GEOVENT

INSTRUCTION MANUAL

ASX arm

ATEX Extraction arm
ø50, ø80, ø100, ø125, ø160 og ø200 mm

Version 2.0 11.06.13

www.geovent.dk

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1.0 General safety precautions

IMPORTANT- Read the entire manual before installing and using the ASX arm.

Retain this manual for future reference and instruct all users in the operation and function of the ASX arm.

Do not remove factory installed parts as it will make the operation of the ASX arm difficult.

All electrical connections should be carried out by a trained professional.

1.1 Danger

Danger of mutilation. Do not place hand between gas spring and support arm.

Danger of fatal injury. Do not drill the gas spring or otherwise puncture it.

1.2 Area of application

GEOVENT ASX arm is the classic extraction arm for welding smoke, grinding dust and fumes in environments requiring ATEX approved products.

Geovent ASX conforms with
ATEX-direktive 94/9/EC: EX II 3 D II

ASX Standard issue
- zone 2/22

1.3 Handling

Always use gloves by handling.
The ASX arm is carried in the support arm when handling and installation.
NOTE. risk of fingers being mutilated between gas spring and support arm.

Recommended flow:

Hose dimension:

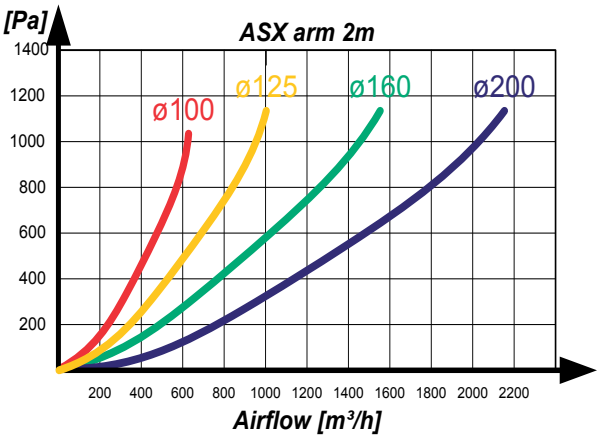
ø80	200-300 m³/h
ø100	300-450 m³/h
ø125	450-800 m³/h
ø160	800-1000 m³/h
ø200	1000-2000 m³/h

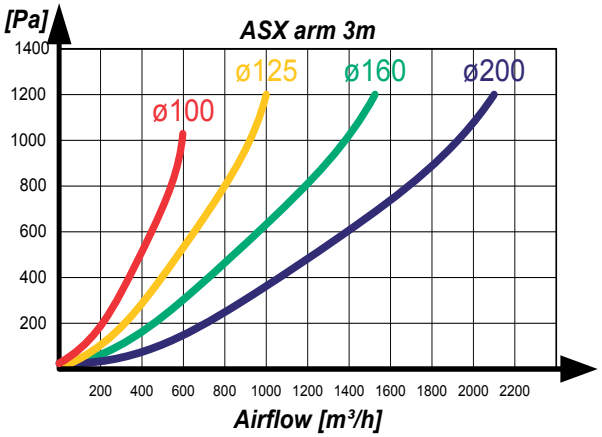
Reach using outrigger: up to 8 m.
Other types of hoses available.
Contact supplier for further information.

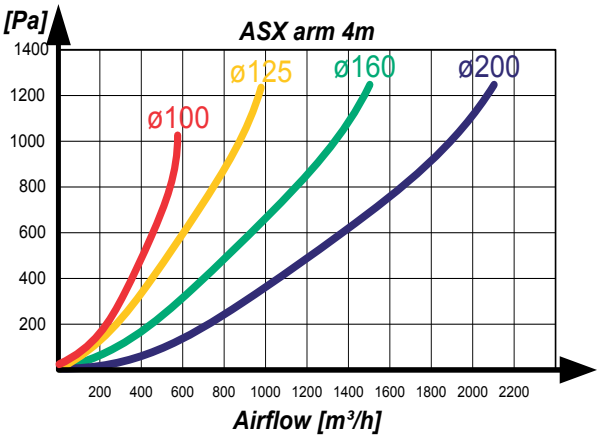
1.4 Technical specifications

Order no.	Description	Weight
ASX-01	ASX arm 2,0m ø80mm, complete	8 kg
ASX-05	ASX arm 2,0m ø80mm complete w/damper	8 kg
ASX-11	ASX arm 3,0m ø80mm, complete	8,5 kg
ASX-15	ASX arm 3,0m ø80mm, complete w/damper	8,5 kg
ASX-21	ASX arm 4,0m ø80mm, complete	9 kg
ASX-25	ASX arm 4,0m ø80mm complete w/damper	9 kg
ASX-02	ASX arm 2,0m ø100mm, complete	8 kg
ASX-06	ASX arm 2,0m ø100mm complete w/damper	8 kg
ASX-12	ASX arm 3,0m ø100mm, complete	8,5 kg
ASX-16	ASX arm 3,0m ø100mm complete w/damper	8,5 kg
ASX-22	ASX arm 4,0m ø100mm complete	9 kg
ASX-26	ASX arm 4,0m ø100mm complete w/damper	9 kg
ASX-03	ASX arm 2,0m ø125mm, complete	8,5 kg
ASX-07	ASX arm 2,0m ø125mm, complete w/damper	8,5 kg
ASX-13	ASX arm 3,0 m ø125mm, complete	9 kg
ASX-17	ASX arm 3,0 m ø125mm, complete w/damper.	9 kg
ASX-23	ASX arm 4,0 m ø125mm, complete	9,5 kg
ASX-27	ASX arm 4,0 m ø125mm, complete w/damper.	9,5 kg
ASX-04	ASX arm 2,0m ø160mm, complete	8,5 kg
ASX-08	ASX arm 2,0m ø160mm, complete w/damper.	8,5 kg
ASX-14	ASX arm 3,0m ø160mm, complete	9 kg
ASX-18	ASX arm 3,0m ø160mm, complete w/damper	9 kg
ASX-24	ASX arm 4,0m ø160mm, complete	9,5 kg
ASX-28	ASX arm 4,0m ø160mm, complete w/damper	9,5 kg
ASX-31	ASX arm 2,0m, ø200mm, complete	10 kg
ASX-32	ASX arm 2,0m ø200mm, complete w/damper	10 kg
ASX-33	ASX arm 3,0m ø200mm, complete	11 kg
ASX-34	ASX arm 3,0m ø200mm, complete w/damper	11 kg
ASX-35	ASX arm 4,0m ø200mm, complete	12 kg
ASX-36	ASX arm 4,0m ø200mm, complete w/damper	12 kg

Pressure drop ASX:







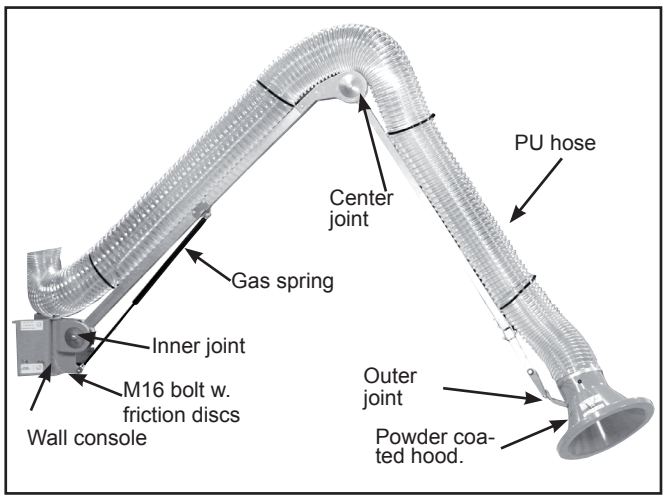
1.4 Construction

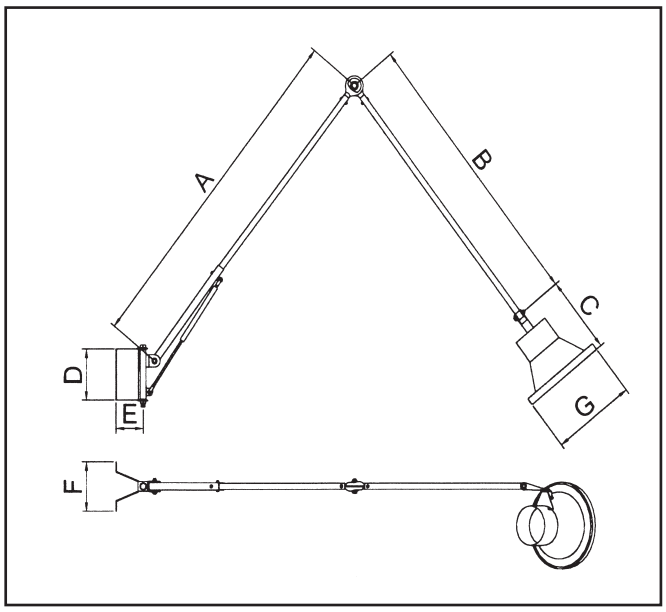
Wall console: Powder coated RAL 1007 steel console, The console it pivotable up to 270°.

Hood: Aluminium ø80, ø100, ø125, ø160 eller ø200 mm. ø160 og ø200 mm
The hood has an integrated grip for easy positioning and comes as standard powdercoated RAL 1007.

Support arms and friction joints: Inner support arm in 30x30 mm aluminium, with bracket for the gas spring.
Outer supprt arm is 25x25 mm aluminium, joined with a knee joint with friction discs and a spring disc.

Hose: Transparent PU-hose with copper plated steel spiral (GeoFlex P2 PU).





Dimensions for ASX					
Length	A (mm)	B (mm)	D (mm)	E (mm)	F (mm)
2,0 m	920	680	206	120	200
3,0 m	1420	1180	206	120	200
4,0 m	1870	1710	206	120	200

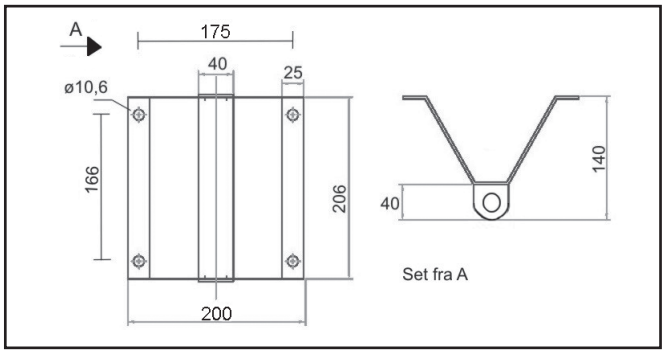
Hood ASX		
Hood	**C (mm)**	**G (mm)**
Ø80	180	178
Ø100	180	198
Ø125	180	223
Ø160	318	360
Ø200	318	360

2.0 Installation

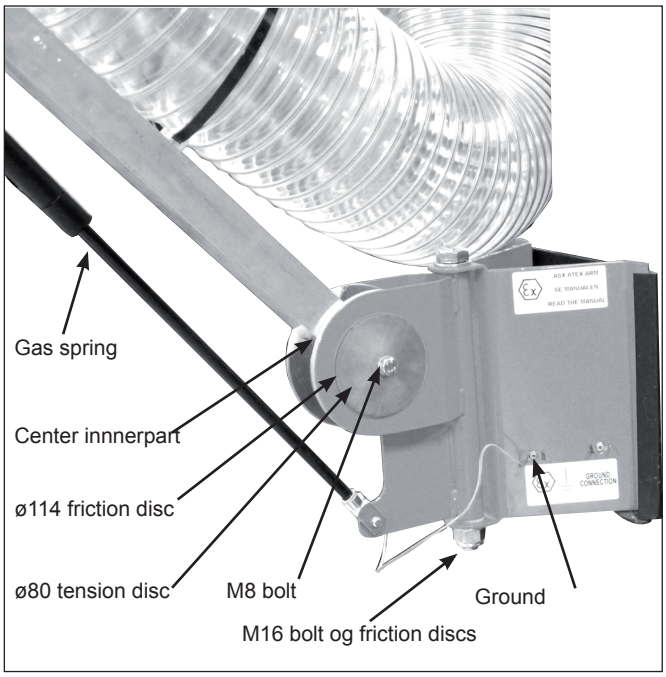
The ASX arm is supplied partly assembled.
1 partly assembled supprt arm with wall console.
1 hood and hose with clamps and rubber band.samt 1 sæt slange med spændebånd og gummibånd.

Before installing, consider:
- Is there sufficient space for the arm to operate satisfactory.
- The ideal height of installation
- How to connect ducts and automatics, if any.

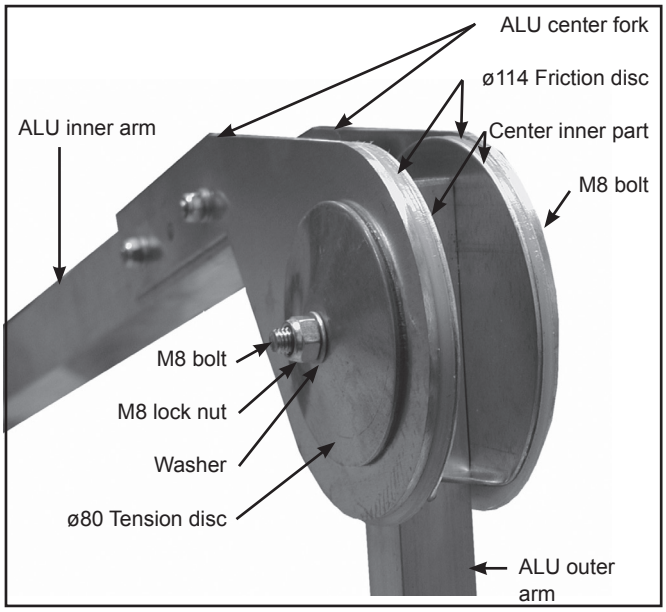
Procedure:
1. Fasten the wall console in the wall using 4 10mm
   Note: The console should be grounded.



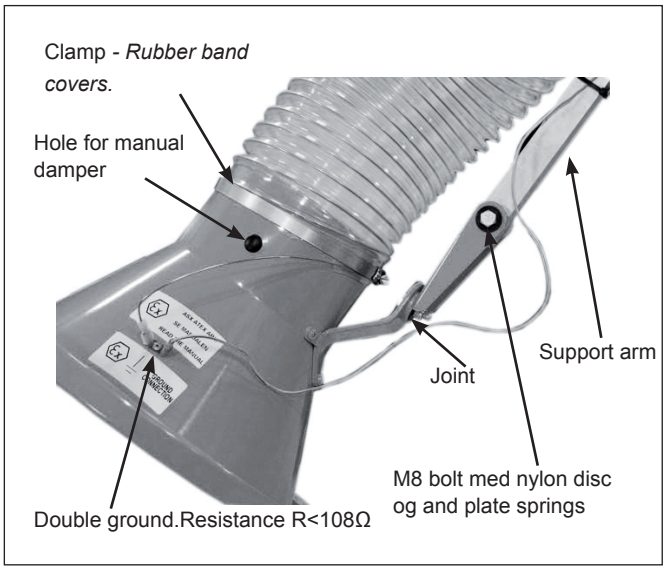
2. Mount the arm on the wall console using the M16 bolts bolt and friction discs.
   Tighten so the can still move freely.



3. Test center joint and tighten if needed.



4. Now mount the hood on the louter joint by putting the supplied 8mm bolt though 3 spring washers, the hood bracket, the friction disc and secure with an 8mm lock nut.



5. Attach the hose to the hood. Pull the rubber band over the hood and secure the hose to the hood using a clamp. When the hose is secured pull the rubber band over the clamp

Now extend the hose to its max. length to give the least resistance in the hose.
The hose is fastened using the supplied plastic strips in the striholders.
Now use clamps to fasten the hose to the duct system.

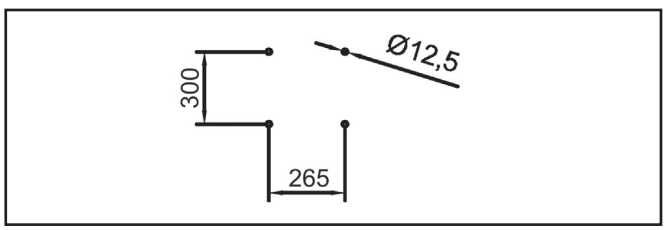
2.1 Fitting accessories.

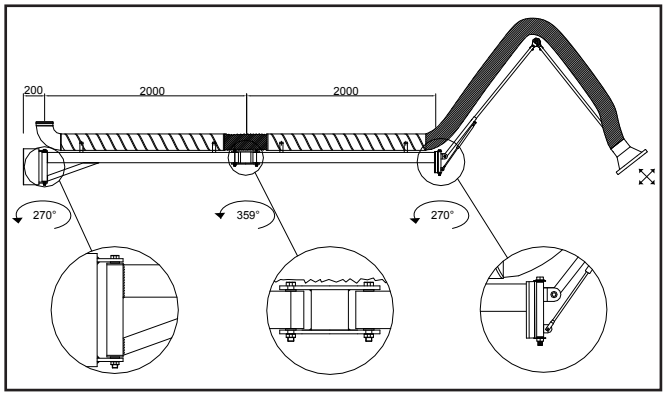
Fitting outrigger
Outriggers for ASX is available in 1,0m, 2,5m and 4,0m. (4,0m with one or two joints).

1m Outrigger
Fasten the outrigger on a sturdy wall just like the wall console in chapter 2.0.
Now fasten the ASX-arm on the outrigger

2,5 og 4,0 meter outrigger.
First fasten the wall console of the outrigger.

(see hole dimensions below)





When installing 4 meter outrigger, 2 joints, first mount inner arm, then the middle and finally the outer arm.

Make sure that the hose holders are facing up when installing.

Now faster spiro ducts on the outrigger arm with the supplied self-drilling screws. The gap between the two spiro ducts are connected using clamps and the supplied hose.
Then fasten the arm on the outrigger.

Mounting of dampers.
Must be fitted from the factory. Contact distributor.

2.3 Test run - Calibration

For optimal use of the ASX arm, it should be adjusted

after installation. To do this, adjust the two joints so they are firm but at the same time able to move freely.

3.0 User instruction

When in use, handle the arm by gripping the hood and move it to the desired position. Do not grab arm or hose.
Note the risk of crushing your fingers near the gas spring.
Move the hood to the desired position and wait for a second until the friction discs lock the arm in position.

If the fan and ducts are correctly dimensioned, the hood should be placed between 300 and 500 mm above the place that needs to be vented.
Place the hood vertically above the work place for optimal ventilation. This will catch up to 99% of the polluting particles.

The ASX arm will not work correctly if…

- Unauthorized parts have been mounted on the arm.
- The arm is pushed into position.
  In stead move it in a controlled manner and wait for the friction discs to hold it in place.
- If the arm is used to hang something from.
  The ASX arm is built to support only its own weight.

4.0 Maintenance

- Should the arm become difficult to position, please readjust the joints and tighten if nessecary.
- Control the state of hose, gas spring, and friction discs. Replace if nessecary.

The entire installation should be serviced at least once a year, depending on the work load.

5.0 Liability

Warranty
Geovent A/S offers a warranty for products that are flawed or defective.
The warranty covers repair or replacement whichever Geovent find adequate up to one year after the product has been shipped from Geovent A/S

No claims can be made towards Geovent for compensation for any loss or damage caused by the ASX arm.

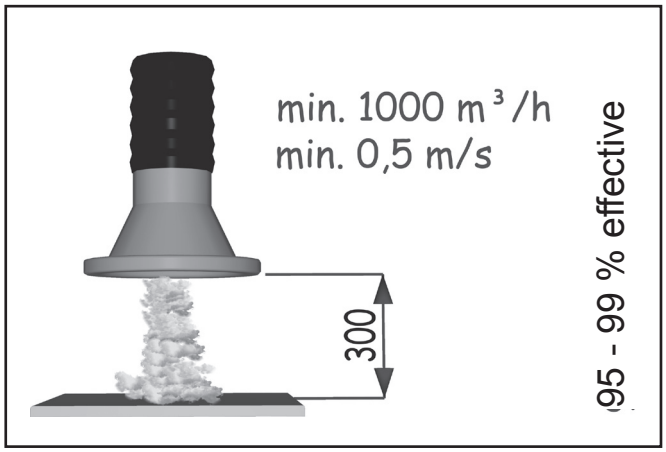
Wear parts like hoses and friction discs are not covered by this warranty.

User responsibility.

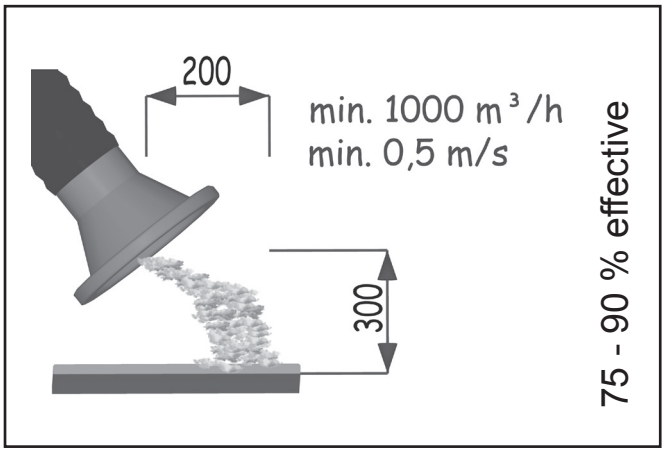
In order for Geovent to provide the mentioned warranty the user and installer must have followed the instructions in this manual carefully.
Geovents responsibility is renedered void if changes have been made to the arms constrution and function.

Moreover we refer to current terms of sale and delivery found at **www.geovent.com**

Optimal welding position:



Less than optimal welding position:



Always make sure that there is the recommended airflow at the hood.

6.0 Declaration of conformity.

GEOVENT

HOVEDGADEN 86 • DK-8831 LØGSTRUP
www.geovent.com

The undersigned hereby declares as manufacturer and represent that:

Product: Extraction arm
Model: ASX

is in conformity with the provisions of the directives and standards mentioned below:

Council Directive 2006/42/EC (May 17, 2006) of the European Parliament on machinery, and amending Directive 95/16/EC.

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

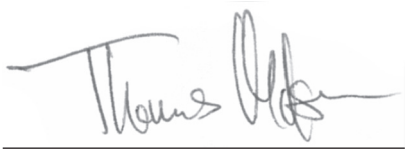
EN ISO 12100-2:2005 Basic concepts, general princip- les for design

EN ISO 12100-2:2009 Construction and design Part 2: Technical principles

The Technical Construction File is maintained at Geovent A/S.
Authorized to collect the Technical Construction File: Ole Madsen

Date: 12.06.2013

Managing director
Thomas Molsen



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