



M27-890 SPECIFICATIONS

M27-890 FFR

OVERVIEW

The M27-890 is a low-frequency, broadband, free flooded ring (FFR) transducer. The M27-890 is capable of operating to full ocean depths and possesses a toroidal beam pattern. The transducer is mechanically isolated from its endcaps which include bolt holes for mounting. FFR's are ideal for a variety of applications including acoustic surveillance utilizing active sonar, acoustic communication and acoustic targets/echo repeaters for sonar training and acoustic trials. The elements of these transducers can be combined to produce custom high-power underwater sources.



CHARACTERISTICS

PHYSICAL:

Maximum Operating Depth	6000 Meters
Weight in Air	30 Kg
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C
Connector	3-Pin Subconn BH3M
Locking Sleeve	DLSA-M
Max Load per Mounting Lug	60 Kg

ACOUSTIC:

Resonance Frequency	990 Hz
TVR @ Resonance	136 dB re 1 μPa/V @ 1 m
Maximum Drive Voltage	600 Vrms
Maximum SPL	191 dB re 1 μPa @ 1 m
Beam Pattern	Toroidal
Capacitance	200 nF
Cavitation Depth at 191 dB re μPa @ 1 m	30 Meters

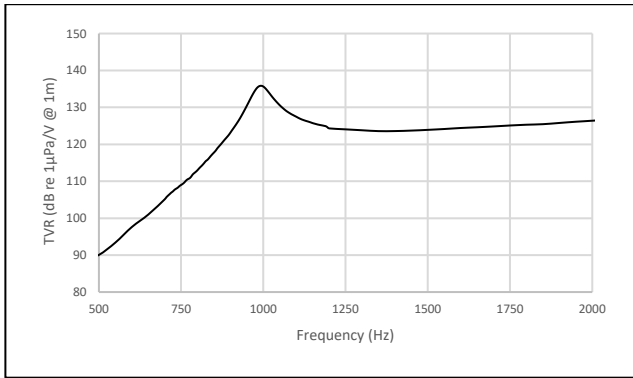


Figure 1: Transmit Voltage Response for M27-890

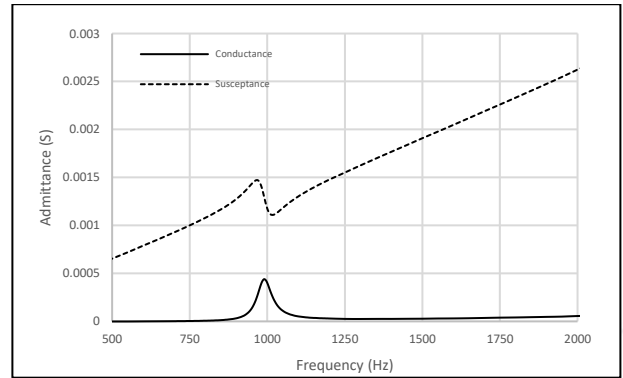


Figure 2: Admittance Plot for M27-890

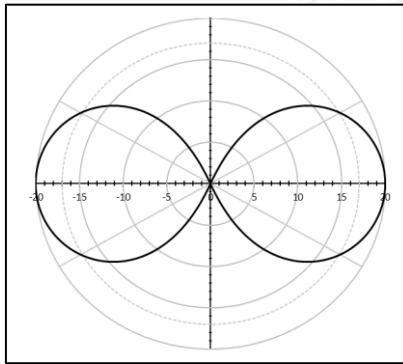


Figure 3: Beam Pattern for M27-890 at 1kHz

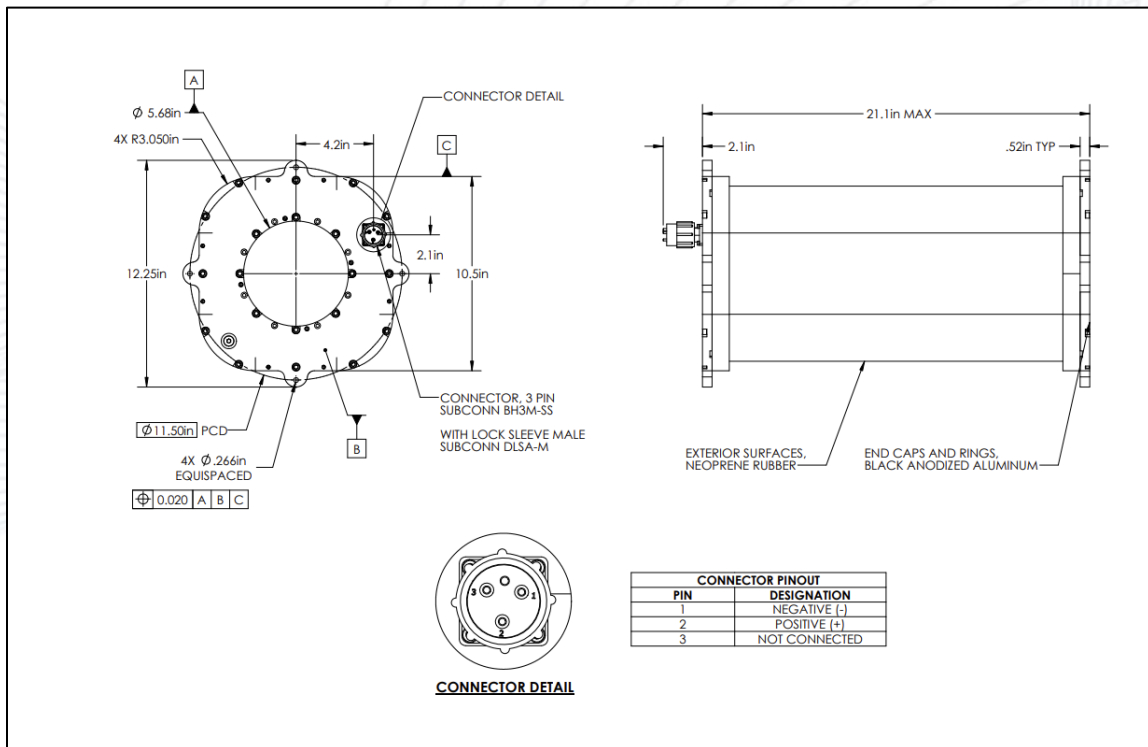


Figure 4: Dimensions of the M27-890 with labeled pin out