



## HGS (INDIA) LIMITED



### HG-24CT 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-24CT geophone which is a broad bandwidth, low distortion geophone with a unique spring design and an extended frequency response in excess of 240 Hz. 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.

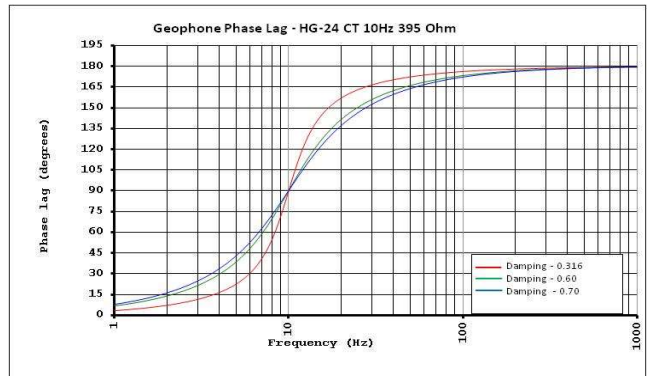
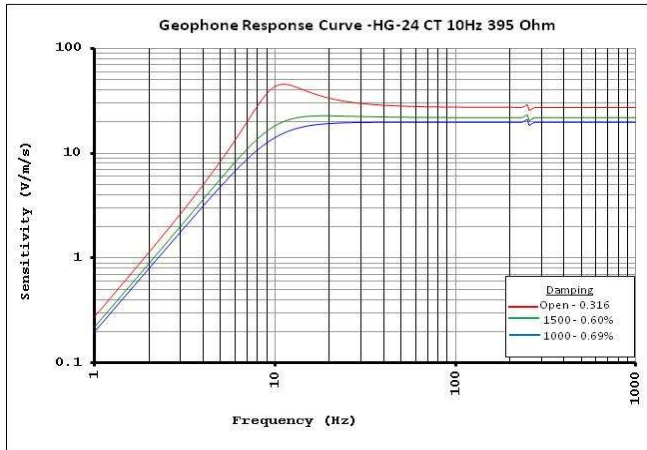
Implementation: Can be installed in a variety of HGSI geophone cases.

#### **Features:**

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

## Specifications - HG-24CT 10 Hz 395 Ohm

<b>Frequency</b>	Value
Natural frequency	10 Hz
Tolerance	±2.5%
Maximum tilt angle for specified Fn	20°
Typical spurious frequency	>240Hz
<b>Distortion</b>	
Distortion with 17.78 mm/s p.p. coil-to-case velocity	≤0.10%
Distortion measurement frequency	12 Hz
Maximum tilt angle for distortion specification	10°
Typical distortion (string of 12 in series, measured at 12 Hz)	0.03%
<b>Damping</b>	
Open circuit (typical)	0.316
Damping calibration-shunt resistance	1000 Ω
Damping with calibration shunt	0.7
Tolerance with calibration shunt	±2.5%
<b>Sensitivity</b>	
Sensitivity	27.5 V/m/s
Tolerance	± 2.5%
Moving mass	11.2 g
Maximum coil excursion p.p .	2 mm



<b>Coil Resistance</b>	
Standard	395 Ω
Tolerance	± 2.5%
<b>Physical Characteristics</b>	
Diameter	25.4 mm
Height	32 mm
Weight	74 g
Operating temperature range	-40°C to 100°C
<b>Warranty Period*</b>	3 Years

\*Warranty excludes damage caused by high voltage and physical damage to the element case.  
All parameters are specified at +25°C in the working position unless stated otherwise.

### Ordering information

Description	Part No.	Working position	
HG-24CT U 10 Hz 395 Ohm	SG000438	Upright	
HG-24CT H 10 Hz 395 Ohm	SG000454	Horizontal	Version 1.1

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