# Thin type thermocouple temperature transducer

# Model TH-2C, 5C





## ■ Input Specification

Thermocouple (JIS C1602-1995)

Code	Sensor	Input	No.Y Limit of specifications
J0	J	0 to 1000°C	-50 to 1000°C
JY		Other than the above	Span:200 to 1050°C
K2	К	-50 to 200°C	-50 to 1200°C Span:200 to 1250°C
K3		0 to 200°C	
K4		-50 to 1200°C	
K5		0 to 1200°C	
KY		Other than the above	
R0	R	0 to 1700°C	0 to 1700°C Span:400 to 1700°C
RY		Other than the above	
T0	Т	-50 to 350°C	-50 to 350°C Span:200 to 400°C
T1		0 to 350°C	
TY		Other than the above	
S0	S	0 to 1700°C	0 to 1700°C Span:500 to 1700°C
SY		Other than the above	

Allowable input value:-50 to 150% F.S

# ■ Output Specification

Code	Output	Load resistance
0	0 to 5V DC	More than 2KΩ
1	1 to 5V DC	
2	0 to 10V DC	More than 4KΩ Negative output:more than 10kΩ
3	-10 to 10V DC	
Α	4 to 20mA DC	Less than 550Ω
Υ	Other than the above	

For code No.Y limit of specifications Voltage output:-10 to 10V DC Minimum span:1 to 20V Current output:0 to 20mA DC Minimum span:1 to 20mA

## General Specifications

Base accuracy:  $\pm 0.2\%$  F.S (at 25±2°C)

Load resistance variation: ±0.06% F.S Power supply variation: ±0.06% F.S Temperature characteristic: ±0.02% F.S/°C

Accuracy of cold junction compensation: ±1°C (10 to 30°C)

 $\begin{array}{ccc} & \pm 2^{\circ}\text{C} \text{ (Other than 10 to 30°C)} \\ \text{Response time:} & 200\text{msec TYP } (0 \rightarrow 90\%) \\ \text{Disconnection detection:} & \text{Upside } (135\pm15\%\text{F.S}) \\ \text{Front adjustments:} & \text{More than } \pm5\%\text{F.S (zero, span)} \end{array}$ 

Insulation resistance: Between the input and output/power supply

More than 100MΩ at 500V DC

Dielectric strength: Between the input and output/power supply

For 1 min. at 1500V AC Power supply voltage: 100 to 240V AC ±10% 24V DC ±10%

Consuming current: Less than 20mA (at 100V AC)

Less than 50mA (at 24V DC)

Operating ambient temperature : -5 to 50°C

Operating ambient humidity: Less than 90%RH (No-condensing)

Storage temperature : Within -10 to +70°C

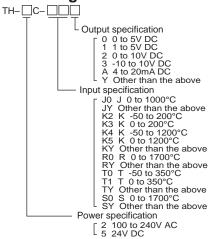
Storage humidity: Less than 60%RH (No-condensing)

Case material : Black PC 94V-2 Weight : Approx. 80g

#### Features

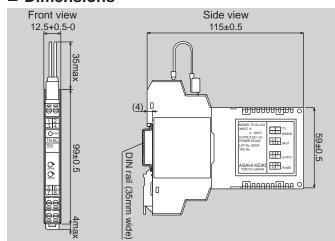
- AC power supply 100 to 240V AC
- DIN rail mounting
- Input/Output/Power supply isolated

# ■ Ordering Code

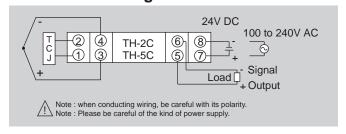


Example: TH-5 C-K32

#### Dimensions



## ■ Connection Diagram



## ■ Block Diagram

