General Specifications

Models FHFA, FHFV Isolator (Super Speed Response Type)

NTXUL

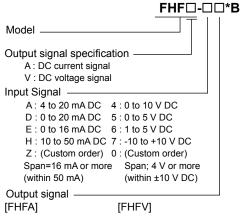
GS 77J08H11-01E

■ General

The FHFA/FHFV is a compact, front terminal connection type isorator that converts DC current or DC voltage signals into isolated DC current or DC voltage signals.

Max 63% response, 1 ms super high speed conversion

■ Model and Suffix Codes



Power supply 24 V DC±10%

■ Ordering Information

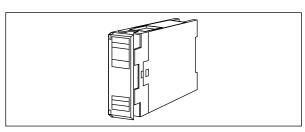
Specify the following when ordering.

• Model and suffix codes :e.g. FHFV-66*B

■ Input/Output Specifications

Input signal: DC current or DC voltage signal Input resistance:

DC current input	Input resistance	DC voltage input	Input resistance
4 to 20 mA	250 Ω	0 to 10 V	1 MΩ durning
0 to 20 mA	250 Ω	0 to 5 V	power on
0 to 16 mA	250 Ω	1 to 5 V	100 kΩ during power off
10 to 50 mA	100 Ω	-10 to +10 V	



Maximum allowable input: Voltage input: ±30 V DC or less

Current input: Any level that satisfies the following condition.

 $(Input current)^2 x Input resistance \le 0.5 W$ Output signal: DC current or DC voltage signal

Allowable load resistance:

DC current Allowable load output resistance output resistance

DC current output	Allowable load resistance	DC voltage output	Allowable load resistance
4 to 20 mA	750 Ω or less	0 to 10 V	10 kΩ or more
0 to 20 mA	750 Ω or less	0 to 5 V	2 kΩ or more
0 to 16 mA	900 Ω or less	1 to 5 V	2 kΩ or more
		-10 to +10 V	10 kΩ or more

Zero adjustment: -5 to +5% Span adjustment: 95 to 105%

■ Standard Performance

Accuracy rating: ±0.1% of span

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

Response speed: 1 ms, 63% response (10 to 90%) Insulation resistance: 100 M Ω or more at 500 V DC between input and output, output and power supply, and input and power supply.

Withstanding voltage: 1500 V AC/min. between input and (output and power supply.)
500 V AC/min. between 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 ambient temperature change: ±0.2% of span or less for a temperature change of 10°C.

Current consumption: 24 V DC 110 mA (FHFA), 72 mA (FHFV)



■ Mounting and Dimensions

Material: ABS resin (Case body)

Mounting method: Rack, Wall or DIN rail mounting

Connection method: M4 screw terminals

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

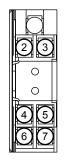
Weight: Approx.130 g

■ Standard Accessories

Tag number label: 1 Mounting block: 2

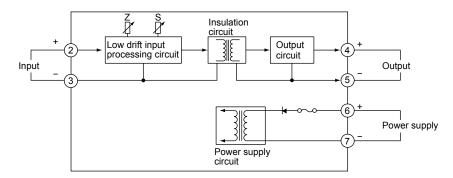
Mounting screw: M4 screw x 2

■ Terminal Assignments



2	Input	(+)
3	Input	(–)
4	Output	(+)
5	Output	(–)
6	Supply	(+)
7	Supply	(-)

■ Block Diagram



■ External Dimension

