



Features

- High dynamic response, non-contact, direct drive voice coil motor
- High-precision optical linear encoder
- Excellent positioning accuracy and dynamic performance
- Modularized design, customized requirements accepted

Description

This module adopts modularized design with direct-drive cylindrical voice coil motor. Combined with high-precision linear guides, high-precision dynamic performance and positioning accuracy can be achieved.

Applications

- Healthcare
- Semiconductor equipment
- Automotive

Technical Specifications

	MVA35	MVA50	MVA60	MVA108
Travel range	7 mm	10 mm	25 mm	32 mm
Unidirectional repeatability	±1 μm	±1 μm	±1 μm	±1 μm
Straightness	±3 μm/25 mm	±3 μm/25 mm	±3 μm/25 mm	±3 μm/25 mm
Flatness	±3 μm/25 mm	±3 μm/25 mm	±3 μm/25 mm	±3 μm/25 mm
Continuous force	20.2 N	50 N	19.8 N	283 N
Mechanical properties				
Dimensions	260 mm x 120 mm x 130 mm	150 mm x 60 mm x 65 mm	165 mm x 60 mm x 73.5 mm	260 mm x 120 mm x 130 mm
Max. load	0.8 kg	1.3 kg	2 kg	8 kg
Total mass	0.8 kg	1.55 kg	1.85 kg	12 kg
Material	Aviation aluminum, black anodized			
Electrical properties				
Drive type	Voice coil motor			
Force constant	12.89 N/A	37.21 N/A	13.3 N/A	72.2 N/A
Peak force	75.5 N	120.1 N	69.8 N	1296 N
Peak current	5.86 A	3.22 A	5.25 A	17.96 A
Continuous current	1.57 A	1.34 A	1.48 A	3.93 A
Electrical resistance	4.65 ohms	7.12 ohms	6.42 ohms	6.27 ohms
Electrical inductance	2.37 mH	7.57 mH	3.43 mH	6.2 mH
Feedback	Incremental optical linear encoder			
Resolution	0.1 μm			
Electrical limit	Optical sensor			