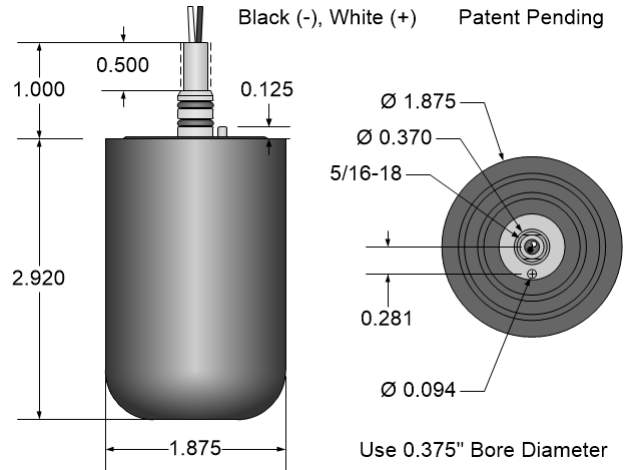


Model BT-28UF

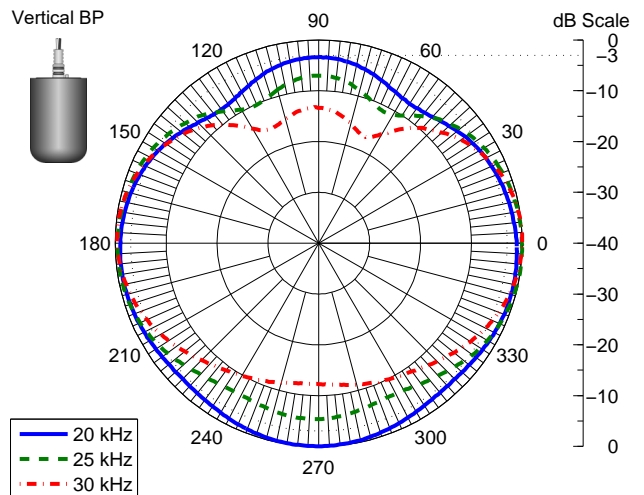
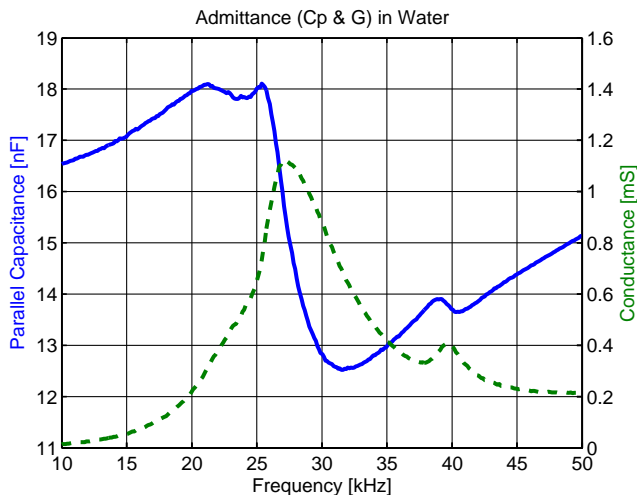
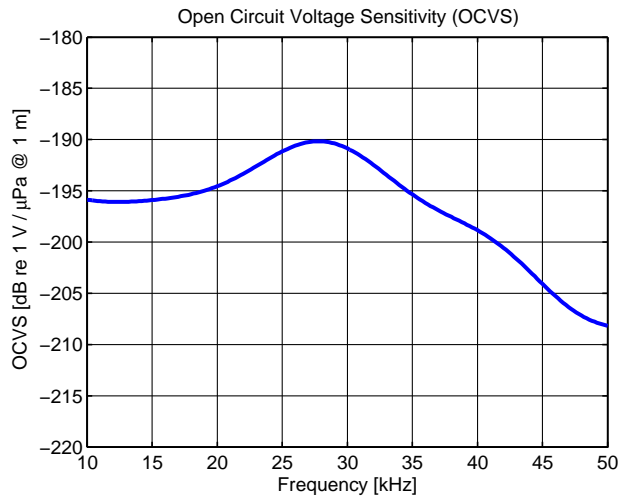
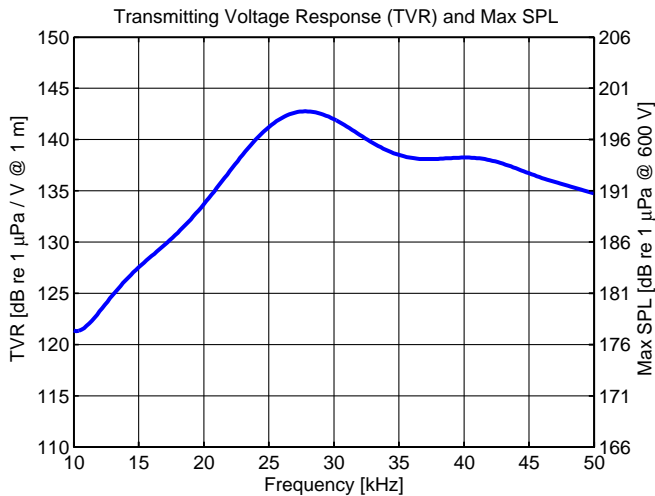
BTech's Model BT-28UF transducer is a proven standard for underwater acoustic communication (AComms).

Specifications (Nominal):

- Resonance Frequency (f_r): 28 kHz
- Coupling Coefficient (k_{eff}): 0.33
- TVR at f_r : 143 dB re 1 $\mu\text{Pa}/\text{V}$
- SPL (max) at f_r (@ 1 m): 199 dB re 1 μPa
- OCVS at f_r : -190 dB re 1 $\text{V}/\mu\text{Pa}$
- Horizontal Beam Pattern: Omnidirectional
- Vertical Beam Pattern: Toroidal
- Depth (max): 700 m
- Voltage (max): 600 Vrms
- Weight (in air, in water): 232 g (a), 83 g (w)

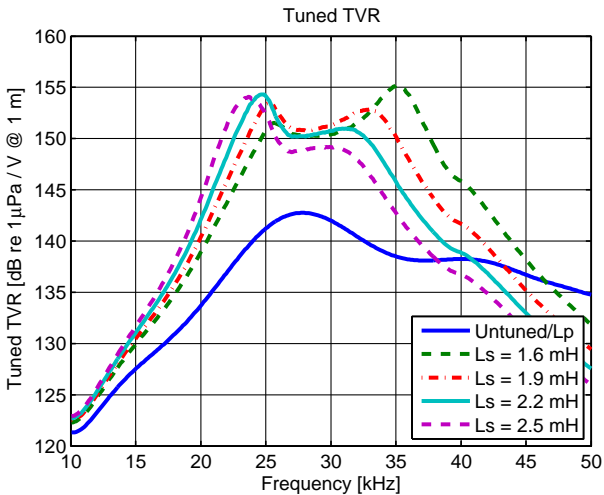
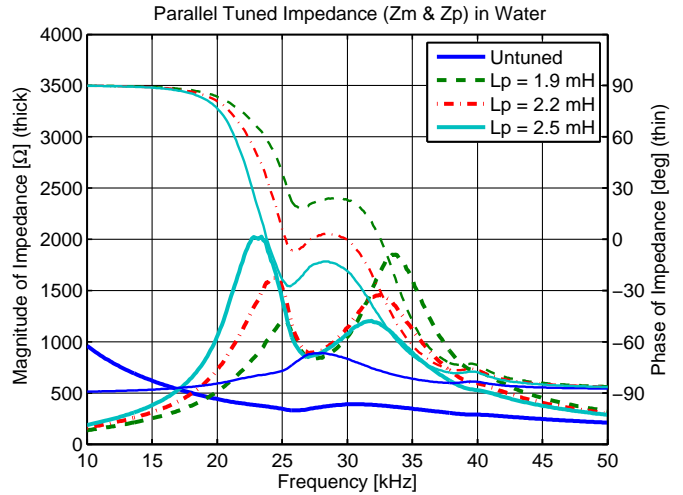
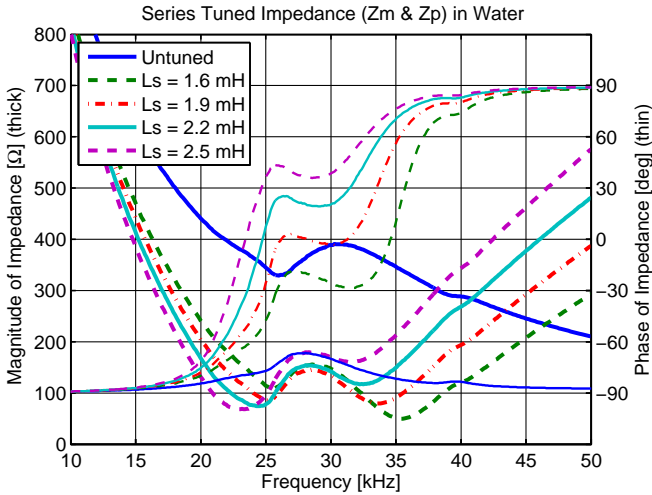
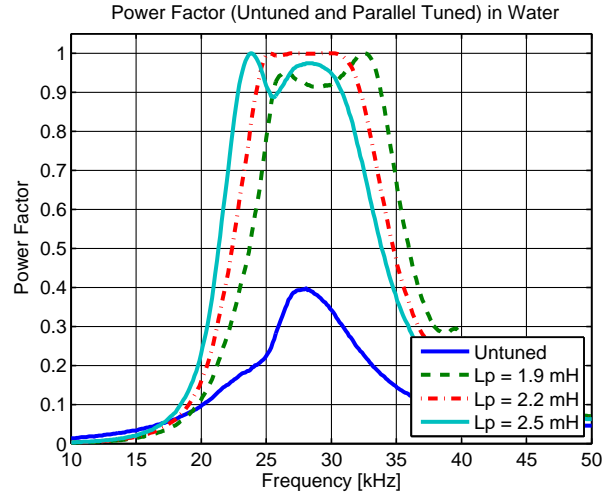
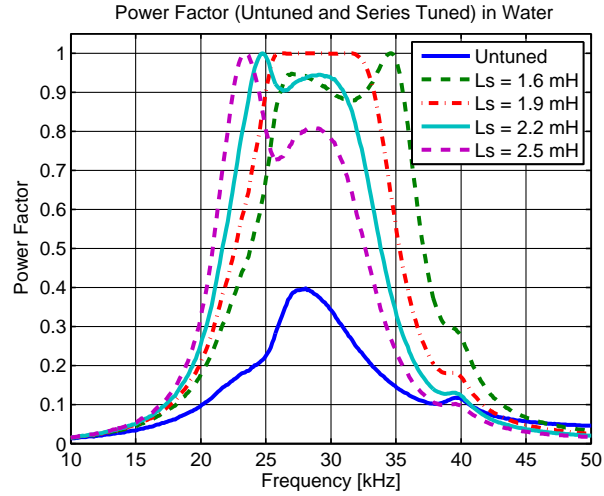


Performance Curves (Nominal):



Model BT-28UF

Tuned Performance Curves (Nominal):



Tuning and Matching is required for highly effective power delivery to the transducer. The impact on system performance for several values of series and parallel inductive tuning elements are provided.

BTech has extensive modeling capabilities to optimize any system configuration for greater bandwidth and efficiency.

NOTE: Serial numbers 100 and above have roughly 2 nF higher capacitance than those below 100. Refer to the device calibration sheet for actual admittance values.