

MULTITURN ENCODER

## **36-mm magnetic CANopen encoder**

**Kuebler (Germany) has released another optical absolute multiturn encoder: the Sendix M36 series of magnetic encoders. The series comes with a size of 36 mm and IP67 protection level.**

LIKE ALL SENDIX ENCODERS, THE ENCODERS OF this series are equipped with the company's Safety-Lock. As magnetic encoders, they even have the Safety-Lock-plus feature, which offers an additional mechanical protection of the shaft seal. According to the company, the magnetic technology ensures reliable use in harsh environments. The encoders are also suitable for applications in the mobile automation area.

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*(Photo: Kuebler)*

The Safety-Lock allows reaching the protection levels IP67 or IP69k. Even more robustness and safety is ensured by the rugged variant: Sendix M36xxR. It includes a stainless steel housing and offers higher bearing loads. These encoders are subjected to thorough testing, e.g. in compliance with a special guideline for "road vehicles". Particular focus is set on environmental requirements such as the combination of temperature, humidity, and dust.

The encoders have been granted the e1 approval of the KBA (German Federal Motor Vehicle and Transport Authority). This approval sets specific requirements for EMC and on-board power supply. The devices have a die-cast housing. Together with the Safety-Lock design, this housing contributes to the robustness against vibrations and installation errors. The devices feature CANopen or 4 mA to 20 mA and 0 V to 10 V analog outputs. An SSI interface is also available.

The magnetic scanning makes these devices insensitive to dust and condensation. In addition, the temperature range of -40 °C to +85 °C ensure durability. The 36-mm size allows a blind hollow shaft reaching 10 mm. Solid shaft variants are also available. With a total resolution of 36 bits obtained from the combination of a multiturn encoder with a maximum resolution of 24 bits and a singleturn stage reaching a 12-bit resolution, the encoders of the series offer versatility that opens up a range of application areas.