



## Exhaust air duct with Ø 370 (14,5) to 1,270 mm (50 inch)

- easy to assemble, flow and energy efficient



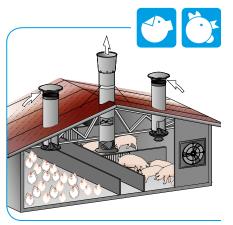
The contaminated stable air is optimally transported outside with the proven REVENTA® ventilation system. Irrespective of the individual farm size, the REVENTA® meets all requirements for an efficient exhaust air system. That saves energy and provides for animal-friendly climate.

The ducting system is comprised of a "sandwich construction" with highly insulated polyurethane rigid foam in the core and a hard GRP outer and inner coating. Perfect insulation impedes the formation of condensation water.

The air duct is available in lengths of 1,000  $\mbox{mm}$ 

(39,4 inch) and 1,500 mm (59,1 inch). At 1,500 mm (59,1 inch), fewer adhesive joints are required, which shortens the installation process. In addition to our extensive duct portfolio, scope of service includes the most important components for efficient exhaust air conveyance:

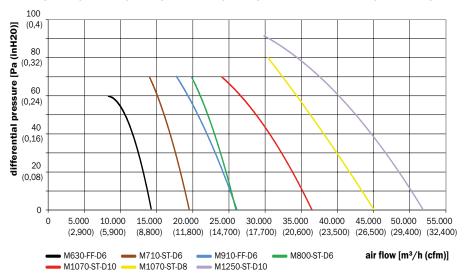
- Diffusers
- Roofing panels
- Economical fans as module cartridge
- · Module seal flaps
- Intake nozzles, etc.



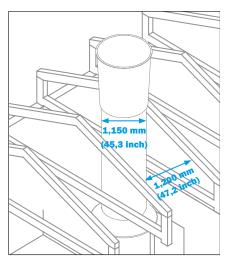
#### **ADVANTAGES**

- Large selection of duct diameters from 370 (14,5) to 1,270 mm (50 inch)
- Air capacity from 5,000 (2,900) up to 52,000 m3/h (30,600 cfm)
- Sound reduction up to 5 dB(A), with the REVENTA® duct silencer up to 12 dB(A)
- Perfect insulation of 0.022W/mK to avoid condensation
- Covering layers made from reinforced polyester, chemical resistant and easy to clean
- Extensive components programme

# Air capacities, exhaust air duct Ø 650 (29,6), Ø 730 (28.7), 820 (32.3), 920 (36.2), 1,090 (42.9) and 1.270 mm (50 inch)



Dimensions in mm (inch). Further flow volume diagrams on request.



Pipe diameter 1,090 mm (42,9 inch) fits perfectly between the trusses.





# A modular system with great capacity and energy balance!

The contaminated stable air is optimally transported outside with the proven REVENTA® ventilation system. That saves energy and provides for animal-friendly climate.

| »Module fan«<br>rotary current | Module interior diameter | Air flow at 0 Pa                      | Capacity / V at 0 Pa              |  |  |
|--------------------------------|--------------------------|---------------------------------------|-----------------------------------|--|--|
| M500-ST-D4                     | Ø 520 mm (20,5 inch)     | 9,100 m <sup>3</sup> /h (5,400 cfm)   | 49.0 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M560-ST-D6                     | Ø 580 mm (22,8 inch)     | 10,000 m <sup>3</sup> /h (5,900 cfm)  | _                                 |  |  |
| M630-FF-D6                     | Ø 650 mm (25,6 inch)     | 14,200 m <sup>3</sup> /h (8,400 cfm)  | 34.9 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M710-ST-D6                     | Ø 730 mm (28,7 inch)     | 19,500 m <sup>3</sup> /h (11,500 cfm) | 35.7 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M800-ST-D6                     | Ø 820 mm (32,3 inch)     | 26,000 m <sup>3</sup> /h (15,300 cfm) | 39.7 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M910-FF-D6                     | Ø 920 mm (36,2 inch)     | 26,100 m <sup>3</sup> /h (15,400 cfm) | 30.8 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M910-FN-D6                     | Ø 920 mm (36,2 inch)     | 28.400 m <sup>3</sup> /h (16,800 cfm) | 36,9 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M1070-ST-D8                    | Ø 1,090 mm (42,9 inch)   | 45,100 m <sup>3</sup> /h (26,500 cfm) | 33.4 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M1070-ST-D10                   | Ø 1,090 mm (42,9 inch)   | 36,500 m <sup>3</sup> /h (21,500 cfm) | 31.3 [W/(1,000m <sup>3</sup> /h)] |  |  |
| M1250-ST-D10                   | Ø 1,270 mm (50 inch)     | 52,300 m <sup>3</sup> /h (30,800 cfm) | 37.1 [W/(1,000m <sup>3</sup> /h)] |  |  |

»AGROFLEX«® - duct (3 m /10 feet) with PU intake nozzle, diffuser and shutter

SI = Sickle-shaped impeller FF = Owlet impeller W = 230V/50Hz 4/6/8 = Number of pole pairs

FN= Owlet sickle impeller D = 400V/50Hz ST = Standard impeller

### Intake nozzle and diffuser

The airflow is optimally guided through the diffuser and intake nozzle. In the diffuser, the new contour with integrated support points provides for an even simpler as-

- Increase of the air flow by up to 15%
- This means an energy saving of up to



#### **Duct silencers**

It reduces the sound pressure level demonstrably by up to 12 dB(A)! Already 3 dB(A) means a reducing the perceived loudness.

- TÜV tested
- Retrofitting in existing exhaust air duct systems possible **TUV NORD**



### 4 Anchoring ring and storm bracing

With the REVENTA® anchoring ring and the suitable bracing, each static-prescribed bracing can be implemented reliably.

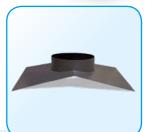
· We would be happy to support you with the precise planning and development of your respective project.



## 6 GFK roofing panel

The roofing panel made of UV-stabilised, glass fibre reinforced polyester is specifically adapted to the existing roof.

Appropriate aesthetics and leaktightness (approved in accordance with **DIN E 12691**)

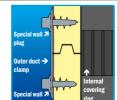


# The duct system »AGROFLEX«® 1



The »AGROFLEX«® duct svstem comprises of a "sandwich construction" with a highly insulated polyurethane rigid foam at the core and a rigid GRP exterior and interior coating. It is available in the lengths 1.000 mm (39.4 inch) and 1,500 mm (59 inch) and duct diameters 370 (14,6 inch) to 1,270 mm (50 inch).

- Air capacity: 5,000 - 52,000 m<sup>3</sup>/h (2,900 - 36,600 cfm) [0 Pa]
- Lengths 1,000 mm (39,4 inch) and 1,500 mm (59 inch)
- Pro assembly kit
- No condensation
- Easy to install
- · Hygienically cleaned easily
- Safety through »Pro assembly kit«



# \*Fan module« fan cartridge

Completely pre-assembled module for duct diameters 420 - 1,270 mm (16,5 -50 inch) / 5,000 - 52,000 m<sup>3</sup>/h (2,900 - 30,600 cfm) [0 Pa] with integrated REVENTA® fan ready for connection. Also available with integrated intake nozzle.

- Increases the air capacity
- For a reduction in costs during planning and assembly.
- Easily cleaned



## 7 Shutter module MVSK with measuring fan

As a measuring and throttling unit in the exhaust air duct. The measuring fan is universally usable on every suitable climate computer and measures the exact airflow of every exhaust air unit.

- Better climate control
- Optimal exhaust air rate
- Higher saving potential



|   | Measure<br>range |         | Minimum<br>(m³/h)       | Maximum<br>(m³/h)        |
|---|------------------|---------|-------------------------|--------------------------|
|   | Ø 420            | mm      | 250 m³/h                | 6,000 m <sup>3</sup> /h  |
|   | (16,5 i          | nch)    | (147 cfm)               | (3,500 cfm)              |
|   |                  |         | to                      |                          |
|   | Ø 920            | mm      | 1,050 m <sup>3</sup> /h | 28,960 m <sup>3</sup> /h |
|   | (36,2 i          |         | (6618 cfm)              | (17,000 cfm)             |
| 1 | The measur       | rements | were performe           | d in a REVENTA®          |

shutter module with fully opened shutter segments.

Ø 1,090/1,270 mm on request.

# The duct system »vario clip«®



That transport-optimised variant of the »AGROFLEX«® system: As half-pipe segments, the transportation volume of the pipes is reduced by more than 50%. The segments are »clipped« without additional duct clips or duct clips by means of a PVC profile.

- Safe clip connection
- Easy to assemble
- Reduction of the transport volume by up to 50%!

8 Water collecting basin Made of UV-stabilised, glass-fibre reinforced polyester for suspension below the

air duct.



### Light trap

It reduces the penetration of daylight to a





### Technical data »Fan module« three-phase / alternating current

|                 | le<br>al Ø           | Speed<br>revs per min | ge V      | ent A      | **Capacity W | Air flow m³/h (cfm) Pressure Pa (inH20) |          |                       |                       |             |             |              | Capacity/V at 0 Pa<br>[W/(1,000m³/h)] |           |          |
|-----------------|----------------------|-----------------------|-----------|------------|--------------|---|----------|-----------------------|-----------------------|-------------|-------------|--------------|---------------------------------------|-----------|----------|
| Type            | Module<br>Internal ( | Speed<br>revs p       | Voltage V | *Current A | **Cap        | 0                                       | 0        | 30<br>(0, <b>12</b> ) | 30<br>(0, <b>12</b> ) | 50<br>(0,2) | 50<br>(0,2) | 80<br>(0,32) | max.                                  | Fan       | Duct     |
| 3-phase current |                      |                       |           |            |              | R                                       | AGROFLEX | R                     | AGROFLEX              | R           | AGROFLEX    | R            | R                                     | R         | AGROFLEX |
| MEGO CT D4      | 520 mm               | 1.360                 | 400       | 1.20       | 530          | 8,300                                   | 9,100    | 7,800                 | 8,300                 | 7,500       | 7,600       | 6,800        | 4,900 / 130 Pa                        | 53.4      | 49.0     |
| M500-ST-D4      | (20 inch)            | ;h) 1,360             |           |            |              | (4,900)                                 | (5,400)  | (4,600)               | (4,900)               | (4,400)     | (4,500)     | (4,000)      | (2,900 / 0,52 inH20)                  |           |          |
| 14500 07 00     | 580 mm               | 000                   | 400       | 0.74       | 360          | 9,000                                   | 10,000   | 8,000                 | 8,800                 | 7,100       | 7,600       |              | 5,700 / 70 Pa                         | 40.0      | _        |
| M560-ST-D6      | (23 inch) 890        | 890                   | 0 400     |            |              | (5,300                                  | (5,900)  | (4,700)               | (5,200)               | (4,200)     | (4,500)     | _            | (3,400 / 0,28 inH20)                  |           |          |
| Meao EE De      | 650 mm               | 930                   | 400       | 1.05       | E 40         | 12,300                                  | 14,200   | 11,100                | 12,500                | 10,200      | 10,600      | _            | 7,400 / 78 Pa                         | 39.3      | 24.0     |
| M630-FF-D6      | (26 inch)            | 930                   | 400       | 1.25       | 540          | (7,200                                  | (8,400)  | (6,500)               | (7,400)               | (6,000)     | (6,200)     | _            | (4,400 / 0,31 inH20)                  |           | 34.9     |
| M710-ST-D6      | 730 mm               | 900                   | 400       | 1.80       | 890          | 17,000                                  | 19,500   | 15,800                | 17,600                | 14,800      | 16,000      | 13,100       | 11,000 / 110 Pa                       | 40.9 35.7 | 25.7     |
| M1/TO-21-DQ     | (29 inch)            | 890                   | 400       |            |              | (10,000                                 | (11,500) | (9,300)               | (10,400)              | (8,700)     | (9,400)     | (7,700)      | (6,500 / 0,44 inH20)                  |           | 35.7     |
| MOOO OT DO      | 820 mm               | 000                   | 400       | 2.90       | 4 200        | 22,900                                  | 26,000   | 21,400                | 23,900                | 20,300      | 22,000      | 18,700       | 14,200 / 125 Pa                       | 45.0      | 20.7     |
| M800-ST-D6      | (32 inch)            | 900                   | 400       |            | 1,300        | (13,500                                 | (15,300) | (12,600)              | (14,100)              | (11,900)    | (12,900)    | (11,000)     | (8,400 / 0,5 inH20)                   | 45.0      | 39.7     |
| M910-FF-D6      | 920 mm               | 880                   | 400       | 1.90       | 920          | 23,500                                  | 26,100   | 20,900                | 23,100                | 19,100      | 20,700      | 15,600       | 12,500 / 95 Pa                        | 35.5      | 20.0     |
| INIATO-LL-DQ    | (36 inch)            | 000                   | 400       | 1.90       | 920          | (13,800                                 | (15,400) | (12,300)              | (13,600)              | (11,200)    | (12,200)    | (9,200)      | (7,400 / 0,38 inH20)                  | 35.5      | 30.8     |
| M910-FN-D6      | 920 mm               | 840                   | 0 400     | 4.00       | 1,950        | 24,800                                  | 28,400   | 22,500                | 26,300                | 21,100      | 24,700      | 18,800       | 11,500 / 139 Pa                       | 42.3      | 36.9     |
|                 | (36 inch)            | 840                   |           |            |              | (14,600                                 | (16,700) | (13,200)              | (15,500)              | (12,400)    | (14,500)    | (11,100)     | (6,800 / 0,56 inH20)                  |           |          |
| M4070 CT DO     | 1,090 mm             | 700 4                 | 400       | 2.00       | 1,600        |   | 45,100   |                       | 39,900                |             | 36,300      |              |                                       | -         | 33.4     |
| M1070-ST-D8     | (43 inch)            | 700                   | 0 400     | 3.60       |              | _                                       | (26,500) |                       | (23,500)              | _           | (21,400)    | _            | _                                     |           |          |
| M4070 CT D40    | 1,090 mm             | F40                   | 100       | 3.20       | 1,300        |   | 36,500   | )                     | 32,300                |             | 28,800      |              |                                       | _         | 31.3     |
| M1070-ST-D10    | (43 inch)            | 540 400               | 400       |            |              | _                                       | (21,500) | -                     | (19,000)              | _           | (17,000)    | _            | _                                     |           |          |
|                 | 1,270 mm             | 500                   | 400       | 4.50       | 2,200        | 46,100                                  | 52,300   | 41,700                | 46,200                | 38,900      | 42,500      | 33,100       | 29,600 / 90 Pa                        | 42.1 37   | 37.1     |
| M1250-ST-D10    | (50 inch)            | 500 400               | 400       |            |              | (27,100                                 | (30,800) | (24,500)              | (27,100)              | (22,900)    | (25,000)    | (19,500)     | (17,400 / 0,36 inH20)                 |           | 37.1     |
| Alternating cur | rrent                |                       |           |            |              |   |          |                       |                       |             |             |              |                                       |           |          |
| M500-ST-W4      | 520 mm               | 1,310                 | 230       | 2.70       | 0 510        | 8,000                                   | 8,700    | 7,400                 | 7,900                 | 7,000       | 7,300       | 6,500        | 5,000 / 115 Pa                        | 52.4 48.  | 40.0     |
| 101500-51-004   | (20 inch)            | 1,310                 | 230       |            |              | (4,700)                                 | (5,100)  | (4,400)               | (4,600)               | (4,100)     | (4,300)     | (3,800)      | (2,900 / 0,46 inH20)                  |           | 40.2     |
| MEGO CT WG      | 580 mm               | 000                   | 230       | 1 OF       | 420          | 8,900                                   | 9,900    | 8,000                 | 8,600                 | 7,100       | 7,200       |              | 5,800 / 70 Pa                         | 48.3      | -        |
| M560-ST-W6      | (23 inch)            | 880                   |           | 1.95       | 430          | (5,200)                                 | (5,800)  | (4,700)               | (5,100)               | (4,200)     | (4,200)     | _            | (3,400 / 0,28 inH20)                  |           |          |
| M630-FF-W6      | 650 mm               | 800                   | 000 000   | 2.50       | F20          | 12,200                                  | 13,900   | 10,700                | 12,400                | 9,700       | 10,500      |              | 6,000 / 74 Pa                         | 40.2      | 35.8     |
|                 | (26 inch)            | 890 230               | 230       | 30 2.50    | 0 520        | (7,200)                                 | (8,200)  | (6,300)               | (7,300)               | (5,700)     | (6,200)     | _            | (3,500 / 0,3 inH20)                   |           |          |
| M740 CT WC      | 730 mm               | 050                   | 050 000   | 4.40       | .10 890      | 16,100                                  | 18,500   | 15,000                | 16,600                | 14,000      | 14,800      | 12,000       | 10,900 / 95 Pa                        | 44.7      | 38.8     |
| M710-ST-W6      | (29 inch)            | 850 230               | 230       | 30 4.10    |              | (9,500)                                 | (10,900) | (8,800)               | (9,800)               | (8,200)     | (8,700)     | (7,100)      | (6,400 / 0,38 inH20)                  |           |          |
| MOOO OT WO      | 820 mm               | 020                   | 000 000   | 30 7.00    | 0 1,350      | 23,000                                  | 25,600   | 21,200                | 22,900                | 20,000      | 20,600      | 18,100       | 12,100 / 115 Pa                       | 43.7      | 39.3     |
| M800-ST-W6      | (32 inch)            | 830 230               | 230       |            |              | (13,500)                                | (15,100) | (12,500)              | (13,500)              | (11,800)    | (12,100)    | (10,700)     | (7,100 / 0,46 inH20)                  |           |          |
| M910-FF-W6      | 920 mm               | 040                   | 000       | 1.00       | 20 940       | 22,800                                  | 25,300   | 19,700                | 22,000                | 17,500      | 18,600      | 13,400       | 11,900 / 88 Pa                        | 38.4      | 33.5     |
|                 | (36 inch)            | 940 230               | 230       | 4.20       |              | (13,400)                                | (14,900) | (11,600)              | (12,900)              | (10,300)    | (10,900)    | (7,900)      | (7,000 / 0,35 inH20)                  |           |          |

<sup>\*</sup> Rated current at the separation point of the fan characteristic curve; \*\* Rated power consumption

R = Frame fan measured in full duct without contact protection, version A per ISO 5801

SI = Sickle-shaped impeller FF = Owlet impeller

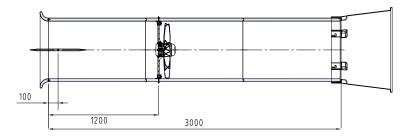
FN= Owlet sickle impeller D = 400V/50Hz

W = 230V/50Hz 4/6/8 = Number of pole pairs

»AGROFLEX«®; measured in accordance with drawing below

Technical data for »AGROFLEX«® - exhaust air duct Ø 420 mm (16,5 inch) on request.

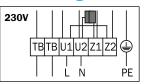
### »AGROFLEX«® – duct (3 m / 9,8 ft) with PUR intake nozzle, diffuser and shutter





Tested on the certified REVENTA® test bench

### **Connection** circuit diagram



1 ~ Motor with operating capacitor U1 brown / U2 blue / Z1 black / Z2 orange

#### "Extras + accessories"



Formed pieces/curve



Light trap



**Duct silencers** 



PU adaptor ring Transition "Full duct" to AGROFLEX® and »vario-clip«



Shutter module with measuring fan

Do you have any questions or do you require advice concerning your own projects? - We shall be happy to assist you: