

# MOVING COIL TYPE INDICATOR

DATA SHEET

PAJ

The moving coil type indicator receives various types of input signals, DC voltage, DC current, and signals from thermocouple and resistance bulbs.

## FEATURES

1. Input signal can be directly connected.
2. High input impedance ( $1M\Omega$  at 1 to 5V DC input). No adjusting resistor is required for thermocouple input.
3. Compact and lightweight design.



## SPECIFICATIONS

Measuring input: Signal

- A; 1 to 5V DC
- B; 4 to 20mA DC
- DC current
  - D; 0 to 100 $\mu$ A ..... 200mA DC
- DC voltage
  - E; 0 to 10mV ..... 5V DC
- Thermocouple
  - F; 0 to 10mV DC or more  
(with reference junction compensator)  
(Upper limit overshoot burnout circuit is available on request)
- Thermocouple
  - G; 10mV DC span or more  
(with reference junction compensator)  
(Upper limit overshoot burnout circuit is available on request)
- Resistance bulb
  - H; JPt100 $\Omega$   
50 $^{\circ}$ C span or more 3-wire type
  - W; Pt100 $\Omega$   
50 $^{\circ}$ C span or more 3-wire type
- Slide resistant (resistance span; 100 $\Omega$ )
  - J; 3-wire type
  - K; 2-wire type (with adjusting resistor)
- Opening angle transmitter (resistance span: 100 $\Omega$ )
  - L; 3-wire type  
(zero point and span adjustable)

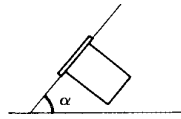
Input resistance and allowable input signal source resistance:

Input signal		Input resistance	Allowable input signal source resistance
Voltage	1 to 5V	$1M\Omega$	2k $\Omega$ or less
	Others	40k $\Omega$ to $1M\Omega$	100 $\Omega$ or less
Current	4 to 20mA	5 $\Omega$	–
	Others	1 to 100 $\Omega$	–
Thermocouple		40 to 600k $\Omega$	100 $\Omega$ or less (50 $\Omega$ or less when burnout is provided)
Resistance		–	6 $\Omega$ or less per wire

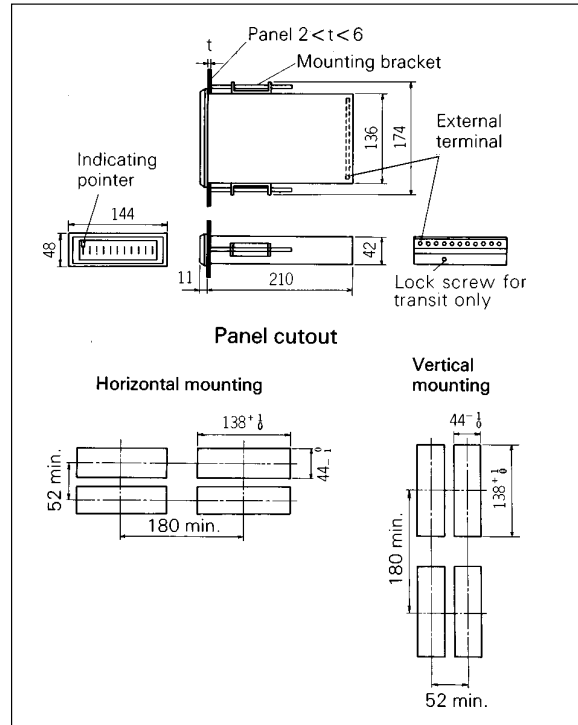
- Allowance:**  $\pm 1.0\%$  of full scale
- Scale length:** 100mm
- Response time:** Within 3 sec (time required for stabilizing the indicator pointer within  $\pm 1.5\%$  after applying input corresponding to 2/3 (approx.) of full scale)
- Power supply:** 100V  $\pm 10\%$  AC, 50/60Hz  
\*200V  $\pm 10\%$  AC, 50/60Hz, or  
\*24V  $^{+15\%}_{-10\%}$  AC, 50/60Hz
- Power consumption:**  
Approx. 1.8VA max.
- Ambient temperature:**  
–10 to +50 $^{\circ}$ C
- Ambient humidity:**  
30 to 90%RH
- Enclosure:** Steel case
- External dimensions (H  $\times$  W  $\times$  D):**  
48  $\times$  144  $\times$  210mm
- Mass(weight):** Approx. 1.5kg
- Finish color:** Munsell 7.5BG 3.2/0.8 or equivalent
- Scope of delivery:** Indicator and mounting bracket

Mounting method:

- Panel flush mounting
  - Standard;
    - Horizontal mounting on vertical panel
  - Non-standard;
    - Tilted mounting, vertical mounting
- Specify  $\angle\alpha$  when mounting on tilted panel



OUTLINE DIAGRAM (Unit : mm)

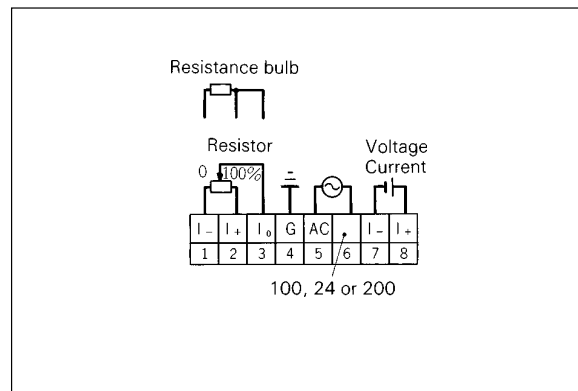


CODE SYMBOLS

1	2	3	4	5	6	7	8	9	Description
P	A	J	0	2	-				Input signal
	A								1 to 5V DC
	B								4 to 20mA DC
	D								0 to 100 $\mu$ A.....200mA DC
	E								0 to 10mV.....5V DC
	F								0 to 10mV DC or more (with reference junction compensator)
	G								10mV DC span or more (with reference junction compensator)
	H								Resistance bulb JPt100 $\Omega$ 50 $^{\circ}$ C span or more, 3-wire type
	W								Resistance bulb Pt100 $\Omega$ 50 $^{\circ}$ C span or more, 3-wire type
	J								Slide resistant, 3-wire type
	K								Slide resistant, 2-wire type (with circuit adjusting resistor)
	L								For opening angle indicator (resistance; 100 $\Omega$ , zero point and span adjustable)
	* Z								Other inputs
									Power supply
				* 1					24V AC 50/60Hz
				3					100V AC 50/60Hz
				* 5					200V AC 50/60Hz
									Application
				0					For general use
				3					For zener barrier connection Specify "3" only when connecting to zener barrier (PWZB3 or PWZB4) with thermocouple or resistance bulb input used.
									Mounting method
				1					Horizontal mounting
				2					Vertical mounting

Notes: Symbols of resistance bulbs are as follows.  
JPt100 Previous JIS standard  
Pt100 New JIS standard

CONNECTION DIAGRAMS



ORDERING INFORMATION

1. Product name
2. Code symbols
3. Input
4. Scale
5. Power supply
6. Application
7. Other necessary information

• Asterisked (\*) items; Non-standard

⚠ Caution on Safety

\*Before using this product, be sure to read its instruction manual in advance.

Fuji Electric Systems Co., Ltd.

Head Office

Gate City Ohsaki, East Tower, 11-2, Osaki 1-chome,  
Shinagawa-ku, Tokyo 141-0032, Japan

<http://www.fesys.co.jp/eng>

Instrumentation Div.

International Sales Dept.

No.1, Fuji-machi, Hino-city, Tokyo, 191-8502 Japan  
Phone: 81-42-585-6201, 6202 Fax: 81-42-585-6187

<http://www.fic-net.jp/eng>

Information in this catalog is subject to change without notice.

Printed in Japan