

Fan Filter Unit

(FFU) FANJET

FANJET

The air is drawn in through a G3 prefilter by a powerful and silent motor fan. The overpressure air is filtered by a HEPA filter (ULPA option). The MONOBLOC system guarantees the integrity of the box.

The new FANJET type FFU boxes with ECM system (direct current) allow centralized management by PC. A network driver links the boxes together to the PC station. Possibility of remote management by Internet.

ECM fan technologies

The automatic flow regulation compensates for clogging of the absolute filter and thus ensures a constant air flow. The ECM fan is supplied with direct current and has many advantages

- Low consumption: reduced from 30% to 40% compared to conventional fans
- Very high yield
- Low heat loss
- Regulation without probe (speed or pressure) independent of surrounding conditions
- Very high precision
- Low noise level

Applications: Final filtration for clean rooms and laminar flow equipment

Fan type: AC-normal, DC-ecm

Housing: Aluminum housing and filter frames

Nominal use: 80W, 800rpm

Rated power: 240W

Maximum rotation speed: 1200 rpm/min

Special features: Sound absorbers in the center of the box, air diffuser for better laminarity

Media: Fiberglass paper

Filter grid: P-epoxy, X-stainless

Efficiency EN 1822: H14 and U15

MPPS efficiency: 99.995% and 99.9995%

DOP / EMERY TEST efficiency: 99.999% and 99.9999%

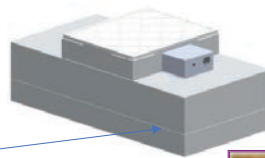
Total weight: Less than 35kg

Maximum temperature: 80 ° C

Relative humidity: 100%

Benefits: Modbus and Bacnet compatible, ETL/UL listed

Option: Fanjet SP with interchangeable filter from the clean room



FILTRATION

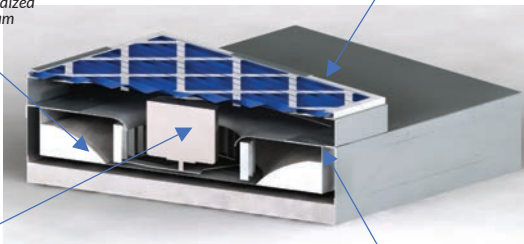
HEPA filter

Filter: Miniplis type
Efficiency: 99.995%

MPPS H14

Protection grid: epoxy painted steel

Frame: anodized aluminum

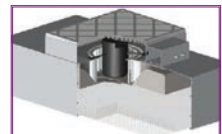


PREFILTRATION

Frame: cardboard

Efficiency: 85% ASHRAE (G3)

Media: synthetic



VENTILATION

Fan

• Normal use: 120 W, 1000 rpm / 220-230V

• Power: 240W / 220-230V (max)

• Turbine rotation: 1200 rpm (max)

• Noise level: 54 dBA (48 dBA on false ceiling)

• Voltage: 110 V / 230 V

SOUND ABSORBERS

Available references:

Fanjet 6/6

Fanjet 6/9

Fanjet 6/12

Fanjet 12/12

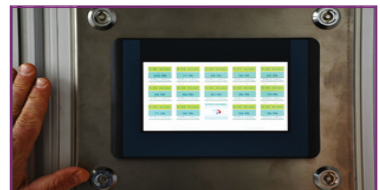
Fan Filter Unit

Fan Filter Units (FFU) FANJET

Modèle		FAN JET 6/6	FAN JET 6/9	FAN JET 6/12	FAN JET 12/12
Fan	DC	entec type DC motor with ECM technology ref. DF 280ECM DF 280 ECM motor type			DF 315ECM
	AC	DF 280 AC			DF 315 AC
Prefilter	Type	W-04-16-20-1	W-04-20241-C	W-04-20241-C	W-04-20242-C
Feed filter EN 1822: H14 99,995% MPPS		M-14-600-600-250- 78-AP	M-14-600-905-250- 78-AP	M-14-600-1210-250- 78-AP	M-14-1160-1160-250- 78-AP
Maximum temperature [°C]		55°C	55°C	55°C	55°C
Maximum hygrometry		80%	80%	80%	80%
Sound level (0,45m/s)		47 dBA in false ceiling	47 dBA in false ceiling	47 dBA in false ceiling	47 dBA in false ceiling
		up to 54 dBA maximum	up to 54 dBA maximum	up to 54 dBA maximum	up to 54 dBA maximum
Dimensions and weight					
Weight [lbs]		70	77	84	119
Lenght	actual	23.6	23.6	23.6	45.7
	nominal	23.8	23.8	23.8	47.6
Width	actual	23.6	35.4	47.6	45.7
	nominal	23.8	35.6	47.8	47.6
Height	actual	13.8	13.8	13.8	15
Debit and pressure					
Debit	nominal	353	412	471	1059
	maximum	588	647	706	1471
Pressure drop	initial	0.31	0.35	0.39	0.47
	clogging	0.79	0.87	0.98	1.18
	maximum	0.98	1.1	1.18	1.38
Electrical data					
Nominal I		1A	1A	1A	1,7A
Max I		2,5A	2,5A	2,5A	4A
Start up I		4A	4A	4A	10A
Protection		4A D curve	4A D curve	4A D curve	4A D curve
Nominal power		150W	150W	150W	300W
Maximum power		400W	400W	400W	600W



There are also several advantages in the HMI control panel. Amongst them, a wide variety of communication protocols as well as a possibility of adjustment, notably box by box are available and possible.



Fan Filter Unit

Fan Filter Units (FFU) I-GEL

The I-GEL is an independent filtration box (FFU) with ECM motorization. The fan is a combination of a motor with ECM technology and a turbine mounted into a soundproof box. This system guarantees a constant air flow whatever the pressure drop (or the clogging of the filter) in the available pressure range. The box and its ECM engine cover are assembled using an easily removable system in the case of replacing the filter. This optimized assembly principle guarantees perfect sealing of the FFU. The FANJET is equipped with high-end technology, has a very affordable price as well as being light weight and not very high.

Applications: Terminal filtration for clean rooms and laminar flow equipment

Fan type: AC-normal, DC-ecm

Frame: A-aluminum, S-stainless steel

Nominal use: 80W, 800rpm

Rated power: 240W

Maximum rotation speed: 1200rpm

Hanger rings: N-without, H-with

Media: Fiberglass paper

Filter grid: P-epoxy, X-stainless

Efficiency EN 1822: H14 and U15

MPPS efficiency: 99.995% and 99.9995%

DOP / EMERY TEST efficiency: 99.999% and 99.9999%

Maximum temperature: 80 ° C

Relative humidity: 100%

Benefits

- Low consumption: reduced by 30 to 40% compared to conventional fans
- Low temperature rise
- Absence of sensors (speed or pressure) to regulate the flow
- Very high precision
- Low noise level
- MODBUS and Bacnet compatible

I-GEL: a box fitted with a pleated filters with BLUE GEL allowing the possibility of maintenance from underneath without leaving the clean room and without dismantling the box

ECM technologies (available in DC direct current version)

Automatic regulation of the air flow according to the fouling of the filter, controlled by piloting and control software type EOL 2.

Principle: The on-board microprocessor measures and analyzes several parameters in real time: current, torque, engine speed. Using these parameters, the software corrects the data in order to reposition the fan on its operating curve. The caissons can be fitted with a TAC VIEWER type control screen allowing the real-time reading of the flow speed, pressure and flow rate of the box.

This box is perfectly suited to T-BAR structures. The supreme advantage of the I-GEL is the possibility of maintenance from underneath without leaving the clean room

