

## DUO-FINE® II Series Filter Cartridges

### Designed to Provide Efficient Particle Removal in Liquid or Gas Systems

- Superior Filtration Performance
- More Economical Than Depth Type Cartridges
- Excellent Classifying Filter
- Optional 100% Bubble Point Testing
- Rigid Polypropylene Outer Cage Protects Filter Media in Harsh Operating Environments
- Available with Extended Core
- Imprinted for Easy Identification
- Excellent Chemical Compatibility

### Performance Specifications in Compatible Fluids<sup>1</sup>

#### Filter Grades:

0.2, 0.45, 1, 3, 10, 30, 50 micron (µm) (nominally rated)

#### Recommended Change Out Differential Pressure<sup>2</sup>:

35 psid (2.4 bard)

#### Maximum Differential Pressure:

75 psid (5.2 bard) @ 68°F (20°C)

40 psid (2.8 bard) @ 150°F (65°C)

#### Sterilization:

All Duo-Fine II Series cartridges may be autoclaved for 30 minutes at 250°F (121°C) under no end load conditions.

### Product Specifications

#### Materials of Construction:

##### Filter Media:

50 µm: Spunbonded Polyester  
All Other Grades: Borosilicate Microfiberglass with Acrylic Binder

Support Material: Spunbonded Polyester

Netting: Polypropylene

Hardware: Polypropylene

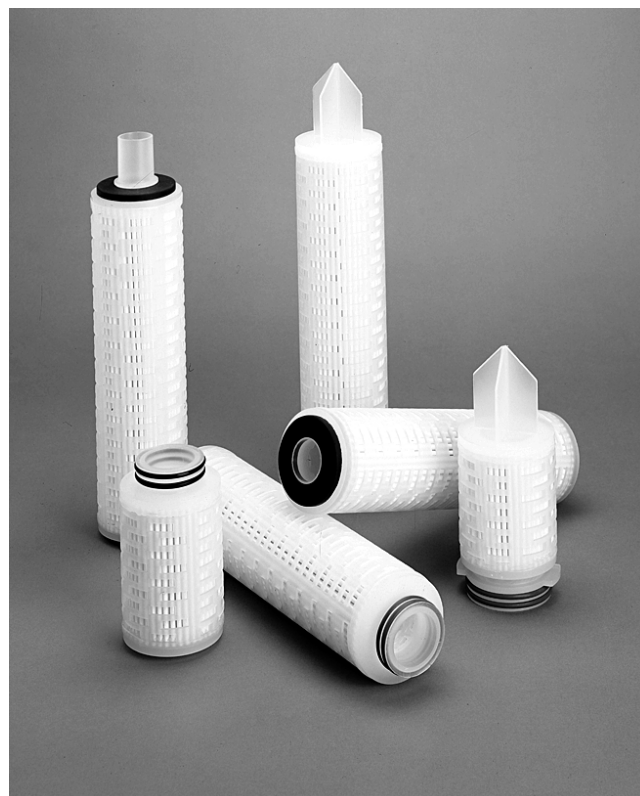
Sealing: Thermal Bond

Gaskets/O-rings: Silicone Elastomer, Buna N, Viton<sup>3</sup> A, Nordel, FEP, Encapsulated Silicone, Expanded PTFE, White Buna N, White Silicone

#### Dimensions (nominal):

Outside Diameter: 2 3/8" (6.6 cm)

Lengths: 4" (10.2 cm), 9 3/4" (24.8 cm), 10" (25.4 cm), 19 1/2" (49.5 cm), 20" (50.8 cm), 29 1/4" (74.3 cm), 30" (76.2 cm), 39" (99.1 cm), 40" (102 cm)



### Particle Retention (µm)

Cartridge Designation	Liquid Service (by ASTM F-795 Test)		Gas Service
	90% Efficiency	>99.9% Efficiency	Removal Efficiency by DOP Test
DFNT 0.2	0.2	1	99.999%
DFNT 0.45	0.45	2	99.998%
DFNT 1	1	4	96%
DFNT 3	3	10	_____
DFNT 10	10	18	_____
DFNT 30	30	45	_____
DFNT 50	50	75	_____

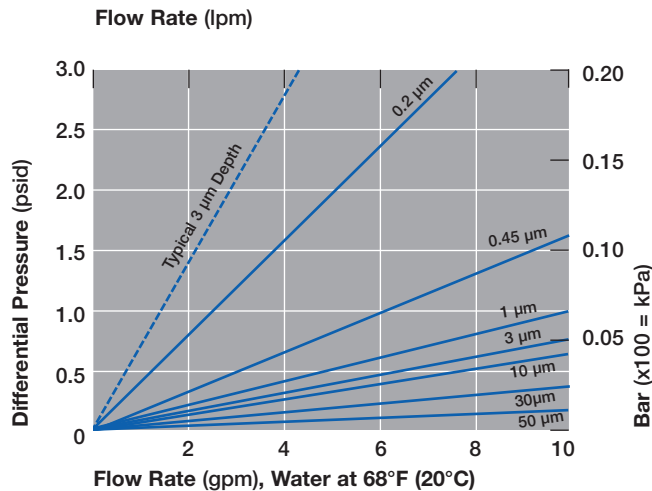
Liquid removal ratings are based on Pall's Dynamic Efficiency test protocol. This single pass, destructive challenge test is based on ASTM F-795 test procedures for determining the performance of a filter.

<sup>1</sup> - Compatible fluids are defined as those which do not swell, soften or attack any of the filter components.

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

<sup>3</sup> - Registered trademark of DuPont Dow Elastomers.

## Typical Flow vs. Differential Pressure for Application Sizing



Flow rate is per 10" (25.4 cm) cartridge. For liquids other than water, multiply pressure drop by fluid viscosity (cP).

### Part Numbers/Ordering Information

DFNT ■ - ● U ◆ - ▼ ☆ - \* (e.g. DFNT 0.2-10UN-M3B-BLK)

Code ■	Filter Grades
0.2	0.2 µm
0.45	0.45 µm
1	1 µm
3	3 µm
10	10 µm
30	30 µm
50	50 µm

Code ●	Cartridge Lengths (nominal)
4	4"
9.75	9.75"
10	10"
19.5	19.5"
20	20"
29.25	29.25"
30	30"
39	39"
40	40"

Code ◆	Gasket/O-ring Materials
S	Silicone
N	Buna N
E	Nordel
V	Viton A
T	FEP Encapsulated Silicone (O-rings)
M	White Silicone
W	White Buna N (gaskets)
X	No O-ring required (M2 style only)
T	Expanded PTFE (gaskets)

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

Code ▼	End Configurations
Blank	DOE with elastomer gasket seals & end caps
1X	DOE 1" (2.54 cm) extended core
M2	SOE flat closed end, fits housings with 020 O-ring post
M3	SOE flat closed end, external 222 O-rings (retrofits other manufacturers' Code 0) <sup>4</sup>
M3H	SOE large diameter closed end external 222 O-rings
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>
M20	SOE with internal O-rings (same as M10), closed end with deep recess

Code ☆	Bubble Test Option	Code *	Packaging
Blank	Sample Bubble Tested	Blank	Standard Packaging
B	100% Bubble Test	-BLK	Bulk Packaging <sup>4</sup>



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