

# General Specifications

Models WA1A, WA1V  
Distributor

**JUXTA**

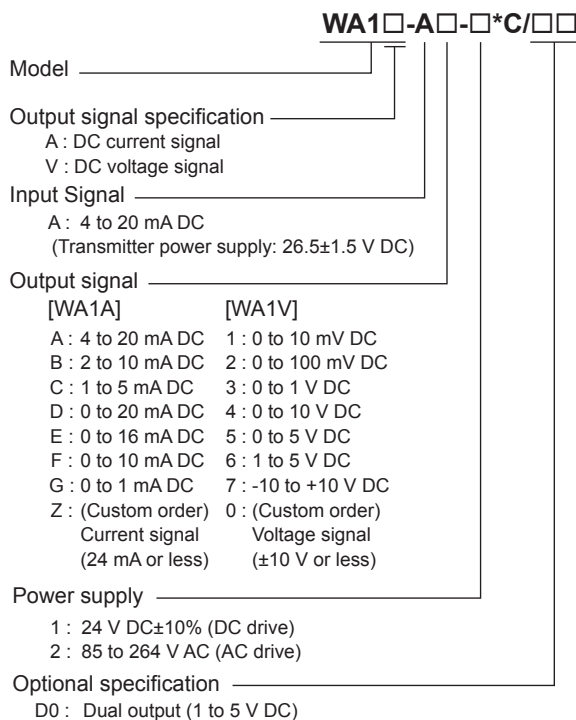
## GS 77J09A01-01E

### ■ General

The WA1A/WA1V is a compact, front terminal connection type distributor that is used in combination with a two-wire transmitter, and converts the transmitter's 4 to 20 mA DC signals into isolated DC current or DC voltage signals.

- Dual output and 2000 V AC withstand voltage specifications are available upon requests.

### ■ Model and Suffix Codes



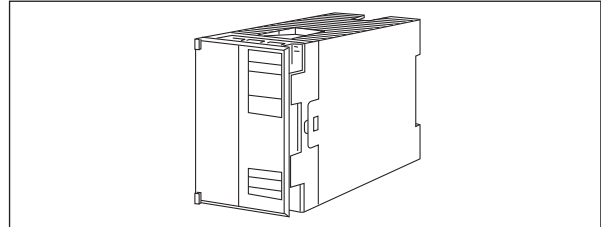
### ■ Ordering Information

Specify the following when ordering.

- Model and suffix codes :e.g. WA1V-A6-2\*C

### ■ Input/Output Specifications

Input signal: 4 to 20 mA DC signal from two-wire transmitter  
 Input resistance: 250 Ω  
 Maximum allowable input: 40 mA DC  
 Transmitter power supply: 26.5 ±1.5 V DC  
 (provided with a current limiter to keep the current between 25 and 35 mA)  
 Allowable conductor resistance (RL):  
 Up to [(20 – transmitter's minimum operating voltage) V/0.02 A] Ω  
 Output signal: DC current or DC voltage signal  
 Zero adjustment: -1 to +1%  
 Span adjustment: 95 to 105%



Allowable load resistance:

DC current output	Allowable load resistance	DC voltage output	Allowable load resistance
4 to 20 mA	750 Ω or less	0 to 10 mV	250 kΩ or more
2 to 10 mA	1500 Ω or less	0 to 100 mV	250 kΩ or more
1 to 5 mA	3000 Ω or less	0 to 1 V	2 kΩ or more
0 to 20 mA	750 Ω or less	0 to 10 V	10 kΩ or more
0 to 16 mA	900 Ω or less	0 to 5 V	2 kΩ or more
0 to 10 mA	1500 Ω or less	1 to 5 V	2 kΩ or more
0 to 1 mA	15 kΩ or less	-10 to +10 V	10 kΩ or more

### ■ Standard Performance

Accuracy rating: ±0.1% of span

Accuracy is not guaranteed for output level less than 0.5% of the span of a 0 to X mA output range type.

Dual output (optional): Relative error between output-1 and 2 is within ±0.2%. These outputs are not insulated.

Response speed: 200 ms, 63% response (10 to 90%)

Insulation resistance: 100 MΩ or more at 500 V DC between input and output, output and power supply, power supply and ground, and ground and input.

Withstand voltage:

DC drive    1500 V AC/min. between input and (output and power supply).  
 500 V AC/min. between output and power supply.

AC drive    1500 V AC/min. between input and output, output and power supply, power supply and ground, and ground and input.

### ■ Environmental Conditions

Operating temperature range: 0 to 50°C

Operating humidity range: 5 to 90% RH (no condensation)

Power supply voltage: 85 to 264 V AC, 47 to 63 Hz or 24 V DC±10%

Effect of power supply voltage fluctuations: ±0.1% of span or less for fluctuation within the operating range of power supply voltage specification.

Effect of ambient temperature change: ±0.2% of span or less for a temperature change of 10°C.

Current consumption:

24 V DC 110 mA (WA1A-Ax-1), 75 mA (WA1V-Ax-1)

Power consumption:

100 V AC 12 VA (WA1A-Ax-2), 8 VA (WA1V-Ax-2)

### ■ Mounting and Dimensions

Material: ABS resin (Case body)  
 Mounting method: Rack, Wall or DIN rail mounting  
 Connection method: M4 screw terminals  
 External dimensions: 72 × 48 × 127 mm (H × W × D)  
 Weight: DC; Approx. 150 g, AC; Approx. 300 g

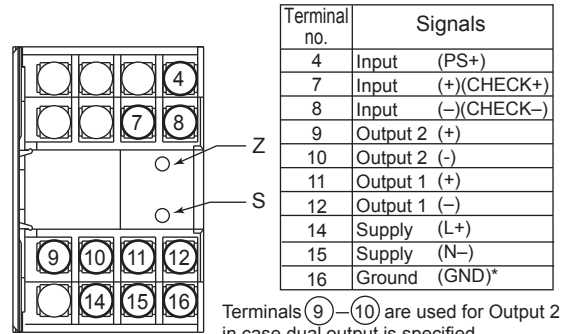
### ■ Standard Accessories

Tag number label: 1  
 Mounting block: 2  
 Mounting screw: M4 screw x 4

### ■ Custom Order Specifications

	Current Signal	Voltage Signal
Output range (DC)	0 to 24 mA	-10 to +10 V
Span (DC)	1 to 24 mA	10 mV to 20 V
Zero elevation	0 to 200%	-100 to +200%

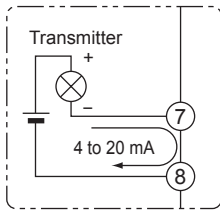
### ■ Terminal Assignments



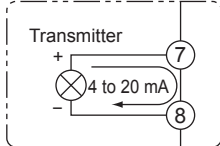
\*: Use for AC power supply only  
 Z: Zero-adjustment volume  
 S: Span-adjustment volume

### ■ Block Diagram

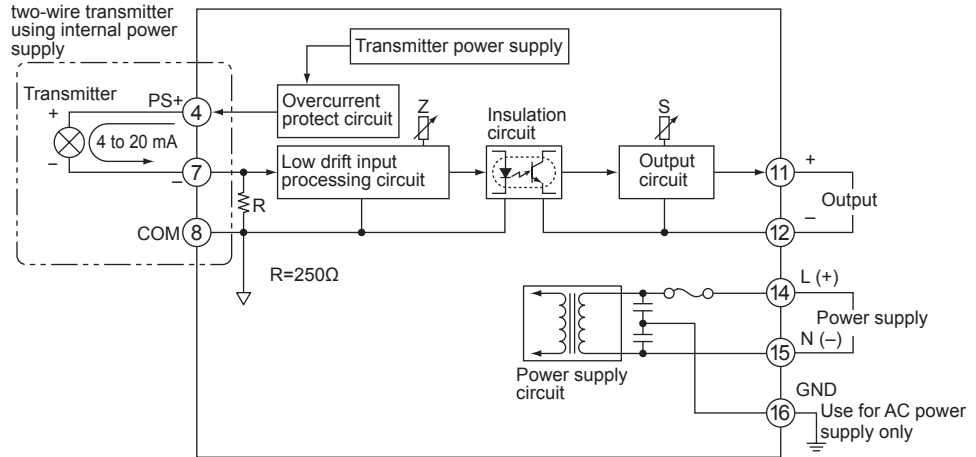
Combination with two-wire transmitter using external power supply



When using as an isolator



Combination with two-wire transmitter using internal power supply



### ■ External Dimensions

