



## HGS (INDIA) LIMITED



### HG-24SG Geophone Element



Based on the technology transfer for manufacturing the SM<sup>®</sup> range of geophones from Sensor<sup>®</sup> Nederland BV, HGS (India) Limited (erstwhile Geosource India Limited) offers the HG-24SG geophone which is a broad bandwidth, low distortion geophone with a unique spring design and an extended frequency response in excess of 240 Hz. The HG-24SG is fully compatible with the SG-10<sup>®</sup> geophone. It offers all the advantages of low distortion and tight specifications.

Applications: 2D and 3D seismic exploration with bandwidth from 10 Hz to 240 Hz. It can be installed in a variety of geophone cases.

Implementation: Can be installed in a variety of HGS geophone cases.

#### **Features:**

- Low distortion geophone
- Extended spurious frequency over 240 Hz, allowing full bandwidth at 2 ms sampling
- Horizontal version also available
- Rugged design with rotating-coil contacts

## Specifications - HG-24SG

<b>Frequency</b>	Value
Natural frequency	10 Hz
Tolerance	±2.5%
Tilt	0° to 15°
Typical spurious frequency	>240Hz

<b>Distortion</b>	
Distortion with 17.78 mm/s p.p. coil-to-case velocity	≤0.075%
Distortion measurement frequency	12 Hz

<b>Damping</b>	
Open circuit (typical)	0.68
Tolerance	±5%

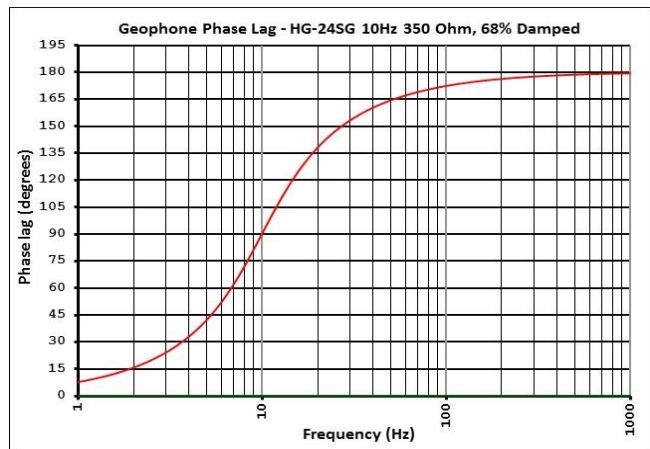
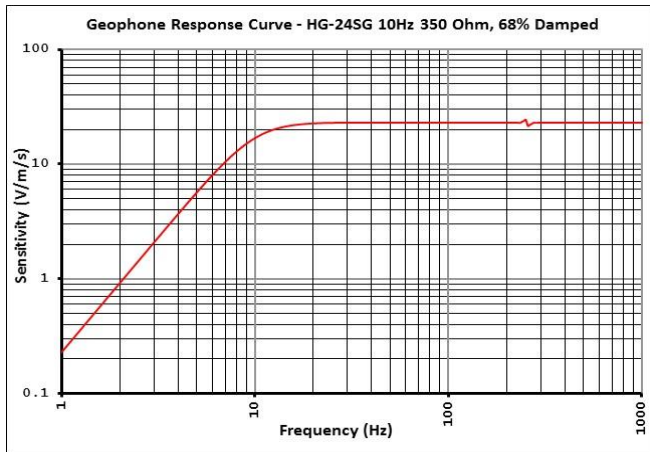
<b>Sensitivity</b>	
Sensitivity	22.8 V/m/s
Tolerance	± 2.5%
$R_t B_c f_n$	4925 Ω Hz
Moving mass	8.4 g
Coil excursion p.p.	1.78 mm

<b>Coil Resistance</b>	
Standard	350 Ω
Tolerance	± 3.5%

<b>Physical Characteristics</b>	
Diameter	25.4 mm
Height	32 mm
Weight	72 g
Operating temperature range	-40°C to 100°C

**Warranty Period\*** 3 Years

\*Warranty excludes damage caused by high voltage and physical damage to the element case.  
All parameters are specified at +20°C in the vertical position unless stated otherwise.



### Ordering information

Description	Part No.	Direction
HG-24SG U 10 Hz 350 Ohm	SG000463	Upright

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