



HGS (INDIA) LIMITED



HG-5HS 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-5HS geophone with low natural frequency and high sensitivity compared to conventional geophone.

Applications: 2D and 3D seismic exploration with bandwidth from 5 Hz to 180 Hz.

Features:

- Low distortion geophone
- High Sensitivity versions used in earthquake monitoring systems
- Rugged design with rotating-coil contacts

Specifications - HG-5HS

Frequency	Value
Natural frequency	5 Hz
Tolerance	± 7.5%
Maximum tilt angle for specified Fn	10°
Spurious frequency	>180Hz

Distortion	
Distortion with 17.78 mm/s p.p. coil-to-case velocity	≤0.1%
Distortion measurement frequency	12 Hz
Max. tilt angle for distortion specification	10°

Damping	
Open circuit (typical)	0.6
Damping calibration-shunt resistance	51000 Ω
Damping with calibration shunt	0.7
Tolerance with calibration shunt	± 7.5%

Sensitivity	
Sensitivity	80 V/m/s
Tolerance	± 5%
Moving mass	12.9 g
Max coil excursion p.p.	3 mm

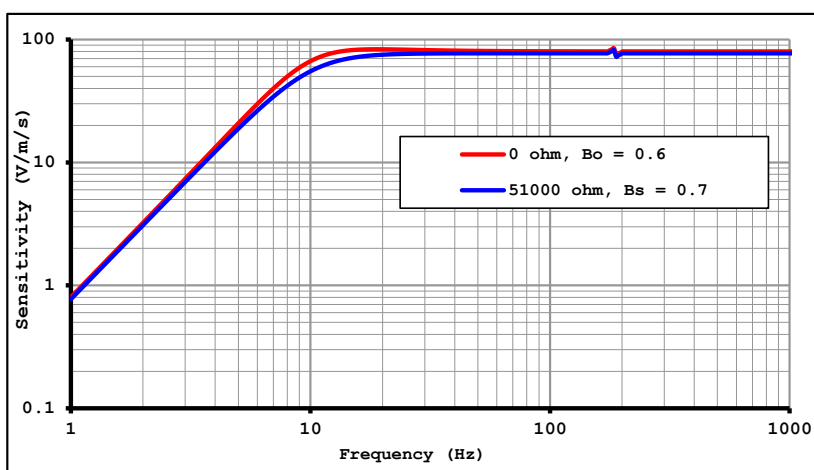
Coil Resistance	
Standard	1850 Ω
Tolerance	± 5%

Physical Characteristics	
Diameter	26.7 mm
Height	37.5 mm
Weight	105 g
Operating temperature range	-40°C to 100°C

Warranty Period* 2 Years

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

All parameters are specified at +20°C in the working position unless stated otherwise.



Ordering information

Description	Part No.	Working position
HG-5HS U 5 Hz 1850 Ohm	SG000430	Upright
HG-5HS H 5 Hz 1850 Ohm	SG000431	Horizontal

Version 1.1

India
 HGS (India) Ltd
 Tel : +91-11-46066604
 Fax : +91-11-24333772
 Website : www.hgsindia.com

The Netherlands
 HGS Products B.V.
 Tel : +31 708200820
 Fax : +31 708200828
 Website : www.hgsproducts.nl