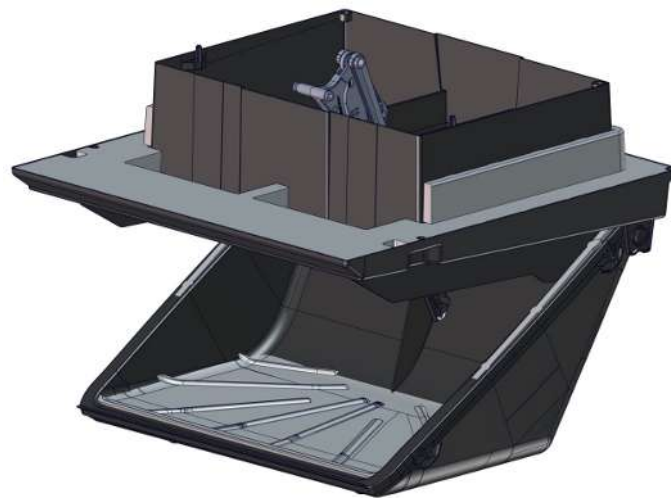


# DA 1540 Ceiling Inlet

## Technical Info



## 1 Product description

The DA 1540 is an efficient, compact fresh air inlet for ceiling constructions. The inlet opens by pulling the cord. The ceiling inlet is made of dirt-repellent, easy-to-clean, injection-moulded PS, PA and POM.

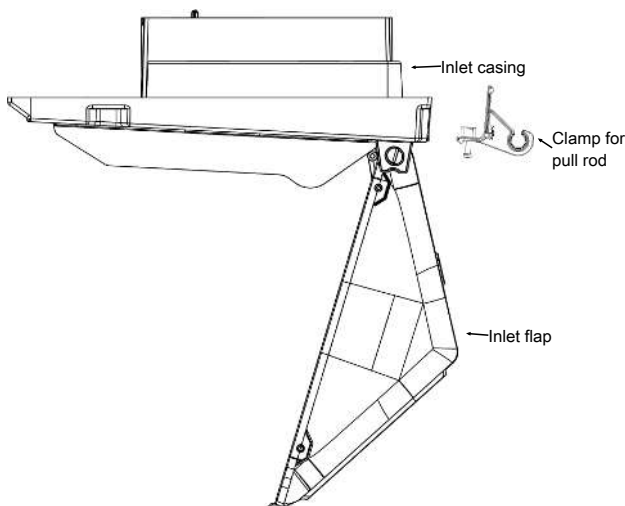
The inlet is delivered fully assembled. The ceiling inlet consists of an inlet casing, a draw hook with a cord, and an inlet flap.

The ceiling inlet is available in the following variants:

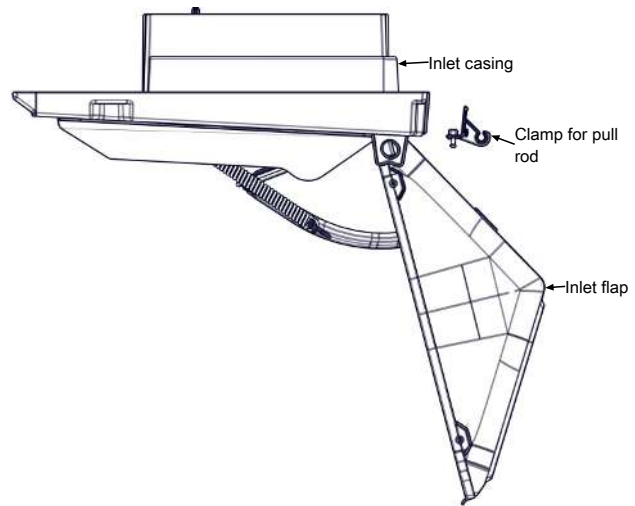
- DA 1540 ceiling inlet
- DA 1540 HP ceiling inlet
- DA 1540 chill inlet

DA 1540 ceiling inlet is used when the ceiling is flat, while DA 1540 HP ceiling inlet has more powerful springs, so it can be used for ceiling pitches up to 15°. DA 1540 ceiling inlet and DA 1540 HP ceiling inlet can be used with advanced inlet control.

DA 1540 chill inlet has the special feature that it can open up to 105° degrees and thus direct the air vertically down the pen. When the inlet is placed near the wall, it can thus create a "chill" effect in the area occupied by the animals when maximum cooling is required.



DA 1540/ DA 1540 HP ceiling inlet



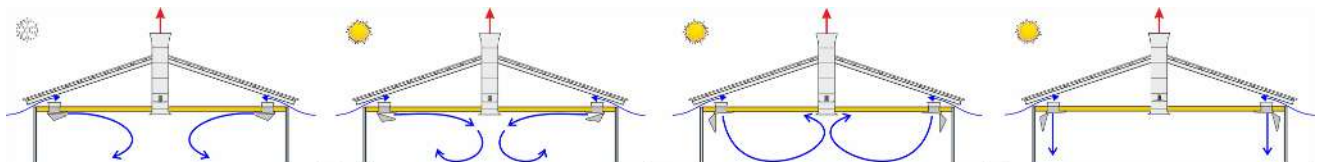
DA 1540 Chill Inlet

### 1.1 Principle of application

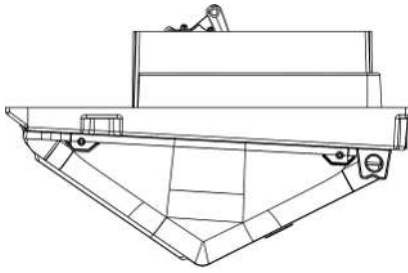
During cold periods, it is possible to supply the necessary volume of air at a low air velocity.

During hot periods with high ventilation requirements, the inlet maintains the Coanda effect of the air along the ceiling.

During hot periods with high ventilation requirements, a large volume of air can be directed down into the animal zone.



## 2 Product survey



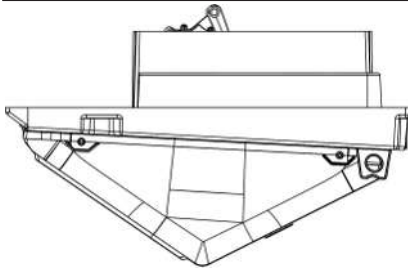
### 401350 DA 1540 ceiling inlet

DA 1540 ceiling inlet is a universal air inlet, which brings fresh air into the house through the attic. DA 1540 ceiling inlet is insulated.

Is supplied incl. operation kit, Advanced Inlet Control and one 526194 DA 1540 clamp for pull rod.

To be used when the ceiling pitch is 0°.

The inlet funnel must be ordered separately if required.



### 401370 DA 1540 HP ceiling inlet

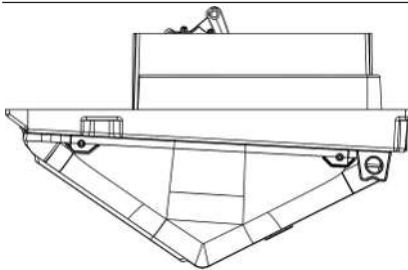
DA 1540 HP ceiling inlet is a universal air inlet, which brings fresh air into the house through the attic. DA 1540 HP ceiling inlet is insulated.

Is supplied incl. operation kit, Advanced Inlet Control and one 526194 DA 1540 clamp for pull rod. DA 1540 HP has a reinforced spring compared to DA 1540 and thus a significantly increased winch motor load.

To be used when the ceiling pitch is between 0° and 15°.

If high-pressure cooling is installed, see *Technical user guide for high-pressure cooling* regarding cooling pipe suspension in the ceiling.

The inlet funnel must be ordered separately if required.



### 401355 DA 1540 chill inlet

DA 540 chill inlet is a universal air inlet, which brings fresh air into the house through the attic and the inlet can direct the air vertically down into the animal zone. DA 1540 chill inlet is insulated.

Is supplied incl. operation kit and one 526194 DA 1540 clamp for pull rod.

The required tensile force is significantly increased compared to the 401350 DA 1540 ceiling inlet.

To be used when the ceiling pitch is 0°.

Inlet funnel must always be used with the inlet.

## 2.1 Accessories



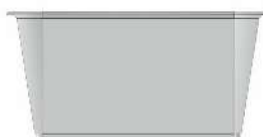
### 401359 DA 1540 chill inlet update kit

The DA 1540 chill inlet update kit is used for updating the DA 1540 inlet to the 1540 chill inlet, or as a spare part for the DA 1540 chill inlet.

Note that the required tensile force is increased by an update.



### 401323 DA 1500/1800 inlet funnel - short



### 401337 DA 1540/1800 inlet funnel - long

The purpose of using the inlet funnel is partly to increase the incorporation height of the inlet to a total of 250/400 mm from the lower edge of the ceiling to the upper edge of the inlet funnel. Furthermore, the aerodynamic design of the inlet funnel ensures optimized inflow conditions which reduce the pressure loss and thus the energy loss at a given amount of air. This reduces the necessary negative pressure in the house.

Use one unit per inlet.



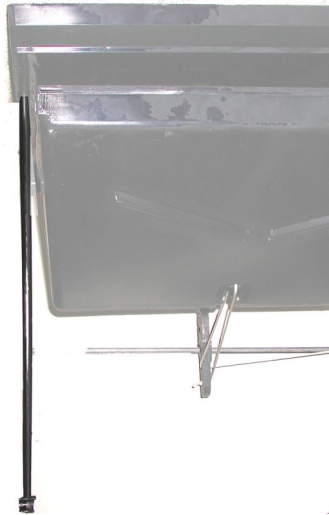
**401364 DA 1540/1800 insert module**

DA 1540/1800 insert module is used to reduce the air capacity in a single pen, often at the end of an inlet row.

The insert module can be used with or without the inlet funnel, the inlet funnel will not affect the capacity significantly.

The insert module reduces the air capacity to approx. 55 % at DA 1540 chill inlet with inlet funnel in chill mode (90-degree opening).

Use one unit per inlet.



**437482 DA 1500/1800 pipe holder**

For DA 1540/1800 ceiling inlet a special pipe hanger has been developed, which can be used for securing high pressure cooling pipes from SKOV A/S, if high pressure cooling is installed. The pipe holder can only be used when the ceiling pitch is 0°.

If the distance between the inlets exceeds approx. 1.5 m supplement the inlet by item no. 437480 DA 1540/1800 pipe holder with adapter.

If the length of the cooling piping exceeds 40 m, the pressure impact from the start/stop of pump may cause breakage of the rather long pipe holder.

One per inlet.



**437480 DA 1540/1800 pipe holder with adapter - 0.5 m**

Used where extra support of the cooling pipe is required. Height approx. 49 cm which means that it is suited for the 437482 pipe holder for DA 1540/1800. The pipe holder can only be used when the ceiling pitch is 0°.

Mount it directly on the ceiling with the two screws supplied.

In Denmark one unit per 1.2 m free-hanging cooling pipe is used - corresponding to normal lath distance.

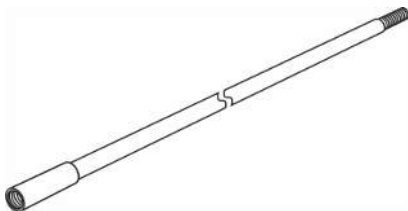
If the length of the cooling piping exceeds 40 m, the pressure impact from the start/stop of pump may cause breakage of the rather long pipe holder.



**401349 All-purpose holder for pull rod**

Is applied if the distance between the inlets exceeds 2 m. The distance from the ceiling to the pull rod is 6.5 cm when the all-purpose holder is mounted.

Mounted vertically with 2 screws in the ceiling.



**413109 Pull rod M8x5500 galv. incl. sleeve**

The pull rods are 5.5 m long and the number of pull rods can be determined using the table below. Please note that house length means the length of the inlet row in those cases when the pull rods go across the house.

Determine the number of pull rods.

One side with inlets in one row = 1 x house length / 5.5

One side with inlets in two rows = 2 x house length / 5.5

Two sides with inlets in one row = 2 x house length / 5.5

Two sides with inlets in two rows = 4 x house length / 5.5

**415033 Coil spring ø30x300 mm stainless**

The standard mounting sets for DA 175 contain 2 pcs. coil springs per row.

If the DA 1540 inlet is used with the DA 75A winch motor, it is necessary to order one extra coil spring per inlet row beside the standard mounting set.

2 coil springs are necessary in continuation of each other due to the long tensile length.

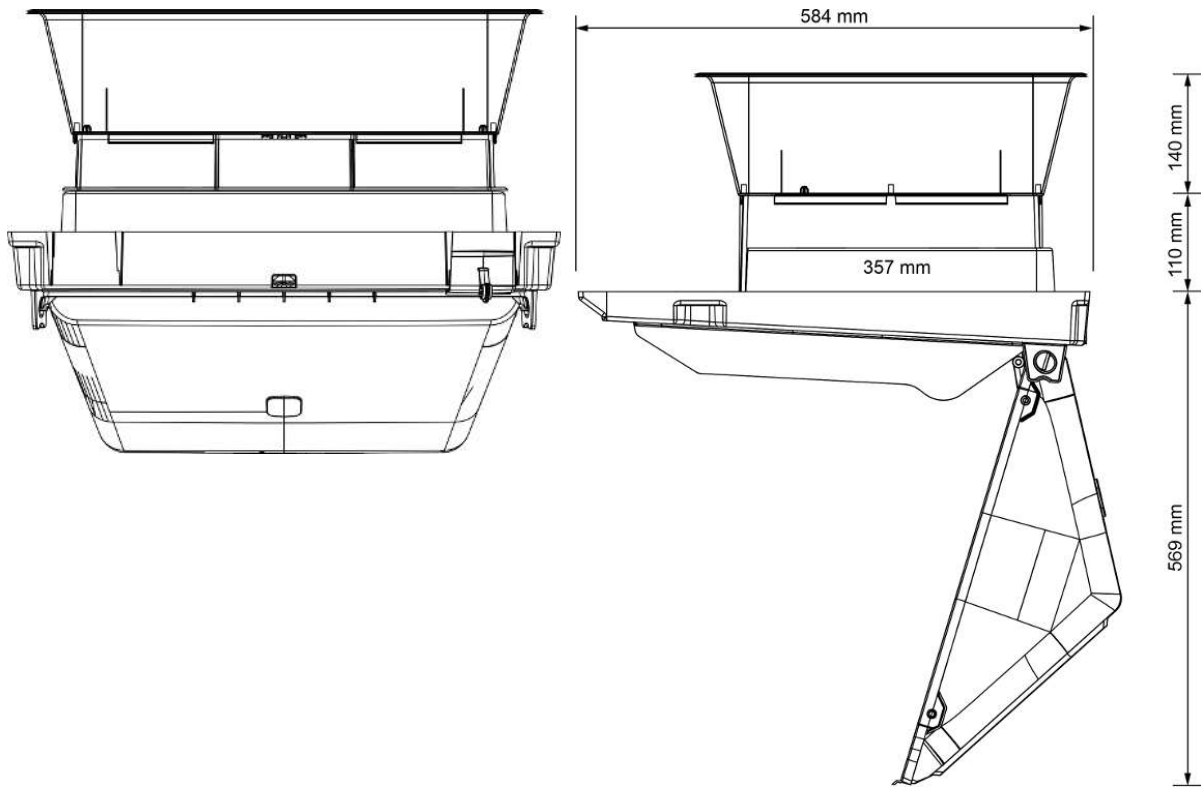
At assembly, the pretension of the 2 springs in continuation of each other must be 2300 mm.

### 3 Technical data

<b>Mechanical</b>				
Material		100% recyclable thermoplastic, high-impact material, dimensionally stable and UV stabilized		
Color		Black		
Tensile force per inlet (DA 1540)	kg	2.9		
Tensile force per inlet (DA 1540 HP)	kg	6.1		
Tensile force per inlet (DA 1540 chill inlet)	kg	6.1		
Tensile length (DA 1540)	mm	575		
Tensile length (DA 1540 HP)		575		
Tensile length (DA 1540 chill inlet)	mm	460		
Pretension at 2 coil springs	mm	2300		
<b>Fan output</b>				
		DA 1540/DA 1540 HP with inlet funnel 30 cm inlet opening	DA 1540/DA 1540 HP without inlet funnel 30 cm inlet opening	DA 1540 chill inlet with inlet funnel 90° inlet opening
Air output at -5 Pa	m <sup>3</sup> /h	1050	850	1350
Air output at -10 Pa	m <sup>3</sup> /h	1450	1250	1950
Air output at -20 Pa	m <sup>3</sup> /h	2100	1750	2700
Air output at -30 Pa	m <sup>3</sup> /h	2550	2100	3350
Air output at -40 Pa	m <sup>3</sup> /h	2950	2450	3850
<b>Environment</b>				
Temperature, operation	°C (°F)	-40 to +40 (-40 to +104)		
Storage temperature	°C (°F)	-40 to +65 (-40 to +149) – and protected against direct sunlight.		
Ambient humidity, operation	% RH	0-95 % RH		
<b>Shipment</b>				
Weight (DA 1540)	g	4130		
Weight (DA 1540 HP)	g	4130		
Weight (DA 1540 chill inlet)	g	4206		

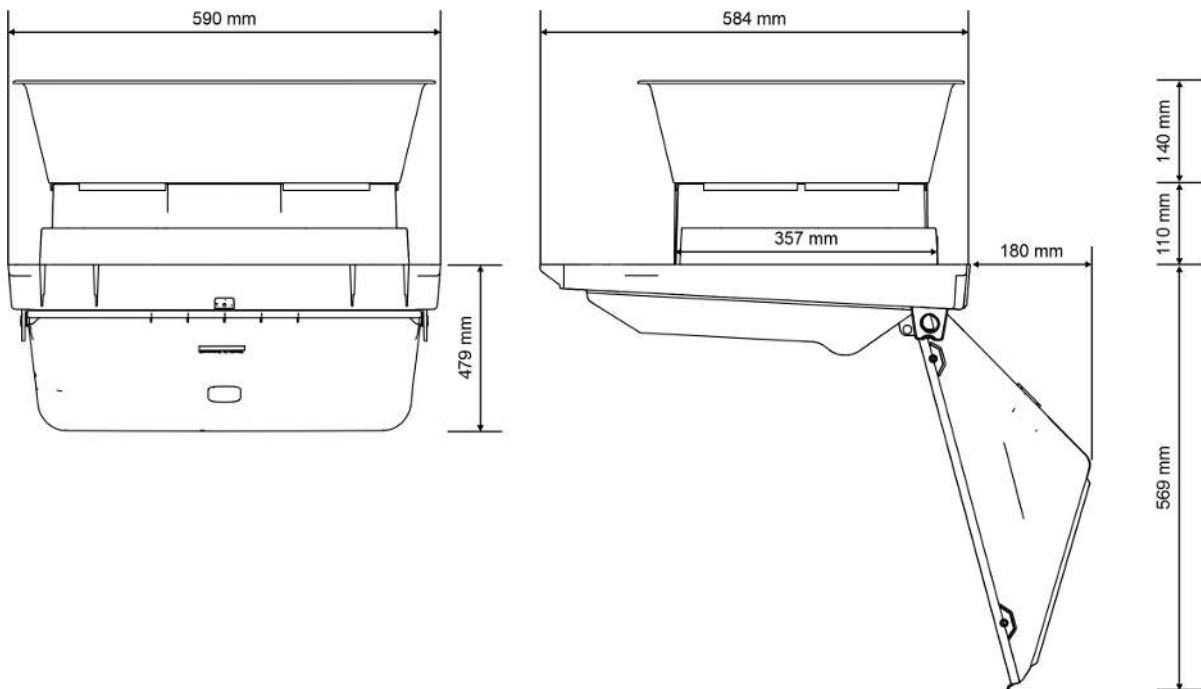
### 3.1 Dimensioned sketch DA 1540/DA 1540 HP

Dimensions in mm



### 3.2 Dimensioned sketch DA 1540 chill inlet

Dimensions in mm



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