

50 (W) x 96 (H) x 125.5 (D) mm Approx. 400 g

This converter applies primary delay processing to the input signal. It is ideal for damping of rapidly changing signals or phase compensation between signals. It also provides an effective means of averaging ripple components superimposed on measuring signals. The time constant can be specified from the front panel of the converter. The DBS model has its input and output signals isolated from each other using the highly reliable photocoupler method.

Features

- The time constant can be set from 0.5 sec to 20 sec from the front panel.
- Input and output are isolated from each other using the highly reliable photocoupler method.
- Power supply is isolated from the input and output by a transformer.
- Plug-in design enables mounting on and demounting from DIN rails using a one-touch process.

Model WVP - - -

| | |
|-----|-------------------|
| DBD | Non-isolated type |
| DBS | Isolated type |

| Power Supply | |
|--------------|------------------------------|
| 1 | AC 100 V \pm 10%, 50/60 Hz |
| 2 | AC 200 V \pm 10%, 50/60 Hz |
| 3 | DC 24 V \pm 10% |
| 4 | AC 110 V \pm 10%, 50/60 Hz |
| 5 | AC 220 V \pm 10%, 50/60 Hz |

| Input Signal | | |
|--------------|---|------------------|
| | | Input Resistance |
| 10 | DC 0-10 mV | 1 M Ω |
| 11 | DC 0-100 mV | 1 M Ω |
| 12 | DC 0-1 V | 1 M Ω |
| 13 | DC 0-5 V | 1 M Ω |
| 14 | DC 1-5 V | 1 M Ω |
| 15 | DC 0-10 V | 1 M Ω |
| 16 | DC 0-50 mV | 1 M Ω |
| 17 | DC 0-60 mV | 1 M Ω |
| 31 | DC 0-100 μ A | 100 Ω |
| 32 | DC 0-1 mA | 100 Ω |
| 33 | DC 0-10 mA | 50 Ω |
| 34 | DC 0-16 mA | 50 Ω |
| 35 | DC 0-20 mA | 50 Ω |
| 36 | DC 4-20 mA | 50 Ω |
| 99 | Other than the above (Please consult with us.): Over 10 mV \cdot fs up to 300 V \cdot fs Over 10 μ A \cdot fs up to 20 mA \cdot fs | |

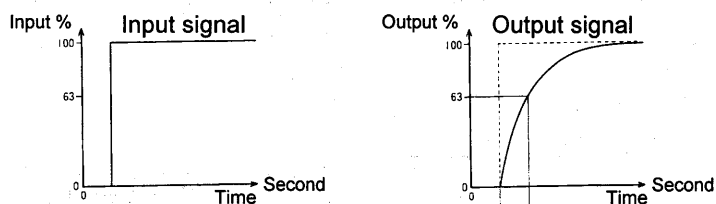
| Output Signal | | |
|---------------|---|---------------------------|
| | | Allowable Load Resistance |
| A | DC 4-20 mA | 750 Ω or less |
| B | DC 1-5 mA | 3 K Ω or less |
| C | DC 2-10 mA | 1.5 K Ω or less |
| D | DC 0-1 mA | 15 K Ω or less |
| E | DC 0-10 mA | 1.5 K Ω or less |
| F | DC 0-16 mA | 937 Ω or less |
| G | DC 0-20 mA | 750 Ω or less |
| H | DC 1-5 V | 2.5 K Ω or more |
| J | DC 0-10 mV | 10 K Ω or more |
| K | DC 0-100 mV | 100 K Ω or more |
| L | DC 0-1 V | 500 Ω or more |
| N | DC 0-5 V | 2.5 K Ω or more |
| P | DC 0-10 V | 5 K Ω or more |
| S | Other than the above (Please consult with us.): Voltage output 10 V or less Current output 20 mA or less | |

Specification

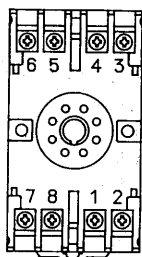
| | |
|-------------------------------------|---|
| Input signal: | DC voltage, DC current |
| Output signal: | DC voltage, DC current |
| Time constant: | Variable between 0.5 and 20 seconds (response 0–63%·fs) |
| Accuracy: | ±0.2%·fs (at 23°C) |
| Allowable load resistance: | For voltage output, use the converter with a load current of 2 mA or less (1 μA or less for an output below 1 V·fs). For current output, use the converter with a voltage drop of 15 V or less between output terminals. |
| Zero & span adjustment: | ±20%·fs each (multi-turn trimmer) |
| Operating temperature and humidity: | -5 to +55°C, 90% RH or less (without condensation) |
| Influence of ambient temperature: | ±0.2%·fs/10°C |
| Insulation resistance: | 100 MΩ or more with a 500 VDC megger between the input/output terminal and power supply terminal, and between the input and output terminals (isolated type) |
| Dielectric strength: | 2,000 VAC for 1 minute between the input and output terminals (isolated type), and between the input/output terminal and power supply terminal |
| Power consumption: | Approx. 4 VA (AC), approx. 120 mA (DC) |

Step Response Diagram

T: Time constant



Explanation of Terminals



| No. | Symbol | Description |
|-----|--------|-------------|
| 1 | OUTPUT | + |
| 2 | | - |
| 3 | INPUT | + |
| 4 | | - |
| 5 | | N.C. |
| 6 | | N.C. |
| 7 | POWER | U (+) |
| 8 | | V (-) |