

GTSS

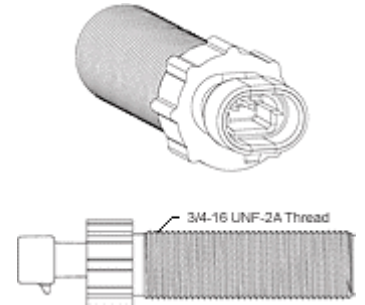


Generic Threaded Speed Sensor

Designed for rugged, reliable speed sensing requirements where durability and dependability are required.

The Generic Threaded Speed Sensor (GTSS) is built for use in the agricultural, heavy vehicle, off-highway, and construction markets. Its proven, field tested design conforms to SAE standards, while offering customers flexibility in variations and features. The GTSS is ideal for applications such as:

- Engine speed
- Transmission speed
- PTO speed
- Input / Output shaft speed
- Implement speed



The GTSS is available in a wide variety of packages, including single or dual outputs, and has passed extreme DV testing requirements.

generic sensors offer customers low cost options with minimal or little tooling investment.

Count on Technologies for sensing solutions that add performance and value to products. We serve customers with advanced design and engineering capabilities, flawless quality performance, flexible manufacturing and on-time delivery.

Technical Specifications

PHYSICAL

- Ideal for transmission speed sensor applications
- Robust product (aluminum housing)
- Single or dual output
- Multiple electrical packages

ELECTRICAL All measurements made at free ambient air @ 25°C ±5° (77°F ±9°)

	Inner Coil	External Coil
Resistance for dual coil	890 ohm ±10%	1270 ohm ±10%
Inductance for dual coil*	200 mh ±20%	220 mh ±20%
Resistance for single coil		270 ohm ±10%
Inductance for single coil*		94 mh ±20%

*1000 Hz 3" leads

OUTPUTCoil output minimum: P-P volts

	143 RPM		3500 RPM	
Air Gap:	0.5mm	1.27mm	0.5mm	1.27mm
Single output	3.11	1.69	19.65	11.47

Dual output, inner coil	4.15	2.27	23.88	13.99
Dual output, external coil	4.82	2.63	30.33	17.54

DURABILITY All measurements made at free ambient air @ 25°C ±5° (77°F ±9°)

Durability	Condition	Units
Air to Air Thermal Shock	-40°C to +150°C 60 min soak < 5 min transfer 1000 Cycles	Monitor coil resistance each half cycle. No more than ± 60% change in R from room temp. No distortion which inhibits sensor function. No physical damage.
Salt Spray	1000-hour Per ASTM B117-73	Corrosion superficial, nonferrous and not impair function. No physical damage or distortion. No salt ingress past connector seal.
Humidity	Mount sensor with mating connector and test sensor per SAE J1455 Sect 4.2.3 figure 4a. Test for 60 cycles of 8 hours. Upper soak temperature is to be 85 °C. 95% ±3% relative humidity should be maintained at all times for temperature ranges of 15 - 38 °C. Resistance should be checked and must be within specification.	No physical damage or distortion. No evidence of moisture ingress past connector seal.
Liquid Containment Immersion	200hr soak at 125°C ±3° <ul style="list-style-type: none"> • Transmission fluid • Diesel fuel • Motor oil • Detergent • Antifreeze (SAE-J1034) • Brake fluid (SAE-J1703F) • Full CD-50 synthetic lubricant • Magnesium Chloride • Calcium Chloride 	After exposure, wipe clean and visually inspect. No physical damage or distortion.
Vibration	Mount the sensor in a fixture equivalent to the production installation. Resistance of device shall be measured and be constant within specification after being subjected to the following test: Vibrate this assembly in 3 mutually perpendicular significant planes for 24 hours (8 hours per plane) at a temperature of +100°C. Frequency range is to be between 5 to 500 Hz Power Density Level to be 0.2535 G2/Hz, with 3dB per octave roll-off to from 100 to 500 Hz. Overall Acceleration level 8G's.	Monitor coil resistance. No physical damage or distortion.
Submersion	Completely immerse sensor in 5% salt, 1% soap aqueous solution and check for electrical continuity to the coil. Thermal cycle part 125 to -40 for 100 cycles in Air to Air chamber. Repeat immersion testing. Repeat entire sequence 4 additional times (500 total thermal cycles).	