



# M27-650 SPECIFICATIONS

## M27-650 FFR

### OVERVIEW

The M27-650 is a Free Flooding Ring (FFR) transducer that are 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	4.5 Kg
Weight in Water	2.5 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	3050 Hz
TVR in at Resonance	137 dB re 1 μPa/V @ 1 m
Maximum Drive Voltage	600 Vrms
Maximum SPL	193 dB re 1 μPa @ 1 m
Beam Pattern	Toroidal
Capacitance	95 nF
Cavitation Depth at 193 dB re μPa @ 1 m	25 Meters

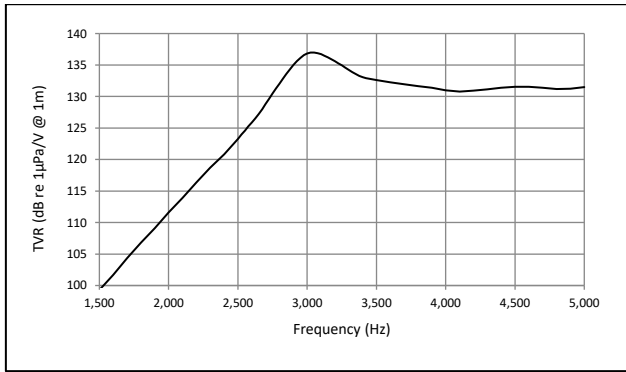


Figure 1: Transmit Voltage Response for M27-650

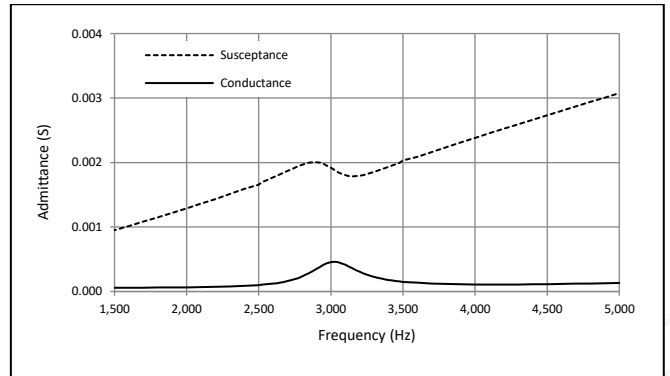


Figure 2: Admittance Plot for M27-650

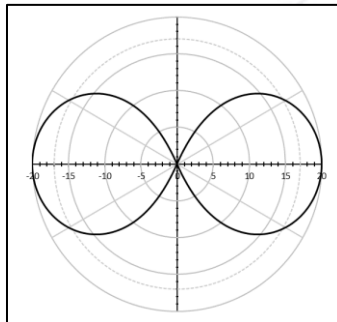


Figure 3: Beam Pattern for M27-650 at 3.05 kHz

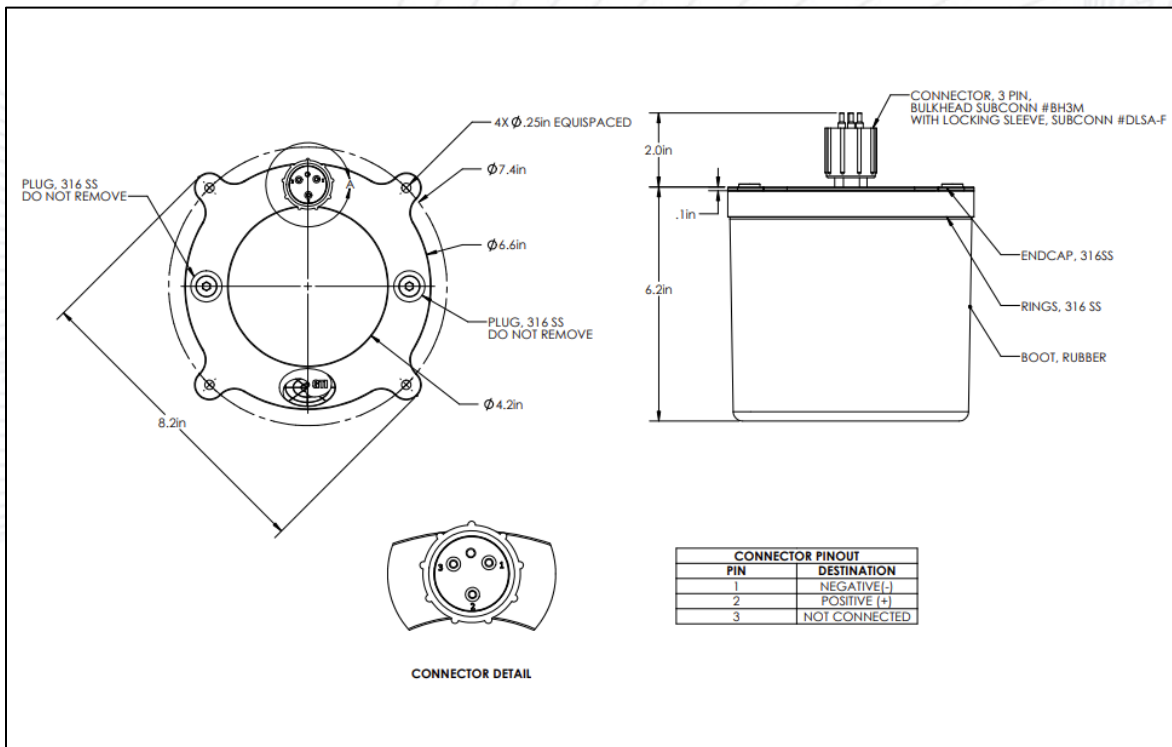


Figure 4: Dimensions of the M27-650 with labeled pin out