

Up to 18 bit fit into small 36mm size encoder.

New high resolution absolute encoder for applications with compact space.

Absolute rotary encoders at a size of 36 mm have been available for some time now for apparatus engineering applications where conventional industrial sizes are too large.

TR-Electronic has now integrated optical scanning into this compact design.

The revolution of the COV36 series is scanned at a resolution of up to 18 bits, which is synonymous with ~ 0.0014 degrees.

The CEV36 series resolves one revolution with 15 bits. The real multi-turn scanning delivers 65536 clearly identifiable revolutions. Highly accurate and highly dynamic position feedback is thus enabled for areas in which space is restricted. Measuring machines, medical technology, handling devices in laboratory complexes, direct installation in small businesses. The housing is made of stainless steel and welded on the hood side up to IP69k is attained.

The measuring values are transmitted via a synchronous-serial interface. The compact format opens up new paths for rotary encoders in terms of the connection technology as well. The sensor cables are connected with M12 connectors - a system that has proved its worth for initiators and other binary sensors and for which a wide range of different plugs and prefabricated cables are available on the market. Further interfaces are under development.

The encoder interface can be configured conveniently by the user. These settings enable the user to adjust the output resolution, the number of transmitted revolutions and the direction of rotation to suit the respective application. Machine zero point and the encoder reference are adjusted through the software - the offset value is saved permanently in the encoder. The position signal is available immediately without any need for referencing - even when the relevant axis has moved to a de-energized state.

- CEV: up to 15 bit (32768 steps per turn)
- COV: up to 18 bit (262144 steps per turn)
- Real multiturn with up to 65536 absolutely detected revolutions
- Can be adjusted and scaled via programming interface.



TR_Electronic_CE_36: New, high resolution absolute multiturn encoder made by TR-Electronic: 18 bit per turn, up to 65536 revolutions.

Technical data for the CEV36 series with 15 bits per revolution:

www.tr-electronic.com/s/S007311

Technical data for the COV36 series with 18 bits per revolution:

www.tr-electronic.com/s/S007312