

FC SERIES MOVING COIL TYPE INDICATOR

DATA SHEET

PBA

This is an indicator compatible with various types of inputs such as FC series signal, DC voltage and current signals as well as thermocouple and resistance bulb signals.

FEATURES

1. Various types of signals can be input directly to the indicator.
2. High input impedance
The instrument has an input impedance of 1 M Ω for input of 1 to 5V DC. No circuit adjusting resistor is required for thermocouple input.
3. The indicator is compact and light weight.

SPECIFICATIONS

Measuring input: FC series signal

	A; 1 to 5V DC
	B; 4 to 20mA DC
DC current	D; 0 to 100 μ 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 Ω 50°C span or more, three-wire type
Resistance bulb W;	Pt100 Ω 50°C span or more, three-wire type



Slide resistance (resistance span 100 Ω)

J: Three wire type

K: Two-wire type
(with circuit adjusting resistor)

Opening angle transmitter L:

Three-wire type, resistance span 100 Ω (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 Ω	2k Ω or less
	Others	40k Ω to 1M Ω	100 Ω or less
Current	4 to 20mA	5 Ω	—
	Others	1 to 100 Ω	—
Thermocouple		40 to 600k Ω	100 Ω or less (50 Ω or less when burnout circuit is provided)
Resistance		—	6 Ω or less per wire

Allowance: $\pm 1.0\%$
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: 24V (20 to 30V) DC or
 100V $\pm 10\%$ AC, 50/60Hz

Power indicator lamp:
 Rectangular green LED

Power consumption:
 Approx. 4W (24V DC)
 Approx. 4.5VA (100V AC)

Ambient temperature:
 0 to 45°C

Ambient humidity:
 90% RH max.

Enclosure: Steel case

External dimensions (H x W x D):
 144 x 48 x 437mm

Weight: Approx. 3kg

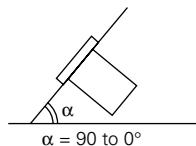
Finish color: Munsell 7Y 7.3/1.4

Optional devices (optional items):

- Alarm device
 - Upper limit (H or A), lower limit (L or B), upper and lower limits (K or C, with one common contact)
 - Setting accuracy: $\pm 1.0\%$
 - H, L, K: Excitation alarm
 - A, B, C: Non-excitation alarm
 - Contact: On alarm type, off alarm is available on request
- Contact capacity:
 - 100V, 0.3A AC } (resistive load)
 - 24V, 0.2A DC }
- Alarm indicator lamp
 - Alarm signal displayed with red LED

Scope of delivery:
 Indicator and mounting bracket

Mounting method:
 Panel flush mounting
 Standard: Vertical mounting on vertical panel
 Non-standard: Titled mounting (angle α to be specified)

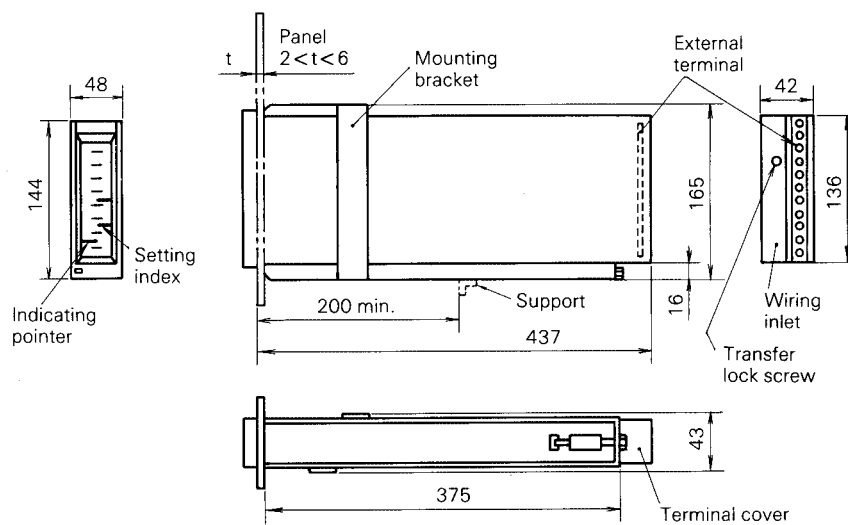


CODE SYMBOLS

1	2	3	4	5	6	7	8	9	10	Description
P	B	A						1	2	
A										Input signal
B										1 to 5V DC
D										4 to 20mA DC
E										0 to 100μA ...200mA DC
F										0 to 10mV ...5V DC
G										0 to 10mV DC or more (with reference junction compensator)
H										10mV DC span or more (with reference junction compensator)
W										Resistance bulb JPt 100Ω, 50°C span or more, three-wire type
J										Resistance bulb Pt 100Ω, 50°C span or more, three-wire type
K										Slide resistant, three-wire type
L										Slide resistant, two-wire type (with circuit adjusting resistor)
* Z										For opening angle indicator (resistance 100Ω, zero point and span adjustable)
										Other inputs
H										Alarm device
L										Upper limit
K										Lower limit
										Upper and lower limits
* A										Upper limit
* B										Lower limit
* C										Upper and lower limits
Y										Without alarm
										Power supply
1										24V DC
* 3										100V AC 50/60Hz
										Application
0										For general use
3										For connecting Zener barrier: "3" to be specified for connecting the indicator with thermocouple, resistance bulb input to Zener barrier (PWZB3 or PMZB4).
										Mounting-method
2										Vertical mounting
										Alarm indicator lamp
0										None
* 1										provided

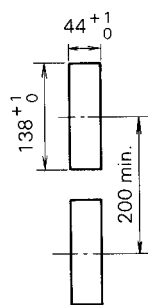
Notes: Symbols of resistance bulbs are as follows.
 Jpt 100 ... Previous JIS standard
 pt 100 ... New JIS standard

OUTLINE DIAGRAM (Unit : mm)

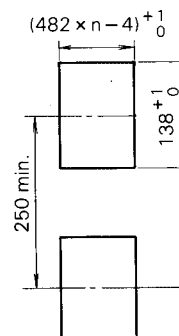


Panel cutout

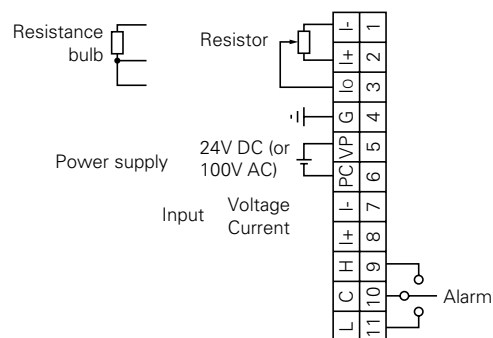
For mounting a single instrument



For mounting "n" instruments



CONNECTION DIAGRAM



ORDERING INFORMATION

1. Product name
2. Code symbol
3. Input
4. Scale
5. Whether or not alarm device and alarm indicator lamp are required
6. Power supply
7. Application
8. Other necessary information

⚠ Caution on Safety

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

Asterisked (*) items; Non-standard.

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Information in this catalog is subject to change without notice.

Printed in Japan