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lika

Smart encoders & actuators

## SMLA absolute encoder doubles the measuring length

*SMLA absolute encoder is designed for installation on round (arcs) and flat surfaces and can measure travels up to 800 mm / 31.496".*

*With dual interface for position and speed feedback applications.*



- For round (arcs) and flat surfaces
- measuring length up to 800 mm / 31.496"
- SSI / BiSS interfaces and incremental additional signals
- IP68 protection

For speed and position monitoring on arcs and curved axes Lika Electronic introduces a new version of well-known **SMLA absolute encoder**. The bearingless encoder is designed to measure **travels up to 800 mm / 31.496" on arcs and round surfaces whose diameter is greater than 300 mm / 11.811**.

It is paired with a flexible magnetic tape that can be easily fixed round the application's shaft (Lika can also offer customized curved structures with tape on request). It is suited for flat surfaces as well.

The read-head incorporates an absolute and an incremental magnetic sensor in the same package so it can read the absolute and incremental tracks coded on the magnetic tape.

The absolute position information can be used for example to detect the system position on starting, while the incremental position information allows speed control. The magnetic sensing technology ensures non-contact and frictionless measuring principle with no components subject to wear or fatigue.

Furthermore the fully encapsulated electronics integrated in the

rugged sensor head is optimally protected against dirt, moisture, water, oil, grease, shocks, vibrations etc. (IP68 protection) and guarantees excellent durability under aggressive industrial environments and temperature fluctuations (-25°C +85°C, -13°F +185°F).

SMLA reaches a max. absolute resolution of 16 bits, i.e. 12 µm, and provides the absolute position through the SSI and BiSS interfaces. The incremental measuring system has a resolution of 1,024 pulses, i.e. 190 µm, and yields square wave signals via Line Driver or Push-Pull output circuits. The sensor can operate at remarkable speeds up to 15,000 rpm / 16 m/s and allows ultra-fast position refresh.

SMLA is ideally suited for installation in pick & place robots and delta robots, textile and wood, metal & stone working machinery, packaging lines, mobile equipment, 3D printers, electronic assembly systems, material handling equipment, even in harsh industrial environments. It is effectively used also to measure the rotation of the rollers on bending machines.