

Inductive Sensor with Increased Switching Distance

I1DH003

Part Number

weproTec



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

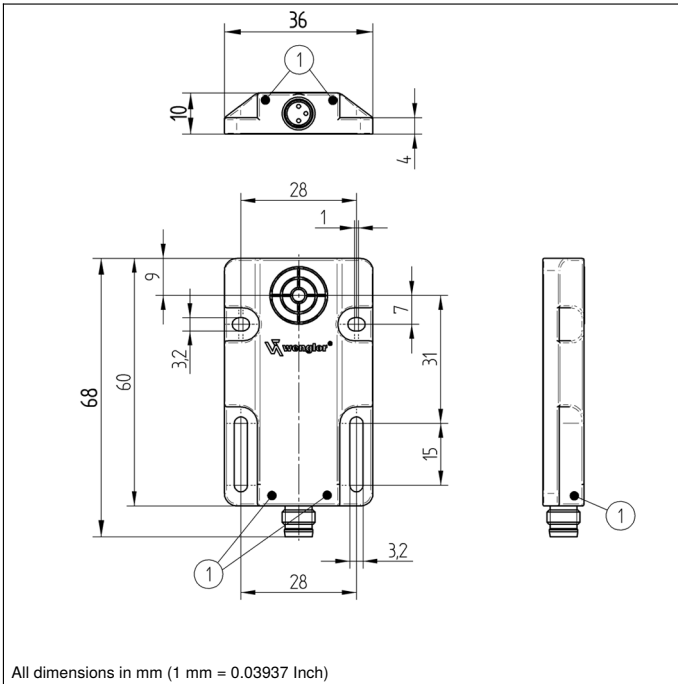
Inductive Sensors with increased switching distances are distinguished by rugged design, easy installation and reliable measured values. The large range makes additional types of sensor superfluous because they can also be used to implement special applications. In addition to error-free operation of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

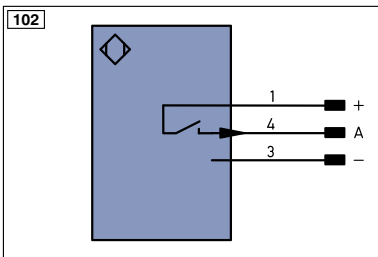
Inductive Data	
Switching Distance	10 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,06/0,56/0,52
Mounting	non-flush
Mounting A/B/C/D in mm	72/14/30/10
Mounting B1 in mm	0...12
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 10 mA
Switching 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 NO	●
Connection Diagram No.	102
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 +	PT	Platinum measuring resistor	EN _A ES42Z	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN _B ES42Z	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN _A	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN _B	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A _{MIN}	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A _{MAX}	Digital output MAX
Ṽ	Contamination/Error Output (NC)	O	Analog Output	A _{OK}	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY _{in}	Synchronization In
T	Teach Input	BZ	Block Discharge	SY _{OUT}	Synchronization OUT
Z	Time Delay (activation)	A _{MV}	Valve Output	OL _T	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to DIN IEC 757	
RDY	Ready	SY-	Ground for the Synchronization	BK	Black
GND	Ground	E+	Receiver-Line	BN	Brown
CL	Clock	S+	Emitter-Line	RD	Red
E/A	Output/Input programmable	±	Grounding	OG	Orange
	IO-Link	S _n R	Switching Distance Reduction	YE	Yellow
PoE	Power over Ethernet	Rx+/-	Ethernet Receive Path	GN	Green
IN	Safety Input	Tx+/-	Ethernet Send Path	BU	Blue
OSSD	Safety Output	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet
Signal	Signal Output	L _a	Emitted Light disengageable	GY	Grey
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN0 _{ES42Z}	Encoder 0-pulse 0-0 (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactor Monitoring	GNYE	Green/Yellow

Mounting

