

Inductive Analysis Module for Extreme Temperature Ranges

INTT331

Part Number



- Cable lengths of 5 to 20 m
- Cable with analysis module integrated into M12 sensor connector
- Compatible with INTT320 sensor head
- Easy to replace sensors with data storage feature
- Three configurable switching distances: 30/35/40 mm

The inductive high-temperature sensors are designed for use in very hot work environments and consist of an analysis module with cable and a separate sensor head. 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 such as switching distances 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 Drift	< 10 %
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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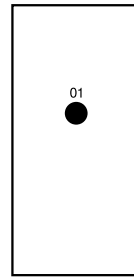
Function

Error Indicator	yes
Programmable switching distance	30/35/40 mm
IO-Link	●
Error Output	●
PNP NO	●
Connection Diagram No.	704
Control Panel No.	B3
Suitable Connection Equipment No.	2
Suitable Mounting Technology No.	170 172

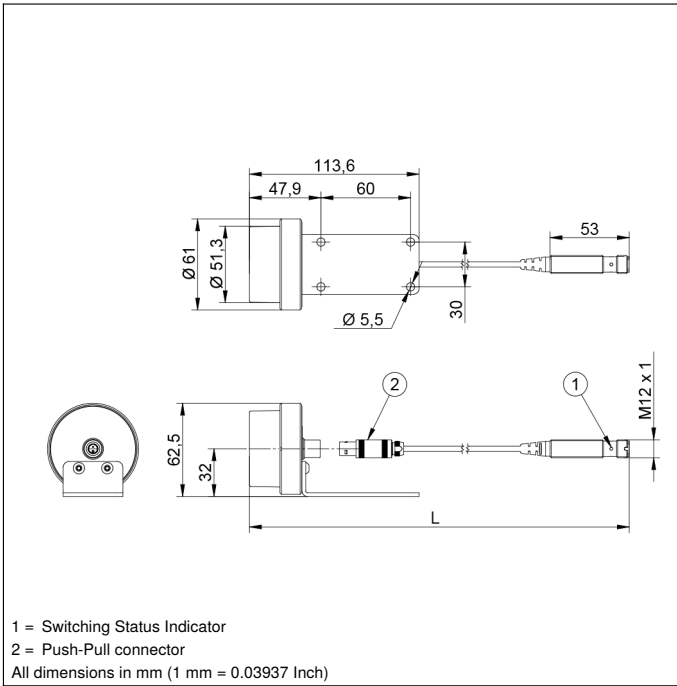
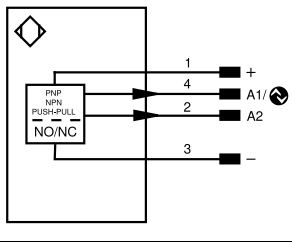
Complementary Products

Inductive sensor head
IO-Link Master
Software

Ctrl. Panel

B3


01 = Switching Status Indicator


704


Legend

+	Supply Voltage +	nc	Not connected	EN _{BRS422}	Encoder B/B̄ (TTL)
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	EN _b	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)	O	Analog Output	AOK	Digital output OK
V̄	Contamination/Error Output (NC)	O-	Ground for the Analog Output	SY In	Synchronization In
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT
T	Teach Input	Amv	Valve Output	OLT	Brightness output
Z	Time Delay (activation)	a	Valve Control Output +	M	Maintenance
S	Shielding	b	Valve Control Output 0 V	rsv	Reserved
RxD	Interface Receive Path	SY	Synchronization	Wire Colors 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
	IO-Link	Rx+/-	Ethernet Receive Path	GN	Green
PoE	Power 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
Bl_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation	PK	Pink
EN _o RS422	Encoder 0-pulse 0/0̄ (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow
PT	Platinum measuring resistor	EN _{ARS422}	Encoder A/Ā (TTL)		

