

Impeller Flowmeter Probe

The impeller flowmeter provides a continuous log of vertical fluid velocity within a borehole. Two sizes of high-sensitivity probes satisfy most borehole-size requirements and expected flow rates.

Principle of Measurement:

The probes are equipped with lightweight helical impellers mounted on double sapphire bearings. The impellers contain magnets which actuate Hall-effect switches within the probe to detect impeller rotation. Separate log channels record the time of rotation according to fast and slow timebases for improved resolution at high and low flow rates. Uphole and downhole rotations are distinguished within the sonde.

probe specification

> Features

- Jewelled bearings for minimum friction
- Low-drag sensors
- Choice of head diameters
- Cable-speed readout

> Measurements

- Flow
- Cable velocity

> Applications

Water

- Flow measurement within a water well
- Location of permeable zones
- Casing leak detection

> Operating Conditions

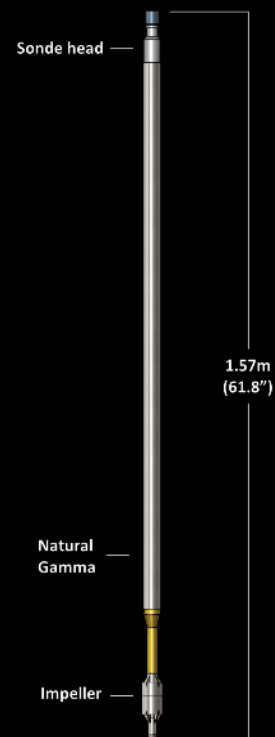
Borehole type: open/cased, water-filled
Centralisation: required

> Specifications

Diameter: 45mm, 70mm
Weight: 7.3kg
Temperature: 0-70°C (extended ranges available)
Max. pressure: 20MPa

> Sales Information

Probe:	
I002122	Flowmeter 45mm
I002115	Flowmeter 70mm
I014255	Centraliser 38mm Range 70-110mm (2 req.)
I001682	Centraliser Range 90-180mm (2 req.)
I001683	Centraliser Range 180-260mm (2 req.)
I001684	Centraliser Range 260-342mm (2 req.)
I001685	Centraliser Range 342-472mm (2 req.)



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