

# Special Application Probes

The special application probes are tailor-made for specific measurement purposes.

Anritsu Meter offers a wide array of probe types for extremely small surfaces, for air temperature measurements for insertion use, and other uses.

特殊测温棒

针对不同用途而设计的温度感应器。

备有微型表面用、空气温用、插入型等各种模式。

測定用途別に設計された温度センサです。

微小表面用、空気温用、差込用など、様々なタイプを用意しています。

## How to order of special application probes

The probes shown from page 31 to page 35 are available with customer-specified thermocouples, compensating lead wire lengths (cord section), and connection plug types.

31頁至35頁所记载的温度感应器的热电偶类型、补偿导线的长度(接线部分)以及连接插头的形状都可以按照客户的需求选配。

31ページから35ページに掲載された温度センサは、熱電対種、補償導線の長さ(コード部)、接続プラグの種類がカスタマイズが可能です。

Example:

### 123K-TC1-ANP



<b>Thermocouple type</b>	Choose type K or type E Be sure to choose the same thermocouple type as the one used for the main thermometer unit.	请选择E模式或K模式 请选择与测量器相同类型的热电偶。 計測器本体と同じ熱電対種を選択してください
<b>Cable length</b>	Length of cord section Specify a cord length in 1m increments.	接線の長さ 可以以1m为单位指定长度。 コード部の長さです 1m単位で指定できます
<b>Plug</b>	Choose ANP or ASP Be sure to choose the same plug type as the one used for the main thermometer unit.	请选择ANP或ASP 请选择与测量器相同形状的插头。 計測器本体と同じプラグ形状を選択してください

### Attention

The following probes have certain restrictions on customization.

下列型号的感应器中，客户可选配的内容有限制。

下記のセンサは、カスタマイズ内容に制限があります

Model No.	Restrictions
619 620 621	These probes are type K only.

※For detailed information on thermocouples, cords, and plugs, refer to "Attention of Order" on pages 4 and 5.

※有关热电偶、接线、插头的具体规格请参阅[4-5页：订购注意事项]。

※熱電対、コード、プラグの詳細については、「Page.4~5:Attention of order」をご覧ください。

## Molten metal surface probes

**Type K Model 518K-TC1-ANP**  
**Type E Model 518E-TC1-ANP**

Temp. range	Tolerance	Response time	Durability
0~700°C	±2.5°C (at 100°C)	2.0 s	S

**Type K Model 524K-TC1-ANP**  
**Type E Model 524E-TC1-ANP**

Temp. range	Tolerance	Response time	Durability
0~700°C	±2.5°C (at 100°C)	2.0 s	S

### No Junction type probes applications

This probe can not measure the internal temperature of molten metal because the junction is formed on the surface of molten metal.



## Micro sensor probes (Thin head type)

Type K Model **310K-TC1-ANP**  
Type E Model **310E-TC1-ANP**



Temp. range	Tolerance	Response time	Durability
-50~250°C	±2.5°C (at 100°C surface)	0.5 s	B

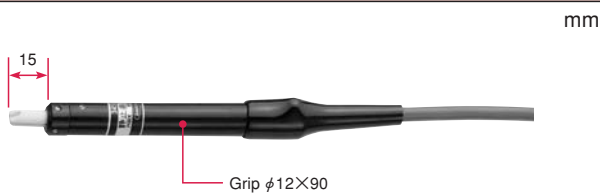
Type K Model **343K-TC1-ANP**  
Type E Model **343E-TC1-ANP**



Temp. range	Tolerance	Response time	Durability
-50~250°C	±2.5°C (at 100°C surface)	0.5 s	B

## Micro sensor probes (for large heat-capacity)

Type K Model **345K-TC1-ANP**  
Type E Model **345E-TC1-ANP**



Temp. range	Tolerance	Response time	Durability
-50~600°C	±2.5°C (at 100°C surface)	2.5 s	B

Type K Model **346K-TC1-ANP**  
Type E Model **346E-TC1-ANP**



Temp. range	Tolerance	Response time	Durability
-50~600°C	±2.5°C (at 100°C surface)	2.5 s	B

## High temperature probes

Model **619K-010-TC1-ANP**  
L



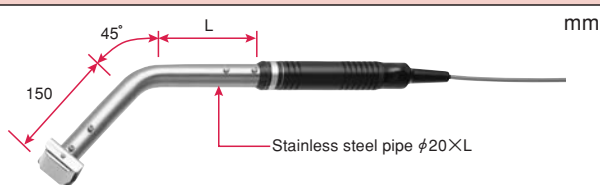
Temp. range	Tolerance	Response time	Durability
-50~1200°C	±2.5°C (at 100°C surface)	15 s	B

Model **620K-010-TC1-ANP**  
L



Temp. range	Tolerance	Response time	Durability
-50~1200°C	±2.5°C (at 100°C surface)	15 s	B

Model **621K-010-TC1-ANP**  
L



Temp. range	Tolerance	Response time	Durability
-50~1200°C	±2.5°C (at 100°C surface)	15 s	B

Specify the pipe length "L".

L	Pipe length
010	100mm
020	200mm
030	300mm
050	500mm
100	1000mm

※ These probes are suitable for high temperature measurement of stationary metallic surface.

# Pipe outside probes

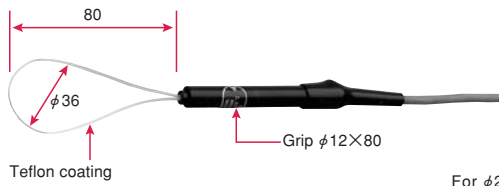
**Model 123K- $\phi$ 50-TC1-ANP**  
**Model 123E- $\phi$ 50-TC1-ANP**



mm

Temp. range	Tolerance	Response time	Durability
-50~250°C	±2.5°C (at 100°C surface)	2.0 s	B

**Model 528K-TC1-ANP**  
**Model 528E-TC1-ANP**

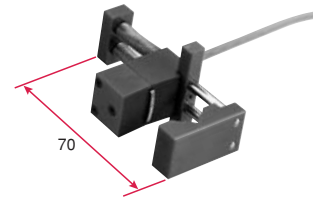


mm

For  $\phi$ 20~ $\phi$ 50

Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C surface)	3.0 s	B

**Model 1811K-TS1-ANP**  
**Model 1811E-TS1-ANP**



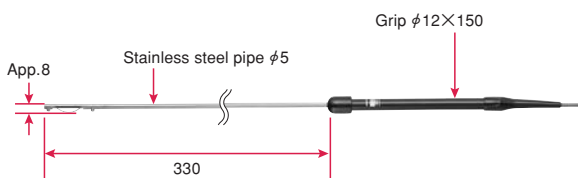
mm

For  $\phi$ 6~ $\phi$ 25

Temp. range	Tolerance	Response time	Durability
-50~100°C	±2.5°C (at 100°C surface)	2.0 s	S

# Pipe inside probes

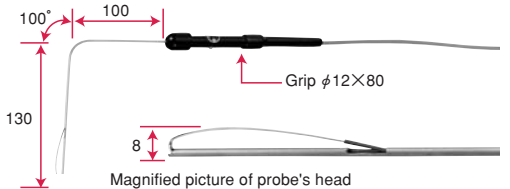
**Model 344K-TC1-ANP**  
**Model 344E-TC1-ANP**



mm

Temp. range	Tolerance	Response time	Durability
-50~400°C	±2.5°C (at 100°C surface)	5.0 s	C

**Model 305K-TC1-ANP**  
**Model 305E-TC1-ANP**

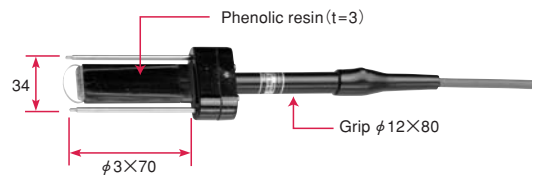


mm

Temp. range	Tolerance	Response time	Durability
-50~220°C	±2.5°C (at 100°C surface)	2.0 s	C

# Slit type probes

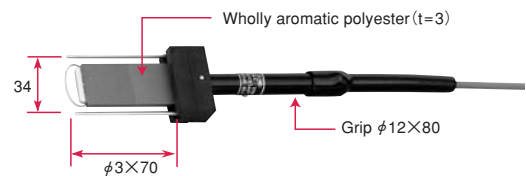
**Type K Model 304K-TC1-ANP**  
**Type E Model 304E-TC1-ANP**



mm

Temp. range	Tolerance	Response time	Durability
-50~220°C	±2.5°C (at 100°C surface)	1.5 s	B

**Type K Model 362K-TC1-ANP**  
**Type E Model 362E-TC1-ANP**



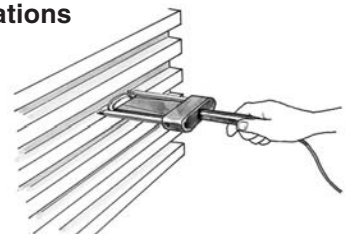
mm

Temp. range	Tolerance	Response time	Durability
-50~350°C	±2.5°C (at 100°C surface)	1.5 s	B

## Pipe inside probes applications



## Slit type probes applications



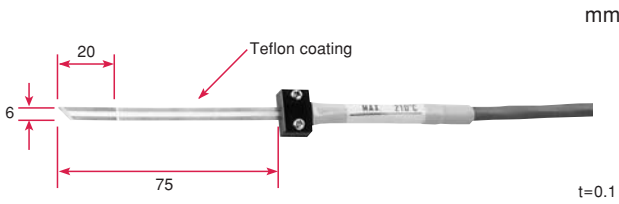
These probes are ideal for measuring the temperatures of surfaces having a small-radius bend, such as pipes.

Choose the most appropriate guard, based on the diameter of the measurement target.

Guard form	Producible range	Tolerance when specified
	$\phi$ 9~15mm	±1mm
	$\phi$ 16~39mm	±2mm
	$\phi$ 40~100mm	±5mm

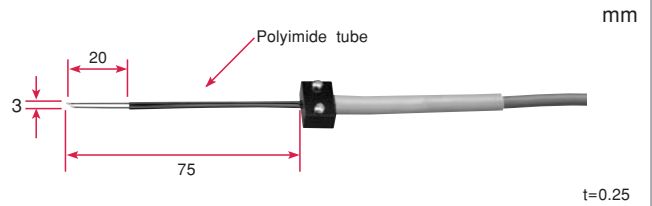
## Flat leaf probes

**Type K Model 503K-TC1-ANP**  
**Type E Model 503E-TC1-ANP**



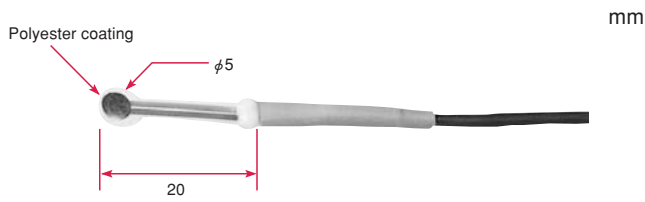
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	3.0 s	S

**Type K Model 505K-TS1-ANP**  
**Type E Model 505E-TS1-ANP**



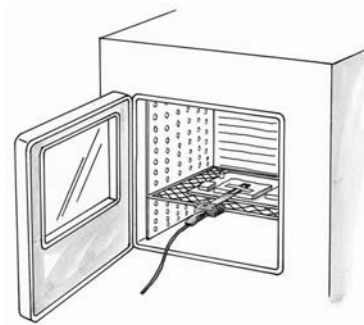
Temp. range	Tolerance	Response time	Durability
-50~400°C	±2.5°C (at 100°C)	6.0 s	S

**Type K Model 540K-TS1-ANP**  
**Type E Model 540E-TS1-ANP**



Temp. range	Tolerance	Response time	Durability
-50~100°C	±2.5°C (at 100°C)	8.0 s	S

### Flat leaf probes applications



## Insertion probes

**Type K Model 502K-TC1-ANP**  
**Type E Model 502E-TC1-ANP**



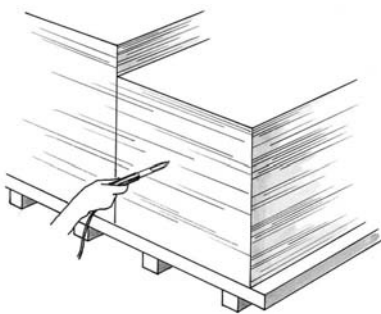
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	3.0 s	S

**Type K Model 504K-TC1-ANP**  
**Type E Model 504E-TC1-ANP**



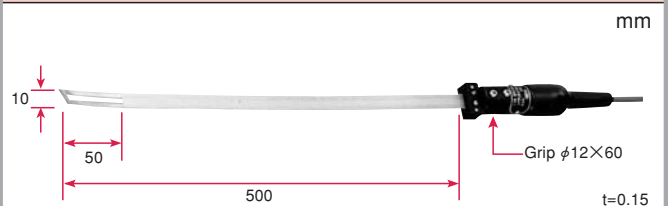
Temp. range	Tolerance	Response time	Durability
-50~500°C	±2.5°C (at 100°C)	6.0 s	S

### Insertion probes applications



## Sheet probes

**Type K Model 501K-TC1-ANP**  
**Type E Model 501E-TC1-ANP**



Temp. range	Tolerance	Response time	Durability
-50~250°C	±2.5°C (at 100°C)	4.0 s	S

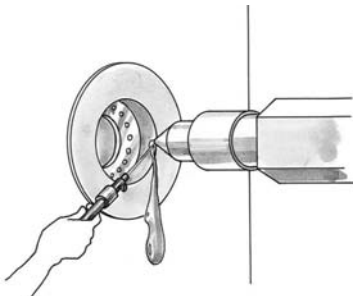
## Depth adjustable probes

**Model 520K-TC1-ANP**  
**Model 520E-TC1-ANP**



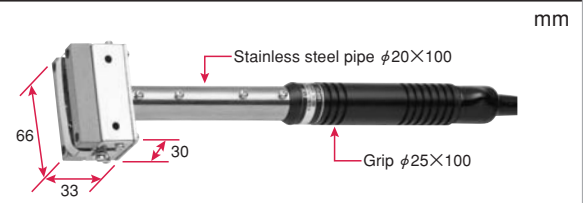
Temp. range	Tolerance	Response time	Durability
-200~300°C	±2.5°C (at 100°C)	1.5 s	B

### Depth adjustable probes applications



## Heavy duty moving surface probes

**Type K Model 213K-TC1-ANP**  
**Type E Model 213E-TC1-ANP**



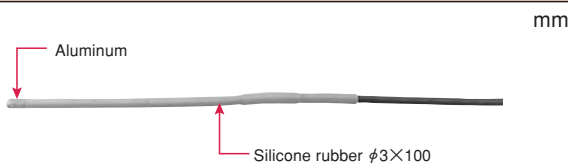
Temp. range	Tolerance	Response time	Durability
-50~600°C	±2.5°C (at 100°C)	5.0 s	B

The following model designations are used, based on the length of the stainless pipe:

Stainless pipe length	Model
100mm	213K-TC1-ANP
200mm	214K-TC1-ANP
300mm	215K-TC1-ANP
500mm	216K-TC1-ANP
1000mm	217K-TC1-ANP

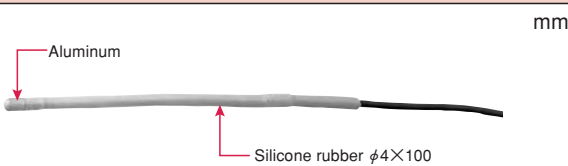
## Soft body probes

**Type K Model 1600K-TS1-ANP**  
**Type E Model 1600E-TS1-ANP**



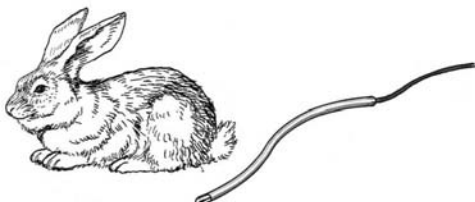
Temp. range	Tolerance	Response time	Durability
0~200°C	±2.5°C (at 100°C)	4.0 s	S

**Type K Model 1601K-TS1-ANP**  
**Type E Model 1601E-TS1-ANP**



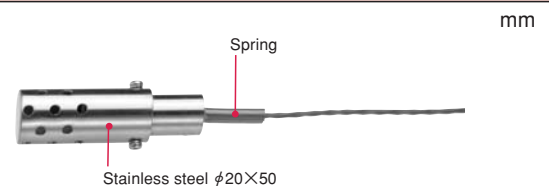
Temp. range	Tolerance	Response time	Durability
0~200°C	±2.5°C (at 100°C)	4.0 s	S

### Soft body probes applications



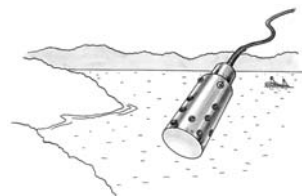
## Drop probes

**Type K Model 530K-TF5-ANP**  
**Type E Model 530E-TF5-ANP**



Temp. range	Tolerance	Response time	Durability
-50~150°C	±2.5°C (at 100°C)	3.0 s	S

### Drop probes applications



Strong lead cable enable this probe to throw into sea, bath and tank. 5 meters lead cable is provided for standard order.