

# Inductive Sensor with Increased Switching Distance

## I1DH005

Part Number

weproTec

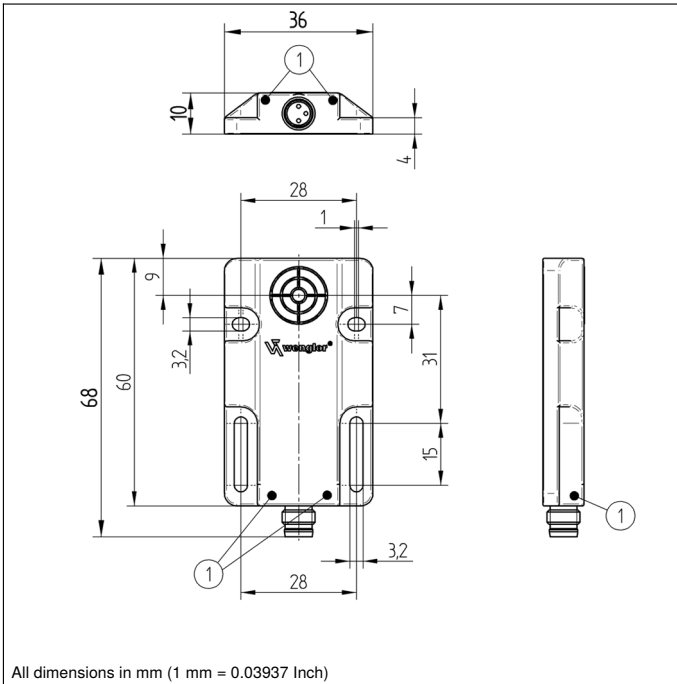


- Increased switching distance
- Innovative ASIC circuit technology
- Integrated error display
- Minimal mounting clearance thanks to wenglor weproTec

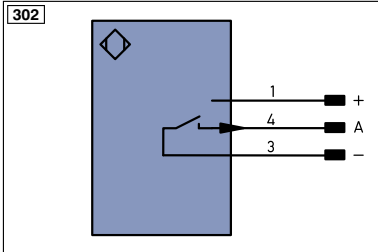
Inductive Sensors with increased switching distances are distinguished by rugged design, easy installation and reliable measured values. The large range makes additional types of sensor superfluous because they can also be used to implement special applications. In addition to error-free operation of 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	1,06/0,56/0,52
Mounting	non-flush
Mounting A/B/C/D in mm	72/14/30/10
Mounting B1 in mm	0...12
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 10 mA
Switching Frequency	460 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	Plastic
Degree of Protection	IP67/IP68
Connection	M8 × 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>8</b>

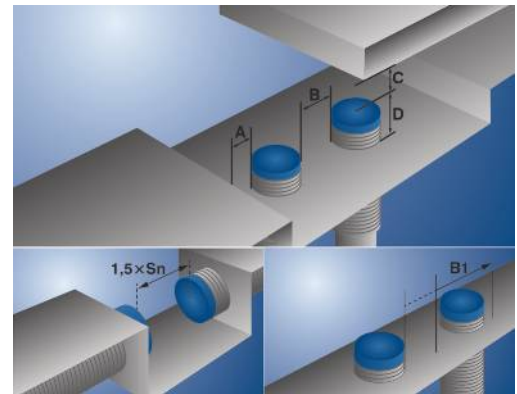


All dimensions in mm (1 mm = 0.03937 Inch)



Legend					
<b>+</b>	Supply Voltage +	<b>PT</b>	Platinum measuring resistor	<b>EN<sub>A</sub>RS422</b>	Encoder A/Ā (TTL)
<b>-</b>	Supply Voltage 0 V	<b>nc</b>	not connected	<b>EN<sub>B</sub>RS422</b>	Encoder B/B̄ (TTL)
<b>~</b>	Supply Voltage (AC Voltage)	<b>U</b>	Test Input	<b>EN<sub>A</sub></b>	Encoder A
<b>A</b>	Switching Output (NO)	<b>Ū</b>	Test Input inverted	<b>EN<sub>B</sub></b>	Encoder B
<b>Ā</b>	Switching Output (NC)	<b>W</b>	Trigger Input	<b>A<sub>MIN</sub></b>	Digital output MIN
<b>V</b>	Contamination/Error Output (NO)	<b>W-</b>	Ground for the Trigger Input	<b>A<sub>MAX</sub></b>	Digital output MAX
<b>Ṽ</b>	Contamination/Error Output (NC)	<b>O</b>	Analog Output	<b>A<sub>OK</sub></b>	Digital output OK
<b>E</b>	Input (analog or digital)	<b>O-</b>	Ground for the Analog Output	<b>SY<sub>in</sub></b>	Synchronization In
<b>T</b>	Teach Input	<b>BZ</b>	Block Discharge	<b>SY<sub>OUT</sub></b>	Synchronization OUT
<b>Z</b>	Time Delay (activation)	<b>A<sub>MV</sub></b>	Valve Output	<b>OL<sub>T</sub></b>	Brightness output
<b>S</b>	Shielding	<b>a</b>	Valve Control Output +	<b>M</b>	Maintenance
<b>RxD</b>	Interface Receive Path	<b>b</b>	Valve Control Output 0 V	<b>rsv</b>	reserved
<b>TxD</b>	Interface Send Path	<b>SY</b>	Synchronization	Wire Colors according to DIN IEC 757	
<b>RDY</b>	Ready	<b>SY-</b>	Ground for the Synchronization	<b>BK</b>	Black
<b>GND</b>	Ground	<b>E+</b>	Receiver-Line	<b>BN</b>	Brown
<b>CL</b>	Clock	<b>S+</b>	Emitter-Line	<b>RD</b>	Red
<b>E/A</b>	Output/Input programmable	<b>±</b>	Grounding	<b>OG</b>	Orange
	<b>IO-Link</b>	<b>S<sub>n</sub>R</b>	Switching Distance Reduction	<b>YE</b>	Yellow
<b>PoE</b>	Power over Ethernet	<b>Rx+/-</b>	Ethernet Receive Path	<b>GN</b>	Green
<b>IN</b>	Safety Input	<b>Tx+/-</b>	Ethernet Send Path	<b>BU</b>	Blue
<b>OSSD</b>	Safety Output	<b>Bus</b>	Interfaces-Bus A(+)/B(-)	<b>VT</b>	Violet
<b>Signal</b>	Signal Output	<b>L<sub>a</sub></b>	Emitted Light disengageable	<b>GY</b>	Grey
<b>Bl_D+/-</b>	Ethernet Gigabit bidirect. data line (A-D)	<b>Mag</b>	Magnet activation	<b>WH</b>	White
<b>EN<sub>0</sub>RS422</b>	Encoder 0-pulse 0-0̄ (TTL)	<b>RES</b>	Input confirmation	<b>PK</b>	Pink
		<b>EDM</b>	Contacting Monitoring	<b>GNYE</b>	Green/Yellow

### Mounting



Specifications are subject to change without notice