



# M27-550 SPECIFICATIONS

## M27-550 FFR

### OVERVIEW

The M27-550 is a low-frequency, broadband, free flooded ring (FFR) transducer, designed to be light-weight despite its performance at low frequencies. The M27-550 is capable of operating to full ocean depths and possesses a toroidal beam pattern. The transducer's endcaps 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	32 Kg
Weight in Water	13 Kg
Storage Temperatures	-40°C to +70°C
Operating Temperatures	0°C to +35°C
Connector	Subconn BH3M
Locking Sleeve	Subconn DLSA-M

#### ACOUSTIC:

Resonance Frequency	530 Hz
TVR in Band	135 dB re 1 $\mu$ Pa/V @ 1 m
Maximum Drive Voltage	600 Vrms
Maximum SPL	191 dB re 1 $\mu$ Pa @ 1 m
Beam Pattern	Toroidal
Capacitance	290 nF
Cavitation Depth at 191 dB re $\mu$ Pa @ 1 m	55 Meters

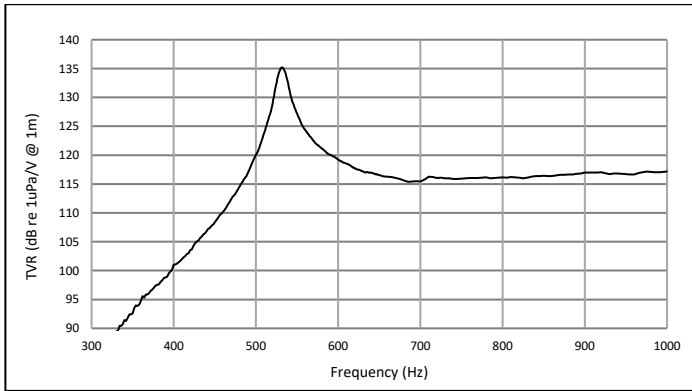


Figure 1: Transmit Voltage Response for M27-550

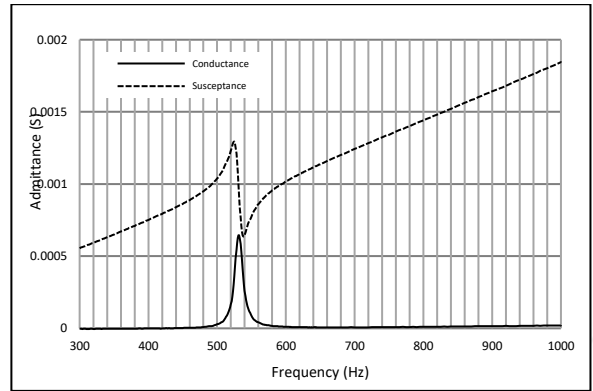


Figure 2: Admittance Plot for M27-550

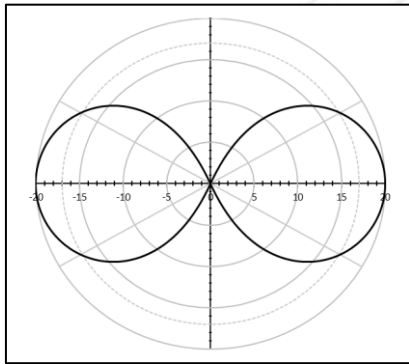


Figure 3: Beam Pattern for M27-550 at 530kHz

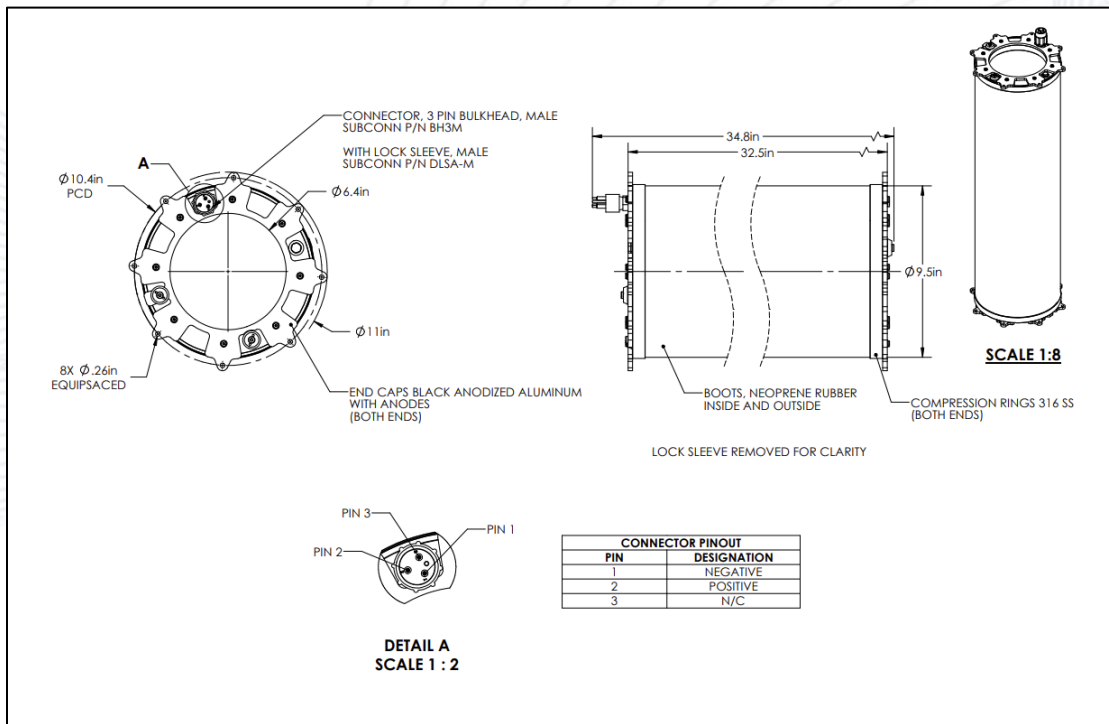


Figure 4: Dimensions of the M27-550 with labeled pin out