



## DUO-FINE® 1401 Series Filter Cartridges

### High Surface Area Pleated Filter Cartridges For Critical Applications

- Available in Retention Ratings of 0.45 to 50 microns (µm)
- Lifting Bail Provides Quick and Easy Cartridge Change Outs
- High Surface Area Provides Long Service Life
- Internal O-ring Seal Minimizes Contaminant Bypass
- Tin and Stainless Steel Hardware Provides Increased Mechanical Strength
- Manufactured Under ISO 9001 Quality System

### Performance Specifications

#### Filter Grades:

0.45, 3, 10, 30, or 50 µm

**Recommended Change Out Differential Pressure<sup>1</sup>:**  
35 psid (2.4 bard)

**Maximum Differential Pressure:**  
40 psid (2.8 bard) @ 200°F (93°C)

**Maximum Operating Temperature:**  
250°F (121°C)

### Product Specifications

#### Materials of Construction:

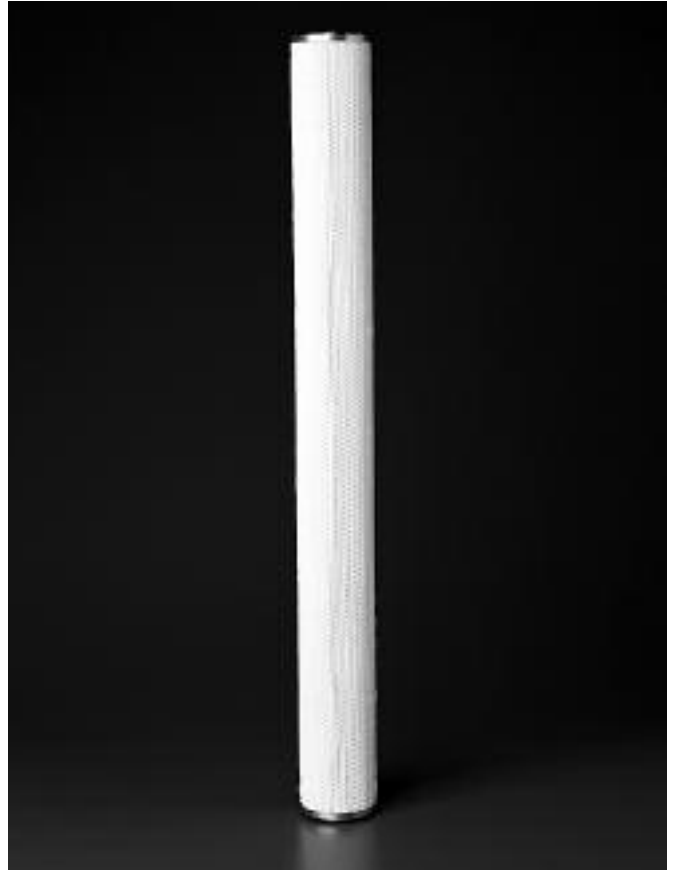
##### Filter Media:

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

Support Material: Polyester  
Core: Tin Plated Steel  
End Caps: Stainless Steel  
Outer Netting: Polypropylene  
Sealing: Epoxy Bond  
O-ring: Buna N

#### Dimensions (nominal):

Outside Diameter: 3 ¾" (9.5 cm)  
Inside Diameter: 2 ⅛" (5.4 cm)  
Length: 38 ¾" (98.4 cm)



<sup>1</sup> - Provided that the maximum differential pressure is not exceeded based on temperature limits defined above.

## Particle Retention (µm)

| Cartridge Designation | Liquid Service (by ASTM F-795 Test) |                   | Gas Service                    |
|-----------------------|-------------------------------------|-------------------|--------------------------------|
|                       | 90% Efficiency                      | >99.9% Efficiency | Removal Efficiency by DOP Test |
| DFN 0.45              | 0.45                                | 2                 | 99.998%                        |
| DFN 3                 | 3                                   | 10                | _____                          |
| DFN 10                | 10                                  | 18                | _____                          |
| DFN 30                | 30                                  | 45                | _____                          |
| DFN 50                | 50                                  | 75                | _____                          |

Duo-Fine 1401 filter cartridges have been extensively laboratory and field tested to determine removal efficiencies in the most stringent of operating conditions.

The removal rating of any filtration device will depend, to some extent, on the conditions under which it is used or tested. The test results will be influenced by the nature of the fluid, its viscosity, the flow rate, the type of contaminant, and the temperature. The absolute ratings given above represent the diameter of the largest hard spherical particle that will pass through the filter under normal operating conditions. Contact Pall for a complete description of Pall's test procedures.

The DOP test measures the ability of the filter to capture fine particles in air or gas. The retention ratings given above represent the removal efficiencies with respect to an aerosol dispersion of 0.3 µm Dioctyl Phthalate (DOP) particles.

## Part Numbers/Ordering Information

DFN ■ – 1401 (e.g., DFN 10-1401)

| Code<br>■ | Filter<br>Grades |
|-----------|------------------|
| 0.45      | 0.45 µm          |
| 3         | 3 µm             |
| 10        | 10 µm            |
| 30        | 30 µm            |
| 50        | 50 µm            |



**Pall Corporation**

2200 Northern Boulevard.  
East Hills, New York 11548-1289

1.800.FILTERS toll free  
516.484.5400 phone  
516.484.3216 fax  
www.pall.com web

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