

# Inductive Sensor with Full-Metal Housing

## I12G001

Part Number

wenglorTec



- Easy sensor configuration using the IO-Link interface
- Increased switching distance
- Innovative ASIC circuit technology
- IO-Link 1.1
- Minimal mounting clearance thanks to wenglor weproTec

The inductive sensors with full-metal housing are suitable for harsh ambient conditions and washdown areas thanks to the 316L stainless steel housing. The sensors with full-metal housing impress with their easy installation and reliable switching behavior. 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, IO-Link interface and wenglor weproTec.

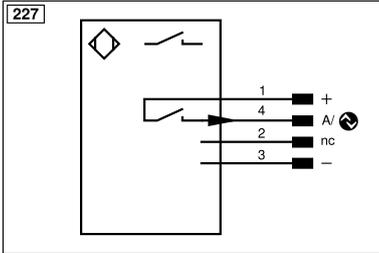
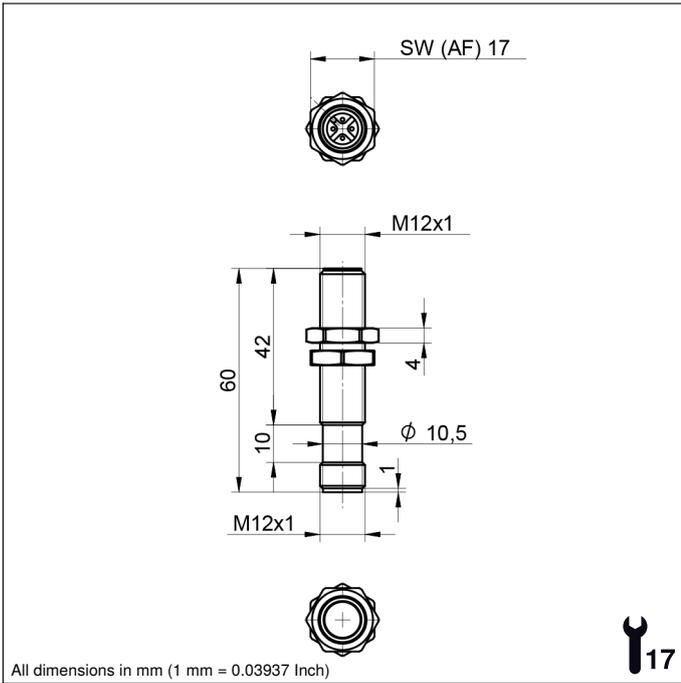
### Technical Data

Inductive Data	
Switching Distance	4 mm
Correction Factors Stainless Steel V2A/CuZn/Al	0,98/0,51/0,48
Mounting	Flush
Mounting A/B/C/D in mm	0/12/12/0
Mounting A/B/C/D (V2A) in mm	0/12/12/0
Mounting B1 in mm	0...2
Installation B1 (V2A) in mm	0...1
Switching Hysteresis	< 10 %
Electrical Data	
Supply Voltage	10...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 15 mA
Switching Frequency	465 Hz
Temperature Drift	< 10 %
Temperature Range	-25...70 °C
Switching Output Voltage Drop	< 1 V
Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 100 µA
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Interface	IO-Link V1.1
Mechanical Data	
Housing Material	Stainless steel, V4A (1.4404 / 316L)
Sensing face	Stainless steel, V4A
Degree of Protection	IP67/IP68/IP69K *
Connection	M12 × 1; 4-pin
Torque	max. 25 Nm
Pressure Resistance Sensor Area	60 bar
EX II 3D Ex tc IIIC T90° Dc	yes
EX II 3G Ex ic IIC T5 Gc	yes
Safety-relevant Data	
MTTFd (EN ISO 13849-1)	3706,54 a
Packaging unit	1 Piece
PNP NO	<input checked="" type="checkbox"/>
Connection Diagram No.	<b>227</b>
Suitable Connection Equipment No.	<b>2</b>
Suitable Mounting Technology No.	<b>170</b>

\* For applications inside hazardous areas: IP67

### Complementary Products

IO-Link Master



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)
			Encoder B/B̄ (TTL)
			Encoder A
			Encoder B
			Digital output MIN
			Digital output MAX
			Digital output OK
			Synchronization In
			Synchronization OUT
			Brightness output
			Maintenance
			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

