SF

Pleated filter elements

SF, is not only the best choice for a good protection of membrane filter elements, the large filter area guarantees high dirt capacity and consequently a long life. A wide choice of filter media is available to make it suitable for several process applications.

End-Cap configurations:

- A1 = Double open ended with flat gaskets
- C8 = O.R. 2-222 + capped - flat
- P8 = O.R. 2-222 + capped with spear
- C7 = O.R. 2-226 + bayonet - capped flat
- P7 = O.R. 2-226 + bayonet – capped with spear

Standard nominal lengths:

- 1 = 10" = 250 mm
- 2 = 20" = 500 mm
- 3 = 30" = 750 mm
- 4 = 40" = 1000 mm

Structure materials:

- outer cage: polypropylene
- inner core: polypropylene
- end-caps: polypropylene

All SF filter elements are provided with a multi- layer filter media with thermo-bonded fibres to prevent fiber release and contaminant downloading, most of them take advantage of polypropylene melt-blown microfibers to enhance filtration efficiency on very small particles.
The range comprehends also two borosilicate (glass fiber) and two polyester filter media. Borosilicate has a natural charge (Z potential) to capture organic matter, while polyester guarantees high permeability when only large particles have to be captured.

Main applications

- Sugar solution
- Trap filters in breweries
- Filtration and/or pre-filtration of wine
- Rinse water
- Spirits
- Milk
- Demineralised water
- Fluids of ultra-sonic cleaning systems
- Tank venting
- Moisture in air

SF

10 times the filter area of a conventional non-pleated element

CARTRIDGE CODE SELECTION

Series Identification	Filter media Material and Micron rating	Outer Cage	Cartridge Length	End-Cap # 1	End-Cap # 2	Gasket Material
SF	Please select from Table 1	None = - Extruded = Z Moulded = K	10" = 1 20" = 2 30" = 3 40" = 4	Open = A Capped = C Spear = P	Open = 1 O.R. 2-222 = 8 O.R. 2-226 = 7	Buna = N Viton = V Silicone = S EPDM = E PTFE = T
SF	Y50	K	3	P	8	S

TEHNOCON FILTER doo
Bulevar Maršala Tolbuhina 22
11070 Belgrade, Serbia

Ph/Fax: +381 11 311 4042
Web:www.tehnoconfilter.com
e-mail: office@tcfbeograd.com

Table 1 - Standard filter media

Filter media code	Material	Filter area	Particles removal in liquids: Nominal ß = 10	Nominal ß = 100	Absolute ß = 1000
Y80	polyester	0.70 m²	55*	68*	80*
Y50	polyester	0.65 m²	25	35	50
M25	polypropylene	0.60 m²	10	15	25
M15	polypropylene	0.60 m²	5	12	15
M8	polypropylene	0.60 m²	3	5	8
M3	polypropylene	0.60 m²	0.6*	1.5*	3
M1	polypropylene	0.60 m²	0.45*	0.8*	1*
M06	polypropylene	0.60 m²	0.2*	0.4*	0.6*
G1	borosilicate	0.60 m²	0.45*	0.8*	1*
G06	borosilicate	0.60 m²	0.2*	0.4*	0.6*

* - Extrpolated value

Definition of "Beta ratio"

The value of "ß" for a given particle size (x) is the result of the following ratio:

$$ß(x) = \frac{\text{n° of particles with size } >x \text{ up-stream}}{\text{n° of particles with size } >x \text{ down-stream}}$$

The relation between Beta ratio and efficiency, is as follows:

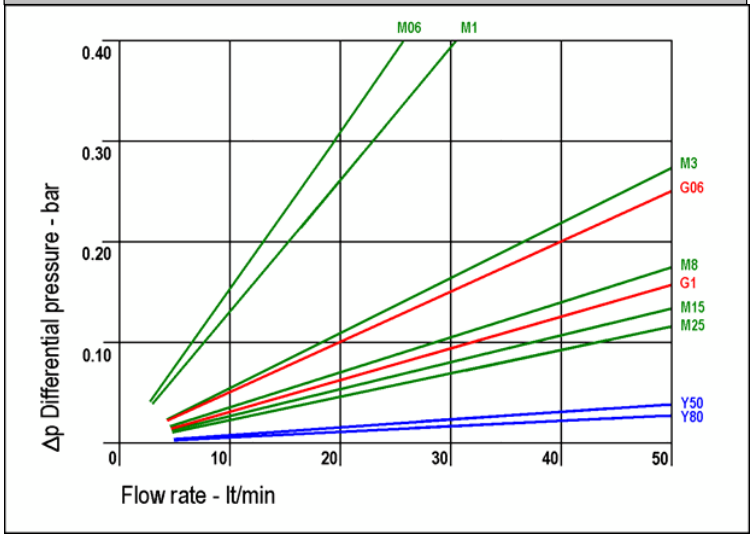
$$\text{Eff.\%} = \left(1 - \frac{1}{ß}\right) 100$$

Table 2 - Sterilization

Method	Filter media material: polyester	polypropylene	borosilicate
hot water max 80°C (*)	good	good	good
caustic soda max 80°C (*)	max conc. 3%	max conc. 30%	max conc. 3%
in line steam max 120°C (*)	good	good	good
sodium hypoclorite - cold	max conc. 5%	max conc. 5%	max conc. 10%
autoclave 120°C	good	good	good

(*) - Due to the elongation, cartridges with A1 configuration could stand a temperature of 40°C in line, while they can withstand 120°C in autoclave as well as the other configurations

Water flow-rate for a 10" module



TEHNOCON FILTER doo
Bulevar Maršala Tolbuhina 22
11070 Belgrade, Serbia

Ph/Fax: +381 11 311 4042
Web:www.tehnoconfilter.com
e-mail: office@tcfbeograd.com