# HEPA FILTRATION FOR SURGICAL SUCTION AND STERILE FILTRATION FOR COMPRESSORS



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### Introduction

#### Hygiene for the dental practice

The actual global situation related to the Covid-19 pandemic, brings to our attention how critical the contamination caused by the exhaust air of the suction systems in the dental practice and the importance of the proper air filtration of compressed air.

Two key points that must be followed:

- 1. Correct suction capacity during the patient treatment: suction capacity must never be lower than 300 l/min, to ensure the proper protection to patients, dentists and assistants.
- 2. Correct use of the dental compressor: the use of oil-free compressors with air dryer is a must. The use of MGF compressors with regular maintenance will guarrantee clean air in accordance with the International Standards in matter of «dental air» (ISO 7494-2015)





### Introduction

#### Hygiene for the dental practice

The hygienic environment of the technical room is also essential!



- 1. Exhaust air from the suction system can be contaminated and therefore compromise the safety of the people in the dental practice.
- 2. Suction systems are often placed in the same room of the compressor. Contaminated air coming from the exhaust air of the suction can be reused by the compressor and can contaminate patients, dentists and assistants if not properly treated.





#### Air filters for vacuum pumps

MGF offers a complete range of air filters complete with HEPA 14 elements for the treatment of exhaust air coming from the suction systems.

- ✓ These filters can be adapted to all dental suction available on the market, are easy to install and have simple maintenance.
- ✓ Filtration level of the element is HEPA 14, with an efficiency of the 99,99% of bacteria
- ✓ They can be installed as terminal filters or integrated in the existing waste air piping (connecting the exhaust air entrance and the waste air exit)
- ✓ HEPA 14 elements are also available in combination with activated carbon filters for bacteria and smell





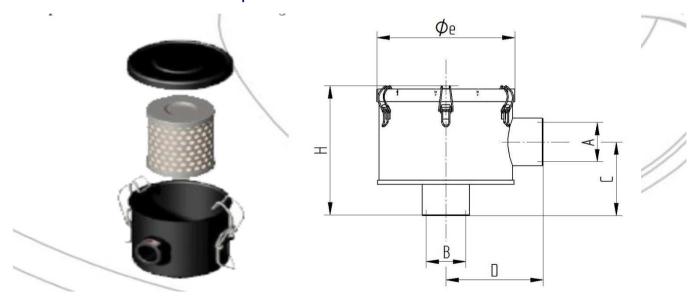


### **Air filters for vacuum pumps**

The range is composed by 2 solutions:

- A. Standard filters with HEPA 14 element (datasheet A)
- B. Filters composed by HEPA 14 elements and activated carbon element (datasheet B)

Flow rates referred to a loss of pressure of 200 mm H2O







#### Air filters for vacuum pumps (HEPA 14 element)

#### **Datasheet A**

MGF Code	Description	Nominal air flow (m3/h)	IN A	OUT B	IN A (mm)	OUT B (mm)	C (mm)	D (mm)	Øe (mm)	H (mm)	Weight (Kg)
TA-FV-011	Filtration kit with HEPA H14 element for vacuum unit G1 ¼"	144	G 1 1/4"	G 1 1/4"	30/40*	30/40*	95	98	173	156	1,7
TA-FV-011-C	HEPA H14 element for vacuum unit G1 1/4"										
TA-FV-012	Filtration kit with HEPA H14 element for vacuum unit G2 1/2"	300	G 2 1/2"	G 2 1/2"	50*	50*	126	118	201	288	3,85
TA-FV-012-C	HEPA H14 element for vacuum unit G 2 1/2''										
	Filtration kit with HEPA H14 G 3" element for vacuum unit	450	G 3"	G 3"	90*	90*	162	198	201	276	14
TA-FV-013-C	HEPA H14 element for vacuum unit G 3"				_						

<sup>✓</sup> Material: MICROFIBER HEPA 14 as per specific product material datasheet

<sup>✓ \*</sup> all the filters are supplied with PVC fittings to enable the connection of eshaust air pipes with
the shown internal diameter





# Air filters for vacuum pumps (HEPA 14 element) Datasheet A

MGF Code	Description	Nominal air flow (m3/h)	Number of max dental units		Replace every:
IA-FV-011	Filtration kit with HEPA H14 element for vacuum unit G1 ¼"	144	3	downstream HYBRID 1S, HYBRID 1 and HYBRID 2; downstream or upstream ASPIR 1, ASPIR 2 and ASPIR 3	-
TA-FV-011-C	HEPA H14 element for vacuum unit G1 1/4"				2 years
TA-FV-012	Filtration kit with HEPA H14 element for vacuum unit G2 1/2"	300		downstream Hybrid 5; downstream or upstream ASPIR 4	-
TA-FV-012-C	HEPA H14 element for vacuum unit G 2 1/2"				2 years
$11\Delta - EV - 0.13$	Filtration kit with HEPA H14 element for vacuum unit G 3"	450	15	downstream for 2 HYBRID 5 or 3 HYBRID 5 with collected waste air piping	1
TA-FV-013-C	HEPA H14 element for vacuum unit G 3"				2 years

Shown prices include: connectors pipeline-filter (in/out), high temperature hose 1m,





# Air filters for vacuum pumps ( HEPA 14 + activated carbon filter elements)

#### **Datasheet B**

MGF Code	Description	Nominal air flow (m3/h)	IN A	OUT B	IN A (mm)	OUT B (mm)	C (mm)	D (mm)	Øe (mm)	H (mm)	Weight (Kg)
TA-FV-011-CA	Filtration kit with HEPA H14 and activated carbon elements for vacuum unit G1 ¼"	144	G 1 1/4"	G 1 1/4"	30/40*	30/40*	95	98	173	156	1,7
TA-FV-011-CA-C	HEPA H14 and activated carbon elements for vacuum unit G1 1/4"										
TA-FV-012-CA	Filtration kit with HEPA H14 and activated carbon elements for vacuum unit G2 1/2"	300	G 2 1/2"	G 2 1/2"	50*	50*	126	118	201	288	3,85
	HEPA H14 and activated carbon elements for vacuum unit G 2 1/2"										
TA-FV-013-CA	Filtration kit with HEPA H14 and activated carbon elements for vacuum unit G 3"	450	G 4"	G 4"	90*	90*	162	198	201	276	14
TA-FV-013-CA-C	HEPA H14 and activated carbon elements for vacuum unit G 3"										

- ✓ Material: MICROFIBER HEPA H14 as per specific product material datasheet
- ✓ \* all the filters are supplied with PVC fittings to enable the connection of exhaust air pipes with
  the shown internal diameter





# Air filters for vacuum pumps ( HEPA 14 + activated carbon filter elements)

#### **Datasheet B**

MGF Code	Description	Nominal air flow (m3/h)	Number of max dental units	Suction units	Replace every:
TA-FV-011- CA	Filtration kit with HEPA H14 and activated carbon elements for vacuum unit G1 ¼"	144	3	downstream HYBRID 1S, HYBRID 1 and HYBRID 2; downstream or upstream ASPIR 1, ASPIR 2 and ASPIR 3	-
TA-FV-011- CA-C	HEPA H14 and activated carbon elements for vacuum unit G1 1/4"				2 years
TA-FV-012- CA	Filtration kit with HEPA H14 and activated carbon elements for vacuum unit G2 1/2"	300	10	downstream Hybrid 5; downstream or upstream ASPIR 4	-
TA-FV-012- CA-C	HEPA H14 and activated carbon elements for vacuum unit G 2 1/2"				2 years
TA-FV-013- CA	Filtration kit with HEPA H14 and activated carbon elements for vacuum unit G 3"	450	15	downstream for 2 HYBRID 5 or 3 HYBRID 5 with collected waste air piping	-
TA-FV-013- CA-C	HEPA H14 and activated carbon elements for vacuum unit G 3"				2 years

Shown prices include: connectors pipeline-filter (in /out), high temperature hose 1m





#### Air filters for compressed air

MGF compressors with air dryer are equipped with a filtration system in conforming with ISO 7494-2015, providing a filtration system till 0,01 micron.

With regular maintenance of the filtration system (periodical replacement of the cartridges) already provides a high compressed air quality filtration (0,01 micron)



5 micron cart.



0,01 micron cart.



Suction filter

This efficiency can be even improved with the installation of the MGF sterile filter!





#### Sterile filtration

MGF sterile filters is placed at the compressor air exit, the range of these filters covers all the MGF dental compressors and have the following characteristics:

- ✓ The filter has a stainless steel cartridge that can be sterilized in the autoclave.
- ✓ We suggest to weekly sterilize the cartridge for the best filtration efficiency
- ✓ The filter can be installed with every oilfree compressor on the market
- ✓ The filter is supplied with 2 drain cocks to easily open it for the removal of the stainless steel cartridge



TA-FT cartridge





#### Sterile filtration

MGF sterile filters is placed at the compressor air exit, the range of these filters covers all the MGF dental compressors and have the following characteristics:

- ✓ DOP particle removal efficiency: >99,9999%
- ✓ Particle removal: 0,01 micron
- ✓ Maximum autoclave temperature for the cartridge: 134°C
- ✓ Reccomended replacement time of the cartridge is 2 years



Cod. TA-FT-001

Cod. TA-FT-002 and 003





#### **Sterile filtration**

#### The range:

MGF Code	Description	Nominal air flow (I/m)	Number of max dental units	Suitable for models	Replace every:
TA-FT-001	Sterile filter 0015 lt/min 400	400		24/10 and 50/10 GENESI, 30/7 PRIME, 50/15 PRIME, 50/25 PRIME	-
TA-FT-001-C	Sterile filter spare cartridge 0015 lt/min 400				2 years
TA-FT-002	Sterile filter 0025 lt/min 700	700	10	100/30 TANDEM PRIME, 100/50 TANDEM PRIME	1
TA-FT-002-C	Sterile filter spare cartridge 0025 lt/min 700				2 years
TA-FT-003	Sterile filter 0035 lt/min 1.000	1.000		200/75 PRIME, 270/100 TANDEM PRIME, 500/150 PRIME	-
TA-FT-003-C	Sterile filter spare cartridge 0035 lt/min 1.000				2 years

- ✓ Shown prices include: fittings and drain cocks up and down stream of the filter, for the safe removal of the cartridge
- ✓ DOP particle removal efficiency: >99,9999% ,
- ✓ Particle removal: 0,01 micron
- ✓ Maximum autoclave temperature for the cartridge: 134°C
- ✓ Replacement of the cartridges recommended every 2 years for the indicated models. The use of the filter with higher compressor air flow will reduce the life time of the cartridge.





#### **Contact us!**

### MGF is at your disposal for any question!

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We'll be glad to give you our best support! Looking forward to hear from you soon, thank you and best regards.