Hydrophone with Pre-Amplifier MODEL D/140/H

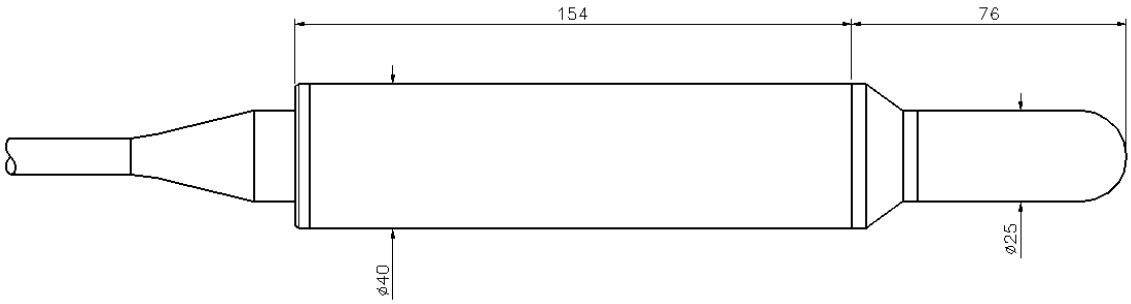
- INTEGRAL PRE-AMPLIFIER
- OMNI-DIRECTIONAL RESPONSE
- LOW NOISE PERFORMANCE
- BROADBAND OPERATION
- MARINE MAMMAL AUDIO SENSOR
- MAXIMUM CABLE LENGTH 150 MTS

The D/140/H is a true spherical balanced differential element combined with a signal conditioning amplifier housed in a stainless steel tube with an O-ring sealed end-cap at each end.

The hydrophone is moulded in polyurethane onto one of the end-caps whilst the other acts as a penetrator for the polyurethane cable. Two of the cores are used for supplying the 24 volt power with the other pair providing the differential output signal.

The proximity of the amplifier to the hydrophone element allows the signals to be transmitted along long lengths of cable (up to 150 metres) without suffering any degradation.

The differential output also improves the signal to noise ratio and extends the upper frequency cut-off. The gain of the amplifier can be adjusted to suit customers requirements with an additional 20dB from the optional 'Surface Receiver Unit' which can be supplied separately.

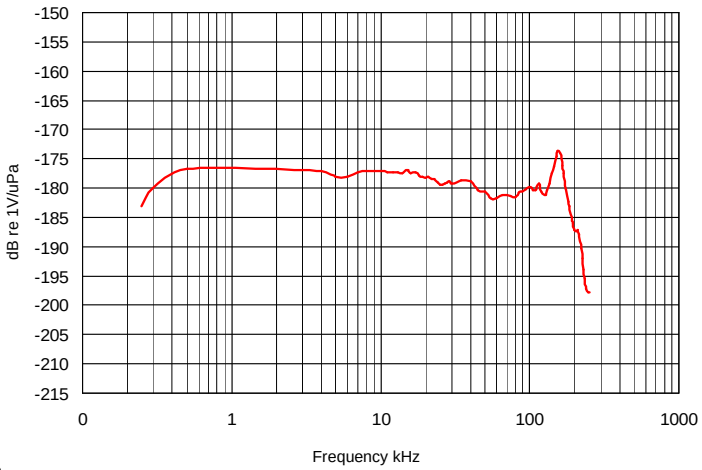


All dimensions in mm

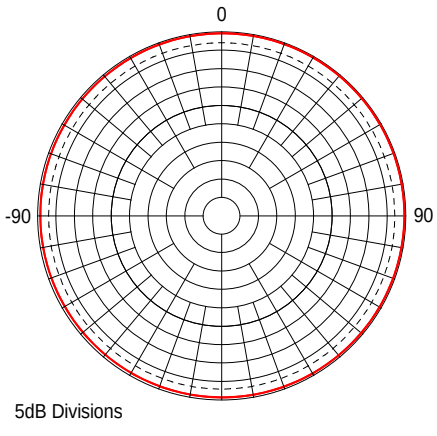
MODEL D/140/H *Hydrophone with Pre-Amplifier*

Technical Specification	
Resonant Frequency	150 kHz (Nominal)
Usable Frequency Range	350 Hz to 190 kHz
Beam Pattern	Omni ± 3 dB up to 180 kHz
Receive Sensitivity	See Graph
Pre-Amplifier Gain (Pre-Set)	10 to 40 dB
Power Supply	24 Volts DC @ <150mA
Signal Output	Differential
Operating Depth	700 Metres
Operating Temperature	-5 to +40 °C
Storage Temperature	-40 to +80 °C
Cable Type	Polyurethane 2 x Twisted screened Pairs
Cable Length	10 metres standard Additional lengths supplied to order
Optional: Surface Receiver Unit	Input (Differential - Hydrophone) Output (Single Ended) Power Supply Input Gain Switch - 0dB or additional 20dB

Receive Graph with 30dB Gain



Beam Pattern at 150 kHz



Data illustrated is taken from actual in-water measurements