

# Thin type potentiometer transducer

## MODEL TH-2B, 5B



### Input Specification

Potentiometer resistance 100 to 10kΩ  
Reference voltage 0.5V

Code	Input
1	0 to 100%
Y	Other than the above

For code No.Y limit of specifications  
Minimum span: More than 50%

### 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
3	-10 to 10V DC	Negative output: more than 10kΩ
A	4 to 20mA DC	Less than 550Ω
Y	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:  $\pm 0.1\%$  F.S (at  $25 \pm 2^\circ\text{C}$ )  
Load resistance variation:  $\pm 0.06\%$  F.S  
Power supply variation:  $\pm 0.06\%$  F.S  
Temperature characteristic:  $\pm 0.02\%$  F.S/ $^\circ\text{C}$   
Response time: 50msec TYP (0  $\rightarrow$  90%)  
Setting change error:  $\pm 1\%$  F.S  
Front adjustments: More than  $\pm 5\%$  F.S (zero, span)  
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  $\pm 10\%$   
24V DC  $\pm 10\%$   
Consuming current: Less than 20mA (at 100V AC)  
Less than 50mA (at 24V DC)  
Operating ambient temperature:  $-5$  to  $50^\circ\text{C}$   
Operating ambient humidity: Less than 90%RH (No-condensing)  
Storage temperature: Within  $-10$  to  $+70^\circ\text{C}$   
Storage humidity: Less than 60%RH (No-condensing)  
Case material: Black PC 94V-2  
Weight: Approx. 80g  
Applicable standards: TH-5B (24V DC POWER)  
EN61326-1  
Only in the case of lines < 30m.  
The above standards do not apply to the converter with "Y" specifications.  
EN IEC 63000

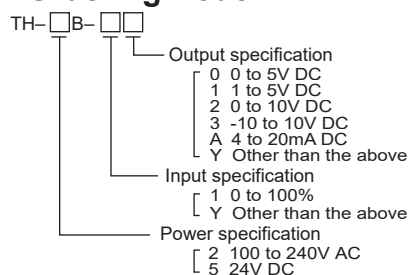
### Setting input range

ON OFF	1 2 3 4 [ON] [OFF]	0 to 70%	ON OFF	1 2 3 4 [ON] [OFF]	10 to 90%
	[ON] [OFF]	0 to 80%		[ON] [OFF]	10 to 100%
	[ON] [OFF]	0 to 90%		[ON] [OFF]	20 to 90%
	[ON] [OFF]	0 to 100%		[ON] [OFF]	20 to 100%
	[ON] [OFF]	10 to 80%		[ON] [OFF]	30 to 100%

### Features

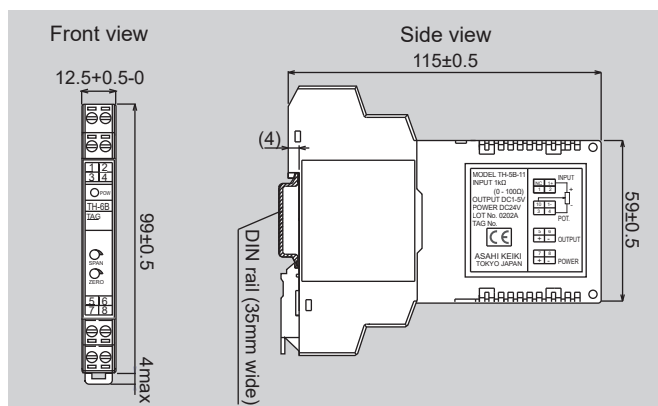
- AC power supply 100 to 240V AC
- DIN rail mounting
- Input/Output/Power supply isolated
- Can change input and output by dip switch

### Ordering Code

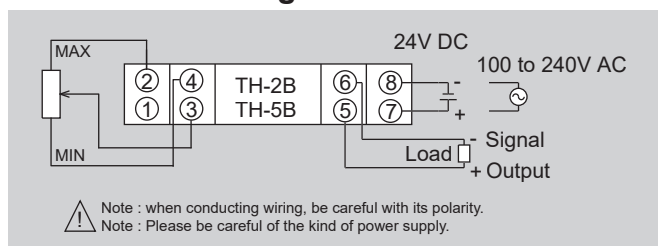


Example: TH- 5 B- [1] [0]

### Dimensions



### Connection Diagram



### Block Diagram

