

ARK30

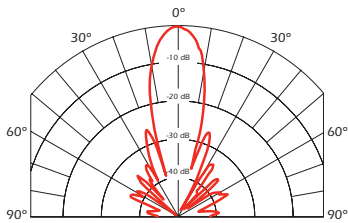


SPECIFICATIONS

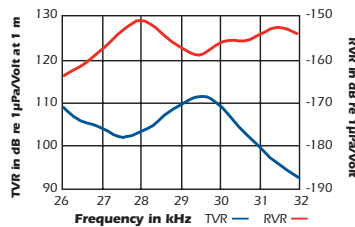
- Best Operating Frequency:** 30 kHz, $\pm 4\%$
- Minimum Transmit Sensitivity at Best Transmit Frequency:** 105 dB, 1 $\mu\text{Pa/V}$ at 1 m
- Minimum Receive Sensitivity at Best Receive Frequency:** -155 dB re 1V/ μPa
- Minimum Parallel Resistance:** 700 Ω , $\pm 30\%$
- Minimum and Maximum Sensing Range*:** 60 cm to 30 m
- Typical Sensing Range:** 80 cm to 25 m
- Free (1 kHz) Capacitance:** 5,700 pF, $\pm 1,000$ pF
- Beamwidth (@ -3 dB Full Angle):** 12°, $\pm 2^\circ$
- Maximum Driving Voltage (2% Duty Cycle Tone Burst):** 2,200 V_{pp}
- Operating Temperature:** -40°C to 90°C
- Weight:** 800 g
- Housing Material:** PVDF
- Acoustic Window:** PVDF

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

Directivity Pattern



Transmit & Receive Voltage Response



Impedance Magnitude & Phase

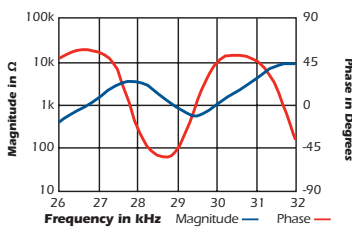
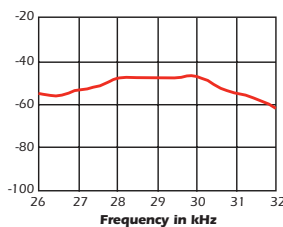


Figure of Merit (Sum of TVR & RVR)



30 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement
- Proximity
- Obstacle avoidance
- Traffic control

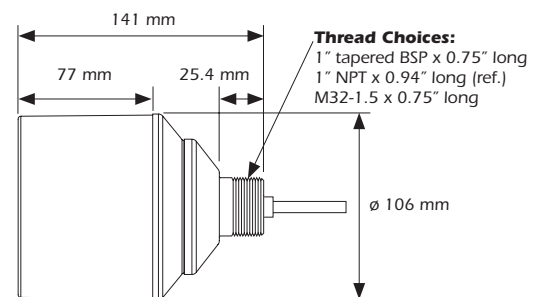
Features

- Rugged sealed construction
- Housing design will accommodate transceiver and signal processing electronics
- Mounting cap available in BSP, NPT, or M32 threads
- Standard internal shielding
- PVDF housing for use in chemically aggressive environments

Options

- Cylinder housing available with mounting cap kit
- Complete assembly available with standard cable lengths
- 10 K Ω thermistors are optional for temperature compensation
- FM approved

Dimensions



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