

Skillair® FILTER



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 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. The transparent windows allow to view the level of condensation at 360°.



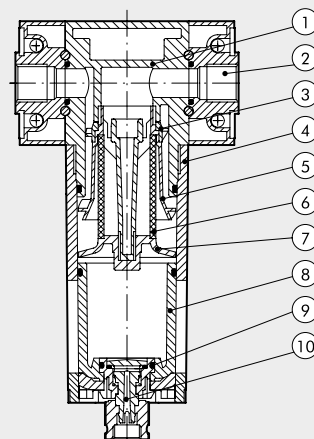
TECHNICAL DATA	FIL 100		FIL 200			FIL 300			FIL 400				
	1/4"	3/8"	1/4"	3/8"	1/2"	1/2"	3/4"	1"	1"	1 1/4"	1 1/2"	2"	
Threaded port													
Degree of filtration	μm 5 - 20 - 50		5 - 20 - 50			5 - 20 - 50			5 - 20 - 50				
Max. input pressure	MPa 1.5		1.3			1.3			1.3		1.3		1.3
	bar 15		13			13			13		13		13
	psi 217		188			188			188		188		188
Flow rate at 6.3 bar (0.63 MPa to 91 psi)	NL/min 1400		2400			3800			16500		20000		
ΔP 0.5 bar (0.05 MPa to 7 psi)	scfm 50		85			135			590		710		
Flow rate at 6.3 bar (0.63 MPa to 91 psi)	NL/min 2000		3100			5300			-		-		
ΔP 1 bar (0.1 MPa to 14 psi)	scfm 71		110			188			-		-		
Max temperature at 1 MPa; 10 bar; 145 psi	°C 50		50			50			50		50		
	°F 122		122			122			122		122		
Weight	kg 0.4		0.7			1.4			5.2		6		
Wall fixing screws	M4 x 50		M5 x 60			M5 x 70			M6 x 110		M6 x 110		
Bowl capacity	cm ³ 22		45			75			270		270		
Mounting position	Vertical		Vertical			Vertical			Vertical		Vertical		
Drain	RMSA - SAC		RMSA - SAC - RA			RMSA - RA			RMSA - RA		RMSA - RA		
Fluid	RMSA: drain with manual condensate discharge and automatic discharge at zero pressure RA: automatic drain with condensate discharge, independent of pressure and flow rate. Version conveys the draining by inserting the pipe having internal diameter 6 mm in the lower port. SAC: automatic drain with condensate discharge. Operates by pressure drop – requires variable air take-offs. Compressed air.												
Notes on use	The maximum inlet pressure for the version with RA automatic condensate drainage must not exceed 10 bar.												

UNITS

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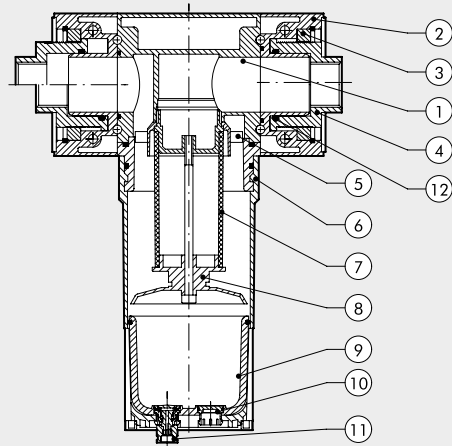
COMPONENTS FIL 100 - 200 - 300

- 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 HDPE filter cartridge
- ⑦ Technopolymer screen
- ⑧ Clear technopolymer glass
- ⑨ NBR gaskets
- ⑩ Drain (RMSA)



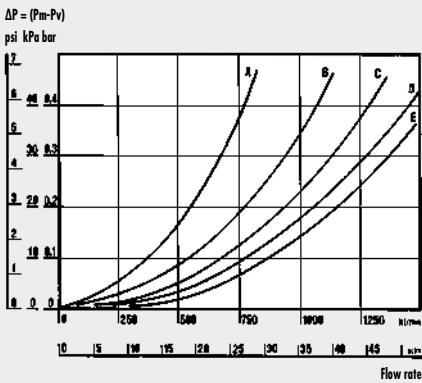
COMPONENTS FIL 400

- ① Aluminium body
- ② Aluminium end plate
- ③ OT58 brass retaining ring
- ④ Anodized aluminium 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

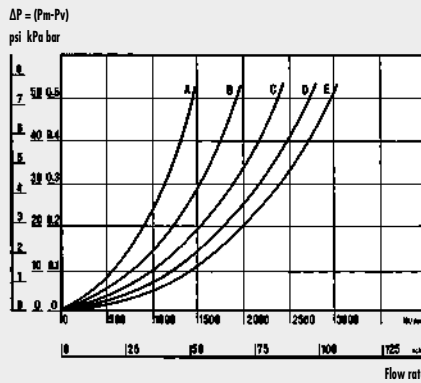


FLOW CHARTS

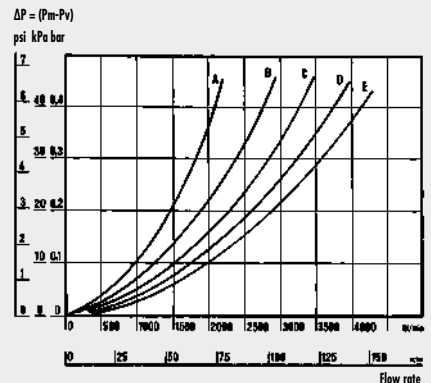
FIL 100 1/4 - 3/8



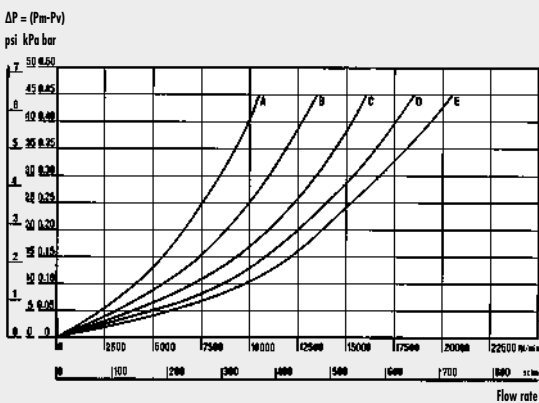
FIL 200 1/4 - 3/8 - 1/2



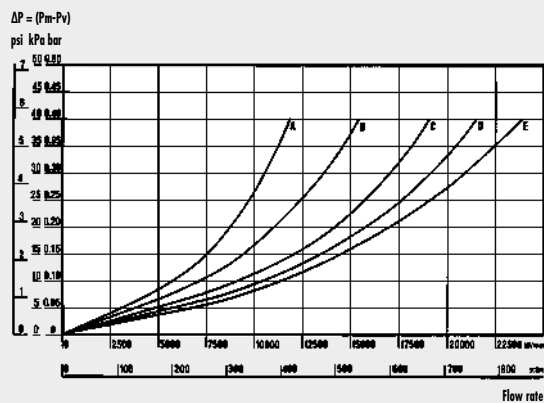
FIL 300 1/2 - 3/4 - 1



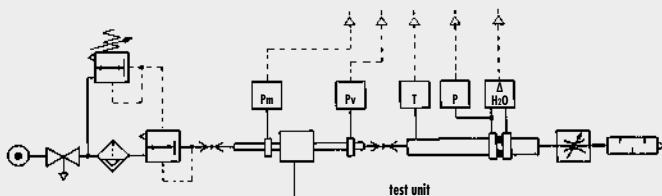
FIL 400 1"



FIL 400 2"



• 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.

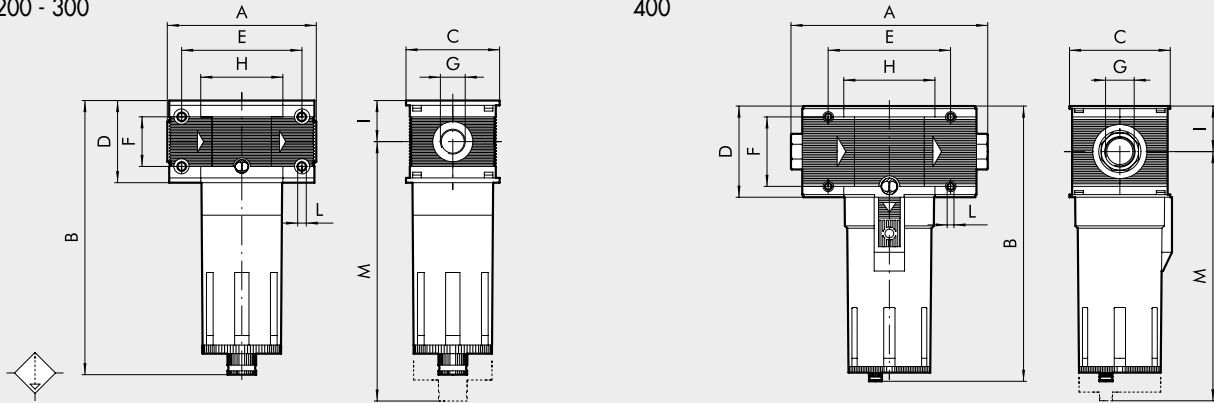


- (A) = 2 bar - 0.2 MPa - 29 psi
- (B) = 4 bar - 0.4 MPa - 58 psi
- (C) = 6 bar - 0.6 MPa - 87 psi
- (D) = 8 bar - 0.8 MPa - 116 psi
- (E) = 10 bar - 1 MPa - 145 psi

DIMENSIONS

100 - 200 - 300

400



	FIL 100		FIL 200			FIL 300			FIL 400			
	1/4"	3/8"	1/4"	3/8"	1/2"	1/2"	3/4"	1"	1"	1 1/4"	1 1/2"	2"
Threaded port G												
A	78			93.5		110		112		225 to 255		283 to 313
B	RMSA 144			175			195			320		
	RA -			179			199			324		
	SAC 148			179			-			-		
C	50			63			72			118		
D	43			55			65			105		
E	63			78.5			92			141.4		
F	26			36			42			80		
H	43			55.5			65			105.4		
I	21.5			27.5			32.5			52.5		
L	Hole for M4 screws		Hole for M5 screws			Hole for M5 screws			Hole for M6 screws			
M	RMSA 137			196			215			378		
	RA -			200			219			382		
	SAC 141			200			-			-		

NOTES

SYNOPTIC, SIZES AND VERSIONS

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

RMSA: drain with manual condensate discharge and automatic discharge at zero pressure

RA: automatic drain with condensate discharge, independent of pressure and flow rate. (for size 300 and 400). Version conveys the draining by inserting the pipe having internal diameter 6 mm in the lower port.

SAC: automatic drain with condensate discharge.

Operates by pressure drop – requires variable air take-offs.
(for size 100 and 200)

* For Skillair® 200 with RA, please contact our sales assistance department.

ORDERING CODES

Code	Description	Code	Description	Code	Description
Skillair® 100 FILTER		Skillair® 300 FILTER		Skillair® 400 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		4680001	FIL 300 1 5 RMSA	6380001	FIL 400 1 1/2 5 RMSA
3480001A	FIL 200 5 RMSA without end plates	4680002	FIL 300 1 20 RMSA	6380002	FIL 400 1 1/2 20 RMSA
3480007A	FIL 200 5 SAC without end plates	4680003	FIL 300 1 50 RMSA	6380003	FIL 400 1 1/2 50 RMSA
3480002A	FIL 200 20 RMSA without end plates	4680004	FIL 300 1 5 RA	6380004	FIL 400 1 1/2 5 RA
3480008A	FIL 200 20 SAC without end plates	4680005	FIL 300 1 20 RA	6380005	FIL 400 1 1/2 20 RA
3480003A	FIL 200 50 RMSA without end plates	4680006	FIL 300 1 50 RA	6380006	FIL 400 1 1/2 50 RA
3480009A	FIL 200 50 SAC without end plates			6480001	FIL 400 2 5 RMSA
3480001	FIL 200 1/4 5 RMSA			6480002	FIL 400 2 20 RMSA
3480007	FIL 200 1/4 5 SAC			6480003	FIL 400 2 50 RMSA
3480002	FIL 200 1/4 20 RMSA			6480004	FIL 400 2 5 RA
3480008	FIL 200 1/4 20 SAC			6480005	FIL 400 2 20 RA
3480003	FIL 200 1/4 50 RMSA			6480006	FIL 400 2 50 RA
3480009	FIL 200 1/4 50 SAC				
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				

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