Fuel flow meter DFM

Purpose

Fuel flow meter DFM is designed for measuring diesel fuel consumption in the fuel line of vehicles, river boats, diesel-generators, boilers, burners etc.

Application

Fuel flow meter DFM may be used both with vehicle tracking and fuel monitoring systems. DFM allows to solve the following tasks:

- Fuel monitoring;
- Fuel consumption rationing;
- Detecting and preventing theft of fuel;
- Real-time monitoring and optimization of fuel comsumption;
- Engine fuel consumption testing.

Compatibility

Fuel flow meter DFM can operate with any on-board terminals which have discrete or pulse input 0-32V, for example, with Off-line fuel monitor CKPT 31 Lite, On-line terminal CKPT 45.

Operating principle

Fuel flow meter DFM has three-dimension ring type measuring chamber. DFM generates the impulse, when the volume of fuel (which is equal to the volume of measuring chamber) passes through it. For 1 liter of consumed fuel DFM generates the number of impulses, which is marked on the meter harness.

Models

Fuel flow meter DFM realizations may differ in maximum measured consumption, screen presence, type of output.

This is the table of the DFM models designation for the ordering:

THE ACTUAL FUEL CONSUMPTION MEASURING

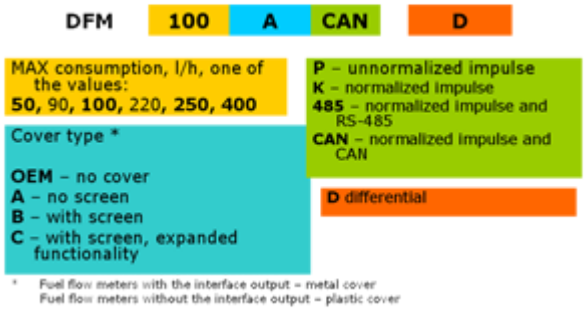
Specifications

Connecting thread	M14x1.5
Nominal pressure, MPa	0.2
MAX pressure, MPa	2.5
Measured liquid temperature, °C	from 10 to 40
Supply voltage, V	10-50
Overvoltage protection, V	≤100
Current consumption, mA	≤ 25 (12 V) ≤ 50 (24 V)
Operating temperature, °C	without screen: from -40 to +80; with screen: from -20 to +60

Measurement scope and accuracy

Model	The nominal bore	MIN consumption, l/h	MAX consumption, l/h	Inaccuracy, ±%
DFM 50	6	1	50	1
DFM 90	6	3	90	2
DFM 100	6	2	100	1
DFM 220	8	8	220	2
DFM 250	8	5	250	1
DFM 400	10	30	400	2

Measured fluids



Advantages

- Protection against unauthorized interference and tampering with the meter;
- Operation in the absence of power;
- Engine time control - general and in various modes of operating;
- Fuel flow meters DFM meet road standards of electromagnetic compatibility, mechanical and climatic influences;
- Big in-built mud filter;
- All the fuel flow meters DFM are tested on the metrologically certified installation.

Warranty

Warranty period is 24 months.

The manufacturer

TECHNOTON

Fuel flow meters DFM can be used for consumption measuring of the following fluids:

- Diesel fuel;
- Heating oil;
- Mineral oil;
- Other types of liquids with kinematic viscosity from 1.5 to 6 mm^2/sec*.

* Application for more viscous liquids is also possible, but the maximum consumption may get less than critical and the pressure on the meter gets down. All the meters DFM are tested in the diesel fuel. Please, specify the fuel type and viscosity in your order.

The materials resistant to gasoline are used for DFM manufacturing. Use safety means in accordance with the national laws when working with gasoline.

Mounting

Mounting kit №4 is recommended to be used on the engines with maximum consumption more than 50 liters per hour.

Fuel flow meters DFM are installed into the vehicle fuel system in accordance with the developed schemes.

To get the detailed information about the fuel flow meters DFM installation please contact to Technical Support of JV "Technoton".