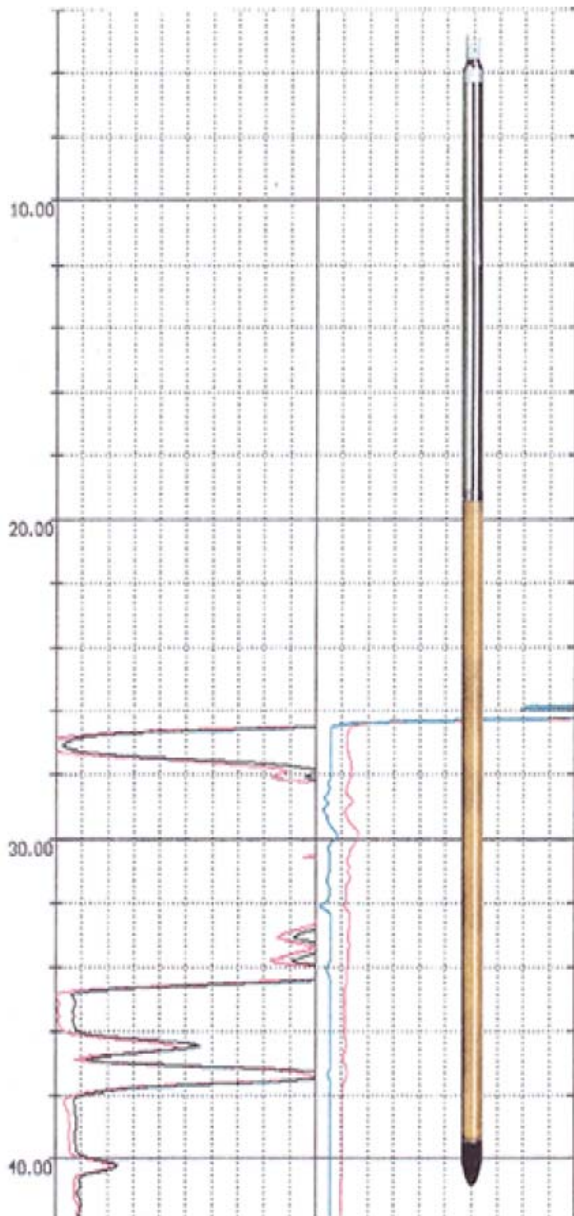


HMI-453-E EM Induction / Magnetic Susceptibility Probe



These probes are designed for measurement of magnetic susceptibility and electric conductivity of rocks along borehole profile.

High stability and exceptionally wide dynamic range are giving you a possibility to carry out precise measurements of magnetic susceptibility and conductivity from layers of clay to strongly magnetic and conductive sulphate and magnetic rocks.

Thanks to the induction method applied the probes can be used in water filled, dry and plastic cased boreholes. The probe response is practically instantaneous ($<0.5s$).



Specifications

Probe Parameters:

Diameter	45 mm
Length	150 cm
Weight	7.0 kg
Maximum Working Temperature/Pressure	75°C / 20 MPa
Minimum No. of Cable Conductors	2
Supply Voltage Range	30 - 45 V _{DC}
Maximum/Nominal Current Consumption	100 / 40 mA _{DC}
Supply Voltage Polarity	+ on central conductivity. - on probe casing

Measuring Parameters:

Sensors	two coil system
Crosstalk between meas. channels	< 2%
Intercoil Spacing	50 cm and 80 cm
Communication	
Magnetic channel (positive pulse)	0 - 50 000 cps
Conductivity channel (negative pulse)	0 - 50 000 cps

Magnetic susceptibility channel:

Measuring range	10 ⁻⁵ - 0.5 SI units 10 ⁻⁴ - 2 SI units)
Intercoil Spacing	25 cm 30 cm (*)
Operating Frequency	~2 kHz
Accuracy	< 3% F.S.

Conductivity channel:

Measuring range	1 - 3000 mS/m 3 - 3000 mS/m (*)
Intercoil Spacing	50 cm 30 cm (*)
Operating Frequency	~100 kHz
Accuracy	< 3% F.S.

