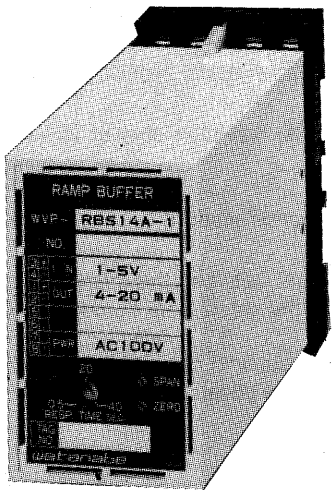


50 (W) x 96 (H) x 125.5 (D) mm Approx. 400 g

This converter limits the variation speed of its output signals. If the input signal varies faster than the response speed that is preset via the trimmer located on the front panel (for example, if the signal rapidly varies by steps), this unit converts it into a signal that varies with a specified constant gradient (speed). Conversely, if the input signal varies more slowly than the preset response speed, the output signal will follow the input. It is ideal for the damping of control signals for valves, etc., shockless control of the start/stop of a hydraulic or pneumatic unit, or filtering of spike noise.

Features

- Response time can be set from 0.5 sec to 40 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 action.

Model WVP-□□□-□□ □-□

RBD	Non-isolated type
RBS	Isolated type

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

	Input Signal	Input Resistance
10	DC 0–10 mV	1 MΩ
11	DC 0–100 mV	1 MΩ
12	DC 0–1 V	1 MΩ
13	DC 0–5 V	1 MΩ
14	DC 1–5 V	1 MΩ
15	DC 0–10 V	1 MΩ
16	DC 0–50 mV	1 MΩ
17	DC 0–60 mV	1 MΩ
31	DC 0–100 μA	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·fs up to 300 V·fs Over 10 μA·fs up to 20 mA·fs	

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

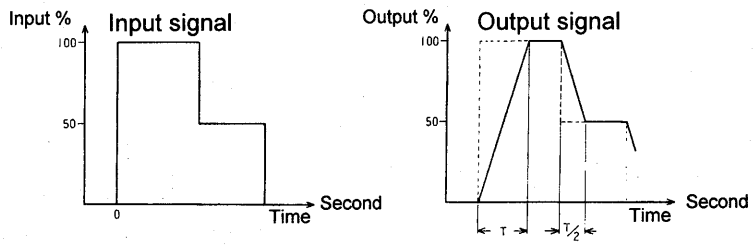
watanabe WATANABE ELECTRIC INDUSTRY Co., Ltd.
6-16-19 Jinguumae Shibuya-Ku, Tokyo, Japan 150-0001 Tel 03-3400-6141 Fax 03-3409-3156

Specification

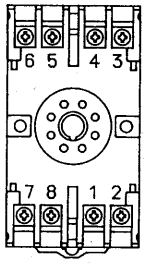
Input signal:	DC voltage, DC current
Output signal:	DC voltage, DC current
Accuracy:	±0.2%·fs (at 23°C)
Allowable load resistance:	For voltage output, use the converter with a load current of 2 mA or less (1 μA or less for an output below 1 V·fs). For current output, use the converter with a voltage drop of 15 V or less between output terminals.
Response time:	Variable from 0.5 to 40 seconds (against 0–100% variations)
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: Response time constant



Explanation of Terminals



No.	Symbol		Description
1	OUTPUT	+	Output signal
2		-	
3	INPUT	+	Input signal
4		-	
5			N.C.
6			N.C.
7	POWER	U (+)	Power supply
8		V (-)	

watanabe WATANABE ELECTRIC INDUSTRY Co., Ltd.
6-16-19 Jinguumae Shibuya-Ku, Tokyo, Japan 150-0001 Tel 03-3400-6141 Fax 03-3409-3156