

# FloView Holdup Measurement Tool

**Schlumberger**



The FloView\* holdup measurement tool is used to determine the percentage of the heavy phase, normally water, in the flow stream downhole. The tool also measures the bubble count of the light phase, either gas or oil, in the flow stream. This measurement is used to calculate the velocity of the light phase, if in bubble form, at the point of measurement (i.e., the intrinsic velocity) and is independent of the velocity measured by propeller flowmeters.

## Applications

- Accurate water holdup
- First oil-entry detection
  - From bubble count
  - Works at high water cut
- First water-entry detection for water shutoff (at low water cut)
- Caliper measurement
- Differentiation of fresh and injected waters

## Measurement Specifications

	FloView Tool
Output	Bubble count, water holdup, caliper
Logging speed	Stationary to variable based on application
Range of measurement	Caliper: 2 to 9 in. [5.08 to 22.86 cm]
Vertical resolution	Point of measurement
Accuracy	Water holdup ( $H_w$ ): $\pm 5\%$ ( $\pm 2\%$ for $H_w > 90\%$ ) <sup>†</sup> Relative oil flow rate: $\pm 20\%$
Depth of investigation	Borehole measurement
Mud type or weight limitations	Min. salinity of all wellbore fluids: 2,000 ppm [ $2,000 \times 10^{-6}$ ] at 77°F [25°C] 1,000 ppm [ $2,000 \times 10^{-6}$ ] at 212°F [100°C] 700 ppm [ $2,000 \times 10^{-6}$ ] at 302°F [150°C]
Combinability	Gamma ray, CPLT* Combinable Production Logging Tool
Special applications	H <sub>2</sub> S service

<sup>†</sup> Valid for bubble size greater than 0.08 in. [2 mm] and deviation less than 30°

## Mechanical Specifications

	FloView Tool
Temperature rating	302°F [150°C]
Pressure rating	DEFT-A and DEFT-AB: 15,000 psi [103 MPa] DEFT-B: 10,000 psi [69 MPa]
Borehole size—min.	2 in. [5.08 cm]
Borehole size—max.	9 in. [22.86 cm]
Outer diameter	1.6875 in. [4.29 cm]
Length	DEFT-A and DEFT-AB: 6.75 ft [2.06 m] DEFT-B: 6.08 ft [1.85 m]
Weight	16 lbm [7 kg]
Tension	10,000 lbf [44,480 N]
Compression	1,000 lbf [4,450 N]