

ME-42/F1 - ME-42/F2

MIST ELIMINATOR WITH INTEGRATED FAN

The MistEliminators ME-42/F1 and MF-42/F2 are stationary filter units for mainly oil mist applications, to be used in machine tool processes. This comprises basically any process that uses metal working fluids like oil or an emulsion to cool or lubricate the operation.

The ME-42/F1 and ME-42/F2 are based on a 6-step filtration method which allows for recirculation of the filtered air.

The units are fitted with an integrated extraction fan.



APPLICATIONS

The ME-42/F1 and ME-42/F2 are intended to be used for the following applications:

- machine tool processes with "clean" or recyclable low viscosity oil as a residue; e.g.
 - CNC machining centers for cutting, boring, drilling and honing
 - machines for metal forming operations like cold heading and stamping
 - oil mist produced by heat and surface treatments like hardening and wet grinding

Do **not** use the ME-42/F1 and ME-42/F2 for the following applications or in the following circumstances:

- oxy-fuel cutting
- aluminium laser cutting
- arc-air gouging
- paint mist
- extraction of hot gases (more than 45°C/113°F continuously)
- grinding aluminium and magnesium
- flame spraying
- extraction of cement, saw dust, wood dust, grit etc.
- explosive environments or explosive substances/gases

Note: this list is not all-embracing.

SPECIFICATIONS

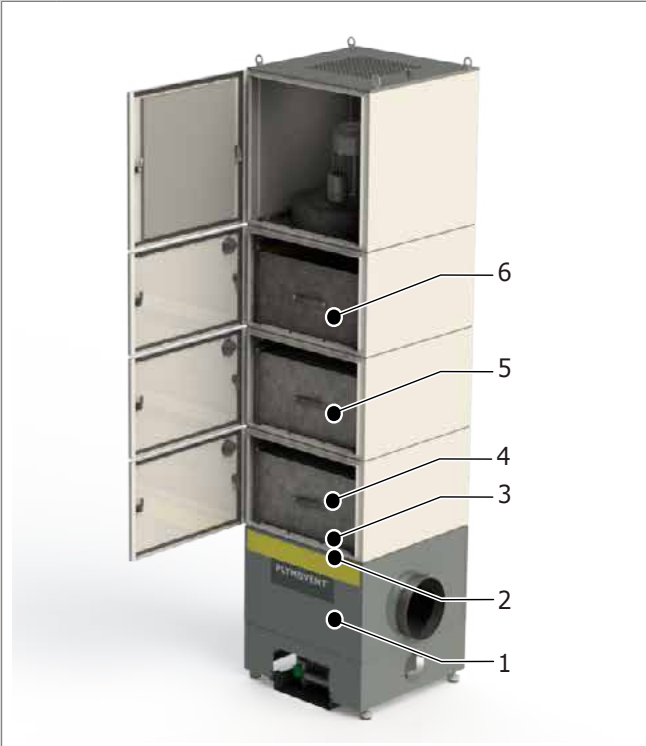
■ Physical dimensions and properties	
Housing:	electro-zinc coated steel (according to DIN EN 10152)
<ul style="list-style-type: none"> • steel grade • steel grade no. 	<ul style="list-style-type: none"> • DC01+ZE • 1.0330
Colour:	
<ul style="list-style-type: none"> • air inlet module • filter modules 	<ul style="list-style-type: none"> • grey RAL 7011 • grey RAL 7035
Weight (net):	
<ul style="list-style-type: none"> • ME-42/F1 • ME-42/F2 	<ul style="list-style-type: none"> • 182 kg (401 lbs) • 190 kg (419 lbs)
■ Filters	
Filter class	H13 according to EN 1822
Pressure drop	1500 Pa (6.0 in. WG)
Negative pressure	max. 4000 Pa (16 in. WG)

■ Electrical data	
Supply voltage	<ul style="list-style-type: none"> • 230-400V/3ph/50Hz • 208-220/460V/3ph/60Hz
Motor power:	
<ul style="list-style-type: none"> • ME-42/F1 • ME-42/F2 	<ul style="list-style-type: none"> • 1,1 kW (1.5 HP) • 2,2 kW (3.0 HP)
■ Performance	
Airflow:	
<ul style="list-style-type: none"> • ME-42/F1 • ME-42/F2 	<ul style="list-style-type: none"> max. 1200 m³/h (700 CFM) max. 2000 m³/h (1175 CFM)
<i>Max. airflow is a ceiling value and generally not recommended as a design value for operating the ME unit, as it might lead to short lifespan of filters. The performance of the ME unit is next to airflow influenced by other variables like amount and composition of metal working fluid, process, temperature and pre-treatment. Ask your local expert on the recommended airflow for your system design.</i>	
Noise level (at 1,5 m distance from the front; non ducted)	<70 dB(A)
■ Ambient conditions	
Operating temperature:	
<ul style="list-style-type: none"> • min. • nom. • max. 	<ul style="list-style-type: none"> • 5°C (41°F) • 20°C (68°F) • 45°C (113°F)
Max. relative humidity	80%
Outdoor use allowed	no
Storage conditions	<ul style="list-style-type: none"> • 5-45°C (41-113°F) • relative humidity max. 80%
■ Options and accessories	
CFD	constant flow damper
FF-RACK	floor rack
■ Scope of supply	
Assembled filter unit with integrated fan - duct cap Ø 250 mm (9.8 in.) - oil container	
■ Order information	
230-400V/3ph/50Hz:	Article no.:
<ul style="list-style-type: none"> • MistEliminator ME-42/F1 • MistEliminator ME-42/F2 	<ul style="list-style-type: none"> • 0000100805 • 0000100806
208-220/460V/3ph/60Hz:	
<ul style="list-style-type: none"> • MistEliminator ME-42/F1 • MistEliminator ME-42/F2 	<ul style="list-style-type: none"> • 0000100807 • 0000100808
Number/package	1

Shipping data

Gross weight (incl. pallet):	
• ME-42/F1	• 221 kg (487 lbs)
• ME-42/F2	• 229 kg (505 lbs)
Max. number/pallet	1
Harmonized Tariff Code	8421.39.2090
Country of origin	Netherlands

FILTER STAGES



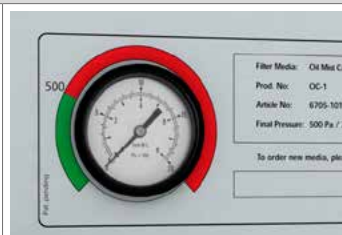
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|---|---|
| 1 | Air inlet module; pre separator that distributes the air and prevents large particles from entering the filter package |
| 2 | HydroFilter; impinger to separate oil droplets and coalesce oil mist into droplets |
| 3 | Aluminium mesh pre filter to keep larger particles |
| 4 | OC-1; self-draining cassette filter that coalesces oil mist to droplets and collects <i>medium sized</i> particles |
| 5 | OC-2; self-draining cassette filter that coalesces oil mist to droplets and collects <i>fine</i> particles |
| 6 | HEPA filter for final filtration |

APPROVALS/CERTIFICATES



FEATURES

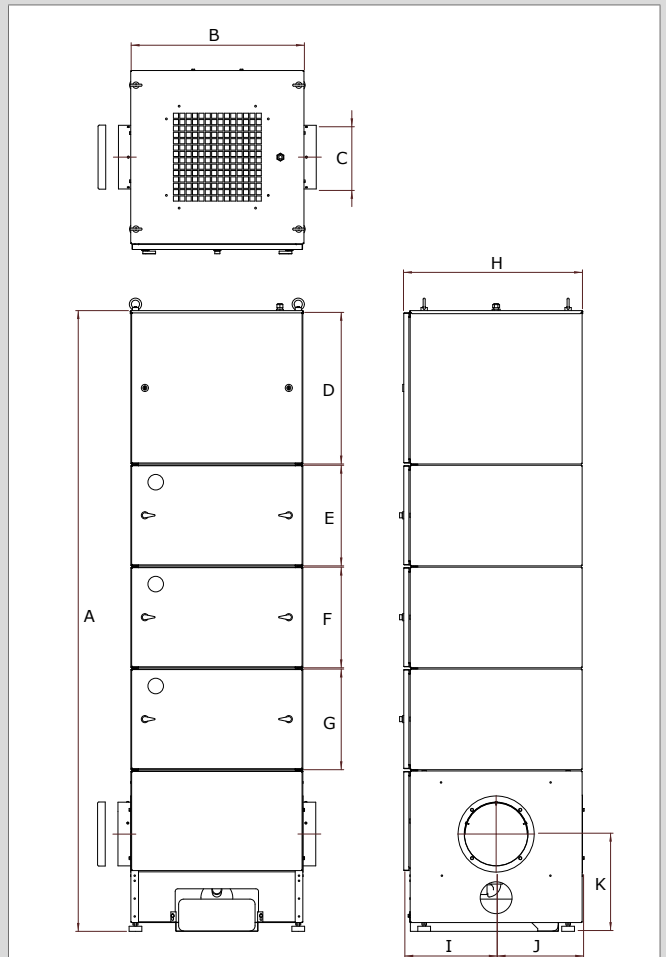
A differential pressure gauge on each filter module indicates status and need for filter replacement.



Easy to handle oil container.
Volume: 8 liters (2 gallon).

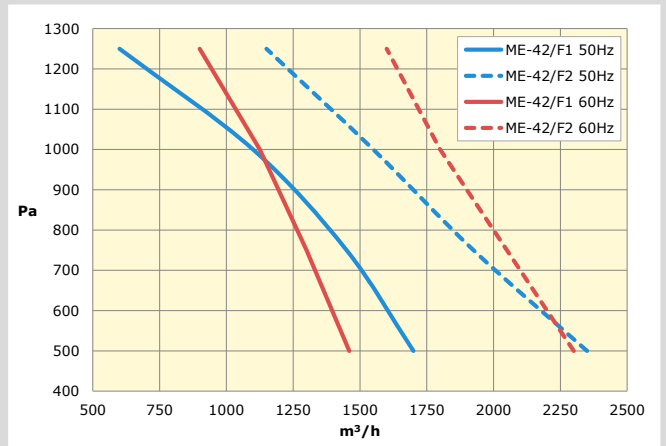


DIMENSIONS



	mm	inch		mm	inch
A	2437	95.9	G	395	15.6
B	680	26.8	H	703	27.7
C	Ø 250	Ø 9.8	I	363	14.3
D	595	23.4	J	339	13.3
E	395	15.6	K	382	15.0
F	395	15.6			

FAN CURVES



Product type

ME-42/F1 - ME-42/F2

Article no.

refer to order information

Product category

oil mist filters

Version

221216/D

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