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# Electronic Control Systems Sensors

GS50 Speed Sensor



ENGINEERING YOUR SUCCESS.

## Application

The GS50 speed sensor belongs to the Parker family of accessories provided to complement electronic control systems. The GS50 is a digital output, non-contact, ferrous sensor and has a wide voltage supply range for mobile hydraulic applications. The GS50 can be used as a speed pickup with a variety of toothed wheels. The sensor has twelve inch leads with an attached Deutsch connector. To make the sensor suitable for mobile equipment, we have focused upon properties such as reliability and ease of installation.

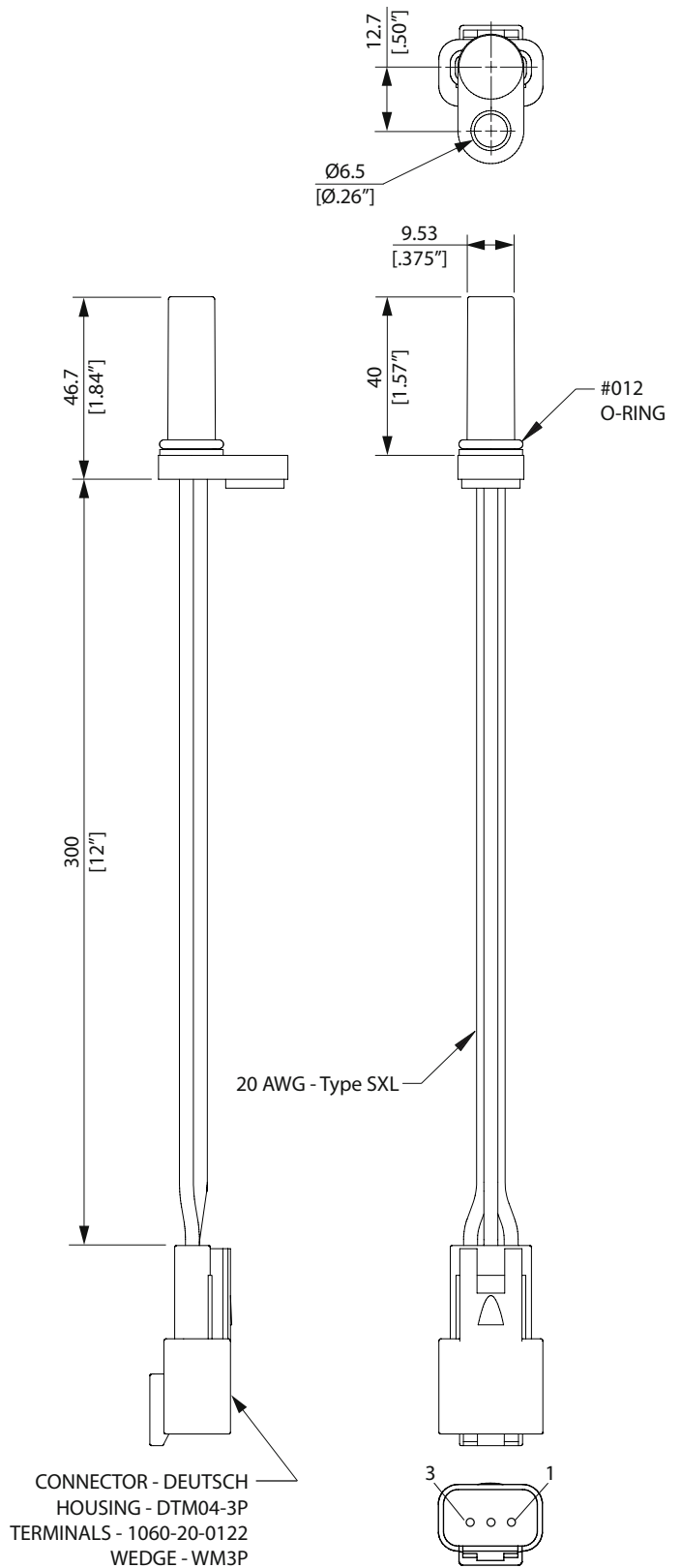
## Properties

### Reliability

The GS50 has a glass-filled nylon plastic construction for sturdiness and corrosion resistance. The mounting hole is reinforced with an aluminum insert for added strength. The sensor uses back-biased, Hall-effect technology for trouble free operation. The GS50 has a self-adjusting digital output which is immune to variations in air gap and rotary alignment. The sensor is very robust and able to withstand rugged applications.

### Installation

The GS50 is well designed for the mobile hydraulics industry. The sensor barrel has an o-ring seal. The 3 pin connector is a sealed Deutsch DTM type designed for automotive use. This connector combined with potted electronics gives the sensor IP67 protection for exposed outdoor applications. The single mounting hole in the flange simplifies alignment. These features provide for easy installation and removal, even in field conditions.



**General**

Weight 23 g  
 Temperature range -20°C to 125°C  
 Air gap 0 - 3 [0 - .12"]  
 (target size and material dependent)

**Mechanical characteristics**

Mounting Flange  
 Connector Deutsch DTM

**Electrical specifications**

Frequency range 0 - 15 kHz  
 Supply Voltage(Vs) 3.5 - 24 Vdc operational  
 Max 30 Vdc  
 Current supply 3 mA typical  
 Max 6 mA  
 Output type Digital switch, open collector <sup>1)</sup>  
 Output current Max 25 mA

1) Requires external output resistor.

**Ordering part number**

GS50 01711

**Environmental protection**

**ESD**

JEDEC 22-A114 HBM 3 kV

**Mechanical**

Shock 1m drop  
 Vibration 30 Gs

**Climate**

Sealing (electronics) IP67

**Chemical environment**

Liquids (resistance) standard automotive



**WARNING - USER RESPONSIBILITY**

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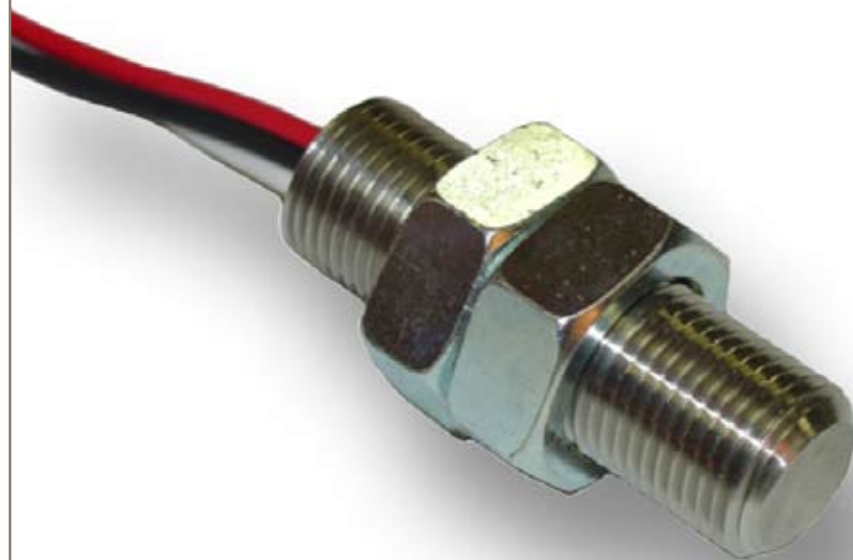
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# Electronic Control Systems Sensors

GS60 Speed Sensor



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## Application

The GS60 speed sensor belongs to the Parker family of accessories provided to complement electronic control systems. The GS60 is a digital output, non-contact, ferrous sensor and has a wide voltage supply range for mobile hydraulic applications. The GS60 can be used as a speed pickup with a variety of toothed wheels. The sensor has twelve inch leads with an attached Deutsch connector. To make the sensor suitable for mobile equipment, we have focused upon properties such as reliability, electromagnetic immunity and ease of installation.

## Properties

### Reliability

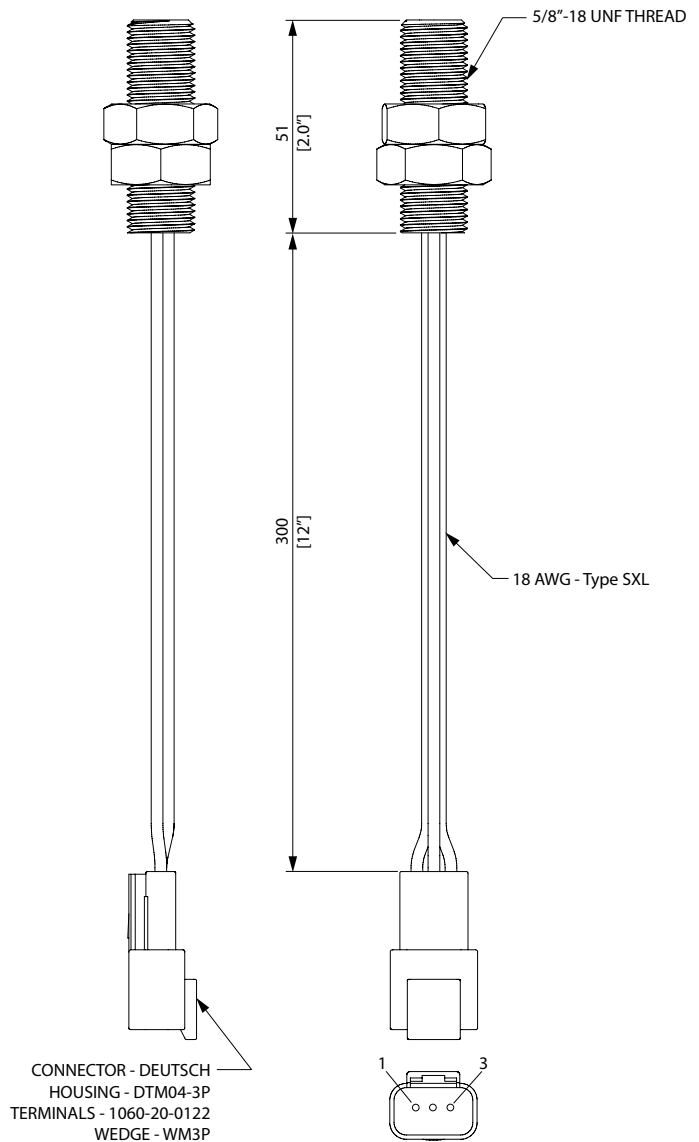
The GS60 has stainless steel construction for sturdiness and corrosion resistance. The heavy-duty mounting nuts for locking the sensor in position are also stainless steel. The sensor uses back-biased, Hall-effect technology for trouble free operation. The digital switch has an internal pull-up resistor and a self-adjusting digital output which is immune to variations in air gap and rotary alignment. The sensor is very robust and able to withstand rugged applications.

### Electromagnetic immunity

The design of the GS60 has a high level of EMI protection.

### Installation

The GS60 is well designed for the mobile hydraulics industry. The sensor barrel is threaded for its entire length and is a common 5/8" diameter. The 3 pin connector is a sealed Deutsch DTM type designed for automotive use. This connector combined with potted electronics gives the sensor IP67 protection for exposed outdoor applications. The fully threaded provides for easy installation and removal, even in field conditions.



**General**

Weight 94 g  
 Temperature range -40°C to 85°C  
 Air gap 0 - 5.0 [0 - .197"]  
 (target size and material dependent)

**Mechanical characteristics**

Mounting Threaded body  
 Connector Deutsch DTM

**Electrical specifications**

Frequency range 0 - 10 kHz  
 Supply Voltage(Vs) 5 - 24 Vdc operational  
 Max 30 Vdc  
 Current supply 8 mA typical  
 Output type Digital switch, open collector <sup>1)</sup>  
 Output current Max 25 mA

1) Requires external output resistor.

**Ordering part number**

GS60 01712

**Environmental protection**

**EMI**  
 ISO 11452-2 100 V/m

**ESD**  
 EN 61000-4-2 8 kV

**Mechanical**

Shock 1m drop  
 Vibration 30 Gs

**Climate**

Sealing (electronics) IP67

**Chemical environment**

Liquids (resistance) standard automotive



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