

# **Emflon® Filter**

# **Description**

Emflon filter elements are designed for  $\geq 3$  nm filtration of bulk gas applications found in the semiconductor industry.

### **Features**

- Wide variety of applications
- High particle retention
- High flow rates vs. differential pressure
- Optimized cartridge design
- Manufactured in a cleanroom environment
- 100% integrity tested

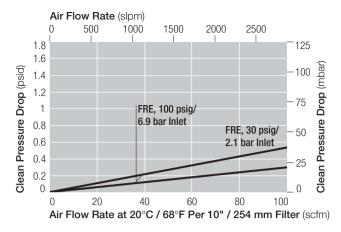


# **Specifications**

### Materials of Construction

| Components                            | Materials  |                                   |
|---------------------------------------|--|-----------------------------------|
| Filter Medium                         | PTFE   |                                   |
| Media Support                         | Polypropylene  |                                   |
| Inner Core                            | Polypropylene  |                                   |
| Outer Cage                            | Polypropylene  |                                   |
| End Caps                              | Polypropylene  |                                   |
| O-ring Options                        | Acid proof fluoroelastomer, FEP Encapsulated fluoroelastomer   |                                   |
| Gasket Options                        | NBR, PTFE, fluoroelastomer, EPDM   |                                   |
|                                       |  |                                   |
| Removal Ratings                       | ≥ 3 nm (0.003 µm)  |                                   |
| Filter Areas                          | AB1  | MCY1001                           |
|                                       | 10" / 254 mm : 9.45 ft² / 0.88 m²  | 10" / 254 mm : 9.26 ft² / 0.86 m² |
| Nominal Length                        | 10" / 254 mm<br>20" / 508 mm<br>30" / 762 mm<br>40" / 1,016 mm   |                                   |
| Diameter                              | 2.75" / 70 mm  |                                   |
| O-ring Size /<br>End Caps             | Code 3 (222 double O-ring / flat end) Code 8 (222 double O-ring / finned end) Code 7 (226 double O-ring bayonet lock / finned end) |                                   |
| Maximum Operating<br>Temperature      | 194 °F / 90 °C   |                                   |
| Maximum forward differential pressure | 80 psid @ 120 °F / 5.5 bar @ 50 °C<br>50 psid @ 194 °F / 3.5 bar @ 90 °C   |                                   |

# Pressure Drop vs. Gas Flow Rate (AB1, MCY1001)



# **Part Numbers / Ordering Information**

# O-Ring Seal

**AB** 1 2 3 **E** 4

#### Table 1

| Code | Nominal length (mm / in) |
|------|--------------------------|
| 1    | 254 / 10                 |
| 2    | 508 / 20                 |
| 3    | 762 / 30                 |
| 4    | 1,016 / 40               |

#### Table 2

| Code | Removal Ratings |
|------|-----------------|
| FR   | ≥ 3 nm          |
|      |                 |

#### Table 3

| Code | O-ring Specifications |
|------|-----------------------|
| 7    | AS568A-226            |
| 8    | AS568A-222            |
| 3    | AS568A-222            |

#### Table 4

| Code | O-ring Materials <sup>-1</sup>   |  |
|------|----------------------------------|--|
| H1   | FEP Encapsulated Fluoroelastomer |  |
| HF   | Acid-proof Fluoroelastomer       |  |

 $<sup>^{\</sup>ast 1}$  Other O-ring material options available.

## Representative example part numbers

| AB1FR3EHF | AB2FR8EHF | AB2FR7EH1 | AB3FR3EH1 |
|-----------|-----------|-----------|-----------|
| AB1FR3EH1 | AB2FR7EHF | AB3FR7EHF | AB4FR7EHF |
| AB1FR7EH1 | AB2FR3EHF | AB3FR8EHF | AB4FR3EHF |
| AB1FR3EHF | AB2FR3EH1 | AB3FR3EHF |           |

#### Gasket seal

MCY1001 7 E 8

### Table 7

| Code | Removal<br>Ratings |
|------|--------------------|
| FR   | ≥ 3 nm             |

# Table 8

| Code | Gasket<br>Materials |  |
|------|---------------------|--|
| H13  | NBR                 |  |
| H2   | PTFE                |  |
| Н    | Fluoroelastomer     |  |
| J    | EPDM                |  |

 $<sup>^{\</sup>star}$  Part number suffix -ss has the label for gas application rating with (GAS 0.003  $\mu\text{m})$ 

#### Representative example part numbers



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