

# MAHLE

*Industry*

Filter cartridge  
amaGuard TP

## 1. Introduction

The amaGuard TP pleated filter cartridge uses a high quality filter media creating a high performance filter cartridge. The unique design and filter media ensures a high flow, low pressure drops and high dirt load capacity. The amaGuard TP filter cartridge can be used for liquid as well as for gas applications. The amaGuard TP pleated filter cartridge has been designed to allow higher flow rates whilst providing a high dirt holding capacity. It is constructed of 100% FDA listed polypropylene and is of a non fibre releasing construction. The amaGuard TP is suitable for a wide range of aggressive chemicals and solvents. It will rinse up to 18 Megaohm-cm extremely quickly and is manufactured in a class 10,000 clean room.



## 2. Features

- High flow rates
- Rated at 90% efficiency
- No fibre release
- Broad chemical compatibility
- High dirt load capacity
- FDA listed materials
- Biologically inert material
- Manufactured in class 10,000 clean room

## 3. Sanitation and Food safety

### Sanitation

The cartridges can be sanitised with hot water at max. 82 °C. Before use the cartridges must be cooled down to the normal operating temperatures. The cartridges can be sanitised with the standard chemical agents.

### 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.

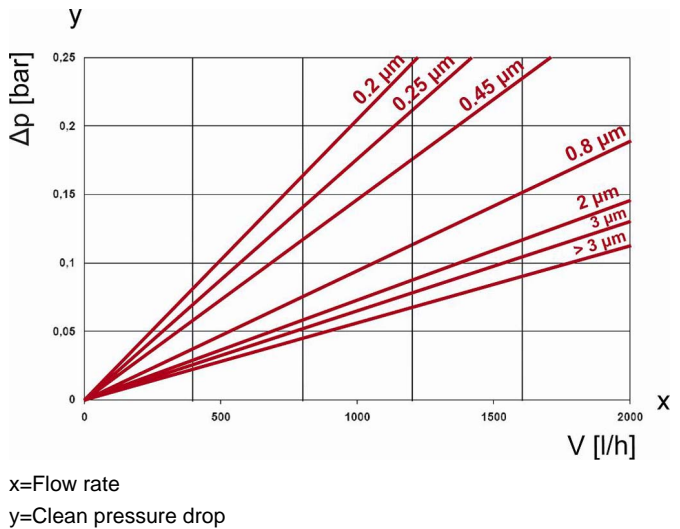
### Bio safety

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

## 4. Product/Performance specifications

Filter medium	: polypropylene
Support medium	: polypropylene
Hardware	: polypropylene
End cap seal	: thermally bonded
Gaskets/O-rings	: silicone, EPDM, Viton®
<i>Dimensions</i>	
External diameter	: 68 mm
Length	: see ordering information
Filtration area	: 0.7 m <sup>2</sup> /10" cartridge
<i>Maximum recommended differential pressure</i>	
Design	: 4.8 bar at 20 °C / 2.1 bar at 80 °C
Operating	: 2.5 bar
Maximum operating temperature	: 80 °C for continuous operation

## 5. Water flow rate for 10" cartridge



## 6. Ordering code

### Example

amaGuard TP	2	10	U	X3	S
<b>Cartridge type</b>	<b>Micron rating</b>	<b>Nominal length [inch]</b>	<b>Hardware material</b>	<b>Cartridge style</b>	<b>O-Ring material</b>
	0.2	4 (102 mm)	U=polypropylene	X3	S=Silicone
	0.25	10 (254 mm)		X4	V=Viton®
	0.45	20 (508 mm)		X7	E=EPDM
	0.8	30 (762 mm)		X8	
	2	40 (1016 mm)			
	3				
	5				
	10				
	30				

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