MLS-5282 – Precision Linear Stage

The **SMAR**SHIFT MLS-5282 is a precision linear stage with electromagnetic direct drive. Its compact size simplifies integration into existing systems and leaves enough space for your application. Thanks to its compatibility with the **SMAR**BOTIC modular system, it can be easily combined with the CLS family and other SmarAct positioners.



Applications

The MLS-5282 has been specifically designed for demanding tasks in industrial manufacturing, including micro assembly, pick-and-place operations, and the alignment and adjustment of components for adhesive processes. Additional application areas include high-precision metrology, such as fly-scan procedures, ultra-fine additive manufacturing, and the precise alignment of optical components in the semiconductor and photonics industries.

All **SMAR**SHIFT products are suitable for use in ambient conditions and inert gas environments, including as helium and nitrogen. Cleanroom options are available.
Travel: 38 mm Dimensions (mm): 52 × 82 × 14 Weight: 200 g

	Mechanical
Travel [mm]	38
Continuous Force [N]	2
Peak Force [N]	5
Max. Normal Force [N]	28
Moved Mass (unloaded) [g]	100
Max. Lift Force [N]	1
Dimensions [mm]	52 × 82 × 14
Weight [g]	200
	Material
Base Material	Aluminum, black anodized
	Closed-Loop

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Sensor Types	SC
Max. Acceleration (no load) [m/s²]	45
In-Position Stability [nm]	±5
Sensor Resolution MCS2 [nm]	1
Uni-Directional Repeatability MCS2 [nm]	±40

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