



Pressure Transducers | Gun Depth and Line Pressure Transducers

- **Significant improvement over conventional units achieved by implementing a curve-fitting algorithm. A thick ceramic piezo-resistive sensor film ensures excellent long term stability repeatability and accuracy.**
- **Advanced digital circuit design utilizing the latest advanced electronic design techniques with embedded dual digital processors and improved signal conditioning circuitry.**
- **Standard frequency output makes them fully compatible with existing industry standard depth and pressure monitoring systems and sensors.**
- **Available as 0-40M gun depth transducers or 15-3000 psi high pressure monitors.**



The Seamap range of depth and pressure transducers offer improved linearity, accuracy and stability over existing conventional transducer designs at an affordable price.

A significant improvement is achieved by implementing a curve-fitting algorithm utilizing a thick ceramic piezo-resistive sensor film.

The Seamap transducer design incorporates the latest in advanced electronic design techniques with embedded dual digital processors and improved signal conditioning circuitry, providing the capability to apply advanced error correction techniques which improve overall accuracy of depth and pressure readings over the full operating range.

Transducers are configured to have a standard modulated frequency output making them fully compatible with existing industry standard frequency modulated depth and pressure monitoring systems and sensors.

Optional communication formats such as RS232, RS485 or current loop 4-20mA are available. The digital output allow multiple transducers to transmit data on a single twisted pair eliminating the need for discrete analog pairs per sensor and, providing the ability to have additional depth or pressure monitoring positions on the sub array.

The Seamap transducers are designed specifically to work reliably in the harsh and demanding marine environment. They are capable of withstanding extreme physical conditions. Special care is exercised in the selection of high quality components and their packaging is designed to protect them against component failure, corrosion and physical abuse.

A ruggedised mechanical design utilizing 316 stainless steel, encapsulated electronics and industry proven connector protects the transducer from seawater corrosion and high impact mechanical shock.

A snubber attachment allows the sensor face to survive repetitive high over pressure acoustic shock, minimizing the effect of long term fatigue. The ceramic sensor element eliminates problems commonly associated with conventional units such as corrosion and deformation damage to the sensor face.

Our improved design extends the working life of the transducer well beyond conventional units.

A Seamap 16 channel 19" rack mount Depth and Pressure Monitoring System complete with quality control software is available to interface as required.

Pressure Transducers

Specifications

Performance (Gun Depth Transducer)

Operating Range 0-40 Meters	Frequency 6000 Hz - 10,000 Hz (100Hz/meter)
Full Scale Depth Range	40 m seawater
Maximum Tolerable Depth	150 meter seawater
Accuracy (25°C)	±0.125% of full scale
Temperature Drift	0.05% of full scale range/°C
Cable Length	700m (22AWG)
Sensing Element	Ceramic Thick Film Piezo-resistive

Performance (High Pressure Transducer)

Operating Range 15 psi-3,000 psi	Frequency 6,015 - Hz 9,000 Hz (1Hz/psi)
Full Scale Range	3,000 psi
Maximum Tolerable Pressure	4,500 psi
Accuracy (25°C)	±1% of full scale
Temperature Drift	0.03% of full scale range/°C
Cable Length	700m (22AWG)
Sensing Element	Ceramic Thick Film Piezo-resistive

Operating Environment

Operating Temperature	-20°C to 80°C
Compensated temperature	0 to 40°C
Shock Tested	80G

Electrical Specification

Connector	AGM1704M Male (1 ¹ / ₁₆ " Straight Thread 12 UNF)
Operating Voltage	24Vdc, 30mA nominal, reverse voltage and short circuit protected
Compatibility	Compatible with GCS90 Depth Monitor input, Seamap GunLink and DepthLink

Ordering Information

Description	Part Number
0-40m Depth Transducer ADT-F	01-19-0308
15-3,000 PSI Air Pressure	01-19-0304
SS Pressure Snubber	40-19-0003
Quick Connect 1/4" NPT Brass Connector	40-19-0040

Electrical Connection

Pin 1	+Vdc
Pin 2	NC
Pin 3	Gnd
Pin 4	NC

Mechanical

Housing Material	Stainless Steel 316
Length	28.5cm
Diameter	4.7cm
Weight	1.5 kg



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