

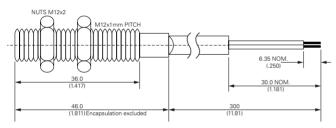
# 55075 Stainless Steel M12 Geartooth Speed Sensor

RoHS

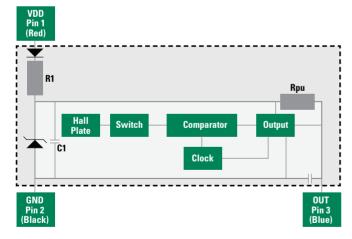


### Dimensions

Dimensions in mm (inch)



# **Block Diagram**



## Description

The 55075 is a robust stainless steel hall effect barrel sensor with an M12 x 1mm pitch thread, 46mm (1.810") long primarily for geartooth speed sensing. It protects against severe and automotive environments and is capable of switching up to 27Vdc and 20mA. It is available as three-wire (voltage output) version with a range of sensitivity, cable length and connector options. It is ideally suited to wheel, transmission and cam shaft speed sensing, geartooth sensor, rotary encoders, industrial, commercial, and automotive applications.

#### **Features**

- Ferrous target geartooth speed sensor
- Stainless steel M12 threaded barrel
- Electronic protection against severe and automotive environments

#### **Benefits**

- Long life, up to 20 billion operations
- High speed operation
- No chopper delay
- Unaffected by harsh environments

#### **Applications**

- Geartooth sensor
- Camshaft sensor

• Rotary orientation not critical

Self adjusting magnetic rangeThree-wire (voltage output)

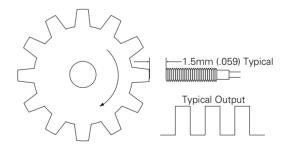
Short circuit/reverse voltage

protection

• EMC Protection (Consult Littelfuse)

- On-chip 10-bit A/D converter
  Customer selection of cable length
- and connector type
- Linear encoder
- Rotary encoder

#### **APPLICATION EXAMPLE - Geartooth Sensor**



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## **Electrical Ratings**

Hall Type			Digital Switch 3-Wire (Voltage Output)	
Supply Voltage 1	Maximum Operation Overvoltage Protection	Vdc Vdc Vdc - max.	-25 to +25.2 4.75 to 25.2 27	
Output High Voltage		Vdc - min.	VDD - 2 (sinking output with internal pull-up resistor)	
Output Low Voltage		Vdc - max.	0.6 @20mA	
Output Current (continuously on)		mA - max.	20	
Current Consumption		mA - min. mA - max.	1 10.5	
Switching Speed		KHz-max.	15	
Temperature	Operating	°C	-40 to +85	

Note: 1. As long as Tj (Junction Temperature) is not exceeded.

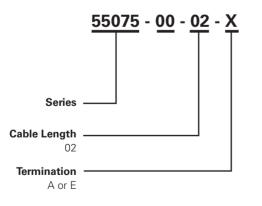
## **Cable Length Options**

Cable Type: 24 AWG 7/32 PVC 105°C Double Insulated				
Select Option	Cable Length mm (inch)			
02	300 (11.81)			

## **Termination Options**

Select Option	Description	
А	Tinned Leads	
E	JST XHP 2.5mm pitch	

## Part Numbering System



### Packaging

Packaging Option	Packaging Specification	Quantity	Quantity & Packaging Code	Taping Width
Bulk	Bulk	500	N/A	N/A