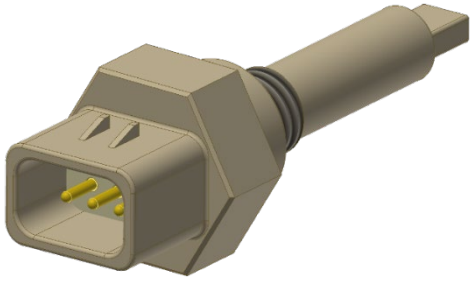
Rochester Sensors
AN AMPHENOL COMPANY
Engineering Innovative Solutions™

3100 Series Water in Fuel Sensor (WIF)

27-MAY-26/REV 2

The Water in Fuel (WIF) sensor will detect the presence of water in diesel in the fuel filter housing assembly by measuring the capacitance levels of the liquids. It has a unique three wire design and because it is capacitive it has no moving parts. It is a completely sealed design with no exposed probes or leads for leak free operation. Compatible with biodiesels and upon start up the sensor has a self-test function.



Features:

- Made from fuel tolerant 25% GF Acetal Copolymer (POM-C).
- Sensing location is variable depending on probe length.
- External Viton O ring for trouble free application sealing.
- Integrated connector allows re-use during filter replacement.
- No exposed components negate corrosion issues.
- All components are on the PCBA inside the housing.
- Can be mounted vertically or horizontally in the application.
- Intended for use in separated fluids, not designed for emulsified mixtures of water and diesel.

SPECIFICATION

Electrical

Supply Voltage: 8 to 36 VDC

Connector Integrated Ampseal 16 3 way. Gold plated terminal PINS.

Performance

Power Consumption: <15mA Typ

Output

Switch to Ground: Open circuit in fuel
Switch to ground in water (dielectric 29.30 – 80.30)

Power on Time: <500ms

Construction

Thread Specification: ½" – 20UNF(SAE 5) as std. Please consult Rochester Engineering for other details.

Environmental Ratings

Operating Temp: -40°C to 85°C
Storage Temp: -40°C to 85°C
Application Pressure: 10 PSI max
Vibration: 15.3 Grms, BS EN 60068-2-64: 1993
ingress rating: IP67 when connected with mating connector.
Drop: 1M to concrete surface

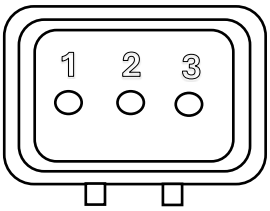
Options

Accessories: C/K18 Ampseal-16 3-way c/w terminals & wire seals

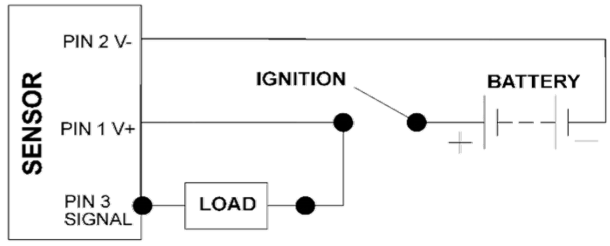
EMC: Type approval to EN ISO 13766:2006

Supplied with appropriate 'O'ring on request

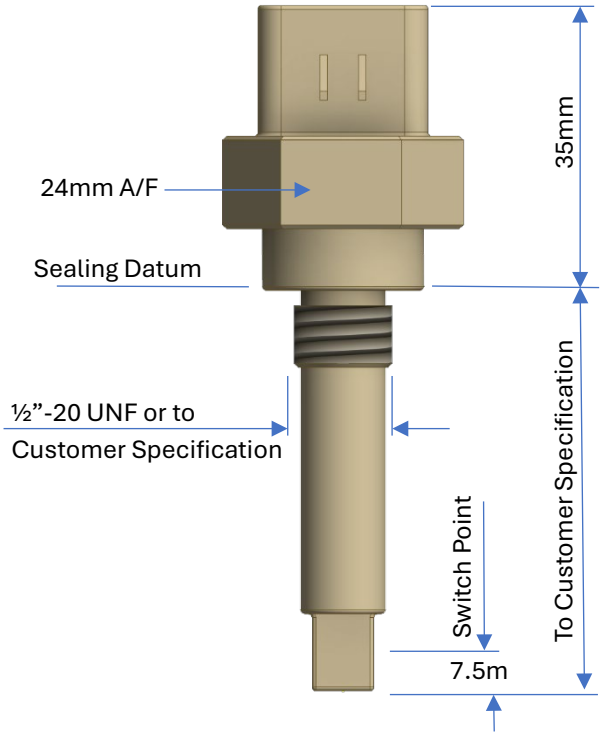
Polarity		
Pin 1	Pin 2	Pin 3
8-36V	GND	Signal



Pin Configuration



SCHEMATIC



Manufacturing Worldwide