JUXTA F Series General Specification

Model FX1□-PR (Variable software type) Pressure Compensator

NTXUL

1. GENERAL

This is a variable software type computing unit which accepts two voltage signal inputs from various converters and outputs an isolated DC voltage or current signal after pressure compensation is performed.

2. SPECIFICATIONS

| Model No. | FX1A-PR, FX1V-PR | | |
|--------------------------------|--|--|--|
| Input signal | DC voltage signal: 2 points V_0 to V_{100} correspond to 0 to 100%. | | |
| Measuring range | 0 to 10 V DC (Measuring span: More than 2 V) (*1) | | |
| Input resistance | 1 MΩ (At power failure: More than 100 KΩ) | | |
| Output signal | 4 to 20mA, 2 to 10mA, 1 to 5mA, 0 to 20mA, 0 to 16mA, 0 to 10mA or 0 to 1mA DC 0 to 10mV, 0 to 100mV, 0 to 1V, 0 to 10V, 0 to 5V, 1 to 5V or -10 to +10V DC | | |
| Computing equation | Y = K1 · X1 √ K2 · X2 + A2 Where, Y: Flow output signal already compensated (%) X1: Flow input signal not yet compensated (%) (*2) X2: Pressure input signal (%) K1: Gain (No unit) (*3) K2: Gain (No unit) (*4) A2: Bias (%) (*5) | | |
| Basic accuracy | ±0.3% of measuring span | | |
| Signal insulation | Between input signal and output signal/power supply circuits, and between output signal and power supply circuits | | |
| Insulation resistance | Between input signal and output signal/power supply circuits, between output signal and power supply circuits: $100 \text{ M}\Omega/500 \text{ V DC}$ | | |
| Dielectric strength | Between input signal and output signal/power supply circuits: 1500 V AC/min. Between output signal and power supply circuits: 500 V AC/min | | |
| Power supply voltage | 24 V DC ± 10% | | |
| Ambient temperature/humidity | 0 to 50°C (32 to 122°F) and 5 to 93% relative humidity (No condensation) | | |
| Effect of ambient temperature | ±0.2% of span for 10°C (50°F) change | | |
| Effect of power supply voltage | ±0.1% of span for 24 V DC ±10% variation | | |
| Power consumption | 24 V DC, 60 mA (Voltage output) and 24 V DC, 82 mA (Current output) | | |
| Dimensions | 72 (2.83") H × 24 (0.94") W × 127 (5.00") D mm (inch) | | |
| Weight | Approx. 130 g | | |
| Accessories | Tag number label: 1 sheet Mounting blocks: 2 pcs. | | |

Specify the following when ordering:

(*1) Measuring range from □ to □ mV

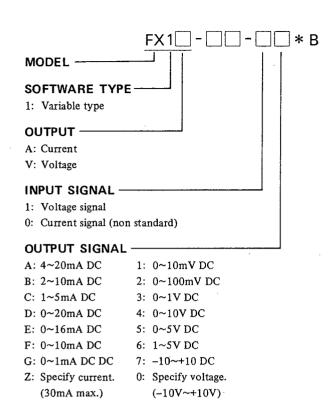
(*2) Square root extraction of uncompensated flow input

(*3) Gain K1 within the range between -7.990 and 7.990

(*4) Gain K2 within the range between -7.990 and 7.990

(*5) Bias A2 within the range between -799.0 and 799.0%





| Ordering Information | | | | | |
|--|--|--|--|--|--|
| | | | | | |
| Measuring Range of Input | | | | | |
| Voltage input signal: | | | | | |
| 2V min. Span for 0~10V DC | | | | | |
| Current input signal (input resist. 250Ω): | | | | | |
| $(250\Omega) \times (Input current)$ shall be within the | | | | | |
| measuring span of voltage input signal. | | | | | |
| Recommended Range | | | | | |
| 4~20mA DC | | | | | |
| 2~10mA DC | | | | | |
| 0~20mA DC | | | | | |
| 0~16mA DC | | | | | |
| 0~10mA DC | | | | | |
| 0~10V DC | | | | | |
| 0~ 5V DC | | | | | |
| 1~ 5V DC | | | | | |
| | | | | | |

(Note) Change of input between voltage and current is impossible by Handy Terminal.

OUTPUT RESISTANCE AND LOAD RESISTANCE

| Output Signal | Load Resistance | Output Impedance |
|---------------|-----------------|------------------|
| 4 to 20mA DC | 0 to 750Ω | |
| 2 to 10mA DC | 0 to 1500Ω | |
| 1 to 5mA DC | 0 to 3000Ω | |
| 0 to 20mA DC | 0 to 750Ω | 5MΩ or more |
| 0 to 16mA DC | 0 to 900Ω | |
| 0 to 10mA DC | 0 to 1500Ω | |
| 0 to 1mA DC | 0 to 15kΩ . |] |

| Output Signal | Load Resistance | Output Impedance |
|----------------|-----------------------------|------------------|
| 0 to 10mV DC | 100kΩ or more | 100Ω or less |
| 0 to 100mV DC | 100875 01 111016 | |
| 0 to 1V DC | | |
| 0 to 5V DC | $2\mathrm{k}\Omega$ or more | 1Ω or less |
| 1 to 5V DC | | |
| 0 to 10V DC | 101-0 | |
| -10 to +10V DC | 10kΩ or more | |