



# M72-300 SPECIFICATIONS

## M72-300 C-Bass

### OVERVIEW

The M72-300 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:

|  |                |
|--|----------------|
| Maximum Operating Depth  | 80 m           |
| Maximum Survival Depth w/o Pressure Compensation               | 280 m          |
| Max Operating Depth with Standard Passive Compensation [10GAL] | 500 m          |
| Max Operating Depth with Standard Active Compensation          | 1000 m         |
| Mass   | 9 Kg           |
| Apparent Mass in Water   | 5.7 Kg         |
| Storage Temperatures   | -40°C to +70°C |
| Operating Temperatures   | 0°C to +35°C   |

#### ACOUSTIC:

|                                 |                  |
|---------------------------------|------------------|
| Resonance Frequency @ 20m Depth | 300 Hz           |
| Maximum SPL @ 1 m               | 190 dB re 1 μPa  |
| Transmitting Range              | 10Hz-4kHz        |
| Directivity                     | Omni-Directional |

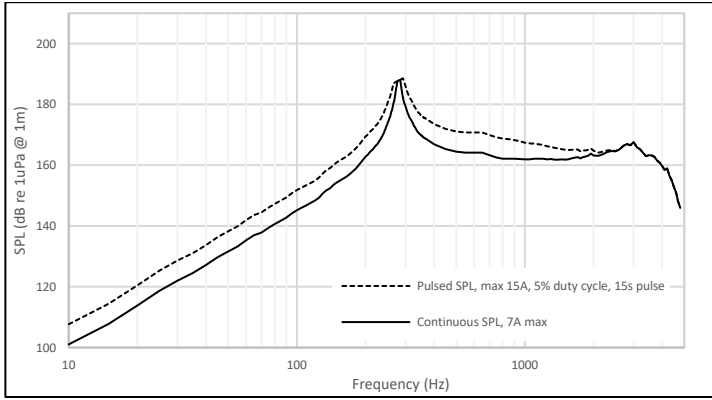


Figure 1: Sound Pressure Level Limits Plot for M72-300 with M620-110 Amplifier Limit and Cable Impedance of 1Ω

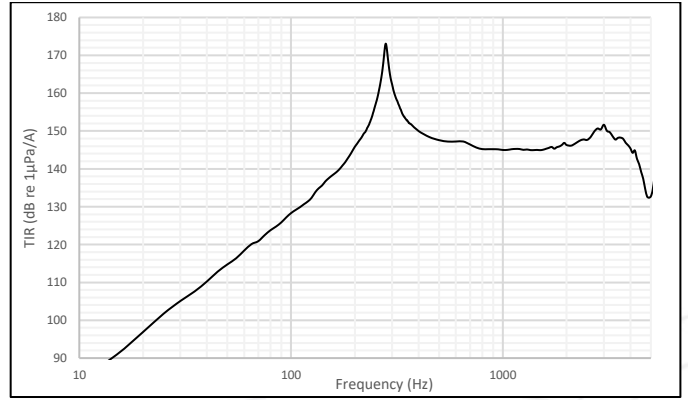


Figure 2: Transmit Current Response for M72-300

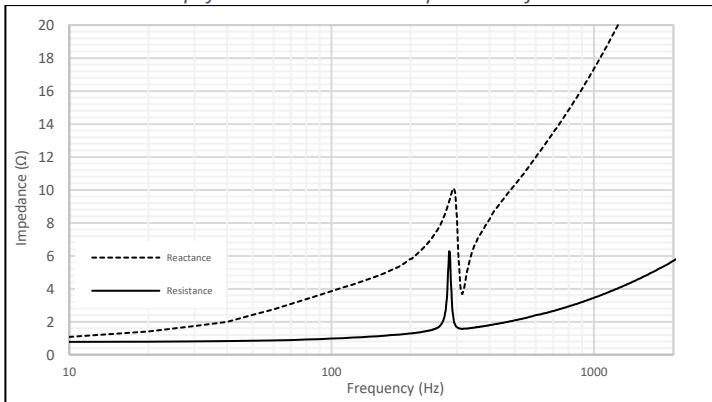


Figure 3: Impedance Plot for M72-300

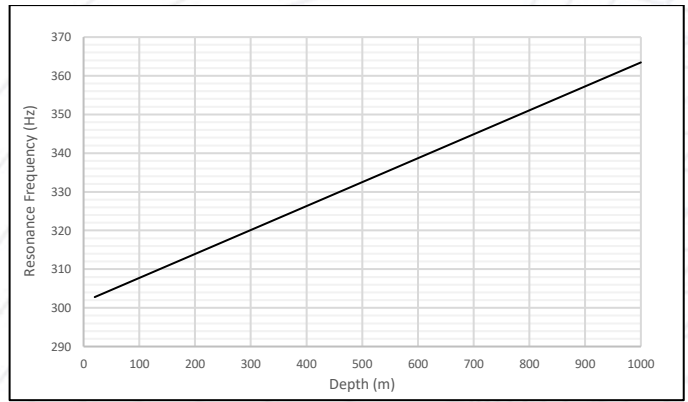


Figure 4: Predicted Resonance Frequency vs Depth

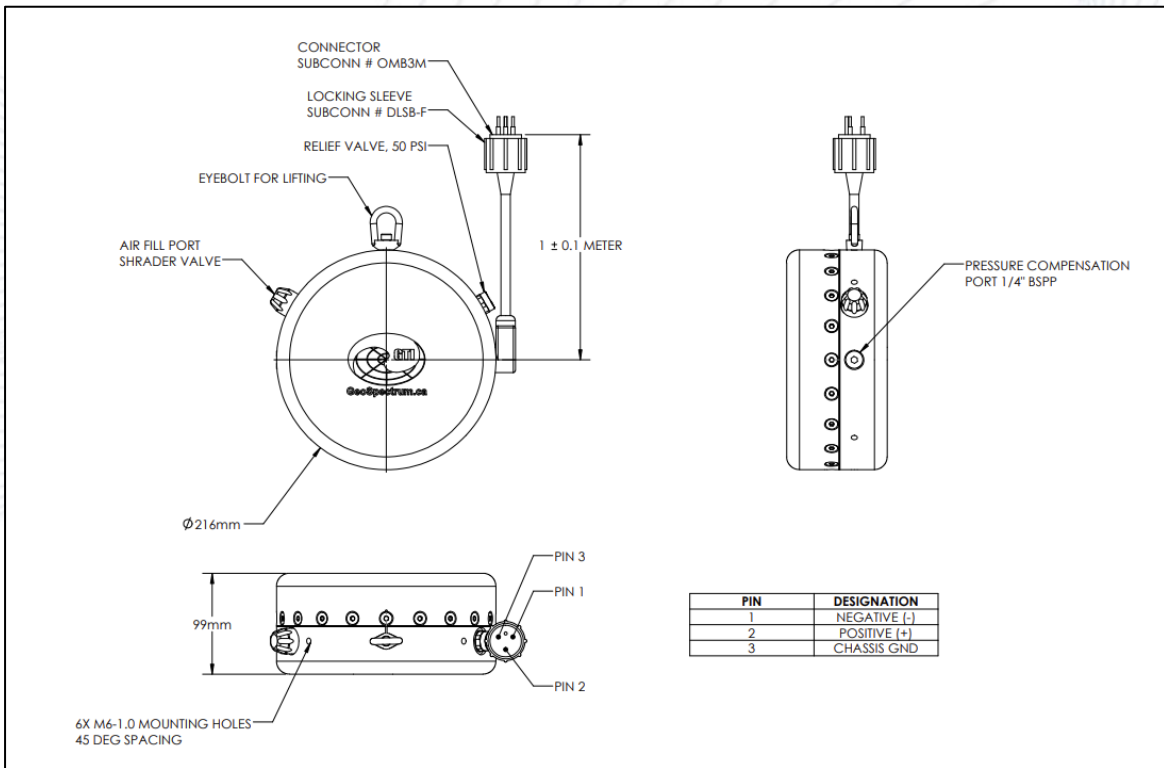


Figure 5: Dimensions of the M72-300 with labeled pin out