# Terminal Type Potentiometer Transducer (AC Power)

# **MODEL TZ-1BA**





#### 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%
1234		1 2 3 4	

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

### Output Specification

Code No.	Output signal	Allowable Loadresistance	
0	0 to 5VDC	More than 2kΩ	
1	1 to 5VDC		
2	0 to 10VDC	More than $4k\Omega$ Negative output:more than $10k\Omega$	
3	-10 to 10VDC		
4	-2 to 2VDC	More than 2kΩ Negative output:more than 10kΩ	
5	-2.5 to 2.5VDC		
6	-5 to 5VDC		
7	0 to 4VDC	More than 2kΩ	
Α	4 to 20mADC	Less than 550Ω	
В	0 to 20mADC	Less (Hall 5501)	
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 (Road resistance :  $10k\Omega$  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  $100M\Omega$  at 500 VDC

Dielectric strength: Between input and output/power supply;

For 1 min. at 2000VAC Power supply voltage: 100 to 240VAC ±10 %

Consuming current: Less than 20mA (100VAC at voltage output)

Less than 30mA (100VAC 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 rasin (Black) 94V-2

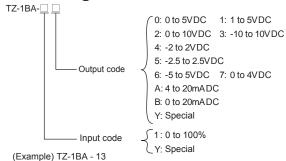
Weight: Approx. 80g Vibration resistance:

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

#### Features

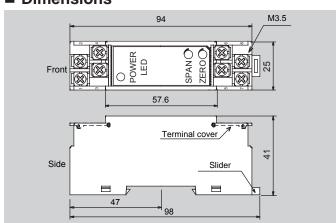
- AC power supply 90 VAC to 240 VAC
- DIN rail mounting
- Input/Output/Power supply isolated

#### Ordering Code

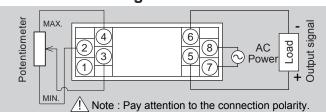


Potentiometer resistance : (total resistance  $100\Omega$  to  $10k\Omega$ )

#### Dimensions



#### ■ Connection Diagram



## ■ Block Diagram

