

# COMBI III (Melt-blown absolute depth)

## Description

COMBI III cartridges which have absolute removal grade are melt blown 3 dimensional depth filter. A graded density matrix of all polypropylene or nylon fibers that makes random structure inside and high void volume.

This design produces a gradient pore structure, which effectively captures large particles in the outer sections while providing highly efficient and consistent removal of smaller particles in the innermost sections.



## Features

- Absolute micron rating
- Exceptional low pressure drop
- Excellent chemical compatibility
- High dirt holding capacity
- No media migration from thermally bonded fiber structure

## Applications

Food & Beverage Industry	Bottle water, wine, beer, green tea, fruit juice
Chemical Industry	Bulk chemical, sodium hypochlorite, acid, make up water
Cosmetics Industry	Mouthwash, lotion
Electronics Industry	CMP slurry, pre-RO, bulk chemical pre-filtration
Metal Finishing Industry	Machine coolant, plating solution, stripping solution
Oil & Gas Industry	Completion fluid, deep well injection, amine filtration
Pharmaceutical Industry	Pre-filtration, ultra-pure water system
Photographic Industry	Film processing, developer, fixer

## Specifications

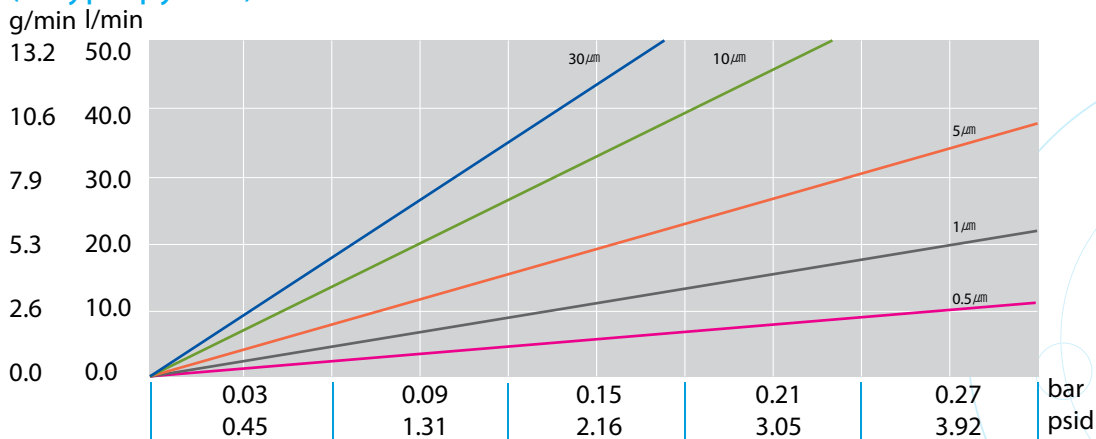
Dimension & Structure	Length	10", 20", 30", 40" / 254, 508, 762, 1016 mm
	ID	28 mm
Materials of Construction	OD	63 mm
	Effective filtration area	0.05m <sup>2</sup> per 10inch
Operating Conditions	Filtration media	Polypropylene / Nylon
	Inner Core	Polypropylene / Nylon
	O-rings & gaskets	Silicone, EPDM, Viton, TEV & Foamed polyethylene
Operating Conditions	Maximum differential pressure	30 psid / 2.1 bar at 60 60 psid / 4.2 bar at 30
	Maximum operating temperature	Polypropylene - 176 °F / 80 °C Nylon - 250 °F / 121 °C

## Liquid Particle Retention Ratings

Removal Ratings ( $\mu\text{m}$ )		$\beta = 5,000$		$\beta = 1,000$		$\beta = 10$	
Polypropylene	Nylon	99.98%		99.90%		90.00%	
0.5	-	< 0.5*	-	< 0.5*	-	< 0.5*	-
1	1	< 1.0*	< 1.0*	< 0.9*	< 0.9*	< 0.5*	< 0.5*
3	3	3.0	3.0	2.5	2.5	< 1.0*	< 1.0*
5	5	5.0	5.0	3.7	3.7	1.8	1.8
10	10	10.0	10.0	9.0	9.0	6.5	6.5
20	20	20.0	20.0	18.0	18.0	10.0	10.0
30	30	30.0	30.0	25.0	25.0	15.0	15.0
40	40	40.0	40.0	35.0	35.0	20.0	20.0
50	50	50.0	50.0	45.0	45.0	25.0	25.0
70	70	-	-	60.0	60.0	35.0	35.0
90	90	-	-	80.0	80.0	50.0	50.0
120	120	-	-	120.0	100.0	60.0	75.0

\* Extrapolated value

## Pressure Drop vs. Water Flow Rate (Polypropylene)



## (Nylon)

