## **CONTINUOUS SPINNER FLOWMETER**



Continuous Spinner Flowmeter (CSF) is designed to measure a wide range of flow rates inside the tubing or when the Full-Bore Spinner Flowmeter collapses. The tool is available in both memory and SRO modes.

## **Applications**

- Accurate fluid flow measurement in small diameters from 2 <sup>7</sup>/<sub>8</sub> to 5 <sup>1</sup>/<sub>2</sub>" casings
- Detailed production/injection profiling
- Leak detection
- Perforations/SSDs/frac ports performance evaluation

## **Advantages**

- Needle-type diamond bearings for extra low friction and easy rotation of the impeller
- Wide range of detectable flowrates

Tool Specifications					
Threshold	0.1 ft/min (2 m/hr)				
Detectable flowrate range	19-15,860 bpd (3-2,521 m <sup>3</sup> /d)				
Impeller diameter	1.38 in (35 mm)				
Maximum operating pressure	14,500 PSI (100 MPa)				
Maximum operating temperature	150°C (304°F)				
Tool OD	1.50/1.65 in (38/42 mm)				
Tool length	2.3 ft (0.7 m)				
Tool weight	7.7 lbs (3.5 kg)				
Connections	15/16 SR				
Operational time in memory mode	Over 100 hrs				
H <sub>2</sub> S resistance	6% standard (25% optional)				
Surface read-out / Memory	Both				



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MD	SKETCH	GR	Temperature	WHU	Spinner	Total rate	Zonal rate
		OPEN HOLE, GAPI	Flowing 1, F	Flowing 1, %	Flowing 1, rps	Oil, bpd	Oil, bpd
		0 150	115 121	50 100	0 4	0 1200	-150 900
		Flowing pass, GAPI	Flowing 2, F	Flowing 2, %	Flowing 2, rps	Water, bpd	Water, bpd
		0 150	115 121	50 100	0 4	0 1200	-150 900
			Flowing 3, F 115 121	Flowing 3, % 50 100	Flowing 3, rps 0 4	Spinner-based profile	
- 950.0 - 1000.0 - 1000.0 - 1050.0 - 1100.0 - 1100.0	956.00 						