# Sensor 4.5 Hz Geophones Borehole Sonde





## Characteristics of IMS 4.5 Hz geophones

#### Sensor

Low frequency -3dB point.	3.8 Hz
Natural frequency <sup>2</sup>	Hz ± 0.5 Hz
Distortion with 18 mm/s p.p. coil to case velocity	<sup>2</sup> < 0.3%
Distortion measurement frequency	12 Hz
Open circuit damping	0.56 ± 5%
Standard coil resistance	. 375Ω ± 5%
Open circuit sensitivity28.8	3 V/m/s ± 5%
Damped (0.7) sensitivity27.5	V/m/s ± 5%
Moving Mass	11.1 g
Maximum coil excursion (peak to peak)	4 mm

### Physical (for sonde)

Diameter 3	51 mm
Length	300 mm
Mass	1.3 kg

### Installation

Working position	vertical or horizontal
Vertical tolerance	± 1°
Horizontal tolerance	± 1°
Recommended hole diameter	76 mm
Pressure tested water depth <sup>4</sup>	400 m

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Refer to http://www.imseismology.org/notices for important information about equipment installation and warranty conditions, as well as the most recent product specifications.

#### NOTES

- <sup>1</sup> Undamped
- Specified at tilt angle of 0°
- <sup>3</sup> Without springs
- <sup>4</sup> High pressure rated sensors (up to 2000 m depth) available on request