

Sensor Cables

Thermax sensor cables are designed to maintain critical low-level signals from sophisticated sensors, providing a clean data transmission that helps preserve the information from the sensor.

Whether your application calls for the measurement of weight, fluid levels, flow rate, proximity or vibration, we can design and build a cable to meet even your most demanding needs in such applications as:

- Pressure Transducers (Liquid Level, Flow Level, Load Cell);
- Photoelectric Transducers;
- Proximity Transducers;
- Vibration Sensors.

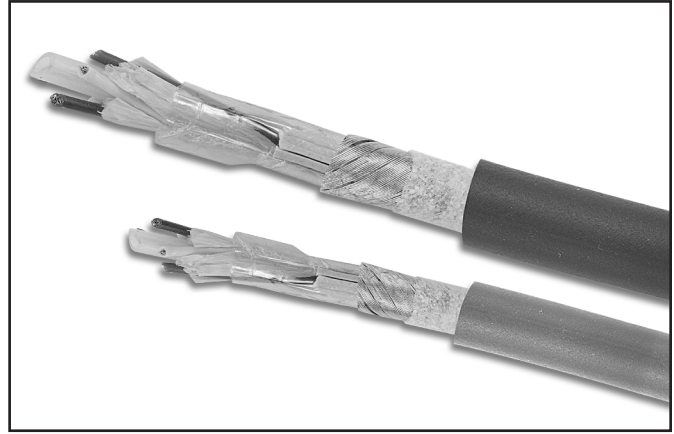
We have extensive experience manufacturing rugged cable constructions suitable for hostile environments such as those present in wastewater treatment facilities, municipal drainage sumps, and well-monitoring applications.

Our cables can be designed with materials suitable for demanding short term, long term, or permanent installations, even those with extreme environments.

Our cables are capable of withstanding temperatures from -55°C to $+260^{\circ}\text{C}$.

The material options listed on this page represent typical choices for sensor cables.

Please contact your Thermax representative with your specific requirements.



Construction Options

Typical sensor cable materials:

Conductors: Stranded or solid copper or high-strength copper alloy. Silver or nickel plated.

Insulation: FEP; PVC; Nylon; PTFE; polyethylene; polypropylene. An optional secondary insulation of Nylon can be applied over the primary insulation to assure low leakage current, even under environmental extremes of moisture, chemicals and mechanical flexure.

Breather Tubes: Polyethylene; Nylon.
(For use in submersible applications where air pressure regulation is required.)

Shields: Aluminum/Mylar foil; copper braid, either flat or round wires (nickel, silver, or tin plated); stainless steel braid for increased mechanical strength. Custom combinations of shield types available for enhanced shielding and EMI resistance.

Jackets: FEP; PFA; PVC; TPR; polyurethane; Surlyn[®]; Tefzel[®]. Dupont Tefzel[®] and Surlyn[®] materials are commonly used where their increased abrasion resistance and inert chemical profile are desirable for the specific application. Examples are remediation wells and drinking water tanks that are periodically sanitized using chemicals such as sodium hypochlorite without removing the transducer.

Strength Members: Stainless steel or Kevlar[®] strength members can be incorporated into cables requiring enhanced longitudinal strength.