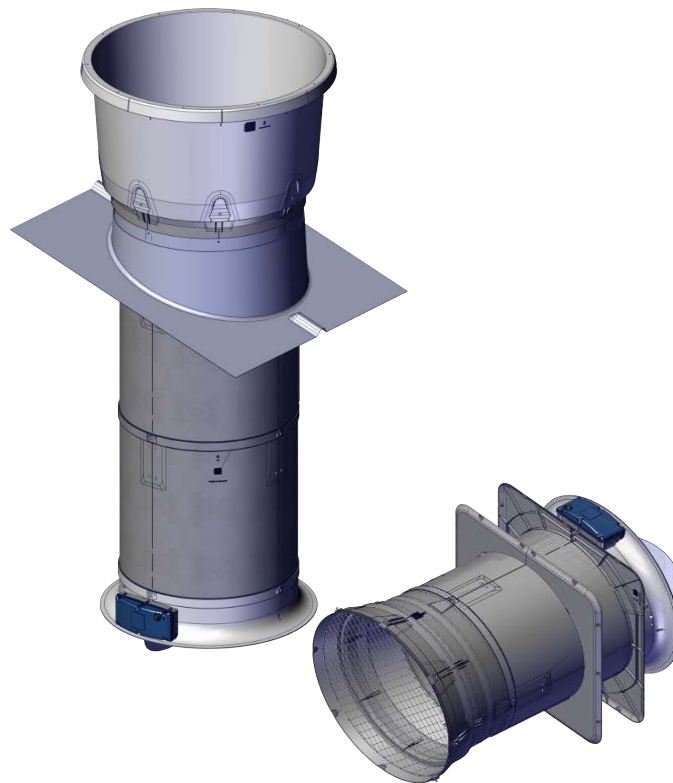


# DA 820 Chimney/Wall Exhaustion

## Technical Info



Your service partner



**LAE Anlagenbau GmbH**  
Altenwalder Chaussee 94-100  
D – 27472 Cuxhaven  
GERMANY

Tel.: +49 4721 105 0

FAX : +49 4721 105 210

Mail : [info@lae-cuxhaven.de](mailto:info@lae-cuxhaven.de)

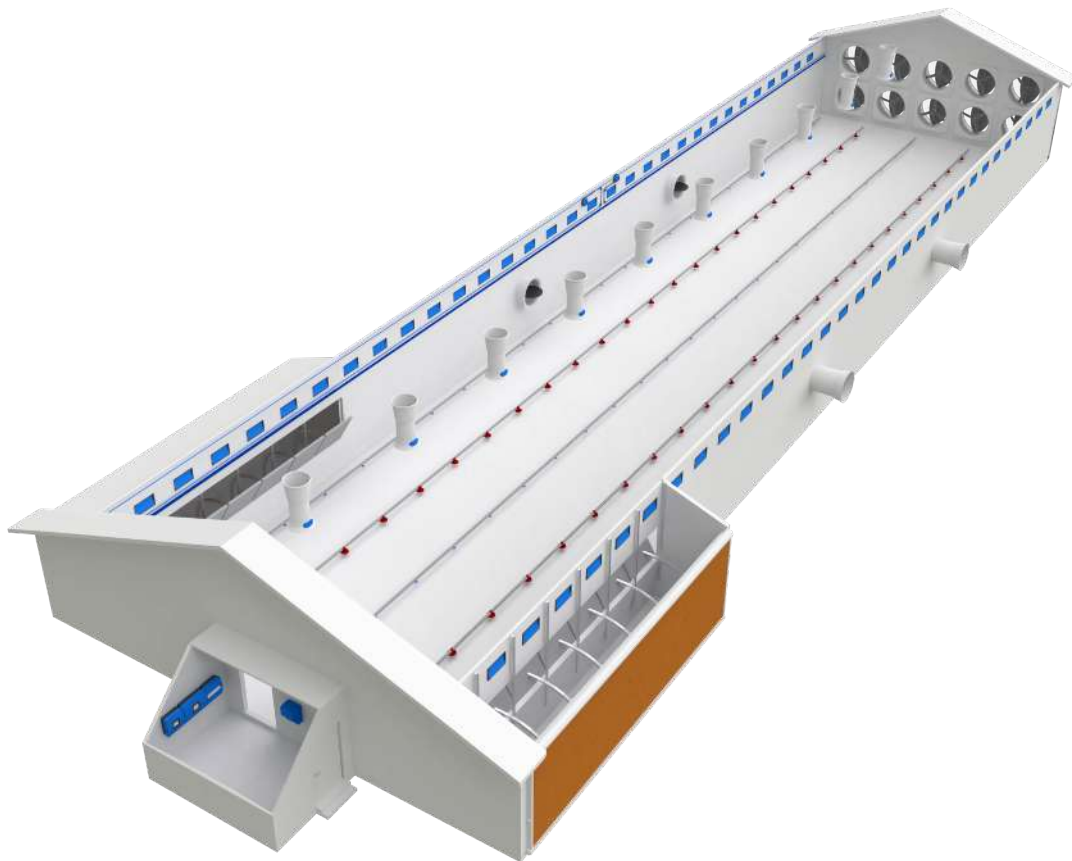
Web : <https://lae-cuxhaven.de>



## 1 Product description

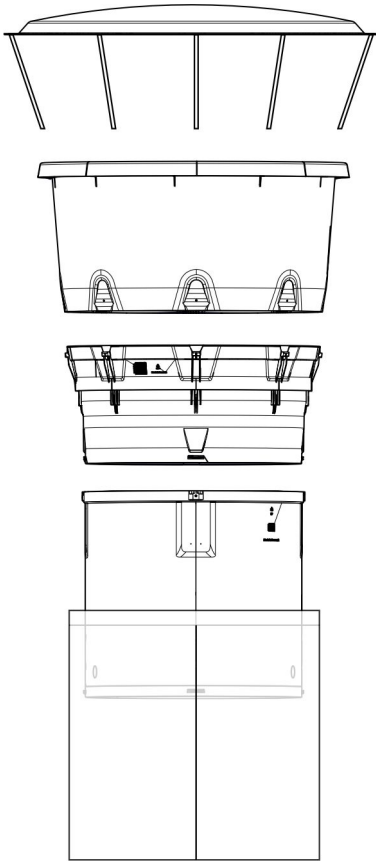
The DA 820 components are used for extracting air from livestock houses. The DA 820 is aerodynamic and provides high air output with low energy consumption. The DA 820 is made of a special polypropylene material, which withstands heavy high-pressure cleaning. The special polypropylene is smooth and anti-soiling and DA 820 is thus easy to clean. Polypropylene is environmentally sound, it is recyclable and no contaminants are generated in the manufacturing process.

The labyrinth sealing between the roof duct and the roofing sheet ensures a life-long impermeability of the unit without using silicone, rubber sealing or plastic cover.

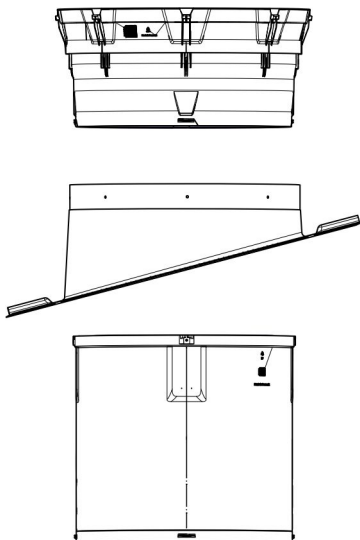


## 2 Product survey

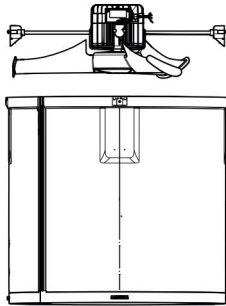
### 2.1 Outline of chimney



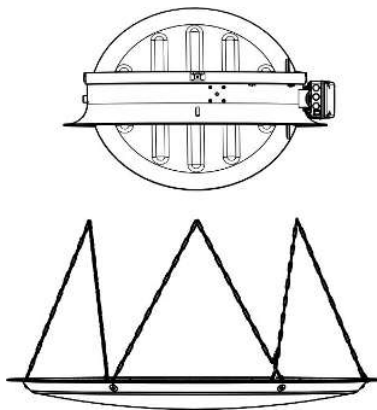
Above the roof



Lead-through



Attic/section



Inlet

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### 2.1.1 Above the roof



**434610 DA 820 roof cap ø1400 gray**  
**434611 DA 820 roof cap ø1400 black**

The roof cap reduces water penetration problems; note, however, that the chimney output will also be reduced. The roof cap must be mounted on the roof duct.

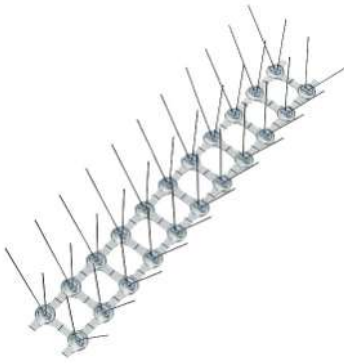
Supplied with mounting set.



**434612 DA 820 roof cap ø1400 with net gray**  
**434613 DA 820 roof cap ø1400 with net black**

Roof cap with net prevents birds from entering the house and reduces water ingress problems, but be aware that the performance of the chimney is also reduced. The roof cap with net is to be mounted on the outlet cone.

Supplied with a mounting set.

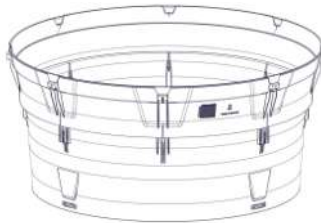
**434655 DA 820 bird protection f. outlet cone, set**

Used to prevent birds making contact with the outlet cone.  
Supplied with screws.

**434600 DA 820 outlet cone, gray**  
**434601 DA 820 outlet cone, black**

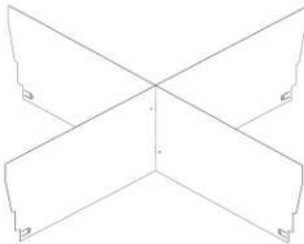
Outlet cone which reduces water penetration problems and the pressure loss. This increases the output of the chimney.

Supplied with screws.

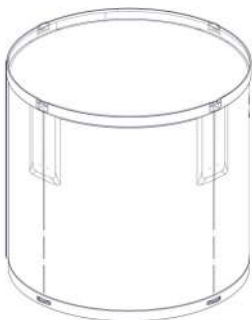
**434602 DA 820 roof duct gray**  
**434603 DA 820 roof duct black**

Used for roof ducts in roof, outlet cone assembly, and for wall exhaust units.

Supplied with screws, bit and DA 820 mounting guide.

**434661 DA 820 environment module**

The environment module concentrates the air from the fan to increase the air jet range over the roof.

**434604 DA 820 duct 750 mm, gray**  
**434605 DA 820 duct 750 mm, black**

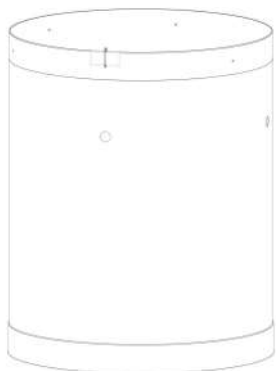
Duct without fan suspension.

Supplied with screws.

**434652 DA 820 supporting ring**

Use it if there are more than 1.5 meters of duct above the roof, and you use one supporting ring for each commenced 1.5 m of duct above the roof.

You also use it to stabilize the duct by the fan in the wall exhaustion, so the duct remains circular.



**434616 DA 820 duct, out ø880x1000 gray**  
**434617 DA 820 duct out ø880x1000 black**

It is used as an outer duct around the DA 820 duct when extending the duct above the roof.

You typically apply the outer duct if customers want a double duct construction for the sake of being able to insulate to prevent condensation, or if they experience that it provides increased robustness in the duct construction itself. However, there is no requirement to use an outer duct for the DA 820 series.

Remember that insulation (item number 434650) must be purchased separately and that a reinforced roofing sheet (item number 434642/434643) is also required.

It comes with a mounting set.

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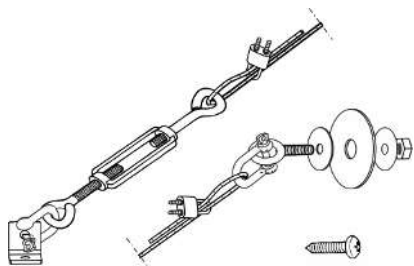


**434650 DA 820 insulation 1200 mm**

20 mm insulation with aluminum foil/vapor barrier, which is used together with 434616/434617.

It comes with the tape.

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**434449 DA 600/DA 820 storm protection kit**

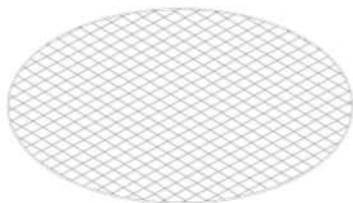
To be used if the chimney is extended by more than 1.5 m above the roof.

The storm protection kit stabilizes the chimney with steel wires between the roof duct and the roof.

Supplied with 24 m ø4 wire.

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## 2.1.2 Lead-through

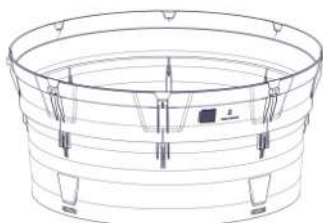


**434654 DA 820 net, roof duct**

The protective net is used for wall exhaustion or where extra protection is required.

Supplied with cable ties.

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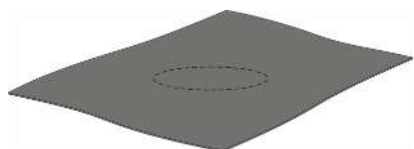


**434602 DA 820 roof duct gray**  
**434603 DA 820 roof duct black**

Used for roof ducts in roof, outlet cone assembly, and for wall exhaust units.

Supplied with screws, bit and DA 820 mounting guide.

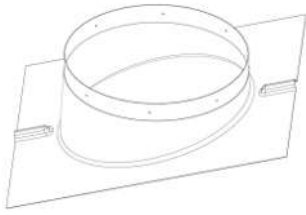
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**523051 Roof cloth 1.9x1.7 m, neopren, black**

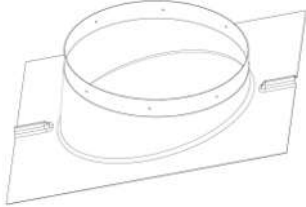
To be used where roofing sheets are not used.

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**434640 DA 820 roof sheet, side, gray**  
**434641 DA 820 roof sheet, side, black**

The roofing sheet is used for mounting on the side and is available in different versions in terms of roofing sheet types and pitches.



**434642 DA 820 roof sh, side, long gray**  
**434643 DA 820 roof sh, side, long black**

It is a reinforced roofing sheet in weather-resistant fiberglass for side mounting, which is available in various versions concerning roofing sheet type and slope.

Always use it if a double duct construction is established using 434616/434617.

DA 820 roof duct outside (434616/434617) must be ordered separately.



**434644 DA 820 roof sheet, ridge, gray**  
**434645 DA 820 roof sheet, ridge, black**

The roofing sheet is used for mounting on the ridge and is available in different pitches.

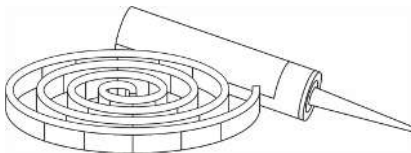


**434646 DA 820 rf sh, ridge, long gray**  
**434647 DA 820 rf sh, ridge, long black**

It is a reinforced roofing sheet in weather-resistant fiberglass for ridge mounting, which is available in various versions concerning slope.

Always use it if a double duct construction is established using 434616/434617.

DA 820 roof duct outside (434616/434617) must be ordered separately.



**434093 DA 600/DA 820 kit for closure of water outlet**

Used if water outlet is not required.

Includes Bostik rear stop 20 mm and Sikaflex AT Connection, gray, 600 ml.

### 2.1.3 Attic/section



**434604 DA 820 duct 750 mm, gray**  
**434605 DA 820 duct 750 mm, black**

Duct without fan suspension.

Supplied with screws.



**434606 DA 820 duct with fan suspension, gray**  
**434607 DA 820 duct with fan suspension, black**

Duct (750 mm) with shoe for suspension of fan unit.

Supplied with fan suspension and screws.

Remember that ducts in the house must be insulated to counteract condensation.

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**434652 DA 820 supporting ring**

Use it if there are more than 1.5 meters of duct above the roof, and you use one supporting ring for each commenced 1.5 m of duct above the roof.

You also use it to stabilize the duct by the fan in the wall exhaustion, so the duct remains circular.

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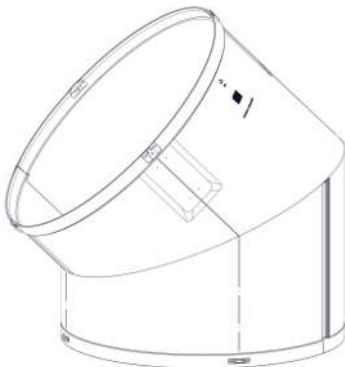


**434608 DA 820 duct w/door 750 mm gray**

Duct with door is used for servicing of fan.

Supplied with fan suspension and screws.

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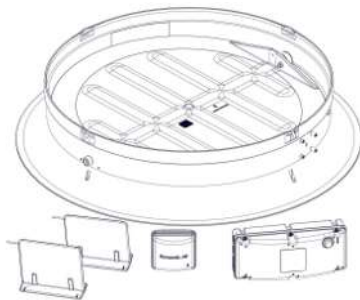
**434614 DA 820 elbow 45°, gray**  
**434615 DA 820 elbow 45°, black**

The elbow can be used for adjustments in attics.

Supplied with screws.

---

## 2.1.4 Inlet



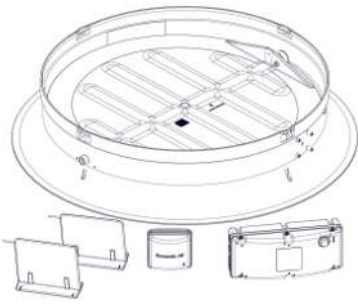
**434658 DA 820 bell m/chimney stepless DynAir gray**  
**434659 DA 820 bell m/chimney stepless DynAir black**

You use it for stepless DA820 exhaust units, where the maximum air volume is 12,500-29,000 m<sup>3</sup>/h.

It comes with Dynamic Air sensor, bell mouth, swivel shutter, baffle plates, and a DA 74CV stepless swivel shutter motor.

Note that the bell mouth/exhaust unit can only be used for registration of air volumes: that is, the current software version does not support dynamic Air Control.

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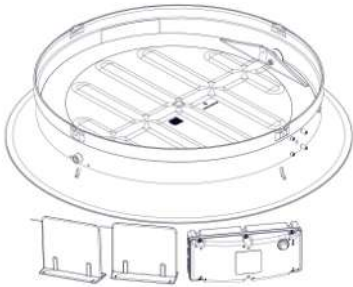


**434660 DA 820 bell mouth/duct stepless DynAir gray**

Use it for stepless DA and 820 duct take-offs, where the maximum air volume is 5,500-12,500 m<sup>3</sup>/h.

It comes with Dynamic Air sensor, bell mouth, swivel shutter, and a DA 74CV stepless swivel shutter motor.

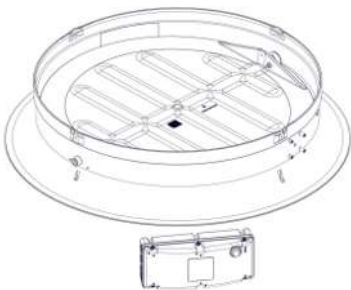
There must always be at least half a meter of duct connected to the unit to obtain a stable measurement.



**434662 DA 820 bell mouth stepless gray**  
**434663 DA 820 bell mouth stepless black**

Used for stepless regulation of shutter.

Supplied with bell mouth, swivel shutter, baffle plates and a DA 74CV stepless winch motor.



**434664 DA 820 bell mouth on/off, gray**  
**434665 DA 820 bell mouth on/off, black**

Used for ON/OFF regulation of shutter.

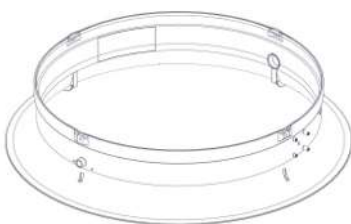
Supplied with bell mouth, swivel shutter and a DA 74CO ON/OFF winch motor.

Please note if a contactor is required, cf. article no. 280060.



**434620 DA 820 bell mouth with flap, gray**  
**434621 DA 820 bell mouth with flap, black**

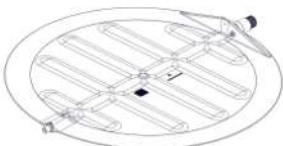
Used for chimney with mechanical drive.



**434618 DA 820 bell mouth, gray**  
**434619 DA 820 bell mouth, black**

A bell mouth is used where a swivel shutter is not required.

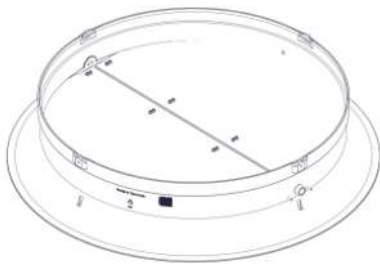
Supplied with screws.



**434623 DA 820 swivel shutter black**

Used for mounting in duct.

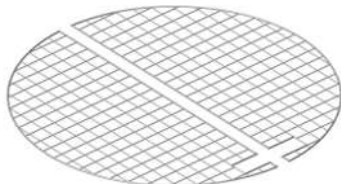
Supplied with axle.



**434628 DA 820 butterfly flap w/bell mouth**

Use it until the ON/OFF exhaust unit opens through an air current.  
The air output of the exhaust unit will be reduced.  
Comes with screws.

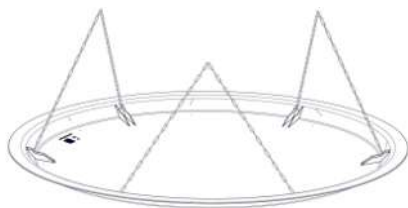
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**434653 DA 820 net, swivel shutter**

The protective net is used if the fan is placed in a low position, e.g. less than 2.70 m above the floor and by wall exhausts.  
Supplied with cable ties.

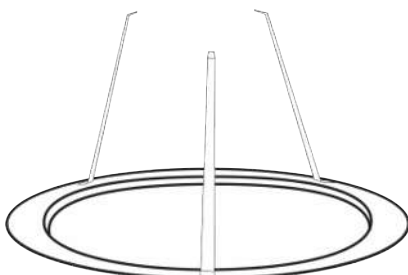
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**434626 DA 820 drip tray ø1400 gray**  
**434627 DA 820 drip tray ø1400 black**

The drip tray is used to prevent any encroaching water from dripping straight down into the livestock house.  
The air output of the exhaust unit will be reduced.  
The drip tray is suspended under the exhaust unit. A tiltable installation is an option, which facilitates cleaning and emptying.  
It comes with a mounting set.

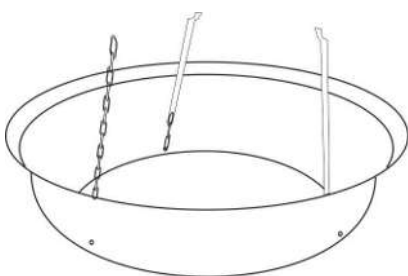
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**434629 DA 820 light plate ø1700, black**

You use it for moderate protection from light ingress into the livestock house.  
The air output of the exhaust unit will be reduced.  
A tiltable installation is an option, which facilitates cleaning and emptying.  
It comes with a mounting set.

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**434631 DA 820 light bowl Ø1500 black**

You use it for a high degree of protection from light ingress into the livestock house.  
The air output of the exhaust unit will be reduced.  
A tiltable installation is an option, which facilitates cleaning and emptying.  
It comes with spacer rod and mounting set.

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**280060 Contactor tripolar 400V, 230V 50/60 Hz**

The contactor kit is necessary when an ON/OFF fan unit is used together with DA 74.  
Contactor AC3 12 A - 5.7 kW (400 V).  
In other words, 1 contactor must be ordered for each DA 74 when the fan runs ON/OFF.

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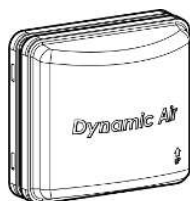


#### 434018 Dynamic Air - kit for bell mouth/chimney

Dynamic Air sensor (0- 300 Pa) for measuring and regulation of air output for stepless chimneys. This item number is to be used only for retrofitting on existing chimneys.

Supplied with screw kit.

See specifications and limitations for item number 434016/434216 bell mouth/chimney stepless DynAir.



#### 434035 Dynamic Air - kit for bell mouth/duct

Dynamic Air sensor (0- 100 Pa) for measuring and regulation of air output for stepless take-offs in central duct. This item number is to be used only for retrofitting on existing take-off.

Supplied with screw kit.

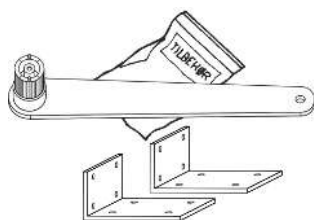
See specifications and limitations for item number 434034 bell mouth/duct stepless DynAir.



#### 434008 DA 600/DA 820 air direction baffles, black

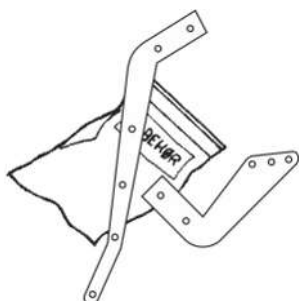
Used to improve the accuracy of the minimum ventilation.

The baffle plates are used together with stepless fans and include two air baffle plates and mounting screws.



#### 432056 Universal kit f. plastic swivel shutter

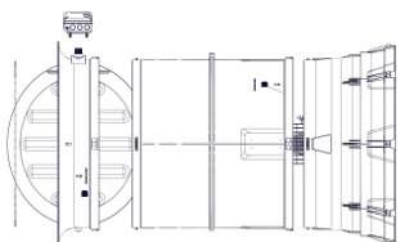
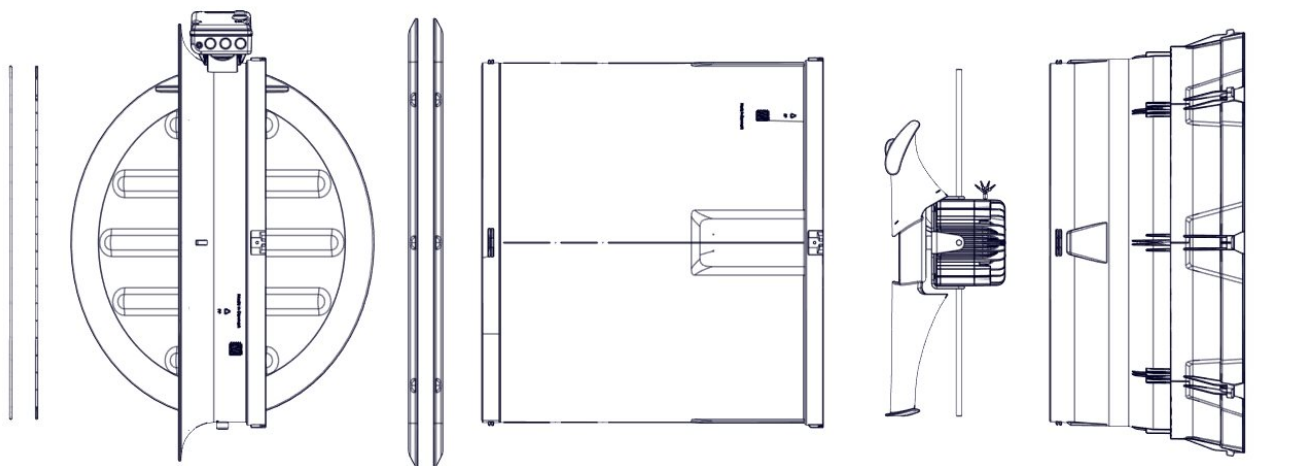
Used when the swivel shutter is placed in a duct and not in the bell mouth.



#### 434088 Arm for swivel shutter in bell mouth

Includes a short and a long arm for the swivel shutter, suspension plate and various mounting screws.

## 2.2 Outline of wall exhaust

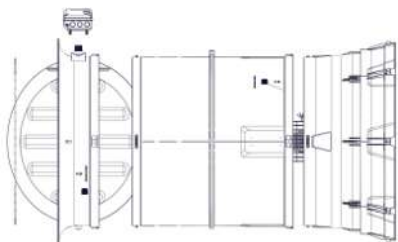


### 434666 DA 820 wall exhaust stepless gray

Used for stepless wall exhaust units.

Includes DA 820 bell mouth, winch motor stepless, 0.75 m duct, roof duct, fan suspension, inside and outside safety net, one wall cover, support ring and screws.

If an extra wall cover is needed, order 434624 DA 820 wall cover and 560322 DA 820 mounting set for wall cover.



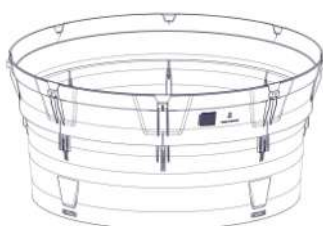
### 434667 DA 820 wall exhaust ON/OFF gray

Used for ON/OFF wall exhaust units.

Includes DA 820 bell mouth, winch motor ON/OFF, 0.75 m duct, roof duct, fan suspension, inside and outside safety net, one wall cover, support ring and screws.

If an extra wall cover is needed, order 434624 DA 820 wall cover and 560322 DA 820 mounting set for wall cover.

Please note if a contactor is required, cf. item number. 280060.



### 434602 DA 820 roof duct gray 434603 DA 820 roof duct black

Used for roof ducts in roof, outlet cone assembly, and for wall exhaust units.

Supplied with screws, bit and DA 820 mounting guide.

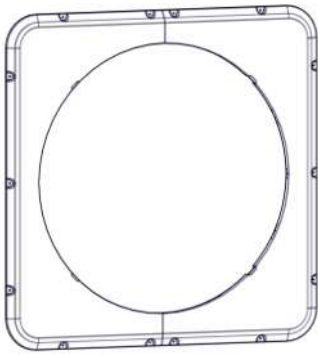


### 434606 DA 820 duct with fan suspension, gray 434607 DA 820 duct with fan suspension, black

Duct (750 mm) with shoe for suspension of fan unit.

Supplied with fan suspension and screws.

Remember that ducts in the house must be insulated to counteract condensation.

**434624 DA 820 wall cover gray**

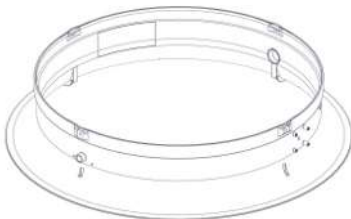
Used as closure against a wall. May be used both outdoors and indoors.

When using wall covers order one 560322 DA 820 mounting set for wall cover per wall exhaust.

**560322 DA 820 mounting kit f/wall cover**

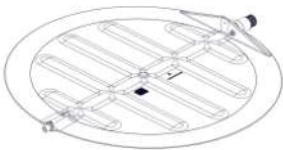
Used for wall exhaustion for closure against wall.

Order 1 set per wall exhaustion.

**434618 DA 820 bell mouth, gray****434619 DA 820 bell mouth, black**

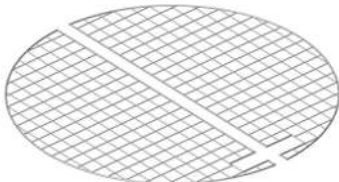
A bell mouth is used where a swivel shutter is not required.

Supplied with screws.

**434623 DA 820 swivel shutter black**

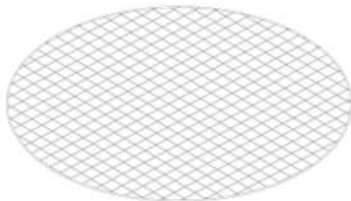
Used for mounting in duct.

Supplied with axle.

**434653 DA 820 net, swivel shutter**

The protective net is used if the fan is placed in a low position, e.g. less than 2.70 m above the floor and by wall exhausts.

Supplied with cable ties.

**434654 DA 820 net, roof duct**

The protective net is used for wall exhaustion or where extra protection is required.

Supplied with cable ties.

**280060 Contactor tripolar 400V, 230V 50/60 Hz**

The contactor kit is necessary when an ON/OFF fan unit is used together with DA 74.

Contactor AC3 12 A - 5.7 kW (400 V).

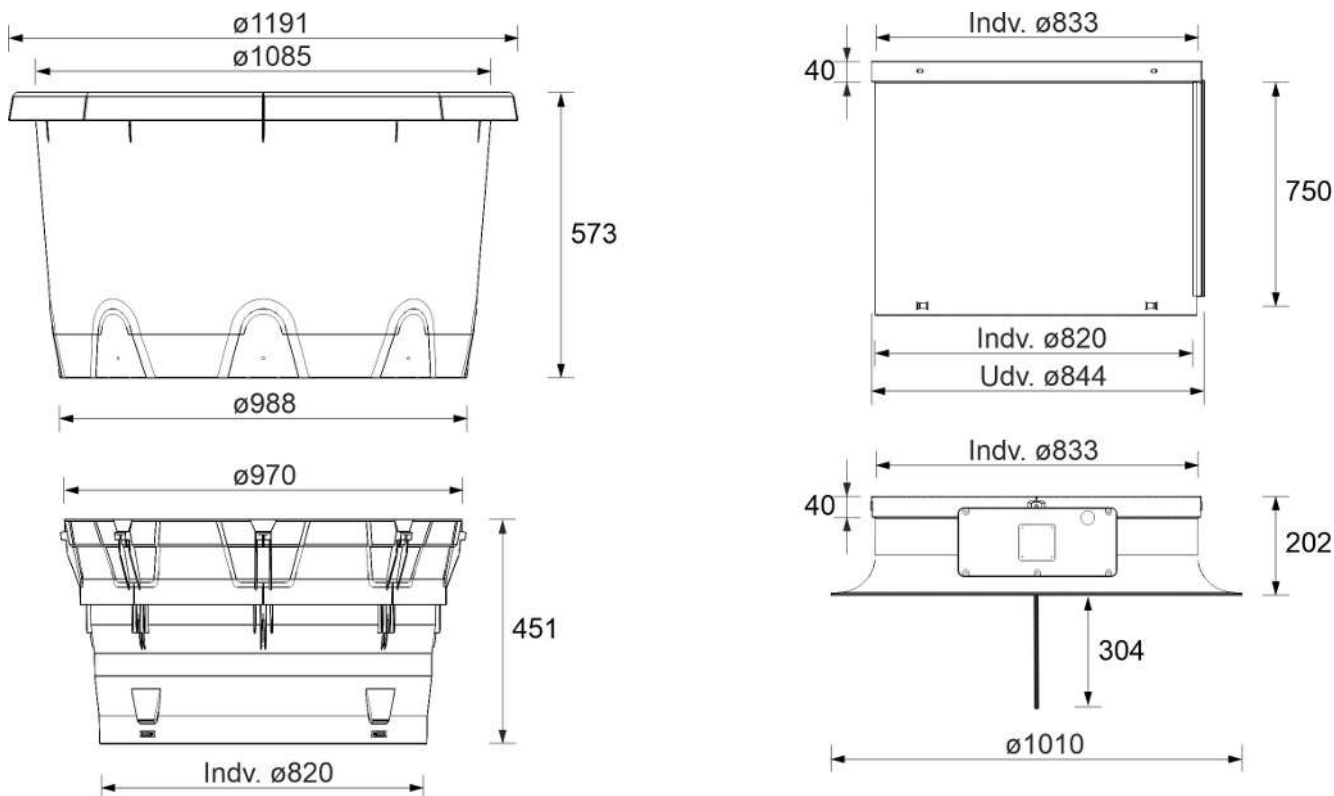
In other words, 1 contactor must be ordered for each DA 74 when the fan runs ON/OFF.

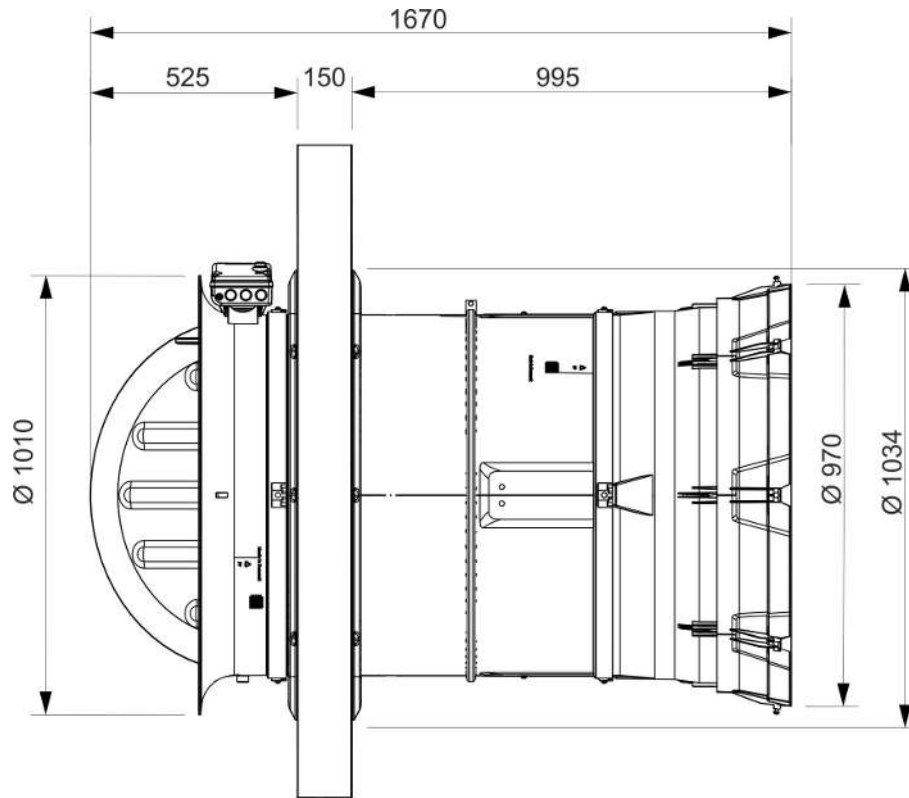
### 3 Technical data

Mechanical		
Material	%	PP T20
Color		Black, gray
Environment		
Temperature, operation	°C (°F)	-30 to +70 (-22 to +158)
Temperature, storage	°C (°F)	-40 to +65 (-40 to +149) – and protected against direct sunlight.
Ambient humidity, operation	% RH	0-95 % RH
Shipment		
Bell mouth, dimensions HxWxD	mm	202x1010x1010
Roof duct, dimensions HxBxD	mm	451x970x970
Outlet cone, dimensions HxWxD	mm	573x1191x1191
Duct 750 mm, dimensions HxWxD	mm	750x844x844
Bell mouth, weight	g	9370
Roof duct, weight	g	6012
Outlet cone, weight	g	9006
Duct 750 mm, weight	g	10006

#### 3.1 Dimensioned sketch

In mm





Your service partner



**LAE**  
ANLAGENBAU

**LAE Anlagenbau GmbH**  
Altenwalder Chaussee 94-100  
D – 27472 Cuxhaven  
GERMANY  
Tel.: +49 4721 105 0  
FAX : +49 4721 105 210  
Mail : [info@lae-cuxhaven.de](mailto:info@lae-cuxhaven.de)  
Web : <https://lae-cuxhaven.de>

SKOV A/S • Hedelund 4 • Glyngøre • DK-7870 Roslev  
Tel. +45 72 17 55 55 • [www.skov.com](http://www.skov.com) • E-mail: [skov@skov.dk](mailto:skov@skov.dk)

