INTEGRAL CABLE SENSORS FOR

Submersible Applications



WHEN RELIABILITY MATTERS CONNECT TO CONFIDENCE

Many industrial processes have a requirement for sensors to be submerged. Whenever sensors are submerged they must be properly designed to meet certain requirements depending on the environmental conditions where they will be immersed.

Underwater Sensors & Cables



Sensor Construction

All of CTC's sensors are hermetically sealed and 100% of our sensors are helium leak tested to ensure against microscopic leaks that can form in improperly welded seams. Integral cables are soldered and molded to the sensor bodies after the leak testing.



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Water Submersion

In most situations involving water submersion, in either freshwater or salt water, as long as no other potentially damaging chemicals are present, polyurethane integral jacketed cables are the proper choice. For integral polyurethane jacketed cables, the cables are soldered to the glass insulated sensing element contacts and have an additional reinforcing stainless steel piece over which the cable and sensor receive a molded polyurethane strain relief.





Submersion in Oils or Chemically Active Solutions When sensors are submerged in oils or solutions that involve chemicals present in potentially damaging concentrations, integral FEP jacketed cables are usually recommended. The integral FEP jacketed sensors use the same basic sensor body design as the polyurethane jacketed versions with a hermetically sealed, helium leak tested body. The integral FEP jacketed cables are highly resistant to damaging chemicals and can be submerged up to 200 ft or 60 m, the same depth as CTC's sensor line with integral polyurethane jacketed sensors.

Other Abrasive Applications

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In other situations where extra durability is required, armor jacketed FEP cables are recommended. Manufactured with the same processes as the other integral cables above, the integral armored cables can be used in applications where there may be abrasive materials present, such as sand or gravel.



CTC is the world leader in the design and manufacture of industrial accelerometers, piezo velocity transducers, 4-20 mA vibration sensors, and proximity probes as well as all related mounting hardware, cabling, and junction boxes. Our products enable efficient vibration monitoring for predictive maintenance in a wide variety of industries. Industries served include cement, mining, petrochemical, food & beverage, auto, steel, wind, paper & pulp, power generation, water & wastewater treatment, pharmaceutical, hospitals, bottling, and more. Our mission is to offer the widest variety of accelerometers and vibration hardware products, which are compatible with data collectors and online monitoring systems, as well as the tools for installation.



The CTC product line features vibration analysis hardware for heavy industry.

All CTC products are backed by our unconditional, lifetime warranty. If any CTC product should ever fail, we will repair or replace it at no charge.



The PRO line offers 4-20mA vibration monitoring solutions and proximity probes.

All PRO products are backed by a lifetime warranty on materials and workmanship. PRO will repair or replace any of our products as long as the product was not subjected to misuse, neglect, natural disasters, improper installation, or modification.

All stock products qualify for a full refund if returned in new condition within 90 days of shipment. Build to order products qualify for a 50% refund if returned in new condition within 90 days of shipment. Custom products are quoted and built specifically to the requirements of the customer, which may include completely custom product designs or private labeled versions of standard products for OEM customers. Custom products ordered are non-cancellable, non-returnable and non-refundable.