

# AML Series Linear Module

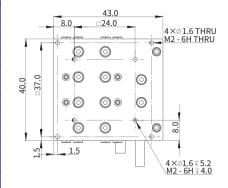
- ▶ Compact design
- ► Direct drive technology
- ► High precision optical encoder
- ▶ High response
- ► Stackable configuration

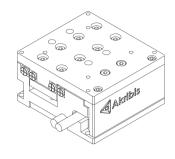
## **AML40-10**

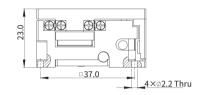
| Specifications              | Unit | Value                      |
|-----------------------------|------|----------------------------|
| Stroke                      | mm   | 10                         |
| Continuous Force            | N    | 2.3                        |
| Peak Force                  | N    | 6.9                        |
| Resolution                  | μт   | ABI22: SINCOS              |
|                             |      | ABI21: 0.5 / 0.2           |
|                             |      | AT2: SINCOS                |
|                             |      | AT2:0.2 / 0.05             |
| Bidirectional Repeatability | μm   | ABI22 SINCOS: ±0.4 (4096X) |
|                             |      | AB21 0.5 / 0.2: ±1.0       |
|                             |      | AT2 0.2 / 0.05: ±0.5       |
|                             |      | AT2 SINCOS: ±0.3 (4096X)   |
| Straightness                | μm   | ±1.5                       |
| Flatness                    | μm   | ±1.5                       |
| Rated Payload •             | kg   | 0.4                        |
| Moving Mass <sup>2</sup>    | kg   | 0.06                       |
| Total Mass 9                | kg   | 0.16                       |
| Max. Payload                | kg   | 2.0                        |
| Max. Roll Moment Load       | Nm   | 1.0                        |
| Max. Pitch Moment Load      | Nm   | 1.6                        |
| Max. Yaw Moment Load        | Nm   | 1.8                        |

- ① The rated load is based on the load in which the acceleration of the mass is at least 1G.
- 2 The moving mass and total mass do not include the rated payload.

#### ■ Dimension Drawing







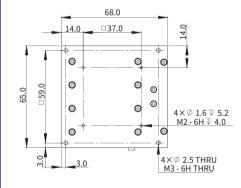


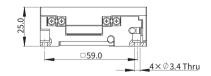
## AML65-15

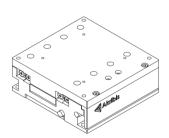
| Specifications              | Unit | Value                      |
|-----------------------------|------|----------------------------|
| Stroke                      | mm   | 15                         |
| Continuous Force            | N    | 5.9                        |
| Peak Force                  | N    | 17.7                       |
| Resolution                  | μт   | ABI22: SINCOS              |
|                             |      | ABI21: 0.5 / 0.2           |
|                             |      | AT2: SINCOS                |
|                             |      | AT2:0.2 / 0.05             |
| Bidirectional Repeatability | μт   | ABI22 SINCOS: ±0.4 (4096X) |
|                             |      | AB21 0.5 / 0.2: ±1.0       |
|                             |      | AT2 0.2 / 0.05: ±0.5       |
|                             |      | AT2 SINCOS: ±0.3 (4096X)   |
| Straightness                | μm   | ±1.5                       |
| Flatness                    | μm   | ±1.5                       |
| Rated Payload •             | kg   | 1.1                        |
| Moving Mass <sup>2</sup>    | kg   | 0.18                       |
| Total Mass @                | kg   | 0.39                       |
| Max. Payload                | kg   | 6.0                        |
| Max. Roll Moment Load       | Nm   | 5.4                        |
| Max. Pitch Moment Load      | Nm   | 7.0                        |
| Max. Yaw Moment Load        | Nm   | 8.4                        |

- The rated load is based on the load in which the acceleration of the mass is at least 1G.
- 2 The moving mass and total mass do not include the rated payload.

#### ■ Dimension Drawing









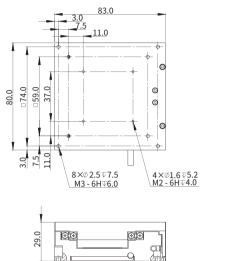
### **AML80-20**

| Specifications              | Unit | Value                      |
|-----------------------------|------|----------------------------|
| Stroke                      | mm   | 20                         |
| Continuous Force            | N    | 9.6                        |
| Peak Force                  | N    | 28.8                       |
| Resolution                  | μm   | ABI22: SINCOS              |
|                             |      | ABI21: 0.5 / 0.2           |
|                             |      | AT2: SINCOS                |
|                             |      | AT2:0.2 / 0.05             |
| Bidirectional Repeatability | μт   | ABI22 SINCOS: ±0.4 (4096X) |
|                             |      | AB21 0.5 / 0.2: ±1.0       |
|                             |      | AT2 0.2 / 0.05: ±0.5       |
|                             |      | AT2 SINCOS: ±0.3 (4096X)   |
| Straightness                | μm   | ±1.8                       |
| Flatness                    | μm   | ±1.8                       |
| Rated Payload •             | kg   | 1.3                        |
| Moving Mass <sup>®</sup>    | kg   | 0.32                       |
| Total Mass 9                | kg   | 0.61                       |
| Max. Payload                | kg   | 8.5                        |
| Max. Roll Moment Load       | Nm   | 9.0                        |
| Max. Pitch Moment Load      | Nm   | 9.7                        |
| Max. Yaw Moment Load        | Nm   | 11.7                       |

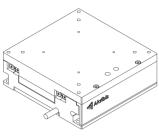


The moving mass and total mass do not include the rated payload.

#### ■ Dimension Drawing



\_4ר3.4





# **Ordering Part Numbering**

