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# Poly-Fine® ARD Series Filter Cartridges

# Spiral Wound Absolute Rated Depth Filter Cartridge

Innovative depth filter cartridge technology
All-polypropylene components

Absolute rated at >99.9% efficiency with retention ratings from 0.5 to 70 microns •

Proprietary filter media produced directly by Pall for highly consistent, reproducible performance •

Cartridge free of surfactants, binders and adhesives • Graded pore structure provides pre and final filtration in one cartridge •

Resists contaminant unloading even at high differential pressures

#### **Performance Specifications**

### Filter grades<sup>1</sup>

0.5, 1, 3, 5, 10, 20, 40, 70 µm

#### **Maximum differential pressure**

1.0 bard @ 82°C (15 psid @ 180°F) 5.2 bard @ 20°C (75 psid @ 68°F)

<u>NOTE</u>: Heavy wall center core option is recommended for applications where the operating temperature exceeds 52°C (125°F).

## Recommended change-out differential pressure<sup>2</sup>

2.4 bard (35 psid)

## Food and water contact use

Please contact Pall Corporation to verify that the product conforms to your national legislation and/or regional regulatory requirements for water and food contact use.

#### Rinse-up

Rinse-up to 18 Megohm-cm with a minimum of throughput.

### **Purity**

Cartridges are free of surfactants, resins, binders, and adhesives.

#### Chemical compatibility

Poly-Fine ARD Series filter cartridges are compatible with a broad array of fluids. Consult the factory for specific compatibility information.

### Sanitizing agents

Cartridge may be sanitized in place with common oxidizing agents. Consult the factory for compatibility information.



#### **Product Specifications**

#### Materials of construction

Filter media: Polypropylene Hardware: Polypropylene Support material: Polypropylene Netting: Polypropylene

Gaskets/O-rings: Silicone elastomer, EPDM, nitrile,

fluorocarbon elastomer, expanded PTFE, FEP encapsulated silicone, white silicone, white nitrile, white neoprene, Santoprene<sup>3</sup> (DOE only), FEP encapsulated fluorocarbon

elastomer

#### **Dimensions (nominal)**

Outside diameter: 6.6 cm (2.6 in)

Lengths: 10.2 cm (4 in), 24.8 cm (9.75 in),

25.4 cm (10 in), 49.5 cm (19.5 in), 50.8 cm (20 in), 74.3 cm (29.25 in), 76.2 cm (30 in), 99.1 cm (39 in),

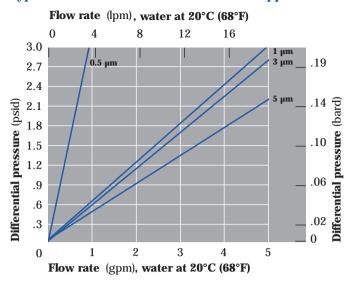
102 cm (40 in)

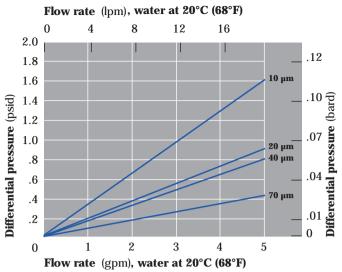
<sup>&</sup>lt;sup>1</sup> - >99.9% retention rating by ASTM F-795 test.

<sup>&</sup>lt;sup>2</sup> - Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.

<sup>&</sup>lt;sup>3</sup> - Registered trademark of Advanced Elastomer Systems.

## Typical Flow vs. Differential Pressure for Application Sizing<sup>3</sup>





Unit conversion: 1 bar = 100 kPa

## **Part Numbers/Ordering Information**

ARD ■ - • • • - ▼ (e.g., ARD 10-10US-M3)

Code	Filter Grades
0.5	0.5 μm
1	1 µm
3	3 µm
5	5 μm
10	10 µm
20	20 μm
40	40 μm
70	70 μm

**Center** 

Code

Code	Cartridge Lengths cm/in (nominal)
4	10.2 (4)
9.75	24.8 (9.75)
10	25.4 (10)
19.5	49.5 (19.5)
20	50.8 (20)
29.25	74.3 (29.25)
30	76.2 (30)
39	99.1 (39)
40	102 (40)

	Core
U	Polypropylene (standard)
HW	Heavy wall polypropylene (except 0.5 μm)
Code	Gasket/O-ring Materials <sup>5</sup>
S	Silicone
N	Nitrile
Е	EPDM
V	Fluorocarbon elastomer
Т	Expanded PTFE (gaskets)
	FEP encapsulated silicone (O-rings)
M	White silicone
W	White nitrile
Z	White neoprene (gaskets)
F	FEP encapsulated fluorocarbon elastomer (O-rings)

<b>Code</b> ▼	End Configurations
1X	DOE, 2.54 cm (1 in) extended core
M3	SOE flat closed end, external 222 O-rings (retrofits other manufacturers' Code 0) <sup>4</sup>
МЗН	SOE large diameter closed end, external 222 O-rings
M4	SOE fin end, external 222 O-rings with locking tabs (silicone and EPDM O-rings only)
M5	DOE, internal 120 O-rings (retrofits 213 O-ring style) <sup>4</sup>
M6	SOE flat closed end, external 226 O-rings (retrofits other manufacturers' Code 6) <sup>4</sup>
M7	SOE fin end, external 226 O-rings (retrofits other manufacturers' Code 7) <sup>4</sup>
M8	SOE fin end, external 222 O-rings (retrofits other manufacturers' Code 5) <sup>4</sup>
M10	DOE, internal O-rings (fits other manufacturers' housings) <sup>4</sup>
M11	SOE flat closed end, internal 120 O-ring (retrofits other manufacturers' X style) <sup>4</sup>
M18	SOE flat closed end, external 222 O-ring
M20	SOE with internal O-rings (same as M10), closed end with deep recess
DOE	DOE with elastomer gasket seals and end caps
H21	DOE, Santoprene gasket seal

<sup>&</sup>lt;sup>4</sup> - For details, contact Pall Corporation.

<sup>&</sup>lt;sup>3</sup> - Flow rate is for a 25.4 cm (10 in) cartridge. For liquids other than water, multiply differential pressure by fluid viscosity (cP).

<sup>&</sup>lt;sup>5</sup> - Leave blank if ordering H21 end configuration.



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