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Electrode Holder

PS-□S(R)/-31

CSM_PS-_S(R)_-31_DS_E_7_3

Separate Electrode Holders for Water Supply and Drainage Control in Buildings. Small, Lightweight Electrode Holders for Use as Built-in Components.

- The PS-□S(R) are separate Electrode Holders that allow the Electrodes to be withdrawn easily for inspection.
- The PS-□S(R) come in 3, 4, or 5 pole models for supply and drainage of tap water in buildings.
- PS-31 is a small and light-weight Electrode Holder that is suitable for installation in limited space and built-in components.

⚠ **Refer to *Safety Precautions for Electrodes and Electrode Holders*.**



Ordering Information

■ Electrode Holders

Application	Model
General applications for purified water	
For 3-pole electrode	PS-3S
For 3-pole electrode (2-wire)	PS-3SR
For 4-pole electrode	PS-4S
For 4-pole electrode (2-wire)	PS-4SR
For 5-pole electrode	PS-5S
For 5-pole electrode (2-wire)	PS-5SR
For small spaces (3-pole)	PS-31 (SUS304, 300 mm) PS-31 (SUS304, 1,000 mm)

■ Accessories (Order Separately)

Application	Model
Protective Cover (for PS-□S and BF-3/-5)	F03-11
Mounting Frame (for PS-□S)	F03-12
Mounting Frame for Installing in Concrete (for PS-□S(R))	F03-13
Dust-proof Rubber Cap (for PS-31)	F03-31

Specifications

Item / Model	PS-3S(R) (See note 1.)	PS-4S(R) (See note 1.)	PS-5S(R) (See note 1.)	PS-31 (See note 2.)
No. of Electrodes	3	4	5	3 (See note 3.)
Material	Resin (PBT = Polybutylene terephthalate)			
Insulation resistance	100 MΩ min.			
Operating temperature	–10 to 70°C (with no icing)			
Operating pressure	Atmospheric pressure			
Applications	Water supply and drainage control in buildings			Limited Mounting Space
Electrodes	Purchase F03-01 separately.			Single-piece construction

Note: 1. The Two-wire Electrode Holders (R models) have a built-in resistor of 6.8 kΩ. They should be used with the Two-wire 61F Controllers.

2. Cut the electrodes to the desired length.

3. PS-31 comes in a 3-pole model only.

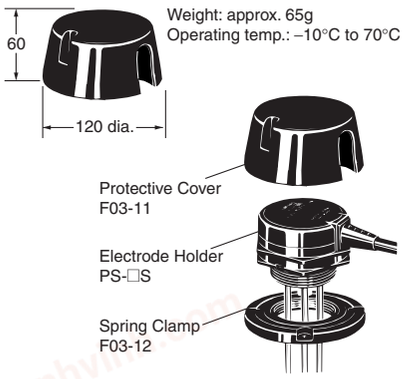
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■ PS-□S(R) Electrode Holder Accessories (Order Separately)

F03-11 Protective Cover

Use this Cover for PS-series Electrode Holders with Mounting Frames (upper one in the following illustration), This Cover can also be used when installing the BF-series Electrode Holders outdoors. This Cover is for protection from rain and wind. It is not waterproof.

Applicable Electrode Holders:
BF-3, BF-4, BF-5, PS-3S(R), PS-4S(R), PS-5S(R)

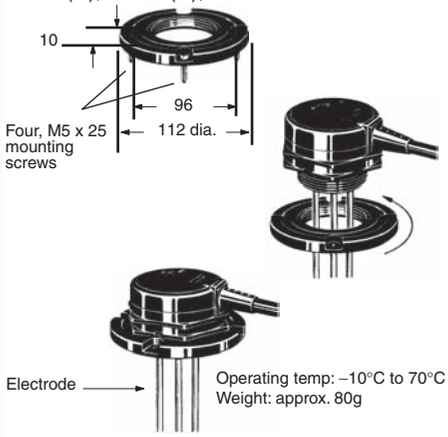


F03-12 Spring Clamp

Used to clamp an Electrode Holder with ease, as shown in the illustrations, when the Electrode Holder is applied to a tank without a coupling.

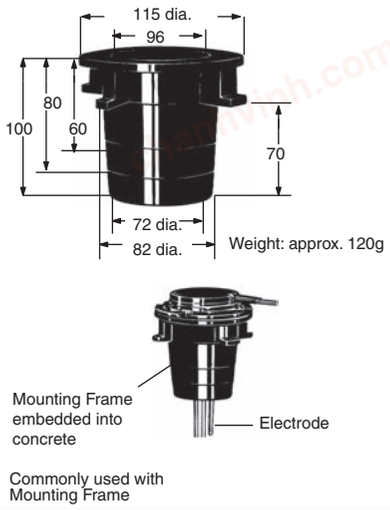
Squeeze the mounting frame into the Holder as shown below.

Applicable Electrode Holders:
PS-3S(R), PS-4S(R), PS-5S



F03-13 Mounting Frame for installing in concrete

Firmly secure the F03-12 Spring Clamp to the F03-13 Mounting Frame with M5 x 25 screws and embed it into the concrete production water tank. Cut the F03-13 to match the depth of the concrete.

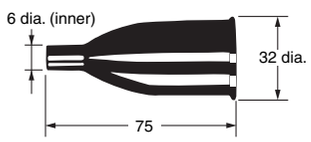


Note: If the F03-11 and F03-12 are used together, the screws and bolts that are provided with the F03-11 cannot be used.

■ PS-31 Electrode Holder Accessories (Order Separately)

F03-31 Dust-proof Rubber Bushing

Note: This Bushing is not waterproof.



Material: Silicon rubber

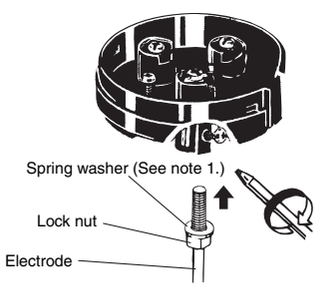
■ Accessories Required for Connecting the PS-□S(R) and Electrodes (Order Separately)

Electrodes Shorter than 1 m

The following items are required for each pole.

- 1 × F03-01 Electrode
- 1 × F03-03 Lock Nut

The Electrode can be cut anywhere based on the control level.

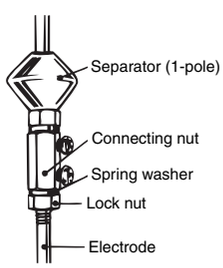


Electrode Longer than 1 m

The following items are required for every additional meter of electrode for each pole.

- 1 × F03-01 Electrode
- 1 × F03-02 Connecting Nut
- 2 × F03-03 Lock Nuts

Use F03-14 1P, 3P, and 5P Separators to prevent the electrodes from touching each another.

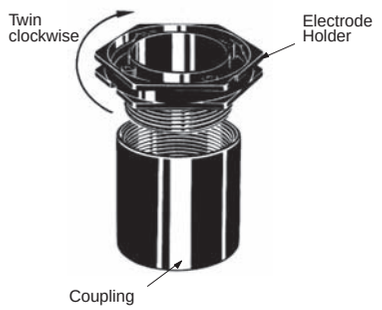
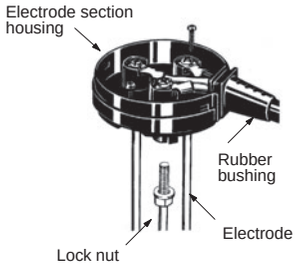
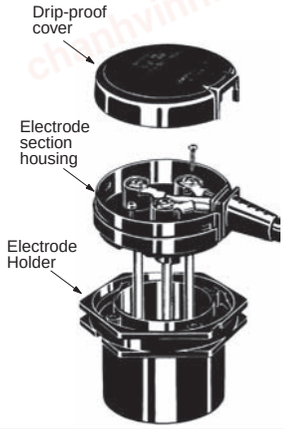


Note: 1. The spring washer comes with the lock nut.
2. Refer to *F03-□* for details on Electrodes, Connecting Nuts, Lock Nuts, and Separators.

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Mounting

■ PS-3S Electrode Holders

1. Mounting Electrode Holder	2. Attaching Electrode(s) to Electrode section	3. Inserting Electrode section into Electrode Holder
• Screw the Electrode Holder into the coupling secured at the installation location.	• Insert each Electrode into the connecting nut, secure the Electrode with the clamp screws, and then tighten the lock nut. • Connect the leads, inserted through the hole of the rubber bushing, into the respective terminals.	• Fit the Electrode section into the Electrode Holder and secure it with the two screws. • Check the Electrode section for proper wiring, fit the rubber bushing in position, and then cover the Electrode Holder with the drip-proof cover.
		

Note: 1. OMRON does not sell couplings.

2. Screw in the Electrode until it reaches the bottom of the nut. Insufficient insertion will cause a faulty connection.

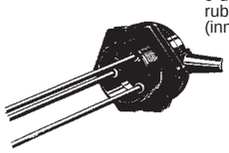
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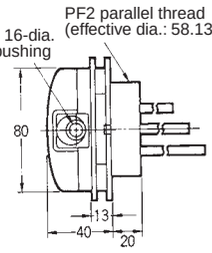
Dimensions

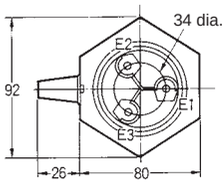
Note: All units are in millimeters unless otherwise indicated.

■ Electrode Holders

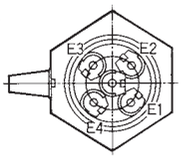
PS-3S/-4S/-5S
PS-3SR/-4SR/-5SR
(see note)



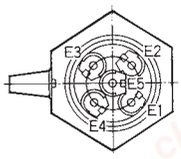




PS-3S (approx. 150 g)
PS-3SR (approx. 155 g)

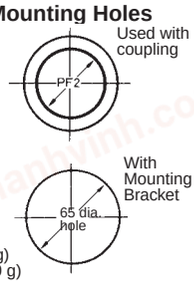


PS-4S (approx. 170 g)
PS-4SR (approx. 175 g)



PS-5S (approx. 185 g)
PS-5SR (approx. 190 g)

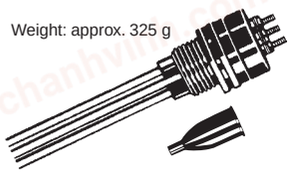
Mounting Holes



Mounting Screw Holes

Note: The PS-3SR, PS-4SR, and PS-5SR have built-in resistor of 6.8 kΩ and used for the two-wire 61F models.

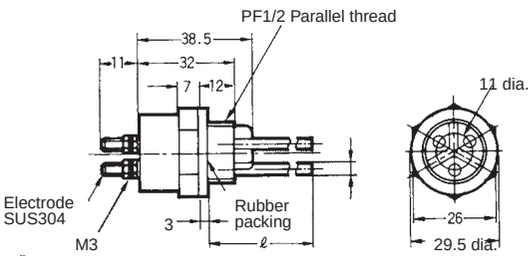
PS-31



Weight: approx. 325 g

F03-31 Dust-preventive rubber cap (optional)

Weight: approx. 20 g



Mounting Holes



Note: The holder is integrated with the electrode.
Weights: Approx. 118 g: L = 300 mm
Approx. 325 g: L = 1,000 mm

■ 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.

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