

MAHLE

Industrial Filtration

Filter cartridge amaGuard PP Plus

1. Introduction

The amaGuard PP Plus consists of up to 5 layers of polypropylene filter media. The layers have a decreasing porosity creating a highly effective absolute filter cartridge.

The unique design and filter media ensures high flow rates, low pressure drops and high dirt load capacity. Due to its strength, chemical compatibility and FDA materials the amaGuard PP Plus can be used in a wide variety of applications, ranging from food and beverage to chemical applications.



2. Features

- Extended effective filtration area
- Graded porosity high dirt holding capacity
- Absolute filter ratings (β -ratio ≥ 5000)
- Steamable in situ
- Sanitisable with hot water
- Construction materials chemically and biologically inert according to FDA and EEC directives
- Manufacturing according to cGMP guidelines

4. Product/Performance specifications

Filter medium	: polypropylene
Support medium	: polypropylene
Hardware	: polypropylene
Longitudinal weld	: ultrasonic welding
End cap seal	: thermally welded
Gaskets/O-rings	: silicone, EPDM, Viton®, other materials on request

Dimensions

External diameter	: 70 mm
Length	: see ordering information
Filtration area	: 0.7 m ² /10" cartridge
Maximum recommended differential pressure	
Design	: 5.0 bar at 25 °C
Operating	: 2.0 bar at 25 °C
Maximum operating temperature	: 65 °C

3. Sterilisation and Food safety

Sterilisation/sanitisation/regeneration

Continuously steam sterilisable at 121 °C with cycles of 20 minutes. Hot water sanitisation with max. 80 °C water. The cartridges can be sanitised with the standard chemical agents.

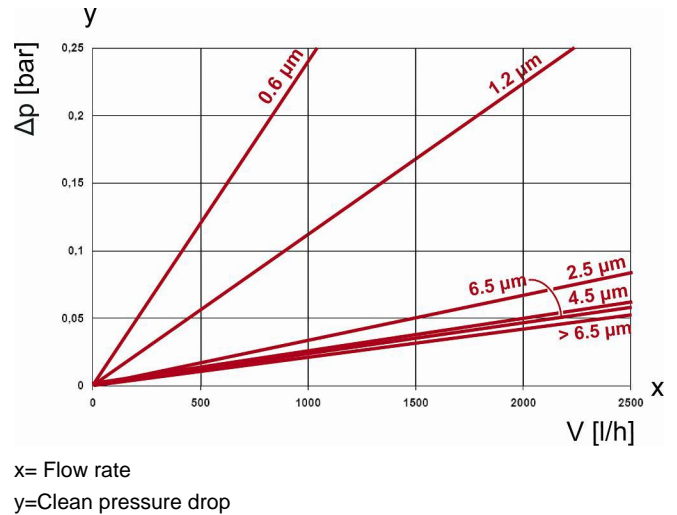
Food safety

The filter cartridges meet the European Directives 2002/72/EC and 2004/19/EC for food contact and global migration. All materials used are listed in the FDA 21CFR regulations.

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



6. Ordering code

Example

amaGuard PPP	2.5	20	U	X7	S
Cartridge type	Micron rating	Nominal length [inch]	Hardware material	Cartridge style	O-Ring material
	0.6	10 (254 mm)	U=polypropylene	X3	S=Silicone
	1.2	20 (508 mm)		X4	E=EPDM
	2.5	30 (762 mm)		X7	V=Viton®
	4.5	40 (1016 mm)		X8	
	6.5			X28	
	10				
	20				
	40				
	60				
	120				

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, X28=SOE with fin end, 3 wing bayonet and external 222 O-rings