



# M72-50 SPECIFICATIONS

## M72-50 C-Bass

### OVERVIEW

The M72-50 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)	20 m
Max Depth with Standard Active Compensation	600 m
Mass	157 Kg
Apparent Mass in Water	101 Kg
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C

#### ACOUSTIC:

Resonance Frequency @20m Depth	53 Hz
Maximum SPL at Resonance @ 1 m	189 dB re 1 $\mu$ Pa
Transmitting Range	1Hz-1kHz
Directivity	Omni-Directional

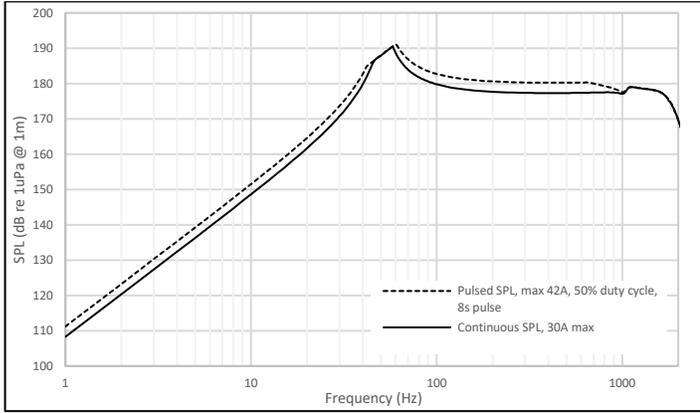


Figure 1: Sound Pressure Level Limits Plot for M72-50 with M620-210 Amplifier Limit and Cable Impedance of 1Ω

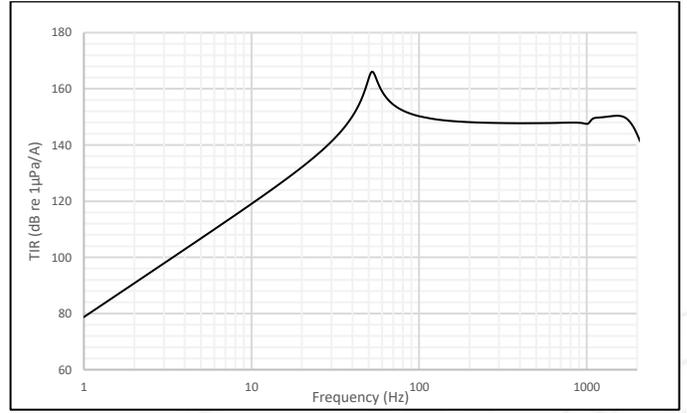


Figure 2: Transmit Current Response for M72-50

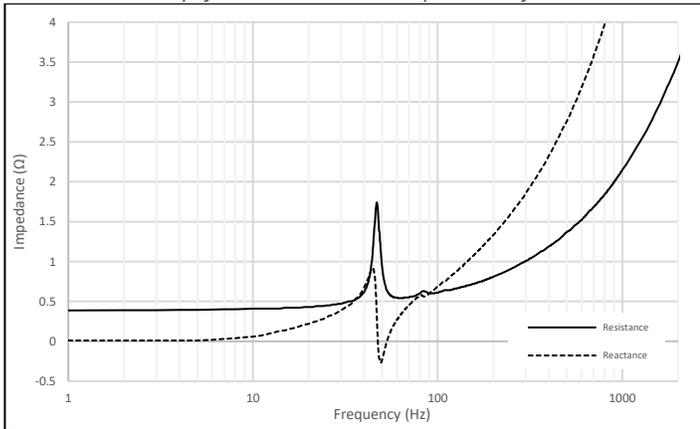


Figure 3: Impedance Plot for M72-50

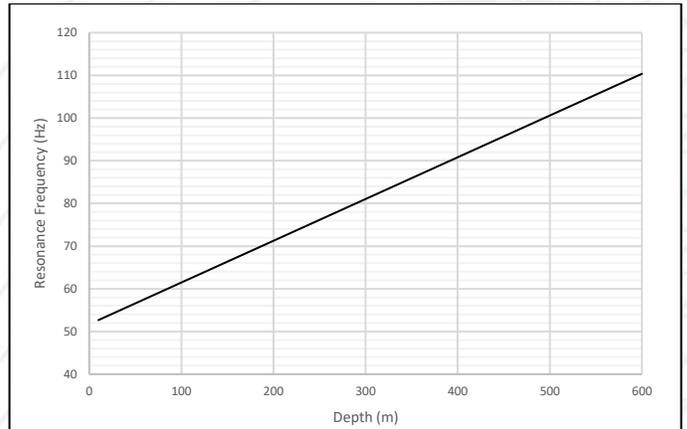


Figure 4: Predicted Resonance Frequency vs Depth

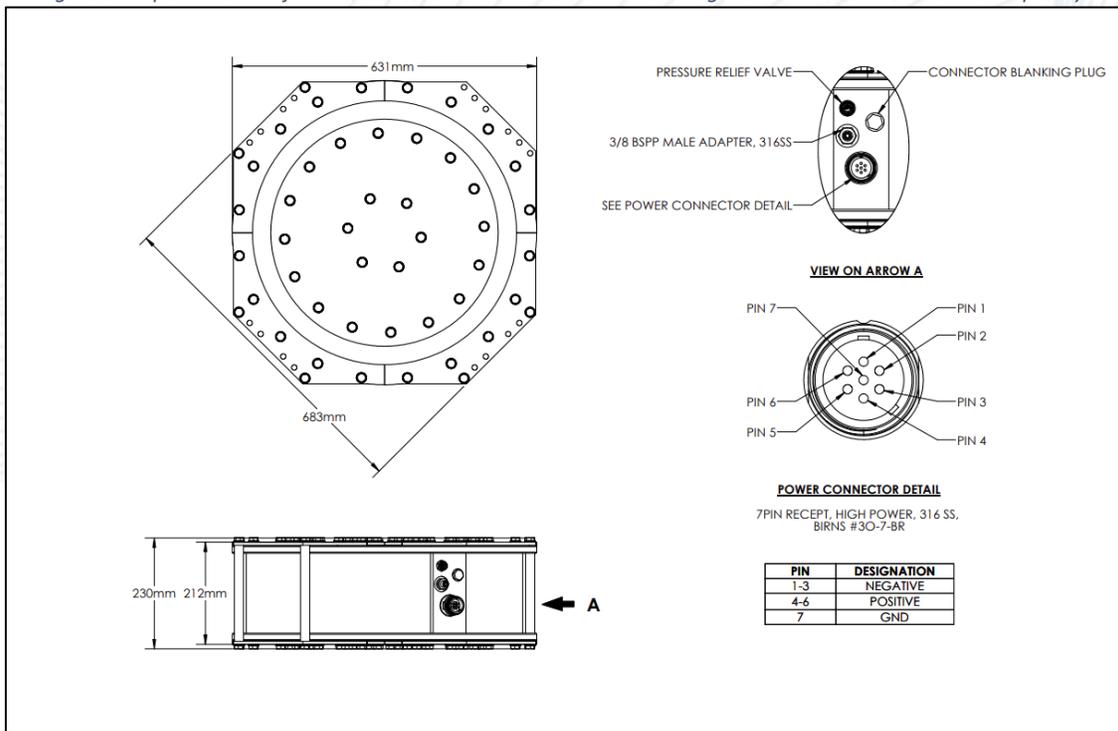


Figure 5: Dimensions of the M72-50 with labeled pin out