

# VOLTAGE PULSE TRANSDUCER

CVFTP1 - □ □ □

## Use

A transducer which converts a DC input signal into a unit pulse.  
Please use the device by combining it with either one of open collector, voltage pulse, relay contact and photo-MOS relay output according to application. Also, the device has the function to cut the output pulse at the time of a low input as standard equipment. Setting of the frequency of output pulse, pulse width, output cut value at the time of a low input are possible by using a programming unit (type CCM-1).

## Features

1. Constant voltage/current output.
2. Withstand voltage between electric circuit and outer case  
AC2, 000V (50/60Hz), AC1, 500V (50/60Hz) for 1 minute between input/output and auxiliary supply, or AC1, 500V (50/60Hz) for 1 minute between input and output.
3. Plus/minus input/output is not manufacturable.
4. Impulse withstands voltage 5kV, 1.2/50μs between electric circuit and outer case is guaranteed.

## Specification

Input (input resistance)	Output (load resistance)	Auxiliary supply	Common specification
<b>A1</b> : DC0-10mV (approx.1M ) <b>A2</b> : DC0-50mV (approx.1M ) <b>A3</b> : DC0-60mV (approx.1M ) <b>A4</b> : DC0-100mV (approx.1M ) <b>A5</b> : DC0-1V (approx.1M ) <b>A6</b> : DC0-5V (approx.1M ) <b>A7</b> : DC0-10V (approx.1M ) <b>A8</b> : DC1-5V (approx.1M ) <b>C1</b> : DC0-10 μ A*1 (100mV) <b>C2</b> : DC0-100 μ A (100mV) <b>C3</b> : DC0-1mA (approx.100 ) <b>C4</b> : DC0-5mA (approx.100 ) <b>C5</b> : DC0-10mA (approx.100 ) <b>C6</b> : DC0-16mA (approx.100 ) <b>C7</b> : DC4-20mA (approx.100 ) <b>00</b> : other than those above	<b>1</b> : voltage pulse 10Vp ( 2k ) <b>2</b> : open collector DC48V, 100mA MAX. <b>3</b> : no-voltage 1a contact DC30V, 200mA 5,000,000 times (resistance load) AC125V, 200mA 2,000,000 times (COSφ=1) <b>4</b> : Photo MOS relay AC/DC125V, 70mA MAX. (resistance load)	<b>1</b> : AC100V(+10%, -15%),50/60Hz <b>2</b> : AC110V(+10%, -15%),50/60Hz <b>3</b> : AC200V(+10%, -15%) 50/60Hz <b>4</b> : AC220V(+10%, -15%), 50/60Hz <b>5</b> : DC24V(+10%, -15%) <b>0</b> : other than those above	Tolerance: ± 0.25% *2 (% against output span) Consumption VA: AC power source:2.5VA DC power source:3.0W Weight: AC power source:500g DC power source:400g

\*1. Circuit voltage: 15V for an input of 10μA. \*2. Tolerance becomes ±0.5% when input voltage is less than 50mV; input current is less than 100μA.

## Output range

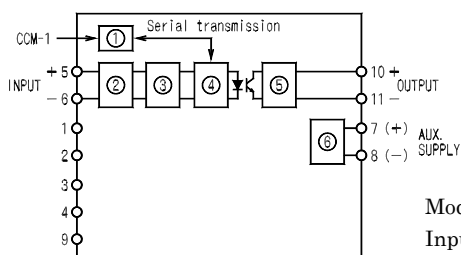
Mark	Output signal (allowable load)	Range of output frequency
<b>1</b>	Voltage pulse 10Vp (load 2 k Ω)	10p/h-36,000p/h (0.002778Hz-10Hz) <b>3</b> : 3,600P/h (1Hz)
<b>2</b>	Open collector DC48V, 100mA MAX.	
<b>3</b>	No-voltage 1a contact	
<b>4</b>	Photo-MOS relay AC/DC125V, 70mA MAX.	

## Factory preset

Products are shipped in the following setting.  
(Can be changed by specification)

PARAMETER		Mark	Name	Setting range
No.	DATA			
P	3,600p/h	P	Number of the output pulse	10P/h-36, 000P/h However, 1a contact: MAX.3, 600P/h
C	1.0%	C	Low input cut value	0.0-20.0%
T	100ms	T(1)	Output pulse width	50-300ms

## Block diagram



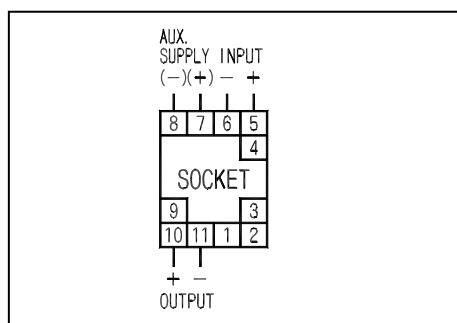
Modular jack  
Input circuit  
V/F circuit  
CPU operational circuit  
Output circuit  
Insulated power source circuit



CVFTP1-C711

(80 × 50 × 133mm/500g)

## Connection diagram



## Purchase specifications

Item to specify	Type
CVFTP1 -	C 7 1 1
	Input Output Auxiliary supply