

# FC SERIES ISOLATOR

## DATA SHEET

**PRL**

The FC series isolator is designed to convert input signals into other signals as required in addition to providing isolation between input and output. This system is therefore suitable when connecting an FC system with other systems or to prevent stray current.

## FEATURES

1. Mounting and wiring are simple since the isolator is compact, lightweight and the external terminals are in a stacked arrangement.
2. Instruments with an accuracy of either  $\pm 0.25\%$  or  $\pm 0.5\%$  are available.
3. A variety of input and output signals are available, to allow a wide range of applications.

## SPECIFICATIONS

### Input signal and input resistance:

DC 1 to 5V (bias current  $1\mu\text{A}$  or less)  
 DC 0 to 10V (approx.  $36\text{k}\Omega$ )  
 DC -10 to +10V (approx.  $35\text{k}\Omega$ )

### Output signal and allowable load resistance:

DC 0 to 10V ( $2\text{k}\Omega$  or more)  
 DC 1 to 5V ( $1\text{k}\Omega$  or more)  
 DC -10 to +10V ( $10\text{k}\Omega$  or more)

**Allowance:**  $\pm 0.5\%$  of full span;  $\pm 0.25\%$  of full span also available on request

**Reproducibility:**  $\pm 0.1\%$  of full span

**Response time:** Approx. 0.1 sec (for 99.5% response)

**Power supply:** DC 24V (DC 20 to 30V) or AC 24V  
 $+13\%$   
 $-10\%$ , 50/60Hz

### Power consumption:

	DC 24V	AC 24V
Current output	Approx. 2W	Approx. 4VA
Voltage output	Approx. 1W	Approx. 2VA

### Isolation characteristic:

Between input and output, between input and power supply, and between output and power supply

Withstand voltage; AC 1500V for 1 minute

Insulation resistance;  $100\text{M}\Omega$  or more at DC 500V

### Ambient temperature:

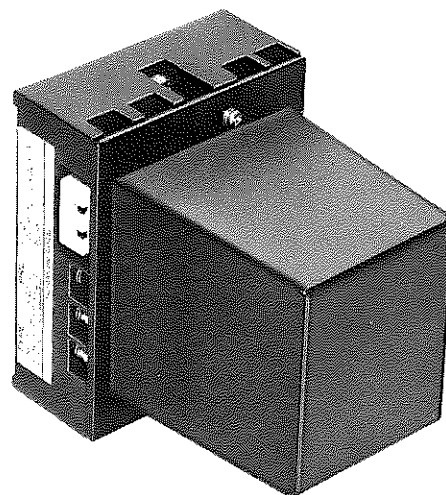
0 to  $45^\circ\text{C}$

### Ambient humidity:

90% RH or less

### Outer dimensions (H x W x D):

100 x 80 x 110 mm



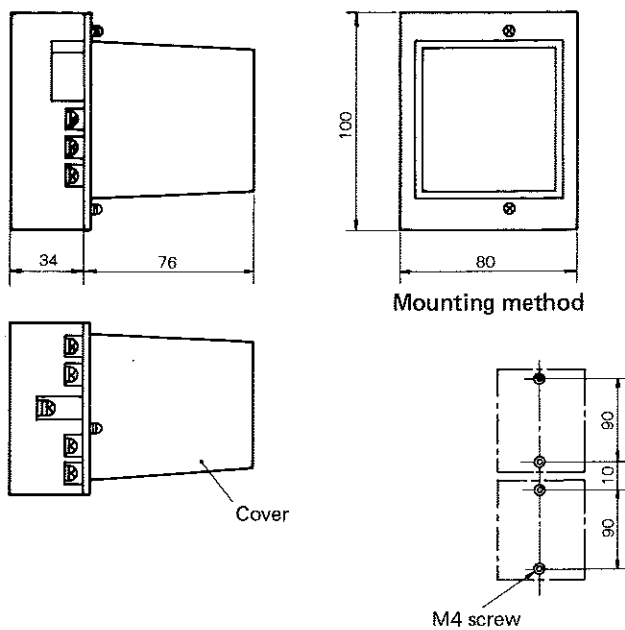
**Weight:** Approx. 0.5 kg  
**Finish color:** Case; black (molded synthetic resin)  
 Cover; semi-transparent (molded synthetic resin)

**Scope of delivery:** Isolator and mounting screws

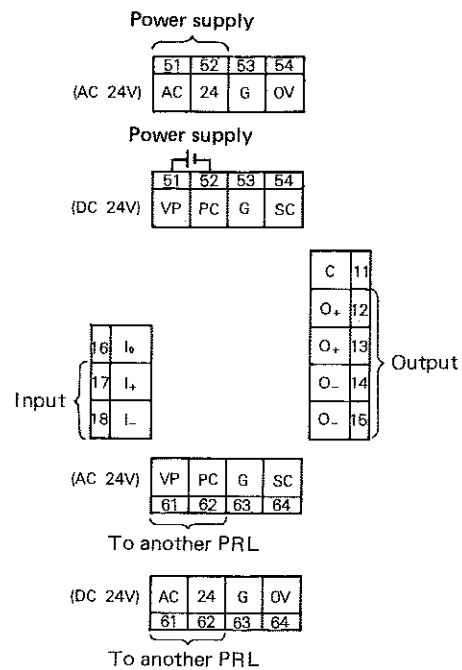
## CODE SYMBOLS

P	R	L						Description
							1	Input signal
			A					DC 1 to 5V
			B					DC 4 to 20mA
			C					DC 10 to 50mA
			D					DC 0 to 20mA
			E					DC 0 to 50mA
			F					DC 0 to 10V
			G					DC -10 to +10V
								Output signal
			A					DC 1 to 5V
			B					DC 4 to 20mA
			D					DC 0 to 20mA
			F					DC 0 to 10V
			G					DC -10 to +10V
								Allowance
			1					$\pm 0.5\%$
			2					$\pm 0.12\%$
								Power supply
			1					DC 24V
			7					AC 24V 50/60Hz

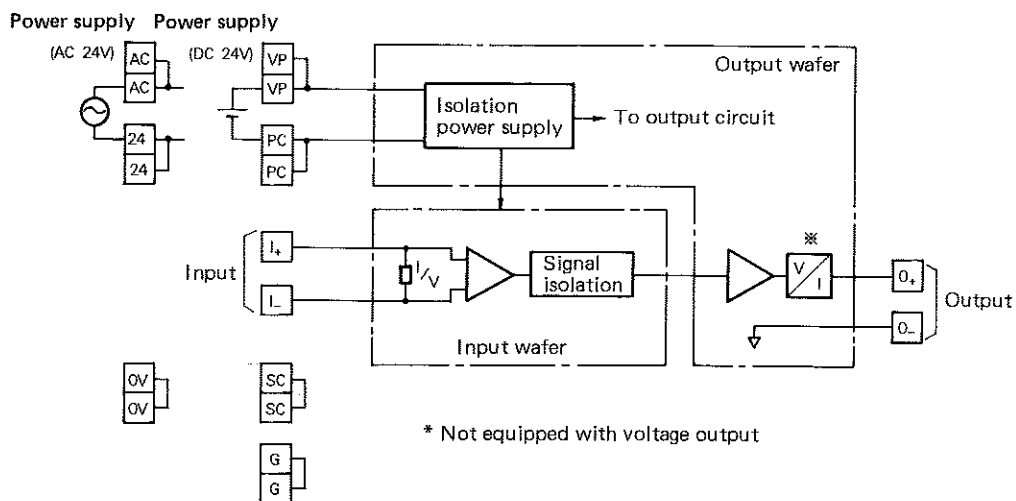
## OUTLINE DIAGRAM (Unit:mm)



## CONNECTION DIAGRAM



## BASIC CIRCUIT DIAGRAM



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