

# General Specifications

Model WP1P  
Pulse Repeater

**JUXTA**

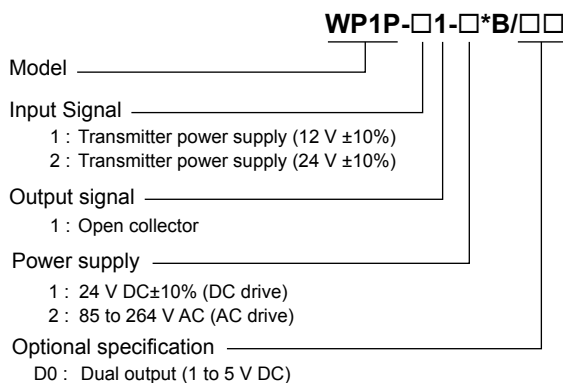
GS 77J09P01-01E

## ■ General

The WP1P is a compact, front terminal connection type pulse repeater that converts pulses from voltage-free contacts, open collector contacts, voltage, and current into isolated transistor switch pulses.

- With built-in 12 V or 24 V power supply for transmitter inputs.
- Internal filter can be set to eliminate chattering. (In cases where the input frequency range is up to 100Hz, the pulse width is 3ms or more.)
- 2000 V AC withstand voltage specifications are available upon requests.

## ■ Model and Suffix Codes



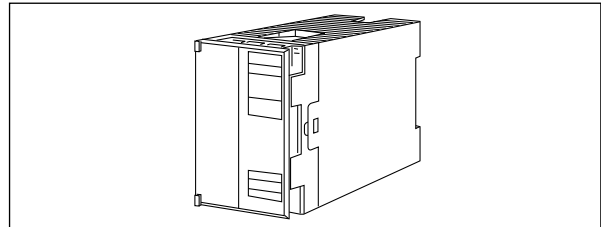
## ■ Ordering Information

Specify the following when ordering.

- Model and suffix codes :e.g. WP1P-21-2\*B

## ■ Input/Output Specifications

- Input signal:
- 2-wire type: Voltage-free contact pulse, voltage pulse, or current pulse (transmitter power supply available)
  - 3-wire type: Voltage pulse or current pulse (transmitter power supply available)
- Input resistance: 15 kΩ or more (for contact or voltage pulse)
- Internal load resistance (for current pulse):  
 200 Ω, 510 Ω, 1 kΩ (selectable with switch inside)
- Input frequency: 0<FR≤6 kHz (FR=input frequency)  
 In case the input is voltage pulse and the swing is 5 V or more, 0<FR≤10 kHz
- Minimum input pulse width: ON; 60 μs, OFF; 60 μs
- Transmitter power supply: 12 V DC±10%, 24 V DC±10%, 30mA or less
- Contact input type: Relay contact or transistor ON/OFF contact
- Contact resistance:  
 Close: 200 Ω or less,  
 Open: 100 kΩ or more
- Contact capacity: 15 V DC, 15 mA maximum



- Filter: Switch selectable for set or release (filter time constant; 10 ms)
- Swing width: EH-EL≥3 V
- Voltage EL (low level): -1 to +8 V DC
- Voltage EH (high level): 3 to 24 V DC
- Output signal: Transistor contact (open collector)
- Output frequency: Same as input frequency
- Output contact capacity: 30 V DC, 30 mA maximum

## ■ Standard Performance

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

## ■ 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 63Hz 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: Normal operation is guaranteed over the rated operating temperature range.
- Current consumption: 24 V DC 60 mA
- Power consumption: 100 V AC 6 VA

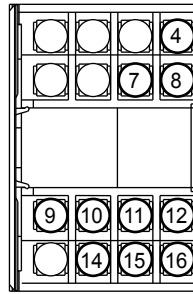
## ■ Mounting and Dimensions

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

### Standard Accessories

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

### Terminal Assignments



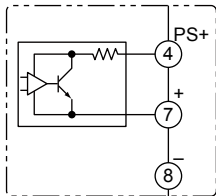
4	Input (PS+)
7	Input (+)
8	Input (-)
9	Output 2 (+)
10	Output 2 (-)
11	Output 1 (+)
12	Output 1 (-)
14	Supply (L+)
15	Supply (N-)
16	Ground (GND)*

Terminals (9)–(10) are used for Output 2 only when the dual output is specified.

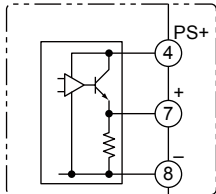
\*: Use for AC power supply only

### Block Diagram

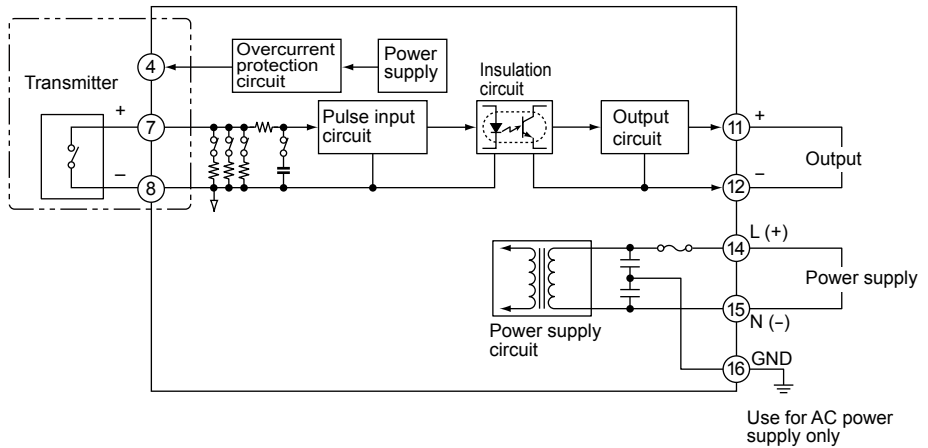
When receiving current pulse using internal resistor power supply



When receiving voltage pulse using internal transmitter power supply

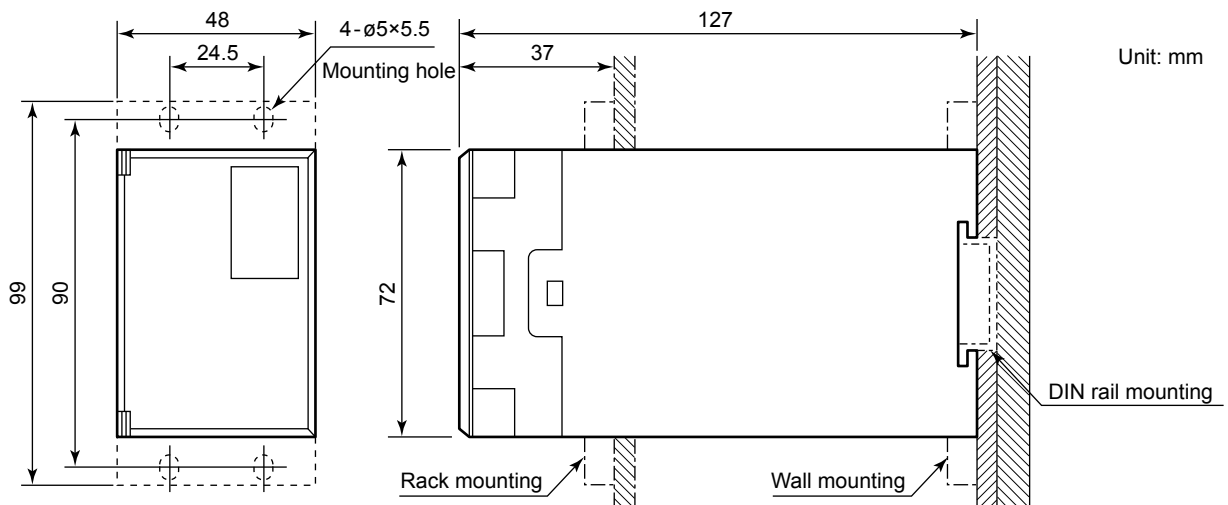


When receiving a voltage-free contact signal (or an open collector signal)



Use for AC power supply only

### External Dimensions



Unit: mm