

**Features**

- Fuel flow measurement: Gasoline, Diesel.
- Rugged aluminum housing compatible with most light transmitting, non-corrosive liquids.
- Excellent EM/RFI immunity.
- ¼" NPT fitting.
- Lightweight, small size.
- Mini sure-seal® connector.

**Description**

The fuel flow transducer measures the flow of hydrocarbon fuels such as gasoline, kerosene, #2 diesel and other light transmitting, non-corrosive liquids of similar viscosities. It has an internal diaphragm that absorbs any pulsations by nearby fuel pumps and a flow chamber design that makes fuel blockage impossible.

The transducer gives repeatable signal for gasoline down to 1.15 Litres/hour (L/h). The higher viscosity of diesel fuel reduces signal repeatability at flow rates below 7.5L/h.

**Specifications**

- Black Box operation is limited to 11-15VDC when using SENFFW family.
- Power supply: 50mA max.
- Measurement repeatability: 0.25% @ 60L/h.
- Operating temperature: -65°C to 100°C.
- Working pressure 200psi.
- Maximum flow: 3x for short periods.
- Bearing Life Expectancy: 10 000hr. min.
- Piping: ¼" NPT fitting.

<b>Flow Range</b>			
	<b>DTCFFW-101</b>	<b>DTCFFW-201</b>	<b>DTCFFW-301</b>
<b>Gasoline</b>	1.15-115L/h	2.3-230L/h	7.5-300L/h
<b>#2Diesel</b>	7.5-115L/h	11.5-230L/h	30-300L/h
<b>Pressure Drop</b>			
	<b>DTCFFW-101</b>	<b>DTCFFW-201</b>	<b>DTCFFW-301</b>
<b>Gasoline</b>	0.6psi @ 55L/h	1.2psi @ 115L/h	1.4psi @ 150L/h
	2.4psi @ 115L/h	4.8psi @ 230L/h	5.8psi @ 300L/h
<b>#2Diesel</b>	0.8psi @ 55L/h	1.5psi @ 115L/h	1.8psi @ 150L/h
	3.0psi @ 115L/h	6.0psi @ 230L/h	7.2psi @ 300L/h



**Installation**

- A filter should be installed upstream of the flow transducer. To eliminate turbulence, provide a reasonable unobstructed straight section length (15 to 30cm (6" to 12")) both upstream and downstream of the sensor.
- Install flow transducer with wire leads (or tabs) pointed UP to vent any entrained air bubbles and to ensure that the rotor is well immersed in liquid. For maximum accuracy at low flow rates the transducer should be mounted level (horizontal).
- The transducer should be at least 30cm (1') upstream of the pump.
- Connect the sensor to a DTC input on the Black Box. Carefully align indexing rib when mating mini sure-seal® connectors.
- Do not expose wire/connector to water, oil or fuel.
- Do not place sensor near sources of interference, such as ignition coils, plug leads, electronic modules or antennas.
- Do not bend cable with curvature radius smaller than 1.60" [40 mm].

## Calibration

<b>Name</b>	<b>DTCFFW-101</b>
<b>Predefined Equation</b>	Flow
<b>Units</b>	L/h, GPH (US), GPH (UK)
<b>Pulses per Litre (Gasoline)</b>	8454
<b>Pulses per Litre (#2 Diesel)</b>	8718

<b>Name</b>	<b>DTCFFW-201</b>
<b>Predefined Equation</b>	Flow
<b>Units</b>	L/h, Gal/h (US), Gal/h (UK)
<b>Pulses per Litre (Gasoline)</b>	7397
<b>Pulses per Litre (#2 Diesel)</b>	7397

<b>Name</b>	<b>DTCFFW-301</b>
<b>Predefined Equation</b>	Flow
<b>Units</b>	L/h, Gal/h (US), Gal/h (UK)
<b>Pulses per Litre (Gasoline)</b>	6340
<b>Pulses per Litre (#2 Diesel)</b>	6604