



# GS50 Sensors

Catalog HY33-2358/US



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.

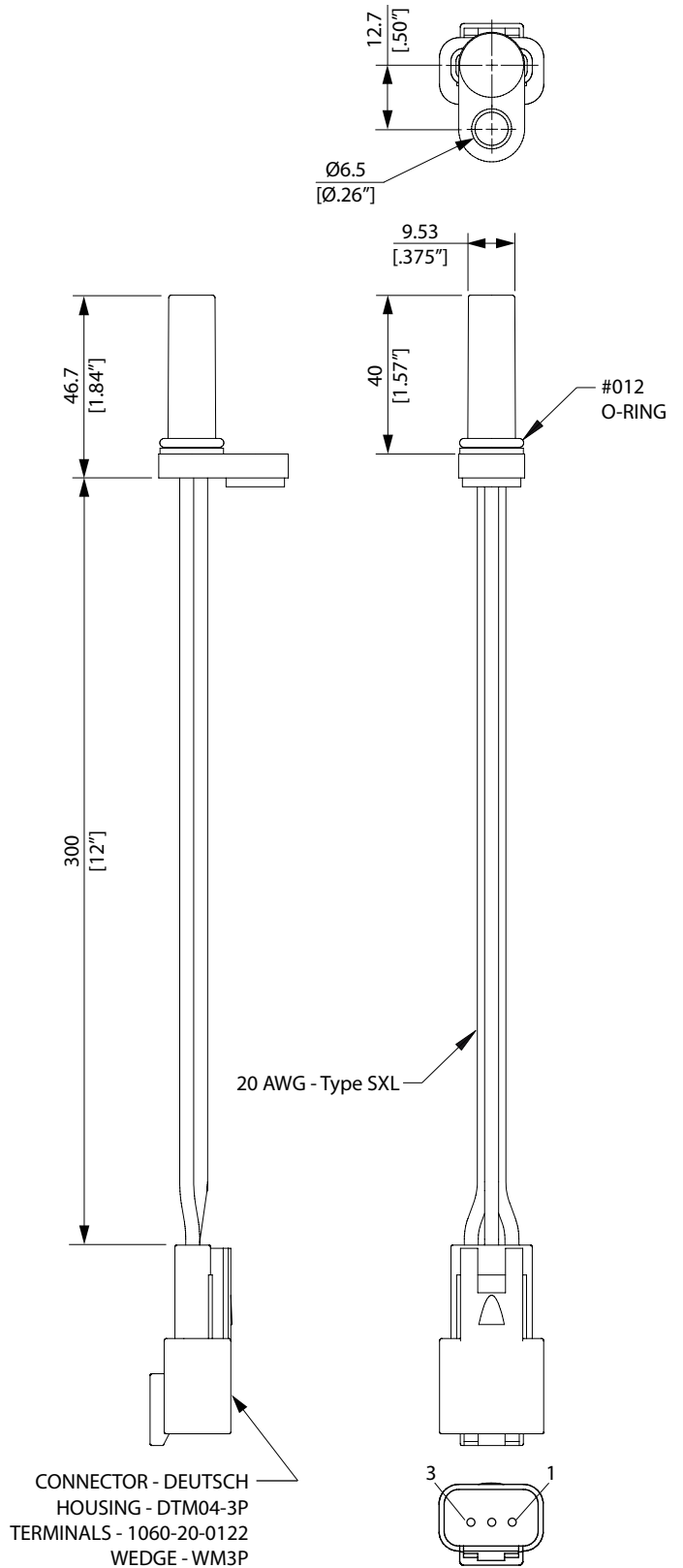
### Properties

#### 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) 5 - 16 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

**Ordering part number**

GS50 01711ECD

**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

1) *Requires external output resistor.  
 Refer to installation sheet for more information.*



**WARNING - USER RESPONSIBILITY**

**FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.**

- This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.
- The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.
- To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

**OFFER OF SALE**

Please contact your Parker representative for a detailed "Offer of Sale".

# Parker Hydraulics International Sales Offices

## North America

### Hydraulics Group Headquarters

6035 Parkland Boulevard  
Cleveland, OH 44124-4141 USA  
Tel: 216-896-3000  
Fax: 216-896-4031

### Parker Canada Division

160 Chisholm Drive Milton  
Ontario Canada L9T 3G9  
Tel: 905-693-3000  
Fax: 905-876-1958

### Parker Hannifin de México

Industrial Hydraulic Sales  
Eje Uno Norte No.100  
Parque Industrial Toluca 2000  
Toluca, Edo, de Mexico CP 50100  
Tel: 52 722 275 4200  
Fax: 52 722 279 9308

### Parker Hannifin de México

Mobile Hydraulic Sales  
Via de FFCC a Matamoraos 730  
Apodaca, NL, de Mexico CP 66600  
Tel: 52 81 8156 6000  
Fax: 52 81 8156 6068

## Europe

### Hydraulics Group Headquarters

La Tuilière 6  
1163 Etoy - Switzerland  
Tel: 41 21 821 8500  
Fax: 41 21 821 8580

## South Africa

### Parker Hannifin Africa Pty Ltd

P.O. Box 1153  
ZA-Kempton Park 1620,  
Republic of South Africa  
Tel: 27 11 961 0700  
Fax: 27 11 392 7213

## Mobile Sales

### Mobile Sales Organization and Global Sales

850 Arthur Avenue  
Elk Grove Village, IL 60007 USA  
Tel: 847-258-6200  
Fax: 847-258-6299

## Industrial Sales

### Central Region

1042 Maple Avenue  
Unit 331  
Lisle, IL 60532 USA  
Tel: 630-964-0796

### Great Lakes Region

6035 Parkland Boulevard  
Cleveland, OH 44124-4141 USA  
Tel: 216-896-2740  
Fax: 866-498-7507

### Gulf Region

20002 Standing Cypress Drive  
Spring, TX 77379 USA  
Tel: 817-473-4431  
Fax: 888-227-9454

### Southwest Region

700 S. 4th Avenue  
Mansfield, TX 76063 USA  
Tel: 817-473-9341  
Fax: 817-473-2680

### Mid Atlantic and Southeast Regions

1225 Old Alpharetta Road  
Suite 290  
Alpharetta, GA 30005 USA  
Tel: 770-619-9767  
Fax: 770-619-9806

### Midwest Region

8145 Lewis Road  
Minneapolis, MN 55427 USA  
Tel: 763-513-3535  
Fax: 763-544-3418

### Northeast Region

P.O. Box 396  
Pine Brook, NJ 07058 USA  
Tel: 973-227-2565  
Fax: 973-227-2467

### Northwest Region

6458 North Basin Avenue  
Portland, OR 97217 USA  
Tel: 503-283-1020  
Fax: 866-611-7308

### Pacific Region

8460 Kass Drive  
Buena Park, CA 90621  
Tel: 714-228-2510  
Fax: 714-228-2511

## Asia Pacific

### Parker Hannifin Shanghai Ltd

280 Yunqiao Road,  
Jin Qiao Export Processing Zone  
Shanghai 201206, China  
Tel: 86 21 2899 5000  
Fax: 86 21 6445 9917

### Parker Hannifin Hong Kong Ltd

8/F, Kin Yip Plaza  
9 Cheung Yee Street  
Cheung Sha Wan, Hong Kong  
Tel: 852 2428 8008  
Fax: 852 2425 6896

### Parker Hannifin Korea Ltd

9F KAMCO Yangjae Tower  
949-3 Dogok1-dong, Gangnam-gu  
Seoul, 135-860, Korea  
Tel: 82 2 559 0400  
Fax: 82 2 556 8187

### Parker Hannifin India Pvt Ltd

Plot No. EL-26, MIDC  
TTC Industrial Area  
Mahape, Navi Mumbai, 400 709 India  
Tel: 91 22 6513 7081  
Fax: 91 22 2768 6841

### Parker Hannifin Australia

Parker Hannifin Pty Ltd.  
9 Carrington Road  
Castle Hill, NSW 2154, Australia  
Tel: 612 9634 7777  
Fax: 612 9842 5111

## Latin America

### Parker Hannifin Ind. e Com. Ltda Hydraulics Division

Av. FredericoRitter, 1100  
94930-000 Cachoeirinha RS, Brazil  
Tel: 55 51 3470 6090  
Fax: 55 51 3470 9281

### Parker Hannifin Argentina S.A.I.C.

Stephenson 2711  
1667-Tortuguitas-Malvinas Argentinas  
Pcia. de Buenos Aires, Argentina  
Tel: 54 3327 44 4129  
Fax: 54 3327 44 4199

### Pan American Division

7400 NW 19th Street, Suite A  
Miami, FL 33126 USA  
Tel: 305-470-8800  
Fax: 305-470-8808



## Parker Hannifin Corporation Electronic Controls Division

56641 Twin Branch Dr.  
Mishawaka, IN, 46545 USA  
phone 574 256 6630  
fax 574 256 6643  
[www.parker.com/eccd](http://www.parker.com/eccd)