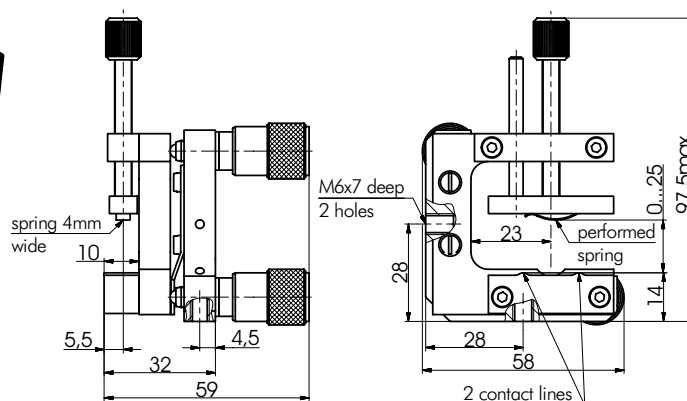
Two Angular Fine Adjustment Mounts

50M37-TPF

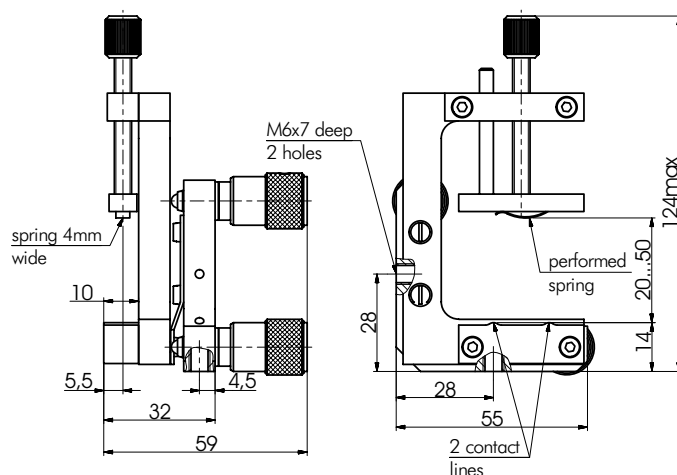


50M37-50TPF-9S7C

NEW



50M37-20TPF



50M37-50TPF

Optics Mount 50M37-50TPF offers possibility not only to hold optics of different size and shape but also grants orthogonal angular adjustment. Accepts objects from 20 mm to 50 mm in height. Unique property of this mount is that the length is not limited – this comes handy when application requires optics to be centered. Smooth and gentle securing of the inserted element is provided by the metal spring from above and two contact lines from below.

Model	Weight, kg
50M37-20TPF	0.23
50M37-50TPF	0.28
50M37-20TPF-9S7C	0.23
50M37-50TPF-9S7C	0.28

APPLICATION SUGGESTIONS

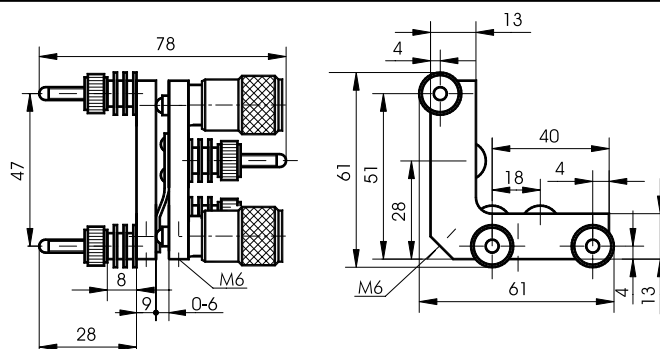

5FM57
Multiple Filter Mount

50M37-20
Two Angular Fine Adjustment
Mount

5PMF57
Universal Prism/Optics Mount

Multiple Filter Mount

5FM57

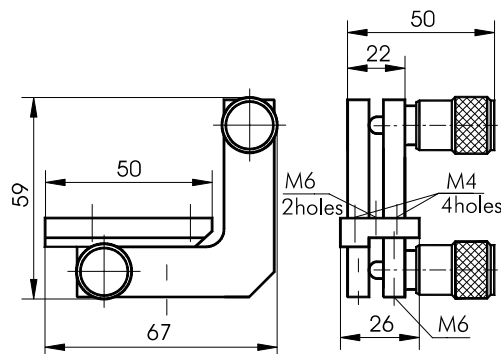


Provides fixation and adjustments of up to 6 filters about two angular coordinates.
Filter thickness can be from 2 mm to 6 mm.

Weight **0.27 kg**

Prism/Optics Mount

5PM57



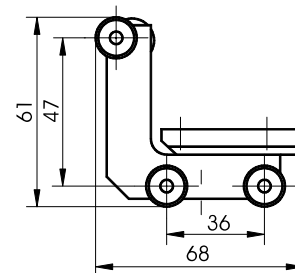
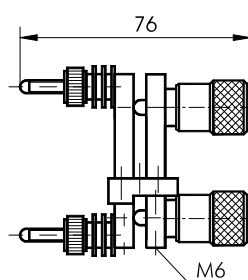
Platform of this holder allows to hold wider optics. Clamps 4BC32 and 4VC41 (ordered separately) used for fastening optical elements like prisms, cubes and etc.

Weight **0.29 kg**

LOW-COST page 5-8
versions are available

Universal Prism/Optics Mount

5PMF57



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

Modifications and ordering

Optical Mounts



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.

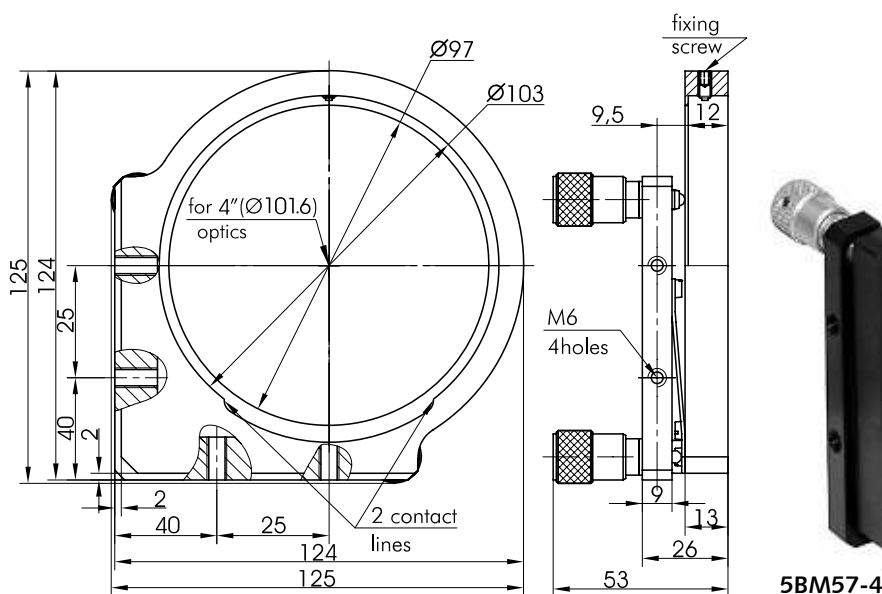
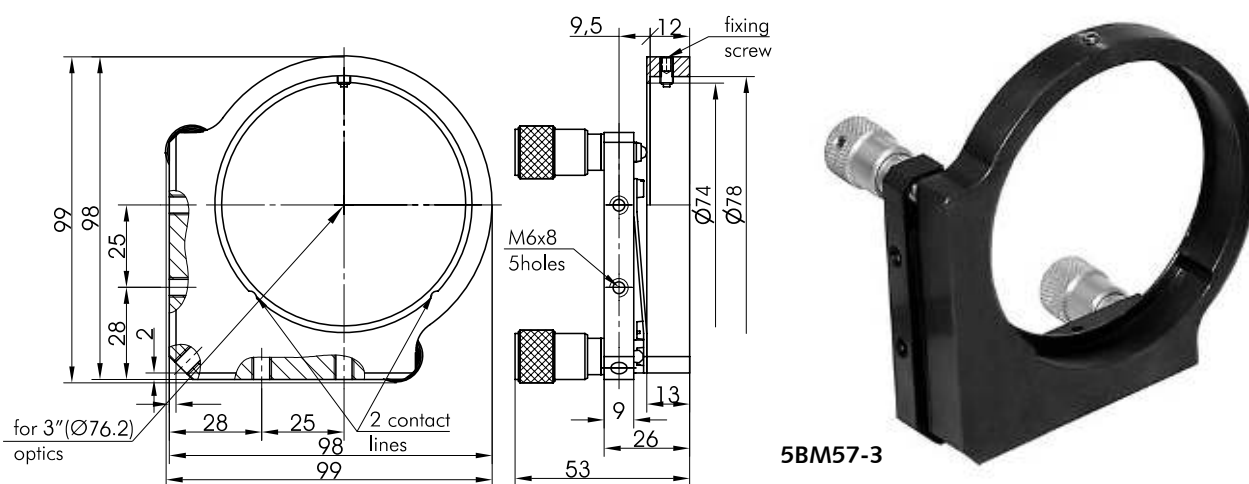
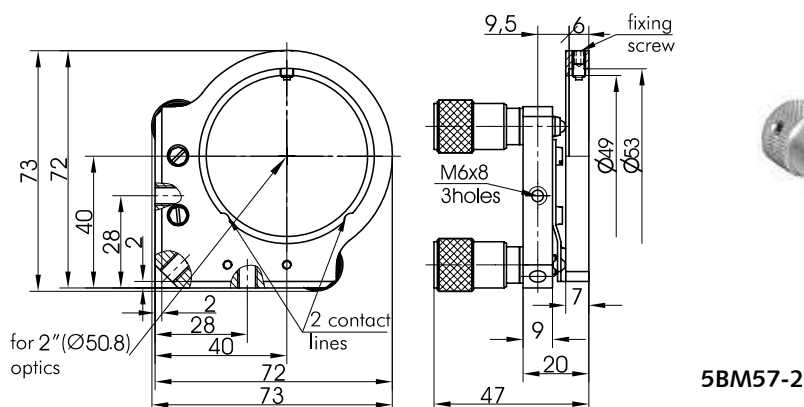
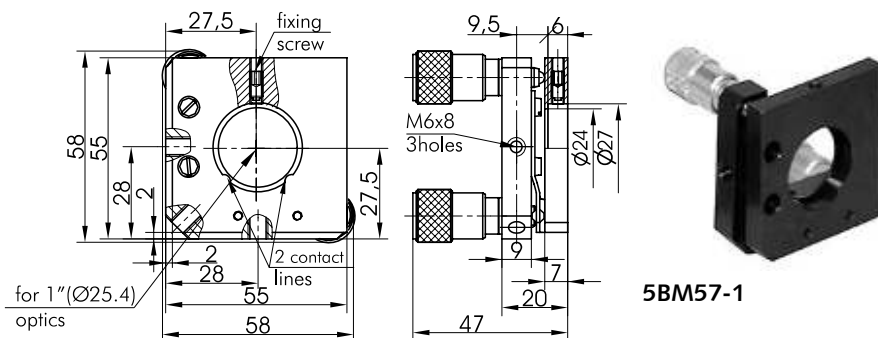
Stable Steel Mirror/Beamsplitter Mounts

5BM57

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

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.



www.standa.it

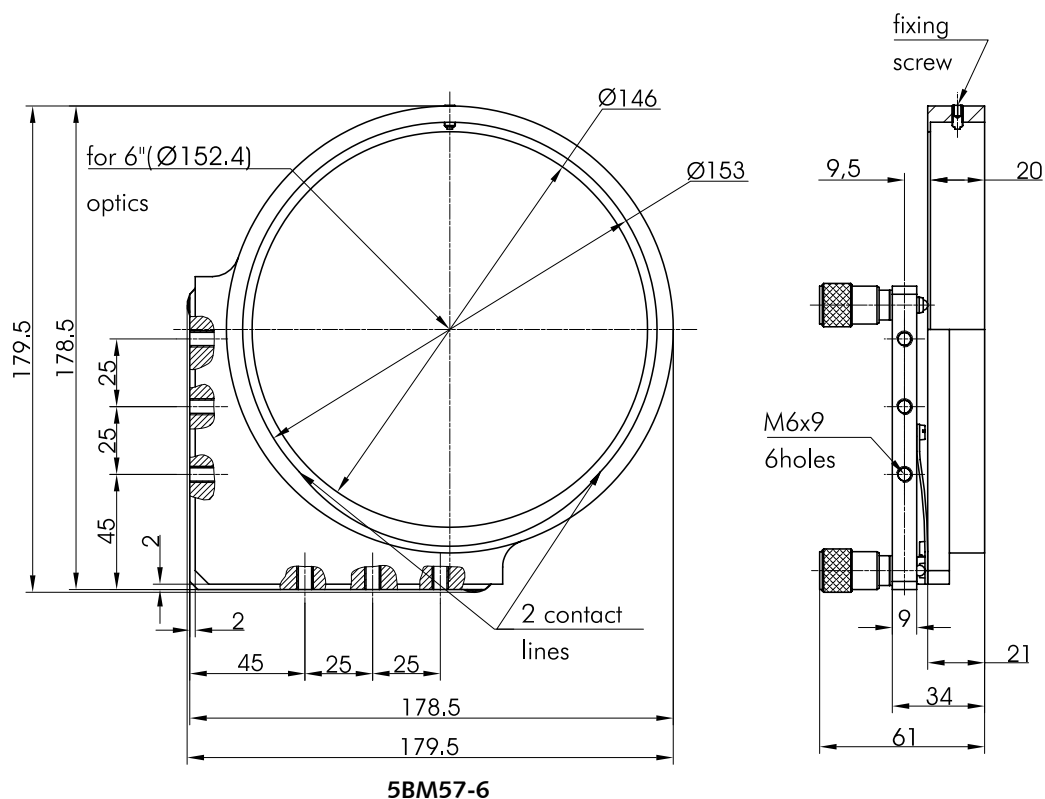
e-mail: sales@standa.it



Fax: +370-5-2651483

Phone: +370-5-2651474


standa

5BM57-6

Ordering Information

Model		Weight, kg
5BM57-1	for 1" (25.4) optics	0.07
5BM57-2	for 2" (50.8) optics	0.18
5BM57-3	for 3" (76.2) optics	0.44
5BM57-4	for 4" (101.4) optics	1.04
5BM57-6	for 6" (152.4) optics	1.4



Available
motorized version
8MBM57-2
8MBM57-4
8MBM57-6

Miniature Precision Mirror Mounts

- Miniature mounts for small optical elements
- $\pm 10^\circ$ 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

50M111

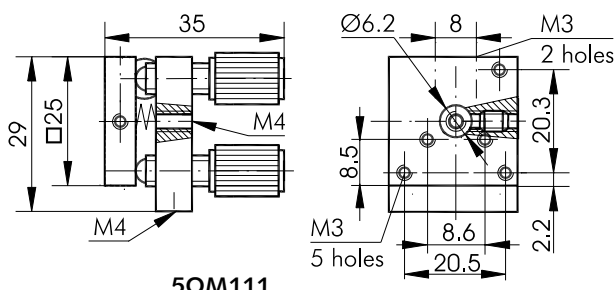

Mirror/Optics Mount 50M111 provides smooth and precise adjustment with sensitivity of **10 arcsec**.

It can be used as a tilt platform – with Spring Clamp **4SC-28M4** and Mounting Post **3SMP4-47**.

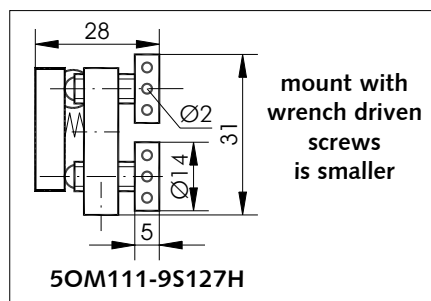
Platform of the mount has a clear aperture of **6.2 mm** in diameter.

The mount has **M6×0.35 mm** holes on its base for adjustment screws. Alternatively, to order the mount with wrench driven screws, you append the code of that screw: **50M111-9S127H**.

Weight **0.04 kg**



50M111

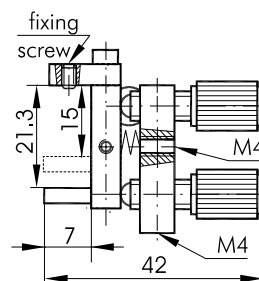


50M111-9S127H

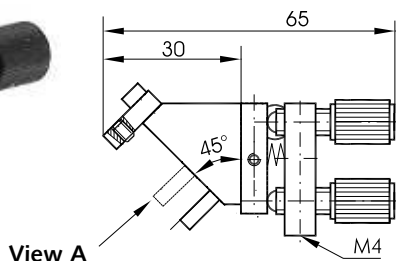
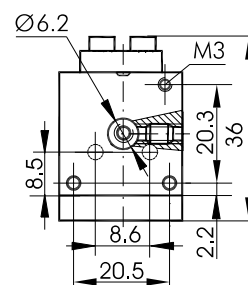
Modifications

50M111-0 • 50M111-45

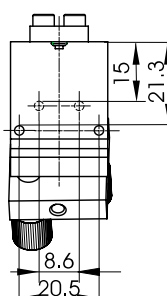
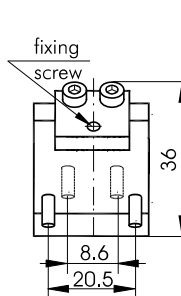
Mirror/Optics Mount 50M111 with adapters **50M111A0** and **50M111A45** are suitable for round ($\varnothing 25.4$ (1") and $\varnothing 12.7$ (0.5")) and square (15x15 mm and 20x20 mm) optical elements.



50M111-0



50M111-45



View A

ORDERING INFORMATION

Examples of codes:

- **50M111** - standard mount.
- **50M111-0** - Mount **50M111** with adapter **50M111A0**.
- **50M111-9S127H-45** - Mount **50M111** with **9S127H** screws and with adapter **50M111A45**.



Mirror/Optics Mount 5OM111-0
with **round 1"** 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.

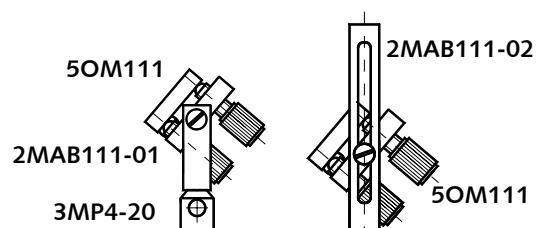


Mirror/Optics Mount 5OM111-0
with a **15x15x15mm** polarizing beamsplitter cube.



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

For optical elements see page 14-1.

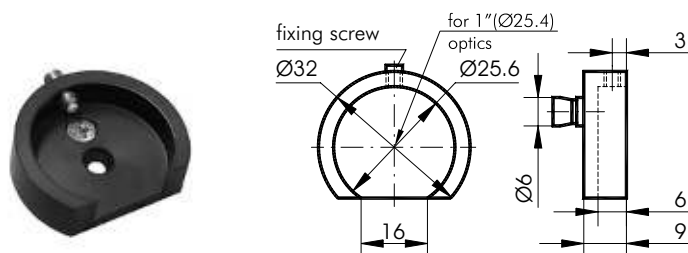


For coarse adjustments about horizontal or vertical axes compact Mirror mounts can be used with Mini Angle Brackets **2MAB111**.



Mirror Adapter

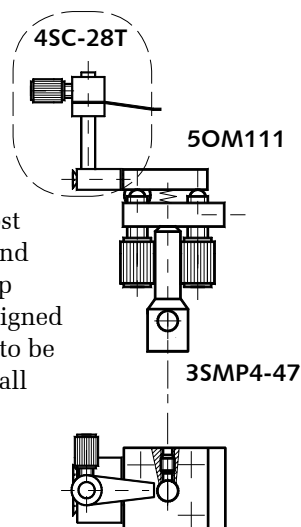
5OM100A3



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)

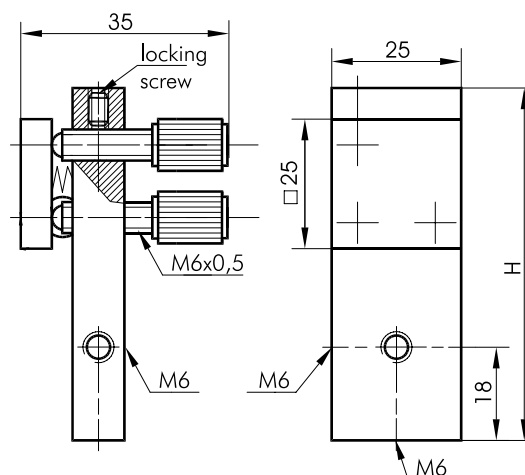
Weight 0.01 kg

Mounting Post 3SMP4-47, and Spring Clamp 4SC-28T designed for 5OM111 to be used as a small tilt platform.



Mirror Mounts with Locking Screws

5LSM110



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.

Model	H, mm	Weight, kg
5LSM110-01	68	0.07
5LSM110-02	33	0.04

Compact Mirror Mount

5CM123

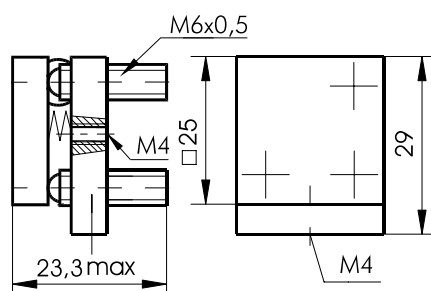
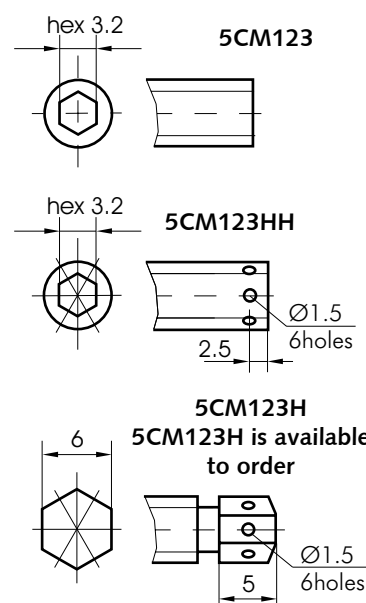


The extremely small mount has small adjustment screws with a hexagonal head or a hexagonal keyhole.

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

- 5CM123** hexagonal keyhole
- 5CM123HH** hexagonal keyhole and six holes for a wrench
- 5CM123H** hexagonal head and six holes for a wrench

Weight 0.04 kg



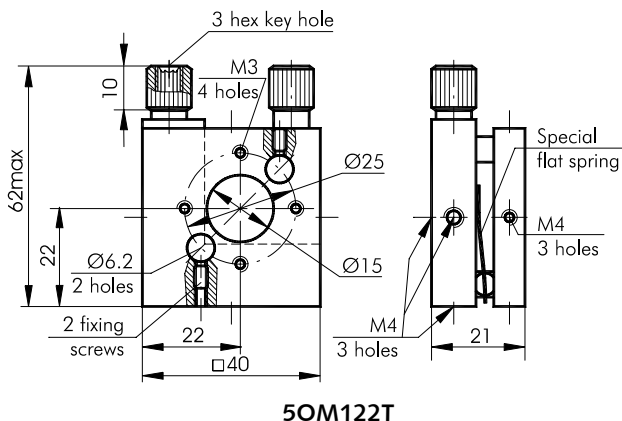
Mirror Mounts/Tilt Platforms of Side Drive

5OM122T • 5OM122TE

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 $\pm 2.5^\circ$ 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.



5OM122T

Weight 0.09 kg



5OM122T

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.

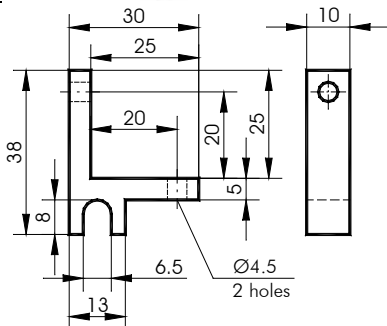


5OM122TE

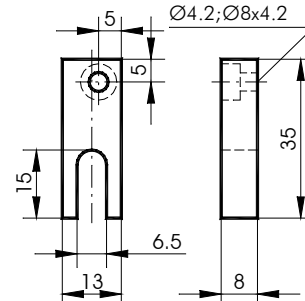
Special Base Mounts 5OM122B allow 5OM122T to be mounted in different positions. 5OM122T may be mounted as a tilt platform using 5OM122B1.



5OM122B1 allows mounting with extremely low-profile



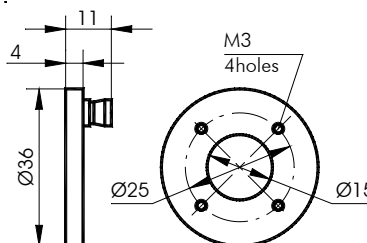
5OM122B2 attaches to 5OM122T both immediately and through intermediate accessories.



Platform Adapter 5OM122A5



Allows to turn optics to a convenient position.



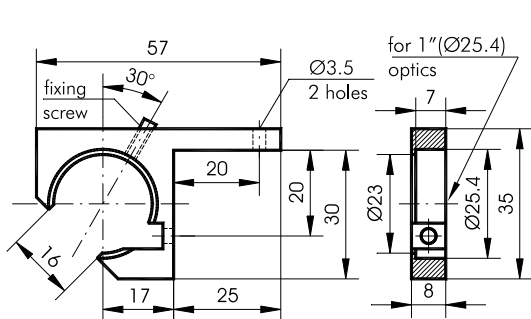
Round Optics Adapters 5OM122A1



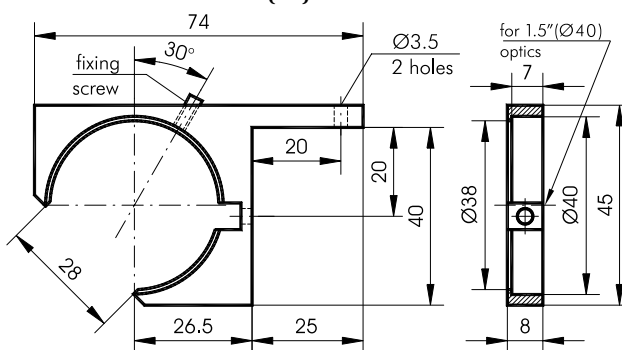
5OM122A1 can be attached to the platform of 5OM122T mount on any side. Optics is firmly held by a stainless steel fixing screw, and it rests against two contact lines – the edges of the cut-off corner. The frame doesn't obstruct the view. It allows to work with two beams going very close to each other.

50M122A1-40 fixes thin optical elements Ø30-Ø40 mm in diameter.

50M122A1-25 fixes elements Ø20 to Ø25 (1") in diameter.

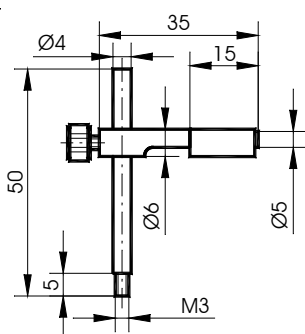


50M122A1-25



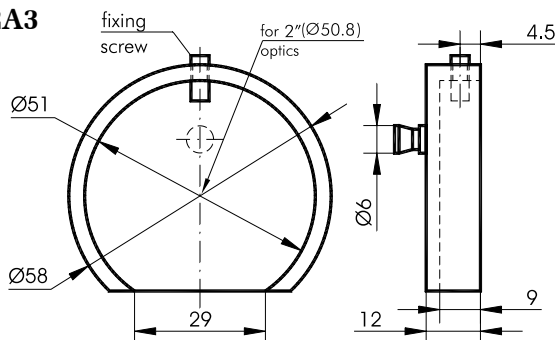
50M122A1-40

Miniature Clamp 5OM122A2



Ideal if a Mount is used as a Tilt platform. **Plastic** clutching **pad** clamps elements upto Ø**40 mm** (1.5").

Mirror Adapter 5OM122A3



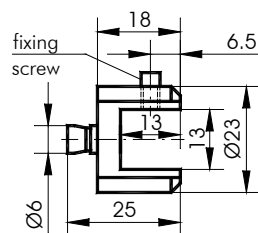
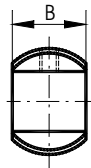
For optics upto 1" see
5OM100A3 in article
5OM10T



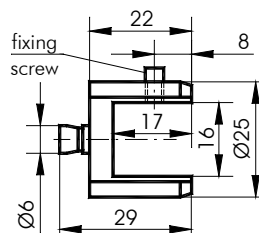
Connecting cone facilitates adjustment of the adapter. The cut-off side clears the edge of the optics for working with a beam very closely situated to another beam. Optics is firmly clutched by a stainless steel fixing

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



50M100A4-13 (B=16)



50M100A4-16 (B=18)



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**).

Small Optical Mount of Side Drive

50M10T



- Single side drive
- Tilt/tip $\pm 5^\circ$ about two orthogonal axes
- Fine adjustment screws with 0.25 mm pitch
- Hardened seats under adjustment screws
- Sensitivity 10 arcsec
- Large assortment of additional adapters
- Material: black anodized aluminium
- Weight: 0.05 kg

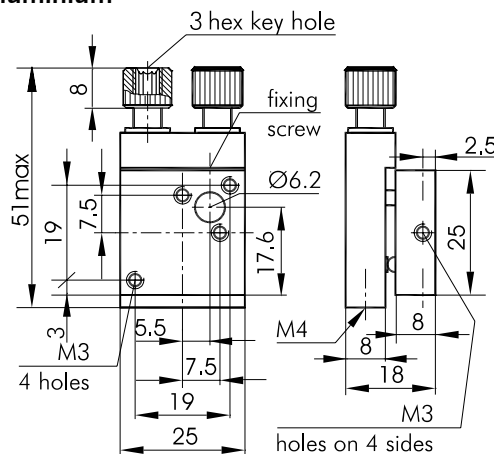
50M10T is designed to hold optics in schemes of high density. **Adapters** are available for round and rectangular lenses, mirrors and beamsplitters or polarizing cubes (see below and next page).

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 $\varnothing 6.2$ 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.



See this and next page for special base mounts and optics adapters

Note: 50M10T replaces the older mount 50M100T.

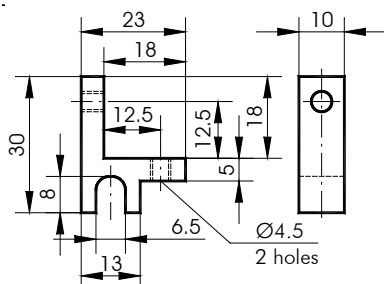
The pictures on this and on the next page show how to combine bases and adapters with the old mount 50M100T.

These adapters combine in the same manner with the new mount 50M10T.

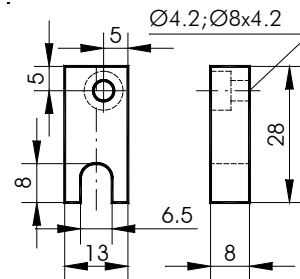
Special Base Mounts 50M100B allow 50M10T to be mounted in different positions. 50M10T may be mounted as a tilt platform.



50M100B1 allows mounting with extremely low-profile



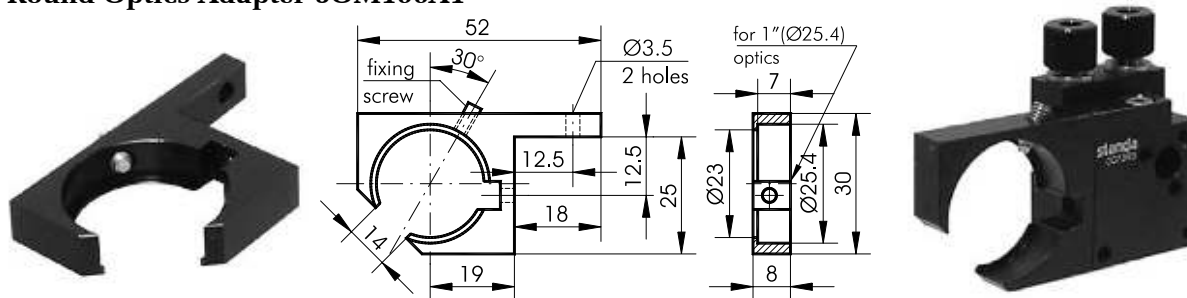
50M100B2 attaches to 50M10T both immediately and through the intermediate accessories.





Many of these adapters may be used with other mounts, e.g. 5OM111, 5OM122T. For more adapters browse this catalogue, e.g. in article 5OM122T.

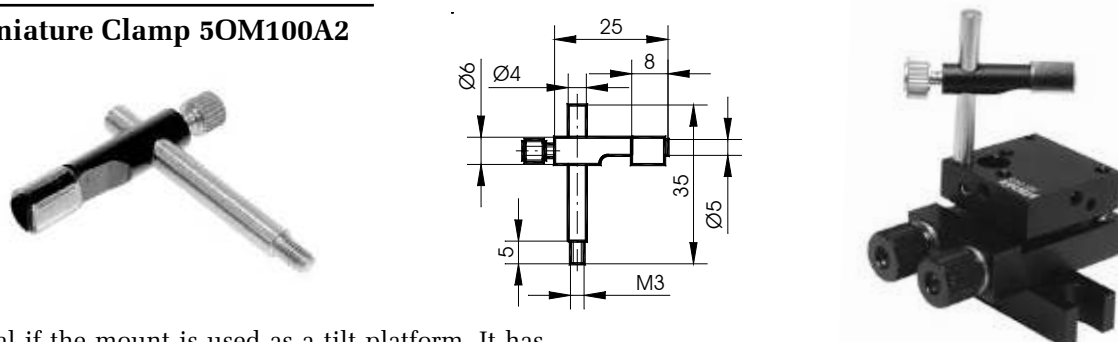
Round Optics Adapter 5OM100A1



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.

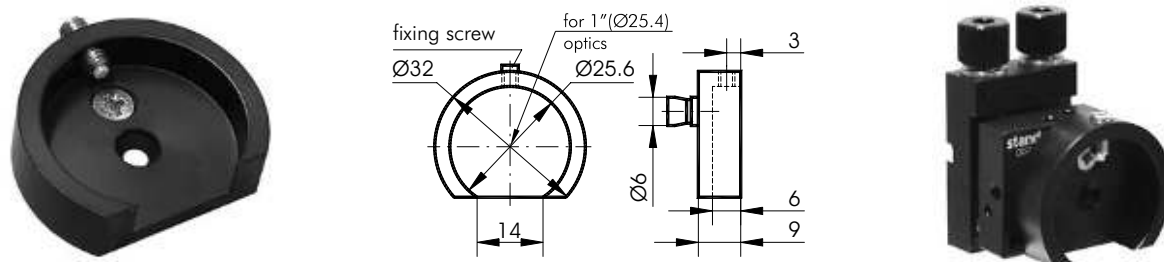
Miniature Clamp 5OM100A2



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.

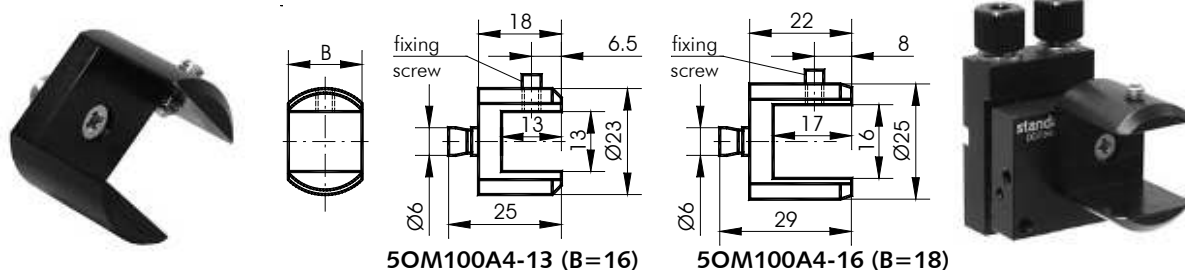
Mirror Adapter 5OM100A3



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.

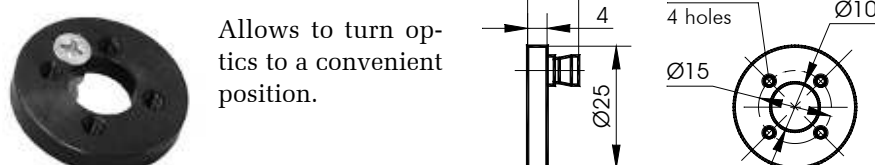
Prism and Polarizing Cube Adapters 5OM100A4



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.

- 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 $\pm 2^\circ$
- 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 $\pm 2^\circ$ 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.

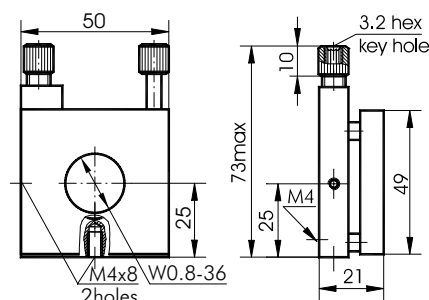
The mount is produced from black anodized aluminium. L-shaped spring is produced from high quality stainless spring steel.

Objective Mount

5OBM119T

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**

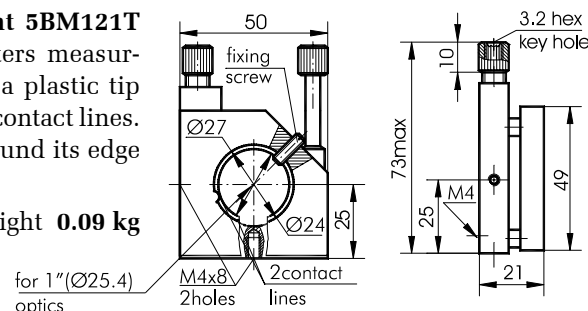


Beamsplitters/Optics Mount

5BM121T

The Beamsplitters/Optics Mount 5BM121T is designed to adjust beamsplitters measuring $\varnothing 25$ 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**

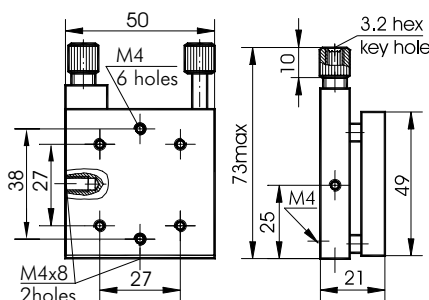


Universal Mirror Mount/Platform

5UM122T

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**

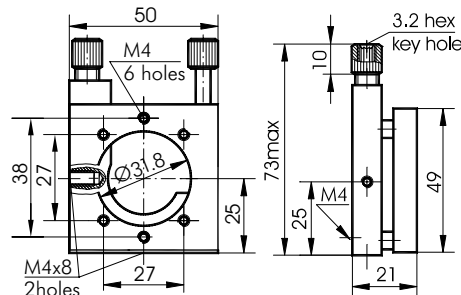


Large Aperture Optical Mount

5LAM124T

The Large Aperture Optical Mount 5LAM124T on its platform has $\varnothing 31.8$ 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

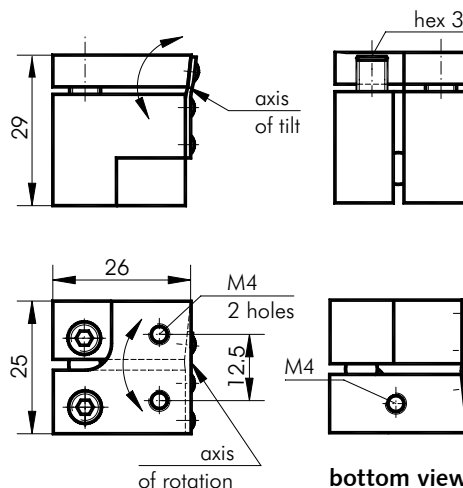
50M101T

- 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 50M101T 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

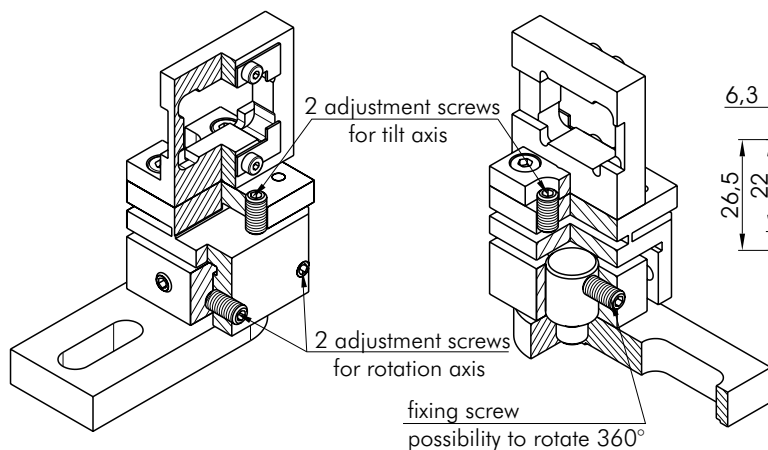
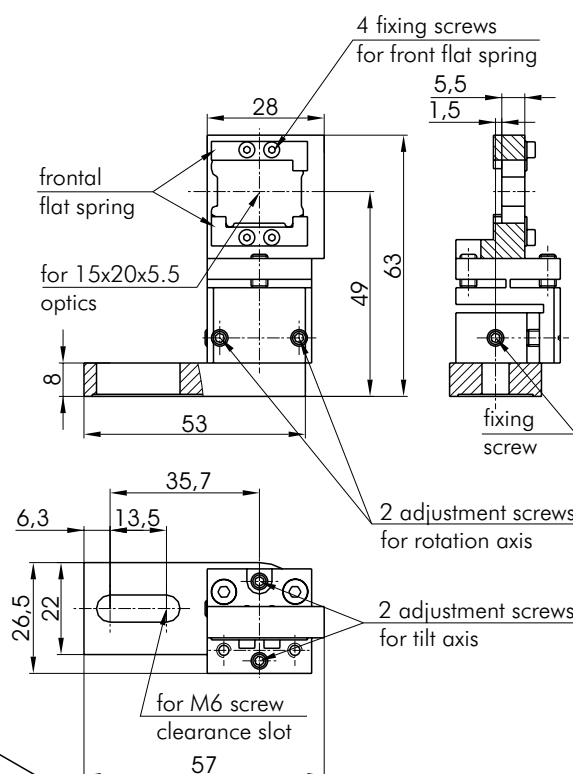
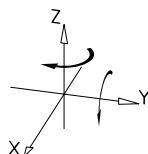
Tilt range	6°
Rotation range	6°
Sensitivity	10 arcsec
Weight	0.06 kg

Best for crystal adjustment!

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.



Beamsplitter Mount of Side Drive

5BM59T-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 inch) in diameter
- Tilt/tip travel range $\pm 2^\circ$
- Two pick-hollows allow gripping optics while reinserting
- Horizontal and Vertical mounting
- Mounting holes M4 on three sides

pick-hollows ease lifting of optics

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 5APH59T-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.

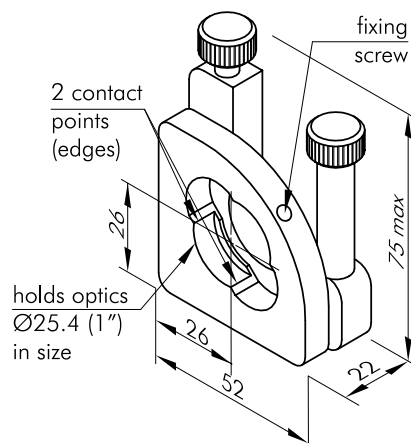
To allow an **unimpeded** access for your fingers there are two **pick-hollows**. Now you may forget about problems like: hassle and stains while picking the optics out, or dropping the optics before you secure it.

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 $\pm 2^\circ$.

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

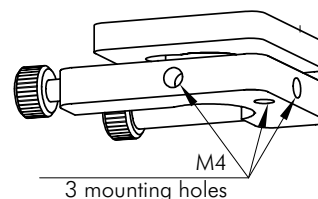


allows easy access, and dense placement of surrounding instruments.

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.

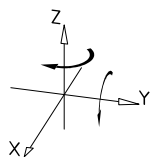
Material: black anodized aluminium. L-shaped spring is made of high quality stainless spring steel.



3 mounting holes allow different mounting orientations

SPECIFICATIONS

Tilt/tip range	$\pm 2^\circ$
Sensitivity	3 arcsec
Optics accepted	
Diameter	$\leq \text{Ø}25.4 \text{ mm}$
Clear aperture	23 mm
Weight	0.1 kg



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 upto 10.5 mm thick
- Tilt/tip travel range $\pm 2^\circ$
- 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 $\pm 2^\circ$. The design is the **slimmest ever**.

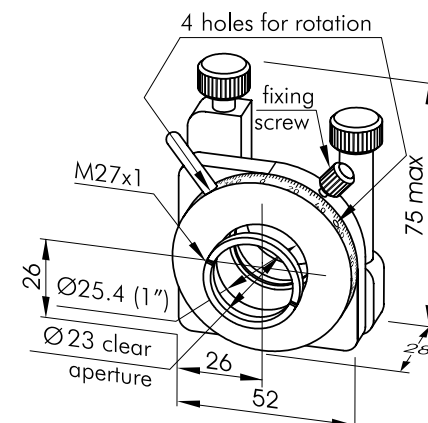
The polarizer platform is graduated in 2° on a **360°** angular scale. The platform has a **removable rod** by which you rotate it continuously the whole **360°**, **without obscuring the aperture**. You can use the rod on any of the 4 holes on the perimeter.

The holder accepts $\varnothing 25.4$ mm optics. Optics is stopped by a **rest-flange**, and is secured by a threaded retaining ring with $\varnothing 23$ 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.

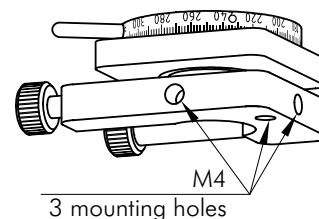
For **tilting**, the platform is preloaded against the base with L-shaped flat spring of our original design which



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.

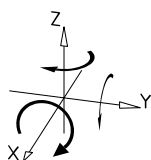


3 mounting holes allow different mounting orientations, e.g. as a rotation stage.

SPECIFICATIONS

Tilt/tip range	$\pm 2^\circ$
Sensitivity	3 arcsec
Rotation range	360°
Scale gradation	2°
Optics accepted	
Diameter	$\leq \varnothing 25.4$ mm
Thickness	≤ 10.5 mm
Clear aperture	23 mm
Weight	0.15 kg

*super slim
hybrid
saves space,
gives extra
precision,
saves cost and
time.*

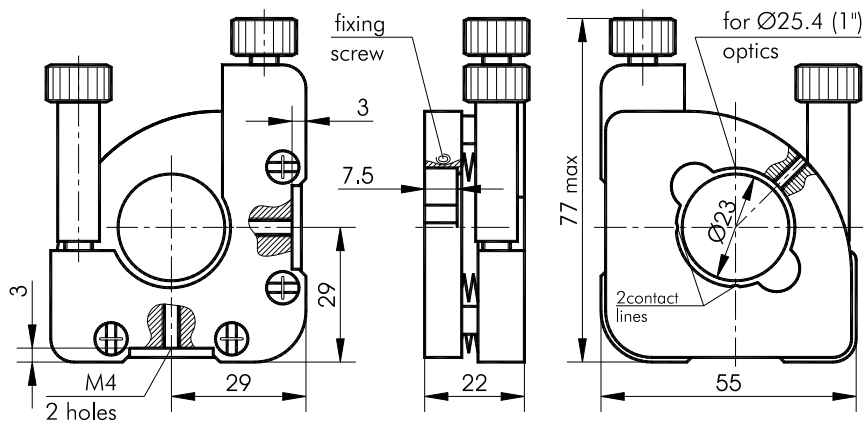


Kinematic Optical Mount of Side Drive

5BM69T-1



- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range $\pm 2^\circ$
- 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



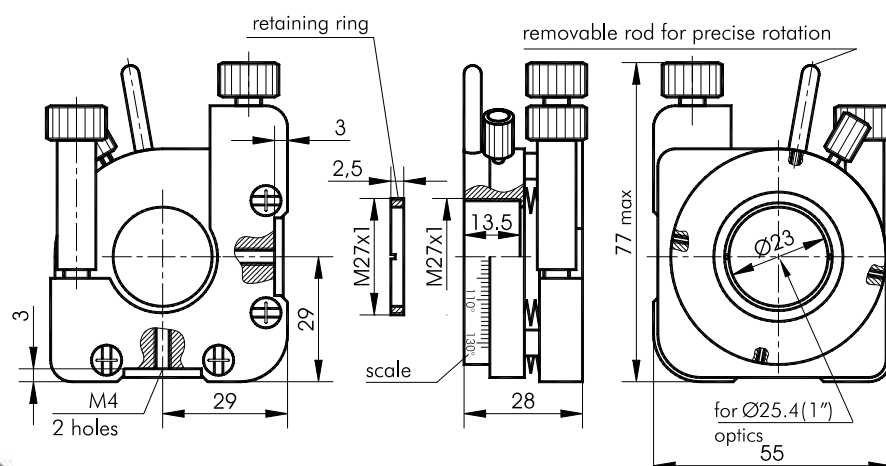
To prevent damage to the optics the fixing screw has a plastic tip.

Kinematic Adjustable Polarizer Holder of Side Drive

5APH69T-1

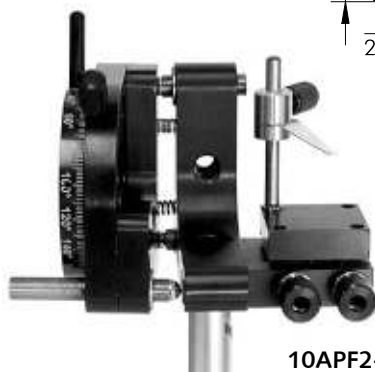


- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range $\pm 2^\circ$
- Sensitivity 3 arcsec
- Both tilt and tip controlled from aside the optical path
- Ideal for dense optical schemes
- Fine adjustment screws with 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.



10APF2-1
Five axis combination

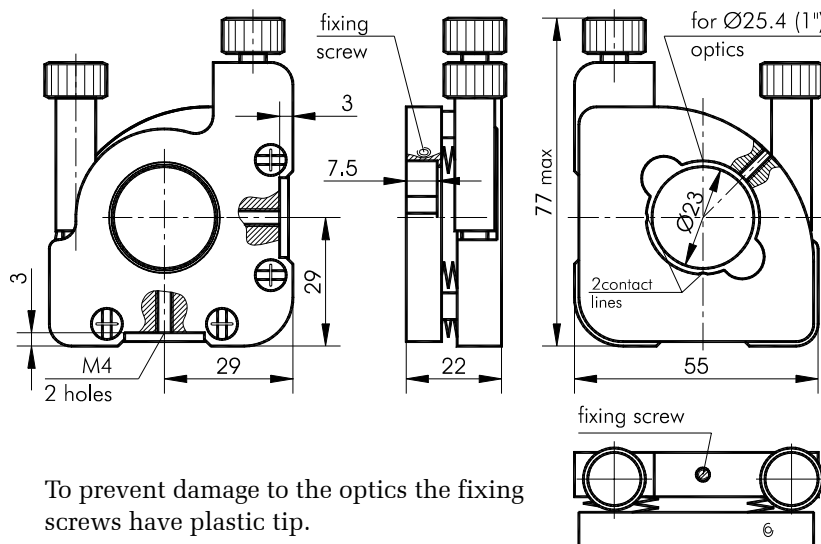
Model	Accepts optics, diameter	Places for optics	Weight, kg
5APH69T-1	25.4 mm (1 inch)	1	0.13
5APH79T-1	25.4 mm (1 inch)	2	0.13
5BM69T-1	25.4 mm (1 inch)	1	0.10
5BM79T-1	25.4 mm (1 inch)	2	0.10

Kinematic Double Optical Mount of Side Drive

5BM79T-1


- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range $\pm 2^\circ$
- 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)



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

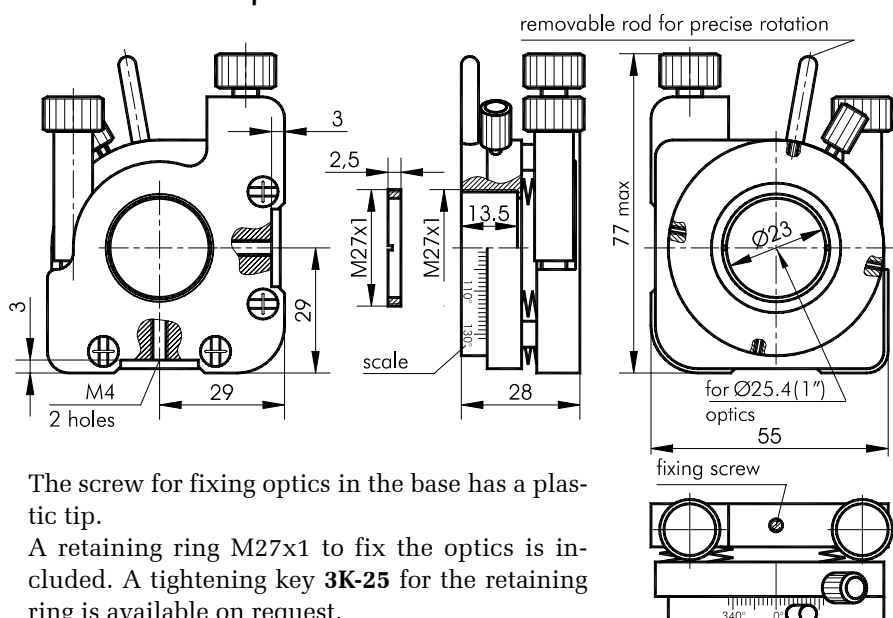
To prevent damage to the optics the fixing screws have plastic tip.

Kinematic Double Optical Mount of Side Drive with Adjustable Polarizer Holder

5APH79T-1


- For Ø25.4 mm (1 inch) optics
- Clear aperture 23 mm
- Kinematic design
- Dimensions most compact among 1 inch optics mounts
- Tilt/tip range $\pm 2^\circ$
- 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)

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.

Polarizer Holders

Polarizer Holders

5PH50



two scales
extend viewing
range

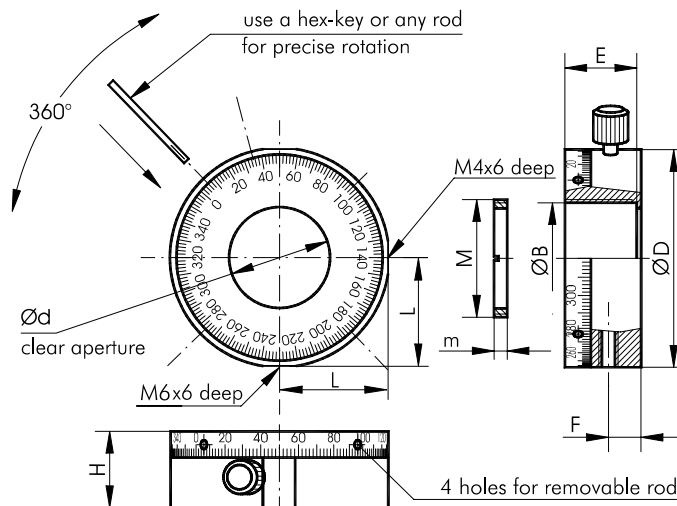
- 2 engraved scales located on face and outer surfaces
- Compact design with roller bearings
- Lockable
- Continuous 360° rotation
- Direct mounting of optics 1", 2" or 3" in diameter

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.



5PH50-1, 5PH50-2

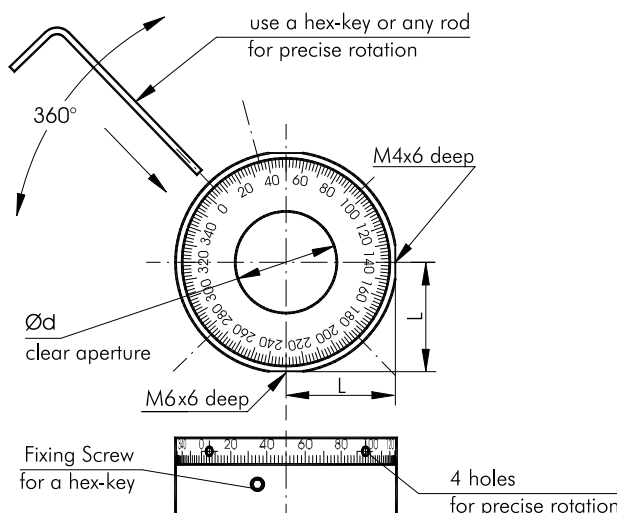
Model	D, mm	E, mm	H, mm	B, mm	d, mm	L, mm	M, mm	F, mm	m, mm	Weight, kg
5PH50-1	51	16.5	17.5	25.5	23	25	M27x1	7.5	2.5	0.08
5PH50-1-H	51	16.5	17.5	25.5	23	25	M27x1	7.5	2.5	0.08
5PH50-2	82	19	20	51.5	48	40.5	M53x1	9.5	2.5	0.18
5PH50-2-H	82	19	20	51.5	48	40.5	M53x1	9.5	2.5	0.17
5PH50-3	115	24.5	26.5	76.9	72	57	M78x1	12	3.5	0.46
5PH50-3-H	115	24.5	26.5	76.9	72	57	M78x1	12	3.5	0.45

Polarizer Holders

5PH50-H

Polarizer Holders 5PH50-H are the same as **5PH50**, except that their fixing screw is tightened with a **hex-key** (included), this way fixing screw doesn't stand out from the surface.

Like in **5PH50**, the platform is rotated by any rod or the same **hex key**.



5PH50-1-H, 5PH50-2-H

Ordering Polarizer Holders

5PH50, 5PHH50, 5PH51 – 1 and 2 inch

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

2" polarizer holders 5PH50-2, 5PH50-2-H, 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

5PH51-1 • 5PH51-2



Scale with
variable
origin

- Revolving scale resets the angular position
- Conical scale easily read from a wide angle
- Continuous 360° rotation
- Lockable
- Accepts 1" optics (25.4 mm); 2" model available
- Accepts optics up to 19 mm thick
- Mounting holes M6 and M4
- Compact design with roller bearings

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 scale 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.

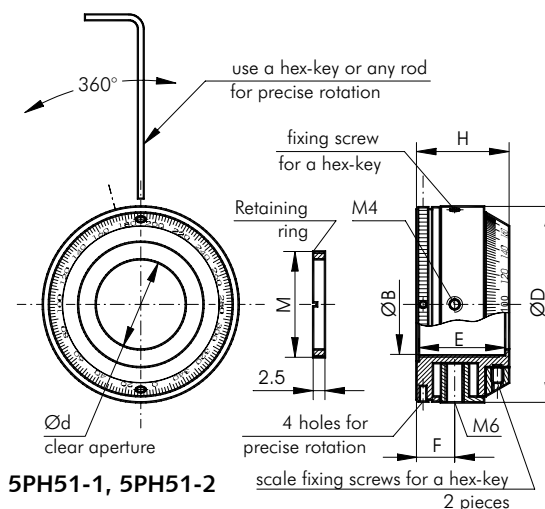
The holder accepts rotation sensitive optics **1"** (25.4 mm) or **2"** (50.8 mm) in diameter.

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.

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.



Model	D, mm	E, mm	H, mm	B, mm	d, mm	M, mm	F, mm	Weight, kg
5PH51-1	50	23	24	25.5	23	M27x1	10	0.09
5PH51-2	81	26	27	51.5	48	M53x1	11	0.19

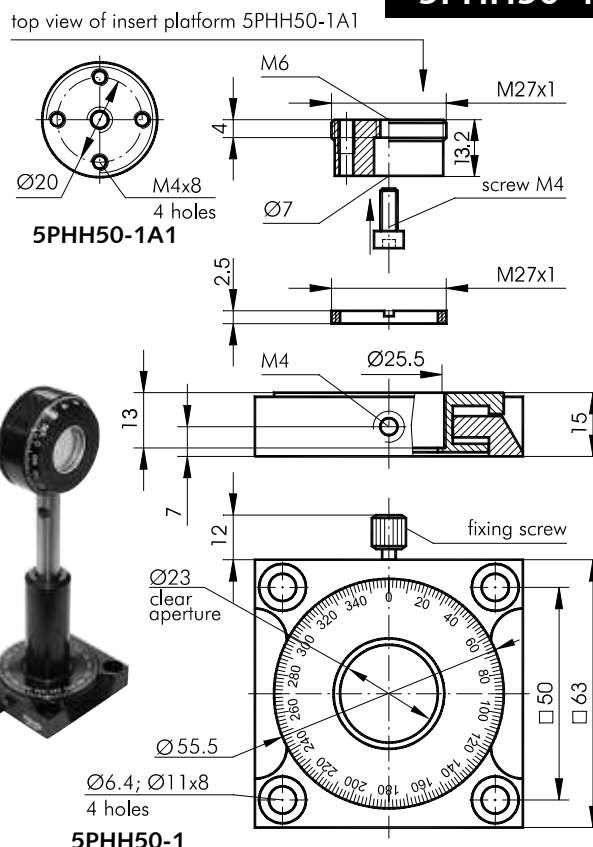
Polarizer Holders

5PHH50-1



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).





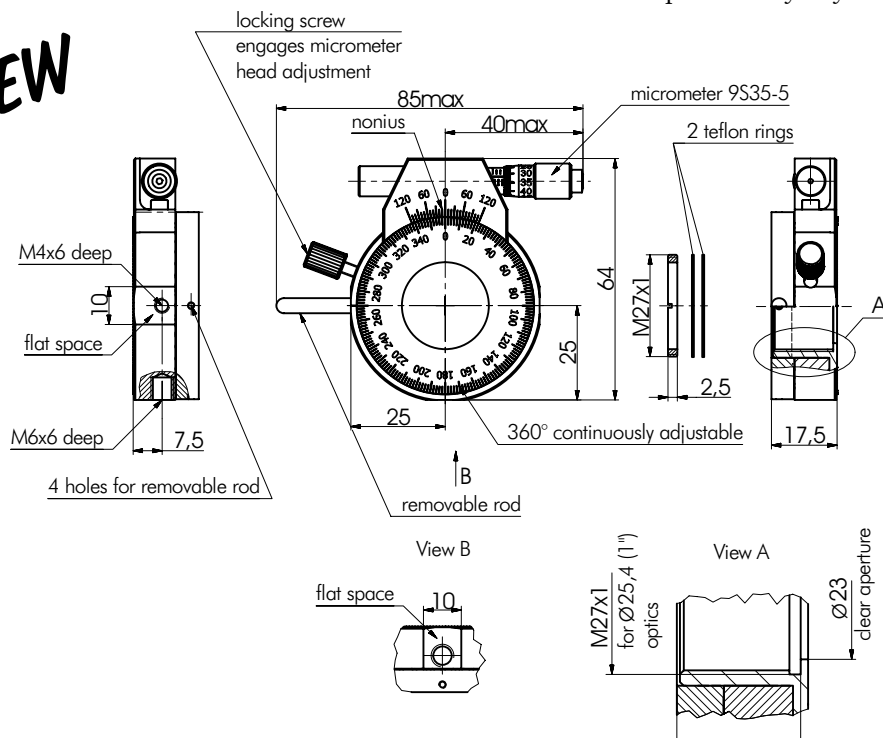
5PPH50-1

- For Ø25.4 mm (1 inch) optics
- One retaining ring included
- Accepts optics up to 13 mm thick
- Continuous 360° rotation with 2° scale gradation
- Lockable
- ±5° of fine micrometer adjustment when locked
- Sensitivity 1 arcmin
- Vernier scale provides 10 arcmin resolution
- Micrometer screw 9S35 installed
- Roller bearings design
- M6 threaded holes for mounting on posts or bases
- Material: black anodized aluminum

High Precision Rotation Mount 5PPH50-1 is ideal for manual rotation positioning sensitive optics such as polarizers or waveplates. The most common requirement for polarizers is to rotate them about their optical axis. Optics are placed inside central aperture, where it is securely held in place by a threaded retaining ring. The position is indicated on **360° angular scale** with **gradation of 2°**. Once mount is fixed in desired position it can

be fine adjusted within **5° range** with **1 arcmin accuracy**. Vernier scale above optical mount provides effective reference tool for angular positioning. **Micrometer screw 9S35** is used, can be optionally replaced with **9SH147 fine hex adjustment screw**. The base and side of the polarizer holder has **M6** threaded holes for mounting on posts or bases. Surface around mounting holes is flattened so the mount stays rigid once fixed on a mounting post or any other flat base. **5PPH50-1** has a removable rod to rotate the platform by any of its 4 holes.

NEW



SPECIFICATIONS

Continuous rotation	360°
Fine rotation	±5°
Graduation on main dial	2°
Sensitivity	1 arcmin
Optics diameter	1"
Optics thickness (max)	13 mm
Body material	Aluminium
Finish	Black anodized

ORDERING INFORMATION

- 5PPH50-1** – with micrometer screw **9S35**
5PPH50-1-9SH147 – with fine hex adjustment screw **9SH147**



5PPH50-1-9SH147

Y-Z Positioner for Lens, Pinholes, and Objectives

5ZYP


5ZYP-1

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.

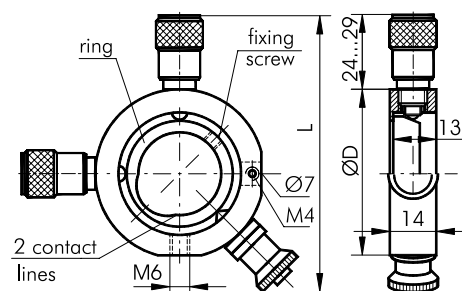
The mounts provide **5 mm** translation with sensitivity of **2 μ m**.

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.

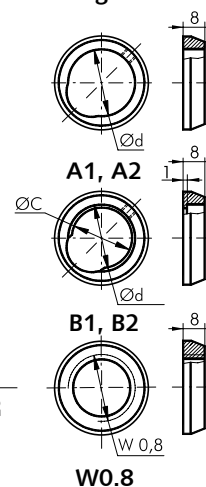
Two ways to fasten **5ZYP**: by an **M6** hole or on a connecting cone **3CC4**, **3CC6** by a $\varnothing 7$ hole.

Material: black anodized aluminium.



Model	D, mm	d, mm	C, mm	L, mm	Weight, kg
5ZYP-1	58	25.5	24	102	0.26
5ZYP-2	83	51	48	127	0.38

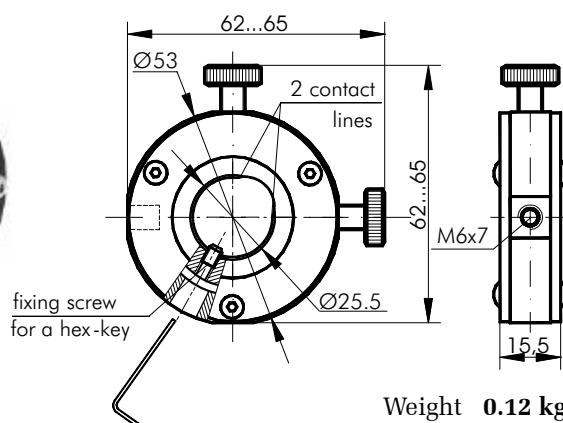
Insert rings for 5ZYP



ORDERING INFORMATION

5ZYP-1-A1	– 1" Positioner with ring A1	5ZYP-2-A2	– 2" Positioner with ring A2
5ZYP-1-B1	– 1" Positioner with ring B1	5ZYP-2-B2	– 2" Positioner with ring B2
5ZYP-1-W0.8	– 1" Positioner with ring W0.8		

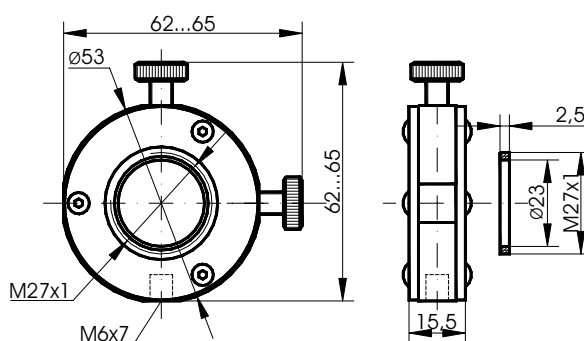
Y-Z Positioner for Lens, Pinholes and Objectives

5TLM-1


– Travel range 3 mm

Y-Z Positioner 5TLM-1 accepts optics of $\varnothing 25.4$ 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.

Y-Z Positioner for Lens, Pinholes and Objectives

5TLM-1TH


– Travel range 3 mm

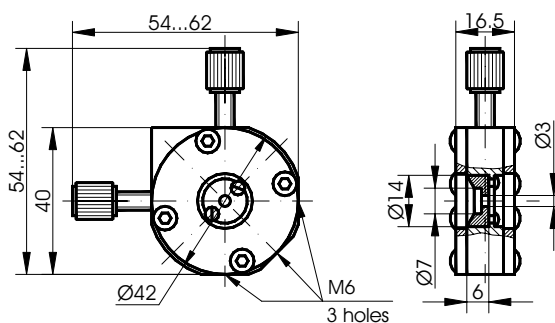
Two plastic padding rings and a retaining ring **M27x1** to fix the optics are included.

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

Weight **0.12 kg**

Self-made Pinholes Y-Z Mount

5ZYPS



5ZYPS

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

standard configuration with screws 9S7C.

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

3TPH-13

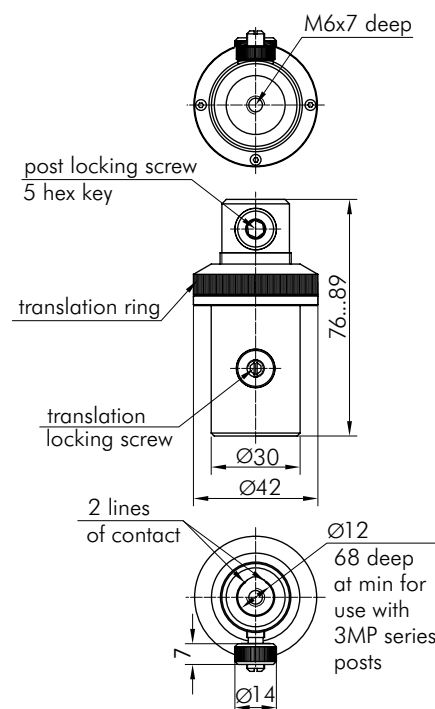


- Fine post height adjustment within 13 mm without rotation
- One rotation of adjustment ring adjusts height of post by 1 mm
- High stability position locking

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



Locking Option



5MBM22SL



5OBM119TL



7T228TL

example –
lockable versions of these
standard units:
5MBM22S, 5OBM119T, 7T228T

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.

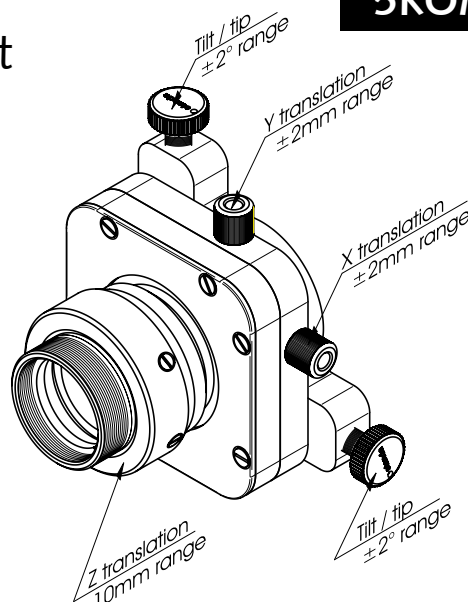
Some models of our Ultra Fine Screws (see Section 9) have locking mechanisms of their own. You may use them, just make sure a given unit has the appropriate mounting holes for these screws.

Kinematic Optical Mount Translation Optical Mount

5KOM • 5TOM

SPECIFICATIONS

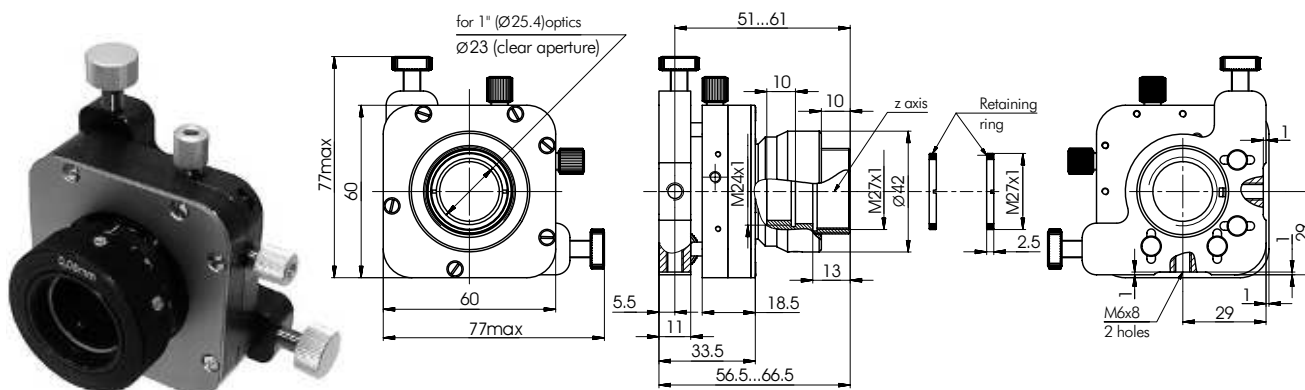
Optics diameter	Ø25.4 mm
Tilt/tip range	±2°
screw thread pitch	250 µm (100TPI)
Sensitivity	3 arcsec
XY translation range	±2 mm
screw thread pitch	250 µm (100TPI)
Sensitivity for XY translation	1 µm
Sensitivity for Z translation	1 µm
Z translation range	10 mm
Material	black anodized aluminium
Weight	0.28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



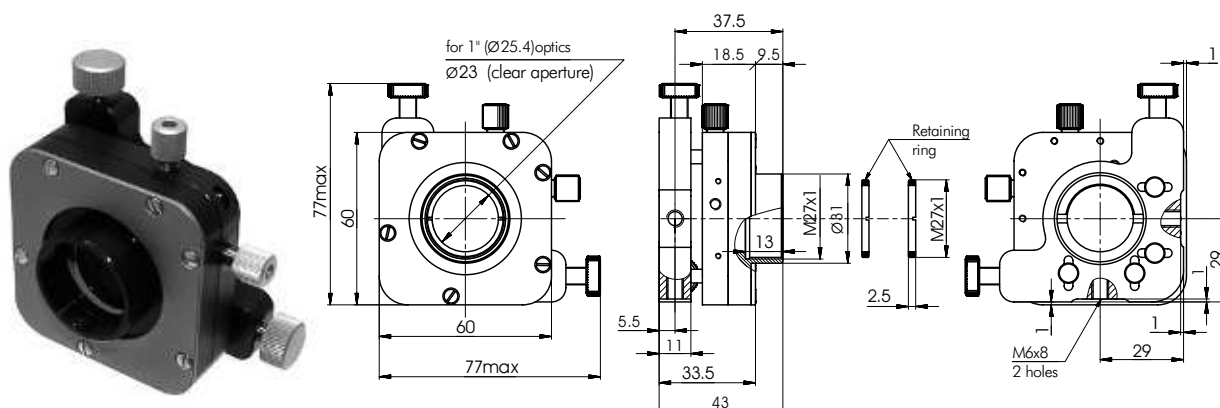
ORDERING INFORMATION

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
5KOM5V-1	Five Axis Vacuum Compatible Kinematic Optical Mount	- Tilt/tip range; - XY translation range; - Z translation range
5KOM4-1	Four Axis Kinematic Optical Mount	- Tilt/tip range; - XY translation range
5KOM4F-1	Four Axis Kinematic Optical Mount	- with reinforced springs for mounting of heavy objects
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

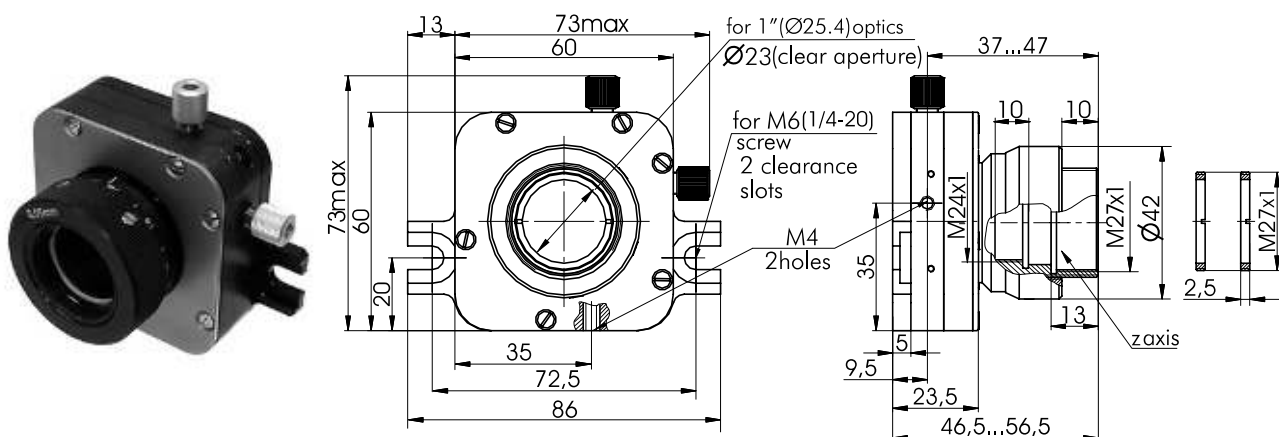
5KOM5-1


Four Axis Kinematic Optical Mount

5KOM4-1


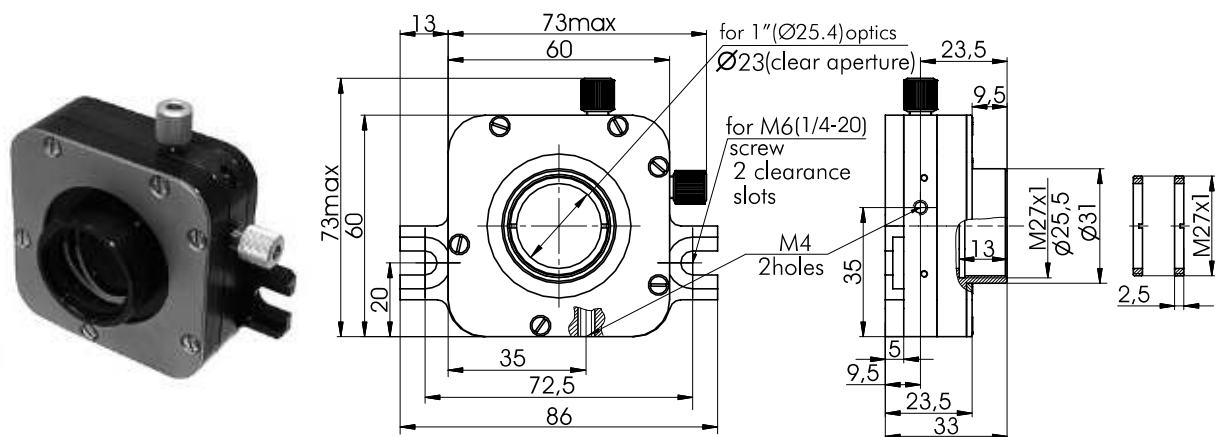
Three Axis Translation Optical Mount

5TOM3-1



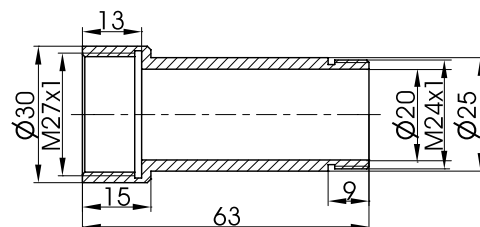
Two Axis Translation Optical Mount

5TOM2-1



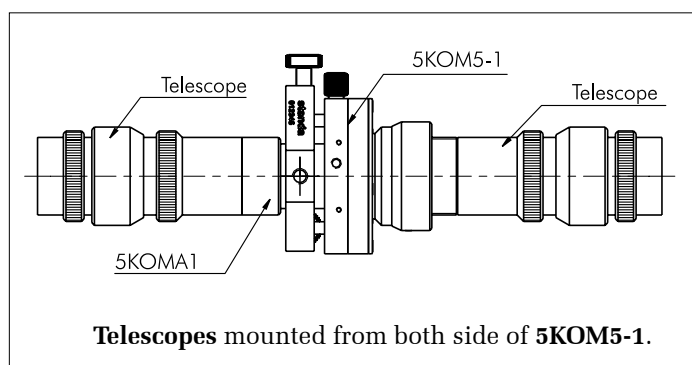
Adapter

5KOMA1

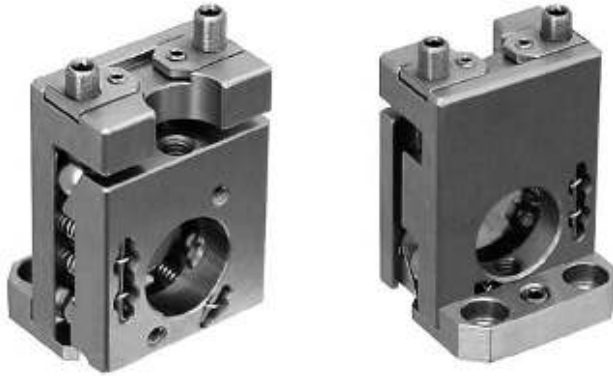


Material: aluminium with black finish.

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.



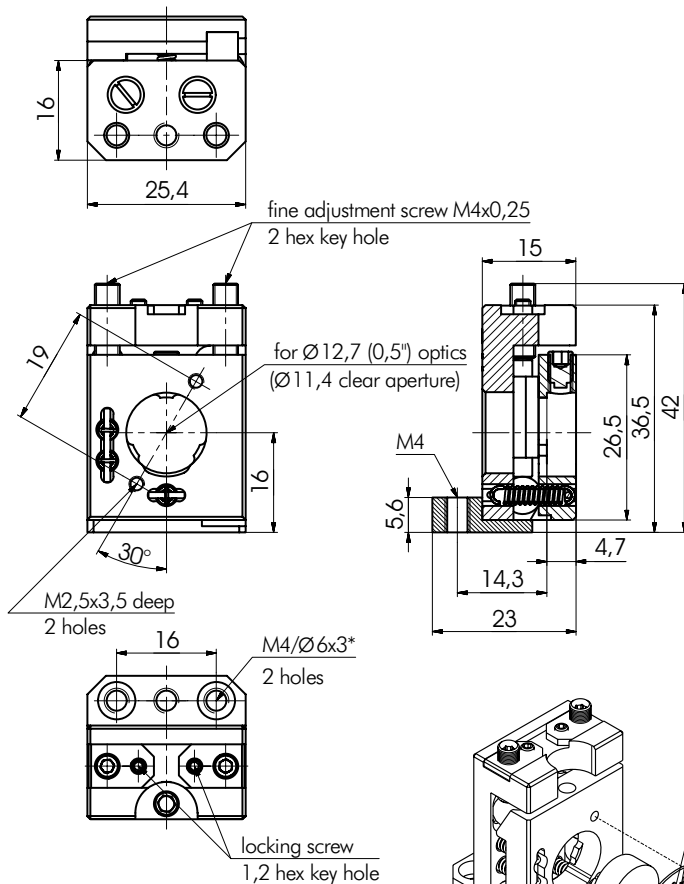
Kinematic Vertical Drive Optical Mount

5KVDOM-05


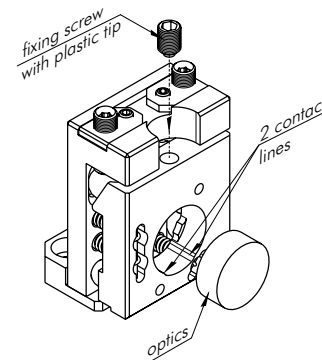
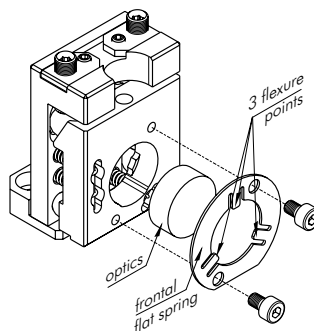
- For Ø12.7 mm (0.5 inch) optics
- Stainless steel
- Compact/robust design
- Lockable adjustment screws
- Fine screws pitch 0.25 mm (101,6 TPI)
- Tilt/tip range $\pm 2.5^\circ$
- Sensitivity 2 arcsec
- Vacuum compatible version is available on request
- Weight 0.1 kg

ORDERING INFORMATION

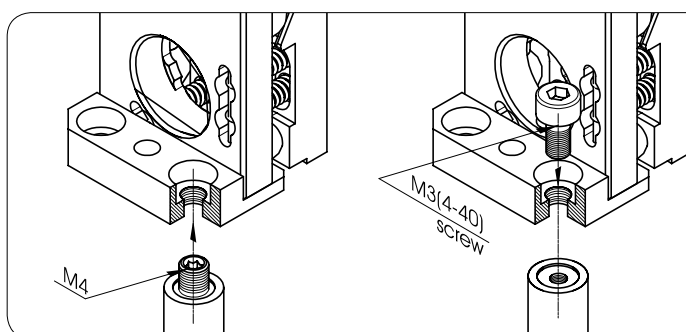
5KVDOM-05 Ultra-stable **Kinematic** Mirror Mount
5KVDOM-05.10 Frontal flat spring



5KVDOM 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**.



*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

Kinematic Vertical Drive Optical Mounts

Vertical Drive Optical Mounts

5KVDOM

5VDOM

- For 1", 1.5", 2" or 3" optics
- Stainless steel
- Compact/robust design
- Lockable adjustment screws
- Fine screws pitch 0.25 mm (101.6 TPI)
- Tilt/tip range $\pm 2.5^\circ$
- Sensitivity 2 arcsec
- Vacuum compatible version is available on request



5VDOM 5KVDOM

Vertical drive Optical mount is manufactured in two modifications:

- 5VDOM with flat L-form spring
- 5KVDOM with spiral spring



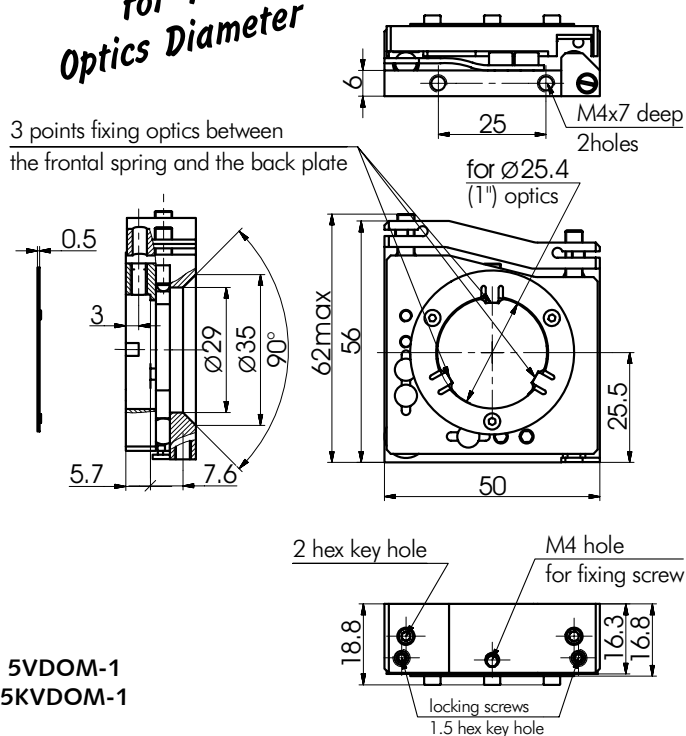
Ultra-stable Kinematic Mirror Mounts 5VDOM and 5KVDOM are designed to minimize mount-induced wavefront distortions. In conventional mounts, the mirror is tightened by a side screw. Radial forces acting on the mirror induces parasitic wavefront distortion, such as astigmatism. **5VDOM** mirror mounts use secure 3-points mirror suspension in between frontal flat spring and the back plate. Uniformly distributed axial forces eliminate wavefront distortion.

Due thermal processes on optic holding part, all metal inner tensions were removed and part makes none micro movements.

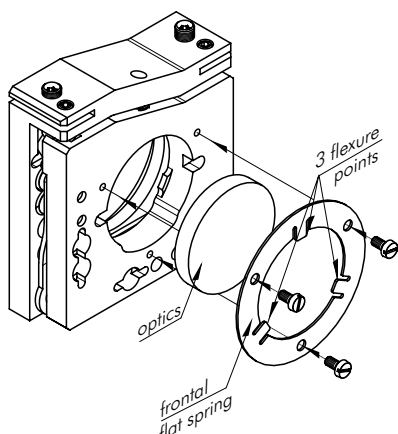
These mounts are ideal for industrial applications in different optical devices (laser cavities, optical sub-assemblies, limited space applications) because of their long-term stability.

Vertical Drive Optical Mount 5KVDOM-1 5VDOM-1

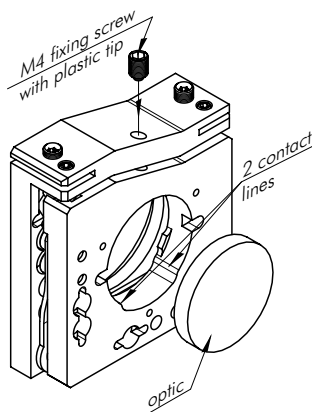
for 1" Optics Diameter



5VDOM-1 5KVDOM-1



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**.

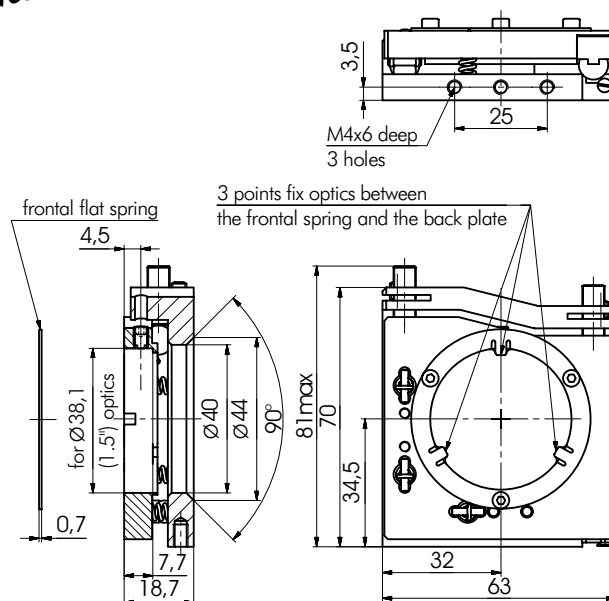
Vertical Drive Optical Mount

5KVDOM-1.5
5KVDOM-1.5W
5VDOM-1.5
5VDOM-1.5W

for 1.5"
Optics Diameter



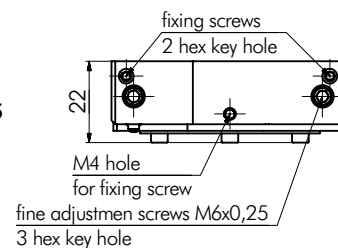
5KVDOM-1.5



5VDOM-1.5

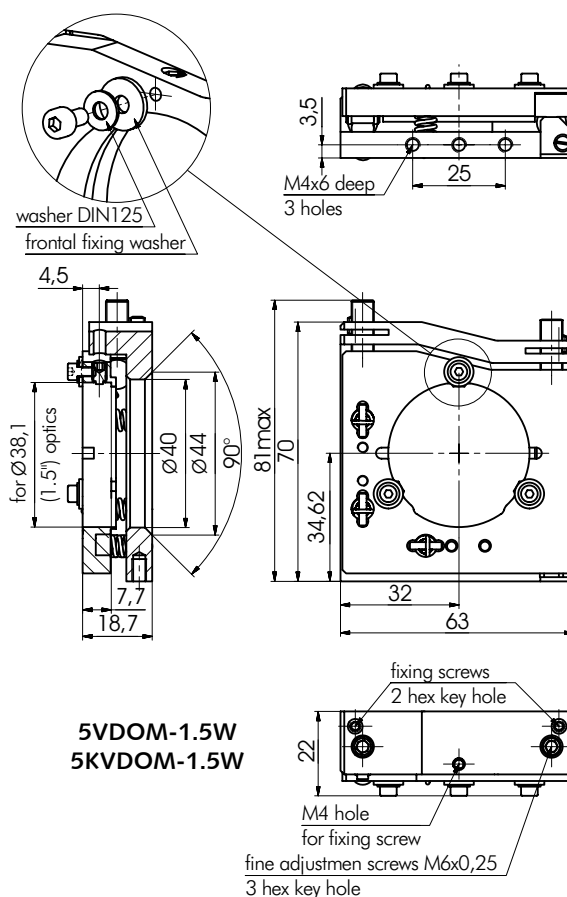
Optics fixed with 3 spots on flat spring.
 For 8 ± 0.2 mm thickness optics.

5VDOM-1.5
5KVDOM-1.5



5KVDOM-1.5W

Optics fixed with 3 spots by plastic washers.
 For 8 ± 0.2 mm thickness optics.



5VDOM-1.5W
5KVDOM-1.5W

www.standa.it

e-mail: sales@standa.it

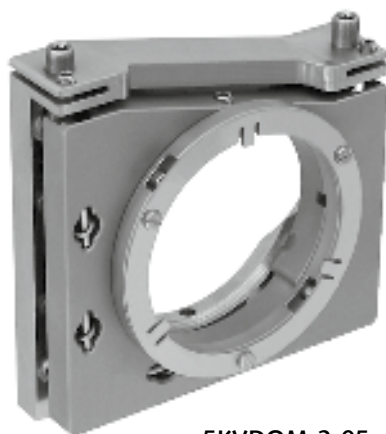
Phone: +370-5-2651474 Fax: +370-5-2651483

standa

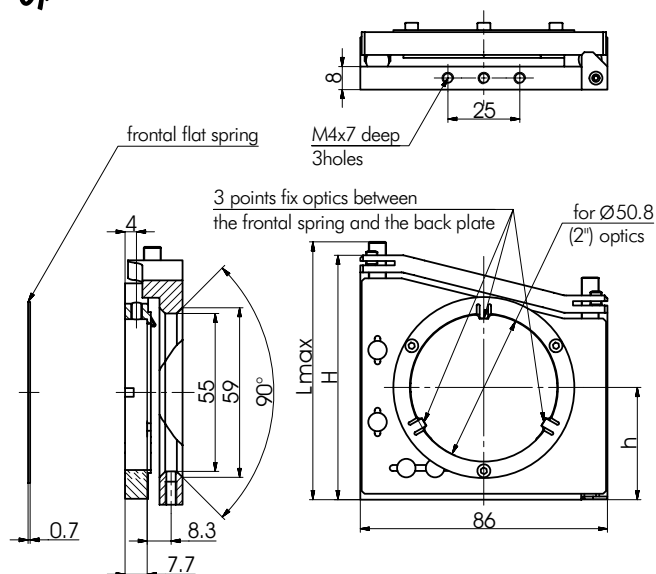
Vertical Drive Optical Mount

5KVDOM-2
5KVDOM-2-05
5VDOM-2
5VDOM-2-05

for 2"
Optics Diameter

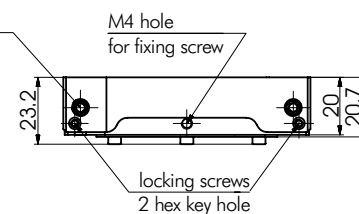


5KVDOM-2-05

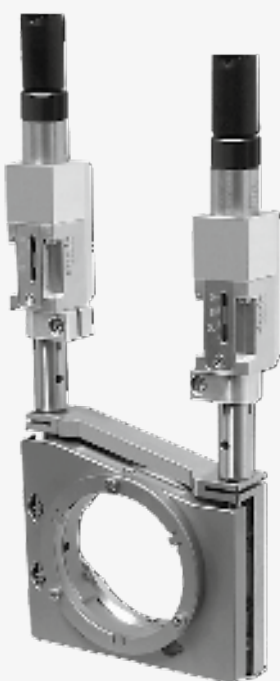


fine adjustment screws M6x0.25
3 hex key hole

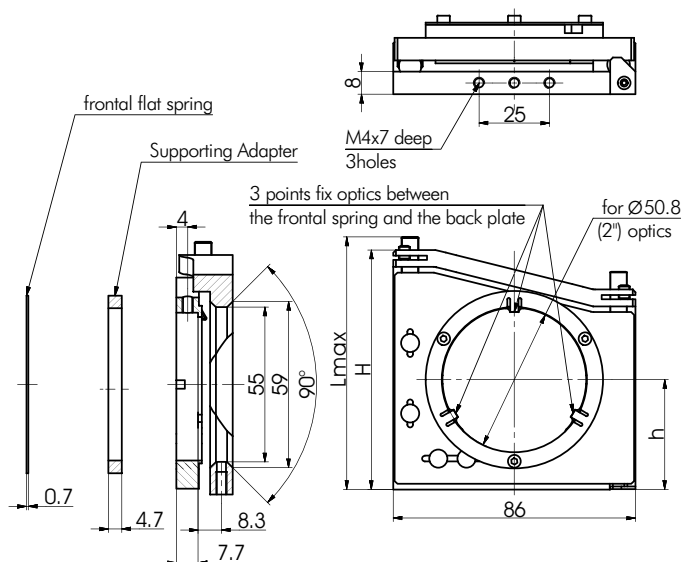
5VDOM-2
5KVDOM-2



Motorized version
with DC motor
8MKVDOMV-2

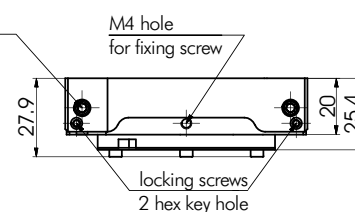


for vacuum



fine adjustment screws M6x0.25
3 hex key hole

5VDOM-2-05
5KVDOM-2-05



Model	Lmax, mm	H, mm	h, mm
5VDOM-2	99	89	43
5KVDOM-2	95	85	39
5VDOM-2-05	99	89	43
5KVDOM-2-05	95	85	39

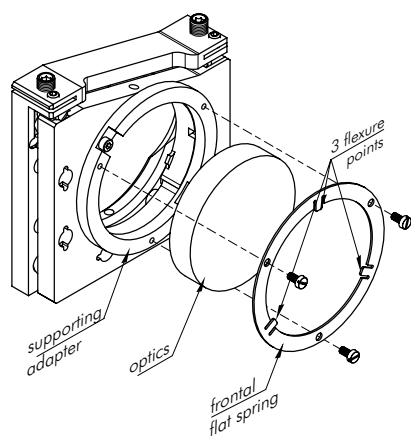
Vertical Drive Optical Mount

5KVDOM-3 5KVDOM-3-05

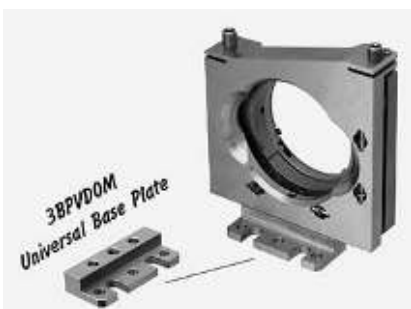


5KVDOM-3

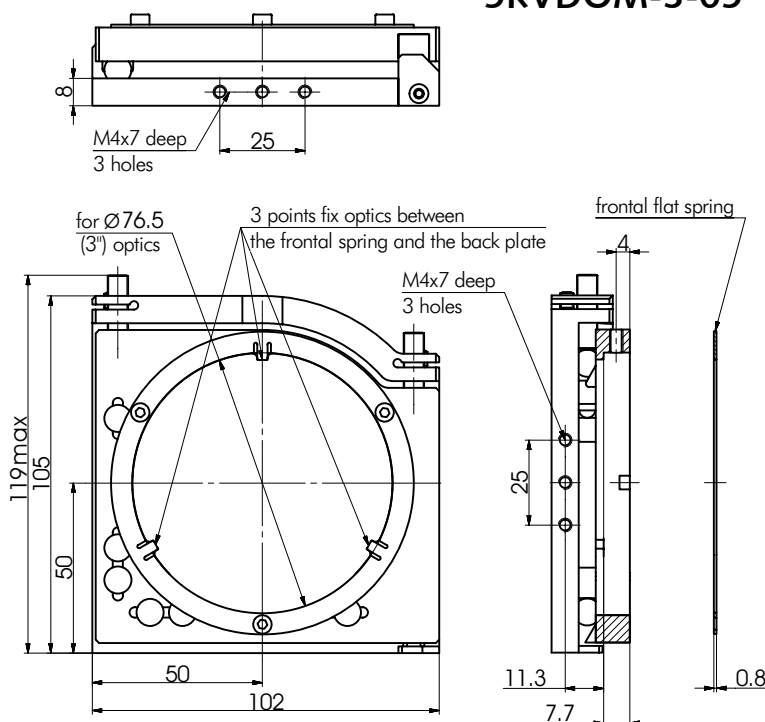
for 3"
Optics Diameter


5KVDOM-2-05
5KVDOM-2-05
5KVDOM-3-05

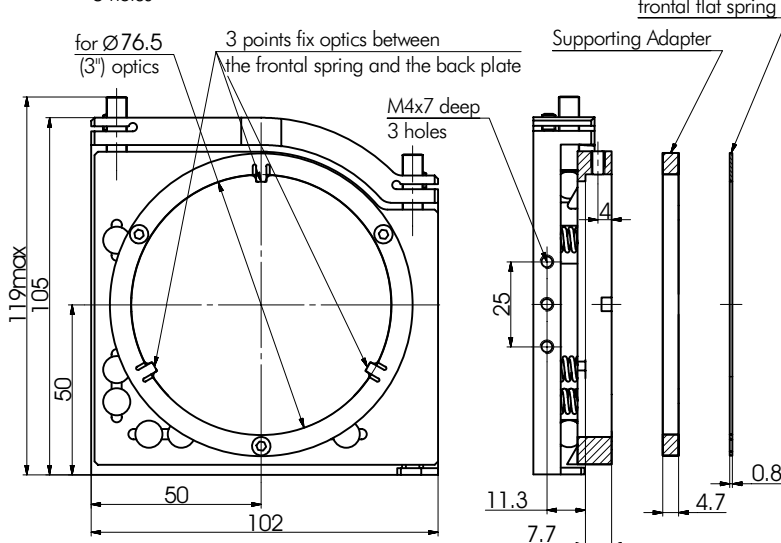
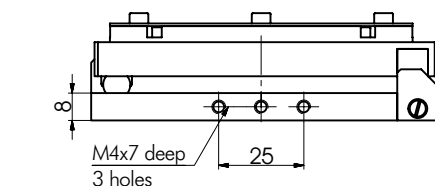
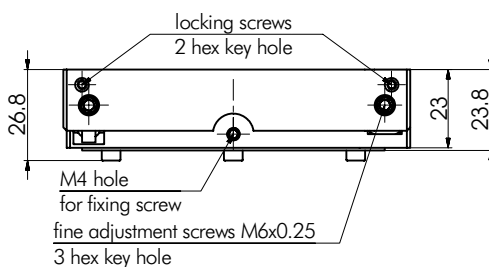
For 12.7 mm thickness optics,
we recommend Optical Mount
with Supporting Adapter



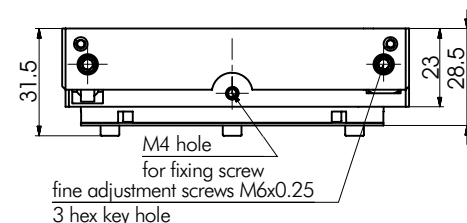
Universal Base Plate 3BPVDOM
is designed to fix Optical Mounts
5KVDOM series to optical tables and
other flat surfaces. Fits metric and
imperial hole patterns.



5KVDOM-3

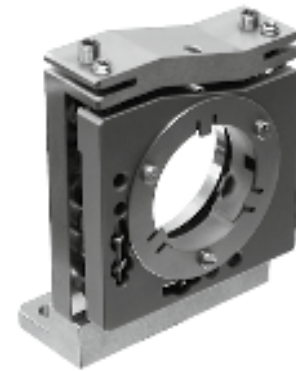
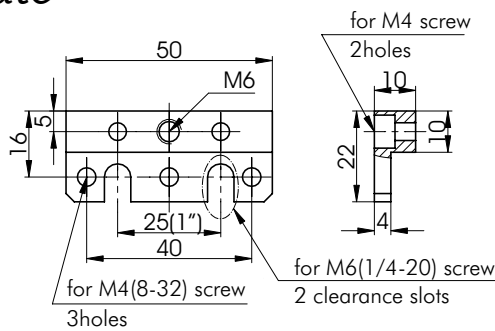



5KVDOM-3-05



Universal Base Plate

3BPVDOM






8MKVDOM-1

*Motorized version
with STEPPER motor*

Available motor version

8MKVDOM-1-DC

- Compact design
- Stainless steel
- Super stable



8MKVDOM-1-DC

*Motorized version
with DC motor*

ORDERING INFORMATION

5KVDOM-1	Kinematic Mirror Mount with spiral spring for Ø25.4 mm (1 inch) optics
5VDOM-1	Mirror Mount with L-shaped flat spring for Ø25.4 mm (1 inch) optics
5KVDOM-1.5	Kinematic Mirror Mount with spiral spring for Ø38.1 mm (1.5 inch) and 8 mm thickness optics
5KVDOM-1.5W	Kinematic Mirror Mount with spiral spring for Ø38.1 mm (1.5 inch) and 8 mm thickness optics
5VDOM-1.5	Mirror Mount with L-shaped flat spring for Ø38.1 mm (1.5 inch) and 8 mm thickness optics
5VDOM-1.5W	Mirror Mount with L-shaped flat spring for Ø38.1 mm (1.5 inch) and 8 mm thickness optics
5KVDOM-2	Kinematic Mirror Mount with spiral spring for Ø50.8 mm (2 inch) and 8 mm thickness optics
5KVDOM-2-05	Kinematic Mirror Mount with spiral spring for Ø50.8 mm (2 inch) and 12.7 mm thickness optics
5VDOM-2	Mirror Mount with L-shaped flat spring for Ø50.8 mm (2 inch) and 8 mm thickness optics
5VDOM-2-05	Mirror Mount with L-shaped flat spring for Ø50.8 mm (2 inch) and 12.7 mm thickness optics
5KVDOM-3	Kinematic Mirror Mount for Ø76.5 mm (3 inch) and 8 mm thickness optics
5KVDOM-3-05	Kinematic Mirror Mount for Ø76.5 mm (3 inch) and 12.7mm thickness optics

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.



8-0023
3-axis Continuous Rotation System

Motorized XYZ rotation 360° continuous, rotators used 8MR190-2-28



8-0029
Custom system

8MR151-30 – motorized Y rotation stage $\pm 45^\circ$
8MR190-2-28 – motorized Z rotation stage/system 360°
7R7 – manual Z rotation stage/table continuous



7-0027
6 Axis System

7T68-25XY – manual XY translation stage travel 25 mm
7T68-25T – manual Z translation stage travel 25 mm
7R172-2 – manual X rotation stage continuous
7R190-2 – manual Y rotation stage continuous
7R172-2 – manual Z rotation stage continuous



8MT167-100-XYZ-8MR191-8MR151
Standa Robotics For Photonics

8MT167-100XYZ – motorized XYZ stage travel 100 mm
8MR191-28 – motorized X rotation stage 360°
8MR151 – motorized Z rotation stage 360°

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

Large Adjustable Kinematic Optical Mount

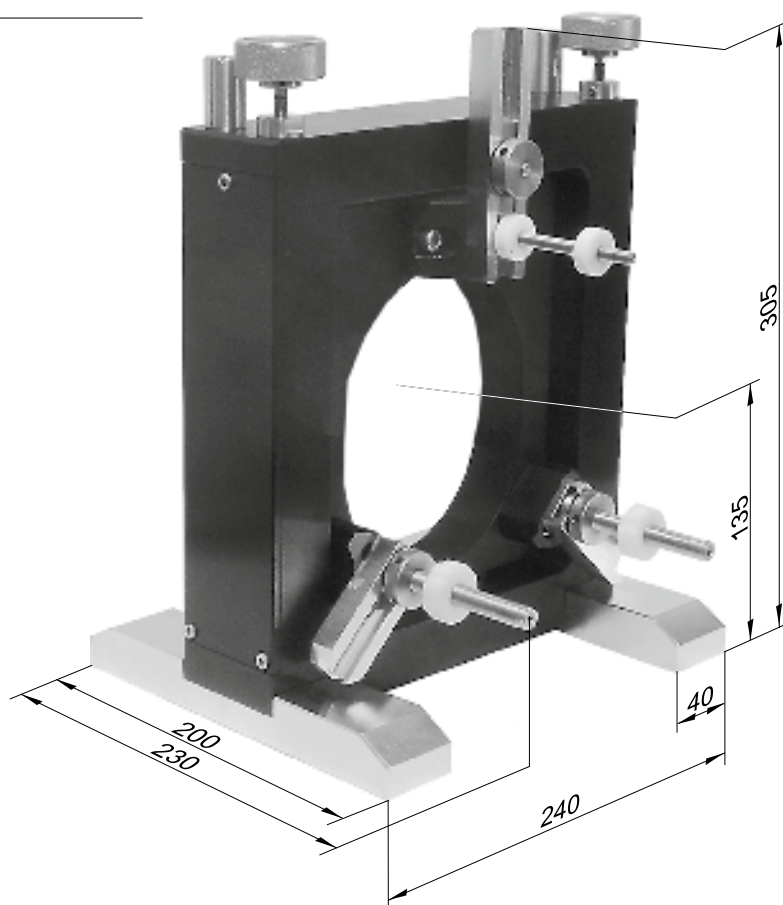
5AM-250

5TAM-250

5AM-250

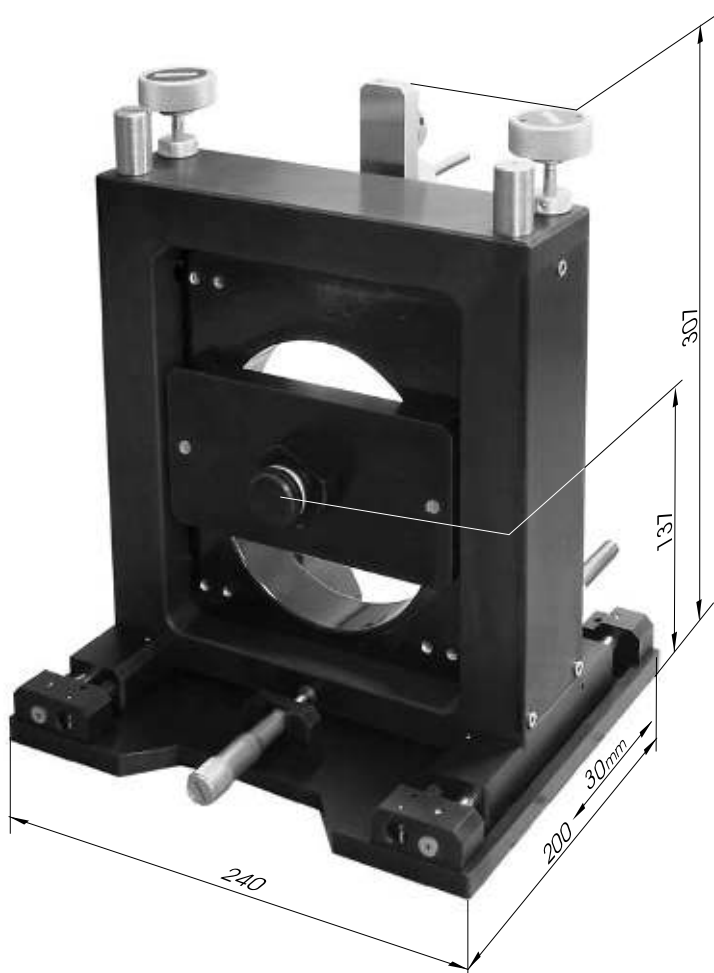
- 2 axis
- Tilt/tip travel range $\pm 1.5^\circ$
- Optics diameter 115÷250 mm
- Optics thickness 52 mm
- Sensitivity 0.5 arcsec
- Load capacity 10 kg
- Weight 10.1 kg

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 $\pm 1.5^\circ$
- 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



4BM-250

See page 4-5 for details

e-mail: sales@standa.it

www.standa.it

Phone: +370-5-2651474

Fax: +370-5-2651483

standa

Precise Adjustable Kinematic Mount for Large Optics

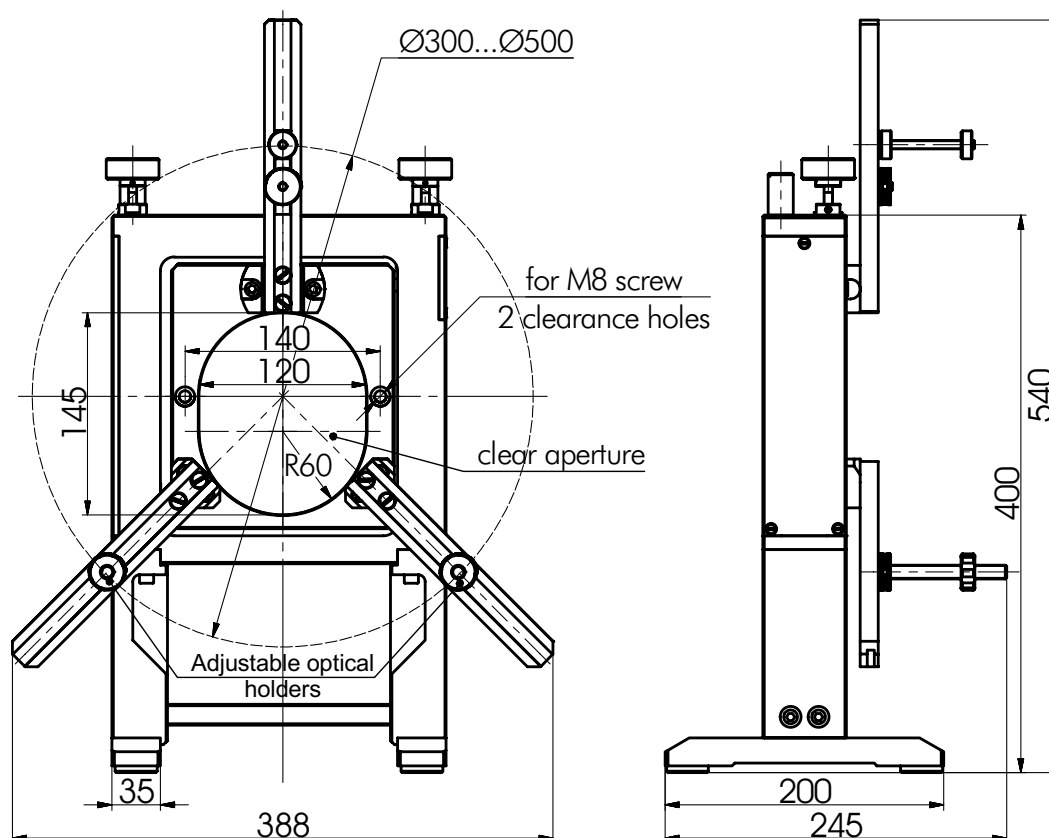
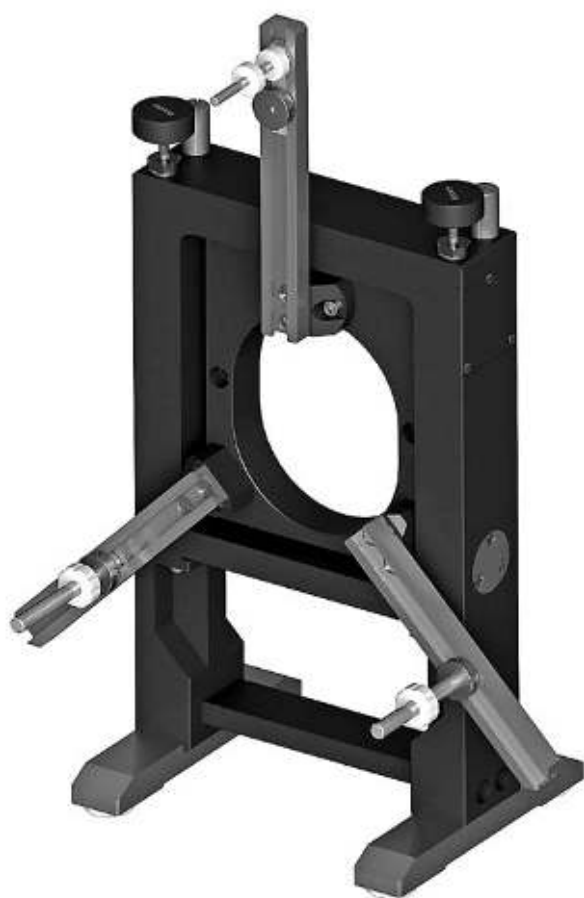
5AM-500

SPECIFICATIONS

Fine screw thread	M6×0.35
Horizontal rotation range	±1.5°
Vertical yaw range	±1.5°
Sensitivity	0.5 arcsecond
Load capacity	10 kg
Compatible with optical elements	
Diameter	300÷500 mm
Thickness	up to 52 mm
Weight	11 kg

5AM-500 is a modification of our standard version of the **Precise Adjustable Kinematic Mount for Large Optics 5AM-250**. This model is designed for **optics** with diameter up to **500 mm**, while retaining mechanical parameters of the standard version.

NEW



Self-centring Large Aperture Optical Mount

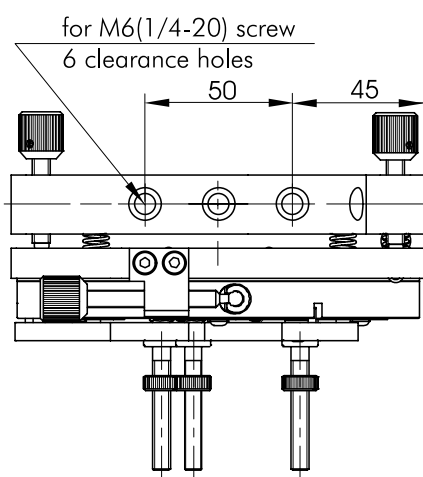
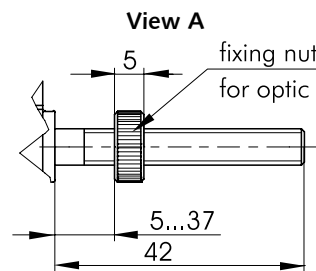
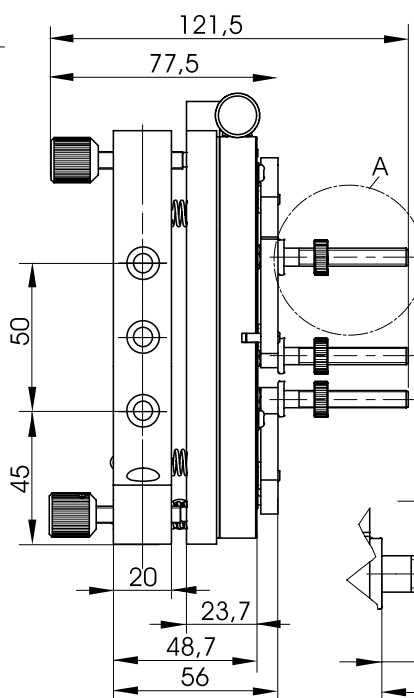
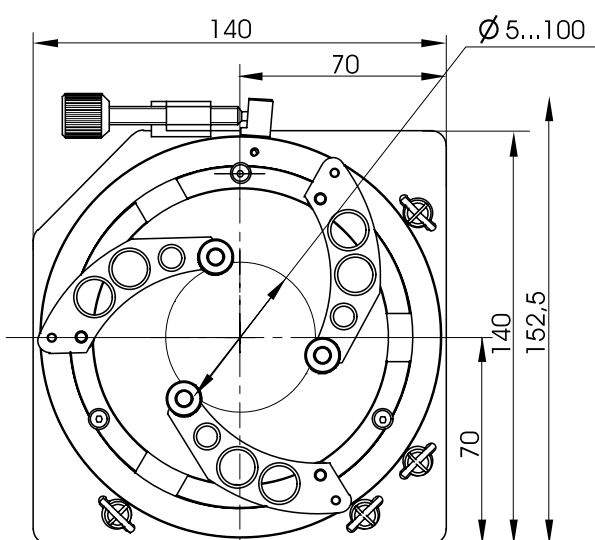
5AM-100



- Tilt/tip range $\pm 2.2^\circ$
- 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
- Weight 1.1 kg

SPECIFICATIONS

Optics diameter range	5-100 mm
Tilt/tip range	$\pm 2.2^\circ$



5BAM-1

SPECIFICATIONS

Optics diameter range	5-100 mm
Tilt/tip range	$\pm 2.2^\circ$

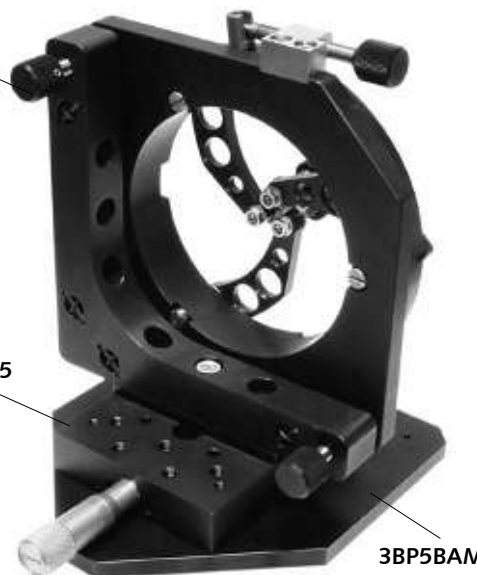
Option

Translation stage 7T67-25	25 mm
Base plate 3BP5BAM	

5AM-100

7T67-25

3BP5BAM



e-mail: sales@standa.it

www.standa.it

Phone: +370-5-2651474 Fax: +370-5-2651483

standa

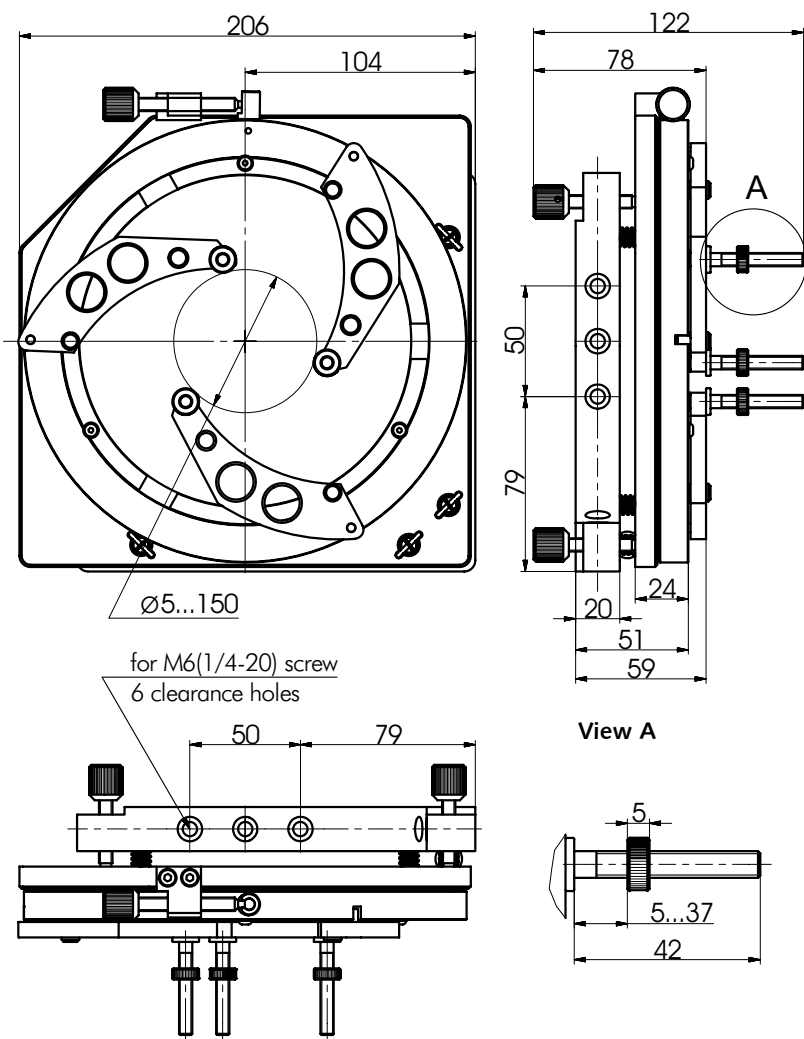
Self-centring Large Aperture Optical Mount

5AM-150


- Tilt/tip range $\pm 2^\circ$
- 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
- Weight 1.9 kg

SPECIFICATIONS

Optics diameter range	5-150 mm
Tilt/tip range	$\pm 2^\circ$



Optical Tables	1
Brackets & Rails	2
Base Mounts & Accessories	3
Optical Mounts	4
Optical Positioners	5
Base Positioners	6
Translation & Rotation Stages	7
Motorised Positioners & Controllers	8
Fine Adjustment Screws	9
Opto-Mechanics & Sets	10
Light Test & Measurement Instruments	11
Lasers & Accessories	12