Inductive proximity sensor

V₅ Group

Compact inductive proximity sensors series - Q8 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-Q08N-02NO-L2M	VL1C-Q08N-03NO-L2M
NPN , NC	VL1C-Q08N-02NC-L2M	VL1C-Q08N-03NC-L2M
PNP , NO	VL1C-Q08P-02NO-L2M	VL1C-Q08P-03NO-L2M
PNP , NC	VL1C-Q08P-02NC-L2M	VL1C-Q08P-03NC-L2M

■ Installation

(flush/quasi-flush mounting)

Product parameters

Features: Diameter Q8 Sensing distance: P/N table Body material: Stainless steel Built-in electric protection Output: See P/N table Connection: PVC Cable 2m; 3*0.18mm₂ Ф3.0 Power supply: 24V DC, 3 wires ϵ ϵ

INDICTOR EDECIFICATION				
INDUCTIVE SPECIFICATION				
	Sensing Distance	See P/N table		
	Correction Factor	Nav-ferrous metal Fe360	Factor 1	
	Correction ractor	I	35 ~ 0.45	
		I	.35 ~ 0.5 .35 ~ 0.45	
			35 ~ 0.45	
		I	.93 ~ 1.05	
		Nickel 0	.65 ~ 0.75	
	Mounting	Flush type installation		
	Switching Histeresis	< 10%		
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		
ENVIRONMENT DATA				
	Ambient Temperature	-2570 ℃		
	Ingress Protection	IP67		
MECHANICAL DATA				
	Housing Material	Nickel plated brass body		
	Face Material	РОМ		
ELECTRICAL CONNECTION DATA				
	Connection	PVC Cable 2m ; 3*0.18mm²		
ACCESORIES				
	Cable	Two meter angled cable (P/N: V5PN-AM	8302OF) (available	
	Cable	Ten meter angled cable (P/N: V5PN-AM	8310OF) (available	
	Connector	M8, 3 PIN, Male type, IP67, Straight, Wi connection (P/N: EAM8MC3001A) (ava		

■ Input/Output circuit

