



# SENSYS

Sensorik & Systemtechnologie

## Susceptibility measurement system MagSoil®



Developed and verified in cooperation with Bohrlochmessung Storkow GmbH



### Features

- detection of ferromagnetic and electrical conductive substances
- very compact: 16x78 mm
- operating frequency: 22.5 kHz
- measurement interval: 0.02s to 0.1s
- high operating temperature range: -15°C to +70°C
- long-term operation due to low power consumption
- IP code: IP68 (pressure water protected)

### Applications (among others)

- geological surveys
- quality assurance core logging
- archaeology
- materials testing

The MagSoil® is a precise instrument for detection of ferromagnetic and electrical conductive material. It can distinguish between magnetically and electrically conductive substances. Therefore it is the perfect device for quality assurance when plugging wells as well as for material testing.

Due to its small dimensions of only 16x78 mm the SSM1 sensor can be used for very narrow pipes. It can also be integrated into customer specific probe tubes.

The MagSoil® is using the principle of inductivity and can be adapted to specific type of samples and to different measurement characteristics.

In addition the measurement can be referenced using a

GPS. The control unit connects via Bluetooth® to devices like PDA, laptop or tablet computer for data recording and visualization of the results.



Sensor on cable reel incl. 10" tablet, control unit and outdoor case



Use of various mobile devices possible

# MagSoil®

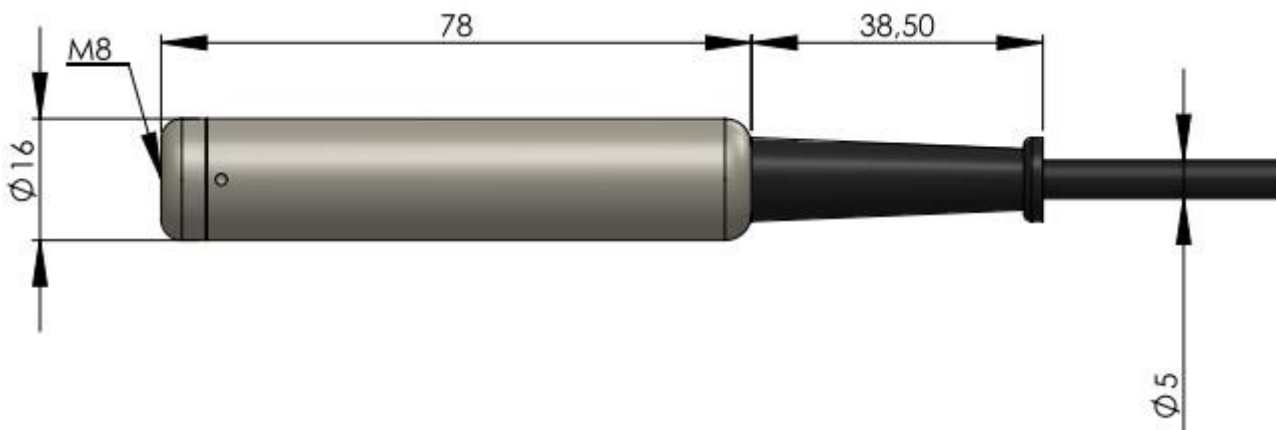
## standard package

## options

SSM1 sensor, incl. 10 m cable	<i>Other cable lengths at sensor</i>
	100 m cable
	250 m cable
Control unit, incl. Bluetooth, RS232 and power supply	<i>Control unit upgraded with</i>
	GPS module
PC software for data recording, storage and visualization	USB interface with 2 m USB cable
	Outdoor PDA incl. data recording software
	Cable reel (capacity 500m max.) incl. length gauge, slip ring, control unit mount, battery mount 12V battery 7Ah, fuse, MIL-connector and charger

## SSM1 sensor specifications

Axial intrusion range	50%/6mm, 10%/16mm, 1%/25mm
Operating frequency	22.5 kHz
Measurement interval	adjustable 0.02s...0.1s
Temperature drift ppm/°C at -15°C...70°C	<10 ppm/°C
Sensor dimensions (ØxL)	16x78 mm
Weight	45g
Warm up time, error <1ppm	10 minutes
Cable length	0 ... max. 600m
IP code	IP68, pressure water protected up to 30 Bar
Operating temperature	-15°C...+70°C



Dimensions of SENSYS SSM1 sensor