# Dual-Output Pulse Isolator

136.5
105
25.6
(Unit : mm)

This slim-type 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 of up to 2000V between the signal input, output, and power supply.

## Features

★ High vibration tolerance
★ Dielectric strength of 2000Vac between input, output and power supply
★ Isolated two signal outputs are available
★ Both AC and DC power supply are available
★ Easy to maintain by plug-in structure
★ Output modes can be selected with the DIP switch

## Ordering code

WGP- F Z - ☐☐☐☐ - ☐☐

| Code | Input |
|------|-------|
| 12 | Voktage pulse (Peak to peak voltage measurement type) 200mVp-p to 50Vp-p (0V on center) |
| 14 | **DIP Switch Selection** — Voltage pulse Compatible with proximity switch and light switch [1]: 5 to 30V, [0]: -30 to 1.5V / ON-OFF pulse Compatible with non-voltage contact and open collector 5V at OFF, 1mA at ON |
| 99 | Contact us for other than the above |

| Code | Power Supply |
|------|--------------|
| 1 | 80 to 132Vac 50/60Hz Rated voltage : 100 to 120V |
| 2 | 170 to 264Vac 50/60Hz Rated voltage : 200 to 240V |
| 3 | 24Vdc ±10% |
| 8 | 110Vdc ±10% |

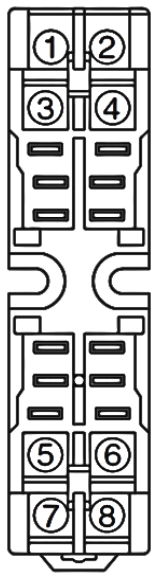| Code | Output 2 | Rated value |
|------|----------|-------------|
| C | Open collector | 30Vdc, 30mA or less, ON-voltage 0.4V or less |
| K | 12V voltage pulse output | [1]: 12V, [2]: 0.4V or less Internal resistance 1kΩ |

| Code | Output 1 | | Rated value |
|------|----------|--|-------------|
| E | One-shot non contact output (Max. 5Hz) For driving AC/DC electromagnetic counter ON-time 100ms | | ON-voltage : 2V (max.) ON-current : 500mA or less Operating circuit voltage : 200Vdc, 130Vac or less |
| F | **DIP Switch Selection** / Open collector output — Through mode | | 30VDC, 30mA or less ON-voltage : 0.4V or less |
| | Open collector output — One-shot output mode 100ms duration (Max. 5Hz) | | |
| | Voltage pulse output — Through mode | | [1] : 5V or 12V (selected via DIP switches) [0] : 0.4V or less Internal resistance : 620Ω |
| | Voltage pulse output — One-shot output mode 100ms duration (Max. 5Hz) | | |
| S | Contact us for other than the above | | |

## Specifications

| | |
|---|---|
| Input / output frequency | DC to 100kHz (any frequency) If input signal code is '12', 10Hz or less not available If output signal code is 'E', Max. 5Hz |
| Input waveform | Square or sine (Duty ratio 25 to 75%) |
| Input resistance | For input code '12' : 100kΩ or more / For input code '14' : 20kΩ or more |
| Output waveform | For output code : 'E' Electromagnetic counter ON-time 100ms For output code : 'F' Voltage pulse and Open collector and their One-shot output (DIP Switch selection) |
| Operating temperature | -5 to +55°C |
| Operating relative humidity | 90% or less (non-condensing) |
| Isolation | Between input, output, and power supply |
| Insulation resistance | 100MΩ or more with a 500Vdc megger Between input, output, and power supply terminal |
| Dielectric strength | 2000Vac for 1 minute |
| Power consumption | Approx. 4.5VA (AC), Approx. 90mA (DC) |
| Dimensions | 105(H) X 25.6(W) X 136.5(D)mm |
| Weight | Approx. 200g |
| Structure | Plug-in |
| Connection | M3.5 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



| No | Signal | Description |
|----|--------|-------------|
| 1 | INPUT(+) | Input |
| 2 | INPUT(-) | |
| 3 | OUTPUT 2(+) | Output 2 |
| 4 | OUTPUT 2(-) | |
| 5 | OUTPUT 1(+) | Output 1 |
| 6 | OUTPUT 1(-) | |
| 7 | POWER U(+) | Power Supply |
| 8 | POWER V(-) | |

∗ Specification is subject to change without notice

## Watanabe Electric Industry Co., Ltd.