



# QMC™ Series Filter Cartridges

## High Efficiency Polypropylene Filter Cartridge

### Product Specifications

**Media:** Polypropylene

**Inner Core, end caps, cage:**  
Polypropylene

**Gaskets/O-Rings:**

Buna-N, EPDM, Silicone, Teflon  
Encapsulated Viton (O-Rings only),  
Teflon (gaskets), Viton

**Micron rating:**

0.1, 0.2, 0.4, 0.6, 1, 3, 5, 10  $\mu\text{m}$

### Dimensions

**Nominal lengths:**

5" 9.75" 10" 20" 30" 40"  
12.7 24.8 25.4 50.8 76.2 101.6 cm

**Outside diameter:** 2.7" (6.86 cm)

**Inside diameter:** 1.0" (2.54 cm)

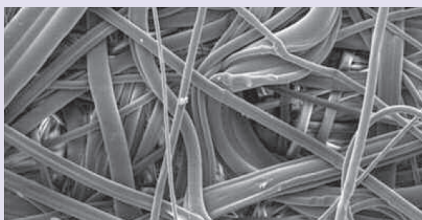
### Operating Parameters

**Maximum operating temperature:**  
176°F (80°C)

**Maximum differential pressure:**  
75 psid @ 70°F (5.2 bar @ 21°C)  
30 psid @ 176°F (2.0 bar @ 80°C)

**Maximum reverse pressure:**  
40 psid @ 70°F (2.8 bar @ 21°C)

**Recommended change-out pressure:**  
35 psid (2.4 bar)



An innovative product manufactured with multiple layers of melt blown polypropylene media. This unique structure allows high flow rates while maintaining low differential pressure and ideal depth filtration characteristics.

### FEATURES & BENEFITS

- Micron ratings from 0.1 to 10  $\mu\text{m}$  — Broad application range
- High Filtration Efficiency — 95%
- Graded pore structure — Multilayer, media for high dirt holding capacity
- Fixed pore construction — Resists dirt unloading at maximum differential pressure
- Polypropylene construction — Inert to many process fluids
- Various Gasket/O-ring materials — Compatible with many fluids

### CERTIFICATIONS

- USP Class VI: Meets USP Class VI Biological Test for Plastics
- FDA Listed Materials: All materials comply with FDA Title 21 of the Code of Federal Regulations Sections 174.5, and 177.1520, as applicable for food and beverage contact.

### TYPICAL APPLICATIONS

- Food & beverage
- Pharmaceuticals
- RO Prefilters
- DE Trap
- Aqueous solutions
- Cosmetics
- Ink
- Photoresists
- Chemicals
- Ultrapure water

### PERFORMANCE SPECIFICATIONS

- Cleaning/Sanitization:
  - Hot water at 176°F (80°C) at 5 psid (0.35 bar) for 30 min
  - In-line steam at 257°F (125°C) at 1psid (0.07 bar) for 30 min
  - Autoclavable at 257°F (125°C) for 30 min

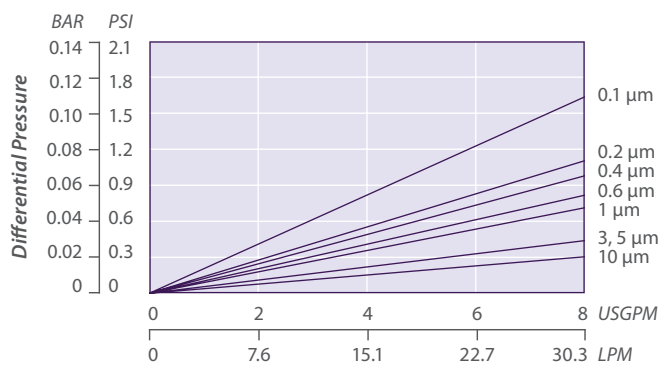
## QMC NOMENCLATURE INFORMATION

Filter Type	Retention Rating (microns)		Nominal Length (inches)		End Configuration	Gasket or O-Ring
QMC Series	0.1	1	-5	-20	P Double Open End	B Buna-N
	0.2	3	-9.75 <sup>1</sup>	-30	P2 226/Flat Single Open End	E EPDM
	0.4	5	-10	-40	P3 222/Flat Single Open End	S Silicone
	0.6	10			P7 226/Fin Single Open End	T Teflon encap. Viton (O-Rings only)
				P8 222/Fin Single Open End	T Teflon (gaskets)	
				PX Extended Core	V Viton	
				AM Single Open End, Internal O-Ring		
				NPC Double Open End, Internal O-Ring		
Example: QMC 1-20P3V						
QMC	1		-20		P3	V

<sup>1</sup>Available only for DOE (P) configuration

## QMC FLOW RATE

Typical Flow Rate Clean Water at Ambient Temperature  
(per 10" cartridge)



For liquids other than water, multiply pressure drop by the fluid viscosity in centipoise

## REMOVAL EFFICIENCY

Beta Ratio Efficiency	Beta 100 99%	Beta 20 95%
0.1 μm	0.8	0.1
0.2 μm	1.0	0.2
0.4 μm	2.0	0.4
0.6 μm	3.0	0.6
1 μm	6.0	1.0
3 μm	14.0	3.0
5 μm	17.0	5.0
10 μm	25.0	10.0

$$\text{Beta Ratio} = \frac{\text{Upstream particle counts}}{\text{Downstream particle counts}}$$

The micron ratings shown at various efficiency and beta ratio value levels were determined through laboratory testing, and can be used as a guide for selecting cartridges and estimating their performance. Under actual field conditions, results may vary somewhat from the values shown due to the variability of filtration parameters.

Testing was conducted using the single-pass test method, water at 2.5 gpm/10" cartridge. Contaminants included latex beads, coarse and fine test dust. Removal efficiencies were determined using dual laser source particle counters.

### FOR MORE INFORMATION

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