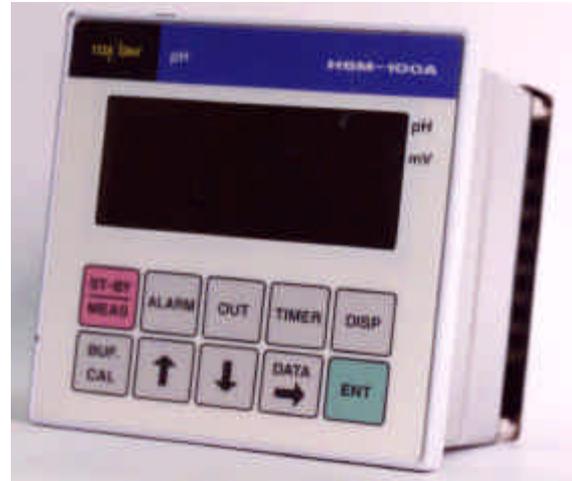


PANEL TYPE pH/ORP TRANSMITTER

Model: HBM-100A

Model: HBM-102A

- Panel cut-out 92 × 92 mm (DIN size) and light weight type.
- 5 types of pH standard solution data stored in internal memory. No need to reenter standard solution value nor temperature for calibration as a temperature sensor is installed in electrode. Stability determination function enables accurate calibration without human error. (HBM-100A)
- Transmitter judges electrode quality from potential characteristics under calibration with standard solution.
- Electrode deterioration detection function.
- Transmission output range can be freely set.
- LCD ST-BY blinks and transmission output is held at most recent value during maintenance mode. Control output contact is set at OFF not to disturb control system. Auto return function to measurement mode available as one of the settings. When combined with chemical cleaner, transmission output from the cleaner is set according to previous data.
- Double circuit control contact point enables free setting against pH/ ORP measurement range. Control sensitivity setting can be set freely. Four circuit control contact point compatible for optional use.
- Free power supply with voltage between 90 ~ 264V AC.
- Power supply of cleaners without timer function such as BHC-7E / JHC-7E can be controlled as an option.



HBM-102A;
mV; -2000~+2000mV (Resolution; 1mV)
Temp; 0~100 (Resolution; 0.1)
*Only display and no transmission output for mV and temperature.

Display: 4-digits LCD
Transmission Output Range: HBM-100A; Wider than 2 pH width at 0.1pH unit
HBM-102A; Wider than 400mV width at 10mV unit
(Freely set according to measurement range.)

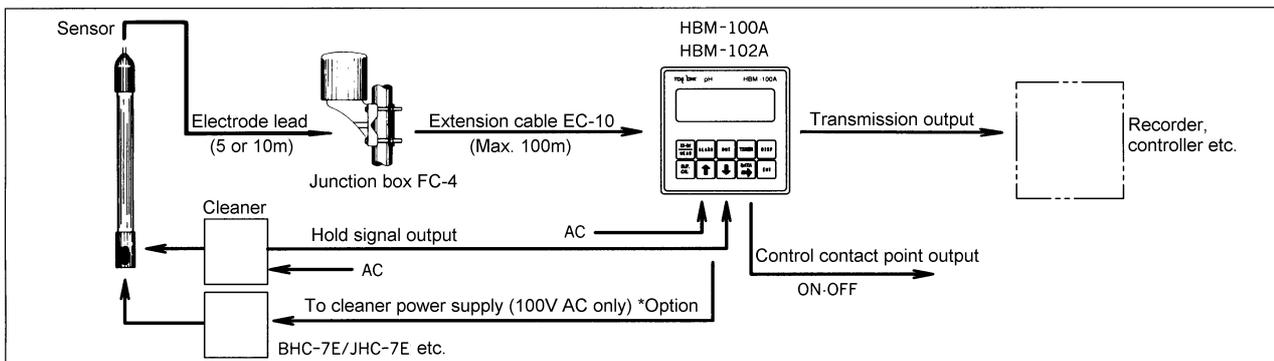
Performance: (Sensor excluded)

| Model | HBM-100A | HBM-102A |
|---------------|-----------------|--------------|
| Linearity | Within ± 0.03pH | Within ± 3mV |
| Repeatability | Within ± 0.02pH | Within ± 2mV |

STANDARD SPECIFICATIONS

Product Name: Panel type pH / ORP transmitter
Model: HBM-100A, HBM-102A
Measurement Range:
HBM-100A;
pH; -1.00~15.00pH (Resolution; 0.01pH)
mV; -600~+600mV (Resolution; 1mV)
Temp; 0~100 (Resolution; 0.1)

SYSTEM CONFIGURATION



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

Control Function: HBM-100A = pH
HBM-102A = ORP (mV)

Object; 2 points, "a" contact point, 4a contact points as option

Control points;

Contact point capacity; 250V AC, below 3A (resistive load)

Control sensitivity; Free setting (standard; 2a)
HBM-100A = 0.01~2.0pH
HBM-102A = 1~200mV

Processing; Microcomputer

Ambient Temp: -10~50 , below 95% RH

Power source: 90~264V AC, 50/60Hz

Power Consumption: Approx. 5VA

Construction: Indoor, panel mounted type

Dimensions: 96(W) x 96(H) x 90(D)mm

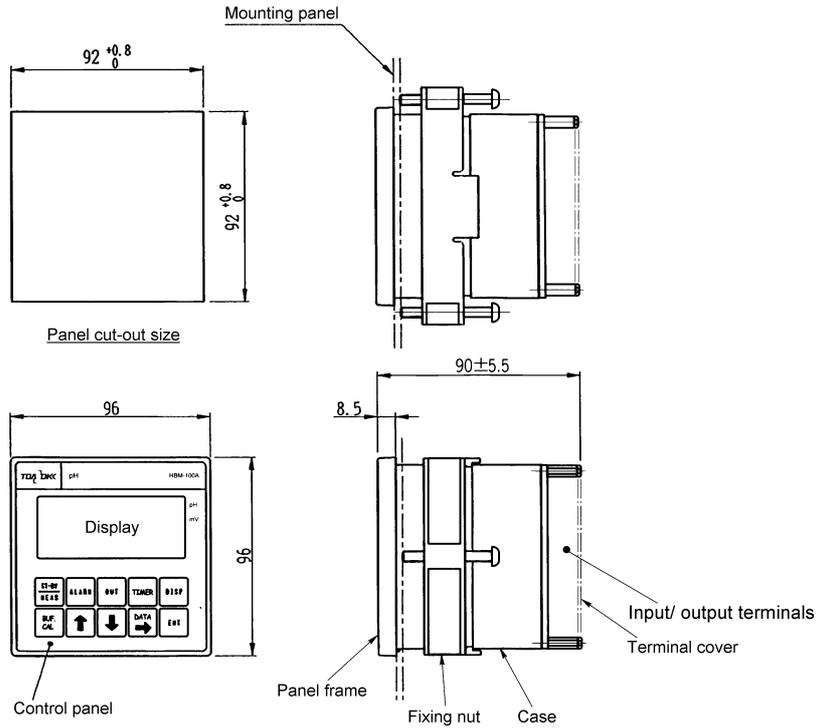
Panel cut-out: 92 x 92mm (DIN standard)

Weight: Approx. 0.5kg

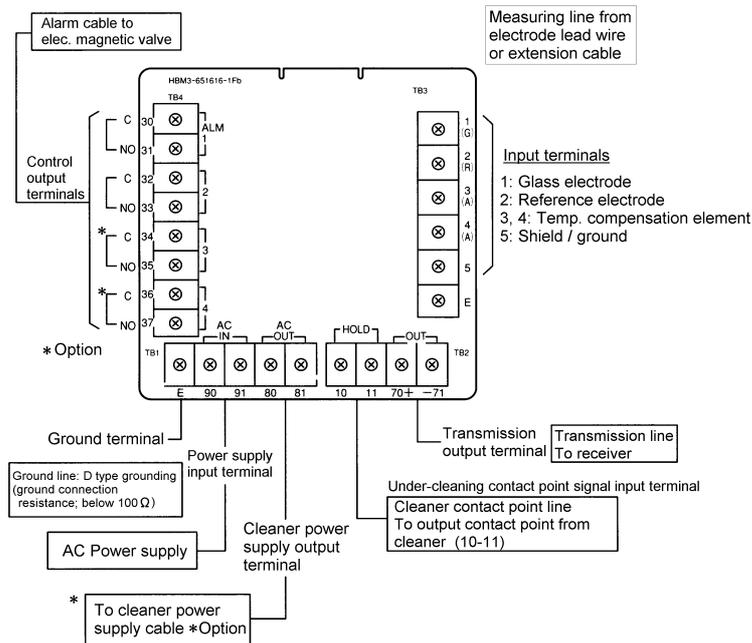
Combined Instruments: Sensor;

- Electrode holder; HC-7, HC-8 etc.
- pH Electrode; 5600, 5610 etc.
- ORP Electrode; 2600, 2610 etc.
- Connector box; FC-4
- Cable; EC-10

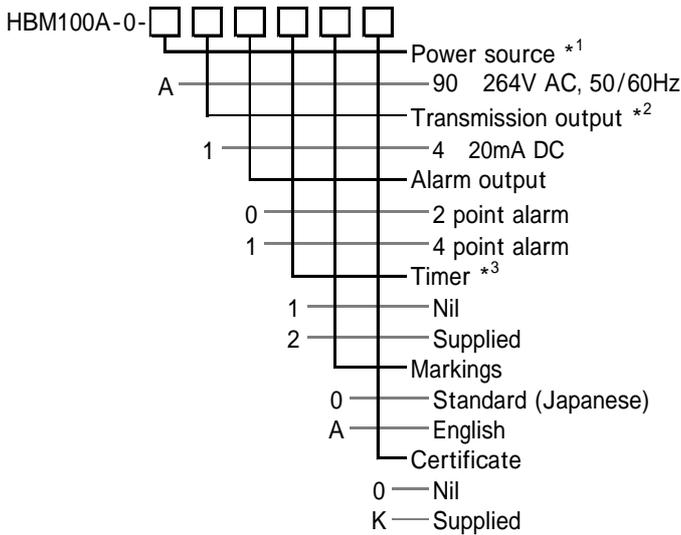
DIMENSIONS



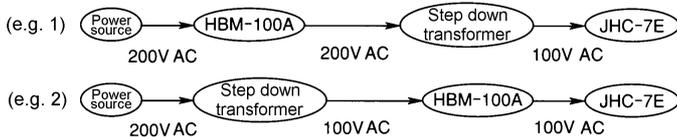
TERMINALS



PRODUCT CODE



*1. (*3) Power output from HBM-100A to external device such as cleaner is the incoming power supply voltage. Ensure external powered devices are compatible with incoming power supply or supply suitable transformer.

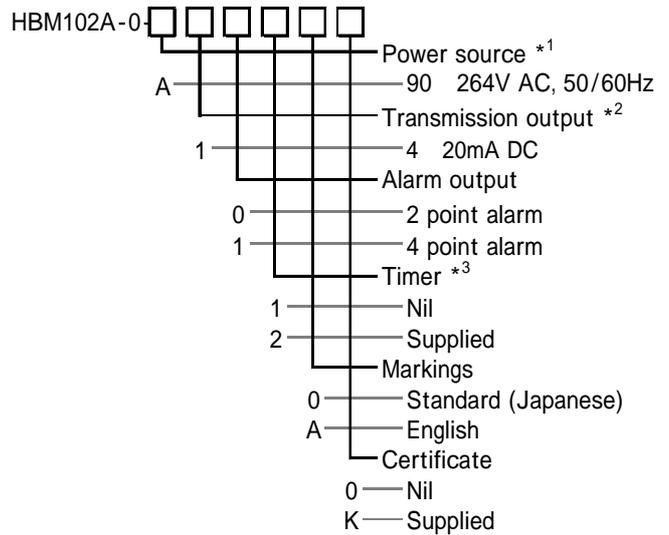


*2. RS232C option available

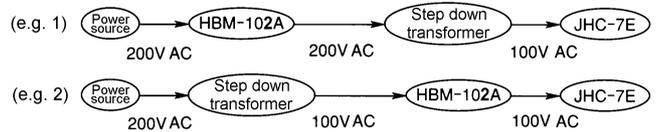
*3. In addition to UHC cleaner, E series (JHC-7E, BHC-7E, RHC-7E) can be combined.

Notes;

1. Equipped with functions such as glass membrane crack detection (with burn-out function), pH meas. Value shift, and manual temp. compensation switch. Hold function operates by direct signal (ON/OFF) from cleaner. (Standard)
2. Combined electrode msut have temp. compensation resistance of 10k /25 or 1k /0 . (Manual temp. compensation can be used for item without temp. compenstaion function.)
3. Transmission output is key operated setting type, 0.1pH unit with above 2pH width. (Shipped at 0 14pH setting)
4. Meas. range; -1.00 15.00pH



*1. (*3) Power output from HBM-102A to external device such as cleaner is the incoming power supply voltage. Ensure external powered devices are compatible with incoming power supply or supply suitable transformer.



*2. RS232C option available

*3. In addition to UHC cleaner, E series (JHC-7E, BHC-7E, RHC-7E) can be combined.

Notes;

1. Equipped with ORP meas. value shift function. Hold function operates by direct signal (ON/OFF) from cleaner. (Standard)
2. Combined electrode msut have temp. compensation resistance of 10k /25 white gold temp. element or 1k /0 white gold element. (Manual temp. compensation can be used for item without temp. compenstaion function.)
3. Transmission output is key operated setting type, 10mV unit with above 400mV width. (Shipped at -2000 2000mV setting)
4. Meas. range; -2000 2000mV.

DKK-TOA CORPORATION



CAUTION

Do not operate products before consulting instruction manual.

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Information and specifications are for a typical system and are subject to change without notice.