

## DEPTH FILTER CARTRIDGE IN MELT-BLOWN PP MICRO-FIBERS

Ultra-fine fiber technology High retention efficiency Available in very tight pore sizes

### **MATROX ULTRA**

# A safe and versatile high performance controlled porosity depth filtration cartridge

Matrox Ultra combines the trademark performance of the Matrox range with Melt-Blown Ultrafine Fibre technology, to significantly increase the cartridge's retention efficiency when filtering liquids containing organic and inorganic aggregates. For critical filtration applications, the Matrox Ultra delivers consistently high particulate retention rates that equal the performance of absolute-rated filters. This cartridge removes particles below one micron, which impair the liquid's brightness and transparency. Similarly to Matrox, the Matrox Ultra also employs a graded density structure. The external, low density part of the filter separates coarser particulate, preventing the premature blocking of the filter. The internal, higher density part separates finer particulate. This configuration also gives the cartridge a superior contaminant holding capacity.

The use of bonding processes in assembly without the use of resins or adhesives reduces the level of extractables to a minimum and makes the whole component compact and rigid.

The Matrox Ultra cartridge is biologically inert, does not adsorb odor, tastes or color and is cleaned by simply flushing with hot water.





MELT BLOWN FILTER MATRIX



A safe and versatile high performance, controlled porosity depth filter cartridge

#### **TECHNICAL SPECIFICATIONS**

- high-precision depth filter, consistent quality performance right up until blocking
- Filtration efficiency: >99%
- rigid structure
- · biologically inert, no fiber release from the filter media
- no adsorption or release of color, odor and flavors
- wide chemical compatibility, easily regenerated with chemical products
- uniform filtration across the entire surface
- thermo-bonded construction with no surfactants, binders or adhesives
- all materials meet the requirements of FDA CFR Title 21 for food contact
- in compliance with EC Directive for food contact. Regulation (EU) No.10/2011+amendments;1935/2004-1895/2005

#### **OPERATING CONDITIONS**

Max operating pressure (∆p)	80°C @ 1.2 bar 60°C @ 2.1 bar
	20°C @ 4.2 bar
Recommended replacement pressure drop	2.0 bar @20°C
Suggested operating pressure range	0.1 to 2.0 bar

#### PORE SIZE RATING

0.3 um – 0.5um – 0.8um – 1.0um

#### **FLOW RATE**

Water Flow 20°C @0.1 bar /10"	0.3um	0.5um	0.8um	1.0um	Extra
Typical Flow Rate	3.0L/min	5.0L/min	8.0L/min	10.0L/min	high as flo the h

Extrapolation for multiple housings and higher pressure drops is acceptable, but as flows increase the pressure drop of he housing becomes more apparent

#### **FILTRATION AREA**

0.05m<sup>2</sup>/10"

#### SANITIZATION

Steam : 121°C/30mins – Hot water : 80°C/30mins

#### **MATERIALS OF CONSTRUCTION**

Filtering media	PP Ultra-Fine Melt-Blown Fibers
Supports	Polypropylene
Inner sleeve	Polypropylene
Connections and tip	Polypropylene
Cage (only CR version)	Polypropylene
Gaskets	Silicone (standard), EPDM, Viton, FEP

#### DIMENSION

Length	254mm (10")-508mm (20")-762mm (30")-1016mm (40")	
Outer diameter	69mm	
Inner diameter	26mm	

#### TRACEABILITY

Each filter element is identified by a lot number for complete traceability.

