



MBV SERIES

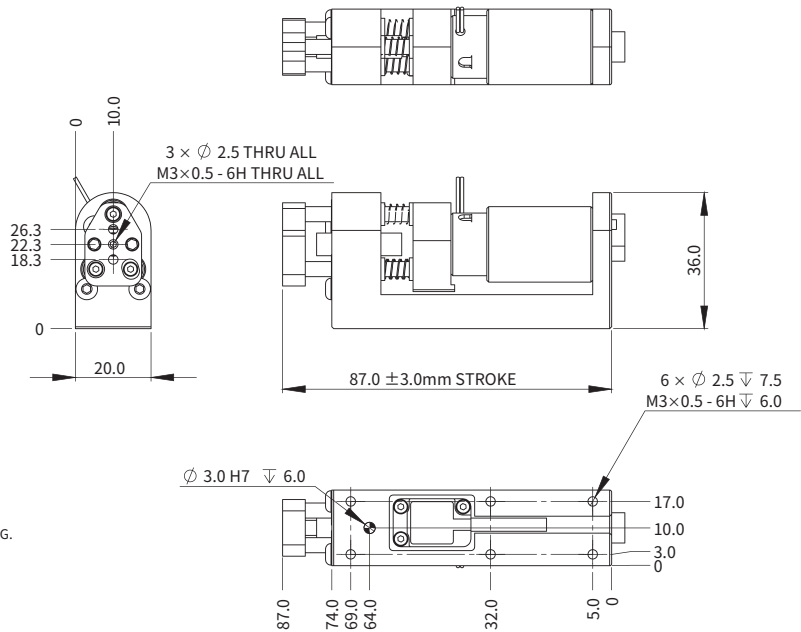
- ▶ Direct drive linear mechanism by voice coil motor
- ▶ Zero cogging effect, zero backlash
- ▶ Suitable for short stroke, high speed, and high acceleration application

MBV20

Specifications	Unit	Value
Stroke ^❶	mm	6.0
Motor	-	AVM20-HF-6-C28-3.0A
Continuous Force	N	5.69
Peak Force	N	17.06
Resolution	μm	ABI21: 1.0/0.5/0.2
		AT2: 0.2/0.1
Bidirectional Repeatability	μm	±2.5
Straightness	μm	±5.0
Flatness	μm	±5.0
Rated Payload ^❷	Kg	0.3
No-load Moving Mass	Kg	0.035
No-load Total Mass	Kg	0.14
Max. Allowable Payload	Kg	0.4
Max. Allowable Roll Moment Load	Nm	* ^❸
Max. Allowable Pitch Moment Load	Nm	* ^❸
Max. Allowable Yaw Moment Load	Nm	* ^❸

- ❶ Stroke refers to hardstop-to-hardstop mechanical stroke. Effective stroke equals to mechanical stroke for this short-stroke stage.
- ❷ The rated load is based on the load in which the acceleration of the mass is at least 1G.
- ❸ This stage is not suitable for moment load, please contact us for more details.

■ Dimension Drawing

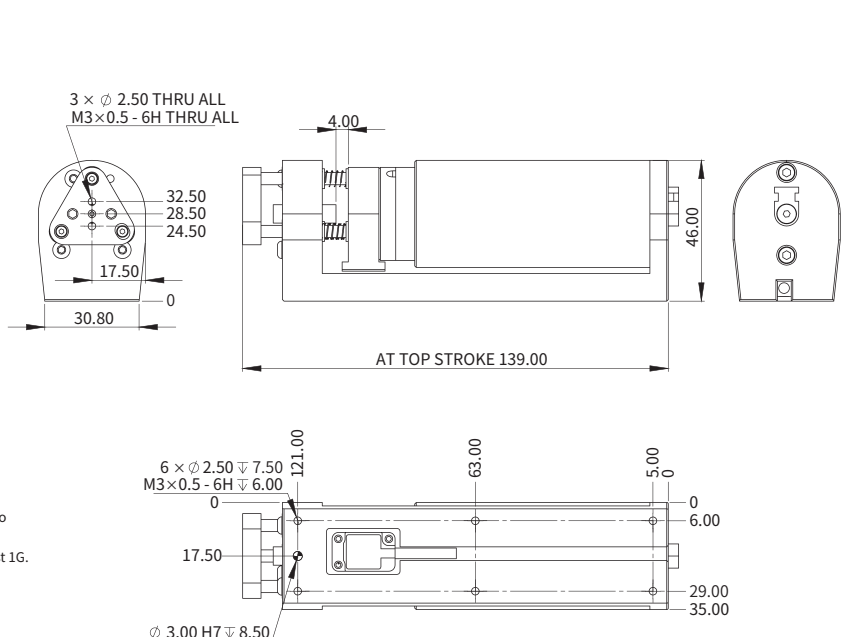


MBV35

Specifications	Unit	Value
Stroke ^❶	mm	8.0
Motor	-	AVM35-HF-8-C35-3.0A
Continuous Force	N	27.43
Peak Force	N	137.16
Resolution	μm	ABI21: 1.0/0.5/0.2
		AT2: 0.2/0.1
Bidirectional Repeatability	μm	±2.5
Straightness	μm	±5.0
Flatness	μm	±5.0
Rated Payload ^❷	Kg	2.0
No-load Moving Mass	Kg	0.14
No-load Total Mass	Kg	0.65
Max. Allowable Payload	Kg	3.0
Max. Allowable Roll Moment Load	Nm	* ^❸
Max. Allowable Pitch Moment Load	Nm	* ^❸
Max. Allowable Yaw Moment Load	Nm	* ^❸

- ❶ Stroke refers to hardstop-to-hardstop mechanical stroke. Effective stroke equals to mechanical stroke for this short-stroke stage.
- ❷ The rated load is based on the load in which the acceleration of the mass is at least 1G.
- ❸ This stage is not suitable for moment load, please contact us for more details.

■ Dimension Drawing



Ordering Part Number (OPN)

MBV1 E V08 E0E 1 A 1

Model:

MBV1: MBV20
MBV2: MBV35

Cover Type:

E: EN

Coil Type:

V08: AVM20-HF-6-0.5A-C28 (Peak Force: 17.06N)
V23: AVM35-HF-8-0.5A-C35 (Peak Force: 137.16N)

Termination:

1: Flying Leads

Cable Length:

A: 0.5m

Scale Type:

1: Steel tape, 11ppm/K

Encoder Type:

E0E: ABI-21 (1.0µm)
E0F: ABI-21 (0.5µm)
E0G: ABI-21 (0.2µm)

