

# The CTS "Trifecta" Of Excellence:



## Why The Best Choose CTS:

### QUALITY PRODUCTS

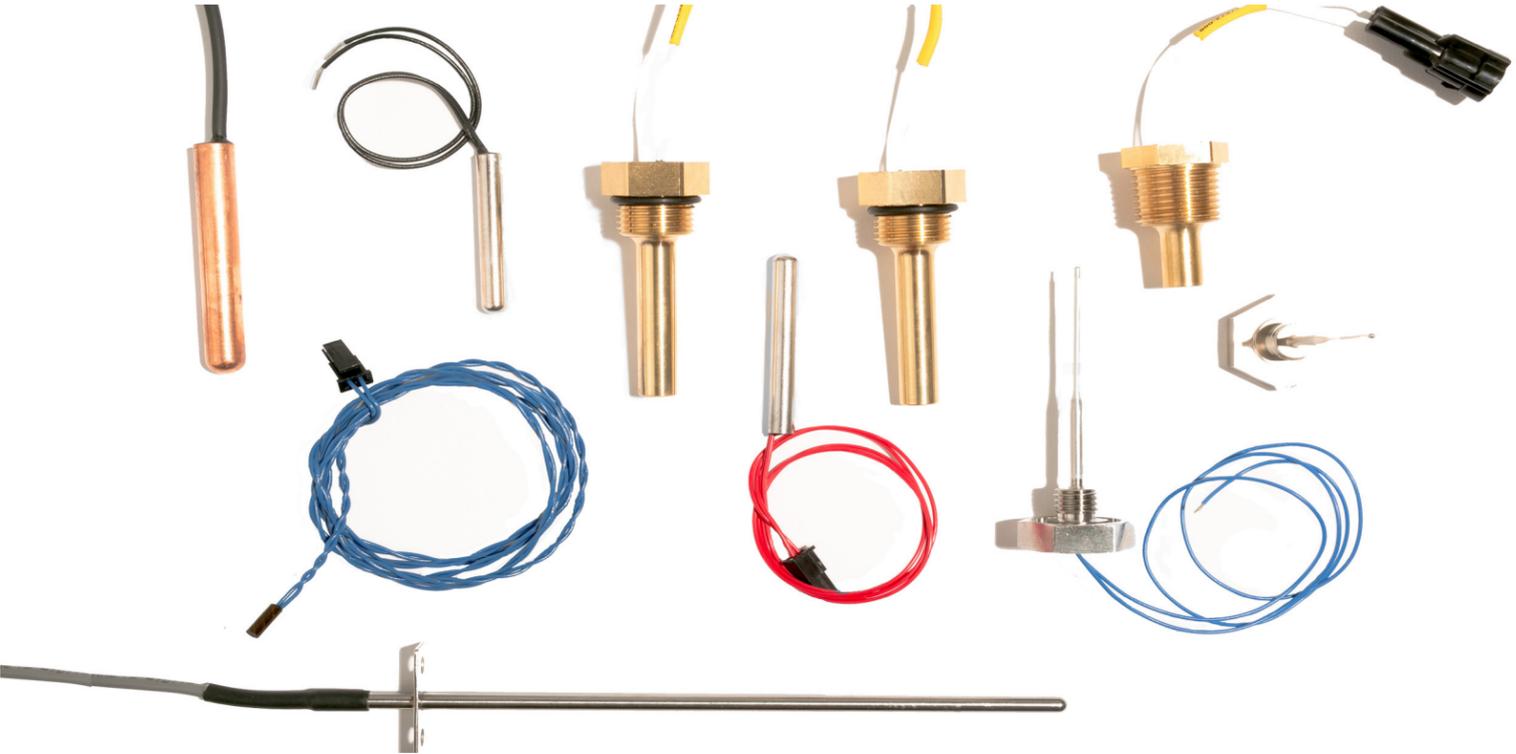
- World-class application engineering
  - Design capabilities
- Highly accelerated life testing
- Rapid prototyping

### ON-TIME DELIVERY

- Commitment to world-class manufacturing
  - 100% on-time delivery—no excuses
- 100% commitment to lean and Six Sigma certification
  - Focus factory approach to scalability

### AUTHENTIC RELATIONSHIPS

- Strategic partnership focused on winning together
- Accountability that only a true partner can offer



# HVAC/ REFRIGERATION SENSOR LINE

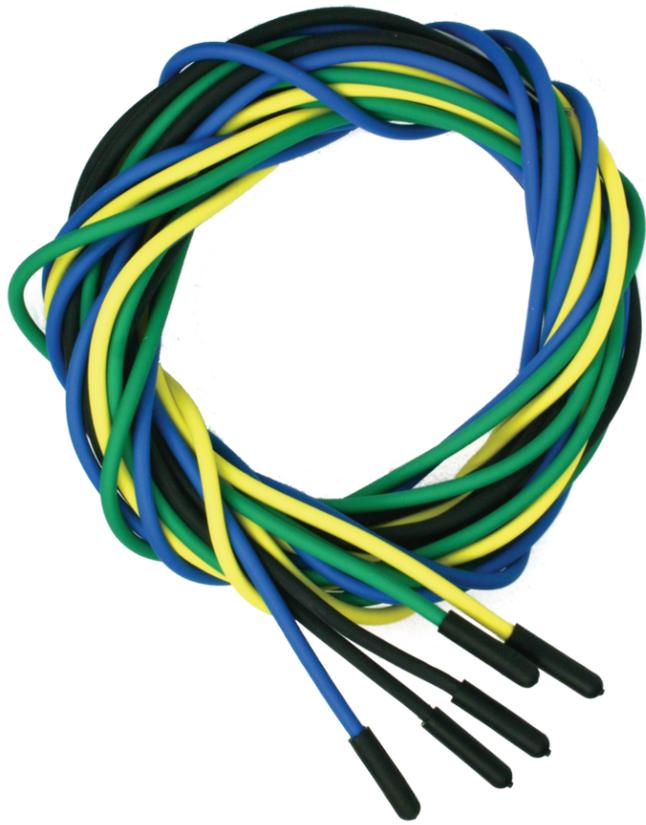
There is an increasing need for dependable, cost-effective sensors for use in HVAC and Refrigeration equipment and building automation. CTS Temperature Solutions delivers cost-effective and high-quality solutions tailored to the temperature sensing needs of small to large OEMs. Our HVAC/R line includes temperature sensors suitable for a wide range of applications, such as humidifiers, air handlers, evaporator fins, and cabinet temperature applications.

### HVAC/R SENSOR LINE FEATURES

- Sensors for a wide variety of HVAC/R applications, from discharge lines and cabinet temperature to air ducts and plenums
- Sensors and assemblies can be customized
- CTS' HVAC/R sensor line is made to withstand harsh environmental conditions
- Value-added options, such as sensor clip mounts, connectors, and cable assemblies, are available



CTS is a leader in world-class temperature sensing technology with proven expertise for the most demanding customers in the world. We custom-engineer the industry's most reliable temperature sensors for mission-critical applications. As a true business partner, we deliver beyond the products we make as we relentlessly pursue excellence in everything we do. Contact us to discuss your temperature sensing needs today.



## IP68 TEMPERATURE SENSORS

CTS' IP68 temperature sensors are engineered to meet the harshest of environments within refrigeration applications. Our proprietary design and assembly process ensures these sensors will continue to perform as expected, exceeding customer warranty requirements. Our in-house validation testing is able to cycle parts through freeze and defrost cycles giving OEM's the level of confidence required when designing this sensor into their refrigeration system.

(Left) QTIP68 temperature sensors can be customized to fit your sensor needs.

## VALUE-ADDED OPTIONS

### CLIP MOUNT

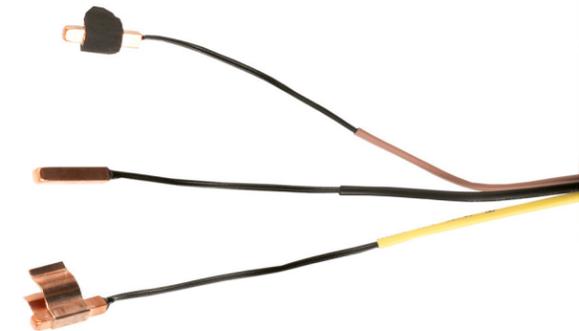
Save installation time and improve the performance of QTIP68 and QT06042 Swage Series sensors by clipping them to copper tubing. Our standard clip made from stainless steel is compatible with copper tubing. A variety of clip sizes are available to suit most refrigeration appliances.

Clip sizes available: 1/4", 3/8", 1/2", 5/8", 7/8", and 1 1/8". 1/4" and 3/8" clips are 0.38" wide. Other clips are 0.625" wide.



### QT06044 Series

CTS' custom engineered HVAC sensor line is designed to quickly and easily mount to copper refrigeration lines and keep water from penetrating the sensor. These fast responding sensors are ideal for high volume production where ultimate reliability is demanded.



## WATERPROOF SENSORS

### HYDROGUARD QTIP68

- Double insulated thermoplastic rubber
- Ruggedized housing, corrosion resistant cable
- Waterproof rating to IP68
- Based on the most common industry NTC thermistor curves ideal for harsh freeze/thaw cycles
- Possible applications: refrigeration and air conditioning equipment and high humidity environments
- Optional clip mount for easy installation on copper tubing (see "Clip Mount")
- Cable color and thermistor resistance values customizable



### QT06042 SWAGE SERIES

- Robust sensor for a broad range of sensing applications
- Operating temperature range: -40 °C to 105 °C (-40 °F to 221 °F)
- Ideal for industrial applications where response time is crucial
- Swaged end provides cable strain relief and improves moisture resistance
- CTS-manufactured thermistor provides unrivaled accuracy, stability, and reliability
- Optional clip mount for easy installation on copper tubing (see "Clip Mount")



## AIR SENSORS

### QT06037 SNAP-IN AIR SENSOR SERIES

- Typical wire sizes #22-26 AWG
- Material: stainless steel or nickel plated brass
- Incorporated press-in clip for easy installation and greater sensor accuracy
- Ideal for air temperature sensing in HVAC applications (install in plenums or blower housings)
- Available in several thermistor curves and resistances



### QT06004 FLANGED TIP SERIES

- Available in a variety of sizes with or without brazed ange
- Flange can be screwed or riveted in place
- Typical wire sizes #22-28 AWG
- Material: stainless steel
- Flange style, cable length, connector, and terminations can be customized
- Available in multiple thermistor accuracies and values



## MULTI-PURPOSE SENSORS

### QT06001 THREADED SERIES

- General purpose, rugged high-pressure design
- Typical wire sizes #22-28 AWG
- Material: stainless steel, brass, titanium
- Straight thread option with or without O-rings
- Threads allow for simple sensor installation
- Sensor type and accuracy, connector, and cable length can be customized



### QT06005 CLOSED END TUBE SERIES

- Versatile multi-purpose sensor
- Standard size is 0.040" to 0.250" in diameter
- Typical wire sizes #22-32 AWG
- Material: stainless steel, brass, titanium, Inconel, Hastelloy
- Moisture resistant
- Termination type, cable length, housing style, and wire style can be customized
- Available in multiple thermistor accuracies and values