# § PLUG-IN TRANSDUCER § 1 OUTPUT TYPE

ISOLATOR WITH LOWER LIMITER

TP2 -

### Use

A transducer which has a lower limit limiter (fixed) function included in output which is proportional to input.

### Features

- 1. Constant voltage/current output
- 2. Withstand voltage between input, output, auxiliary supply and outer case (earth) is AC2, 000V (50/60Hz), complete insulation for 1 minute.
- 3. Input/output line surge protection (2,000A, 8/20µs, positive/negative polarity)
- 4. Lower limit limiter function.

Output less than -1% against output 0–100% is not available. Consult us for a limiter value equal to or less than -1%.

### Specification

Input (input resistance or voltage drop)		Output (load resistance)	Auxiliary supply	Common specification
<u>A1</u> : DC0-10mV (approx.1MQ)	<u>C1</u> : DC0-10 µ A (100mV) *1	1: DC0-100mV ( 200 )	1:AC100V±10%,	Tolerance: ± 0.25% *2
$\underline{A2}$ : DC0-50mV (approx.1MQ)	C2 : DC0-100 µ A (100mV)	2: DC0-1V ( 200 )	50/60 Hz	Response time:
$\underline{A3}$ : DC0-60mV (approx.1MQ)	<u>C3</u> : DC0-1mA (арргох.100Ω)	3:DC0-5V (1k)	2:AC110V±10%,	0.5sec./99%
A4 : DC0-100mV (approx.1MQ)	C4 : DC0-5mA (approx.100Ω)	4 : DC 0-10V ( 2k )	50/60 Hz	Consumption VA:
$\overline{\text{A5}}$ : DC0-1V (approx.1MQ)	C5 : DC0-10mA (approx.100Ω)	5:DC1-5V (1k)	3:AC200V±10%,	AC power source:3VA
$\underline{A6}$ : DC0-5V (approx.1MQ)	<u>C6</u> : DC0-16mA (approx.100Ω)	6: DC ± 5V (1k)	50/60 Hz	DC power source:3.5W
$\overline{\text{A7}}$ : DC0-10V (approx.1MQ)	C7 : DC4-20mA (approx.100Ω)	$\overline{7}$ : DC ± 10V (2k)	4 : AC220V±10%,	Weight:
$\underline{A8}$ : DC1-5V (approx.1MQ)	D1 : DC ± 10 µ A (± 100mV)*1	A:DC0-1mA ( 10k )	50/60 Hz	AC power source:400g
B1 : DC $\pm 10$ mV (approx.1MQ)	D2 : DC ± 100 µ A (± 100 mV)	$\underline{\mathbf{B}}$ : DC0-5mA (2k)	5: DC24V±10%	DC power source:300g
B2 : DC ± 50mV (approx.1MQ)	$D3 : DC \pm 500 \mu A (\pm 100 mV)$	<u>C</u> :DC0-10mA (1k)		
B3 : DC ± 60mV (approx.1MQ)	$D4$ : DC ± 1mA (approx.100 $\Omega$ )	D:DC0-16mA ( 600 )	0∶other than	
B4 : DC ± 100mV (approx.1MQ)	$D5$ : DC ± 5mA (approx.100 $\Omega$ )	E:DC1-5mA (3k)	those above	
$\underline{B5}$ : DC ± 1V (approx.1MQ)	$\underline{D6}$ : DC ± 10mA (approx.100 $\Omega$ )	<b>F</b> : DC4-20mA ( 750 )		
$\underline{B6}: DC \pm 5V \qquad (approx.1M\Omega)$	00: other than those above	0 : other than those above		
$\underline{B7}: DC \pm 10V \qquad (approx.1M\Omega)$				

\*1. Circuit voltage  $~~15\mathrm{V}$  for an input of 10  $\mu$  A.

\*2. Tolerance becomes  $\pm 0.5\%$  when input voltage is less than 50mV, input current is less than 100µA.

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.

### Impulse withstand voltage

Impulse withstands voltage between electric circuit and outer case (earth) 5kV, 1.2/50µs, and positive/negative polarity 3 times each is guaranteed.

Option: surge absorber (5kV, 1.2/50µs positive/negative polarity 3 times each.)

When an inductive lightning surge occurs from input or output side, this device absorbs the surge and protects connected equipments.

However, the device is not necessary if the connected equipment is protected by an arrester or suchlike.

### 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. Please consult with us for special wave patterns such as an inverter.

# LOW LIMIT ISOLATOR

SIGNAL TRANSDUCER

**TP2-C7F5L** (80 × 50 × 123mm/300g)

# § PLUG-IN TRANSDUCER § 1 OUTPUT TYPE

## UR-1 precise resistance unit (selling separately)

Please use a UR-1 combined with an insulated transducer of voltage input. When changing the insulated transducer in a hot line state at the time of current input, if measures against open are necessary, connect UR-1 to socket and convert it into a voltage signal before using it. (UR-1, the resistance specified)

### Connection diagram



## Block diagram



Low-drift amplifying circuit Low limit circuit Pulse width modulation circuit Pulse width demodulation circuit Output circuit Output line surge protection circuit Insulated power source circuit

Purchase specifications

