

# MAHLE

*Industrial Filtration*

Filter cartridge  
amaFine GM

## 1. Introduction

The amaFine GM membrane cartridges use a highly asymmetric polysulphone membrane which ensures high flow rates at very low pressure drops. The amaFine GM is specially developed for the micro filtration of demineralised and high purity water. The broad chemical compatibility makes it also very useful in other applications.



## 2. Features

- Highly asymmetric polysulphone membrane
- High capacities at low pressure drops
- Rated at > 99.9% efficiency (Latex Bead test)
- Manufactured in clean room, class 10,000
- Pre-flushed with 18.MΩ.cm water
- Materials of construction are according to FDA requirements

## 4. Product/Performance specifications

Filter medium	: polysulphone membrane
Surface treatment	: hydroxypropylcellulose
Support medium	: polypropylene
Hardware	: polypropylene
Longitudinal weld	: thermally bonded
End cap seal	: thermally bonded
Gaskets/O-rings	: silicone, EPDM, Viton®, PTFE encapsulated silicone, PTFE encapsulated Viton®

### Dimensions

External diameter	: 66 mm
Length	: see ordering information
Filtration area	: 0.6 m <sup>2</sup> /10" cartridge

### Maximum recommended differential pressure

Design	: 1.4 bar at 95 °C
Operating	: 5.5 bar at 20 °C
Operating	: 2.5 bar
Maximum operating temperature	: 95 °C

### Rinse up volume

The cartridges will rinse up to 18 MΩ.cm in less than 6 minutes at a flow rate of 600 l/h.

## 3. Sanitation and Food safety

### Sanitisation

The cartridges can be sanitised in place with the standard chemical agents.

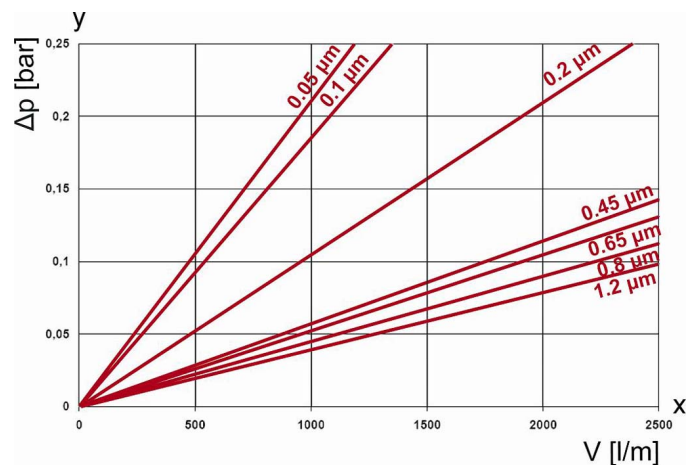
### Food safety

All materials used are listed in the FDA CFR21 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



x: Flow rate  
y: Clean pressure drop

## 6. Ordering code

### Example

amafine GM	0.2	10	U	X7	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>
	0.05		U=polypropylene	X3	S=Silicone
	0.1	10 (254 mm)		X4	N=Buna-N
	0.2	20 (508 mm)		X7	E=EPDM
	0.45	30 (762 mm)		X8	V=Viton®
	0.65	40 (1016 mm)			T=PTFE encapsulated silicone
	0.8				F=PTFE encapsulated Viton®
	1.2				

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