

TECHNICAL SHEET

ELECTROMAG

INDUCTION

DIL38

Generalities

Principle

An oscillating high-frequency magnetic field from a transmitter coil within the probe induces an alternating electrical current within the surrounding conductive formation. This current, in turn, induces voltages within receiver coils, proportional to the formation conductivity. The transmitter-receiver spacings determine the depth of investigation of the measurements.

Results

The dual induction probe provides two simultaneous conductivity logs, corresponding to "medium" and "deep" radius of investigation into the formation.

Interest

Formation conductivity measurement in wet/dry borehole through plastic casing, indicator of permeable zones and porosity, formation water salinity, indication of hydrocarbons etc...

Option

Natural gamma sensor.

Constraints / borehole

filling up	:	<input checked="" type="checkbox"/> water	<input checked="" type="checkbox"/> mud	<input checked="" type="checkbox"/> dry
casing	:	<input checked="" type="checkbox"/> PVC	<input type="checkbox"/> steel	<input checked="" type="checkbox"/> open
borehole	:	<input checked="" type="checkbox"/> cored	<input checked="" type="checkbox"/> destructive	
max. depth	:	2000 m		
effective diam.	:	60 mm – 450 mm		
temperature	:	0°C – 70°C		
max. pressure	:	200 bars		

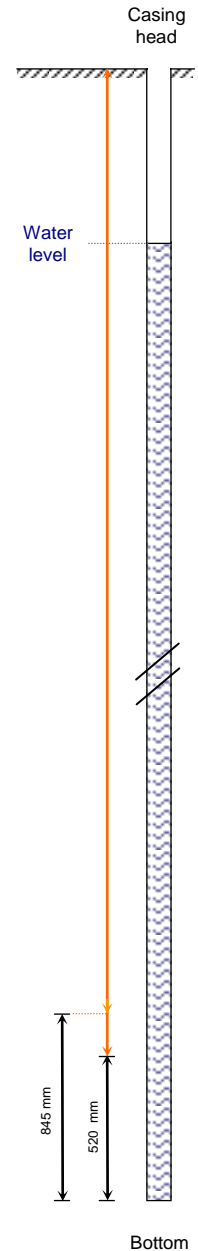
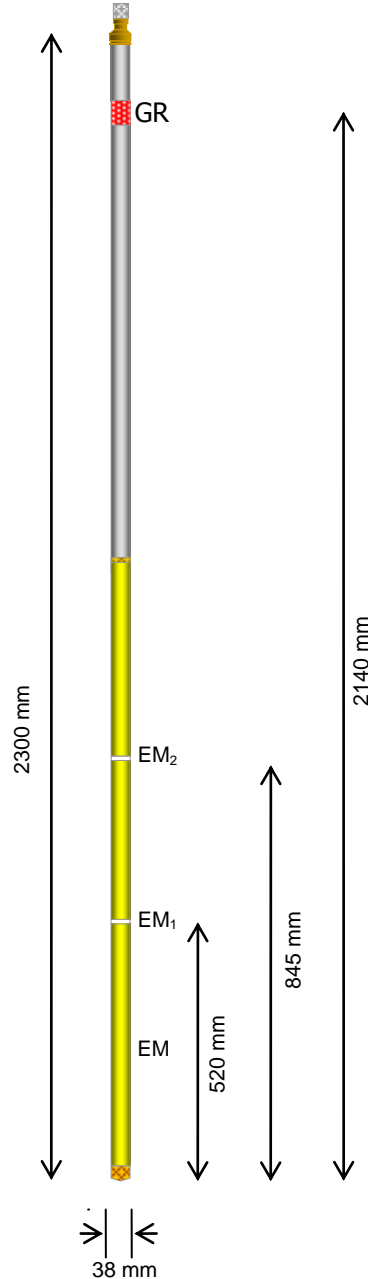
Technical specifications

Dimensions

- length : 2300 mm
- diameter : 38 mm
- weight : 9 kg

Elements

- 1 transmitter coil (39.062 kHz) : EM
- 2 receiver coils : EM₁ - EM₂
- 1 natural gamma ray sensor : GR



Records / Measures

Records

- Tool : centered off-centered
- Measure : down up
- Rec. speed : 5 m/min

Measures

- Range : 0.25 Ω.m - 100 Ω.m (absolute measure)
100 Ω.m - 200 Ω.m (relative measure)
- Horiz. resolution : 1 % of full scale
- Vert. resolution : 50 cm (short space)
80 cm (long space)

Example

