

Sensor 14 Hz Geophones

Borehole Sensor



institute
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seismology



Characteristics of IMS 14 Hz geophones

Sensor

Low frequency -3dB point ¹	8.8 Hz
Natural frequency	14 Hz ± 1 Hz
Distortion with 18 mm/s p.p. coil to case velocity.....	< 0.7%
Distortion measurement frequency	14 Hz
Open circuit damping	0.185 + 10 % - 5 %
Standard coil resistance	3500 Ω ± 5 %
Open circuit sensitivity	80.0 V/m/s + 5 % - 10 %
Damped (0.5) sensitivity	56.1 V/m/s + 5 % - 10 %
Moving Mass	10.2 g
Maximum coil excursion (peak to peak)	0.5 mm

Physical (for sonde)

Diameter ²	51 mm
Length	300 mm
Mass	1.3 kg

Installation

Working position	omni-directional
Recommended hole diameter	76 mm
Pressure tested water depth ³	400 m

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NOTES

¹ 0.5 damping with capacitive enhancement

² Without springs

³ High pressure rated sensors (up to 2000 m depth) available on request