

General

Specifications

Pulse/Analog Transmitter

1. GENERAL

This instrument converts pulse train signals to current or voltage signals.

- Built-in 12V or 24V power supply to pulse transmitter.
- Input pulses include current pulse, voltage pulses, non-voltage contact, and open collector contact.

2. SPECIFICATIONS

IO Specifications	
Input signal	0~F100Hz (F100 = 100% input frequency) (50Hz ≤ F100 ≤ 10kHz)
Input resistance	10kΩ
Input signal level	Voltage pulse input
Pulse height	Lo level (VL) -1~8V Hi level (VH) 2V min VH - VL = 2~50V
Input pulse width	Pulse width when 100% input, duty is 50±30% max
Output signal	DC current or voltage signal
Zero point adjustment range	±1% of span
Span adjustment range	±5% of span
Standard performance	
Precision rating	±0.3% of span
Response speed	600ms (100Hz span min), 3.0 sec (100Hz span max) 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 (WQ1A-1), 60mA (WQ1V-1)
Power dissipation	100V AC 11VA (WQ1A-2), 7.5VA (WQ1V-2)
Mountings and dimensions	
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
Accessories	
Tag number labels: 1	
Mounting blocks: 2	M4 mounting screws: 4

WQ1 - - - * B

TYPE NO.

OUTPUT SPECIFICATION

A: Current
V: Voltage

INPUT SIGNAL

- 1: 12V DC ±10% transmitter power supply
- 2: 24V DC ±10% transmitter power supply
- 3: No transmitter power supply

OUTPUT SIGNAL

WQ1A	WQ1V
A: 4~20mA DC	1: 0~10mV DC
B: 2~10mA DC	2: 0~100mV DC
C: 1~5mA DC	3: 0~1V DC
D: 0~20mA DC	4: 0~10V DC
E: 0~16mA DC	5: 0~5V DC
F: 0~10mA DC	6: 1~5V DC
G: 0~1mA DC	7: -10~+10V DC
Z: (custom) current signal (24mA max)	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
WQ1A	4~20mA DC 2~10mA DC 1~5mA DC 0~20mA DC 0~16mA DC 0~10mA DC 0~1mA DC	1~5V DC
WQ1V	0~10mV DC 0~100mV DC 0~1V DC 0~10V DC 0~5V DC 1~5V DC -10~+10V DC	1~5V 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

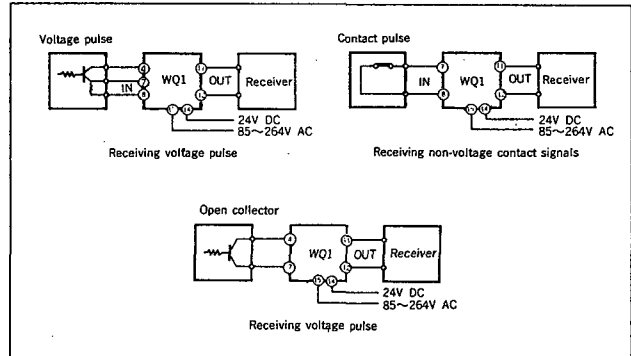
WQ1A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I ₁₀₀ =24mA max		

I₁₀₀ : 100% output current

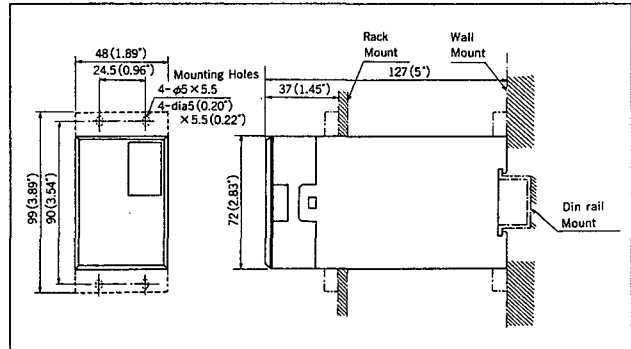
WQ1V (DC Voltage Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
0~10mV DC	100Ω max	250kΩ min	
0~100mV DC			
0~1V DC	1Ω max	2kΩ min	
0~10V DC		10kΩ min	
0~5V DC		2kΩ min	
1~5V DC		2kΩ min	
-10~+10V DC		10kΩ min	
Others where V ₁₀₀ ≤100mV	100Ω max	250kΩ min	
V ₁₀₀ =10V max	1Ω max	10kΩ min	

V₁₀₀ : 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance