# 2150 Series Water in Fuel Sensor (WIF) with drain function

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 two wire design and because it is capacitive it had no moving parts. It is a completely sealed design with no exposed probes or leads for leak free operation. Compatible with biodiesels.

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.
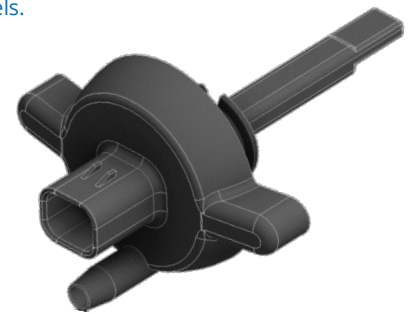
SPECIFICATION

Electrical

Supply Voltage:	3.3 to 5 VDC
Connector	Integrated Ampseal 16 2 way. Gold plated terminal.

Performance

Power Consumption:	<1mw @ 5VDC

Output

Binary output:	22 – 90 µA in diesel 100 – 200 µA in water (dielectric 29.30 – 80.30)
Switching Time:	500mS
Power on Time:	<500ms

Construction

Thread Specification:	Please consult Rochester Engineering

Environmental Ratings

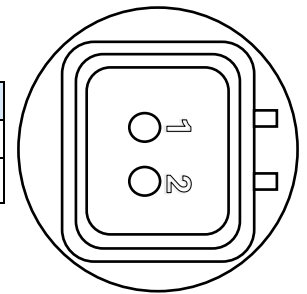|	
Operating Temp:	-20ºC to 115ºC
Storage Temp:	-40ºC to 125ºC
Application Pressure:	10 PSI max
Vibration:	15.3 Grms, 3 orthogonal planes, 3 hours per plane in accordance with BS EN 60068-2-64: 1993
Ingress rating:	IP67 when connected with mating connector.
Drop:	1M to concrete surface

Options

Accessories:	C/K17 Ampseal-16 2-way c/w terminals & wire seals
Radiated immunity:	250 MHz – 6GHZ, 30 V/m per ISO 11452-2
Bulk current injection:	AM 0.5 MHz – 400 MHz @60 mA to ISO 11452-4

Polarity	
Pin 1	Pin 2
5VDC	GND

Pin Configuration

Ø50mm

27.5mm

Sealing Datum

To customer Specification

Switch Point

To Customer Specification

7.5mm

Schematic

Engine Controller

5V

10K

A/D

+ Sensor –

ISO 14001 ENVIRONMENTAL MANAGEMENT | ISO 9001 QUALITY MANAGEMENT | RoHS COMPLIANT | UKCA | CE

Manufacturing Worldwide