

The designs 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, high force density and a high reliability/lifetime are required. The integrated bearing system allows for a low cost high reliability design that is easy to integrate into your application.

The working principle of these moving magnet voice coil actuators 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. A good thermal path is beneficial for high force densities. The absence of moving wires leads to very high reliability and lifetime and does not limit the achievable accelerations and speeds.



Left: static part consisting of coil and housing  
Right: moving part on which driving force acts.

### Key Features:

- High reliability and lifetime due to the absence of moving wires
- Compact design
- No heat load on the moving part
- Integrated slide bearing
- Bearing system tested to 100's of Millions of cycles and counting.
- High peak and continuous force possible
- Simple control through optional integrated sensor possible. (MMS-Series contact factory).
- Durable stainless steel design.
- Very high acceleration

### Application Areas:

- Production automation.
- Process- and Flow control
- Medical equipment

Technical Data						
Parameter [unit]	Note	MMB Models				
		1555	2368	4022	5533	9050
OD [mm]	1)	15	23	40	55	90
Height [mm]	1)	55	68	22	33	50
Stroke [mm]	1)	18	28	5	8	12
F continuous [N] middle position	2)	2	7.1	12.3	38.4	114
F peak [N]	3)	6	26.7	46	259	665
Moving mass [kg]		0.0179	0.025	0.04	0.13	0.5

Note :

- 1) Standard range. Other dimensions and force ranges available upon request.
- 2) Continuous force at 25°C ambient and 155 °C coil temperature
- 3) Peak force for 10 sec. at 25°C ambient and 155 °C coil temperature

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