

## ME-31/ME-32 BANKS

### MIST ELIMINATOR; 4- AND 5-STEP FILTRATION

The MistEliminators ME-31 and ME-32 are stationary filter banks 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-31 bank is based on a 4-step filtration method which allows for exhaust to the atmosphere. In case of recirculation, it is recommended to use an ME-32 bank which is fitted with additional HEPA filters.

ME-3X/2 and ME-3X/3 are *single base filter banks*.  
ME-3X/4 and ME-3X/5 are *dual base filter banks* that are composed of two interconnected single base ones.



Shown: ME-32/3

#### APPLICATIONS

The ME-31 and ME-32 banks are intended to be used for the following applications:

- metal working processes with "polluted" or burnt high viscosity oil/emulsion 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-31 and ME-32 banks 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

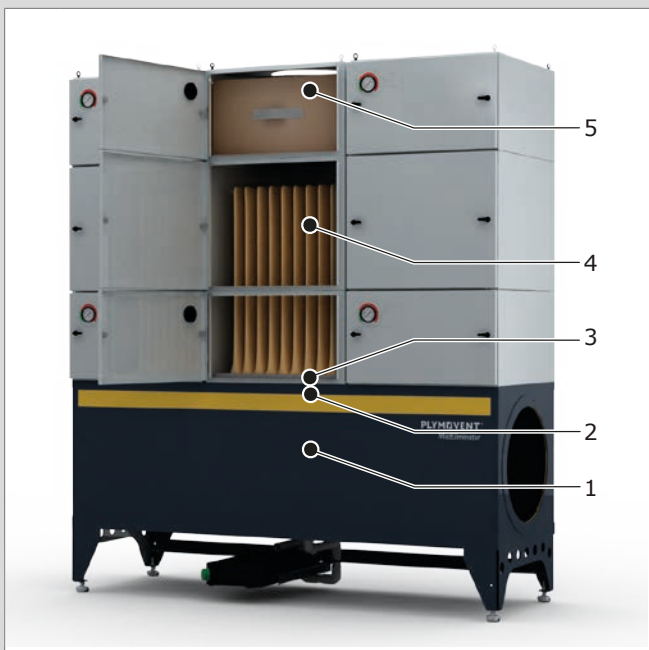
##### Physical dimensions and properties

Housing:	electro-zinc coated steel (according to DIN EN 10152)			
• steel grade	• DC01+ZE			
• steel grade no.	• 1.0330			
Colour:	• grey RAL 7011			
• air inlet module	• grey RAL 7035			
• filter modules				
Weight (net):	<b>ME-31/X</b>		<b>ME-32/X</b>	
	kg	lbs	kg	lbs
X = 2	195	430	266	584
X = 3	283	624	389	858
X = 4	398	877	540	1,190
X = 5	486	1,071	663	1,462

<b>Filters</b>	
Filter class:	<ul style="list-style-type: none"> <li>• ME-31 banks</li> <li>• ME-32 banks</li> </ul>
	<ul style="list-style-type: none"> <li>• F9 according to EN 779-2003</li> <li>• H13 according to EN 1822-2009</li> </ul>
Pressure drop:	(for dimensional purpose)
• ME-31/X	• 700 Pa (2.7 in. WG)
• ME-32/X	• 1200 Pa (4.75 in. WG)
Negative pressure	max. 4000 Pa (16 in. WG)
<b>Performance</b>	
Airflow:	Max.:
• ME-3X/2	• 6000 m³/h (3500 CFM)
• ME-3X/3	• 9000 m³/h (5250 CFM)
• ME-3X/4	• 12.000 m³/h (7000 CFM)
• ME-3X/5	• 15.000 m³/h (8750 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>	
<b>Ambient conditions</b>	
Operating temperature:	<ul style="list-style-type: none"> <li>• min.</li> <li>• nom.</li> <li>• max.</li> </ul>
	<ul style="list-style-type: none"> <li>• 5°C (41°F)</li> <li>• 20°C (68°F)</li> <li>• 45°C (113°F)</li> </ul>
Max. relative humidity	80%
Outdoor use allowed	no
Storage conditions	<ul style="list-style-type: none"> <li>• 5-45°C (41-113°F)</li> <li>• relative humidity max. 80%</li> </ul>
<b>Options and accessories</b>	
<i>Selection required:</i>	
Single base filter banks:	Ø 500 mm (19.7 in.):
• ME-INL-500 (1)	• inlet connection
• ME-INL-COV (1)	• inlet cover plate
Dual base filter banks:	Ø 500 mm (19.7 in.):
• ME-INL-500 (1 or 2)	• inlet connection
• ME-INL-COV (max. 1)	• inlet cover plate
<i>Remaining options:</i>	
CFD	constant flow damper
ME-OUTL-X/S	outlet unit; side connection

ME-OUTL-X/T	outlet unit; top connection			
OilPump 230V	oil container with electric pump			
OilPump 115V	pump			
<b>■ Scope of supply</b>				
<ul style="list-style-type: none"> <li>• Single base filter banks: Assembled filter bank with common inlet - Oil container</li> <li>• Dual base filter banks: Assembled filter bank with common inlet (2) - Inlet join kit - Oil container (2)</li> </ul>				
<b>■ Order information</b>				
MistEliminator:	Article no.:			
• ME-31/2	• 0000100786			
• ME-31/3	• 0000100787			
• ME-31/4	• 0000100788			
• ME-31/5	• 0000100789			
• ME-32/2	• 0000100791			
• ME-32/3	• 0000100792			
• ME-32/4	• 0000100793			
• ME-32/5	• 0000100793			
Number/package	1			
<b>■ Shipping data</b>				
Gross weight (incl. pallet):	<b>ME-31/X</b>		<b>ME-32/X</b>	
	kg	lbs	kg	lbs
X = 2	225	496	301	664
X = 3	323	712	434	957
X = 4	458	1,010	610	1,345
X = 5	556	1,226	743	1,638
Harmonized Tariff Code	8421.39.2090			
Country of origin	Netherlands			

#### FILTER STAGES



1	<b>Air inlet module</b> ; pre separator that distributes the air and prevents large particles from entering the filter package
2	<b>HydroFilter</b> ; impinger to separate oil droplets and coalesce oil mist into droplets
3	<b>Aluminium mesh pre filter</b> to keep larger particles
4	<b>Bag filter</b> for main filtration
5	<b>HEPA filter</b> for final filtration (ME-32 series only)

#### CONFIGURATIONS

Single base filter banks	ME-3X/2 and ME-3X/3
Dual base filter banks	ME-3X/4 and ME-3X/5, which are composed of two interconnected single base filter banks

#### FEATURES

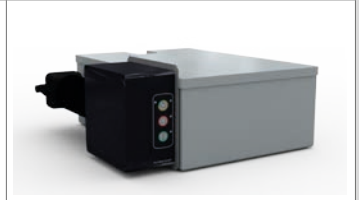
A differential pressure gauge on each filter module indicates status and need for filter replacement.



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



Option: OilPump; oil container with electric pump, serving both single and dual base filter banks.

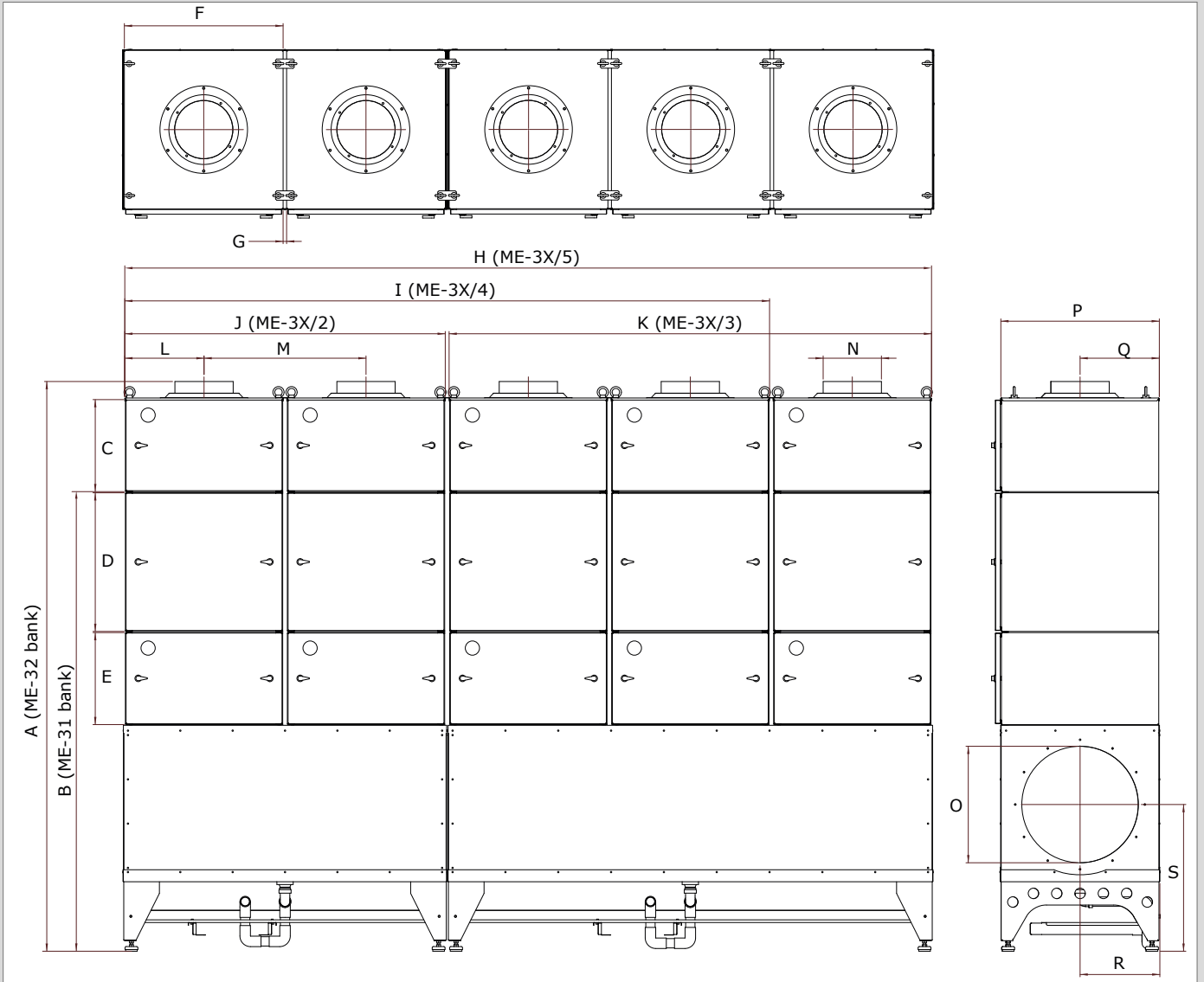


Option: outlet unit for side or top connection of duct.

Shown: top connection ME-OUTL-3/T.



## DIMENSIONS



	mm	inch
<b>A</b>	2445	96.3
<b>B</b>	2045	80.3
<b>C</b>	395	15.6
<b>D</b>	595	23.4
<b>E</b>	395	15.6
<b>F</b>	680	15.0
<b>G</b>	15	0.6
<b>H</b>	3460	136.2
<b>I</b>	2765	108.9
<b>J</b>	1375	54.1
<b>K</b>	2070	81.5
<b>L</b>	340	13.4
<b>M</b>	695	27.4
<b>N</b>	Ø 250	Ø 9.8
<b>O</b>	Ø 500	Ø 19.7
<b>P</b>	680	26.8
<b>Q</b>	340	13.4
<b>R</b>	342	13.5
<b>S</b>	630	24.8

Product type

**ME-31 / ME-32 banks**

Article no.

*refer to order information*

Product category

oil mist filters

Version

041213/B

Always check the latest version on [www.plymovent.com](http://www.plymovent.com)