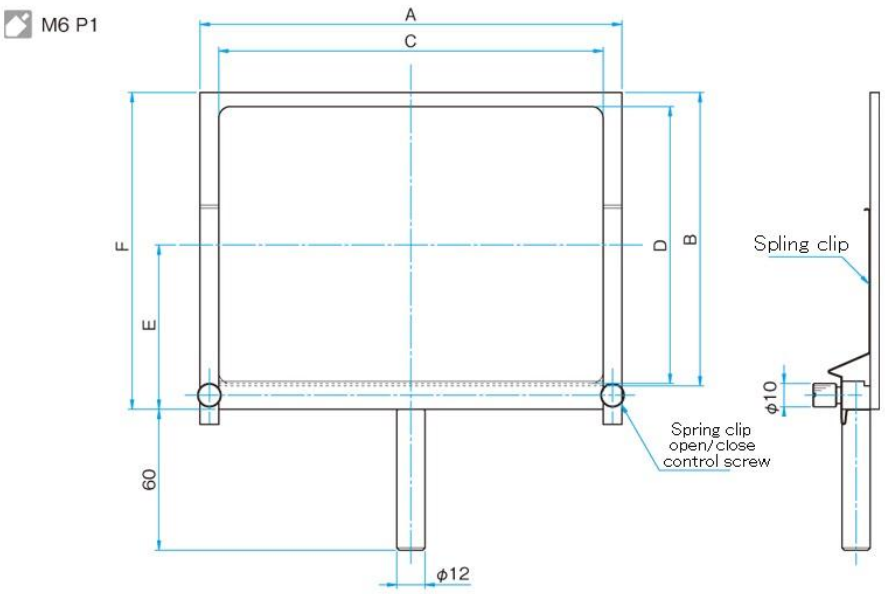
Dry Plate Holders

Holder for holding a slim sample, dry plate or the like.

- Clamps with a spring clip, ensuring easy attachment/detachment of a sample.
- Also applicable to transmitted light.
- Non-standard sizes can also be fabricated (subject to separate consultation).

Specifications

A	90mm	D	58mm
B	65mm	E	40mm
C	74mm	F	75mm
Weight	0.13kg	-	



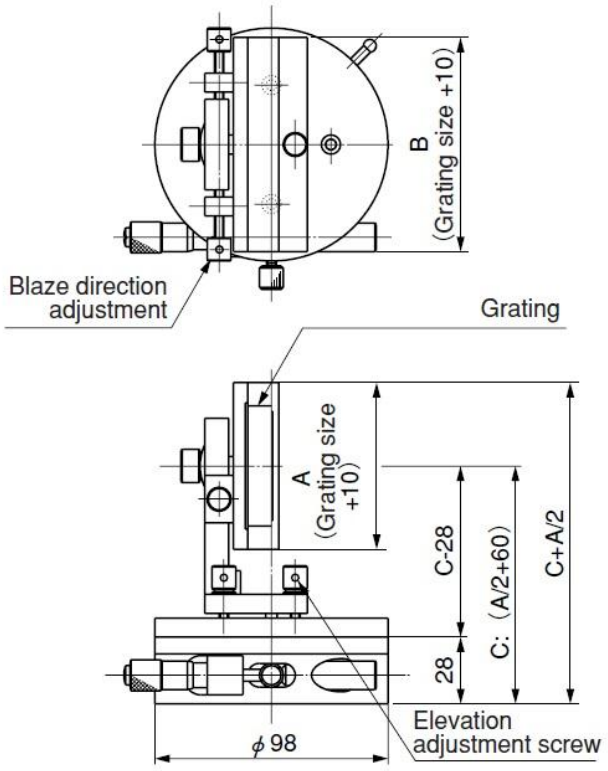
Grating Holders

Holder specially designed for gratings (diffraction gratings).

- Each order will be custom-built to meet your grating's specifications. Specify the size of your grating. The holder size will change depending on the grating.
- This holder is made up of a grating holding section and a rotary section.
- Allows adjustment of the forward/backward tilt and blazing direction, as well as the coarse/fine rotation of the grating.

Common Specifications

Primary material	Aluminium
Finish	Black Anodized



Square Plate Holders
Camera Holders

KMH
CMH

KMH

RoHS Catalog Code W4047

Holders for square plates such as flare plates (BBP), test targets and square filters.

- Designed to gently hold glass plates, the holder include a soft cork lined back plate and resin tipped clamping screws.

Specifications

Primary material: Aluminum
Finish: Black Anodized

Part Number	Options specified*	Compatible Optics Dimensions [mm]	Compatible Optics Thickness [mm]	Weight [kg]
KMH-30	N/EE/UU	□10 – □45	3 – 5	0.08
KMH-80	N/EE/UU	□45 – □100	1 – 7	0.11
KMH-150	N	□100 – □180	6 – 17	0.38

* For specifying options, please refer to "Conversion of Posts, Post Holders and Pedestal Bases of Holders". Reference C007

Guide

- Use the sliding cylindrical lens holder (CHA) to hold rectangular lenses. Reference C048
- Post length can be changed by specifying the post length when you place an order. We may charge the difference in price depending on the length. Contact our Sales Division for more information.

Attention

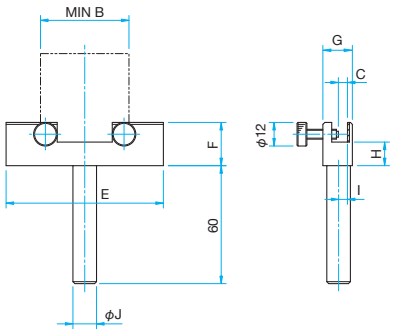
- Glass can break if screws are over tightened.

Outline Drawing

KMH

M6 P1

2D CAD 3D CAD



Part Number	MIN B (mm)	MAX C (mm)	MIN C (mm)	E (mm)	F (mm)	G (mm)	H (mm)	I (mm)	ϕJ (mm)
KMH-30	10	5	3	30	15	12	10	3.5	ϕ12
KMH-80	45	7	1	80	22	15	12.5	4.5	ϕ12
KMH-150	100	17	6	150	30	30	15	10.5	ϕ20

CMH

RoHS Catalog Code W4104

Post mounted ball head camera mount. Allows cameras with standard 1/4-20 mounting holes to be used on an optical breadboard.

- Loosen the clamp to freely position the camera, and tighten the clamp to lock in place.
- These platforms can mount any camera because they use the mounting screw standard commonly used for cameras.
- Posts with 1/4-20 screws can be directly attached to cameras for applications where tilt adjustment is not needed.

WEB Reference Catalog Code W6052

Specifications

Primary material: Aluminum
Finish: Black Anodized

Part Number	Options specified*	MAX Load Capacity [N]	Weight [kg]
CMH-1	N	29.5 (about 3kgf)	0.17
CMH-2	N	40 (about 4kgf)	0.34

* For specifying options, please refer to "Conversion of Posts, Post Holders and Pedestal Bases of Holders". Reference C007

Outline Drawing

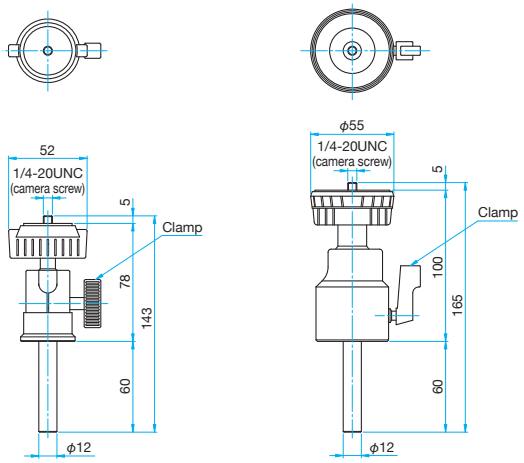
CMH-1

1/4-20UN (inch male thread)

CMH-2

1/4-20UNC (inch male thread)

2D CAD 3D CAD



Test Target Holders
Beam Dumps

TGH
BD

TGH

RoHS Catalog Code W4049

Fixtures used for optical axis adjustment of non-visible lasers. Insert IR sensor cards or van paper in the path using the spring clips, rotate cross wires into the laser light to confirm the positional relationship of the shadow of beam and cross wire.

- The cross wires are retractable and are placed in the center of posts to enable good repeatability.
- If two target holders are placed leaving an interval, they can be used as a laser beam tilt adjustment jig.

Specifications

Primary material: Aluminum
Finish: Black Anodized

Part Number	Options specified*	Clear Aperture [mm]	MAX Holding Thickness [mm]	Weight [kg]
TGH-30	N/UU	ϕ30	3	0.09

* For specifying options, please refer to “Conversion of Posts, Post Holders and Pedestal Bases of Holders”. Reference C007

Guide

- Iris diaphragm (IH) convenient for visible light lasers is also available. Reference C063

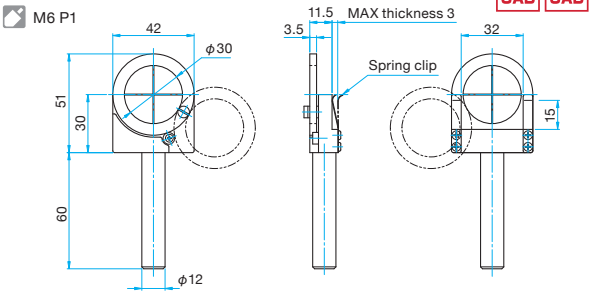
Attention

- Use IR sensor cards with large light receiving surface. Card type IR/UV sensors (SIRC-1 or SUVC-1) cannot be used.

Outline Drawing

TGH

2D CAD 3D CAD

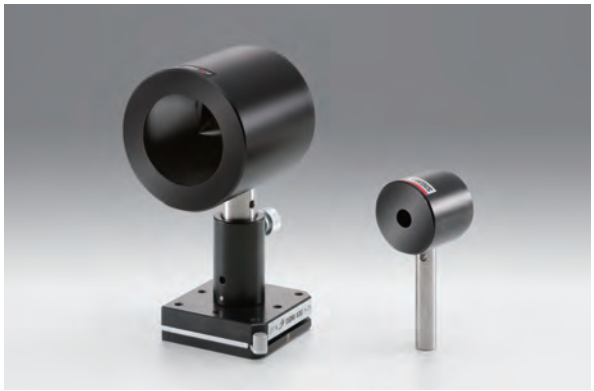


BD

RoHS Catalog Code W4050

Beam Dumps safely terminate the beam of high-power lasers and high energy pulse lasers. The laser light is scattered and absorbed in the beam dump and converted into heat.

- Because the incident laser beam is scattered onto a conical surface, the light scatter back to the incident side can be greatly attenuated.
- BD-40 for small beam diameter (ϕ5mm or less) and BD-80 for large diameter beams (ϕ30mm or less) are available.



Guide

- High-power laser shutters (SHPS) combining optical path switching shutter and beam diffuser are available. WEB Reference Catalog Code W4110

Attention

- When used with a high-power laser, the beam diffuser might become quite warm. Be careful not to touch the beam diffuser directly.
- When used with a high energy pulse laser, the finish of the conical surface may be lost. The volume of scattering will increase somewhat, but as long as the conical shape is not changed, the beam diffuser will maintain performance.
- When a repeatedly oscillating high energy pulse laser irradiates the beam diffuser, the beam diffuser sometimes makes a sound like it is striking metal. This is due to the shock wave produced when the laser changes to heat on a metallic surface, not damage on the beam diffuser.

2D CAD 3D CAD

Specifications

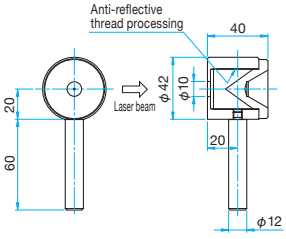
Primary material: Aluminum
Finish: Black Anodized

Part Number	Options specified*	Aperture Diameter [mm]	Weight [kg]
BD-40	N/EE/UU	ϕ10	0.15
BD-80	N/EE/UU	ϕ52	0.65

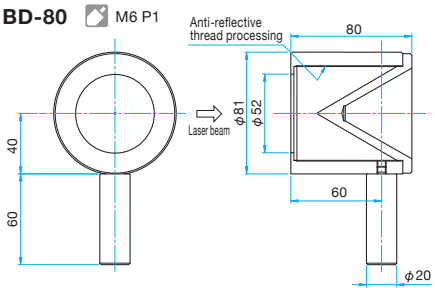
* For specifying options, please refer to “Conversion of Posts, Post Holders and Pedestal Bases of Holders”. Reference C007

Outline Drawing

BD-40 M6 P1



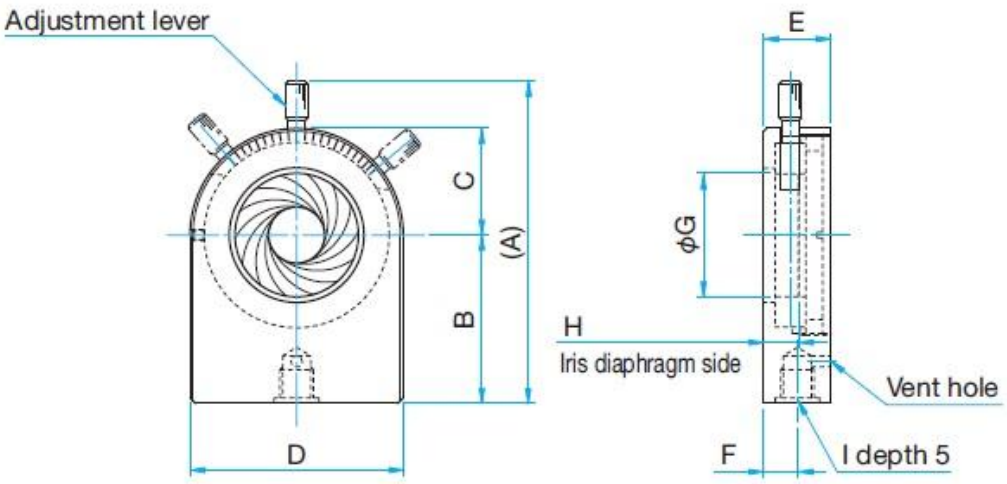
BD-80 M6 P1



Vacuum Iris Diaphragm Holder

These are stainless steel iris diaphragms which can change it's aperture size. It is mainly used for optical axis alignment of the laser beam and blocking the return light or stray light.

- It also can be used in a UV optical system or in a clean room.
- By sliding the adjustment lever, 12pcs diaphragm blades can be controlled and aperture will have a shape similar to a circular shape. By turning the adjustment lever, the aperture diameter can be fixed.
- The scale for aperture diameter is in the front of the holder.
- To minimize the outgassing, venting hole and grooving are provided onto screw holes and inset sections.

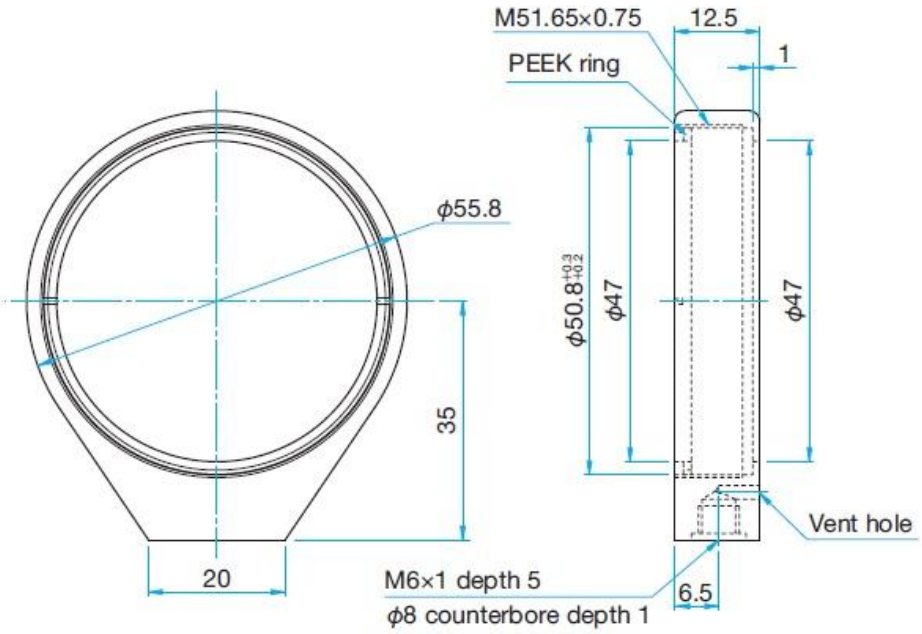


Part Number	A	B	C	D	E	F	G	H	I
VIH-15	43	20	15	30	10	5	15	5.2	M4
VIH-22	57.5	30	19	38	12	5	22	6.2	M6
VIH-36	75	35	30	60	12	6.4	36	6.9	M6

Vacuum Lens Holder

These are low outgassing lens holders which are ideal for using in the high vacuum conditions.

- It also can be used in a UV optical system or in a clean room.
- To minimize the outgassing, venting hole and grooving are provided onto screw holes and inset sections.
- Specially designed polyether ether ketone resin (PEEK resin) retaining ring is used for this holder.



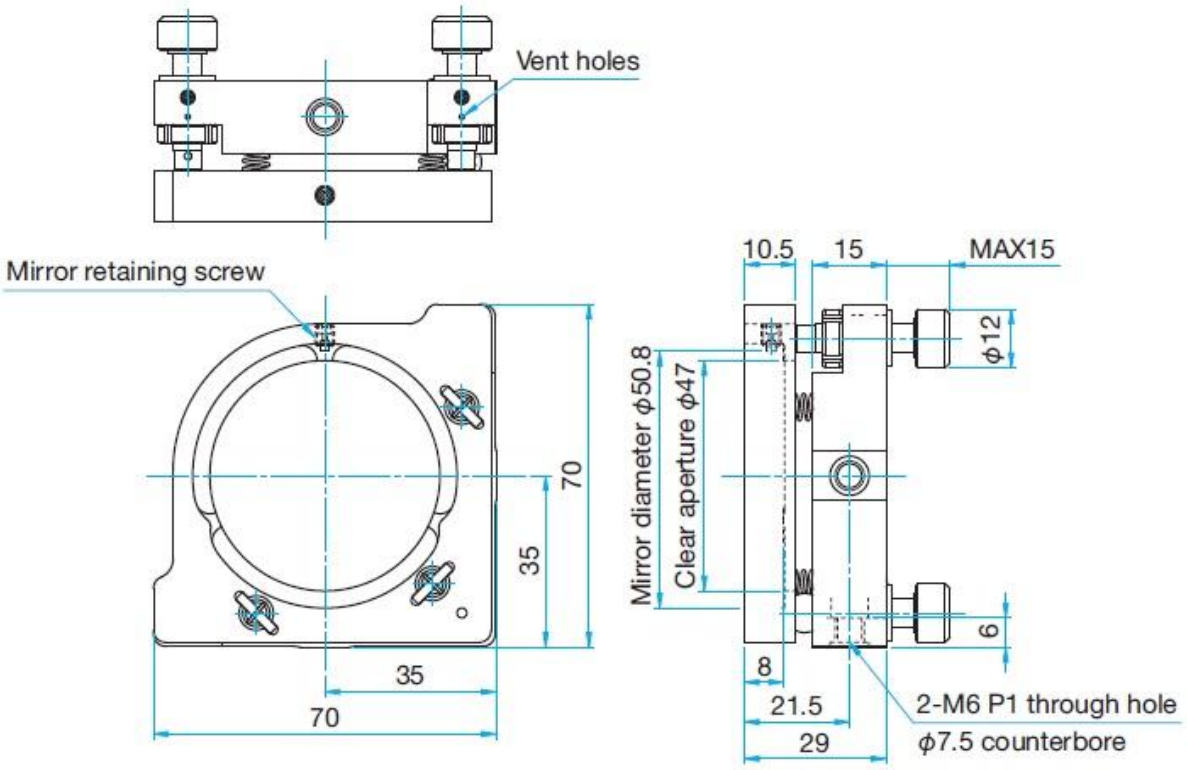
Vacuum Mirror Holder

These are low outgassing mirror holders which are ideal for using in the high vacuum conditions.

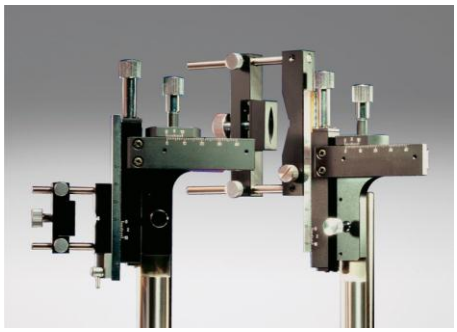
- It also can be used in a UV optical system or in a clean room.
- Adjustment screws are removable (except for VMHG-12.7) so that it can remount other electric actuators for remote controll. (Actuators are not included.)
- To minimize the outgassing, venting hole and grooving are provided onto screw holes and inset sections.
- BARRIERTA SUPER IS/V grease is used for sliding part.

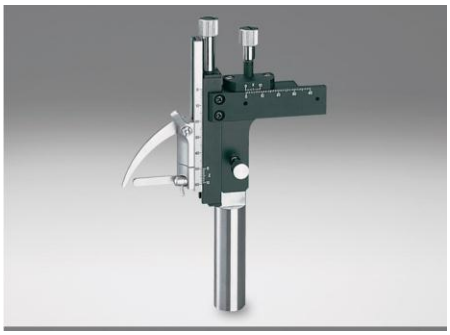
Specifications

Compatible Optics Diameter	**VMHG-12.7** (ϕ12.7mm) **VMHG-25.4** (ϕ25.4mm/ϕ25mm) **VMHG-30** (ϕ30mm) **VMHG-50.8** (ϕ50mm/ϕ50.8mm)
Compatible Optics Thickness	**VMHG-12.7** (3 - 7mm) **VMHG-25.4** (3 - 10mm) **VMHG-30** (3 - 10mm) **VMHG-50.8** (3 - 10mm)
Clear Aperture	**VMHG-12.7** (ϕ11mm) **VMHG-25.4** (ϕ22.4mm) **VMHG-30** (ϕ27mm) **VMHG-50.8** (ϕ47mm)
Number of Adjustment Axes	2 points
Adjustment Range /tilt	±3°
Adjustment Range /Rotation	±3°
Resolution /Tilt	0.3°- 0.4°/rotation
Resolution /Rotation	0.3°- 0.4°/rotation


Vent holes
Mirror retaining screw
70
35
35
70
10.5
15
MAX15
ϕ12
Mirror diameter ϕ50.8
Clear aperture ϕ47
6
8
21.5
29
2-M6 P1 through hole
ϕ7.5 counterbore

XZ Mechanical Stage



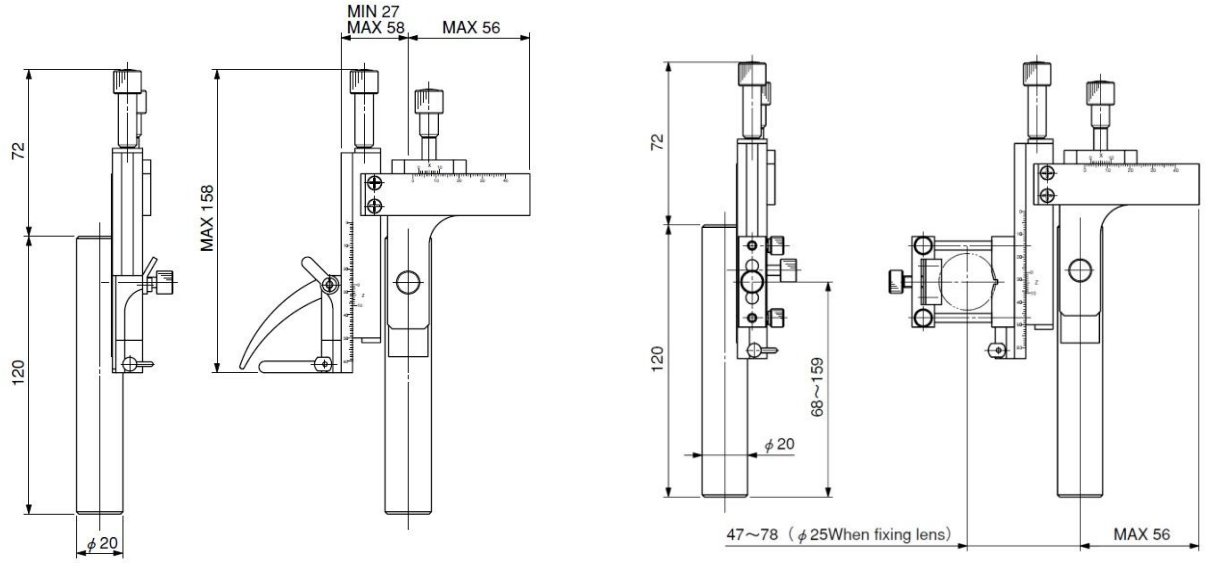


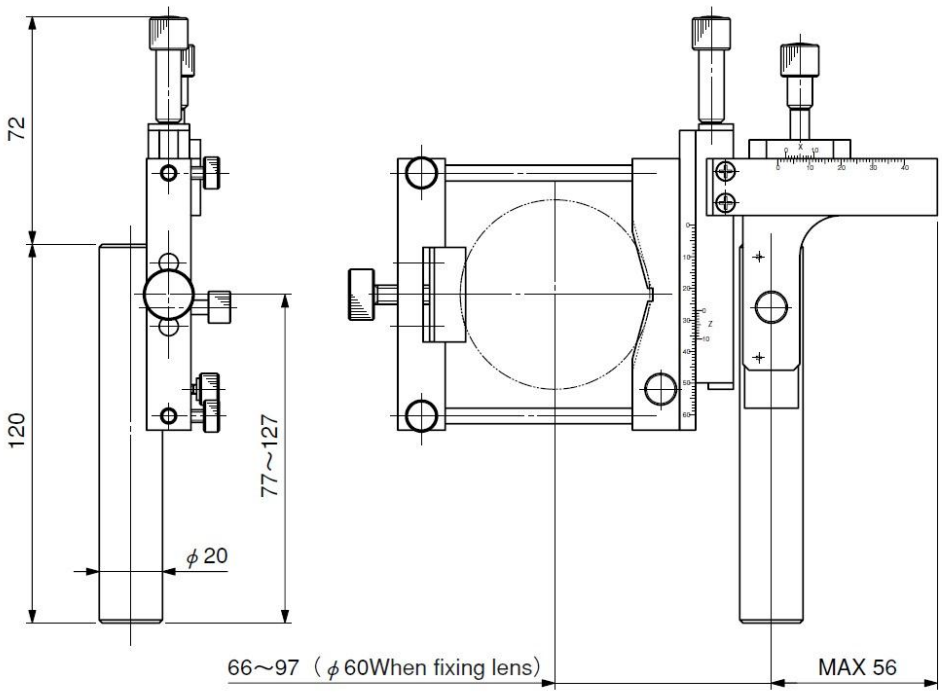
Centering holder attached,Slide Clip, Adjustable Round Lens Holder, Adjustable Iris Diaphragm in dovetail stage of 2-axis.

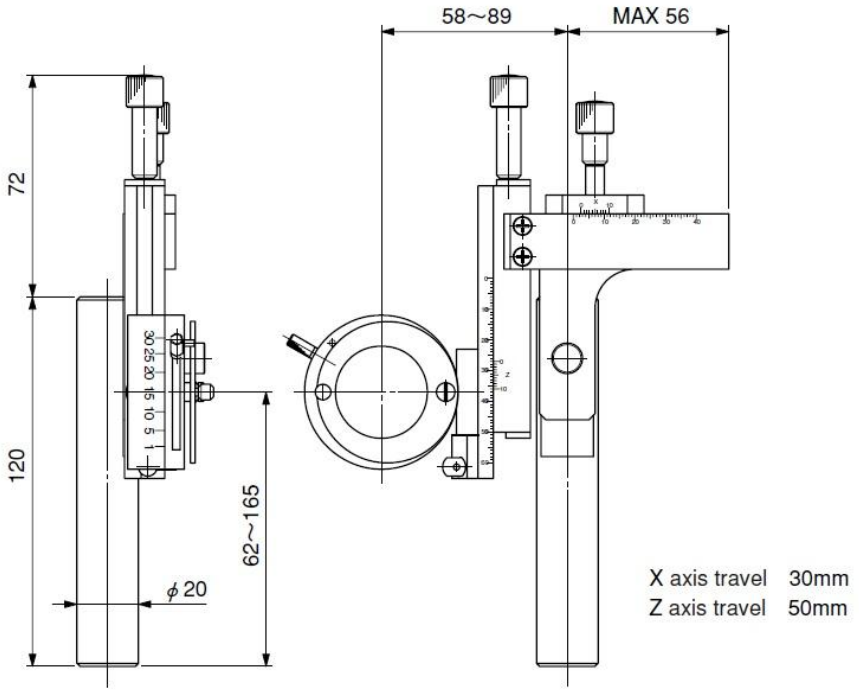
◦Mechanical stage for a microscope, combined with rack-and-pinion stages with dovetail-grooved guides, capable of fine motion in the vertical and horizontal directions.

Specifications

Type	Adjustable Round Lens Holder
Compatible Optics Diameter	φ5 - 25mm (φ10 - 60mm)
Compatible Optics Thickness	1 - 2.5mm (1 - 4.7mm)
Travel:Vertical（Fine）	50mm
Travel:Horizontal（Fine）	30mm
Weight	0.5kg (0.6kg)




72
120
77～127
ϕ 20
66～97（ϕ 60When fixing lens）
MAX 56


58～89
MAX 56
72
120
62～165
ϕ 20
X axis travel 30mm
Z axis travel 50mm