

JUXTA D Series

General Specifications

Model DA5
DISTRIBUTOR
(with Square Root Extractor)

JUXTA

1. General

This DCS correspondence nest stored type distributor (with square root extractor) converts differential pressure flow signals to linear signals combining with 2-wire transmitter.

- Incorporation of transmitter short-circuit protection, low cut circuit and one-chip micro-computer provide high efficiency and superior performance.
- Zero and span adjustment, I/O monitoring, etc. can easily be made even in the field by upper system or handy terminal.

2. Specifications

Input & Output	
Input signal	4~20mA DC from 2-wire transmitter
Input resistance	250Ω
Permissible applied current	40mA or less
Transmitter power supply voltage	26.5±1.5V DC (with current limit circuit, limit at 25~35mA)
Conductor resistance	$RL \leq (20 - \text{transmitter minimum operating voltage}) \sqrt{0.02A} (\Omega)$
Input compensating function	Extraction computation $Y = 2\sqrt{X-1} + 1 (V)$ (Y:output signal, X:input signal)
Ch1 output signal	1~5V DC Low cut point: 0.6%
Ch2 output signal	DC voltage or current signal (In case of current output, output is only available either from front terminal ③~④ or connector Low cut point : 0.6%)
Zero point adjustment range	±1% of span (input adjust), ±10% of span (output correction)
Span adjustment range	±1% of span (input adjust), ±10% of span (output correction)
Standard Performance	
Accuracy rating	±0.1% of span
Response speed	200ms 63% response (10~90%)s
Insulation resistance	100MΩ or more (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 : -10~70°C, 5~95% RH (no condensation)
Power supply voltage	24V DC±10% (ripple content 5% p-p or less)
Effect of power supply voltage fluctuation	±0.1% or less of span per 24V DC±10% fluctuation
Effect of ambient temperature change	±0.2% or less of span per 10°C temperature change
Current dissipation	24V DC 110mA (4~20mADC), 75mA (1~5VDC)
Mounting & Dimension	
Boards	Both sides glass-epoxy
Mounting method	Store in exclusive nest (signal·power supply be connected through back board and connector)
Wiring	External wiring : Connect to terminal M4 screw of input/output of exclusive nest. Connection to I/O card: By exclusive cable (connector)
External dimension	130.6 X 23.6 X 126mm (HxWxD)
Weight	About 120g
Accessories	
Tag number label ...	4

DA5-A6□*A

TYPE

INPUT SIGNAL

A : 4~20mA DC
Transmitter Power Supply 25~28V

CH1 OUTPUT SIGNAL

6 : 1~5V DC

CH2 OUTPUT SIGNAL

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 0 : (CUSTOM) Voltage Signal
(24mA or less) (±10V or less)

POWER SUPPLY
24V DC±10%

Output resistance and permissible load resistance

(DC current output type)		
Output signal	Output resistance	Permissible load resistance
4~20mA DC	5kΩ or more	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, in case of $I_{...} = 24mA$ or less		

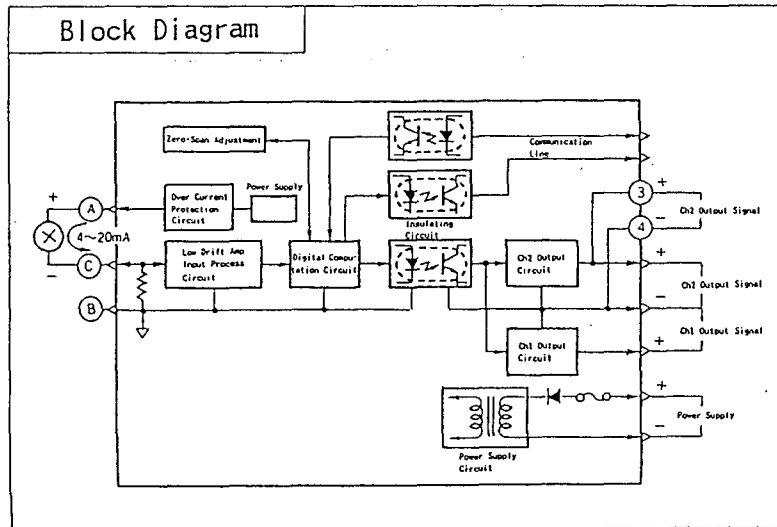
$I_{...} = 100\%$ output current value

(DC voltage output type)			
Output signal	Output resistance	Permissible load resistance	
0~10mV DC	100Ω or less	250kΩ or more	
0~100mV DC			
0~1V DC	1Ω or less	2kΩ or more	
0~10V DC		10kΩ or more	
0~5V DC		2kΩ or more	
1~5V DC		2kΩ or more	
-10~+10V DC		10kΩ or more	
Others, in case of $V_{...} \leq 100mV$		100Ω or less	250kΩ or more
$I_{...} = 10V$ or less $V_{...} > 100mV$		1Ω or less	10kΩ or more

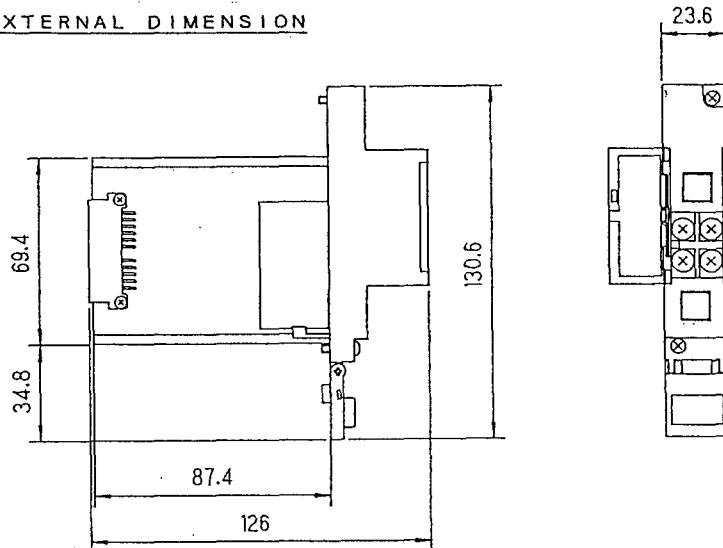
$V_{...} = 100\%$ output voltage value

ORDERING INFORMATION
(Example) Type Code : DA5-A6A*A

(Note) At 0~XmA of current output type, output value of 0.5% or less would be out of warranty regarding relative accuracy for Ch1 output.



EXTERNAL DIMENSION



Unit : mm

Subject to change without notice for grade up quality and performance