

# MOVING COIL TYPE ALARMING INDICATOR

DATA SHEET

PAK

The moving coil type alarming indicator is designed to receive various input signals such as FC series signals. DC voltage or current, and signals from thermocouples or resistance bulbs.

## FEATURES

1. Direct connection of input signals.
2. High input impedance (1M $\Omega$  for 1 to 5V DC input).  
No circuit adjusting resistor is required for thermocouple input.
3. Compact and lightweight.



## SPECIFICATIONS

**Input signal:**

- FC series 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)
  - 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
- Ring tube (resistance span 14 $\Omega$ )
- 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 circuit
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. 4.5VA 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  $\times$  275mm

**Mass(weight):** Approx. 2kg

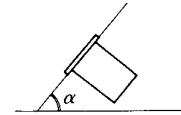
**Finish color:** Munsell 7.5BG 3.2/0.8 or equivalent

**Alarm device:** Upper limit (H or A), lower limit (L or B)  
 Upper and lower limits (K or C with one common contact)  
 H, L, K; Excitation alarm  
 A, B, C; Non-excitation alarm  
 Setting accuracy;  $\pm 1.0\%$   
 Contact; ON alarm (OFF alarm is available on request)  
 Contact capacity; 100V AC 0.3A/24V DC 0.2A (resistance load)  
 Alarm indicator lamp (available on request); Alarm signal displayed with LED mounted on indicator panel

**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  $\angle\alpha$  for tilted mounting

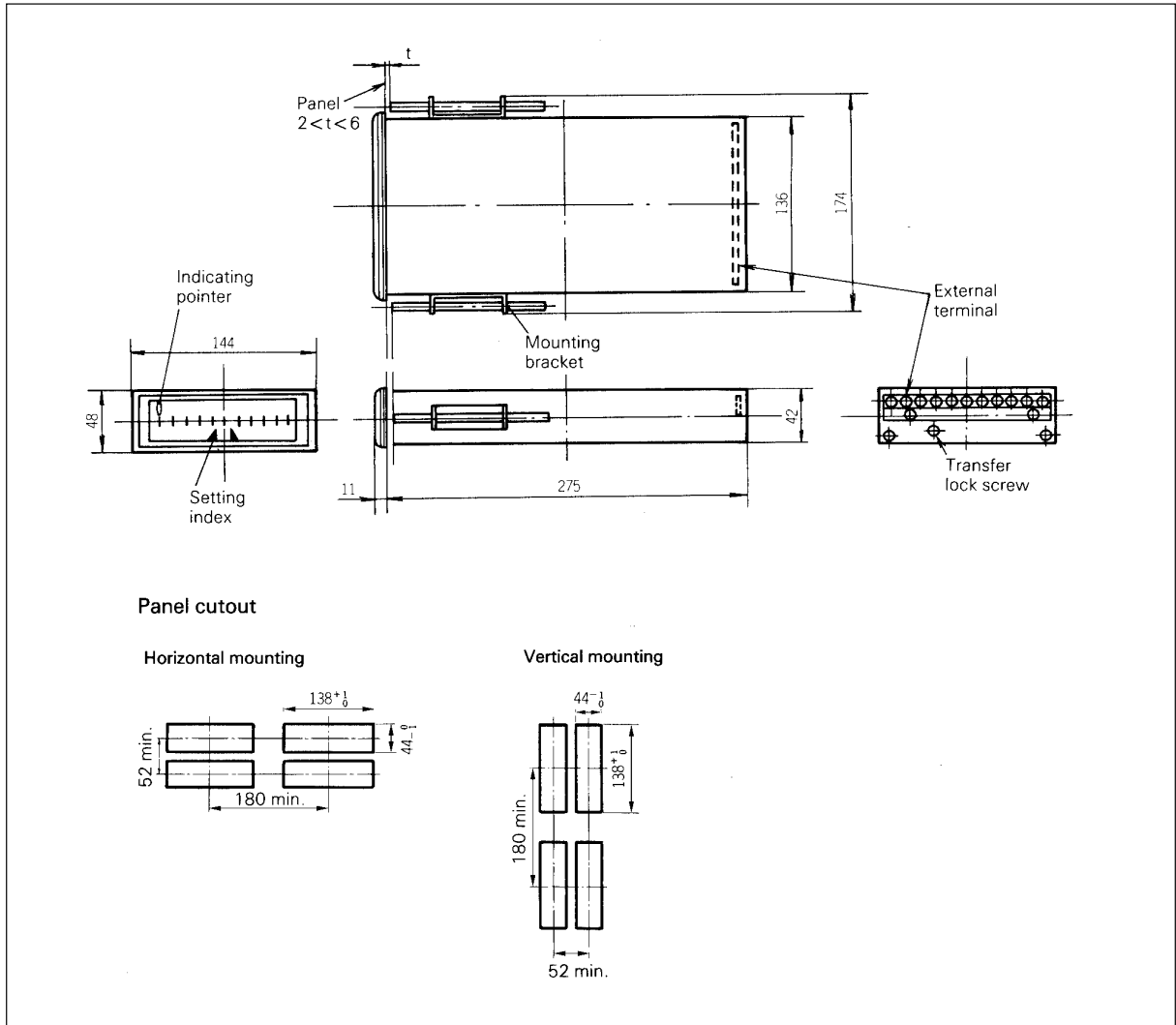


**CODE SYMBOLS**

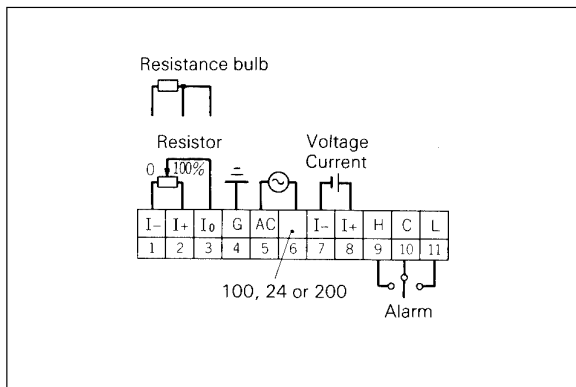
1	2	3	4	5	6	7	8	9	10	Description
P	A	K						2		
<b>Input signal</b>										
A										1 to 5V DC
B										4 to 20mA DC
D										0 to 100 $\mu$ A.....200mA DC
E										0 to 10mV.....5V DC
F										0 to 10mV DC or more (with reference junction compensator)
G										10mV DC span or more (with 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										Ring tube, slide resistant, 3-wire type
K										Ring tube, slide resistant, 2-wire type (with circuit adjusting resistor)
L										Opening angle indicator (resistance 100 $\Omega$ , zero point and span adjustable)
* Z										Other inputs
<b>Alarm device</b>										
H										} Excitation alarm (ON alarm)
L										
K										
* A										} Non-excitation alarm (ON alarm)
* B										
* C										
<b>Power supply</b>										
* 1										24V AC 50/60Hz
3										100V AC 50/60Hz
* 5										200V AC 50/60Hz
<b>Application</b>										
0										For general use
3										For connection zener barrier: Specify "3" only when zener barrier (PWZB3 or PMZB4) is to be connected and thermocouple or resistance bulb is used as input source.
<b>Mounting method</b>										
1										Horizontal mounting
* 2										Vertical mounting
<b>Alarm indicator lamp</b>										
0										None
* 1										Provided

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

# OUTLINE DIAGRAM (Unit : mm)



# CONNECTION DIAGRAMS



## ORDERING INFORMATION

1. Product name
2. Code symbols
3. Input
4. Scale
5. Alarm device and alarm indicator lamp  
(whether required or not)
6. Power supply
7. Application
8. Other necessary information

⚠ Caution on Safety

• Asterisk (\*) items; Non-standard

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

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