

Inductive Sensor

Ring sensor

IR2D001

Part Number



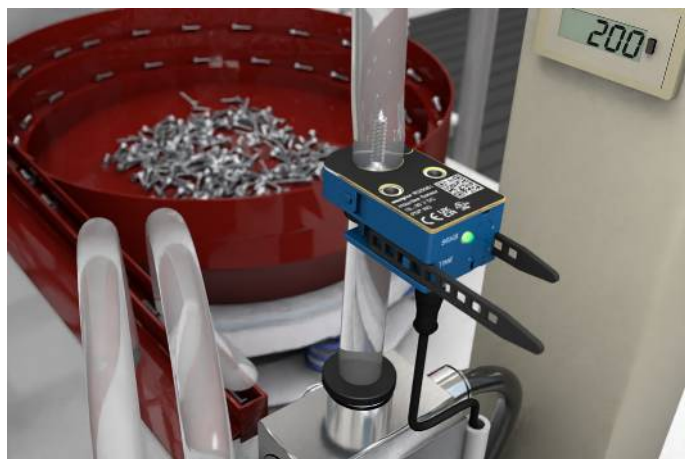
- **Correction factor 1**
- **Flexible soft binder on the sensor**
- **Intuitive operating concept with IO-Link interface**
- **Plug and Play**
- **Separable housing**

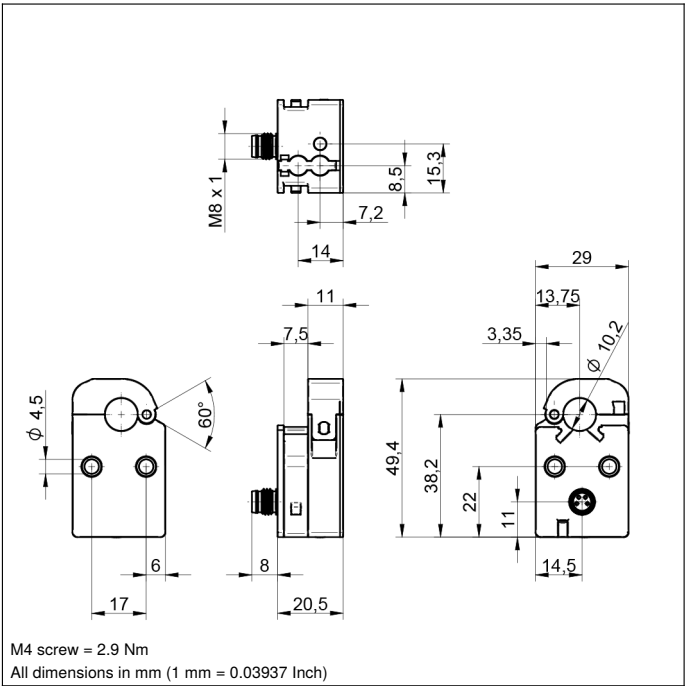
Technical Data

Inductive Data	
Inside diameter	10,2 mm
Installation A/Bx/By/C in mm	0/15/35/5
Installation A/Bx/By/C in mm with frequency switching	0/0/0/5
Functional principle	Dynamic
Smallest recognizable object (Ø)	2 mm*
Correction Factors Stainless Steel V2A/CuZn/Al	1/1/1
Electrical Data	
Supply Voltage	10...30 V DC
Current Consumption (U _b = 24 V)	< 20 mA
Object speed	< 50 m/s
Response Time	< 300 µs
Ready-state delay	< 1,5 s
Switching Output Voltage Drop	1,5 V
Temperature Range	0...60 °C
Short Circuit Protection	yes
Reverse Polarity and Overload Protection	yes
Switching Output/Switching Current	100 mA
Pulse extension	200 ms
Interface	IO-Link V1.1
Mechanical Data	
Connection	M8 × 1; 4-pin
Setting Method	Potentiometer/IO-Link
Hanger opening/closing cycles	Max. 100
Degree of Protection	IP54
Packaging unit	1 Piece
PNP NO	●
Connection Diagram No.	271
Control Panel No.	T19

* Relates to a steel ball

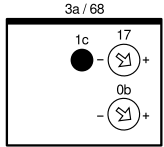
The inductive ring sensor with separable housing enables quick and flexible mounting on various objects, such as tubes. The compact format with a status light visible on all sides and a cable outlet in the hose direction is particularly well suited for confined spaces. It is intuitive to operate via the potentiometer or the IO-Link interface. The sensor switches independently of the material thanks to correction factor 1. Frequency switching enables the operation of several sensors in the immediate vicinity without any reciprocal influence.



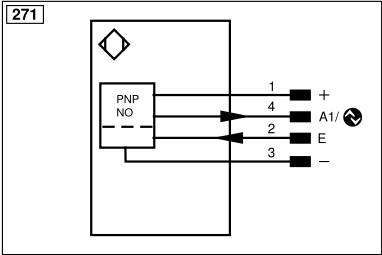


Ctrl. Panel

T19



0b = Pulse length adjuster
17 = Sensitivity Adjustment
1c = Status display/setup aid
3a = Switching Status Indicator/Error Indicator
68 = supply voltage indicator



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
Ä	Switching Output (NC)	W-	Ground for the Trigger Input
V	Contamination/Error Output (NO)	O	Analog Output
Ÿ	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/Ü (TTL)	EDM	Contact Monitoring
PT	Platinum measuring resistor	ENARIS422	Encoder A/Ä (TTL)
ENBRIS422	Encoder B/B (TTL)	ENA	Encoder A
ENB	Encoder B	AMIN	Digital output MIN
AMAX	Digital output MAX	Ack	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

