



## UltiKleen™-CDS Filter



### Description

The UltiKleen-CDS filter is Pall's standard all-fluoropolymer cartridge for the semiconductor industry. It is designed primarily for use in today's bulk chemical delivery systems.

- Excellent compatibility
- Low extractable levels
- All-fluoropolymer construction
- Three removal ratings available
- High temperature and pressure capabilities
- Optimized crescent-shaped Ultipleat® filter design
- Very high flow rates
- Low differential pressure
- Manufactured in a cleanroom environment
- 100% integrity tested

### Specifications

#### Materials

- Medium: PTFE
- Core, cage, and end caps: High purity PFA
- Support and drainage: PTFE
- Sealing methods: Melt seal patented process
- O-ring options: FEP encapsulated fluoroelastomer, Kalrez<sup>1</sup>, and Chemraz<sup>2</sup>

#### Removal Ratings

- 0.2 µm, 0.1 µm, 0.05 µm

#### Filter Areas

- 102 mm / 4 in: 0.53 m<sup>2</sup> / 5.7 ft<sup>2</sup>
- 254 mm / 10 in: 1.24 m<sup>2</sup> / 13.3 ft<sup>2</sup>
- 508 mm / 20 in: 1.95 m<sup>2</sup> / 21 ft<sup>2</sup>
- 762 mm / 30 in: 3.0 m<sup>2</sup> / 32.5 ft<sup>2</sup>

#### Configurations

- Nominal length:  
102 mm / 4 in, 254 mm / 10 in,  
508 mm / 20 in, 762 mm / 30 in
- Diameter: 70 mm / 2.75 in

#### O-ring size / End caps

- Code 3: 222 double O-ring / flat end
- MR Code 25: 222 double O-ring / flat end designed to retrofit Code 0 elements

#### Operating Conditions

Maximum operating temperature:

- 185°C / 365°F

Maximum forward differential pressure:

- 0.69 MPa / 100 psid @ 50°C / 120°F
- 0.41 MPa / 60 psid @ 51° – 110°C / 121° – 230°F
- 0.24 MPa / 35 psid @ 111° – 170°C / 231° – 335°F
- 0.14 MPa / 20 psid @ 170° – 185°C / 335° – 365°F

Maximum reverse differential pressure:

- 0.34 MPa / 50 psid @ 20°C / 68°F

#### Integrity Test Values<sup>3</sup>

Per 254 mm / 10 in segment

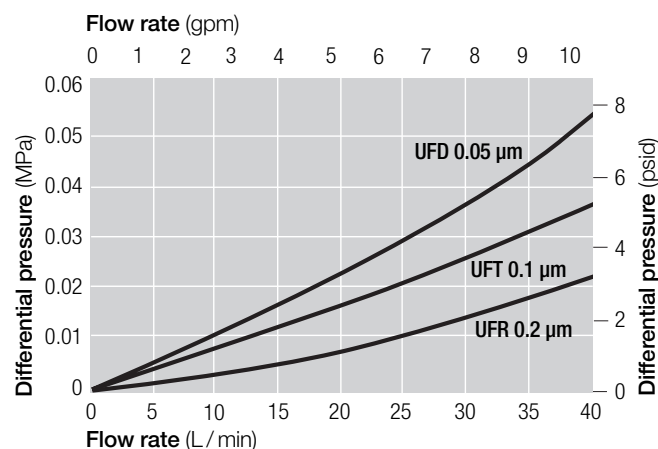
- 0.05 µm: < 24 mL / min @ 0.12 MPa / 17.5 psig
- 0.10 µm: < 35 mL / min @ 0.117 MPa / 17 psig
- 0.20 µm: < 33 mL / min @ 0.084 MPa / 12.2 psig

<sup>1</sup> Kalrez is a registered trademark of E.I. du Pont de Nemours and Company

<sup>2</sup> Chemraz is a registered trademark of Greene Tweed & Co.

<sup>3</sup> Test fluid used is 60/40, IPA:H<sub>2</sub>O

## Pressure Drop vs. Liquid Flow Rate<sup>4</sup>



<sup>4</sup> For liquids with viscosity differing from water, multiply the pressure drop by the viscosity in centipoise.

## Part Number / Ordering Information

Part Number <sup>5</sup>	Removal Rating (µm)	Nominal Length <sup>6</sup> (mm / in)	Configuration Code	O-Ring Material <sup>7</sup>
ABF04UFR3EH1	0.2	102 / 4	3	FEP encapsulated fluoroelastomer
ABF1UFR3EH1	0.2	254 / 10	3	FEP encapsulated fluoroelastomer
ABF2UFR3EH1	0.2	508 / 20	3	FEP encapsulated fluoroelastomer
ABF3UFR3EH1	0.2	762 / 30	3	FEP encapsulated fluoroelastomer
MRF1UFR25EH1	0.2	254 / 10	25	FEP encapsulated fluoroelastomer
ABF04UFT3EH1	0.1	102 / 4	3	FEP encapsulated fluoroelastomer
ABF1UFT3EH1	0.1	254 / 10	3	FEP encapsulated fluoroelastomer
ABF1UFT3EH11	0.1	254 / 10	3	Kalrez
ABF1UFT3EH12	0.1	254 / 10	3	Chemraz
MRF1UFT25EH1	0.1	254 / 10	25	FEP encapsulated fluoroelastomer
ABF2UFT3EH1	0.1	508 / 20	3	FEP encapsulated fluoroelastomer
ABF04UFD3EH1	0.05	102 / 4	3	FEP encapsulated fluoroelastomer
ABF1UFD3EH1	0.05	254 / 10	3	FEP encapsulated fluoroelastomer
ABF1UFD3EH11	0.05	254 / 10	3	Kalrez
ABF1UFD3EH12	0.05	254 / 10	3	Chemraz
MRF1UFD25EH1	0.05	254 / 10	25	FEP encapsulated fluoroelastomer

<sup>5</sup> For prewet option, add -K3 to the end of part number.

<sup>6</sup> The above filter configurations are also available in 508 mm / 20 in, 762 mm / 30 in, and 1016 mm / 40 in lengths. These can be ordered by changing the fourth digit in the part number to a 2, 3 or 4 respectively.

<sup>7</sup> Other O-ring materials are available.

Unit conversion: 1 MPa = 10 bar



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