

# VOICE COIL ACTUATOR

## MI-MMB Series

The ideal motor for precise,  
repeatable and controllable  
linear motion.



Increase the overall performance and quality of your systems with the direct drive motor technology of Magnetic Innovations.

## Are you having problems with?

- High system cost
- High maintenance cost
- Moving wires, causing system failure
- Control complexity
- Poor motor life

## If so, you are looking for our Voice Coil Actuators!

The design of the Moving Magnet Voice Coil Actuators have been proven in various high-end industrial equipment. These actuators can be applied frequently where high speed and high force density are required. Our motor has:

- High reliability and lifetime due to the absence of moving wires
- Low maintenance cost
- No heat load on the moving part
- High peak and continuous force
- A fair price

## Working principle Moving Magnet Voice Coil Actuator

The working principle of these Moving Magnet Voice Coil Actuator is that the moving part is a magnet. The coils are attached to the static part of the actuator which enables a good thermal path. The absence of moving wires leads to a very high reliability and does not limit the achievable accelerations and speeds.

## MMB Series: Voice Coil Actuator with Integrated Slide Bearing

This is our most complete actuator, it comes with an integrated bearing systems. The Moving Magnet Voice Coil Actuator can support high positioning resolutions in combination with external position sensors and motion controllers.

## MMB Actuator Series Performance Parameters

The MI-MMB Moving Magnet Voice Coil Actuator series are patented.

Parameter [unit]	Models MI-MMB Series			
	1555*	3070*	5533	9050
OD [mm] <sup>1</sup>	15	30	55	90
Height [mm] <sup>1</sup>	55	70	33	50
Stroke [mm] <sup>1</sup>	18	25	8	12
F continuous [N] middle position <sup>2</sup>	2	15	37	118
F peak [N] <sup>3</sup>	6	60	156	664
Moving mass [kg]	0.0179	0.092	0.17	0.654

\*Preliminary info for models 1555 and 3070

<sup>1</sup> Standard range. Other dimensions and force ranges available upon request.

<sup>2</sup> Continuous force at 40°C ambient and 90°C coil temperature

<sup>3</sup> Peak force for 10 sec. at 25°C ambient and 90°C coil temperature

## Voice Coil Actuator with slide bearings

Mechanical drawings are available upon request.

Actuators with  
threaded holes



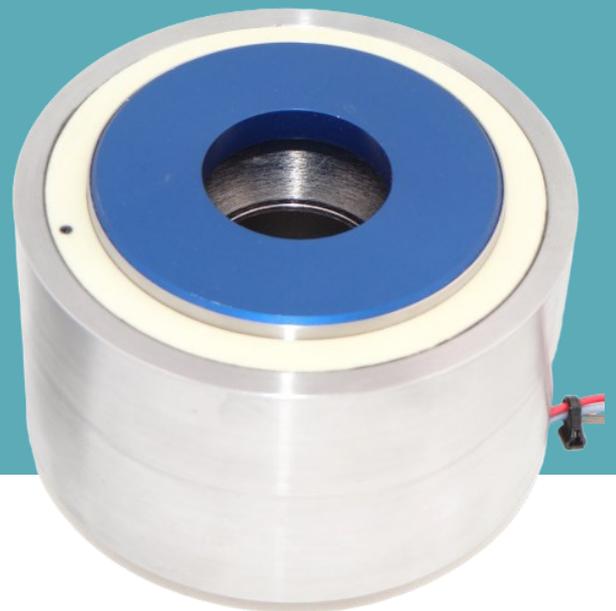
Actuators with  
through-hole



# GO DIRECT DRIVE!

High reliability and lifetime due  
to the absence of moving wires

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