# ME-50 LABORATORY EXTRACTION ARM DATA SHEET



### **ME-50 EXTRACTION ARM**

#### **DESCRIPTION**

The ideal extractor for schools, nail salons and the electronics industry.

With its optimal design, the Ø50 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.

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.

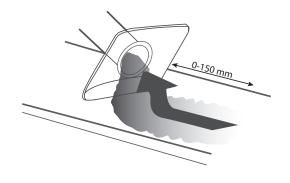
With its uniquely designed joint construction, Movex ME combines maximum flexibility with low pressure drop.

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.

#### **ESD VERSION**



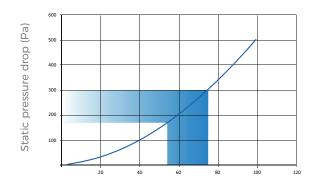


Suitable for evacuating airborne contaminants in environments where there is a need to avoid the risk of spark formation and in areas where products need to be ESD-certified, e.g. the electronics industry.

#### **RECOMMENDED AIR FLOW**

The recommended air flow for a  $\emptyset$ 50 arm is 55-75 m $^3$ /h, See table and diagram.

ACTIVITY	AIRFLOW	
Laboratories	50-75m³/h	15-21 l/h
Schools	50-75m³/h	15-21 l/h
Nail Salons	65m³/h	18 l/h

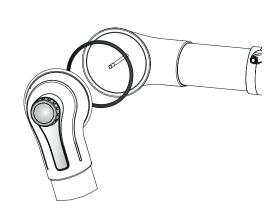


Static pressure drop is measured in Air flow (m³/h) accordance with ISO standard 5167-1

### **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.

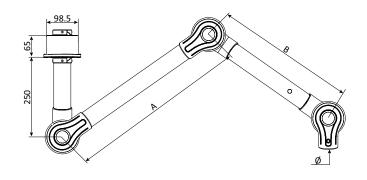
Joints with reinforced ends and ball bearings moderate the friction and allow the arm to be moved up and down while maintaining stability and function.



### MET FOR CEILING AND WALL MOUNTING, 3 JOINTS

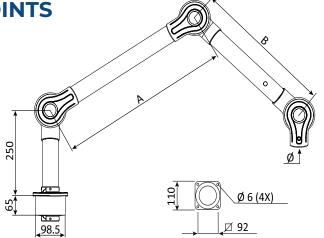
MET for ceiling or wall mounting, excluding bracket MTI or MVK.

ITEM NO	A (mm)	B (mm)	Ø (mm)	WEIGHT (Kg)
MET 1000-50	400	300	50	1.50
MET 1300-50	550	450	50	1.65
MET 1500-50	750	450	50	1.70
ESD				
MET 1000-50ES	400	300	50	1.50
MET 1300-50ES	550	450	50	1.65
MET 1500-50ES	750	450	50	1.70



MEB FOR TABLE MOUNTING, 3 JOINTS

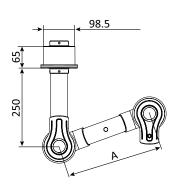
ITEM NO	A (mm)	B (mm)	Ø (mm)	WEIGHT (Kg)
MEB 1000-50	400	300	50	1.50
MEB 1300-50	550	450	50	1.65
MEB 1500-50	750	450	50	1.70
ESD				
MEB 1000-50ES	400	300	50	1.50
MEB 1300-50ES	550	450	50	1.65
MEB 1500-50ES	750	450	50	1.70



### MET FOR CEILING AND WALL MOUNTING, 2 JOINTS

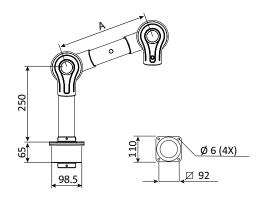
MET for ceiling or wall mounting, excluding bracket MTI or MVK.

ITEM NO	A (mm)	Ø (mm)	WEIGHT (Kg)
MET 650-50	300	50	1.00
MET 750-50	450	50	1.10
ESD			
MET 650-50ES	300	50	1.00
MET 750-50ES	450	50	1.10



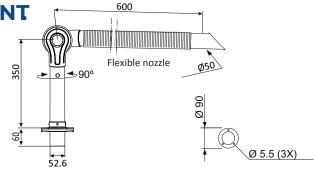
### **MEB FOR TABLE MOUNTING,2 JOINTS**

ITEM NO	A (mm)	Ø (mm)	WEIGHT (Kg)
MEB 650-50	300	50	1.00
MEB 750-50	450	50	1.10
ESD			
MEB 650-50ES	300	50	1.00
MEB 750-50ES	450	50	1.10



MEBC FOR TABLE MOUNTING, 1 JOINT

ITEM NO	Ø (mm)	WEIGHT (Kg)
MEB 700-50ES	50	1.00

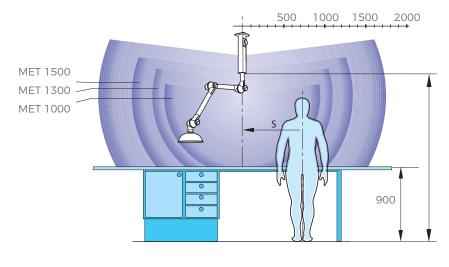


#### REACH AT RECOMMENDED INSTALLATION HEIGHT

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

#### RECOMMENDED INSTALLATION HEIGHT

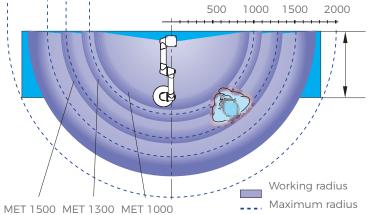
DESIGNATION	H (mm)
MET 1000-50	1700-2000
MET 1300-50	1900-2200
MET 1500-50	2000-2300



#### RECOMMENDED SIDE DISPLACEMENT

Radius, relative to work area

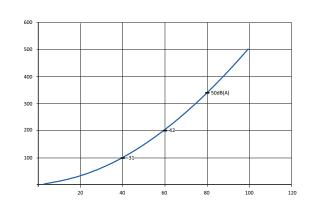
DESIGNATION	S (mm)
MET 1000-50	300-600
MET 1300-50	400-700
MET 1500-50	500-800



#### FLOW AND PRESSURE DROP DIAGRAM

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.

Static pressure drop (Pa)



Air flow (m<sup>3</sup>/h)

## **CAPTURE HOODS**

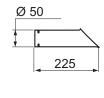
#### **MES SUCTION NOZZLE**

The suction nozzle is used in tight spaces and for getting close to the work without interfering.

Temp. range: -15°C to +80°C

Material: Standard: Aluminium / ES: PEEL black

ITEM NO	VARIANTS	WEIGHT (g)
MES 300-50	ES	15



#### **MEM METAL HOOD**

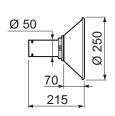
The metal hood is used when working in corrosive environments and for capturing hot gases and dust splatter. Metal hoods can be fitted with work lighting.

Temp. range: -15°C to +80°C

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

ITEM NO	VARIANTS	WEIGHT (g)
MEM 300-50	ES	300





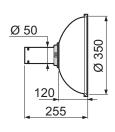
#### MEM DOME HOOD

The clear dome hood is suitable for lighter gases with a wider dispersal of contaminants without blocking the user's vision. Temp. range:  $-15^{\circ}$ C to  $+80^{\circ}$ C

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

ITEM NO	VARIANTS	WEIGHT (g)
MEM 250-50	ES	300





#### **MESH SQUARE HOOD**

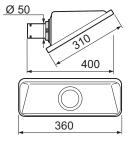
The square hood is suitable for placing above gases with a high lift, or adjacent to the work surface for contaminants with no lift or low lift – all this without interfering with the work.

Temp. range: -15°C to +80°C Material

Standard: PETG

ITEM NO	VARIANTS	WEIGHT (g)
MESH 350-50	-	450





#### MEPH FLAT SCREEN HOOD

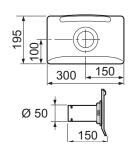
The flat screen hood is designed to maximise the working area without obscuring the object from the user. The flat screen hood gives the best suction effect for table and bench tasks.

Temp. range: -15°C to +80°C

Material: Standard: PETG / ES: PEEL black

ITEM NO	VARIANTS	WEIGHT (g)
MEPH 300-50	ES	330





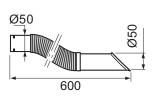
#### MEFS FLEXIBLE SUCTION NOZZLE

The flexible suction nozzle is designed to maximise ease of movement without sacrificing air flow efficiency. Available in the ESD version only.

Temp. range: -15°C to +80°C

ITEM NO	VARIANTS	WEIGHT (g)
MEFS 600-50ES	-	330

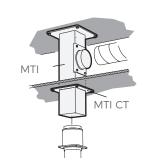




### **BRACKETS**

All Movex laboratory extractors have as standard a full swivel that allows  $360^{\circ}$  of rotation without the need to add special sleeve couplings.

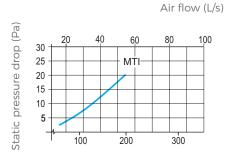
Both ceiling and wall brackets have a special square-shaped profile in anodised aluminium to provide a stylish and stable installation. This aluminum profile also allows both the wall and ceiling brackets to be custom tailored at the job site.



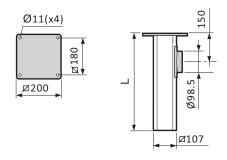
#### MTI & MTF CEILING BRACKET

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 250	250	3.15
MTI 500	500	3.80
MTI 750	750	4.50
MTI 1000	1000	5.15
MTI 1250	1250	5.80
MTI 1500	1500	6.45
MTI 1750	1750	7.10
MTI 2000	2000	7.75



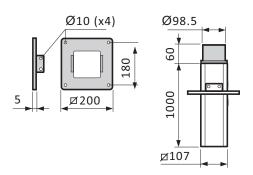
Air flow (m<sup>3</sup>/h)



#### 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	1000	4.20



As well as the standard design, the MTI and MTF are available in ESD (ES) versions.

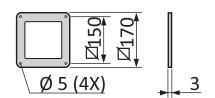
The ceiling brackets can be supplied with an epoxy-coated exterior in all lengths up to 3 m (L).

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 bracket for stabilisation and to cover ducting in false ceilings. As well as the standard design, the escutcheon plate is available in an ESD (ES) version.

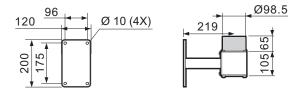
DESIGNATION	WEIGHT (Kg)
MTI CT	0.05



#### **MVK WALL BRACKET**

Included as standard for a wall-mounted arm. Wall brackets can be special ordered in custom horizontal and vertical lengths. As well as the standard design, the bracket is available in an ESD (ES) version.

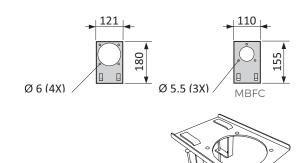
DESIGNATION	WEIGHT (Kg)
MVK	2.15



#### MBF FLEXIBLE TABLE BRACKET

Flexible bracket for attaching to a table-top or shelving. Supplied complete with two clamps. As well as the standard design, the table bracket is available in an ESD (ES) version.

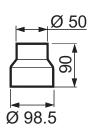
DESIGNATION	WEIGHT (Kg)
MVK	0.75
MBFC ES	0.70



#### **MRM REDUCING SLEEVE**

Polypropylene, fits standard Ø 98.5 mm attachment, for reducing down to Ø 50

DESIGNATION	WEIGHT (Kg)
MRM 100-50	0.08



### 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 ESD	Joints are made from conductive polypropylene, making the entire arm electrically conductive and diverting any static electricity to a separate earth connection. The ESD version of the ME is suitable for the evacuation of airborne contaminants in environments where there is a need to avoid the risk of spark formation caused by static electricity and in areas where products need to be ESD-certified for use, e.g. the electronics industry. The ME ESD has been approved in accordance with EN 61340-5-1.
DELIVERY	
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 wall bracket should be ordered separately.
MEB Table Bracket	Supplied assembled, with attachment plate for table fitting, excluding hood or suction nozzle. The MBF flexible table bracket should be ordered separately.



