

GENERAL INFORMATION

| CARTRIDGE FILTER HOUSINGS – CFHA MODELS | | | | | | | |
|---|---|--|--|--|--|--|--|
| PURPOSE | The Cartridge Filter Housings with inside Halar coating (CFHA models*) offer reliable high-quality filtration for nanotech manufacturing and fulfill the specific needs of Ultrapure water applications such as Semiconductor and UPW polishing. All wetted surfaces of the Cartridge Filter Housings – CFHA models are fluoropolymer lined to ensure Ultrapure water never comes in contact with exposed metal. Ovivo Cartridge Filter Housings – CFHA models are available in different diameters and can support 5 to 28 filter cartridges. The feed water goes in the housing and evenly pass through the filter cartridges (outside-in filtration). Particles are captured on the filter cartridges surface and the filtrate is collected at the housing outlet. | | | | | | |
| INSTALLATION | The Cartridge Filter Housings – CFHA models are often skid mounted and shall be installed either indoor or outdoor on level ground. The installation and operation of the Cartridge Filter Housings – CFHA models must follow specific requirements. Ovivo's filter housings are compatible with almost every filter media (cartridges) available on the market. See operation manual or contact Ovivo for further information. | | | | | | |
| OPERATION | There is no specific maintenance on the Cartridge Filter Housings – CFHA models. The vessel shall be periodically submitted to structural examination. A modification of the pressure test of the vessel is not permitted. Filter cartridges must be cleaned according to supplier information and/or following Ovivo recommendations. | | | | | | |

^{*}CFHA models refer to CFEHA (Cartridge Filter Housing according to European Standard with inside Halar coating) and CFAHA (Cartridge Filter Housing according to ASME with inside Halar coating).



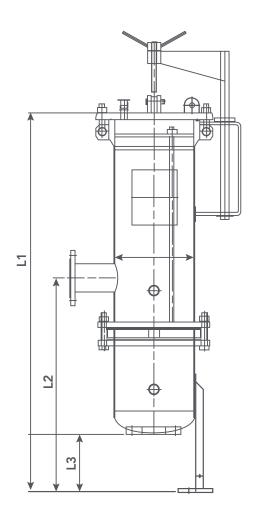
MATERIALS

| CFHA MODELS | | | | | | |
|-------------------------|---|--|--|--|--|--|
| HOUSING | Stainless Steel 316L (1.4404) Halar [®] ECTFE | | | | | |
| BAFFLE PLATE | Stainless Steel 316L (1.4404) Halar® ECTFE | | | | | |
| CARTRIDGE HOLDING PLATE | PVDF | | | | | |
| SUPPORT RODS, NUTS | PVDF | | | | | |
| CARTRIDGE HOLD DOWN PLA | PVDF | | | | | |

CHARACTERISTICS

| CFHA MODELS | | 5–30 | 5–40 | 8–30 | 8–40 | 12–30 | 12-40 | 18–30 | 18–40 | 22–30 | 22-40 | 28-30 | 28-40 | |
|--------------------|------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--|
| HOUSING DIAMETER | mm inch | 220 8.7 | | 270 10.6 | | 325 12.8 | | 410 16.1 | | 460 18.1 | | 510 20.1 | | |
| CONNECTION* | mm inch | 8 | _ | 80 3 | | 100 4 | | 100 4 | 150 6 | 150 6 | | 150 6 | | |
| TOTAL HEIGHT L1 | mm inch | 1'537 60.5 | 1'787 70.4 | 1'548 60.9 | 1'798 70.8 | 1'869 73.6 | 2'119 83.4 | 1'928 75.9 | 2'178 85.7 | 2'059 81.1 | 2'309 90.9 | 2'086 82.1 | 2'336 92.0 | |
| FLANGE POSITION L2 | mm inch | 9 ² | | | 53 7.5 | 944 37.2 | | 1'051 41.4 | | 1'231 48.5 | | 1'256 49.4 | | |
| FLANGE POSITION L3 | mm inch | | 320 12.6 | | 320 12.6 | | 350 13.8 | | 350 13.8 | | 440 17.3 | | 440 17.3 | |

^{*}The size of the connection is variable depending on the flow rate.

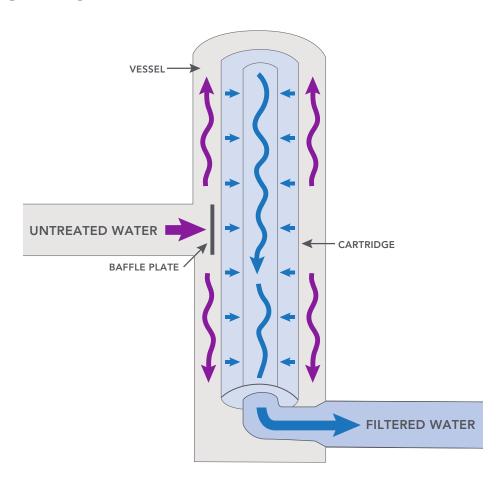


OPERATING PARAMETERS

| CFHA MODELS | | 5–30 | 5–40 | 8–30 | 8–40 | 12–30 | 12–40 | 18–30 | 18–40 | 22–30 | 22–40 | 28–30 | 28-40 |
|-------------------------------------|-------------|-----------|-----------------|-----------|-------------|-----------|-------------|-------------|-------------|-----------|-------------|------------|-------------|
| MEDIUM | | | | | | | Wa | iter | | | | | |
| DESIGN PRESSURE | bar psi | | | | | | -1 -14.5 | . 10 145 | | | | | |
| MAX. ALLOWABLE WORKING PRESSURE | bar psi | | | | | | -1 -14.5 | . 10 145 | | | | | |
| DESIGN TEMPERATURE | °C °F | | 120 248 | | | | | | | | | | |
| ALLOWABLE WORKING TEMPERATURE | °C °F | | 0 100 32 212 | | | | | | | | | | |
| NUMBER OF CARTRIDGES | | 5 8 | | 12 | | 18 | | 22 | | 28 | | | |
| LENGTH OF CARTRIDGES* | mm inch | 750 30 | 1'000 40 | 750 30 | 1'000 40 | 750 30 | 1'000 40 | 750 30 | 1'000 40 | 750 30 | 1'000 40 | 750 30 | 1'000 40 |
| NUMBER OF 10" CARTRIDGE ELEMENTS | | 15 | 20 | 24 | 32 | 36 | 48 | 54 | 72 | 66 | 88 | 84 | 112 |
| MAX. FLOW | m³/h gpm | 23 101 | 30 132 | 36 159 | 48 211 | 54 238 | 72 317 | 81 357 | 108 476 | 99 436 | 132 581 | 126 555 | 168 740 |

^{*}Cartridge Filter Housings for smaller cartridges, such as 10" or 20" are also available on special request.

OPERATING PRINCIPLE



QUALITY

PRESSURE EQUIPMENT DIRECTIVE (PED)

 Designed, developed and manufactured in accordance with the Pressure Equipment Directive - 2014/68/EU, Article 4, paragraph 3 (Sound Engineering Practice).

ASME VIII. DIV.1 (AS ALTERNATIVE TO PED)

- The Cartridge Filter Housings CFHA models are designed and manufactured in accordance with ASME VIII. DIV. 1.
- An ASME U-stamp on the pressure vessel is available in option.

OTHERS (ON REQUEST)

• The Cartridge Filter Housings – CFHA models are designed and manufactured to be compliant with Semiconductors and Ultrapure water requirements.

OTHER INFORMATION

| DISPOSAL | Disposal must be in accordance with the appropriate local regulations. See additional information in the operation manual. |
|----------------------------|---|
| SAFETY ADVICE | Pressure hazards: The Cartridge Filter Housings – CFHA models are operated under pressure. Risk of liquid jets during maintenance work. Unauthorized modification of the Cartridge Filter Housings – CFHA models will void warranty. We recommend using only original spare parts for system maintenance. |
| MANUFACTURER | RAMIVO Manufacturing Hungary Kft. Szabadság utca. 91 7090 Tamási Hungary |
| GLOBAL KNOWLEDGE CENTRE | Ovivo Switzerland AG Benkenstrasse 262 4108 Witterswil Switzerland |

