



GEOVENT

INSTRUCTION MANUAL



ASA-3 AND ASA-4 ARM

Extraction arm $\varnothing 50$, $\varnothing 80$, $\varnothing 100$, $\varnothing 125$, $\varnothing 160$ and $\varnothing 200$ mm

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1.0 Introduction

This manual is made and designed in order to facilitate the best and most secure interaction with the product. The manual is relevant for people involved in transportation, stocking, installation, using, maintaining and all other thinkable interaction with the product.

The manual must be read in full and understood before interacting with the product.

When the manual has been read and understood in full, the table of contents can be used to find the relevant information in each case.

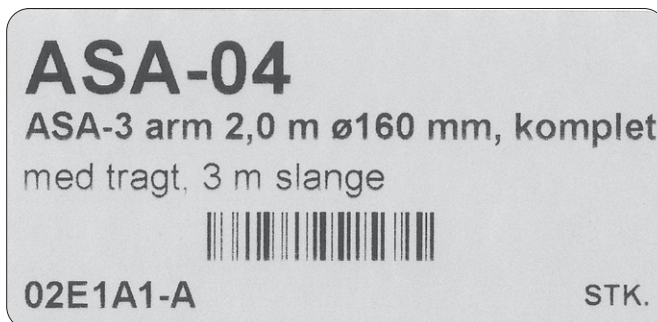
The product is manufactured by:

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DK-8861 Løgstrup
DENMARK

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E-mail: salg@geovent.dk
www.geovent.com

This manual is to be used for all interactions with the product including: Transportation, stocking, installation, operation and maintenance.

This product is marked with: (example)



2.0 Safety

2.1 General safety

Carefully read this manual before use and observe the safety instructions in order to avoid injuries! Keep this manual in a safe place!

Secure that all users of the product have read this manual and that they follow the instructions as described. Observe all instructions marked on the product! Observe the indications of the manufacturer. Never use the product if you are in doubt about how it works or what you should do.

When doing maintenance follow the instructions in chapter 7.0.

Do not modify the product or use spare parts from other suppliers than Geovent, as this may hamper the product and the function.

2.2 Danger

You must wear safety gloves when handling or using the product to protect your hands from scratches etc.

Be aware that the product may tilt when you move it. You must handle the product with care and tie it safely to the truck or the fork lift when it is in transport.

Follow the instructions in chapter 7.0 when the product is maintained.

When handling the product be sure that there is no risk for the installer, and secure that there are no people around the product, secure that the product cannot fall down risking to injure persons or subjects.

The product is not to be used in areas categorised as ATEX zones, e.g. with dust from aluminium, flour, wood, and other mediums that present an explosion hazard.

If a repair is not possible you should dispose of the product. Please follow the instruction for disposal in chapter 10.0.

3.0 Machine overview

3.1. Description

The Geovent ASA-3 Arm is the ideal Extraction Arm for the extraction of welding smoke, grinding dust, fumes, etc., where the well-being of the operator is in focus with regard to lightness, ergonomics and efficiency of the Arm.

The ASA-3 arm is with external support arm and hose.

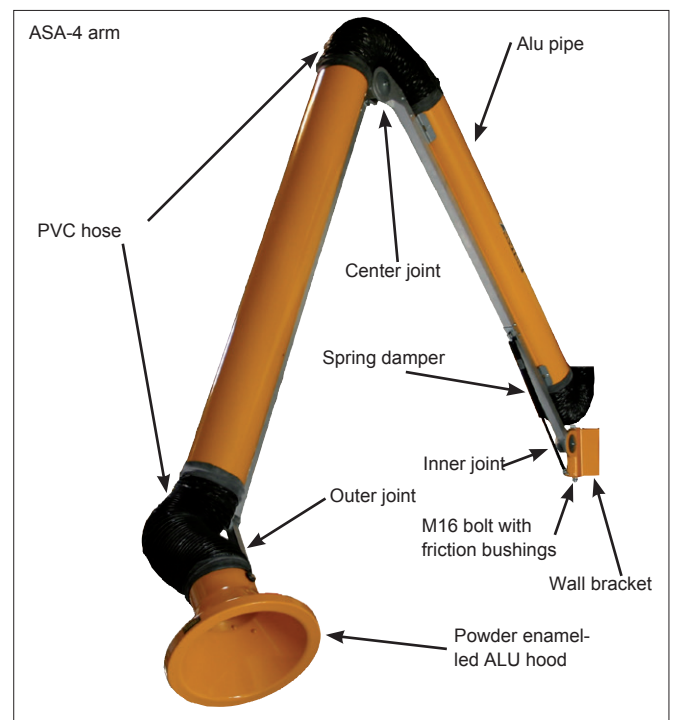
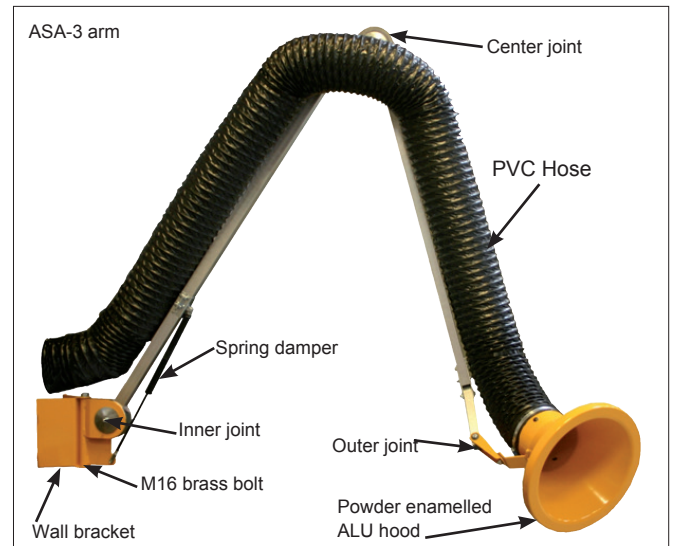
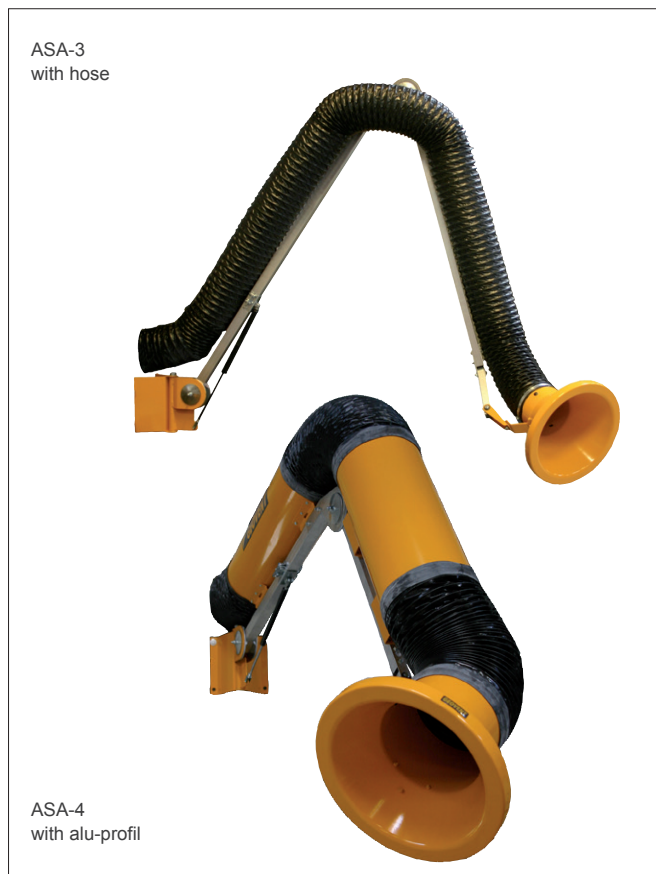
The ASA-4 arm is a tubular arm with an external support arm and aluminum tubes with hose in the bends. ASA-4 has a lower pressure loss than ASA-3, but it is identical to ASA-3 in terms of function and design.

3.2 Intended use

The extraction arm must not be used in areas categorized as ATEX zones, e.g. for extraction of aluminum, flour, textile and wood dust and other media associated with explosion hazards. For ATEX-related processes, ASX arms must be used.

3.3 Machine specifications

3.3.1 Design



Wall bracket: Steel bracket, powder enamelled yellow in RAL 1007. The rotary joints can rotate 180°.

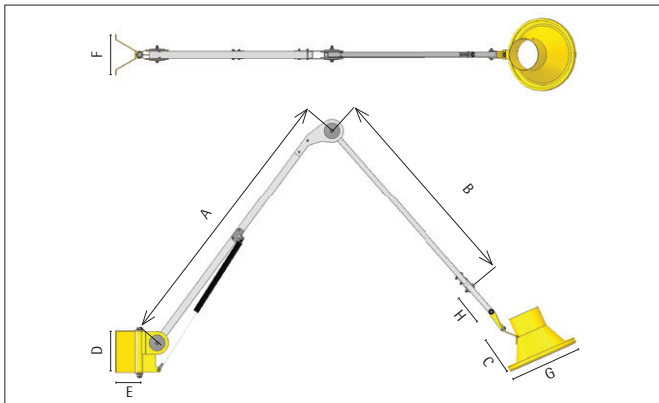
Hood: Light-weight aluminium hood $\varnothing 80$, 100, 125, 160 or 200 mm. The $\varnothing 160$ and the $\varnothing 200$ mm hoods are supplied with integrated handle. The hood is powder enamelled in yellow. May be rotated in all possible positions.

Arms and friction joint: The inner reinforced arm is executed in 35 x 35 mm electro galvanised steel pipe and supplied with a gas damper. The outer joint is 25 x 25 mm aluminium pipe, connected via knee joints with friction discs and disc springs.

Hoses and pipes: ASA-3 is fitted with a PVC hose with steel spiral. ASA-4 is fitted with 0.5 mm yellow powder-coated aluminum tubes.

3.3.2 Technical data

Dimensions



Arm length	A [mm]	B [mm]	D [mm]	E [mm]	F [mm]
2,0 m	870	700	206	120	200
3,0 m	1370	1210	206	120	200
4,0 m	1865	1700	206	120	200

Hood	C [mm]	G [mm]	G [mm]
ø80	225	205	200
ø100	245	225	200
ø125	240	250	200
ø160	225	355	200
ø200	180	355	200

These measurement table applies to ASA-3 and ASA-4.

Recommended installation height of the ASA arm:
2500 mm

Recommended flow

Hose dimension:	Volume of air:
ø80	200-300 m³/h
ø100	300-450 m³/h
ø125	450-800 m³/h
ø160	800-1200 m³/h
ø200	1200-2000 m³/h

Length: 2, 3 or 4 m
By means of an extension arm up to: 9 m

Hose max. temperature standard 80°C
Other hoses upon request

4.0 Transport, handling and storage

During transport in a truck or in another means of transportation the product must be securely packed in a box or a pallet and covered with a water proff material. The product must be securely stowed in the truck so that it will neither tilt nor shift during transport.

During transport over a short distance e.g. in a stock or a factory, the product can be moved by means of a forklift or a stabeler.

When moved it must be secured that the product does not tilt or shift. And it must be secured that the limitations of the means of transportation is not exceeded.

Secure that there are no people around the product, when the product is moved.

The product must be placed in a dry place and covered securely, in order to secure that moist, metal parts or other substances do not damage the product. It is not allowed to place anything on top of the product.

5.0 Assembly, installation and start of operation

5.1 Location

The ASA-3 arm is delivered partially assembled and consists of 1 partially assembled support arm with wall bracket, 1 hood and 1 set of hoses with clamps and rubber bands.

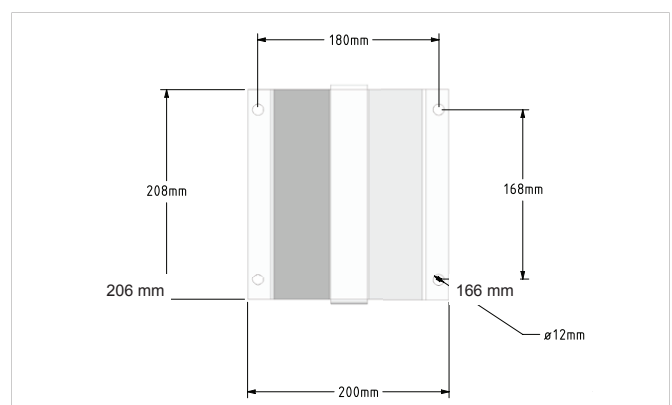
The ASA-4 arm consists of 1 partially assembled support arm with wall bracket, 1 hood, 2 aluminum tubes and 3 hoses with clamps and rubber bands.

Specification of any changes can be found on the order confirmation/invoice.

Before installation, the following should be considered:

- Sufficient space for satisfactory utilization of the arm.
- Optimal installation height for the task.
- Connection options for piping and any automation.
- Due to the gas shock absorbers, the arm has a limited working range, which is determined by the installation height. Installation at a height of approx. 2500 mm will result in an effective working range of 500-1500 mm above the ground. Can be shifted proportionally. Outside this working range, positioning problems may occur.

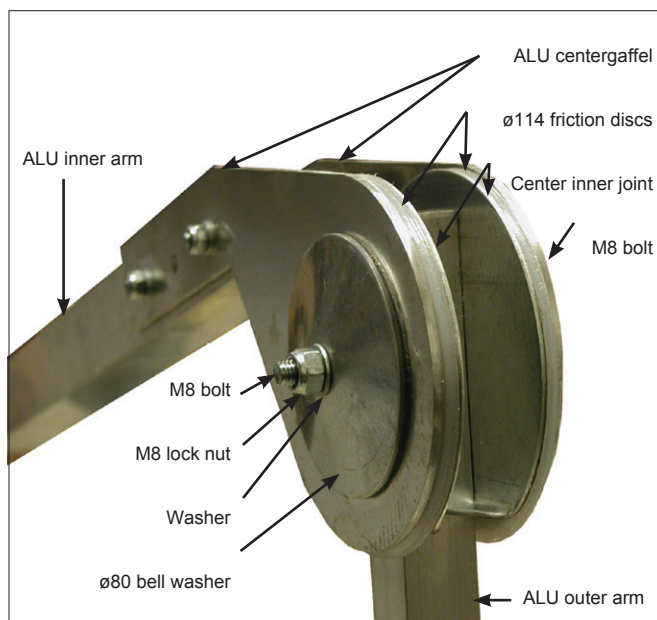
Procedure:



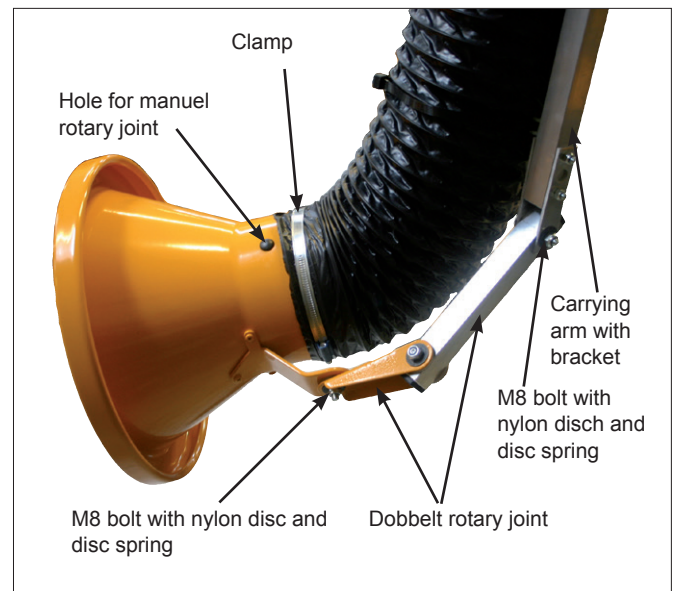
1. The wall bracket is firmly attached to the wall by means of 4 pct. off 10 mm bolts. (When using the extension arm, please fix this bracket first – refer to item 2.1)



2. Mount the Arm on the wall bracket with the M16 bolt and friction discs. Make sure to fasten it in such way that the Arm is easily rotated. If the inner joint/arm hasn't the wanted friction, the bell washer can be loosen or tighten, or by adjusting the spring retainer (against the wall to tighten – away from the wall to loosen).



3. Check the center joint and tighten it if necessary. Tighten the joint so that the arm moves easily, but also so firmly that it can support itself in a slightly bent position.



4. Mount the hood on the outer joint by taking the supplied M8 bolt through 3 disc springs, the alu half, the friction disc, the other alu half and the 3 disc springs and fasten them with an M8 lock nut.

ASA-3

The hose is then attached to the hood. The rubber band is led over the hood and the hose is then secured using a clamp. This is best done by bending the edge of the hose so that it is the steel spiral that is pulled/twisted onto the hood. Once the hose is securely fastened, finally pull the rubber band over the tensioning strap. Then extend the hose to the maximum so that there is as little resistance in the hose as possible. However, be careful not to restrict movement in all swivel joints. Tighten the hose and secure it with the supplied plastic strips in the pre-assembled strip holders. Then attach the hose to the duct pipe using clamps.



ASA-4

The aluminum pipes are mounted on the pipe-holders with the supplied self-tapping screws. The shortest of the pipes are mounted on the outer arm. Then mount the hose pieces for the bends. The rubber band is put on the outside of the pipe/hood, then pull the hose over the pipe and secure it with clamps. When the hose is attached, the rubber band is pulled over the clamp.

5.1.1 Mounting of optional equipment

Mounting of extension arm

1 meter extension arm:

First attach the extension arm to a solid wall, such as a concrete wall.

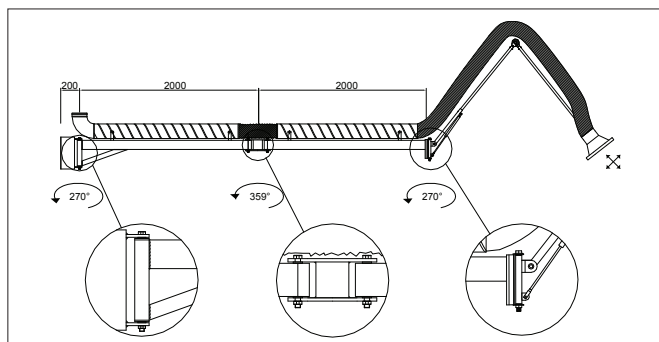
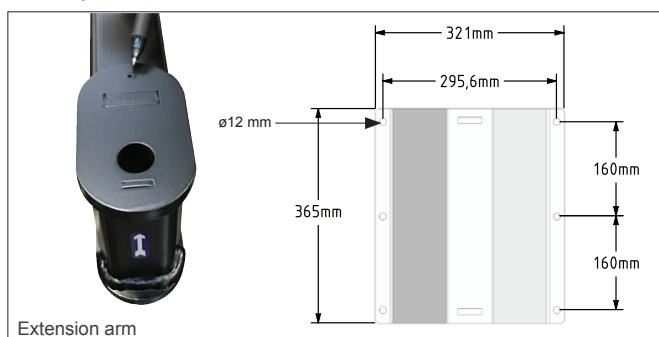
Then attach the ASA arm to the extension arm.

Longer extension arms:

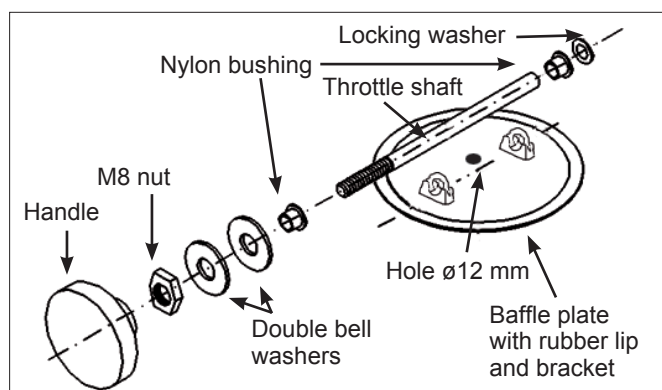
First attach the wall bracket of the extension arm to a fixed wall such as a concrete wall.

Then attach the extension arm and afterwards attach the ASA arm to the extension arm.

For 2-joints, attach the inner joint, then the middle joint and finally the arm itself. Make sure that the outer joint is facing the right way when installing - pipe holders must face upwards.



Then attach the spiral tube to the extension arm, using the self-drilling screws provided. The piece between the spiral tubes is assembled using the clamping strap and the supplied hose. The arm is then attached to the extension arm.



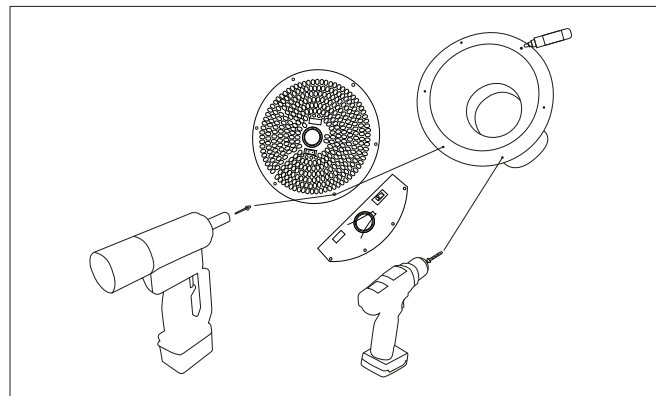
Mounting of the damper

The damper is retrofitted. See the drawing below.

Contact your dealer to order.

Mounting of net with light

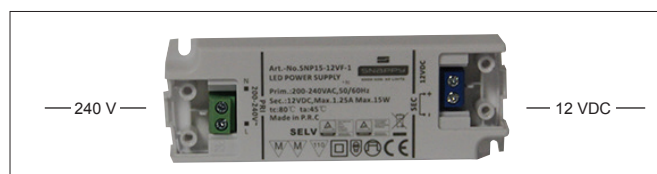
The net must be fixed by pop rivet on the hood. The connection is made by passing the wire attached to the hood inside the arm, where it is zip-tied. See the drawings below.



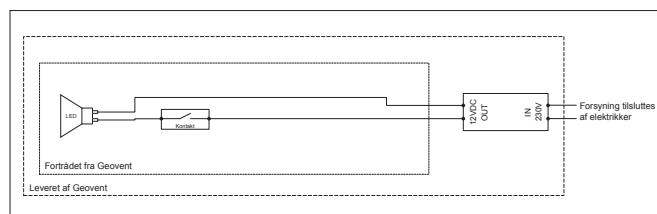
Next the power cord is connected to the transformer (230V → 12V) which again is connected to the mains.

Light specifications:

Type: LED
 Power: 5 W 36°
 Voltage: 12 V
 Supply voltage: 230-240V - 50-60 Hz
 Trafo-power: 12 VDC, Max 1,25 A, Max 15 W



The lead from the lamp must be connected to 12 VDC.

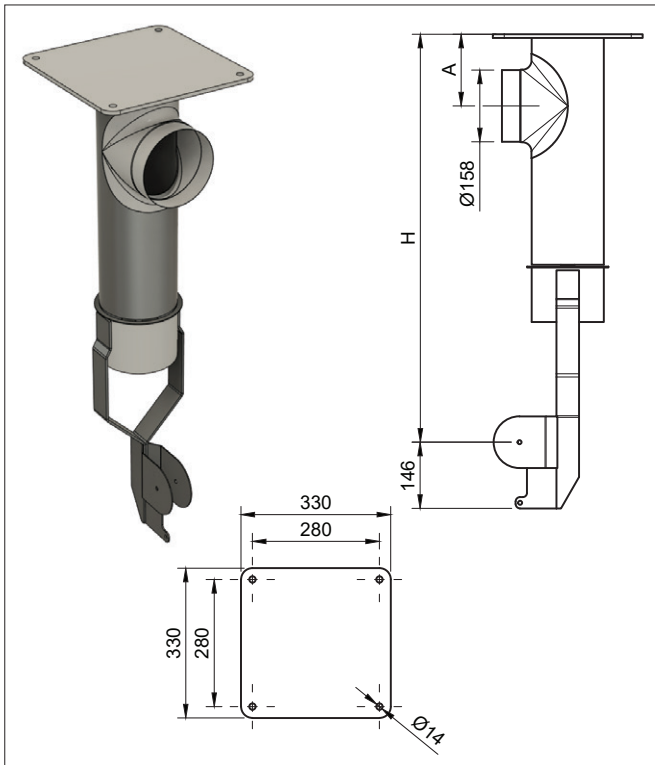


5.1.2 Power connection

For connection of various electrical components (e.g. light sensor), please refer to the enclosed documentation for the actual product.

The electrical installation is to be carried out by a certified electrician.

Mounting the ceiling console 360°



5.3 Control and test of the security system

After the final mounting, the ASA Arm should be adjusted to the typical working area, for optimum utilisation of the Arm. Do so by adjusting the rotary joints mentioned in item 2 by means of 2 off 13 mm fixed spanners.

6.0 Commissioning

Always wear gloves when handling the arm. Best handled/lifted by using the aluminum arm during transport and installation. Note that it is possible to pinch your fingers between the gas spring and the aluminum arm. A pre-assembled arm is operated solely by the hood.

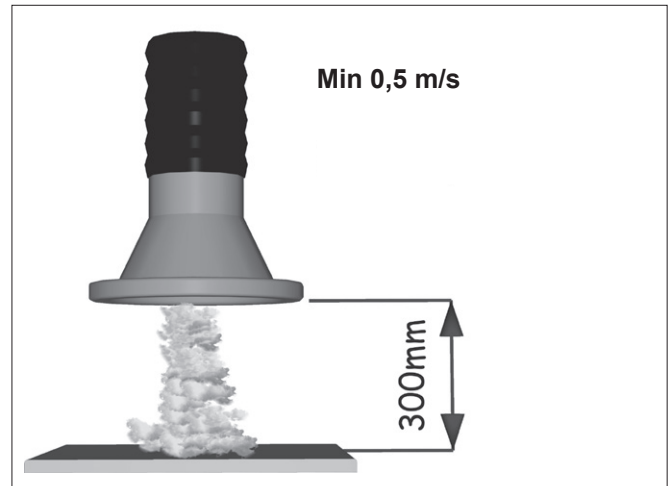
Operated by the hood. Do not jerk the arm or hose. Be especially aware that it is possible to pinch your fingers at the gas spring. Move the funnel to the desired position and wait a moment for the arm's friction disks to lock the arm in place.

For normal use, the Arm is to be self-retentive in the required position within the working area. The bracket of the Arm supplies a 180° rotary working area.

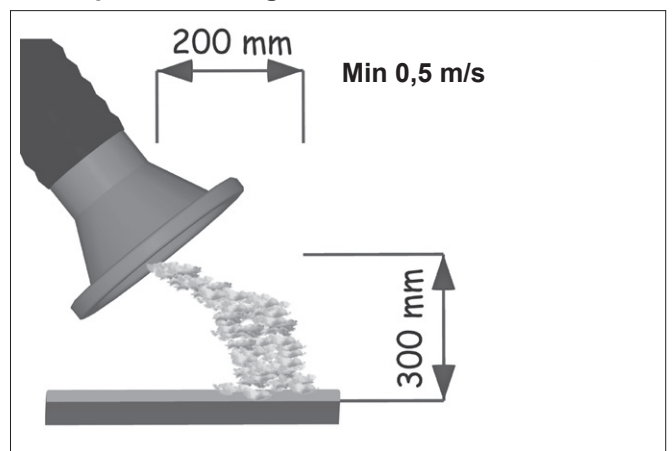
The hose can be damaged and leak under external stress, e.g. from a screwdriver. Therefore, this should be avoided to ensure the longest possible hose life.

If the equipment has been correctly dimensioned, the hood of the Arm should be placed in vertical position 300-500 mm over the blanks to be welded. That is just above the pollutant. Thus up to 99% of the polluting particles will be caught.

Optimal welding situation



Less optimal welding situation



Always check that the correct volume of air is extracted by the suction head/hood.

The Arm does not work if ...

- unauthorised parts have been mounted on the Arm (e.g. power point on the hood)
- the Arm is pushed towards the required position. Instead, please move the Arm to the required position and wait a moment until the friction discs have locked the Arm. If this does not work, please tighten the loose joint with two 13 mm fixed spanners.
- something has been hung on the extension arm. It is only meant to be capable of carrying the weight of the actual Arm.

6.1 After installation

Check the installation according to chapter 5.3.

7.0 Control, test and maintenance

7.1 Control

Check the installation according to chapter 5.3.

7.2 Maintenance

Periodic maintenance

- When it becomes difficult to position the Arm, e.g. if it will not remain in the required position, please adjust the movable joints (please refer to item 2).
- Please check the condition of the hose, the spring as well as the friction discs, and exchange them if necessary. Please contact your dealer in respect of spare parts.

At least once annually, the whole point extraction plant should be overhauled by an authorised serviceman.

8.0 Cleaning

The outside of the product is cleaned with a vacuum cleaner or a cloth.

9.0 Dismantling, disabling and scrapping

Before disassembly, wear protective equipment, gloves, goggles, respiratory protection and protective clothing to avoid injury.

Clean the inside of the product with a vacuum cleaner fitted with a filter designed for this purpose.

Dismantle the metallic parts by unscrewing screws and bolts. Afterwards cut the larger pieces into smaller pieces and dispose of it according to local regulation.

Dismantle plastic parts and dispose of it according to local regulations.

The packing material must be sorted according to local regulations in order to be able to reuse the material.

10.0 Dimensions

ASA-3 and ASA-4 Arm



ASA-3

Art no.	Description	Weight
ASA-01	2,0 m - ø 80 mm	9 kg
ASA-11	3,0 m - ø 80 mm	10 kg
ASA-02	2,0 m - ø 100 mm	9 kg
ASA-12	3,0 m - ø 100 mm	10 kg
ASA-22	4,0 m - ø100 mm	12 kg
ASA-03	2,0 m - ø 125 mm	9 kg
ASA-13	3,0 m - ø 125 mm	10 kg
ASA-23	4,0 m - ø125 mm	12 kg
ASA-04	2,0 m - ø 160 mm	9 kg
ASA-14	3,0 m - ø 160 mm	10 kg
ASA-24	4,0 m - ø 160 mm	12 kg
ASA-31	2,0 m - ø 200 mm	10 kg
ASA-33	3,0 m - ø 200 mm	11 kg
ASA-35	4,0 m - ø 200 mm	12 kg

ASA-4

Art no.	Description	Weight
ASA4-2-160	2,0 m - ø 160 mm	9 kg
ASA4-2-200	2,0 m - ø 200 mm	10 kg
ASA4-3-160	3,0 m - ø 160 mm	10 kg
ASA4-3-200	3,0 m - ø 200 mm	11 kg
ASA4-4-160	4,0 m - ø 160 mm	11 kg
ASA4-4-200	4,0 m - ø 200 mm	12 kg

12.0 Liability**Warranty**

Geovent A/S grants a warranty for products, which are defective, when it can be proved that the defects are due to poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (reparation or exchange) until one year after the date of shipment.

No claims can be made against Geovent A/S in relation to loss of earnings or consequential loss as a result of defects on products from Geovent.

Wear on parts such as filter cartridges and hose is not included in the warranty.

User liability

In order for Geovent to be capable of granting the declared warranty, the user/fitter must follow this instruction manual in all respects.

Under no circumstances may the products be changed in any way, without prior written agreement with Geovent A/S.

Please refer to the current sales and delivery conditions at www.geovent.com

13.0 Declaration of conformity

The manufacturer: GEOVENT A/S
HOVEDGADEN 86
DK-8831 LØGSTRUP

Hereby declares that:

The product: Extraction arm
Model: ASA-3 with hose
ASA-4 with alu profil

Complies with the relevant parts of the following directives and standards:

Directive 2006/42 / EC of the European Parliament and of the Council of 17 May 2006 on machines and amending directives 95/16 / EC.

This declaration is no more valid if changes are made to the product by others than the manufacturer.

Authorized to collect the technical file:

Lise Cramer

Date: 16.02.2024

Position: Director
Name: Thomas Molsen

Signature: _____



14.0 Spare part list

Art. No.	Description
06-12X	Hood
10-252	Hood joint ASA
09-3XX	GeoFlex WELD
GA-250-550	Gas spring
TF-S-XX	Disc spring
01-681ASA	Ceiling bracket 360° ø160 ASA



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