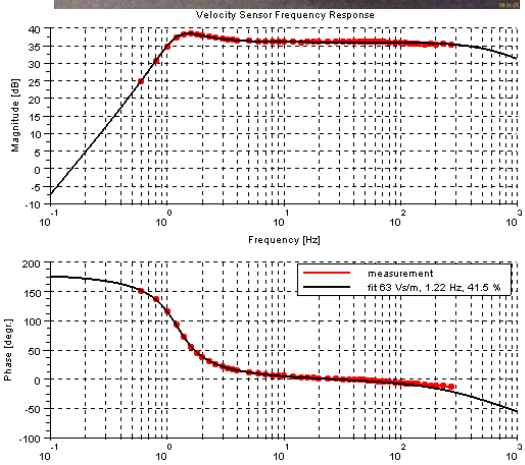
Geophone MI – VS003

The low natural frequency of the MI-VS003 vertical geophone enables a variety of possibilities where signals with low frequency need to be measured.
The long stroke allows the geophone to measure signals with a larger amplitude in comparison with short stroke geophones.
One of its main features is that by a patent pending technology the MI-VS003 is a fully passive geophone with a natural frequency around 1.4 Hz. Considering the small dimensions of the sensor this is a novelty in the geophone market today.
The passive functioning of the geophone in combination with its low natural frequency enables the use of so called stretching filters to further extend the measurement range well into the sub-Hertz range with an unsurpassed signal to noise ratio.
For applications requiring the measurement of low vibration levels the sensor is particularly suitable due to its excellent small signal behavior.
The robust design of the MI-VS003 is compatible with vacuum environments.

SPECIFICATIONS[1]

Frequency	
Natural frequency, f_n	1.4 Hz
Tolerance	±25%
Damping	
Open-circuit damping (can be changed)	43%
Tolerance	±9%
Resistance	
Standard coil resistance	4450 Ω
Tolerance	±5%
Sensitivity	
Open-circuit sensitivity	63 Vs/m
Tolerance	±9%
Maximum magnet excursion p.p.	4 mm
Physical[2]	
Diameter	68 mm
Height	87 mm
Weight	1070 g
Operating temperature	22 ˚C ± 10%



1. The specifications above are preliminary values. No rights can be derived from this specification.
2. For detailed dimensions please refer to the technical drawing, available upon request.

Magnetic Innovations BV, Oude Kerkstraat 61a, 5507 LB Veldhoven. The Netherlands, Phone +31(0)40 -2051718
www.magneticinnovations.com