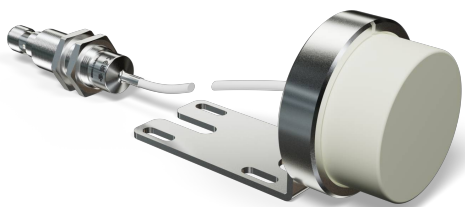


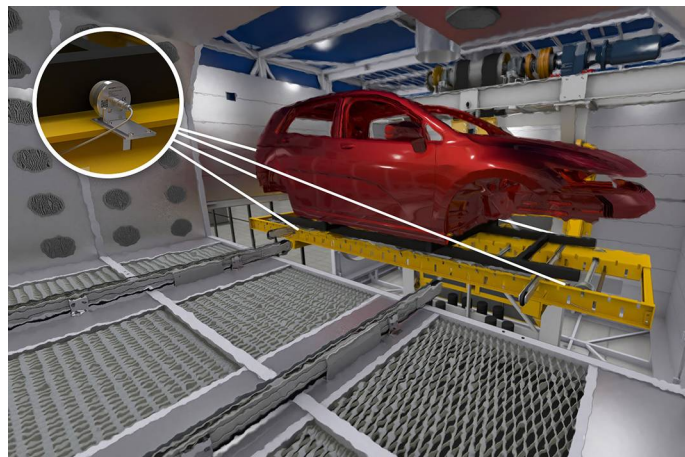
# Inductive Sensor for Extreme Temperature Ranges

## INTT309

Part Number



- Easy replacement thanks to quick-release fastener
- High tightness
- Long service life at temperatures of up to 250 °C
- Minimal mounting clearance thanks to wenglor we-proTec
- Switching distance configurable via IO-Link



### Technical Data

#### Inductive Data

Switching Distance	40 mm
Standard Target	120 × 120 mm
Correction Factors Stainless Steel V2A/CuZn/Al	1,10/0,65/0,58
Mounting	Non-flush
Mounting A/B/C/D in mm	30/130/80/20
Mounting B1 in mm	0...70
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	50 Hz
Temperature Drift	< 10 %
Sensor head temperature range	-10...250 °C
Analysis module temperature range	0...70 °C
Number of Switching Outputs	2
Switching Output Voltage Drop	< 1,5 V
Switching Output/Switching Current	100 mA
Residual Current Switching Output	< 100 μA
Short Circuit Protection	yes
Reverse Polarity Protection	yes
Overload Protection	yes
Interface	IO-Link V1.1
Protection Class	III
Service Life (T = +200 °C)	100000 h
Service Life (T = +250 °C)	60000 h

#### Mechanical Data

Sensing face	Plastic, PEEK
Sensor head material	Stainless steel, V2A (1.4305 / 303)
Analysis module material	Stainless steel, V2A (1.4305 / 303)
Degree of Protection	IP65
Connection	M12 × 1; 4-pin
Cable length (L)	15 m
Cable Jacket Material	Plastic, PFA
Outer diameter cable	3,4 mm
Bending Radius	> 17 mm
PWIS-free	yes

#### Safety-relevant Data

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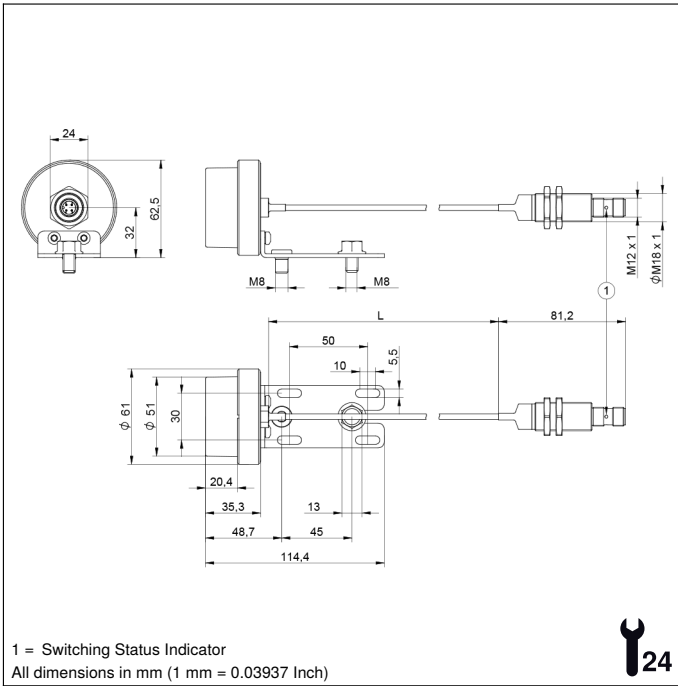
#### Function

Error Indicator	yes
Programmable switching distance	30/35/40 mm
	1 × initial start-up instructions
	1 × MUTTER-M18-E003 hex nut
	1 × sensor

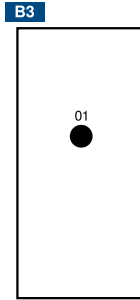
IO-Link	●
Error Output	●
PNP NO	●
Connection Diagram No.	<b>704</b>
Suitable Connection Equipment No.	<b>2</b>
Suitable Mounting Technology No.	<b>150</b>

### Complementary Products

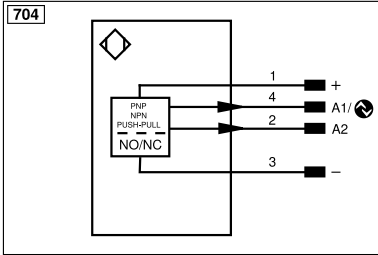
IO-Link Master Software	
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### Ctrl. Panel



01 = Switching Status Indicator



Legend			
+	Supply Voltage +	PT	Platinum measuring resistor
-	Supply Voltage 0 V	nc	Not connected
~	Supply Voltage (AC Voltage)	U	Test Input
A	Switching Output (NO)	Ū	Test Input inverted
Ā	Switching Output (NC)	W	Trigger Input
V	Contamination/Error Output (NO)	W-	Ground for the Trigger Input
ṽ	Contamination/Error Output (NC)	O	Analog Output
E	Input (analog or digital)	O-	Ground for the Analog Output
T	Teach Input	BZ	Block Discharge
R	Reset 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	Rx+/-	Ethernet Receive Path
PoE	Power over Ethernet	Tx+/-	Ethernet Send Path
IN	Safety Input	Bus	Interfaces-Bus A(+)/B(-)
QSSD	Safety Output	La	Emitted Light disengageable
Signal	Signal Output	Mag	Magnet activation
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation
ENo RS422	Encoder 0-pulse 0/0 (TTL)	EDM	Contacting Monitoring
		ENARs422	Encoder A/Ā (TTL)
		ENBRs422	Encoder B/B̄ (TTL)
		ENA	Encoder A
		ENB	Encoder B
		AMIN	Digital output MIN
		AMAX	Digital output MAX
		AOK	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

