SEW SERIES

SPEC SHEET

2-output Thermocouple Transmitter (With Indication Function)

Model: SEWE

Model

Socket

- 1: Screw fall prevention, Finger-safe (For Y terminal)
 2: For Ring terminal
 Power supply
 0: 100 to 240V AC
 - 1: 24V AC/DC

How to Order

Specify a model. (e.g.) SEWE-1-0

Factory Default Value:

Input	K: -200 to 1370℃
Output 1	4 to 20mA DC
Output 2	4 to 20mA DC

SEWE-D-D

Accessories (Sold Separately)

Communication cable to connect console software: CMB-001

Input Specifications

Input resistance: $1M\Omega$ or more External resistance: 100Ω or less, however, B: 40Ω or less Burnout: Upscale, Downscale (Selectable by the keypad) Input

Thermocouple	Input Range		
К	-200 to 1370℃	-328 to 2498°F	
J	-200 to 1000℃	-328 to 1832 °F	
R	-50 to 1760℃	-58 to 3200°F	
S	-50 to 1760℃	-58 to 3200°F	
В	0 to 1820℃	32 to 3308°F	
E	-200 to 800 ℃	-328 to 1472°F	
Т	-200 to 400 ℃	-328 to 752 °F	
N	-200 to 1300℃	-328 to 2372°F	
PL-II	0 to 1390℃	32 to 2534°F	
W5Re/W26Re	0 to 2315℃	32 to 4199°F	
W3Re/W25Re	0 to 2315℃	32 to 4199 °F	

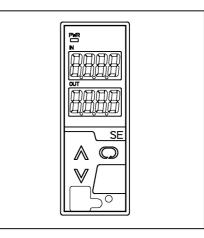
Minimum span: 50°C (100°F)

Output Specifications

When the output range lower limit is zero, (even if zero adjustment results in a negative value), the output value will not be negative.

DC Current

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Output range	Allowable load resistance	Zero adjustment range	Span adjustment range
4 to 20mA DC	700 Ω or less	-5 to 5%	95 to 105%
0 to 20mA DC	700 Ω or less	0 to 5%	95 to 105%
0 to 12mA DC	1.2k Ω or less	0 to 5%	95 to 105%
0 to 10mA DC	1.2k Ω or less	0 to 5%	95 to 105%
1 to 5mA DC	$2.4k\Omega$ or less	-5 to 5%	95 to 105%



DC Voltage

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Output range	Allowable load resistance	Zero adjustment range	Span adjustment range	
0 to 1V DC	100 Ω or more	0 to 5%	95 to 105%	
0 to 5V DC	500 Ω or more	0 to 5%	95 to 105%	
1 to 5V DC	500 Ω or more	-5 to 5%	95 to 105%	
0 to 10V DC	1k Ω or more	0 to 5%	95 to 105%	

Performance

Basic accuracy (at 23°C of ambient temperature)

- Input: Within $\pm 0.1\%$ of each input span
- R, S inputs, -50 to 200°C (-58 to 392°F): Within ± 6 °C (12°F) B input: 0 to 300°C (32 to 572°F): Accuracy is not guaranteed. K, J, E, T, N inputs: Less than 0°C (32°F): Within $\pm 0.4\%$ of input span

• Output: Within ±0.1%

Cold junction compensation accuracy: Within $\pm 1^{\circ}$ C at -5 to 55°C Indication accuracy: Within Basic input accuracy ± 1 digit Input sampling period: 25ms, 125ms, 250ms

(Selectable by the keypad)

Response time: (Selectable by the keypad)

- 65ms (typ.) ($0 \rightarrow 90\%$) (Input sampling period: 25ms)
- 225ms (typ.) $(0\rightarrow 90\%)$ (Input sampling period: 125ms)

425ms (typ.) (0→90%) (Input sampling period: 250ms)

Temperature coefficient: $\pm 0.015\%$ /°C or less

Insulation resistance: $10M\Omega\,$ or more, at 500V DC

(Input - Output - Power)

Dielectric strength: 2.0kV AC for 1 minute (Input - Output - Power)

SEW SERIES

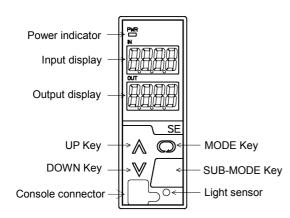


General Structure

Case: Flame-resistant resin Color: Light gray Front panel: Membrane sheet Setting: Using front keypad Connector for console software: Only CMB-001 cable usable Displays and indicators:

Input display: 7-segment Red LED display 4-digit, Character size: 10 x 4.6mm (H x W) Output display: 7-segment Red LED display 4-digit, Character size: 10 x 4.6mm (H x W)

Power indicator: Green LED



Installation Specifications

Power supply: 100 to 240V AC 50/60Hz 24V AC/DC 50/60Hz Allowable voltage range: 85 to 264V AC, 20 to 28V AC/DC Power consumption: Approx. 8VA Ambient temperature: -5 to 55°C Ambient humidity: 35 to 85%RH (non-condensing) Weight: Approx.190g (including socket) Mounting: DIN rail

Dimensions: W30 x H88 x D108mm (including socket)

Attached Functions

Light sensor: Automatically measures and controls brightness of the displays, saving energy.

Power failure countermeasure:

The data is backed up in non-volatile IC memory.

Self diagnosis: The CPU is monitored by a watchdog timer, and when an abnormal status is found on the CPU, the unit is switched to warm-up status turning all outputs OFF.

Cold junction compensation: Available

Environmental Specification

RoHS directive compliance

Settings

Function Keys

- (1) UP Key: Increases numeric value.
- (2) DOWN Key: Decreases numeric value.
- (3) MODE Key: Selects a setting mode.
- (4) SUB-MODE Key: Lights the displays again when in unlit status.

Displays and Indicators

Input display: Indicates the input value.

When a range with a decimal point is selected:

Indication of -200.0 or less: The minus (-) sign and input value light alternately.

Under range: "____ " flashes on the Input display.

Over range: " " flashes on the Input display. Warm-up indication:

For approx. 3 seconds after the power to the instrument is turned on, input type is indicated on the Input display, and Output 1 type is indicated on the Output display.

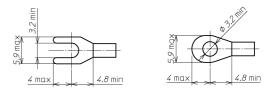
Output display: Indicates the output volume in percentage (%) form.

Power indicator: A green LED is lit when the power to the instrument is turned on.

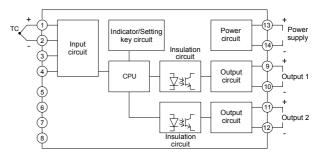
Solderless Terminals

Y Terminal

Ring Terminal



Circuit Configuration, Terminal Arrangement



External Dimensions (Scale: mm)

