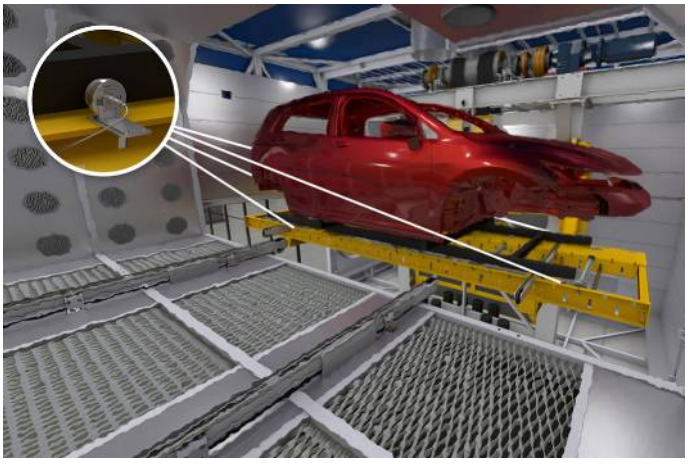
# Inductive Analysis Module
**for Extreme Temperature Ranges**

# INTT229
Part Number

- **Cable lengths of 5 to 20 m**
- **Cable with analysis module integrated into M12 sensor connector**
- **Easy to replace sensors with data storage feature**
- **Three configurable switching distances: 15/20/25 mm**

The inductive high-temperature sensors are designed for use in very hot work environments and consist of an analysis module with cable and a separate sensor head. Long switching distances and a long service life in hot areas ensure maximum system reliability. Sensor heads can be replaced without the use of tools, and numerous standard cable lengths with integrated analysis module are available separately. weproTec technology makes it possible to install the sensors directly next to or opposite one another. In addition, IO-Link can be used to individually configure sensor parameters such as switching distances and output functions.

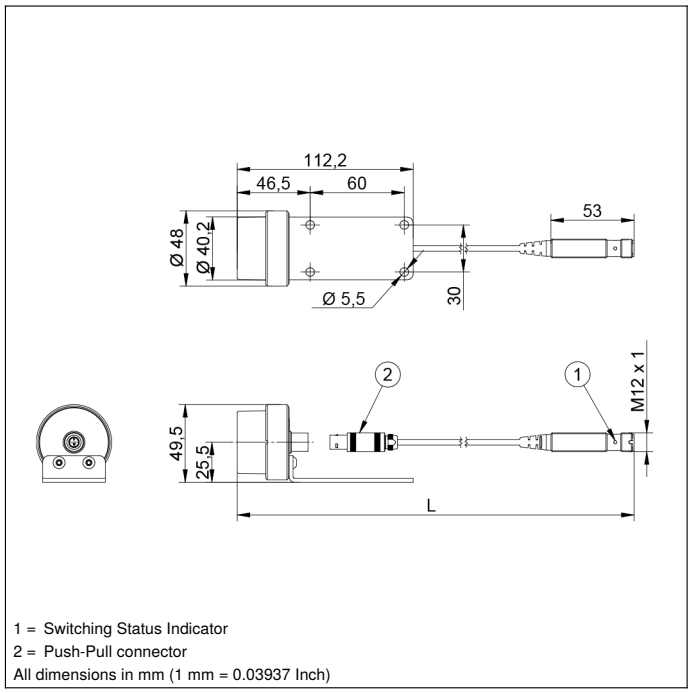


## Technical Data

| | |
|---|---|
| **Electrical Data** | |
| Supply Voltage | 10...30 V DC |
| Supply Voltage with IO-Link | 18...30 V DC |
| Current Consumption (Ub = 24 V) | < 15 mA |
| Switching Frequency | 50 Hz |
| Temperature range of the plug | 0...70 °C |
| Number of Switching Outputs | 2 |
| Switching Output Voltage Drop | < 1 V |
| Switching Output/Switching Current | 100 mA |
| Residual Current Switching Output | < 100 µA |
| Short Circuit Protection | yes |
| Reverse Polarity and Overload Protection | yes |
| Interface | IO-Link V1.1 |
| Protection Class | III |
| **Mechanical Data** | |
| Analysis module material | V2A; PEEK; PTFE; Brass (chrome plated) |
| Degree of protection, sensor head | IP50 |
| Degree of protection of the plug | IP50 |
| Connection | M12 × 1; 4-pin |
| Cable Length (L) | 15 m |
| 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 |
| Scope of delivery | Push-pull connection cable with analysis module, M12 connector; MUTTER-M12-E001 |
| IO-Link | ● |
| Error Output | ● |
| PNP NO | ● |
| Connection Diagram No. | 704 |
| Control Panel No. | B3 |
| Suitable Connection Equipment No. | 2 |
| Suitable Mounting Technology No. | 170 172 |

## Complementary Products

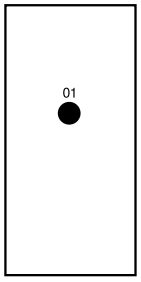
| |
|---|
| Inductive sensor head |
| IO-Link Master |
| Software |




1 = Switching Status Indicator
2 = Push-Pull connector
All dimensions in mm (1 mm = 0.03937 Inch)

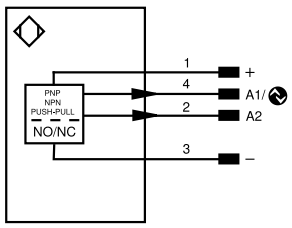
## Ctrl. Panel

B3




01 = Switching Status Indicator

704




| Legend | | | | | |
|---|---|---|---|---|---|
| + | Supply Voltage + | nc | Not connected | ENBRS422 | Encoder B/B̄ (TTL) |
| – | Supply Voltage 0 V | U | Test Input | ENA | Encoder A |
| ~ | Supply Voltage (AC Voltage) | Ū | Test Input inverted | ENB | Encoder B |
| A | Switching Output (NO) | W | Trigger Input | AMIN | Digital output MIN |
| Ā | Switching Output (NC) | W– | Ground for the Trigger Input | AMAX | Digital output MAX |
| V | Contamination/Error Output (NO) | O | Analog Output | AOK | Digital output OK |
| V̄ | Contamination/Error Output (NC) | O– | Ground for the Analog Output | SY In | Synchronization In |
| E | Input (analog or digital) | BZ | Block Discharge | SY OUT | Synchronization OUT |
| T | Teach Input | AMV | Valve Output | OLT | Brightness output |
| Z | Time Delay (activation) | a | Valve Control Output + | M | Maintenance |
| S | Shielding | b | Valve Control Output 0 V | rsv | Reserved |
| RxD | Interface Receive Path | SY | Synchronization | Wire Colors according to DIN IEC 60757 | |
| 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 | ower 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 |
| EN0 RS422 | Encoder 0-pulse 0/0̄ (TTL) | EDM | Contactor Monitoring | GNYE | Green/Yellow |
| PT | Platinum measuring resistor | ENARS422 | Encoder A/Ā (TTL) | | |