

## General

## Specifications

Tachometer Transmitter

### 1. GENERAL

This signal conditioner converts AC voltage signals from electrical tachometers (tachogenerators) into current or voltage signals.

- AC/DC conversion is made by mean value.

### 2. SPECIFICATIONS

<b>IO Specifications</b>	
Input signal	0~V <sub>100</sub> V AC (V <sub>100</sub> = 100% input voltage) 16 ≤ V <sub>100</sub> ≤ 150V AC
Input frequency	15Hz ≤ F <sub>100</sub> ≤ 1kHz (F <sub>100</sub> = 100% input frequency)
Permissible over-input	120% (continuous), 200% (1 minute)
Output signal	DC current or voltage signal
Zero point adjustment range	±5% of span
Span adjustment range	±5% of span
<b>Standard performance</b>	
Precision rating	±0.3% of span (100% input, 30Hz min frequency range)
Response speed	2.4s 63% response (10~90%)
Insulation resistance	100MΩ min (at 500V DC) between input~output~power supply (DC drive) input~output~power supply~ground (AC drive)
Voltage withstand	1500V AC/minute between input~output, input~power supply 500V AC/minute between output~power supply (DC drive) 1500V AC/minute between input~output~power supply~ground (AC drive)
Ambient temperature and humidity	Normal operating condition: 0~50°C, 5~90% RH Operating limit: -10~60°C, 5~95% RH Storage condition: -40~70°C, 5~95% RH (no condensation)
Power supply voltage	85~264V AC 47~63Hz, 24V DC ±10%
Effect of power supply voltage fluctuation	±0.1% max of span per 85~264V AC or 24V DC ±10% fluctuation
Effect of change in ambient temperature	±0.2% max of span per 10°C change in temperature
Current dissipation	24V DC 90mA (WD1A-1), 60mA (WD1V-1)
Power dissipation	100V AC 7VA (WD1A-2), 6VA (WD1V-2)
<b>Mountings and dimensions</b>	
Material	Case: ABS plastic
Boards	Both sides glass-epoxy
Mounting methods	Rack, wall, or DIN rail
Connection method	M4-screw terminals
External dimensions	72 x 48 x 127 mm (h x w x d)
Weight	DC drive: approx. 150g, AC drive : approx. 300g
<b>Accessories</b>	
Tag number labels: 1	
Mounting blocks: 2	M4 mounting screws: 4

WD1-1- \* B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

Input signals

1: AC voltage signals

OUTPUT SIGNAL

WD1A

A: 4~20mA DC

B: 2~10mA DC

C: 1~5mA DC

D: 0~20mA DC

E: 0~16mA DC

F: 0~10mA DC

G: 0~1mA DC

Z: (custom) current signal  
(24mA max)

WD1V

1: 0~10mV DC

2: 0~100mV DC

3: 0~1V DC

4: 0~10V DC

5: 0~5V DC

6: 1~5V DC

7: -10~+10V DC

0: (custom) voltage signal  
(±10V max)

POWER SUPPLY

1: 24V DC±10% 2: 85~264V AC

DUAL OUTPUT SPECIFICATIONS		
Model	1st Output (selectable)	2nd Output
WD1A	4~20mA DC	1~5V DC
	2~10mA DC	
	1~5mA DC	
	0~20mA DC	
	0~16mA DC	
	0~10mA DC	
WD1V	0~10mV DC	1~5V DC
	0~100mV DC	
	0~1V DC	
	0~10V DC	
	0~5V DC	
	1~5V DC	
	-10~+10V DC	

The JUXTA W Series allows dual output.  
Enter/DO after the model code when ordering.

### High Voltage Withstand Specifications

The JUXTA W Series is also available in 2000V AC voltage withstand specifications. Contact your dealer for details.

### OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

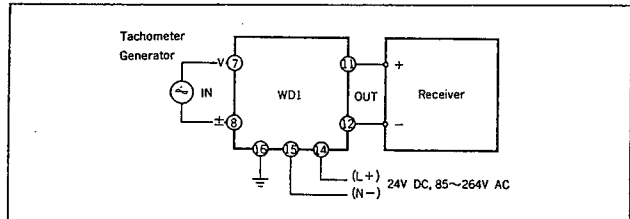
WD1A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I <sub>100</sub> =24mA max		

I<sub>100</sub>: 100% output current

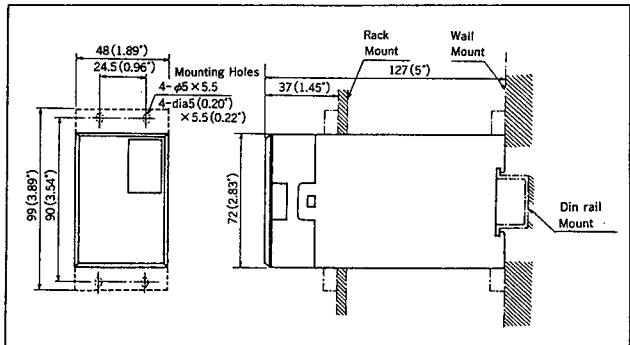
WD1V (DC Voltage Output)		
Output Signal	Output Resistance	Permissible Load Resistance
0~10mV DC	100Ω max	250kΩ min
0~100mV DC		
0~1V DC	1Ω max	2kΩ min
0~10V DC		10kΩ min
0~5V DC		2kΩ min
1~5V DC		2kΩ min
-10~+10V DC		10kΩ min
Others where V <sub>100</sub> ≤100mV	100Ω max	250kΩ min
V <sub>100</sub> >100mV	1Ω max	10kΩ min

V<sub>100</sub>: 100% output voltage

### WIRING DIAGRAM



### EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance