

RTC-100Hz

RTC Geophones are compatible with all field data acquisition systems.

Their excellent characteristics are compatible with larger, heavier, and more expensive units. High Quality, Low Cost Geophones for your Geophysical, Industrial, and Military Uses. Designed to yield

the performance needed for scientific studies, yet has the ruggedness required for petroleum exploration work. Internally dampened to eliminate external noise.



100Hz Elements Main Specifications (at 22°C)

| Parameters \ Mode | RTC-100Hz |
|--|---------------|
| Frequency | |
| Natural Frequency (fn) | 100 Hz |
| Tolerance | ±7.5% |
| Max Tilt Angle For Specified fn | 90° |
| Typical spurious frequency | >400 Hz |
| Distortion | |
| Distortion with 0.7 in/s p.p coil to case velocity | <0.2% |
| Distortion measurement frequency | 100 Hz |
| Max tilt angle for distortion specification | 90° |
| Damping | |
| Typical open circuit damping | 0.55 |
| Damping with 1500 Ohm shunt resistor | 0.62 |
| Tolerance | ±7.5% |
| Coil Resistance | |
| Standard | 832 ohm |
| Tolerance | ±5% |
| Sensitivity | |
| Open Circuit Intrinsic Voltage Sensitivity | 52.5 V/m/s |
| Sensitivity with 1500 Ohm shunt resistor | 33.8 V/m/s |
| Tolerance | ±7.5% |
| Physical | |
| Moving Mass | 7.6 g |
| Maximum coil excursion p.p | 1.5 mm |
| Diameter | 27 mm |
| Height | 33.3 mm |
| Weight | 97 g |
| Operating temperature range | -40°C ~ +70°C |
| Warranty Period | 3 years |

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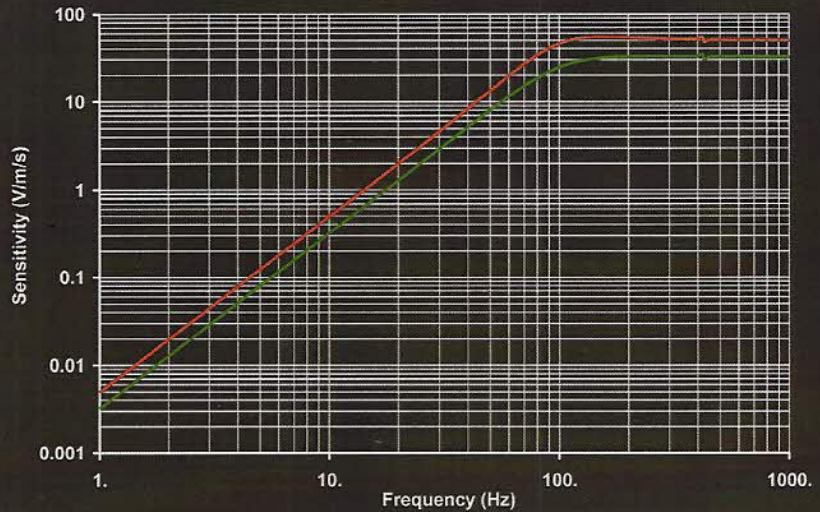
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RTC-100Hz

Geophone Response Curve

Geo Type : RTC-100Hz
 Frequency : 100. Hz
 Moving Mass : 7.6 g
 Nr of geophones in series : 1.
 Nr of parallel branches : 1.

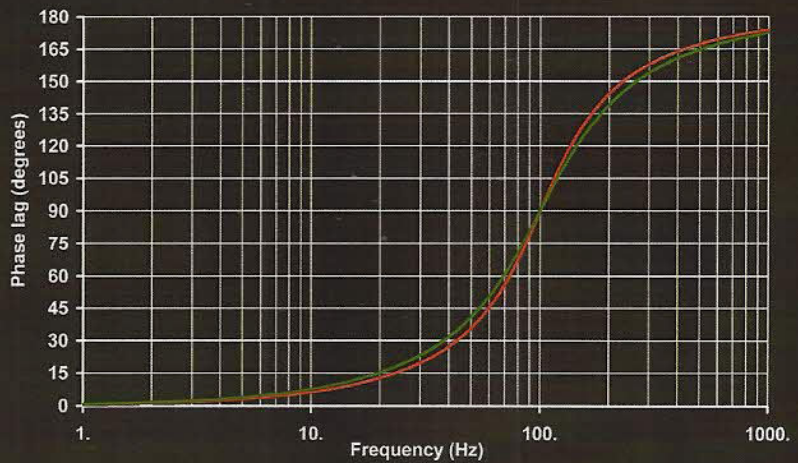
| | Shunt (ohm) | R total (ohm) | Damping | Sensitivity V/m/s |
|---------|-------------|---------------|---------|-------------------|
| Curve 1 | 0. C. | 832.00 | 0.550 | 52.50 |
| Curve 2 | 1,500 | 535.16 | 0.620 | 33.77 |



Geophone Phase Lag (signal relative to case velocity)

Geo Type : RTC-100Hz
 Frequency : 100. Hz
 Moving Mass : 7.6 g
 Nr of geophones in series : 1.
 Nr of parallel branches : 1.

| | Shunt (ohm) | R total (ohm) | Damping | Sensitivity V/m/s |
|---------|-------------|---------------|---------|-------------------|
| Curve 1 | 0. C. | 832.00 | 0.550 | 52.50 |
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