Inductive proximity sensor

Common inductive proximity sensors series - M8 size DC 2 wire

Highlights

Inductive sensor

When the metal conductive objects close to the magnetic field and reach the induction area, high-frequency alternating magnetic field generated by a LC oscillation circuit, which is composed of a coil wound on a ferrite, through the eddy current effect generated by internal of metal objects to achieve non-contact detection.

Standards

All inductive proximity sensors conform to IEC 60947-5-2.

Housing material

The housing material of sensor including nickel plated copper, also stainless steel and plastic with resistance of compression and temperature rapid change. Most of square sensor is plastic housing. These materials can also be used to produce square sensors with adjustable sensing surface or compact (small square) sensors. Such sensors can be used in the occasions of limited installation space or required large detection range.



Product parameters

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Features: Diameter M8 Sensing distance: P/N table Body material: Nickel plated brass Built-in electric protection Output: See P/N table Connection: PVC cable/2m; 2*0.25mm² Power supply: 24V DC, 2 wires Ф3.0 ϵ

TECHNICAL INFORMATION INDUCTIVE SPECIFICATION				
	Correction Factor	Nav-ferrous metal Factor Fe360 1 Aluminum 0.35 ~ Brass 0.35 ~ Copper 0.35 ~ Stainless Steel 0.35 ~ Cast Iron 0.93 ~ Nickel 0.65 ~	0.45 0.5 0.45 0.45 1.05	
	Mounting	Flush type installation		
	Switching Histeresis	< 10%		
ELECTRICAL DATA				
	Operating Voltage	10~60V DC		
	Switching Frequency	1000Hz		
	Voltage Drop	≤ 2.0 V	≤ 2.0 V	
	Leakage Current	< 0.01mA	< 0.01mA	
	Load Current	200 mA	200 mA	
	No Load Current	≤ 10 mA (24V DC)	≤ 10 mA (24V DC)	
	Hysteresis	< 15% (Sr)	< 15% (Sr)	
	Repeatability	< 1.0% (Sr)	< 1.0% (Sr)	
	Temperature Drift	< 1.0% (Sr)	< 1.0% (Sr)	
	Short Circuit Protection	Yes	Yes	
	Overload Protection	Yes		
	Polarity Reversal Protection	Yes		
ENVIRONMENT DATA				
	Ambient Temperature	-2570 ℃		
	Ingress Protection	IP67		
MECHANICAL DATA				
	Housing Material	Stainless still		
	Face Material	POM		
ELECTRICAL CONNECTION DATA				
	Connector	PVC cable/2m ; 2*0.25mm²		
ACCESORIES				
	Cable	Two meter angled cable (P/N: V5PN-AM12402	Two meter angled cable (P/N: V5PN-AM12402OF) (available)	
	Cable	Ten meter angled cable (P/N: V5PN-AM12410	Ten meter angled cable (P/N: V5PN-AM12410OF) (available)	
	Connector	M12, 4 PIN, Male type, IP67, Straight, Female, connection (P/N: EAM12MC4001A) (available		

Application

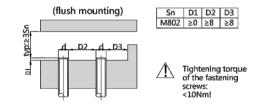
Inductive proximity switch is a low cost method for non-contact detection of metal objects, which is widely used in the following sectors, such as:

- Automotive Industry
- Metallurgical sector - Machine tool sector
- Robot industry
- Conveyor system
- Paper and printing industry - Mechanical Engineering

■ P/N table

Sensing distance	Sn: 2mm	
2 Wire , NO	VL1B-F08-02NO-M8	
2 Wire , NC	VL1B-F08-02NC-M8	

Installation



■ Input/Output circuit

