

Inductive Sensor with Increased Switching Distance

I1DH004

Part Number

weproTec



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

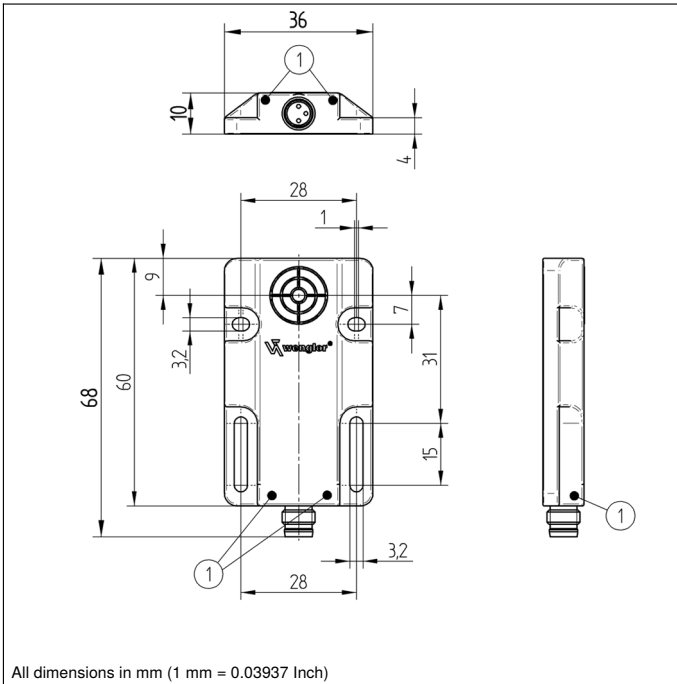
Inductive Sensors with increased switching distances are distinguished by rugged design, easy installation and reliable measured values. The large range makes additional types of sensor superfluous because they can also be used to implement special applications. In addition to error-free operation of 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

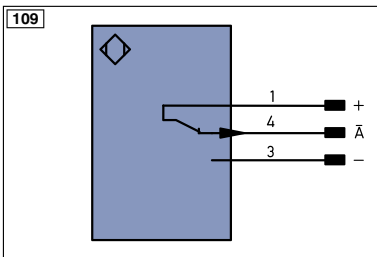
Inductive Data	
Switching Distance	10 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,06/0,56/0,52
Mounting	non-flush
Mounting A/B/C/D in mm	72/14/30/10
Mounting B1 in mm	0...12
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 10 mA
Switching 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
PNP NC	<input checked="" type="checkbox"/>
Connection Diagram No.	109
Suitable Connection Equipment No.	8

Complementary Products


PNP-NPN Converter BG8V1P-N-2M



All dimensions in mm (1 mm = 0.03937 Inch)



Legend

+ Supply Voltage +	nc not connected	EN_AES42Z Encoder A/Ā (TTL)
- Supply Voltage 0 V	U Test Input	EN_BES42Z Encoder B/B̄ (TTL)
~ Supply Voltage (AC Voltage)	Ū Test Input inverted	EN_A Encoder A
A Switching Output (NO)	W Trigger Input	EN_B Encoder B
Ā Switching Output (NC)	W- Ground for the Trigger Input	A_{MIN} Digital output MIN
V Contamination/Error Output (NO)	O Analog Output	A_{MAX} Digital output MAX
V̄ Contamination/Error Output (NC)	O- Ground for the Analog Output	A_{OK} Digital output OK
E Input (analog or digital)	BZ Block Discharge	SY_{in} Synchronization In
T Teach Input	A_{MV} Valve Output	SY_{OUT} Synchronization OUT
Z Time Delay (activation)	a Valve Control Output +	OL_T Brightness output
S Shielding	b Valve Control Output 0 V	M Maintenance
RxD Interface Receive Path	SY Synchronization	rsv reserved
TxD Interface Send Path	SY- Ground for the Synchronization	Wire Colors according to DIN IEC 757
RDY Ready	E+ Receiver-Line	BK Black
GND Ground	S+ Emitter-Line	BN Brown
CL Clock	± Grounding	RD Red
E/A Output/Input programmable	S_{nR} Switching Distance Reduction	OG Orange
 IO-Link	Rx+/- Ethernet Receive Path	YE Yellow
PoE Power over Ethernet	Tx+/- Ethernet Send Path	GN Green
IN Safety Input	Bus Interfaces-Bus A(+)/B(-)	BU Blue
OSSD Safety Output	L_a Emitted Light disengageable	VT Violet
Signal Signal Output	Mag Magnet activation	GY Grey
Bl_D+/- Ethernet Gigabit bidirect. data line (A-D)	RES Input confirmation	WH White
EN₀ES42Z Encoder 0-pulse 0-0̄ (TTL)	EDM Contactor Monitoring	PK Pink
		GNVE Green/Yellow

Mounting

