

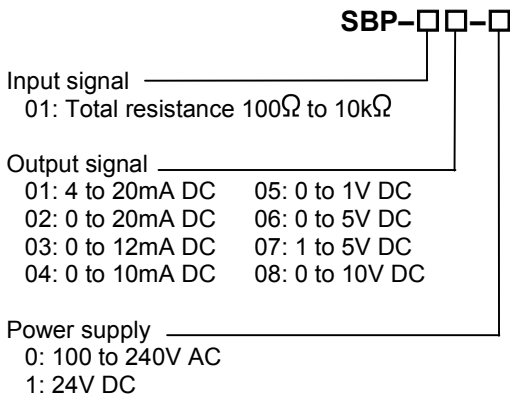
Potentiometer Transmitter

Model: **SBP**

■ Features

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

■ Model



■ How to order

Specify a model name.
 (e.g.) SBP-0101-0

■ Input specifications

Total resistance : 100Ω to 10kΩ
 Reference voltage: 1.0V DC
 Minimum span : 50% or more of the Total resistance

■ Output specifications

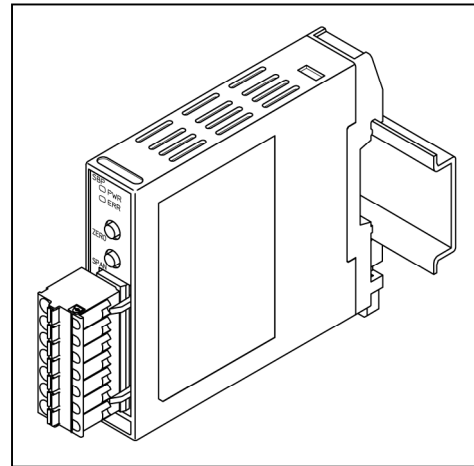
When the output range lower limit is zero, (even if zero adjustment results in a negative value), output value will not indicate a negative value.

DC current

Output range	Allowable load resistance
4 to 20mA DC	600Ω or less
0 to 20mA DC	600Ω or less
0 to 12mA DC	1kΩ or less
0 to 10mA DC	1kΩ or less

DC voltage

Output range	Allowable load resistance
0 to 1V DC	100Ω or more
0 to 5V DC	500Ω or more
1 to 5V DC	500Ω or more
0 to 10V DC	1kΩ or more



■ Performance

Accuracy : Within ±0.2%
 Response time : 1 sec. (0 → 90%)
 (Average 0.5 sec)
 Temperature coefficient: ±0.015%/°C
 Insulation resistance : 10MΩ 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:

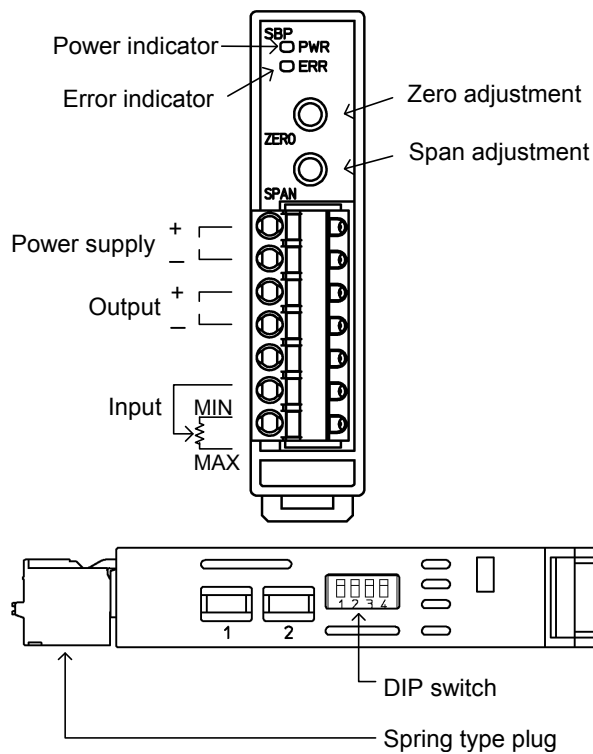
Output status either Normal or Reverse can be selected by the DIP switch.

No.1 OFF: Normal, ON: Reverse

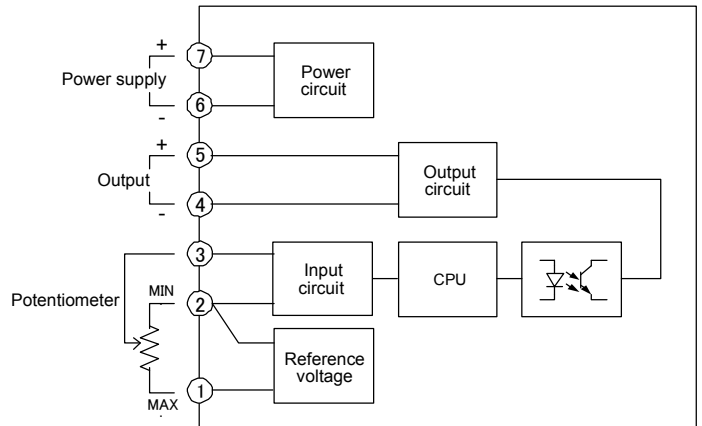
Momentary power failure: 30msec

Self diagnosis:

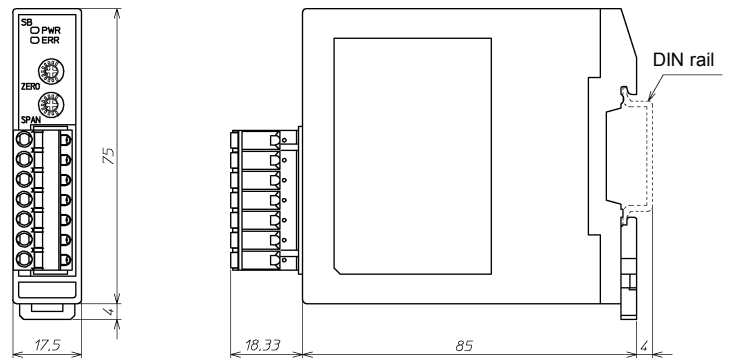
The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit restarts with the Reset action.



■ Circuit configuration, terminal arrangement



■ External dimensions (Scale: mm)



■ 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 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
A10.25-6BU	0.2 – 0.25mm ²
A10.34-8TQ	0.25 – 0.34mm ²
A10.5-8WH	0.34 – 0.5mm ²
A10.75-8GY	0.5 – 0.75mm ²
A11-8RD	0.75 – 1.0mm ²
A11.5-8BK	1.0 – 1.5mm ²
A12.5-8BU	1.5 – 2.5mm ²

Crimping pliers
 CRIMPFOX ZA3
 CRIMPFOX UD6