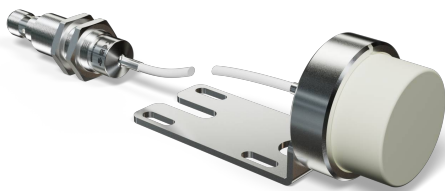


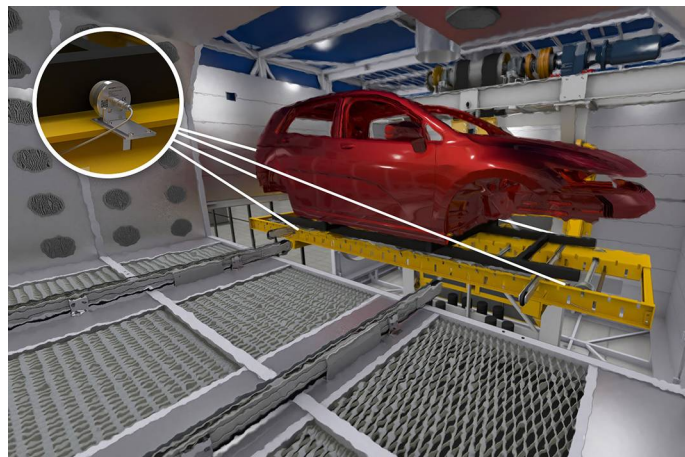
# Inductive Sensor for Extreme Temperature Ranges

## INTT209

Part Number



- Easy replacement thanks to quick-release fastener
- High tightness
- Long service life at temperatures of up to 250 °C
- Minimal mounting clearance thanks to wenglor we-proTec
- Switching distance configurable via IO-Link



### Technical Data

#### Inductive Data

|  |                |
|--|----------------|
| Switching Distance                             | 25 mm          |
| Standard Target                                | 75 × 75 mm     |
| Correction Factors Stainless Steel V2A/CuZn/Al | 0,60/1,00/0,85 |
| Mounting                                       | Non-flush      |
| Mounting A/B/C/D in mm                         | 10/120/50/20   |
| Mounting B1 in mm                              | 0...40         |
| Switching Hysteresis                           | < 10 %         |

#### Electrical Data

|   |              |
|---|--------------|
| Supply Voltage                              | 10...30 V DC |
| Supply Voltage with IO-Link                 | 18...30 V DC |
| Current Consumption (U <sub>b</sub> = 24 V) | < 15 mA      |
| Switching Frequency                         | 50 Hz        |
| Temperature Drift                           | < 10 %       |
| Sensor head temperature range               | -10...250 °C |
| Analysis module temperature range           | 0...70 °C    |
| Number of Switching Outputs                 | 2            |
| Switching Output Voltage Drop               | < 1,5 V      |
| Switching Output/Switching Current          | 100 mA       |
| Residual Current Switching Output           | < 100 µA     |
| Short Circuit Protection                    | yes          |
| Reverse Polarity Protection                 | yes          |
| Overload Protection                         | yes          |
| Interface                                   | IO-Link V1.1 |
| Protection Class                            | III          |
| Service Life (T = +200 °C)                  | 100000 h     |
| Service Life (T = +250 °C)                  | 60000 h      |

#### Mechanical Data

|                          |                                     |
|--------------------------|-------------------------------------|
| Sensing face             | Plastic, PEEK                       |
| Sensor head material     | Stainless steel, V2A (1.4305 / 303) |
| Analysis module material | Stainless steel, V2A (1.4305 / 303) |
| Degree of Protection     | IP65                                |
| Connection               | M12 × 1; 4-pin                      |
| Cable length (L)         | 15 m                                |
| Cable Jacket Material    | Plastic, PFA                        |
| Outer diameter cable     | 3,4 mm                              |
| Bending Radius           | > 17 mm                             |
| PWIS-free                | yes                                 |

#### Safety-relevant Data

|                        |           |
|------------------------|-----------|
| MTTFd (EN ISO 13849-1) | 3706,54 a |
|------------------------|-----------|

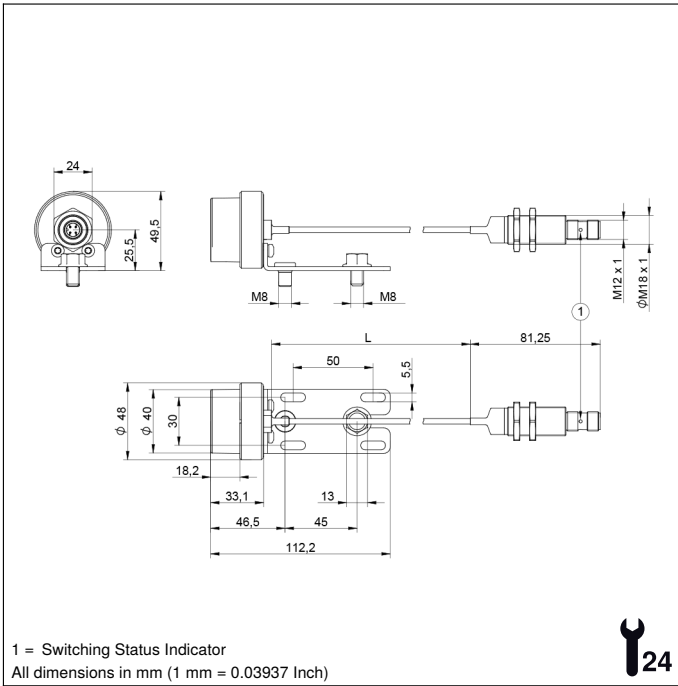
#### Function

|                                 |                                   |
|---------------------------------|-----------------------------------|
| Error Indicator                 | yes                               |
| Programmable switching distance | 15/20/25 mm                       |
|                                 | 1 × initial start-up instructions |
|                                 | 1 × MUTTER-M18-E003 hex nut       |
|                                 | 1 × sensor                        |

|                                   |            |
|-----------------------------------|------------|
| IO-Link                           | ●          |
| Error Output                      | ●          |
| PNP NO                            | ●          |
| Connection Diagram No.            | <b>704</b> |
| Suitable Connection Equipment No. | <b>2</b>   |
| Suitable Mounting Technology No.  | <b>150</b> |

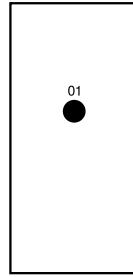
### Complementary Products

|                         |
|-------------------------|
| IO-Link Master Software |
|-------------------------|

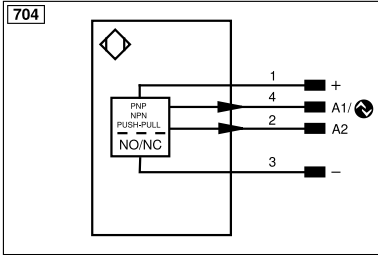


### Ctrl. Panel

B3



01 = Switching Status Indicator



| Legend              |  |  |                                |
|---------------------|--|--|--------------------------------|
| +                   | Supply Voltage +                           | PT                                     | Platinum measuring resistor    |
| -                   | Supply Voltage 0 V                         | nc                                     | Not connected                  |
| ~                   | Supply Voltage (AC Voltage)                | U                                      | Test Input                     |
| A                   | Switching Output (NO)                      | Ū                                      | Test Input inverted            |
| Ā                   | Switching Output (NC)                      | W                                      | Trigger Input                  |
| V                   | Contamination/Error Output (NO)            | W-                                     | Ground for the Trigger Input   |
| Ṽ                   | Contamination/Error Output (NC)            | O                                      | Analog Output                  |
| E                   | Input (analog or digital)                  | O-                                     | Ground for the Analog Output   |
| T                   | Teach Input                                | BZ                                     | Block Discharge                |
| R                   | Reset input                                | Amv                                    | Valve Output                   |
| Z                   | Time Delay (activation)                    | a                                      | Valve Control Output +         |
| S                   | Shielding                                  | b                                      | Valve Control Output 0 V       |
| RxD                 | Interface Receive Path                     | SY                                     | Synchronization                |
| TxD                 | Interface Send Path                        | SY-                                    | Ground for the Synchronization |
| RDY                 | Ready                                      | E+                                     | Receiver-Line                  |
| GND                 | Ground                                     | S+                                     | Emitter-Line                   |
| CL                  | Clock                                      | ≡                                      | Grounding                      |
| E/A                 | Output/Input programmable                  | SnR                                    | Switching Distance Reduction   |
|                     | IO-Link                                    | Rx+/-                                  | Ethernet Receive Path          |
| PoE                 | Power over Ethernet                        | Tx+/-                                  | Ethernet Send Path             |
| IN                  | Safety Input                               | Bus                                    | Interfaces-Bus A(+)/B(-)       |
| QSSD                | Safety Output                              | La                                     | Emitted Light disengageable    |
| Signal              | Signal Output                              | Mag                                    | Magnet activation              |
| Bl_D+/-             | Ethernet Gigabit bidirect. data line (A-D) | RES                                    | Input confirmation             |
| EN <sub>RS422</sub> | Encoder 0-pulse 0/0 (TTL)                  | EDM                                    | Contacting Monitoring          |
|                     |  | EN <sub>RS422</sub>                    | Encoder A/Ā (TTL)              |
|                     |  | EN <sub>RS422</sub>                    | Encoder B/B̄ (TTL)             |
|                     |  | ENA                                    | Encoder A                      |
|                     |  | ENB                                    | Encoder B                      |
|                     |  | AMIN                                   | Digital output MIN             |
|                     |  | AMAX                                   | Digital output MAX             |
|                     |  | AOK                                    | Digital output OK              |
|                     |  | SY In                                  | Synchronization In             |
|                     |  | SY OUT                                 | Synchronization OUT            |
|                     |  | OLT                                    | Brightness output              |
|                     |  | M                                      | Maintenance                    |
|                     |  | rsv                                    | Reserved                       |
|                     |  | Wire Colors according to DIN IEC 60757 |                                |
|                     |  | BK                                     | Black                          |
|                     |  | BN                                     | Brown                          |
|                     |  | RD                                     | Red                            |
|                     |  | OG                                     | Orange                         |
|                     |  | YE                                     | Yellow                         |
|                     |  | GN                                     | Green                          |
|                     |  | BU                                     | Blue                           |
|                     |  | VT                                     | Violet                         |
|                     |  | GY                                     | Grey                           |
|                     |  | WH                                     | White                          |
|                     |  | PK                                     | Pink                           |
|                     |  | GNYE                                   | Green/Yellow                   |

### Mounting

