

Full-Bore Spinner Mechanical Tool

Provides variable-bore size access for fluid velocity measurement

Applications

Production logging flow and injection profiling

Features and Benefits

- Combinable with flow and temperature electronics (FLTE) tool
- Centerline flow measurement at bottom of tool string
- Collapsible assembly for compatibility with minimum }wellbore restriction

Tool Description

The Weatherford full-bore spinner mechanical (FBSM) tool combines flowmeter sensor electronics with a fast-response temperature tool or with the 1 11/16-in. combined capacitance, flow and temperature (CFT) tool.

The flowmeter closes while passing through the completion tubing and other restrictions and opens in the casing or liner, enabling use of optimum-diameter impellers that occupy a large cross-sectional area. The FBSM can be used in all casing sizes from 4 1/2 to 9 5/8 in.

The tool is fitted with an Elgiloy® spring, tungsten carbide rollers, and with replaceable bushes.



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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	6.1 in. (2.8 mm)
Weight	6.1 lb (2.8 kg)
Flow measure point (4-1/2 in.)	16.3 in. (414 mm)

Measurements

Casing range	4.5 to 9.625 in. (114.3 to 244.48 mm)
Flow output	10 pulses per revolution
Maximum rps measured by FLTE01 or CFT004	200 rps = 4,000 ft/min (1,219.2 m/min)
Threshold (typical)	<1.6 ft/min. (<0.5 m/min)
Range	Better than 500 ft/min (152 m/min.) in 7-in. casing

Hardware Characteristics

Materials	Corrosion-resistant materials used throughout
Combinability	All high-speed digital (HD) telemetry tools (RADii®, iQ™, PL, RAS™)
Acquisition mode	Real time with telemetry control unit (TCU) Memory with memory logging tool (MLT)

