3M™ 740 Series

Filter Cartridges

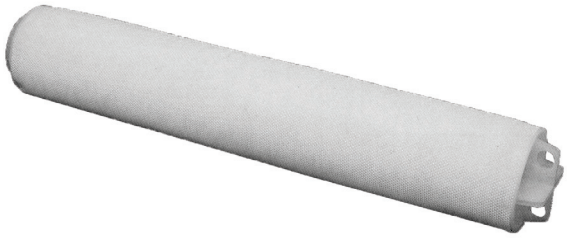
3M™ 740 Series filter cartridges are high efficiency, outside to inside flow direction liquid filtration cartridges designed for applications with high contaminant removal requirements.

The 3M 740 Series cartridges are for use in filter housings that accept 6.5" (165 mm) outside diameter, 40" (1016 mm) length filter cartridges with 226 o-ring connections.

The large diameter, pleated depth media cartridge design permits higher flow rates than standard 2.5” diameter filter cartridges resulting in significantly fewer required filter cartridges for a given flow.

3M polypropylene microfiber forms the basis of the filtration media utilized in the 3M 740 Series filter cartridges. 3M’s manufacturing processes allow for tightly controlled specifications resulting in a filter media with consistent and predictable particle retention characteristics. The 3M 740 Series cartridges are offered in micron grades ranging from 1 µm to 70 µm (@ 99.9% Particle Removal Efficiency).

The 3M 740 Series cartridges are offered in two configurations – the “B” and “K” versions. The “B” versions contain the maximum amount of filter media surface area for those applications where the highest contaminant holding capacity and/or throughput is desired. The “K” versions contain an optimized amount of filter media surface area (60% - 70% of ‘B” versions) for those applications where a lower unit cost filter design is beneficial. For both designs, the microfiber media is pleated in a radial design (a 3M Innovation) which optimizes the usable surface area of the filter cartridges. The 3M 740 Series cartridges utilize polypropylene end caps, outer sleeves and cores to protect the pleat structure integrity and provide a robust filter construction. A double o-ring seal design is incorporated to reduce the risk of fluid bypass.



Applications

- Process Waters (pre-RO, Cooling...)
- Machine Coolants
- Chemicals
- Refining (Amine, Final Product...)
- Ground/Reclaimed/Waste Waters
- Well Injection & Produced Waters

Features & Benefits

Higher Flow Capability per Cartridge (vs. conventional 2.5” diameter cartridges)

- Fewer cartridges required, resulting in:
  - Reduced cartridge handling
  - Less individual cartridge seal points reducing chance of fluid bypass

Radial Pleat Design

- High contaminant capacity

Use of 3M Microfiber Filtration Medias

- Consistent and predictable filtration performance
- High particle removal efficiencies throughout filter life

Easy to Use

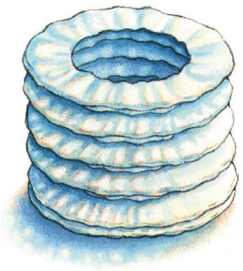
- No special tools or hardware required for filter change-out

All Polypropylene Filter Construction

- Broad chemical compatibility

FDA Compliant

- Compatible in applications requiring direct food contact in food and beverage processing per 21 CFR

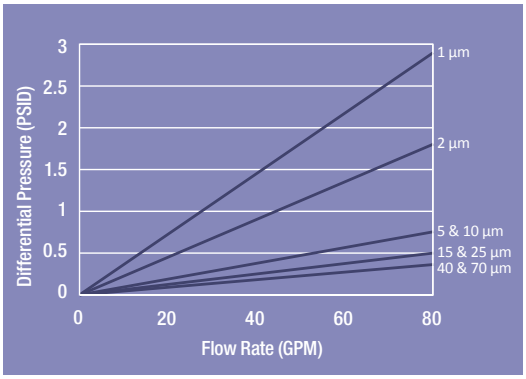


3M™ 740 Series Filter Cartridge Specifications

Construction	
Filter Media, Center Core, End Caps, Outer Sleeve	Polypropylene
Sealing O-ring	Nitrile [1]
O-ring Size	226
Operating Conditions	
Maximum Flow Rate	60 gpm (14 m^3/hr) – (1 µm & 2 µm versions) 80 gpm (18 m^3/hr) – (all other versions)
Maximum Operating Temperature	160° (71°C)
Maximum Forward Differential Pressure	50 psid @ 68°F (3.4 bar @ 20°C)
Recommended Change-out Differential Pressure	35 psid @ 68° (2.4 bar @ 20°C)
Cartridge Dimensions	
Inside Diameter (nominal)	1.5" (38.1 mm)
Outside Diameter (nominal)	6.5" (165 mm)
Length (nominal)	40" (1016 mm)
Regulatory	
All component materials of construction are listed for food contact per FDA 21 CFR Parts 170-199	

[1] Contact factory regarding availability of other o-ring materials

Graph 1: 3M™ 740 Series Filter Cartridges Pressure Drop vs. Flow Rate Information



NSF COMPONENT

3M™ 740 Series filter cartridges are tested and certified by NSF International against NSF/ANSI Standard 61 for material requirements only.*

* For 1µm, 2µm, 5µm, 10µm, 15µm versions only

3M™ 740 Series Filter Cartridge Ordering Guide

Model	Filter Construction	Length	Material (Media/ Plastic Components)	Micron Grade (@ 99.9% PRE)	Gasket Material	Packaging
740 – 740 Style	**B –** Maximum Filter Area **K –** Optimized Filter Area	**40 –** 40" Nominal	**PP –** Polypropylene	**001 –** 1µm **002 –** 2µm **005 –** 5µm **010 –** 10µm **015 –** 15µm **025 –** 25µm **040 –** 40µm **070 –** 70µm	**D –** Nitrile	**1 –** 1 per Case

Important Notice

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