Inductive proximity sensor

Common inductive proximity sensors series - Ø6.5 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 Ø6.5 Sensing distance: P/N tableBody 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		
	Sensing Distance	See P/N table
	Correction Factor	Nav-ferrous metal Factor Fe360 1 Aluminum 0.35 ~ 0.45 Brass 0.35 ~ 0.5 Copper 0.35 ~ 0.45 Stainless Steel 0.35 ~ 0.45 Cast Iron 0.93 ~ 1.05 Nickel 0.65 ~ 0.75
	Mounting	Flush type installation
	Switching Histeresis	< 10%
ELECTRICAL DATA		
	Operating Voltage	10~60V DC
	Switching Frequency	1000Hz
	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
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-AM12402OF) (available)
	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)

■ P/N table

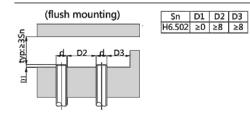
Application

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

Sensing distance	Sn: 2mm	
2 Wire , NO	VL1B-F06.5-02NO-2M	
2 Wire , NC	VL1B-F06.5-02NC-2M	

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:

■ Installation



■ Input/Output circuit

