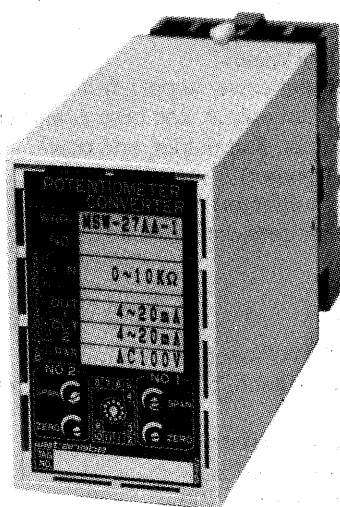


POTENTIOMETER CONVERTER (WITH 2 ISOLATED OUTPUTS)

WAP-MSW



50 (W) x 84 (H) x 135.5 (D) mm Approx. 400 g

This plug-in type signal converter with 2 isolated outputs converts the amount of rotational motion or linear movement that is taken out in the form of a resistance variation from a potentiometer into a current signal or voltage signal. Since you can choose an optimum output from this converter, which has its input, output and power supply isolated from one another, for feeding it to a measurement control device, the unit can be employed in a wide variety of applications.

Features

- Offers wide adjusting ranges of Zero and Span, and causes almost no interference.
- A high accuracy of $\pm 0.1\%$ fs and a fast response of 25 msec have been achieved.
- Capable of delivering signals both to the loop installed for it and to a computer simultaneously.
- The four ports of input, 1st output, 2nd output, and power supply are isolated from one another with a dielectric strength of 2 kVAC.
- Small-sized plug-in type that can be mounted on DIN rails by a one-touch action.

Model WAP - MSW - -

MSW Isolation (2,000 VAC for 1 minute among input, outputs and power supply)
Response time (25 msec/0 - 90%)

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

2nd Output Signal		
		Allowable Load Resistance
A	DC 4-20 mA	300 Ω or less
H	DC 1-5 V	2.5 K 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.)	

Input Signal			
	Rated Input	Span Adjusting Range	Zero Adjusting Range
20	0-50 Ω	25-50 Ω	0-25 Ω
21	0-100 Ω	50-100 Ω	0-50 Ω
22	0-200 Ω	100-200 Ω	0-100 Ω
23	0-500 Ω	250-500 Ω	0-250 Ω
24	0-1 K Ω	0.5-1 K Ω	0-500 Ω
25	0-2 K Ω	1-2 K Ω	0-1 K Ω
26	0-5 K Ω	2.5-5 K Ω	0-2.5 K Ω
27	0-10 K Ω	5-10 K Ω	0-5 K Ω
99	Other than the above (Please consult with us.)		

1st 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 mA	10 K Ω or more
K	DC 0-100 mA	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
R	DC ± 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	

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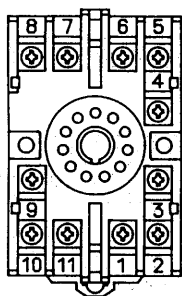
Specifications

Input signal:	Potentiometer or slide rheostat (3-wire system)
Output signal:	DC current or DC voltage, respectively, for the 1st and the 2nd output
Allowable load resistance:	Within the range specified in the part of Model, respectively, for the 1st and the 2nd output
Accuracy:	$\pm 0.1\% \cdot fs$ (at 23°C)
Response time:	25 msec (time to reach 90% of the final value)
Isolation:	Among input, 1st output, 2nd output, and power supply, from one another
Dielectric strength:	2,000 VAC for 1 minute among input, 1st output, 2nd output, and power supply
Insulation resistance:	100 MΩ or more among input, 1st output, 2nd output, and power supply
Zero adjusting range:	0% to 50% of rated input (multi-turn trimmer)
Span adjusting range:	50% to 100% of rated input (multi-turn trimmer)
Effective measuring range:	The range used for measurement after zero and span adjustments is more than 50% of the rated input
Output limitation:	Approx. $120\% \cdot fs$ (fixed)
Influence of ambient temperature:	Influence on accuracy: $\pm 0.015\% \cdot fs/^\circ C$
Influence of supply voltage:	Influence on accuracy: $\pm 0.1\% \cdot fs/\text{rated voltage} \pm 10\%$
Power supply:	100 V, 110 V, 200 V, or 220 VAC $\pm 10\%$ each, 50/60 Hz, 24 VDC $\pm 10\%$
Power consumption:	Approx. 5 VA (AC)
Operating ambient temperature and humidity:	-5 to +60°C, 90% RH or less (without condensation or icing)
Material of case:	ABS resin (outer covering), Noryl resin (base socket)
Dimensions and weight:	50 wide x 84 high x 135.5 deep (mm), approx. 400 g
Construction and mounting:	Plug-in type. Directly installed or mounted on DIN rails
Connection method:	Coupled to M3.5 x 7 SEMS screws of base socket

Major Applications

- Transmission of measurement signals from a float type level gauges to a remote location.
- Measurement of aperture of gates and dampers, and cylinder stroke.

Pin and Terminal Assignment



No.	Symbol	Description
1	OUT No. 1	+
2		-
3		N.C.
4		High
5	INPUT	Slide
6		Low
7	POWER	U
8		V
9		N.C.
10	OUT No. 2	+
11		-