Inductive Sensor with IO-Link

I18H013

Part Number



- Easy sensor configuration using the IO-Link interface
- Innovative ASIC circuit technology
- Integrated error display and error output
- Minimal mounting clearance thanks to wenglor weproTec

The Inductive Sensors have not only been equipped with ASIC, but rather with an IO-Link interface as well for ideal integration into networks. As a result, a total of three switching distances and two switching frequencies can be selected, and PNP/NPN as well as NO/NC/antivalent options can be set as desired. This reduces the number of variants while simultaneously expanding the scope of functions.

Technical Data

Industive Date			
Inductive Data	40		
Switching Distance	12 mm		
Standard Target	36 × 36 mm		
Correction Factors Stainless Steel V2A/CuZn/Al	0,97/0,47/0,43		
Mounting	semi-flush		
Mounting A/B/C/D in mm	18/46/36/5		
Mounting B1 in mm	028		
Switching Hysteresis	< 10 %		
Electrical Data			
Supply Voltage	1030 V DC		
Supply Voltage with IO-Link	1830 V DC		
Current Consumption (Ub = 24 V)	< 13 mA		
Switching Frequency	500 Hz		
Temperature Drift	< 10 %		
Temperature Range	-4080 °C		
Switching Output Voltage Drop	< 1 V		
Switching Output/Switching Current	150 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			
Housing Material	CuZn, nickel-plated		
Degree of Protection	IP67		
Connection	M12 × 1; 4-pin		
Safety-relevant Data			
MTTFd (EN ISO 13849-1)	3706,54 a		
Function			
Error Indicator	yes		
Programmable switching distance	8/10/12 mm		
Programmable switching frequency	yes		
IO-Link	•		
Switchable to NC/NO	Ŏ		
Configurable as PNP/NPN/Push-Pull	Ŏ		
Programmable error output	Ŭ		
Connection Diagram No.	704		
Suitable Connection Equipment No.	2		
Suitable Mounting Technology No.	150 152		

weproTec

Complementary Products

IO-Link Master Software







Leger	nd	PT	Platinum measuring resistor	FNARCO	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	Амін	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	
Е	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	Valve Control Output 0 V	rsv	reserved	
RxD	Interface Receive Path	SY	Synchronization	Wire Co	Colors according to DIN IEC 757	
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	
0	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	
BI_D+/	- Ethernet Gigabit bidirect. data line (A-D)	RES	Input confirmation		Pink	
ENORS	₂ Encoder 0-pulse 0-0 (TTL)	EDM	Contactor Monitoring	GNYE	Green/Yellow	

Mounting



