



# Temperature Probes

## Probe Tips

### Penetration / Immersion Type "F"

20 Pointed penetration

21 Tapered penetration

22 Chisel penetration

24 Rounded Immersion

26 Corkscrew penetration

28 Alligator Immersion

### Surface/Contact Type "C"

30 Flat disk (Thermistor)

32 Ribbon

34 Between pack

36 Heavy duty spring

### Air/Gas Type "G"

40 Air (Thermistor)

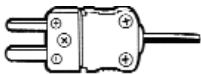
42 Beaded thermocouple

44 Hooded

46 Caged

48 Caged with rack clip

## Sub-Mini Connector

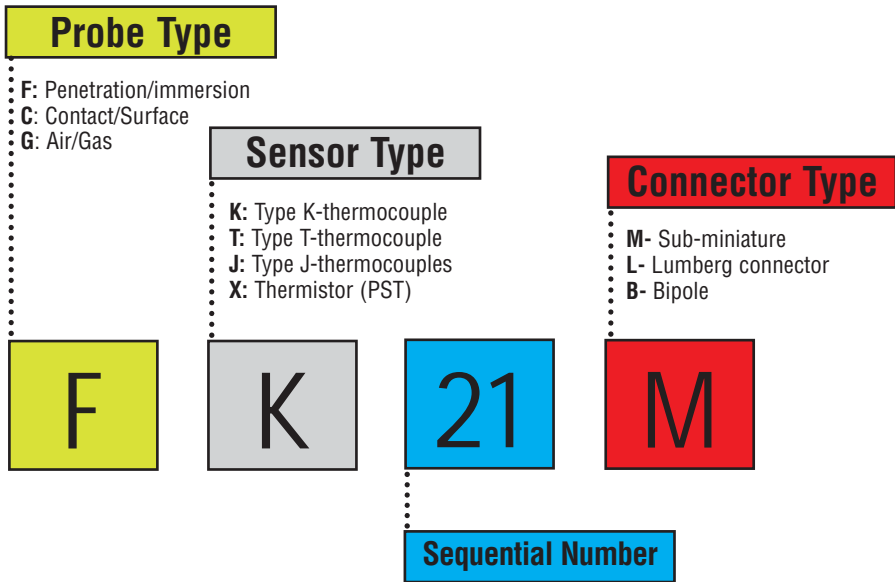


## Lumberg Connector



## Bipolar Connectors





**Probe Tips**

Penetration / Immersion  
Type "F"

- 20 Pointed penetration
- 21 Tapered penetration
- 22 Chisel penetration
- 24 Rounded Immersion
- 26 Corkscrew penetration
- 28 Alligator Immersion

Surface/Contact  
Type "C"

- 30 Flat disk (Thermistor)
- 32 Ribbon
- 34 Between pack



36 Heavy duty spring



Air/Gas  
Type "G"

- 40 Air (Thermistor)
- 42 Beaded thermocouple
- 44 Hooded
- 46 Caged
- 48 Caged with rack clip

**What is the difference between thermocouple and thermistor probes?**

Thermocouple probes utilize the reaction between two dissimilar metals to produce a voltage that changes as temperature changes. A thermistor is a resistive with a change in temperature. In general, thermocouples offer a wider temperature range and quicker response time than thermistors. Thermistors are typically more accurate than thermocouples.

**What are the differences between thermocouple types?**

Each thermocouple uses different metals and there fore have different characteristics. Here are general guidelines:

K-Type- Wide temperature range used in many digital thermometers. Identified by a yellow connector.

T-Type- Narrower temperature range than J-type but more accurate than K and J types, used in digital thermometers. Identified by a blue connector.

J-Type- Narrower temperature reange the K-Type used in analog and digital thermometers. Identified by a black connector.

**Can different thermocouple types be interchanged?**

No. Since each thermocouple type uses different metals in it's construction they have different output characteristics. Using a J-type thermocouple in a K-type thermometer will cause measurements to be very inaccurate.

**What are the differences between the connector types TPI offers?**

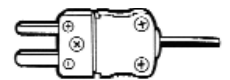
Sub-Mini- This is an industry standard connector type allowing TPI probes to be used in any thermocouple thermometer using this type of connector. Sub-mini connectors are quick and easy to use, simply push in and out. A wide variety of economical probes are available with sub-mini connectors, enhancing versatility and affordability of the temperature tester.

Lumberg- This connector uses a screw collar to attach to the thermometer and is the most secure connection available. Lumberg connectors are designed for the rigors of food processing environments. Advantages include:

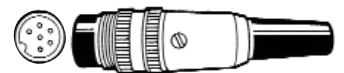
- Strong connection - stainless steel collar holds and protects connection. Probe will not pull out of instrument with out unscrewing the collar.
- Waterproof stainless steel will not rust and is ideal for wet, humid conditions
- Lumberg connectors are manufactured following ISO9000 quality control guidelines.

Bi-Polar- This connector is used in the TPI thermistor probe line.

**Sub-Mini Connector**



**Lumberg Connector**



**Bipolar Connectors**



**REFER TO THE TPI WEBSITE FOR ADDITIONAL OR OEM PROBE OPTIONS**

**Contact/Surface Probe Applications (C)**




- Measure grill temperature to assure correct cooking temperatures.
- Check frozen food to assure proper storage temperatures.
- Measure temperatures between package to ensure proper quality control.
- Check any surface for correct process control temperatures.
- Measure superheats on condensers.
- Measure griddle temperature.
- Measure machinery or mold temperature with a surface probe.
- Measure pipe temperatures in any industrial application.

**Penetration / Immersion Probe Applications (F)**

- Check internal food temperatures to assure quality control.
- Measure deep fat fryers with a high temp immersion probe.
- Measure liquids and semi-solid temperatures in food processing applications.
- Use a reduced tip probe for quicker response times where time is crucial to the process.

**Air/Gas Probe Applications. (G)**

- Measure air temperatures in duct work.
- Measure air temperature coming from diffusers while Trouble-shooting heating and air conditioning systems.
- Measure flame temperatures to trouble-shoot industrial heating applications.
- Calibrate thermostats using an ambient air probe.

Probe Tips	Penetration/Immersion (F)	Contact/ Immersion (C)	Air/Gas (G)
	 Use for penetration into solids and immersion into semi-solids & liquids. <b>Pointed:</b> Can be used in air with slower response <b>Chisel:</b> Can be used in air and on surfaces with slower response <b>Tapered:</b> Heavy duty, large diameter shaft for bend resistant	 Designed to measure surface temperatures <b>Ribbon:</b> Fast response. <b>Spring:</b> Heavy duty sensing element for higher surface temperatures	 Measure air or gas temperatures <b>Beaded:</b> Flexible, can be used in some liquid immersion applications <b>Hooded:</b> Rigid, hood provides protection for the sensing element. <b>Caged:</b> Rigid, cage provides maximum protection for the sensing element.

**What type of probe should I use?**

The type of probe you use depends upon your application. Here are some general guidelines for different types of probes.

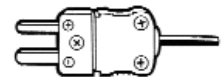
Penetration/Immersion (F) General purpose probe used for penetration and immersion; can be used for air, but is much slower than an air probe.






Need to select the tip type that best suits the application.

Contact/Surface (C) Contact probes are used to measure surface temperatures. Penetration probes, with the exception of the chisel tip, can't measure surface temperatures. Need to select the tip type that best suits the application

Air/Gas (G) Air probes measure the air or gas temperatures. They respond significantly faster than penetration or contact probes in air. Need to select the tip type that best fits the application.

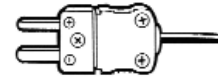
**K-Type Thermocouple with Sub-Mini Connector Probes**



Model # Description	Application	Range °F/°C	Probe tip	Dimensions	Insulation Material
<b>CK11M</b> Contact surface probe, water proof	Contact temperatures on flat and uneven surfaces	-58° to 500°F -50° to 250°C		Stem Length: 4" (102mm) Diameter: 0.13" (3.2mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK12M</b> Contact surface probe, right angle, waterproof	Contact temperatures on flat and uneven surfaces	-58° to 500°F -50° to 250°C		Stem Length: 4" (102mm) w/90° bend Diameter: 0.3" (7.5mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK13M</b> Heavy-duty contact surface probe	Contact temperatures on flat and uneven high temperature surfaces	-58° to 1202°F -50° to 650°C		Stem Length: 4" (102mm) Diameter: 0.6" (14mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK14M</b> Right angle heavy-duty contact surface probe	Contact temperatures on flat and uneven high temperature surfaces	-58° to 1202°F -50° to 650°C		Stem Length: 6" (152mm) w/90° bend Diameter: 0.6" (14mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK15M</b> Heavy-duty contact surface probe for HK11M handle	Contact temperatures on flat and uneven high temperature surfaces	-40° to 950°F -40° to 510°C		Stem Length: 8" (203mm) Diameter: 0.6" (14mm) Lead Length: N/A IP Rating: N/A	N/A

**REFER TO THE TPI WEBSITE FOR ADDITIONAL OR OEM PROBE OPTIONS**

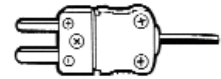
# K-Type Thermocouple with Sub-Mini Connector Probes



Model # Description	Application	Range°F/C		Probe tip	Dimensions	Insulation Material
<b>CK16M</b> Heavy-duty contact surface probe	Contact temperatures on flat and uneven high temperature surfaces	-40° to 950°F -40° to 510°C		36	Stem Length: 8" (203mm) Diameter: 0.6" (14mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK17M</b> Contact surface probe, 45 degree angle	Contact temperatures on flat and uneven surfaces	-40° to 500°F -50° to 250°C		32	Stem Length: 4" (102mm) w/45° bend Diameter: 0.3" (7.5mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK18M</b> Contact surface probe	Contact temperatures on flat surfaces	-58° to 500°F -50° to 250°C		32	Stem Length: N/A Nominal: 2.36" (60mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK20M</b> Pipe clamp probe	Clamp probe for pipe temperatures	-58° to 212°F -50° to 100°C		N/A	Max jaw opening: 0.79" Nominal jaw opening: 0.25" Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK21M</b> Pipe clamp probe	Clamp probe for pipe temperatures	-58° to 212°F -50° to 100°C		N/A	Max jaw opening: 1.2" Nominal jaw opening: 0.75" Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK22M</b> Fast response contact surface probe, 45 degree angle swivel head sensor	Contact temperatures on flat and uneven surfaces	-58° to 500°F -50° to 250°C		32	Stem Length: 4.5" (114mm) w/45° bend Diameter: 0.5" (12.7mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>CK23M</b> Fast response contact surface probe, 90 degree angle swivel head sensor	Contact temperatures on flat and uneven surfaces	-58° to 500°F -50° to 260°C		32	Stem Length: 4.9" (125mm) w/90° bend Diameter: 0.5" (12.7mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>FK11M</b> Chisel tip penetration probe	General purpose penetration into semi-solids and liquids	-58° to 500°F -50° to 250°C		20	Stem Length: 4" (102mm) Diameter: 0.13" (3.2mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK12M</b> Pointed tip tapered penetration probe	Heavy duty penetration into semi-solids and liquids tapered shaft resist bending	-58° to 500°F -50° to 250°C		21	Stem Length: 11.8" (300mm) Diameter: 0.25 / 0.10" (6.4 / 2.5mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK13M</b> Pointed tip penetration probe for HK11M handle	General purpose penetration into semi-solids and liquids	-40° to 1562°F -40° to 850°C		20	Stem Length: 8" (203mm) Diameter: 0.15" (3.75mm) Lead Length: N/A IP Rating: 67	N/A
<b>FK14M</b> Chisel tip penetration probe	General purpose penetration into semi-solids and liquids	-40° to 1562°F -40° to 850°C		20	Stem Length: 8" (203mm) Diameter: 0.15" (3.75mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK15M</b> Tapered tip low mass quick response penetration probe	Food temperature measurements and other light duty applications	-58° to 500°F -50° to 250°C		20	Stem Length: 3.75" (80mm) Diameter: 0.06 (1.6mm) Lead Length: 39.4" (1M) IP Rating: N/A	Teflon
<b>FK21M</b> Tapered chisel tip penetration probe	General purpose light duty penetration applications requiring fast response	-58° to 500°F -50° to 250°C		21	Stem Length: 4." (101.6mm) Diameter: 0.13"/.06" (3.2/1.6mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK22M</b> Pointed tip penetration probe	General purpose light duty penetration applications requiring fast response	-58° to 500°F -50° to 250°C		21	Stem Length: 4" (101.6mm) Diameter: 0.09/0.06" (3.2/2.5mm) Lead Length: 39.4" (1M) IP Rating: N/A	Teflon
<b>FK23M</b> Rack clamp probe	General purpose air / liquid probe with clip	-40° to 950°F -40° to 510°C		28	Stem Length: N/A Diameter: N/A Lead Length: 177" (4.5M) IP Rating: 67	Teflon
<b>FK24M</b> Heavy duty T-handle long stem penetration probe	General purpose penetration into semi-solids and liquids	-40° to 500°F -40° to 250°C		21	Stem Length: 24" (610mm) Diameter: 0.37"/0.15" (9.5mm/3.76mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane



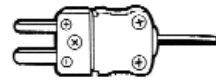
# K-Type Thermocouple with Sub-Mini Connector Probes



Model # Description	Application	Range °F/°C		Probe tip	Dimensions	Insulation Material
<b>FK25M</b> Flat sensor pack probe	Between pack temperatures	-40° to 400°F -40° to 204°C		34	Stem Length: N/A Diameter: N/A Lead Length: 39.4" (1.2M) IP Rating: 67	Polyurethane
<b>FK26M</b> Petes plug probe	Petes plug temperatures	-40° to 400°F -40° to 204°C		24	Stem Length: 3" (76mm) Diameter: 0.12" (3mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK27M</b> Waterproof long stem heavy duty penetration probe	General purpose penetration into semi-solids and liquids	-58° to 500°F -50° to 250°C		21	Stem Length: 11.8" (300mm) Diameter: 0.25"/0.10" (6.4mm/2.5mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK28M</b> Heavy duty penetration probe	Heavy duty penetration into semi-solids and liquids tapered shaft resist bending	-58° to 500°F -50° to 250°C		22	Stem Length: 6.3" (160mm) Diameter: 0.13" (3.2mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>FK29M</b> Long stem pointed tip penetration probe	General purpose penetration into semi-solids and liquids	-58° to 500°F -50° to 250°C		22	Stem Length: 6.3" (160mm) Diameter: 0.13" (3.2mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>FK30M</b> Long stem heavy duty T-handle penetration probe	Heavy duty penetration into semi-solids and liquids tapered shaft resist bending	-58° to 500°F -50° to 250°C		22	Stem Length: 24" (609.60mm) Diameter: 0.38" (9.5mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK31M</b> T-handle corkscrew insertion probe	General purpose penetration into semi-solids	-58° to 500°F -50° to 250°C	 Must be used with EXT31M extension (included)	26	Stem Length: 4.5" (114mm) Diameter: 0.20" (5mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK32M</b> Long stem heavy duty T-handle penetration probe	Heavy duty penetration into semi-solids and liquids tapered shaft resist bending	-58° to 500°F -50° to 250°C		24	Stem Length: 18" (457mm) Diameter: 0.37"/0.15" (9.5mm/3.76mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>GK11M</b> General purpose beaded tip probe	Exposed junction for fast response in non-food liquid, air and surface applications	-40° to 950°F -40° to 510°C		42	Stem Length: N/A Diameter: 28 gauge Lead Length: 48" (1.2M) IP Rating: N/A	Fiberglass
<b>GK12M</b> General purpose beaded tip probe with rack clip	Exposed junction for fast response in air applications.	-40° to 950°F -40° to 510°C		42	Stem Length: N/A Diameter: 20 gauge Lead Length: 48" (1.2M) IP Rating: N/A	Fiberglass
<b>GK13M</b> General purpose beaded tip probe	Exposed junction for fast response in food and non-food liquid, air and surface applications	-40° to 400°F -40° to 204°C		42	Stem Length: N/A Diameter: 24 gauge Lead Length: 48" (1.2M) IP Rating: N/A	Teflon
<b>GK14M</b> Rigid stem hooded exposed tip probe	Exposed junction for fast response in air applications.	-58° to 910°F -40° to 510°C		44	Stem Length: 3.74" (95mm) Diameter: 0.13" (3.75mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>GK16M</b> General purpose caged air probe for use with HK11M handle	Caged exposed junction for fast response in air	-40° to 500°F -40° to 260°C		46	Stem Length: 8" (203mm) Diameter: 0.26" (6.5mm) Lead Length: 39.4" (1M) IP Rating: N/A	N/A
<b>GK17M</b> General purpose caged air probe	Caged exposed junction for fast response in air	-40° to 500°F -40° to 260°C		46	Stem Length: 8" (203mm) Diameter: 0.26" (6.5mm) Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>GK18M</b> General purpose caged air probe with rack clip and armored cable	Caged exposed junction for fast response in air	-40° to 586°F -40° to 308°C		48	Stem Length: N/A Diameter: N/A Lead Length: 39.4" (1M) IP Rating: N/A	Braided stainless steel
<b>GK19M</b> General purpose beaded tip probe with armored cable	Exposed junction for fast response in non-food liquid, air and surface applications	-40° to 950°F -40° to 510°C		42	Stem Length: N/A Diameter: 28 gauge Lead Length: 48" (1.2M) IP Rating: N/A	Braided stainless steel

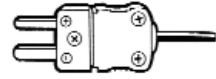
**REFER TO THE TPI WEBSITE FOR ADDITIONAL OR OEM PROBE OPTIONS**

## K-Type Thermocouple with Sub-Mini Connector Probes



Model # Description	Application	Range°F°C		Probe tip	Dimensions	Insulation Material
<b>GK20M</b> Flue temperature probe	Exposed junction with cone stop, fast response in flue temperature applications	-40° to 932°F -40° to 260°C		42	Stem Length: 4.33" (110mm) Diameter: 0.24" (6mm) Lead Length: 16' (4.9M) IP Rating: N/A	Teflon
<b>EXT 31M</b> Male to Male Extension	Use with FK31M	N/A		N/A	Stem Length: NA Diameter: NA Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane
<b>HK11M</b> Handle for use with K-type interchangeable probe tips	Use with FK13M, CK15M, and GK16M	N/A		N/A	Stem Length: N/A Diameter: N/A Lead Length: 39.4" (1M) IP Rating: N/A	Polyurethane

## J-Type Thermocouple with Sub-Mini Connector Probes



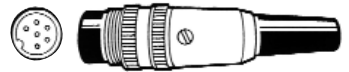
Model # Description	Application	Range°F°C		Probe tip	Dimensions	Insulation Material
<b>GJ11M</b> Standard fiberglass insulation, 4 foot, beaded end (disposable)	Exposed junction for fast response	-40° to 950°F -40° to 500°C			Stem Length: N/A Diameter: 24 Gauge Lead Length: 1.2 IP Rating: N/A	Fiberglass
<b>GJ12M</b> GJ11M with oven clip	Oven clip to shield sensor from direct radiated heat	-40° to 950°F -40° to 500°C			Stem Length: N/A Diameter: 24 Gauge Lead Length: 1.2 IP Rating: N/A	Fiberglass

## K-Type Thermocouple with Lumberg Connector Probes



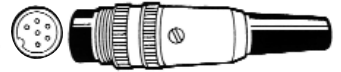
Model # Description	Application	Range°F°C		Probe tip	Dimensions	Insulation Material
<b>FK21L</b> Contact surface probe with ribbon sensor. Water proof	Food Penetration	-58° to 500°F -50° to 250°C		21	Stem Length: 4" (101.6mm) Diameter: 0.13/.06" (3.2/1.6mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>FK22L</b> Oven food probe	Testing food temperatures during cooking	-58° to 500°F -50° to 250°C		20	Stem Length: 4" (101.6mm) Diameter: 0.09/.06" (3.2/1.6mm) Lead Length: 47.2" (1.2M) IP Rating: 67	Teflon
<b>FK23L</b> Immersion / Penetration probe no handle or lead	Food Penetration	-58° to 500°F -50° to 250°C		21	Stem Length: 3.9" (100mm) Diameter: 0.15" (3.75mm) Lead Length: NA IP Rating: 67	NA
<b>FK25L</b> Flat sensor pack probe	Between pack	-40° to 400°F -40° to 204°C		34	Stem Length: NA Diameter: NA Lead Length: 47.2" (1.2M) IP Rating: 67	Teflon
<b>FK26L</b> Immersion / Penetration probe	Food Penetration	-58° to 500°F -50° to 250°C		20	Stem Length: 4" (101.6mm) Diameter: .09/.06" (2.4/1.6mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane

## T-Type Thermocouple with Lumberg Connector Probes



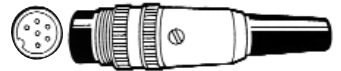
Model # Description	Application	Range°F°C		Probe tip	Dimensions	Insulation Material
<b>CT11L</b> Surface probe with ribbon sensor	Surface Temperatures Grills	-58° to 500°F -50° to 250°C		32	Stem Length: 4" (102mm) Diameter: 0.13" (3.2mm) Lead Length: 39.4" (1M) IP Rating: N/A	PVC
<b>FT11L</b> Chisel tip penetration probe	General purpose penetration into semi-solids and liquids	-148° to 500°F -100° to 250°C		22	Stem Length: 4" (101.6mm) Diameter: 0.13/.15" (3.2mm/2.2mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane

## T-Type Thermocouple with Lumberg Connector Probes



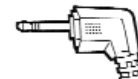
Model # Description	Application	Range°F/°C		Probe tip	Dimensions	Insulation Material
<b>FT12L</b> Needle probe	Weiner probe for food processing	-148° to 500°F -100° to 250°C		22	Stem Length: 4"(101.6mm) Diameter: 0.13"(3.2mm) Lead Length: 39.4" (1.0M) IP Rating: 67	PVC
<b>FT15L</b> Needle probe	Weiner probe for food processing	-148° to 500°F -100° to 250°C		22	Stem Length: 3.15"(80mm) Diameter: 0.06"(1.6mm) Lead Length: 39.4" (1.2M) IP Rating: N/A	Teflon
<b>FT21L</b> Tapered end for food penetration Waterproof	Food penetration	-148° to 500°F -100° to 250°C		21	Stem Length: 3.75"(95.3mm) Diameter: 3.2/1.6mm Lead Length: 39.4" (1.0M) IP Rating: 67	PVC
<b>FT22L</b> Oven food probe	Testing food temperature during cooking	-40° to 500°F -50° to 250°C		22	Stem Length: 3.93"(100mm) Diameter: 0.13" (3.2mm) Lead Length: 98.4" (2.5M) IP Rating: N/A	Teflon
<b>FT23L</b> Oven food probe	Testing food temperature during cooking	-40° to 950°F -40° to 510°C		28	Stem Length: NA Diameter: NA Lead Length: 177.2" (4.5M) IP Rating: N/A	Teflon
<b>FT24L</b> Heavy duty T-handle long stem penetration probe	General purpose penetration into semi-solids and liquids	-40° to 500°F -40° to 250°C		21	Stem Length: 24" (610mm) Diameter: 0.37/0.15" (9.5mm/3.76mm) Lead Length: 39.4" (1M) IP Rating: 67	Polyurethane
<b>GT13L</b> Beaded probe with FDA approved insulation	General Purpose. Air	-148° to 500°F -100° to 250°C		42	Stem Length: NA Diameter: NA Lead Length: 47.2" (1.2M) IP Rating: 67	Teflon
<b>GT19L</b> Oven clamp probe	Special hangingClip for ovens. Air.	-40° to 500°F -40° to 510°C		48	Stem Length: NA Diameter: NA Lead Length: 39.4" (1M) IP Rating: 67	SS

## Thermistor Probe with Lumberg Connectors



Model # Description	Application	Range°F/°C		Probe tip	Dimensions	Insulation Material
<b>FX11L</b> Liquid immersion probe	General Purpose, Liquid	-40° to 300°F -40° to 150°C		24	Stem Length: 4"(102mm) Diameter: 0.13" (3.2mm) Lead Length: 39.4" (1M) IP Rating: 67	PVC

## Thermistor Probe with Bipolar Connectors



Model # Description	Application	Range°F/°C		Probe tip	Dimensions	Insulation Material
<b>CX13B</b> Surface flat disk probe	Surface	-40° to 300°F -40° to 150°C		30	Stem Length: 3.15"(80mm) Diameter: 0.3" (7.5mm) Lead Length: 15.7" (0.4M) IP Rating: N/A	PVC
<b>FX12B</b> Liquid immersion probe	General Purpose	-40° to 300°F -40° to 150°C		24	Stem Length: 3.15"(80mm) Diameter: 0.13" (3.2mm) Lead Length: 15.7" (0.4M) IP Rating: N/A	PVC
<b>FX13B</b> Liquid immersion probe	General Purpose	-40° to 300°F -40° to 150°C		24	Stem Length: 8"(203mm) Diameter: 0.13" (3.2mm) Lead Length: 15.7" (0.4M) IP Rating: 67	PVC
<b>GX15B</b> Shielded air probe	Air	-40° to 300°F -40° to 150°C		44	Stem Length: 3.15"(80mm) Diameter: 0.13" (3.2mm) Lead Length: 15.7" (0.4M) IP Rating: N/A	PVC
<b>EX11B</b> extension lead	Thermistor probes	N/A		NA	Stem Length: N/A Diameter: N/A Lead Length: 36" (0.9M) IP Rating: N/A	PVC

REFER TO THE TPI WEBSITE FOR ADDITIONAL OR OEM PROBE OPTIONS



# The Value Leader

- Digital Multimeters
- Digital Clamp-Ons
- Temperature Products
- Combustion Analyzers
- Carbon Monoxide Analyzers
- Combustible Gas Detectors
- Digital Manometers
- Indoor Air Quality
- Insulation Resistance Testers (IRT)
- Handheld Oscilloscopes
- Refrigeration Leak Detectors
- Coax / BNC Cables and Adapters
- Oscilloscope Probes / SMTP Clips
- Specialty Testers

## **Probe selection**

TPI has three basic types of temperature probes: Penetration/Immersion (F), Contact/Surface (C), and Air/Gas (G).

- Penetration/Immersion (F) probes are used for liquids, semi-solids, and solids.
- Contact/Surface (C) probes are designed for surface temperatures.
- Air/Gas (G) probes are designed to measure air or gas temperatures.

Select your type of application and probe tip first. Then match the connector type of the probe to your instrument.

## **OEM/specialty temperature probes**

Whatever your OEM temperature probe needs are, let TPI help you. Just let us have the following information, along with your company and contact information.

1. Application, environment, and operating temperature
2. New or existing product
3. Annual usage and release quantities
4. Connector type or bare wire details
5. Length of lead wire and straight or coiled wire
6. Probe tip type and dimensions
7. Any other special requirements, materials, etc.

## **Cost of ownership temperature probe**

Ask us about a customized cost of ownership temperature probe program.

### **Three Year Limited Warranty on TPI Products**

Copyright © 2008 Test Products International, Inc.

Temperature Probe brochures 07.10.08



#### **Test Products International, Inc.**

Headquarters:  
9615 SW Allen Blvd.  
Beaverton, OR 97005 USA  
503-520-9197  
Fax: 503-520-1225  
info@tpi-thevalueleader.com



#### **Test Products International, Ltd.**

342 Bronte St. South Unit #9  
Milton, Ontario L9T 5B7 Canada  
905-693-8558  
Fax: 905-693-0888  
info@tpicanada.com



#### **Test Products International UK Ltd.**

Longley House, East Park  
Crawley, West Sussex RH10 6AP  
England  
Tel: +44 (0)1293 561212  
Fax: +44 (0)1293 813465  
e-mail: info@tpi-uk.com

The  
Value  
Leader™

For additional products, specifications, and info contact TPI at [tpi-thevalueleader.com](http://tpi-thevalueleader.com) or 800.368.5719