

JUSTA F Series Model FQ2P

General Analog / Pulse Transmitter

Specifications

JUSTA

1. GENERAL

Model FQ2P Analog/Pulse Transmitter, μ P built-in type, converts DC voltage or current signal into pulse train signal.

Change of input/output range, settings of pulse width and output 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 | DC voltage or current signal | See Table 1 |
| Input resistance | [current input] 100Ω [voltage input] $1M\Omega$ (when power on), $100K\Omega$ (when power off) | See Table 1 |
| Output signal | $0 \sim F_{100}$ Hz $[0 \leq F_o \leq \frac{F_{100}}{2}] \quad [0.001\text{Hz} \leq F_{100} \leq 1000\text{Hz}]$ $F_o = 0\%$ output frequency $F_{100} = 100\%$ output frequency | |
| Low output cut point | Variable range : $0.0001\text{Hz} \sim F_{100}$ Hz 0Hz is output when output is less than output low cut point | |
| Output pulse width | Duty $-50 \pm 10\%$ On pulse fixed time : $0.1 \sim 500\text{ms}$ Off pulse fixed time : $0.1 \sim 500\text{ms}$ | |
| Max. permissible load | Open collector : $30V \text{ DC}/200mA$ No contact point AC/DC switch : $240V \text{ AC}/200mA$ | |
| 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 | 200ms 63% response (10~90%) | |
| Insulation resistance | More than $100M\Omega$ (at 500V DC) between input~output~power supply mutually | |
| Withstand voltage | 1500V AC/1 minute between output~input, output~power supply 500V AC/1 minute between input~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 24V DC $\pm 10\%$ fluctuation | |
| Effect of ambient temperature change | Less than $\pm 0.2\%$ of span per $10^\circ C$ change | |
| Current dissipation | 24V DC $65mA$ | |
| 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 | |

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Type _____

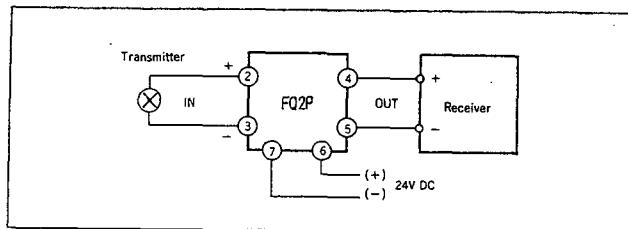
Input Signal

- | | |
|-----------------------------|-----------------------------|
| A : 0~50mA DC | 1 : -10~-+10V DC |
| B : 0~10mA DC | 2 : -1~-+1V DC |
| Z : (CUSTOM) Current Signal | 0 : (CUSTOM) Voltage Signal |

Output Signal

- | |
|------------------------------|
| 1 : Open Collector |
| 3 : Non Contact AC/DC Switch |

WIRING DIAGRAM



EXTERNAL DIMENSION

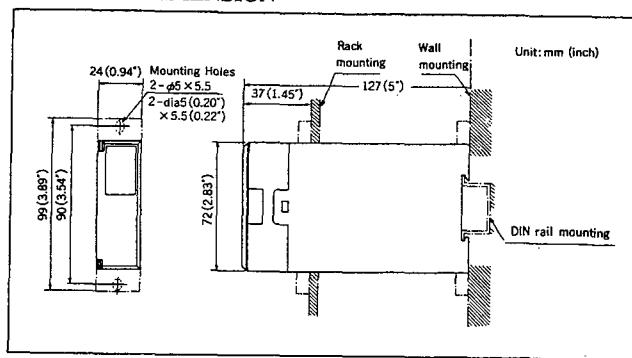


TABLE 1

| Input Type | Input Setting Range | Permissible Applied Input | Input Resistance |
|------------|--|--|--|
| 1 | -10~-+10V DC, Span 1V min., Elevation -50~50% | ±15V | 1MΩ (when power on) |
| 2 | -1~-+1V DC, Span 0.1V min., Elevation -50~50% | ±15V | |
| 0 | -30~-+30V DC, Span 3V min., Elevation -50~50% | ±50V | 100KΩ minimum (when power off) |
| A | 0~50mA DC, Span 10mA min., Elevation 0~50% | 70mA | |
| B | 0~10mA DC, Span 1mA min., Elevation 0~50% | 70mA | 100Ω |
| Z | 0~5mA DC, Elevation 0~50% Span should be $R_s \times I_s \geq 1(V)$ 100% point should be $R_s \times I_{100\%} \leq 10(V)$ | Current 1(mA) when $R_s \times I^2 \leq 0.5(W)$ | Specify by customer (satisfy conditions mentioned left) |

R_s : Input resistance I_s : Input current span I : Permissible maximum input current
 $I_{100\%}$: 100% input current

Subject to change without notice for grade up quality and performance