## Inductive Sensor with Full-Metal Housing

# **I30G005**

Part Number

- Easy sensor configuration using the IO-Link interface
- Innovative ASIC circuit technology
- IP68/IP69K
- Minimal mounting clearance thanks to wenglor weproTec
- Stainless steel housing

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	15 mm		
Correction Factors Stainless Steel V2A/CuZn/Al	0,91/0,47/0,40		
Mounting	Flush		
Mounting A/B/C/D in mm	0/65/45/0		
Mounting A/B/C/D (V2A) in mm	0/30/45/0		
Mounting B1 in mm	020		
Installation B1 (V2A) in mm	015		
Switching Hysteresis	< 10 %		
Electrical Data			
Supply Voltage	1030 V DC		
Supply Voltage with IO-Link	1830 V DC		
Current Consumption (Ub = 24 V)	< 15 mA		
Switching Frequency	354 Hz		
Temperature Drift	< 10 %		
Temperature Range	-2570 °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		
Protection Class	III		
Interface	IO-Link V1.1		
Mechanical Data			
Housing Material	Stainless steel, V4A (1.4404 / 316L)		
Sensing face	Stainless steel, V4A		
Full Encapsulation	yes		
Degree of Protection	IP67/IP68/IP69K *		
Connection	M12 × 1; 4-pin		
Torque	max. 85 Nm		
Pressure Resistance Sensor Area	10 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		
Stock Type			
Packaging unit	1 Piece		
NPN NO			
Connection Diagram No.	1046		
Suitable Connection Equipment No.	2		
Suitable Mounting Technology No.	130		

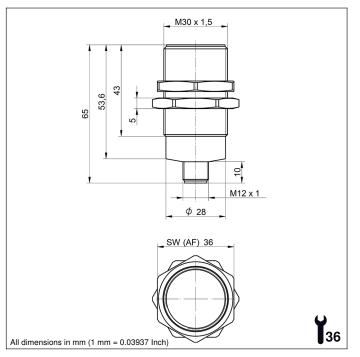
\* For applications inside hazarous areas: IP67

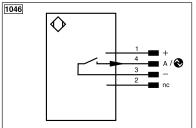
#### **Complementary Products**

Circlip Z0007 IO-Link Master

### InoxSens

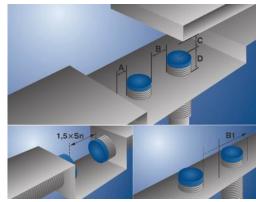






Legend						
+	Supply Voltage +	nc	Not connected	ENBRS422	Encoder B/B (TTL)	
-	Supply Voltage 0 V	U	Test Input	ENa	Encoder A	
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENв	Encoder B	
A	Switching Output (NO)	W	Trigger Input	Amin	Digital output MIN	
Ā	Switching Output (NC)	W-	Ground for the Trigger Input	Amax	Digital output MAX	
V	Contamination/Error Output (NO)	0	Analog Output	Аок	Digital output OK	
V	Contamination/Error Output (NC)	0-	Ground for the Analog Output	SY In	Synchronization In	
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT	
Т	Teach Input	Amv	Valve Output	Olt	Brightness output	
Z	Time Delay (activation)	а	Valve Control Output +	M	Maintenance	
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved	
RxD	Interface Receive Path	SY	Synchronization	Wire Colo	ors according to DIN IEC 60757	
TxD	Interface Send Path	SY-	Ground for the Synchronization	BK	Black	
RDY	Ready	E+	Receiver-Line	BN	Brown	
GND	Ground	S+	Emitter-Line	RD	Red	
CL	Clock	÷	Grounding	OG	Orange	
E/A	Output/Input programmable	SnR	Switching Distance Reduction	YE	Yellow	
۲	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green	
PoE	ower over Ethernet	Tx+/-	Ethernet Send Path	BU	Blue	
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)	VT	Violet	
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey	
Signal	Signal Output	Mag	Magnet activation	WH	White	
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink	
EN0 RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow	
PT	Platinum measuring resistor	ENARS422	Encoder A/Ā (TTL)			

Mounting





Specifications are subject to change without notice V2-05.03.2024