

Flowmeter and Temperature Electronics Tool

Measures wellbore qualitative fluid identification data

Applications

- Production logging flow and injection profiling
- Conventional temperature logging
- Leak detection, gas inflow points, top of cement
- Basic “fracture height” determination
- Flow behind pipe

Features and Benefits

- Combinable with high-speed digital (HD) telemetry tools
- Common base tool with multiple spinner options
- Compact, versatile, and robust tool

Tool Description

The Weatherford flowmeter and temperature electronics tool (FLTE) is used in with both the full-bore spinner and the fixed-cage spinner mechanical impeller.

A dedicated hall-effect array provides ten pulses per revolution flowmeter output and a fast-response PRT measures wellbore temperature.



Flowmeter and Temperature Electronics Tool

Specifications

Ratings and Dimensions

Maximum temperature	350°F (177°C)
Maximum pressure	15,000 psi (103.4 MPa)
Outside diameter	1.69 in. (43.3 mm)
Length	14.6 in. (371 mm)
Weight	7.2 lb (3.3 kg)
Materials	Corrosion-resistant materials used throughout

Flowmeter Measurements

Output	10 pulses per revolution
Maximum rps	200 rps
Resolution	2 ft (0.61 m)/min in water
Accuracy	+/- 2 ft (0.61 m)/min in water
Velocity max	4,000 ft (1,219.2 m)/min with 4.0-in. (10.16-cm) pitch spinner

Temperature Measurements

Range	-40 to 350°F (-40 to 177°C)
Resolution	0.006°F (0.003°C)
Accuracy	0.9°F (0.5°C)
Linearity	0.5°F (0.15°C)
Response time	Approx. 0.5 seconds

Hardware Characteristics

Combinability	All HD tools (RADii®, iQ™, PL, RAS™)
Acquisition mode	Real time with telemetry Control unit (TCU) Memory with memory logging tool (MLT)

Electrical

Current	7 mA at 50 V 16 mA at 19 V
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