



# **GEOVENT**

## INSTRUCTION MANUAL



# **ASA-HV50**

Extraction arm for high vacuum



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### 1.0 General safety precautions

**IMPORTANT** – Please study all the instructions before mounting and commissioning.

Please keep these instructions in a safe place and instruct all users in the function and operation of the product.

Do not dismantle any factory-mounted parts, since it impedes the commissioning of the equipment.

All electrical installations must be carried out by an authorised electrician.

#### 1.1 Danger

**Explosive media** – The Extraction Arm is not suitable for the extraction of aluminium dust, flour, textile dust nor for sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

Placing the hand between the gas spring and the carrying arm could involve a risk of mutilation.

Boring in the gas spring or other ways of puncturing it is deadly dangerous.

#### 1.2 Field of application

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 Extraction Arm is not suitable for the extraction of aluminium dust, flour, textile dust nor sawdust or other media, which are connected with danger of explosion, without specific approval from Geovent A/S.

The hose may be damaged and leaky via outer loads, e.g. by a screw driver. Avoid such load in order to safeguard a long life.

Art. No.	Description
74-480	ASA-HV50 Arm for High Vacuum 2 m. ø50
74-481	ASA-HV50 Arm for High Vacuum 3 m. ø50
74-482	ASA-HV50 Arm for High Vacuum 4 m. ø50
74-483	Mini-HV50 Arm for High Vacuum 1 m. ø50
74-484	Mini-HV50 Arm for High Vacuum 1,5 m. ø50
74-485	Muffled HV hood with magnet



HV50 Hood. Insulated for noise reduction.

#### 1.3 Handling

Always use gloves when you are handling this product. Always lift the arm in the aluminum arm during transport and assembly.

Be aware that it is possible to trap your fingers between the gas spring and aluminum arm.

A mounted arm is operated exclusively by the hood.

#### 1.4 Technical data

##### Recommended flow area

Hose dimension:	Volume of air:
Ø50	100-200 m³/h

Length:	1, 1½, 2, 3 or 4 m
By means of an extension arm up to:	8 m

Hose max. temp. (depends on Up to 100°C the type)

#### 1.5 Construction

**Wall bracket:** Steel bracket, powder enamelled yellow in RAL 1007. The rotary joints can rotate 270°.

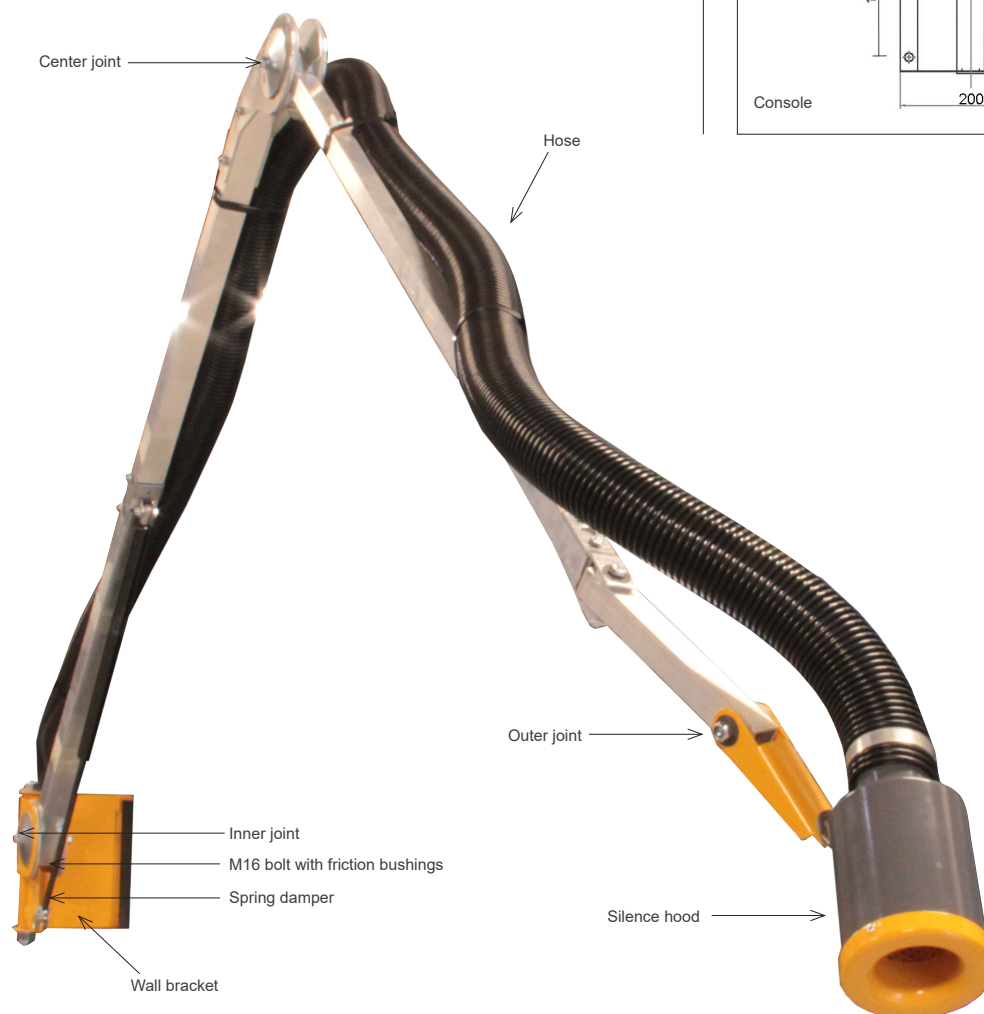
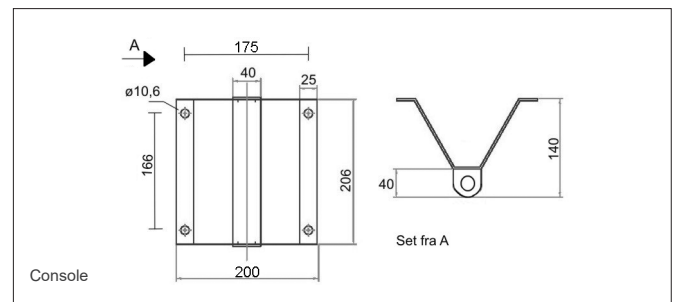
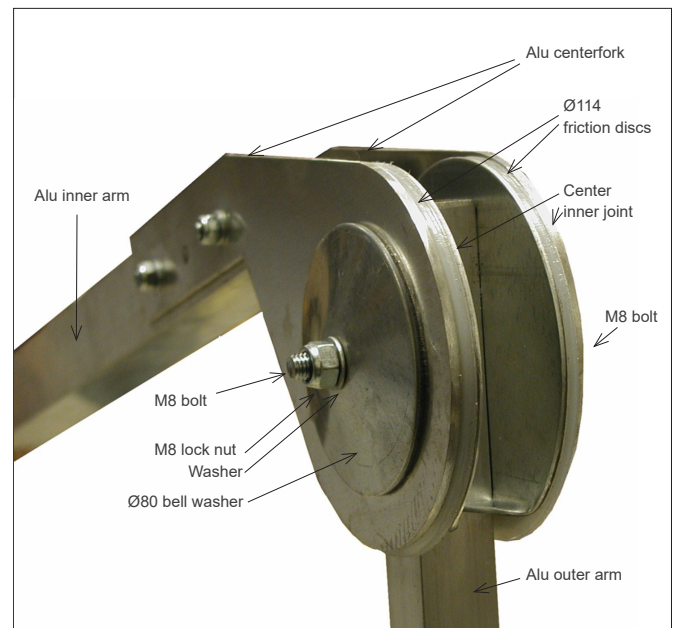
**Funnel:** Light-weight aluminium funnel. The funnel is powder enamelled in RAL 1007. May be rotated in all possible positions.

**Arms and friction joint:** 25x25 mm aluminium pipe, connected via knee joints with friction discs and disc springs. The inner reinforced arm is executed in 30x30 mm electro galvanised steel pipe and supplied with a gas damper.

**Hose and pipes:** Ethyl-vinyl-acetyl (EVA) hose. Mack of extruded EVA material. Inside and outside wavy. Is self-supporting, so a spiral is unnecessary.

## 2.0 Installation

The ASA-3 Arm is supplied partly assembled. Depending on model, it may consist of 1 partly assembled carrying arm, 1 funnel and 1 set of hose with clamp. The centre part of the carrying arm is to be turned around and fastened with two 13 mm fixed spanners. Before mounting the Arm, please make sure that the optimum working area is selected. Is there space enough for the satisfactory utilisation of the Arm? What about connection possibilities for piping and automatics? The optimum installation height is then to be selected in accordance with the table below:



**Recommended installation height HV50 arm: 2500 mm**

**Procedure:**

1. The wall bracket is firmly attached to the wall by means of 4 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. Center wrist checked and tightened if needed. Tighten the joint so that the arm moves freely, but also so fast that it can sustain itself in a slightly bent position.
4. Mount the funnel 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.
5. The hose is mounted on the funnel by tightening the clamp around the funnel and the hose. Now pull out the hose to max. so that the least possible resistance is left in the hose and fasten with the enclosed plastic binders. Subsequently, the hose is mounted on the branch pipe by means of the clamp.

## 2.1 Mounting of optional equipment

### Mounting of extension arm

The extension arm for HV50 is available in 1.0 m, 2.5 m and 4.0 m. (4,0 m available in both 1 and 2 line arm).

#### 1 m extension

Fixing the extension arm to a solid wall, in the same way as the wall bracket in the section. 2.0.  
Then fastened HV50 arm to the extension arm.

#### 2.5 and 4.0 m extension

Attach the wall bracket.  
Then install the extension arm

At 4.0 meters 2-leds mounted inner part, then mid link and eventually outer loops. Ensure that the outer part is positioned properly during assembly - tube holders must face up.

Then attach the ducts to the extension arm with the self-carving screws. The distance between the duct assembled using a Clamp and the hose. The arm is then fastened to the extension arm.



## 2.2 Trial run – exact adjustment

After the final mounting, the 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.

## 3.0 User instruction – application

Operated by the hood. Do not use the arm or hose. Be especially aware that it is possible to squeeze your fingers at the gas spring. Move the hood to the wanted position and wait for the friction discs to locked the arm.

In normal use, the arm can lift it self in the wanted position. The arm can rotary 270° in the working space.

The hose can be damaged and leaky by not using it right, for example a screwdriver. This should be avoided to ensure a long life span.

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

The Arm does not work if ...

- unauthorised parts have been mounted on the Arm (e.g. power point on the funnel)
- 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.

## 4.0 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.

## 5.0 Liability

### Warranty

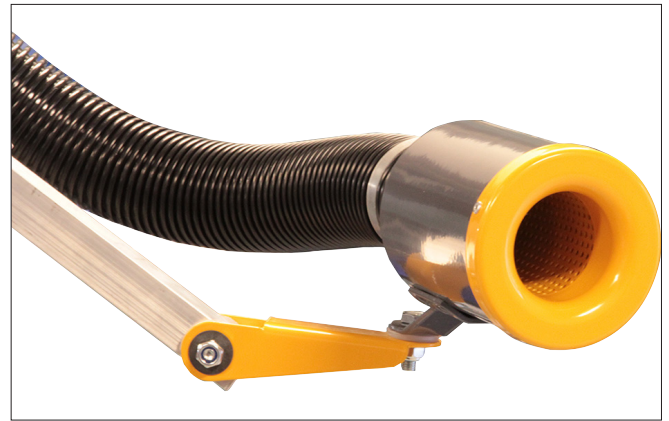
Geovent A/S grants a warranty for products, which are defective, when it can be proved that the defects are due to poor manufacture or materials on the part of Geovent. The warranty comprises remedial action (reparation or exchange) until one year after date of shipment. No claims can be made against Geovent A/S in relation to loss of earnings or consequential loss as a result of defects on products from Geovent.

Wear parts like hoses, etc. are 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.





## 6.0 Declaration of conformity



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Hereby declares that:

The product: Extraction Arms  
Models: ASA-HV50

have been manufactured in compliance with the directions of the Directive Council of 14 June 1989 in common approximation to the legislation of the member states regarding machine safety (89/392/EEC amended by the directive 91/368/EEC) with special reference to appendix 1 in the Directive regarding basic health and safety requirements in connection with the construction and manufacturing of machinery.

Council Directive 2006/42/EC (May 17, 2006) of the European Parliament on machinery, and amending

EN ISO 14121-1:2007 Safety of machinery -  
Risk assessment - Part 1: Principles

EN ISO 12100-1:2005 Safety of machinery -  
Basic concepts, general principles for design

EN ISO 12100-1:2009 Construction and design  
Part 1: Terminology, methodology

EN ISO 12100-2:2005 Basic concepts, general principles for design

EN ISO 12100-2:2009 Construction

Date:

30/01-17

Position: Managing Director  
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Underskrift :





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