

FluorPure-DG PTFE Pleated Cartridge Filter

»» An Absolute Filter with High Flow Rate For Gases.



Specifications

» Materials of Construction

Filter membrane	Double layer Polytetrafluoroethylene
Supports	Polypropylene
Cage/End Caps	Polypropylene
Core	Polypropylene/SS 316L
Adaptor	Polypropylene
O-rings	Please refer to the ordering info.

» Operating Parameters

Maximum Operating Temperature	80 °C
Maximum Differential Pressure (forward)	5.2bar@25 °C
Maximum Differential Pressure (reverse)	2.1bar@25 °C

» Filter Dimensions

Outer Diameter	69mm
Inner Diameter	33.0mm
Filtration Area	≥0.74m ² /10inch

» Safety

Bacterial Endotoxin	≤0.25EU/mL
Extractable	≤40mg/10inch

» Sterilizable

Autoclave	126 °C, 60min, 100cycles
	140 °C, 60min, 40cycles
Steam In-Place	126 °C, 60min, 100cycles
	140 °C, 60min, 40cycles

Description

FluorPure-DG filters using the double layer PTFE membranes, have great efficiency for applications requiring sterilization of air, gas or aggressive solvents and chemicals. Through the optimization of structure, FluorPure-DG can make full use of the advantages of high velocity and high carrying amount of PTFE membrane, which prolong service life and performance with far more than competitive filters.

» Reliability

From raw materials purchase, transport to production and storage, all operations follow ISO 9001 quality management system. FluorPure-DG manufactured, tested and packaged in a cleanroom to ensure product cleanliness. FluorPure-DG provide absolute retention based on liquid bacteria challenge, 100% integrity tested after manufactured, and validation guide is available for compliance with regulatory requirements.

» Compatibility

FluorPure-DG cartridge filters are sealed using thermal bonding process, contain no adhesive and surfactant. The components of FluorPure-DG, include of Polytetrafluoroethylene, Polypropylene and Silicone/EPDM, provide broad chemical compatibility and optimized for long on-stream air service. Especially suitable for gases, as well as with PP and PTFE compatible chemicals, work for a long time and have very low precipitation.

» Regulatory Compliance

FDA 21 CFR 177
ISO 10993-Part 1, 5
EN 285:2015
Regulation (EC) No 1935/2004

Suitable for Severe High Temperature Sterilizing

FluorPure-DG can ensure integrity at temperature up to 140 °C and pressure drop up to 0.3 bar due to the enhanced core and adapter structure. FluorPure-DG can provide excellent filtration service for your process. For applications requiring autoclaving and sterilization, AFEM recommends the use of the adaptor with SS insert to ensure filter sealing after cooling. Cartridges should be cooled to system operating temperature prior to use.

» Integrity Test Data

Pore Size	Min. Bubble Point@25 °C *	Max. Diffusion@25 °C *	Max. Water Intrusion@25 °C
0.20µm	≥1.0bar	≤20mL/min@0.8bar	≤1.0mL/min@2.6bar

*Tested by 60%(v:v) IPA@10"

Features

- Extensive chemical compatibility
- High sterilization efficiency
- High flux, low pressure difference
- Water intrusion test can be used

Applications

- Sterilization filtration of compressed air/nitrogen
- Sterilization of fermentation tank, batching tank and breathing filter
- Filtration of aseptic packaging air
- Sterilization filtration of solvents/disinfectants

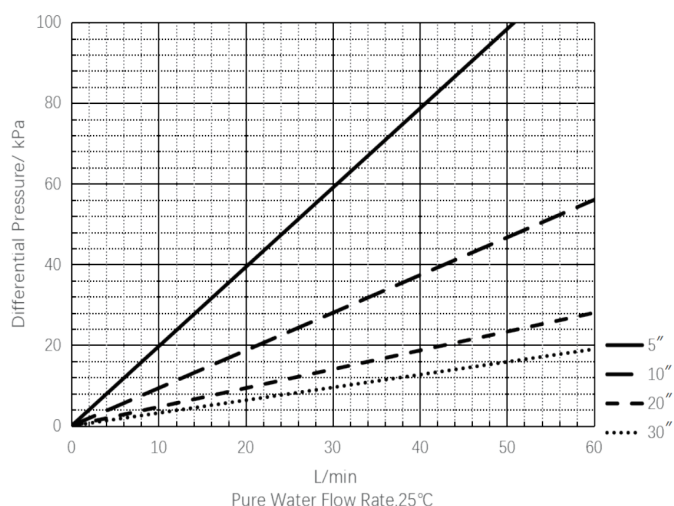
OUR MEMBRANE , YOUR SOLUTIONS

AFEM-RD-E-0020-EN A/3

Flow Rate-Pressure Drop

FluorPure-DG have higher flow rate with the design of configuration. Follows are the gas flow rate and water flow rate-pressure drop curves.

» DI Water Flow Rate-Pressure Drop Curve/0.2um

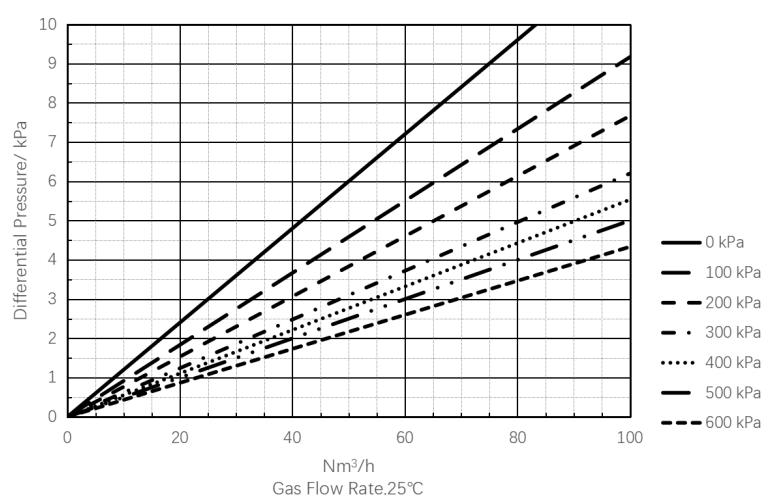


(Water / 1 cP fluid)

Typical flow rates. For liquids with viscosity differing from water, multiply the pressure drop by the viscosity in centipoise.

Unit conversion: 1 bar = 100 kPa = 14.5 psi

» Air Flow Rate-Pressure Drop Curve/0.2um



10" cartridge filter, 25 °C. For gases other than air and for multi-round cartridge installations, please contact AFEM for proper sizing.

Ordering Information*

Filter Media	Length	Pore Size	Adaptor	Sealing	Core
PTFE: Polytetrafluoroethylene membrane	005 = 5 inch 010 = 10 inch 020 = 20 inch 030 = 30 inch 040 = 40 inch	G03=0.003µm(Gas) 020=0.2µm	0=DOE 1=222/Flat with SS insert 2=222/Flat 3=222/Fin 4=222/Fin with SS insert 5=226/Fin with SS insert 6=226/Fin 7=226/Flat 8=226/Flat with SS insert	S = Silicone E = EPDM F = FPM/FKM N= NBR PV=FEP Encapsulated FPM/FKM PS=FEP Encapsulated Silicone	Blank=PP R=GF Reinforced PP S=316L Stainless Steel

* This information is a guide to the part number structure and possible options. For applications requiring autoclaving and sterilization, AFEM recommends the use of adaptor with SS insert to ensure filter sealing after cooling. If products that require autoclaving and sterilization use EPDM sealing rings and require customization. For availability of specific options and housing details, please contact AFEM..

AFE AIRFILTER MALAYSIA SDN. BHD.

Company No. 198601008219 (157412-D)
(formerly known as I.R.I.S. (Malaysia) Sdn. Bhd.)

No. 10, Jalan Anggerik Mokara 31/59,
Kota Kemuning, Section 31,
40460 Shah Alam,
Selangor Darul Ehsan,
Malaysia

Tel: +603 5121 0920
Fax: +603 5122 0040
Mobile (O): +6012 383 4628
enquiries@airfilterengineering.my
www.airfilterengineering.my

Johor Branch

No. 7, Jalan Ekoperniagaan
2/2, Taman Ekoperniagaan,
81100 Johor Bahru, Johor
Tel: +607 558 3428
Mobile: +6019 711 3928

Penang Branch

No. 57, 1st Floor, Jalan Bagan
Baru 1, Taman Bagan Baru,
12000 Butterworth, Penang
Tel: +604 324 8928
Mobile : +6012 383 5227