Inductive Sensor for Extreme Temperature Ranges

INTT211

Part Number



- Easy to replace sensors with data storage feature
- Evaluation unit integrated into M12 sensor connector
- Highly efficient with an average service life of 5 years
- Three configurable switching distances: 15/20/25 mm

The high temperature inductive sensor can, with cable lengths of 1 to 30 meters, be positioned as needed in hot areas of systems and machines. Installation is also easy due to the ultra-compact design, as the evaluation unit is integrated into the M12 sensor connector. The sensor thus takes up far less space and is highly compatible thanks to its standardised design. The weproTec technology makes it possible to install the sensors directly next to or across from one another. In addition, sensor parameters like switching distance and output functions can be configured individually via IO-Link.



Technical Data

Inductive Data			
Switching Distance	25 mm		
Standard Target	75 × 75 mm		
Correction Factors Stainless Steel V2A/CuZn/Al	0,60/1,00/0,85		
Mounting	non-flush		
Mounting A/B/C/D in mm	50/130/50/20		
Mounting B1 in mm	075		
Switching Hysteresis	< 10 %		
Electrical Data			
Supply Voltage	1030 V DC		
Supply Voltage with IO-Link	1830 V DC		
Current Consumption (Ub = 24 V)	< 15 mA		
Switching Frequency	50 Hz		
Temperature Drift	< 10 %		
Sensor head temperature range	-10250 °C		
Temperature range, plug	070 °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		
Service Life (T = +200 °C)	100000 h		
Service Life (T = +250 °C)	60000 h		
Mechanical Data			
Sensor head material	Stainless steel V2A; PEEK; PTFE		
Plug material	CuZn, nickel-plated		
Degree of Protection	IP65		
Connection	M12 × 1; 4-pin		
Cable Length (L)	20 m		
PWIS-free	yes		
Safety-relevant Data			
MTTFd (EN ISO 13849-1)	3706,54 a		
Function			
Error Indicator	yes		
Programmable switching distance	15/20/25 mm		
IO-Link			
Switchable to NC/NO			
Configurable as PNP/NPN/Push-Pull	Ó		
Error Output	Ó		
Connection Diagram No.	704		
Control Panel No.	B3		
Suitable Connection Equipment No.	2		
Suitable Mounting Technology No.	170 172		
0 0			

Complementary Products IO-Link Master

Inductive Sensors







1 = Switching Status Indicator All dimensions in mm (1 mm = 0.03937 Inch)



Leger	nd	PŤ	Platinum measuring resistor	ENAR5422	Encoder A/Ā (TTL)	
+	Supply Voltage +	nc	not connected	ENBR5422		
-	Supply Voltage 0 V	U	Test Input	ENA	Encoder A	
~	Supply Voltage (AC Voltage)	Ū	Test Input inverted	ENв	Encoder B	
А	Switching Output (NO)	W	Trigger Input	Amin	Digital output MIN	
Ā	Switching Output (NC)	W -	Ground for the Trigger Input	Амах	Digital output MAX	
V	Contamination/Error Output (NO)	0	Analog Output	Аок	Digital output OK	
V	Contamination/Error Output (NC)	0-	Ground for the Analog Output	SY In	Synchronization In	
E	Input (analog or digital)	BZ	Block Discharge	SY OUT	Synchronization OUT	
Т	Teach Input	Awv	Valve Output	OLT	Brightness output	
Z	Time Delay (activation)	а	Valve Control Output +	м	Maintenance	
S	Shielding	b SY	Valve Control Output 0 V	rsv	reserved	
RxD	Interface Receive Path		Synchronization	Wire Co	Colors according to 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		Orange	
E/A	Output/Input programmable	SnR	Switching Distance Reduction		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(-)		Violet	
OSSD	Safety Output	La	Emitted Light disengageable	GY	Grey	
Signal	Signal Output	Mag	Magnet activation	WH	White	
BI_D+/-	Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation		Pink	
ENO RS42	2 Encoder 0-pulse 0-0 (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow	

Mounting



