GEOVENT

INSTRUCTION MANUAL

COMPACT ARM

ø160 and 200 mm

Version 2.0 16.08.16

www.geovent.com

Contents

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.

An authorised electrician must carry out all electrical installations.

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 spring and the carrying arm could involve a risk of mutilation.

Demounting the spring is deadly dangerous.

1.2 Field of application

The GEOVENT Compact Arm is the ideal Extraction Arm for the extraction of welding smoke, grinding dust, fumes, etc. when there is only limited space available in the working area.
Since the Arm is telescopic, it only requires minimum space, and still it is a perfect combination between the large arms with major suction capacity and the smaller arms, which are easy to position.

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.

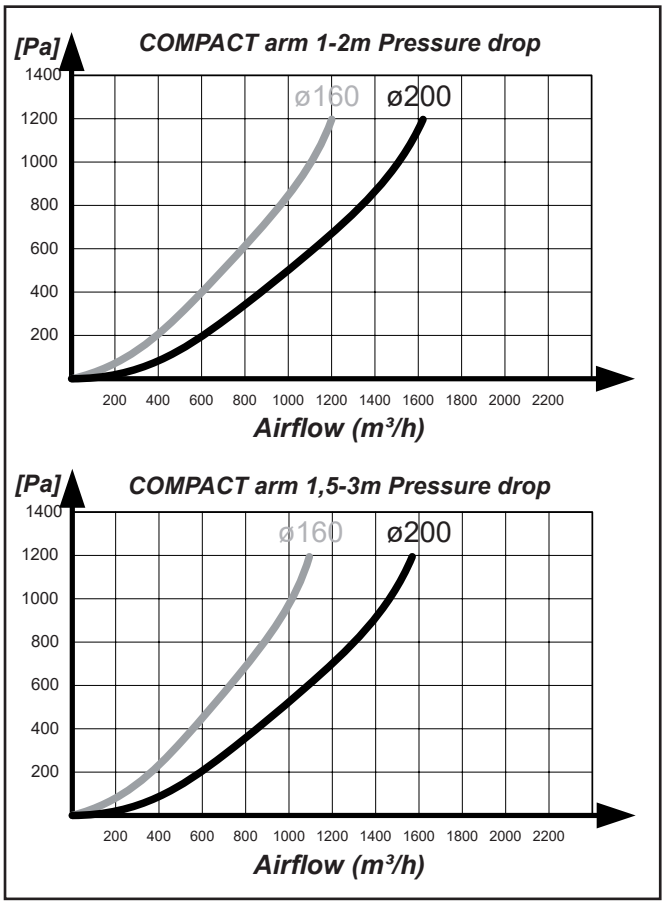
Under no circumstances may the balancer, which is mounted on the ceiling bracket, be loosened or tightened to the extent that the inner spring breaks. Therefore, be careful in order to avoid loading the spring in the outer areas.

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

1.3 Technical data

Recommended flow area

Hose dimension:	
Ø160	800-1000 m³/h
Ø200	1000-1500 m³/h
Length:	1-2 and 1,5-3 m
Via an extension arm up to:	7 m
Hose Max. Temp. (depends onthe type)	Up to 150°C



1.4 Construction

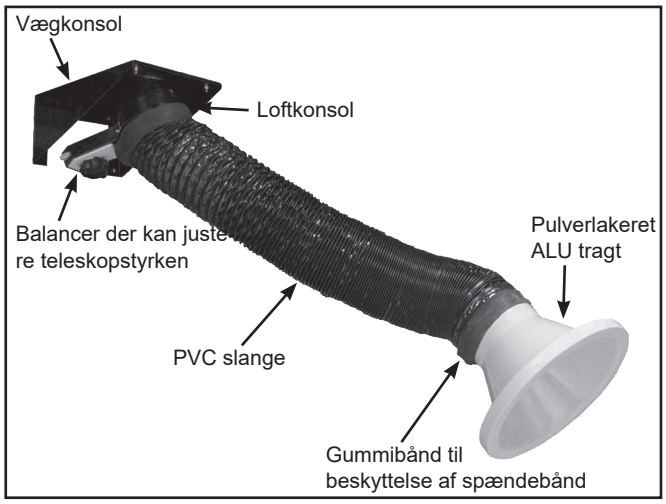
Ceiling bracket: Powder enamelled in black RAL 9005 steel bracket, the rotary joint of the bracket can rotate 360°.

Funnel: The light-weight aluminium funnel ø160 or ø200 mm is equipped with an integrated handle.
The funnel is powder enamelled in RAL 1007.
May be rotated in all possible positions.

Arms and friction joints: The Arm consists of three joints. The inner carrying arm is executed in 45x45 mm aluminium profile, supplied with adjustable fittings, where the power of the spring may be adjusted. Inside this profile, the middle 35x35 mm ALU-profile is moved by means of journal bearings. The outer joint, a 25x25 mm aluminium profile, is moved by means of journal bearings in the middle profile.

2.0 Installation

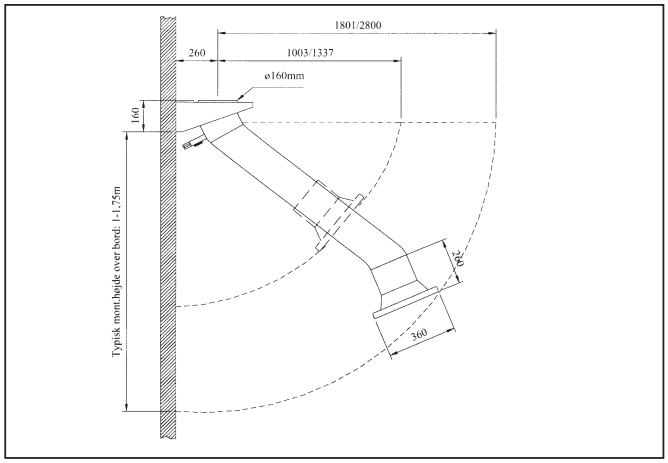
The COMPACT Arm is supplied partly assembled. Depending on model, it may consist of one carrying arm, one funnel, and one set of hose with clamp and rubber band. As standard, the Arm is prepared for ceiling mounting, however, in most cases it will be mounted on a wall by means of a wall bracket (to be ordered separately).



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:

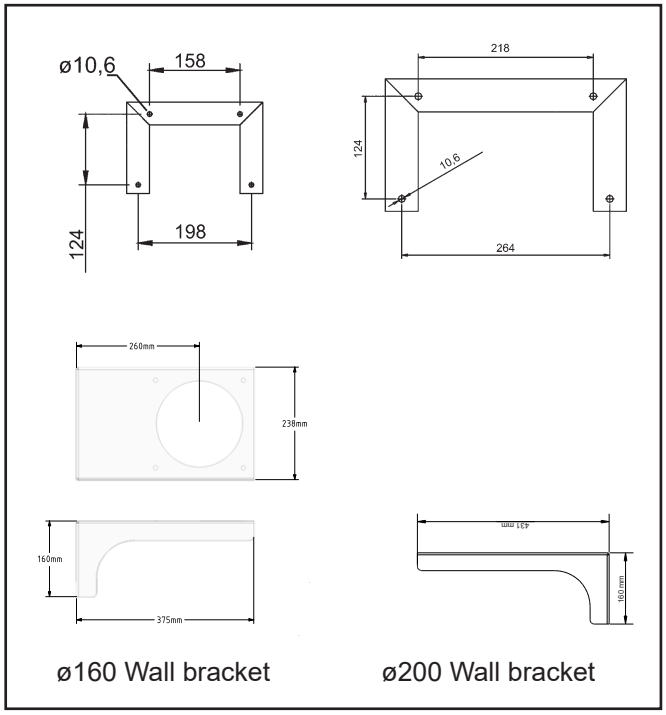
Recommended installation height COMPACT Arm:

1-2 m	1800 mm
1.5-3 m	2000 mm
3.0 to 7.0 m (incl. extension arm)	2500 mm



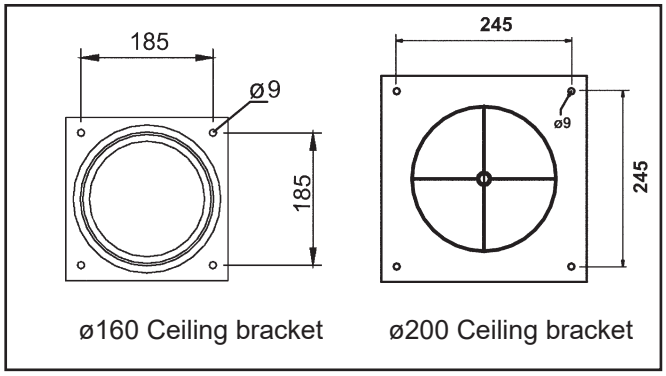
Procedure:

1. For wall mounting, attach the wall bracket firmly 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).



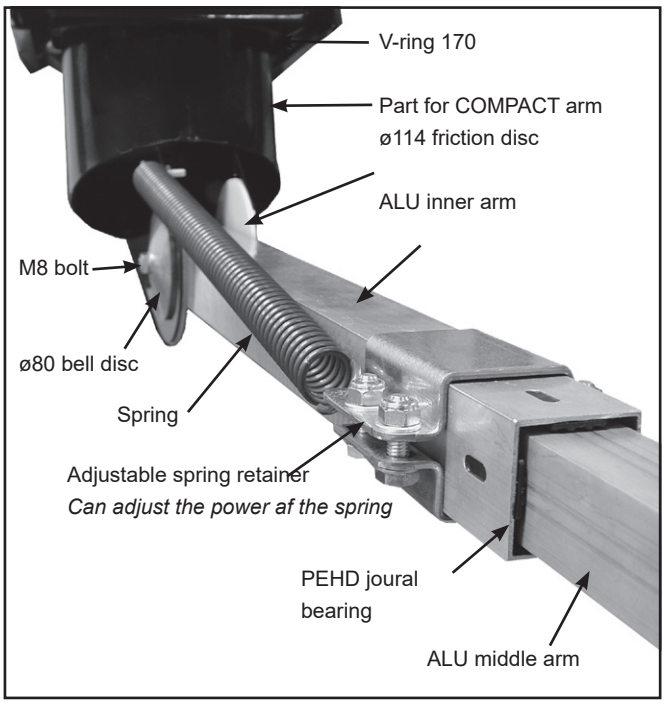
ø160 Wall bracket ø200 Wall bracket

2. Then the ceiling bracket is mounted, either in the ceiling or in the wall bracket (refer to the drawing below). The bracket is fixed via attaching the 4 of 8 mm bolts with 4 of bevel-edged washers and lock nuts.

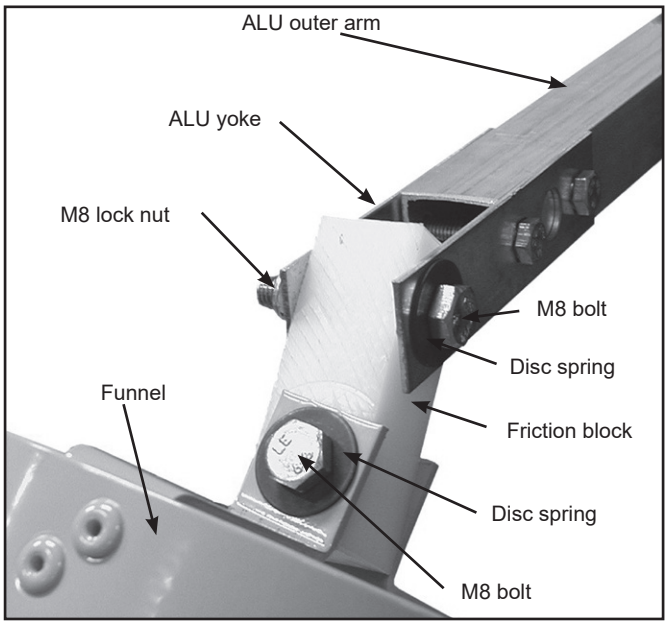


ø160 Ceiling bracket ø200 Ceiling bracket

3. Then the Arm looks like the one shown on the picture below. The functionality of the Arm is tested and the inner joint is tightened up, if necessary.



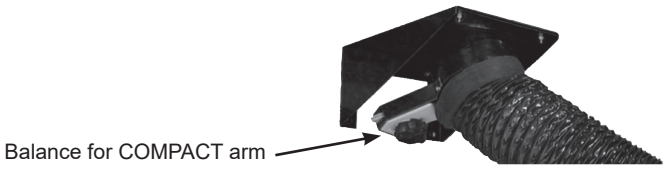
4. The outer joint for the funnel is tested and tightened up, if necessary. The funnel must be self-retaining in all positions.



5. Subsequently, the hose is mounted on the ceiling bracket. The rubber band is taken out over the ceiling bracket, after which the hose is fixed by means of a clamp. Bending the edge of the hose is the best way of doing this, so that the steel spiral is pulled/twisted up on the bracket. When the hose has been properly fixed, the rubber band is finally pulled over the clamp.

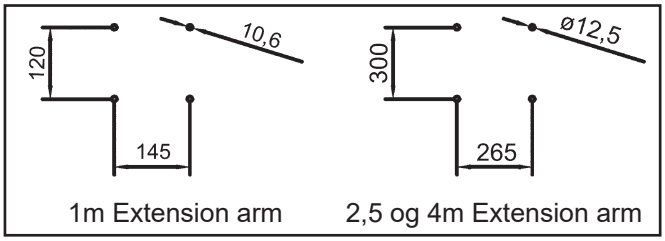
6. The hose is mounted on the funnel by tightening the clamp around the funnel and the hose. (NB. Remember first to pull the rubber band over the funnel). When the hose has been fixed properly, the rubber band ispulled over the clamp. Subsequently, the Arm is connected to the complete piping system.

7. If the telescopic function cannot remain in the required position or if there is too much resistance in the Arm, please adjust the balancer at the back of the ceiling bracket.

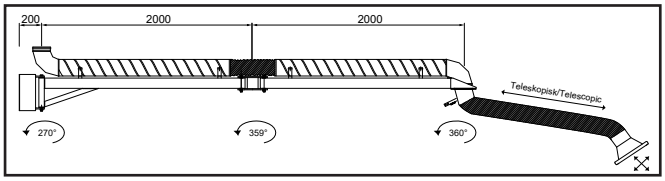


2.1 Mounting of optional equipment

Mounting of the extension arm
Start by fixing the extension arm to a solid wall, e.g. a concrete wall (applies to 1.0, 2.5 and 4.0 m). (Please refer to the whole dimensions).



At 4 meters, every joint is assembled and then the Arm is mounted. Next, the spiro pipe is fastened to the extension arm by means of the enclosed self-cutting screws. The part between the spiro pipes is assembled by means of clamps and the supplied hose. Subsequently, the Arm is attached to the extension arm.



Mounting of the damper
Is factory-mounted. Contact your dealer.

Mounting of light
The mounting of light and net should have been taken care of by the factory. The connection is made by extending the power cord, which is attached inside the Arm, where it is to be fixed. Next, the power cord is connected to the transformer which again is connected to the mains.

Light specifications:

Type:	LED
Power:	5 W 36°
Voltage:	11,5 V
Supply voltage	230-240V - 50-60 Hz
Trafo-power:	20-70 W

2.2 Power connection

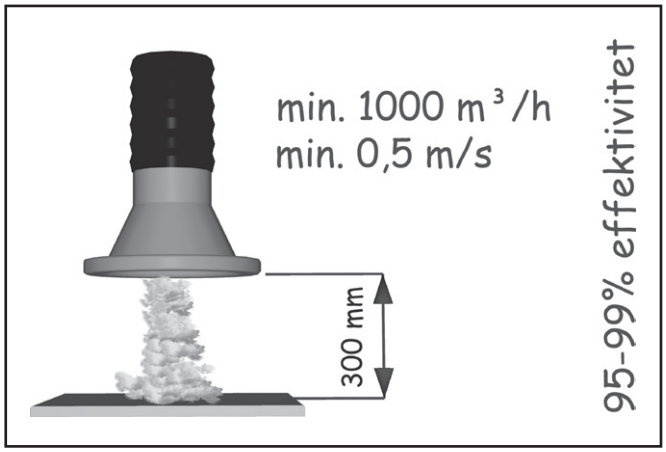
For connection of various electrical components (e.g. light sensor), please refer to the enclosed documentation for the actual product.
The electrical installation is to be carried out by a certified electrician.

2.3 Trial run – exact adjustment

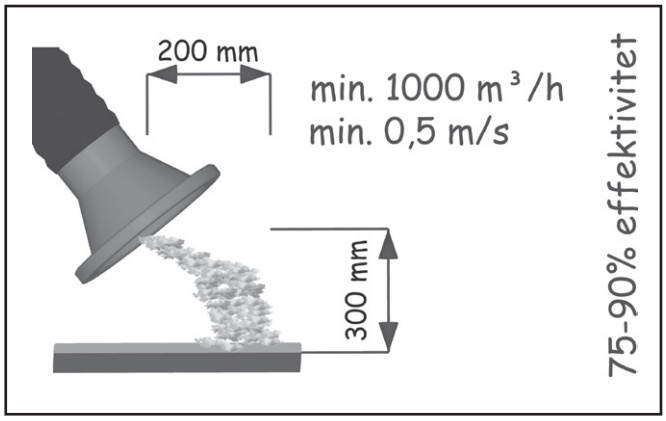
After the final mounting, the COMPACT Arm should be adjusted to the typical working area, for optimum utilisation of the Arm. Do so by adjusting the points mentioned in item 2 (3. 4. and 7.) exactly.

3.0 User instruction – application

For normal use, the Arm is to be self-retaining in the required position within the working area. The bracket of the Arm supplies a 360° rotary working area.
If the equipment has been correctly dimensioned, the funnel 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.
Always check that the correct volume of air is extracted by the suction head/funnel.



Less optimal welding situation.



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.
- 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 or the balancer (please refer to item 2).
- Please check the condition of the hose, the spring, the balancer 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

GEOVENT
HOVEDGADEN 86 • DK-8831 LØGSTRUP
(+45) 8664 2211 • salg@geovent.dk

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

hereby declares that:

The products: Extraction Arms
Model: COMPACT (ø160 to ø200)

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 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

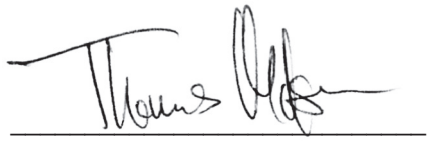
EN ISO 12100-2:2005 Basic concepts, general principles for design

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

Dato: 16/08-16

Position: Managing Director
Name: Thomas Molsen

Signature :



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