

NON-MAGNETIC & VACUUM-COMPATIBLE DUAL PERFORMANCE YOU CAN TRUST.

"LOW OUTGASSING", "NON-MAGNETIC", "CLEANROOM READY"

Non-Magnetic & Vacuum Compatible Products



Holders & Mounts

- VMHG-NM** Non-Magnetic Vacuum-Compatible Mirror Mount
- VMHG-NMT** Non-Magnetic Vacuum-Compatible Mirror Mount (Titanium)
- VMHV-NM** Non-Magnetic Vacuum-Compatible Vertical Control Mirror Mount

Bases

- VRO-NM** Non-Magnetic Vacuum-Compatible Posts
- VRS-NM** Non-Magnetic Vacuum-Compatible Post Holders
- VPST-NM** Non-Magnetic Vacuum-Compatible Pedestal Bases
- VPSM-NM** Non-Magnetic Vacuum-Compatible Post Stand (M16)
- VPSCS-NM** Non-Magnetic Vacuum-Compatible Pedestal Bases
- VBSP-NM** Non-Magnetic Vacuum-Compatible Base Plates

Manual Stages

- VTASB-NM** Non-Magnetic Vacuum-Compatible X Axis Preset Dovetail Translation Stages - Footprints

- VCHS-NM** Non-Magnetic Vacuum-Compatible Thread Adapters M4-M6 (Set of 5)
- VSC-NM** Non-Magnetic Vacuum-Compatible Dog Point Set Screws (Set of 5)

Non-Magnetic Vacuum-Compatible Product Guidance

Ideal for Vacuum and Cleanroom Applications in Strong Magnetic Fields

Sigma Koki's non-magnetic and vacuum-compatible products feature extremely low magnetic properties achieved through our proprietary demagnetization process. They are ideal for use in environments where it is critical to avoid magnetic interference, offering significantly lower magnetic properties compared to conventional non-magnetic materials.

In addition, these products are designed with materials, shapes, and manufacturing processes optimized for vacuum environments, making them well-suited for both non-magnetic and vacuum applications.



Non-Magnetic Characteristics

- Proprietary demagnetization process
- Magnetic properties are less than 1/10 that of standard non-magnetic stainless steel (Refer to Magnetic Field Measurement Data)

Vacuum & Cleanroom Compatibility

- Main material: SUS316
- Uses vacuum-compatible grease(BARRIERTA SUPER IS/V)
- Carefully cleaned components
- Specialized packaging method

Key Features of Non-Magnetic Vacuum-Compatible Products

① Main Components

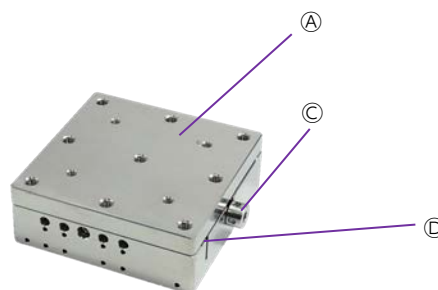
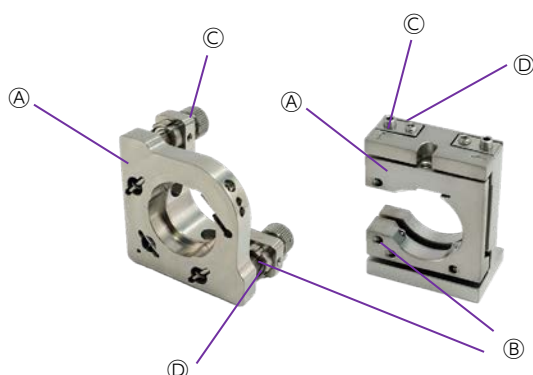
Front plate and main body made of SUS316 stainless steel with demagnetization treatment.

② **Internal Ball Bearings** Ceramic balls (zirconia) are used.
Retainer: Titanium.

③ Adjustment Mechanism

Stainless steel non-magnetic fine-pitch screws
VMHG-NM / VMHV-NM: Screw pitch 0.25 mm
VTASB-NM: Screw pitch 0.5 mm

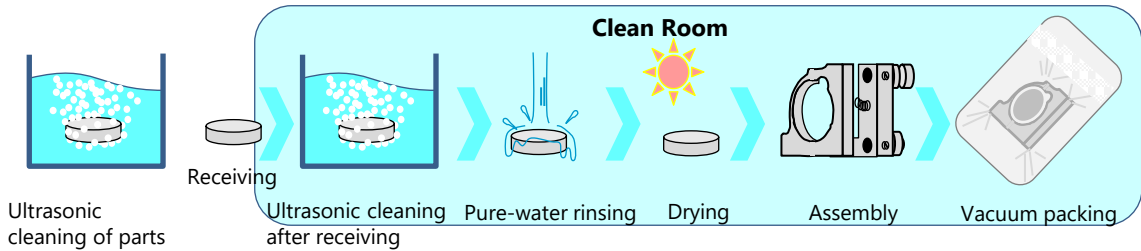
④ **Vacuum-Compatible Grease** Uses BARRIERTA SUPER IS/V



Stainless steel materials such as SUS316 and SUS303 are generally considered non-magnetic; however, they may not be suitable in certain environments where minimizing magnetic influence is critical. To address this, Sigma Koki has developed a proprietary demagnetization technique that enables stainless steel components to achieve magnetic properties comparable to aluminum, while maintaining high rigidity and durability. In addition, we offer high-end products made primarily of titanium, a fully non-magnetic material, which are now available in our catalog lineup. Magnetic properties are tested using our proprietary inspection method. For details, please refer to the "Magnetic Field Measurement" section.

Cleaning

In the ultra-high vacuum, gas adsorbed on the metal surface can be a problem. Stainless steel and aluminum are protected from corrosion by creating an oxide film immediately after processing. However, when oil and water is present on the surface after processing, oxide film can not be generated properly and it may cause outgassing. For this reason, proper cleaning is first carried out for the parts and later for the finished product also.



Packing

Products are assembled in a clean booth and packed in a clean room. Packaging is also different from the normal packaging. It is delivered in a special packing method, and a deterioration of quality which become problematic in a high vacuum environment does not occur.

- Wrap the product with aluminum foil
- Vacuum packing using special bags

It is recommended to unpack the vacuum products inside the clean room or vicinity of the vacuum chamber. If the vacuum product has been left for a long time after unpacking, there is a possibility that quality with respect to the vacuum is degraded.



High-end version - VMHG-NMT Series -

A high-end version of the versatile MHG-type mirror holder is available, featuring titanium components. It is ideal for use in specialized environments such as non-magnetic or vacuum chambers.

Main Components:

Front plate, body, and springs are made of titanium — lighter than stainless steel.

Vacuum-Compatible Grease
(BARRIERA SUPER IS/V)

Internal Bearing:
Uses ceramic balls
(silicon nitride)

Adjustment Mechanism:

Titanium fine-pitch screws (Pitch: 0.25 mm)

※Some small-size screws are made of demagnetized stainless steel.

- MHG-NL Series -

A cost-effective kinematic mirror holder with the same form factor is also available, featuring our original NOMI LOCK™ mechanism.

For applications that do not require use in non-magnetic environments or vacuum chambers, we recommend the MHG-NL Series.

- Compatible Optics Diameter : $\phi 20 - \phi 100\text{mm}$
- Primary material : Aluminum
- Finish : Black Anodized
- Number of Adjustment Axes : 2 Axis or 3 Axis



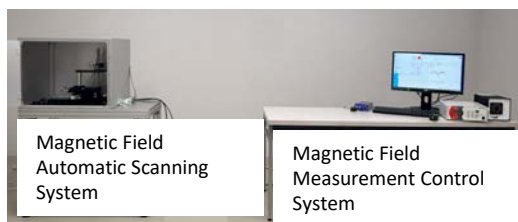
MHG-MP-NL
(Cost-Effective /
2-Axis Type)



MHG-HS-NL
(3-Axis Type)

About Magnetic Field Inspection

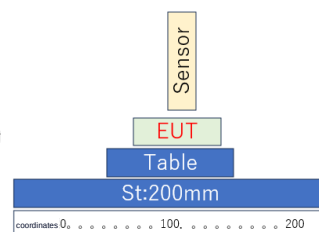
Magnetic field inspection is conducted after the assembly of parts or finished products. A non-contact sensor scans the magnetic field in the XYZ directions of the test object. This enables the measurement of both the magnetic field intensity and its distribution.



■ Magnetic Field Measurement: Magnetic field sensor

■ Measurement System:
Automatic stage with non-contact scanning
Maximum measurement range: 200 mm

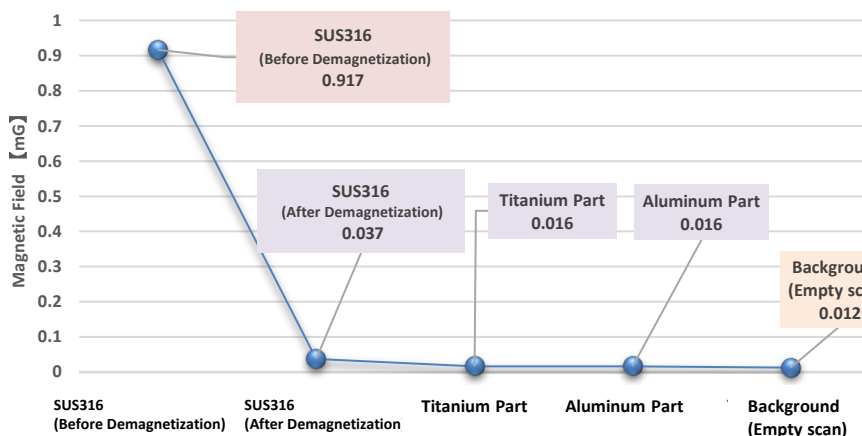
■ Measurement Method:
To cancel out the magnetic field generated by system itself, two measurements are taken: one without the test object, and one with the test object placed. The difference between these two readings is used to evaluate the magnetic field of the test object.



Reference Data – Magnetic Field Measurement

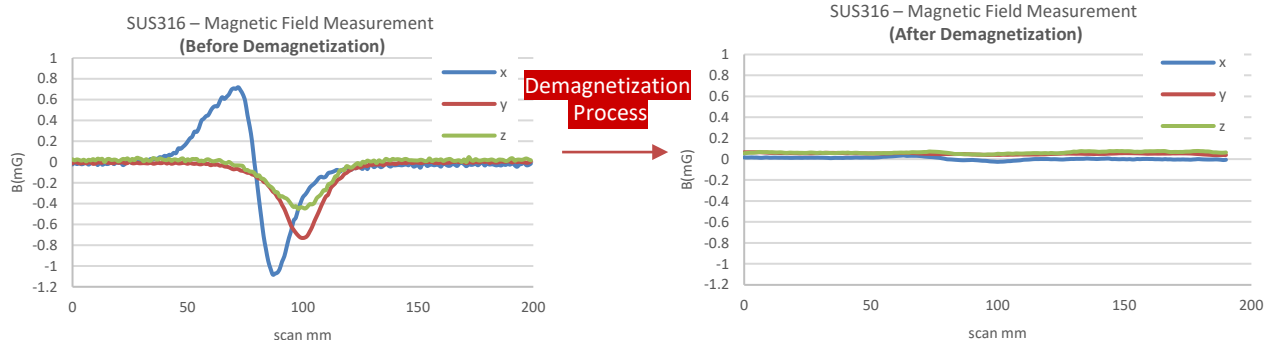
The graph below shows the magnetic field (residual magnetism) measurements for various metal parts, including SUS316. This reference data allows evaluation of the effectiveness of demagnetization, comparison with other materials, and the background (empty scan) magnetic field level.

Magnetic Field Measurement Example

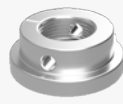
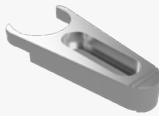


After demagnetization, SUS316 exhibits magnetic field levels comparable to those of titanium and aluminum parts—essentially close to zero.

Even when compared to the background noise level of the measurement system, the magnetic field of demagnetized SUS316 is nearly the same, demonstrating that the demagnetization process is highly effective.



Non-Magnetic Vacuum-Compatible Product Lineup

VMHG-NM  Non-Magnetic Vacuum-Compatible Mirror Mount	VMHG-NMT  Non-Magnetic Vacuum-Compatible Mirror Mount (Titanium)	VMHV-NM  Non-Magnetic Vacuum-Compatible Vertical Control Mirror Mount	VTASB-NM  Non-Magnetic Vacuum-Compatible X Axis Preset Dovetail Translation Stages - Footprints
VRO-NM  Non-Magnetic Vacuum-Compatible Posts	VRS-NM  Non-Magnetic Vacuum-Compatible Post Holders	VPST-NM  Non-Magnetic Vacuum-Compatible Pedestal Bases	VPSM-NM  Non-Magnetic Vacuum-Compatible Post Stand (M16)
VPSCS-NM  Non-Magnetic Vacuum-Compatible Pedestal Bases	VBSP-NM  Non-Magnetic Vacuum-Compatible Base Plates	VCHS-NM  Non-Magnetic Vacuum-Compatible Thread Adapters M4-M6 (Set of 5)	VSC-NM  Non-Magnetic Vacuum-Compatible Dog Point Set Screws (Set of 5)

Custom Orders

For non-magnetic customization of products not listed in the web catalog, please contact our sales department. We also accept individual custom requests for either non-magnetic or vacuum-compatible specifications.

Non-Magnetic Vacuum-Compatible Product		Vacuum-Compatible Product		Custom Orders
Product Name	Series Part Number	Product Name	Series Part Number	Non-magnetic only
Non-Magnetic Vacuum-Compatible Mirror Mount	VMHG-NM	Vacuum-Compatible Mirror Mount	VMHG	Custom orders available
Non-Magnetic Vacuum-Compatible Mirror Mount (Titanium)	VMHG-NMT	—	—	Custom orders available
Non-Magnetic Vacuum-Compatible Vertical Control Mirror Mount	VMHV-NM	—	Custom Orders	Custom orders available
Non-Magnetic Vacuum-Compatible X Axis Preset Dovetail Translation Stages - Footprints	VTASB-NM	—	Custom Orders	Custom orders available
Non-Magnetic Vacuum-Compatible Posts	VRO-NM	Vacuum-Compatible Posts	VRO	Custom orders available
Non-Magnetic Vacuum-Compatible Post Holders	VRS-NM	Vacuum-Compatible Post Holders	VRS	Custom orders available
Non-Magnetic Vacuum-Compatible Pedestal Bases	VPST-NM	Vacuum-Compatible Pedestal Bases	VPST	Custom orders available
Non-Magnetic Vacuum-Compatible Post Stand (M16)	VPSM-NM	Vacuum-Compatible Post Stand (M16)	VPSM	Custom orders available
Non-Magnetic Vacuum-Compatible Pedestal Bases	VPSCS-NM	Vacuum-Compatible Pedestal Bases	VPSCS	Custom orders available
Non-Magnetic Vacuum-Compatible Base Plates	VBSP-NM	Vacuum-Compatible Base Plates	VBSP	Custom orders available
Non-Magnetic Vacuum-Compatible Thread Adapters M4-M6 (Set of 5)	VCHS-NM	Vacuum-Compatible Thread Adapters M4-M6 (Set of 5)	VCHS	Custom orders available
Non-Magnetic Vacuum-Compatible Dog Point Set Screws (Set of 5)	VSC-NM	Vacuum-Compatible Dog Point Set Screws (Set of 5)	VSC	Custom orders available

Non-Magnetic Vacuum-Compatible Mirror Mount

VMHG-NM/NMT

RoHS

Catalog Code

W4162

These products offer both non-magnetic and vacuum-compatible performance.

They are designed using non-magnetic materials that minimize the effects of magnetic fields and feature a low outgassing design suitable for use in vacuum environments. Ideal for use in magnetic-sensitive experiments and inside vacuum chambers.

- **NM Series:**
Products made with ultra-low magnetic stainless steel (SUS316L), ceramic balls, and titanium components. These materials have undergone our proprietary demagnetization process.
- **NMT Series:**
High-end models using titanium as the primary material, offering full non-magnetic properties and reduced weight.
- Vacuum-compatible designs with vent holes and groove machining help suppress outgassing. These products are engineered with vacuum use in mind, from material selection to cleaning and packaging.
- Moving parts are lubricated with BARRIERTA SUPER IS/V grease, known for its low outgassing performance.
- No adhesives are used in these products.
- For some models (excluding VMHG-12.7-NM(T)), remote-control-compatible piezo drive motors from the VPDM-NM series are also available as non-magnetic vacuum-compatible options. Please contact our sales department for details.



VMHG-NM

VMHG-NMT

Guide

- Each product undergoes magnetic field characteristic inspection and is vacuum-packed under high cleanliness conditions prior to shipment.
- Please use the included titanium hex wrench for element mounting and fine adjustments.
- Non-magnetic, vacuum-compatible Pedestal Bases (VPST-NM) and Posts (VRO-NM) are available. These can be mounted using the included titanium screws.
- Custom non-magnetic specifications are also available upon request.
- Vacuum-compatible versions of the VMHG series (VMHG-12.7 / -25.4) are also available separately.
- For custom specifications tailored to your needs, please contact our Sales Division

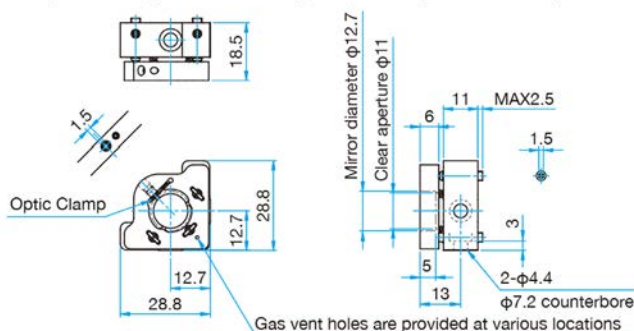
Attention

- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Specifications				
Part Number	VMHG-12.7-NM	VMHG-12.7-NMT	VMHG-25.4-NM	VMHG-25.4-NMT
Primary material	Stainless steel (SUS316L)	Titanium	Stainless steel (SUS316L)	Titanium
Finish	None	None	None	None
Optical Axis Height [mm]	12.7	12.7	25.4	25.4
Compatible Optics Diameter [mm]	φ12.7	φ12.7	φ25.4, φ25	φ25.4, φ25
Compatible Optics Thickness [mm]	3 - 7	3 - 7	3 - 10	3 - 10
Clear aperture [mm]	φ11	φ11	φ22.4	φ22.4
Number of Adjustment Axes	2	2	2	2
Adjustment Screw [mm]	M3×0.25	M3×0.25	M6×0.25	M6×0.25
Adjustment Range	Tilt [°]	±3	±3	±3
	Rotation [°]	±3	±3	±3
Resolution	Tilt [°/rotation]	About 0.3	About 0.39	About 0.39
	Rotation [°/rotation]	About 0.3	About 0.39	About 0.39
Magnetic Field (Reference) [mG]	0.1	0.1	0.2	0.1
Weight [kg]	0.05	0.03	0.22	0.12

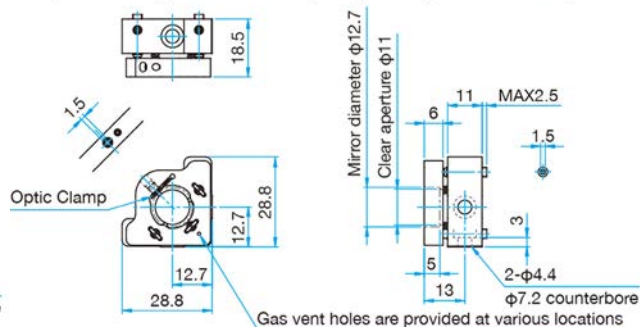
VMHG-12.7-NM

- Titanium hexagon socket head cap screws M4×8...1 screws
- Titanium hexagonal wrench 1.5mm...1 piece
- (for mounting elements and adjusting fine adjustment screws)



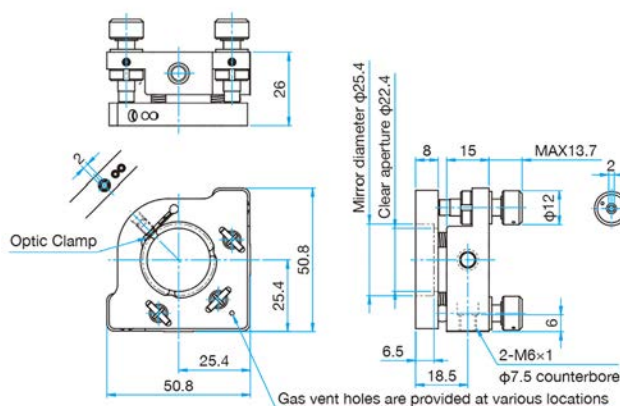
VMHG-12.7-NMT

- Titanium hexagon socket head cap screws M4×8...1 screws
- Titanium hexagonal wrench 1.5mm...1 piece
- (for mounting elements and adjusting fine adjustment screws)



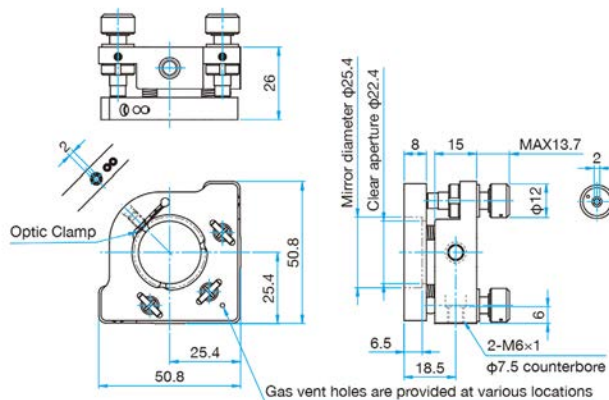
VMHG-25.4-NM

- Titanium hexagon socket head cap screws M4×10...1 screws
- Titanium hexagonal wrench 2mm...1 piece
- (for mounting elements and adjusting fine adjustment screws)



VMHG-25.4NMT

- Titanium hexagon socket head cap screws M4×10...1 screws
- Titanium hexagonal wrench 2mm...1 piece
- (for mounting elements and adjusting fine adjustment screws)



Non-Magnetic Vacuum-Compatible Vertical Control Mirror Mount

VMHV-NM

RoHS

Catalog
Code

W4163

These products offer both non-magnetic and vacuum-compatible performance.

This kinematic mirror mount is designed for use in environments where magnetic interference must be avoided. It features non-magnetic materials and a low-outgassing specification, making it suitable for use in vacuum conditions. Ideal for experimental systems sensitive to magnetism or for use inside vacuum chambers.

- **NM Series:**
Products made with ultra-low magnetic stainless steel (SUS316L), ceramic balls, and titanium components. These materials have undergone our proprietary demagnetization process.
- Designed for vacuum compatibility, including material selection, cleaning, and packaging, to ensure suitability for vacuum environments.
- Sliding components use BARRIERA SUPER IS/V grease, which offers low outgassing and excellent vacuum compatibility.
- No adhesives are used in these products.
- MHV-L-F allows the mirror to be inserted from the front of the frame, whereas MHV-L-R enables insertion from the rear side of the mirror mount.
- Both types include a hole for mirror bonding, an anti-rotation structure for installation, and positioning pin holes.



Guide

- Each product is tested for magnetic characteristics and delivered in vacuum packaging to ensure high cleanliness.
- For installation or fine adjustment, please use the included titanium hex wrench.
- Non-magnetic, vacuum-compatible Pedestal Bases (VPST-NM) and Posts (VRO-NM) are available. These can be mounted using the included titanium screws.
- We also accept custom requests for non-magnetic and vacuum-compatible specifications.

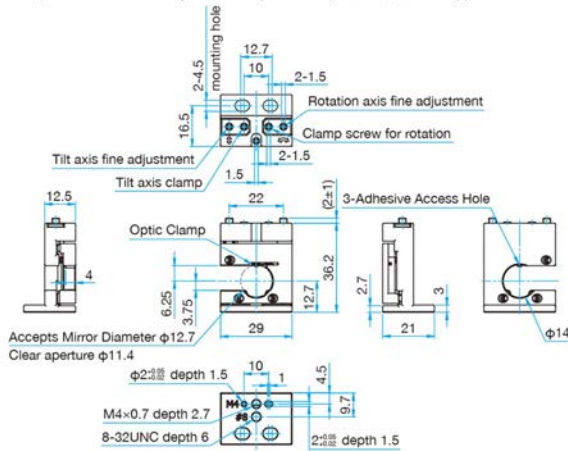
Attention

- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Specifications					
Part Number		VMHV-12.7L-F-NM	VMHV-12.7L-R-NM	VMHV-25.4L-F-NM	VMHV-25.4L-R-NM
Primary material		Stainless (SUS316L)	Stainless (SUS316L)	Stainless (SUS316L)	Stainless (SUS316L)
Finish		None	None	None	None
Optical Axis Height [mm]		12.7	12.7	25.4	25.4
Compatible Optics Diameter [mm]		φ12.7	φ12.7	φ25.4, φ25	φ25.4, φ25
Compatible Optics Thickness [mm]		2 - 7	2 - 7	3 - 7	3 - 7
Clear aperture [mm]		φ11.4	φ11.4	φ23	φ23
Number of Adjustment Axes		2	2	2	2
Adjustment Screw [mm]		M3×0.25	M3×0.25	M4×0.25	M4×0.25
Adjustment Range	Tilt [°]	±2°	±2°	±1.5°	±1.5°
	Rotation [°]	±2°	±2°	±1.5°	±1.5°
Resolution	Tilt [°/rotation]	About 0.7	About 0.7	About 0.37	About 0.37
	Rotation [°/rotation]	About 0.65	About 0.65	About 0.38	About 0.38
Magnetic Field (Reference) [mG]		0.1	0.1	0.1	0.1
Weight [kg]		0.064	0.064	0.16	0.16

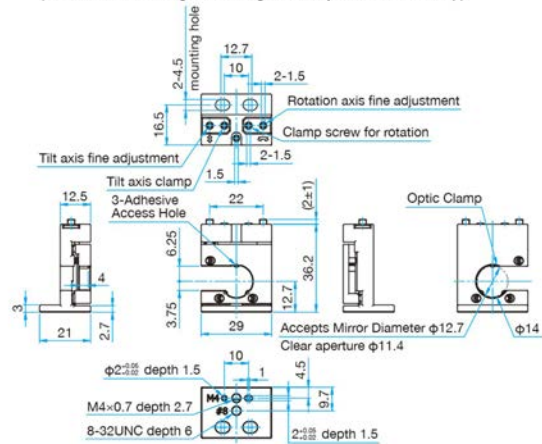
VMHV-12.7L-F-NM

- Titanium hexagon socket head cap screws M4×8...2 screws
- Titanium hexagonal wrench 1.5mm...1 piece
- (For element mounting, fine-tuning screw adjustment, and clamp)



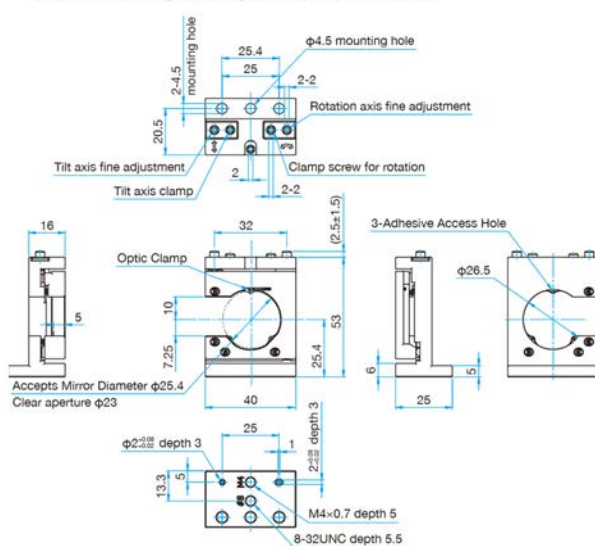
VMHV-12.7L-R-NM

- Titanium hexagon socket head cap screws M4×8...2 screws
- Titanium hexagonal wrench 1.5mm...1 piece
- (For element mounting, fine-tuning screw adjustment, and clamp)



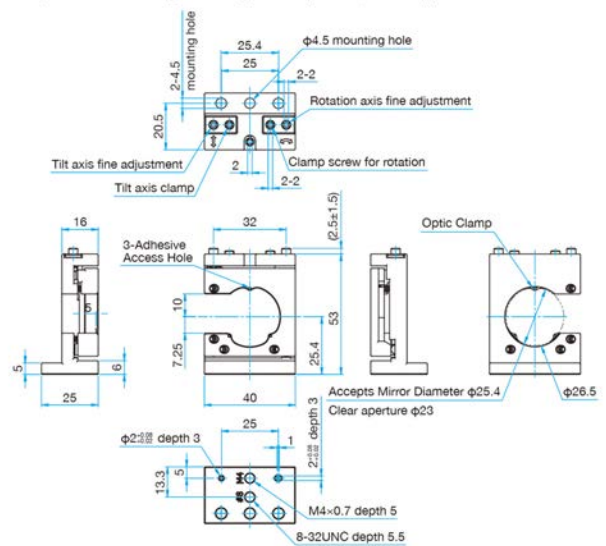
VMHV-25.4L-F-NM

- Titanium hexagon socket head cap screws M4×10...3 screws
- Titanium hexagonal wrench 2mm...1 piece
- (For element mounting, fine-tuning screw adjustment, and clamp)



VMHV-25.4L-R-NM

- Titanium hexagon socket head cap screws M4×10...3 screws
- Titanium hexagonal wrench 2mm...1 piece
- (For element mounting, fine-tuning screw adjustment, and clamp)



These products offer both non-magnetic and vacuum-compatible performance.

This product is made of non-magnetic materials suitable for environments that require avoidance of magnetic interference and features a low-outgassing design that allows use in vacuum environments.

Additionally, it is a block stage with a dovetail guide and screw-driven adjustment mechanism, ideal for integration into equipment.

- **NM Series:**
 - These products use ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.
 - Designed for vacuum use, the components suppress outgassing through venting holes and grooving. From material selection to cleaning and packaging, the design is optimized for vacuum compatibility.
 - BARRIER TA SUPER IS/V grease, known for its excellent vacuum compatibility and low outgassing properties, is used for sliding parts.
 - No adhesives are used in these products.
 - The block-type structure, which minimizes protrusions such as knobs and adjustment screws, reduces installation space.

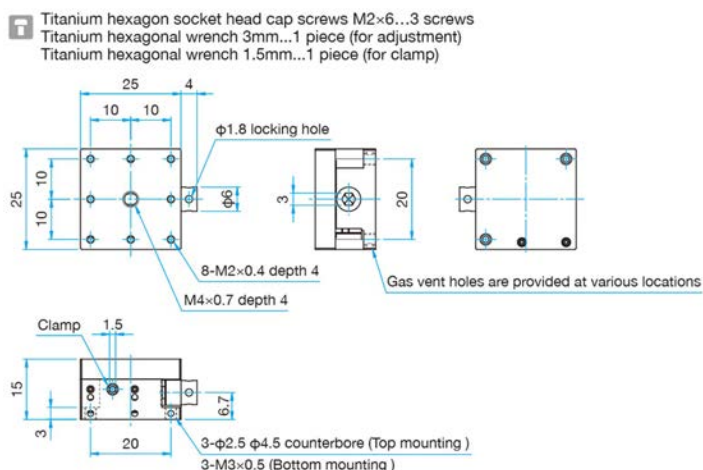


- Guide
- After inspecting the magnetic properties of the product, it is packaged in a vacuum-sealed container to maintain a high level of cleanliness.
 - For adjustment or clamp operation, please use the included titanium hex wrench.
 - The included screws are also made of titanium.
 - We also accept custom requests for non-magnetic and vacuum-compatible specifications.

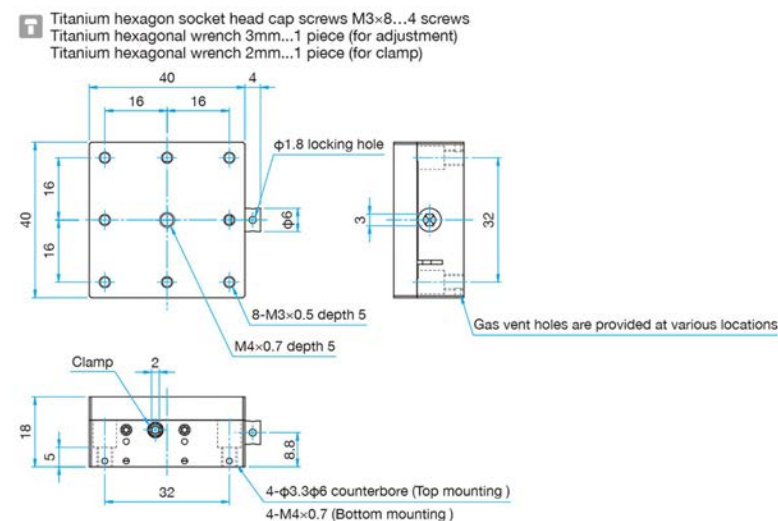
- Attention
- Avoid storing or using the product near strong magnetic fields.
 - To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
 - When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Specifications				
Part Number		VTASB-251-NM	VTASB-401-NM	VTASB-601-NM
Primary material		Stainless (SUS316L)	Stainless (SUS316L)	Stainless (SUS316L)
Finish		None	None	None
Stage Size [mm]		25×25	40×40	60×60
Travel [mm]		±3	±7	±10
Screw Pitch [mm]		0.5	0.5	0.5
Guide Method		Dovetail method	Dovetail method	Dovetail method
Load Capacity [N]		49 (5.0kgf)	98 (10.0kgf)	147 (15.0kgf)
Travel Accuracy	Straightness [μm]	10	10	10
	Pitch [N · m]	2	4	5.1
	Yaw [N · m]	1	3	4
	Roll [N · m]	2	3.75	5.1
Moment Stiffness	Pitch ["/N · cm]	2	0.61	0.4
	Roll ["/N · cm]	1.5	0.51	0.3
Parallelism [μm]		50	50	50
Magnetic Field (Reference) [mG]		0.1	0.2	0.3
Weight [kg]		0.062	0.2	0.5

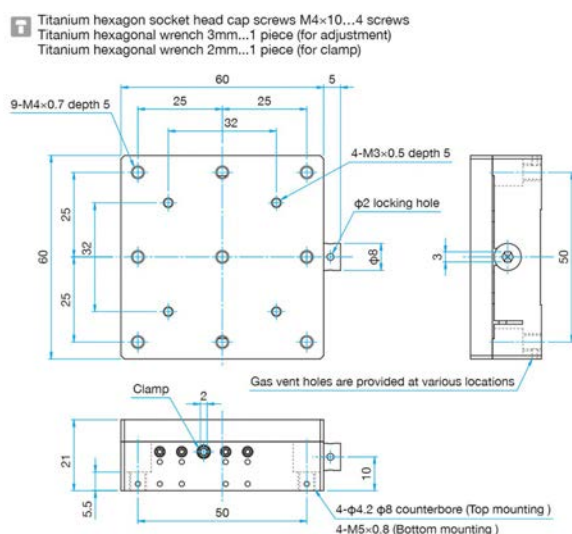
VTASB-251-NM



VTASB-401-NM



VTASB-601-NM



Non-Magnetic Vacuum-Compatible Posts

VRO-NM

RoHS

Catalog Code

W6121

These products offer both non-magnetic and vacuum-compatible performance.

This product is made of non-magnetic materials suitable for environments that require avoidance of magnetic interference and features a low-outgassing design that allows use in vacuum environments.

This post features a low outgassing design suitable for vacuum environments and a stackable structure that allows for various lengths.

- **NM Series:** Products made with ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.
- Designed for vacuum compatibility, these products suppress outgassing through gas venting holes and grooving. They are suitable for use in vacuum environments from material selection to cleaning and packaging.
- Uses M6 and M4 male threads, allowing for extension using non-magnetic, vacuum-compatible screws (VSC-NM / VCHS-NM).



Guide

- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
- When combined with non-magnetic, vacuum-compatible post stands (VRS-12-NM series), it is possible to adjust the optical axis height of the mount.
- By using non-magnetic, vacuum-compatible screws (VSC-NM / VCHS-NM), the mount can be secured with either M6 or M4 screws.
- Vacuum-compatible post (VRO-12-**) are also available separately.
- Custom specifications for non-magnetic and vacuum compatibility are available. Please contact our Sales Division for further information.

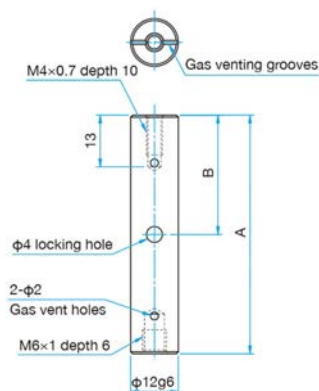
Attention

- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Outline Drawing

(Alt : mm)

VRO-12-**-NM



Part Number	A (mm)	B (mm)
VRO-12-30-NM	30	15
VRO-12-40-NM	40	20
VRO-12-60-NM	60	30
VRO-12-80-NM	80	40
VRO-12-100-NM	100	50

Specifications

Part Number	VRO-12-30-NM	VRO-12-40-NM	VRO-12-60-NM	VRO-12-80-NM	VRO-12-100-NM
Primary material	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)
Finish	None	None	None	None	None
Length A [mm]	30	40	60	80	100
B [mm]	15	20	30	40	50
Magnetic Field (Reference) [mG]	0.1	0.1	0.1	0.1	0.1
Weight [kg]	0.026	0.033	0.049	0.066	0.096

Non-Magnetic Vacuum-Compatible Post Holders

VRS-NM

RoHS

Catalog Code

W6122

These products offer both non-magnetic and vacuum-compatible performance.

This kinematic mirror mount is designed for use in environments where magnetic interference must be avoided. It features non-magnetic materials and a low-outgassing specification, making it suitable for use in vacuum conditions. This stand is designed to adjust the optical axis height of various mounts attached to the low outgassing, non-magnetic vacuum post (VRO-NM), which is compatible with use in vacuum environments.

- **NM Series:**
- These products use ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.
- The vacuum-compatible design suppresses outgassing by incorporating vent holes and grooving. From material selection to cleaning and packaging, all processes are carried out under specifications suitable for vacuum environments.
- By loosening the height-fixing clamp of the post holders, the protruding length of the post can be adjusted. Additionally, a middle ring is included to prevent the post from falling, allowing the holder to be rotated around the post's center without changing the optical axis height.

Guide

- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
- Please use in combination with the separately available non-magnetic vacuum-compatible rods (VRO-12--NM).
- Vacuum Post Holders (VRS-12 Series) are also available separately.
- Custom specifications for non-magnetic and vacuum compatibility are available. Please contact our Sales Division for further information.

Attention

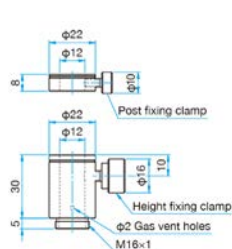
- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.



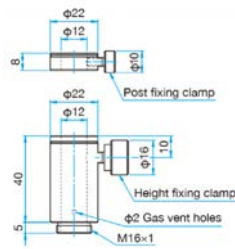
Outline Drawing

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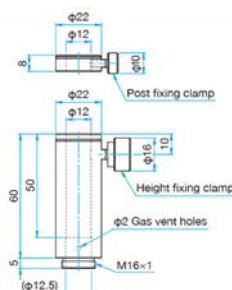
VRS-12-30-NM



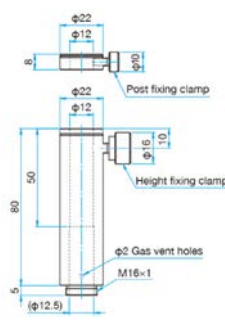
VRS-12-40-NM



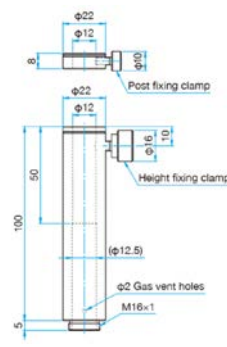
VRS-12-60-NM



VRS-12-80-NM



VRS-12-100-NM



Specifications

Part Number	VRS-12-30-NM	VRS-12-40-NM	VRS-12-60-NM	VRS-12-80-NM	VRS-12-100-NM
Primary material	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)
Finish	None	None	None	None	None
Height [mm]	30	40	60	80	100
Applicable rod diameter[mm]	φ12	φ12	φ12	φ12	φ12
Magnetic Field (Reference) [mG]	0.1	0.1	0.1	0.1	0.1
Weight [kg]	0.1	0.12	0.16	0.21	0.25

Non-Magnetic Vacuum-Compatible Pedestal Bases

VPST-NM

RoHS

Catalog
Code

W6123

These products offer both non-magnetic and vacuum-compatible performance.

This kinematic mirror mount is designed for use in environments where magnetic interference must be avoided. It features non-magnetic materials and a low-outgassing specification, making it suitable for use in vacuum conditions.

This is a low outgassing post stand designed for use in vacuum environments, ideal for mounting non-magnetic vacuum-compatible mirror mounts (VMHG-NM(T), VMHV-12.7-NM).

- NM Series:**

These products use ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.

- The vacuum-compatible design suppresses outgassing by incorporating vent holes and grooving. From material selection to cleaning and packaging, all processes are carried out under specifications suitable for vacuum environments.



Guide

- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
- By combining with the non-magnetic vacuum-compatible post clamp (VPSCS-11.5-NM), the unit can be fixed at any desired position.
- Optional non-magnetic vacuum-compatible screws (VSC-NM / VCHS-NM) are available for fixing mounts with M6 or M4 threads.
- Vacuum-compatible versions (VPST series) are also available separately.
- We also support non-magnetic only specifications. Custom designs based on your specific requirements are also available. Please contact our Sales Division.

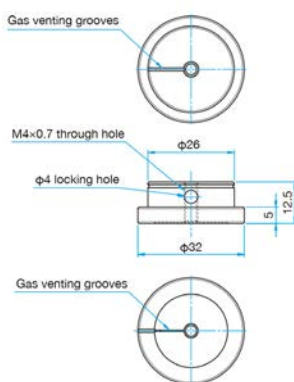
Attention

- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

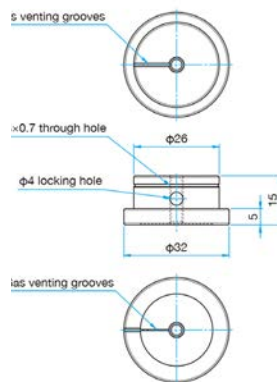
Outline Drawing

(Alt : mm)

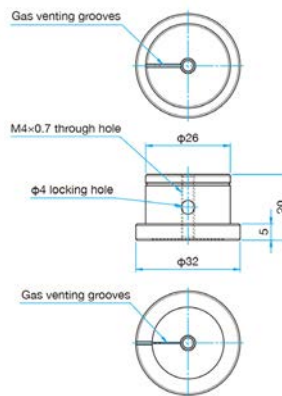
VPST-12.5-NM



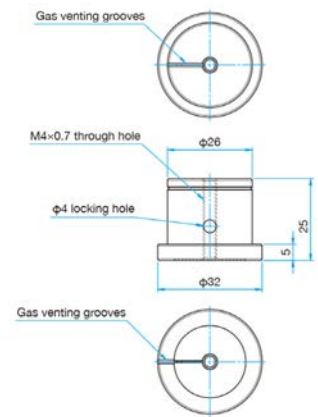
VPST-15-NM



VPST-20-NM



VPST-25-NM



Specifications

Part Number	VPST-12.5-NM	VPST-15-NM	VPST-20-NM	VPST-25-NM
Primary material	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)
Finish	None	None	None	None
Height [mm]	12.5	15	20	25
Magnetic Field (Reference) [mG]	0.4	0.4	0.4	0.4
Weight [kg]	0.065	0.07	0.08	0.1



Tokyo Head Office
5F, SIGMA KOKI Tokyo Head office 1-19-9,

Osaka Branch
4-9-28 Nishi-Nakajima,

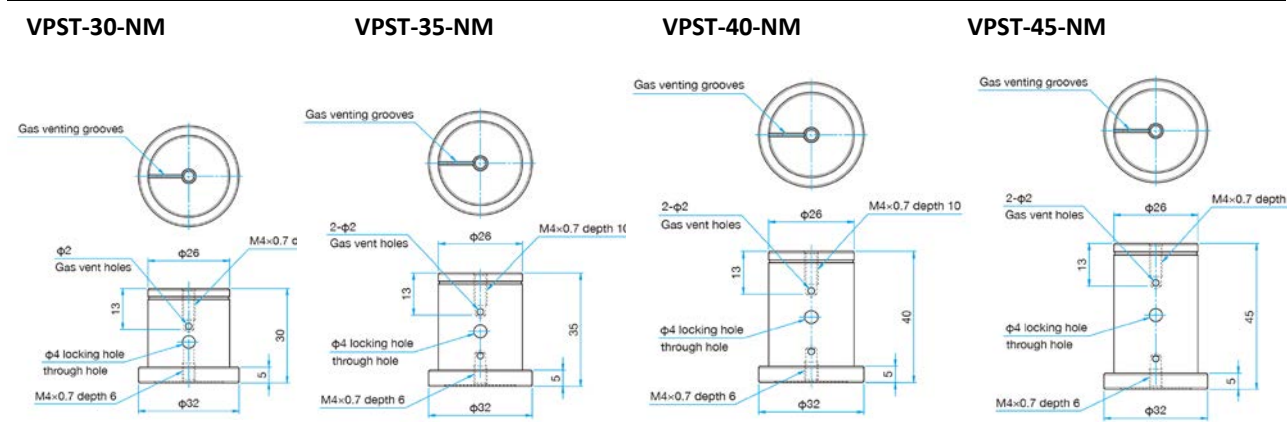
Kyushu Sales Office
1-17-25 Hakata-eki-higashi, Hakata-ku,

INTERLAB Sp. z o.o. | Instrumenty badawcze i pomiarowe

Kosiarzy 37 paw. 20, 02-953 Warszawa | +48 22 840 81 80 | interlab@interlab.pl | interlab.pl

Outline Drawing

(Alt : mm)



Specifications				
Part Number	VPST-30-NM	VPST-35-NM	VPST-40-NM	VPST-45-NM
Primary material	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)	Stainless steel (SUS316L)
Finish	None	None	None	None
Height [mm]	30	35	40	45
Magnetic Field (Reference) [mG]	0.4	0.4	0.4	0.4
Weight [kg]	0.12	0.15	0.17	0.19

Non-Magnetic Vacuum-Compatible Post Stand (M16)

VPSM-NM

RoHS

Catalog Code W6124

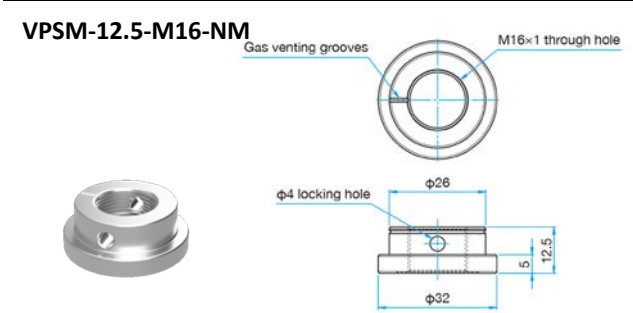
These products offer both non-magnetic and vacuum-compatible performance.

This kinematic mirror mount is designed for use in environments where magnetic interference must be avoided. It features non-magnetic materials and a low-outgassing specification, making it suitable for use in vacuum conditions. This is a low outgassing post stand designed for use in vacuum environments, ideal for mounting non-magnetic vacuum-compatible post holders (VRS-NM).

- **NM Series:**
These products use ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.
- The vacuum-compatible design suppresses outgassing by incorporating vent holes and grooving. From material selection to cleaning and packaging, all processes are carried out under specifications suitable for vacuum environments.

Outline Drawing

(Alt : mm)



Specifications	
Part Number	VPSM-12.5-M16-NM
Primary material	Stainless steel (SUS316L)
Finish	None
Magnetic Field (Reference) [mG]	0.2
Weight [kg]	0.065

- Guide
- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
 - By combining with Non-Magnetic Vacuum-Compatible Pedestal Bases (VPSCS-NM), the unit can be fixed at any desired position.
 - It can also be connected to Non-Magnetic Vacuum-Compatible Post Holders (VRS-12-NM), which are sold separately.
 - Vacuum-compatible models (VPSM-12.5-M16) are also available.
 - We also support non-magnetic only specifications and offer custom-made products based on your requirements. Please contact our Sales Division.

- Attention
- Avoid storing or using the product near strong magnetic fields.
 - To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
 - When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Non-Magnetic Vacuum-Compatible Pedestal Bases

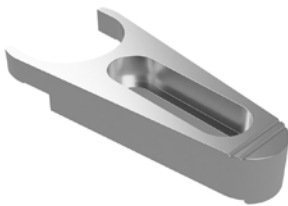
VPSCS-11.5-NM   W6124

These products offer both non-magnetic and vacuum-compatible performance.

This kinematic mirror mount is designed for use in environments where magnetic interference must be avoided. It features non-magnetic materials and a low-outgassing specification, making it suitable for use in vacuum conditions.

This is a low outgassing post clamp designed for use in vacuum environments. It serves as a clamping component to secure non-magnetic, vacuum-compatible post stands to breadboards or similar setups.

- **NM Series:**
These products use ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.
- The vacuum-compatible design suppresses outgassing by incorporating vent holes and grooving. From material selection to cleaning and packaging, all processes are carried out under specifications suitable for vacuum environments.
- The elongated slot design allows the post clamp to be fixed at any desired position. By tightening the screw, the mechanism uses the principle of leverage to securely press the post stand against the breadboard for firm fixation.

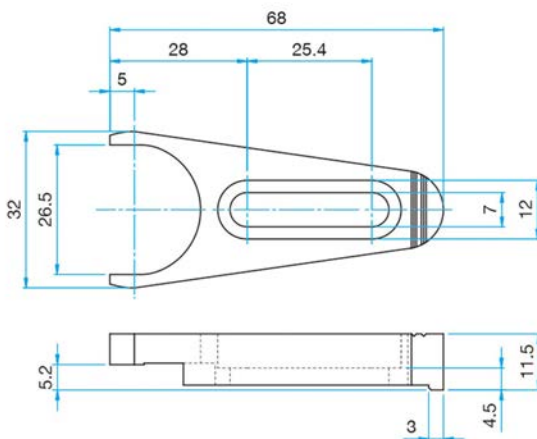


Outline Drawing

(Alt : mm)

VPSCS-11.5-NM

- Hexagon socket head cap screws with built-in titanium washers
M6×12...1 screws
- Titanium flat washers (flat washers)...1 screws



Guide

- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
- Please install using the included titanium hex socket head bolt with flat washer.
- A vacuum-compatible version (VPSCS-11.5) is also available.
- Non-magnetic-only versions are also available upon request. Custom designs tailored to your specifications are available. Please contact our Sales Division.

Attention

- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Specifications	
Part Number	VPSCS-11.5-NM
Primary material	Stainless steel (SUS316L)
Finish	None
Magnetic Field (Reference) [mG]	0.1
Weight [kg]	0.062

Non-Magnetic Vacuum-Compatible Base Plates

VBSP-NM

RoHS

Catalog
Code

W6125

These products offer both non-magnetic and vacuum-compatible performance.

This kinematic mirror mount is designed for use in environments where magnetic interference must be avoided. It features non-magnetic materials and a low-outgassing specification, making it suitable for use in vacuum conditions.

This is a low outgassing base plate designed for use in vacuum environments, used to mount non-magnetic vacuum-compatible post stands and stages onto a breadboard.

- **NM Series:**
These products use ultra-low magnetic stainless steel (SUS316L) that has undergone our proprietary demagnetization process.
- The vacuum-compatible design suppresses outgassing by incorporating vent holes and grooving. From material selection to cleaning and packaging, all processes are carried out under specifications suitable for vacuum environments.
- This is a low outgassing base plate designed for use in vacuum environments, used to secure non-magnetic vacuum-compatible post stands and stages onto a breadboard.



Guide

- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
- Please use the included titanium cap screws with integrated washers for installation.
- This base plate can be used to secure non-magnetic vacuum-compatible post stands (VRS-NM series) and non-magnetic vacuum-compatible stages (VTASB-251/-401-NM).
- Vacuum-compatible models (VBSP-2460 / VBSP-40100) are also available.
- We also accept requests for non-magnetic-only models and custom designs tailored to your specifications. Please contact our Sales Division.

Attention

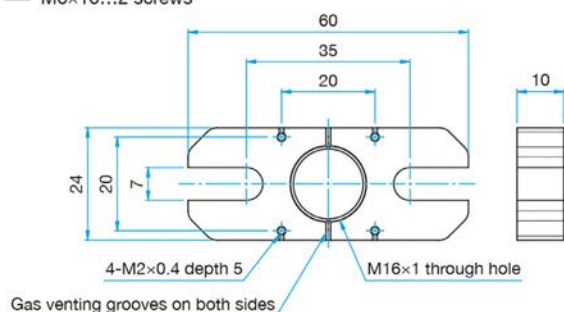
- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

Outline Drawing

(Alt : mm)

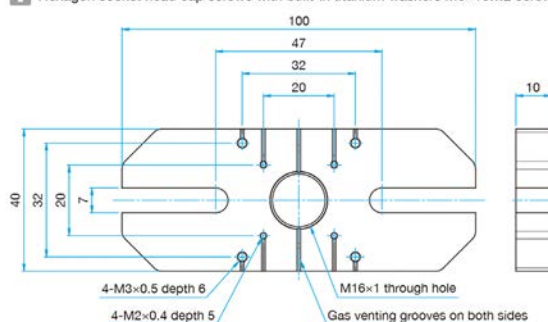
VBSP-2460-NM

 Hexagon socket head cap screws with built-in titanium washers M6×16...2 screws



VBSP-40100-NM

 Hexagon socket head cap screws with built-in titanium washers M6×16...2 screws



Specifications

Part Number	VBSP-2460-NM	VBSP-40100-NM
Primary material	Stainless steel (SUS316L)	Stainless steel (SUS316L)
Finish	None	None
Magnetic Field (Reference) [mG]	0.1	0.2
Weight [kg]	0.062	0.26

Non-Magnetic Vacuum-Compatible Screw Set

VCHS-NM/VSC-NM
RoHS
**Catalog
Code**
W6126

Stainless Steel Replacement Screws for Non-Magnetic Vacuum-Compatible Post Stands and Rods.

- **NM Series:**
The main components are made of ultra-low magnetic stainless steel (SUS304) that has undergone our proprietary demagnetization process.
- Designed with vacuum compatibility in mind, from material selection to cleaning and packaging.
- By replacing the screws, you can switch between holders for M6 and M4 mounting.
- Please use together with non-magnetic vacuum-compatible post stands (VPST-NM) or non-magnetic vacuum-compatible rods (VRO-NM).



Guide

- Products are inspected for magnetic properties and packaged in vacuum-sealed containers to maintain a high level of cleanliness.
- Vacuum-compatible models (VCHS-M6-M4-9 / VSC-M4-18EE) are also available.
- Non-magnetic specifications only are also supported.

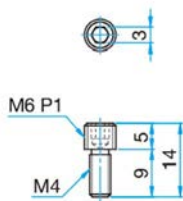
Attention

- The screw does not have a through-hole. Please use it with vacuum-compatible post stands or rods.
- Avoid storing or using the product near strong magnetic fields.
- To prevent attachment of magnetic particles or metal powders, handle the product in a clean environment.
- When opening the vacuum packaging, do so in a cleanroom environment and avoid touching the product directly with bare hands.

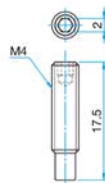
Outline Drawing

(Alt : mm)

VCHS-M6-M4-9-NM



VSC-M4-18EE-NM

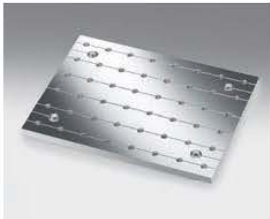


Specifications

Part Number	VCHS-M6-M4-9-NM	VSC-M4-18EE-NM
Primary material	Stainless steel (SUS304)	Stainless steel (SUS304)
Finish	None	None
Screw Type	M6-M4 Thread Adapters	M4 Straight
Quantity [Pieces]	5	5
Magnetic Field (Reference) [mG]	0.1	0.1
Weight [kg]	0.009	0.008

Vacuum-Compatible Products

We offer a wide range of vacuum-compatible products.

Vacuum Pedestal Base VPST/VPSM RoHS Catalog Code W6108 	Vacuum Pedestal Clamps VPSCS RoHS Catalog Code W6104 	Vacuum Posts VRO RoHS Catalog Code W6107 	Vacuum Pedestal Spacer VPS-SP RoHS Catalog Code W6109 
Vacuum Post Holders VRS RoHS Catalog Code W6100 	Vacuum Stand Base VRCA RoHS Catalog Code W6106 	Vacuum Stand Clamps VRC RoHS Catalog Code W6105 	Vacuum Base Plate VBSP RoHS Catalog Code W6101 
Vacuum Base Clamps VBSC RoHS Catalog Code W6103 	Vacuum Optical Baseplates VOBC RoHS Catalog Code W6102 	Vacuum Dog Point Set Screws / Vacuum Thread Adapters VSC/VCHS RoHS Catalog Code W6110 	SDC® Clean bolt (Gas vent hole drilling) Hexagon socket head cap screw (Silver plating treatment) VPCB/VAGB RoHS Catalog Code W6111 

Vacuum mounts are also introduced in more detail in the WEB.

Nut Drivers VNS RoHS Catalog Code W6112 	Vacuum Mirror Holder VMHG RoHS Catalog Code W4150 	Vacuum Lens Holder VLHG RoHS Catalog Code W4151 	Vacuum Iris Diaphragm Holder VIH RoHS Catalog Code W4152 
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