

Inductive analysis module for Extreme Temperature Ranges

INTT231

Part Number



- Cable lengths of 5 to 20 m
- Cable with analysis module integrated into M12 sensor connector
- Compatible with INTT220 sensor head
- Easy to replace sensors with data storage feature
- Three configurable switching distances: 15/20/25 mm

The inductive high-temperature sensors, consisting of a sensor head and an analysis module with cable, are designed for use in very hot work environments. Long switching distances and a long service life in hot areas ensure maximum system reliability. Sensor heads can be replaced without the use of tools, and numerous standard cable lengths with integrated analysis module are available separately. weproTec technology makes it possible to install the sensors directly next to or opposite one another. In addition, IO-Link can be used to individually configure sensor parameters like switching distance and output functions.



Technical Data

Electrical Data

Supply Voltage	10...30 V DC
Supply Voltage with IO-Link	18...30 V DC
Current Consumption (U _b = 24 V)	< 15 mA
Switching Frequency	50 Hz
Temperature range of the plug	0...70 °C
Number of Switching Outputs	2
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
Protection Class	III

Mechanical Data

Analysis module material	V2A; PEEK; PTFE; Brass (chrome plated)
Degree of protection, sensor head	IP50
Degree of protection of the plug	IP50
Connection	M12 × 1; 4-pin
Cable Length (L)	20 m
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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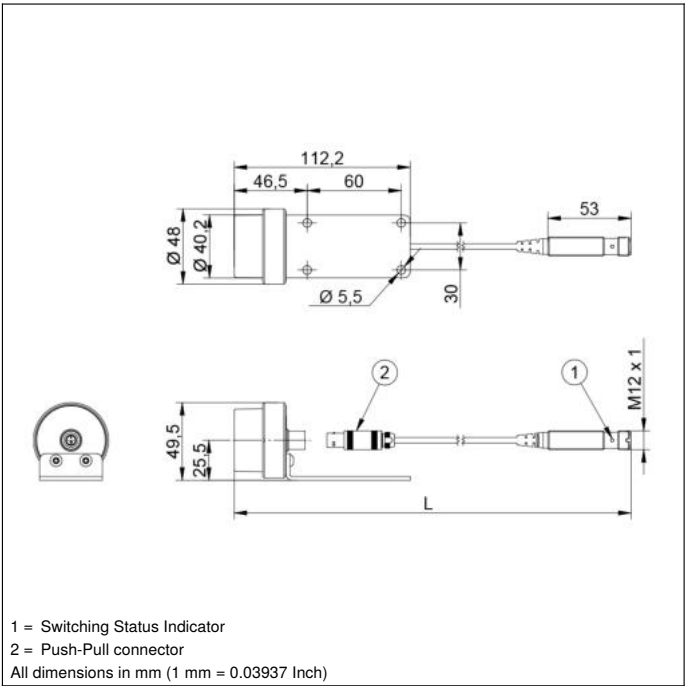
Function

Error Indicator	yes
Programmable switching distance	15/20/25 mm
IO-Link	●
Switchable to NC/NO	●
Configurable as PNP/NPN/Push-Pull	●
Error Output	●

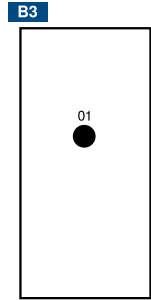
Connection Diagram No.	704
Control Panel No.	B3
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170 172

Complementary Products

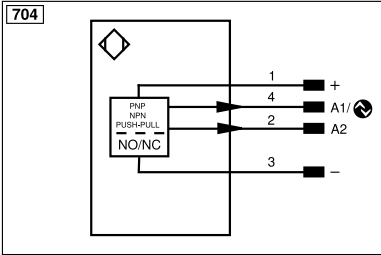
Inductive Sensor Head
Inductive Sensor Head
IO-Link Master
Software



Ctrl. Panel



01 = Switching Status Indicator



Legend			
+	Supply Voltage +	nc	Not connected
-	Supply Voltage 0 V	U	Test Input
~	Supply Voltage (AC Voltage)	Ū	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
BL_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	ENARIS422	Encoder A/Ā (TTL)
		ENBRIS422	Encoder B/Ē (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

