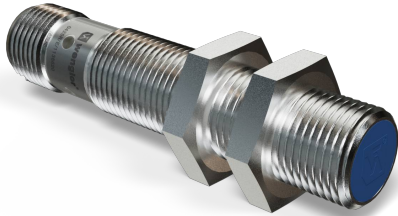


# Inductive Sensor of the Basic series

## I12X001

Part Number

weproTec



- Increased switching distance
- Integrated error display
- Minimal mounting clearance thanks to wenglor weproTec
- Robust metal housing

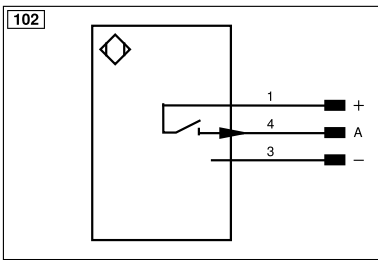
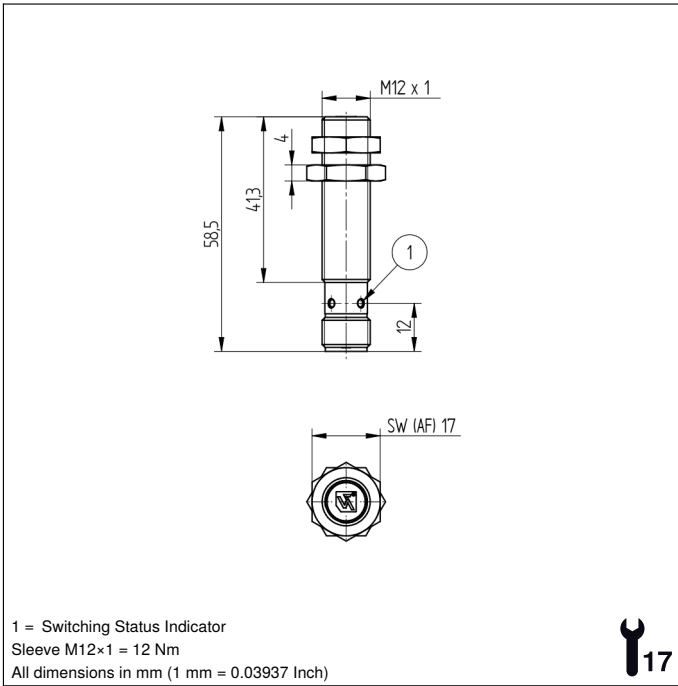
Inductive sensors of the Basic series impress with their robust metal housing, easy installation and reliable switching points. With their increased switching distance, they offer a large range so that many applications can be implemented without additional or special sensor types. Thanks to wenglor weproTec, the sensors ensure stable and low-interference operation – even in confined spaces. They are ideal for standard industrial applications and stand for reliable functionality at an attractive price-performance ratio.

### Technical Data

Inductive Data	
Switching Distance	4 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,02/0,54/0,52
Mounting	Flush
Mounting A/B/C/D in mm	0/8/12/0
Mounting B1 in mm	0...2
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 7 mA
Switching Frequency	400 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 Protection	yes
Overload Protection	yes
Protection Class	III
Mechanical Data	
Housing Material	Brass, nickel-plated
Sensing face	Plastic, PBT
Degree of Protection	IP67
Connection	M12 × 1; 3-pin
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3706,54 a
Function	
Error Indicator	yes
Scope of delivery	1 × MUTTER-M12-E001 hex nut 1 × sensor
Packaging unit	1 Piece
PNP NO	<input checked="" type="checkbox"/>
Connection Diagram No.	102
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170   171

### Complementary Products

PNP-NPN Converter BG2V1P-N-2M



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

