

Hydrophone TC4013

Miniature Reference Hydrophone



TC4013

- High sensitivity
- Omnidirectional to high frequencies
- Broad banded
- O-ring sealed mounting
- Individually calibrated

The TC4013 offers a usable frequency range of 1Hz to 170kHz and a high sensitivity relative to its size. It further-more provides uniform omnidirectional sensitivities in both horizontal and vertical planes up to high frequencies. The TC4013 is an excellent transducer for making absolute sound measurements and calibrations within a broad frequency range. It can also be applied as an omnidirectional reference projector. The overall characteristics makes TC4013 extremely applicable for laboratory as well as industrial uses.

TECHNICAL SPECIFICATIONS

| | |
|---------------------------------|--|
| Usable Frequency range: | 1Hz to 170kHz |
| Receiving Sensitivity: | -211dB \pm 3dB re 1V/ μ Pa |
| Transmitting Sensitivity: | 130dB \pm 3dB re 1 μ Pa/V at 1m at 100kHz |
| Horizontal Directivity Pattern: | Omnidirectional \pm 2dB at 100kHz |
| Vertical Directivity Pattern: | 270° \pm 3dB at 100kHz |
| Nominal capacitance: | 3.4nF |
| Operating depth: | 700m |
| Survival depth: | 1000m |
| Operating temperature range: | -2°C to +80°C |
| Storage temperature range: | -40°C to +80°C |
| Weight (in air): | 75g |
| Cable length: | Standard length 6m Optional cable lengths available on request |
| Encapsulating material: | Special formulated NBR |

NBR means Nitrile Rubber

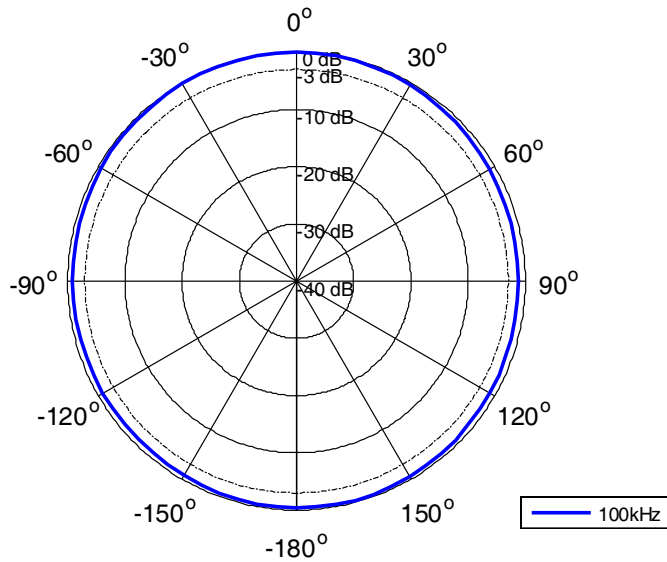
The NBR rubber is first of all resistant to sea and fresh water but also resistant to oil. It is limited resistant to petrol, limited resistant to most acids and will be destroyed by base, strong acids, halogenated hydrocarbons (carbon tetrachloride, trichloroethylene), nitro hydrocarbons (nitrobenzene, aniline), phosphate ester hydraulic fluids, Ketones (MEK, acetone), Ozone and automotive brake fluid.



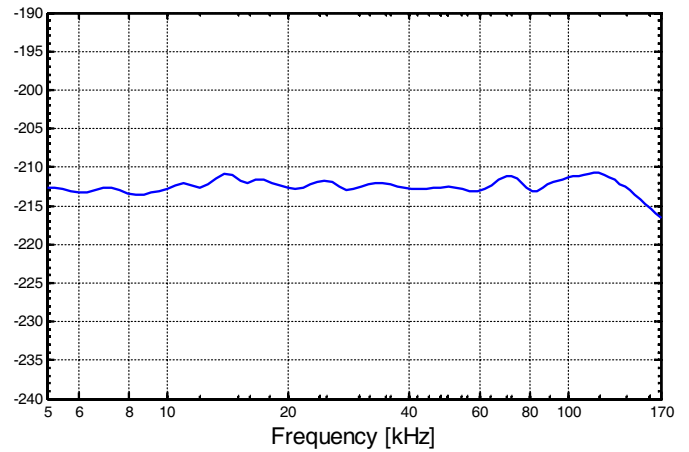
Hydrophone TC4013

Miniature Reference Hydrophone

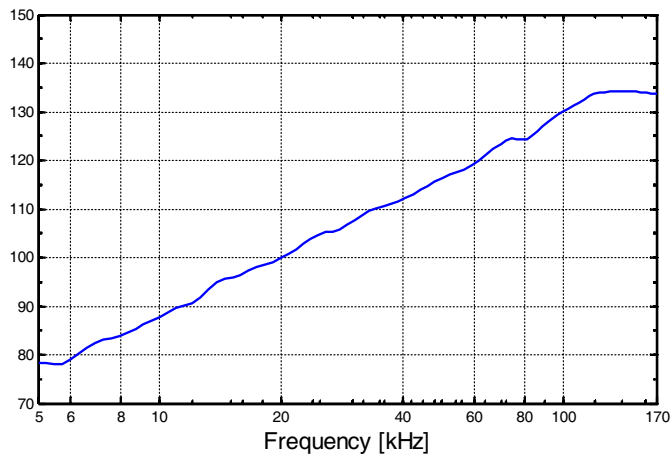
Horizontal directivity pattern



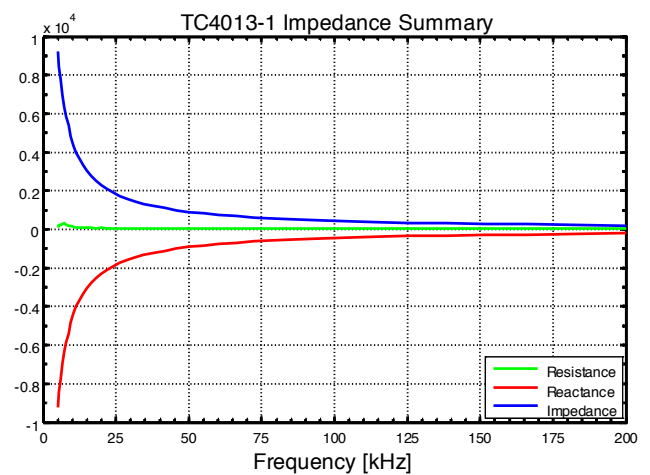
Receiving Sensitivity [dB re 1V/μPa @ 1m]



Transmitting Sensitivity [dB re 1μPa/V @ 1m]



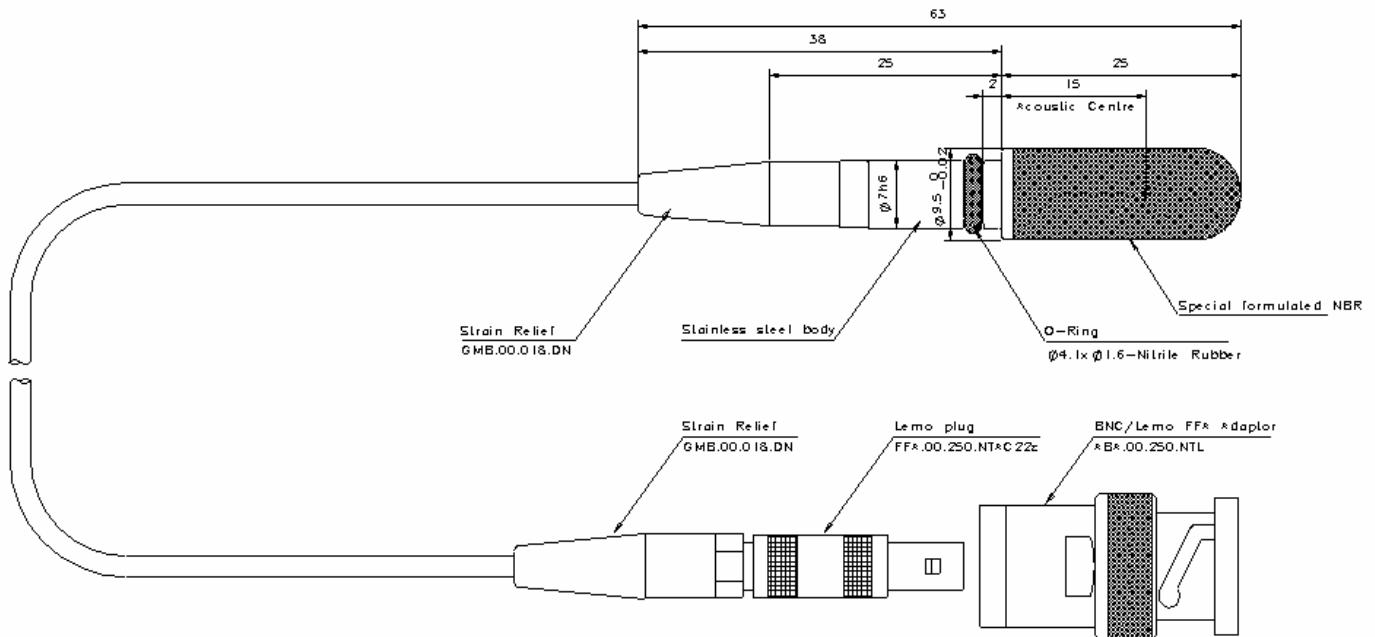
Impedance



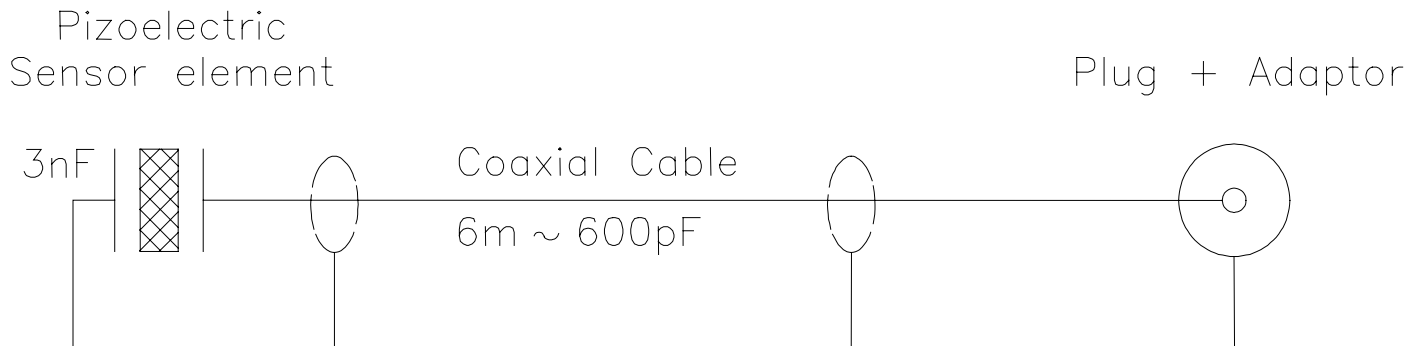
Hydrophone TC4013

Miniature Reference Hydrophone

Outline Dimensions



Electrical Diagram



RESON reserves the right to change specifications without notice. © 2005 RESON A/S
For Acoustical Measurement Accuracy please refer to www.reson.com or contact sales.

Version: B108 070711 / US

Teledyne RESON A/S

Denmark
Tel: +45 4738 0022
reson@teledyne-reson.com

Teledyne RESON Inc.

U.S.A.
Tel: +1 805 964-6260
sales@teledyne-reson.com

Teledyne RESON LTD.

Scotland U.K.
Tel: +44 1224 709 900
sales@reson.co.uk

Teledyne RESON B.V.

The Netherlands
Tel: +31 (0) 10 245 1500
info@reson.nl

Teledyne RESON Pte. Ltd.

Singapore
Tel: +65 6725 9851
singapore@teledyne-reson.com

Teledyne RESON Shanghai Office

Shanghai
Tel: +86 21 6473 5403
shanghai@teledyne-reson.com

Copyright Teledyne RESON. all specification subject to change without notice

www.teledyne-reson.com