



- 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	3 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,26/0,65/0,64
Mounting	flush
Mounting A/B/C/D in mm	0/10/9/0
Mounting B1 in mm	0...4
Switching Hysteresis	< 10 %

### Electrical Data

Supply Voltage	10...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 10 mA
Switching Frequency	920 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
Full Encapsulation	yes
Degree of Protection	IP67
Connection	Cable, 3-wire, 2 m
Cable Jacket Material	PVC

### Safety-relevant Data

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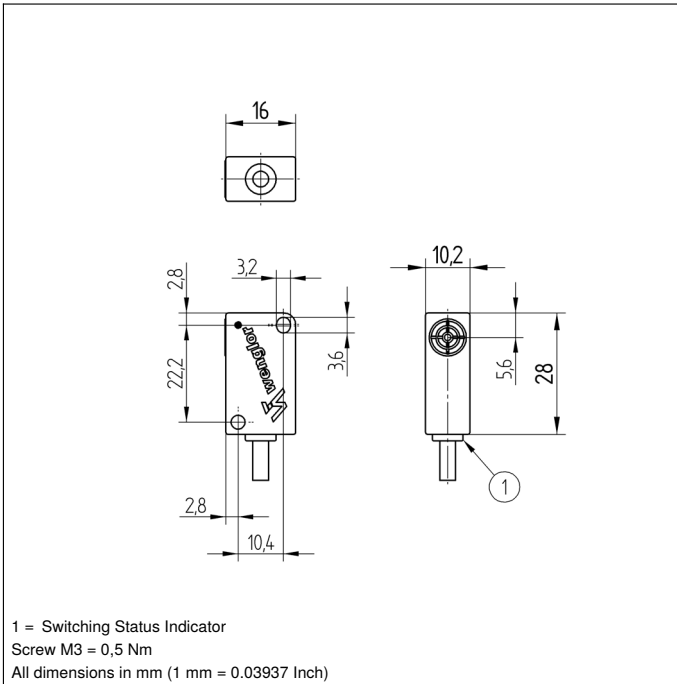
### Function

Error Indicator	yes
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PNP NO	●
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Connection Diagram No.	<b>202</b>
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\* Temperature range with permanently installed cable, bending radius: > 40 mm



Legend		Legend		Legend	
+	Supply Voltage +	PT	Platinum measuring resistor	EN <sup>A</sup> ES42Z	Encoder A/Ā (TTL)
-	Supply Voltage 0 V	nc	not connected	EN <sup>B</sup> ES42Z	Encoder B/B̄ (TTL)
~	Supply Voltage (AC Voltage)	U	Test Input	EN <sup>A</sup>	Encoder A
A	Switching Output (NO)	Ū	Test Input inverted	EN <sup>B</sup>	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
Ṽ	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	OL <sub>T</sub>	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	S <sub>n</sub> 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 <sub>a</sub>	Emitted Light disengageable	GY	Grey
Bl..D+/-	Ethernet Gigabit bidirect. data line (A-D)	Mag	Magnet activation	WH	White
EN <sup>0</sup> ES42Z	Encoder 0-pulse 0-0̄ (TTL)	RES	Input confirmation	PK	Pink
		EDM	Contactur Monitoring	GN <sub>YE</sub>	Green/Yellow

## Mounting

