

Manual 12-axis (6-axis) Optical Fiber Alignment Stage Unit

Motorized 12-axis (6-axis) Optical Fiber Alignment Stage Unit

DAU-080M

DAU-080A

DAU-080M

Catalog Code W2032

Application Systems

Optics & Optical Coatings

Opto-Mechanics

Bases

Manual Stages

Actuators & Adjusters

Motorized Stages

Light Sources & Laser Safety

Index

Microscope Unit

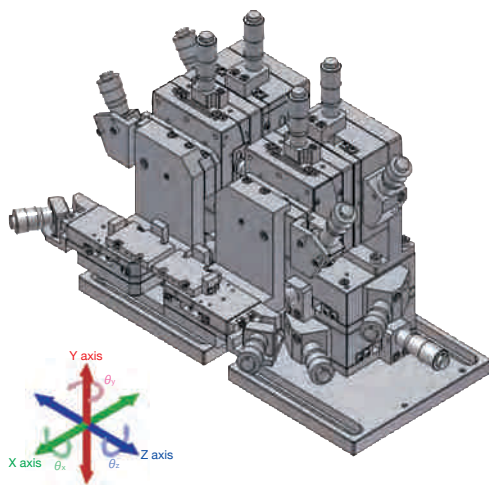
Alignment

Interferometers

Inspection/Observation

Bio-photonics

Laser Processing



Manual 12-axis (6-axis) optical fiber alignment stage units. These units are best suited for alignment of passive devices such as optical waveguide and fiber array.

- Use of high resolution stages enables alignment with high rigidity and high efficiency.
- The magnetic mounting method and the positioning mechanism used in the holders ensure positional repeatability.
- A variety of compatible holders enables application extension associated with device change.
(Fiber holders, fiberrotation holders, fiber array holders, etc.)

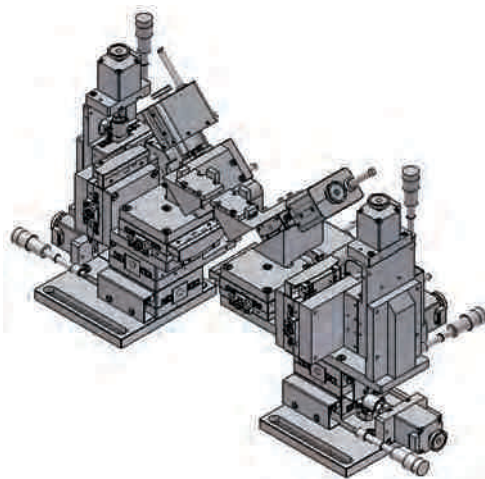
| Part Number | Axis |
|-------------|---------|
| DAU-080M-0 | 12 axes |
| DAU-080M-L | 6 axes |
| DAU-080M-R | 6 axes |

Specifications

| Part Number | Axis | X | Y | Z | θ_x | θ_y | θ_z |
|-------------|------------|---|---|---|-----------------|-----------------|---------------|
| DAU-080M-L | Travel | Coarse: $\pm 6.5\text{mm}$ Fine: $\pm 0.25\text{mm}$ | Coarse: $\pm 6.5\text{mm}$ Fine: $\pm 0.25\text{mm}$ | Coarse: $\pm 6.5\text{mm}$ Fine: $\pm 0.25\text{mm}$ | $\pm 2.5^\circ$ | $\pm 2.5^\circ$ | $\pm 5^\circ$ |
| | Resolution | Coarse: 0.01mm Fine: 0.0005mm | Coarse: 0.01mm Fine: 0.0005mm | Coarse: 0.01mm Fine: 0.0005mm | 27.8" | 27.8" | 26.8" |
| DAU-080M-R | Travel | Coarse: $\pm 6.5\text{mm}$ Fine: $\pm 0.25\text{mm}$ | Coarse: $\pm 6.5\text{mm}$ Fine: $\pm 0.25\text{mm}$ | Coarse: $\pm 6.5\text{mm}$ Fine: $\pm 0.25\text{mm}$ | $\pm 2.5^\circ$ | $\pm 2.5^\circ$ | $\pm 5^\circ$ |
| | Resolution | Coarse: 0.01mm Fine: 0.0005mm | Coarse: 0.01mm Fine: 0.0005mm | Coarse: 0.01mm Fine: 0.0005mm | 27.8" | 27.8" | 26.8" |

DAU-080A

Catalog Code W2033



Motorized 12-axis (6-axis) alignment stage units with six pairs of symmetrical axes. These units are best suited for alignment of passive devices such as optical waveguide and fiber array.

- Use of high resolution stages enables alignment with high rigidity and high efficiency.
- The magnetic mounting method and the positioning mechanism used in the holders ensure positional repeatability.
- A variety of compatible holders enables application extension associated with device change.
(Fiber holders, fiberrotation holders, fiber array holders, etc.)

| Part Number | Axis |
|-------------|---------|
| DAU-080A-0 | 12 axes |
| DAU-080A-L | 6 axes |
| DAU-080A-R | 6 axes |

Specifications

| Part Number | Axis | X | Y | Z | θ_x | θ_y | θ_z | |
|--------------------------|----------------------|------------------|------------------|---------------------|---------------------|-------------------------|-------------------------|------------------------|
| DAU-080A-L | Travel | 30mm | 30mm | 30mm | $\pm 9^\circ$ | $\pm 7^\circ$ | $\pm 5^\circ$ | |
| | Resolution | (Full) | 2 μm | 2 μm | 2 μm | $\approx 0.00229^\circ$ | $\approx 0.00198^\circ$ | $\approx 0.0217^\circ$ |
| | | (Half) | 1 μm | 1 μm | 1 μm | $\approx 0.00115^\circ$ | $\approx 0.00095^\circ$ | $\approx 0.0108^\circ$ |
| | Positioning Accuracy | <6 μm | <6 μm | <6 μm | – | – | – | |
| Positional Repeatability | <1 μm | <1 μm | <1 μm | < $\pm 0.004^\circ$ | < $\pm 0.004^\circ$ | < $\pm 0.004^\circ$ | | |
| DAU-080A-R | Travel | 30mm | 30mm | 30mm | $\pm 9^\circ$ | $\pm 7^\circ$ | $\pm 5^\circ$ | |
| | Resolution | (Full) | 2 μm | 2 μm | 2 μm | $\approx 0.00229^\circ$ | $\approx 0.00198^\circ$ | $\approx 0.0217^\circ$ |
| | | (Half) | 1 μm | 1 μm | 1 μm | $\approx 0.00115^\circ$ | $\approx 0.00095^\circ$ | $\approx 0.0108^\circ$ |
| | Positioning Accuracy | <6 μm | <6 μm | <6 μm | – | – | – | |
| Positional Repeatability | <1 μm | <1 μm | <1 μm | < $\pm 0.004^\circ$ | < $\pm 0.004^\circ$ | < $\pm 0.004^\circ$ | | |

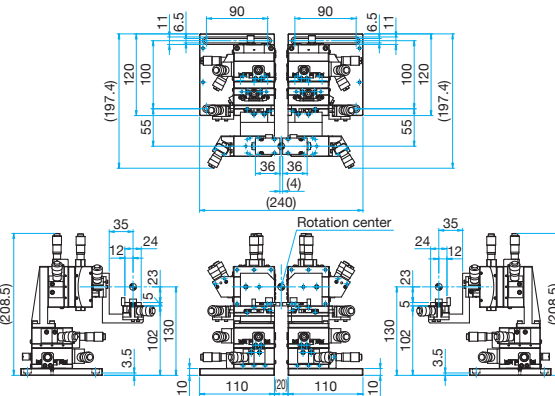
Motorized 3-axis XYθ Stage Unit | DAU-120A



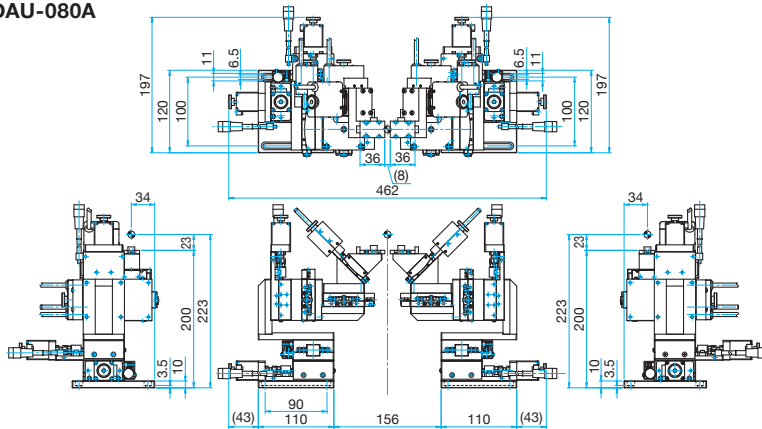
Outline Drawing

(in mm)

DAU-080M



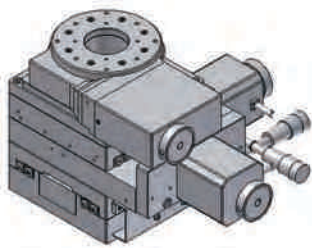
DAU-080A



DAU-120A

Catalog Code W2034

Motorized 3-axis XYθ stage unit required for alignment of TOSA (UV cure adhesive mounting type)/ROSA.



- Optional configurations include a gimbaled mount for YAG laser welding as well as a Z axis stage.
- Use of the high stiffness and high performance stages enabled alignment with excellent repeatability.
- A variety of compatible holders enables application extension associated with device change.
(Fiber holders, fiberrotation holders, fiber array holders, etc.)

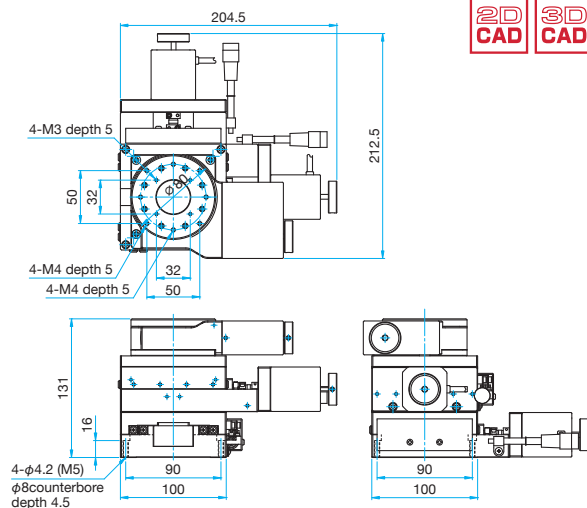
| | |
|-------------|--------|
| Part Number | Axis |
| DAU-120A | 3 axes |

Specifications

| Part Number | Axis | X | Y | θ | |
|--------------------------|----------------------|--------|-------|---|---------------|
| DAU-120A | Travel | 50mm | 50mm | Move in the counterclockwise CCW direction to ∞, and stop at near 0 degree (-2.5°) in the clockwise CW direction. | |
| | Resolution | (Full) | 2μm | 2μm | 0.005°/pulse |
| | | (Half) | 1μm | 1μm | 0.0025°/pulse |
| | Positioning Accuracy | <6μm | <6μm | 0.15° | |
| Positional Repeatability | <1μm | <6μm | 0.02° | | |

Outline Drawing

(in mm)



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