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# Multi-axis lens holders are a convenient way to align a lens an optical axis. Can be used in adjusting the collimating lens for laser applications.

- Five-axis adjustment holder (ALHN-5RO) can adjust lenses for wavefront and intensity distribution.
- To focus a lens, rotate the lens tube with the lever while moving the tube forwards or backwards.
- The centering mechanism is fitted with a nut clamp, and the focus adjustment is fitted with a screw clamp.
- Singlet/doublets up to 28 mm thick can be used.



#### Guide

- ▶ Multi-axis lens hodlers (ALHN-3/ALHN-5) on a basepalte are available. Reference CO43
- X-Y lens holders (LHCM) without a focus adjustment function are also available. Reference C040
- ▶ 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

- ▶ Two spacers are included with these mounts to allow positioning of the lens within the lens tube.
- ▶ When the focal length of lens is long, adjustment does not work effectively because the focus adjustment range is too narrow. In such a case, please use the dovetail stages or optical benches.



[Accessory Spacer]

φ30

φ50

 $\phi 50.8$ 

(mm)

φ22

ф22

Φ27

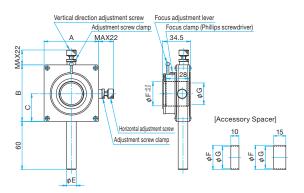
φ46

φ46



### **Outline Drawing**

ALHN-3RO M6 P1



| Part Number   | A<br>(mm) | B<br>(mm) | C<br>(mm) | φE<br>(mm) | φF<br>(mm) | φG<br>(mm) |
|---------------|-----------|-----------|-----------|------------|------------|------------|
| ALHN-25-3RO   | 68        | 70.5      | 34.5      | φ12        | φ25        | φ22        |
| ALHN-25.4-3RO | 68        | 70.5      | 34.5      | φ12        | φ25.4      | φ22        |
| ALHN-30-3RO   | 68        | 70.5      | 34.5      | φ12        | φ30        | φ27        |
| ALHN-50-3RO   | 88        | 91        | 45        | φ20        | φ50        | φ46        |
| ALHN-50.8-3RO | 88        | 91        | 45        | φ20        | φ50.8      | φ46        |

## 

Rotation direction adjustment screw (mm) (mm) (mm) (mm) (mm) (mm) ALHN-25-5RO 54 68 90 74 φ12 φ25 ALHN-25.4-5RO 74 54 φ25.4 68 90 φ12

90

112.7

112.7

68

88

88

Horizontal adjustment screw

54

66.7

66.7

74

94

94

φ12

φ20

φ20

Adjustment screw clamp

Tilt direction adjustment screw

| Three-axis Pos | Primary material: Aluminum<br>Finish: Black Anodized |                                 |  |                                       |   |                                   |                |
|----------------|--|---------------------------------|--|---------------------------------------|---|-----------------------------------|----------------|
| Part Number    | Options specified*                                   | Compatible Optics Diameter [mm] | Compatible Optics<br>Thickness<br>[mm] | Centering Adjustment<br>Range<br>[mm] | Centering Adjustment<br>Resolution<br>[mm/rotation] | Focus<br>Adjustment Range<br>[mm] | Weight<br>[kg] |
| ALHN-25-3RO    | N/EE/UU  | φ25                             | 0 – 28                                 | φ6                                    | 0.25  | ±3                                | 0.31           |
| ALHN-25.4-3RO  | N/EE/UU  | φ25.4                           | 0 – 28                                 | φ6                                    | 0.25  | ±3                                | 0.31           |
| ALHN-30-3RO    | N/EE/UU  | φ30                             | 0 – 28                                 | φ6                                    | 0.25  | ±3                                | 0.31           |
| ALHN-50-3RO    | N/EE/UU  | φ50                             | 0 – 28                                 | φ6                                    | 0.25  | ±3                                | 0.5            |
| ALHN-50.8-3RO  | N/EE/UU  | φ50.8                           | 0 – 28                                 | φ6                                    | 0.25  | ±3                                | 0.5            |

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ALHN-30-5RO

ALHN-50-5RO

ALHN-50.8-5RO

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

| Five-axis Post | Туре               |                                       |                   |               |                          |             |                 |                      |                       | Primary material: Al<br>Finish: Black Anodi |                |
|----------------|--------------------|---------------------------------------|-------------------|---------------|--------------------------|-------------|-----------------|----------------------|-----------------------|---|----------------|
|                | 0-4:               | Compatible Optics Centering Adjustmen |                   | Adjustment    | Tilt Range               |             | Tilt Resolution |                      | Focus                 | 14/-:                                       |                |
| Part Number    | Options specified* | Diameter<br>[mm]                      | Thickness<br>[mm] | Range<br>[mm] | Resolution [mm/rotation] | Tilt<br>[°] | Rotation [°]    | Tilt<br>[°/rotation] | Rotation [°/rotation] | Adjustment Range [mm]                       | Weight<br>[kg] |
| ALHN-25-5RO    | N/EE/UU            | φ25                                   | 0 – 28            | φ6            | 0.25                     | ±4          | ±4              | about 0.5            | about 0.5             | ±3  | 0.46           |
| ALHN-25.4-5RO  | N/EE/UU            | φ25.4                                 | 0 – 28            | φ6            | 0.25                     | ±4          | ±4              | about 0.5            | about 0.5             | ±3  | 0.46           |
| ALHN-30-5RO    | N/EE/UU            | φ30                                   | 0 – 28            | φ6            | 0.25                     | ±4          | ±4              | about 0.5            | about 0.5             | ±3  | 0.46           |
| ALHN-50-5RO    | N/EE/UU            | φ50                                   | 0 – 28            | φ6            | 0.25                     | ±3          | ±3              | about 0.36           | about 0.36            | ±3  | 0.72           |
| ALHN-50.8-5RO  | N/EE/UU            | φ50.8                                 | 0 – 28            | φ6            | 0.25                     | ±3          | ±3              | about 0.36           | about 0.36            | ±3  | 0.72           |

<sup>\*</sup> For specifying options, please refer to "Conversion of Posts, Post Holders and Pedestal Bases of Holders". Reference 2007