

AR41



| SPECIFICATIONS | |
|---|---|
| Best Operating Frequency: | 41 kHz, $\pm 4\%$ |
| Minimum Transmit Sensitivity at Best Transmit Frequency: | 110 dB re $1\mu\text{Pa}/\text{V}$ at 1 m |
| Minimum Receive Sensitivity at Best Receive Frequency: | -160 dB re $1\text{V}/\mu\text{Pa}$ |
| Minimum Parallel Resistance: | 150 Ω , $\pm 30\%$ |
| Minimum and Maximum Sensing Range*: | 30 cm to 20 m |
| Typical Sensing Range: | 35 cm to 15 m |
| Free (1 kHz) Capacitance: | 5,000 pF, $\pm 20\%$ pF |
| Beamwidth (@ -3 dB Full Angle): | 14°, $\pm 2^\circ$ |
| Maximum Driving Voltage (2% Duty Cycle Tone Burst): | 1,800 V _{pp} |
| Operating Temperature: | -40°C to 90°C |
| Weight: | 560 g |
| Housing Material: | Glass filled polyester |
| Acoustic Window: | Glass reinforced epoxy |

*Pulse-Echo Mode. Minimum and maximum ranges are best case scenarios. Actual range may vary, depending on drive circuitry and signal processing.

41 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement
- Proximity
- Obstacle avoidance
- Traffic control
- Flow measurement

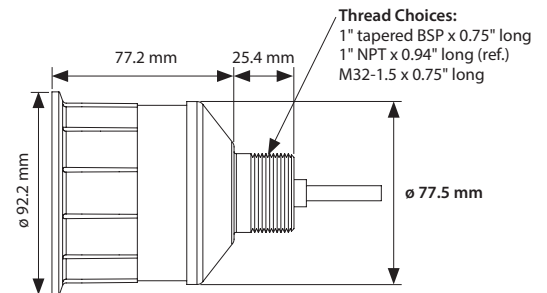
Features

- Rugged sealed construction
- Housing design will accommodate transceiver and signal processing electronics
- Standard internal shielding

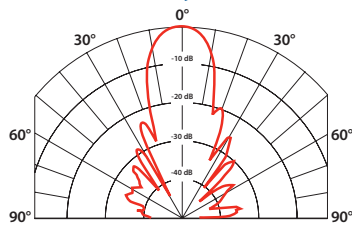
Options

- Complete assembly available with standard cable lengths
- Mounting cap available in BSP, NPT, or M32 threads
- Available in PVDF housing for use in chemically aggressive environments
- 10 K Ω thermistor available for temperature compensation

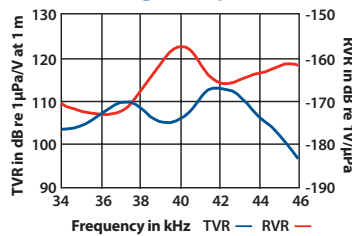
Dimensions



Directivity Pattern



Transmit & Receive Voltage Response



Impedance Magnitude & Phase

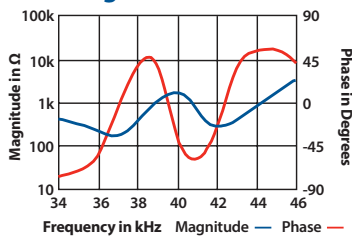


Figure of Merit (Sum of TVR & RVR)

