

OBJECTIVES

BLMM (Bistable Linear Moving Magnet) actuators are dedicated to applications requiring compact actuators with high holding force without electrical supply. They require less electrical power than non polarized electromagnets.

PRESENTATION

BLMM actuators are designed to be capable to:

- hold two stable equilibrium positions without electrical supply
- provide high holding force density without electrical supply
- provide high acceleration for fast commuting
- be robust (simple parts, robust interface, adapted guiding)

BLMM actuators can also be tuned, by design or by command, to provide a particular profile of force along the stroke.

ADVANTAGES

- High holding force density without electrical supply
- High acceleration
- Low energy consumption compared to non polarized electromagnet
- Easy integration
- Easy to manufacture

VERSATILITY

BLMM actuators have been used in the following ranges of:

- stroke: 0.5mm to 6.5 mm
- holding force: 0.08N to 150N

APPLICATIONS

- Valve actuation
- Locking and unlocking applications
- Mechanism activation and desactivation

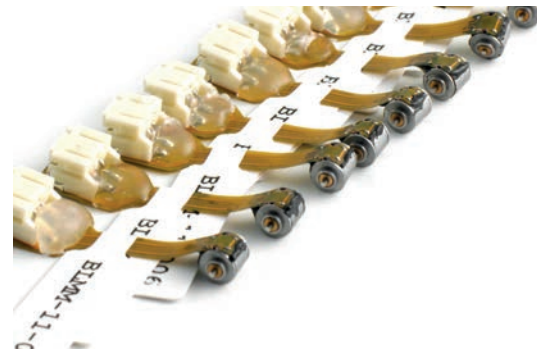


Fig. 1: BLMM-1 batches

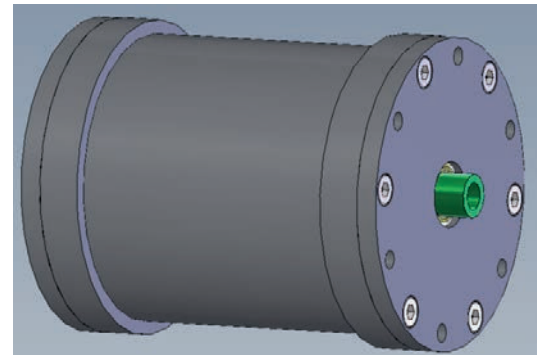


Fig. 2: custom-1

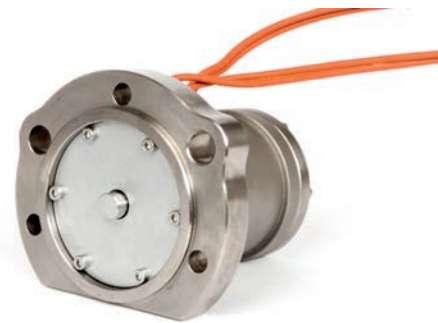


Fig. 3: Custom-2

	BLMM-1	CUSTOM-1	CUSTOM-2
Stroke	0.5mm	6.5	6.0
Holding Force	0.08N	70N	150N
Mobile Mass	0.076g	42g	121g
Size (when facing the motion axis)	Ø5mm Depth 7.5mm	Ø57mm Depth 75mm	Ø50mm Depth 92mm
Comment	Standard product	Space and fluidic application	Automotive application