### Communication Transducers

# MODEL T204

- HEMISPHERICAL BEAM PATTERN
- BROAD BAND TRANSMISSION
- DEEP WATER CAPABILITY
- TRANSPONDER
- RANGE TRACKING
- COMMUNICATIONS



The T2O4 is one of a series of transducers available from Neptune that have been designed for use in transponder beacons, tracking systems, acoustic release mechanisms and data communication systems.

A versatile transducer the T2O4 combines efficient broadband transmission and reception with an almost hemispherical beam pattern.

This transducer has been successfully used to track and position ROVs down to depths of ISOO metres.

The anodised aluminium base incorporates a threaded fastening and 'O' ring seal allowing simple and direct mounting onto equipment or pressure housings, washer and nut provided. Electrical connection is via a twisted screen pair cable.

All dimensions in mm

## Communication Transducers

#### **Technical Specification**

Resonant Frequency	54 kHz (Nominal)
Useful Frequency Band	45 kHz to 65 kHz
Horizontal Beam Pattern	Omni ± 2 dB up to 60 kHz
Vertical Beam Pattern	Hemispherical
Impedance at Resonance	220 Ohms
Input Power Max	250 Watts pulsed
Operating Depth	I500 Metres
Base Material	Anodised Aluminium
Cable Type	Polyurethane Ø4mm 2 Core Screened
Cable Length	3 Metres Standard Additional lengths supplied to order
Storage Temperature	-40 to +80 °C
Operating Temperature	-5 to +70 °C

50

55

Frequency kHz

60

65

70

75

Transmit Graph

40

45

35



Admittance Plot



#### Beam Pattern Vertical at 54 kHz



Data illustrated is taken from actual in-water measurements