

# §Small-sized plug-in transducer§

2-output type

Ultrahigh speed isolator

FWUS

## Application

Insulates various kinds of DC signals and converts them into a unified intersystem signal. With input and output insulated, the product offers full advantages in transmitting insulated signals between measuring systems, cutoff of noise, protecting a control circuit from a sneak current, and transmitting an output signal directly to a distant place. Also can be used as a high speed feedback signal (  $180 \mu s/90%$ ) in a control circuit. 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. Keep in mind that because this device is high speed response, its ripple-removal ability is not as high as that of an isolator.

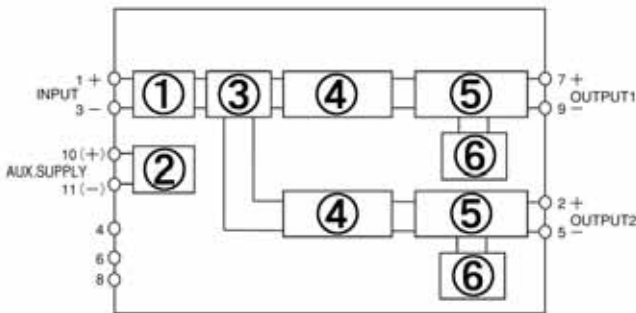


29.5 × 76 × 125mm/180g

## Feature

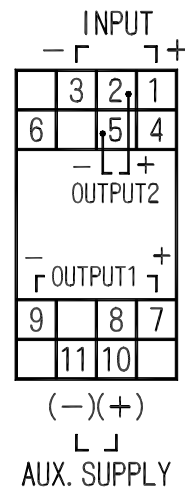
1. Withstand voltage between input and output is AC1, 500V (50/60Hz) for 1 min..
2. Withstand voltage between input/output/auxiliary supply/outer case is AC2, 000V (50/60Hz) for 1 min..
3. Withstand voltage between outputs is AC500V (50/60Hz) for 1 min..
4. Constant voltage/current output type. No need to adjust the product if it operates within load resistance range.
5. A LED can confirm status of electric power applied.
6. Zero/span of 1st and 2nd output can be adjusted individually. ( $\pm 2%$  adjustable)

## Block Diagram



- Input filter
- Insulated power source circuit
- Input amplifying circuit
- Capacitively-coupled isolation amplifier
- Constant voltage/current
- Reference voltage

## Connection diagram (socket)



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## Specification

How to specify

Type name  
**FWUS**

Specification code  
□ □ □ □ □ 0

Input (input resistant)	1 <sup>st</sup> Output (load resistant)	2 <sup>nd</sup> Output (load resistant)	Auxiliary supply	Power fuse	Common specification
<b>0A2</b> :DC0-50mV (approx.1M )	<b>2</b> :DC0-1V	<b>2</b> :DC0-1V	<b>1</b> :	<b>1</b> :without fuse	Conversion accuracy: ± 0.1%
<b>0A3</b> :DC0-60mV (approx.1M )	( 200 )	( 200 )	AC/DC80-264V	<b>2</b> :with fuse	
<b>0A4</b> :DC0-100mV (approx.1M )	<b>3</b> :DC0-5V	<b>3</b> :DC0-5V	Rated Voltage		Temperature characteristics: 0.2%/10
<b>0A5</b> :DC0-1V (approx.1M )	( 600 )	( 1k )	AC100/110V		
<b>0A6</b> :DC0-5V (approx.1M )	<b>4</b> :DC0-10V	<b>5</b> :DC1-5V	50/60Hz		Response time: 180 μ s/90%
<b>0A7</b> :DC0-10V (approx.1M )	( 2k )	( 1k )	AC200/220V		
<b>0A8</b> :DC1-5V (approx.1M )	<b>5</b> :DC1-5V	<b>6</b> :DC ± 5V	50/60Hz		Consumption VA: At AC110V: 3.5VA At AC220V: 4.5VA At DC110V: 2.0W At DC24V: 2.5W
	( 600 )	( 1k ) *1	DC100/110V		
<b>0B2</b> :DC ± 50mV (approx.1M )	<b>6</b> :DC ± 5V	<b>7</b> :DC ± 10V	<b>3</b> :DC24V		Weight: Without socket: approx.130g With socket: approx.180g
<b>0B3</b> :DC ± 60mV (approx.1M )	( 1k ) *1	( 2k ) *1	(DC19-30V)		
<b>0B4</b> :DC ± 100mV (approx.1M )	<b>7</b> :DC ± 10V	<b>8</b> :DC1-5mA			
<b>0B5</b> :DC ± 1V (approx.1M )	( 2k ) *1	( 1.4k )			
<b>0B6</b> :DC ± 5V (approx.1M )		<b>9</b> :DC4-20mA			
<b>0B7</b> :DC ± 10V (approx.1M )		( 350 )			
*1	<b>0C3</b> :DC0-1mA (approx.100 )	<b>0</b> :other than those above *2			
	( 100 )	(See product range)			
<b>0C4</b> :DC0-5mA (approx.100 )	<b>0</b> :other than those above *2	(See product range)			
( 100 )					
<b>0C5</b> :DC0-10mA (approx.100 )					
( 100 )					
<b>0C6</b> :DC0-16mA (approx.100 )					
( 100 )					
<b>0C7</b> :DC4-20mA (approx.100 )					
( 100 )					
<b>0D4</b> :DC ± 1mA (approx.100 )					
( 100 )					
<b>0D5</b> :DC ± 5mA (approx.100 )					
( 100 )					
<b>0D6</b> :DC ± 10mA (approx.100 )					
*1					
<b>ZZZ</b> : other than those above *2					
(See product range)					

\*1 Plus/minus output is the standard for plus/minus input.

\*2 Consult with us for specification other than those indicated in the table above.

### Product Range (including special handling)

Input	1 <sup>st</sup> output	2 <sup>nd</sup> output
Current input : 10 μ A-50mA	Current output: -4-20mA,1-5mA only	Current output: 4-20mA,1-5mA only
Voltage input : 10mV-300V	Voltage output: -10V-10V(output span 1V)	Voltage output: -10V-10V

Current input: conversion accuracy, temperature characteristics and suchlike of an input more than 10μA but less than 499μA are different from standards.  
Voltage input: conversion accuracy, temperature characteristics and suchlike of an input more than 10mV but less than 49mV are different from standards.  
2nd output: output more than 5.1V but less than 10V is subject to special handling. (Load current 2mA)

### UR-2 precise resistance unit (Selling separately)

Please use a UR-2 combined with an isolator of voltage input. When changing the isolator in a hot line state at the time of current input, if measures against open are necessary, connect UR-2 to socket and convert it into a voltage signal before using it. (UR-2, resistance to be specified) (Specify any one of 10Ω, 50Ω, 62.5Ω, 100Ω, 250Ω, 500Ω, 1kΩ)