

# Underwater Electrode PH-1, -2

CSM\_PH-1\_PH-2\_DS\_E\_4\_1

## Easy Mounting and Removal. Ideal for Applications in Deep Wells.

- Applicable in locations where space is limited between the water tank and ceiling.
- The PH-1 is used for applications where wastewater and scum accumulates, such as for a deep well pump. The PH-2 is used for applications where the distance to the water surface is long.



## Ordering Information

### ■ Underwater Electrodes

#### PH-1 (single pole)

Length
1M
5M
10M
15M
20M
30M
40M
50M
60M
70M
80M
90M
100M

#### PH-2 (double pole)

Length
1M
5M
10M
15M
20M
30M
40M
50M
60M
70M
80M
90M
100M

- Note:** 1. Specify the cable length for PH-1 and PH-2 from the list above.  
2. The cables can be cut.

## Specifications

### Underwater Electrodes

Item	Model	PH-1	PH-2
Cable length		100 m max. (See note 1.)	
Operating temperature		Vinyl cable: -10 to 60°C	Vinyl cable: -10 to 60°C
		Hypalon cable: -30 to 70°C	Hypalon cable: -30 to 70°C

- Note:** 1. PH-1 and PH-2 Cables are available in lengths of 1, 5, 10, 15, 20, 30, 40, 50, 60, 70, 80, 90 or 100 m.  
2. The PH-1 and PH-2 are vinyl cables unless specified otherwise.  
3. "ビニソフト" is printed in Japanese on the actual vinyl cable.  
4. Hypalon is a registered trademark of Mitsui Chemicals, Inc.

### Weight

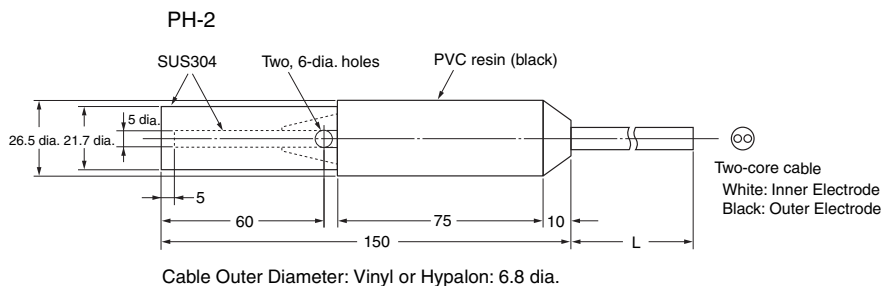
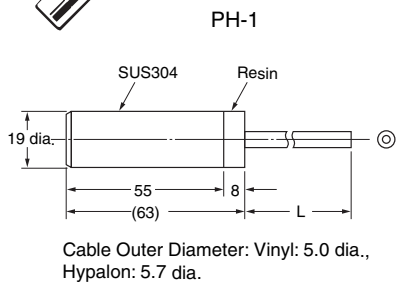
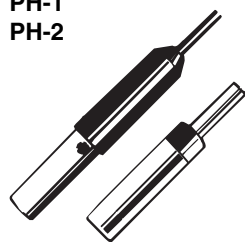
		Electrode + 1 m cable	Cable (per meter)
PH-1	Vinyl cable	Approx. 140 g	Approx. 40 g
	Hypalon cable	Approx. 140 g	Approx. 40 g
PH-2	Vinyl cable	Approx. 230 g	Approx. 60 g
	Hypalon cable	Approx. 230 g	Approx. 60 g

# Dimensions

Note: All units are in millimeters unless otherwise indicated.

## Underwater Electrodes

PH-1  
PH-2



## ■ Safety Precautions

Refer to *Safety Precautions for All Level Controllers*.

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.  
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.

In the interest of product improvement, specifications are subject to change without notice.

## Terms and Conditions Agreement

### Read and understand this catalog.

Please read and understand this catalog before purchasing the products. Please consult your OMRON representative if you have any questions or comments.

### Warranties.

(a) Exclusive Warranty. Omron's exclusive warranty is that the Products will be free from defects in materials and workmanship for a period of twelve months from the date of sale by Omron (or such other period expressed in writing by Omron). Omron disclaims all other warranties, express or implied.

(b) Limitations. OMRON MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE PRODUCTS. BUYER ACKNOWLEDGES THAT IT ALONE HAS DETERMINED THAT THE PRODUCTS WILL SUITABLY MEET THE REQUIREMENTS OF THEIR INTENDED USE.

Omron further disclaims all warranties and responsibility of any type for claims or expenses based on infringement by the Products or otherwise of any intellectual property right. (c) Buyer Remedy. Omron's sole obligation hereunder shall be, at Omron's election, to (i) replace (in the form originally shipped with Buyer responsible for labor charges for removal or replacement thereof) the non-complying Product, (ii) repair the non-complying Product, or (iii) repay or credit Buyer an amount equal to the purchase price of the non-complying Product; provided that in no event shall Omron be responsible for warranty, repair, indemnity or any other claims or expenses regarding the Products unless Omron's analysis confirms that the Products were properly handled, stored, installed and maintained and not subject to contamination, abuse, misuse or inappropriate modification. Return of any Products by Buyer must be approved in writing by Omron before shipment. Omron Companies shall not be liable for the suitability or unsuitability or the results from the use of Products in combination with any electrical or electronic components, circuits, system assemblies or any other materials or substances or environments. Any advice, recommendations or information given orally or in writing, are not to be construed as an amendment or addition to the above warranty.

See <http://www.omron.com/global/> or contact your Omron representative for published information.

### Limitation on Liability; Etc.

OMRON COMPANIES SHALL NOT BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, LOSS OF PROFITS OR PRODUCTION OR COMMERCIAL LOSS IN ANY WAY CONNECTED WITH THE PRODUCTS, WHETHER SUCH CLAIM IS BASED IN CONTRACT, WARRANTY, NEGLIGENCE OR STRICT LIABILITY.

Further, in no event shall liability of Omron Companies exceed the individual price of the Product on which liability is asserted.

### Suitability of Use.

Omron Companies shall not be responsible for conformity with any standards, codes or regulations which apply to the combination of the Product in the Buyer's application or use of the Product. At Buyer's request, Omron will provide applicable third party certification documents identifying ratings and limitations of use which apply to the Product. This information by itself is not sufficient for a complete determination of the suitability of the Product in combination with the end product, machine, system, or other application or use. Buyer shall be solely responsible for determining appropriateness of the particular Product with respect to Buyer's application, product or system. Buyer shall take application responsibility in all cases.

NEVER USE THE PRODUCT FOR AN APPLICATION INVOLVING SERIOUS RISK TO LIFE OR PROPERTY OR IN LARGE QUANTITIES WITHOUT ENSURING THAT THE SYSTEM AS A WHOLE HAS BEEN DESIGNED TO ADDRESS THE RISKS, AND THAT THE OMRON PRODUCT(S) IS PROPERLY RATED AND INSTALLED FOR THE INTENDED USE WITHIN THE OVERALL EQUIPMENT OR SYSTEM.

### Programmable Products.

Omron Companies shall not be responsible for the user's programming of a programmable Product, or any consequence thereof.

### Performance Data.

Data presented in Omron Company websites, catalogs and other materials is provided as a guide for the user in determining suitability and does not constitute a warranty. It may represent the result of Omron's test conditions, and the user must correlate it to actual application requirements. Actual performance is subject to the Omron's Warranty and Limitations of Liability.

### Change in Specifications.

Product specifications and accessories may be changed at any time based on improvements and other reasons. It is our practice to change part numbers when published ratings or features are changed, or when significant construction changes are made. However, some specifications of the Product may be changed without any notice. When in doubt, special part numbers may be assigned to fix or establish key specifications for your application. Please consult with your Omron's representative at any time to confirm actual specifications of purchased Product.

### Errors and Omissions.

Information presented by Omron Companies has been checked and is believed to be accurate; however, no responsibility is assumed for clerical, typographical or proofreading errors or omissions.

2015.4

In the interest of product improvement, specifications are subject to change without notice.

**OMRON Corporation**  
Industrial Automation Company

<http://www.ia.omron.com/>

(c)Copyright OMRON Corporation 2015 All Right Reserved.