

§Small-sized plug-in transducer§

1 output type

Potentiometer transducer

FSRT

Application

Replaces mechanical displacement of an angle or a position with resistance value change of a potentiometer, inputs the resistance change, then insulates and converts it into a DC signal proportional to the change. Up to 16 units can be housed in an installation base.



23 × 76 × 125mm/130g

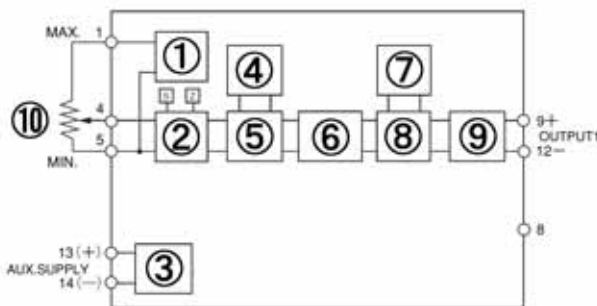
Feature

1. Compact and high withstand voltage.
2. Withstand voltage between input/output/auxiliary supply/outer case is AC2, 000V (50/60Hz) for 1 min..
3. Compatible with resistance range 100Ω-10kΩ of a potentiometer.
4. Constant voltage/current output type. No need to adjust the product if it operates within load resistance range.
5. A LED can confirm status of electric power applied.

How to adjust

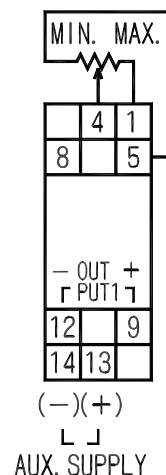
Please adjust output ZERO VR/SPAN VR of front VR in accordance with the potentiometer you actually Use. Variable range of output ZERO VR/SPAN VR are as follows. (ZERO VR: 0-50% of nominal resistance value, SPAN VR: 50-100% of nominal resistance value)

Block Diagram



- Specified voltage circuit
- Input amplifying circuit
- Insulated power source circuit
- Oscillating circuit
- Pulse width modulation circuit
- Photo coupler insulation
- Reference voltage
- Pulse width demodulation circuit
- Output circuit
- Potentiometer

Connection diagram (socket)



§Small-sized plug-in transducer§

1 output type

Potentiometer transducer

Specification

How to specify

Type name **FSRT** - Specification code **0**

Input (nominal resistant)	Output (load resistant)	Auxiliary supply	Power fuse	Common specification
<p>00F: Any value within 100Ω-10kΩ</p> <p>Any potentiometer of range 100Ω-10kΩ can be used within the following adjustment range of output signal.</p> <p>Voltage between terminals: approx. DC 0.5V (from No. 1 to No. 5)</p> <p>ZZZ: other than those above *1 (See product range)</p>	<p>1:DC0-100mV (200)</p> <p>2:DC0-1V (200)</p> <p>3:DC0-5V (600)</p> <p>4:DC0-10V (2k)</p> <p>5:DC1-5V (600)</p> <p>A:DC0-1mA (10k)</p> <p>B:DC0-5mA (2k)</p> <p>C:DC0-10mA (1k)</p> <p>D:DC0-16mA (600)</p> <p>E:DC1-5mA (3k)</p> <p>F:DC4-20mA (750)</p> <p>Z:other than those above *1 (See product range)</p>	<p>F:AC/DC80-264V Rated Voltage AC100/110V 50/60Hz AC200/220V 50/60Hz DC100/110V</p> <p>E:DC24V (DC19-30V)</p>	<p>1:without fuse</p> <p>2:with fuse</p>	<p>Conversion accuracy: ± 0.3%</p> <p>Temperature characteristics: 0.3%/10</p> <p>Response time: 0.5s/90%</p> <p>Consumption VA: At AC110V: 3.5VA At AC220V: 4.5VA At DC110V: 2.0W At DC24V: 2.5W</p> <p>Weight: Without socket: approx.100g With socket: approx.130g</p>

*1 Consult with us for specification other than those indicated in the table above.

Product Range (including special handling)

Input	Output
Nominal resistance value: 50Ω-10kΩ	Current output: -5mA-20mA Voltage output: -10V-10V

Input: Nominal resistance value 50-99.99Ω is subject to special handling. (Conversion accuracy ±0.3%)
Output: Plus/minus output is subject to special handling.

Adjustment range of output signal

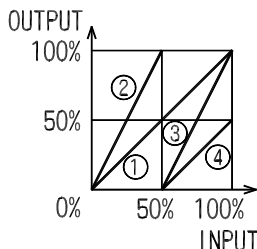
Input form ZERO adjustment range: 0-50% of nominal resistance value

00F

(can be changed from the front of converter)

SPAN adjustment range: 50-100% of nominal resistance value

(can be changed from the front of converter)



ZERO.....0%, SPAN.....100% Standard

ZERO.....0%, SPAN.....50%

ZERO.....50%, SPAN.....50% (parallel shift of)

ZERO.....50%, SPAN.....100% (parallel shift of)

* Output value can be adjusted to zero against any input value between 0-50%.

Because this device is potential-free type, factory preset input is 0-10kΩ; factory preset output is indicated in graph above (standard).