

## RTC-4.5Hz-375

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.



### 4.5Hz Elements Main Specifications (at 20°C)

| Parameters \ Mode                                  | RTC-4.5Hz-375  |
|--|----------------|
| <b>Frequency</b>                                   |                |
| Natural Frequency (fn)                             | 4.5 Hz         |
| Tolerance  | ±0.5 Hz        |
| Max Tilt Angle For Specified fn                    | 0°             |
| Typical spurious frequency                         | >140 Hz        |
| <b>Distortion</b>                                  |                |
| Distortion with 0.7 in/s p.p coil to case velocity | <0.3%          |
| Distortion measurement frequency                   | 12 Hz          |
| Max tilt angle for distortion specification        | 0°             |
| <b>Damping</b>                                     |                |
| Typical open circuit damping                       | 0.56           |
| Tolerance  | ±5%            |
| <b>Coil Resistance</b>                             |                |
| Standard   | 375 ohm        |
| Tolerance  | ±5%            |
| <b>Sensitivity</b>                                 |                |
| Sensitivity  | 28.8 V/m/s     |
| Tolerance  | ±5%            |
| RtBcFn (Ohm Hz)                                    | 6000           |
| <b>Physical</b>                                    |                |
| Moving Mass  | 11.1 g         |
| Maximum coil excursion p.p                         | 4.0 mm         |
| Diameter   | 25.4 mm        |
| Height   | 36 mm          |
| Weight   | 81 g           |
| Operating temperature range                        | -40°C ~ +100°C |
| Warranty Period                                    | 1 year         |

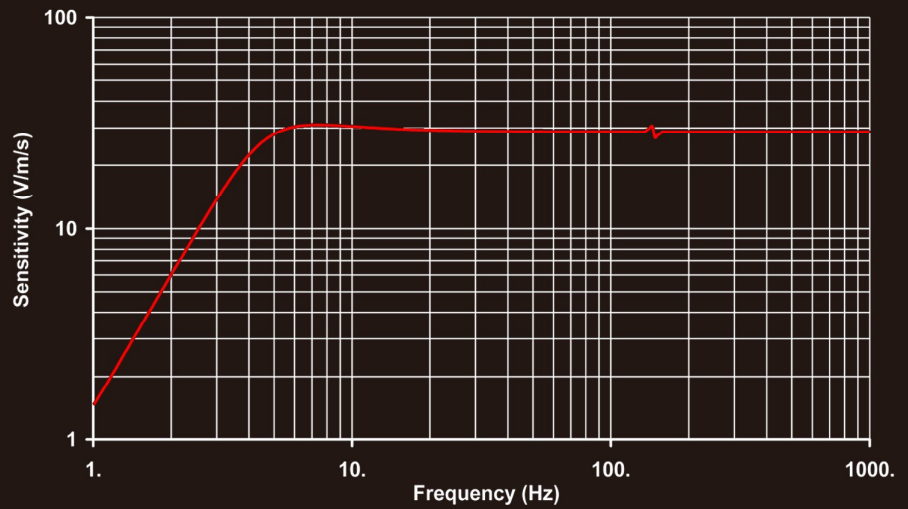
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# RTC-4.5Hz-375

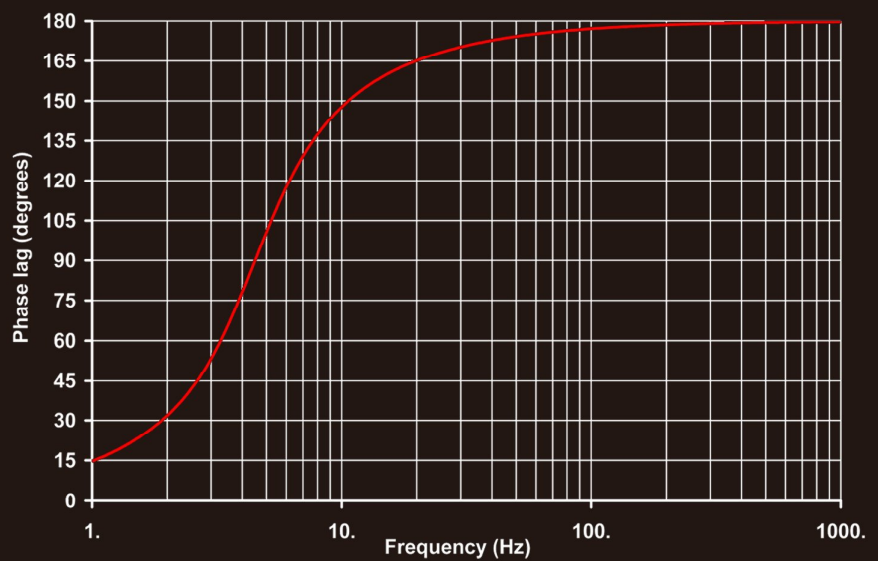
## Geophone Response Curve

| Geo Type : RTC-4.5Hz-375      | Shunt (ohm)     | R total (ohm) | Damping | Sensitivity V/m/s |
|-------------------------------|-----------------|---------------|---------|-------------------|
| Frequency : 4.5 Hz            | Curve 1<br>O.C. | 375.00        | 0.560   | 28.80             |
| Moving Mass : 11.1 g          |                 |               |         |                   |
| Nr of geophones in series: 1. |                 |               |         |                   |
| Nr of parallel branches: 1.   |                 |               |         |                   |



## Geophone Phase Lag (signal relative to case velocity)

| Geo Type : RTC-4.5Hz-375      | Shunt (ohm)     | R total (ohm) | Damping | Sensitivity V/m/s |
|-------------------------------|-----------------|---------------|---------|-------------------|
| Frequency : 4.5 Hz            | Curve 1<br>O.C. | 375.00        | 0.560   | 28.80             |
| Moving Mass : 11.1 g          |                 |               |         |                   |
| Nr of geophones in series: 1. |                 |               |         |                   |
| Nr of parallel branches: 1.   |                 |               |         |                   |



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