

JUXTA F Series

General Specifications

Model FQ2A/V
PULSE/ANALOG TRANSMITTER

JUXTA

1. GENERAL

Model FQ2A/V Pulse/Analog Transmitter, μ P 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	$F_0 \sim F_{100}$ Hz ($0\text{Hz} \leq F_0 \leq F_{100}/2\text{Hz}$) $F_0 = 0\%$ input frequency ($0.1\text{Hz} \leq F_{100} \leq 10\text{KHz}$) $F_{100} = 100\%$ input frequency
Input resistance	[current pulse input] 200 Ω , 500 Ω , 1K Ω [voltage pulse input] 10K Ω minimum
Input low-cut point	Setting range 0.01Hz $\sim F_{100}$ Hz $F_{100} = 100\%$ input frequency Below input low cut point corresponds to 0Hz output
Pulse height	Lo level (VL) -1 \sim 8V Hi level (VH) 2 \sim 50V $VH - VL = 2\text{V}$ minimum
Input pulse width	Duty is 50 \pm 30% max. when 100% input
Output signal	DC voltage or current signal See Table 1
Zero point adjust range	$\pm 1\%$ of span (input adjust), $\pm 10\%$ of span (output correction)
Span adjust range	$\pm 1\%$ of span (input adjust) $\pm 10\%$ of span (output correction)
Standard Performance	
Accuracy rating	$\pm 0.1\%$ of span
Response speed	Pulse period x 2 + 50ms 63% response (10 \sim 90%)
Insulation resistance	More than 100M Ω (at 500V DC) between input \sim output \sim power supply mutually
Withstand voltage	1500V AC/1 minute between input \sim output, input \sim power supply 500V AC/1 minute between output \sim power source
Ambient temperature & humidity	Normal operating condition: 0 \sim 50 $^\circ$ C, 5 \sim 90%RH Operating limit: -10 \sim 60 $^\circ$ C, 5 \sim 95%RH Storing condition: -40 \sim 70 $^\circ$ C, 5 \sim 95%RH (no condensation)
Power supply voltage	24V DC $\pm 10\%$ (ripple: 10%P \sim P max)
Effect of power source voltage fluctuation	Less than $\pm 0.1\%$ of span per fluctuation of 24V DC $\pm 10\%$
Effect of ambient temperature change	Less than $\pm 0.2\%$ of span per change of 10 $^\circ$ C
Current dissipation	24V DC 90mA(FQ2A), 60mA(FQ2V)
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	72x24x127mm (HxWxD)
Weight	130g
Accessories	
Tag number label ... 1	Range label ... 1
Mounting block 2	M4 mounting screw ... 2

FQ2□-□□*A

Type

Output Specifications

A: Current
V: Voltage

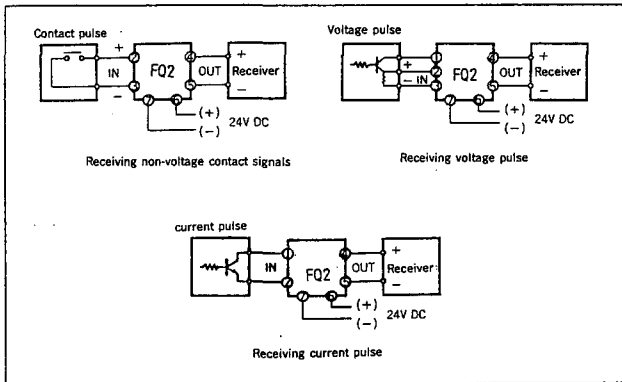
Input Signal

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)

[FQ2A] [FQ2V]
A: 0~20mA DC 1: 0~10V DC
B: 0~5mA DC 2: 0~100mV DC
0: (CUSTOM) Voltage Signal

WIRING DIAGRAM



EXTERNAL DIMENSION

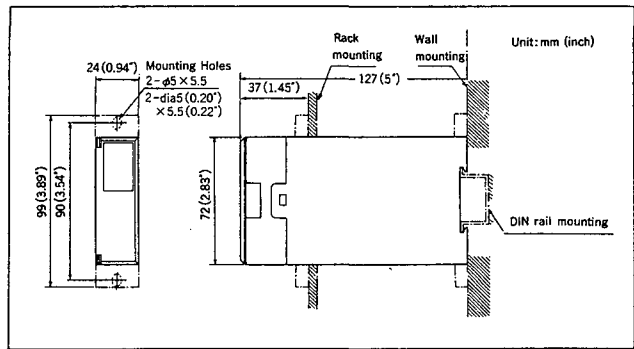


TABLE 1

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 exists 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, ..)Ω max.
B	0~20mA DC, Span 4mA min., Elevation 0~50% where accuracy limit exists in span less than 8mA		

Subject to change without notice for grade up quality and performance