POSITAL

INCREMENTAL ROTARY ENCODERS

PROGRAMMABLE INCREMENTAL Magnetic ENCODERS

Versatile Solutions For Your Application

POSITAL

INCREMENTAL ROTARY ENCODERS

Tough Enough for the Harshest Environments

Incremental Rotary Encoders

Incremental encoders are used in a wide range of motion and speed control applications including all types of production machinery, material handling and mobile machinery. They generate an output signal each time the shaft rotates a certain angle. The number of signals (pulses) per turn (PPR) defines the resolution of the device. IXRAC incremental rotary encoders feature a unique combination of high performance and rugged durability. They are available in a large variety and have a programming interface for maximum versatility.

High Performance due to Signal Processing

The technological leap that pushes IXARC magnetic encoders to the performance level of optical systems is based on a new generation of electronic components. Built around high-precision magnetic sensor technology, resolutions of up to 16,384 pulses per turn are offered with excellent dynamic response. IXARC encoders feature industry-leading signal quality to ensure very reliable process control.

- **High Resolution up to 16,384 PPR**
- **Lower Phase Angle Error Compared to Most Incremental Encoders**

For Tough Environments – No Code Discs

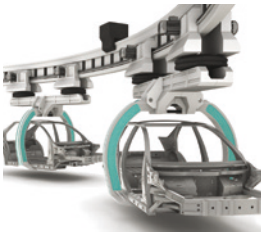
The magnetic technology gives a huge benefit to customers in terms of mechanical robustness compared to optical code disc based devices. It can achieve a high shock rating of 300 g at the same time due to the contact-less nature of the technology, it can have an IP69K rating which makes these products fully waterproof. Magnetic sensing allows for use in dusty and oily environments with lower IP ratings as no optical discs signals can be obstructed.

- **IP69K & 300 g Shock Resistance Stainless Steel Housings**
- **Better Protected against Dust Humidity and Oil**

High Resolution – Fits in the Palm of your Hand

POSITAL encoders are small in size (36 mm Ø) yet provide a resolution as high as 16,384 steps. POSITAL has the smallest high resolution programmable encoders on the market. A lot of features are packed in a product that actually fits in the palm of your hand.

- **Compact and Versatile − Fits in Where you Need It!**
- **Smallest Programmable Encoder**



POSITAL

INCREMENTAL ROTARY ENCODERS

Smart Phone Meets Smart Sensors

Large Variety – Easy To Select

POSITAL's incremental encoders are available in a very large variety of mechanical configurations, including 36, 40, 42, 48 and 58 mm flanges and multiple shaft styles (solid shaft, or blind hollow shaft versions with a range of shaft diameters) to ensure compatibility with most common standards in America, Asia and Europe. Radially or axially positioned connectors and cable outputs are both available. Heavy duty versions support a shaft load of up to 180 N and are available in both aluminum and 316 L grade stainless steel housings. 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.

- **Versatile Product Finder for Easy Selection**
- **Large Variety of Mechanical Designs and Electrical Connections**

Programmable Features – Save Time And Money

POSITAL has replaced hardware by software and has taken versatility to a new level. Resolution (PPR) can be set anywhere from one to 16,384 pulses per turn. Similarly, pulse direction and the output driver – either Push-Pull (HTL) or RS422 (TTL) – can be defined through software parameters. All of these parameters can be configured very easily using the UBIFAST tool and any WiFi-enabled smartphone, tablet or laptop computer. It is not necessary to install any software or app. Additionally all the configuration data for each encoder is sent to POSITAL's ERP system and can be retrieved in the future for replacement. Since a small number of devices can be programmed to take on a wide range of measurement tasks, distributors and OEM customers can reduce their inventory levels and simplify the supply chain. System integrators can decide at the last minute how to tailor the encoder to specific requirements on site and initiate the purchase of the encoders while final design requirements are still under discussion. End users can receive spare parts from a distributor or system integrator quickly.

- **Fully Flexibility – Any PPR from 1 to 16,384**
- **Reduce Stocks, Minimize Down Time**

Check our Website for the Full Range of Products

PRODUCT FINDER

At Your Fingertips 1,000,000 Sensors

A Million Possibilities

Unparalleled Choice of Mechanical Features and Electrical Connections!

POSITAL

OVER 50 YEARS EXPERIENCE WITH POSITION SENSORS

FRABA Group

FRABA is a group of enterprises focused on providing advanced products for the motion control and industrial automation markets. POSITAL has been a leading manufacturer of industrial rotary encoders for over 50 years and recently has expanded its business to tilt and linear motion sensors. Other FRABA Group subsidiaries include VITECTOR which focuses on protection sensors to guard doors and production machine covers.

History

FRABA was founded by Franz Baumgartner in Cologne, Germany, in 1918. Until the 1960s, FRABA's main product was mechanical relays. In 1963 FRABA started selling "brush" absolute encoders and in 1973 FRABA introduced one the first non-contact, optical absolute rotary encoders. Today, FRABA companies specialize in innovative products that use advanced technologies to deliver exceptional performance and value.

Service

POSITAL's unique online product finder is providing access to a huge variety of solutions without requiring specialized knowledge. Many hundred thousand specific datasheets are available in 11 languages and easy to browse. The traditional practice of customization has been replaced by this new approach to a large extent. Furthermore experienced engineers are available in Europe, North America and Asia at different locations to support the large global network of distributors and customers within their time zone and in many languages.

Production

POSITAL products are manufactured in advanced production facilities. The computer-guided semi-automated production system tracks each device from order, through assembly and testing, to final delivery. Even with hundred thousands of unique configurations available, standard products are ready to ship within five working days of receiving an order.

Join Our Network!

www.posital.com

Cologne (EMEA) – Hamilton (Americas) – Singapore (APAC) – Shanghai (China)