The FPS2800 is a fluid property sensor that will directly and simultaneously measure the viscosity, density, dielectric constant and temperature of fluids. Relying on innovative tuning fork technology, the sensor monitors the direct and dynamic relationship between multiple physical properties to determine the quality, condition and contaminant loading of fluids such as engine oil, fuel, transmission and brake fluid, hydraulic and gear oils, refrigerants and solvents.

The multi-parametric analysis capability improves fluid characterization algorithms. The FPS provides in-line monitoring of fluids for a wide range of OEM and aftermarket installations including fluid reservoirs, process lines and pressurized high flow conduits (e.g., engine oil gallery) for applications that include on and off-road vehicles, HVACR, compressors, industrial equipment and turbines. A universal digital CAN J1939 compliant protocol provides easy to connect interface to main Host controller. A simple 4 pin connector allows for cost effective mounting options.
Benefits

- Rugged construction for high pressure and high flow environments
- Proprietary corrosion and contaminant resistant coating for wetted parts
- On-board microprocessor for real-time data analysis with 12 - 24 volts supply
- Highly reliable and long term stability

Applications

- On and Off-road Vehicles
- HVACR
- Compressors
- Industrial equipment
- Turbines
OIL PROPERTY SENSOR

TE Model #: FPS2800
TE Internal #: CAT-FPS0009

FPS2800
OIL PROPERTY SENSOR

MULTI-PARAMETRIC SENSING
Measures dynamic viscosity, density, dielectric constant & temperature for enhanced oil analysis from a single sensor.

SIMPLE INTEGRATION
Fits to any M14x1.5 ports and a simple communication CAN as per SAE J1939 standard.

RUGGED CONSTRUCTION
Stainless-steel 316L housing to provide long-term performance.

Multi-parametric oil property sensor for condition monitoring in applications from industrial machinery and compressors to off-road vehicles. The FPS2800 from TE Connectivity (TE) responds to the increasing market requirements for long-term oil condition monitoring.
Additional Assets

Installation Guide
How to install the FPS2800 (English)

White Paper
Engine Oil Condition Monitoring with FPS2800 Oil Property Sensor (English)

Infographic
FPS2800 Oil Property Sensor (English)

Features

Usage Conditions

<table>
<thead>
<tr>
<th>Operating Temperature Range (°C)</th>
<th>-40 - 150</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temperature Range (°F)</td>
<td>-40 - 302</td>
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</table>

Operation/Application

<table>
<thead>
<tr>
<th>Operating Range</th>
<th>Density from 0.65 to 1.5 g/cc, Dielectric from 1.0 to 6.0, Viscosity from 0.5 to 50 mPa-s</th>
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</table>

Other

<table>
<thead>
<tr>
<th>Package</th>
<th>Fully Integrated, Stand-Alone Module Combines Sensor &amp; Processing Electronics For In-Situ Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluid Property Sensor Product Type</td>
<td>Oil Property Sensors</td>
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SEE PRODUCTS ON NEXT PAGE
Products (1 of 1)

**FPS2800B12C4 STD**

<table>
<thead>
<tr>
<th>TE Model / Part #</th>
<th>FPP800A110</th>
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<tr>
<td>EU RoHS Directive 2011/65/EU</td>
<td>Not Yet Reviewed for EU RoHS</td>
</tr>
<tr>
<td>EU ELV Directive 2000/53/EC</td>
<td>Not Yet Reviewed for EU ELV</td>
</tr>
<tr>
<td>Product Families</td>
<td>MEAS</td>
</tr>
<tr>
<td>Series</td>
<td>MEAS FPS2800</td>
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</tbody>
</table>

*EU RoHS Directive 2011/65/EU*

These products comply with the substance restrictions of the Restriction on Hazardous Substances Directive 2011/65/EU (RoHS2). The RoHS2 Directive requires that certain electrical and electronic equipment products do not contain mercury, cadmium, hexavalent chromium, PBB, PBDE, lead, DEHP, BBP, DBP and DIBP above defined thresholds. Products indicated as ‘Compliant’ do not contain any of these substances above the prohibition thresholds. Finished electrical and electronic equipment products will be CE marked as required by the Directive. Components may not be CE marked.

**EU ELV Directive 2000/53/EC**

These products comply with the substance restrictions of the End of Life Vehicles Directive 2000/53/EC (ELV). The ELV Directive requires that materials and components of vehicles do not contain mercury, cadmium, hexavalent chromium, and lead above defined thresholds. Products indicated as ‘Compliant’ do not contain any of these substances above the prohibition thresholds.
Related Materials

Customer View Model
3D

Customer View Model
English

Customer View Model
English

Customer View Model
English

Data Sheet
FPS2800B12C4
English

Brochure
Industrial and Commercial Transportation Sensor Solutions (English)
Learn more about our sensor solutions for industrial and commercial transportation applications.
English

Also in the Series

MEAS FPS2800

Fluid Property Sensors(1)