



HGS (INDIA) LIMITED



HG-2 2.5Hz Geophone Element



Based on the technology transfer for manufacturing the SM[®] range of geophones from Sensor[®] Nederland BV, HGS (India) Limited (erstwhile Geosource India Limited) offers the HG-2 2.5Hz (Low Frequency) geophone with low natural frequency compared to conventional geophone. The HG-2 2.5Hz geophone offers the best in class frequency bandwidth up to 100 Hz at a distortion $\leq 0.2\%$. Ideal as a low frequency single point receiver.

Applications: 2D and 3D deep seismic exploration with bandwidth from 2.5 Hz to 150 Hz and advanced predictions, natural seismic surveys, pulsating microseismic measurements of bridges, dams, highways and railways, safety monitoring, earthquake monitoring & land nodal systems.

Features:

- Low natural frequency & low distortion geophone
- Rugged design with rotating-coil contacts
- Very high sensitivity of 150V/m/s
- Vertical & horizontal versions available

Specifications - HG-2 2.5 Hz 3000 Ohm

Frequency	Value
Natural frequency	2.5 Hz
Tolerance	± 0.5Hz
Maximum tilt angle for specified Fn	Vertical 5° Horizontal 0°
Spurious frequency	>100Hz

Distortion	
Distortion with 17.78 mm/s p.p. coil-to-case velocity	≤0.2%
Distortion measurement frequency	12 Hz

Damping	
Open circuit (typical)	0.6
Tolerance	± 10%

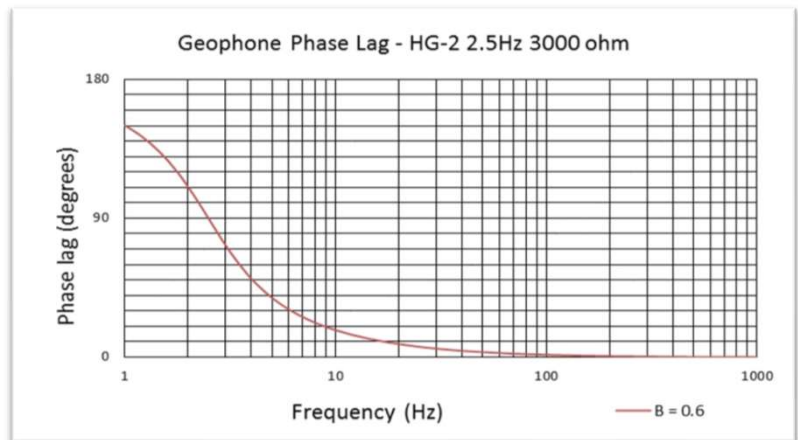
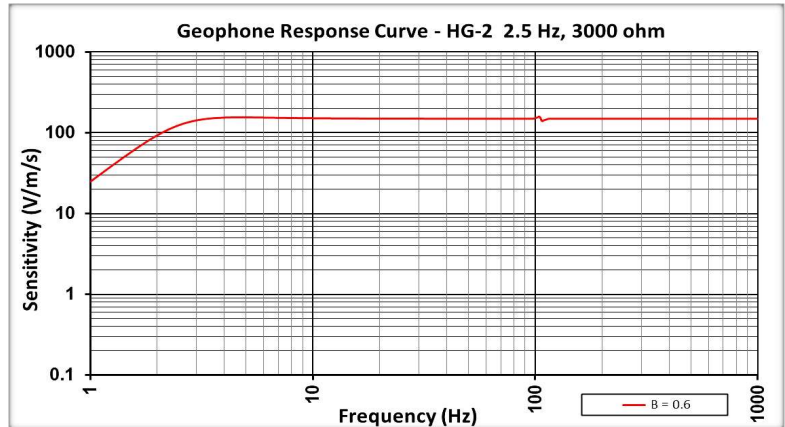
Sensitivity	
Sensitivity (open Circuit)	150 V/m/s
Tolerance	± 10%
Moving mass	50.5 g
Maximum coil excursion p.p .	6 mm

Coil Resistance	
Standard	3000 Ω
Tolerance	± 5%

Physical Characteristics	
Diameter	37.9 mm
Height	53.6 mm
Weight	330 g
Operating temperature range	-40°C to 100°C

Warranty Period*	1 year
*Warranty excludes damage caused by high voltage and physical damage to the element case.	

All parameters are specified at +20°C.



Ordering information

Description	Part No.	Work direction
HG-2 U 2.5 Hz 3000 Ohm	SG000553	Upright
HG-2 H 2.5 Hz 3000 Ohm	SG000592	Horizontal

Version 1.4

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