

**Inductive Sensor**  
with Standard Switching Distances

**I30N006**

Part Number

weproTec

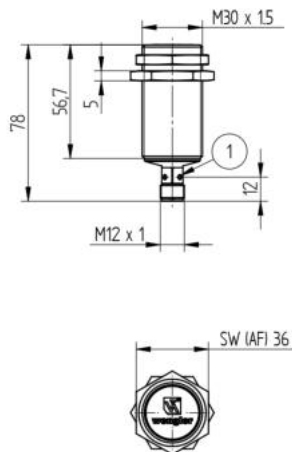


- Innovative ASIC circuit technology
- Integrated error display
- Minimal mounting clearance thanks to wenglor weproTec

Inductive Sensors with standard switching distances are distinguished by rugged design, easy installation and reliable measured values. In addition to error-free operation of several sensors in a very small space, the new generation also provides the possibility of detecting system errors before it's too late thanks to ASIC und wenglor weproTec.

**Technical Data**

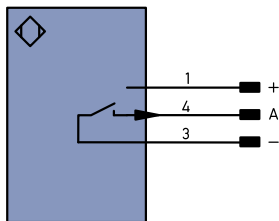
| Inductive Data                                 |                     |
|--|---------------------|
| Switching Distance                             | 10 mm               |
| Correction Factors Stainless Steel V2A/CuZn/Al | 1,18/0,5/0,46       |
| Mounting                                       | flush               |
| Mounting A/B/C/D in mm                         | 0/20/30/0           |
| Mounting B1 in mm                              | 0...10              |
| Switching Hysteresis                           | < 10 %              |
| Electrical Data                                |                     |
| Supply Voltage                                 | 10...30 V DC        |
| Current Consumption (Ub = 24 V)                | < 10 mA             |
| Switching Frequency                            | 580 Hz              |
| Temperature Drift                              | < 10 %              |
| Temperature Range                              | -40...80 °C         |
| Switching Output Voltage Drop                  | < 1 V               |
| Switching Output/Switching Current             | 150 mA              |
| Residual Current Switching Output              | < 100 µA            |
| Short Circuit Protection                       | yes                 |
| Reverse Polarity and Overload Protection       | yes                 |
| Protection Class                               | III                 |
| Mechanical Data                                |                     |
| Housing Material                               | CuZn, nickel-plated |
| Degree of Protection                           | IP67                |
| Connection                                     | M12 × 1; 3-pin      |
| Safety-relevant Data                           |                     |
| MTTFd (EN ISO 13849-1)                         | 3706,54 a           |
| Function                                       |                     |
| Error Indicator                                | yes                 |
| NPN NO   |                     |
| Connection Diagram No.                         | <b>302</b>          |
| Suitable Connection Equipment No.              | <b>2</b>            |
| Suitable Mounting Technology No.               | <b>130   131</b>    |



1 = Switching Status Indicator  
Sleeve M30×1,5 = 50 Nm  
All dimensions in mm (1 mm = 0.03937 Inch)



302



#### Legend

|          |  |
|----------|--|
| +        | Supply Voltage +                           |
| -        | Supply Voltage 0 V                         |
| ~        | Supply Voltage (AC Voltage)                |
| A        | Switching Output (NO)                      |
| Ā        | Switching Output (NC)                      |
| V        | Contamination/Error Output (NO)            |
| Ṽ        | Contamination/Error Output (NC)            |
| E        | Input (analog or digital)                  |
| T        | Teach Input                                |
| Z        | Time Delay (activation)                    |
| S        | Shielding                                  |
| RxD      | Interface Receive Path                     |
| TxD      | Interface Send Path                        |
| RDY      | Ready                                      |
| GND      | Ground                                     |
| CL       | Clock                                      |
| E/A      | Output/Input programmable                  |
|          | IO-Link                                    |
| PoE      | Power over Ethernet                        |
| IN       | Safety Input                               |
| OSSD     | Safety Output                              |
| Signal   | Signal Output                              |
| BI-D+/-  | Ethernet Gigabit bidirect. data line (A-D) |
| EN0-PS42 | Encoder 0-pulse 0-0 (TTL)                  |

|       |                                |
|-------|--------------------------------|
| PT    | Platinum measuring resistor    |
| nc    | not connected                  |
| U     | Test Input                     |
| Ū     | Test Input inverted            |
| W     | Trigger Input                  |
| W-    | Ground for the Trigger Input   |
| O     | Analog Output                  |
| O-    | Ground for the Analog Output   |
| BZ    | Block Discharge                |
| AWV   | Valve Output                   |
| a     | Valve Control Output +         |
| b     | Valve Control Output 0 V       |
| SY    | Synchronization                |
| SY-   | Ground for the Synchronization |
| E+    | Receiver-Line                  |
| S+    | Emitter-Line                   |
| ±     | Grounding                      |
| SnR   | Switching Distance Reduction   |
| Rx+/- | Ethernet Receive Path          |
| Tx+/- | Ethernet Send Path             |
| Bus   | Interfaces-Bus A(+)/B(-)       |
| La    | Emitted Light disengageable    |
| Mag   | Magnet activation              |
| RES   | Input confirmation             |
| EDM   | Contacting Monitoring          |

|                                      |                     |
|--------------------------------------|---------------------|
| EN0-PS42                             | Encoder A/Ā (TTL)   |
| EN0-PS42                             | 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 757 |                     |
| 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

