Physitemp multisensors are made with our specially manufactured thermocouple wire. We test and grade this wire to standards better than the accepted “Special Limits of Error” and guarantee 0.1°C accuracy in the range of 0-50°C. All multisensor probes conform to NIST standards. These multisensor probes are custom-made and should be ordered to your requirements on number of sensors and spacing between sensors.

Most common applications have been for cancer hyperthermia, where tissue temperature is an important clinical variable.

We use two different design techniques for the manufacture of the IT Series Flexible teflon probes. Each method has advantages:

In METHOD A, two individual wires (one copper, one constantan) are used for each sensor. Sensors can be as close as 5 mm apart.

In METHOD B, a single common constantan wire is used. Separate copper wires are then connected to different points along the constantan wire to form the sensors. With this method, the probe can be made at least one gauge thinner and errors due to wire conduction are reduced. Sensors must be no closer than 5 mm apart.

**IT Series Flexible Teflon® Probes**

Teflon® sheathed thermocouple wires are implanted with regular hypodermic needle 14ga. or 17ga.

When ordering, specify: Probe series (IT), needle gauge, number sensors and distance between sensors. We can put up to 10 sensors in a IT series probe.

e.g.: IT-17(3) is implanted with 17ga needle and has 3 sensors. Unless otherwise specified we put sensors 1cm apart, starting at tip.

**MT Series Needle Microprobes**

These stainless steel microprobes have closed, sharpened tips. We can put up to 3 sensors in a 23ga needle and 2 sensors in a 26 ga. needle. When ordering, specify: Probe series (MT), needle gauge, needle length, number of sensors and distance between sensors in cm.

e.g. MT-23/5(2)I is a 23ga needle, 5cm long with 2 sensors -isolated. Unless otherwise specified, sensors will be 1 cm apart, starting at tip.

**Multisensor needle probes can be made with either isolated or non-isolated sensors. Please specify when ordering.**

**Note:** Probe length is 60” maximum. Shorter lengths can be made. To extend to distance between probe and readout, order 6 foot extension lead, EXT-6 (see p. 15).