



FPS2800B12C4 FLUID PROPERTY SENSOR

FPS KIT

- Fully integrated, stand-alone module sensor and processing electronics
- Accurate, repeatable temperature, viscosity, density and dielectric constant
- Factory calibrated with NIST traceable fluids
- Digital output based on J1939, CAN2.0B standard featuring high-resolution parameter readings

Description

The FPS2800B12C4 is a fluid property sensor (FPS) that will directly and simultaneously measure the viscosity, density, dielectric constant and temperature of low conductivity fluids. Relying on patented tuning fork technology, the sensor monitors multiple physical properties that enables the OEM to determine the quality, condition and contaminant loading of fluids such as engine oil, transmission, hydraulic and gear oils. 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 highway vehicles, HVAC&R, compressors, industrial equipment and turbines. A universal digital CAN J1939 based protocol provides easy to connect interface to main Host controller. A simple four pins connector allows for cost effective mounting options.

Please Refer to document FPS2800B12C4 datasheet for detailed information on performance and features of the sensor.

Features

- Rugged construction for high pressure and high flow environments
- On-board microprocessor for real-time data analysis with 12-24 volts supply
- Highly reliable and long term stability

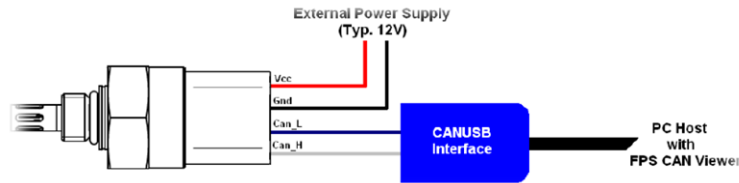
Applications

- Engine, transmission and hydraulic oils for on and off-highway vehicles

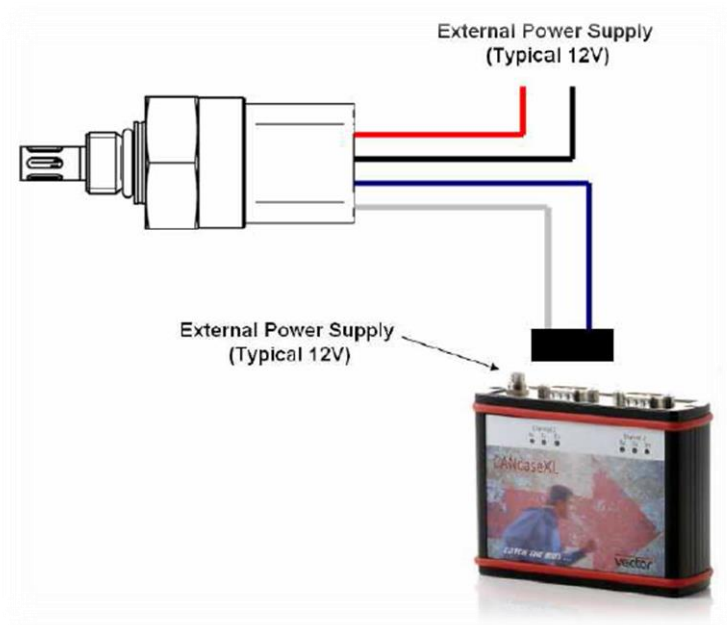
1. Two kit configurations

In order to provide plug and play tools for early tests of the Fluid Property Sensor, two kit configurations are available by TE connectivity:

- Kit 1: Data Viewer Kit provides all required equipment that allow direct plug-in, readings, data acquisition of the sensor through the customer PC interface. The CAN Viewer software is an ideal tool to realize stationary tests in laboratory conditions.



- Kit 2: Data Logger Kit provides all required equipment that allow direct plug-in of the sensor for data acquisition using a mobile CAN Logger interface. The CAN Logger interface is an ideal tool for “in field” testing on vehicles or mobile machines without any modification of the ECU software.





Details of the two kits configuration are in the hereunder table:

| Components | Kit 1: data viewer kit | Kit 2: data logger kit |
|-----------------------------------|--|--|
| Sensor | FPS2800B12C4 | FPS2800B12C4 |
| Standard calibration | Standard Viscosity (18cP at 100°C) | |
| Specific calibration | Upon customer request | |
| Connecting elements | | |
| From sensor to power supply | FPS cable (an integrated 100V – 240V to 12V power supply is added to FPS Cable) | FPS cable (if requested, an integrated 100V – 240V to 12V power supply can be added to FPS Cable) |
| From sensor to data saving system | FPS Cable + CAN to USB dongle (to connect to PC) | FPS cable |
| Acquisition system | | |
| Data saving system | Customer PC | CAN LOGGER BOX |
| Software | CAN VIEWER software (**) (provided on USB key) | CAN LOGGER Software (integrated to the box) |
| FPS documents (*) | | |
| Documentation included in the kit | FPS Datasheet | |
| | FPS Installation Guideline | |
| | KIT FPS installation guide | |

(*) Documents are electronically provided on a delivered USB key

(**) Following configurations are compatible: XP (SP1/2/3), Vista (no SP / SP1/2), and Windows 7 (compatible with 32 and 64bits versions)

2. Ordering information

Please refer to the following table to order the FPS Kit with the desired configuration:

| Product Name | Reference | Kit 1: Data viewer kit | Kit 2: Data logger kit |
|--------------------------------|------------------|-------------------------------|-------------------------------|
| FPS2800B12C4 | FPP800A110 | X | X |
| USB Key | FPPCLEFUSB | X | X |
| CAN logger box | FPS CAN LO | | X |
| FPS Cable | HPP130LAB10 | X | X |
| Power Supply (100-240V to 12V) | FPPPOWERW | X | If requested |
| CAN-USB dongle | FPSCANUSBC | X | |
| CAN viewer software | FPL800CANV | X | |
| P/N for order | | FPP800KIT1 | FPP800KIT2 |



Customer service contact:

TE connectivity
4 Rue Gaye Marie
CS 83 163
31027 Toulouse Cedex 3
France
Tél : +33 (0) 5 820 822 02
Fax : +33 (0) 5 820 821 51

Sales: customercare.tlse@te.com

te.com

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