HIGH RESOLUTION SPINNER FLOWMETER

The spinner, or impeller, flowmeter is used to measure the velocity of water moving vertically in a wellbore or open borehole. The flowmeter has a lightweight helical impeller mounted between two sapphire bearings at the bottom of the probe for very low-friction, high-resolution detection of changes in fluid velocity as a result of groundwater flow (inflow or outflow) in the wellbore.

COLOG utilizes two separate channels of communication for differentiation of upflow or downflow rotation directions of the impeller, allowing for more accurate interpretations involving complex directional flow movement. The identification of downflow versus upflow is especially useful under ambient, or static, logging conditions.

Calibrations are performed in the wellbore under static and/or pumping/injection conditions at multiple trolling speeds to provide quantitative flow rates of each hydrostatic unit.

The spinner flowmeter requires fluid in the wellbore, and can be run in large diameter wells, open boreholes and even small diameter coreholes or piezometers. Stessed testing can be done by either pumping or injection, providing a versatile solution for most flowlogging project's needs.



APPLICATIONS:

- + Water Supply Wells
- + Water Quality Evaluation Coupled With Downhole Sampling
- + Environmental Impact Studies
- + Vertical Distribution of Flow in Multi-Screened Wells
- + Small Diameter Coreholes, Deep Water-Level

PROBE SPECIFICATIONS:

Tool Diameter: 45 mm (1.77 in.) Tool Length: 157 cm (61.8 in.)

Max Temperature Rating: 70 °C (158 °F) extended ranges available

Max Pressure Rating: 2,900 psi
Fluid Velocity Range: Fluid velocity
Min Hole Size: 51 mm (2 in.)
Max Hole Size: 1,524 mm (60 in.)

