

New Low-Profile Absolute Encoder from TR Electronic – The Solution for Extremely Confined Installation Spaces.

When it comes to precise position determination in extremely limited space, the new low-profile absolute encoder from TR Electronic sets new standards. Wherever conventional hollow-shaft encoders in the standard industrial 58-mm size reach their limits due to their housing depth, this new development shines as a true problem-solver. With a standard diameter of 58 mm and an exceptionally low profile of less than 40 mm, the system integrates seamlessly into compact machine environments. A space-saving cable exit via a grommet saves valuable millimeters during installation.

Mechanical Flexibility and Robust Construction

Despite its extremely flat design, the system makes no compromises in terms of reliability. The mechanical design is particularly robust, featuring bearings at both ends of the housing. The solid hollow shaft, with a diameter of up to 15 mm, offers maximum flexibility. The encoder also adapts to the installation conditions: Mounting and anti-rotation are achieved either via a spring-sheet torque support or a pin-and-groove system. Additionally, the system can be mounted either on the flange side or the cover side—the torque support can be flexibly secured on the side with the clamping ring or, optionally, on the opposite flange.

Direct Connectivity and Expanded Interface Capabilities

To ensure seamless integration into modern control architectures, the ultra-compact encoder comes with factory-integrated direct interfaces such as CANopen, IO-Link, and SSI. If more sophisticated Industrial Ethernet networks need to be supported, that's also possible: Using the external CIB2X interface box, PROFINET, EtherCAT, and all other interfaces from the proven 582 series can be connected in no time.

Wherever space is really tight

The new absolute encoder shines wherever every millimeter counts. Its main areas of application include:

- Compact drive units for AGVs (automated guided vehicles in logistics), which must combine maximum functionality in the smallest possible chassis.
- Straightforward use as an absolute encoder for retrofitting into existing, highly integrated installation scenarios.

The CEL582 flat absolute encoder at a glance:

- Ultra-compact: Standard diameter of 58 mm with a mounting depth of less than 40 mm.
- Optimized installation: Space-saving cable gland and flexible

mounting—either via a spring-loaded torque support or a pin-and-slot design.

- Mechanically versatile: Through-hole shaft up to 15 mm, as well as flange- or housing-side mounting of the torque support.
- Robust design: Maximum stability thanks to dual-sided mounting on the housing.
- Extensive interface support: Direct CANopen, IO-Link, and SSI; PROFINET, EtherCAT and other interfaces from Family 582 available via the CIB2X interface box.

Flat absolute multiturn encoders from TR Electronic

<https://www.tr-electronic.com/s/S027207>

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CEL582 Flat Absolute Encoders with iOLink from TR Electronic



Available Connection Options for the CEL582 Absolute Encoder from TR Electronic