§Small-sized plug-in transducer§

2-output type

Distributor

FWDT

■ Application

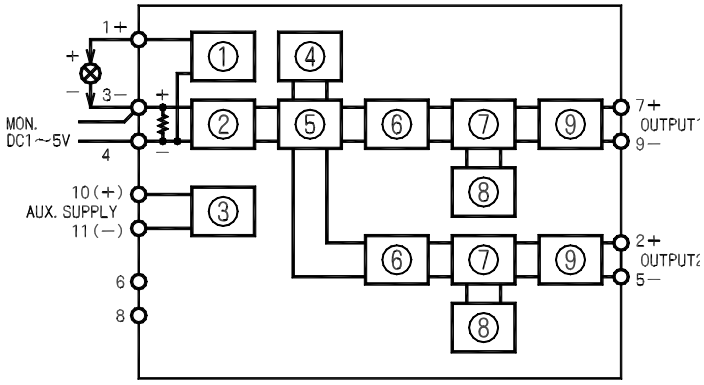
Supplies electrical power to a 2-wire transmitter, receives a DC4-20mA signal from the transmitter, then insulates and outputs a proportional DC signal. Because this transducer can extract two insulated outputs, control and monitor can be done by a single unit. Up to 16 units can be housed in an installation base.

29.5×76×125mm/180g

■ Feature

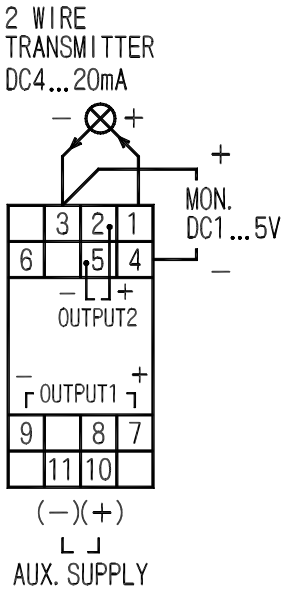
1. Compact and high withstand voltage.
2. Withstand voltage between input/output/auxiliary supply/outer case is AC2, 000V (50/60Hz) for 1 min..
3. Withstand voltage between outputs is AC500V (50/60Hz) for 1 min..
4. With distributing and signal converting function, this is a distributor for two-wire transmitter use.
5. With transmitter power source short-circuit protection (limited current 23-30mA).
6. A DC4-20mA signal from transmitter monitored as a DC 1-5V(±0.1%) signal through socket (FW11) terminals 3-4.
7. Constant voltage/current output type. No need to adjust the product if it operates within load resistance range.
8. A LED can confirm status of electric power applied.
9. Zero/span of 1st and 2nd output can be adjusted individually. (±2% adjustable)

■ Block Diagram



① Power source circuit
② Input amplifying circuit
③ Insulated power source circuit
④ Oscillating circuit
⑤ Pulse width modulation circuit
⑥ Photo coupler insulation
⑦ Pulse width demodulation circuit
⑧ Reference voltage
⑨ Output circuit

■ Connection diagram (socket)



§Small-sized plug-in transducer§

2-output type *Distributor*

■ Specification

● How to specify

Type name **FWDT** - Specification code □□□ □ □ □ □ **0**

Input (input resistance)	1st Output (load resistant)	2nd Output (load resistant)	Auxiliary supply	Power fuse	Common specification
0C7 :DC 4-20mA (250Ω±0.1%)	1 :DC0-100mV (≧200Ω) 2 :DC0-1V (≧200Ω) 3 :DC0-5V (≧600Ω) 4 :DC0-10V (≧2kΩ) 5 :DC1-5V (≧600Ω) A :DC0-1mA (≦10kΩ) B :DC0-5mA (≦2kΩ) C :DC0-10mA (≦1kΩ) D :DC0-16mA (≦600Ω) E :DC1-5mA (≦3kΩ) F :DC4-20mA (≦750Ω)	1 :DC0-100mV (≧200Ω) 2 :DC0-1V (≧200Ω) 3 :DC0-5V (≧1kΩ) 5 :DC1-5V (≧1kΩ) A :DC0-1mA (≦7kΩ) B :DC0-5mA (≦1.4kΩ) C :DC0-10mA (≦700kΩ) D :DC0-16mA (≦430Ω) E :DC1-5mA (≦1.4kΩ) F :DC4-20mA (≦350Ω)	F : AC/DC80-264V Rated Voltage AC100/110V 50/60Hz AC200/220V 50/60Hz DC100/110V 5 :DC24V (DC19-30V) A :DC24V (DC19-30V) CE marking *2	1 : without fuse 2 :with fuse	**Conversion accuracy:** ±0.1% **Temperature characteristics:** 0.2%/10℃ **Response time:** ≦0.5s/90% **2-wire transmitter power source:** DC24-28V (when there is no load) **Current capacity:** ≦DC22mA **Consumption VA:** At AC110V: 5.0VA At AC220V: 6.0VA At DC110V:3.0W At DC24V: 3.5W **CE marking item:** At DC24V: 4.4W **Weight:** Without socket: approx.130g With socket: approx.180g
ZZZ :other than those above *1 (See product range)	Z :other than those above *1 (See product range)	Z :other than those above *1 (See product range)			

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

Product Range (including special handling)

Input	1st Output	2nd Output
Current input span: ≧12mA Full input: MAX20mA	Current output: 1mA-20mA Voltage output: 10mV-10V	Current output: 1mA-20mA Voltage output: 10mV-10V

*2 CE marking compliant specifications

EMC compliant specifications

EMI (emission) EN61000-6-4
EMS (immunity) EN61000-6-2

Safety standard

EN61010-1
CAT Ⅲ, pollution degree: 2

●Transmitter power source

In case that overcurrent which exceeds current capacity of incoming current/short-circuit is circulated in transmitter power source terminal, a built-in short-circuit protection circuit functions, supply voltage is lowered and supply current is limited to protect the distributor.

●Line resistance (between transmitter and distributor)

$$\text{Line resistance} \leqq \frac{19\text{V (*)} - \text{MIN. operating voltage of transmitter}}{0.02\text{A}}$$

(*)MIN. supply voltage (24V) - Internal voltage drop (5V) = 19V