

# 55075 Series

## Stainless Steel M12 Geartooth Speed Sensor

RoHS



### 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 25mA. 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 & Benefits

- Ferrous target geartooth speed sensor
- Stainless steel M12 threaded barrel
- Electronic protection against severe and automotive environments
- Self adjusting magnetic range
- Three-wire (voltage output)
- EMC Protection (Consult Littelfuse)
- Short circuit/reverse voltage protection
- Long life, up to 20 billion operations
- High speed operation
- No chopper delay
- Unaffected by harsh environments
- Rotary orientation not critical
- On-chip 10-bit A/D converter
- IP67 rated

### Additional Information



Resources



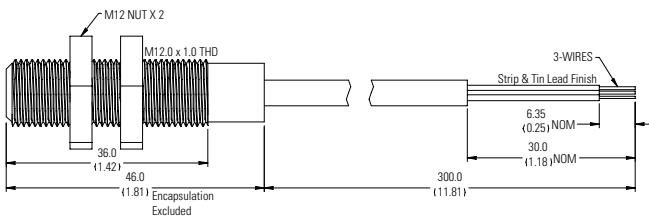
Accessories



Samples

### Dimensions

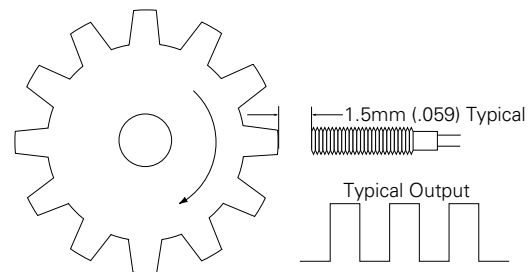
Dimensions in mm (inch)



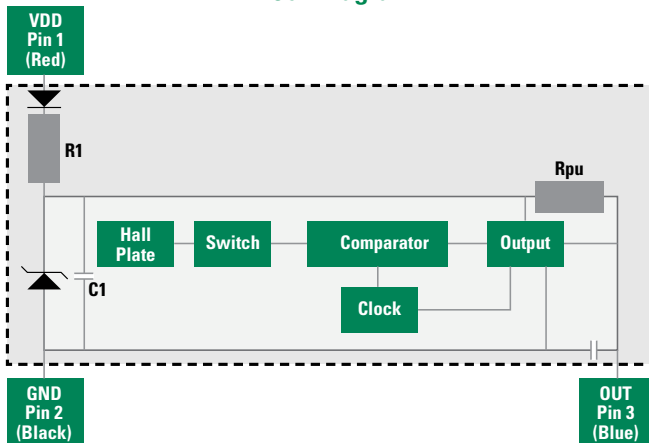
### Applications

- Geartooth sensor
- Camshaft sensor
- Linear encoder
- Rotary encoder

### Application Example - Geartooth Sensor



### Block Diagram



# 55075 Series

## Stainless Steel M12 Geartooth Speed Sensor

### Electrical Ratings


Hall Type	Digital Switch 3-Wire (Voltage Output)		
Supply Voltage <sup>1</sup>	Operate	Vdc	4.75 to 25.2
	Reverse Voltage		-25
	Overvoltage Protection	Vdc - max.	27
Output High Voltage		Vdc (max)	VDD - 2 (sinking output w/internal pull-up resistor)
Output Low Voltage		Vdc (max)	0.6 @ 25mA
Output Current (continuously on)		mA (max)	25
Current Consumption		mA (min)	1.0
		mA (max)	6.0
Switching Speed		kHz (max)	15
Temperature	Operating	°C	-40 to +125

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

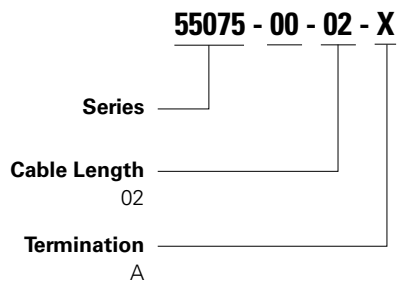
### Cable Length Options

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	
A	Tinned Leads	

### Part Numbering System



### Packaging

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

**Disclaimer Notice** - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.