



# M72-30 SPECIFICATIONS

## M72-30 C-Bass

### OVERVIEW

The M72-30 is a member of the M72 “C-Bass” family of very low frequency electrodynamic sound projectors.

This source is capable of transmitting arbitrary waveforms, including single and combined tones, frequency modulated sweeps, communication signals and white or shaped noise. It omits an omni-directional response which can be used individually or in arrays to produce high-power sources with or without directivity.

This versatile source is suitable to be used for over-the-side trials, routine VLF calibrations, long-duration moorings, or integration into custom systems. It can be utilized as a beacon for navigation or timing, target emulation, VLF communication systems, VLF acoustic science, and more.



### CHARACTERISTICS

#### PHYSICAL:

|  |                |
|--|----------------|
| Max Operating Depth with Standard Passive Compensation [10GAL] | 10 m           |
| Max Operating Depth with Standard Active Compensation          | 340 m          |
| Mass   | 355 Kg         |
| Apparent Mass in Water   | 202 Kg         |
| Storage Temperatures   | -40°C to +70°C |
| Operating Temperatures   | 0°C to +35°C   |

#### ACOUSTIC:

|                                |                   |
|--------------------------------|-------------------|
| Resonance Frequency @60m Depth | 35Hz              |
| Maximum SPL at Resonance @ 1 m | 198.5 dB re 1 μPa |
| Transmitting Range             | 1Hz-500Hz         |
| Directivity                    | Omni-Directional  |

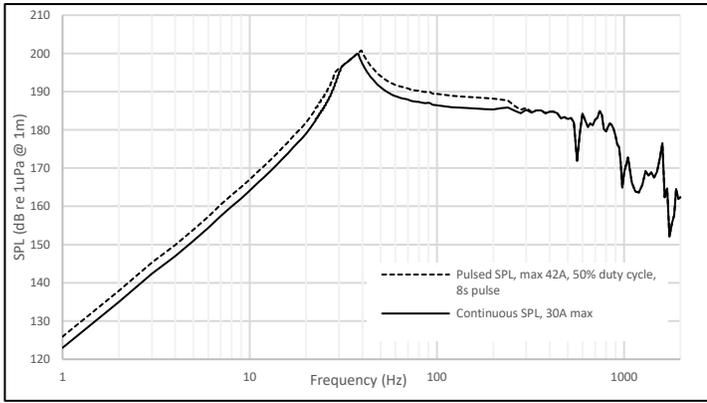


Figure 1: Sound Pressure Level Limits Plot for M72-30 with M620-210 Amplifier Limit and Cable Impedance of 1Ω

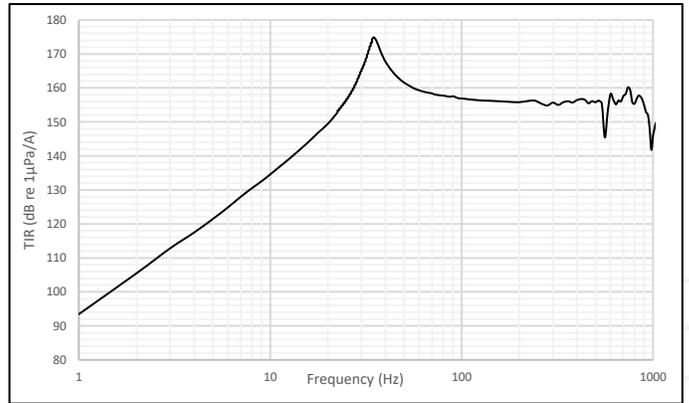


Figure 2: Transmit Current Response for M72-30

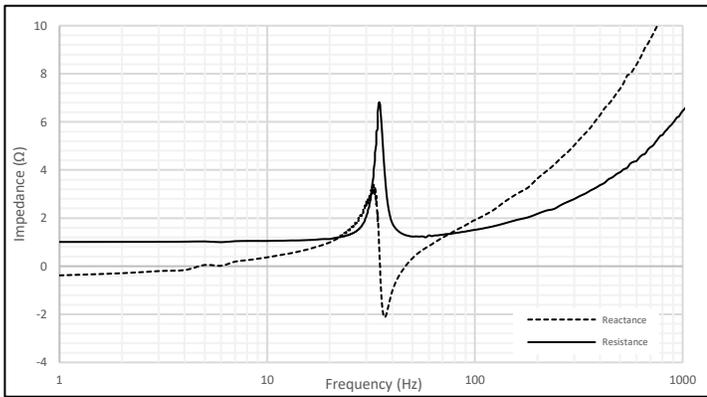


Figure 3: Impedance Plot for M72-30

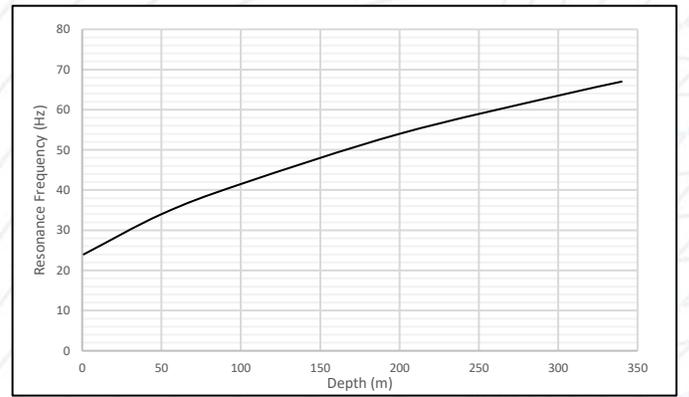


Figure 4: Modelled Resonance Frequency vs Depth

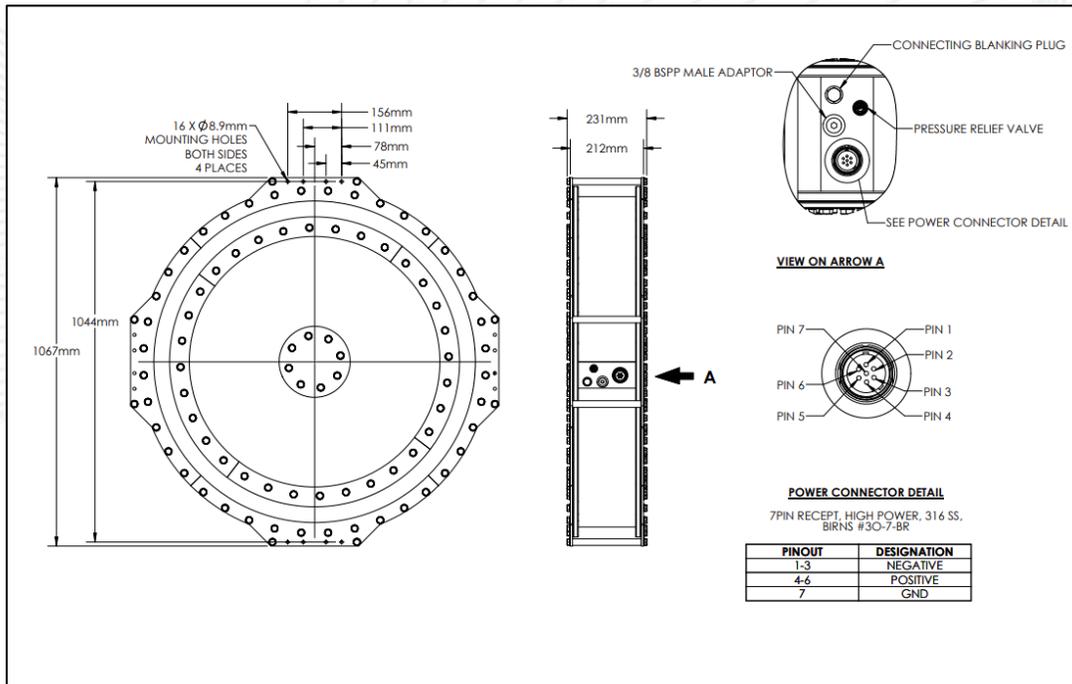


Figure 5: Dimensions of the M72-30 with labeled pin out