

Filter cartridge amaPure ES

1. Introduction

The amaPure ES is manufactured using a special technique creating a high quality melt blown filter cartridge. The combination of very fine fibres for selectivity and coarser fibres for stability creates the ideal depth filter medium with true gradient pore structure. The amaPure ES is suitable for use in food and beverage applications and many others.

Sterilisation

Single open end cartridges can be sterilised in an autoclave for 30 minutes at 121 °C under no end load conditions. Before use the cartridges must be cooled down to the normal operating temperatures.



2. Features

- Gradient pore structure
- All polypropylene material
- Rated at 90% efficiency
- Excellent chemical compatibility
- Low pressure drop
- High solid loading capability
- FDA listed materials
- Rigid structure

4. Product/Performance specifications

Filter medium	: polypropylene
Hardware	: polypropylene
Centre core	: molded polypropylene ($\leq 10 \mu\text{m}$) extruded polypropylene ($> 10 \mu\text{m}$)
End cap seal	: thermally bonded
Gaskets/O-rings	: silicone, EPDM, Buna-N, Viton®, PTFE encapsulated silicone, PTFE encapsulated Viton®, polyethylene (for X9)

Dimensions

External diameter	: 64 mm
Length	: see ordering information
Filtration area	: 0.05 m ² /10" cartridge

Maximum recommended differential pressure

0.5 - 10 μm	: 1.0 bar at 82 °C
	1.7 bar at 66 °C
	4.1 bar at 30 °C
15 μm and above	: 1.7 bar at 60 °C
	3.4 bar at ambient temperature

6. Ordering code

Example

amaPure ES	5	10	U	X3	S
Cartridge type	Micron rating [μm]	Nominal length [inch]	Hardware material	Cartridge style	O-Ring material
	0.5, 1, 3, 5, 7, 10, 15, 20, 25, 30, 40, 50, 75, 100, 120, 150, 200	4 (102 mm) 5 (127 mm) 9.75 (248 mm) 10 (254 mm) 19.5 (495 mm) 20 (508 mm) 29.25 (743 mm) 30 (762 mm) 39 (991 mm) 39.5 (1003 mm) 40 (1016 mm)	U=polypropylene	X0 X3 X4 X7 X8 X9	S=Silicone E=EPDM V=Viton® N=Buna-N T=PTFE encapsulated silicone F=PTFE encapsulated Viton®

X0=DOE, no gaskets, X3 = SOE with external 222 O-rings, X4=DOE with flat gaskets, X7=SOE with fin end, bayonet and external 226 O-Rings, X8=SOE with fin end and external 222 O-Rings, X9=DOE with polyethylene soft gaskets

3. Food safety

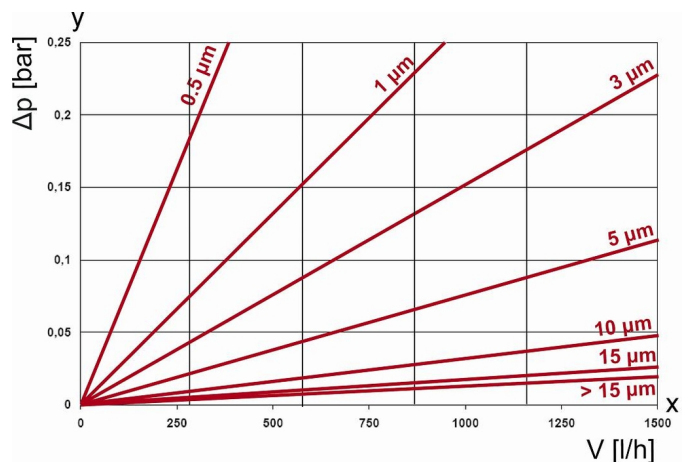
Food safety

The filter cartridges comply with the requirements of the 'Food and Drug Administration (FDA)' title 21 of the "Code of Federal Regulations" 177.1520. The filter cartridges (except for 0.5 and 1 micron) comply with EU Directive 2002/72/EC for plastic in food contact (in simulants A, B, C and D).

Bio Safety

The components of the filter cartridges (excl. O-rings and gaskets) pass the USP Biological Reactivity and Chemical-Physical tests for CLASS VI plastics.

5. Water flow rate for 10" cartridge



x: Flow rate
y: Clean pressure drop