

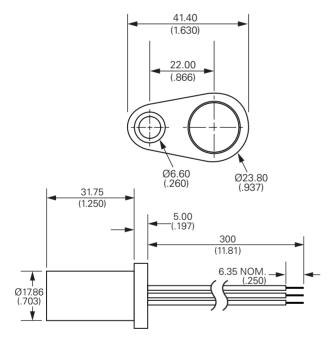
55505 Hall Effect Flange Mount Geartooth Speed Sensor

RoHS



Dimensions

Dimensions in mm (inch)



Description

The 55505 is a robust flange mounting hall effect sensor primarily for geartooth speed sensing. Protected against severe and automotive environments. It is capable of switching up to 27Vdc and 20mA and available as three-wire (voltage output) version. It's case design encorporates brass mounting bush. It is ideally suited to wheel, transmission and camshaft speed sensing, geartooth sensor, rotary encoders, industrial, commercial, and automotive applications.

Features

- Ferrous target speed sensing
- Internal circuit protection
- Protection against severe and automotive environments
- Self adjusting magnetic range
- Automotive grade circuit protection
- High speed operation
- Short circuit and reverse voltage protection
- On board 10-bit A/D convertor

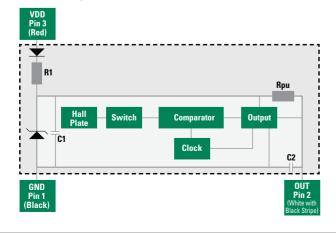
Benefits

- No chopper delay
- Immune to target run out
- Rotational alignment to target not critical

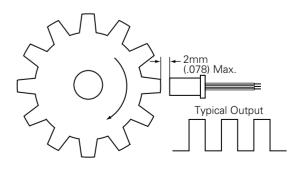
Applications

- Wheel, transmission and camshaft speed sensing
- Geartooth sensor
- · Rotary encoders
- Industrial
- Commercial
- Automotive

Block Diagram



Application Example (Geartooth Sensor)





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Electrical Ratings

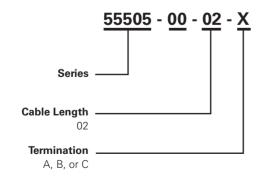
| Hall Type | Digital Switch 3-Wire (Voltage Output) | | |
|--|---|-------------------------------------|---|
| Supply Voltage ¹ | Operate Overvoltage Protection Reverse Voltage Protection | Vdc Vdc - max. Vdc - max. | 4.75 to 24 27 -25 |
| Output High Voltage | | Vdc - min. | VDD -2 (-2 sinking output with internal pull-up) |
| Output Low Voltage | | Vdc - max. | 0.6 @ 20mA |
| Output Current (continuously on) Current Consumption Current Consumption | | mA - max. mA - max. mA - max. | 20 1 10.5 |
| Current Consumption | | mA - min. mA - max. | 1 10.5 |
| Switching Speed | | KHz-max. | 15 |
| Temperature | Operating | °C | -40 to +125 |

Note:

Cable Length Options

| Cable Type: 20AWG 7/28 TXL 125C SAE J1128 | | | | |
|---|---------------------------|--|--|--|
| Select Option | Cable Length mm (inch) | | | |
| 02 | 300 (11.81) | | | |

Part Numbering System



Termination Options

| Select Option | Description | |
|------------------|------------------|--|
| А | Tinned Leads | |
| В | Deutsch DTM04-3P | |
| С | Molex MX 150 | |

Packaging

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

^{1.} As long as Tj (Junction Temperature) is not exceeded.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Littelfuse:

55505 01 02 A 55505 00 02 B 55505 01 02 B 55505 00 02 C 55505 01 02 C 55505 00 02 A 55505-00-02-C 55505-00-02-B 55505-00-02-A 55505-00-01-C 55505-00-03-C 55505-00-05-C 55505-00-04-A 55505-00-04-C 55505-00-05-A 55505-00-03-B 55505-00-03-A 55505-00-05-B 55505-00-04-B 55505-00-01-B