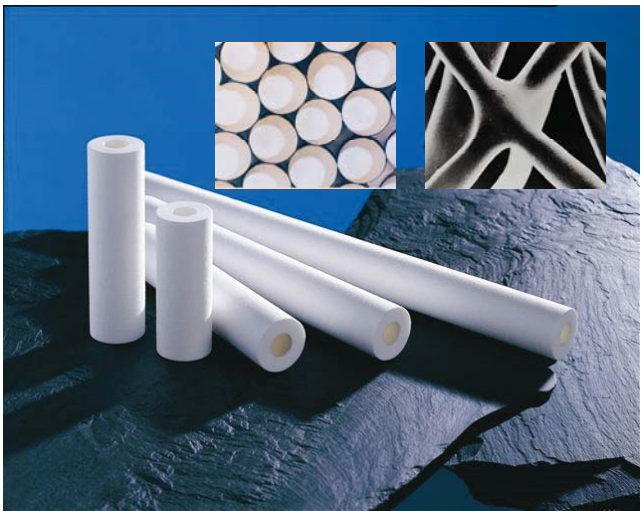
CLEAL® CP FILTER

Features, Advantages and Benefits:

- **Excellent Chemical Compatibility** Polyolefin construction conforming to FDA regulations provides excellent chemical resistance for a large variety of applications.
- **Rigid Depth Filtration Design** Maximises dirt holding pore volume in media & ability to remove challenging gels and deformable contaminants as well as oversized rigid contaminants, eliminating rejection or rework.
- **Absolute and Nominally Rated.** Meet a wide range of requirements with consistency and reliability whilst minimising filter inventory.
- **Bicomponent Fibre Construction** Manufactured with advanced JNC fibres with lower melting point outer sheath to create 3-dimensional bonding wherever the fibres touch without the distortion, high web density and pore collapse that typically occurs with highly fused, fine unicomponent fibres. The porous structure is maintained by the more rigid inner fibres which do not melt during the nodal fusion process producing a highly porous and rigid structure for reliability and consistency.
- **Long Service Life** Extra fine fibre construction results in high media porosity thus low clean pressure drop and large dirt holding capacity, delivering long filter life.
- **No Media Migration or Rating Drift** Rigid nodally fused structure ensures consistent performance throughout filter life without particle unloading, media channelling, end cap bypass, fibre release or media compression and contaminant push through. This ensures consistent performance throughout filter service resulting in less process variability and reliable, consistent processes and products.
- **Withstand High Differential Pressure** Excellent media rigidity enables cartridges to operate reliably under high differential pressure even in challenging applications such as pulsing flow and with high viscosity fluids.
- **Classification Filtration** Removal of larger defect causing particles and agglomerates without stripping small, acceptable or desired particles. This allows coatings and slurries to be processed so that defect causing contaminants are removed but filters are not blocked prematurely by pigment or slurry particles. It also facilitates much longer filter life in applications where a specified particle size must be removed but smaller particles are acceptable as these are allowed through rather than blocking the filter.

CP Filter Retention Ratings & Flow Data

Grade	Absolute µm 99.9%	Nominal µm	Specific Pressure Drop (mbar/lpm/ cP/250mm)	Specific Pressure Drop (psid/gpm/ cP/10")
CP-01	15	1	2	0.110
CP-03	20	3	1.6	0.088
CP-05	30	5	1.3	0.071
CP-10	40	10	1	0.055
CP-25	50	25	0.55	0.030
CP-50	70	50	0.4	0.022
CP-75	90	75	0.35	0.019
CP-100	100	100	0.3	0.016
CP-125	125	125	0.2	0.011
CP-150	150	150	0.15	0.008
CP-200	170	200	0.1	0.005



To calculate pressure drop, multiply relevant specific pressure drop by viscosity in centipoise ($g.cm^{-1}.s^{-1}$) by flow rate in litres per minute (lpm) [or US gallons per minute (gpm)] divided by cartridge equivalent single lengths (10" multiples). E.g. Clean pressure drop for 20" CP-25 cartridge with water flow of 20lpm (1cP viscosity) = 0.65x1x20/2 = 6.5mbar.

CP Filter Materials of Construction & Regulatory Compliance:

- Polyolefin
- Silicone Free Construction. Manufactured using carefully controlled materials and processes to ensure silicone or other defect causing contaminants are not present.
- Complies with CFR21 FDA regulations.

CP FILTER Standard Cartridge Specifications

Product	Adaptor	Inside Diameter (mm)	Inside Diameter (in)	Outside Diameter (mm)	Outside Diameter (in)	Maximum Differential Pressure 20°C (68°F)	Maximum Operating Temperature *
CP-01 to 100	DOE	30	1.18”	68	2.68”	5.5bard (80psid)	80°C (175°F)
CP-125 to 200	DOE	30	1.18”	65	2.56”	5.5bard (80psid)	80°C (175°F)

* Limit specifications are for general guidance only and users must check suitability for their own process conditions.

Special Configurations

CP FILTERs are available in special configurations on request. Length, inside and outside diameter can be modified and adaptors added to meet your requirements.

CLEAL® CP FILTER Ordering Guide

e.g. DOE (Double Open Ended) CP-10 30x68x254, DOE for tight PCD spacing (smaller o.d.) CP-10 28x64x254,

Cartridge Code	Nominal Micron Rating (µm)	Adaptor	Seal	Inside Diameter mm (in)	Outside Diameter mm (in)	Length mm (in)
			□	X	X	
CP-	**01** (1) **03** (3) **05** (5) **10** (10) **25** (25) **50** (50) **75** (75) **100** (100) **125** (125) **150** (150) **200** (200)	**Blank** DOE **G0** Gasket DOE PE Foam SOE **E3** Code 3 **M3** Code 0 **E7** Code 7 **M8** Code 8	DOE only **Blank** No Gasket **Blank** SOE only **1** NBR Rubber **2** Silicone Rubber **3** Fluoro Rubber **4** Fluoro-Polymer **5** EPT Rubber	DOE **30** (1.18”)	1-100µm **68** (2.68”) 125-200µm **65** (2.56”)	**250** (9.8”) **500** (19.7”) **750** (29.5”) **1000** (39.4”)
				DOE **28** (1.1”) For tight spacing	1-200µm **64** (2.52”)	**248** (9¾”) **254** (10”) **496** (19½”) **508** (20”) **743** (29¼”) **762** (30”) **992** (39”) **1016** (40”)
				SOE **25** (0.98”)	SOE **70** (2.76”)	Please refer to SOE Length Table 1 on Page 23

Note: □ = Space, Blank = No character or space