# Inductive Sensor with Analog Output

# IX130RM65MG3

Part Number



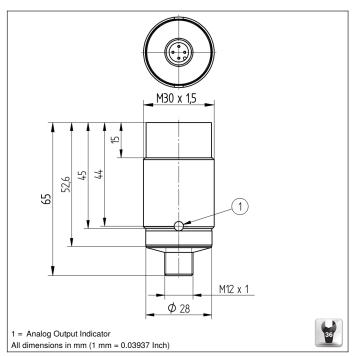
#### **Technical Data**

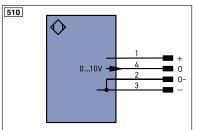
| Inductive Data                                 |                     |  |  |
|--|---------------------|--|--|
| Vorking Range 313 mm                           |                     |  |  |
| Measuring Distance                             | 8 mm                |  |  |
| Measuring Range                                | 10 mm               |  |  |
| Correction Factors Stainless Steel V2A/CuZn/Al | 1/1/1               |  |  |
| Mounting                                       | non-flush           |  |  |
| Mounting A/B/C/D in mm 30/30/36/20             |                     |  |  |
| Standard Target FE360, thickness 1 mm          | 39 × 39 mm          |  |  |
| Linearity                                      | < 1 %               |  |  |
| Resolution                                     | 4 μm                |  |  |
| Electrical Data                                |                     |  |  |
| Supply Voltage                                 | 1830 V DC           |  |  |
| Current Consumption (Ub = 24 V)                | < 30 mA             |  |  |
| Cut-Off Frequency                              | 900 Hz              |  |  |
| Temperature Drift                              | 10 μm/K             |  |  |
| Temperature Range                              | -1070 °C            |  |  |
| Analog Output                                  | 010 V               |  |  |
| Load Current Voltage Output                    | < 1 mA              |  |  |
| Resistant to Magnetic Fields                   | yes                 |  |  |
| Short Circuit Protection                       | yes                 |  |  |
| Reverse Polarity Protection                    | yes                 |  |  |
| Protection Class                               | III                 |  |  |
| Mechanical Data                                |                     |  |  |
| Housing Material                               | CuZn, nickel-plated |  |  |
| Full Encapsulation                             | yes                 |  |  |
| Degree of Protection                           | IP67                |  |  |
| Connection                                     | M12 × 1; 4-pin      |  |  |
| Analog Output                                  | •                   |  |  |
| Connection Diagram No.                         | 510                 |  |  |
| Suitable Connection Equipment No.              | 2                   |  |  |
| Suitable Mounting Technology No.               | 130                 |  |  |
|  |                     |  |  |

## **Complementary Products**

Analog Evaluation Unit AW02







| Leger   | nd                                |            | PT    | Platinum measuring resistor    | ENARS422 | Encoder A/Ā (TTL)                    |  |
|---------|-----------------------------------|------------|-------|--------------------------------|----------|--------------------------------------|--|
| +       | Supply Voltage +                  |            | nc    | not connected                  | ENBRS422 | Encoder B/B (TTL)                    |  |
| _       | Supply Voltage 0 V                |            | U     | Test Input                     | ENA      | Encoder A                            |  |
| ~       | Supply Voltage (AC Voltage)       |            | Ū     | Test Input inverted            | ENв      | Encoder B                            |  |
| Α       | Switching Output                  | (NO)       | W     | Trigger Input                  | Amin     | Digital output MIN                   |  |
| A       | Switching Output                  | (NC)       | W -   | Ground for the Trigger Input   | Амах     | Digital output MAX                   |  |
| V       | Contamination/Error Output        | (NO)       | 0     | Analog Output                  | Аок      | Digital output OK                    |  |
| V       | Contamination/Error Output        | (NC)       | 0-    | Ground for the Analog Output   | SY In    | Synchronization In                   |  |
| E       | Input (analog or digital)         |            | BZ    | Block Discharge                | SY OUT   | Synchronization OUT                  |  |
| Т       | Teach Input                       |            | Awv   | Valve Output                   | OLT      | Brightness output                    |  |
| Z       | Time Delay (activation)           |            | а     | Valve Control Output +         | М        | Maintenance                          |  |
| S       | Shielding                         |            | b     | Valve Control Output 0 V       | rsv      | reserved                             |  |
| RxD     | Interface Receive Path            |            | SY    | Synchronization                | Wire Co  | Wire Colors according to DIN IEC 757 |  |
| TxD     | Interface Send Path               |            | SY-   | Ground for the Synchronization | BK       | Black                                |  |
| RDY     | Ready                             |            | E+    | Receiver-Line                  | BN       | Brown                                |  |
| GND     | Ground                            |            | S+    | Emitter-Line                   | RD       | Red                                  |  |
| CL      | Clock                             |            | ±     | Grounding                      | OG       | Orange                               |  |
| E/A     | Output/Input programmable         |            | SnR   | Switching Distance Reduction   | YE       | Yellow                               |  |
| •       | IO-Link                           |            | Rx+/- | Ethernet Receive Path          | GN       | Green                                |  |
| PoE     | Power over Ethernet               |            | Tx+/- | Ethernet Send Path             | BU       | Blue                                 |  |
| IN      | Safety Input                      |            | Bus   | Interfaces-Bus A(+)/B(-)       | VT       | Violet                               |  |
| OSSD    | Safety Output                     |            | La    | Emitted Light disengageable    | GY       | Grey                                 |  |
| Signal  | Signal Output                     |            | Mag   | Magnet activation              | WH       | White                                |  |
| BI_D+/- | - Ethernet Gigabit bidirect, data | line (A-D) | RES   | Input confirmation             | PK       | Pink                                 |  |
| ENors42 | 2 Encoder 0-pulse 0-0 (TTL)       | , ,        | EDM   | Contactor Monitoring           | GNYE     | Green/Yellow                         |  |

## Mounting

