

Fork Density Meter

Application

The fork density meter (FDM) uses a vibrating fork sensor to measure both the density and viscosity of the fluid immediately surrounding the sensor. Since oil, gas, and water all have different properties, the average density and viscosity of the wellbore fluid can be used to determine the percentage of the various fluids present. Orientation does not affect the FDM, allowing it to operate in highly deviated wells. Due to the fast response, this measurement can be obtained while continuously moving in the wellbore.

The FDM is used with other tools in a tool string and transmits its data to either the telemetry tool or the memory adapter tool (MAT).

Benefits

The fork density meter uses a vibrating fork sensor to instantaneously measure density and viscosity of the surrounding fluid. The measurement remains valid regardless of the orientation of the tool.

Features

- Measures both Density and Viscosity
- Measurements can be Obtained While the Tool is Moving or Stationary
- Can be Used in Highly Deviated Wells

Fork Density Meter

Type	Part No.
Standard Service	111373
H2S Service	112435

Spare Parts

Type	Part No.
Seal Kit	112884



Specifications

	Details
OD	1.375 in (34.9 mm)
Length	30.3 in. (77.0 cm)
Weight	8 lb (3.6 kg)
Resolution	0.001 g/cc (1 kg/m ³)
Accuracy	± 0.03 g/cc (± 30 kg/m ³)
Range	0 - 1.25 g/cc (0 - 1,250 kg/m ³)
Temperature Rating	302°F (150°C)
Pressure Rating	15,000 psi (103 MPa)
18V Power Requirement (Memory String)	60 mA
100V Power Requirement (Telemetry String)	18 mA