



M27-450 SPECIFICATIONS

M27-450 FFR

OVERVIEW

The M27-450 is a Free Flooding Ring (FFR) transducer that is broadband with unlimited depth capability and possess a toroidal beam pattern. They 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 together to produce custom high-power underwater sources.



CHARACTERISTICS

PHYSICAL:

Maximum Operating Depth	6000 Meters
Weight in Air	5 kg
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C
Connector	Subconn BH3M
Locking Sleeve	Subconn DLSA-F

ACOUSTIC:

Resonance Frequency	4250 Hz
TVR in at Resonance	138 dB re 1 μ Pa/V @ 1 m
Maximum Drive Voltage	600 Vrms
Maximum SPL	193 dB re 1 μ Pa @ 1 m
Beam Pattern	Toroidal
Capacitance	60 nF
Cavitation Depth at 193 dB re μ Pa @ 1 m	30 Meters

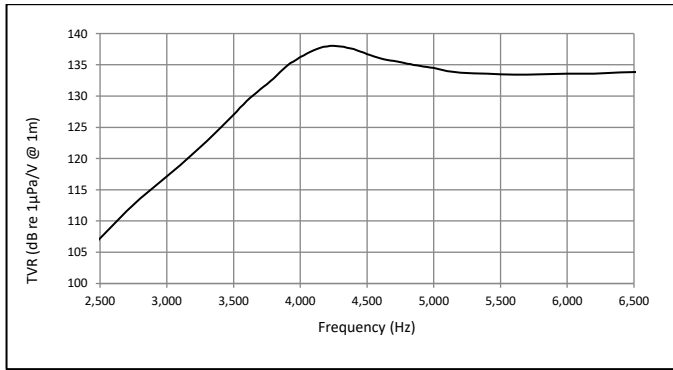


Figure 1: Transmit Voltage Response for M27-450

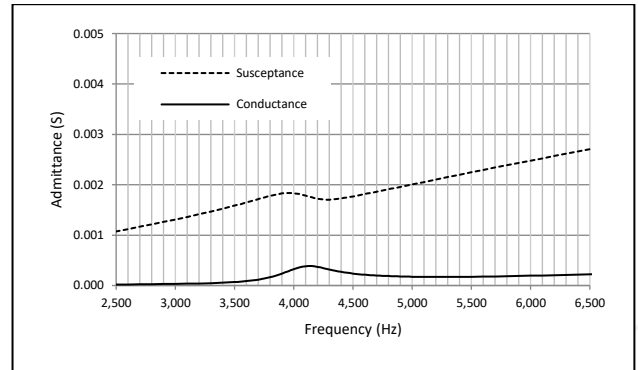


Figure 2: Admittance Plot for M27-450

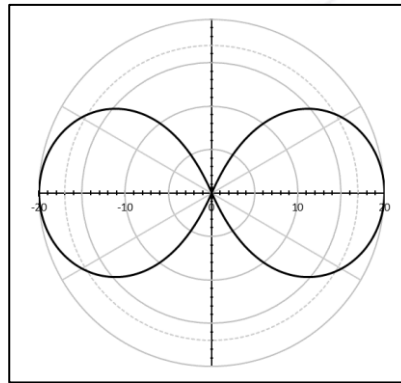


Figure 3: Beam Pattern for M27-450 at 4.25 kHz

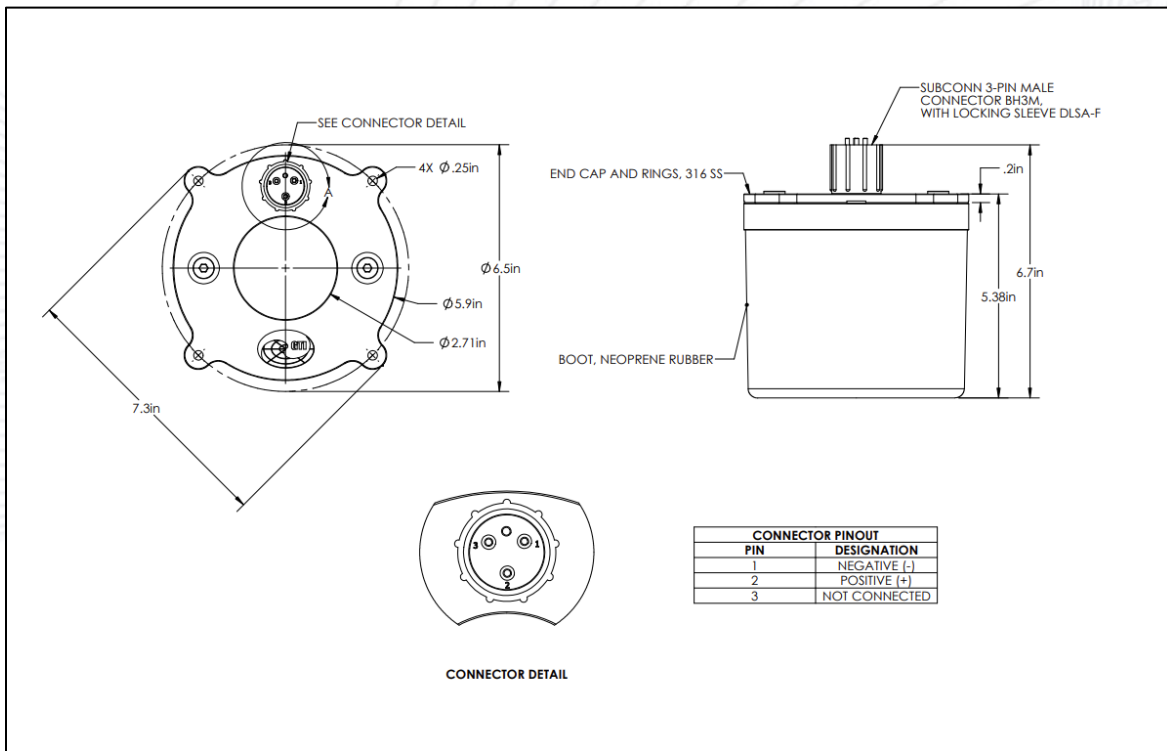


Figure 4: Dimensions of the M27-450 with labeled pin out