

SMA3 bearingless absolute encoder for rotary and linear applications

The new SMA3 bearingless absolute encoder offers the greatest flexibility and can be installed either in rotary applications or in linear applications.

The linear measurement can be up to 20 m / 65.617 ft.

- Minimum size readhead
- Long measuring length up to 20 m / 65.617 ft
- High counting frequency up to 200 kHz
- Large mounting tolerances wider than 1 mm / 0.039"
- BiSS-C and SSI interfaces + additional incremental signals

SMA3 is the **new bearingless absolute encoder** from Lika Electronic. It is designed in a compact readhead and can be installed either **in rotary applications or in linear applications.** Whether it is coupled with a ring or with a magnetic tape, it offers the greatest flexibility and some competitive advantages.

First of all, SMA3 can reach **very long linear measuring lengths**, they are up to 2.5 m / 8.2 ft in the first stage and will be increased up to 20 m / 65.617 ft afterwards. SMA3 is not bound to a defined dimension of the pole pitch. Sometimes the pole size can be limiting as the diameter of the ring depends on the width and the number of the poles and may not match the needs of the specific application. SMA3 does not place limitations on the construction of the ring and the diameter as well as the encumbrance size **can fit exactly the customer's requirements**.

Also the **high counting frequency up to 200 kHz** gives a great competitive advantage and allows the measuring system to reach counting speeds much higher than those of competing products in the market.

SMA3 is also easy to install thanks to the wide mounting tolerances larger than 1 mm / 0.039".

SMA3 offers a **resolution down to 0.5 \mu m** and provides both the absolute information for position feedback through **BiSS-C and SSI interfaces** and an additional incremental information for speed feedback.

The diagnostic LED is an added plus.

SMA3 is designed for demanding position and motion control applications and provides high performance and reliability in many industrial sectors.