



# M36-014 SPECIFICATIONS

## M36-014 Hydrophone

### OVERVIEW

The M36-014 is a robust, wide-band, omni-directional hydrophone designed for marine observation. M36 hydrophones include an integrated low noise, low power pre-amplifier which is electrically shielded along with the piezoelectric sensing element. This hydrophone comes standard with a 10 Hz high pass filter (HPF) and -165 dB re V/ $\mu$ Pa sensitivity. Customizable band pass, pre-amp gain, and pre-amp signalling type is available upon order.



### CHARACTERISTICS

#### PHYSICAL/ENVIRONMENTAL:

Maximum Operating Depth	3500 Meters
Diameter	1.3 in
Length	7.8 in
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C
Connector Type	Subconn MCBH8M

#### ACOUSTIC/ELECTRICAL:

Nominal Voltage Sensitivity [without preamp]	-200 dBV re 1 $\mu$ Pa
Operational Range	1 Hz-30kHz
Pre-Amp Gain	35 dB [0 – 35 dB customizable gain available on order]
Band Pass	10 Hz HPF, no LPF installed [selectable on order]
Current Draw	1.3 mA [at 6.8 VDC] 4.2 mA with current signalling pre-amp
Input Voltage	6.8 VDC nominal 4.5-30 VDC operating range
Preamp Signalling	Current, or single ended voltage [selectable on order]

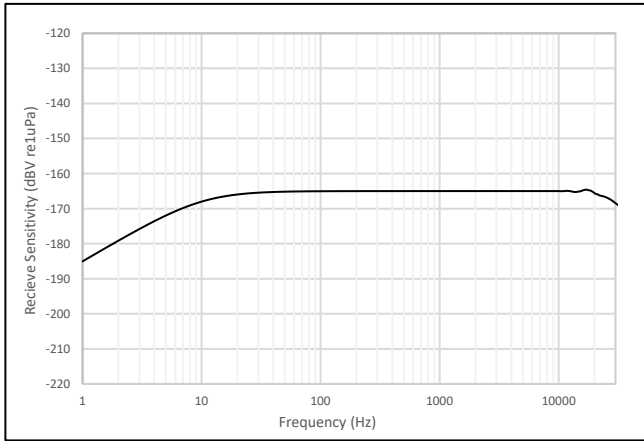


Figure 1: Nominal Receive Sensitivity Plot for M36-014 (With Standard Pre-Amp)

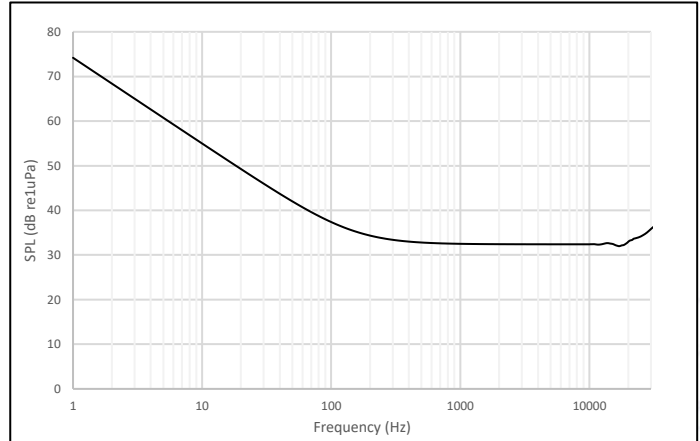


Figure 2: SPL Equivalent Self Noise Plot for M36-014

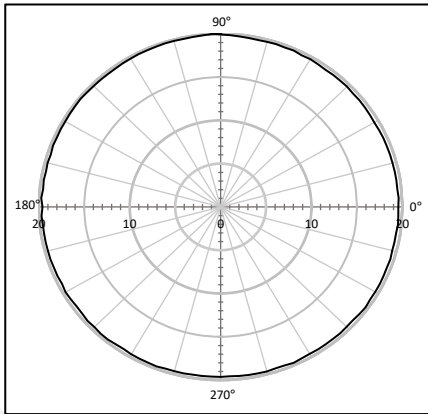


Figure 3: Typical Horizontal Beam Pattern for the M36-014 @ 2 kHz

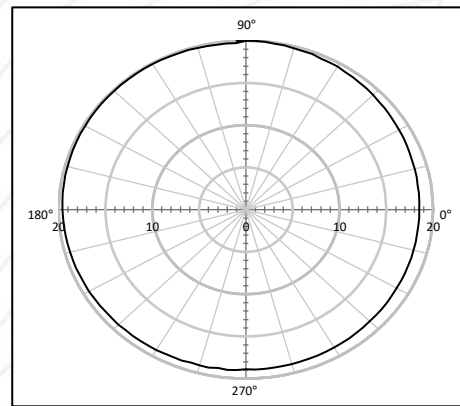


Figure 4: Typical Horizontal Beam Pattern for the M36-014 @ 30 kHz

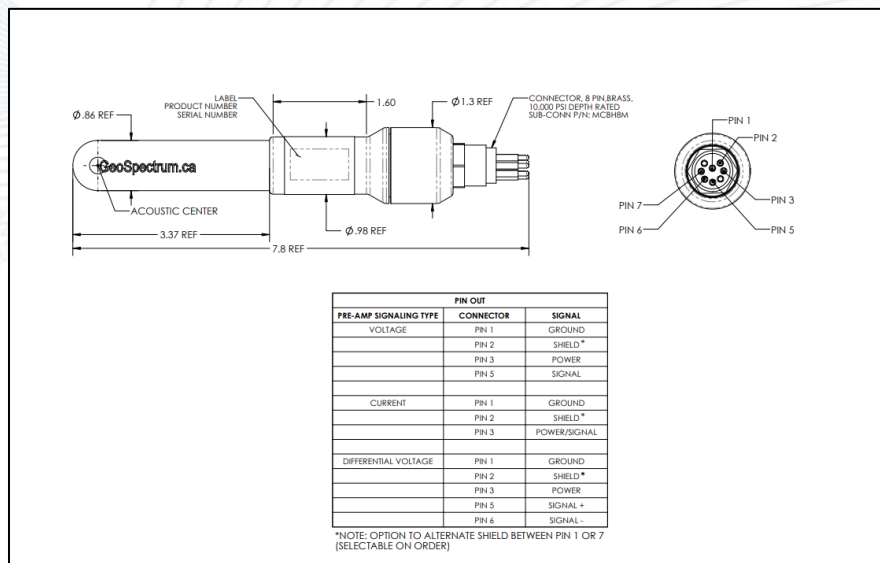


Figure 5: Dimensions of the M36-014 Hydrophone with labeled pin out