



# M18C-2.5 SPECIFICATIONS

## M18C-2.5 Sphere

### OVERVIEW

The M18C-2.5 is a 2.5” diameter spherical transducer. Like all of our M18Cs, it is omnidirectional in transmitting and receiving and has a depth rating of 2500 m. This little transducer is perfect for both transmitting high-frequency high power signals and receiving over a wide frequency band. Applications include marine mammal observation, active/passive sonar, and underwater communications.



### CHARACTERISTICS

#### PHYSICAL:

|                         |                |
|-------------------------|----------------|
| Maximum Operating Depth | 2500 m         |
| Mass                    | .5 Kg          |
| Diameter                | 67 mm          |
| Storage Temperatures    | -40°C to +70°C |
| Operating Temperatures  | 0°C to +35°C   |
| Connector Type          | Subconn 0M3M   |
| Locking Sleeve          | Subconn DLSA-F |

#### ACOUSTIC:

|  |                            |
|--|----------------------------|
| Resonance Frequency                          | 27 kHz                     |
| Maximum Transmitted Voltage Response         | 149 dB re $\mu$ Pa/V @ 1m  |
| Maximum SPL                                  | 204 dB re 1 $\mu$ Pa @ 1 m |
| Maximum Drive Voltage                        | 600 Vrms                   |
| Transmitting Range                           | 1kHz-100kHz                |
| Receiving Range                              | 1kHz-50kHz                 |
| Directivity                                  | Omni-Directional           |
| Capacitance                                  | 37 nF                      |
| Cavitation Depth at 204 dB re $\mu$ Pa @ 1 m | 60 Meters                  |

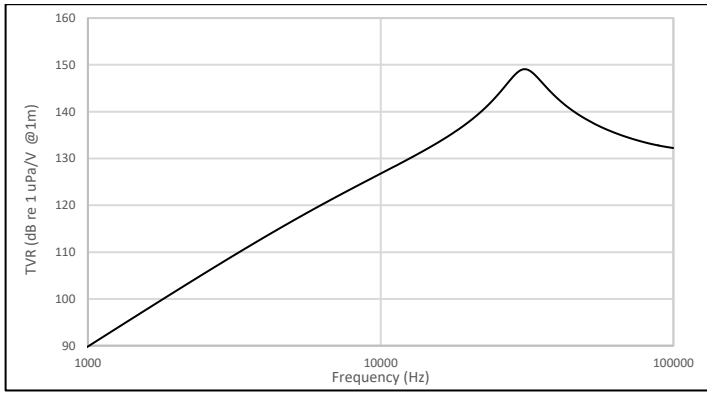


Figure 1: Transmit Voltage Response for M18C-2.5

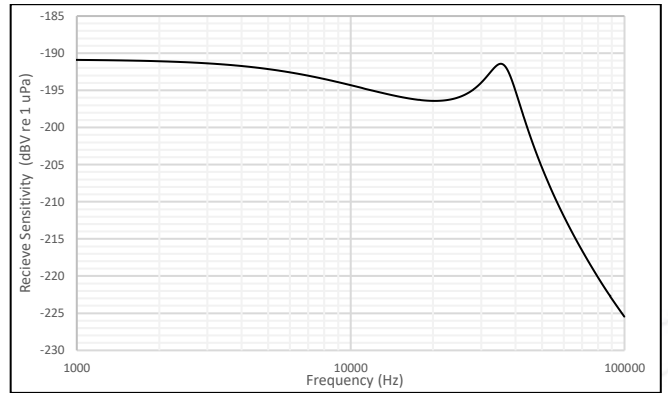


Figure 2: Receive Sensitivity Plot for M18C-2.5

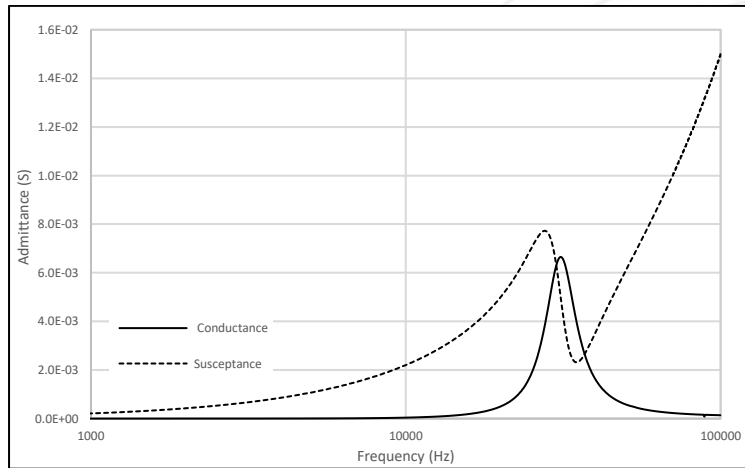


Figure 3: Admittance Plot for M18C-2.5

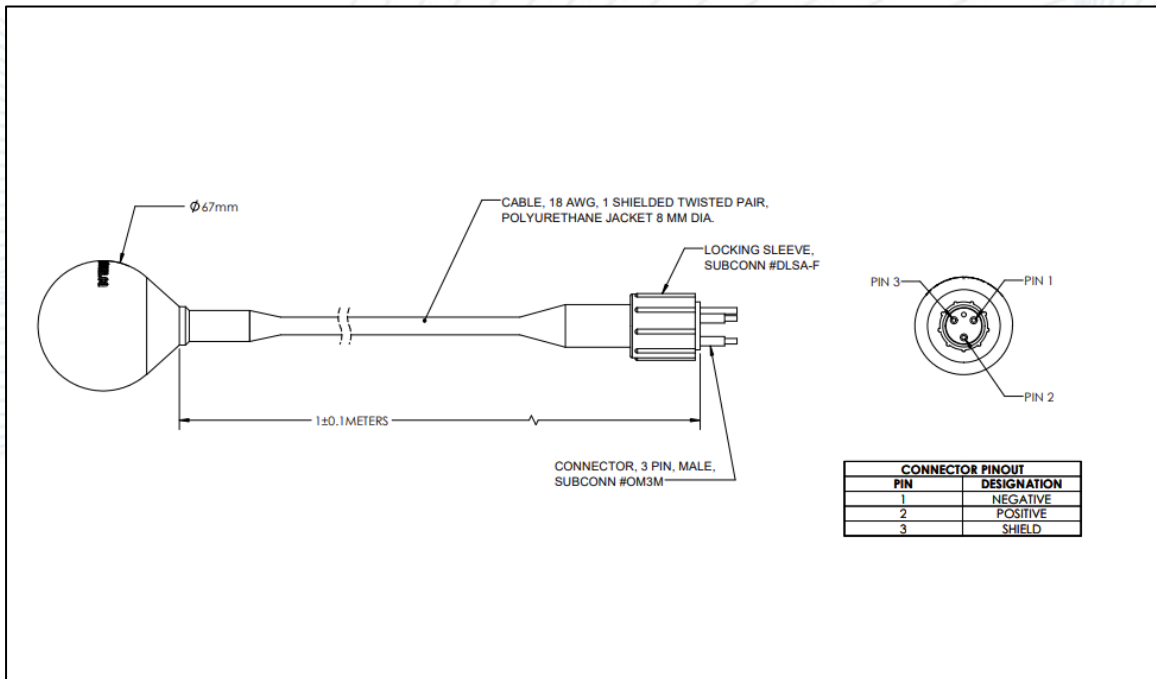


Figure 4: Dimensions of the M18C-2.5 with labeled pinout