

HRS-PF003, HRS-PF004 Particle Filter Set

Thermo-chiller

Applicable model: HRS Series

Read before use

Thank you for purchasing SMC's Thermo-chiller.

This particle filter set is a set of parts for installing a particle filter into the piping used in the thermo-chiller HRS series.

Read and understand the instructions shown below before use.

Safety Instructions

Safety first, only trained personnel who has knowledge of general machinery and equipment can perform the installation of this product.

Ensure this manual and the Operation Manuals for thermo-chiller are fully understood.

Disconnect power from the chiller before performing product installation. Be sure to check that the power supply is shut off.

Remove all circulating fluid before performing product installation.

Confirm that there is no fluid leakage or condensation after installation.

1. Parts and Accessories

This particle filter set includes the following parts.

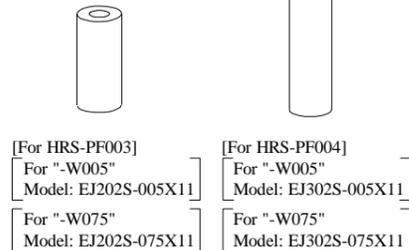
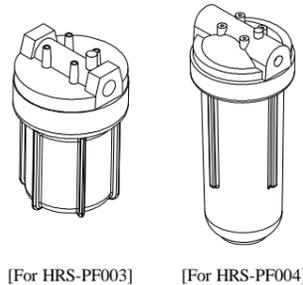
Please confirm that all of them are present before beginning installation.

Parts

1. Resin filter case

2. Element

*The element should be replaced when the pressure drop reaches 0.1 Mpa.



[For HRS-PF003]
For "-W005"
Model: EJ202S-005X11
For "-W075"
Model: EJ202S-075X11

[For HRS-PF004]
For "-W005"
Model: EJ302S-005X11
For "-W075"
Model: EJ302S-075X11

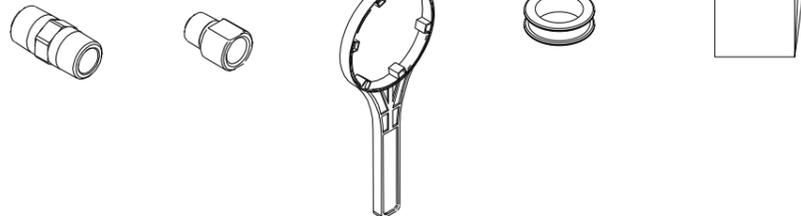
3. Nipple (PTxNPT)

4. Extension piece (NPTxPT)

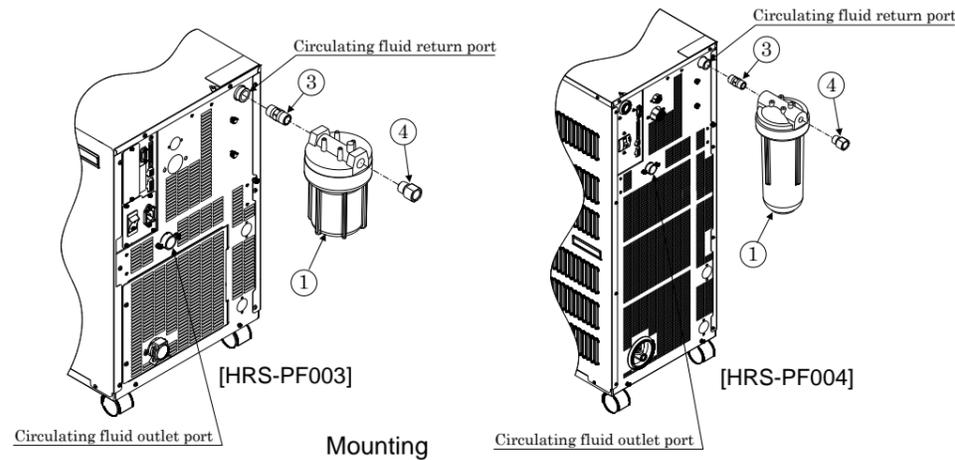
5. Handle (For "-H")

6. Sealant tape

7. Operation manual (This manual)



*Use this handle only to loosen the case. Do not use to tighten the case.



[Materials of wetted parts]
Stainless Steel, PTFE, PP, Acrylonitrile-styrene, NBR (PE: Element)

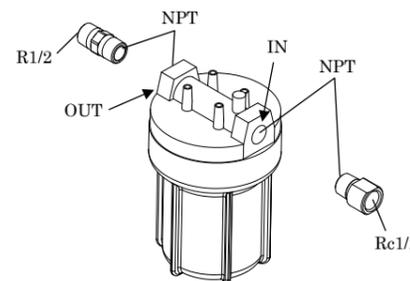
[Applicable models]

| <HRS-PF003> | <HRS-PF004> |
|----------------------------------|--------------------------------|
| HRS01*-A*-10-**, HRS01*-W*-10-** | HRS050-A*20-**, HRS050-W*20-** |
| HRS01*-A*-20-**, HRS01*-W*-20-** | HRS060-A*20-**, HRS050-W*20-** |
| HRS024-A*20-**, HRS024-W*20-** | |
| HRS030-A*20-**, HRS030-W*20-** | |
| HRS040-A*20-**, HRS040-W*20-** | |
| HRS050-A*20-**, HRS050-W*20-** | |
| HRS060-A*20-**, HRS050-W*20-** | |

2. Mounting

- 1) Confirm that no foreign matter such as dust or dirt is adhered to the connecting port or piping.
- 2) Apply the sealant tape (6) to the nipple (3). Mount the nipple (3) to the outlet of the resin filter case (1). Apply the sealant tape to the extension piece (4). Mount the extension piece (4) to the inlet of the resin filter case (1).

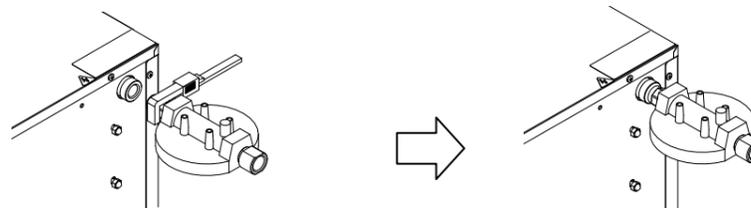
Apply the sealant tape leaving the first thread exposed. (Gray area)



Caution

- Apply the sealant tape on the NPT side of the nipple 4 turns. Screw in it to the filter 4 turns.
- It must not be screwed in too much, it results breakage of the filter and/or leakage.

- 3) Remove the cover of the filter case (1). Mount the nipple (3) (which is mounted in procedure 2) to the circulating fluid return at the back of the thermo-chiller



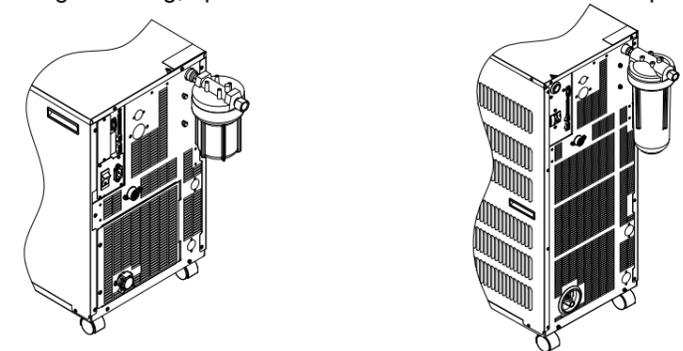
- 4) Insert the element (2) into the resin filter case (1). Mount the resin filter case by hand tighten.



Caution

- Mounting of the case should be performed by hand-tighten. When the case is tightened excessively by tools or handle, the case might crack or be damaged.
- Make sure that the case is held manually by hand when removing and mounting the case. If the case is dropped, it may result in cracking or breakage.

- 5) After mounting the fitting, operate the thermo-chiller to check that liquid does not leak.



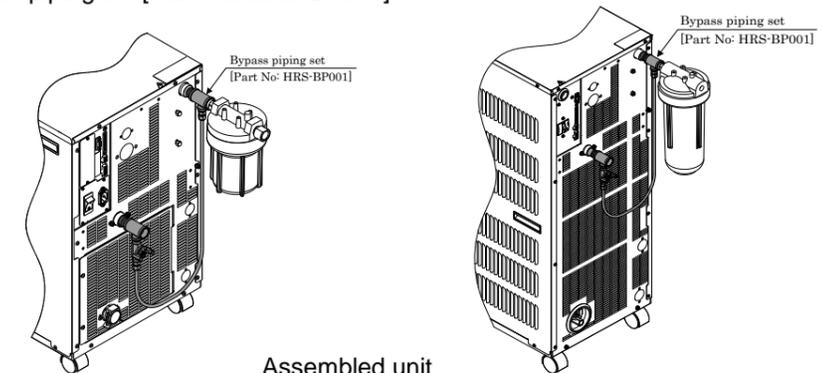
[HRS-PF003]

Assembled unit

[HRS-PF004]

3. Related products

Bypass piping set [Part No: HRS-BP001]



Assembled unit
(Combined with the bypass piping)

Caution

Use in combination with the DI Filter Set (HRS-DP001, HRS-DP002) is not possible.

| Revision |
|----------------|
| Rev.F:Oct.2019 |

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Note: Specifications are subject to change without prior notice and any obligation on the part of the manufacturer.
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