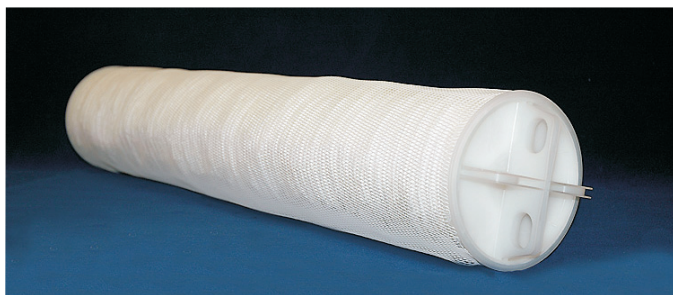


3M™ Series 740B30 High Throughput Filter Cartridges



FEATURES, ADVANTAGES AND BENEFITS

3M™ Series 740B30 High Throughput Filter Cartridge, which incorporates the radial pleat, puts an extraordinary amount of surface area into a single cartridge. This results in the following:

- ◆ High loading capacity for long life and lower cost filtration.
- ◆ Fewer cartridges for fewer change-outs and lower labor cost.
- ◆ Fewer seals, reduced risk of bypass resulting in high quality filtration.
- ◆ Low disposal costs, less than a tenth of some cartridges.

APPLICATIONS

Prefilters or Final Filters for:

- Acids and bases
- Amines
- Desalination
- DI resins
- Glycol
- Machine coolants
- Process Water
- Plating solutions
- Wastewater
- Waterflood

MATERIALS OF CONSTRUCTION

Filter Media:

Melt blown polypropylene microfiber filter media provides high particle removal efficiency for high quality filtration with broad chemical compatibility.

No silicone is intentionally used in materials of construction or in manufacturing.

The raw materials composing these filters are FDA compliant according to CFR Title 21.

O-rings:

Model Number	Material
7010	FDA Buna N (standard)
Other O-rings available; please consult factory	

PERFORMANCE DATA

Loading Capacity

Model Number	742B	743B	744B	745B	746B	747B	748B	749B
Pounds at 30 gpm	8.9	13.4	13.3	13.3	13.7	16.1	17.3	17.5
Kilograms at 7 cu m/hr	4.0	6.1	6.0	6.0	6.2	7.3	7.8	7.9

Loading: The data above shows typical loading capacities of the different micron rated filters. Loading capacity is determined by challenging a filter with a dispersion of silica test dust in water at the recommended flow rate. Pressure drop is monitored and testing is terminated at 50 psid (3.4 bar); 742B is terminated at 35 psid (2.4 bar). The loading capacity reported is the dry weight gain of the cartridge.

Particle Removal Efficiency (microns)

Model Number	742B	743B	744B	745B	746B	747B	748B	749B
Efficiency @99%	1	2	5	10	15	25	40	70
Efficiency @95%	0.9	1.1	2.5	8	9	13	24	43
Efficiency @90%	0.8	0.9	1.7	6	8	10	19	35
Efficiency @75%	<0.7	0.7	1.5	3.5	6	8	13	24
Efficiency @50%	<0.7	<0.7	1.1	1.5	4.0	4.5	8	14

Efficiency: The 3M 740B30 Series High Throughput Filter Cartridges are rated using a silica test challenge in water at 30 gpm (6.8 cu m/hr). The results reported are typical initial efficiencies taken within ten minutes of the start of the test.

3M Purification Inc. offers a complete line of support baskets to retrofit the 740B30 element into existing bag filter housings. The basket ordering guide (below) cross references the competitive filter bag housing manufacturer and model to the correct Series 740 support basket needed to upgrade to the Series 740 filter element.

3M™ Series 740 Element Support Basket Ordering Guide

Existing Bag Filter Housing		740 Basket Information		
MFG	Model	Inlet Entry	Size	Basket Part #
FSI	FSP & Up	Multi Element	#2	6044102
GAF	RB_C2L	Multi Element	#2	6044104
Hayward	Maxiline	Multi Element	#2	6044102
Rosedale	16 & Up	Multi Element	#2	6044102
Plenty	BF	Multi Element	#2	6044102

Clean Pressure Drop Versus Flow Rate (psid)

Model Number	742B	743B	744B	745B	746B	747B	748B	749B
Δp @ 10 gpm	0.30	0.20	0.10	0.10	0.10	0.50	0.05	0.04
Δp @ 20 gpm	0.70	0.50	0.20	0.20	0.10	0.11	0.10	0.08
Δp @ 30 gpm	1.00	0.90	0.40	0.30	0.20	0.21	0.18	0.15
Δp @ 40 gpm	1.30	1.10	0.60	0.40	0.40	0.30	0.25	0.20

Pressure Drop: The 3M™ Series 740B30 High Throughput Filter Cartridges have low initial pressure drop (Dp) in water as the table indicates. The table does not include the pressure drop of the vessel.

OPERATING CONDITIONS

Maximum Operating Temperature	160° F (70° C)
Recommended Flow (in water)	30 gpm (6.8 cu m/hr)
Maximum Flow (in water):	
742B30 & 743B30	45 gpm (10 cu m/hr)
744B30 – 749B30	60 gpm (14 cu m/hr)
Maximum Differential Pressure:	
742B30	35 psid (2.4 bar)
743B30 – 749B30	50 psid (3.4 bar)

Disposal

Disposal of used filter bags must comply with applicable federal, state and local laws and regulations.

PRODUCT SPECIFICATIONS

Model Number	Micron Rating Initial Efficiency	Part Number	NSF/ANSI Standard 61	Length	Outer Diameter	Cartridges per Case
742B30	1 micron @ 99%	70-0708-1618-9	See NSF Note below	28.75 in (73 cm)	6.5 in (16.5 cm)	1
743B30	2 micron @ 99%	70-0708-1619-7				
744B30	5 micron @ 99%	70-0708-1620-5				
745B30	10 micron @ 99%	70-0708-1621-3				
746B30	15 micron @ 99%	70-0708-1622-1				
747B30	25 micron @ 99%	70-0708-1623-9	No			
748B30	40 micron @ 99%	70-0708-1624-7				
749B30	70 micron @ 99%	70-0708-1625-4				

WARRANTY

Seller warrants its equipment against defects in workmanship and material for a period of 12 months from date of shipment from the factory under normal use and service and otherwise when such equipment is used in accordance with instructions furnished by Seller and for purposes disclosed in writing at the time of purchase, if any. Any unauthorized alteration or modification of the equipment by Buyer will void this warranty. Seller's liability under this warranty shall be limited to the replacement or repair, F.O.B. point of manufacture, of any defective equipment or part which, having been returned to the factory, transportation charges prepaid, has been inspected and determined by the Seller to be defective.

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Component

740B30 Series Filter Models 742B30, 743B30, 744B30, 745B30, and 746B30 are tested and certified by NSF International against NSF/ANSI Standard 61 for material requirements only.



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