

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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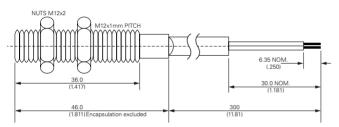
## 55075 Stainless Steel M12 Geartooth Speed Sensor

RoHS

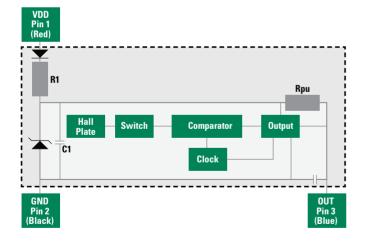


#### **Dimensions**

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
- Self adjusting magnetic range
- Three-wire (voltage output)
- EMC Protection (Consult Littelfuse)
- Short circuit/reverse voltage protection

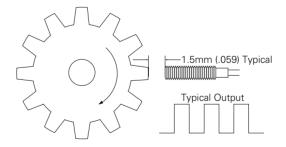
#### **Benefits**

- 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
- Customer selection of cable length and connector type

## **Applications**

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

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





# 55075 Stainless Steel M12 Geartooth Speed Sensor

## **Electrical Ratings**

Hall Type			Digital Switch 3-Wire (Voltage Output)
Supply Voltage <sup>1</sup>	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.

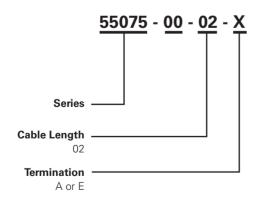
## **Cable Length Options**

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	
Е	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