

DISTRIBUTOR WITH SQUARE ROOT EXTRACTION

WSRDTP2 – C 7

Use

Supplies electrical power to a 2-wire transmitter receives a DC4-20mA signal from the transmitter and outputs a DC signal proportional to the square root of the signal.

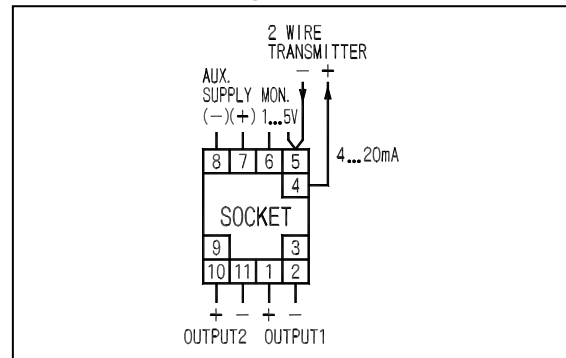
Features

1. Equipped with functions both of a distributor and a signal exchanger, the transducer is for a 2-wire transmitter's use.
2. Short-circuit protection function for transmitter circuit (30mA) .
3. Supplies a 2-wire transmitter with a stable power source.
4. Withstand voltage between 1st output and 2nd output is AC1, 000V.
5. Impulse withstands voltage 5kV, 1.2/50µs (between electric circuit and outer case) positive/ negative polarity 3 times each is guaranteed.
6. Output under 10% shall be clamped at 0% output by a cut circuit.
7. DC1-5V (±0.1%) monitoring of the DC4-20mA signal from the transmitter can be done by the terminal No. 5 and No. 6 of the device.



WSRDTP2-C7H51
(80 × 50 × 133mm/450g)

Connection diagram



Specification

Input (input resistance)	1 st Output (load resistance)	2 nd Output (load resistance)	Auxiliary supply	Common specification
<input type="checkbox"/> DC4-20mA (250Ω±0.1%)	<input type="checkbox"/> : DC0-100mV(200Ω) <input type="checkbox"/> : DC0-1V (200Ω) <input type="checkbox"/> : DC0-5V (1kΩ) <input type="checkbox"/> : DC 0-10V (2kΩ) <input type="checkbox"/> : DC1-5V (1kΩ) <input type="checkbox"/> : DC0-1mA (12kΩ) <input type="checkbox"/> : DC0-5mA (2.4kΩ) <input type="checkbox"/> : DC0-10mA (1.2kΩ) <input type="checkbox"/> : DC0-16mA (750Ω) <input type="checkbox"/> : DC1-5mA (2.4kΩ) <input type="checkbox"/> : DC4-20mA (600Ω) <input type="checkbox"/> : other than those above	<input type="checkbox"/> : DC0-100mV(200Ω) <input type="checkbox"/> : DC0-1V (200Ω) <input type="checkbox"/> : DC0-5V (1kΩ) <input type="checkbox"/> : DC 0-10V (2kΩ) <input type="checkbox"/> : DC1-5V (1kΩ) <input type="checkbox"/> : DC0-1mA (7kΩ) <input type="checkbox"/> : DC0-5mA (1.4kΩ) <input type="checkbox"/> : DC0-10mA (700Ω) <input type="checkbox"/> : DC0-16mA (430Ω) <input type="checkbox"/> : DC1-5mA (1.4kΩ) <input type="checkbox"/> : DC4-20mA (350Ω) <input type="checkbox"/> : other than those above	<input type="checkbox"/> : AC100V±10%, 50/60Hz <input type="checkbox"/> : AC110V±10%, 50/60Hz <input type="checkbox"/> : AC200V±10%, 50/60Hz <input type="checkbox"/> : AC220V±10%, 50/60Hz <input type="checkbox"/> : DC24V±10% <input type="checkbox"/> : other than those above	2-wire transmitter power source: DC24-28V (when there is no load) Current capacity: DC22mA MAX Tolerance: ±0.25% Response time: 0.25sec./90% Consumption VA: AC power source:4VA DC power source:3.5W Weight: AC power source:450g DC power source:350g
	<input type="checkbox"/> : DC4-20mA(800Ω) DC1-5V(250kΩ) With output switching function	<input type="checkbox"/> : DC1-5V (1kΩ)	<input type="checkbox"/> : AC100V+10%, -15%, 50/60Hz <input type="checkbox"/> : AC110V+10%, -15%, 50/60Hz <input type="checkbox"/> : AC200V+10%, -15%, 50/60Hz <input type="checkbox"/> : AC220V+10%, -15%, 50/60Hz <input type="checkbox"/> : DC24V+10%, -15%,	

Open of current output: even if the current output terminal is used in a state of regular open, there is no problem. Also, a voltage of approx. 25V occurs on the output terminal.

Built-in ripple filter

Even if a ripple of single-phase AC full rectification wave (50/60Hz) degree is included in input wave, it still converts the wave into a smoothed DC signal.

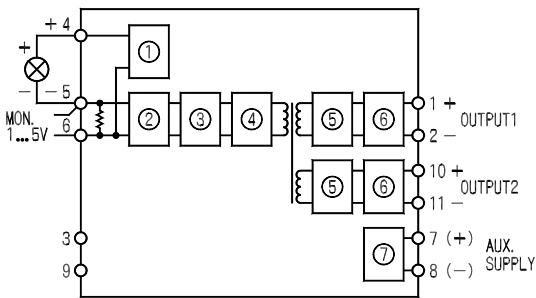
Withstand voltage

Between input/output/power source : AC2, 000V for 1 min
 Between electric circuit and outer case: AC2, 000V for 1 min
 Between 1st and 2nd output : AC1, 000V for 1 min

Insulation resistance

Between input/output/power source : 50M (at DC500V)
 Between electric circuit and outer case: 50M (at DC500V)
 Between 1st and 2nd output : 50M (at DC500V)

Block diagram



Power supply circuit
 Low-drift amplifying circuit
 Square root extracting circuit
 Pulse width modulation circuit
 Pulse width demodulation circuit
 Output circuit
 Insulated power source circuit

Purchase specifications

