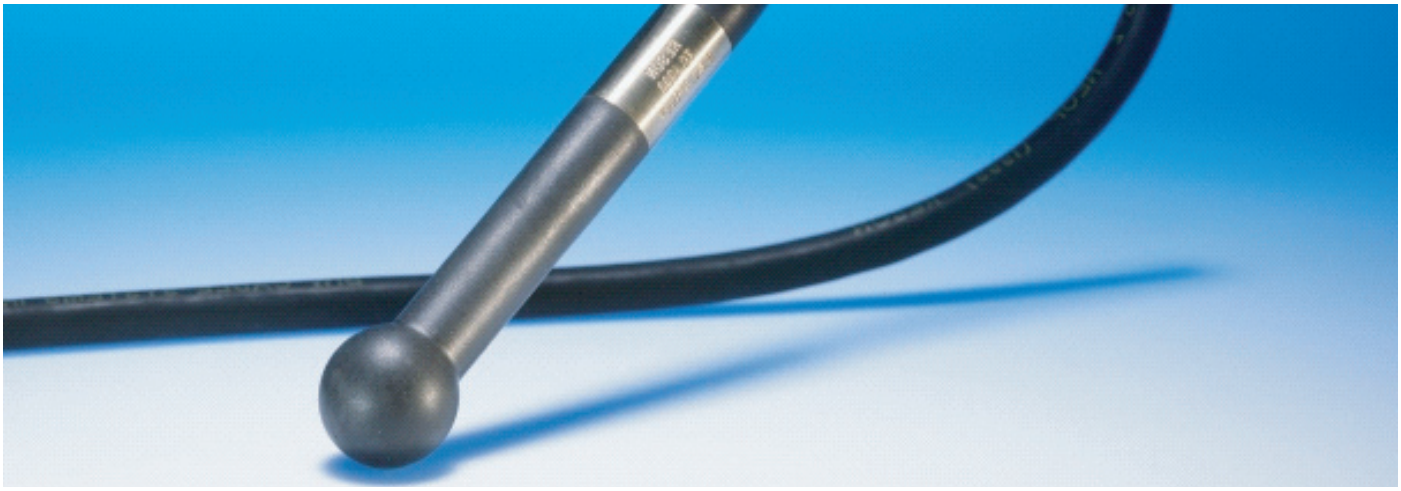
Hydrophone TC4033

Robust Spherical Reference Hydrophone



TC4033

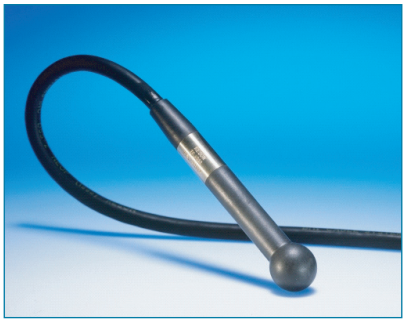
- Omnidirectional in the full frequency range
- Wide frequency range
- Durable construction
- Long term stability
- Individually calibrated

The TC4033 provides uniform omnidirectional characteristics within the full frequency range of 1Hz to 140kHz.

The Typical sensitivity of -203dB re 1V/µPa and the capacitance of 7nF, ensure an excellent signal to noise ratio, thereby allowing TC4033 to be used with extension cables with only a limited reduction in sensitivity.

The TC4033 offers excellent acoustic characteristics and durability, which makes it ideal for a wide range of applications and for calibration purposes.

TECHNICAL SPECIFICATIONS	
Usable Frequency range:	1Hz to 140kHz
Linear Frequency range:	1Hz to 80kHz
Receiving Sensitivity:	-203dB ±2dB re 1V/µPa at 250Hz
Transmitting Sensitivity:	144dB ±2dB re 1µPa/V at 1m at 100kHz
Directivity, Horizontal:	Omnidirectional ±2dB at 100kHz
Vertical Directivity:	270°±2dB at 100kHz
Nominal Capacitance:	7,8 nF (incl.10m cable)
Operating depth:	900m
Operating Temperature range:	-2°C to +80°C
Storage Temperature range:	-40°C to +80°C
Weight incl. 10m cable, (in air):	1.5kg
Cable (length and type):	Standard 10m shielded pair DSS-2/MIL-C-915. Optional cable length available on request
Connector type:	BNC
Encapsulating material:	Special formulated NBR
Metal body:	Alu bronze - AlCu10Ni5Fe4



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 TC4033

Robust Spherical Reference Hydrophone

Documentation:

Individually calibration curves:

Sensitivity at ref.: frequencies:
250 kHz

Receiving sensitivity:
At 5 kHz to 200 kHz

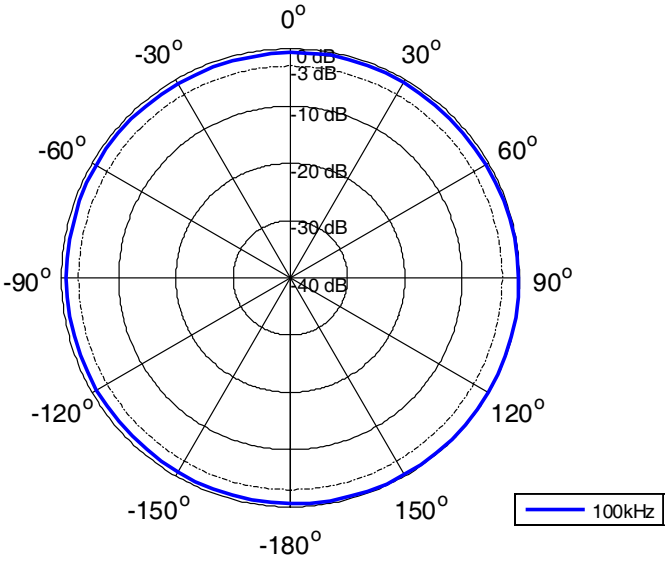
Impedance:
5 kHz to 200kHz

Horizontal directivity:
At 100 kHz

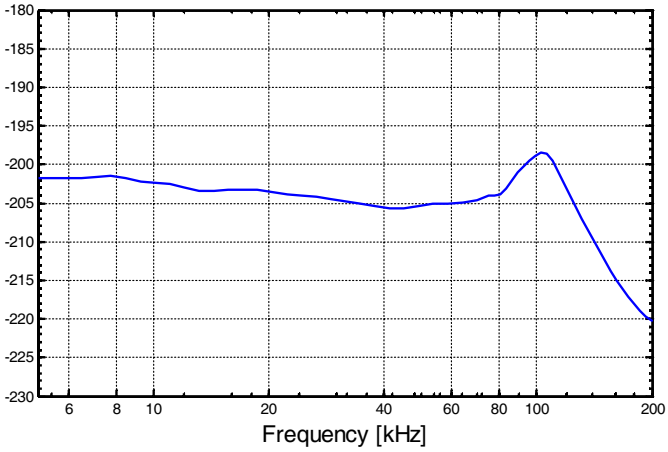
Vertical directivity:
At 100 kHz

Transmitting sensitivity:
5 kHz to 200 kHz

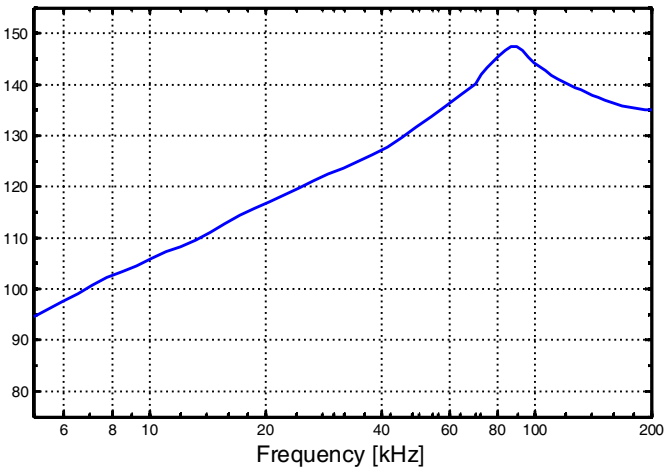
Horizontal directivity pattern



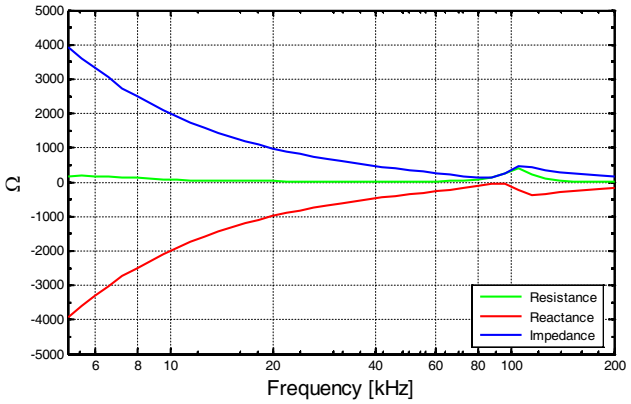
Receiving Sensitivity [dB re 1V/µPa @ 1m]



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



Impedance



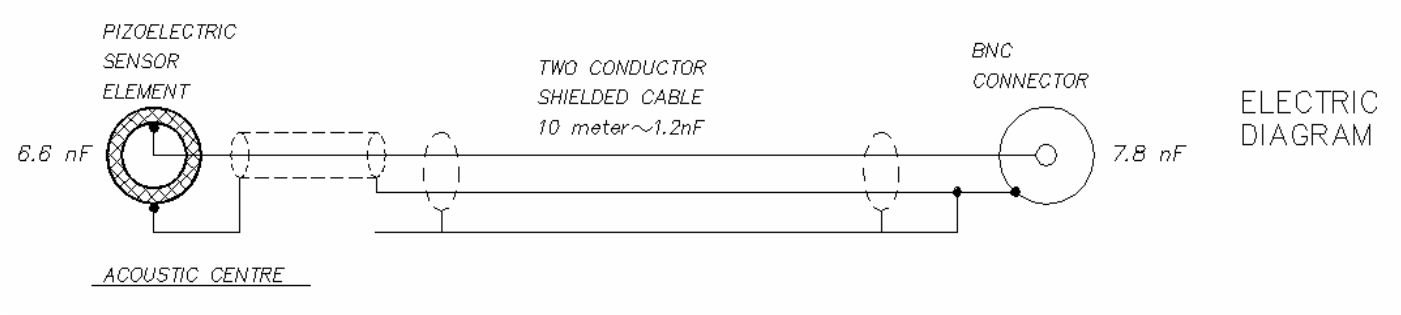
Hydrophone TC4033

Robust Spherical Reference Hydrophone

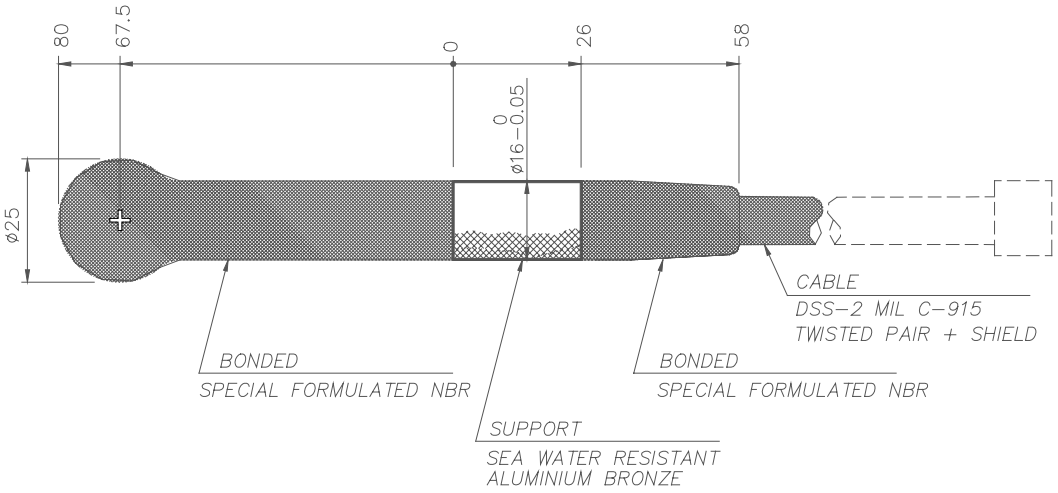
Documentation:

The sensor element is permanently encapsulated in Special formulated NBR, which has been especially compounded to ensure acoustic impedance close to that of water and low water permeability.

Electrical Diagram and Outline Dimensions

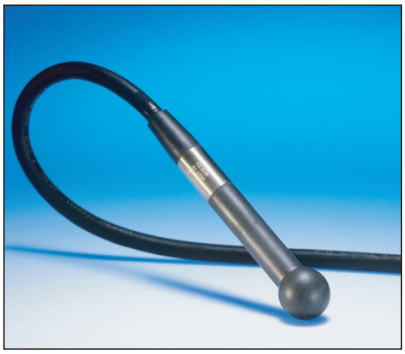


ELECTRIC DIAGRAM



OUTLINE DIMENSIONS

(Weight, (in air): Incl. 10m cable 1500 grams)



RESON A/S
Denmark
Tel: +45 4738 0022
E-mail: reson@reson.dk

RESON Inc.
USA
Tel: +1 805 964-6260
E-mail: sales@reson.com

RESON Offshore Ltd.
United Kingdom
Tel: +44 1224 709 900
E-mail: sales@reson.co.uk

RESON GmbH
Germany
Tel: +49 431 720 7180
reson@reson-gmbh.de

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

RESON (Pte.) Ltd
Singapore
Tel: +65 6725 9851
sales@reson.com

Version: B111 070711 / A4