

## SENSOR PRODUCTS



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## TURCK QR24 Rotary Position Sensor Provides Contactless Position Detection

Minneapolis, MN—November 1, 2013—TURCK introduces the new QR24 rotary position sensor. Designed from the company's rotary inductive sensor technology, the QR24 provides contactless position detection and wear-free performance in a variety of industrial applications ranging from solar energy plants and harvesters to crane vehicles and AGVs.

Rotary feedback is critical in nearly every installation, and most rely on their mechanical bearings to provide proper tolerance and position of the internal system. After time, this results in mechanical wear, vibrations, potential leaks and requires spring elements. The QR24 provides superior performance without the need for contact or bearings, allowing it to successfully execute the same functions as an encoder or potentiometer while eliminating wear and extending sensor longevity.

"Today's rotary feedback applications are becoming more demanding," said Marty Cwach, Product Manager, TURCK. "More and more applications require higher degree of ingress protection, smaller package size and longer life expectancy. TURCK's new QR24 incorporates these new requirements and meets or exceeds the demands."

The TURCK QR24 is part of the company's industry-recognized Q-track family of sensors, which utilize resistance inductive capacitance (RLC) measuring technology. Unlike potentiometric or magnetic technologies, the sensors incorporate precisely manufactured printed emitter and receiver coil systems. The emitter coils are activated with a high frequency AC field and produce an inductive RLC circuit with the positioning element. The element is inductively coupled with the receiver coils, which are arranged so different voltages are induced in the coils, depending on the position of the actuator. The voltages serve as a measure for the sensor signal.

The QR24's multi-coil system provides high resolution, while ensuring 16-bit noiseless operation. The sensor also features a double resonator system, providing increased distance capability and high-end signal processing with multi-core microprocessor for enhanced speed.

Along with advanced design features, the QR24 sensor features a fully potted and sealed IP69K/IP67-rated housing to protect against moisture and dust in demanding environments. It also offers flexible parameterization via IO Link or easyteach, allowing the sensor to easily adapt to specific application requirements.

TURCK is an industry leader providing superior quality sensing, connectivity and network products to help manufacturers improve their automated processes. For other TURCK product or technical information, contact:

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