Inductive proximity sensor

Miniature inductive proximity sensors series - 6.5mm size DC 3 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.

Special miniature sensors

Many engineers are often faced with a particular requirements to fit inductive sensors into tight

The inductive sensors of the Miniature Series are fully integrated without external amplifier and our models were equipped with reverse polarity protection and short-circuit protected switching

Also an optical switching indicator is always built-in.

Benefits

- High quality sensors series
- Space-saving installation and significant flexibility in machine design thanks
- High positioning accuracy and precise switching behavior for reliable detection of fast handling and assembly processes
- Bright sensors led indicators for easy power and detection recognition
- High switching frequency
- Water proof stainless steel body design for high humidity stability IP67 degree protection

Application

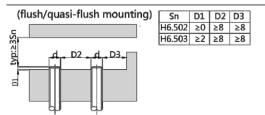
Inductive proximity switch is a low cost method for non-contact detection of metal objects, which is widely used in the following sectors, such as:

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

■ P/N table

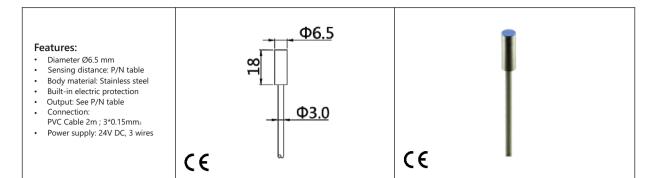
Sensing distance	Sn: 2mm	Sn: 3mm
NPN , NO	VL1C-F6.5N-02NO-M2M	VL1C-F6.5N-03NO-M2M
NPN , NC	VL1C-F6.5N-02NC-M2M	VL1C-F6.5N-03NC-M2M
PNP , NO	VL1C-F6.5P-02NO-M2M	VL1C-F6.5P-03NO-M2M
PNP , NC	VL1C-F6.5P-02NC-M2M	VL1C-F6.5P-03NC-M2M

■ Installation



Product parameters

TECHNICAL INTEGRALATION



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	
	Mounting	Nickel 0.65 ~ 0.75 Flush type installation	
	Switching Histeresis	< 10%	
	Switching Historesis	1070	
ELECTRICAL DATA			
	Operating Voltage	10~30V DC	
	Switching Frequency	2000Hz / 1000Hz	
	Voltage Drop	≤ 2.0 V	
	Leakage Current	< 0.01mA	
	Load Current	100 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	
NVIRONMENT DATA			
	Ambient Temperature	-2570 ℃	
	Ingress Protection	IP67	
MECHANICAL DATA			
	Housing Material	Stainless steel body	
	Face Material	POM	
ELECTRICAL CONNECTION DATA			
	Connection	PVC cable/2m ; 3*0.15mm²	
ACCESORIES			
	Cable	Two meter angled cable (P/N: V5PN-AM8302OF) (available	
	Cable	Ten meter angled cable (P/N: V5PN-AM8310OF) (available	
	Connector	M8, 3 PIN, Male type, IP67, Straight, Wires with screw connection (P/N: EAM8MC3001A) (available)	

■ Input/Output circuit

