

# UF Cartridge

[Type C] / [Type S]

● High performance, compact design, ease of use...

## Features

### 1 Dead-end ultrafiltration

Dead-end ultrafiltration is achieved with high permeability hollow fiber membrane for ultrafiltration.

### 2 Reduced space

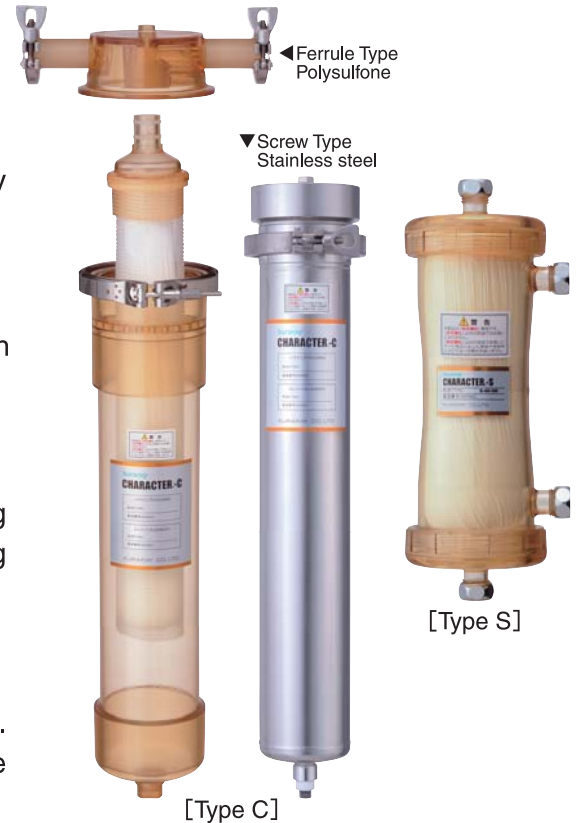
No additional space or equipment is required as the product can be installed directly in existing piping with its compact design.

### 3 Running cost reduction

Due to the cartridge-type configuration [Type C], the housing can be used repeatedly with only the element being replaced. This leads to running cost reduction.

### 4 Selectability

There are two different molecular weight cutoff in [Type C]. An appropriate specification can be chosen according to the application.



## Applications

Both [Type C] and [Type S] are applicable to purification filtration in various fields of technology and daily use.

- Ultrapure water for semiconductor manufacturing
- Bacteria and pyrogen free water for medical and food industries and hospitals
- Ultrapure water for laboratory use
- Potable water for industrial and household use
- Other purposes that need purification filtration

### ■ Bacteria and endotoxin rejection

Bacteria rejection (measured based on JIS K 3823:2012)

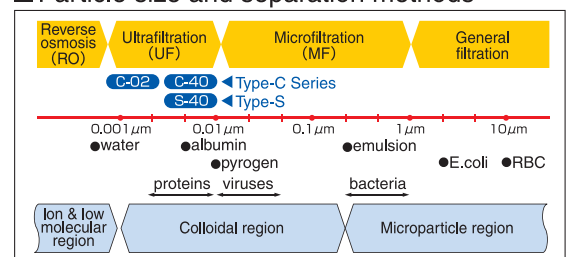
Raw water [CFU/1,000ml]	Filtrate [CFU/1,000ml]	Bacteria rejection (LRV)
$4.8 \times 10^9$	0	>9.6

Endotoxin rejection (measured based on JIS K 3824:2012)

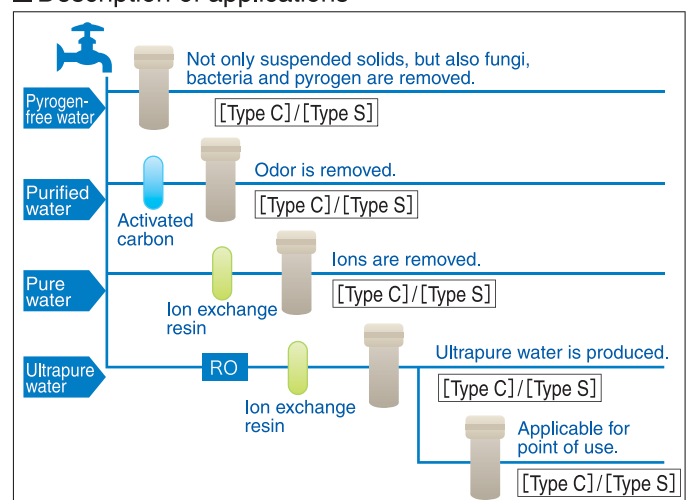
Raw water [EU/ml]	Filtrate [EU/ml]	Endotoxin rejection (LRV)
174	<0.001	>5

\*LRV: Logarithmic reduction value

### ■ Particle size and separation methods



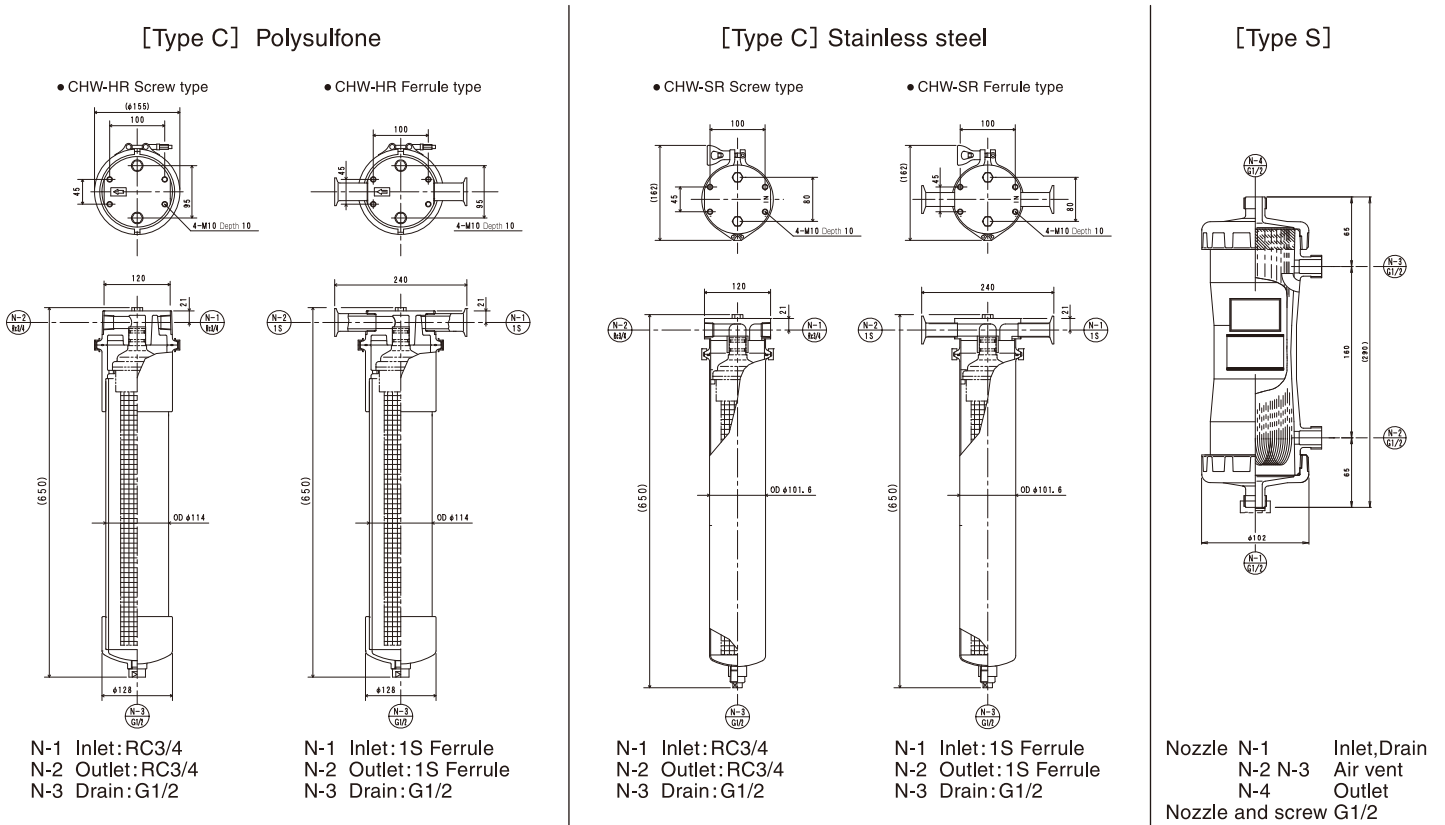
### ■ Description of applications



## ■ Specifications for [Type C] and [Type S]

Type		[Type C]		[Type S]	
Filter	Model	C-40-HR	C-02-HR	S-40-GR	
	Resistance to heat	Thermal resistant		Thermal resistant	
	Configuration	Cartridge type		Single-unit type	
	Hollow fiber membrane	Membrane type	UF-6401	UF-6021	UF-6401
		Molecular weight cutoff (90% cutoff)	MW 13,000	MW 5,000	MW 13,000
	Effective membrane area (m <sup>2</sup> )	4		2	
	Pure water permeate flow rate (L/hr/mod./0.1MPa)*1	≥1,800	≥900	≥1,000	
	Dimensions (mm)	φ 90 × 580		—	
	Materials	Hollow fiber membrane	Polysulfone		Polysulfone
		Potting material	Epoxy resin		Epoxy resin
Cap		Polysulfone		—	
Covering net		Polypropylene		—	
O-ring		Silicone rubber (P22.4)		—	
Filling fluid	Aqueous solution of sodium hypochlorite (25mg/L)		Aqueous solution of sodium hypochlorite (25mg/L)		
Housing	Model*2	CHW-HR	CHW-SR	—	
	Dimensions (mm)	φ 155 × 650	φ 130 × 650	φ 102 × 290	
	Materials	Main body	Polysulfone	SUS316	Polysulfone
		O-ring	Silicone rubber (φ 123 × φ 3)	Silicone rubber (G105)	Silicone rubber
	Hold up volume (L)	4		0.7	
Operating conditions	Filtration type	External-pressure type dead-end filtration		External-pressure type dead-end filtration	
	Allowable maximum operation pressure (MPa)*1	0.5		0.5	
	Allowable maximum transmembrane pressure difference (MPa)*1	0.3 (0.2 at 60-80deg.C, 0.1 at ≥80deg.C)		0.3 (0.2 at 60-80deg.C, 0.1 at ≥80deg.C)	
	Allowable maximum temperature (deg. C)	90 (95 for hot water sterilization*3)		80 (95 for hot water sterilization*3)	
	pH range	1-14		1-14	

\*1 When filtered with pure water at 25 deg. C. \*2 CHW-HR and CHW-SR are compatible with both C-40-HR and C-02-HR. \*3 For about 30 minutes under 0.1MPa.



### Notes:

- Specifications and the type of the filter and housing may be changed without prior notice.
- Applications and basic data (in-house data) specified in this catalog are standard examples. These depend on the influent to be treated, operating conditions and circumstances. Contact us before using.
- This product is designed only for purifying water. Kuraray is not responsible for any incidents and losses arising from the usage of this product for any purposes other than water purification.

Manufacturer

**KURARAY CO., LTD.**  
Environmental Business Development and Promotion  
Division

Ote Center Building, 1-1-3 Otemachi, Chiyoda-ku,  
TOKYO 100-8115, Japan  
TEL: +81-3-6701-1550 FAX: +81-3-6701-1654

Distributor