### Main Specifications

#### **▼**Type

Weather resistance

#### **▼**Thread

Material: SS 304

Size: 1/2"

Type: BSPT, NPT, PF

#### **▼**Electrical connection

1/2" NPT, M20 x 1.5

#### **▼**Stem

Material: SS 304

Outer diameter: 1/4"

(6.35mm)

Length: 50...2000 mm

#### **▼**Temperature range

Min.: 0°C Max.: 1800°C

#### **▼**Applicable fluid

Liquid and gas that compatible with SS 304

#### **▼**Working environment

Insert depth: At least >

8\*thermowell outer diameter

#### **▼**Ambient temperature

15°C to 35°C

#### **▼**Ambient humidity

45 to 75% R.H.

#### **▼**Atmospheric pressure

860...1060 mbar

#### **▼**Protection level

IP 65

### Other Specifications

#### **▼**Ring

Aluminum alloy with enamel

#### **▼**Back housing

Aluminum alloy with enamel

#### ▼ Measuring elements

Thermocouple

For detail information, please refer to temperature range

#### **▼**Temperature accuracy

Class I/II

# (Weather Resistance Type) Model: TC

Thermocouple



Due to the variety of customization, the picture is only for reference, please confirm the actual item with our sales. (If there is any change on specification, please take the latest version as standard.)

## **Features**

- OEM service
- Customized stem length
- Suitable for measuring medium/high temperature

## **Temperature Range Table**

Thermocouple	Class	Suitable	Maximum
material		temp.	temp. range
70%Pt/30%Rh	В	1500°C	100 to 1800°C
90%Pt/10%Rh-Pt	S	1400°C	0 to 1700°C
87%Pt/13%Rh-Pt	R	1400°C	0 to 1700°C
Nicrosil-Nisil	Ν	1000°C	200 to 1300°C
Chromel–alumel	K	700°C	200 to 1370°C
Chromel-constantan	E	550°C	200 to 1000°C
Copper–constantan	Т	200°C	200 to 400°C
Iron-constantan	J	500°C	0 to 700°C

## Thermocouple temperature sensing difference

Type	Properties
Ground	Thermocouple wiring directly connect to the bottom parts. Main features – fast response, working smoothly in high pressure environments. Disadvantage - low anti-interference performance
Non- ground	Thermocouple wiring is absolutely insulate against bottom parts. Response speed is slower than ground type. Longer service life. High anti-interference performance
Open wiring	Thermocouple with open wiring. Fastest response speed that can detect slight temperature change. Disadvantage - wiring without protection reduces service life.



## How to order

<u>TC</u>		<u>A</u>	<u>K</u>	I Ī		$\frac{\mathbf{B}}{I}$	<u>1.0</u>
Model	Code	Head shape	Class	Accuracy class	Code	Wiring type	Wiring length (mm)
TC	Α	Aluminum alloy - Round head	В	I	Α	Ground	0.32
	В	Iron alloy - Round head	S	II	В	Non- ground	0.5
	С	SS 316 - Round head	R		С	Open wiring	0.65
	D	Aluminum – Clamp	Ν			J	1.0
	E	Epoxy coating - Round head	K				1.6
	F	Aluminum – explosion-proof	E				2.3
	G	Aluminum - explosion-proof	Т				3.2
	Н	SS 316 - explosion-proof	J				
	Ι	Digital display - explosion-proof					
	J	Bakelite - round head					

	<u>S6</u>		<u>T</u>	<u>9</u>	<u>100</u>	<u>1</u>
Code	Stem material	Code	Thermowell type	Outer	Thermowell	Measuring
				diameter	length	point
				(mm)	(mm)	
<b>S4</b>	SS 304	T	Threaded	1.0	502000	1
<b>S6</b>	SS 316	F	Flanged	1.6		2
C	ceramic	HT	Threaded (High	2.3		
			pressure type)			
IN	<b>INCONEL 600</b>	HF	Flanged (High	3.2		
			pressure type)			
Ti	Ti			4.8		
HA	Hastalloy			6.4		
ML	Monel			8		
				9		
				12.75		
				21.7		

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