Aerosart

Airfilter Cartridge for Industrial Applications

Description
Aerosart high performance air filter cartridges can significantly reduce operating costs. The Aerosart is a high flow rate, low differential pressure, hydrophobic membrane filter. The unique single layer filter construction also reduces Blow-Down-time. Both the high flow rate and the short Blow-Down-time lowers the energy cost of air supply operations.

Applications
The Aerosart is designed for large-scale fermentation inlet and exhaust gas filtration.

Microbiological Safety
Aerosart filter cartridges have been tested and passed aerosol bacterial and viral challenge tests. Tests were conducted using MS-2 coli phages (NCIMB 10 108) and B. subtils var. niger spores (NCTC 10073) at a challenge level of greater than 2.5 × 107 under worst case conditions of greater than 90% RH. No MS-2 coli phages or B. subtilis spores were detected on the downstream side of the Aerosart filter cartridges.

Performance
The unique single layer pleated filter construction of the highly hydrophobic PTFE membrane provides low differential pressures, excellent flow rates and the fastest blow down times of any gas service filter.

Long Service Life Time
The mechanical and thermal stresses experienced during steam in place sterilization pose the highest risk to any filter cartridge. In many cases, Aerosart filter cartridges will be used for more the 120 steaming cycles. Tests have shown Aerosart cartridges to pass integrity tests with greater than 150 steaming cycles.

Specifications

Materials

Filter Membrane:	PTFE
Support Fleece:	Polypropylene
Core:	Polypropylene
End Caps:	Polypropylene
O-Rings:	EPDM

Pore Size
0.2 µm

Available Sizes | Filtration Area

Size 1	10"	0.7 m² | 7.5 ft²
Size 2	20"	1.5 m² | 16.1 ft²
Size 3	30"	2.25 m² | 24.2 ft²

Available Adapters
25, 27, 28

Packaging
6 cartridges per box

Operating Parameters

Max. Allowable Differential Pressure:	5 bar | 72.5 psi at 20°C 0.5 bar | 7 psi at 134°C
Max. Allowable Back Pressure:	3 bar | 43.5 psi at 20°C 0.5 bar | 7 psi at 134°C

Specifications

Regulatory Compliance
Qualified for retention of aerosolized bacterial spores and viruses (coli-phages) in air

Non pyrogenic according to USP Bacterial Endotoxins

Passes USP Plastics Class VI Test

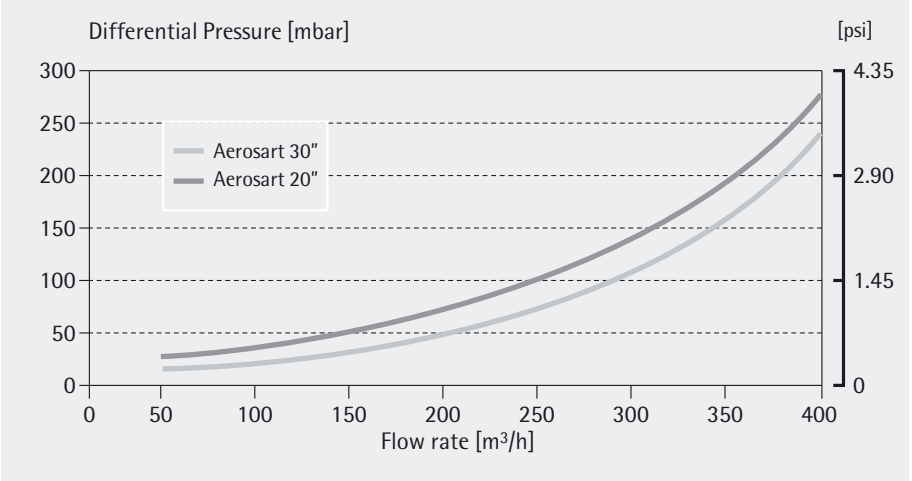
Non fiber releasing according to 21 CFR

Sterilization

In-Line Steam Sterilization
134°C, 20 min. at a maximum differential pressure of 0.5 bar | 7 psi

Sterilization Cycles
Minimum of 150 In-Line Sterilization cycles

Air flow rates Aerosart



Air flow rate for Aerosart filter cartridges (0.2 µm) in relation to the filter cartridge heights at atmosphere pressure condition.

Order Information

Order Code	Pore Size [µm]	Size	Pack Size [Pieces]
5152507T1---E--C	0.2	10"	6
5152507T2---E--C	0.2	20"	6
5152507T3---E--C	0.2	30"	6
5152707T1---E--C	0.2	10"	6
5152707T2---E--C	0.2	20"	6
5152807T1---E--C	0.2	10"	6
5152807T2---E--C	0.2	20"	6

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