

# Inductive Sensor with Full-Metal Housing

## IX250SE65UA3

Part Number



InoxSens

### Technical Data

#### Inductive Data

|  |                |
|--|----------------|
| Switching Distance                             | 25 mm          |
| Correction Factors Stainless Steel V2A/CuZn/Al | 1,09/0,65/0,58 |
| Mounting                                       | non-flush      |
| Mounting A/B/C/D in mm                         | 45/80/75/35    |
| Mounting A/B/C/D (V2A) in mm                   | 30/80/75/35    |
| Switching Hysteresis                           | < 15 %         |

#### Electrical Data

|   |              |
|---|--------------|
| Supply Voltage                              | 10...30 V DC |
| Current Consumption (U <sub>b</sub> = 24 V) | < 15 mA      |
| Switching Frequency                         | 200 Hz       |
| Temperature Drift                           | < 10 %       |
| Temperature Range                           | -25...80 °C  |
| Switching Output Voltage Drop               | < 2,5 V      |
| Switching Output/Switching Current          | 400 mA       |
| Residual Current Switching Output           | < 100 µA     |
| Short Circuit Protection                    | yes          |
| Reverse Polarity and Overload Protection    | yes          |
| Protection Class                            | III          |

#### Mechanical Data

|                                      |                      |
|--------------------------------------|----------------------|
| Housing Material                     | Stainless Steel 316L |
| Full Encapsulation                   | yes                  |
| Degree of Protection                 | IP68/IP69K           |
| Connection                           | M12 × 1; 4-pin       |
| Pressure Resistance Sensor Area      | 25 bar               |
| Ex II 3G Ex nA IIC T5 Gc X           | yes                  |
| Ex II 3D Ex tc IIIC T90 °C Dc IP6X X | yes                  |

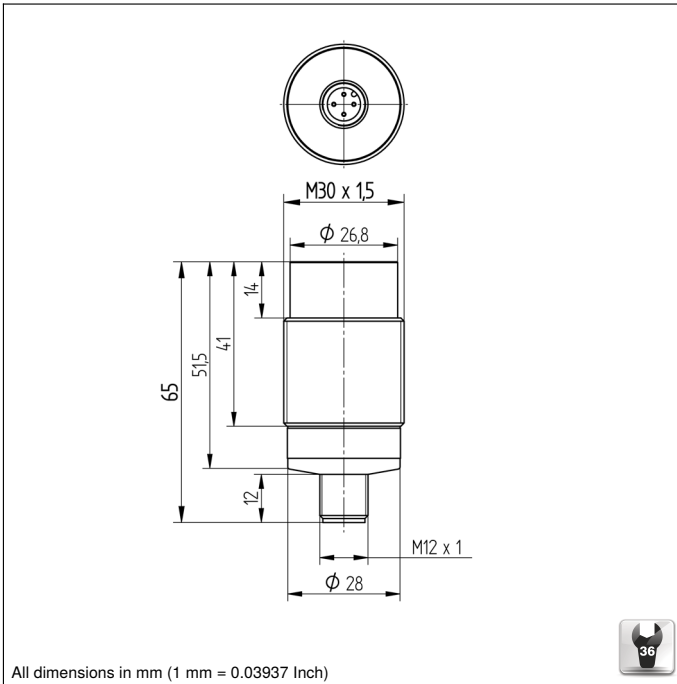
PNP NO/NC antivalent ●

|                                   |            |
|-----------------------------------|------------|
| Connection Diagram No.            | <b>101</b> |
| Suitable Connection Equipment No. | <b>2</b>   |
| Suitable Mounting Technology No.  | <b>130</b> |

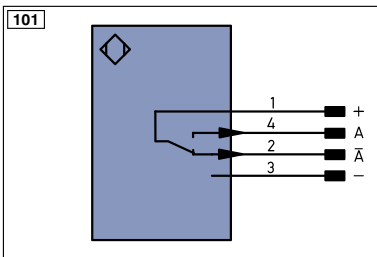
Housing: Stainless Steel V4A 1.4404, 316L

### Complementary Products

|                               |
|-------------------------------|
| Circlip Z0007                 |
| PNP-NPN Converter BG2V1P-N-2M |



All dimensions in mm (1 mm = 0.03937 Inch)



### Legend

|                        |  |                 |                                |                                      |                            |
|------------------------|--|-----------------|--------------------------------|--------------------------------------|----------------------------|
| +                      | Supply Voltage +                           | PT              | Platinum measuring resistor    | EN <sup>A</sup> EN542Z               | Encoder A/ $\bar{A}$ (TTL) |
| -                      | Supply Voltage 0 V                         | nc              | not connected                  | EN <sup>B</sup> EN542Z               | Encoder B/ $\bar{B}$ (TTL) |
| ~                      | Supply Voltage (AC Voltage)                | U               | Test Input                     | EN <sup>A</sup>                      | Encoder A                  |
| A                      | Switching Output (NO)                      | $\bar{U}$       | Test Input inverted            | EN <sup>B</sup>                      | Encoder B                  |
| $\bar{A}$              | Switching Output (NC)                      | W               | Trigger Input                  | A <sub>MIN</sub>                     | Digital output MIN         |
| V                      | Contamination/Error Output (NO)            | W-              | Ground for the Trigger Input   | A <sub>MAX</sub>                     | Digital output MAX         |
| $\bar{V}$              | Contamination/Error Output (NC)            | O               | Analog Output                  | A <sub>OK</sub>                      | Digital output OK          |
| E                      | Input (analog or digital)                  | O-              | Ground for the Analog Output   | SY <sub>in</sub>                     | Synchronization In         |
| T                      | Teach Input                                | BZ              | Block Discharge                | SY <sub>OUT</sub>                    | Synchronization OUT        |
| Z                      | Time Delay (activation)                    | A <sub>WV</sub> | Valve Output                   | OL <sub>T</sub>                      | Brightness output          |
| S                      | Shielding                                  | a               | Valve Control Output +         | M                                    | Maintenance                |
| RxD                    | Interface Receive Path                     | b               | Valve Control Output 0 V       | rsv                                  | reserved                   |
| TxD                    | Interface Send Path                        | SY              | Synchronization                | Wire Colors according to DIN IEC 757 |                            |
| RDY                    | Ready                                      | SY-             | Ground for the Synchronization | BK                                   | Black                      |
| GND                    | Ground                                     | E+              | Receiver-Line                  | BN                                   | Brown                      |
| CL                     | Clock                                      | S+              | Emitter-Line                   | RD                                   | Red                        |
| E/A                    | Output/Input programmable                  | ⊕               | Grounding                      | OG                                   | Orange                     |
|                        | IO-Link                                    | S <sub>nR</sub> | Switching Distance Reduction   | YE                                   | Yellow                     |
| PoE                    | Power over Ethernet                        | Rx+/-           | Ethernet Receive Path          | GN                                   | Green                      |
| IN                     | Safety Input                               | Tx+/-           | Ethernet Send Path             | BU                                   | Blue                       |
| OSSD                   | Safety Output                              | Bus             | Interfaces-Bus A(+)/B(-)       | VT                                   | Violet                     |
| Signal                 | Signal Output                              | L <sub>a</sub>  | Emitted Light disengageable    | GY                                   | Grey                       |
| Bl_D+/-                | Ethernet Gigabit bidirect. data line (A-D) | Mag             | Magnet activation              | WH                                   | White                      |
| EN <sup>0</sup> EN542Z | Encoder 0-pulse 0-0 (TTL)                  | RES             | Input confirmation             | PK                                   | Pink                       |
|                        |  | EDM             | Contactur Monitoring           | GNYE                                 | Green/Yellow               |

## Mounting

