

Inductive Sensor with Analog Output

IW045CM65MG3

Part Number



Technical Data

Inductive Data

| | |
|--|--------------|
| Working Range | 1,5...4,5 mm |
| Measuring Distance | 3 mm |
| Measuring Range | 3 mm |
| Correction Factors Stainless Steel V2A/CuZn/Al | 1,2/1,2/1,2 |
| Mounting | flush |
| Mounting A/B/C/D in mm | 0/18/13,5/0 |
| Standard Target FE360, thickness 1 mm | 18 × 18 mm |
| Linearity | < 1 % |
| Resolution | 1 μm |

Electrical Data

| | |
|---|--------------|
| Supply Voltage | 18...30 V DC |
| Current Consumption (U _b = 24 V) | < 30 mA |
| Cut-Off Frequency | 900 Hz |
| Temperature Drift (-10 °C < T _u ≤ 50 °C) | 5 μm/K |
| Temperature Drift (50 °C < T _u ≤ 70 °C) | 6 μm/K |
| Temperature Range | -10...70 °C |
| Analog Output | 0...10 V |
| Load Current Voltage Output | < 1 mA |
| Resistant to Magnetic Fields | yes |
| Short Circuit Protection | yes |
| Reverse Polarity Protection | yes |
| Protection Class | III |

Mechanical Data

| | |
|----------------------|---------------------|
| Housing Material | CuZn, nickel-plated |
| Full Encapsulation | yes |
| Degree of Protection | IP67 |
| Connection | M12 × 1; 4-pin |

Analog Output



Connection Diagram No.

510

Suitable Connection Equipment No.

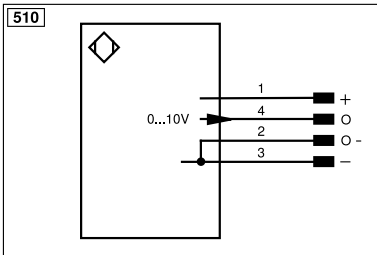
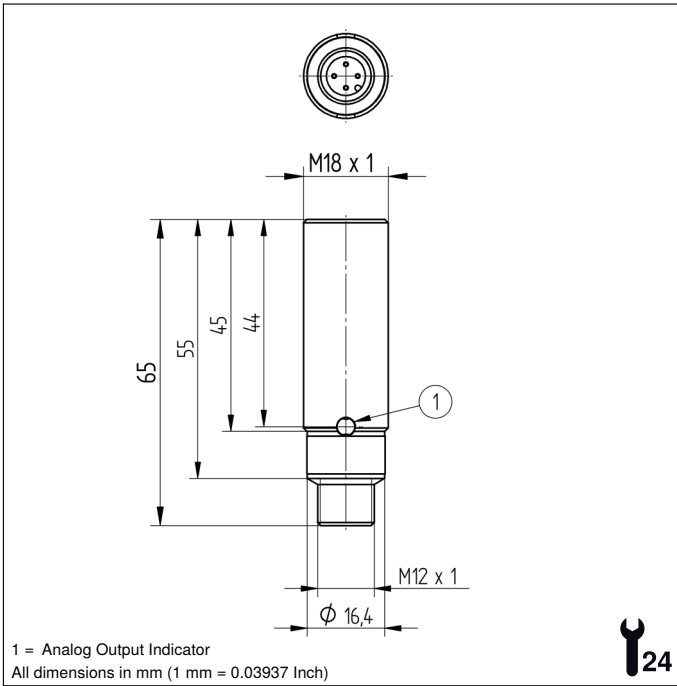
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Suitable Mounting Technology No.

150

Complementary Products

Analog Evaluation Unit AW02



| Legend | | | |
|-----------|--|--|--------------------------------|
| + | Supply Voltage + | nc | Not connected |
| - | Supply Voltage 0 V | U | Test Input |
| ~ | Supply Voltage (AC Voltage) | Ū | Test Input inverted |
| A | Switching Output (NO) | W | Trigger Input |
| Ā | Switching Output (NC) | W- | Ground for the Trigger Input |
| V | Contamination/Error Output (NO) | O | Analog Output |
| ȳ | Contamination/Error Output (NC) | O- | Ground for the Analog Output |
| E | Input (analog or digital) | BZ | Block Discharge |
| T | Teach 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 | IO-Link | Rx+/- | Ethernet Receive Path |
| PoE | Power over Ethernet | Tx+/- | Ethernet Send Path |
| IN | Safety Input | Bus | Interfaces-Bus A(+)/B(-) |
| OSSD | Safety Output | La | Emitted Light disengageable |
| Signal | Signal Output | Mag | Magnet activation |
| BI_D+/- | Ethernet Gigabit bidirect. data line (A-D) | RES | Input confirmation |
| ENo RS422 | Encoder 0-pulse 0/0 (TTL) | EDM | Contact Monitoring |
| PT | Platinum measuring resistor | ENARs422 | Encoder A/Ā (TTL) |
| | | ENBRs422 | 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

