



# pH Analyzer for Water Treatment

## pH Transmitter/Controller

Model: **HBM-50**



### Features

- CE marked compact analyzer.
- 48x48 DIN size & extremely compact body.
- Free voltage of 100 ~ 230V AC available.
- Low power consumption of approx. 5VA.
- Memory backup function.
- Single action calibration with immersion of electrode into std. solution.
- Detection function for cracks on electrode.
- Transmission output adjustable for specified pH range (0 ~ 14pH).

### Specifications

Product Name	: pH Transmitter/Controller	Ambient Temp.	: -5 ~ 50
Model	: HBM-50	Ambient Humidity	: 90% RH
Meas. Object	: pH within solution	Power Source	: 100 ~ 230V AC, 50/60Hz
Linearity	: Within +/- 0.03pH	Power Consumption	: Approx. 5VA
Repeatability	: Within +/- 0.02pH at equivalent electric potential input	Size; (W) x (H) x (D)	: 48 x 48 x 105 (mm)
Output Signal; Transmission Output: 4 ~ 20mA DC Resistive Load	: Max. 600	Mounting Method	: Panel Mount Type, Panel Cut-out; 45 x 45mm, Panel; Max. 4.00mm thick
Alarm Output Signal	: 2 Circuits, 250V AC, 1A	Weight	: 0.2kg
Transmission	: Setting adjustable between	Combined Electrode	: ELP-001/ EL5600-1- G (for general use, immersion type)/ EL5610-1- G / EL5500-1- G
Output Range	: 0 ~ 14pH, increases at 1pH unit for ranges above 2pH band	Cable	: EC10-4- (Option)
Calibration with Standard Solution	: 2 Point calibration with pH Std. solution. Select 2 types from; pH1.68/4.01/6.86/9.18/10.01	Junction Box	: FC4-4- (Option)





# pH Transmitter/Controller

Model: HBM-100A

## Features

- 5 types of pH std. solution data stored in internal memory. No need to re-enter std. solution value nor temp. for calibration as a temp. sensor is installed in electrode. Stability determination function enables accurate calibration without human error.
- Transmitter judges electrode quality from potential characteristics during calibration with std. solution.
- Detection function for cracks on electrode.
- Transmission output range can be freely set.
- LCD ST-BY blinks & 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 meas. mode available. When combined with chemical cleaner, transmission output from cleaner is set according to previous data.
- Double circuit control contact point enables free setting against pH meas. range. Control sensitivity setting can be freely set. 4 circuit control contact point available for optional use.
- Power supply of cleaners without timer function such as BHC-7E/JHC-7E.



## Specifications

Product Name	: pH Transmitter/Controller	Processing	: Microcomputer
Model	: HBM-100A	Ambient Temp.	: -10 ~ 50 , below 95% RH
Meas. Object	: pH within solution	Power Source	: 90 ~ 264V AC, 50/60Hz
Meas. Range (*No transmission output for mV nor temp.)		Power Consumption	: Approx. 5VA
pH	: -1.00 ~ 15.00pH (Resolution; 0.01pH)	Construction	: Indoor, panel mount type
mV	: -600 ~ +600mV (Resolution; 1mV)	Dimensions	: 96(W)×96(H)×90(D)mm
Temp.	: 0 ~ 100 (Resolution; 0.1 )	Panel Cut-out	: 92×92mm (DIN std.)
Linearity	: Within +/-0.03pH	Weight	: Approx. 0.5kg
Repeatability	: Within +/-0.02pH	Combined Instruments:	
Transmission	: Isolated, 4 ~ 20mA DC,	Sensor;	
Output Range	resistive load; Max. 600	pH Electrode	: ELP-001L/5600/5610 etc.
Control Points	: 2 points, "a" contact point, 4a contact points as option	ORP Electrode	: 2600/2610 etc.
Contact Point Capacity:	250V AC, below 3A (resistive load)	Junction Box	: EC10-4- (Option)
Control Sensitivity	: Free setting (std.; 2a), 0.01 ~ 2.0pH	Cable	: FC4-4- (Option)





## pH Electrode

Model: **ELP-001**

### Features

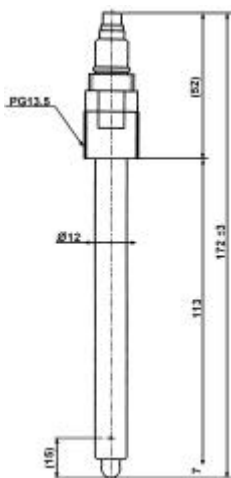
- Ease of maintenance attained with use of hard-to-break glass membrane.
- Compatible with other manufacture's transmitter with temperature compensation function which uses Pt 1000 temperature sensor.
- Water proof connector.



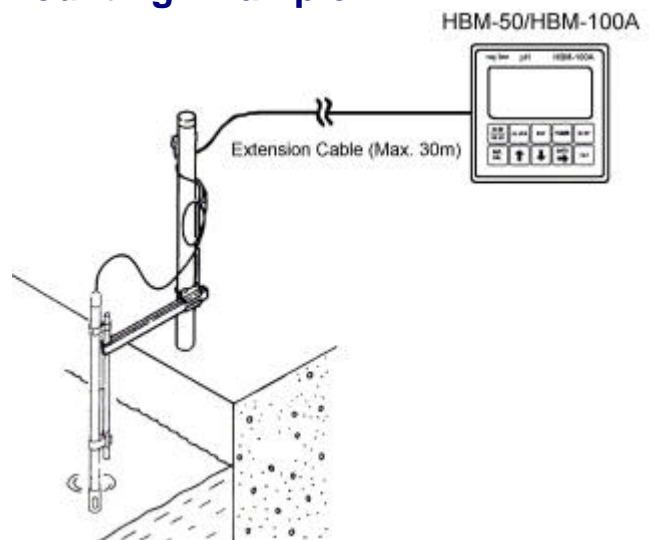
### Specifications

Product Name	: pH Electrode
Model	: ELP-001
Meas. Range	: 0 ~ 12pH
Operation Temp. Range	: 0 ~ 50
Operation Pressur Range	: 0 ~ 0.03MPa
Inner Solution for Reference Electrode	: Gelled KCl solution
Temperature Sensor	: PT1000
Inner Electrode	: Ag/AgCl

### Dimensions (Unit: mm)



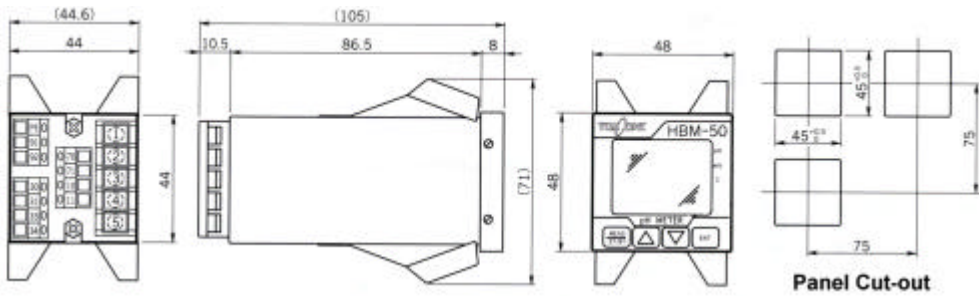
### Mounting Example



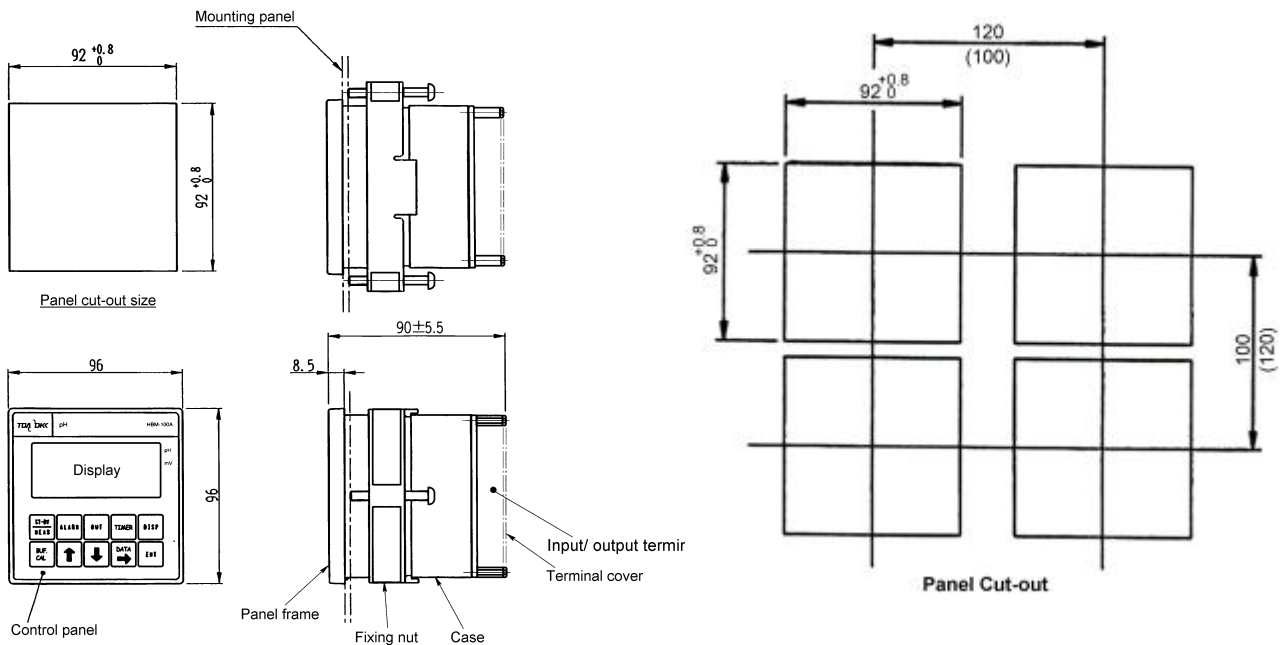


**Dimensions (Unit: mm)**

**Model: HBM-50**



**Model: HBM-100A**



**DKK-TOA CORPORATION**



Do not operate products before consulting instruction manual.

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