

Model **BT** series

Needle Type Probes

BT模式系列

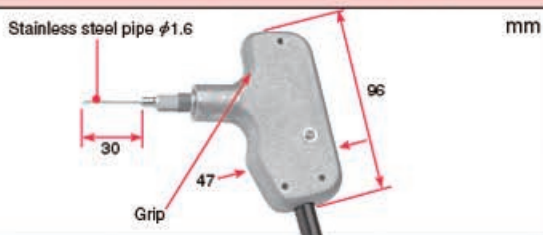
BT模式系列产品的顶端呈针形，是可以插入半固态物体中的温度感应器。其中一部分型号产品的针形顶端可更换，可以单独购买针形顶端配件。通过组合各个规格的组件，可以按照客户的用途进行个性选配。

Model BT series probes feature needle tips that can be inserted into semi-solid materials. Needle tips for models with replaceable tips can be purchased separately. Specific components may be combined to customize products for the needs of a customer's specific application.

モデルBTシリーズは、先端の針部を半固形物に突き刺す事ができる温度センサです。針部の交換が可能なモデルでは、針部のみの購入も可能です。各パーツの仕様を組み合わせる事により、お客様の用途に合わせてカスタマイズする事が出来ます。

Typical probes of BT series

Type K Model **BT-31K-TC1-ANP** Type E Model **BT-31E-TC1-ANP**



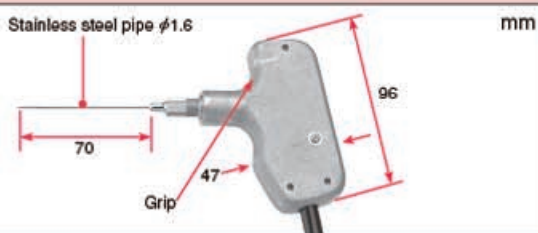
Temp. range	Tolerance	Response time	Durability
-200~300°C	±2.5°C (at 100°C)	1.5 s	S

Type K Model **BT-92K-TC1-ANP** Type E Model **BT-92E-TC1-ANP**



Temp. range	Tolerance	Response time	Durability
-200~500°C	±2.5°C (at 100°C)	3.0 s	B

Type K Model **BT-72K-TC1-ANP** Type E Model **BT-72E-TC1-ANP**



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

Type K Model **BT-22K-TC1-ANP** Type E Model **BT-22E-TC1-ANP**



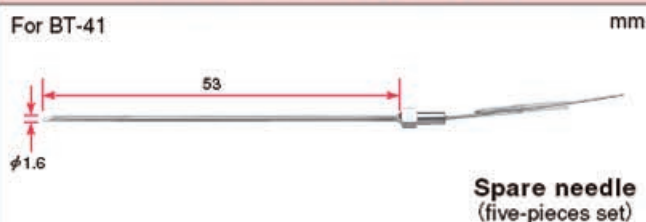
Temp. range	Tolerance	Response time	Durability
-200~300°C	±2.5°C (at 100°C)	1.5 s	C

Type K Model **BT-11K-TC1-ANP** Type E Model **BT-11E-TC1-ANP**



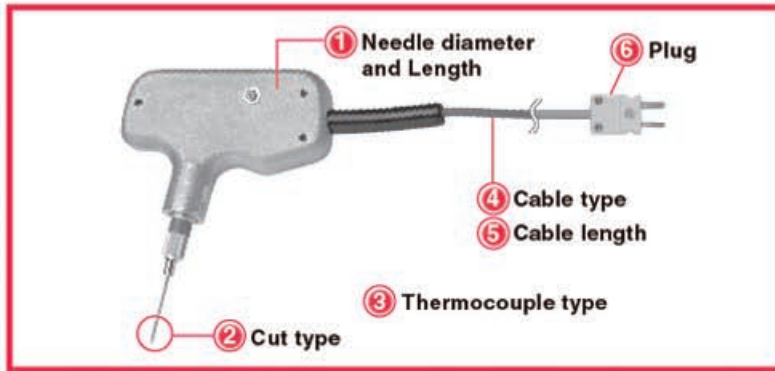
Temp. range	Tolerance	Response time	Durability
-200~210°C	±2.5°C (at 100°C)	0.5 s	C

Type K Model **BTN-41K** Type E Model **BTN-41E**



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

How to order of BT series



BT-31K-TC1-ANP

① ② ③ ④ ⑤ ⑥

① Needle diameter and Length (Max. temp.)	1 : $\phi 0.9\text{mm}$: 15mm (210°C) 2 : $\phi 1.5\text{mm}$: 30mm (300°C) 3 : $\phi 1.6\text{mm}$: 30mm* (300°C) 4 : $\phi 1.6\text{mm}$: 40mm* (300°C) 5 : $\phi 1.6\text{mm}$: 50mm* (300°C) 6 : $\phi 1.6\text{mm}$: 60mm* (300°C) 7 : $\phi 1.6\text{mm}$: 70mm* (300°C) 8 : $\phi 5.0\text{mm}$: 75mm* (500°C) 9 : $\phi 5.0\text{mm}$: 100mm (500°C) (*Top is $\phi 3\text{mm}$) ※ The length of the needle after installation.
② Cut type	1 : Cut 2 : Sharp
③ Thermocouple type	K : Chromel-Alumel E : Chromel-Constantan
④ Cable type (See page 5)	TC
⑤ Cable length	1 : 1m 1.5 : 1.5m 2 : 2m 2.5 : 2.5m
⑥ Plug (See page 4)	ANP ASP W

① Needle diameter and Form

You can choose grip form as below.

	Form
BT-1* BT-2*	
BT-3* BT-4* BT-5* BT-6* BT-7* BT-8*	<p>With replaceable tips</p>
BT-9*	

② Cut type

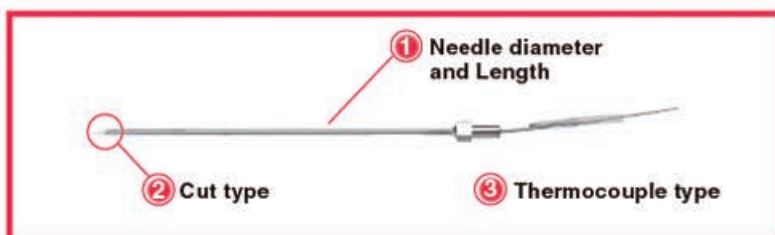
You can choose cut type as below.



Specifications

Needle diameter	Response time	Tolerance (at 100°C)	Durability rank
BT-1*	0.5 s	$\pm 2.5^\circ\text{C}$	C
BT-2*	1.5 s	$\pm 2.5^\circ\text{C}$	C
BT-3*~BT-7*	1.5 s	$\pm 2.5^\circ\text{C}$	S
BT-8*	3.0 s	$\pm 2.5^\circ\text{C}$	S
BT-9*	3.0 s	$\pm 2.5^\circ\text{C}$	B

How to order of Spare needle



Spare needle is a five-pieces set

BTN-41K

① ② ③

① Needle diameter and Length	3 : $\phi 1.6\text{mm}$: 43mm (30mm) 4 : $\phi 1.6\text{mm}$: 53mm (40mm) 5 : $\phi 1.6\text{mm}$: 63mm (50mm) 6 : $\phi 1.6\text{mm}$: 73mm (60mm) 7 : $\phi 1.6\text{mm}$: 83mm (70mm) 8 : $\phi 5.0\text{mm}$: 88mm (75mm)
② Cut type	1 : Cut 2 : Sharp
③ Thermocouple type	K : Chromel-Alumel E : Chromel-Constantan

※ () is the length of the needle after installation.