



M72-110 SPECIFICATIONS

M72-110 C-Bass

OVERVIEW

The M72-110 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	30 m
Maximum Survival Depth w/o Pressure Compensation	50 m
Max Operating Depth with Standard Passive Compensation [10GAL]	200 m
Max Depth with Standard Active Compensation	900 m
Mass	24 Kg
Apparent Mass in Water	16 Kg
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C

ACOUSTIC:

Resonance Frequency @20m Depth	115 Hz
Maximum SPL at Resonance @ 1 m	187 dB re 1 μPa
Transmitting Range	1Hz-1.2kHz
Directivity	Omni-Directional

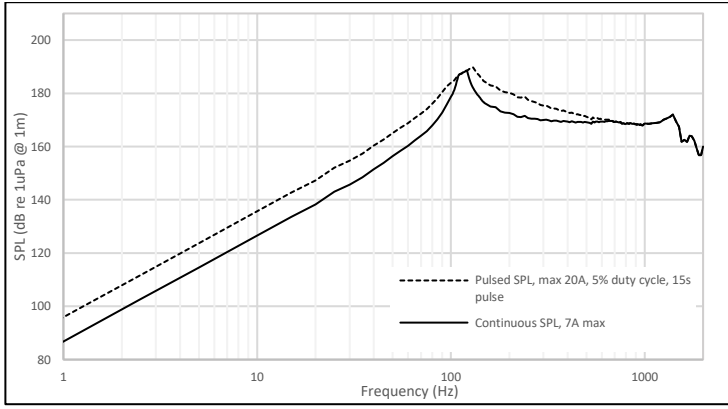


Figure 1: Sound Pressure Level Limits Plot for M72-110 with M620-110 Amplifier Limit and Cable Impedance of 1Ω

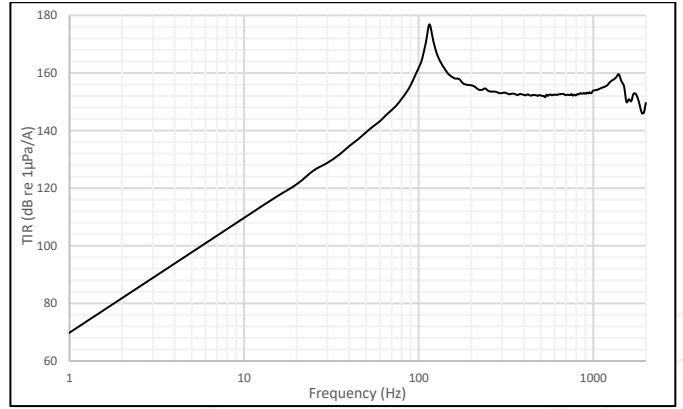


Figure 2: Transmit Current Response for M72-110

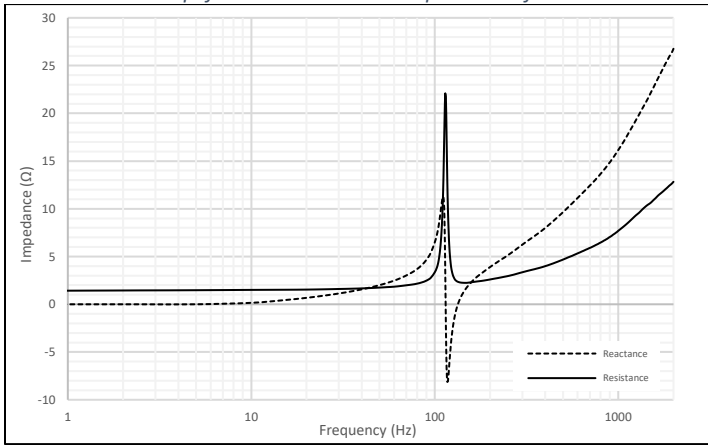


Figure 3: Impedance Plot for M72-110

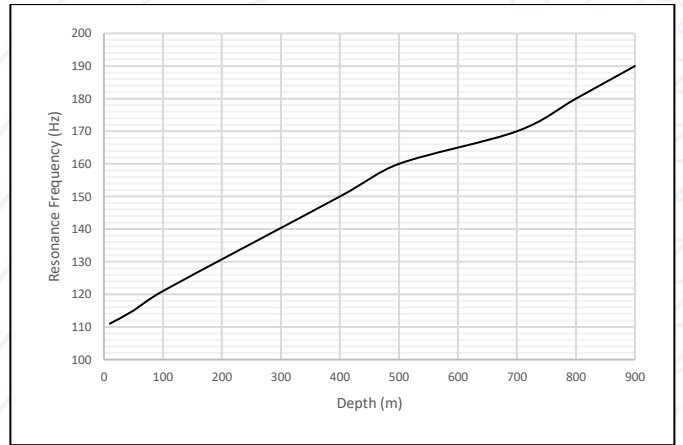


Figure 4: Modelled Resonance Frequency vs Depth

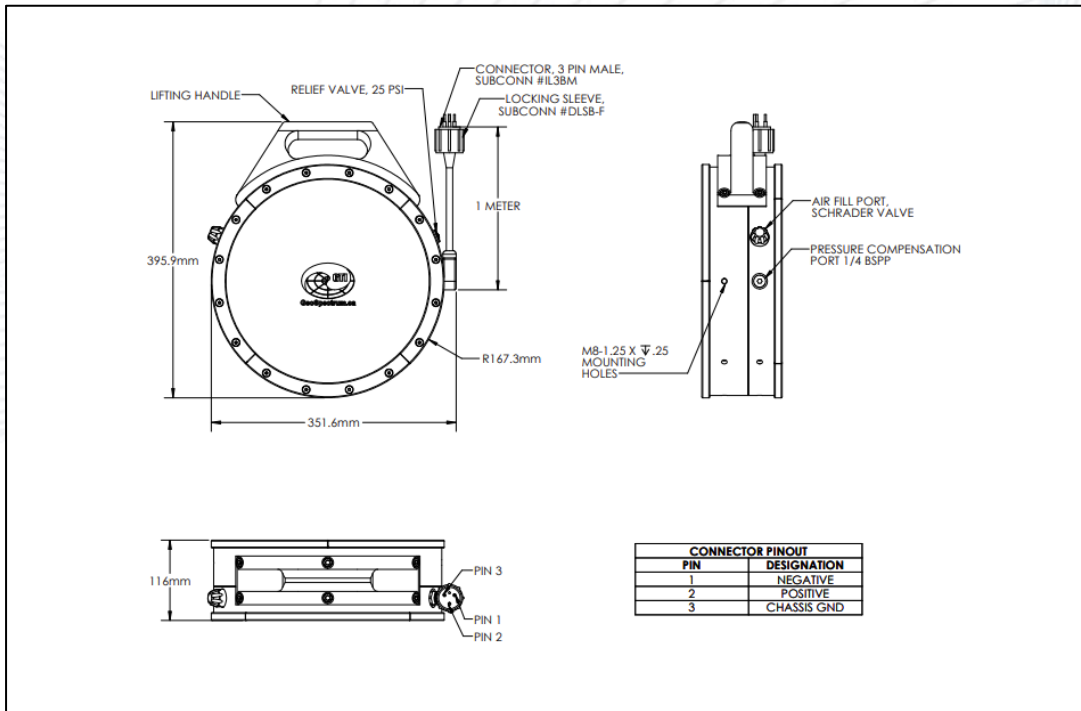


Figure 5: Dimensions of the M72-110 with labeled pin out