# Honeywell

# **MHS Series**

### **Modular Hall Effect Sensors**

### DESCRIPTION

MHS Series Hall Effect gear tooth sensors offer zero speed sensing capability and precise switch point measurement in a package that supports a variety of sensing elements and application needs, including direction sensing and diagnostics capability.

#### FEATURES

- Multiple sensing technologies including Hall Effect
- 2 and 3 wire output configurations open collector or current loop
- Suitable for under the hood applications
- Tyco Ampseal-16 and Packard Metri-Pack 150 connectors (others available upon request) and leadwires
- Various package lengths, mounting configurations and rotation insensitive
- -40 °C to 125 °C (-40 °F to 257 °F) continuous operating temperature
- Reverse voltage, short circuit protected and EMI hardened
- Integrated O ring seal
- High switching frequency and larger airgap capability (dependent on target configuration)

#### BENEFITS

- Sensing element can be chosen to best suit application
- Reduces wiring costs and offers diagnostic capability (two wire version only)
- Robustness and reliability
- Flexibility of packaging for on-vehicle application requirements
- Low cost
- Modular construction that reduces lead times from our facility to the customer
- Wide air gap range
- · Sealed sensing face



 Edge/position sensing for applications requiring precise reference to features on a target

The sensor packaging incorporates design flexibility to allow sensing length as well as connector type and orientation to be configured for specific customer applications.

#### POTENTIAL APPLICATIONS

Speed measurement in:

- transmissions and engines
- engine timing
- abs and wheel speed
  - camshaft
  - · speed and direction applications

### **MHS Series**

### **TECHNICAL DATA**

	2 wire (speed and timing)	3 wire (speed)
Supply voltage	4 V to 24 V	6.5 V to 24 V
Supply current	Low - 4 mA to 8 mA	14 mA max. (9 mA typ.)
	High - 12 mA to 16 mA	
	(Signal state current)	
Sensing length	27,5 mm (1.08 in)	
Operating temperature	-40 °C to 125 °C (-40 °F to 257 °F)	
Termination	Ampseal-16	Packard Metri-Pack 150
	Leadwires with connector	
Sensing face	Sealed to IP67	
Gear speed measuring range	0 Hz to 12 Khz (d	epending on target)

### **ORDER GUIDE**

Description	Listing
Sensor with cable	
Expected release 2006	MHS0001
Sensor with integral connector	
2 wire speed and timing sensor	MHS0002-01
3 wire speed sensor	MHS0002-02

### Modular Hall Effect Sensors

### MOUNTING DRAWINGS, FOR REFERENCE ONLY

2 WIRE







3 WIRE



### WARNING MISUSE OF DOCUMENTATION

- The information presented in this product sheet is for reference only.
  Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

### WARNING PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury. **Failure to comply with these instructions could result in death or serious injury**.

### WARRANTY/REMEDY

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. The foregoing is buyer's sole remedy and is in lieu of all warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

### SALES AND SERVICE

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

E-mail: info.sc@honeywell.com

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