

- OMNI-DIRECTIONAL RESPONSE
- EFFICIENT TRANSMITTER
- OCTAVE BANDWIDTH OPTION
- BROADBAND OPERATION
- HIGH POWER PROJECTOR
- DEEP WATER CAPABILITY



The D/I7 spherical transducer is a versatile design providing an omni-directional transmit and receive beam pattern.

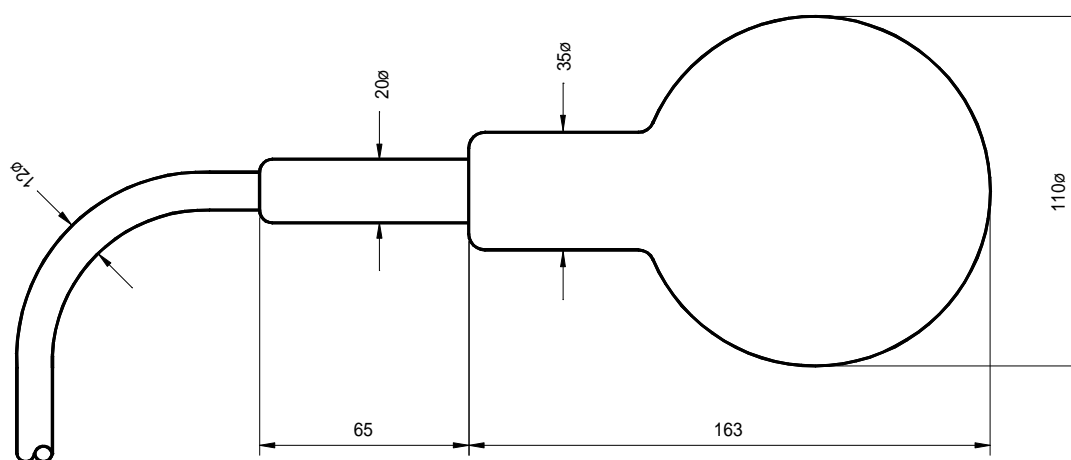
With a useful operating bandwidth from 10 kHz to 30 kHz and capable of achieving source levels of 201dB around resonance it is particularly suitable as a high power noise source or communications transducer. The transducer is extremely robust and able to withstand severe levels of underwater explosive shock.

Electrical connection to the transducer is by a screened twisted pair cable. The outer jacket of the cable is a tough polyurethane material that enables the transducer to be moulded directly into underwater equipment pods or connectors.

As with all Neptune transducers, the D/I7 is available with the option of a full acoustic calibration. All calibrations are traceable to National Standards.

Wideband Version

A broadband version of this transducer is available (see page 57 & 58 Model D/I7/BB). Utilising an internal passive matching network to achieve a 3dB bandwidth from 11 kHz to 26 kHz.

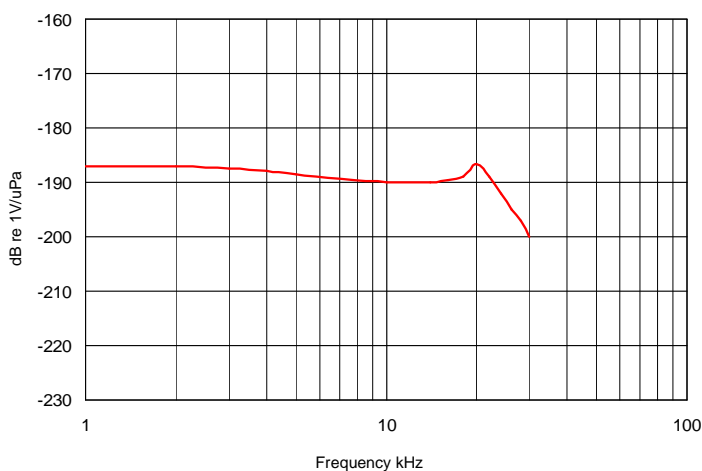


All dimensions in mm

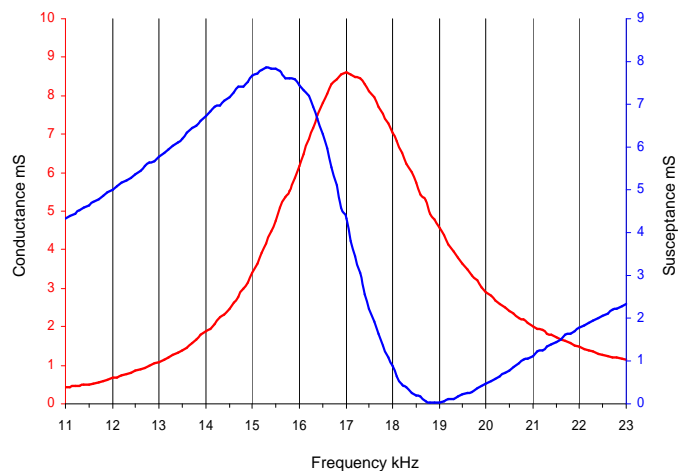
Technical Specification

Resonant Frequency	17 kHz (Nominal)
Beam Pattern	Omni ± 1 dB up to 30 kHz
Receive Sensitivity	See Graph
Transmit Sensitivity	See Graph
Capacitance at 1 kHz	60,000 pF
Input Power	2000 Watts around resonance
Operating Depth	2000 Metres
Operating Temperature	-5 to +40 °C
Storage Temperature	-40 to +80 °C
Cable Type	Polyurethane Ø12mm 2 Core Screened
Cable Length	10 metres standard Additional lengths supplied to order

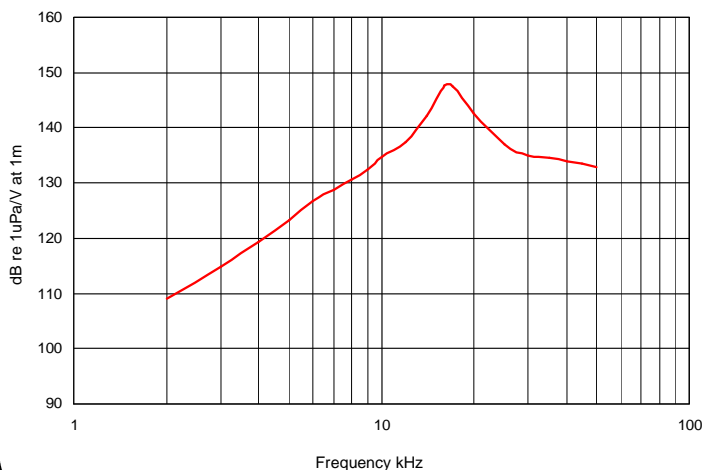
Receive Graph



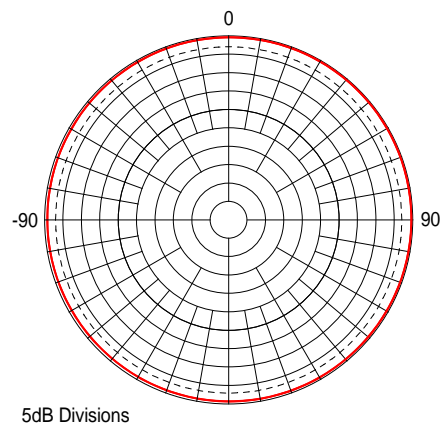
Admittance Plot



Transmit Graph



Beam Pattern at 17 kHz



Data illustrated is taken from actual in-water measurements