

ENCODER

CANopen sensor comes in a 36-mm housing

Novotechnik offers the RSB-3600 and RSB-3800 single- respectively multi-turn encoders. Variohm produces them.

The encoders come in a metal housing of 36,5 mm. They feature ball bearings. Due to the availability of models featuring solid or hollow shafts as well as a heavy-duty IP69K version, the rotary sensors are suitable for many industrial applications, such as sheet metal processing and packaging machines, as well as production lines.

The measurements are provided optionally via the CANopen interface. Furthermore, single- and multi-channel, i.e. completely redundant versions are available. These are suitable for all high-speed applications of up to 12 000 rotations per minute. The rotary sensors utilize the Novohall process. In single-turn applications, measurements are taken across the 360° at a resolution of up to 14 bit. The multi-turn versions can capture up to 16 revolutions (and will be able to capture up to 40 revolutions in the future). It is relying on a patented process based on the principle of Giant Magneto-resistance (GMR-Effekt), and it is capable of gearless counting and storing revolutions during idle intervals and in the absence of batteries. It delivers absolute positional data, and as a “True-power-on“ system, it provides the measured value immediately upon startup.



The encoders are available in IP69K-rated enclosures (Photo: Novotechnik)



The linear encoders by Variohm are CANopen-connectable (Photo: Novotechnik)

Linear position sensor used in London's Crossrail project

The London Crossrail project is one of the largest European construction sites ongoing. In order to upgrade the subway system for future demands, two new tunnels (each approx. 21 km in length and 6 m in diameter) are under construction, there. Such a construction project would be impossible without the help of modern automation solutions. And this involves more than just the now commonly used tunnel boring machines. For instance, the mounting holes for cable systems, cable runs, and walkways are no longer manually drilled by construction crews. In the Crossrail project, these tasks are carried out by automated drilling carriages. Magnetostrictive linear position sensors, which can be directly integrated into the hydraulic cylinders of the boring machines, are assisting the subterranean mobile application.

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