

Inductive Sensor

with Increased Switching Distance

I1QH002

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	20 mm
Correction Factors Stainless Steel V2A/CuZn/Al	0,83/0,32/0,31
Mounting	flush
Mounting A/B/C/D in mm	0/40/60/0
Mounting B1 in mm	6...35
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
Connection	M12 × 1; 4-pin

Safety-relevant Data

MTTFd (EN ISO 13849-1)	3706,54 a
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Function

Error Indicator	yes
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PNP NC, PNP NO

Connection Diagram No.

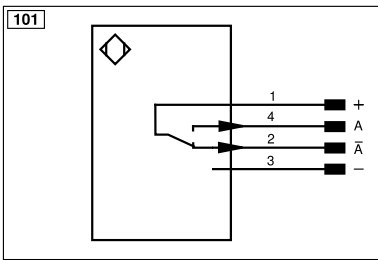
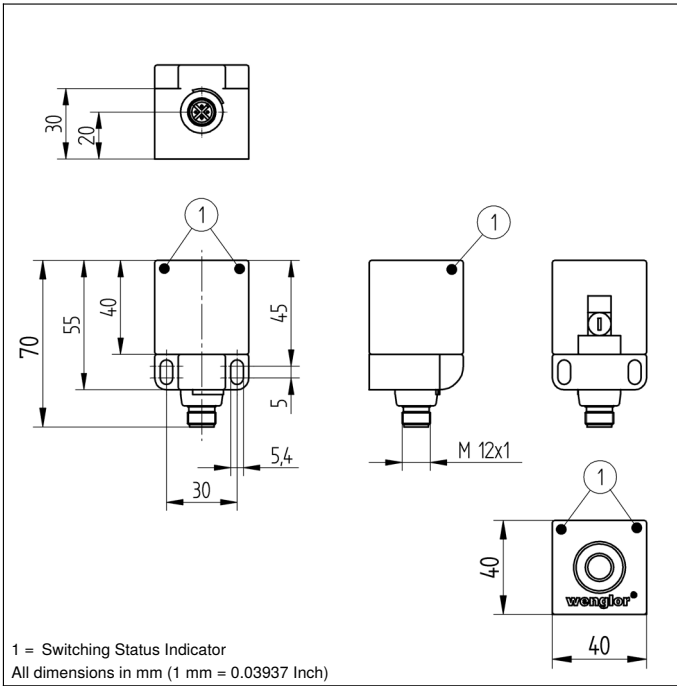
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Suitable Connection Equipment No.

2

Complementary Products

PNP-NPN Converter BG2V1P-N-2M



Legend				
+	Supply Voltage +	nc	Not connected	
-	Supply Voltage 0 V	U	Test Input	
~	Supply Voltage (AC Voltage)	Ü	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/Ī (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

