

## Profile® Nano Filters for CMP Applications

### Description

The Profile® Nano filter has been developed to classify both ceria and low solids colloidal silica slurries typically used in advanced CMP processes, such as shallow trench isolation (STI) and barrier copper. Pall's most advanced melt-blowing process has been utilized to manufacture extremely fine fibers that improve removal efficiency of particles as fine as 100 nm. The ultra-fine fiber matrix is ideally suited for removing particles like ceria that are predominantly captured by mechanical filtration mechanisms like sieving.

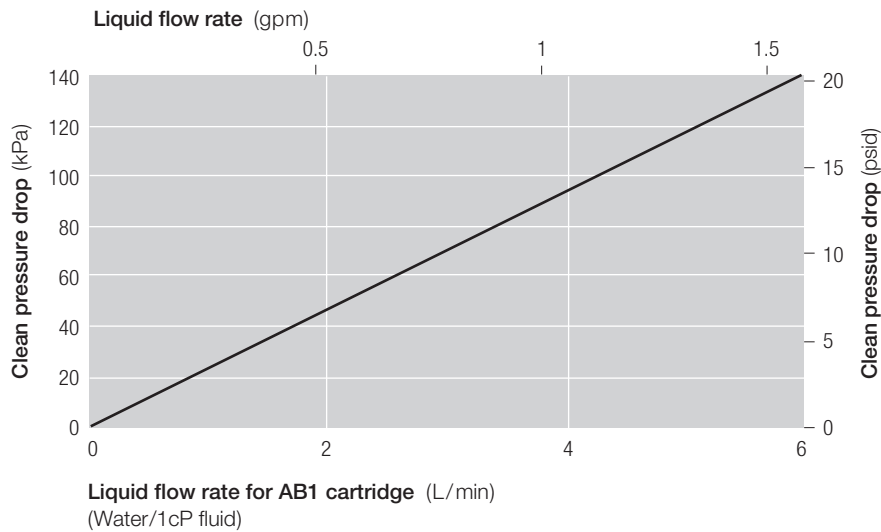
- Multi-zone pore construction optimizes both efficiency and long service life
- Each zone is manufactured to a given specification that ensures consistent, reproducible performance
- Steep efficiency curves result in minimal strip-out of desirable slurry particles while sharply increasing removal of oversized particles



### Specifications

<b>Materials</b>	<ul style="list-style-type: none"> <li>• Medium: polypropylene</li> <li>• Core, cage, and endcaps: polypropylene</li> <li>• O-ring options: ethylene propylene (EPR)</li> </ul>
<b>Removal ratings</b>	<ul style="list-style-type: none"> <li>• 100 nm</li> </ul>
<b>Configurations</b>	<ul style="list-style-type: none"> <li>• Nominal length: 102 mm / 4 in, 254 mm / 10 in, 508 mm / 20 in, 762 mm / 30 in, 1016 mm / 40 in</li> <li>• Diameter: 63 mm / 2.5 in</li> <li>• O-ring size / end caps: Code 19 (222 double O-ring flat end)</li> </ul>
<b>Operating conditions</b>	<ul style="list-style-type: none"> <li>• Maximum operating temperature: 82°C / 180°F</li> <li>• Maximum differential pressure: 0.41 MPa @ 30°C / 60 psid @ 85°F 0.34 MPa @ 50°C / 50 psid @ 120°F 0.2 MPa @ 70°C / 30 psid @ 160°F 0.1 MPa @ 82°C / 15 psid @ 180°F</li> </ul>

## Pressure Drop vs. Liquid Flow Rate



## Ordering Information

Pall Part Number = AB 1 NP10019J

Table 1

Code	Cartridge length mm / in
04	102 / 4
1	254 / 10
2	508 / 20
3	762 / 30
4	1016 / 40



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