Smart encoders & actuators

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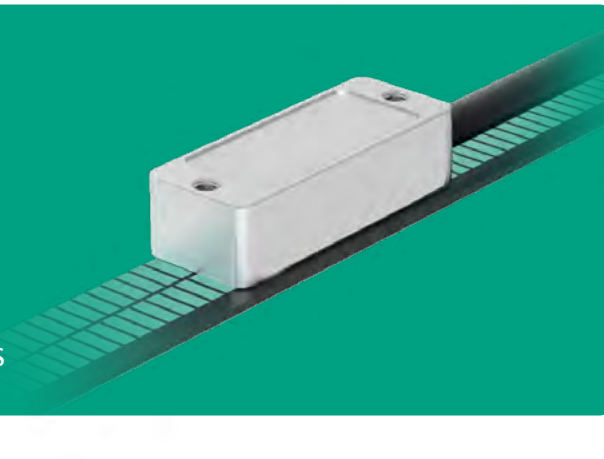
SMA3 non-contact absolute magnetic sensor with MARS tecnology

The SMA3 non-contact absolute magnetic sensor is equipped with the ***Multi Adaptive Range Sensor MARS****. MARS allows the width of the pole divisions to be varied in such a way that they adapt to the linear path or the magnetic ring in the respective application.*

- Ultra-compact readhead, best in class!
- Long measuring length up to 19.3 m / 63.32 ft
- Resolution down to 0.29 µm
- Fast 15 µs position refresh rate
- Large mounting tolerances up to 2 mm / 0.0787"
- BiSS-C and SSI interfaces + additional Sine/Cosine signals



The SMA3 is the non-contact absolute magnetic sensor from Lika Electronic intended for use in both linear and rotary applications. It is equipped with an integral **Multi Adaptive Range Sensor MARS**.
MARS allows the width of the pole divisions to be varied in such a way that they adapt to the linear path or the magnetic ring in the respective application.
The diameter of the ring, for instance, can be designed to fit customer requirements exactly.
The SMA3 is suitable for linear measuring lengths up to 19.3 m / 63.32 ft and most industrial shaft diameters in rotary applications. It is perfect for position and velocity feedback in demanding motion control applications and provides high performance and reliability in many industrial sectors such as robotic systems, linear and torque motors, material handling and transportation systems, automated storage systems, and pallet transport lines.

The SMA3 is designed in a very compact and rugged readhead with fully encapsulated electronics and IP67 protection, the sensor is the most compact of its class. It can reliably perform under harsh industrial environments. It is unaffected by dust, grease, oil, liquids, and contaminants. The wide mounting tolerances up to 2 mm / 0.0787" make installation easy and very comfortable. This allows also the operation to be safer.
The integral LED also helps during installation and alignment. The resolution is down to 0.29 µm and the working speed is up to 20 m/s.

The SMA3 provides the absolute information for position feedback via **BiSS and SSI interfaces** and additional Sine/Cosine signals for speed feedback.
The position refresh rate is very fast (15 µs), so the encoder can be perfect for speed feedback needs.