

# F19CA

## Activated carbon cartridge filters



### Product

F19CA

### Metal plate

Galvanized steel, epoxy powder coated, black colour

### Cartridges

External cladding in painted stretched sheet metal

### SPECIFICATIONS

Activated carbon cartridge filters, model F19CA, consisting of powder-coated galvanized steel plate and galvanized steel sheet cartridge containing granular activated carbon.

### FUNCTIONS

They are applied in air handling units or ventilation ducts, downstream of high efficiency pre-filters that protect them against dust clogging.

### APPLICATIONS

Absorption of odours and toxic substances in gaseous form. Air purification in high airflow systems. Purification of ambient air from hydrocarbons, inorganic compounds, fume compounds.

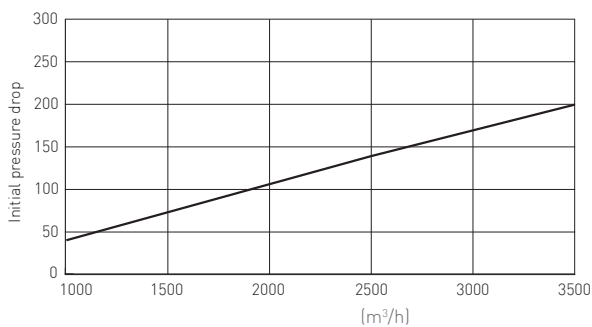
## TECHNICAL FEATURES

	F19CA 5 305 610	F19CA 9 610 610	F19CA 8 305 610	F19CA 16 610 610
Regenerability	Yes	Yes	Yes	Yes
Air flow rate (m <sup>3</sup> /h)	1500	3000	1750	3400
Pressure drop (Pa)	170	180	270	270
Cartridges No.	5	9	8	16
Total carbon quantity (kg)	16	28	20	40
Plate weight (kg)	3,6	6,6	3,5	6,2
Limit temperature value (°C)	50	50	50	50
Relative humidity (%)	70	70	70	70

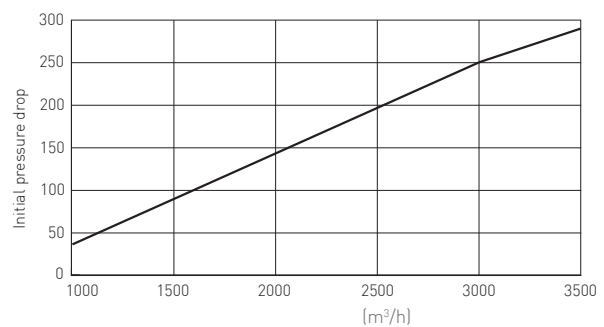
## PERFORMANCE CURVES

### F19CA

F19CA 610x610 - 9 CARTRIDGES



F19CA 610x610 - 16 CARTRIDGES



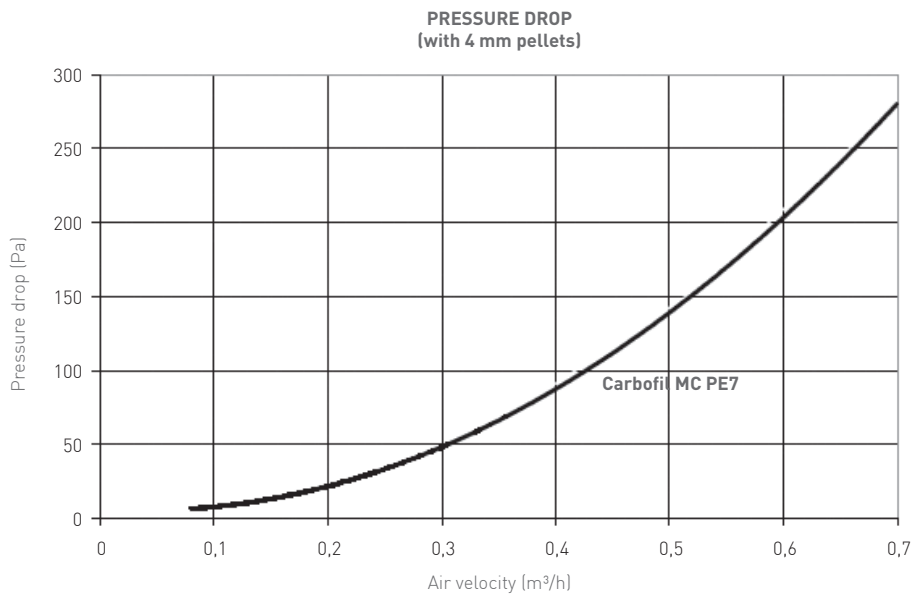


## TECHNICAL CHARACTERISTICS OF THE CONTAINED MATERIAL Activated carbon: standard analysis

Appearance	Pellets
Cylinder diameter (mm)	3,5 - 4,0
Cylinder length (mm)	5 -10
Density (Kg/m <sup>3</sup> )	490 – 520
Internal active surface - BET method (m <sup>2</sup> /g)	1000 (±50)
Total pore volume (cm <sup>3</sup> /g)	0,90
Humidity (%)	8 max
Total ash - ASTM D 2866 (%)	11 max
CCL4 Absorption - ASTM D 3467 (%)	50 min
Recommended face velocity (m/s)	0,3
Recommended contact time (s)	1

## PERFORMANCE CURVES

### ACTIVATED CARBON

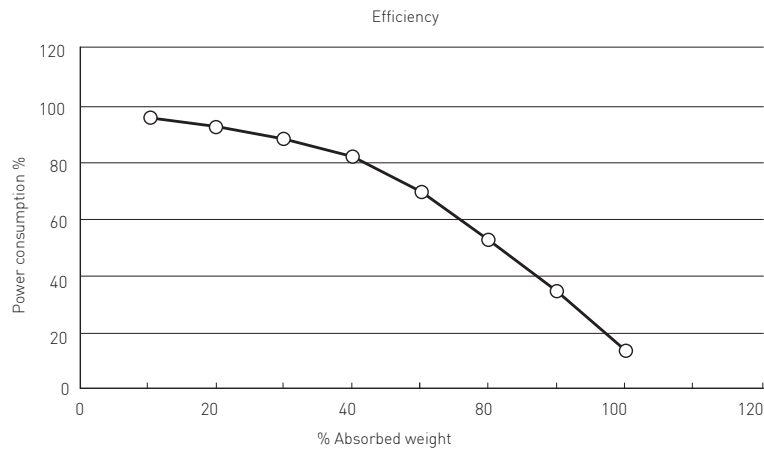


# F19CA

## Activated carbon cartridge filters

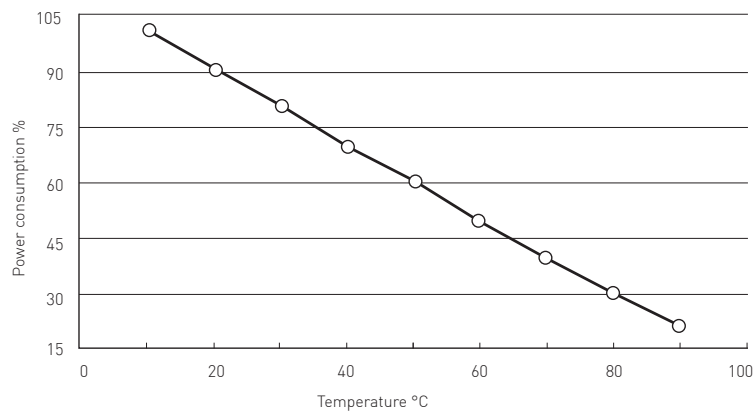
### INDICATIVE ACTIVATED CARBON FILTER LIFESPAN

Tests carried out on activated carbon filters have shown that there is a link between the quantity of solvents and the performance of the activated carbon itself. When the weight of the absorbed solvent is half the weight that can be absorbed by the carbon itself, the carbon filter rapidly loses its absorbing power. Therefore it is advisable to replace the carbon.



### RELATIONSHIP BETWEEN ABSORPTION AND OPERATING TEMPERATURE

% absorption as a function of temperature.



### INSTALLATION

Filters can be installed both vertically and horizontally, installed in ducts or in dedicated housings or inside filtration modules.

### MAINTENANCE

This type of filter is completely regenerable: saturated activated carbon must be regenerated using steam.

### DISPOSAL

Saturated activated carbon is not a toxic or hazardous waste. For disposal, refer to current regulations based on the substances treated with the activated carbon.



## PLATE DIMENSIONS

Front dimensions W x H x D mm	Cartridge holes N.	Cartridge outer diameter mm
305x610x24	5	160
305x610x24	8	140
592x592x24	9	160
592x592x24	16	140
610x610x24	9	160
610x610x24	16	140

## CARTRIDGE DIMENSIONS

External dimensions mm	Internal diameter mm	Height mm	Carbon quantity kg
140	70	400	2,5
160	90	400	3,1