APPLICATIONS

Engine & Control Systems

- Turbine Inlet & Exhaust Air Pressure
- Pumps
- Fuel, Absolute & Gage Pressure
- Fuel Filter Differential Pressure
- Oil Filter Differential Pressure
- Rudder Control
- Flooding Detection

HVAC

- Compressors
- Refrigeration
- Air Duct & Filter Differential Pressure
- Positive Cabin Air Pressure
- Barometric Pressure

Shipboard Water Systems

- Potable Water
- Desalinization Systems
- Fire Mains
- Tank Level Measurement

Hydraulic & Pneumatic Systems

- Compressors
- Pumps
- Membrane Dehydrators

Resource Exploration

- Subsea Control Modules
- ROVs
  - Depth Sensors
  - Hydraulics
- Towed Arrays
- Air Guns
- Downhole Tools

Kulite Marine Pressure Transducers For Extreme Environments

Kulite state of the art pressure transducers are ideal for shipboard, downhole, subsea, and general military and commercial marine applications. The core technology is a patented piezoresistive silicon-on-insulator sensing element with decades of reliable use on mission critical systems on aerospace and naval programs. The specific characteristics of the sensing element are designed to meet the particular pressure and accuracy requirements of each application. The sensing element is combined with the necessary electrical interface to provide the required output. All-welded construction provides a hermetic seal to eliminate the effects of moisture, salt, dust, and other environmental contaminants. Construction is commonly 316 stainless steel, Inconel, or Hastelloy for optimum corrosion resistance and long term reliability in a seawater environment.

The extremely low mass of the solid-state, monocrystalline silicon diaphragm yields a device with excellent tolerance of environmental shock and vibration. This same characteristic of the Kulite sensor also accounts for its extremely fast response. The stiffness of the monocrystalline silicon material renders the device insensitive to changes in inclination.

The Kulite sensor is coupled with an internal electronics assembly, providing proven long term stability. This assembly contains a precision voltage reference to the Wheatstone bridge, appropriate signal conditioning (voltage amplification, voltage to current conversion or voltage to frequency conversion) and RFI/EMI protection to the transducer circuit. Transducer output can be in volts, millivolts, or 4-20 mA.