Inductive proximity sensor

**V**<sub>5</sub> Group

# Common inductive Inductive sensor proximity sensors

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.



series - Ø6.5 size

DC 2 wire

## **TECHNICAL INFORMATION**

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Product parameters

Features:

• Diameter Ø6.5

Connection:

Sensing distance: P/N table

 Built-in electric protection Output: See P/N table

PVC cable/2m; 2\*0.25mm<sup>2</sup>

• Power supply: 24V DC, 2 wires

Body material: Nickel plated brass

DUCTIVE SPECIFICATION				
	Sensing Distance	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 0.93 ~ 1.05 0.65 ~ 0.75	
	Mounting	Non Flush type installation		
	Switching Histeresis	< 10%		

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-25.....70 ℃

Stainless still

IP67

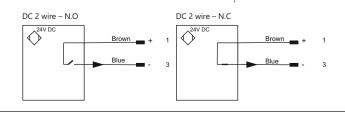
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Operating Voltage	10~60V DC	
Switching Frequency	500Hz	
Voltage Drop	≤ 2.0 V	
Leakage Current	< 0.01mA	
Load Current	200 mA	
No Load Current	≤ 10 mA (24V DC)	
Hysteresis	< 15% (Sr)	
Repeatability	< 1.0% (Sr)	
Temperature Drift	< 1.0% (Sr)	
Short Circuit Protection	Yes	
Overload Protection	Yes	
Polarity Reversal Protection	Yes	

#### ELECTRICAL CONNECTION DATA Connector PVC cable/2m; 2\*0.25mm<sup>2</sup> ACCESORIES Two meter angled cable (P/N: V5PN-AM12402OF) (available) Cable Cable Ten meter angled cable (P/N: V5PN-AM12410OF) (available) Connector M12, 4 PIN, Male type, IP67, Straight, Female, Screw connection (P/N: EAM12MC4001A) (available)

### ■ Input/Output circuit

MECHANICAL DATA



Ambient Temperature

Ingress Protection

Housing Material

Face Material

# 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: 4mm	
2 Wire , NO	VL1B-NF06.5-04NO-2M	
2 Wire , NC	VL1B-NF06.5-04NC-2M	

### Installation

