

JUXTA F Series

General Specifications

Model : FA5A/V

JUXTA

Distributor (with Square Root Extractor)

1. GENERAL

This distributor with square root extractor converts differential pressure flow signals to linear signals in combination with 2-wire type transmitter.

- Incorporated in transmitter short-circuit protection
- Incorporated in low-cut circuit
- Incorporated in one-chip microcomputer for high efficiency and superior performance
- Use of Handy Terminal allows easy on-site zero and span adjustment and I/O monitoring.

2. SPECIFICATIONS

IO Specifications	
Input signals	4~20mA DC from 2-wire type transmitter
Input resistance	250Ω
Permissible applied voltage	40mA max
Transmitter power supply voltage	26.5±1.5V DC (with current limit circuit at 25~35mA)
Permissible conductor resistance	$RL \leq (20 - \text{transmitter minimum operating voltage})V / 0.02A (\Omega)$
Input compensation function	Square root computation: $Y = 2 \sqrt{X} + 1 (V)$ (Y: output signal, and X: input signal)
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%)
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 110mA (FA5A), 75mA (FA5V)
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

FA5 -A * B

TYPE NO. _____

OUTPUT SPECIFICATION _____

A: Current
V: Voltage

INPUT SIGNAL _____

A: 4~20mA DC

Transmitter power supply : 25~28V DC

OUTPUT SIGNAL _____

FA5A

A: 4~20mA DC

B: 2~10mA DC

C: 1~5mA DC

D: 0~20mA DC

E: 0~16mA DC

F: 0~10mA DC

G: 0~1mA DC

Z: (custom) current signal
(24mA max)

FA5V

1: 0~10mV DC

2: 0~100mV DC

3: 0~1V DC

4: 0~10V DC

5: 0~5V DC

6: 1~5V DC

7: -10~+10V DC

0: (custom) voltage signal
(±10V max)

POWER SUPPLY

24V DC±10%

OUTPUT RESISTANCE AND PERMISSIBLE LOAD RESISTANCE

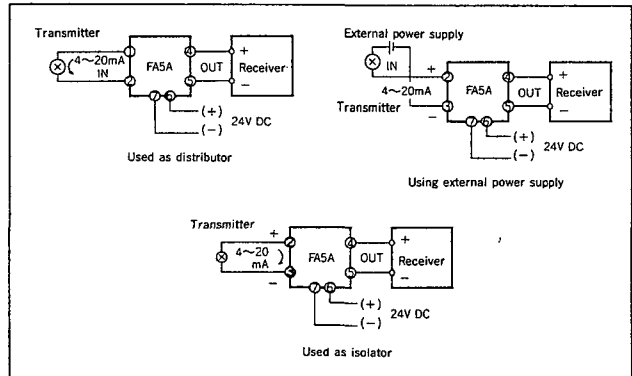
FA5A (DC Current Output)		
Output Signal	Output Resistance	Permissible Load Resistance
4~20mA DC	5MΩ min	0~750Ω
2~10mA DC		0~1500Ω
1~5mA DC		0~3000Ω
0~20mA DC		0~750Ω
0~16mA DC		0~900Ω
0~10mA DC		0~1500Ω
0~1mA DC		0~15kΩ
Others where I ₁₀₀ =24mA max		(15/I ₁₀₀)Ω max

I₁₀₀ : 100% output current

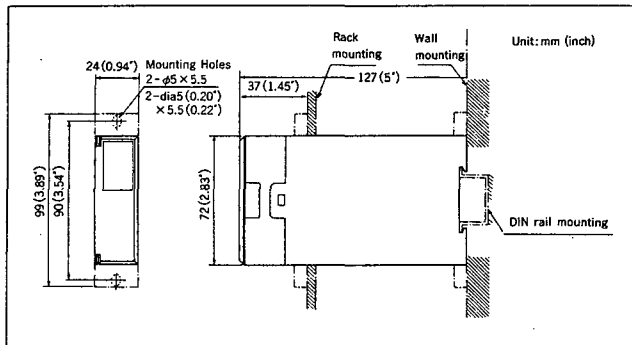
FA5V (DC Voltage Output)			
Output Signal	Output Resistance	Permissible Load Resistance	
0~10mV DC	100Ω max	250kΩ min	
0~100mV DC		250kΩ min	
0~1V DC	1Ω max	2kΩ min	
0~10V DC		10kΩ min	
0~5V DC		2kΩ min	
1~5V DC		2kΩ min	
-10~+10V DC		10kΩ min	
Others where V ₁₀₀ ≤ 100mV	100Ω max	250kΩ min	
V ₁₀₀ =24mA 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