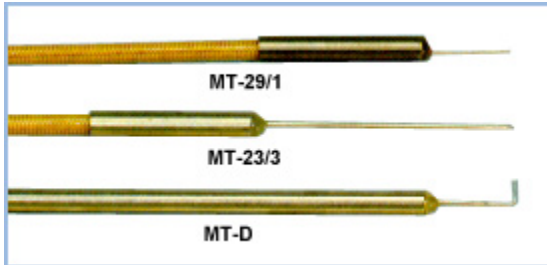


Type T Thermocouple Probes & Wire

Needle Microprobes



Type	Dia.	Time Constant
MT-23	23 ga. (.125")	.15 secs.
MT-26	26 ga. (.018")	.1 secs.
MT-29	29 ga. (.013")	.125 secs.

Fast-response needle probes for instant readings in tissue, semisolids, liquids. Also for very small specimens, powders and materials. Needle tip is sealed to ensure only stainless steel contacts specimen. Max. temp. 200°C. 5 ft. lead. Smallest microprobes give fastest reading. Short probes are easier to insert and last longer. Type #'s indicate needle gauge and needle length in cm..-

Sizes Available (ga/cm.):

MT-29/1, MT-29/2, MT-29/3, MT-29/5

MT-26/2, MT-26/4, MT-26/6

MT-23/3, MT-23/5, MT-23/8

MT-4 - Similar to **MT-29/1** but has blunt tip. Good for instant skin and surface temperatures, liquids. Time constant .025 secs. Not isolated.

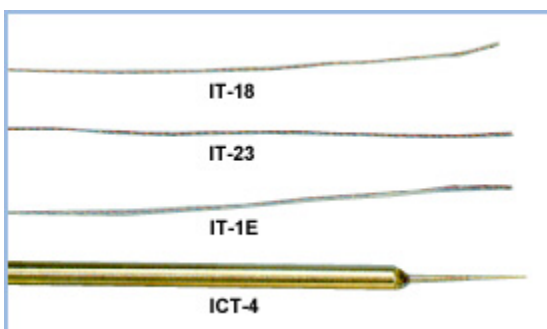
ICT-4 - For use on integrated circuits and other micro specimens. 0.013" dia. straight stainless steel shaft; slightly protruding sensor bead to facilitate temperature probing. 5" tubular handle fits micro- manipulators. Max. Intermittent Temp. 200°C, continuous use 100°C, Time constant 0.25 secs. 5 ft. lead. Not Isolated.

MT-29/1B - Insect Probe - Similar to MT-29/1 but sensor is welded into tip for max. heat transfer. Designed for high accuracy on extremely small specimens such as insects, seeds, etc. Max. insertion depth 1/8". Time constant 0.015 secs. 5 ft. lead. Max. Temp. 150°C. Other sizes made to special order. Not Isolated.

All above probes are non-isolated. Isolated versions of 23 ga. and larger needles are available for special order.

[Get Prices](#)

Flexible Implantable Probes



Type	Dia.	Time Constant	Lead Length
IT-14	.050"	0.3 secs.	3 ft.
IT-18	.025"	0.1 secs.	3 ft.
IT-21	.016"	0.08 secs.	1 ft.

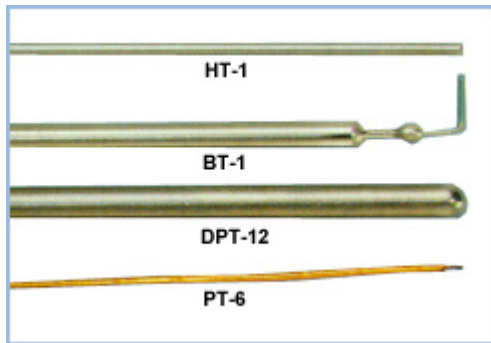
IT Series. Implantable in semi-solids and tissue with needle (supplied). Also for immersion in various solutions and rectal temperatures of small animals. Totally sheathed in chemical resistant Teflon. Quite rugged. Max Temp. 150°C. Isolated. Type # designates needle gauge. (Or one gauge smaller in thin wall).

IT-23 - For ultra fast measurements and for use on micro-size specimens. Sensor lead only 0.009" dia. Tissue implantable with 23ga. needle (supplied). Rather fragile. Max. temp. 150°C. Time constant 0.005 secs. 3 ft. lead. Teflon coated. Isolated.

IT-1E - As IT-18 but sensor bead exposed. Combines the ultra-fast response of IT-23 with the Teflon sheath strength of IT-18. Time constant .005 secs. Isolated.

[Get Prices](#)

General Purpose Probes



HT-1 - "Workhorse" probe for liquids, gases, semi-solids. Plastic handle with straight stainless steel shaft. Not good for surface temps. Max. Temp. 400°C. Time constant 0.5 secs. 5 ft. lead. Not Isolated.

HT-2 - As HT-1 but with 9" shaft.

BT-1 - For surface temperatures of solids, also for liquids, gases and semi-solids. Probably our best general purpose probe. Welded stainless steel shaft, plastic handle. Tip is .02" diameter bent at right angle to probe to facilitate accurate surface measurement. 5 ft. lead. Immersible. Max. Tip Temp. 240°C. Time constant 0.15 secs. Not Isolated.

DPT Series- Immersion probes for liquids. #304 stainless steel welded shaft, wooden handle. 5 ft. lead. Max. Temp. 400°C (750°F). Time constant 2 secs. Not Isolated.

DPT-12 12" shaft	TFT-12 12" shaft
DPT-24 24" shaft	TFT-24 24" shaft
DPT-35 36" shaft	TFT-36 36" shaft

TFT Series - Immersion probes for corrosive liquids. Similar to DPT series but shaft is Teflon coated. Max. Temp. 150°C (300°F). Time constant 3 secs. Isolated. 5 ft. lead.

PT-6 - Sensor Six-Pack. For multi-point measurements. Inexpensive, flexible, welded sensor beads, tough Kapton insulation, 5 ft. leads. Max. Temp. 400° C. Time constant 0.01 secs. Per package of six. Not Isolated.

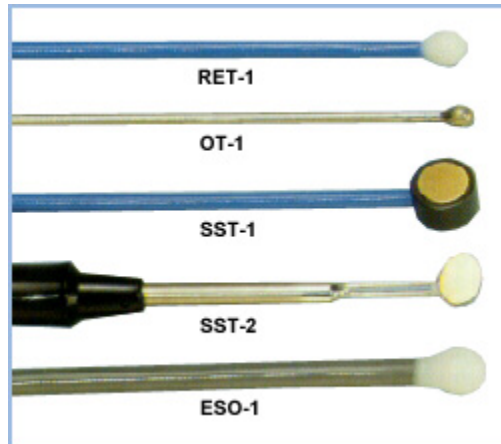
PIT-12 - For permanent installation. 12" Inconel shaft 1/8" dia. Can be formed to fit inside or outside any dia. pipe. Complete with 1/8" NPT compression fitting. 10 ft. leads and quick-disconnect plugs and sockets. Max. Temp. 400°C (750° F). Time constant 3 secs. Not Isolated.

PIT-6 - Has 6" stainless steel shaft; otherwise as PIT-12.

GT-1 - Air and gas probe. 24" #304 stainless steel shaft, wooden handle. 5 ft. leads. For instant readings of temperature gradients in environmental chambers, freezer boxes, etc. Max. Temp. 200°C. Min. Temp. -200°C. Isolated.

[Get Prices](#)

Clinical Probes



RET-1 - Rectal probe for humans, neonatal, rabbits, and larger animals. Flexible, vinyl covered, soft tipped. Does not cause discomfort. Max. Temp. 90°C. Time constant 5.0 secs. 5 ft. lead. Isolated.

OT-1 - For fast reading oral use. Ball-tipped stainless steel shaft, stainless handle. 5 ft. lead. Max. Temp. 125°C. Time constant 0.8 secs. Not Isolated.

DSP-1 - Disposable sheaths for use with OT-1 and RET-1, per 1000.

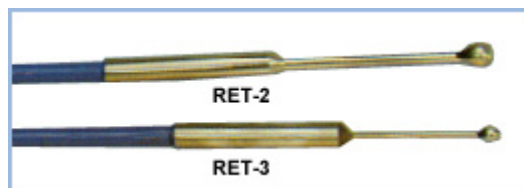
SST-1 - Skin surface probe, to be taped on. 1/4" dia. 10 Kt. gold sensor disc, 5 ft. lead. Max. Temp. 90°C. Time constant 0.15 secs. Not Isolated.

SST-2 - as SST-1 with plastic handle. Isolated.

ESO-1 - Esophageal probe. Flexible vinyl covered 1/8" dia. Max. Temp. 90° C. Time constant 5.0 secs. 5 ft. lead. Isolated.

[Get Prices](#)

Animal Rectal Probes



RET-2 - Rectal probe for rats. For fast intermittent measurements. Smooth ball tip. Stainless steel shaft - 1" long, 0.59" dia., tip dia. .125". 5 ft. lead. Max Temp. 125°C. Time constant 0.8 secs. Not Isolated.

RET-3 - Rectal probe for mice, etc. As RET-2, with shaft 3/4" long. .028" dia. Tip diameter .065". Time constant 0.5 secs. Not Isolated.

[Get Prices](#)

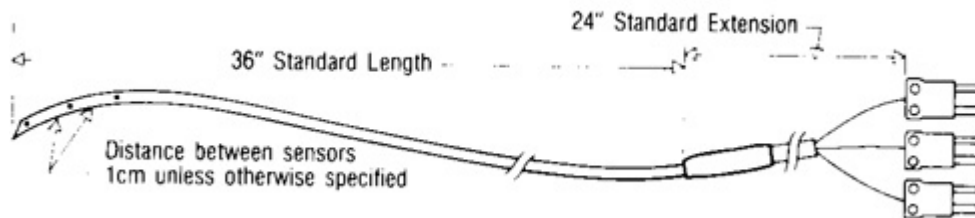
Multi-Sensor Temperature Probes

These sensors 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 multi-sensor probes are custom-made at this time, and should be ordered to your requirements. Reusable microprobes are gas sterilizable.

IT SERIES FLEXIBLE TEFLON PROBES

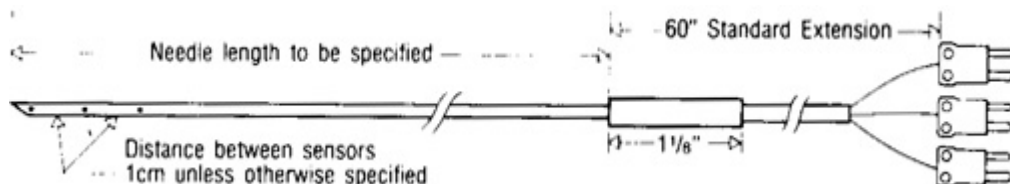
Teflon sheathed thermocouple wires are implanted with regular hypodermic needle. 14ga. or 17ga.



When ordering, specify: Probe series (IT), needle gauge, number sensors and distance between sensors. (e.g.: IT-17(3) is implanted with 17 ga 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 1 or 2 sensors in a 26ga 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) is a 23ga needle, 5 cm needle, 5cm long with 2 sensors. Unless otherwise specified sensors will be 1cm apart, starting at tip.

We also manufacture interchangeable single sensor probes and microprobes available in many configurations. Our thermocouple probes include clinical probes-skin, rectal, oral and esophageal. There are implantable needle and flexible sensors and probes for measuring surfaces, liquid and air. See our data sheet on interchangeable probes and sensors for more descriptive information on individual probes.

[Get Prices](#)

Type T Thermocouple Wire



- **0.1°C accuracy in the following sizes:
30ga, 36ga, 40ga, 44ga**

Most thermocouple wire used in the manufacture of sensors is "Special Limits" wire which, to meet NIST standards, must be accurate to 0.5°C in the range 0-50°C. This means that even with most sophisticated electronics, the best possible accuracy for the system is 0.5°C.

Physitemp wire is tested to stringent standards and is guaranteed accurate to 0.1°C in the range 0-50°C. It is therefore five times more accurate than regular "Special Limits" wire. It is intended for applications where high accuracy is essential but where the low cost of thermocouples is important.

We can supply this wire in rolls of 50' or in larger quantities. We will also weld thermocouples and provide custom sheaths if required.