

THREE-ARM CALIPER PROBE

The three-arm caliper provides a single continuous log of borehole diameter as determined by three mechanically coupled arms in contact with the borehole walls. Models are available to suit a wide range of well diameters. The standard caliper range can be increased using extension arms supplied with the probe.

The caliper is a useful first log to determine the borehole condition before running more costly probes or those containing radioactive sources.

PRINCIPLE OF MEASUREMENT:

Opening and closing of the motor-driven caliper arms is under surface control, allowing the probe to be run into the borehole with the arms retracted. Once opened, at the start of logging, the spring-loaded arms respond to borehole diameter variations as the probe is raised up the borehole. The coupling between the arms means that the resulting log usually represents the minimum diameter in non-circular boreholes. A field calibrator is provided to allow logs to be displayed directly in linear metric or imperial units.

FEATURES

- Small diameter for slim-hole operations
- Extension arms available for small diameter probe
- Optional natural-gamma measurement

MEASUREMENTS

- Caliper
- Natural Gamma (optional)
- Casing collar locator CCL (optional)
- Borehole volume

APPLICATIONS

Minerals/ Water/ Engineering

- Location of borehole collapse or obstructions
- Cement volume calculations for grouting
- Identification of hard and soft lithology
- Location of cracks, fissures, caving, faulting, casing breaks
- Correction of other logs affected by borehole diameter

OPERATING CONDITIONS

Borehole type: open/ cased; water/air-filled
Centralisation: recommended in large holes

SPECIFICATIONS

Standard three-arm caliper probe

Diameter: 38mm
Length: 2.13m
Weight: 9.2kg
Range: 40-300mm and 40-710mm

Long-arm caliper probe

Diameter: 60mm
Length: 2.50m
Weight: 13kg
Range: 65-1000mm

1500mm caliper probe

Diameter: 75mm
Length: 3.11m
Weight: 17kg
Range: 100-1600mm

Max. temperature: 70°C (extended range available)
Max. pressure: 20MPa(extended range available)

SALES INFORMATION

Probe: 25 030 000	Standard caliper probe with arm extension kit and calibrator
25 031 000	-including natural gamma
25 033 000	Long-arm caliper probe with calibrator
25 034 000	-including natural gamma
25 032 000	-including casing-collar locator (CCL)
25 038 000	1500mm caliper probe
Accessories: 21 001 000	Centraliser 90 - 180mm
21 002 000	Centraliser 180 - 260mm
21 003 000	Centraliser 260 - 342mm
21 004 000	Centraliser 342 - 472mm
21 020 000	Centraliser 1200 - 1600mm
20 070 000	Natural-gamma API calibrator without source
30 010 000	3.7MBq ¹³⁷ Cs source for natural-gamma calibrator

