Inductive proximity sensor

Common inductive DC 3 wire

proximity sensors series - Q18 size

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.



Application

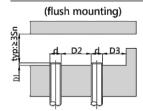
Inductive proximity switch is a low cost method for non-contact detection of metal objects, which is widely used in the following sectors, such as:

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

■ P/N table

Sensing distance	Sn: 4mm	
NPN , NO	VL1C-FQ18N-04NO-2M	
NPN , NC	VL1C-FQ18N-04NC-2M	
PNP , NO	VL1C-FQ18P-04NO-2M	
PNP , NC	VL1C-FQ18P-04NC-2M	

Installation



Product parameters

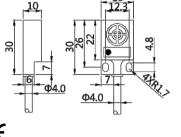
Features:

 Sensing distance: P/N table Body material: Nickel plated brass

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

• Diameter Q18

- PVC Cable 2m; 3*0.25mm²
- Power supply: 24V DC, 3 wires





M12, 4 PIN, Male type, IP67, Straight, Female, Screw connection (P/N: EAM12MC4001A) (available)

 ϵ

E	CHN	ICAL	INFO	KIVIA	IION	

	Continu Bistonia	C. PALLIN	
	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 0.35 ~ 0.45 0.93 ~ 1.05 0.65 ~ 0.75
	Mounting	Flush type installation	
	Switching Histeresis	< 10%	
ELECTRICAL DATA			
	Operating Voltage	10~30V DC	
	Switching Frequency	500Hz	
	Voltage Drop	≤ 2.0 V	
	Leakage Current	< 0.01mA	
	Load Current	200 m A	

	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	ABS		
	Face Material	ABS		
ELECTRICAL CONNECTION DATA				
	Connector	PVC cable 2m ; 3*0.25mm²		
ACCESORIES				
	Cable	Two meter angled cable (P/N: V5PN-AM12402OF) (available)		
	Cable	Ten meter angled cable (P/N: V5PN-AM12410OF) (available)		

■ Input/Output circuit

