



PEGASEM WSS

Wheel Speed Sensors



PEGASEM Wheel Speed Sensors offer high precision information as to the rotational speed of the car wheels, they can also be used as precise vehicle speed and distance transducers. For testing of tyres and Antilock Braking-Systems (ABS), they give exact information as to the status of the wheels for slip and skid calculations. Our Wheel Speed Sensors have been designed for harsh environments typical of tests on a car wheel hub. They resist shock, vibration, dust, mud, salt-water, snow and ice without problems. They fit seamlessly with the PEGASEM Modular Mounting System and can quickly be attached to a wide range of different wheels and hubs. The three different versions of this series of sensor meet various needs in the vehicle testing business.



They are available with pulse output, analogue speed and/or serial data output and calibration capabilities.

Features

- Incremental pulse output
- Analogue speed output (WSS4)
- Serial data interface (WSS4)
- High shock and vibration durability
- Salt-water resistant
- Designed for the harsh environments

Applications

- Precision vehicle speed information
- Precision distance measurement
- Control of vehicle speed during crash tests
- Slip test
- Skid test
- Refinement of ABS
- Support of GPS based test equipment

| Technical Data | WSS2 | WSS3 | WSS4 | Unit / Comments |
|--|-----------|-----------|-----------|-------------------------|
| Electrical Specifications | | | | |
| Supply Voltage (Vcc) | 5..24 | 5..24 | 5..24 | VDC |
| Typ. Supply Current | 25 | 25 | 40 | mA@12V |
| Digital Output Type | TTL 5V | TTL 5V | TTL 5V | Dual channel quadrature |
| Digital Output Pulse Rate | 128 | 1024 | 1024 | PPR |
| Analogue Speed Output | - | - | 0..4095 | mV |
| Serial Interface (RS232) | - | - | yes | |
| Internal Distance Counter | - | - | yes | Accesible per RS232 |
| Optional Windows software for online speed display | - | - | yes | Linked per RS232 |
| Calibration Capability | | | | |
| Output Pulse Rate | - | - | yes | 128/256/512/1024 PPR |
| Speed Voltage | - | - | yes | |
| Mechanical Spezifications | | | | |
| Detachable Harness Protection Tube | yes | yes | yes | |
| Length of Harness Protection Tube | 680 | 680 | 680 | mm (1) |
| Connector Type | Push-Pull | Push-Pull | Push-Pull | Waterproof |
| Maximum Rotational Speed | 3000 | 3000 | 3000 | RPM |
| Stainless Steel Hub Ball Bearings | yes | yes | yes | |
| Operational Temperature Range | -40..+70 | -40..+70 | -40..+70 | °(Deg C) |
| Sensor Size (WxDxH) | 42x26x100 | 42x26x100 | 42x26x100 | mm |
| Weight (Sensor only) | 255 | 255 | 260 | grams |
| Sealing | IP67 | IP67 | IP67 | Hermetically sealed |

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