

The Job of the filter is to remove any solid or liquid impurities from the air generated by the compressor. Incoming air is rotated by the centrifuge unit. The heaviest liquid and solid particles are projected against the walls of the container and forced to adhere to it. As they accumulate they form drops that deposit on the bottom by gravity. The remaining solid particles are held back by the porous element depending on the filtering threshold. The condensate accumulation area is kept still to prevent previously deposited impurities from being re-circulated.

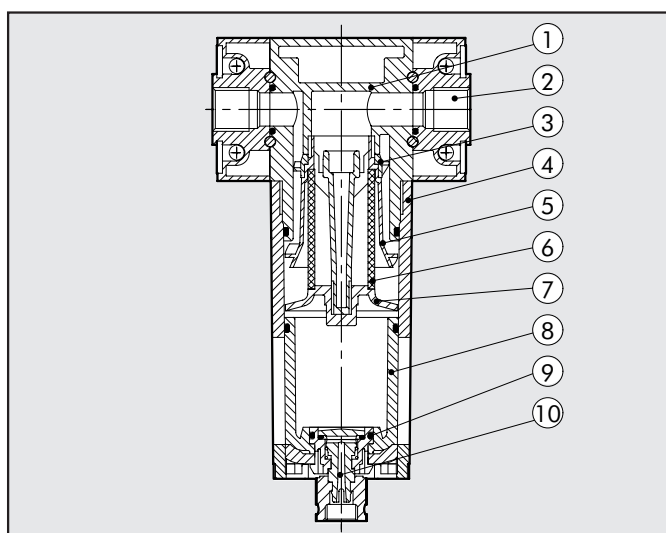
The accumulated condensate is drained out through the drain – automatically when there is no pressure in the filter, or by hand pressing the button. An automatic drain is available. It automatically eliminates condensate from the container whenever necessary, whatever the pressure.

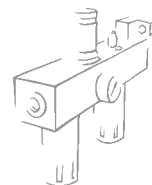


TECHNICAL DATA		FIL 100	FIL 100	FIL 200	FIL 200	FIL 200	FIL 300	FIL 300	FIL 300
Threaded port		1/4"	3/8"	1/4"	3/8"	1/2"	1/2"	3/4"	1"
Degree of filtration		5µm 20µm 50µm		5µm 20µm 50µm			5µm 20µm 50µm		
Max. input pressure	MPa	1.5		1.3			1.3		
	bar	15		13			13		
	psi	217		188			188		
Flow rate at 6.3 bar (0.63 MPa-91 psi)	NI/min	1400		2400			3800		
ΔP 0.5 bar (0.05 MPa – 7 psi)	scfm	50		85			135		
Flow rate at 6.3 bar (0.63 MPa-91 psi)	NI/min	2000		3100			5300		
ΔP 1 bar (0.1 MPa – 14 psi)	scfm	71		110			188		
Fluid		Compressed air		Compressed air			Compressed air		
Max temperature at 1 MPa; 10 bar; 145 psi	°C	50		50			50		
	°F	122		122			122		
Weight	Kg	0.4		0.7			1.4		
Wall fixing screws		M4x50		M5x60			M5x70		
Mounting position		Vertical		Vertical			Vertical		
Drain		Manual		Manual			Manual		
		Manual/semi-auto (RMSA)		Manual/semi-auto (RMSA)			Manual/semi-auto (RMSA)		
		Automatic (SAC)		Automatic (SAC)			Automatic (SAC)		
Bowl capacity	cm ³	22		45			75		

COMPONENTS

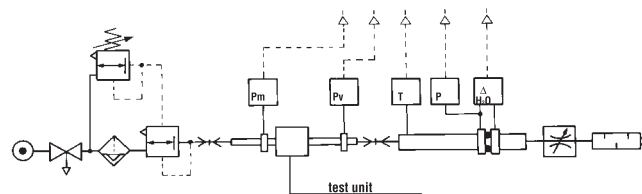
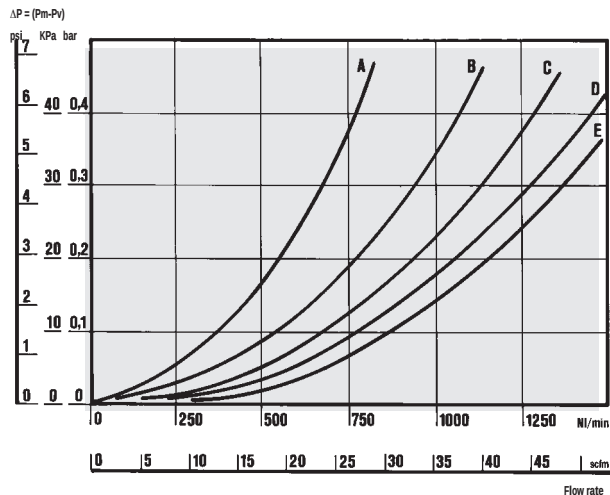
- ① Technopolymer body
- ② Zamak end plate
- ③ Technopolymer centrifuge
- ④ Bowl: technopolymer for FIL 100 and FIL 200, metal for FIL 300
- ⑤ Technopolymer baffle
- ⑥ Sintered bronze filter cartridge
- ⑦ Technopolymer screen
- ⑧ Clear technopolymer glass
- ⑨ NBR gaskets
- ⑩ Drain (RMSA)





FLOW CHARTS

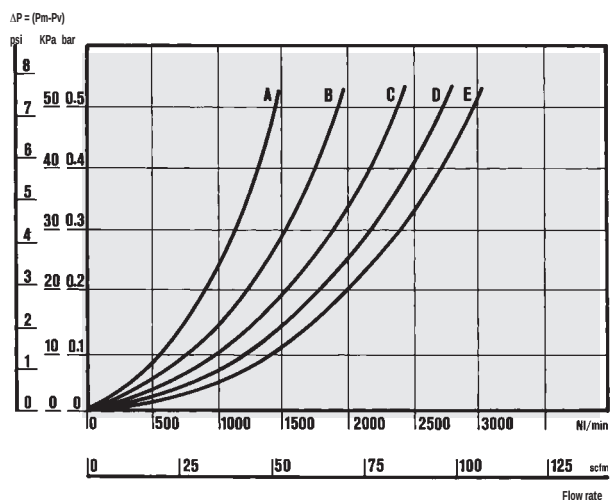
FIL 100 1/4 - 3/8



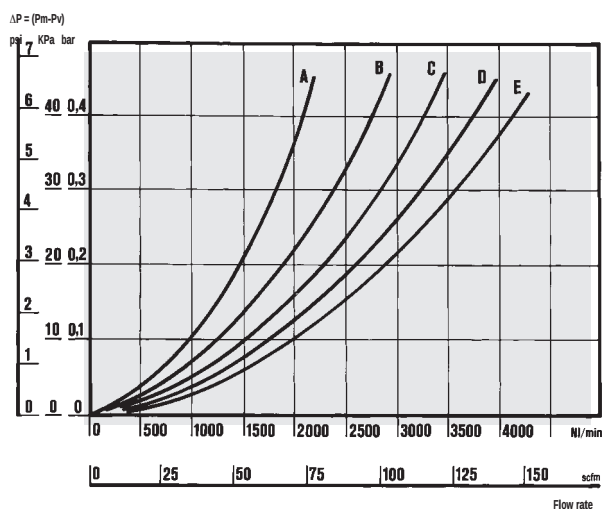
• Flow tests carried out at the Department of Mechanics, Turin Polytechnic, using the computerized test bench following CETOP RP50R recommendations (ISO DIS 6358-2-approved) with ISO 5167 diaphragm gauge.

- (A) = 2 bar - 0,2 MPa - 29 psi (D) = 8 bar - 0,8 MPa - 116 psi
 (B) = 4 bar - 0,4 MPa - 58 psi (E) = 10 bar - 1 MPa - 145 psi
 (C) = 6 bar - 0,6 MPa - 87 psi

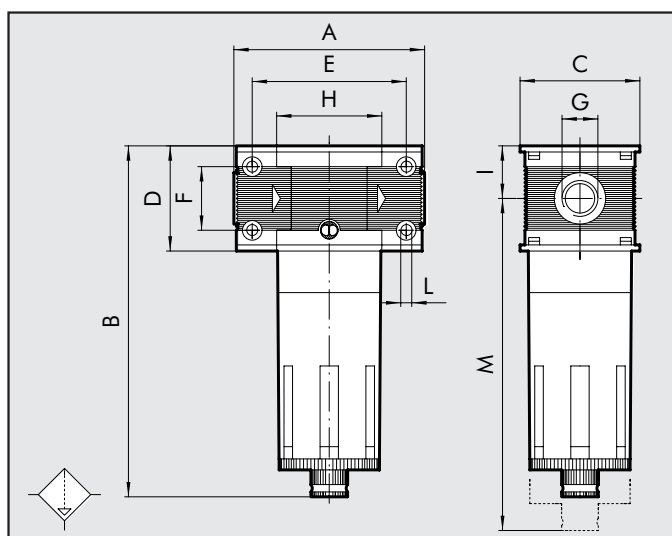
FIL 200 1/4 - 3/8 - 1/2



FIL 300 1/2 - 3/4 - 1



DIMENSIONS



	FIL 100	FIL 100	FIL 200	FIL 200	FIL 200	FIL 300	FIL 300	FIL 300
	G 1/4	G 3/8	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 1"
A	78		93.5			110		112
B	144		175			195		
C	50		63			72		
D	43		55			65		
E	63		78.5			92		
F	26		36			42		
G	G 1/4	G 3/8	G 1/4	G 3/8	G 1/2	G 1/2	G 3/4	G 1"
H	43		55.5			65		
I	21.5		27.5			32.5		
L	M4 hole		M5 hole			M5 hole		
M	137		196			215		

Skillair® 400 FILTER

Filter with different degrees of impurity treatment and high performance:

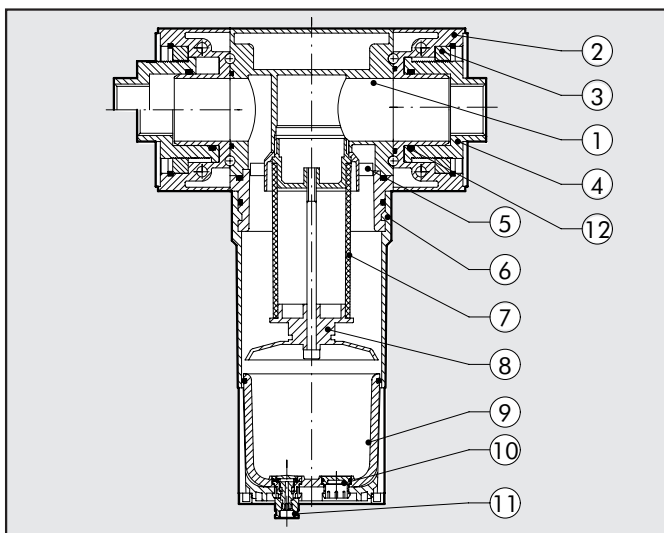
- minimum load loss with changes in flow rate
- maximum degree of condensate separation
- 360° condensate level display
- semi-auto or auto condensate drain

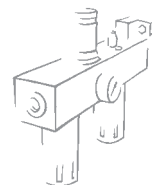


TECHNICAL DATA		FIL 400			
		G1"	G1"1/4"	G1"1/2	G2"
Threaded port					
Degree of filtration		5µm 20µm 50µm			5µm 20µm 50µm
Max. input pressure	MPa		1.3		1.3
	bar		13		13
	psi		188		188
Flow rate at 6 bar (0.6 MPa-87 psi)	NI/min		16500		20000
ΔP 0.5 bar (0.05 MPa – 7 psi)	scfm		590		710
Fluid		Compressed air			Compressed air
Max temperature at 1 MPa; 10 bar; 145 psi	°C		50		50
	°F		122		122
Weight	Kg		5.2		6
Wall fixing screws			M6x110		M6x110
Mounting position			Vertical		Vertical
Drain			Manual/semi-auto (RMSA) Automatic (RA)		Manual/semi-auto (RMSA) Automatic (RA)
Bowl capacity	cm ³		270		270
Notes on use		Series 400 end plates come with a patented system with a rotary sliding end joint to allow the unit to be adapted to the pipe cutting distance (see page 3.1/03).			

COMPONENTS

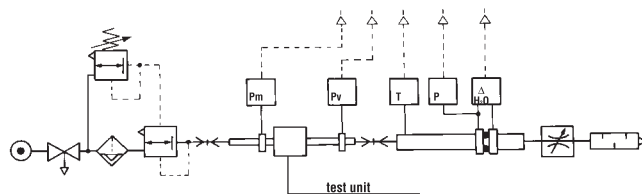
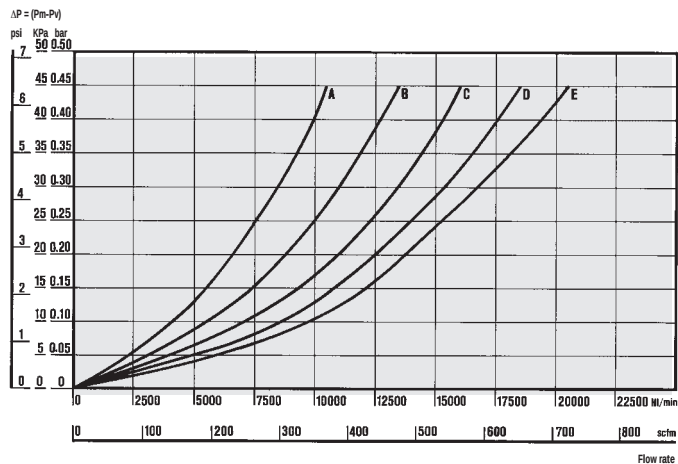
- ① Aluminium body
- ② Aluminium end plate
- ③ OT58 brass retaining ring
- ④ OT58 threaded bush, axial adjustment
- ⑤ Technopolymer centrifuge
- ⑥ Aluminium bowl
- ⑦ Sintered bronze filter cartridge
- ⑧ Aluminium screen
- ⑨ Clear technopolymer glass
- ⑩ Technopolymer plug
- ⑪ Drain (RMSA)
- ⑫ NBR gaskets





FLOW CHARTS

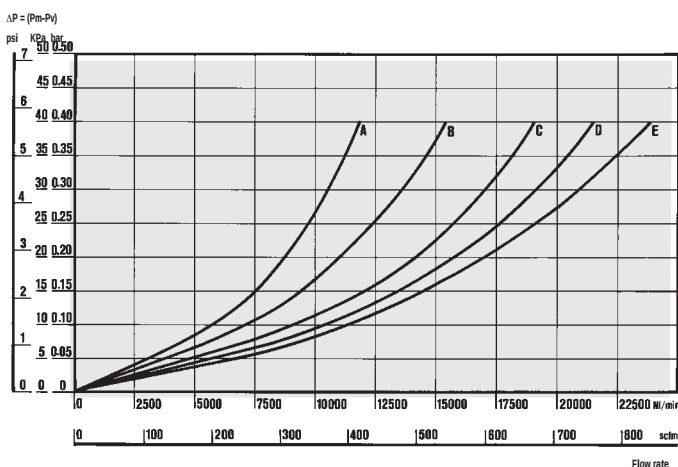
FIL 400 1"



• Flow tests carried out at the Department of Mechanics, Turin Polytechnic, using the computerized test bench following CETOP RP50R recommendations (ISO DIS 6358-2-approved) with ISO 5167 diaphragm gauge.

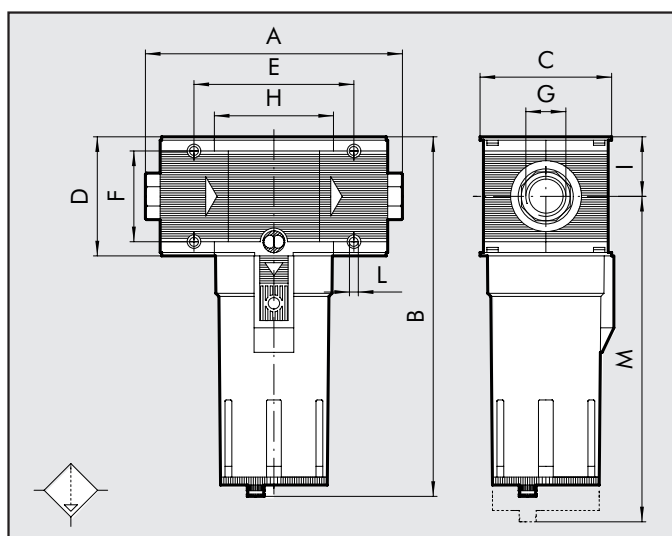
- (A) = 2 bar - 0,2 MPa - 29 psi
- (B) = 4 bar - 0,4 MPa - 58 psi
- (C) = 6 bar - 0,6 MPa - 87 psi
- (D) = 8 bar - 0,8 MPa - 116 psi
- (E) = 10 bar - 1 MPa - 145 psi

FIL 400 2"



3

DIMENSIONS



	FIL 400	FIL 400	FIL 400	FIL 400
Threaded port	G 1"	G 1"1/4	G 1"1/2	G 2"
A		225÷255		283÷313
B			320	
C			116	
D			105	
E			141.4	
F			80	
G	G 1"	G 1"1/4	G 1"1/2	G 2"
H			105.4	
I			52.5	
L			M6 hole	
M			378	

KEY TO CODES

FIL FILTER ELEMENT	100 SIZE	1/4 THREADED PORT	20µm DEGREE OF FILTRATION	RMSA TYPE OF DRAIN
FIL.	100	1/4	5 µm	RMSA SAC
		3/8	20 µm	
	200	1/4	50 µm	
		3/8		
		1/2		RMSA RA
	300	1/2		
		3/4		
		1		
	400	1		
		1 1/4		
		1 1/2		
		2		

RMSA: Manual/semi-auto drain
SAC: Automatic drain for sizes 100 and 200. Operates by depression – requires variable air take-offs.
RA: Drain for size 300 and 400. Float-type operation irrespective of the pressure and flow rate.

ORDERING CODES

Code	Description	Code	Description	Code	Description
SKILLAIR 100 FILTER					
3280001A	FIL 100 5 RMSA WITHOUT END PLATES	4480001A	FIL 300 5 RMSA WITHOUT END PLATES	6180001A	FIL 400 5 RMSA WITHOUT END PLATES
3280007A	FIL 100 5 SAC WITHOUT END PLATES	4480002A	FIL 300 20 RMSA WITHOUT END PLATES	6180002A	FIL 400 20 RMSA WITHOUT END PLATES
3280002A	FIL 100 20 RMSA WITHOUT END PLATES	4480003A	FIL 300 50 RMSA WITHOUT END PLATES	6180003A	FIL 400 50 RMSA WITHOUT END PLATES
3280008A	FIL 100 20 SAC WITHOUT END PLATES	4480004A	FIL 300 5 RA WITHOUT END PLATES	6180004A	FIL 400 5 RA WITHOUT END PLATES
3280003A	FIL 100 50 RMSA WITHOUT END PLATES	4480005A	FIL 300 20 RA WITHOUT END PLATES	6180005A	FIL 400 20 RA WITHOUT END PLATES
3280009A	FIL 100 50 SAC WITHOUT END PLATES	4480006A	FIL 300 50 RA WITHOUT END PLATES	6180006A	FIL 400 50 RA WITHOUT END PLATES
3280001	FIL 100 1/4 5 RMSA	4480001	FIL 300 1/2 5 RMSA	6180001	FIL 400 1 5 RMSA
3280007	FIL 100 1/4 5 SAC	4480002	FIL 300 1/2 20 RMSA	6180002	FIL 400 1 20 RMSA
3280002	FIL 100 1/4 20 RMSA	4480003	FIL 300 1/2 50 RMSA	6180003	FIL 400 1 50 RMSA
3280008	FIL 100 1/4 20 SAC	4480004	FIL 300 1/2 5 RA	6180004	FIL 400 1 5 RA
3280003	FIL 100 1/4 50 RMSA	4480005	FIL 300 1/2 20 RA	6180005	FIL 400 1 20 RA
3280009	FIL 100 1/4 50 SAC	4480006	FIL 300 1/2 50 RA	6180006	FIL 400 1 50 RA
3380001	FIL 100 3/8 5 RMSA	4580001	FIL 300 3/4 5 RMSA	6280001	FIL 400 1 1/4 5 RMSA
3380007	FIL 100 3/8 5 SAC	4580002	FIL 300 3/4 20 RMSA	6280002	FIL 400 1 1/4 20 RMSA
3380002	FIL 100 3/8 20 RMSA	4580003	FIL 300 3/4 50 RMSA	6280003	FIL 400 1 1/4 50 RMSA
3380008	FIL 100 3/8 20 SAC	4580004	FIL 300 3/4 5 RA	6280004	FIL 400 1 1/4 5 RA
3380003	FIL 100 3/8 50 RMSA	4580005	FIL 300 3/4 20 RA	6280005	FIL 400 1 1/4 20 RA
3380009	FIL 100 3/8 50 SAC	4580006	FIL 300 3/4 50 RA	6280006	FIL 400 1 1/4 50 RA
SKILLAIR 200 FILTER					
3480001A	FIL 200 5 RMSA WITHOUT END PLATES	4680001	FIL 300 1 5 RMSA	6380001	FIL 400 1 1/2 5 RMSA
3480007A	FIL 200 5 SAC WITHOUT END PLATES	4680002	FIL 300 1 20 RMSA	6380002	FIL 400 1 1/2 20 RMSA
3480002A	FIL 200 20 RMSA WITHOUT END PLATES	4680003	FIL 300 1 50 RMSA	6380003	FIL 400 1 1/2 50 RMSA
3480008A	FIL 200 20 SAC WITHOUT END PLATES			6380004	FIL 400 1 1/2 5 RA
3480003A	FIL 200 50 RMSA WITHOUT END PLATES			6380005	FIL 400 1 1/2 20 RA
3480009A	FIL 200 50 SAC WITHOUT END PLATES			6380006	FIL 400 1 1/2 50 RA
3480001	FIL 200 1/4 5 RMSA			6480001	FIL 400 2 5 RMSA
3480007	FIL 200 1/4 5 SAC			6480002	FIL 400 2 20 RMSA
3480002	FIL 200 1/4 20 RMSA			6480003	FIL 400 2 50 RMSA
3480008	FIL 200 1/4 20 SAC			6480004	FIL 400 2 5 RA
3480003	FIL 200 1/4 50 RMSA			6480005	FIL 400 2 20 RA
3480009	FIL 200 1/4 50 SAC			6480006	FIL 400 2 50 RA
3580001	FIL 200 3/8 5 RMSA				
3580007	FIL 200 3/8 5 SAC				
3580002	FIL 200 3/8 20 RMSA				
3580008	FIL 200 3/8 20 SAC				
3580003	FIL 200 3/8 50 RMSA				
3580009	FIL 200 3/8 50 SAC				
3680001	FIL 200 1/2 5 RMSA				
3680007	FIL 200 1/2 5 SAC				
3680002	FIL 200 1/2 20 RMSA				
3680008	FIL 200 1/2 20 SAC				
3680003	FIL 200 1/2 50 RMSA				
3680009	FIL 200 1/2 50 SAC				