

AR50



SPECIFICATIONS	
Best Operating Frequency:	50 kHz, $\pm 4\%$
Minimum Transmit Sensitivity at Best Transmit Frequency:	106 dB re $1\mu\text{Pa}/\text{V}$ at 1 m
Minimum Receive Sensitivity at Best Receive Frequency:	-162 dB re $1\text{V}/\mu\text{Pa}$
Minimum Parallel Resistance:	$450\ \Omega$, $\pm 30\%$
Minimum and Maximum Sensing Range*:	25 cm to 15 m
Typical Sensing Range:	30 cm to 10 m
Free (1 kHz) Capacitance:	5,700 pF, $\pm 20\%$ pF
Beamwidth (@ -3 dB Full Angle):	12° , $\pm 2^\circ$
Maximum Driving Voltage (2% Duty Cycle Tone Burst):	1,500 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.

50 kHz

AIRDUCER® Ultrasonic Transducer

Applications

- Level measurement
- Open channel flow
- Obstacle avoidance
- Proximity

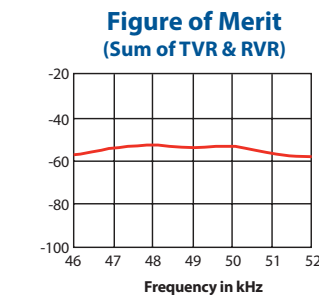
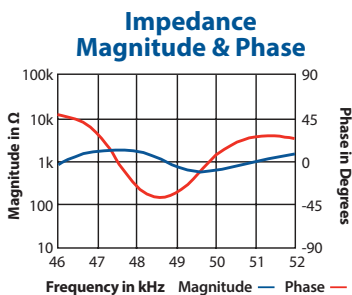
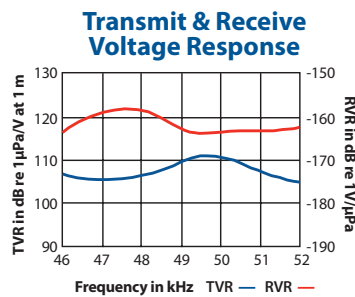
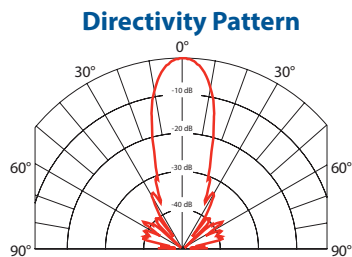
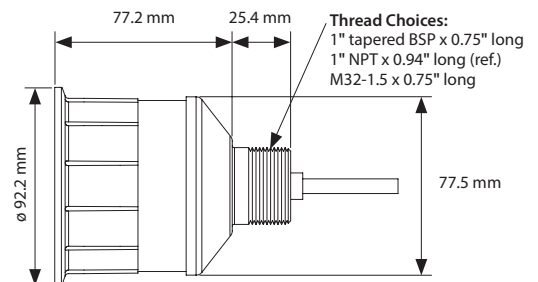
Features

- 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
- 10 K Ω thermistor available for temperature compensation
- Available in PVDF housing for use in chemically aggressive environments
- FM approved

Dimensions



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