

1. Safety notes

1.1 Installation and startup

The rotary sensor is to be placed in service only by technical personnel under observance of all relevant safety regulations. Non-observance of the installation instructions will void any warranty or liability claims.

All personal protection measures in case of a transducer defect or failure must be taken before startup.

1.2 Electrical connections

The specified supply voltage is to be applied only at the terminals provided. Non-observance of the pin configuration will result in destruction of the device and loss of warranty.

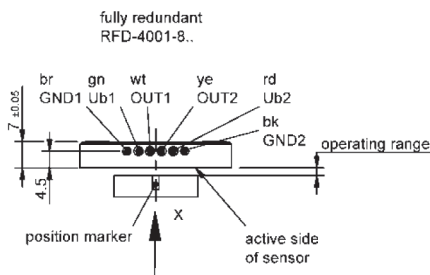
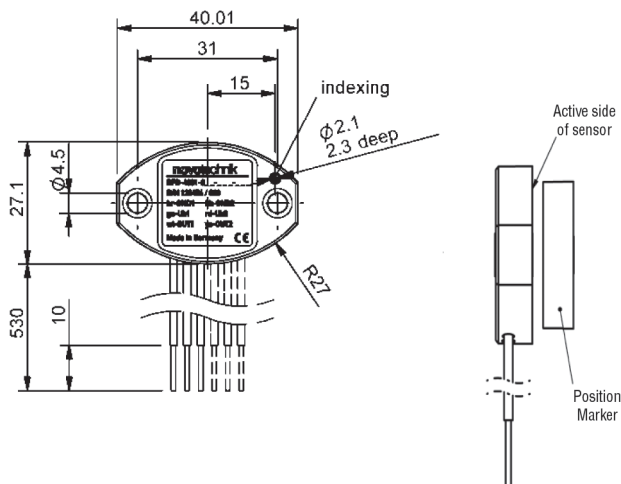
1.3 Further Information

For further information relating to installation and properties of this product and on available add-on items see also the corresponding data sheet. These can be downloaded at www.novotechnik.com under Resources available also from your local representative.

1.4 Limitations for application

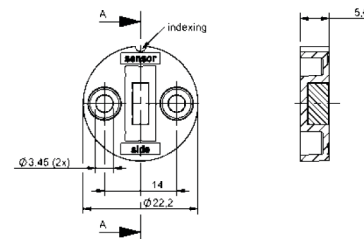
Our products are regularly not approved for aeronautic or aerospace applications and are not allowed to be used in nuclear or military, in particular ABC-relevant applications. For more information see our Terms and Conditions

2. RFD 4000 dimensions



2.1 Position markers

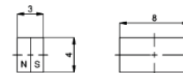
Z-RFC-P30 Recommended position marker for RFD 4000



Operating range:

A = 1.2 ... 2.7mm (single)
A = 0.75 ... 2.25mm (redundant)

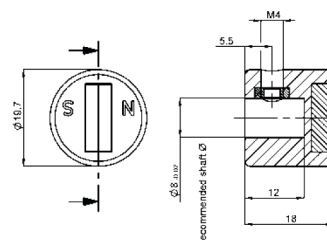
Z-RFC-P03



Z-RFC-P04



Z-RFC-P23



Further position markers pls. refer to separate data sheet

3. Electrical data

Supply voltage

5 VDC (4.5...5.5 VDC)

Current draw

typ. 13 mA (8mA on request) per channel

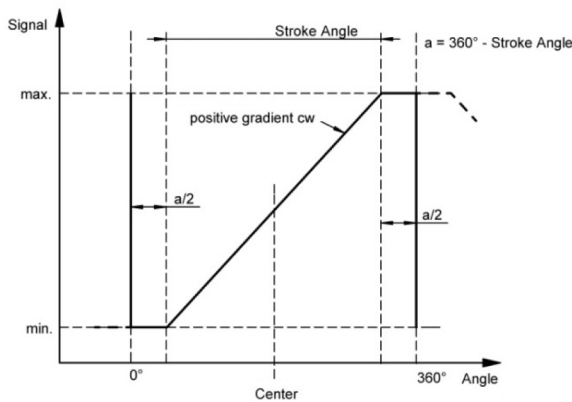
Wires

AWG 20 / 0.5mm²

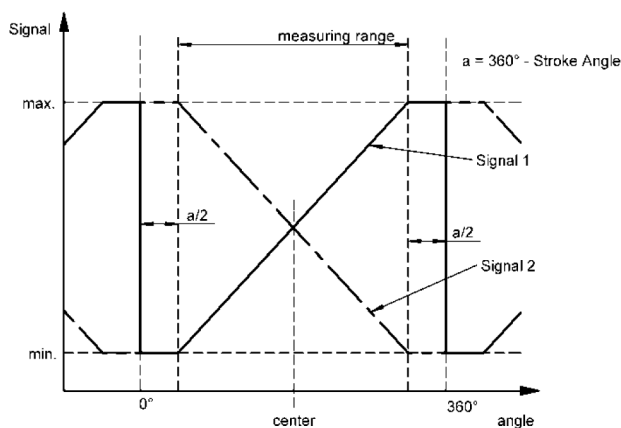
3.1 Electrical Connections

color	green	white	brown	red	black	yellow
single	supply	output	Ground	-	-	-
partly redundant	supply	output 1	Ground	-	-	output 2
fully redundant	supply 1	output 1	Ground 1	supply 2	Ground 2	output 2

3.2 Output signal single

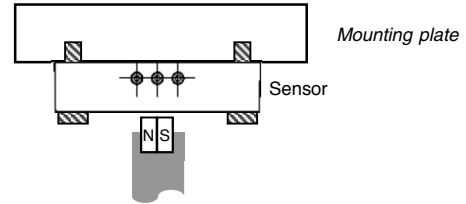


3.3 Output signal redundant

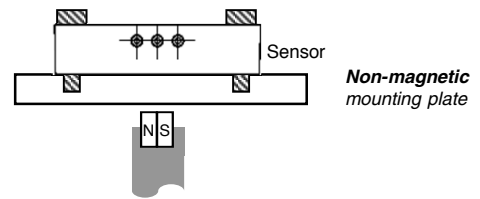


4. Mounting examples sensor - position marker

Example A: mounting plate on inactive side

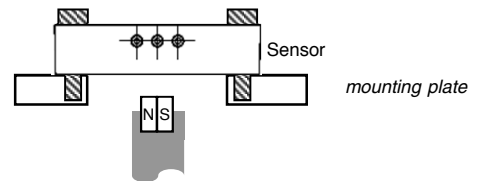


Example B: Measuring through mounting surface



The operating range of the position marker must not be exceeded !

Example C: Position marker through plate



Definition of center position :

When the marking of the position marker is pointing to the wire outlet, the output signal is in center position.

5. Installation Instructions

- Bare Magnets as position markers (Z-RFC-P03 or -P04) should be mounted on non magnetic supports.
- Basically, the sensor is sensitive against ferromagnetic parts and DC magnetic fields in close proximity. To reduce influences from external magnetic fields and ferromagnetic materials, the distance between position marker and sensor should be kept small, refer to allowed operating ranges.
- **Only Novotechnik approved magnets may be used !**
- Using M4 screws, the max. tightening torque is **150 Ncm**.