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lika

Smart encoders & actuators

Two great firsts for Lika in the range of linear encoders

SME53 enabled Lika to design its **highest resolution** linear encoder with resolution down to $0.08 \mu\text{m}$;
SME54 is the **first programmable incremental linear encoder** in the range,
its resolution can be set from 1.25 mm to $0.08 \mu\text{m}$.

- **SME53:** incremental linear encoder with **very high resolution** down to $0.08 \mu\text{m}$
- **SME54:** incremental linear encoder with **programmable resolution** 1.25 mm to $0.08 \mu\text{m}$
- Push-Pull and Line Driver output circuits
- Non-contact and wear-free operation, unaffected by dust, oils, liquids

Lika Electronic is proud to introduce two great innovations in the range of bearingless and contactless linear encoders.

SME53 is the incremental linear encoder with very high resolution down to $0.08 \mu\text{m}$ designed for demanding motion control applications.

SME54 incremental linear encoder **offers the customers a fully configurable solution, its resolution can be programmed** in the range $1.25 \text{ mm} \dots 0.08 \mu\text{m}$ along with Index mark duration and counting direction. It provides complete adaptability, versatility and freedom for any type of industrial application.

The extremely compact and narrow readhead is paired with a flexible 5-mm pole pitch magnetic tape that encodes the incremental position information. It works **without contact and ensures virtually wear- and maintenance-free operation**. The large air gap (up to 2 mm) enables minimum mounting time.

The fully encapsulated electronics integrated in the sensing head is optimally protected against dust, oils, liquids, contaminants, shocks and vibrations (IP67 protection).

The max. permissible speed is 10 m/s .

SME53 & SME54 generate quadrature signals with inverted signals and Index via Push-Pull (HTL) $+10 \div 30 \text{ Vdc}$ and Line Driver (TTL) $+5 \text{ Vdc}$ output circuits.

They are further equipped as a standard with **four diagnostic LEDs** designed to provide information on the correct operation and the proper alignment within the allowed tolerances. SME53 is available with both cable and M12 connector outputs. SME54 features cable output with integral interface for programming via PC.

Thanks to small size, high robustness and finest resolution, excellent position feedback can be achieved for use in critical and demanding applications including robotics and product handling equipment, medical technology applications, packaging machines, textile, wood, metal and stone working machinery.

SME magnetic encoder series includes also the following versions:

- SME11/SME12: high performance encoder, resolution down to $0.5 \mu\text{m}$
- SME21/SME22: versatile encoder, resolution down to $1 \mu\text{m}$
- SME51/SME52: standard encoder, resolution down to $5 \mu\text{m}$

[More information and comprehensive technical specs](#)

