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# M8 Proximity Sensor Datasheet

(SNS-0001)

## Overview

### Description

The M8 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	M8
Length	50mm
Installation Type	Non-shielded
Detection Distance	2mm
Setting Distance	0-1.6mm
Supply Voltage	5-36V
Output Current	DC type: 300mA max; AC Type: 400mA
Standard Detected Object	Mild steel (8x8x1mm)
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

