

PANEL TYPE CONDUCTIVITY ANALYZER

Model: WBM-100

This panel mount type conductivity analyzer is compact and light weight.

This is suitable for use in a broad range of applications from ultra-pure water production to industrial effluent. And the temperature compensation covers -5°C to 120°C.

This conductivity analyzer has some functions like isolated output (DC4~20mA), alarm output terminal (2 circuit change over) and display of sample water temperature.

FEATURES

- **Compact DIN96 size**

Dimensions: 96x96x145mm, panel cut-out 96x96mm (DIN size) Light weight

- **The temperature compensation by microcomputer**

Highly accurate temperature compensation is possible for wider temperature ranges compared to analog method.

- **It is possible to make measurement from -5~120°C***

The detector can be used near hydrothermal germicidal treatment process for ultra-pure water.

- **Free power supply with voltage between 85~265V, AC50/60Hz.**

- **Temperature indication**

Sample temperature can be monitored as each location as well as conductivity

- **Cell constant adjustment function is provided.**

It can make accurate measurement by key operation when replacement of a detector.

- **Two control points can be set**

It is possible to set two control points within measurement range.

If alarm arises, it is displayed on front panel with voltage free contract output.

- **Output is isolated type and DC 4~20mA**

Input/output terminals are isolated. It is available to connect to any external device.

STANDARD SPECIFICATIONS

Products Name : Panel type conductivity analyzer

Model : WBM-100

Measurement range : By selecting a cell constant out of 4, one of the following types can be selected.

: a. 0~20 μ S/cm [Cell constant]
(3 ranges; 0~0.2/0~2/0~20 μ S/cm)
[0.01/cm]

: b. 0~200 μ S/cm
(0~2/0~20/0~200 μ S/cm) [0.1/cm]



: c. 0~2000 μ S/cm

(0~20/0~200/0~2000 μ S/cm) [1.0/cm]

: d. 0~20mS/cm

(0~0.2/0~2/0~20mS/cm) [10.0/cm]

Output range : Transmission output range can be set freely. However it is requires 25% or more width of a measurement range.

Temperature range : -5~120°C*, Resolution 0.1°C

Display : Digital LCD

Temp. compensation: -5~120°C*

Temp sensor: Thermistor (built in sensor)

Accuracy: Within $\pm 1\%$ FS (as equivalent resistance)

Output Transmission: 4~20mA DC isolated,
max load 650 Ω

Control Functions

Control outputs: 2 (H/L, H/HH,, L/LL)

Set range: 0~FS (Free setting is allowed)

Contact output : Voltage free contact

Contact rating : AC250V 3A

Alarm indication : Displayed on front panel

Other function : Over scale indication : Blinking LCD.

Linearity : Within $\pm 0.5\%$ FS (Exclusive sensor)

However, if the cable length is 50m and more, it is within $\pm 1.0\%$ FS

Repeatability : Within 0.1%FS ± 1 digit (exclusive sensor)

Power requirement : AC85~265V, 50/60Hz

Power consumption : Approx. 10VA

Ambient temp. & humidity: -5~50°C, 95%RH or less

Construction : Panel mounted type, indoor (IP30)

Case Material : Aluminum and plastic

Mounting : Panel mounting

Panel cut out : 92(W)x92(H) mm

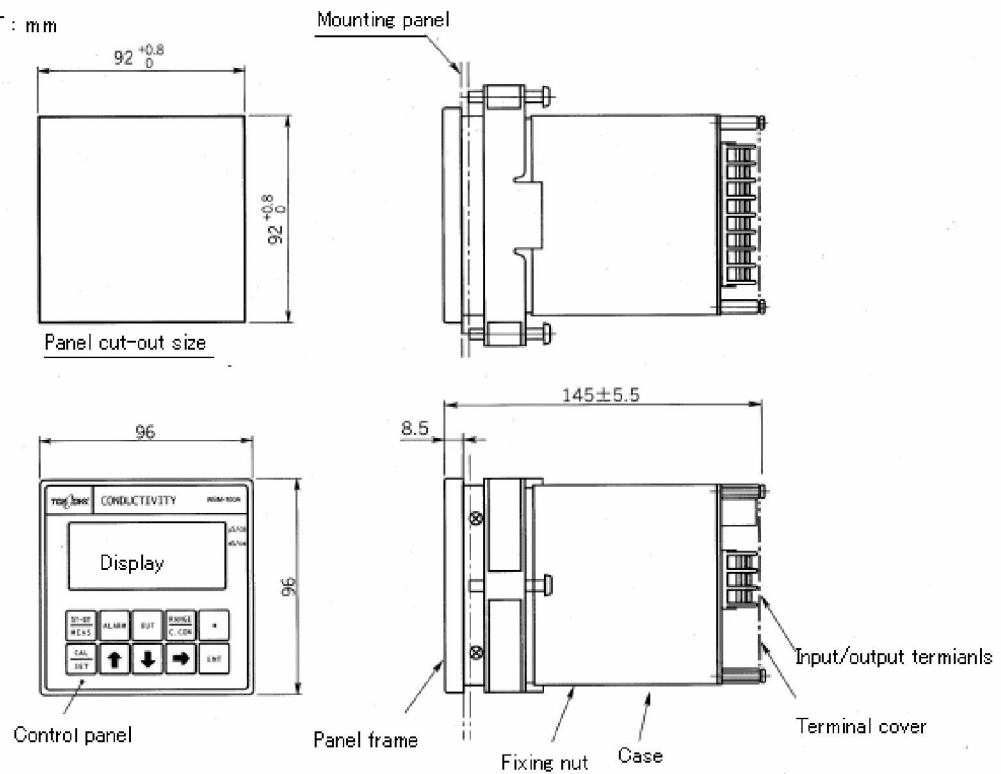
Dimensions : 96(W)x96(H)x145(D)mm

Weight : Approx. 1kg

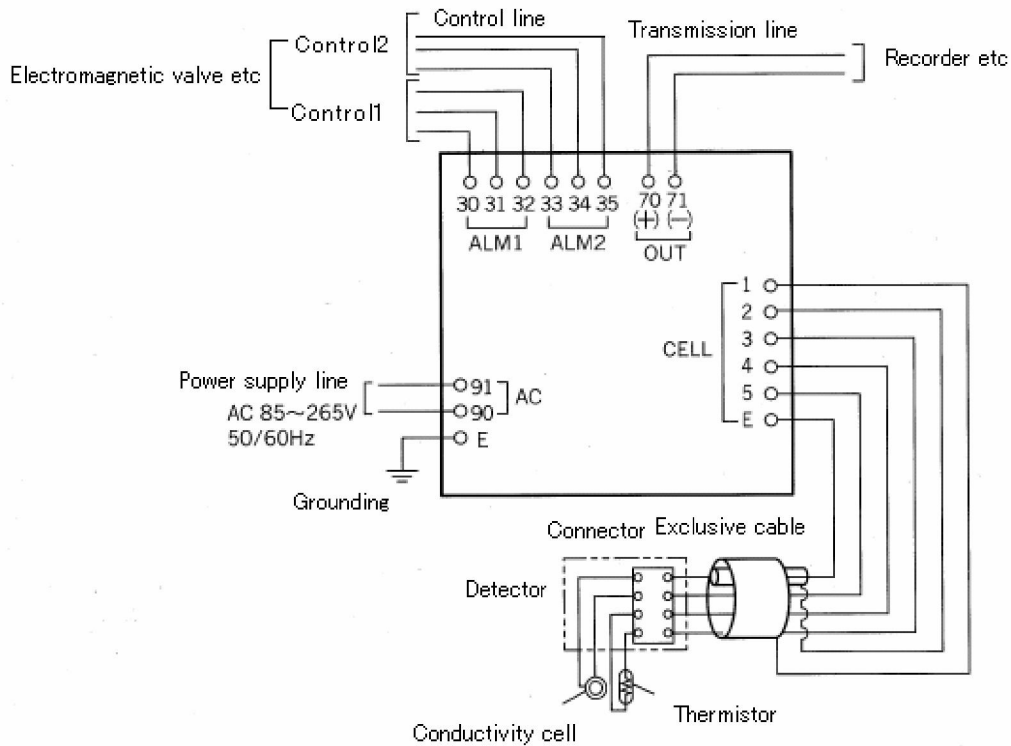
*Depend on the sensor to be connected

DIMENSIONS

UNIT : mm



WIRING SCHEMATIC



Combined Sensor

Product name : Conductivity sensor

Model : A type, AR type etc.

Cell constant : 0.01/0.1/1.0/10.0cm⁻¹

Temp sensor : Thermistor (sealed inside inner electrode)

Sample conditions:

Temperature : 0~100°C

Pressure : 1MPa or less (A type)
0.5MPa or less (AR type)

Materials Main body: SUS 316

Connector : Plastic

Connector box: Aluminum casting

Electrode :SUS 316

Electrode insulation: Glass(hermetic seal)
PTFE (Teflon)

Case : SUS316 or P.P(polypropylene)

Piping connections :R3/4 screw-in type

Piping temp range :0~100°C

Connection cable : OD 8mm (EC-10)standard is 50m or less (max 100m).

● **Extension cable**

The extension cable is a special cable for use with conductivity transmitter. It is used for connection between transmitter and detector.

Model : EC-10

External diameter : ϕ 8mm

Insulator : Polyethylene and vinyl

External coating : Vinyl

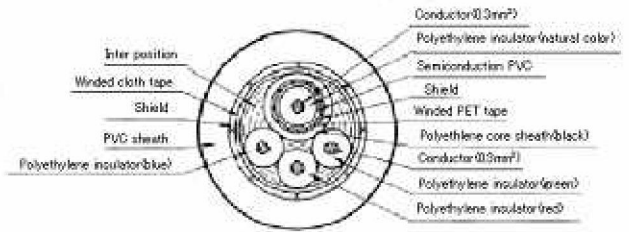
Insulating resistance between wire and lines

$10^5 M\Omega$ or more/100m

Extended distance : 100m at maximum, not allowed to connect lines in the middle.

Standard length : 5~100m in units of 5m.

Weight : Approx. 0.5kg/5m



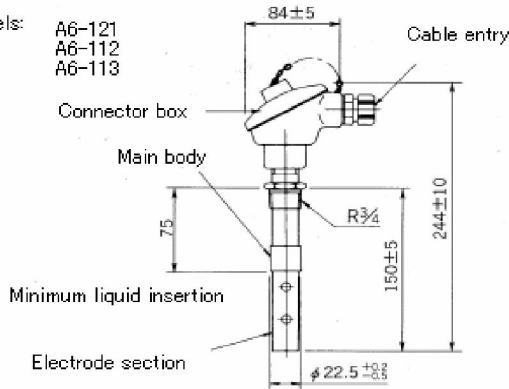
Model EC-10 Cross section diagram

SENSOR DIMENSIONS

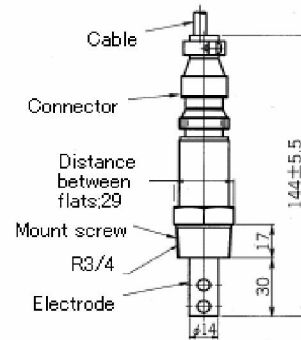
● **Screwded type**

Models:

- A6-121
- A6-112
- A6-113



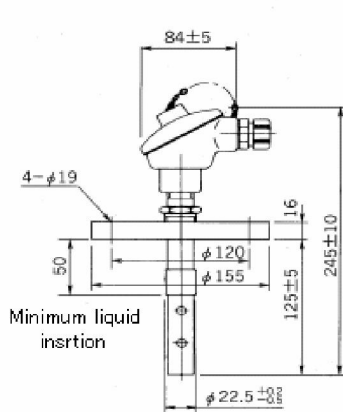
Models: AR4-212



● **Franged type**

Models:

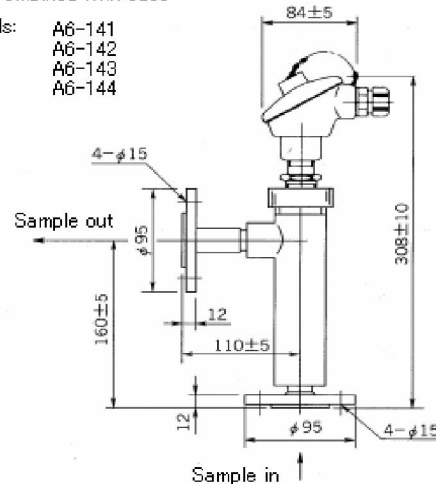
- A6-121
- A6-122
- A6-123



● **Combined with case**

Models:

- A6-141
- A6-142
- A6-143
- A6-144



DKK-TOA CORPORATION



CAUTION

Do not operate products before consulting instruction manual.

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