

# Model N series

## General Stationary Surface Probes

### N模式系列

N模式系列产品是适用于静止表面温度测试的通用型温度感应器。通过对各个规格的组件进行重新组合的方式，可以按照客户的使用需求进行选配。

Model N series probes are general-purpose temperature sensors designed to measure the temperatures of stationary surfaces.

Specific components may be combined to customize products for the needs of a customer's specific application.

モデルNシリーズは、静止表面の温度測定に適した汎用的な温度センサです。

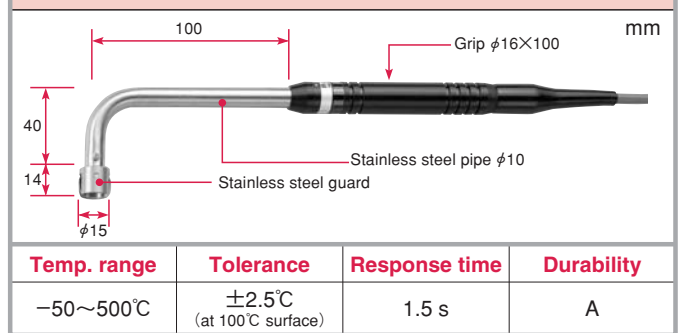
各パーツの仕様を組み合わせる事により、お客様の用途に合わせてカスタマイズする事が出来ます。

## Typical probes of N series

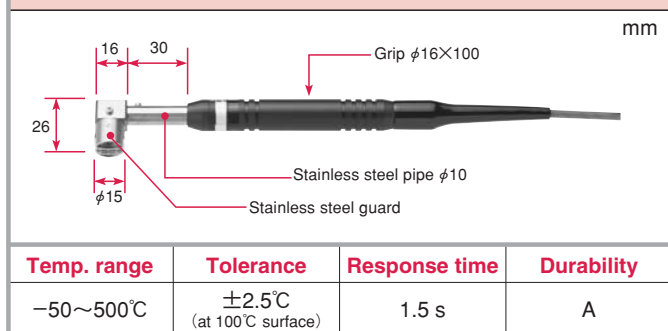
### Type K Model N-231K-00-1-TC1-ANP Type E Model N-231E-00-1-TC1-ANP



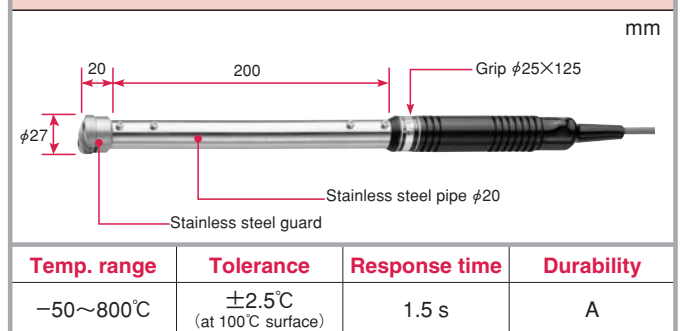
### Type K Model N-233K-01-1-TC1-ANP Type E Model N-233E-01-1-TC1-ANP



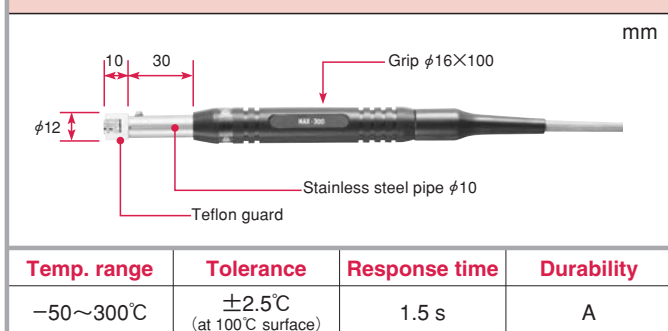
### Type K Model N-234K-00-1-TC1-ANP Type E Model N-234E-00-1-TC1-ANP



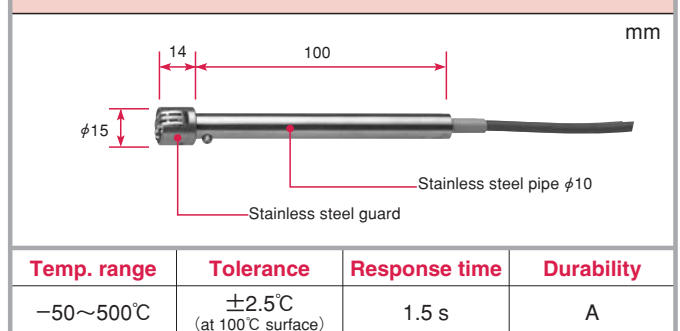
### Type K Model N-141K-02-1-TC1-ANP Type E Model N-141E-02-1-TC1-ANP



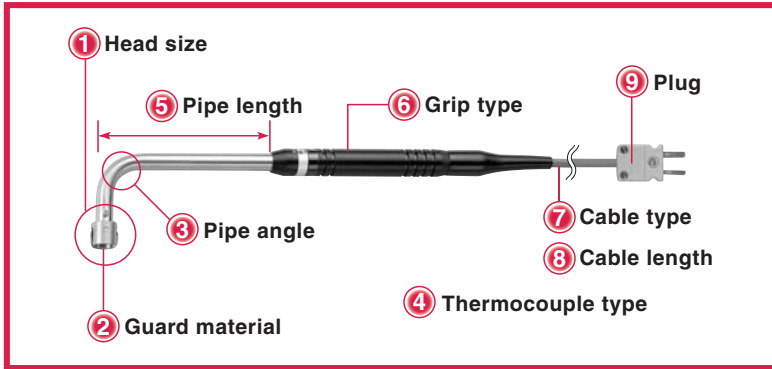
### Type K Model N-311K-00-1-TC1-ANP Type E Model N-311E-00-1-TC1-ANP



### Type K Model N-231K-01-0-TC1-ANP Type E Model N-231E-01-0-TC1-ANP



# How to order of N series



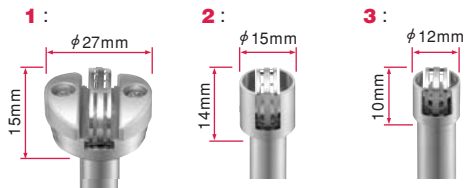
## N-233K-01-1-TC1-ANP



<b>① Head size</b>	<b>1</b> : $\phi 27\text{mm}$ <b>2</b> : $\phi 15\text{mm}$ <b>3</b> : $\phi 12\text{mm}$
<b>② Guard material</b> (Max. temp.)	<b>1</b> : Teflon (300°C) <b>2</b> : Polyimide (400°C) <b>3</b> : Stainless (500°C) <b>4</b> : Stainless for high temp. (800°C) <b>5</b> : Teflon (200°C) (Element is coated by teflon.) <b>6</b> : Polyimide (300°C) (Element is coated by polyimide.) <b>7</b> : Without guard (500°C) (Only N-1**)
<b>③ Pipe angle</b>	<b>1</b> : Straight <b>2</b> : 45 degrees <b>3</b> : 90 degrees <b>4</b> : 90 degrees (elbow) <b>5</b> : 45 degrees* <b>6</b> : 90 degrees* <b>7</b> : 90 degrees (elbow)* *Element direction of right angle
<b>④ Thermocouple type</b>	<b>K</b> : Chromel-Alumel <b>E</b> : Chromel-Constantan
<b>⑤ Pipe length</b>	<b>00</b> : 30mm <b>01</b> : 100mm <b>02</b> : 200mm ..... <b>10</b> : 1000mm <b>15</b> : 1500mm (only N-14*) <b>20</b> : 2000mm (only N-14*)
<b>⑥ Grip type</b>	<b>0</b> : No grip (For fixed-position measurement) <b>1</b> : Standard grip (For handheld measurement)
<b>⑦ Cable type</b> (See page 5)	<b>TC</b> :
<b>⑧ Cable length</b>	<b>1</b> : 1m <b>1.5</b> : 1.5m <b>2</b> : 2m <b>2.5</b> : 2.5m .....
<b>⑨ Plug</b> (See page 4)	<b>ANP</b> : P plug <b>ASP</b> : S plug <b>W</b> : Without plug

### ① Head size

You can choose head size as below.

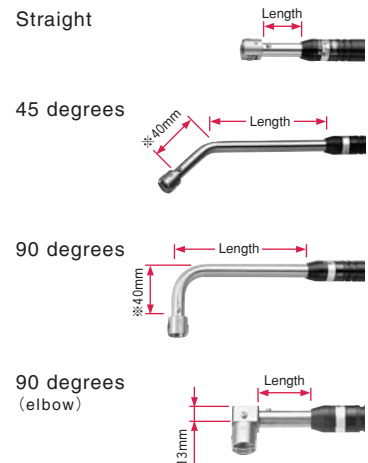


### ③ Pipe angle

You can choose pipe angle as below.

	① Pipe Element	③ Pipe Element
	<b>1</b>	
	<b>2</b>	<b>5</b>
	<b>3</b>	<b>6</b>
	<b>4</b>	<b>7</b>

### ⑤ Pipe length



\*Only the pipe of N-14\* is 110mm in height.

### ⑥ Grip type

No grip	For device, system, auto-machines, mechanical system etc
Standard grip	For handheld measurement

## Specifications

Tolerance	$\pm 2.5^\circ\text{C}$ (at 100°C surface)
Response time	1.5 s 6 s in the case of coated element (N-*5*, N-*6*)
Durability rank	A
Maximum allowable tilt	$\pm 4^\circ$ (N-2**, N-3**) $\pm 8^\circ$ (N-1**)