

# Inductive Analysis Module for Extreme Temperature Ranges

## INTT331

Part Number



- Interchangeable sensor head
- 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

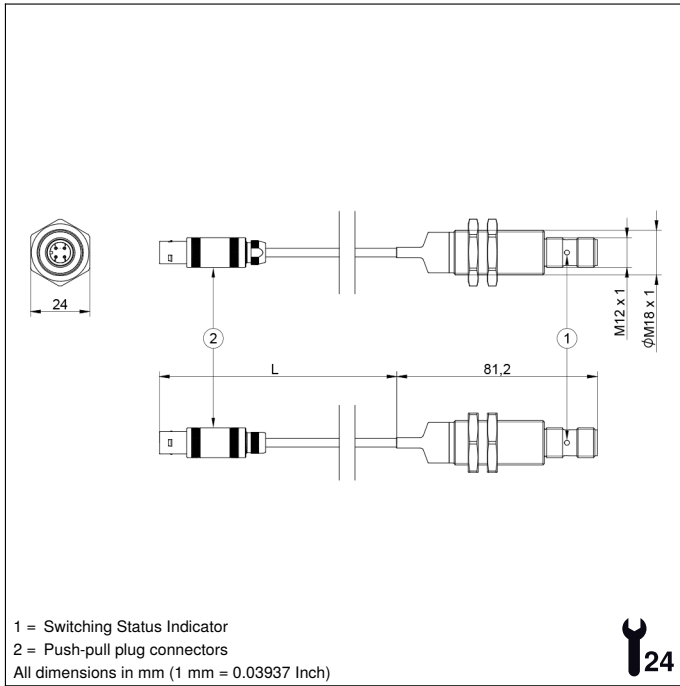
Inductive Data	
Switching Distance	40 mm
Use	With INTT320
Electrical Data	
Supply Voltage	10...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (U <sub>b</sub> = 24 V)	< 15 mA
Switching Frequency	50 Hz
Temperature Drift	< 10 %
Analysis module temperature range	0...70 °C
Number of 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
Mechanical Data	
Analysis module material	Stainless steel, V2A (1.4305 / 303)
Degree of protection, analysis module	IP65
Degree of protection for push-pull connector	IP50
Degree of protection for push-pull connector	IP51*
Connection	M12 × 1; 4-pin
Cable length (L)	20 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
Function	
Error Indicator	yes
Programmable switching distance	30/35/40 mm
Scope of delivery	1 × analysis module 1 × initial start-up instructions 1 × MUTTER-M18-E003 hex nut
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>

\* IP51 only when the sensor head is mounted with the active surface facing upward (water droplets falling from above).

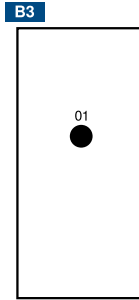


### Complementary Products

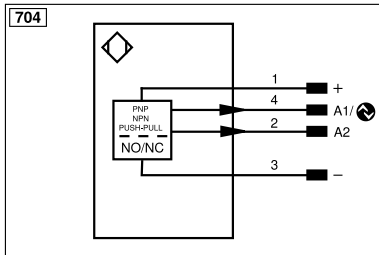
Inductive sensor head	
IO-Link Master	
Software	



### 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

