

***User Manual**



Super-M Extraction-Arm dia. 110mm.

- **Extraction-Arm for use in Chemical, Pharma and Food Industry.**
- **Completely made of Acid Proof Mirror Polished Stainless Steel.**
- **Perfect for extracting Dust, Fume and Gases before it is inhaled.**
- **Parallelogram-Arms and Gas Springs outside. Free Flow in the Hose.**
- **Extremely easy to move and stays in position.**
- **Models: 1.5m/2m/2.2m/2.5m/3m and 4m.**
- **Hoods for dia. 110mm: Straight Hood or 67° Hood or 150° Hood.**
- **Suitable to use by Controlling, Measuring, Weighing, Filling, Blending, Mixing, Emptying, Packaging and similar work situations.**

Table of Contents

1.0 General Information

1.1 Safety Note

1.2 Range of Application

1.3 Unit Description

1.4 Installation

2.0 Maintenance

2.1 Spare Parts

1.0 General Information.

Super-M dia.110mm is an Extraction-Arm made of Acidproof Mirror Polished Stainless Steel. It is designed for extracting Dust, Fume and Gases before somebody inhales them. Especially by Controlling, Measuring, Weighing, Filling, Blending, Mixing, Emptying, Packaging and similar operations where contaminated air may be inhaled by the Operator.

Smoke, Dust and Gases. An Extraction-Arm extracts smoke, dust and gases directly at source, before the contaminated air has been inhaled by somebody. You will get better working environment all over the premises. Less dust in the air will mean less wear and tear of the machines and lower cleaning costs.

Toughest Working Environments. Super-M is made for the toughest working environments in the Pharmaceutical-, Food Process- and Chemical Industry. Every detail is made of acid proof, mirror-polished stainless steel. Wall bracket, parallelogram arms, handle, hood, damper, bolts, nuts, washers – **all of it!**

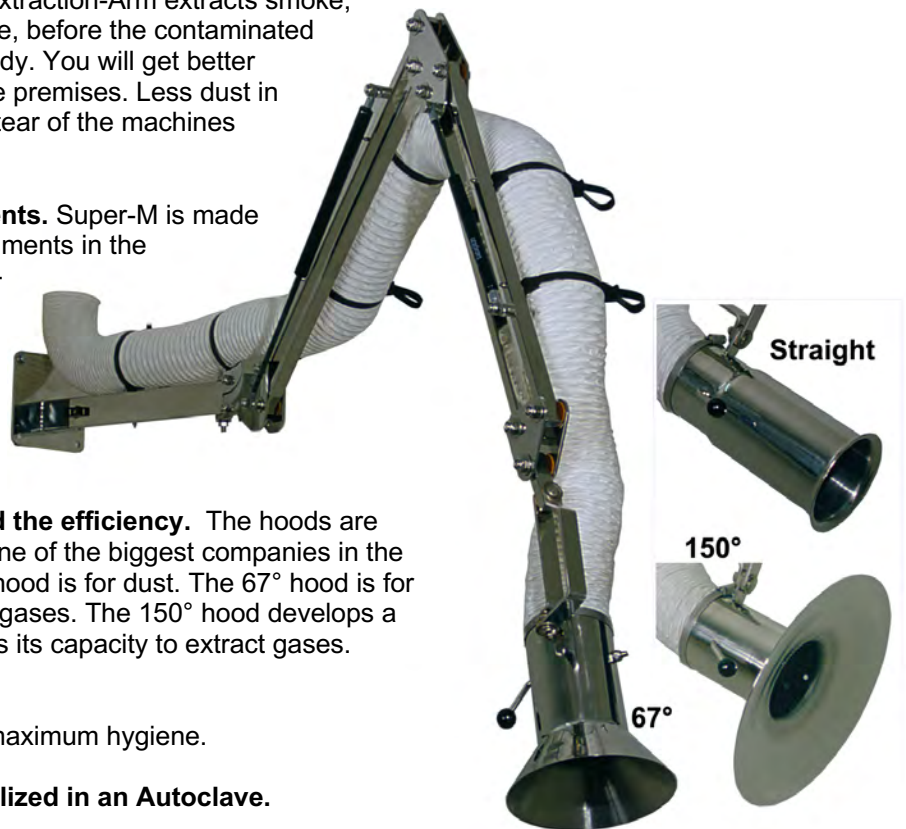
The Hood is the Secret behind the efficiency. The hoods are developed in cooperation with one of the biggest companies in the chemical industry. The straight hood is for dust. The 67° hood is for smoke and the 150° hood is for gases. The 150° hood develops a “tornado” effect, which enhances its capacity to extract gases.

All Tube Ends are sealed for maximum hygiene.

The Super-M Arm can be sterilized in an Autoclave.

All Surfaces are mirror polished for easy disinfection with chemicals.

Perfectly balanced. External hydraulically suspended parallelogram arms make the hood incredibly easy to move and 100 % stable in all positions.



	Art. Nr.	Art. Nr.	Art. Nr.
Wall Bracket, Parallelogram Arm, Hood and Handle of Mirror-polished Acidproof Stainless Steel.	Straight Hood	67° Hood	150° Hood
Super-M d.110mm/1.5 m (0.25 m+1.5m).	P-699	P-705	P-711
Super-M d.110mm/2 m (0.5 m+1.5 m).	P-700	P-706	P-712
Super-M d.110mm/2.2m (0.25 m+2 m).	P-701	P-707	P-713
Super-M d.110mm/2.5 m (0.5 m+2 m).	P-702	P-708	P-714
Super-M d.110mm/3 m (0.5 m+3 m).	P-703	P-709	P-715
Super-M d.110mm /4 m (0.5 m+0.6 m+ 3 m).	P-704	P-710	P-716
Damper, tight, for d.110 mm Hood. Acidproof, Stainless Steel.	P-483	P-482	P-482

1.1 Safety Notes

The product is designed to meet the requirements of the relevant EC directives. To maintain this status all installations, repair and maintenance work must be carried out by qualified personnel using only original spare parts.

Contact your nearest authorized dealer for advise.

Use adequate safety clothing when cleaning the unit.

Check that no objects, which can cause problems, are sucked into the Extraction-Arm.

Avoid impacts against the Hood.

Apart from the general information given in our user manual it is necessary to perform a risk analysis for the particular work prodeses that are going to be done in each induvidual case.

The final responsibility for safety can only be taken by the owner of the installation.

1.2 Range of Application

Super-M Extraction-Arms are designed for being used in Pharma-, Food- and Chemical Industry by for example weighing, mixing, taking samples, examinations, experiments and so on.

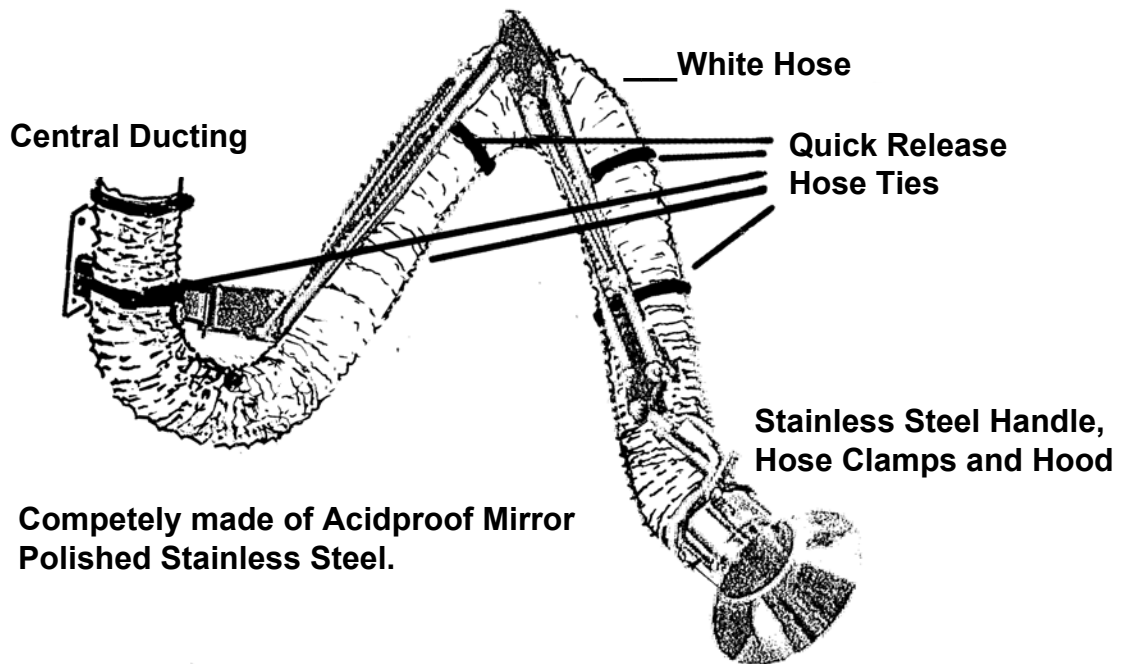
The Hood is easy to position at any point within the working area.

For the best capturing efficiency the hood should be positioned as near the contamination generating process as possible.

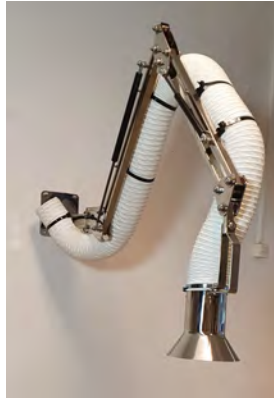
Always dimension your system so the airflow is sufficient for the application in question.

Be sure to follow local laws and regulations.

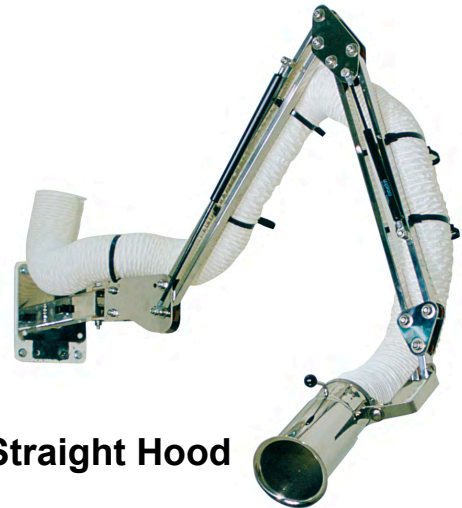
1.3 Unit Description Super-M dia.110mm.



Hood 150°



Hood 67°



Straight Hood

The Super-M Extraction-Arms are designed to extract fume, light dust and gases in corrosive environments.

The flexible PVC Hose, with covered steelspiral, is balanced by Parallelogram-Arms with Gas Springs. It makes the Hood Extremely easy to move and it stays in position.

Free flow in the hose gives lower pressure drop and less maintenance.

The Hood can be turned 90° in all directions. It is easy to position at any point within the working area.

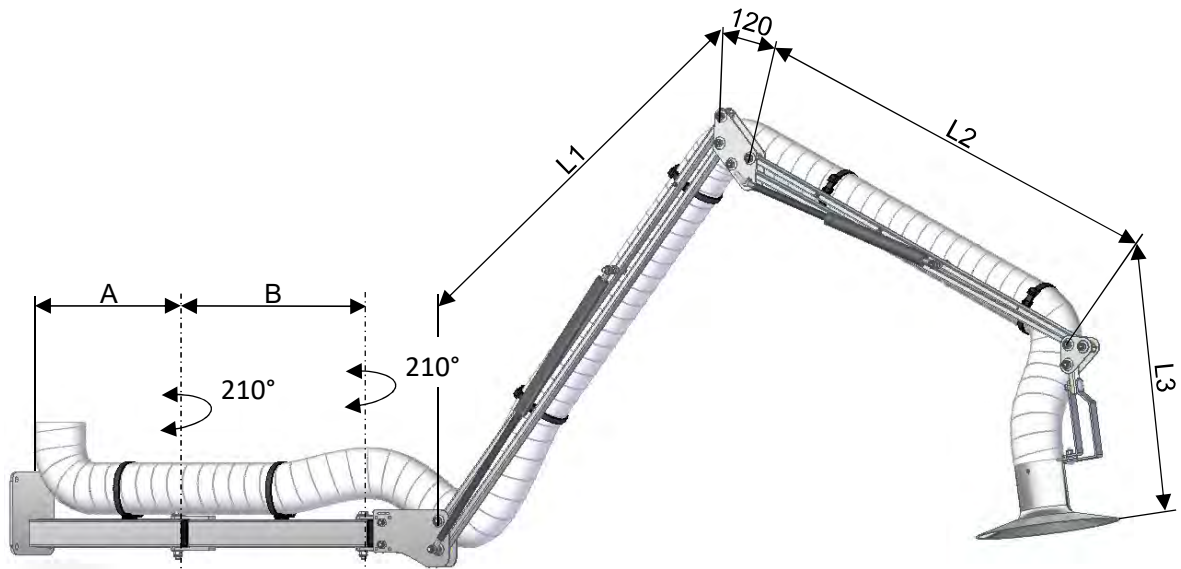
The Hood can be equipped with a Stainless Steel Damper (Accessory).

The Super-M Extraction-Arm shall be connected to a an exhaust system designed for the work situation. Max allowed vacuum is 1500Pa.

Recomended Airflow for dia.110mm Models is 400-700m³/h.

Measures (mm.).

Super-M dia.110mm Extraction-Arms.
1.5m/2m/2.2m/2.5m/3m and 4m Models.



Nozzles/Hoods

Ø110 -Straight

Ø110 - 67°

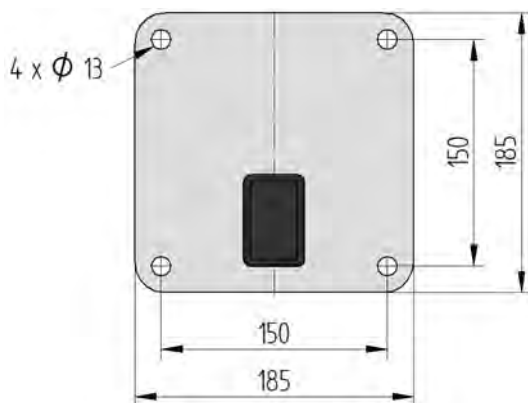


Ø110 - 150°



Important for All Super-M Models!
Each of the Wall Bolts must stand
a Traction Power of min. 1600N.

Wallbracket



	A	B	L1	L2	L3	Weight	Length
1,5 m	250 mm	-	435 mm	335 mm	480 mm	14 kg	1750 mm
2,0 m	500 mm	-	435 mm	335 mm	480 mm	15 kg	2000 mm
2,2 m	250 mm	-	665 mm	565 mm	480 mm	17 kg	2250 mm
2,5 m	500 mm	-	665 mm	565 mm	480 mm	18 kg	2500 mm
3,0 m	500 mm	-	1165 mm	960 mm	480 mm	24 kg	3350 mm
4,0 m	500 mm	500 mm	1165 mm	960 mm	480 mm	27 kg	3850 mm

Pressure Drop: Super-M dia.110mm Extraction-Arms.

Ø 110mm Extraction-Arms.

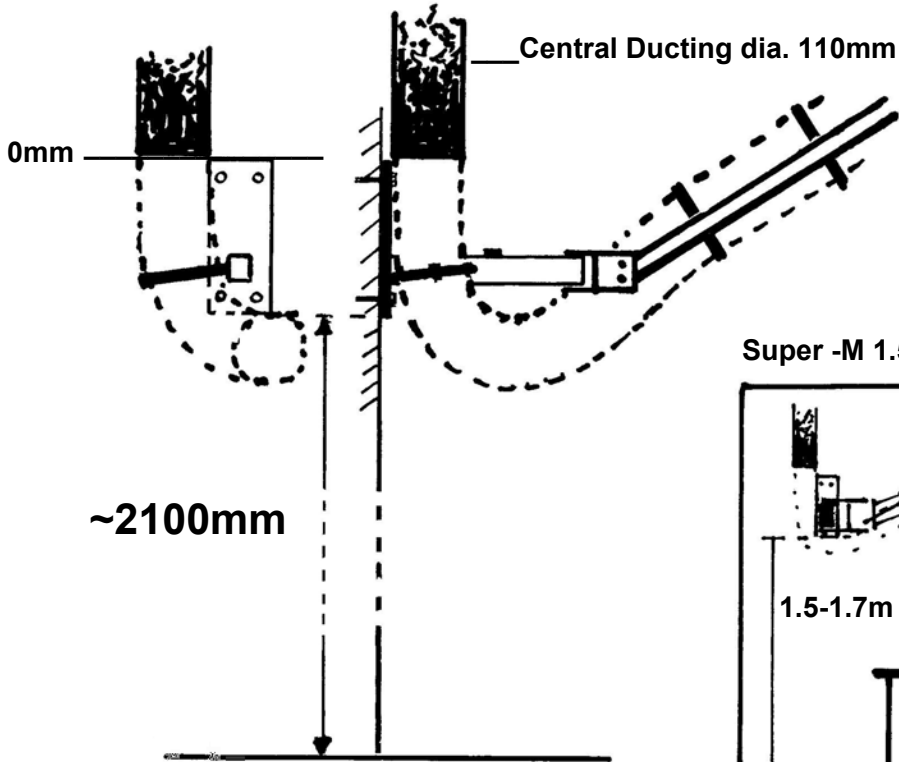
Extraction-Arm	400m ³ /h	500m ³ /h	600m ³ /h	700m ³ /h
1.5-2.5m Ø 110mm	300 Pa	450 Pa	600 Pa	750 Pa
3m Ø 110mm	325 Pa	5000 Pa	650 Pa	825 Pa
4m Ø 110mm	375 Pa	550 Pa	700 Pa	900 Pa



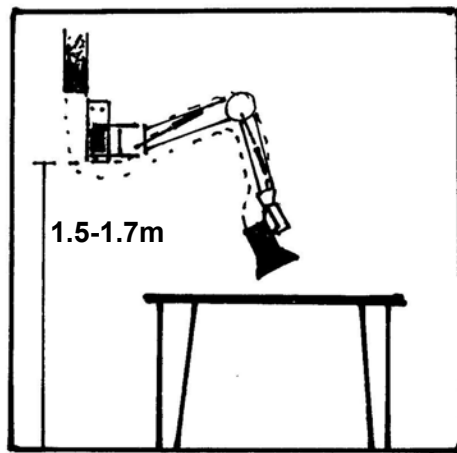
1.4 Installation Super-M dia.110mm.

Mounting Height and Connection of Hose to Central Ducting.

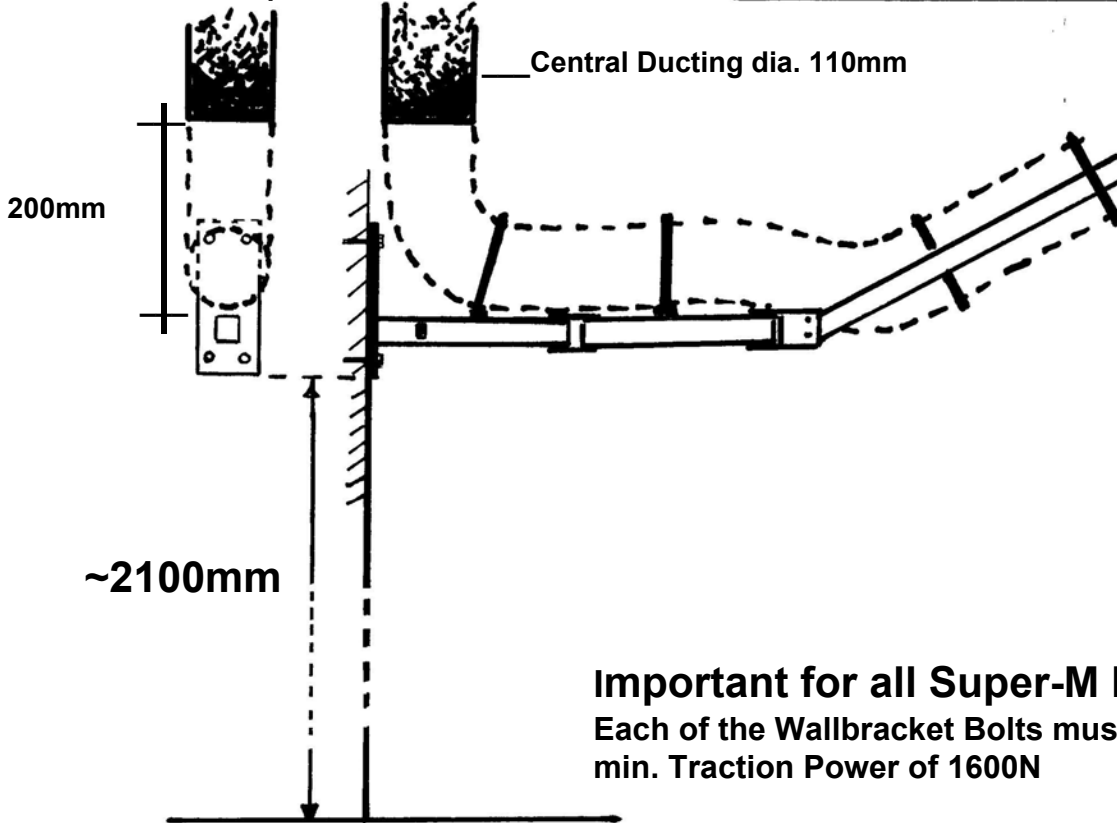
Super-M 2m/2.2m/2.5m and 3m



Super -M 1.5m dia.110mm



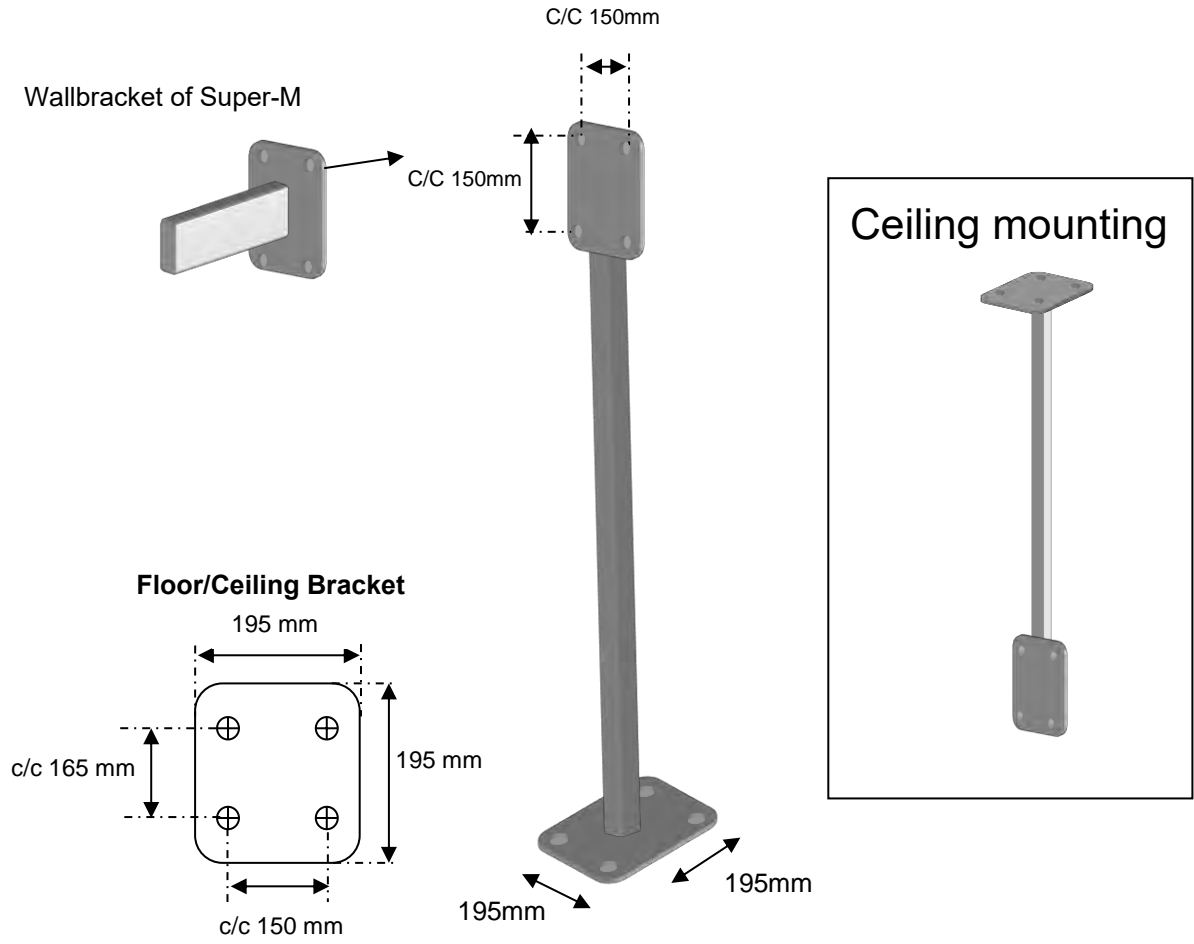
Super-M 4m



Important for all Super-M Models!
Each of the Wallbracket Bolts must stand a min. Traction Power of 1600N

Floor/Ceiling Stanchions of Acidproof Mirror Polished Stainless Steel (Accessory).

For Super-M Extraction-Arms. 1.5m/2m/2.2m/2.5m/3m/4m Length.
Stanchion Height 0.5m-2.5m

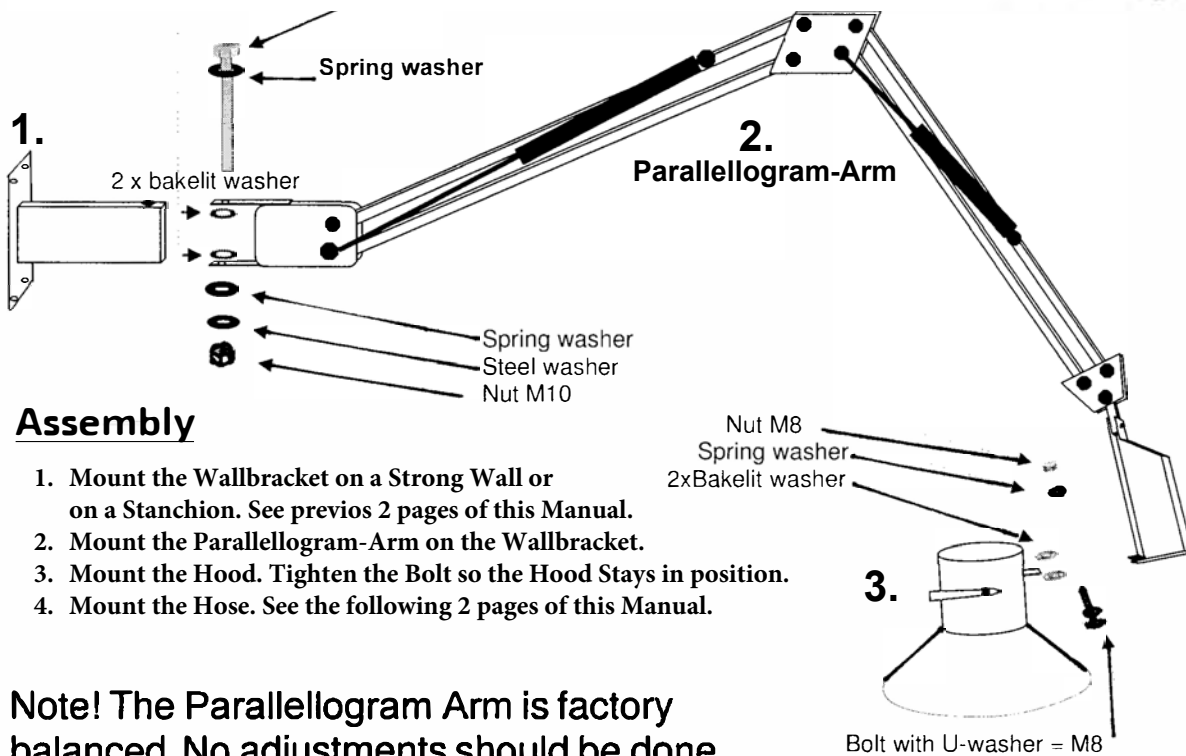
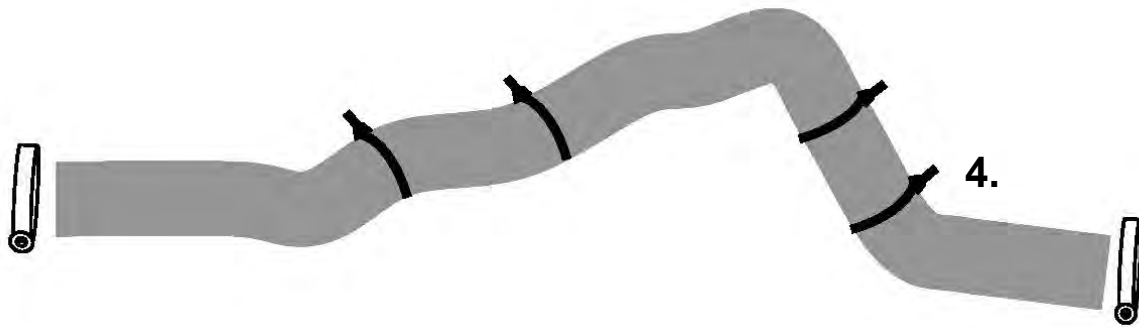


Acidproof Mirror Polished Stainless Steel Stanchions: Product No.

Length	Art.-Nr.
0,5m	P-999
0,75m	P-1000
1,0m	P-1001
1,25m	P-1002
1,5m	P-1003
1,75m	P-1004
2,0m	P-1005
2,25m	P-1006
2,5m	P-1007

Assemblage of Super-M Extraction-Arms.

A: 1.5m/2m/2.2m/2.5m and 3m Models.



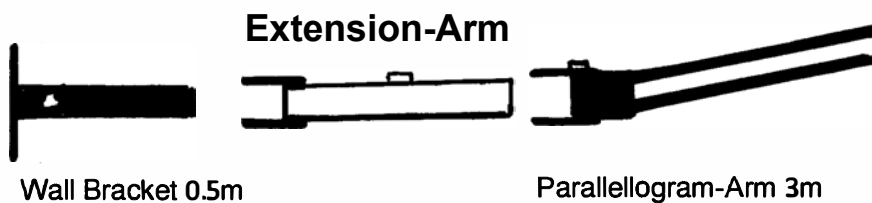
Assembly

1. Mount the Wallbracket on a Strong Wall or on a Stanchion. See previous 2 pages of this Manual.
2. Mount the Parallelogram-Arm on the Wallbracket.
3. Mount the Hood. Tighten the Bolt so the Hood Stays in position.
4. Mount the Hose. See the following 2 pages of this Manual.

Note! The Parallelogram Arm is factory balanced. No adjustments should be done.

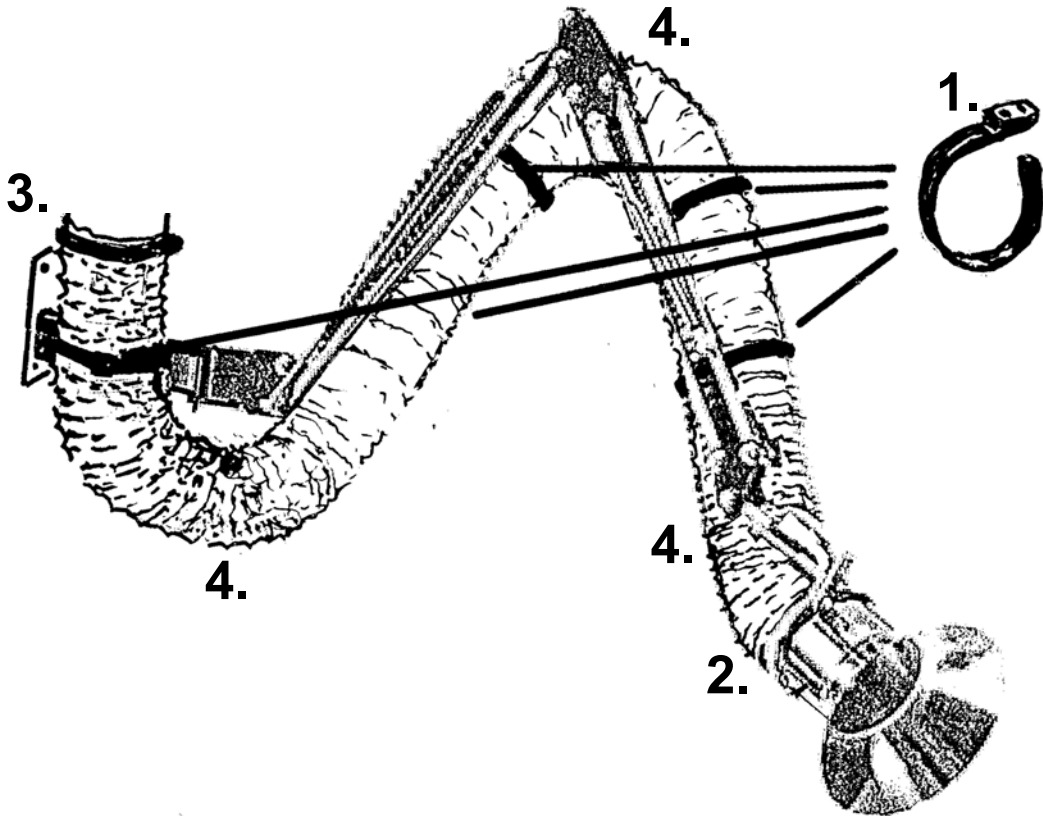
B: 4m Models.

As above but with the Extension-Arm between the Wall-Bracket and the Parallelogram-Arm.



Mounting of the Hose:

Nylon Hose Ties and Stainless Steel Hose Clamps.



1. Nylon Ties for Hose mounting on Wallbracket and Parallellogram Arm.

2.-3. Stainless Steel Hose Clamps for mounting the Hose Ends over Hood and Exhaust Ducting.

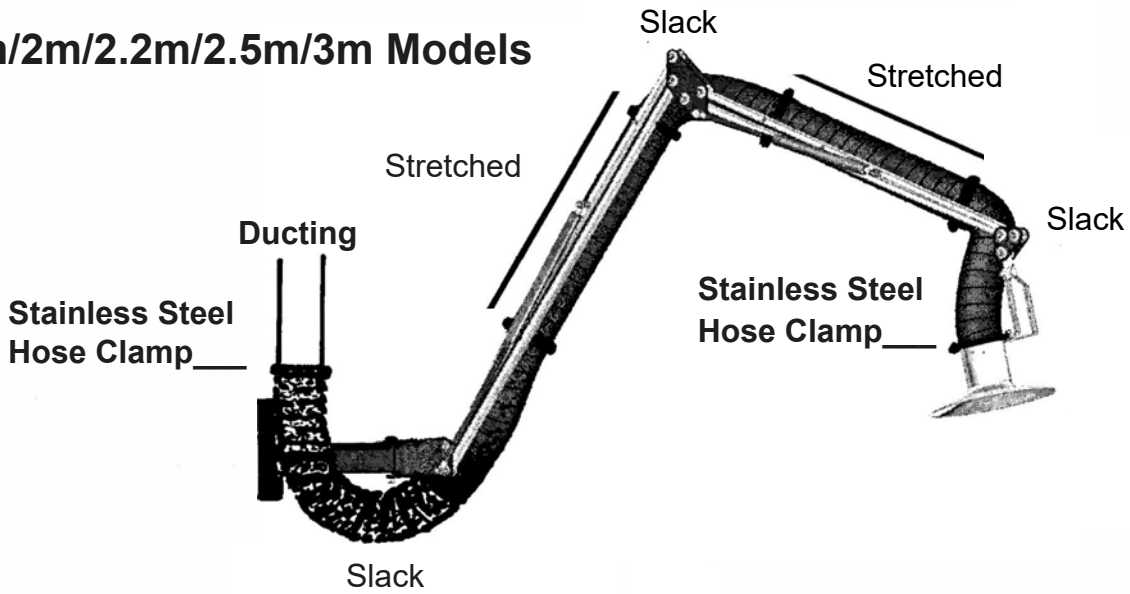
4. Slacked Hose. Please see next Page.

Important Details of the Hose mounting.

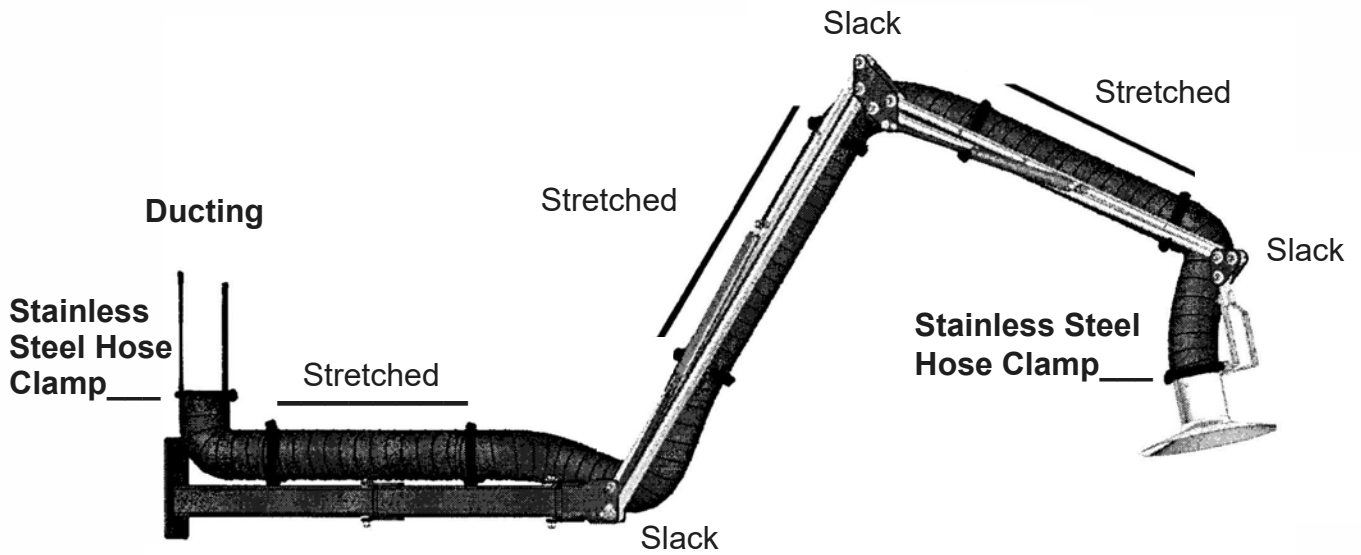
Stretched= Stretch the Hose between the Nylon Hose Ties.

Slack= Mount the Hose so it is not too hard or too loose when moving the joints. Cut the Hose to the right length at the Ducting.

1.5m/2m/2.2m/2.5m/3m Models



4m Models



2.0 Maintenance

We recommend regular safety controls at least once a year on the following points:

Control the Bolts of the Wallbracket.

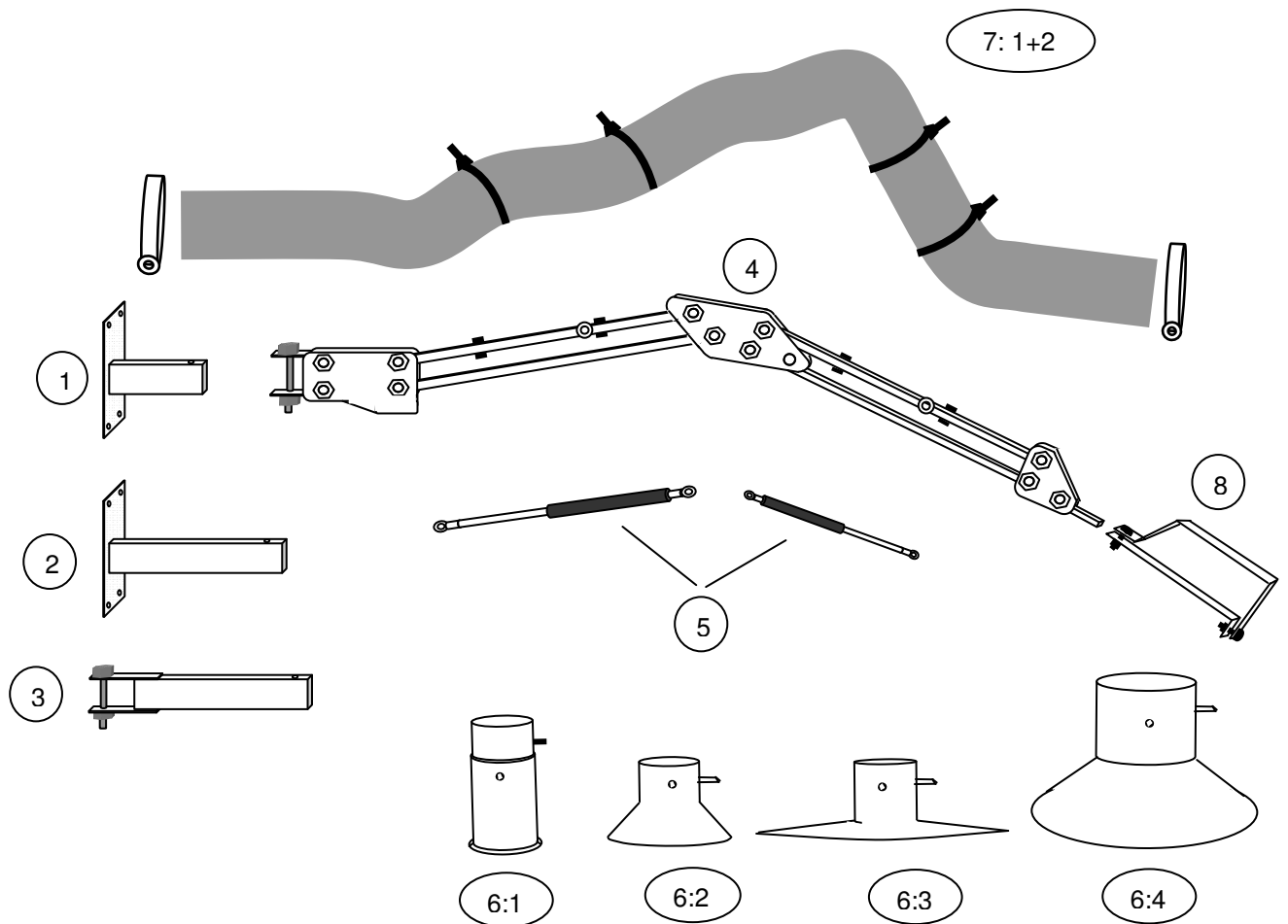
Control the Hose. Small Holes is no problem.

Control Friction Joints, Bakelite Washers and Bolts.

Control the "Ears" of the Gas Springs. If there are cracks you have to change them.

2.1 Spare Parts Super-M dia.110mm and 160mm.

All Parts of Acidproof Mirror Polished Stainless Steel (Not Gas Springs).
White Hose.



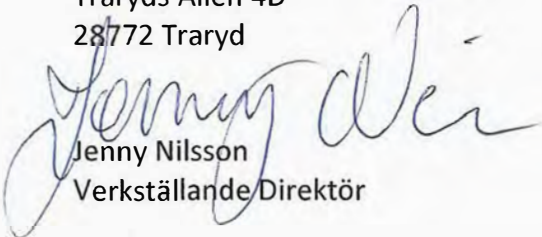
	Specification	1.5m/2 m	2.2m/2.5 m	3 m	4 m
1	Wallbracket 0,25 m	OM-018	OM-018	OM-018	
2	Wallbracket 0,5 m	OM-015	OM-015	OM-015	OM-015
3	Horizontalboom 0,5 m				OM-047
4	Parallelogram-arm	R-135	R-136	R-137	R-137
5	Set of 2 Gas Springs	R-116	R-117	R-118	R-118
6:1	Hood ø 110 mm Straight	R-112	R-112	R-112	R-112
6:2	Hood ø 110 mm 67°	R-113	R-113	R-113	R-113
6:3	Hood ø 110 mm 150°	R-114	R-114	R-114	R-114
6:4	Hood ø 160 mm	R-115	R-115	R-115	R-115
7:1	Hose ø 110 mm White	R-094	R-095	R-096	R-097
7:2	Hose ø 160 mm White	R-127	R-128	R-129	R-130
8	Handle	R-134	R-134	R-134	R-134



Declaration of conformity

We, J. Plymoth AB, declare under our sole responsibility that the product lines **Flexa, Chemikus, Flexi, Super-Max, Super-P, Super-PM, Super-M and Super-Vac** to which this declaration relates is in conformity with Directives 2006/42/EC and Standards EN ISO 12100:2010 and EN ISO20607;2019.

J. Plymoth AB
Traryds Allen 4D
28772 Traryd


Jenny Nilsson
Verkställande Direktör

2023-01-01