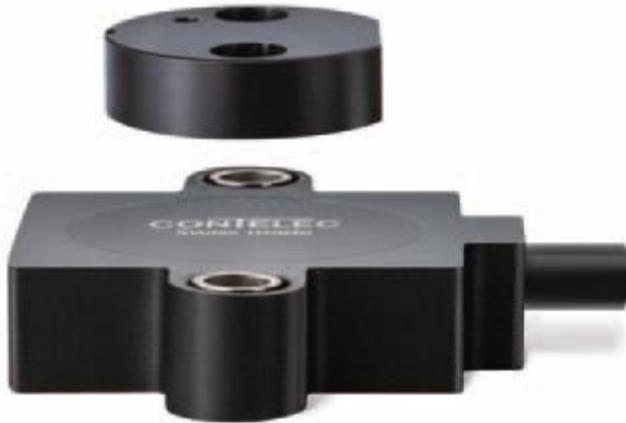


Encoder setting on-site

Mikkelsen Electronics introduces encoders with on-site setting facilities from Swiss-based Contelec.



The challenge

Precision installation and adjustment of encoders, exact setting of the zero or middle point or the start and end points – these are some of the challenges facing system integrators, production plants and service personnel. Components are frequently installed in such confined spaces that mechanical adjustment of the rotary encoder is impossible or extremely difficult. There is also frequently the need to reset angle sensors in the field in order to adjust for wear-related changes of the measured system. This should be easy and convenient to do and not require any complex aids. A further issue, that should not be underestimated, is the wide variety of available applications that many customers have, and the numerous requirements these place on the encoders. Whilst it is true that high-precision angle sensors are preconfigured with custom output characteristics and angle ranges, and are available at attractive prices ex-works, the procurement and storage of a range of different encoder variants has logistic and financial consequences.

The solution

To meet these challenges and create a high level of flexibility for customers, Swiss based Contelec has developed a simple, innovative solution with its 'setting features'. These enable the on-site configuration of encoders based on Vert-X MH-C2 technology after installation.

To enable parameterization, the rotary encoders have two additional digital inputs (Set 1 and Set 2), which are used to set the sense of rotation (CW, CCW), index points

(zero point or middle point) or start and end points as often as needed. This process could not be easier. All that is needed is to connect the two input leads to ground in a specific sequence.

The effortless configuration of the Vert-X MH-C2-based angle sensors with integral setting features significantly simplifies installation and adjustment. A key factor here is that installation in a machine is not restricted by mechanical tolerances or the angle position of the rotary encoder. This can be illustrated with the setting of the start and end points in the 'plough turn control' application. Once the angle sensor has been attached in any position, the plough is physically moved to its starting point and Set 1 is set to zero. In the next step, the plough is moved to its end position and the second input (Set 2) is connected to ground.

This simple process sets the start and end points and ensures highly accurate adjustment of the encoder. Efficient ploughing with optimal plough inclination is now child's play.

Customer benefit – you profit from

- Easy, individual setting of the sense of rotation (CW, CCW), index points (zero or middle point) or start and end points –on site and without any additional aids
- No mechanical adjustment of the rotary encoder necessary (time and cost-saving, highly accurate angle measurements even in systems which do not permit mechanical adjustment)
- Maximization of measurement accuracy – even with wide installation tolerances
- Compensation of mechanical inaccuracies on the system being measured (component tolerances are eliminated)
- Easy compensation of mechanical wear by 'readjustment' in the field (increase in quality)
- Reduction of the required number of encoder variants (simplified storage, reduced costs)
- High level of safety ensured by standardized setting sequence and non-volatile storage of the settings
- Also suitable for use in heavy-duty solutions

The key performance characteristics

The Contelec Vert-X MH-C2 rotary encoders with integral setting features significantly simplify installation and adjustment of angle sensors.

Encoder types	Contactless and non-contacting rotary encoders
Encoder size	From 22 mm outside diameter
Possible settings	Sense of rotation (CW, CCW) Index point (zero point/middle point) Start and end points
Setting	Through two additional digital inputs Standardized setting sequence

About Mikkelsen Electronics

Danish owned Mikkelsen Electronics provide both standard and customized products always based on a qualified dialogue.

Mikkelsen Electronics represent a number of the best producers of components within the industry. Macromelt, RFID, sensors of all kinds and cables - also fiber optics - from well-known brands such as Henkel, Novotechnik, Contelec, Huber+Suhner and BEI Duncan are among the long lasting partnerships. Through own production facilities in Denmark and dependable producers in Estonia and China Mikkelsen Electronics have built up a thorough experience in tailored and specialized projects.

Mikkelsen Electronics are producing after the IPC standard and are UL-certified and ISO 9001:2008-certified. Additionally, the company has an AAA credit rating.

With a sales office in Sweden and based in Denmark, Mikkelsen Electronics export to a number of European countries.

Questions?

If you have any questions about this product and the technology, please feel free to contact Sales Manager Christoffer Bruun at +45 44 34 03 04 or cb@mi-ec.com.

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