Magnetic encoders

Encoder 01-05

Encoder 01-03

Encoder 01-02
Working principles for magnetic encoders
Rotational detection is made with a magnetic code disk and a Hall Effect Integrated Circuit.

A magnetic North pole enables the pulse from the hall IC and a magnetic South Pole disables the pulse again i.e. one pulse is generated by two magnets.

As there is no rotating shaft in these magnetic encoders they are completely watertight.

Distance between the code disk and the detecting devices (d) needs to be controlled very closely. This detection principle is useful when a very compact and economical solution is needed. Eltomatic has developed this type of encoders completely integrated with customers flowmeters.

Characteristics:
- Low number of pulses per revolution (depending on code disk diameter)
- Distance between magnet and Hall element needs to be small and well controlled
- Magnetic code disc can be placed outside of the encoder housing
- Encoder can easily be integrated with the flowmeter
- Economical solution
- Compact solution

Eltomatic has developed several incremental encoders for customers using our patented magnetic detection scheme. These encoders are completely integrated with the flowmeter, where the magnetic disk is placed outside the encoder housing. The encoder can either be built into the flowmeter housing or it can be mounted at the end of the flowmeter. Development of such kind of integrated encoders is always done in close cooperation with the developers of the flowmeters.

Some of these custom specific encoders have been developed exclusively for one customer and may not be available to other customers.

Contact
If you are interested in learning more about our magnetic encoders, please don’t hesitate to send us your request on eltomatic@eltomatic.com or call us at +45 9824 6166