

Small encoder big time

36 mm installation space with true absolute multiturn detection.

Just in time for the SPS trade fair in Nuremberg, TR Electronic GmbH is launching the latest generation of its ultra-compact absolute encoders with a housing diameter of 36 mm. Not only machines and systems with correspondingly large installation space, but also more and more compact apparatus and machine modules rely on the reliable position detection of movements with battery- and counter-independent, absolute multiturn encoders. For these applications, the industry-standard encoders in the 58 mm nominal dimension are supplemented by the state-of-the-art C__362 encoder series - naturally with the reliability of TR Electronic's proven multiturn scanning.

As a mechanical interface to the process, solid shafts with 6, 8 and 10 mm are available as standard, or blind shafts (or slip-on hollow shafts) for shafts with 6, 8, 10 and even 15 mm diameter. The 10 mm solid shaft with face and all blind hole variants with integrated groove in the clamping ring also offer the option of securing the mechanical connection positively against rotation. Suitable for particularly compact applications, encoder systems with factory-mounted draw-wire mechanics offer absolute detection of linear movements. The most compact mechanics available offers a measuring travel of 1.25 m.

Magnetic detection offers a resolution per revolution of up to 13 bit (8,192 steps per revolution). Optical detection already offers 18 bit resolution as standard (262,144 steps per revolution). Multiturn variants measure an additional 4,096 revolutions. Pure singleturn variants have a housing that is approx. 1 cm shorter than multiturn encoders.

The C__362s communicate with the higher-level controller or control unit optionally via CANopen, IO-Link or SSI. Standardized M12 connectors are used for connection. A version with direct cable outlet is also available for SSI.

As usual with TR Electronic, a wide selection of standard devices can be found directly on the website with all associated documentation, 3D models and eplan macros - of course, the modular product design of TR encoders also opens up possibilities for customer-specific versions.

<https://www.tr-electronic.de/s/S025597>



Small absolute rotary encoders 36mm diameter made by TR Electronic with blind and solid shaft.