

Model **STN** series

Flat Leaf Probes (Tape replaceable type)



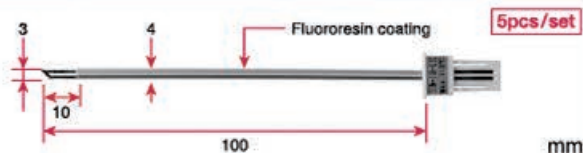
Measuring LED heat
LED的温度检测

Model STN series is a model in which the tape part of the ST probe is replaceable. Similar to the ST series, this multi-purpose temperature sensor features a flexible tape shape.

STN系列产品感温片极薄·柔软性高，并且感温片可自行更换的多用途温度传感器。
可夹可贴，适用于同时多点测量各种微小零部件的表面温度分布。

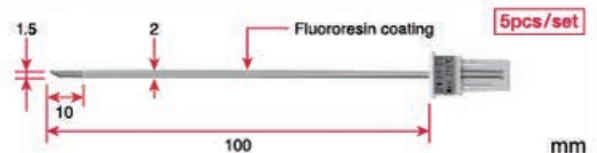
Typical probes of STN series 典型产品

Type K Model **STN-11K-010**
Type E Model **STN-11E-010**



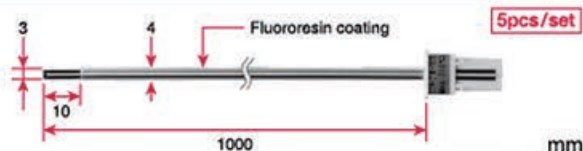
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	2 s	S

Type K Model **STN-31K-010**
Type E Model **STN-31E-010**



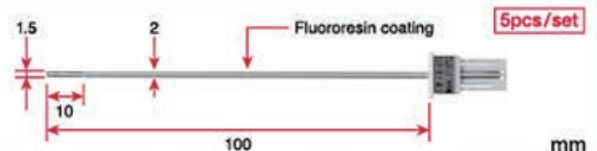
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	2 s	S

Type K Model **STN-21K-100**
Type E Model **STN-21E-100**



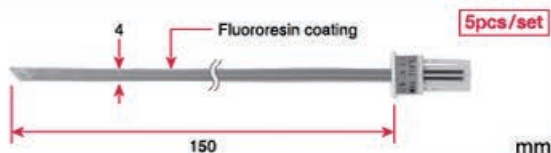
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	2 s	S

Type K Model **STN-41K-010**
Type E Model **STN-41E-010**



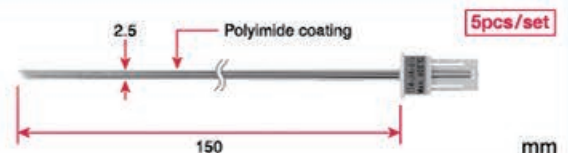
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	2 s	S

Type K Model **STN-12K-015**
Type E Model **STN-12E-015**



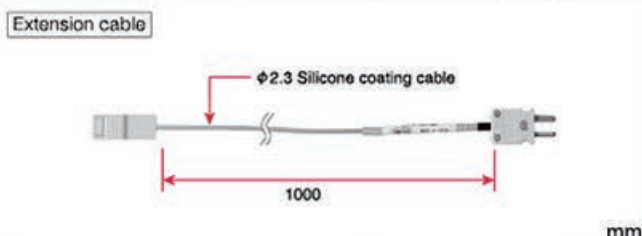
Temp. range	Tolerance	Response time	Durability
-50~210°C	±2.5°C (at 100°C)	8 s	S

Type K Model **STN-34K-015**
Type E Model **STN-34E-015**

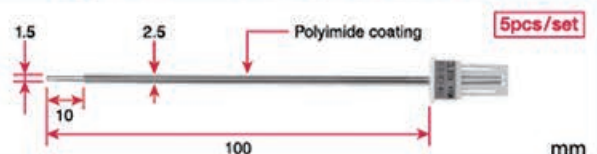


Temp. range	Tolerance	Response time	Durability
-50~400°C	±2.5°C (at 100°C)	8 s	S

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

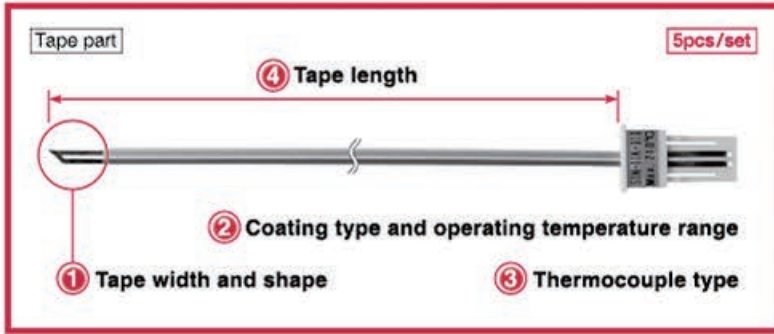


Type K Model **STN-43K-010**
Type E Model **STN-43E-010**



Temp. range	Tolerance	Response time	Durability
-50~400°C	±2.5°C (at 100°C)	2 s	S

How to order of STN series (Tape part) 选型



STN-11K-010



① Tape width and shape 贴片宽窄和形状	1 : Standard type (Sharp) 2 : Standard type (Flat) 3 : Narrow type (Sharp) 4 : Narrow type (Flat)
② Coating type and operating temperature range 外膜材质和使用温度范围	1 : Low temp. Fluororesin coating (Open) 2 : Low temp. All fluororesin coating 3 : High temp. Polyimide coating (Open) 4 : High temp. All polyimide coating
③ Thermocouple type 热电偶种类	K : Chromel-Alumel E : Chromel-Constantan
④ Tape length 贴片长度	003 : 30mm 005 : 50mm 008 : 80mm 010 : 100mm 200 : 2000mm

Attention

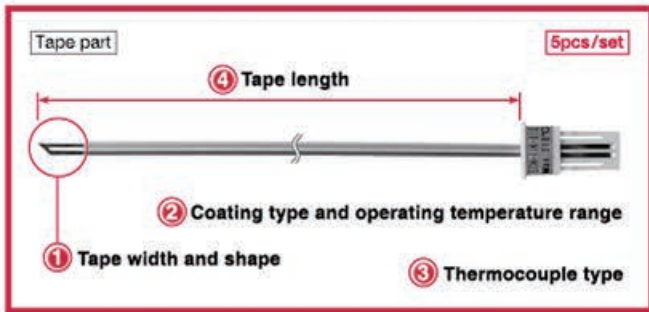
Where the probes are not glued or inserted, the operating temperature limits are as follows:

	STN-*1	STN-*2	STN-*3	STN-*4
Tape ≤ 150mm	200°C	180°C	200°C	200°C
Tape > 150mm	200°C	180°C	180°C	180°C

- ① **Tape width and shape**
贴片宽窄和形状
- ② **Coating type and operating temperature range**
外膜材质和使用温度范围

		① Tape width Standard type
②	①	STN-11 Sharp Thickness t=0.1mm (Open part)
		STN-21 Flat Thickness t=0.1mm (Open part)
	②	STN-12 Sharp Thickness t=0.26mm
		STN-22 Flat Thickness t=0.26mm
②	①	STN-13 Sharp Thickness t=0.1mm (Open part)
		STN-23 Flat Thickness t=0.1mm (Open part)
	②	STN-14 Sharp Thickness t=0.22mm
		STN-24 Flat Thickness t=0.22mm

Thickness other than tip
 Fluororesin type : 0.2mm Polyimide type : 0.17mm



STN-11K-010



① Tape width and shape

贴片宽窄和形状

② Coating type and operating temperature range

外膜材质和使用温度范围

		① Tape width Narrow type	
Low temp. Fluororesin coating Temp. range : -50~210°C	Open	STN-31 Sharp Thickness t=0.1mm (Open part)	STN-41 Flat Thickness t=0.1mm (Open part)
		All coating	STN-32 Sharp Thickness t=0.26mm
	Open		STN-33 Sharp Thickness t=0.1mm (Open part)
		All coating	STN-34 Sharp Thickness t=0.22mm

High temp. Polyimide coating
 Temp. range :
 -50~400°C
 Max. temperature of 350°C when the tape length exceeds 150mm

Thickness other than tip

Fluororesin type : 0.2mm Polyimide type : 0.17mm

③ Thermocouple type

热电偶种类

※ Select the same type of thermocouple as thermometer.

K Type K	E Type E
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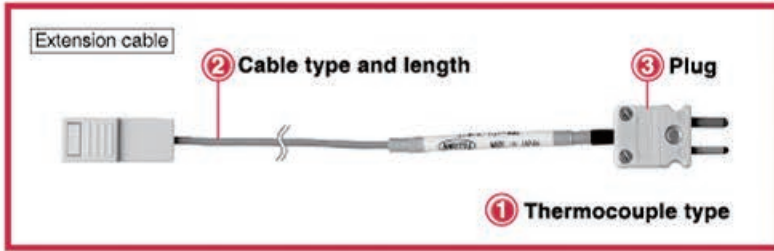
④ Tape length

贴片长度

	30mm	003
	50mm	005
	80mm	008
	100mm	010
	150mm	015
	200mm	020
	300mm	030

	2000mm	200

How to order of STN series (Extension cable) 选型



STN-K-TS1-ANP

① ② ③

① Thermocouple type 热电偶种类	K : Chromel-Alumel E : Chromel-Constantan
② Cable type and length 导线种类和长度 (See page 9)	TS1 Standard specifications : 1m The cable length can be specified each 0.5m.
③ Plug 插头 (See page 8)	ANP (For AM-9***, HR-1*5*, AP-450) ASP (For HR-1*0*, AP-400) W (Without plug)

③ Plug
插头

ANP

For
AM-9***
HR-1*5*
AP-450



ASP

For
HR-1*0*
AP-400



W

Without plug



Specifications of STN series 规格

Model number ^{※1}	STN-*1	STN-*2	STN-*3	STN-*4	
Thermocouple type	Type K or E				
Temp. range ^{※2}	-50~210°C	-50~210°C	Tape length ≤ 150mm : -50~400°C Tape length > 150mm : -50~350°C		
Tolerance ^{※3}	-50°C ≤ t < -40°C	±3.5°C	±3.5°C	±3.5°C	±3.5°C
	0°C	±2.5°C	±2.5°C	±2.5°C	±2.5°C
	100°C	±2.5°C	±2.5°C	±2.5°C	±2.5°C
	200°C	±2.5°C	±2.5°C	±2.5°C	±2.5°C
	300°C	—	—	±2.5°C	±2.5°C
	400°C	—	—	±3.0°C	±3.0°C
	Tolerance calculation method t: Temperature (°C)	At within temperature range -40°C ≤ t ≤ 400°C : ±2.5°C or ±(0.0075× t)°C, whichever is greater			
Response time ^{※4}	2s	8s	2s	8s	
Durability	S (Can not evaluate because of special-application)				

※1 The asterisk (*) is replaced by the number of the model name you selected. The model number after thermocouple type is omitted.

※2 The operating temperature limit is determined by the allowable temperature limit of the sensor head contacts the measurement target.
Note that the operating temperature limit is not the same as the allowable temperature limits of the grip, cable, and plug.

※3 Tolerance is defined in the operating temperature range of at the internal temperature with sufficient heat capacity.
For tolerance at temperature not listed in the above table, please refer to calculation method of tolerance.

※4 The response time given for our temperature measuring probes is the time required to detect 99% of the true value when measuring the temperature of boiling water or vapor.