

Inductive Sensor with IO-Link

I18H014

Part Number

weproTec



- Easy sensor configuration using the IO-Link interface
- Innovative ASIC circuit technology
- Integrated error display and error output
- Minimal mounting clearance thanks to wenglor weproTec

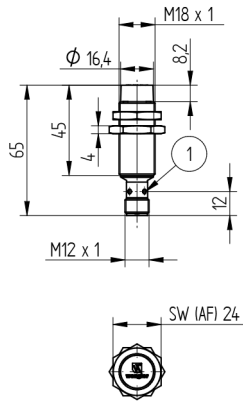
The Inductive Sensors have not only been equipped with ASIC, but rather with an IO-Link interface as well for ideal integration into networks. As a result, a total of three switching distances and two switching frequencies can be selected, and PNP/NPN as well as NO/NC/antivalent options can be set as desired. This reduces the number of variants while simultaneously expanding the scope of functions.

Technical Data

| Inductive Data | |
|--|---------------------|
| Switching Distance | 20 mm |
| Standard Target | 60 × 60 mm |
| Correction Factors Stainless Steel V2A/CuZn/Al | 0,92/0,47/0,46 |
| Mounting | non-flush |
| Mounting A/B/C/D in mm | 24/60/60/20 |
| Mounting B1 in mm | 2...40 |
| Switching Hysteresis | < 10 % |
| Electrical Data | |
| Supply Voltage | 10...30 V DC |
| Supply Voltage with IO-Link | 18...30 V DC |
| Current Consumption (U _b = 24 V) | < 11 mA |
| Switching Frequency | 670 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 |
| Interface | IO-Link V1.0 |
| Protection Class | III |
| Mechanical Data | |
| Housing Material | CuZn, nickel-plated |
| Degree of Protection | IP67 |
| Connection | M12 × 1; 4-pin |
| Safety-relevant Data | |
| MTTFd (EN ISO 13849-1) | 3706,54 a |
| Function | |
| Error Indicator | yes |
| Programmable switching distance | 12/15/20 mm |
| Programmable switching frequency | yes |
| IO-Link | ● |
| Switchable to NC/NO | ● |
| Configurable as PNP/NPN/Push-Pull | ● |
| Programmable error output | ● |
| Connection Diagram No. | 704 |
| Suitable Connection Technology No. | 2 |
| Suitable Mounting Technology No. | 150 153 |

Complementary Products

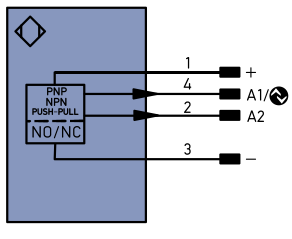
IO-Link Master
Software



1 = Switching Status Indicator
 Sleeve M18x1 = 30 Nm
 All dimensions in mm (1 mm = 0.03937 Inch)



704



Legend

| | | | | | |
|----------|--|----------|------------------------------|--------|---------------------|
| + | Supply Voltage + | PT | Platinum measuring resistor | ENa | Encoder A |
| - | Supply Voltage 0 V | nc | not connected | ENb | Encoder B |
| ~ | Supply Voltage (AC Voltage) | U | Test Input | AMIN | Digital output MIN |
| A | Switching Output (NO) | U | Test Input inverted | AMAX | Digital output MAX |
| A̅ | Switching Output (NC) | W | Trigger Input | AOK | Digital output OK |
| V | Contamination/Error Output (NO) | O | Analog Output | SY In | Synchronization In |
| V̅ | Contamination/Error Output (NC) | O- | Ground for the Analog Output | SY OUT | Synchronization OUT |
| E | Input (analog or digital) | BZ | Block Discharge | Out | Brightness output |
| T | Teach Input | AW | Valve Output | M | Maintenance |
| 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 | E+ | Receiver-Line | | |
| RDY | Ready | S+ | Emitter-Line | | |
| GND | Ground | ≡ | Grounding | | |
| CL | Clock | SnR | Switching Distance Reduction | | |
| E/A | Output/Input programmable | Rx+/- | Ethernet Receive Path | | |
| IO-Link | IO-Link | Tx+/- | Ethernet Send Path | | |
| PoE | Power over Ethernet | Bus | Interfaces-Bus A(+)/B(-) | | |
| IN | Safety Input | La | Emitted Light disengageable | | |
| OSSD | Safety Output | Mag | Magnet activation | | |
| Signal | Signal Output | RES | Input confirmation | | |
| Bl..D+/- | Ethernet Gigabit bidirect. data line (A-D) | EDM | Contactur Monitoring | | |
| EN0r5422 | Encoder 0-pulse 0-0 (TTL) | ENAr5422 | Encoder A/A̅ (TTL) | | |
| | | ENBr5422 | Encoder B/B̅ (TTL) | | |

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

