

Measuring system for tight spaces

With a minimum installation depth of 16 mm, Kuebler offers measuring systems that can be mounted in tight installation spaces. The options include a CANopen interface.

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The encoder can be provided with a CANopen interface (Photo: Kuebler)

Reduced size should not mean reduced safety or performance. With its non-contact sensor technology, Kuebler's RL measuring system boasts a high shock and vibration resistance. The housing and the protection level up to maximum IP69k allow operation even in harsh industrial environments. This combination is insensitive to soiling such as dust or liquids. The bearing-less encoders portfolio includes incremental (RLI) and absolute single-turn variants (RLA50) with CANopen or SSI interface.

The absolute measuring system RLA50 allows resolutions up to 16 000 measuring steps per revolution. Versatility is ensured by the push-pull or EIA-422 interfaces available for RLI20 and RLI50. Regarding performance, rotary speeds up to 12 000 revolutions per minute are possible. Installation takes place by slipping and screwing the ring on the shaft and positioning the reading head accordingly. Solutions for press-fitting are also available. The distance between the reading head and the ring has a tolerance of up to 1,5 mm and a maximum lateral offset of ± 1 mm. The oblong holes provided on the sensor head allow the sensor adjustment. It can be positioned radially and axially.

The measuring system is designed for offers various ring sizes up to a hollow shaft of 390 mm. Another advantage over encoders with bearings, which allow hollow shafts up to a maximum of only 42 mm. Various mounting possibilities are available for optimal fastening of the magnetic ring on the drive shaft: press-fit, screwed flange, or hub screw ring mounting. Bearing-less encoders are used in the drives technology. Their reduced installation depth allows a slim and compact motor design.

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