

SYNTESI® ACTIVE CARBON FILTER

Activated-carbon filtering systems achieve the highest standard of purification possible in industrial applications. They eliminate all traces of oils, solvents and hydrocarbons, and remove unpleasant odours. The operating principle uses activated carbon, which absorbs most of the polluting particles in the air thanks to minute holes in the granules of carbon.

On the front and back there is a port (1/8" for size 1 and 1/4" for size 2) that can be used with pressure gauges, pressure switches or as an additional air intake. **The air taken from here is not filtered by the activated-carbon cartridge.**

Cartridge life and efficiency can be increased by using pre-filtered (5µm) and purified (0.01µm) air.

The cartridge must be replaced at set intervals as there is no difference in load loss between an efficient cartridge and a saturated one.

N.B.: to ensure the performance and duration stated on the data sheet, the load loss (ΔP) must not exceed 75 mbar.

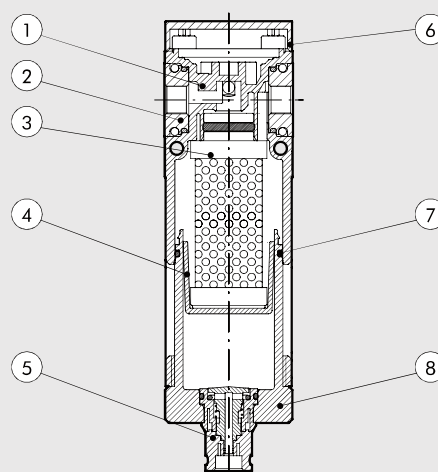


TECHNICAL DATA

TECHNICAL DATA		FIL CA SY1			FIL CA SY2			
Threaded port		1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
Residual oil at 20°C *	mg/m³	0.003 - output air purity class ISO8573-1: 1.7.1						
Duration of cartridge *	hours	4000			4000			
Max. inlet pressure	bar	15			13			
	MPa	1.5			1.3			
	psi	217			188			
Suggested flow rate at 6.3 bar (0.63 MPa; 91 psi)	Nl/min	350			800			
	scfm	12			28			
N.B.: flow rates higher than the recommended value reduces purification efficiency								
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C	From -10 to +50			From -10 to +50			
Weight	g	195	190	181	483	456	452	440
Condensate drain		RMSA: drain with manual condensate discharge and automatic discharge at zero pressure						
Fluid		0.01 µm filtered and deputed air						
Mounting position		In any position			In any position			
Additional air take-off port (unfiltered air from cartridge CA)		1/8", front and rear			1/4", front and rear			
Additional air take-off flow rate at 6.3 bar	Nl/min	500			1500			
(0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	scfm	18			53			
Wall fixing screws		No. 2 M4 screws			No. 2 M5 screws			
Notes on use		Upstream it's necessary to mount a coalescence filter depurator of 0.01µm.						
* if the load loss of 75 mbar is not exceeded								

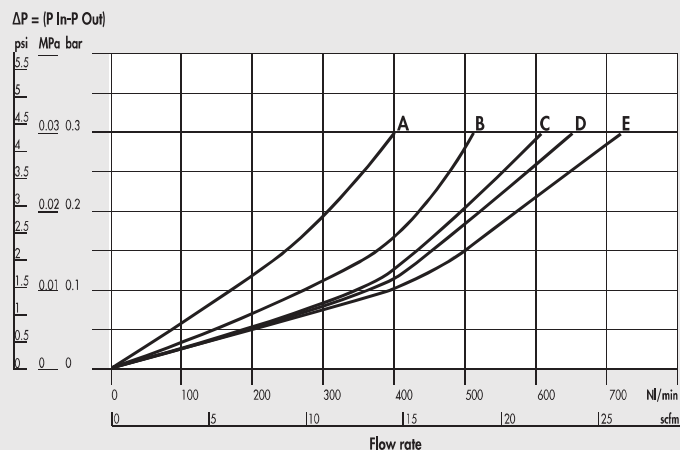
COMPONENTS

- ① Technopolymer depurator body
- ② IN/OUT bushing made of OT58 nickel-plated brass or passivated aluminium for 3/4" - 1"
- ③ Active carbon cartridge
- ④ Technopolymer cartridge support
- ⑤ Drain (RMSA)
- ⑥ Technopolymer plate
- ⑦ NBR o-ring gasket
- ⑧ Clear technopolymer bowl

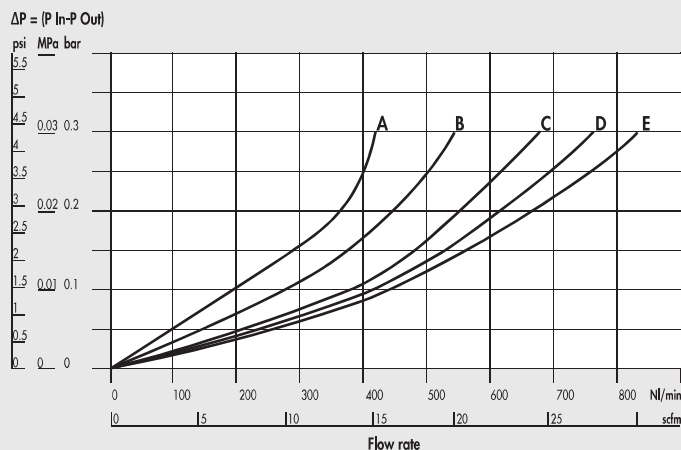


FLOW CHARTS

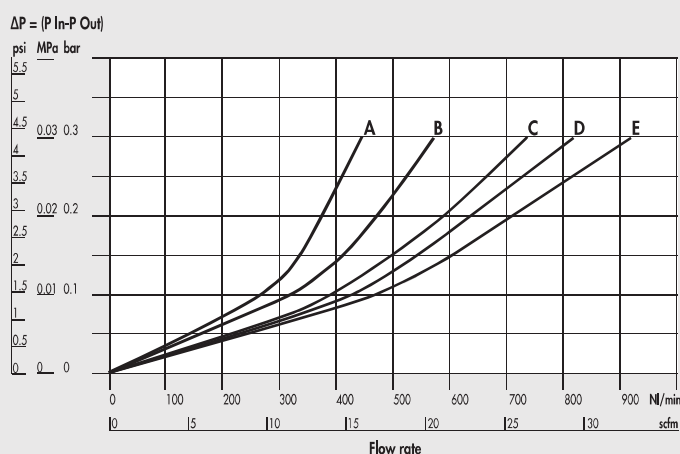
FIL CA Syntesi® SY1 1/8"



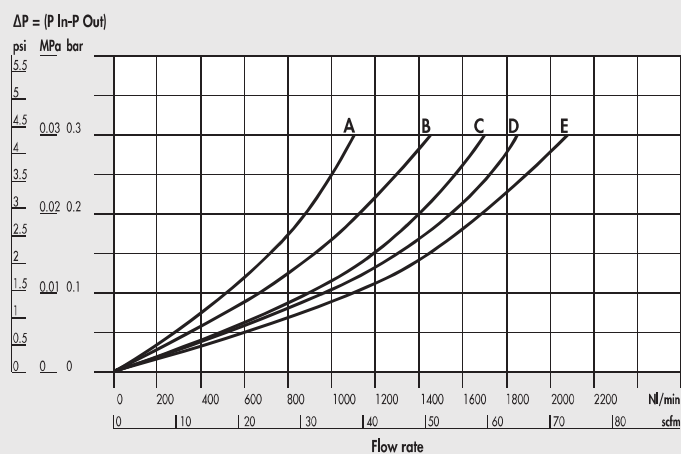
FIL CA Syntesi® SY1 1/4"



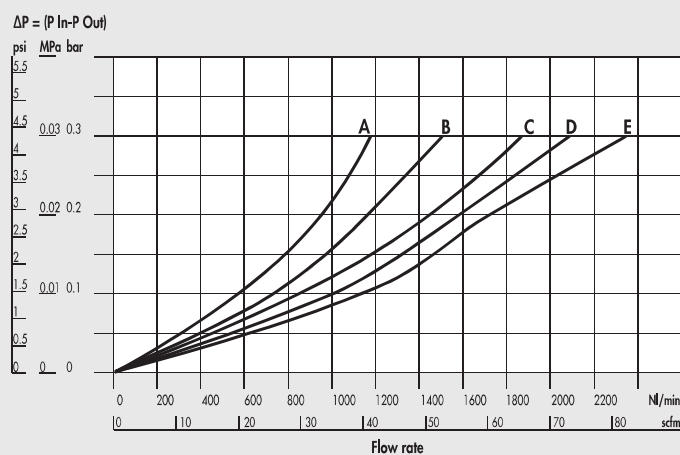
FIL CA Syntesi® SY1 3/8"



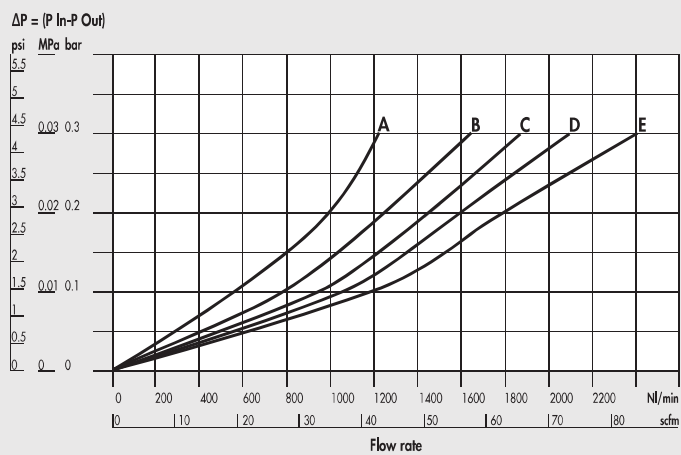
FIL CA Syntesi® SY2 3/8"



FIL CA Syntesi® SY2 1/2"



FIL CA Syntesi® SY2 3/4" - 1"

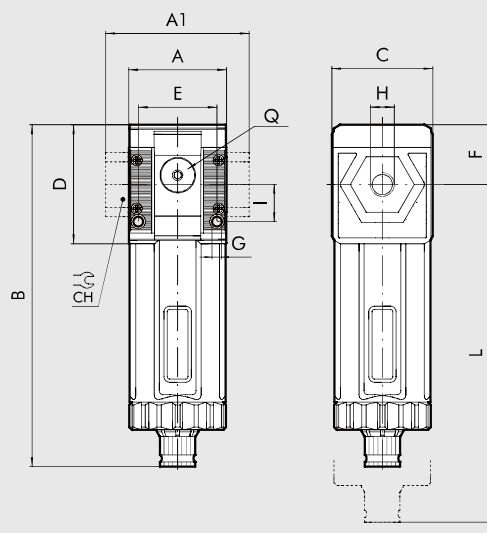


A = 2.5 bar - 0.25 MPa - 36 psi
B = 4 bar - 0.4 MPa - 58 psi

C = 6.3 bar - 0.63 MPa - 91 psi
D = 8 bar - 0.8 MPa - 116 psi

E = 10 bar - 1 MPa - 145 psi

DIMENSIONS



	SIZE 1			SIZE 2			
H (threaded port)	1/8"	1/4"	3/8"	3/8"	1/2"	3/4"	1"
A	42			61			
A1	-	-	44	-	-	95	95
B	148			178			
C	44			61			
CH	-			-	-	32	36
D	51.5			70.5			
E	33.5			47.5			
F	25.8			38.2			
G	Hole for M4 screws			Hole for M5 screws			
I	16			22.5			
L	202			245			
Q (no. 2 additional air takes-off)	1/8"			1/4"			

KEY TO CODES

56	1	1	C	10	1
SYNTESI	SIZE	THREADED INPUT CONNECTION	ELEMENT	TYPE	THREADED OUTPUT CONNECTION
56 Syntesi 5X Syntesi anti-corrosion	1 Size 1	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port	C Active carbon filter	10 RMSA	0 Without bushing 1 1/8" port 2 1/4" port 3 3/8" port
	2 Size 2	0 Without bushing 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port			0 Without bushing 3 3/8" port 4 1/2" port 5 3/4" port 6 1" port

RMSA: Drain with manual condensate discharge and automatic discharge at zero pressure.

PURCHASE ORDER CODES HAVING A MORE FREQUENT USE

N.B. Besides the below mentioned codes, you can order elements composed at your will according to the key to codes.

Syntesi® SY1 ACTIVE CARBON FILTER

Code	Description
5610C100	AC SY1 RMSA without bushings
5611C101	AC SY1 1/8 RMSA
5612C102	AC SY1 1/4 RMSA
5613C103	AC SY1 3/8 RMSA

Syntesi® SY2 ACTIVE CARBON FILTER

Code	Description
5620C100	AC SY2 RMSA without bushings
5623C103	AC SY2 3/8 RMSA
5624C104	AC SY2 1/2 RMSA
5625C105	AC SY2 3/4 RMSA
5626C106	AC SY2 1 RMSA

NOTE

Anti-corrosion version

5X

Example

5X11C101 AC SY1 1/8 RMSA anti-corrosion