V₅ Group

Common inductive proximity sensors series - M18 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.

Application

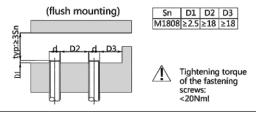
Inductive proximity switch is a low cost method for non-contact detection of metal objects, which is widely used in the following sectors, such as:

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

P/N table

Sensing distance	Sn: 8mm	
2 Wire , NO	VL1B-F18-08NO-S2M	
2 Wire , NC	VL1B-F18-08NC-S2M	

■ Installation



Product parameters

Features: • Diameter M18

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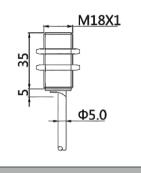
Sensing distance: P/N tableBody material: Nickel plated brass

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

Output: See P/N
 Connection:

M12 Connector , 4 pins , Male type

Power supply: 24V DC, 2 wires





	INDUCTIVE 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 ~ 0.45 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%				
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				
Ambient Temperature	-2570 ℃				
Ingress Protection	IP67				
Housing Material	Nickel plated brass				
Face Material	PBT				
Connector	PVC cable/2m ; 2*0.5mm²				
Cable	Two meter angled cable (P/N:	Two meter angled cable (P/N: V5PN-AM12402OF) (available)			
Cable	Ten meter angled cable (P/N:	Ten meter angled cable (P/N: V5PN-AM12410OF) (available)			
Connector					
	Correction Factor Mounting Switching Histeresis Operating Voltage Switching Frequency Voltage Drop Leakage Current Load Current Hysteresis Repeatability Temperature Drift Short Circuit Protection Overload Protection Polarity Reversal Protection Ambient Temperature Ingress Protection Housing Material Face Material Connector Cable Cable	Correction Factor Nav-ferrous metal Fe360 Aluminum Brass Copper Stainless Steel Cast Iron Nickel			

■ Input/Output circuit

