

Profile® Nano Filters for CMP Applications



Data Sheet MEPNFENb

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.

Features & Benefits

- 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



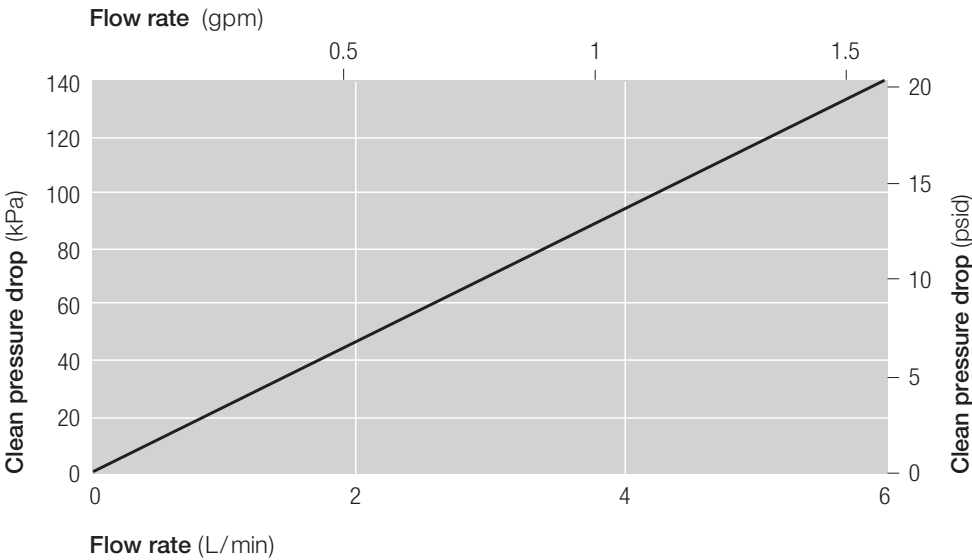
Materials of Construction

Filter Medium	polypropylene
Core, Cage, End Caps	polypropylene
O-ring Options	ethylene propylene (EPR)

Specifications

Removal Ratings	100 nm
Nominal Length	102 mm / 4 in, 254 mm / 10 in, 508 mm / 20 in, 762 mm / 30 in, 1016 mm / 40 in
Diameter	63 mm / 2.5 in
O-ring Size / End Caps	Code 19 (222 double O-ring flat end)
Maximum Operating Temperature	82 °C / 180 °F
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

Typical Flow Characteristics - 1cP fluid, 20 °C



Part Numbers / Ordering Information

AB 1 NP10019J

Table 1

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



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