JUXTA D Series General Specifications

Model DP3
Pulse Transmitter

JUXTA

1. General

This DCS correspondence nest stored type transmitter converts pulse train signals to various current or voltage signals.

- Built-in 12/24V power supply for pulse transmitter.
- Input pulses include current pulse, voltage pulse, non-voltage contact and open collector contact.
- Setting of zero/span of input range, setting of low input cut point, adjustment of zero/span, and I/O monitoring can easily be made even in the field by upper system handy terminal.

2. Specifications

Input & Output	
Input signal	F_0～F_{100}Hz (0Hz≦F_0≦F_{100}/2Hz) F_0= 0% input frequency (0.1Hz≦F_{100}≦10kHz) F_{100}= 100% input frequency
Input resistance	(Current pulse input) 200Ω, 500Ω, 1KΩ (Voltage pulse input) 10kΩ or more
Low input cut point	Setting range 0.01Hz～F_{100} F_{100}= 100% input frequency Input of less than low input cut point corresponds to output of 0Hz
Pulse height	Lo level (VL) -1～8V VH - VL = 2V or more Hi level (VH) 2～24V
Input pulse width	When 100% input, duty is within 50±30%
Ch1 output signal	1～5V DC
Ch2 output signal	DC voltage or current signal (In case of current output, output is available only either from front terminals ③～④ or connector)
Zero point adjustment range	±10% of span
Span adjustment range	±10% of span
Standard Performance	
Accuracy rating	±0.3% of span (in the range of input 10% or more)
Response speed	Input pulse is period x 2 + 50ms 63% response (10～90%)
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 10% p-p or less)
Effect of power supply voltage fluctuation	±0.1% or less of span per 24V DC±10% fluctuation
Effect of ambient tempearture change	±0.2% or less of span per 10°C temperature change
Current dissipation	24V DC 90mA (4～20mA DC), 60mA (1～5V DC)
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	Range label ... 4

DP3-□6□*A

TYPE

INPUT SIGNAL
1 : Transmitter Power Supply with (12V DC±10%)
2 : Transmitter Power Supply with (24V DC±10%))

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

POWER SUPPLY
24V DC±10%

ORDERING INFORMATION
(Example) Type Code : DP3-16AS*A
Input Frequency : 0~1000Hz
Low Input Cut Point : 0.02Hz
(0.01Hz when not specified)

Output resistance and permissible load resistance

(DC current output type)		
Output signal	Output resistance	Permissible load resistance
4~20mA DC	5MΩ 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		(15/$I_{...}$)Ω or less

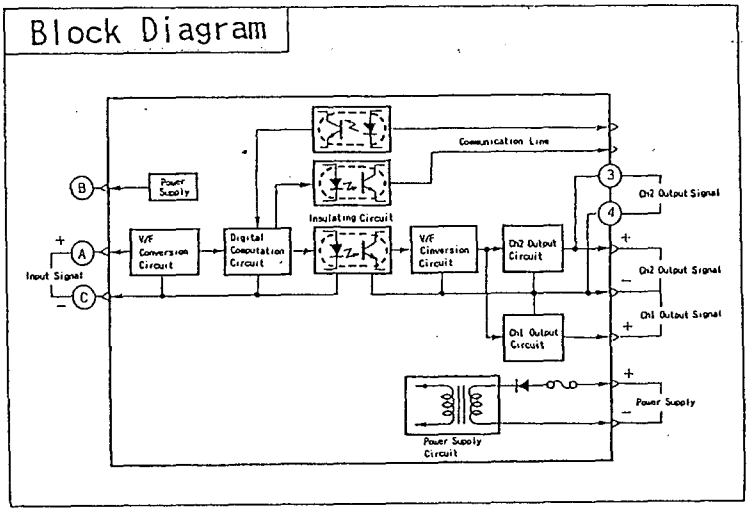
$I_{...}$=100% output current value

(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	$V_{...}$≦100mV	100Ω or less	250KΩ or more
$I_{...}$=10V or less	$V_{...}$>100mV	1Ω or less	10KΩ or more

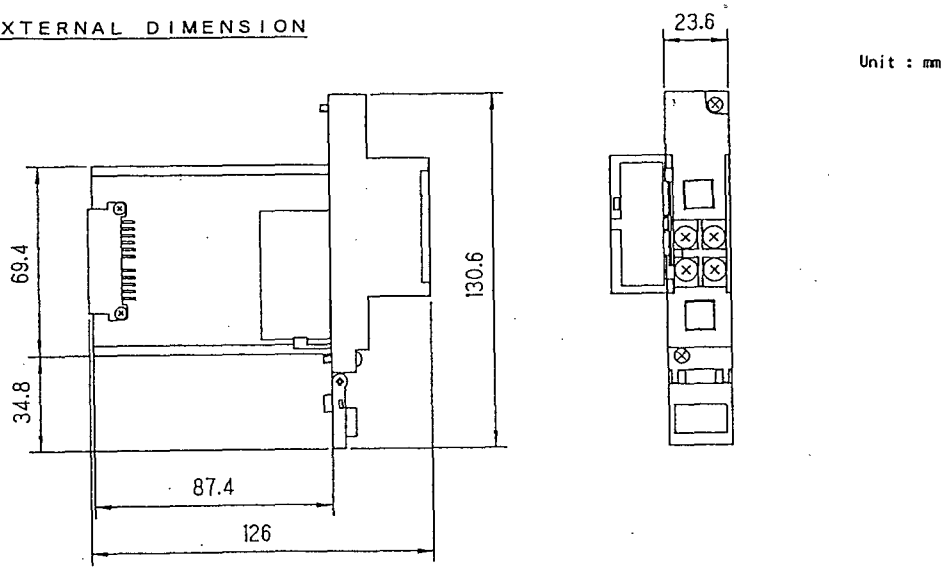
$V_{...}$=100% output voltage value

(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.

Block Diagram



EXTERNAL DIMENSION



Unit : mm

Subject to change without notice for grade up quality and performance