

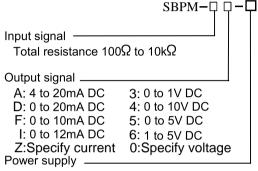
# Porentiometer transmitter

# MODEL SBPM

### ■ Features

- Simple wiring using a plug-in socket
- Compact
- 3-port insulation (Input-Output-Power)

### ■ Model



M: 100 to 240V AC

R: 24V DC

### ■ How to order

Specify a model name. (e.g.) SBPM-A-M

### **■** Input specifications

Total resistance :  $100\Omega$  to  $10k\Omega$  Reference voltage: 1.0V DC

Minimum span : 50% or more of the Total resistance

### ■ Output specifications

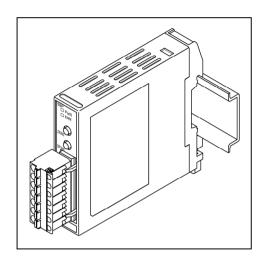
When the output range lower limit is zero, (even if zero adjustment results in a negative value), output value will not indicate a negative value.

### **DC** current

Output range	Allowable load resistance
4 to 20mA DC	$600\Omega$ or less
0 to 20mA DC	$600\Omega$ or less
0 to 12mA DC	1k $\Omega$ or less
0 to 10mA DC	1k $\Omega$ or less

### DC voltage

Output range	Allowable load
	resistance
0 to 1V DC	100 $\Omega$ or more
0 to 5V DC	$500\Omega$ or more
1 to 5V DC	$500\Omega$ or more
0 to 10V DC	1k $\Omega$ or more



### ■ Performance

Accuracy : Within  $\pm 0.2\%$ Response time : 1 sec.  $(0 \rightarrow 90\%)$ 

(Average 0.5 sec)

Temperature coefficient: ±0.015%/℃

Insulation resistance :  $10M\Omega$  or more, at 500V DC

(Input-Output-Power)

Dielectric strength : 2.0kV AC for 1 minute

(Input-Output-Power)

### ■ General specifications

Case : Flame resistant resin, Color: Light gray

Panel : Polycarbonate

Spring type plug: Polyamide, Color: Green Adjustment: By the front adjustment button

Zero adjustment:

By pressing the Zero adjustment button for 2 seconds after setting the input potentiometer to any position of the MIN side, zero position is automatically registered. Span adjustment:

By pressing the Span adjustment button for 2 seconds after setting the input potentiometer to any position of the MAX side, span position is automatically registered.

Indication:
PWR indicator: Green

Lights when power is turned on.

Flashes in 500ms cycles when an error has occurred in non-volatile memory.

ERR indicator: Red

Flashes in 250ms cycles when input is 110% or more. Flashes in 500ms cycles when input is -10% or less.

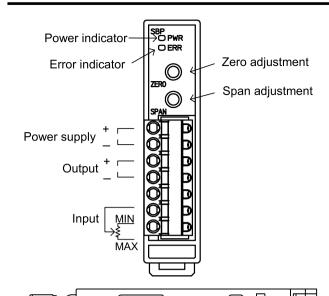
Output status selection:

Output status either Normal or Reverse can be selected by the DIP switch.

No.1 OFF: Normal, ON: Reverse Momentary power failure: 30msec

Self diagnosis:

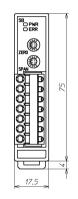
The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit restarts with the Reset action.



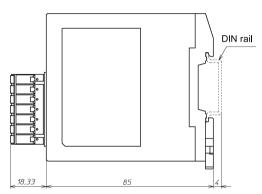
# Power supply Power circuit Output The power circuit Output The power circuit Output Cruit Power circuit Reference

**■** Circuit configuration, terminal arrangement

# ■ External dimensions (Scale: mm)



MAX



# ■ Installation specifications

Power supply

• 100 to 240V AC 50/60Hz

Allowable voltage range: 85 to 264V AC Power consumption : Approx. 3.5VA

• 24V DC

Allowable voltage range: 20 to 28V DC Power consumption : Approx. 3.5W

Ambient temperature: -5 to 55°C

Ambient humidity : 35 to 85%RH (non-condensing)

Weight : Approx. 80g
Mounting method : DIN rail mounting

Be sure to use fastening plates at both ends of the unit after the unit

DIP switch

Spring type plug

is mounted to the DIN rail.

External dimensions: 17.5 (W) x 75 (H) x 85 (D) mm

## **■** Environmental specification

RoHS directive compliance

### **■** Ferrules

Made by Phoenix Contact GMBH & CO.

Insulation sleeve attached

Model Conductor cross section AI0.25-6BU  $0.2 - 0.25 \text{mm}^2$  $0.25 - 0.34 \text{mm}^2$ AI0.34-8TQ AI0.5-8WH  $0.34 - 0.5 \text{mm}^2$  $0.5 - 0.75 \text{mm}^2$ AI0.75-8GY  $0.75 - 1.0 \text{mm}^2$ AI1-8RD AI1.5-8BK  $1.0 - 1.5 \text{mm}^2$ AI2.5-8BU  $1.5 - 2.5 \text{mm}^2$ 

Crimping pliers

CRIMPFOX ZA3 CRIMPFOX UD6