Inductive proximity sensor

Inductive proximity sensors series - Q28 NAMUR 2 wire, DC Switching output

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

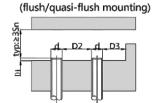
Inductive proximity switch is a low cost method for non-contact detection of metal objects, which is widely used in the following sectors, such as:

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

■ P/N table

Sensing distance	Sn: 2mm	
2 Wire , DC, NAMUR	VL1N-FQ28-2NO-DCT2M	

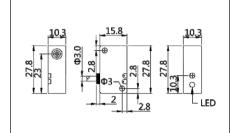
■ Installation



Product parameters

Features:

- Diameter Q28
- Sensing distance: P/N table
- Body material: Stainless steel
- Built-in electric protection
- Output: See P/N table
- Connection:
- PVC cable/2m; 2*0.25mm²
 Power supply: 6~12V DC





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TECHNICAL INFORMAT	ION		
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	6~12V DC	
	Switching Frequency	2000Hz	
	Voltage Drop	≤ 6V DC	
	Leakage Current	> 2.2mA (OFF) / < 1.1mA (ON)	
	Load Current	Max.load:400 mA ; Min.load:5mA /	
		Max.load:200 mA ; Min.load:5mA /	
	Hysteresis	< 15% (Sr)	
	Repeatability	< 2.0% (Sr)	
	Temperature Drift	< 10% (Sr)	
	Short Circuit Protection	Yes	
	Overload Protection	Yes	
	Polarity Reversal Protection	Yes	
ENVIRONMENT DATA			
	Ambient Temperature	-2570 ℃	
	Ingress Protection	IP67	
MECHANICAL DATA			
	Housing Material	PBT	
	Face Material	PBT	
ELECTRICAL CONNECTION DA	TA		
	Connector	PVC cable/2m ; 2*0.25mm²	
ACCESORIES			
	Cable	Two meter straight cable (P/N: V5PN-SM8302OF) (available)	
	Cable	Ten meter straight cable (P/N: V5PN-SM8310OF) (available)	
	Connector	M8, 3 PIN, Male type, IP67, Straight, Female, Screw connection (P/N: EAM8MC3001A) (available)	
			

■ Input/Output circuit

DC 6~12V , 2 wire N.O