Inductive proximity sensor VL1N series

Inductive proximity sensors series - M8 NAMUR 2 wire, DC Switching output

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

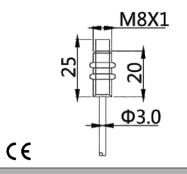
The housing material of sensor including nickel plated copper, also stainless steel and plastic with resistance of compression and temperature rapid change. Most of square sensor is plastic housing. These materials can also be used to produce square sensors with adjustable sensing surface or compact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



Product parameters

Features:

- Diameter M8
- Sensing distance: P/N table
- Body material: Stainless steel
- · Built-in electric protection
- Output: See P/N table
 Connection:
- Connection:
- PVC cable/2m; 2*0.25mm²
 Power supply: 6~12V DC





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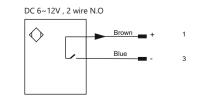
TECHNICAL INFORMATION

Sensing Distance	See P/N table	See P/N table	
Correction Factor	Nav-ferrous metal Fe360 Aluminum Brass Copper Stainless Steel Cast Iron Nickel	Factor 1 0.35 ~ 0.45 0.35 ~ 0.5 0.35 ~ 0.45 0.35 ~ 0.45 0.35 ~ 0.45 0.93 ~ 1.05 0.65 ~ 0.75	
Mounting	Non Flush type installation	Non Flush type installation	
Switching Histeresis	< 10%		

		Cast Iron Nickel	0.35 ~ 0.45 0.93 ~ 1.05 0.65 ~ 0.75	
	Mounting	Non Flush type installation	1	
	Switching Histeresis	< 10%		
ELECTRICAL DATA				
	Operating Voltage	6~12V DC	6~12V DC	
	Switching Frequency	2000Hz		
	Voltage Drop	≤ 6V DC	≤ 6V DC	
	Leakage Current	> 2.2mA (OFF) / < 1.1mA	> 2.2mA (OFF) / < 1.1mA (ON)	
	Load Current	Max.load:400 mA ; Min.loa	Max.load:400 mA ; Min.load:5mA /	
		Max.load:200 mA ; Min.loa	Max.load:200 mA ; Min.load:5mA /	
	Hysteresis	< 15% (Sr)		
	Repeatability	< 2.0% (Sr)		
	Temperature Drift	< 10% (Sr)		
	Short Circuit Protection	Yes		
	Overload Protection	Yes		
	Polarity Reversal Protection	Yes		
ENVIRONMENT DATA				
	Ambient Temperature	-2570 ℃	-2570 ℃	
	Ingress Protection	IP67		
MECHANICAL DATA				
	Housing Material	Stainless steel	Stainless steel	
	Face Material	PBT		
ELECTRICAL CONNECTION DAT	A			
	Connector	PVC cable/2m; 2*0.25mm ²		

ACCESORIES Cable Two meter straight cable (P/N: V5PN-SM8302OF) (available) Cable Ten meter straight cable (P/N: V5PN-SM8310OF) (available) Connector M8, 3 PIN, Male type, IP67, Straight, Female, Screw connection (P/N: EAM8MC3001A) (available)

■ Input/Output circuit



Application

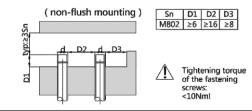
Inductive proximity switch is a low cost method for non-contact detection of metal objects, which is widely used in the following sectors, such as:

- 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 , DC, NAMUR	VL1N-NF08-2NO-DC2M	

■ Installation



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