General Specifications

Models FV1A, FV1V Manual Setter

NTXUL

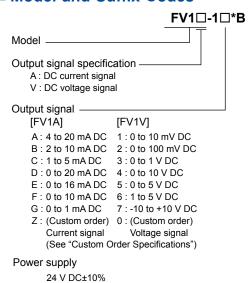
GS 77J08V01-01E

■ General

The FV1A/FV1V is a compact, front terminal connection type manual setter that outputs arbitrarily linearized DC current or DC voltage signals by changing set-volume.

- Available as a transmitter for a loop back test on-site.
- Addition/subtraction of I/O signals can be performed in combination with an isolator.

■ Model and Suffix Codes



■ Ordering Information

Specify the following when ordering.

• Model and suffix codes :e.g. FV1V-16*B

Output Specifications

Output signal: DC current or DC voltage signal Allowable load resistance:

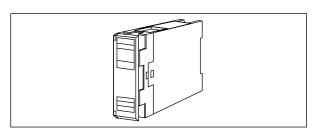
DC current output	Allowable load resistance	DC voltage output	Allowable load resistance
4 to 20 mA	750 Ω or less	0 to 10 mV	250 kΩ or more
2 to 10 mA	1500 Ω or less	0 to 100 mV	250 kΩ or more
1 to 5 mA	3000 Ω or less	0 to 1 V	2 kΩ or more
0 to 20 mA	750 Ω or less	0 to 10 V	10 kΩ or more
0 to 16 mA	900 Ω or less	0 to 5 V	2 kΩ or more
0 to 10 mA	1500 Ω or less	1 to 5 V	2 kΩ or more
0 to 1 mA	15 kΩ or less	-10 to 10 V	10 kΩ or more

Monitor output signal range: 0 to 1 V DC (0 to 100%)

Monitor output resistance: 1 Ω or less

Monitor output allowable load resistance: $2 \text{ k}\Omega$ or

more



Standard Performance

Accuracy rating: ±0.1% of span (for monitor output)

Accuracy is not guaranteed for output level less than 0.5% of the span of a 0 to X mA output range type.

Insulation resistance:

100 MΩ at 500 V DC between (output and monitor output) and power supply.

Withstand voltage: 500 V AC/min. between (output and monitor output) and power supply.

■ Environmental Conditions

Operating temperature range: 0 to 50°C

Operating humidity range: 5 to 90% RH (no condensation)

Power supply voltage: 24 V DC±10% (percentage ripple is 5%p-p or less)

Effect of power supply voltage fluctuations: ±0.1% of span or less for the fluctuation within the operating range of power supply voltage specification.

Effect of load resistance: ±0.05% of span or less (at allowable load resistance range.)

Effect of ambient temperature change: ±0.2% of span or less for a temperature change of 10°C. Current consumption:

24 V DC 90 mA (FV1A), 50 mA (FV1V)

■ Mounting and Dimensions

Material: ABS resin (Case body)

Mounting method: Rack, Wall or DIN rail mounting

Connection method: M4 screw terminals

External dimensions: 72 (H) × 24 (W) × 127 (D) mm

Weight: Approx.130g

Standard Accessories

Tag number label: 1 Mounting block: 2

Mounting screw: M4 screw x 2

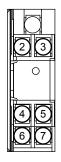


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■ Custom Order Specifications

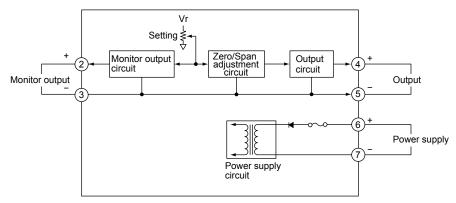
	Current signal	Voltage signal
Output range (DC)	0 to 24 mA	-10 to +10 V
Span (DC)	1 to 24 mA	10 mV to 20 V
Zero elevation	0 to 200%	-100 to +200%

■ Terminal Assignments



2	Monitor output	(+)
3	Monitor output	(–)
4	Output	(+)
5	Output	(–)
6	Supply	(+)
7	Supply	(–)

■ Block Diagram



■ External Dimensions

