



M12 Proximity Sensor Datasheet

(SNS-0002)

Overview

Description

The M12 proximity sensor detects the presence of a metallic material and outputs a digital signal. These proximity sensor features a 5V working voltage. This allows the proximity sensor to work with the native sensor voltage of the roboRIO.

Technical Details

Specifications

Thread	M12
Length	60mm
Installation Type	Non-shielded
Detection Distance	4mm
Setting Distance	0-3.2mm
Supply Voltage	5-36V
Output Current	DC type: 300mA max; AC Type: 400mA
Standard Detected Object	Mild steel (12x12x1mm)
Sensing Object	Magnetic metals (If aluminum, the sensing distance will decrease)
Response Frequency	500Hz
Output Indication	Red LED
Short-Circuit Protection	No
Reverse Connection Protection	Yes
Insulation Resistance	50MΩ min (between charging part and housing)
Dielectric Strength	1000Vac, 1min (between charging part and housing)
IP Rating	IP65
Operating Temperature	13 to 158 °F (-25 to 70 °C)
Cable Length	1.2m, PVC cable
Material	Case: Brass-nickel plated; Sensing surface: ABS

Diagram

