# **Dual-Output Pulse Isolator with Built in Excitation**

**WSP-FZP** 



This compact plug-in converter (pulse isolator) receives a

pulse train signal extracted from the sensor or control equipment,

adds waveform shaping, insulation, and level conversion, and then

outputs two pulse string signals.

And also provides isolation between the signal input, output, and power supply.

## Features

- ★ Built in excitaion 12Vdc ±5% 25mA (Sensor power supply)
- ★ Dielectric strength of 2000Vac between input, output and power supply
- $\star$  Isolated two signal outputs are available
- ★ Both AC and DC power supply are available
- ★ CE approved
- $\star$  Output modes can be selected with the DIP switch

### **Ordering code**

Ordering code								
↓ Code	Input					Code Test Report X None		
<b>14</b> $ \begin{array}{c}             \frac{10}{90} \\             \frac{1}{90} \\        $			ore		Output 0	T         With Test report           Code         Power Supply           A         100 to 240Vac ±10% 50/60Hz           D         24Vdc ±10%           8         100 to 120Vdc ±10%		
<b>99</b> * 1	Contact us for other than	the abo	ove	Code C K		Rated value30Vdc, 30mA or less, ON-voltage 0.4V or less[1]: 12V, [2]: 0.4V or less Internal resistance 620Ω		
*1···DIP switch must be kept at factory settings		↓ T		J	5V voltage pulse output	[1]: 5V, [2]: 0.4V or less Internal resistance $330\Omega$		
	kept at factory settings	Code		Outpu	ut 1	Rated value		
	kept at factory settings when code 99. Also, can't provide code 99 with CE marking	Е	One-shot non contact For driving AC/DC ON-time 100ms	t output (Ma	ax. 5Hz)	Rated value ON-voltage : 2V (max.) ON-current : 500mA or less Operating circuit voltage : 200Vdc, 130Vac or less		
* 2••••	when code 99. Also, can't provide	Е	For driving AC/DC ON-time 100ms Open collector output DIP switch selectio One-shot On-time	t output (Ma electromag t on between 100ms (Ma	ax. 5Hz) gnetic counter normal and one-shot outputs	ON-voltage : 2V (max.) ON-current : 500mA or less		
manuf	when code 99. Also, can't provide code 99 with CE marking	E	For driving AC/DC ON-time 100ms Open collector output DIP switch selectio One-shot On-time 5V voltage pulse outp DIP switch selectio One-shot On-time	t output (Ma electromag n between <u>100ms (Ma</u> out n between 100ms (Ma	ax. 5Hz) gnetic counter normal and one-shot outputs ux. 5Hz) normal and one-shot outputs	ON-voltage : 2V (max.) ON-current : 500mA or less Operating circuit voltage : 200Vdc, 130Vac or less 30Vdc, 30mA or less		
manuf	when code 99. Also, can't provide code 99 with CE marking Cannot be actured with DC	E C	For driving AC/DC ON-time 100ms Open collector output DIP switch selectio One-shot On-time 5V voltage pulse outp DIP switch selectio One-shot On-time 12V voltage pulse out	t output (Ma electromag ton between <u>100ms (Ma</u> on between <u>100ms (Ma</u> tput on between	ax. 5Hz) gnetic counter normal and one-shot outputs <u>ix. 5Hz)</u> normal and one-shot outputs <u>ix. 5Hz)</u> normal and one-shot outputs	ON-voltage : 2V (max.) ON-current : 500mA or less Operating circuit voltage : 200Vdc, 130Vac or less 30Vdc, 30mA or less ON-voltage : 0.4V or less [1]: 5V, [0]: 0.4V or less		

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#### Contact us for other than the above

# **Specifications**

Input / output frequency	DC to 100kHz (any frequency)
Input waveform	Square or sine (Duty ratio 25 to 75%)
Built in excitaion	12Vdc ±5% 25mA
(Sensor power supply)	
Output waveform	For output code : 'E','G'
	One-shot output with ON-time of 100ms (Max.
	5Hz)
	For output code : 'C', 'J', 'K'
	Square wave synchronized with input frequency or
	One-shot output with ON-time of 100ms (Max.
	5Hz)
Operating temperature	-5 to +55°C
Operating relative humidity	90% or less (non-condensing)
Isolation	Between input, output, and power supply
Insulation resistance	100M $\Omega$ or more with a 500Vdc megger
	Between input, output, and power supply terminal
Dielectric strength	2000Vac for 1 minute
Power consumption	Approx. 4.0VA (AC), Approx. 60mA (24Vdc)
Dimensions	84(H) X 23(W) X 106.5(D)mm
Weight	Approx. 130g
Structure	Plug-in
Applicable Directive	EN61326-1, EN61010-1, EN IEC 63000
	Installation category : II, Pollution degree : 2
Connection	M3 SEMS screw part of the base socket

Material of terminal screw	Chromated iron	
Case color and material	Ivory, heat-resistant ABS resin(94V-0)	
Mounting	DIN rail or wall surface	

### Terminal connections

321       654	

No	Signal	Description
1	INPUT(+)	Input
2	No.2 OUTPUT(+)	No.2 Output
3	INPUT(-)	Input
4	NC	No connection
5	No.2 OUTPUT(-)	No.2 Output
6	NC	No connection
7	No.1 OUTPUT(+)	No.1 Output
8	NC	No connection
9	No.1 OUTPUT(-)	No.1 Output
10	POWER U(+)	Power Supply
11	POWER V(-)	

\* Specification is subject to change without notice

### Watanabe Electric Industry Co. Ltd.