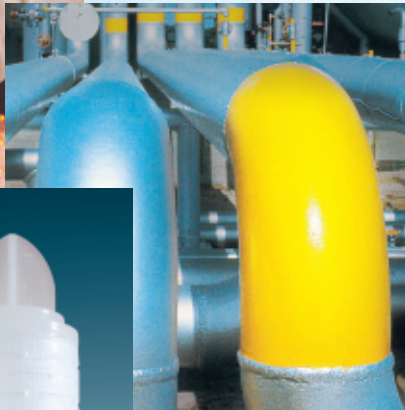
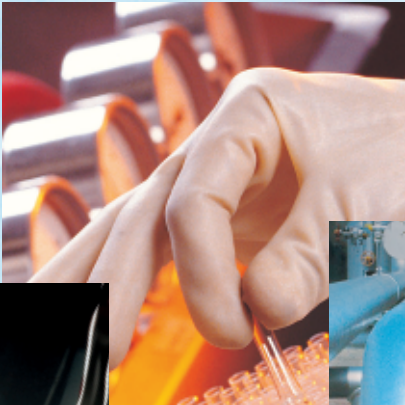


# HIGH PRECISION ABSOLUTE-RATED PLEATED POLYPROPYLENE FILTERS FOR CRITICAL PREFILTRATION OR FINAL FILTRATION

## MICROPRO<sup>®</sup>

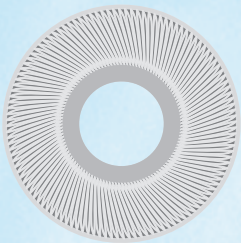
**The reliability of a polypropylene element, the safety and precision of an absolute-rated cartridge.**

Increasingly often, the quality standards that the industry demands today call for the use of polypropylene filters that ensure absolute reliability in terms of retention precision. The MICROPRO<sup>®</sup> absolute micron retention cartridge takes the manufacturing technology of pleated polypropylene filter cartridges a step further. These cartridges are extremely reliable in terms of filtration efficiency and retention grade, making them ideal for critical filtration applications. Graded density multi-layer technology, together with a high density medium, have created a cartridge with absolute retention capacity that is safe and reliable for applications demanding very high quality standards. An innovative pleating system gives the cartridge a very high filtration area and excellent solids holding capacity. The use of thermo-bonding and ultrasound bonding processes in assembly without the use of resins or adhesives eliminates all extractables and makes the whole component compact and resilient.



## MICROPRO®

The reliability  
of a polypropylene element,  
the safety and precision  
of an absolute-rated cartridge.



GRADED DENSITY MULTI-LAYER



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## TECHNICAL SPECIFICATIONS

- exceptionally fine retention and consistent quality right up until blocking
- very large effective filtration area and precise pore ratings
- controlled porosity and uniform filtration across the entire surface
- no fibre release from the filter media
- no adsorption of colour or odour
- backflush regenerable
- sterilisation in autoclave or with inline steam at 210°F
- all materials meet the requirements of FDA CFR Title 21 for food contacts
- all materials compliant with USP class VI, 'Plastic Biosafety'
- broad chemical compatibility

## OPERATING CONDITIONS

Max. operating temperature	175°F@30 psi (80°C@2.0 bar)
Max. operating pressure ( $\Delta p$ )	70 psi@140°F (5 bar@60°C)
Recommended operating $\Delta p$	35 psi (2.5 bar)
Back pressure rating ( $\Delta p$ )	20 psi@100°F (1.5 bar@40°C)

## RECOMMENDED FLOW RATE (H<sub>2</sub>O@68°F/10" – 1.0 psid)

MICRON RATING	0.5-0.6 $\mu\text{m}$	5 gpm (19 lpm)
"	1.0 $\mu\text{m}$	6 gpm (22 lpm)
"	2.5 $\mu\text{m}$	7 gpm (26 lpm)
"	5.0 $\mu\text{m}$	9 gpm (34 lpm)
"	10.0 $\mu\text{m}$	11 gpm (42 lpm)
"	20.0 $\mu\text{m}$	12 gpm (45 lpm)
"	40.0 $\mu\text{m}$	14 gpm (53 lpm)

## SANITISATION

Hot water sanitisation	30 min.@175°F (80°C)
Steam sterilisation	20 min.@250°F (120°C)
Chemical sanitisation	with commonly available chemical products

## PORE SIZE RATING

0,5 – 0,6 – 1,0 – 2,5 – 5,0 – 10,0 – 20,0 – 40,0  $\mu\text{m}$ 

Filtration efficiency: &gt;99.99%

(ISO4572 ACFTD AC FINE TEST DUST<20  $\mu\text{m}$  / AC COARSE>20  $\mu\text{m}$ )

## MATERIALS OF CONSTRUCTION

filter media	polypropylene no resins or binding agents
upstream/downstream supports	polypropylene
inner support core	polypropylene
outer protection cage	polypropylene
end caps	polypropylene
seals	silicone (standard) Viton®, EPDM, Buna N, PTFE

## SEALING METHOD

Ultrasound / Thermo-bonding

## DIMENSIONS

Length	10" (254 mm), 20" (508 mm) 30" (762 mm), 40" (1016 mm)
External diameter	2.71" (69 mm)
Internal diameter	1.02" (26 mm)

## TRACEABILITY

Each filter element is identified with a batch number for complete traceability.