



M18C-1.0 SPECIFICATIONS

M18C-1.0 Sphere

OVERVIEW

The M18C-1.0 is a 1" 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	.2 Kg
Diameter	29 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	70 kHz
Maximum Transmitted Voltage Response	147.5 dB re $\mu\text{Pa}/\text{V}$ @ 1 m
Maximum SPL	203 dB re 1 μPa @ 1 m
Maximum Drive Voltage	600 Vrms
Transmitting Range	1kHz-150kHz
Receiving Range	1kHz-100kHz
Directivity	Omni-Directional
Capacitance	10 nF
Cavitation Depth at 203 dB re μPa @ 1 m	150 Meters

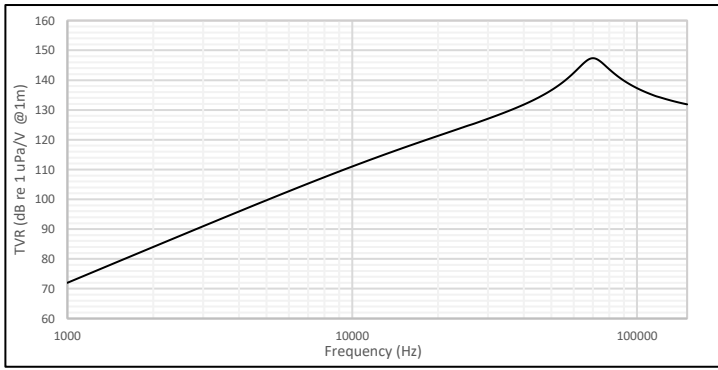


Figure 1: Transmit Voltage Response for M18C-1.0

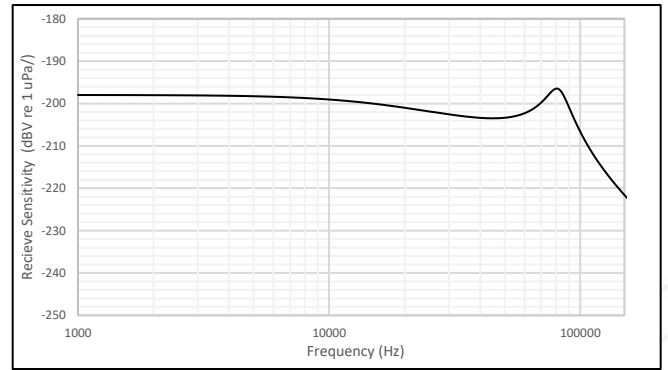


Figure 2: Receive Sensitivity Plot for M18C-1.0

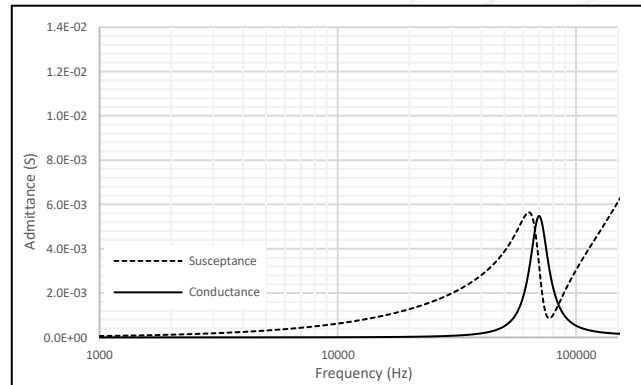


Figure 3: Admittance Plot for M18C-1.0

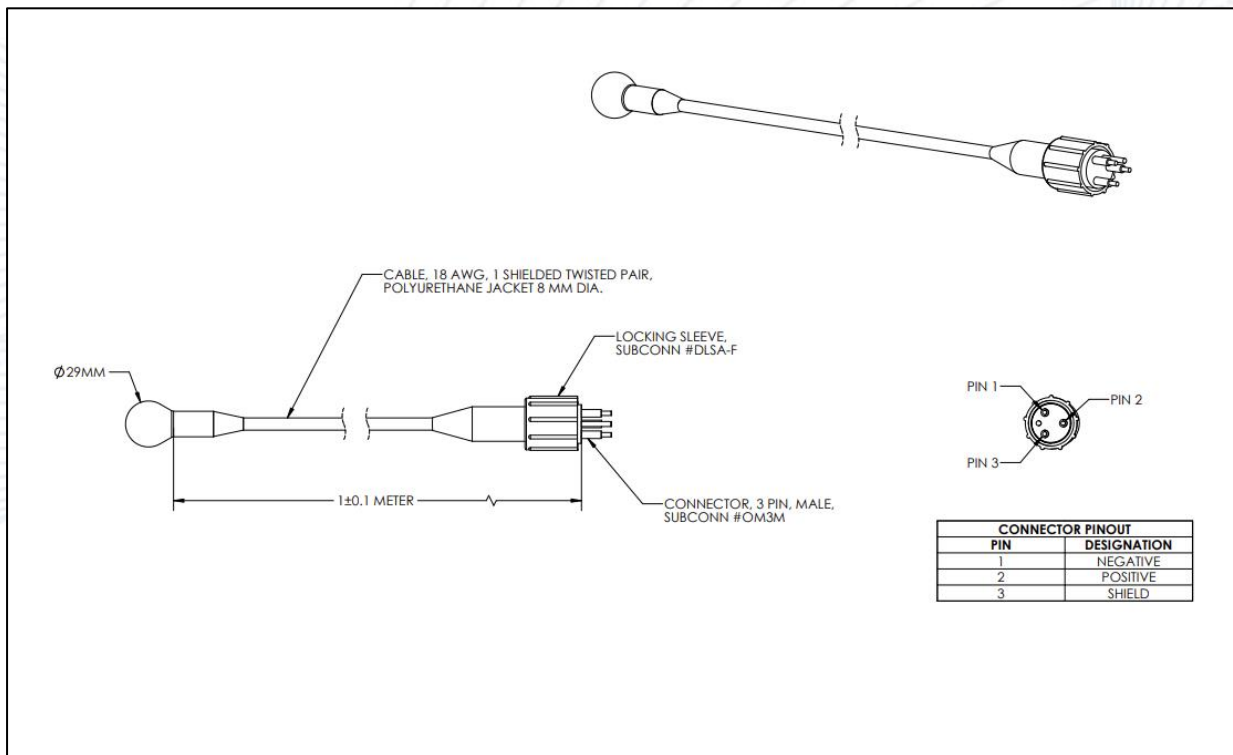


Figure 4: Dimensions of the M18C-1.0 with labeled pinout