### LENNTECH

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# **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 %" (6.6 cm)

Lengths: 4" (10.2 cm), 9 ¾" (24.8 cm),

10" (25.4 cm), 19 ½" (49.5 cm), 20" (50.8 cm), 29 ½" (74.3 cm), 30" (76.2 cm), 39" (99.1 cm),

40" (102 cm)



#### Particle Retention (µm)

	Liquid Service (by ASTM F-795 Test)		Gas Service	
Cartridge Designation	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		

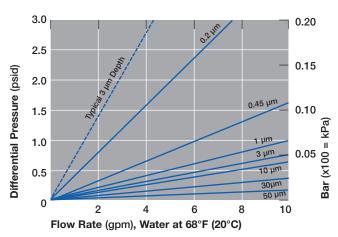
<sup>1 -</sup> Compatible fluids are defined as those which do not swell, soften or attack any of the filter components.

<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 DuPont Dow Elastomers.

#### Typical Flow vs. Differential Pressure for Application Sizing





#### **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"

20"

30"

39"

40"

19.5"

29.25"

10

20

30

39

40

19.5

29.25

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

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

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

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>
МЗН	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
В	100% Bubble Test	-BLK	Bulk Packaging

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