

PANEL TYPE ELECTRODELESS CONDUCTIVITY ANALYZER

Model: MBM-100A

This is an electric conductivity analyzer of panel mount type with electromagnetic induction measurement method.

The analyzer has a wide measurement ranges, from 0 - 500 mS/cm to 0 - 2S/cm, with transmission output of DC 4 - 20 mA and 2 contact signals.

Sensors to combine with are ME-100 series or ME-6/7 series. For details, see separate Spec. Sheet for sensors.

**FEATURES**

- **Compact DIN96 size**  
96 x 96 (DIN size) x 90 mm
- **Temperature compensation with microprocessor**  
Wide-range and highly accurate temperature compensation. Selectable from (i) NaCl temperature characteristic (2 kinds), (ii) %/°C, and (iii) manual input (5 points).
- **Universal power source**  
90 - 264V AC, 50.60 Hz
- **Sample temperature displayed**
- **Conductivity adjustment**  
Enable adjustment with a reference meter.
- **Two contact points**

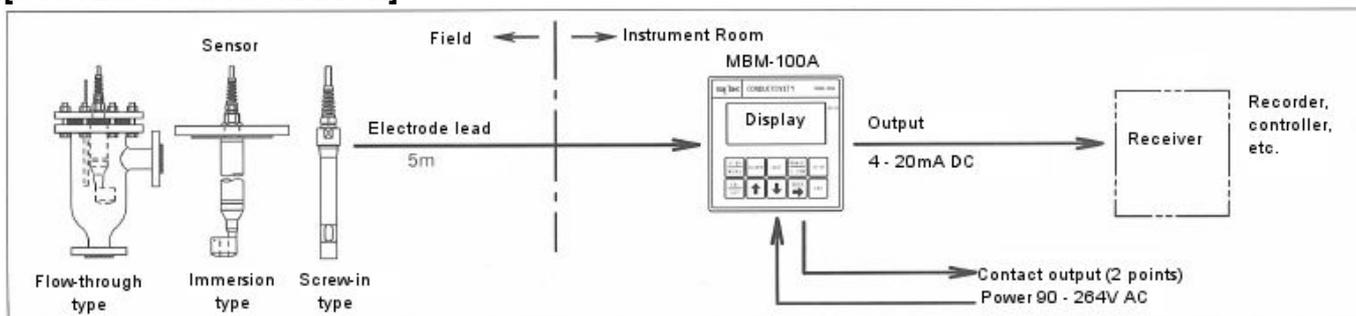
**STANDARD SPECIFICATIONS**

<b>Product Name:</b>	Panel type electrodeless conductivity analyzer
<b>Model Name:</b>	MBM-100A
<b>Measurement Range:</b>	Display: 7 ranges, selectable
	0.000 - 2.100 mS/cm
	0.00 - 7.00
	0.0 - 21.00
	0.0 - 70.0
	0.0 - 210.0
	0 - 700
	0 - 2100
	Transmission output: Freely settable with the range width of 23.8% of the measurement range or wider.

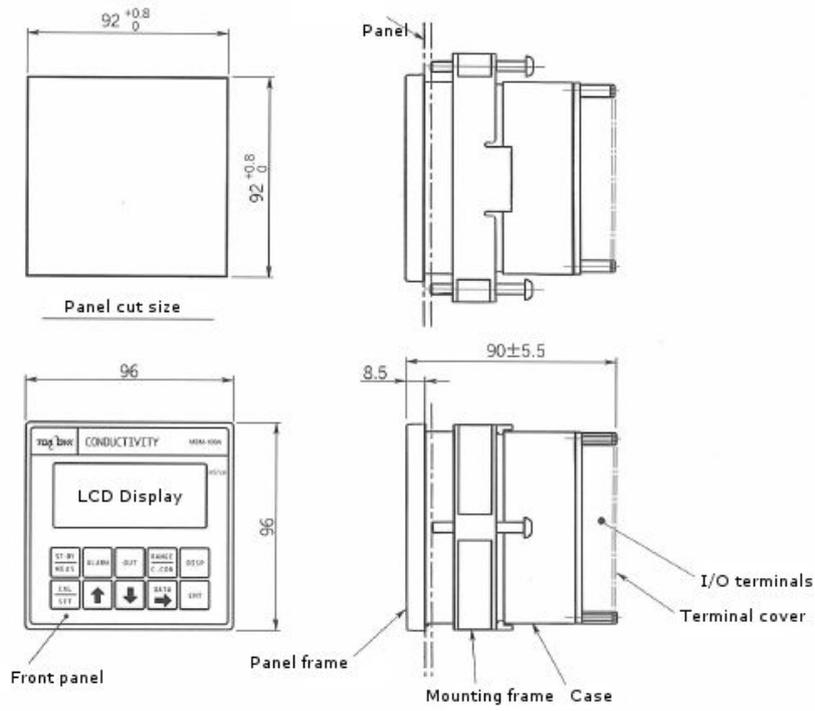


- Temperature display:  
-5 - 120°C, 0.1°C resolution
- Display:  
Digital LCD
- Temp. Compensation:  
-5 - 105°C subject to sensor material
- Performances:  
With equivalent resistance  
Linearity:  
Within +/-0.5%FS  
(Within +/-0.8%FS for Range 1)
- Repeatability:  
Within +/-0.2%FS
- Temp. compensation:  
Within +/-1.5%FS
- Transmission Output:  
Insulation type, 4 - 20 mA DC, load resistance 650Ω or less  
Circuit: 2-circuits C contact  
Setting: measured value 0 - FS  
Contact capacity: 250V AC, 3A
- Control Functions:  
Consumption: approx. 3VA
- Power Source:  
90 - 264V AC, 50/60Hz
- Ambient Conditions:  
-10 - 50°C, 90% RH or less
- Case Material:  
Aluminum
- Dimensions:  
96 (W) x 96 (H) x 90 (D) mm  
Panel cut: 92 x 92 mm (DIN)
- Weight:  
0.5kg

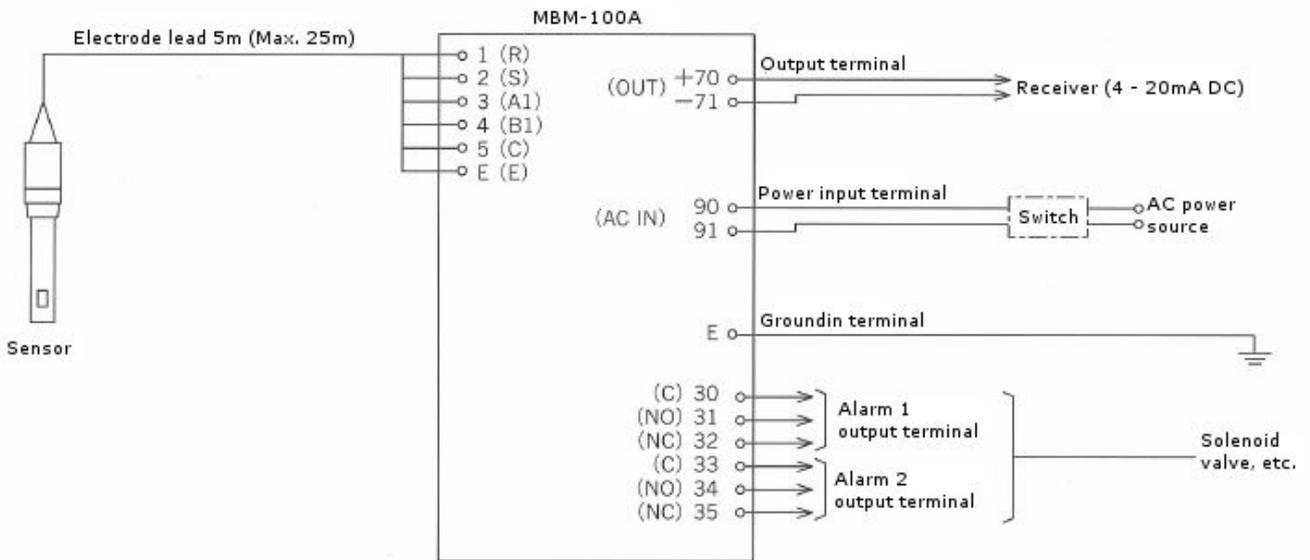
**[SYSTEM CONFIGURATION]**



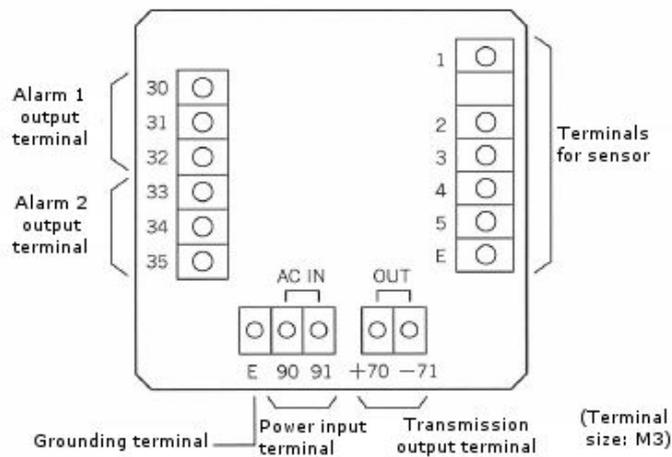
**[DIMENSIONS]** Unit: mm



**[WIRING DIAGRAM]**



**[TERMINAL CONNECTIONS]**



## [HOW TO ENQUIRE/ORDER]

Specify the following before requesting for enquiry or placing an order:

- Unit system: mS/cm system (MBM-100AA), or S/m system (MBM-100AB)
- Transmission output: 4 – 20mA, or 4 – 20mA plus RS-232C interface
- Cell constant of sensor: 9.0/cm (900/m) (ME-100 series), or 2.6/cm (260/m) (ME-6/7 series)
- Transmission output range: Select one from Transmission Output Range Table below, or Specify other (\*1)
- Temp. compensation coefficient: NaCl, or Percent/°C (specify the coefficient), or Manual input up to 6 coefficients (specify the coefficients)
- Temperature at compensation: At 25°C, or Specify the temperature within 5 – 95°C with a 5°C-pitch
- Sensor to be combined: To be ordered together with a transmitter, or Existing sensor (\*2))

- (\*1) Specify the ranges at 5/21 (23.8%) or larger of each of the 7 ranges in “Note 1: Measurement (Display) Ranges”  
 (:2) Specify the serial number of the sensor to be combined.

Transmission Output Range Table

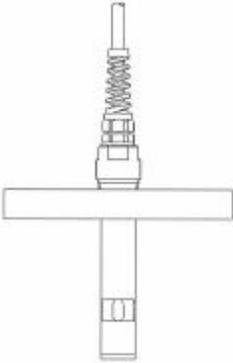
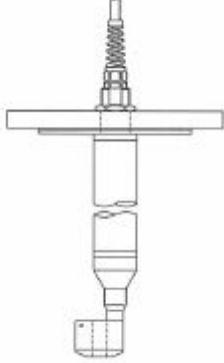
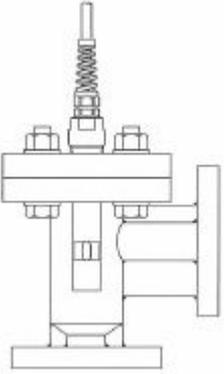
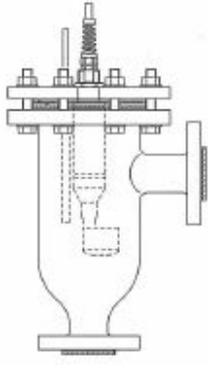
	MBM-100AA mS/cm Unit System	MBM-100AB S/m Unit System	Range
A	0.000 – 0.500	.0000 – .0500	1
B	0.000 – 1.000	.0000 – .1000	
C	0.000 – 2.000	.0000 – .2000	
D	0.00 – 3.00	0.000 – 0.300	2
E	0.00 – 4.00	0.000 – 0.400	
F	0.00 – 5.00	0.000 – 0.500	
G	0.00 – 10.00	0.000 – 1.000	3
H	0.00 – 20.00	0.000 – 2.000	
J	0.0 – 30.0	0.00 – 3.00	4
K	0.0 – 40.0	0.00 – 4.00	
L	0.0 – 50.0	0.00 – 5.00	
M	0.0 – 100.0	0.00 – 10.00	5
N	0.0 – 200.0	0.00 – 20.00	
P	0 – 300	0.0 – 30.0	6
Q	0 – 400	0.0 – 40.0	
R	0 – 500	0.0 – 50.0	
S	0 – 1000	0.0 – 100.0	7
T	0 - 2000	0.0 – 200.0	

Note 1: Measurement (Display) Ranges

Range	mS/cm Unit System at 25°C	S/m Unit System at 25°C
1	0.000 – 2.100	.0000 – .2100
2	0.00 – 7.00	0.000 – 0.700
3	0.00 – 21.00	0.000 – 2.100
4	0.0 – 70.0	0.00 – 7.00
5	0.0 – 210.0	0.00 – 21.00
6	0 – 700	0.0 – 70.0
7	0 - 2100	0.0 – 210.0

Note 2: Temperature compensation range: -5 – 105°C  
 (15 – 60°C for PVC sensor)

## [ELECTRODELESS CONDUCTIVITY SENSORS]

Compact type ME-100 series		Highly sensitive type ME-6/7 series	
Appearance	Specifications	Appearance	Specifications
In-line type (screw-in type)			
	<p>Model name: ME-112[*]</p> <p>Screw: R3/4</p> <p>Insertion length: 123mm</p> <p>Extension cable: EC-11 (connection with waterproof case)</p>		<p>Model name: ME-11T</p> <p>Screw: R2</p> <p>Insertion length: 84mm</p> <p>Lead length: 5m</p>
Closed tank type (flange type)			
	<p>Model name: ME-121[*]</p> <p>Flange: 50A JIS 10K FF</p> <p>Length below flange: 96 – 2000mm</p> <p>Lead length: 5m</p>		<p>Model name: ME-72T</p> <p>Flange: 100A JIS 10K RF</p> <p>Length below flange: 500 – 2000mm</p> <p>Lead length: 5m [Effective length] = [Lead length] - [Length below flange]</p>
Flow-through type with chamber (flange type)			
	<p>Model name: ME-141[*]</p> <p>Chamber flange: 15A JIS 10K FF</p> <p>Lead length: 5m</p>		<p>Model name: ME-62T</p> <p>Chamber flange: 25A JIS 10K RF</p> <p>Lead length: 5m</p>

[\*] shows materials.

C: C-PVC, F: PVDF, T: PFA



Always read the instruction manual before operation.

### International Operations:

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