

- EN** Oil mist filter
- SE** Filter för oljedimma

## MISTWIZARD



- EN** User manual
- SE** Bruksanvisning

---

---

<b>ENGLISH</b>	Page
MistWizard MW-2	2
• Spare parts	10

<b>SVENSKA</b>	
MistWizard MW-2	11
• Reservdelar	10

<b>PLYMOVENT<sup>®</sup></b>	TECHNICAL DESCRIPTION	
<b>MistWizard: MW-</b>		

# Mist Wizard

TO ACHIEVE OPTIMUM FUNCTION AND SAFETY, PLEASE READ THIS MANUAL BEFORE USING YOUR FILTER.

Plymovent MW-filter is specially designed to handle oilmist from both emulsions and straight cutting fluids.

The filter has a unique combination of different filtration methods. The captured oilmist passes a rotation-filter stage where most of the mist condenses and is collected in the filter's separation chamber.

The next step is the main filter where the smallest particles of oilmist and fumes are separated.

## Advantages

- High efficiency rotation filtration.
- Quick replacement of filters without tools.
- Simple installation.
- Compact design.
- Flexible installation possibility.
- Minimum of maintenance.

## Delivery

Filter cabinet complete with filter media and pressure gauge manometer.

Accessories has to be ordered separately.

The inlet/outlet connection are Ø 6,3"/160mm.

## General

**It is forbidden to use the filter in an explosive environment.**

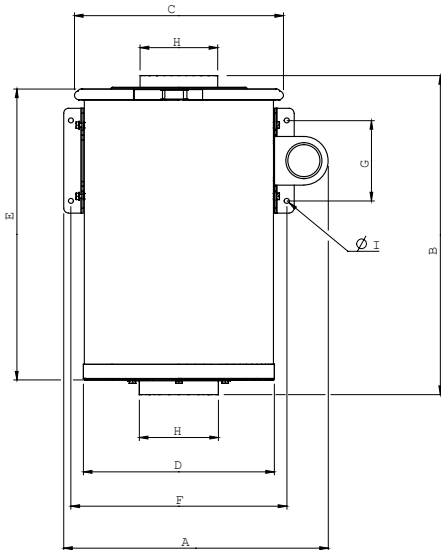
**An "oil mist filter" must never be used for gases or aerosols with a temperature higher than 194°F/ +90°C.**

Filter unit	product no	Weight	Filter area	Inlet/Outlet	Typical air volume	Max air volume
Mistwizard	MW-2	29lb/13kg	107,6ft <sup>2</sup> /10m <sup>2</sup>	6,3"/ 160mm		294cfm/500m <sup>3</sup> h
<b>Accessories</b>						
Wall bracket	MW-W	3,7lb/1,7kg				
Fan Kit	MW-FAN-KIT	3,3lb/1,5kg				
Inlet with drain	MW-INL	1,8lb/0,8kg		6,3"/ 160mm		
Variable outlet	MW-OUT	0,22lb/0,1kg		6,3"/ 160mm		
Stand	MW-STA	4,2lb/1,9kg				
PA- Adapter	MW-ADA	6,6lb/3,0kg				
Stanchion 1100mm	PA-110	37lb/17kg				
Stanchion 2200mm	PA-220	55lb/25kg				
Y- connection	MW-Y 100	2,4lb/1,1kg		4"/100mm		
Y- connection	MW-Y 125	3,1lb/1,4kg		5"/125mm		
<b>Suitable fans</b>			<b>Noise level</b>			
3 phase	FUA-1300	26,5lb/12,6kg	<70dB(A)	6,3"/ 160mm		
1 phase	FUA-1301	28,6lb/13,2kg	<70dB(A)	6,3"/ 160mm		
<b>Filter media</b>				<b>Max air volume</b>	<b>Initial pressure drop</b>	<b>Max pressure drop</b>
Oleofob -2	CART 2 OLE	7,5lb/3,4kg	107,6ft <sup>2</sup> /10m <sup>2</sup>	588cfm/1000m <sup>3</sup> /h	0,6"wg/150Pa	0,4"wg/1000Pa

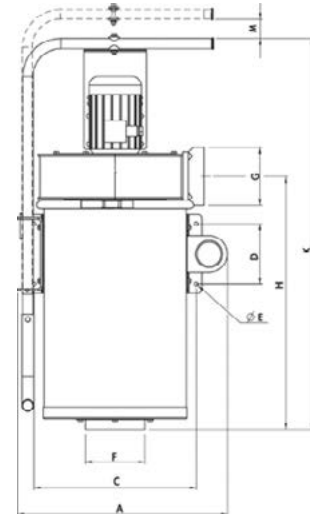
Model: MW-2

## DIMENSIONAL DATA

Model: MW-2 with FUA-1300



	mm	inches
A	542	21 11/32
B	642	25 13/32
C	428	16 27/32
D	390	15 13/32
E	597	23 17/32
F	442	17 13/32
G	165	6 1/2
H	159	6 1/4
I	10.5	13/32
J	572	22 1/5
K	1070	42 1/8
L	695	27 1/4
M	45	1 25/32



NOTE! If the filter unit with fan or without shall be connected to external duct system on filtrated air side a flexible connection is needed between the unit and duct system. MWV-2: L= 600mm.

### Safety information:

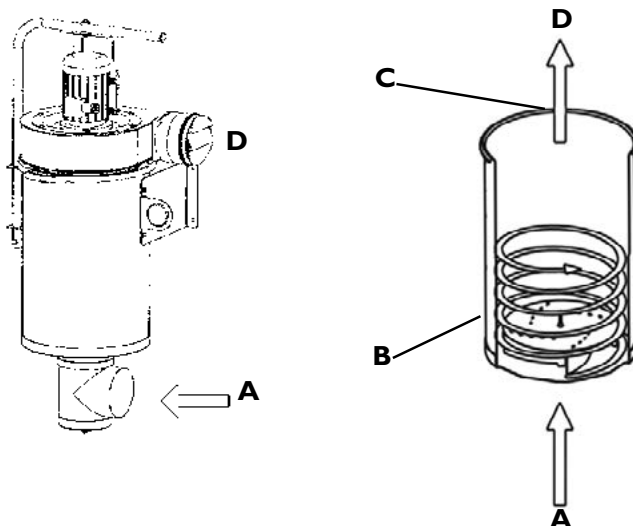
1. Before replacing the filter cartridge always switch off the power to the fan.  
(see separate information: Filter maintenance)
2. Be careful when lifting and turning away fan from the filter unit.
3. When replacing the filters, always use protective gloves and mask.  
The collected oilmist may be dangerous to your health.
4. The filter must never be opened during operation.
5. All electrical maintenance must be carried out by an authorized electrician.

### Design and function

Plymovent Mist Wizard Filter is a highly effective mechanical filter for filtration of oil mist. The unique design removes the oil mist in two stages. These are incorporated in order to maximize their effectiveness. The collected liquids can be re-used or disposed.

#### Filtration:

Polluted air (A) leads in the inlet, duct or hose and passes an air rotation separation stage (B) where separation of solid oil takes place by centrifugal force. The main filter (C) separates the remaining oil particles from the air-stream (D).



# MistWizard

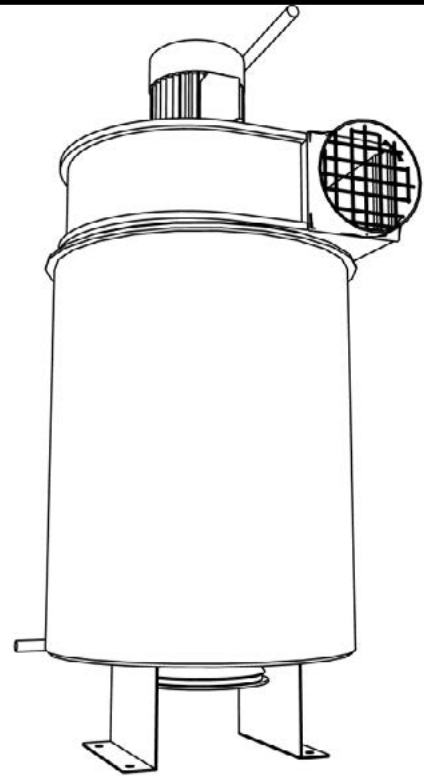
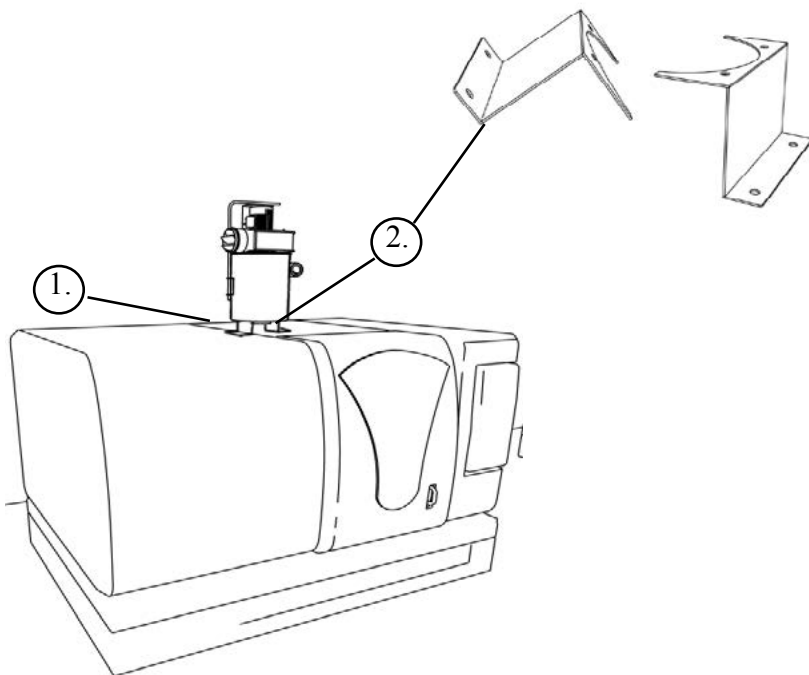
## OPTIONS and ACCESSORIES

	Description	Type	Specification	Art. no.
<b>Extraction fan</b>				
	Extraction fan with radial impeller. Speed of revolutions: 2800 rpm. Outlet: Ø 160 mm.	<b>FUA-1300 (215)</b>	230V/1ph/50Hz	0000100300
		<b>FUA-1300 (435)</b>	230-400V/3ph/50Hz	0000100302
<b>Mounting bracket</b>				
	Wall mouting bracket for MistWizard.	<b>MB-MW/W</b>		0000100777
<b>Fan kit</b>				
	Fan mounting kit. To be used with FUA-1300.	<b>MW-FAN-KIT</b>		0000100778
<b>Stand</b>				
	Stand for elevated machine mounting. Stand elevation 150 mm.	<b>MB-MW/S1</b>		0000100779
<b>Stanchion mounting bracket</b>				
	PA Stanchion mounting bracket. PA-110 and PA-220 to be ordered separately.	<b>MB-MW/S2</b>		0000100780
<b>Stanchion</b>				
 PA-110 PA-220	Stanchion for ceiling, wall, floor or bench mounting of a MistWizard. MB-MW/S2 to be ordered separately.	<b>PA-110</b>	1,1 m	0000101231
		<b>PA-220</b>	2,2 m	0000101234
<b>Inlet</b>				
	Inlet for 160 mm duct connection. Includes drain loop kit and mounting screws.	<b>MW-INLET</b>		0000100781
<b>Outlet</b>				
	360° adjustable outlet diffuser 45° angle discharge. Outlet size Ø 160 mm.	<b>MW-OUTLET</b>		0000100782
<b>Filter wrapper</b>				
	Oil coalescer filter wrapper for MW-2.	<b>MW-WRAP/2</b>		0000100293

### Direct mounting to machine:

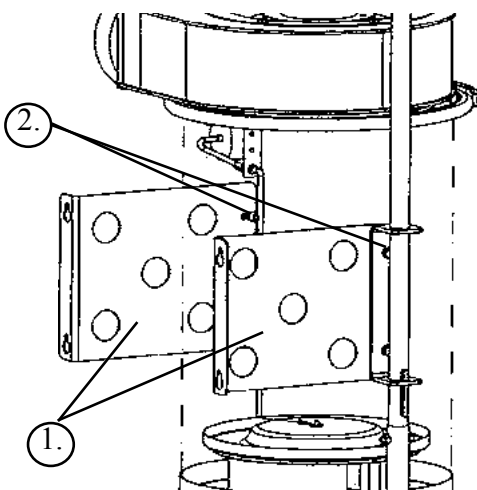
To enter the machine (1.) a  $\varnothing 165$  opening is needed. Filter stand MW-StA (2.) can be used (accessory).

**NOTE!** If the filter unit shall be connected to an external duct system on filtrated air side a flexible connection is needed between the unit and duct system to allow easy filter access.

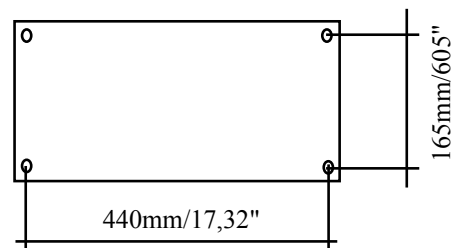


### Wall mounting of filter: MB-MW/S1

Applicate brackets (1) to the filter unit by supplied hardware (2), Note! M8x25 on fan bracket side.



Hole pattern for wall mounting.



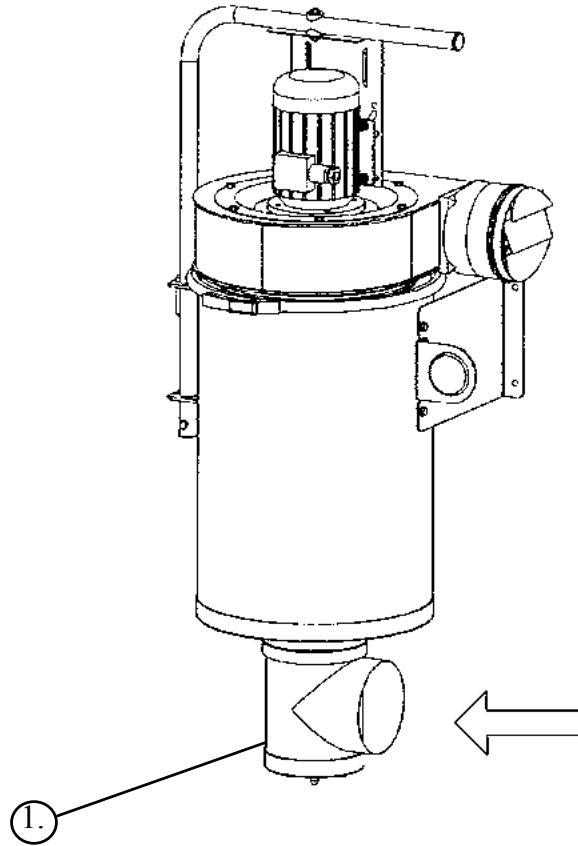
---

---

## To applicate inlet with drain: **MW-INLET**

---

Applicate inlet with drain (1) using supplied detailes.

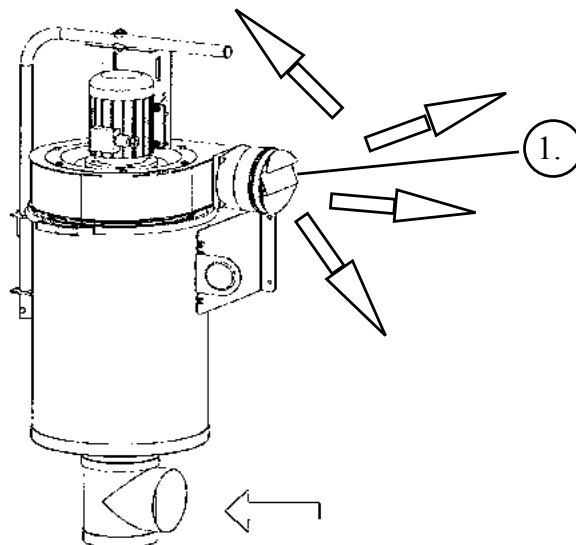


---

## To applicate adjustable fan outlet: **MW-OUTLET**

---

Applicate adjustable outlet (1.) using supplied detailes.



---

---

## To mount fan direct on filter unit: MW-FAN-KIT

---

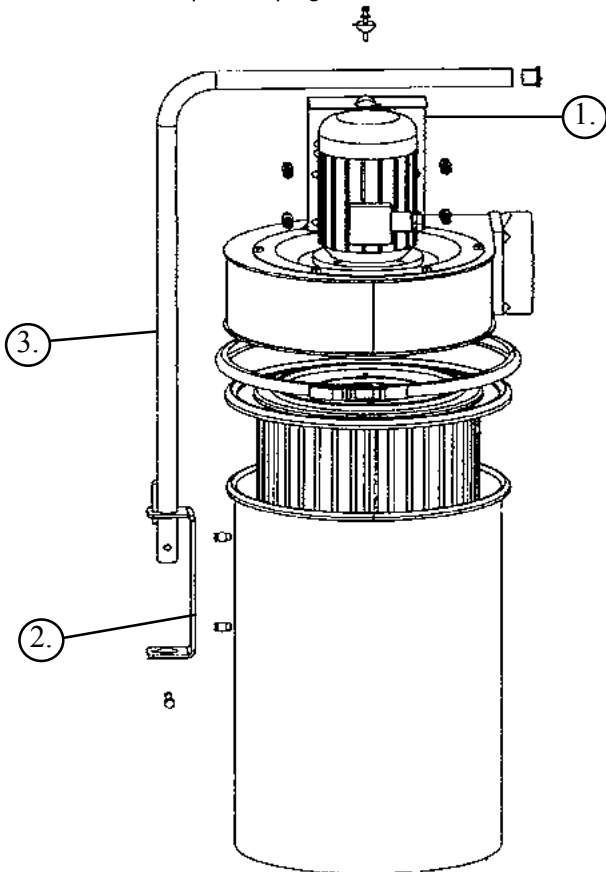
Applicate the bracket (1) to the fan motor, applicate the bracket (2) to the filter unit.

Applicate the tube (3) in to the bracket (2).

Put the fan on top of the filter unit and bolt tubing (3) to bracket (1).

Note! Bracket (1) universal for IEC and NEMA motors.

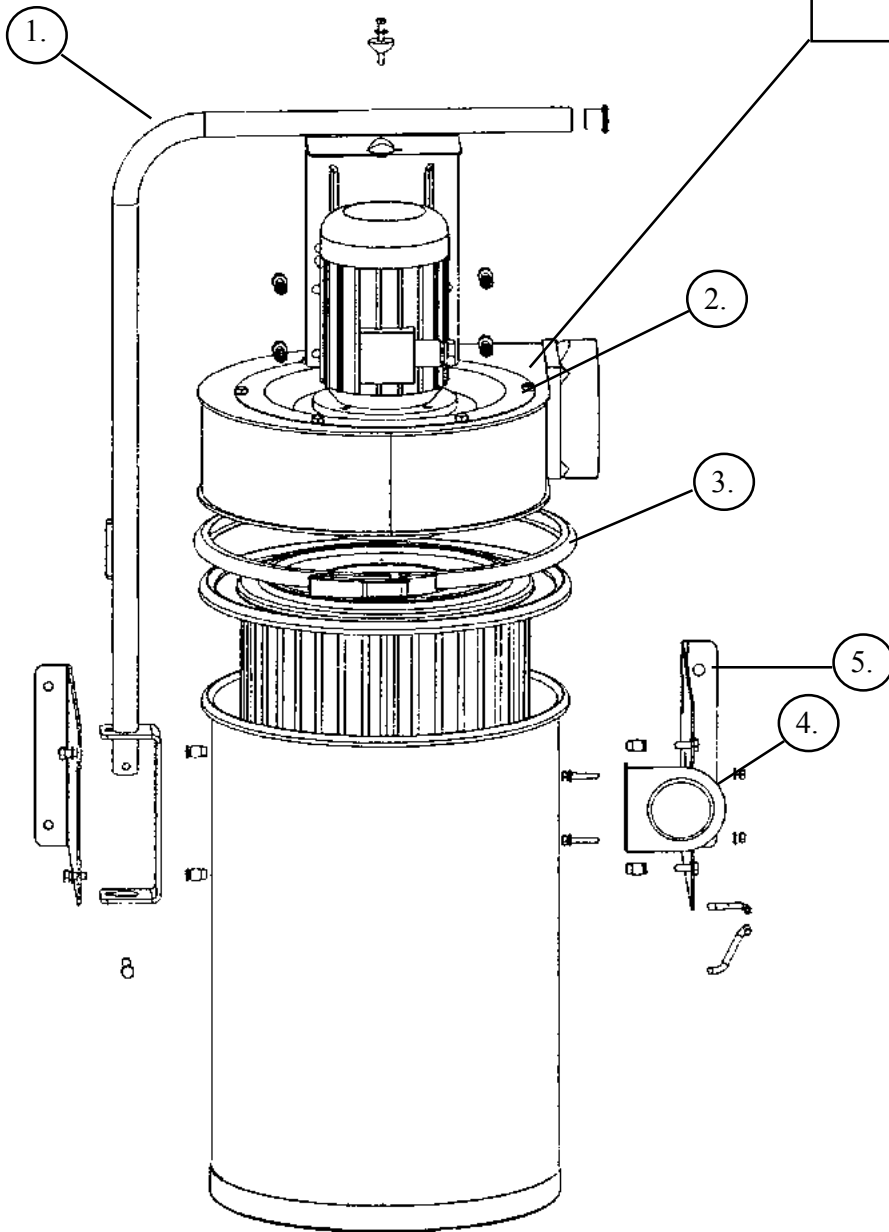
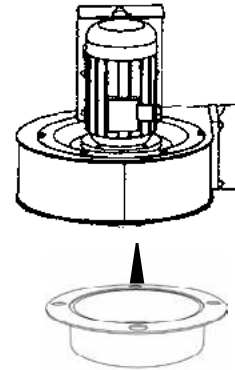
Note! When connected to an external ductwork, always use a hose connection or other quick coupling between fan outlet and ducting to allow easy filter access.



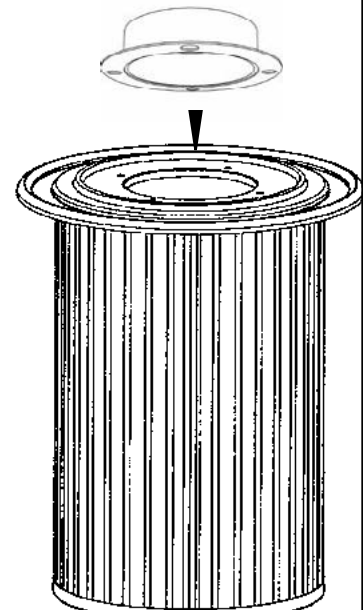


- 1. MW-FAN-KIT
- 2. FAN: FUA-I 300
- 3. CART OLE: Cartridge, oleofob.
- 4. Manometer.
- 5. MB-MW/S1: wall mounting bracket

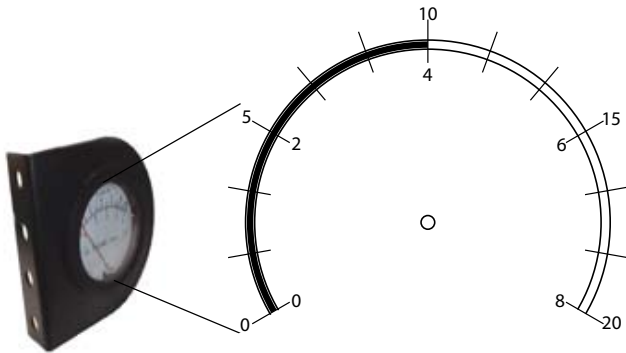
Location for plastic spigot when using fan.



Location for plastic spigot without fan.



### Pressure drop check

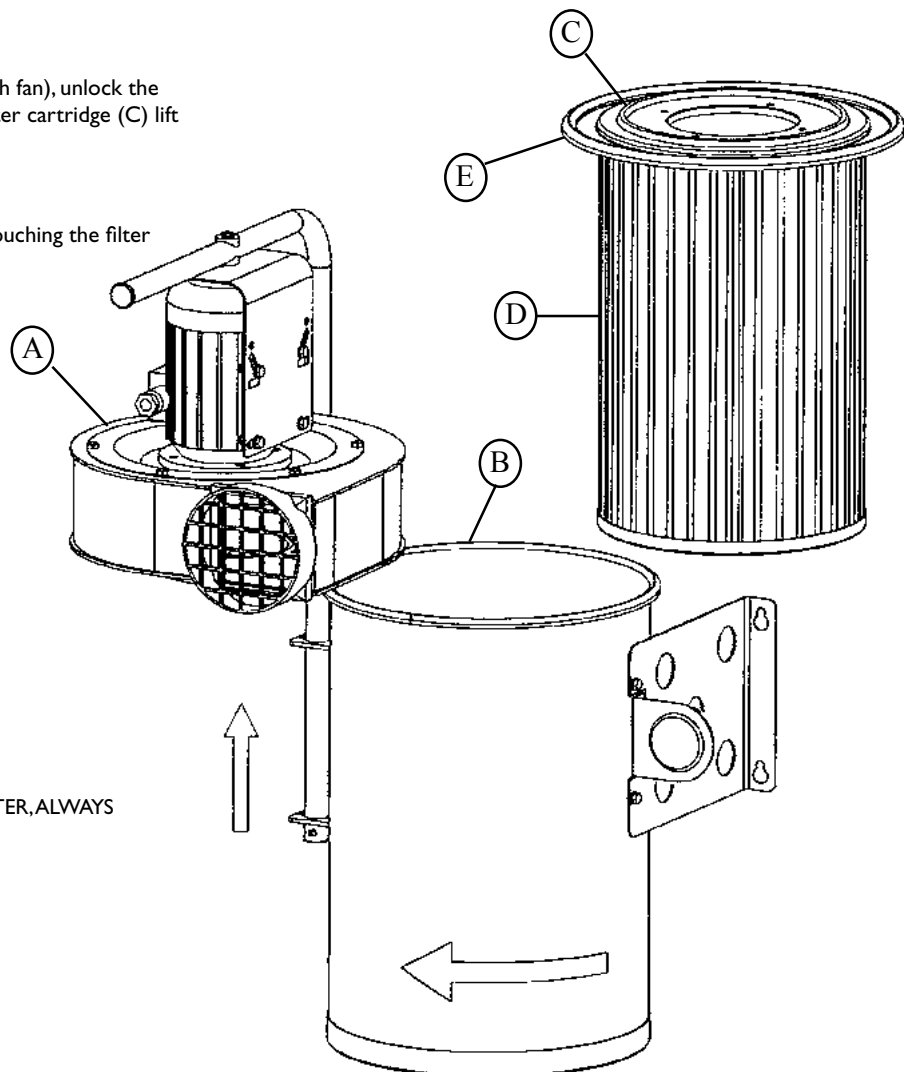


Bad filtration or low airflow, check differential pressure manometer. If the value is 1000Pa/ 4"wg or higher it is necessary to wash or replace filter cartridge.

### Washing filter cartridge/ Replacing filter cartridge

#### Main filter

1. Lift and turn fan (A) to the side (unit with fan), unlock the filter cartridge lock (B). To detach the filter cartridge (C) lift upwards.
2. Put the filter cartridge (C) to side.
3. Re-assemble the filter carefully - avoid touching the filter media (D), check the sealing (E).



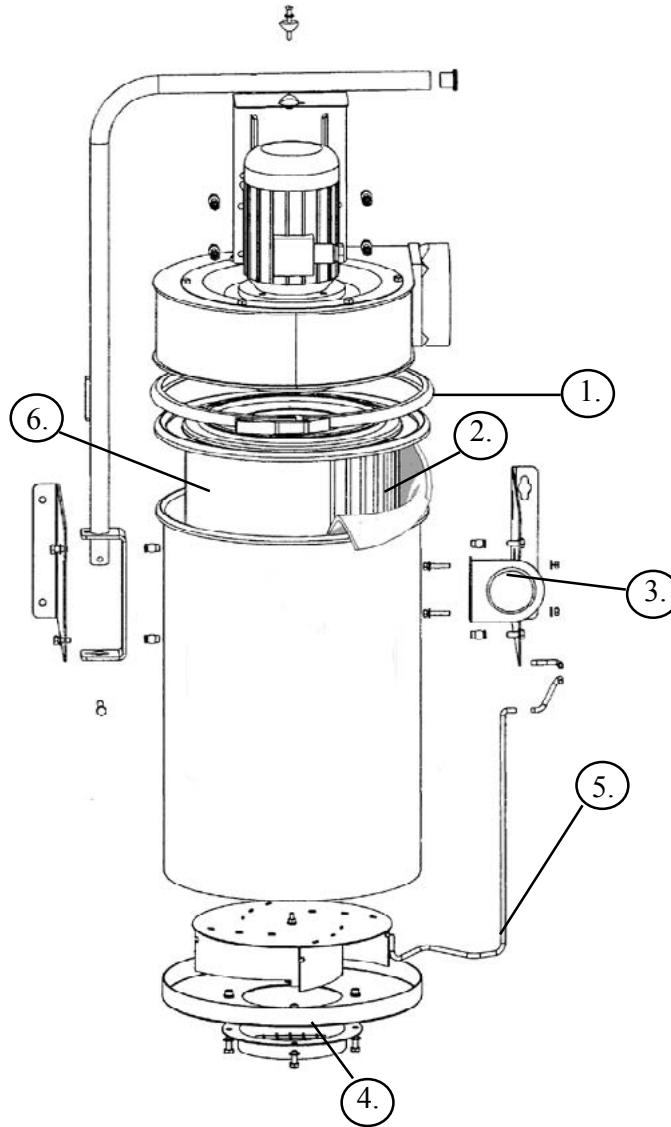
WHEN REPLACING OR WASHING THE FILTER, ALWAYS USE PROTECTIVE GLOVES AND MASK.



# PLYMVENT®

SPARE PART

Mist Wizard



Produkt No:

Description

A	All models	All models of MW
B	MW-1	
C	MW-2	

X = Order as required, state required length.

Pos	Art. No:	A	B	C	D	E	F	G	Description	Note
1	962 787	1							Clamp ring	
2										
	6170-1011			1					CART-2-OLE incl Pre-filter	
3	994 103	1							Manometer incl. hose connections	from 03181
	7773-1011	1							Complete manometer kit	from 03181
4	505 826	1							Inlet Ø157mm/6,2"	
5	985 945	X							Hose for manometers 8mm/0,31"	
6	6125-1011	1							WRAP-2 Prefilter for CART-2-OLE	

<b>PLYMOVENT®</b>	TEKNISK BESKRIVNING	
<b>MistWizard</b>		

# MistWizard Filter

FÖR ATT UPPNÅ OPTIMAL FUNKTION OCH SÄKERHET SKALL DENNA MANUAL LÄSAS NOGGRANT INNAN FILTRET TAS I BRUK!

Plymovent MistWizard Filter är anpassat för att filtrera oljedimma från emulsioner eller raka skär-oljor.

Filtret har en unik kombination av filtrering i olika steg. Den uppsamlade oljedimman passerar rotationsfiltreringen där det mesta av oljedimman kondenseras och avskiljs. Nästa steg är huvudfiltret där de minsta partiklarna av oljedimman och stoft avskiljs. MistWizard Filtret finns i två olika storlekar vilket innebär stor flexibilitet av luftflöden.

#### Fördelar

- Högeffektiv filtrering i flera steg.
- Enkelt att byta filter.
- Enkel att installera.
- Kompakt design
- Flexibla monteringsmöjligheter
- Minimalt underhåll.

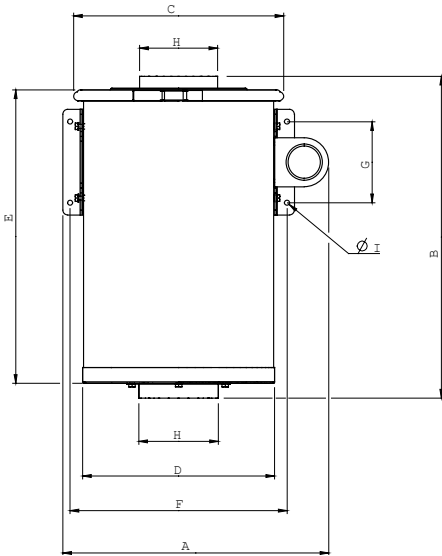
#### Leverans

Filterenheten levereras med filtermedia, fläkt och differenstryckmätare. Alla tillbehör måste beställas separat. Filtrets in och utlopp är Ø160mm.

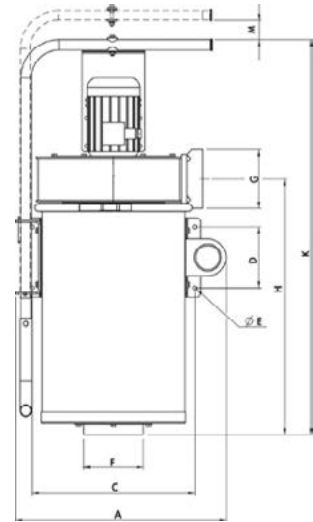
#### Allmänt

**Filtret får aldrig användas i explosiv miljö. Filtret får inte användas till**

Filter unit	product no	Weight	Filter area	Inlet/Outlet	Typical air volume	Max air volume
Mistwizard	MW-2	29lb/13kg	107,6ft²/10m²	6,3"/160mm		294cfm/500m³/h
<b>Accessories</b>						
Wall bracket	MW-W	3,7lb/1,7kg				
Fan Kit	MW-FAN-KIT	3,3lb/1,5kg				
Inlet with drain	MW-INL	1,8lb/0,8kg		6,3"/160mm		
Variable outlet	MW-OUT	0,22lb/0,1kg		6,3"/160mm		
Stand	MW-STA	4,2lb/1,9kg				
PA- Adapter	MW-ADA	6,6lb/3,0kg				
Stanchion 1100mm	PA-110	37lb/17kg				
Stanchion 2200mm	PA-220	55lb/25kg				
Y- connection	MW-Y 100	2,4lb/1,1kg		4"/100mm		
Y- connection	MW-Y 125	3,1lb/1,4kg		5"/125mm		
<b>Suitable fans</b>			<b>Noise level</b>			
3 phase	FUA-1300	26,5lb/12,6kg	<70dB(A)	6,3"/160mm		
1 phase	FUA-1301	28,6lb/13,2kg	<70dB(A)	6,3"/160mm		
<b>Filter media</b>				<b>Max air volume</b>	<b>Initial pressure drop</b>	<b>Max pressure drop</b>
Oleofob -2	CART 2 OLE	7,5lb/3,4kg	107,6ft²/10m²	588cfm/1000m³/h	0,6"wg/150Pa	0,4"wg/1000Pa



	mm	inches
A	542	21 11/32
B	642	25 13/32
C	428	16 27/32
D	390	15 13/32
E	597	23 17/32
F	442	17 13/32
G	165	6 1/2
H	159	6 1/4
I	10.5	13/32
J	572	22 1/5
K	1070	42 1/8
L	695	27 1/4
M	45	1 25/32



NOTE! If the filter unit with fan or without shall be connected to external duct system on filtrated air side a flexible connection is needed between the unit and duct system. MW-2: L= 600mm.

### Säkerhets information:

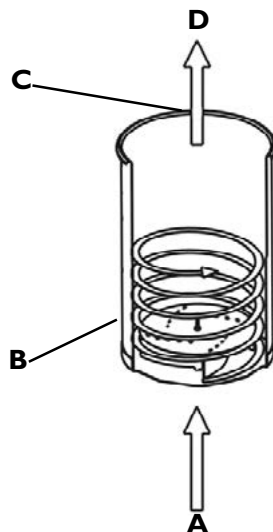
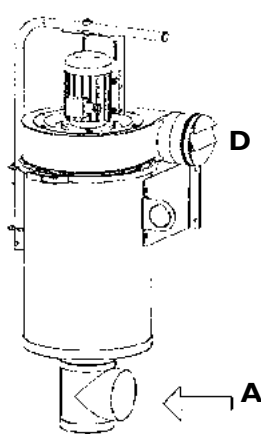
1. Bryt alltid strömmen före byte av filterkassett eller rengöring av filter. ( se instruktion filterbyte )
2. Iakttag försiktighet vid öppnande av filter och lyft av fläkt.
3. Använd alltid skyddshandskar och andningsskydd vid byte eller rengöring av filter. Den uppsamlade oljedimman kan vara farlig för hälsan.
4. Filtert får aldrig öppnas under drift.
5. All elektrisk service skall göras av behörig elektriker.

### Uppbyggnad och funktion:

Plymovent MistWizard Filter är ett högeffektivt mekaniskt oljedimfilter. En unik konstruktion renar oljedimma i två steg. Filtreringen sker i sådan ordning att effektiviteten i oljedimavskiljningen maximeras. Den uppsamlade oljedimman dräneras direkt ned i maskinen eller samlas upp. Den uppsamlade oljan kan återanvändas eller deponeras.

#### Filtrering

Förorenad luft ( **A** ) leds direkt in i inloppet eller via slang/kanaler till rotationsfiltreringen ( **B** ). Där avskiljs tunga och stora oljepartiklar. Luften leds vidare upp i steg två ( **C** ). Detta huvudfilter renar bort dom återstående oljepartiklarna ur den renade luften ( **D** ).



# MistWizard

## OPTIONS and ACCESSORIES

	Description	Type	Specification	Art. no.
<b>Extraction fan</b>				
	Extraction fan with radial impeller. Speed of revolutions: 2800 rpm. Outlet: Ø 160 mm.	<b>FUA-1300 (215)</b>	230V/1ph/50Hz	0000100300
		<b>FUA-1300 (435)</b>	230-400V/3ph/50Hz	0000100302
<b>Mounting bracket</b>				
	Wall mouting bracket for MistWizard.	<b>MB-MW/W</b>		0000100777
<b>Fan kit</b>				
	Fan mounting kit. To be used with FUA-1300.	<b>MW-FAN-KIT</b>		0000100778
<b>Stand</b>				
	Stand for elevated machine mounting. Stand elevation 150 mm.	<b>MB-MW/S1</b>		0000100779
<b>Stanchion mounting bracket</b>				
	PA Stanchion mounting bracket. PA-110 and PA-220 to be ordered separately.	<b>MB-MW/S2</b>		0000100780
<b>Stanchion</b>				
 PA-110 PA-220	Stanchion for ceiling, wall, floor or bench mounting of a MistWizard. MB-MW/S2 to be ordered separately.	<b>PA-110</b>	1,1 m	0000101231
		<b>PA-220</b>	2,2 m	0000101234
<b>Inlet</b>				
	Inlet for 160 mm duct connection. Includes drain loop kit and mounting screws.	<b>MW-INLET</b>		0000100781
<b>Outlet</b>				
	360° adjustable outlet diffuser 45° angle discharge. Outlet size Ø 160 mm.	<b>MW-OUTLET</b>		0000100782
<b>Filter wrapper</b>				
	Oil coalescer filter wrapper for MW-2.	<b>MW-WRAP/2</b>		0000100293

# PLYMØVENT®

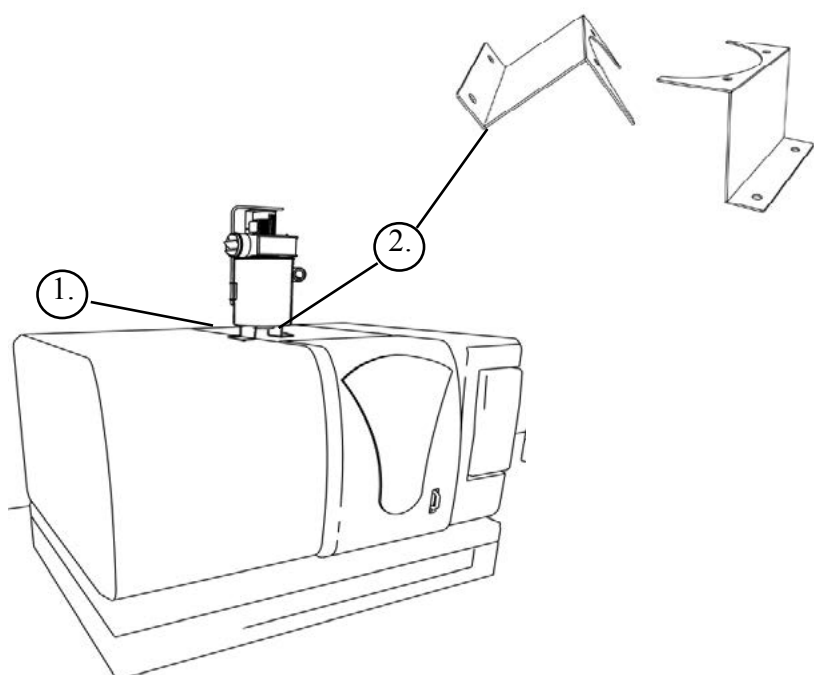
## MONTERINGSANVISNING

Mist Wizard

### Direktmontera på maskin

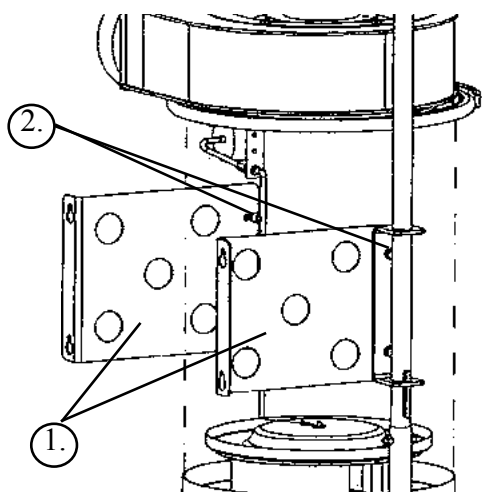
Markera hål och hålbild för montage på maskin (1) och genomför håltagning,  $\text{Ø}165\text{mm}$  är lämpligt.  
Stativ MVW-STA(2.) kan med fördel användas (tillbehör).

**OBS!** Om filter/ Fläkt skall monteras till frånluftskanal skall slang eller annan typ av snabbkoppling användas mellan filter/ fläkt och kanalsystem.

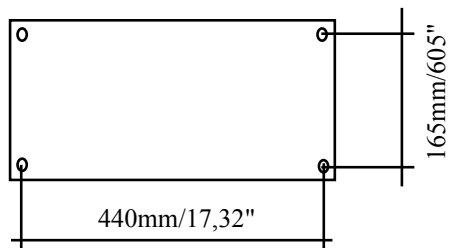


### Filter placering på vägg: MB-MW/S1

Montera väggfästen (1) till filterenheten med medföljande fästelement (2), OBS! M8x25 fläktfästesida.



Hålbild för väggplacering.

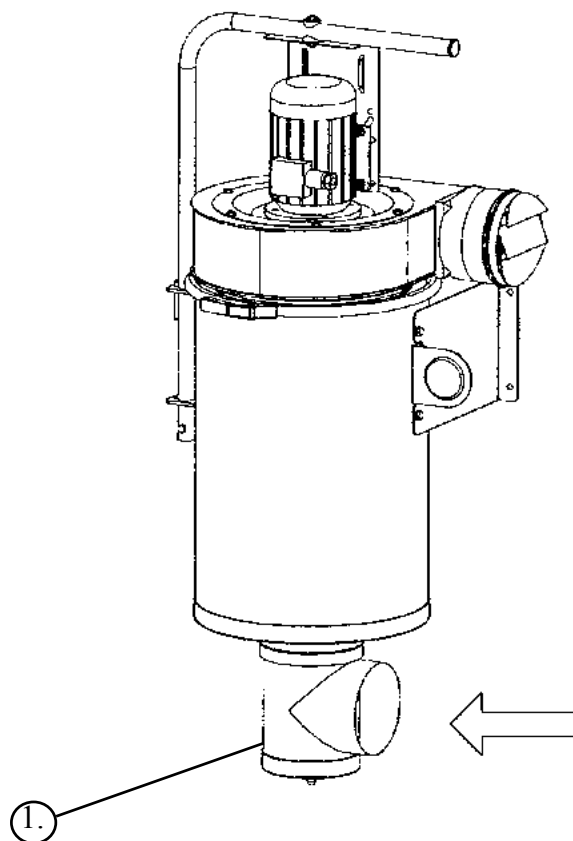


---

## Montering av inlopp med dränering: MW-INLET

---

Montera inloppet (1) med medlevererade detaljer.

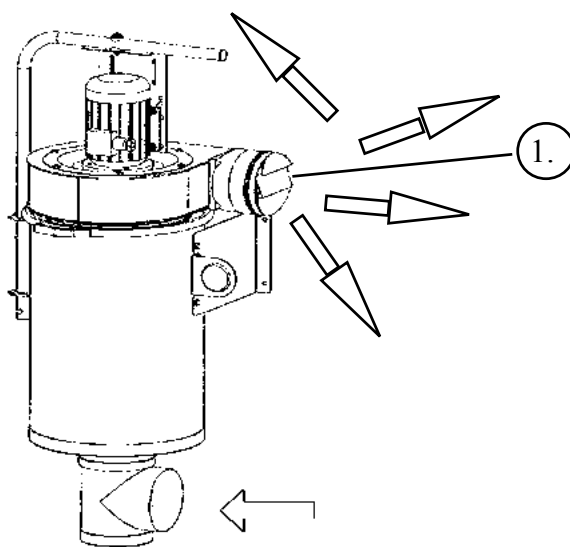


---

## Montering av justerbart utlopp: MW-OUTLET

---

Montera justerbara utloppet (1.) med medlevererade detaljer.





## Direktmontera fläkt på filtret: MW-FAN-KIT

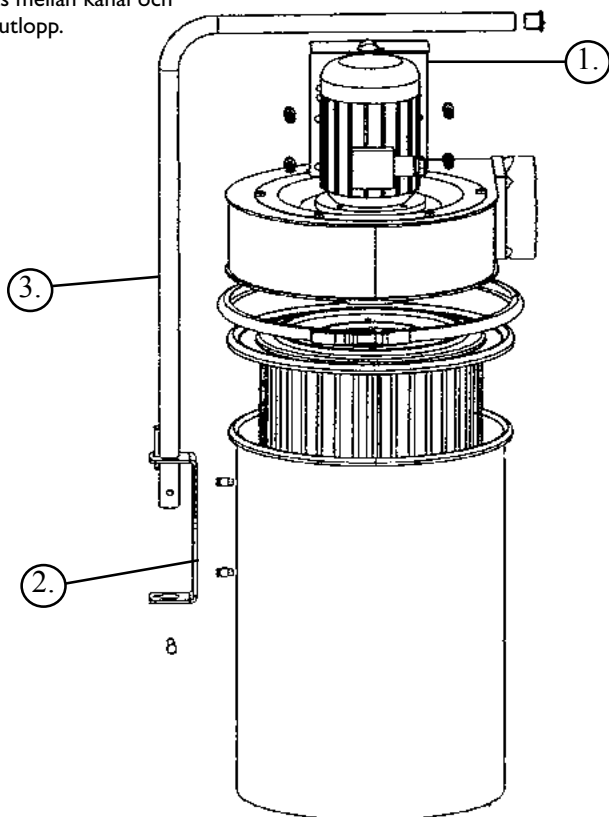
Montera fäste (1) till flätmotor, montera fäste (2) till filterhus.

Montera rör (3) till fäste (2).

Placera fläkten uppe på filterenheten och montera samman rör (3) och fäste (1).

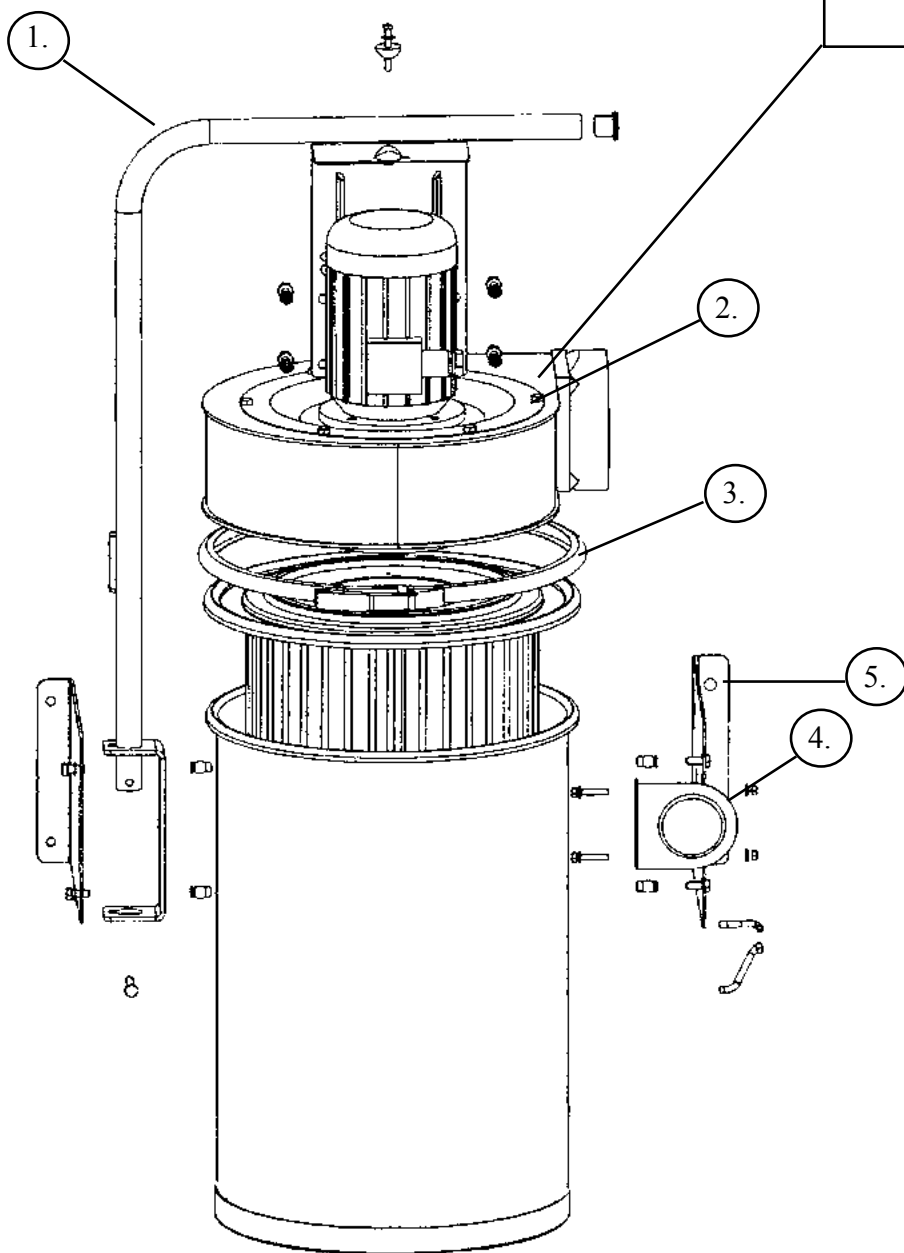
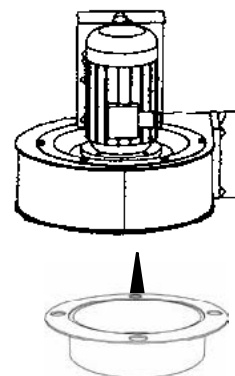
OBS! Fäste (1) passar flera typer av motorer.

OBS! När utloppet skall anslutas till extern kanal måste slang eller annan typ av snabbkoppling monteras mellan kanal och fläktens utlopp.



- 1. MW-FAN: Fläkt kit.
- 2. FLÄKT:FUA-I 300
- 3. CART OLE: Filterpatron oleofob.
- 4. Manometer.
- 5. MB-MW/S1: väggmonteringsdetaljer

Placering av plaststos när fläkt skall monteras.



Placering av plaststos när fläkt ej används.

