

SYNTESI® FILTER

The job of the filter is to retain liquid or solid impurities present in the compressed air.

The incoming air is moved by the centrifuge unit, so that liquid particles, which are heavier, are projected against the walls of the container and force to adhere to it. As they accumulate, they create drops that deposit on the bottom by gravity.

The remaining solid particles are held back by the porous filtering element.

The condensate is maintained in a quiet state to prevent the deposited impurities from re-entering the circulation. The condensate drains out through the drain cock provided.

The RMSA drain discharges when the pressure in the filter drops to zero.

Alternatively the condensate can be drained by hand by pressing the button.

The RA drain discharges condensate from the container automatically whenever necessary, regardless of the pressure level.

On the front and the back is a 1/8" port for use with pressure gauges or pressure switches or, considering the high flow rate, as additional filtered air take-off.

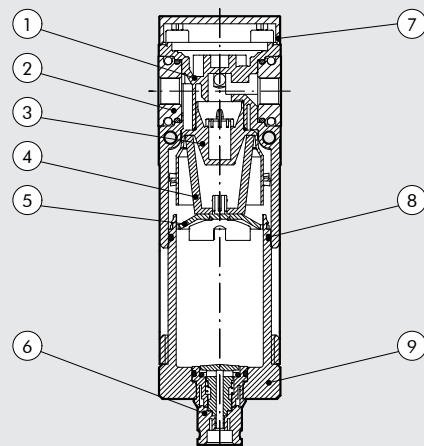


TECHNICAL DATA

		1/8"	1/4"	3/8"
Threaded port		1/8"	1/4"	3/8"
Degree of filtration	µm	5 (yellow) - output air purity class ISO8573-1: 3.7.4 20 (white) - output air purity class ISO8573-1: 4.7.4 50 (blue) - output air purity class ISO8573-1: 5.7.4		
Max. input pressure	bar	15		
	MPa	1.5		
	psi	217		
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 0.5 bar (0.05 MPa; 7 psi)	Nl/min	900	1200	1300
	scfm	32	42	46
Flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	1300	1650	1750
	scfm	46	58	62
Min/max temperature at 10 bar; 1 MPa; 145 psi	°C	From -20 to +50		
Weight	g	178	173	164
Condensate drain		RMSA: drain with manual condensate discharge and automatic discharge at zero pressure RA: automatic drain with condensate discharge, independent of pressure and flow rate Note: the maximum input pressure for the RA version must not exceed 10 bar Compressed air or other inert gases		
Fluid		Compressed air or other inert gases		
Condensate cup capacity	cm ³	30		
Mounting position		Vertical		
Port for additional air take-off		1/8", front and rear		
Additional air take-off flow rate at 6.3 bar (0.63 MPa; 91 psi) ΔP 1 bar (0.1 MPa; 14 psi)	Nl/min	500		
	scfm	18		
Wall fixing screws		No. 2 M4 screws		

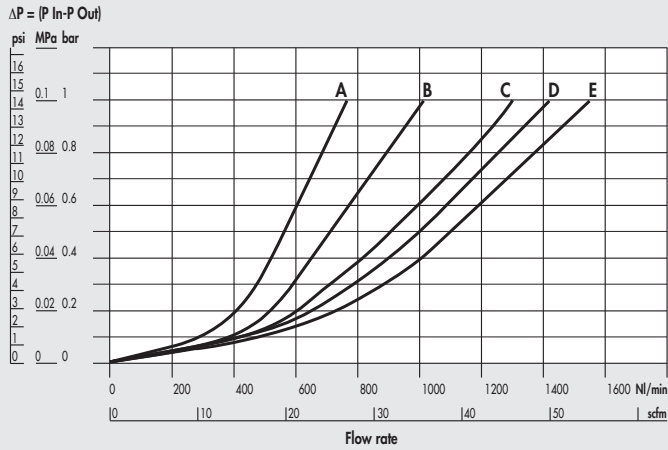
COMPONENTS

- ① Technopolymer filter body
- ② OT58 brass IN/OUT bushing
- ③ Technopolymer centrifuge
- ④ Sintered HDPE filter cartridge
- ⑤ Technopolymer screen
- ⑥ Drain (RMSA)
- ⑦ Technopolymer plate
- ⑧ NBR o-ring gaskets
- ⑨ Clear technopolymer cup

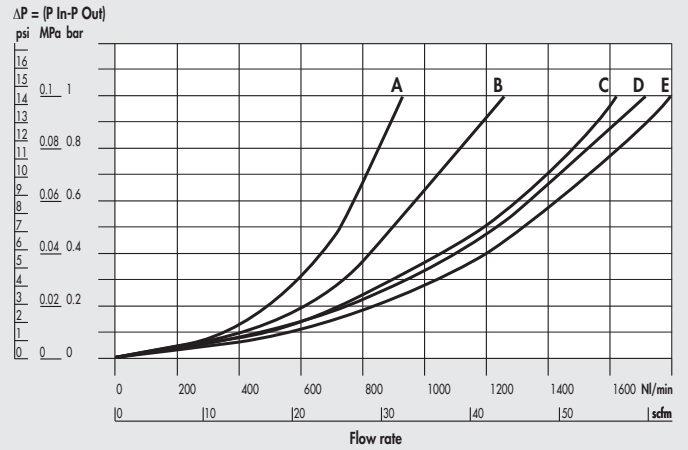


FLOW CHARTS

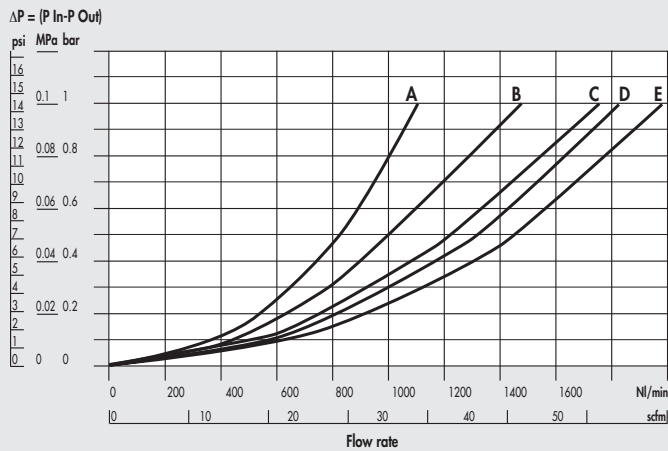
FIL Syntesi® 1/8"



FIL Syntesi® 1/4"

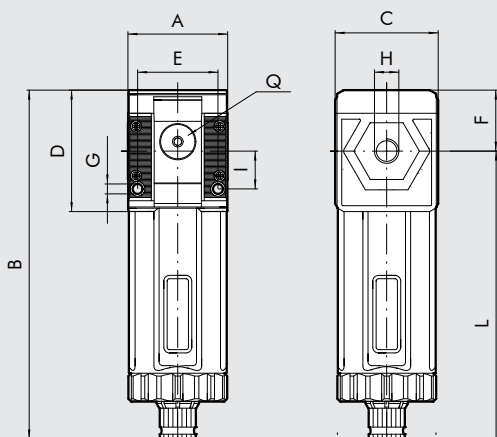


FIL Syntesi® 3/8"



- 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



H (threaded port)	1/8"	1/4"	3/8"
A	42	42	44
B	RMSA	148	
	RA	152	
C		44	
D		51.5	
E		33.5	
F		25.8	
G		Hole for M4 screws	
I		16	
L	RMSA	202	
	RA	206	
Q (no. 2 additional air takes-off)		1/8"	

