

# **Profile® II Filters**

## **Applications**

CMP slurry, Photochemicals, Plating solution, Acids, Alkalis, Solvents, DI water, Paints, Photoresists

## **Description**

Profile II filters are all polypropylene innovative depth filters. The fibers in Profile II filters may be considered continuous. No binder resin is used – the fibers are "bonded" by intertwining during the manufacturing process. As a result, Profile II filters show no media migration. Profile II filters can be expected to yield longer service life and lower your total filtration costs.

# **Revolutionary Cartridge Construction**

### Outer section

(Tapered pore structure: longer service life)
This section has a continuously graded pore structure for built-in prefiltration. With its tapered pore structure and its depth combine to provide long life in service.

#### Inner section

(Constant pore: reliable filtration)
The constant pore size provides reliable filtration.

### **Features**

- Excellent removal efficiency
- No media migration
- Low pressure drop
- High contaminant holding capacity
- Low extractables (no binders or resins)
- Broad chemical compatibility

## **Specifications**

### Materials of Construction

Components	Materials
Filter medium	Polypropylene
Core	Polypropylene
Endcaps and cage (MCY, AB type)	Polypropylene
Sealing methods (RMF type)	Santoprene¹ rubber

<sup>1</sup> Santoprene is a trdemark of Exxon Mobil Corporation.

### **Operating Conditions**

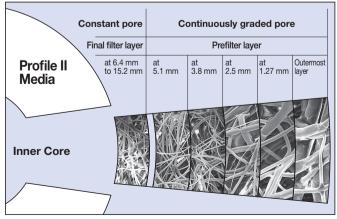
Maximum Temperature <sup>2</sup>	82 °C / 180 °F
Maximum Differential Pressure	0.41 MPa (< 30 °C ) 0.34 MPa (< 50 °C ) 0.21 MPa (< 70 °C ) 0.10 MPa (< 82 °C )

2 Consult your local Pall representative on the condition at high temperature over 49 °C.



Configulation	Housing
RF type	R type housing
MCY type	M type housing
RMF type	M type housing
AB type	A type housing with the same O-ring code

## **Tapered Pore Structure**<sup>3</sup>



3 Shown above are sample sections of Profile II filter medium from a typical Profile II cartridge at 300X.

## **Profile II Filters**

## Part Numbers / Ordering Information

RF type : R 1 F 2 MCY type : MCY100 1 Y 2 3

RMF type : RM 1 F 2 H21 AB type : AB 1 Y 2 4 5

Table 1 (mm) (mm)

	Cartridge Nominal Length					Cartridge		
Code	Nominal Length	RF	RMF	MCY	AB	Туре	Outer diameter	Inner diameter
1	10"	254	254	245	258	RF	64	28
2	20"	510	509	505	506	RMF	64	28
298	30"	=	764	-	-	MCY	70	28
3	30"	768	-	760	753	AB	70	28
44	40"	1022	-	1018	1001			

<sup>4</sup> Custom-order products

## Table 2

		Re	emoval ratings		Typical Clean Pressure Drop
Cartridge Grade	Liquid Service Rating in um at % Efficeincy⁵			ficeincy <sup>5</sup>	Flow rate : 10 L/min (Water)
diade	90 %	99 %	99.9 %	99.98 %	kPa
003	< 0.56	< 0.56	< 0.5 <sup>6</sup>	< 0.5 <sup>6</sup>	64
005	< 0.56	< 0.56	< 0.56	0.56	51
007	< 0.56	< 0.5 <sup>6</sup>	< 0.5 <sup>6</sup>	0.76	49
010	< 0.56	< 0.56	< 0.56	1.0	47
020	< 1.06	1.0	1.5	2.0	35
030	< 1.06	1.8	2.5	3.0	27
050	2.0	3.0	4.0	5.0	15
070	3.5	5.0	6.0	7.0	9
100	6.5	7.5	9.0	10.0	6
120	7.0	9.0	11.0	12.0	4
150	8.0	10.0	13.0	15.0	3
200	10.0	14.0	18.0	20.0	1.8
300	14.0	18.0	26.0	30.0	1.5
400	20.0	30.0	35.0	40.0	< 1
700	32.0	50.0	70.0	-	< 1
900	50.0	78.0 <sup>6</sup>	90.06	-	< 1
1200	60.0	100.06	120.0 <sup>6</sup>	-	< 1

<sup>5</sup> Tested by ISO16889 F2 method ( $\beta$  - 5,000)

Table 3

Code	Gasket Opetions
H13	NBR (standard)
J	EPDM
Н	Fluoroelastomer
H4	Silicone
H21	Santoprene

Table 4

Code	O-ring Size
7	AS568A - 226
8	AS568A - 222
20	AS568A - 226

Table 5

Code	O-ring Opetions	
H4	Silicone (standard)	
Н	Fluoroelastomer	
J	EPDM	

Endcaps Inner diameter

26

<sup>6</sup> Extrapolated values



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of the following patent numbers: US5133878; EP0433661

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