

# I30N002

Part Number

weproTec



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

Inductive Sensors with standard switching distances are distinguished by rugged design, easy installation and reliable measured values. 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	1,18/0,5/0,46
Mounting	flush
Mounting A/B/C/D in mm	0/20/30/0
Mounting B1 in mm	0...10
Switching Hysteresis	< 10 %

### Electrical Data

Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 10 mA
Switching Frequency	580 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	CuZn, nickel-plated
Degree of Protection	IP67
Connection	Cable, 4-wire, 2 m
Cable Jacket Material	PVC

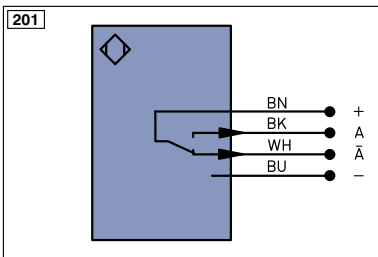
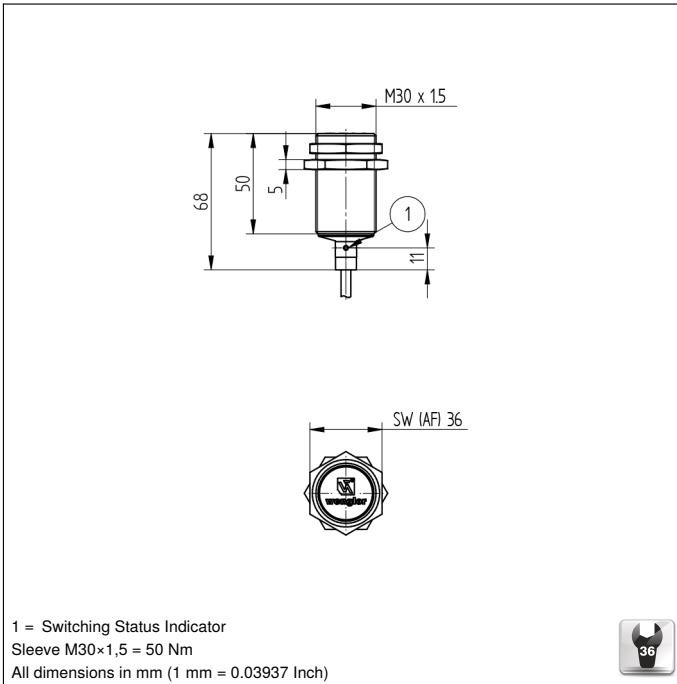
### Safety-relevant Data

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

Error Indicator	yes
PNP NO/NC antivalent	<input checked="" type="checkbox"/>
Connection Diagram No.	201
Suitable Mounting Technology No.	130   131

\* Temperature range with permanently installed cable, bending radius: > 40 mm



Legend		Legend		Legend	
+	Supply Voltage +	PT	Platinum measuring resistor	EN <sub>A</sub> ES42Z	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sub>B</sub> ES42Z	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN <sub>A</sub>	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN <sub>B</sub>	Encoder B
Ā	Switching Output (NC)	W	Trigger Input	A <sub>MIN</sub>	Digital output MIN
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input	A <sub>MAX</sub>	Digital output MAX
V̄	Contamination/Error Output (NC)	O	Analog Output	A <sub>OK</sub>	Digital output OK
E	Input (analog or digital)	O-	Ground for the Analog Output	SY <sub>in</sub>	Synchronization In
T	Teach Input	BZ	Block Discharge	SY <sub>OUT</sub>	Synchronization OUT
Z	Time Delay (activation)	AWV	Valve Output	OLT	Brightness output
S	Shielding	a	Valve Control Output +	M	Maintenance reserved
RxD	Interface Receive Path	b	Valve Control Output 0 V	rsv	reserved
TxD	Interface Send Path	SY	Synchronization	Wire Colors according to IEC 60757	
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	SnR	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 <sub>a</sub>	Emitted Light disengageable	GY	Grey
Bl...D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sub>0</sub> ES42Z	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GNYE	Green/Yellow

