

# **AFE** series

FILTERING CARTRIDGES PLEATED 100% POLYESTER OD 2.71" (69 mm)

# MAIN APPLICATIONS:

- FINE CHEMICALS
- PETROCHEMICAL
- OIL & GAS
- FOOD & BEVERAGE
- PHARMACEUTICAL
- HEALTH & CARE
- MICROELECTRONICS
- GENERAL INDUSTRY

## FEATURES:

- High filtration area
- High flow-rate
- High dirt holding capacity for long duration in service
- Resistant to contaminant unloading even at high Delta-P
- Filtration direction from outside to inside
- Five end cap configurations available
- Pre-flushed with 18 M $\Omega$ -cm DI water and TOC < 40 ppb (as option)
- Pure polyester hardware
- Wide range chemical compatibility
- High temperature resistance
- Thermo-welded assembly
- Manufactured in clean room
- Filtration rating from 1 to 50  $\mu m$
- Filtration efficiency > 99.9%
- Ideal for use in critical filtration processes like:
  - Fine chemicals and cosmetics
  - Corrosive fluids
  - Solvent base solutions
  - Hot degreasing bath
  - Oxide and pure water
  - Hot water
  - Hot oils

ASCO Filtri S.p.A.

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## **TECHNICAL DATA**

#### WORKING TEMPERATURE 120 °C

#### **STERILIZATION / SANITIZATION**

- Autoclaving at 121 °C for 30' without Delta-P up to 10 time

- In hot water at 90 °C per 60'
- in line

#### DIFFERENTIAL PRESSURE

#### Cartridge replacement: 2.0 bar @ 25 °C

Max. allowable: 5.0 bar @ 20 °C 1.5 bar @ 60 °C 1.0 bar @ 120 °C

#### **CONSTRUCTION MATERIAL**

Filter media:

- PBT microfibre Hardware: - High strength PBT
- Gaskets:
  - Buna-n
  - EPDM
  - Viton
  - Silicone
  - Shicone - FEP
  - rer

#### DIMENSIONS

External diameter: 2.71" (69 mm) Internal diameter: 1.1" (28 mm) Length: 10", 20", 30", 40"

#### **FILTERING AREA**

10"	0.5 m <sup>2</sup>
20"	1.0 m <sup>2</sup>
30"	1.5 m <sup>2</sup>
40"	2.0 m <sup>2</sup>

## Flow-rate / Delta-P data:

Filtration	Liquids		Air
(µm)	1 cP	10 cP	0.018 cP
1	1.70	0.20	60
5	2.00	0.35	60
10	2.00	0.64	60
25	2.50	1.10	70
50	2.50	1.30	70

Liquid flow-rate (m3/h) - Air flow-rate (Am3/h) - Initial Delta-P 0.1 bar.

Flow-rate valid for 10" long cartridges.

For gas different than air:  $DP = 0.1 \times gas$  viscosity (cP) / 0.018 cP (air). Flow-rate valid for clean water, reduce the flow-rate according to the application.

#### Filtration efficiency:

	Efficiency		
Filtration (µm)	Liquids		Gas
(µm)	99.9%	90%	99.9%
1	1 µm	0.45 µm	0.3 µm
5	5 µm	3 µm	2 µm
10	10 µm	5 µm	3 µm
25	25 µm	10 µm	5 µm
50	50 µm	25 µm	10 µm

Filtration efficiency of liquids defined with Multipass ISO 4572 test

#### Main compatibility range:

Chemicals	Compatibility	
Acids concentrated	Good - Poor	
Acids diluted	Good	
Alcohols	Good	
Alkalis	Fair	
Aromatic hydrocarbons	Good	
Grease and oils	Good	
Halogenated hydrocarbons	Good - Poor	
Halogens	Poor	
Ketones	Poor	

Chemical compatibility varies with chemicals concentration and temperature change. For detailed compatibility list, refer to Asco Filtri compatibility chart.

## Contact us for any further information.

We reserve the right to change the data of this specification without notice.



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