

# JUXTA F Series

## General Specifications

Model : FS1A/V

JUXTA

POT Transmitter

### 1. GENERAL

This signal conditioner converts the resistance change of potentiometer fitted in motor operated valve or air duct damper, etc., to current or voltage signals.

- Incorporation of one-chip microcomputer provides high efficiency and superior performance.
- Use of Handy Terminal allows easy on-site setting of full resistance value of potentiometer, burnout setting, zero and span adjustment, and I/O monitoring.

### 2. SPECIFICATIONS

IO Specifications	
Input signal	Potentiometer resistance change (3-wire type)
Measuring range	Full resistance: 100~2000Ω
Zero elevation	50% max of full resistance
Span	80~2000Ω (50% min of full resistance)
Input conductor resistance	10Ω max per wire (resistances of each wire must be equal)
Measuring current	1mA
Output signal	DC current or voltage signal
Zero point adjustment range	±10% of span
Span adjustment range	±10% of span
Standard performance	
Precision rating	±0.1% of span
Response speed	200ms 63% response (10~90%)
Burnout	Specify UP, DOWN, or OFF. Burnout time is 60 secs max.
Insulation resistance	100MΩ min (at 500V DC) between input-output, input-power supply and output-power supply
Voltage withstand	1500V AC/minute between input-output, input-power supply 500V AC/minute between output-power supply
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	24V DC ±10% (ripple : 10% P-P max)
Effect of power supply voltage fluctuation	±0.1% max of span per 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 95mA (FS1A), 60mA (FS1V)
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 24 x 127 mm (h x w x d)
Weight	130g
Accessories	
Tag number label : x1	Range label : x1
Mounting blocks: x2	M4 mounting screws: x2

FS1 - - \* B/B

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

1: Total resistance (100-2kΩ)

0: Total resistance 2kΩ min and 30kΩ max

OUTPUT SIGNAL

FS1A

FS1V

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)

Burnout

U: UP

D: DOWN

N: OFF

POWER SUPPLY

24V DC±10%

OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

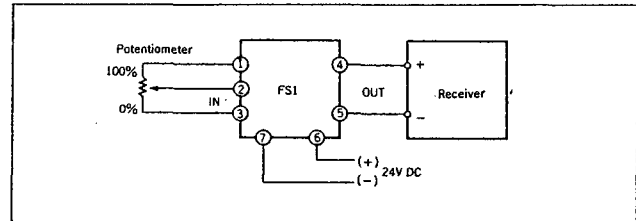
FS1A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I <sub>100</sub> =24mA max		

I<sub>100</sub>: 100% output current

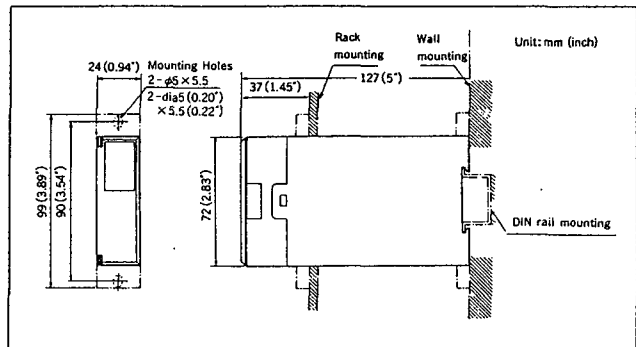
FS1V (DC Voltage Output)		
Output Signal	Output Resistance	Permissible Load Resistance
0~10mV DC	100Ω max	250kΩ min
0~100mV DC		250kΩ min
0~1V DC	1Ω max	2kΩ min
0~10V DC		10kΩ min
0~5V DC		2kΩ min
1~5V DC		2kΩ min
-10~+10V DC		10kΩ min
Others where V <sub>100</sub> ≤ 100mV	100Ω max	250kΩ min
V <sub>100</sub> =24mA max V <sub>100</sub> > 100mV	1Ω max	10kΩ min

V<sub>100</sub>: 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance