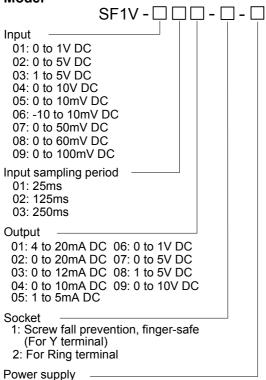
SF SERIES SPEC. SHEET

1ch Isolator

Model: SF1V

Model



Power supply —— 0: 100 to 240V AC 1: 24V AC/DC

How to Order

Specify a model and input range. (e.g.) SF1V-010101-1-0

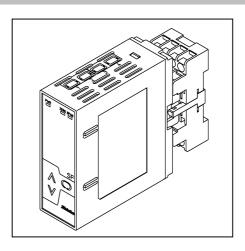
Default value

Input	0 to 1V DC
Output	4 to 20mA DC
Input sampling period	25ms

■ Input Specifications

Input:

Input resistance	Allowable signal resistance			
1ΜΩ	2kΩ or less			
1ΜΩ	100Ω or less			
1ΜΩ	100Ω or less			
1ΜΩ	100Ω or less			
1ΜΩ	20Ω or less			
1ΜΩ	40Ω or less			
1ΜΩ	200Ω or less			
1ΜΩ	200Ω or less			
1ΜΩ	200Ω or less			
	1MΩ 1MΩ 1MΩ 1MΩ 1MΩ 1MΩ 1MΩ 1MΩ			



■ Output Specifications

DC Current

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

DC Voltage

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

■ Performance

Accuracy: Within ±0.2% of input span (at 23°C of ambient temperature)

Input sampling period: 25ms, 125ms, 250ms (Must be specified.)

Response time:

65ms (typ.)(0 \rightarrow 90%)(Input sampling period: 25ms) 225ms (typ.)(0 \rightarrow 90%)(Input sampling period: 125ms) 425ms (typ.)(0 \rightarrow 90%)(Input sampling period: 250ms)

Temperature coefficient: $\pm 0.015\% / ^{\rm C}$ or less Insulation resistance: $10 M\Omega$ or more, at 500V DC

(Input - Output - Power)

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



General Structure

Case: Flame-resistant resin Color: Light gray

Front panel: Membrane sheet **Adjustment**: Using the front keypad

- (1) Press the MODE Key. The ZERO indicator becomes lit. The unit moves to the Output ZERO adjustment mode.
- (2) Press the MODE Key in the Output ZERO adjustment mode. The SPAN indicator becomes lit. The unit moves to the Output SPAN adjustment mode.
- (3) Pressing the MODE Key returns to Step (1).

 If the MODE Key is pressed for approx 3 sec, or if no operation occurs for approx. 30 sec, the unit will revert to the RUN mode.

Indication:

PWR indicator (Green):

Lit when power is turned ON.

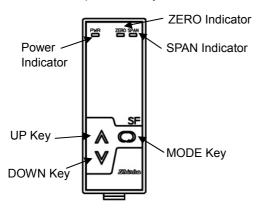
Flashes in 0.5 second cycles if non-volatile memory errors occur.

Flashes in 0.25 second cycles if input errors occur. ZERO indicator (Yellow):

Lit in the Output ZERO adjustment mode.

SPAN indicator (Yellow):

Lit in the Output SPAN adjustment mode.



■ 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. 6VA 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

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.

■ Environmental Specifications

RoHS directive compliance

Settings

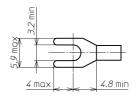
Function keys

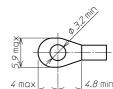
- (1) UP Key: Increases a numerical value.
- (2) DOWN Key: Decreases a numerical value.
- (3) MODE Key: Switches from RUN mode to the Adjustment mode, and registers the adjustment value.

Solderless Terminals

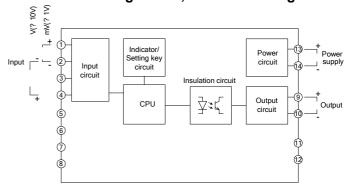
Y Terminal

Ring Terminal





■ Circuit Configuration, Terminal Arrangement



■ External Dimensions (Scale: mm)

