JUXTA W Series General Specifications

Model WQ2A/V
PULSE/ANALOG TRANSMITTER

JUXTA

1. GENERAL

Model WQ2A/V Pulse/Analog Transmitter, μP built-in type, converts pulse train signals into various types of current or voltage signals.

- Built-in 12V or 24V power supply to pulse transmitter.
- Input pulses include current pulse, voltage pulse, non-voltage contact and open collector contact.
- Change of input/output ranges, setting of input pulse width and input low-cut point, adjustment of zero span and monitoring of input/output can easily be made in the field by handy terminal.

2. SPECIFICATIONS

Input & Output	
Input signal	F_0～F_{100}Hz (0Hz ≦ F_0 ≦ F_{100}/2Hz) F_0= 0% input frequency (0.1Hz ≦F_{100} ≦10KHz) F_{100}= 100% input frequency
Input resistance	[current pulse input] 200Ω, 500Ω, 1KΩ [voltage pulse input] 10KΩ minimum
Input low-cut point	Setting range 0.01Hz～F_{100}Hz F_{100}=100% input frequency Below input low cut point corresponds to 0Hz output
Pulse height	Lo level (VL) -1～8V Hi level (VH) 2～50V VH - VL = 2V minimum
Input pulse width	Duty is 50±30% max. when 100% input
Output signal	DC voltage or current signal
Zero point adjust range	±1% of span (input adjust), ±10% of span (output correction)
Span adjust range	±1% of span (input adjust) ±10% of span (output correction)
Standard Performance	
Accuracy rating	±0.1% of span
Response speed	Pulse period x 2 + 50ms 63% response (10～90%)
Insulation resistance	More than 100MΩ (at 500V DC) between input～output～power supply mutually
Withstand voltage	1500V AC/1 minute between input～output, input～power supply 500V AC/1 minute between output～power source (DC Drive) 1500V AC/1 minute between input～output～power supply～ground mutually (AC Drive)
Ambient temperature & humidity	Normal operating condition: 0～50°C, 5～90%RH Operating limit: -10～60°C, 5～95%RH Storing condition: -40～70°C, 5～95%RH (no condensation)
Power supply voltage	85～264V AC, 24V DC±10%
Effect of power source voltage fluctuation	Less than ±0.1% of span per fluctuation of 85～264V AC or 24V DC±10%
Effect of ambient temperature change	Less than ±0.2% of span per change of 10°C
Current dissipation	24V DC 90mA(WQ2A), 60mA(WQ2V)
Power dissipation	100V AC 11VA(WQ2A), 7.5VA(WQ2V)
Mounting & Dimension	
Material	ABS plastic case
Boards	Both sides glass-epoxy
Mounting method	Rack, wall or DIN rail
Connection method	M4-screw terminals
External dimension	72x48x127mm (HxWxD)
Weight	200g(DC Drive), 300g(AC Drive)
Accessories	
Tag number label ... 1 Mounting block 2	Range label ... 1 M4 mounting screw ...2

WQ2□-□□-□*A

Type

Output Specfications
A: Current
V: Voltage

Input Signal
1: Transmitter Power Supply (12V DC±10%, 30mA) furnished
2: Transmitter Power Supply (24V DC±10%, 30mA) furnished

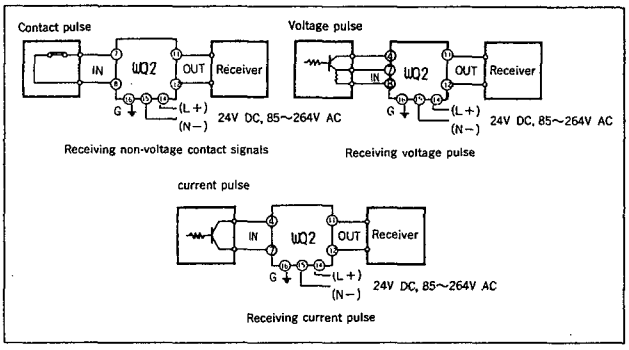
Output Signal (Refer Table 1 for setting range)

[WQ2A]
A: 0~20mA DC
B: 0~5mA DC

[WQ2V]
1: 0~10V DC
2: 0~100mV DC
0: (CUSTOM) Voltage Signal

Power Supply
1: 24V DC±10%
2: 85~264V AC 47~63Hz

WIRING DIAGRAM



EXTERNAL DIMENSION

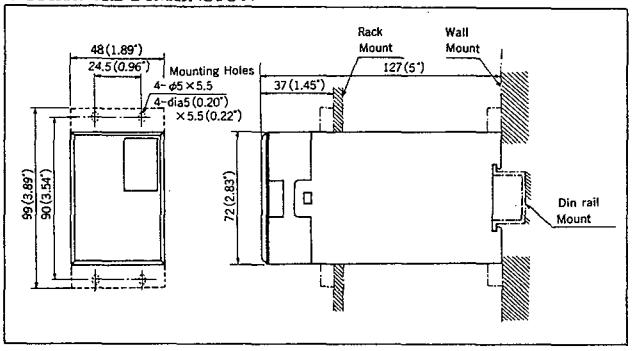


TABLE 1

Output Type	Output Range Setting	Output Resistance	Permissible Load Resistance
1	0~10V DC Span 1V min., Elevation 0~50% where accuracy limit exists in span less than 2V	1Ω maximum	10KΩ min.
2	0~100mV DC Span 10mV min., Elevation 0~50% where accuracy limit exsits in span less than 20mV	100Ω maximum	250KΩ minimum
0	*manufacture available range -10 ~ +10V DC Span 10mV min., Elevation -50~50%	1Ω or 1000Ω maximum	10KΩ or 250KΩ minimum
A	0~ 5mA DC, Span 1mA min., Elevation 0~50% where accuracy limit exists in span less than 2mA	500KΩ minimum	(15/OUT$_{max}$)Ω max.
B	0~20mA DC, Span 4mA min., Elevation 0~50% where accuracy ;imit exists in span less than 8mA		

Subject to change without notice for grade up quality and performance