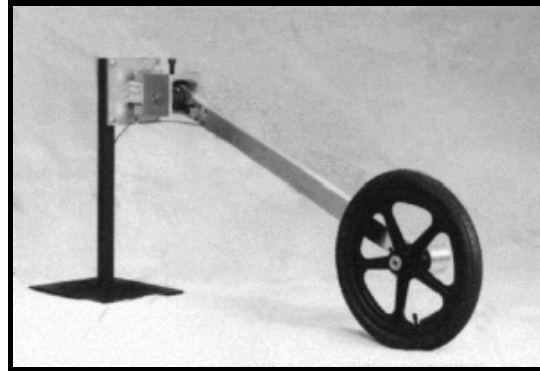


Engineered for all types of uses involving vehicle speed and distance measurements, the HFW80 fifth wheel sensor is accurate, reliable, rugged, and easy to use.

The fifth wheel features a high resolution optical encoder and low wheel tire growth to ensure excellent accuracy. A helical torsion spring keeps it in contact with the ground at all times to ensure correct surface tracking.

The fifth wheel is manufactured using high strength materials and is ruggedly constructed to withstand the high g impacts sustained in vehicle crash tests.

The output of the sensor is a TTL compatible, digital pulse which may either be used to measure speed or distance traveled. An optional digital readout is available or the sensor can interface directly with many types of off-the-shelf hardware, such as digital tachometers. The fifth wheel can also be integrated into electronic control and data acquisition systems.



Features

- Spring loading
- Rugged, impact hardened
- Digital pulse output
- Low power requirement
- Optional readout/power supply unit

Typical Applications

- Vehicle ground speed measurement
- Vehicle crash testing
- Speedometer calibrations
- Length or distance measurements

Contact Information:

GMH Engineering
336 S. Mountain Way
Orem, UT 84058
(801) 225-8970 FAX: (801) 225-9008
Internet: www.gmheng.com Email: info@gmheng.com

Specifications

Output: Digital Optical Encoder, TTL compatible, 500 counts/rev

Speed Measurement:
Range: 0-80 MPH (130 KPH)
Accuracy better than
0.2 MPH (0.33 KPH)

Wheel: 16" (0.4 m.) pneumatic tire
(~15.5" O.D.)

Wheel Tire Growth:
< 0.5% @ 50MPH (80 KPH)

Power Supply: 4.5 - 5.5 VDC

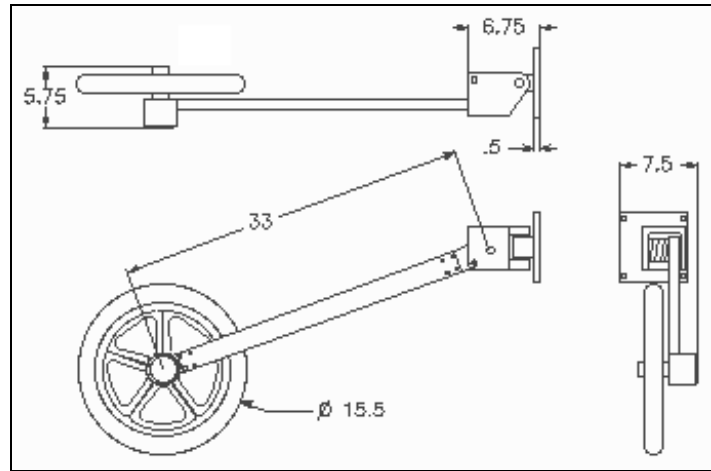


Figure 1 - Fifth Wheel (all dimensions in inches)

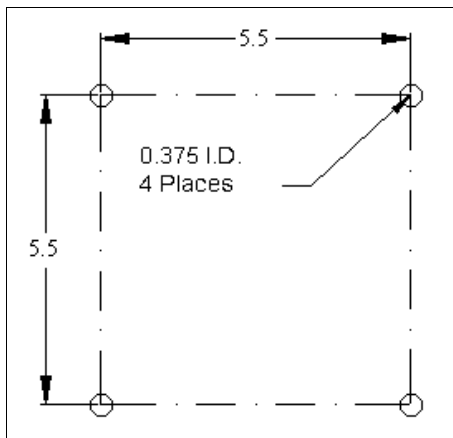


Figure 2 - Mounting Pattern (all dimensions in inches)

Length:

Overall 46" (1.17 m.)

Swing Arm Length: 33" (0.84 m.)

Material:

Arm, mount, pivots: 6061T6 Aluminum

Axle: Hardened & Ground Steel

Wheel: ABS plastic

Temperature Range: -40°C to 100°C

Weight: 20 lb. (9 kg.)

Cable: 20 feet (6 m.), 4 conductor, tinned leads

Available Options

- Custom bumper adapter

- Telemetry for remote measurements

- Custom speed range and resolution

- Readout and Power Supply Unit:

Display: LED 4 digit readout
with 0.8" (2 cm.) tall,
super bright red letters,

Power: 11-18 VDC
(incl. cigarette lighter adapter)

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