

Ultrasonic Air Transducer

Technical Data Sheet

Airmar ultrasonic transducers deliver the highest level of performance in the most challenging environments and they are the key component for our customers success and their applications. Our precision tuned air-ranging transducers are tried and true performers, even when used for difficult tasks. American-made from the highest quality materials, Airmar's ultrasonic transducers provide reliable, long-lasting excellence to any measurement system.

1 MHz - 17mm



SPECIFICATIONS

Nominal Operating Frequency: 1 MHz

Nominal TVR @ 1MHz: 134dB re 1μ Pa per Volt @ 1m Nominal RVR @ 1MHz: -173dB re 1 Volt per μ Pa

Q₊: < 5

Minimum Parallel Resistance @ 1MHz: 230Ω

Free (1kHz) Capacitance: 800pF

Nominal Beam Width (@-3 dB Full Angle): 8°

Max Driving Voltage (2% Duty Cycle Tone Burst): 250V

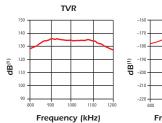
Operating Temperature: -20°C to 60°C

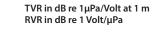
Weight: 3 g

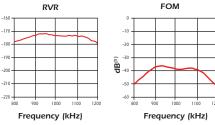
Housing Material: PEEK® **Acoustic Window:** PEEK

Note: Optimally, performance measurements should be taken when the transducer reaches a steady state.

Technical Data







1 MHz

Ultrasonic Transducer

Applications

- In-Pipe Flow Monitoring
- Open Channel Flow
- Wastewater Industry

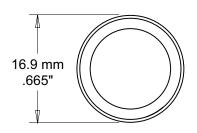
Features

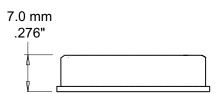
- Robust PEEK Housing
- · Low Profile
- Minimal Side Lobes

Options

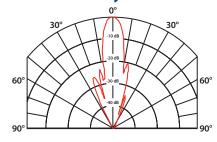
• M16 X 1.0 – 6g Threaded Housing

Dimensions





Directivity Pattern



Additional Resources

Theory of Operations



Applying Ultrasonic Technology



T1 Developer Board



Airmar's T1 Developer's Transceiver Module can be used for evaluation of 1 MHz Transducers.



