SM-24 Geophone Element

- Tight specification, low-distortion geophone
- Extended spurious over 240 Hz, allowing full bandwidth at 2-ms sampling
- Backwards compatible with SM-4, SM-4 Superphone™ range, and SM-24ST
- 3-year limited warranty

The SM-24 geophone element is designed to offer the highest performance in seismic exploration based upon field-proven I/O Sensor technology. Low distortion, combined with excellent specifications, provide high-fidelity data in 2-D and 3-D surveys. The extended bandwidth allows the full potential of 2-ms/24-bit recording systems to be realized.

Applications: 2-D & 3-D seismic exploration with bandwidth from 10 Hz up to 240 Hz.

Implementation: Can be installed in a variety of I/O Sensor geophone cases.
Specifications

Frequency
Natural frequency \((f_n)\)
Tolerance
Max. tilt angle for specified \(f_n\)
Typical spurious frequency

Distortion
Distortion with 0.7 in/s p.p. coil-to-case velocity
Distortion measurement frequency
Max. tilt angle for distortion specification
Typical distortion (string of 12 geophones in series, measured at 12 Hz)

Damping
Typical open-circuit damping
Damping calibration-shunt resistance
Tolerance with calibration-shunt

Coil Resistance
Standard
Tolerance

Sensitivity
Sensitivity
Tolerance
\(R_{Bf_n}\)
Moving mass

Physical Characteristics
Diameter
Height
Weight
Operating temperature range

Limited Warranty Period*

Ordering Information

SM-24
SM-24/U-B 10 Hz 375 Ω
(upright basic unit with insulating disc)

P/N 1004117

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