



Depth **PRO** Series

**Absolute Rated Graded-Density
Melt-Blown Filter Cartridges**



Beta Ratio (B) = 1000 99.9% Absolute Efficiency High-Rigidity Self-Supporting Matrix

Available in Pure PP & Heavy-Duty nylon 6 Advanced Downstream Component Protection



MIKROPORE FILTRATION TECHNOLOGIES LLC

ABSOLUTE DEPTH PRECISION ENGINEERING TO RIVAL GLOBAL STANDARDS

The **DepthPRO Series** represents a major technological advancement in absolute-rated depth filtration, specifically engineered to outperform conventional spun cartridges and directly competes with industry benchmark rigid matrices.



ADVANCED ENGINEERING ADVANTAGES:

- Superior contamin holding capacity
- Longer service life and reduced downtime
- Consistent performance under demanding process conditions
- Broad chemical compatibility
- Absolute-rated filtration with high system reliability



GRADUAL APERTURE MATRIX:

Larger particles are trapped on the outer surface while micro-contaminants are captured deep within the inner layer, maximizing volumetric void spaces and extending service life.



DUAL MATERIAL RESILIENCE (PP & NYLON 6):

Constructed from 100% virgin food-grade polypropylene, perfect for general process liquids and non-corrosive chemicals.
DPRO-NY: Crafted from high-purity nylon, providing a rare and highly rugged solution for harsh aromatic hydrocarbons like butadiylene, and aggressive industrial solvents.



OPTIONAL REINFORCED CORES:

Elements can be ordered with built-in rigid polymer inner supports to prevent core collapse under continuous operational stresses.

OUTER SURFACE
COARSE POROSITY



INNER CORE
ULTRA-DENSE
RETENTION
ZONE



GRADUAL DENSITY TRANSITION



Manufactured through a continuous, automated melt-blown integrated extrusion process, our cartridges are formed into a high-strength self-supporting structure without the use of binding resins, adhesives, or chemical surfactants. The graded-density pore profile transitions from coarse open pores on the exterior to an ultra-dense, uniform absolute retention zone at the center, delivering **99.9% particle removal efficiency (Beta 1000)** even under pulsating hydraulic shocks or high fluid viscosity.

Applications & Technical Specifications

Typical Critical Process Applications:



Fine Chemicals & Petrochemicals:
Absolute purification of technical solvents, paints, automotive coatings, inks, resins, toluene, and benzene streams.



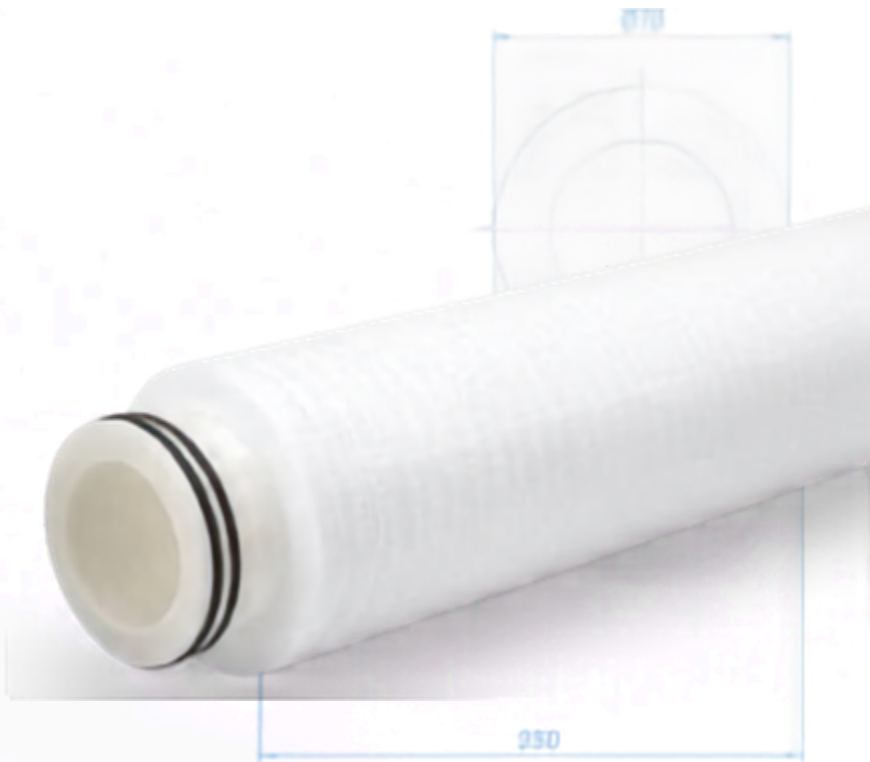
Biopharmaceuticals & Laboratories:
Pre-filtration protection upstream of expensive BioSafe membranes, reducing bioburden in diagnostics and chemical wash loops.



Electronics & Microelectronics:
Clarification of processing chemical feed lines and point-of-use deionized (DI) water treatment.



Food & Beverage Refining:
Trap filtration for syrups, purees, liquid ingredients, and general utility water polishing.

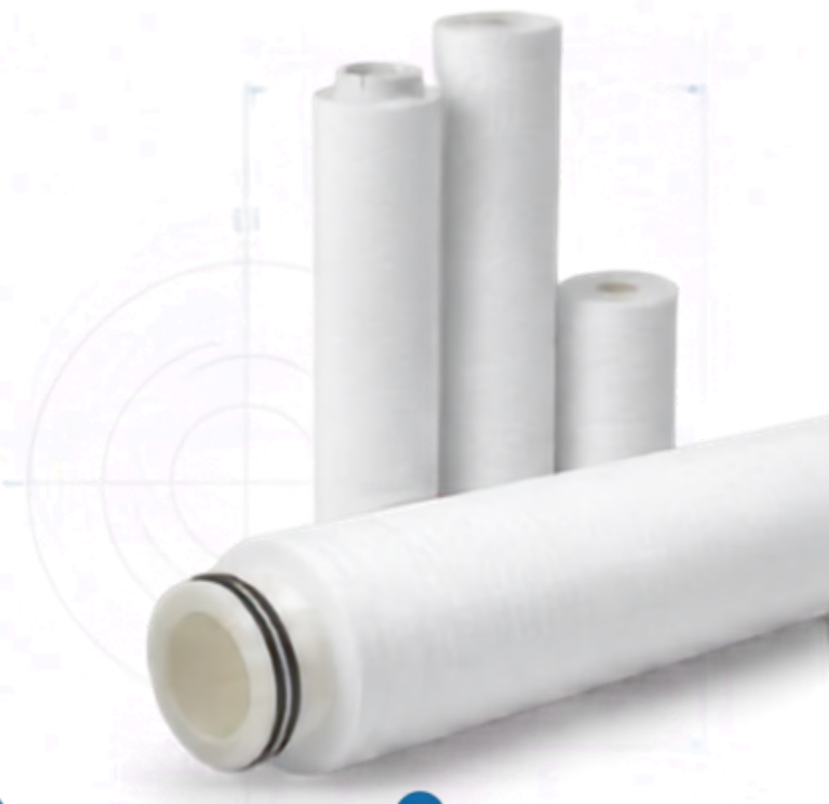


Technical Working Characteristics:

OPERATIONAL DATA		Polypropylene Grade (DPRO-PP)	Nylon Grade (DPRO-NY)
 Maximum Service Temperature:		80 °C (176 °F)	120 °C (248 °F)
 Max. Forward Differential Pressure:		0.40 Pa @ 21 °C / 0.20 Pa @ 80 °C	0.40 Pa @ 21 °C / 0.20 Pa @ 120 °C

Rigid Fiber Cohesion for Consistent Particle Interception

The advanced thermal fusion bonding of the DepthPRO microfilters ensures a highly locked matrix. Unlike standard melt-blown filters that compress or channel under pressure, DepthPRO maintains its pore consistency, ensuring stable Beta 1000 efficiency throughout its operational life.



Part Number / Selection Configurator

Build your custom DepthPRO Microfiber part number using the matrix below:

1

DPRO

-

2

PP

-

3

010

-

4

20

-

5

P28

-

6

C7

-

7

V

# 1. Series Code	 2. Filter Media Type	 3. Microrating	 4. Element Length	 5. Inner Support Option	 6. Adapter Interface	 7. Seal Material
DPRO DepthPRO	PP Polypropylene NY Nylon Matrix	010 = 1.0 µm 030 = 3.0 µm 050 = 5.0 µm 100 = 10 µm 200 = 20 µm 300 = 30 µm	10 = 10" 20 = 20" 30 = 30" 40 = 40" 500 = 50" 100 = 100" 150 = 150"	M28 = Coreless, 28mm ID L30 = Coreless, 30mm ID P28 = PP Core, 28mm ID P30 = PP Core, 30mm ID	DOE = Double Open End C3 = 222 / Flat End C8 = 222 / Fin End C2 = 226 / Flat End C7 = 226 / Fin End	S = Silicone V = Fluoroelastomer E = EPDM N = NBR T = TEV (Teflon Encap)



GLOBAL HEADQUARTERS



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