

JUXTA F Series

General Specifications

Model : FS4A/V

JUXTA

Potentiometer Transmitter (non-isolated)

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.

- Non-isolated type.

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)
External resistance of input	10Ω max per wire (resistances of each wire must be equal)
Output signal	DC current or voltage signal
Zero point adjustment range	±5% of span
Span adjustment range	±5% of span
Standard performance	
Precision rating	±0.1% of span
Burnout	Specify UP, DOWN, or OFF. Burnout time is 60 secs max.
Insulation resistance	100MΩ min (at 500V DC) between input~power supply and output~power supply
Voltage withstand	1500V AC/minute between 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%
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 82mA (FS4A), 53mA (FS4V)
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	
Mounting blocks: x2	M4 mounting screws: x2

FS4□-□□ * B/B□

TYPE NO.

OUTPUT SPECIFICATION

A: Current

V: Voltage

INPUT SIGNAL

1: Total resistance (100-2kΩ)

0: Total resistance 2kΩ min and 10kΩ max

OUTPUT SIGNAL

FS4A

FS4V

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

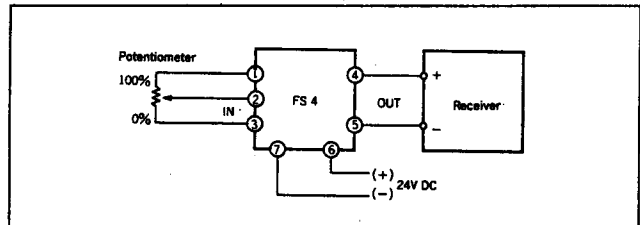
FS4A (DC Current Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
4~20mA DC	5MΩ min	0~750Ω	
2~10mA DC		0~1500Ω	
1~5mA DC		0~3000Ω	
0~20mA DC		0~750Ω	
0~16mA DC		0~900Ω	
0~10mA DC		0~1500Ω	
0~1mA DC		0~15kΩ	
Others where I ₁₀₀ =24mA max			(15/I ₁₀₀)Ω max

I₁₀₀: 100% output current

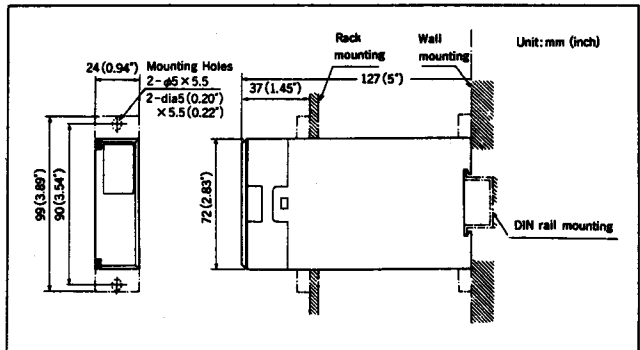
FS4V (DC Voltage Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
0~10mV DC	100Ω max	250kΩ min	
0~100mV DC		250kΩ min	
0~1V DC	1Ω max	2kΩ min	
0~10V DC		10kΩ min	
0~5V DC		2kΩ min	
1~5V DC		2kΩ min	
-10~+10V DC		10kΩ min	
Others where V ₁₀₀ ≤100mV	100Ω max	250kΩ min	
V ₁₀₀ =24mA max	V ₁₀₀ >100mV	1Ω max	10kΩ min

V₁₀₀: 100% output voltage

WIRING DIAGRAM



EXTERNAL DIMENSION



Subject to change without notice for grade up quality and performance

YOKOGAWA

Yokogawa M&C Corporation

Musashino Center Bldg. 5F,
1-19-18, Naka-cho Musashino-shi, Tokyo 180 Japan
Tel : 81-422-51-8141 Fax : 81-422-51-8455