

# ME-100 LABORATORY EXTRACTION ARM DATA SHEET



# ME-100 EXTRACTION ARM

## DESCRIPTION

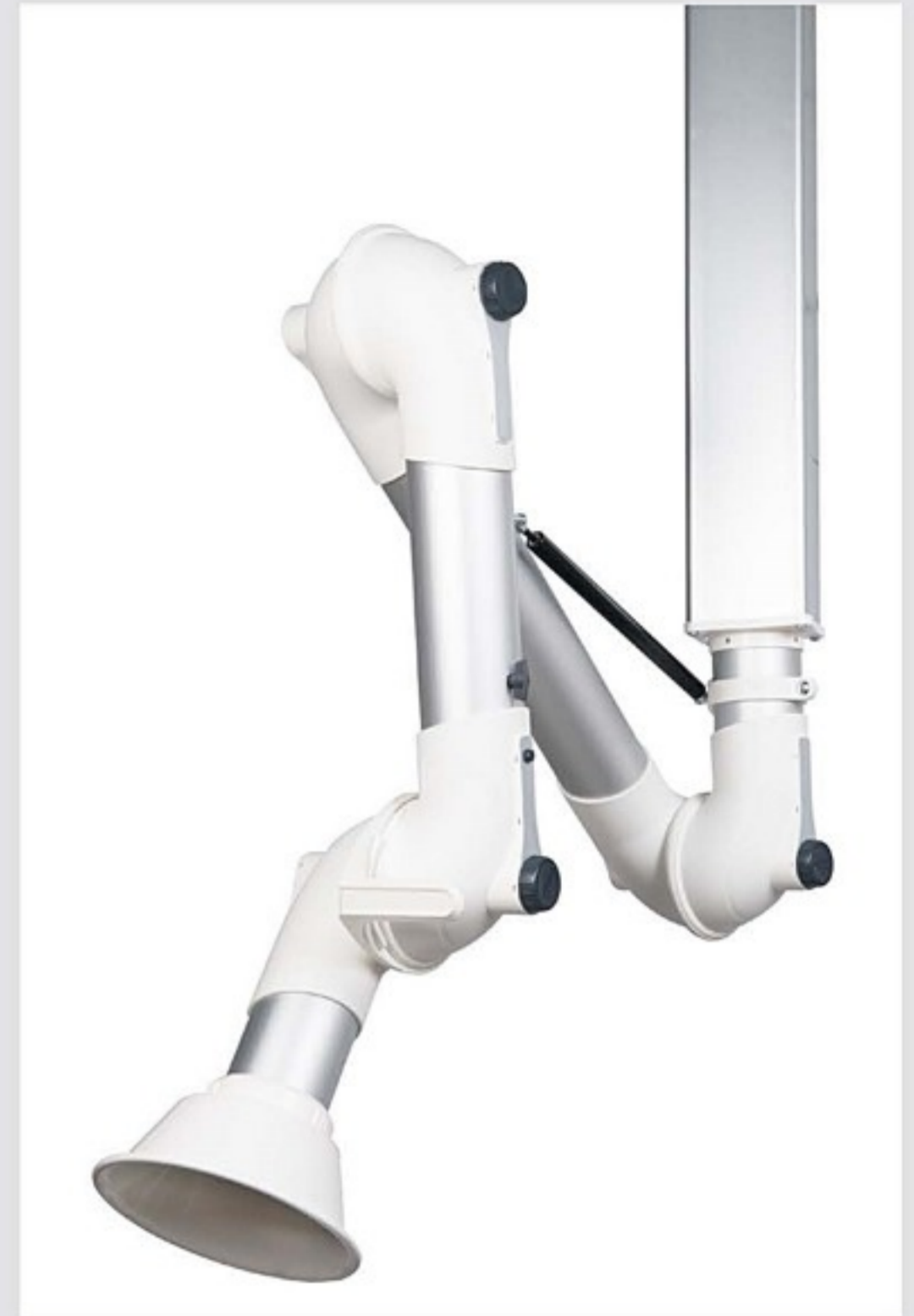
The ideal extractor for light industry and laboratory environments.

With its optimal design, the Ø100 mm Movex ME has a very low pressure drop, which provides many valuable benefits.

- Low pressure drop saves energy.
- Air flow noise is reduced.
- Lower pressure drop is achieved without selecting a larger diameter extractor.
- Lower pressure drop allows the ME to be combined with additional extraction systems.

To further facilitate maneuvering of the extractor, the models 1650 and 1900 are equipped with a pulling gas spring as standard and the models 2100 and 2650 with two pulling gas springs.

An easy-to-grip handle facilitates the maneuverability of the extractor. Unique design and stable mounting brackets make the Movex ME your best choice.



## ALWAYS CHOOSE A LOW PRESSURE DROP

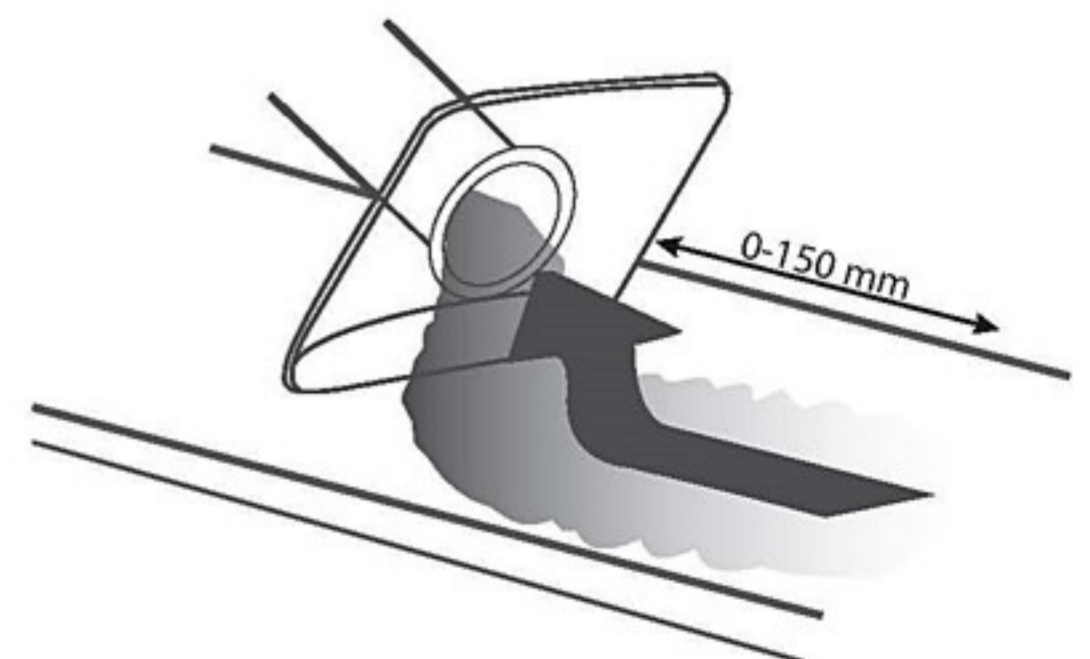
Lowest possible pressure drop is a quality aspect that always should be considered.

With its uniquely designed joint construction, Movex ME combines maximum flexibility with low pressure drop. The air passes through the joints without creating unnecessary turbulence, thus producing an energy-saving low pressure drop and a quieter working environment.



## OPTIMAL CAPTURE

For optimum benefit from the local extractor, it is important to use the flexibility of the extractor to get as close to the contaminant as possible. A good rule of thumb would be a distance of 2-3 times the diameter of the extractor tube. At the recommended air flow, the extractor will provide high efficiency even if disturbances are generated in the surroundings.



# ONE ARM. ALL OPTIONS.

Movex ME has a complete range of accessories to suit every situation, enabling you to create the optimal extractor for the evacuation of hazardous airborne gases and particulates.

## STANDARD VERSION



Suitable for evacuating most types of airborne contaminants, e.g. in laboratories, schools, hospitals, the pharmaceutical industry, nail salons and light industrial applications.

## PP VERSION



Used primarily for evacuating very corrosive contaminants in high concentrations, e.g. in certain laboratories and in the pharmaceutical and chemical industries.

## ATEX VERSION

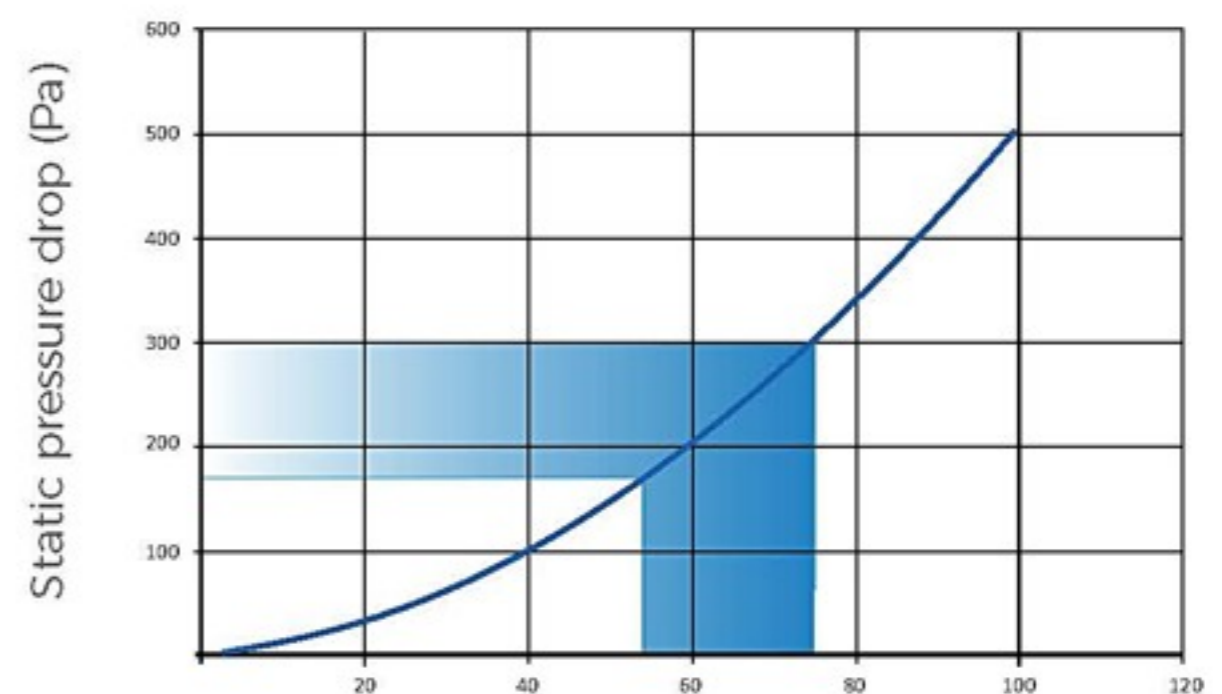


Suitable for evacuating airborne contaminants where there is a requirement for an ATEX-classified environment, e.g. in laboratories, the chemical and petrochemical industries, gas distribution, and the paint and pharmaceutical industries.

## RECOMMENDED AIR FLOW

The recommended air flow for a Ø100 arm is 200-300 m<sup>3</sup>/h. See table and diagram.

| ACTIVITY       | AIRFLOW                   |           |
|----------------|---------------------------|-----------|
| Laboratories   | 200-300 m <sup>3</sup> /h | 55-80 l/s |
| Light industry | 300 m <sup>3</sup> /h     | 80 l/s    |

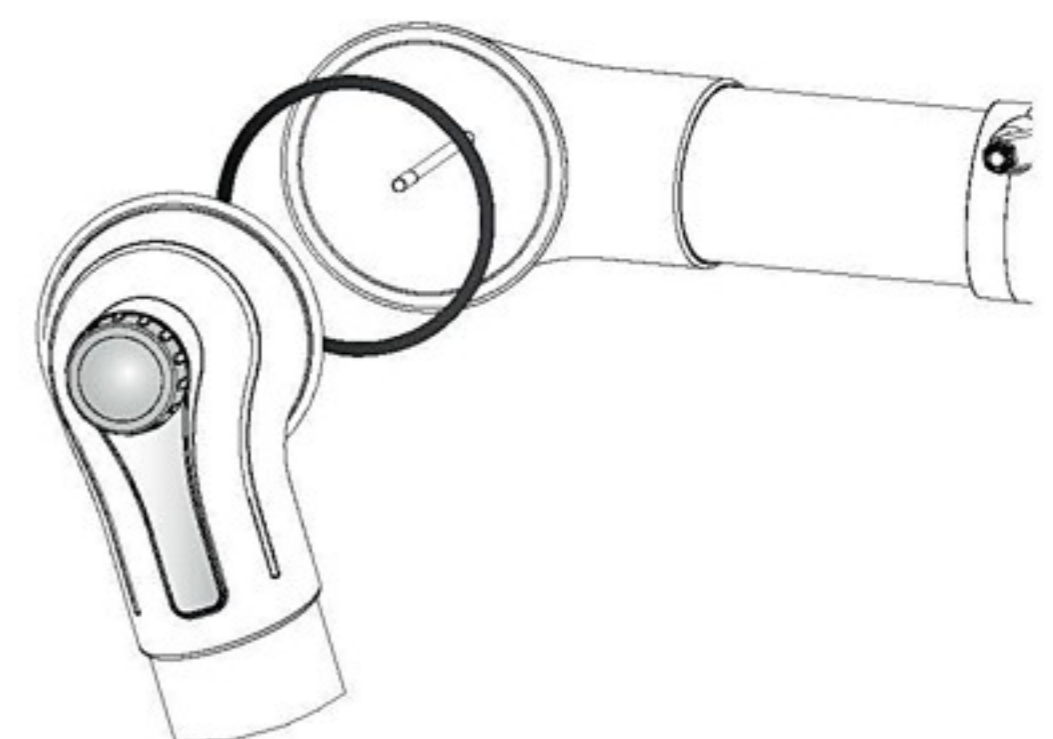


Static pressure drop is measured in accordance with ISO standard 5167-1

## UNIQUE BENEFITS

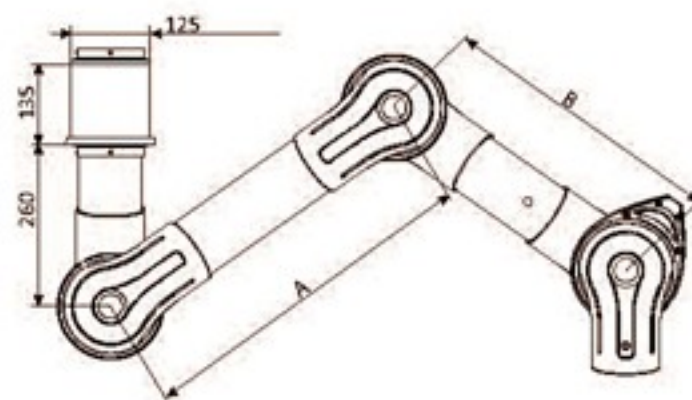
The Movex ME joints have a patented friction design that, combined with the large joint diameter and single grip handle, provide a secure, position-stable arm with smooth adjustments. All without the need to apply excessive force or use tools on the adjusting knob.

Joints with reinforced ends and ball bearings moderate the friction and allow the arm to be moved up and down while maintaining stability and function.



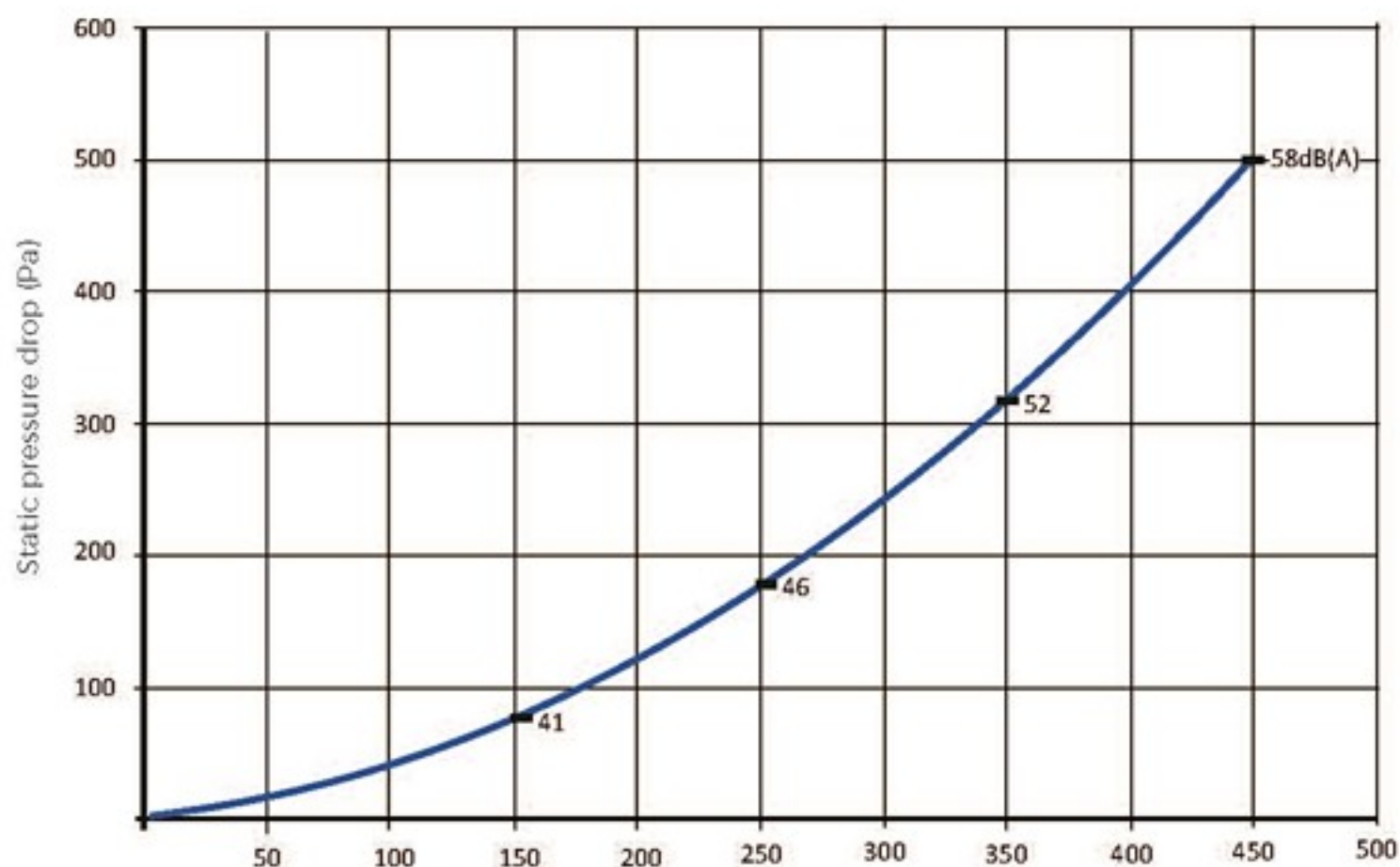
## MET FOR CEILING AND WALL MOUNTING, 3 JOINTS

| ITEM NO         | A (mm) | B (mm) | Ø C (mm) | GAS SPRING pcs | WEIGHT (Kg) |
|-----------------|--------|--------|----------|----------------|-------------|
| <b>STANDARD</b> |        |        |          |                |             |
| MET 1150-100    | 450    | 350    | 100      | 0              | 4,9         |
| MET 1350-100    | 550    | 450    | 100      | 0              | 5,4         |
| MET 1650-100    | 750    | 550    | 100      | 1              | 5,9         |
| MET 1900-100    | 1000   | 550    | 100      | 1              | 6,4         |
| MET 2100-100    | 1000   | 750    | 100      | 2              | 6,9         |
| MET 2650-100    | 1300   | 1000   | 100      | 2              | 7,4         |
| <b>PP</b>       |        |        |          |                |             |
| MET 1150-100PP  | 450    | 350    | 100      | 0              | 4,9         |
| MET 1350-100PP  | 550    | 450    | 100      | 0              | 5,4         |
| MET 1650-100PP  | 750    | 550    | 100      | 1              | 5,9         |
| MET 1900-100PP  | 1000   | 550    | 100      | 1              | 6,4         |
| MET 2100-100PP  | 1000   | 750    | 100      | 2              | 6,9         |
| MET 2650-100PP  | 1300   | 1000   | 100      | 2              | 7,4         |
| <b>ATEX</b>     |        |        |          |                |             |
| MET 1150-100EX  | 450    | 350    | 100      | 0              | 4,9         |
| MET 1350-100EX  | 550    | 450    | 100      | 0              | 5,4         |
| MET 1650-100EX  | 750    | 550    | 100      | 1              | 5,9         |
| MET 1900-100EX  | 1000   | 550    | 100      | 1              | 6,4         |
| MET 2100-100EX  | 1000   | 750    | 100      | 2              | 6,9         |
| MET 2650-100EX  | 1300   | 1000   | 100      | 2              | 7,4         |



MET for ceiling or wall mounting, excluding bracket MTI or MVK-125.

## PRESSURE DROP

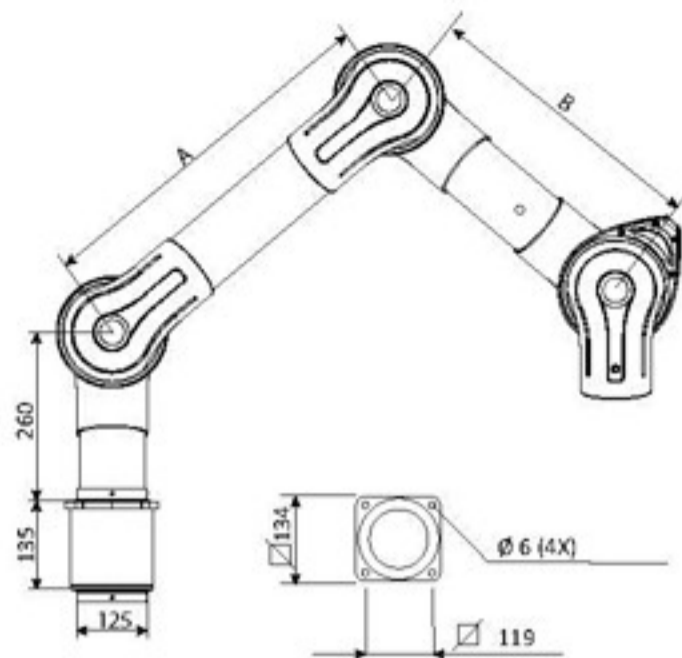


Static pressure drop is measured in accordance with ISO standard 5167-1. Noise level is measured in accordance with ISO standard 3743.

Indicated sound level refers to sound pressure level.

# MEB FOR TABLE MOUNTING, 3 JOINTS

| ITEM NO         | A (mm) | B (mm) | Ø C (mm) | GAS SPRING pcs | WEIGHT (Kg) |
|-----------------|--------|--------|----------|----------------|-------------|
| <b>STANDARD</b> |        |        |          |                |             |
| MEB 1150-100    | 450    | 350    | 100      | 0              | 4,9         |
| MEB 1350-100    | 550    | 450    | 100      | 0              | 5,4         |
| MEB 1650-100    | 750    | 550    | 100      | 1              | 5,9         |
| MEB 1900-100    | 1000   | 550    | 100      | 1              | 6,4         |
| <b>PP</b>       |        |        |          |                |             |
| MEB 1150-100PP  | 450    | 350    | 100      | 0              | 4,9         |
| MEB 1350-100PP  | 550    | 450    | 100      | 0              | 5,4         |
| MEB 1650-100PP  | 750    | 550    | 100      | 1              | 5,9         |
| MEB 1900-100PP  | 1000   | 550    | 100      | 1              | 6,4         |
| <b>ATEX</b>     |        |        |          |                |             |
| MEB 1150-100PP  | 450    | 350    | 100      | 0              | 4,9         |
| MEB 1350-100PP  | 550    | 450    | 100      | 0              | 5,4         |
| MEB 1650-100PP  | 750    | 550    | 100      | 1              | 5,9         |
| MEB 1900-100PP  | 1000   | 550    | 100      | 1              | 6,4         |



## REACH AT RECOMMENDED INSTALLATION HEIGHT

The following installation heights and sideways displacement relative to the work area are recommended for optimal extraction:

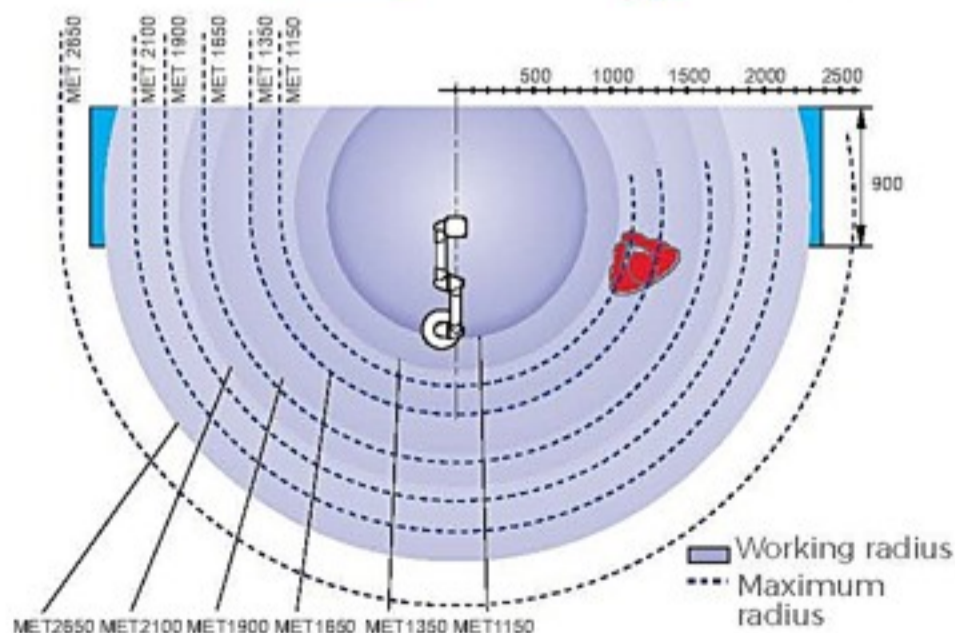
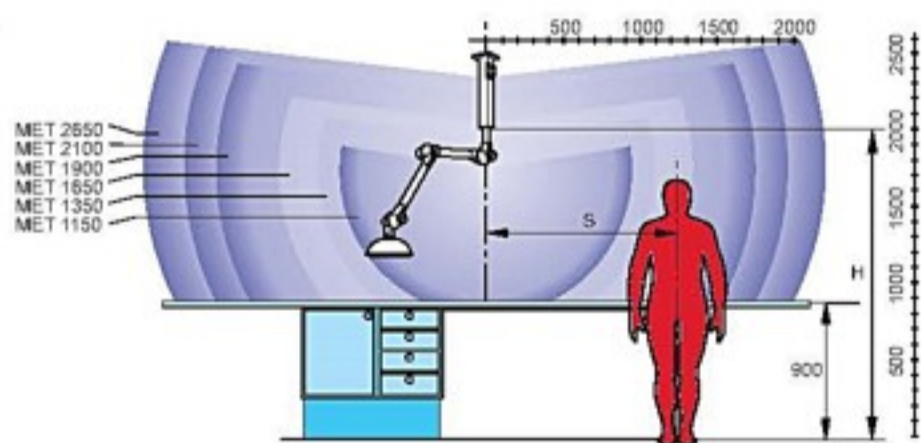
### RECOMMENDED INSTALLATION HEIGHT

| DESIGNATION  | H (mm)    |
|--------------|-----------|
| MET 1150-100 | 1700-2000 |
| MET 1350-100 | 1900-2200 |
| MET 1650-100 | 2000-2300 |
| MET 1900-100 | 2200-2500 |
| MET 2100-100 | 2300-2500 |
| MET 2650-100 | 2300-2500 |

### RECOMMENDED SIDE DISPLACEMENT

Radius, relative to work area

| DESIGNATION  | S (mm)   |
|--------------|----------|
| MET 1150-100 | 300-600  |
| MET 1350-100 | 400-700  |
| MET 1650-100 | 500-800  |
| MET 1900-100 | 700-800  |
| MET 2100-100 | 700-900  |
| MET 2650-100 | 900-1300 |



# CAPTURE HOODS

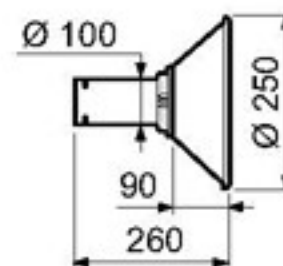
## MEM METAL HOOD

The metal hood is used when working in corrosive environments and for capturing hot gases and dust splatter. Metal hoods can be fitted with work lighting.

Temp. range: -15°C to +80°C

Material: Standard: Powder-coated aluminium / ES: Aluminium

| ITEM NO     | VARIANTS | WEIGHT (g) |
|-------------|----------|------------|
| MEM 251-100 | PP, ES   | 510        |



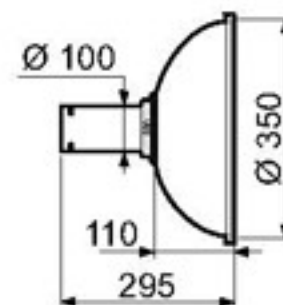
## MEK DOME HOOD

The clear dome hood is suitable for lighter gases with a wider dispersal of contaminants without blocking the user's vision.

Temp. range: -15°C to +80°C

Material: Standard: Powder-coated aluminium / ES: Aluminium

| ITEM NO     | VARIANTS | WEIGHT (g) |
|-------------|----------|------------|
| MEK 351-100 | PP, EX   | 610        |



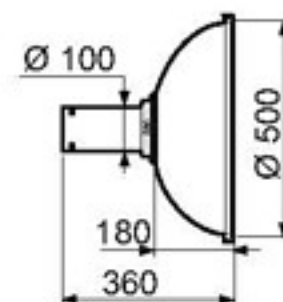
## MEK DOME HOOD

The clear dome hood is suitable for lighter gases with a wider dispersal of contaminants without blocking the user's vision.

Temp. range: -15°C to +80°C

Material: Standard: Powder-coated aluminium / ES: Aluminium

| ITEM NO     | VARIANTS | WEIGHT (g) |
|-------------|----------|------------|
| MEK 500-100 | PP, EX   | 735        |



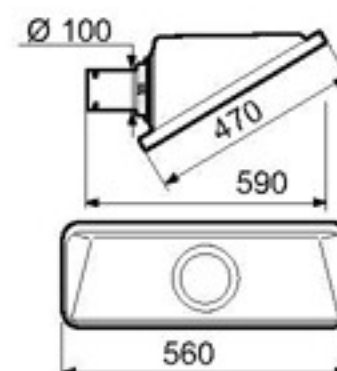
## MESH SQUARE HOOD

The square hood is suitable for placing above gases with a high lift, or adjacent to the work surface for contaminants with no lift or low lift - all this without interfering with the work.

Temp. range: -15°C to +80°C

Material: Standard: PETG

| ITEM NO      | VARIANTS | WEIGHT (g) |
|--------------|----------|------------|
| MESH 500-100 | -        | 1125       |

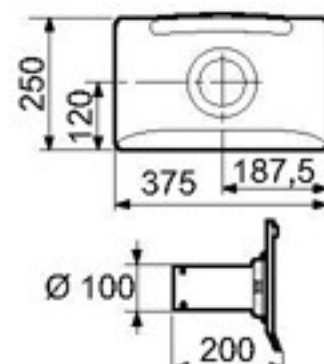


## MEPH FLAT SCREEN HOOD

The flat screen hood is designed to maximise the working area without obscuring the object from the user. The flat screen hood gives the best suction effect for table and bench tasks.

Temp. range: -15°C to +80°C

Material: Standard: PETG / ES: PEEL black

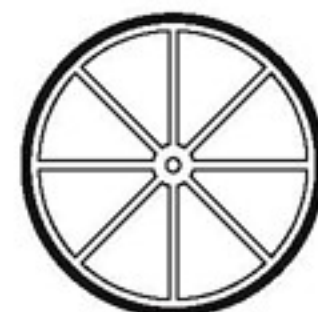


| ITEM NO      | VARIANTS   | WEIGHT (g) |
|--------------|------------|------------|
| MEPH 375-100 | PP, ES, EX | 625        |

## MESG PROTECTIVE GRILLE

Protective grill to be mounted in joints. Prevents objects being sucked into the system. Temperature range: -15°C to +80°C.

Material: Standard, EX: EN 1.4436

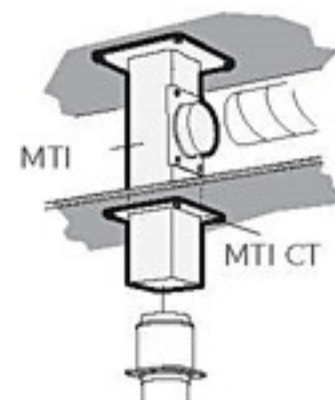


| ITEM NO  | VARIANTS | WEIGHT (g) |
|----------|----------|------------|
| MESG-100 | EX       | 12         |

## BRACKETS

All Movex laboratory extractors have as standard a full swivel that allows 360° of rotation without the need to add special sleeve couplings.

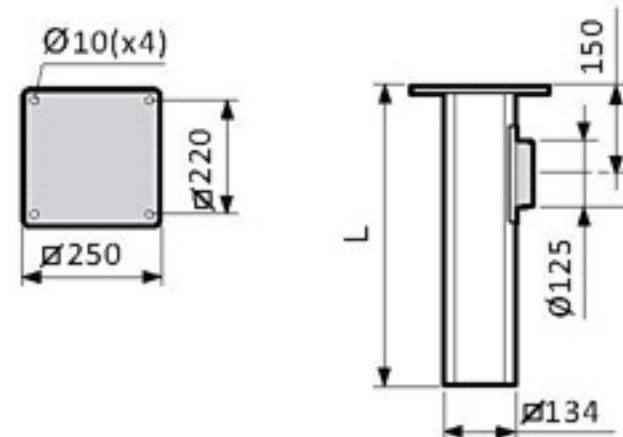
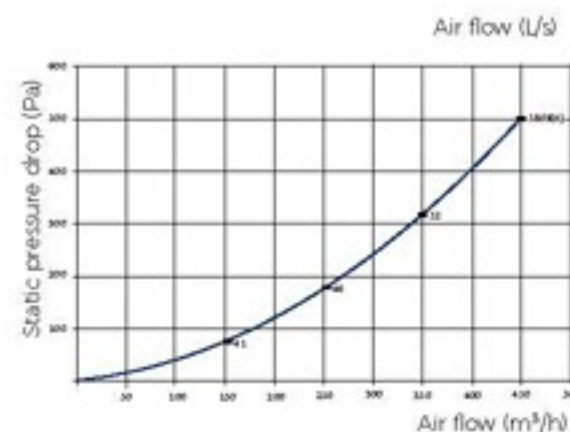
Both ceiling and wall brackets have a special square-shaped profile in anodised aluminium to provide a stylish and stable installation. This aluminum profile also allows both the wall and ceiling brackets to be custom tailored at the job site.



## MTI CEILING BRACKET

The ceiling bracket functions as a simple and stable duct for outgoing air, avoiding the need for expensive ducting and additional holes through false ceilings. On request, the MTI can be supplied in lengths exceeding 2m.

| ITEM NO      | DIMENSIONS (mm) L | WEIGHT (Kg) |
|--------------|-------------------|-------------|
| MTI 500-125  | 500               | 4,90        |
| MTI 750-125  | 750               | 5,80        |
| MTI 1000-125 | 1000              | 6,75        |
| MTI 1250-125 | 1250              | 7,65        |
| MTI 1500-125 | 1500              | 8,60        |
| MTI 1750-125 | 1750              | 9,50        |
| MTI 2000-125 | 2000              | 10,40       |



## MTF CEILING BRACKET

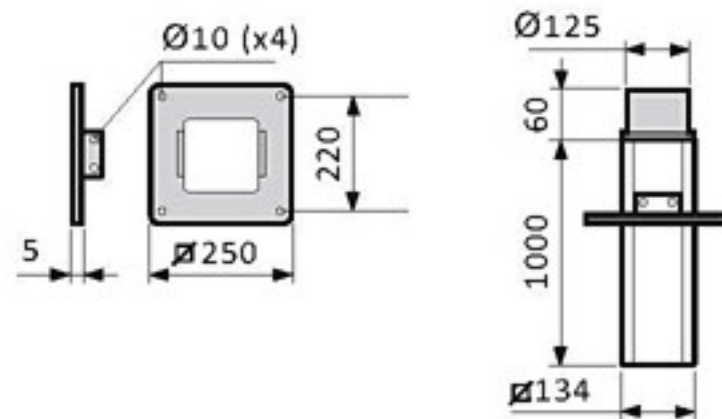
Ceiling bracket, for fitting through beams. The attachment plate is adjustable for the entire length of the aluminium profile. If required, the aluminium profile can be cut during fitting.

| ITEM NO | DIMENSIONS (mm) L | WEIGHT (Kg) |
|---------|-------------------|-------------|
| MTF-125 | 1000              | 5.50        |

As well as the standard design, the MTI/MTF is available in an ATEX (EX) version.

The ceiling brackets can be supplied with an epoxy-coated exterior in all lengths up to 3 m (L).

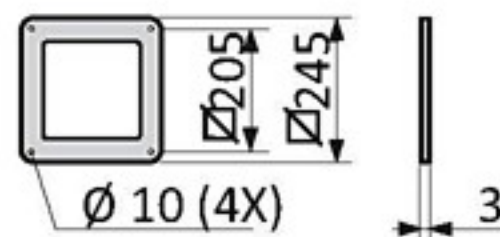
For aggressive environments, we recommend epoxy coating on the interior and exterior up to 1.25 m (IL).



## MTI CT ESCUTCHEON PLATE

Escutcheon plate, used with the MTI ceiling brackets for stabilisation and to cover ducting in false ceilings. As well as the standard design, the escutcheon plate is available in an ATEX (EX) version.

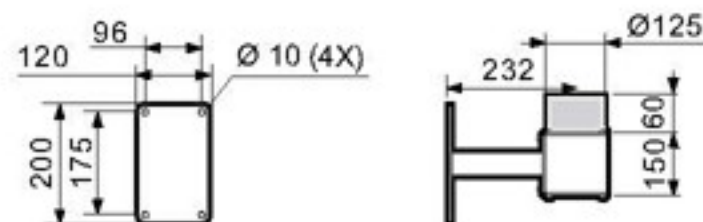
| ITEM NO    | WEIGHT (Kg) |
|------------|-------------|
| MTI-CT-125 | 0.125       |



## MVK WALL BRACKET


Wall brackets can be special ordered in custom horizontal and vertical lengths. As well as the standard design, the bracket is available in an ATEX (EX) version.

| ITEM NO    | WEIGHT (Kg) |
|------------|-------------|
| MTI-CT-125 | 0.125       |





# TECHNICAL DATA

| MATERIAL  | DESCRIPTION  |
|---|--|
| Friction Joints   | Ball bearing-equipped adjustable friction joints in polypropylene (PP), with guide ring in low friction-treated rubber. Support springs and other component parts in zinc-plated steel or stainless steel.   |
| Tubes   | Made from thin-walled anodised aluminium. Air-tight damper supplied as standard.   |
| ME Standard   | The standard ME version has polypropylene joints and anodised aluminium tubes. The standard ME version is suitable for evacuating most types of airborne contaminants, e.g. in laboratories, schools, hospitals, the pharmaceutical industry, hairdressing salons and light industrial applications.   |
| ME PP   | Polypropylene joints and tube version. All metallic parts that are in contact with the air flow are made of stainless steel. The PP version of the ME is used primarily for evacuating very corrosive contaminants in high concentrations, e.g. in certain laboratories and in the pharmaceutical and chemical industries. When using a PP extractor fitted to a ceiling, we recommend that you order the MTI ceiling bracket with an internal epoxy coating.  |
| ME ATEX<br> | Conductive polypropylene joints and tubes. All metallic parts that are in contact with the air flow are made of stainless steel. Static electricity is diverted to a separate earth connection. All steel supporting parts are lined in a conductive powder coating. The product meets the requirements of category 2 of the ATEX directive (94/9/EC) for gases and dust.<br><br>The ATEX version of the ME is suitable for evacuating airborne contaminants where there is a requirement for ATEX-classified products, e.g. laboratories, the chemical and petrochemical industries, gas distribution, and the paint and pharmaceutical industries. |
| <b>DELIVERY</b>   |  |
| MET Ceiling Bracket   | Supplied assembled, excluding hood or suction nozzle. The MTI or MTF ceiling brackets should be ordered separately.  |
| MET Wall Bracket  | Supplied assembled, excluding hood or suction nozzle. MVK-125 wall bracket should be ordered separately.   |
| MEB Table Bracket   | Supplied assembled, with attachment plate for table fitting, excluding hood. The MBF flexible table bracket should be ordered separately.  |

