

# Terminal Type Potentiometer Transducer

## MODEL TZ-5BA

**NEW!**



### Input Specification

Code No.	Total resistance	Input range
1	100Ω to 10kΩ	0 to 100%

Reference voltage : 0.5V  
For Code No. Y

Limit of specifications  
Span : More than 50%

Note : No dip swithes can be used for the Yspecification.

By changing a Dip switch setup, change of an input range is possible.

Dip switch	Input range	Dip switch	Input range
ON	0 to 70%	ON	10 to 90%
ON	0 to 80%	ON	10 to 100%
ON	0 to 90%	ON	20 to 90%
ON	0 to 100% (Factory setting)	ON	20 to 100%
ON	10 to 80%	ON	30 to 100%

Note : Always manipulate each dip switch with the power turned off.

### Output Specification

Code No.	Output signal	Allowable Loadresistance
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
4	-2 to 2VDC	More than 2kΩ Negative output: more than 10kΩ
5	-2.5 to 2.5VDC	
6	-5 to 5VDC	More than 2kΩ
7	0 to 4VDC	
A	4 to 20mADC	Less than 550Ω
B	0 to 20mADC	
Y	Other than the above	

For code No. Y

Limit of specifications

Voltage output : Less than +15 VDC and more than -12 VDC

Minimum span : Less than +27 VDC and more than 0.06 VDC

(Load resistance : 10kΩ at the output exceeding 10V, and a negative output)

(Base accuracy : ±0.15 %F.S and temperature characteristic :

±0.03 %F.S/°C for a span of less than 1V)

Current output : Less than +20 mADC and more than 0 mADC

Minimum span : Less than +20 mADC and more than 1 mADC

Outputs can be reversed for both voltage and current outputs.

### General Specifications

Base Accuracy : ±0.1 %F.S (At 25±2°C)

Power supply variation : ±0.06 %F.S

Load resistance variation : ±0.06 %F.S

Temperature characteristic : ±0.02 %F.S/°C

Response time : Less than 50msec (TYP)(0→90%)

Error caused by input range setting change : Within ±2 %F.S

Front adjustments : ±5% for zero and span

Insulation resistance : Between input and output/power supply ;  
More than 100MΩ at 500 VDC

Dielectric strength : Between input and output/power supply ;  
For 1 min. at 1500VAC

Power supply voltage : 24VDC ±10 %

Consuming current : Less than 35mA (24VDC at voltage output)

Less than 50mA (24VDC at current output)

Operating ambient temperature : -5 to 50°C

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

Storage temperature : -10 to 70°C

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

Case material : ABS resin (Black) 94V-2

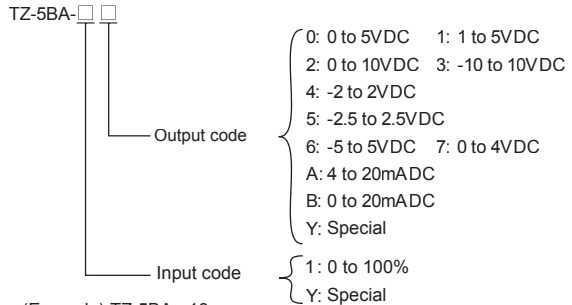
Weight : Approx. 80g

Vibration resistance : Frequency: 10 to 55Hz; amplitude(half): 0.15mm  
to 10 sweeps of 5 min each in X, Y, and Z directions

### Features

- DC power supply 24V DC
- DIN rail mounting
- Input/Output/Power supply isolated

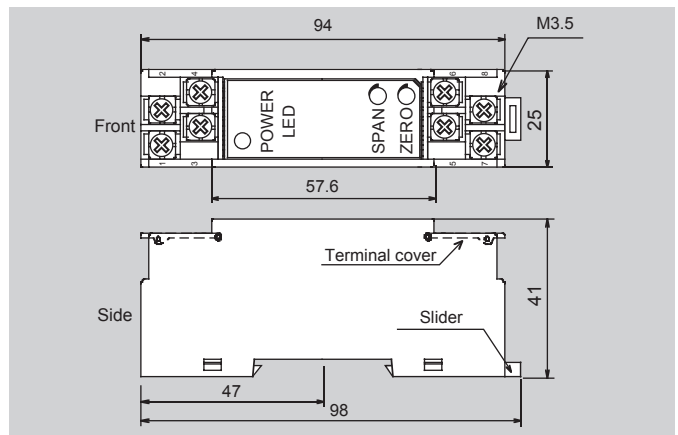
### Ordering Code



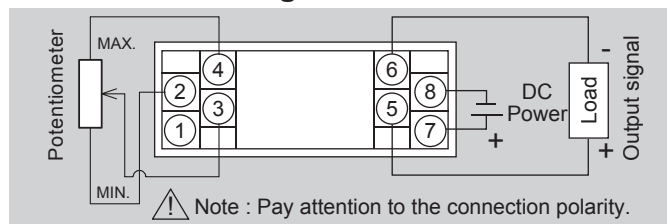
(Example) TZ-5BA - 13

Potentiometer resistance : (total resistance 100Ω to 10kΩ)

### Dimensions



### Connection Diagram



### Block Diagram

