New POSITAL Absolute Encoders for Safety-Critical Systems

POSITAL has expanded its family of IXARC absolute rotary encoders to include models explicitly designed for use in safety-critical motion control systems. The new encoders are certified to Safety Integrity Level 2 (SIL 2) and Performance Level d (PL d). They feature a PROFINET communications interface and support PROFIsafe protocols. PROFIsafe-based control systems are used for critical applications such as industrial robots or material handling equipment, where loss of control could result in serious hazard.

- Reliable Redundant Magnetic Measurement
- Safety Integrity Level 2 (SIL 2) and Performance Level d (PL d)
- High Vibration and Shock Resistance
- Saltwater Resistant
- Protection Class up to IP69K
- Status LED's
- Counts up to 4,096 Absolute Turns
- Maximum Resolution of 13 bit Real Time
- Accuracy of up to ±0,2%
- Clamp, Synchro and Blind-Hollow Flanges Available

At Your Fingertips

1,000,000
Sensors

SAFETY ROTARY ENCODERS

Reliable Magnetic Measurement Technology

At the heart of the new SIL 2-certified encoders is POSITAL's extremely reliable magnetic measurement technology. The sensing elements in these devices are more mechanically rugged than optical measurement systems and significantly more resistant to presence of moisture and dust. Moreover, with no direct contact between sensing elements, IXARC magnetic encoders will retain their accuracy and reliability for very long periods. The measurement system is backed up by advanced signal processing and interface management software that supports a full range of PROFINET and PROFIsafe capabilities, including prioritized startup, media redundancy and the possibility of firmware updates through the PROFINET communications network. Ethernet bridging functionality is built into the communications interface, which makes it possible to make use a variety of network topologies. System

troubleshooting is simplified by the presence of LEDs that indicate the device's operating status and helps to isolate faults.

Like other members of POSITAL's IXARC family, the SIL 2-certified absolute rotary encoders are available in a wide range of mechanical configurations. Saltwater-resistant aluminum housings make these devices suitable for use in harsh environments.

A Million Possibilities

Like other POSITAL sensors, IXARC encoders are available with multiple options for housing size and materials, flange configuration, shaft type and diameter, connection/wiring type and level of environmental protection. The online product finder at **www.posital.com** helps users navigate this wide range of available models and provides more than 280,000 specific data sheets in 11 different languages.