

# REVERSE FINCELL HF

## coalescing filter elements for gas

Reverse Fincell HF filter elements are specially designed to purify large volumes of gas.

- High separation efficiency
- High flow capacity
- Low pressure drops (Energy saving)
- Double anti-entrainment barrier
- External stainless steel guard



**REVERSE FINCELL HF** are used in application where an high efficiency grade is needed to remove mist, aerosol, and solid particles from compressed gas.

Expensive catalytic beds, recompression booster equipment turbines and all the manufacturing process where clean gas is a must, need to have a strong upstream protection that can be met using Reverse Fincell HF filter element.

The coalescing effect is caused by the media stratification used in manufacturing; the contaminated compressed gas flows through the cartridge from inside to outside; the solid particles are trapped while the aerosols and the mist are agglomerated in larger droplets and conveyed by the gas flow to the final layers; the accumulated liquid flows by gravity to the bottom end of the cartridge from which drops into the sump at the bottom of the vessel.

The pleated filtering structure allows to gain an extended filtering surface with a lower pressure drop and therefore an enhanced operating life.

The performance of filter elements series Reverse Fincell HF is tested in accordance with ISO 12500-1 & ISO 12500-3.

### Filtration grade and characteristics

Description	RD		RA	
	3 micron	0,1 micron	0,5 micron	0,01 micron
Filtration grade	3 micron	0,1 micron	0,5 micron	0,01 micron
Solid removal efficiency	@ 99,9999 %	@ 99,9%	@ 99,9999 %	@ 99,999 %
Aerosol removal efficiency @ 0,3 micron	@ 99,99 %		@ 99,9995 %	
Design temperature	120 °C			
Residual Oil content at 20°C	0,1 mg/m3 ( assuming <30 mg/m3 @ inlet )		0,01 mg/m3 ( assuming <3 mg/m3 @ inlet )	
Pressure drop @ clean	60 mbar		90 mbar	
Pressure drop @ operation	140 mbar		200 mbar	
Pressure drop filter change	0,7 - 1,2 bar			
Max. differential pressure	3 bar			
Flow direction	Inside / Outside			
Media arrangement	Pleated			

## Materials

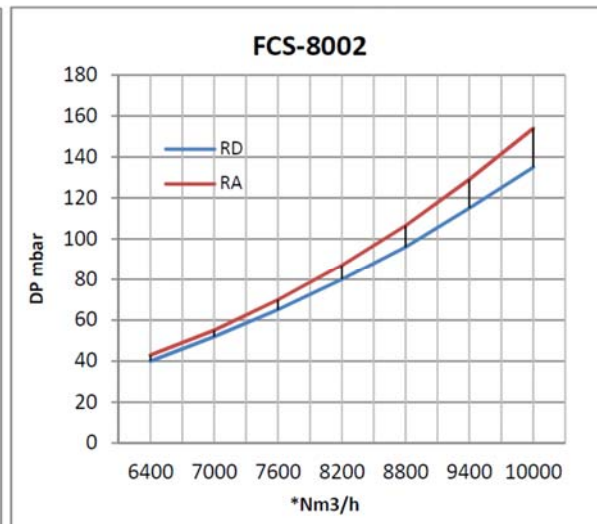
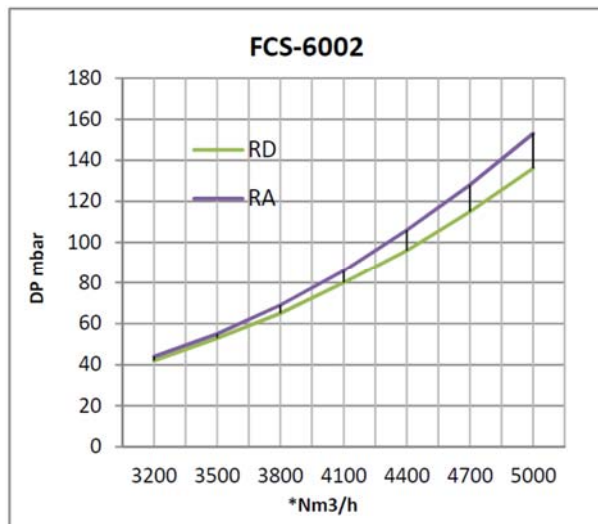
Description	Type	
	FCS	FCC (1)
End caps	S.S. AISI 304	S.S. AISI 316L
Internal core		
External cage		
Filter media	Borosilicate glass fiber + Cellulose resin impregnated	
Standard gaskets	V=Viton	
Gaskets on request	B=Buna N ; T=Teflon ; S=Silicone	

(1) available on request (minimum quantity)

## Selection table

Model	Filtering area	Flow rate *		Dimensions mm			
	cm <sup>2</sup>	Nm <sup>3</sup> /h	SCFM	OD	ID	Length	Center hole
<b>FCS-6002- **</b>	24.300	4100	2413	170	110	915	Not foreseen
<b>FCS-8002- **</b>	33.300	8200	4825	210	155	915	16

\*\* Select filtration degree required



\* Flow rate are referred to air at compressor intake conditions (1 bar abs. @ 20°C) and compressed at 7 barg

Data contained in this bulletin are informative and subject to change without notice. User is responsible for determining whether the product is fit for particular purpose and suitable for User's method of application.