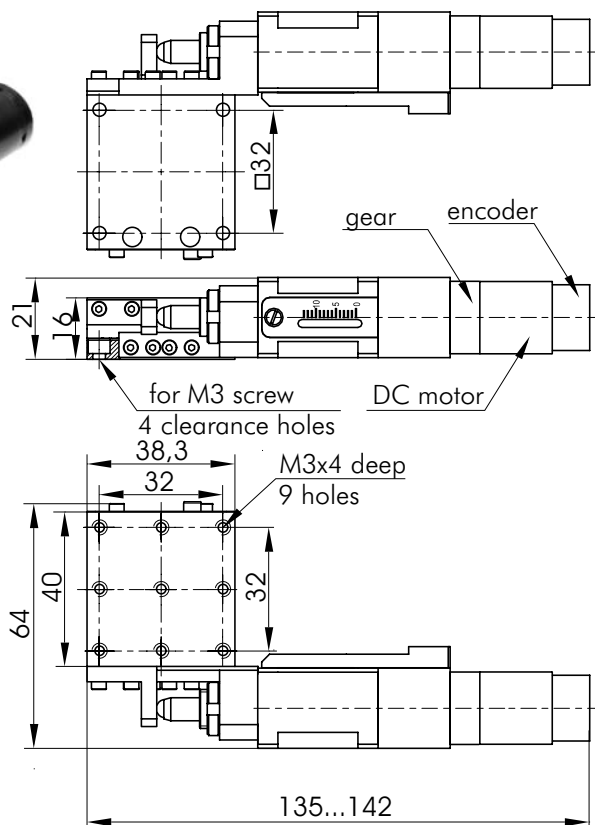


Motorized Translation Stage

8MT184-13DC



- Compact design
- Precise movement
- 13 mm travel range
- X-Y-Z direct stacking
- Stacks directly with stages of 174 series
- Motorized Actuator 8CMA16DC-13/15
- Lockable
- Black anodized aluminium
- Angle bracket 2AB174 for vertical mounting



*Available Motorized Translation Stage
with VACUUM 10^{-6} Torr Compatible DC motor*
8MT184V-13DC

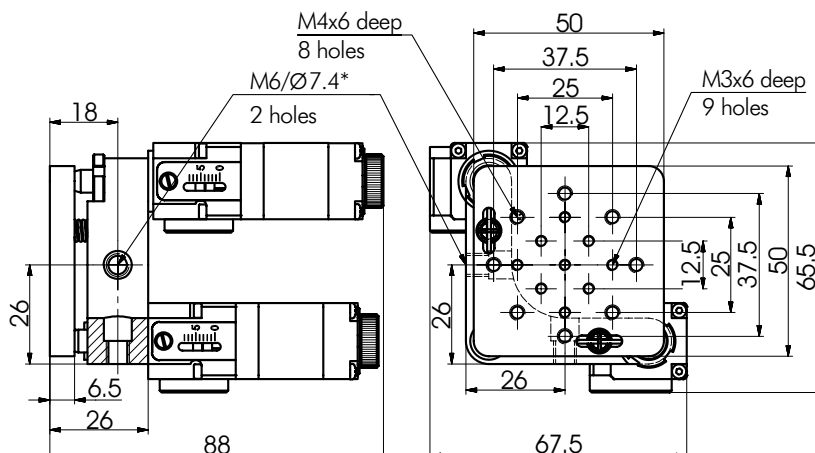
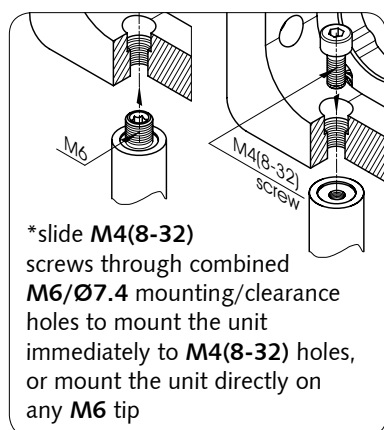
Motorized Optical Mount

8MUP21-2



SPECIFICATIONS

Travel range	4 mm
Resolution	<1 arcsec
Tilt range	9°(about two axes)
Speed (Standa SMC1-USBh controller)	from 1 arcsec/sec to 1°/sec
Type of actuator	8CMA20-8/15
Optocoupler end limit switches	2 per actuator
Cable	1.2 m length cable included
Motor connector	HDB15(M)
Recommended controllers	8SMC4-USBh



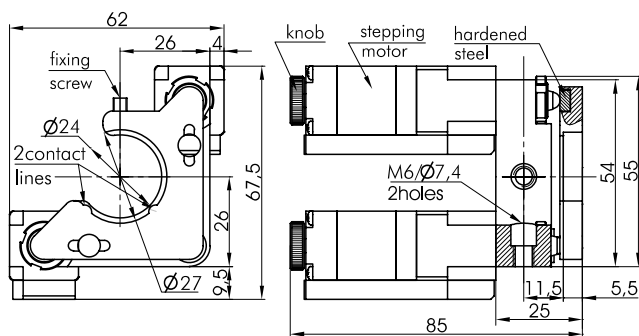
Motorized Kinematic Mirror/Beamsplitter Mounts

8MBM24



8MBM24-1-2

- 1" optics mounts
- Tilt range 9° (about two axes)
- Travel range 4 mm
- Mounting on either of 2 sides
- Two models – round and square aperture
- Kinematic
- Clear edge design
- A motorized actuator 8CMA20-8/15 pushes via seat of hardened stainless steel
- Black anodized aluminium
- 2", 3" models available 8MBM24-2, 8MBM24-3



Motorized Two Axis Translation Optical Mount

8MTOM2-1



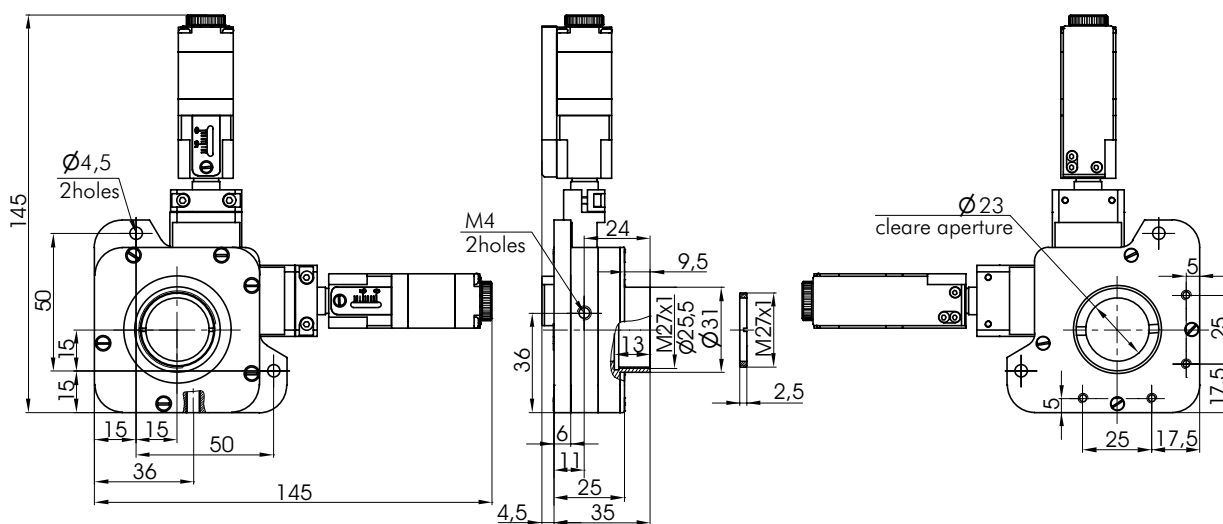
Designed to use with microscope

- 1" optics mounts
- Limit switch: optoelectronic couple
- Black anodized aluminium

The 8MTOM2-1 is made of 5TOM2-1 XY Translation Mount and 8CMA20-8/15 Compact Motorized Actuators.

SPECIFICATIONS

Resolution in full step	1.25 μ m
in 1/8 step	0.156 μ m
XY translation range	± 2 mm
Lead screw pitch	0.25 mm
Weight	0.8 kg



DC motor base Actuators are available on request

DC motor base Actuators are available on request

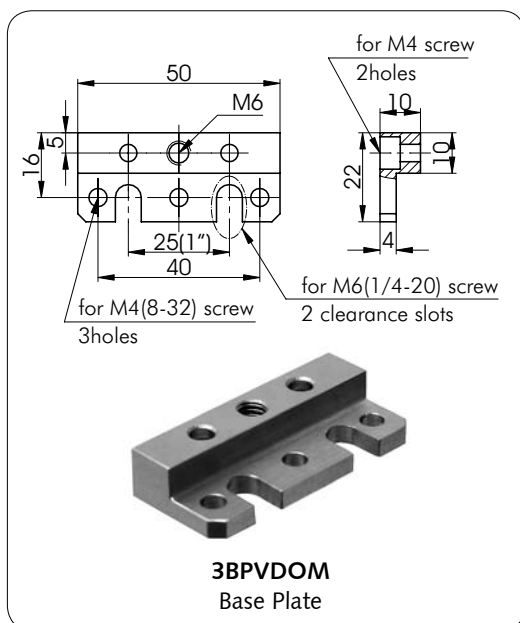
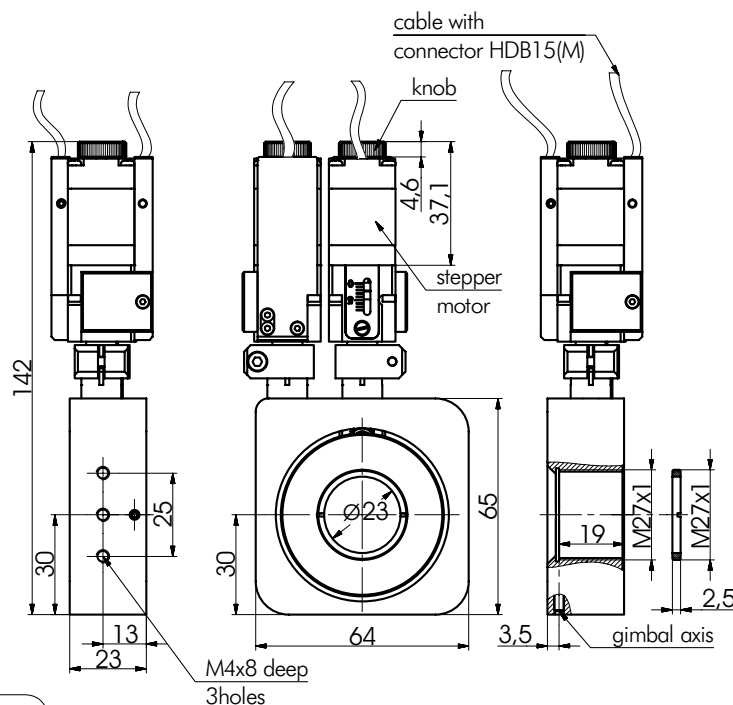
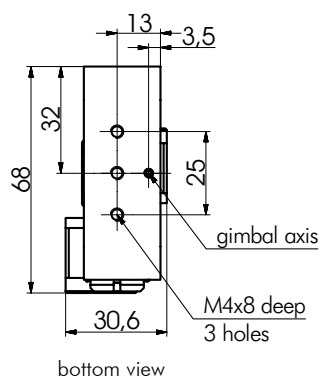
Motorized Gimbal Mount

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 μm
in 1/8 step	0,156 μm
Lead screw pitch	0.25 mm
Repeatability	1 μm
Maximum speed	4 mm/s
Cable	1.2 m length cable included
Motor connector	HDB15(M)
Weight	0.7 kg

*Actuator's movement dependance of horizontal position is not lineral.



DC motor base Actuators are available on request

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

Motorized Vertical Drive Optical Mounts

8MKVDOM

Motorized Vertical Drive Optical Mounts 8MKVDOM 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. **8MKVDOM** mirror mounts use secure **3-points mirror suspension** in between frontal flat spring and the back plate. Uniformly distributed axial forces eliminate wavefront distortion.

- 1", 2" optics diameter
- Stainless steel
- Compact/robust design
- Annealed front panel

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.

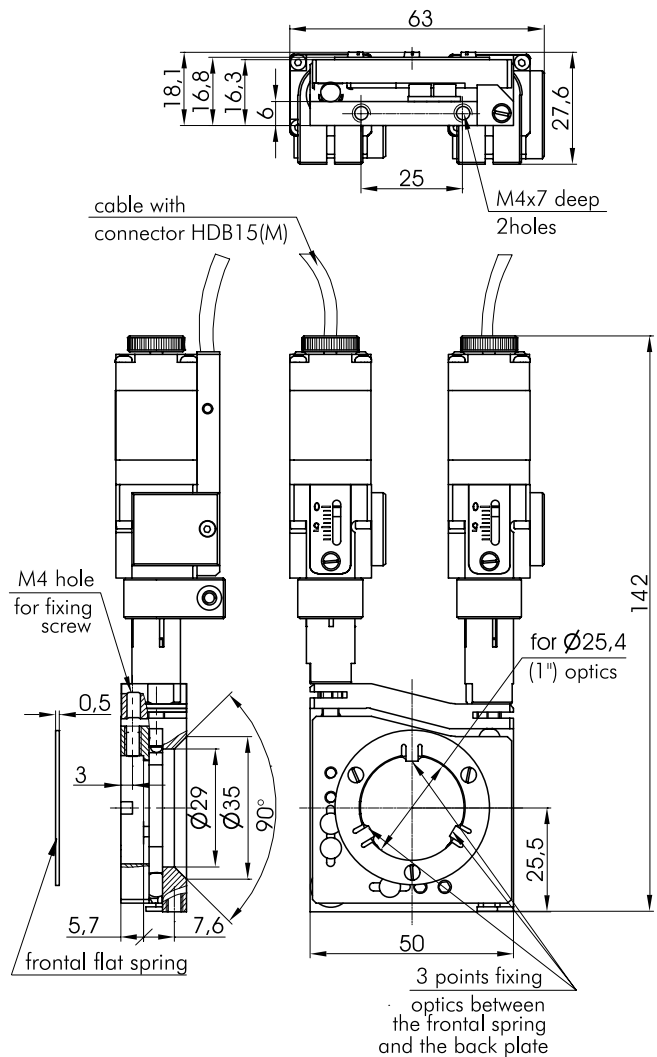
Motorized Vertical Drive Optical Mount

8MKVDOM-1



SPECIFICATIONS

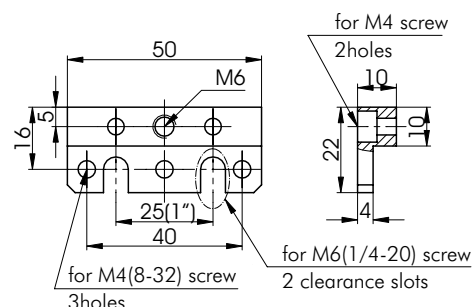
Optics diameter	25.4 mm
Clear aperture	23 mm
Tilt/tip range	±2.5°
Sensitivity	
by horizontal	3.8 arcsec. in full step of actuator
by vertical	3.9 arcsec. in full step of actuator in the middle tilt of platform
Type of actuator	8CMA20-8/15
Travel range of actuator	6 mm
Resolution	
in full step	1.25 μm
in 1/8 step	0.156 μm
Lead screw pitch	0.25 mm
Repeatability	1 μm
Cable	1.2 m length cable included
Motor connector	HDB15(M)
Weight	0.5 kg



Stepper/DC Motor Controller with USB Interface



2 axis Controller in box
8SMC4-USB-B9-2



3BPVDOM Universal Base Plate is designed to attach Motorized Vertical Drive Mirror Mounts **8MKVDOMV** to STANDA optical tables or to another stages.



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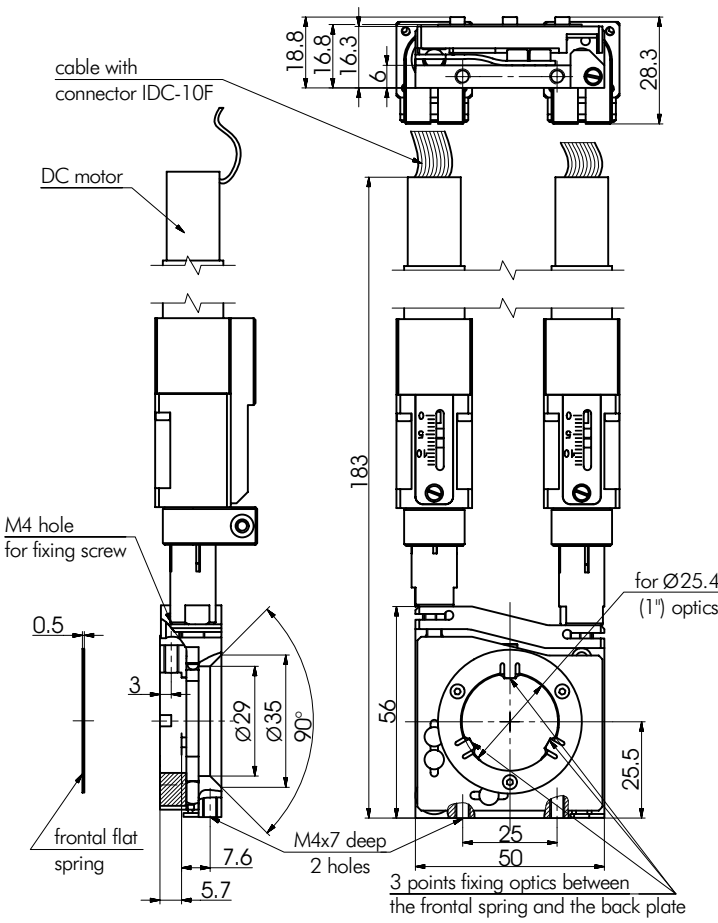
Motorized Vertical Drive Optical Mount with DC motor

8MKVDOM-1-DC

8MKVDOMV-1



8MKVDOMV-1
available for Vacuum!



SPECIFICATIONS	8MKVDOM-1-DC	8MKVDOMV-1
Optics diameter, mm		25.4
Clear aperture, mm		23
Tilt/tip range, °		±2.5
Angular Resolution:		
by horizontal, arcsec.		1.5
by vertical, arcsec.		1.75 arcsec. in the middle tilt of platform
Type of actuator	8CMA16DC-13/15	8CMA16DCV-13/15
Lead screw pitch, mm		0.25
Cable		integrated, 1.2 m length
Motor connector		HDB15(M)
Type of motor	DC motor DCE1524	Vacuum compatible DC motor DCE1841
Recommended controller		8SMC4-USB

ORDERING INFORMATION

8MKVDOM-1	Mount with stepper motor for Ø25.4 mm (1 inch)
8MKVDOM-1-DC	Mount with DC motor for Ø25.4 mm (1 inch)
8MKVDOMV-1	Vacuum Compatible Mount with DC motor for Ø25.4 mm (1 inch)
8MKVDOM-2	Mount with stepper motor for Ø50.8 mm (2 inch) and 8 mm thickness optics
8MKVDOM-2-DC	Mount with DC motor for Ø50.8 mm (2 inch) and 8 mm thickness optics
8MKVDOMV-2	Vacuum Compatible Moun with DC motor for Ø50.8 mm (2 inch) and 8 mm thickness optics
8MKVDOM-2-05	Mount with stepper motor for Ø50.8 mm (2 inch) and 12.7 mm thickness optics
8MKVDOM-2-05-DC	Mount with DC motor for Ø50.8 mm (2 inch) and 12.7 mm thickness optics
8MKVDOMV-2-05	Vacuum Compatible Moun with DC motor for Ø50.8 mm (2 inch) and 12.7 mm thickness optics



Motorized Vertical Drive Optical Mount with DC motor

8MKVDOM-2-DC

8MKVDOMV-2



8MKVDOMV-2
available for
Vacuum!

8MKVDOMV-2-05 – for 12.7 mm thickness optics we recommend Optical Mount with Supporting Adapter.

SPECIFICATIONS	8MKVDOM-2-DC	8MKVDOMV-2
Optics diameter, mm	50.8	
Clear aperture, mm	48	
Tilt/tip range, °	±2.5	
Angular Resolution:		
by horizontal, arcsec.		1
by vertical, arcsec.		1.25 arcsec. in the middle tilt of platform
Type of actuator	8CMA16DC-13/15	8CMA16DCV-13/15
Lead screw pitch, mm		0.25
Cable		integrated, 1.2 m length
Motor connector		HDB15(M)
Type of motor	DC motor DCE1524	Vacuum compatible DC motor DCE1841
Recommended controller		8SMC4-USB

Stepper/DC Motor Controller with USB Interface

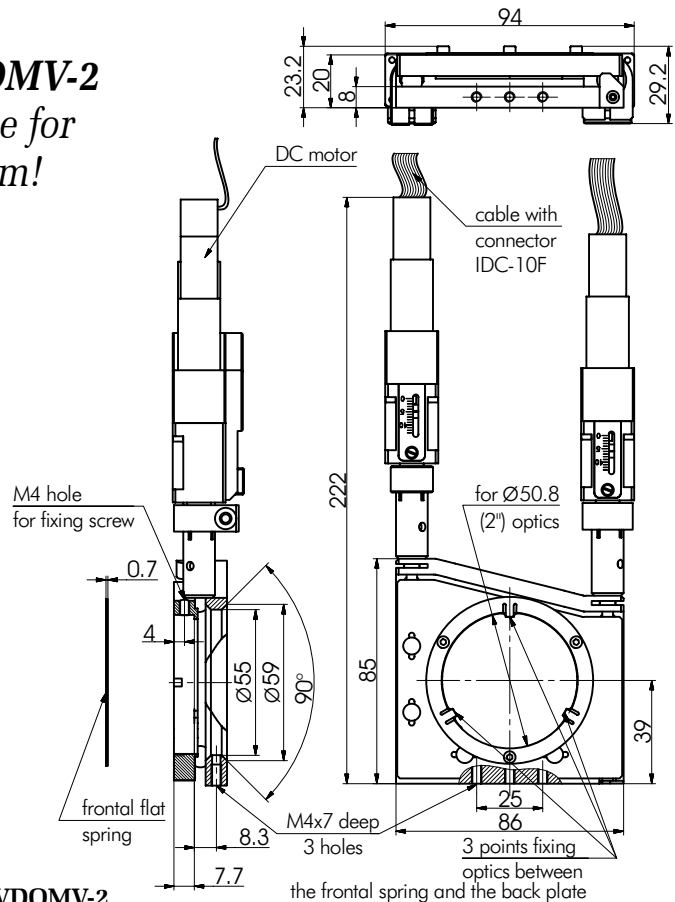


2 axis Controller in box
8SMC4-USB-B9-2

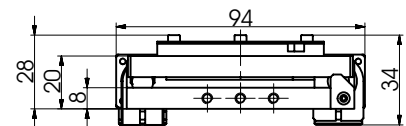
Assembly kit to fix two or more controller boxes together



Assembly kit
5AK-B9-B9



8MKVDOM-2-DC / 8MKVDOMV-2



8MKVDOM-2-05-DC / 8MKVDOMV-2-05

Motorized Gimbal Optical Mount

8MLAOM

new



- Rotation range in azimuth and elevation: $360^{\circ}/360^{\circ}$
- Fine adjustment range: $\pm 4^{\circ}/\pm 4^{\circ}$
- High positioning resolution: 3 arcsec
- Maximum acceptable thickness of optical element: 100 mm.
- Maximum acceptable weight of optical element: 150 kg.
- High thermal and vibration stability
- Near zero backlash
- Various range of apertures can be customized on request.
- Manual version of optical mount is available
- Vacuum Compatible Version is available

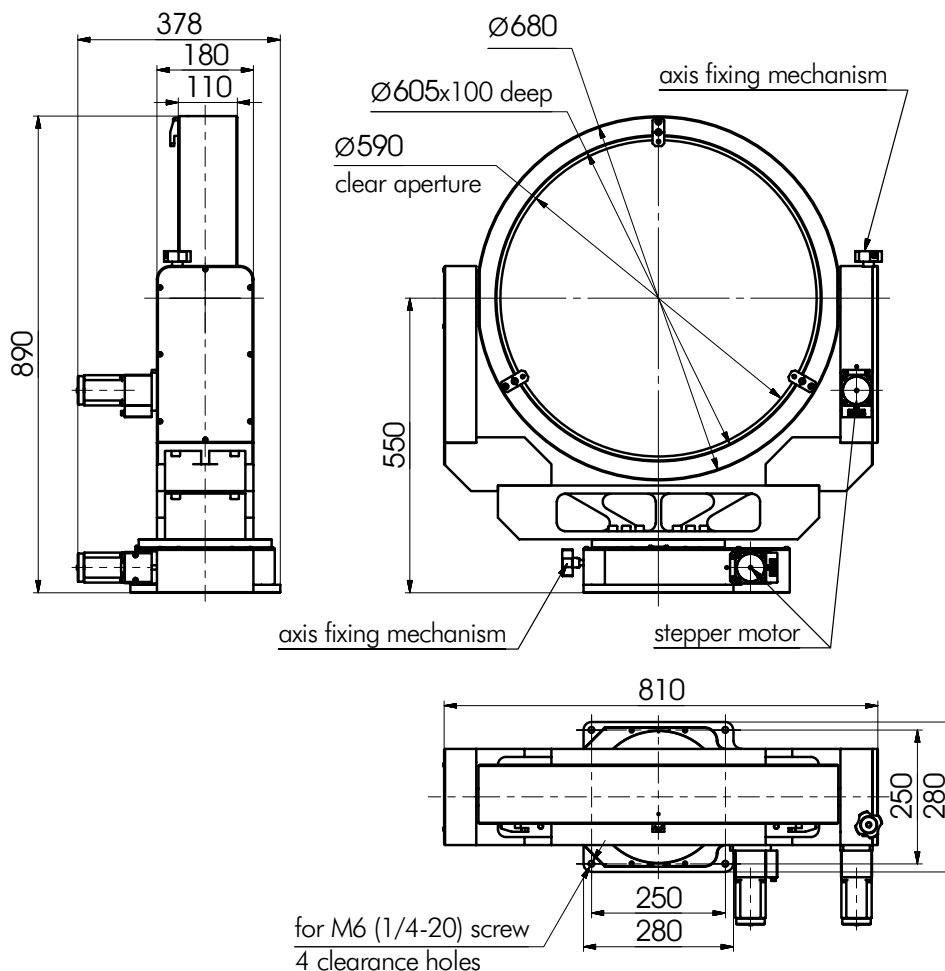
8MLAOM Motorized Gimbal Optical Mount has been designed for positioning of large optical elements up to 600 mm. Commonly LAOM optical mounts is extremely efficient solution in such applications as: high power laser systems and astronomy.

LAOM series optical mounts have complete 360 degree rotation in azimuth and elevation axes if transmission of both coordinates is decoupled. Special spring preloaded internal mechanisms result near zero backlash motion, what allows user to avoid

additional feedback system in order to reduce the uncertainty of the system. Fine adjustment in $\pm 4^{\circ}$ range provides high quality motion with resolution down to 3 arcsec (or better by request).

Age hardened aluminum alloy guarantees: softness of the assembly, high thermal stability and high vibration stability.

Control of LAOM series motorized optical mounts is available with **Standa controller 8SMC4-USB-B9-2**.



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Optical Tables	1
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Optical Mounts	4
Optical Positioners	5
Base Positioners	6
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Fine Adjustment Screws	9
Opto-Mechanics & Sets	10
Light Test & Measurement Instruments	11
Lasers & Laser Accessories	12

SPECIFICATIONS

Kinematics and Feedback information

Azimuth/Elevation (coarse)	360°/360°
Azimuth/Elevation (fine)	±4°/±4°
Resolution	
4000 steps/rev	0.3 arcsec
1000 steps/rev	1.2 arcsec
400 steps/rev	3 arcsec
Encoder type	On request
Encoder resolution	On request
Bidirectional repeatability	3 arcsec
Unidirectional repeatability	3 arcsec
Accuracy	On request
Backlash	0
Maximum speed	1 °/sec
Limit Switches	Hall sensors (2pcs on each axis)
Switch polarity	Pushed is closed

Load and Transmission information

Load capacity	150 kg
Lead Screw Pitch	1 mm
Stepper Motor	5909
DC motor	On request
Gearbox	On request

Material and environment conditions

Base material	Aluminum
Finish	Powder coating
Environment pressure	Atmosphere (10 ⁻³ torr / 10 ⁻⁶ on request)
Ambient temperature	On request

Control and Communication

Recommended controllers	8SMC4-USB-B9-2
Recommended power supply	PS36-3.4-4 / PS24-2.5-4
Connector	HDB15(M)
Cable length	1.6 m

Additional Details

Measurement system	Metric
Weight	79 kg
Aperture	Ø590 mm
Max optic diameter	Ø600 mm
Min optic diameter	Ø500 mm
Max optic thickness	100 mm

Recommended Controller for DC/Stepper Motors



8SMC4-USB-B9-2
2 axis Controller in box



8JXY-03
Joystick for 8SMC4-USB controller

More info on www.standa.it

Motorized Mirror Mount

8MMA60



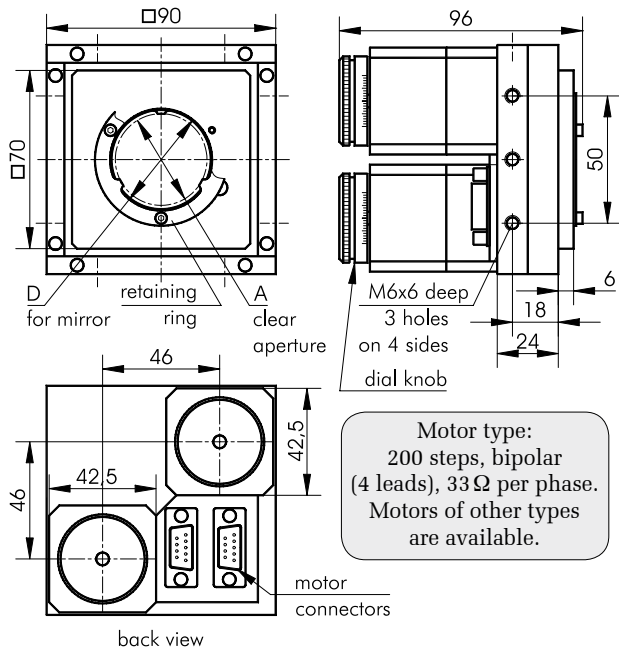
Motorized Mirror Mounts 8MMA60 are designed for precise angular alignment of optical elements. Platform is **tilted** about **two axes**. A **retaining ring** keeps optics in a non-through mounting opening of the platform.

The ring is fixed by 3 screws. It has **3 dents** with which it **clamps** optics against similar **3 rests** in the platform.

The **dents** are exactly opposite to the **rests** – this **minimizes deformation**.

SPECIFICATIONS

Tilt range	5° both axes
Visual reading	dial knobs graduated in 200 steps per revolution
Resolution	0.0016° (0°00'06") per step
Optics accepted	(see the drawing) diameter (D) , and clear aperture (A) :
	8MMA60-1 Ø25.4 mm (1"), A=21.4 mm
	8MMA60-40 Ø40 mm, A=36 mm
	8MMA60-2 Ø50.8 (2"), A=46.8 mm
	custom sizes available
Optics thickness	10 mm (retaining rings for custom thickness available)
Material	black anodized aluminium
Weight	1.08 kg



Motorized Vertical Translation Stage

8MVT188-20



Motorized Vertical Translation Stage 8MVT188-20 boasts our unique design. Being very compact, it provides smooth and stable adjustment of height. It has a large travel range, and it supports large loads. While moving the platform stays parallel to the base.

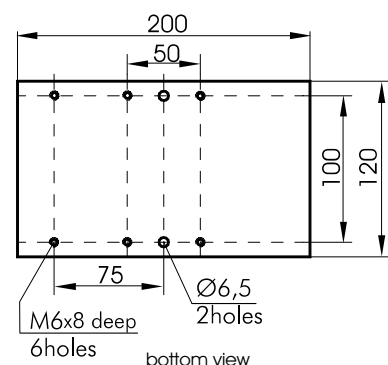
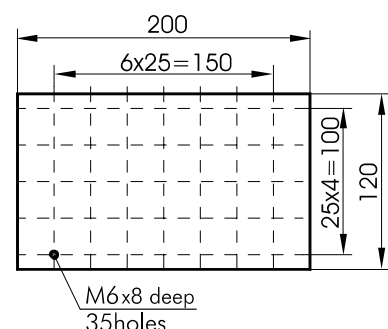
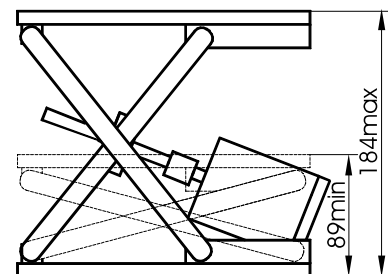
Examples of use: making up for height differences during the set up; automation of technological processes, like laser welding.

A stepper motor type – **5918**, 200 steps. Customer can specify any other types of motors to install. Load capacity and speed all greatly depend on the motor. We can test and select an appropriate motor for your requirements.

The lead screw acts at a varying angle, so the resolution of the stage varies with position.

The platform has an array of **M6** holes spaced by **25 mm**. The base has **six M6** and **two Ø6.5** holes.

Material: black anodized aluminium.



- Pantograph design
- 16 ball bearings
- Stepping motor drive
- Precision lead screw
- 95 mm vertical travel
- Height: min 89 mm max 184 mm
- Top and bottom plates parallel to 1 mm
- Load capacity 8 kg (depending on motor and controller)
- Supply voltage – 36 V
- Weight: 4.3 kg