



Moving Iron Linear Motor Module



Main Feature

- Motor without cogging force
- High thrust density
- Compact design for ultra low profile
- Moving magnet structure
- High dynamic response
- High precision optical linear encoder
- Excellent positioning accuracy
- Modular design, customization possible

Performance Introduction

The moving iron linear motor adopts a flat design and uses an ironcore moving magnet linear motor to direct drive the load. The motor has fast movement speed and low heat generation. With high-precision linear guide rails, it can achieve high-precision positioning accuracy.

Main Application

	MIL12-50	MIL25-40
Positioning Accuracy		
Travel	±25 mm	±40mm
Accuracy	±2 μm	±2 μm
Repeatability	±1 μm	±1 μm
Straightness	±3 μm	±3 μm
Flatness	±3 μm	±3 μm
Continuous Force	7.5 N	24 N
Maximum Speed	500 mm/s	500 mm/s
Mechanical Specifications		
W x L x H	134mm x 101mm x 12mm	215mm x 150mm x 25mm
Height	12mm	25mm
Max Load	2.5 kg	7kg
Total Mass	0.78 kg	2.23kg
Material	SUS 304	SUS 304
Electrical Parameters		
Drive System	Moving iron linear motor	Moving iron linear motor
Force Constant	4.70 N/A	9.23 N/A
Peak Force	19.2 N	61.5 N
Peak Current	4.08 A	6.66 A
Continue Current	1.60 A	2.60 A
Electrical Resistance	3.16 ohms	1.25 ohms
Electrical Inductance	1.15 mH	1.00 mH
Feedback	Incremental optical linear encoder	Incremental optical linear encoder
Resolution	0.1μm	0.1μm
Electrical Limit	NA	NA