

Movement by Perfection

The Royal League in ventilation, control and drive technology



MAXvent owlet

Efficient and quiet thanks to unique bionic inspired blades in **ZAmid**[®] Technology

ZA vblue

ZIEHL-ABEGG

Die Königs

der Lufttechnik
Regeltechnik und Antriebs

**Mehr
Volumen**
bei kleinerer
Baugröße



Welcome to the technology leader

Top technology made by ZIEHL-ABEGG

The workshops in the pit lane at the Formula 1 race track in Abu Dhabi, the premises of the broadcaster RTL in Cologne, large wind-driven power stations, modern animal stalls, office buildings and shopping centres – ZIEHL-ABEGG fans provide ventilation, cooling and air conditioning in almost all application areas. Air technology from the Künzelsau-based company is even used in clean rooms and operating theatres. ZIEHL-ABEGG is a trend-setter in product development according to the principles of bionics. With the help of retrofit concepts, older systems can also be made state of the art.

The Künzelsau-based company ZIEHL-ABEGG SE has developed and built truly efficient, durable and robust electric motors for over 100 years. Drive technology is another area in which the company uses its innovative products to successfully deliver a wide range of applications in everything from lifts to medical technology. The efficiency of the electric in-wheel hub motor for city buses is the highest in the world.

More than half of the company's 3,700 employees work in southern Germany. This is also home to the world's largest combined measuring and test bench for fans, which is able to simultaneously measure sound and efficiency. Annual research and development expenditure amounts to some seven per cent of turnover. These framework conditions have enabled ZIEHL-ABEGG to set global standards in the efficiency and sound characteristics of motors and fans over a number of decades.

The high-tech company was founded by Emil Ziehl in 1910 as a manufacturer of electric motors. ZIEHL-ABEGG SE is not listed on the stock market and is entirely family-owned.

Global sales network and production group

ZIEHL-ABEGG has 28 subsidiaries worldwide. With over 100 dedicated sales offices, the company is able to operate in close proximity to customers across the globe. This makes it possible to tap into trends and developments around the world that can be incorporated into product development. 18 international production sites deliver consistent product quality on a global level.

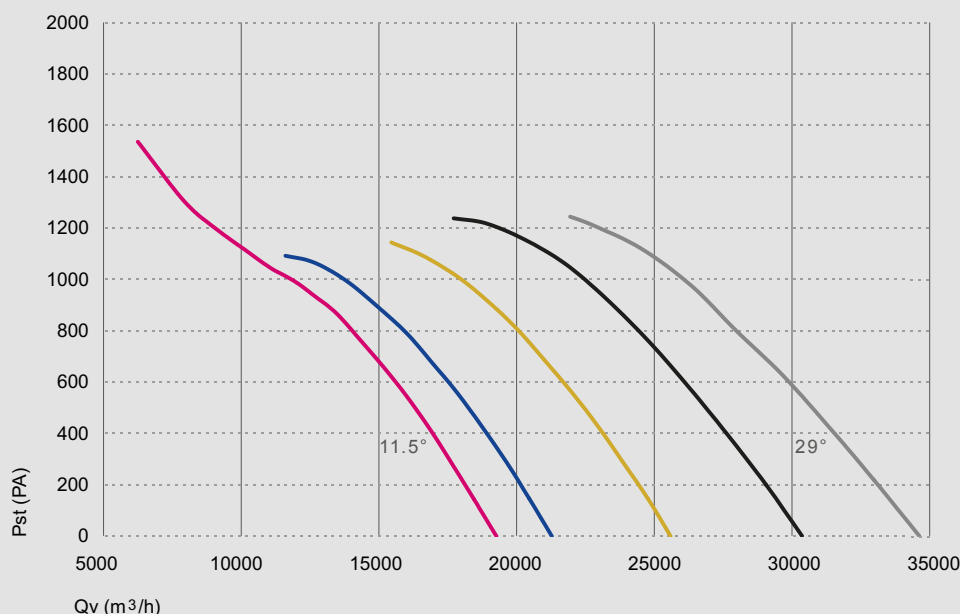


MAXvent owlet

Medium pressure axial fans with unique bionic inspired blades

A few years ago ZIEHL-ABEGG set a key innovation milestone by introducing bionic inspired fan blades. Their unique design was inspired by nature, owls' wings providing the inspiration. Now, the third generation of the MAXvent owlet medium

pressure fans is also benefiting from this proven experience. It features low noise emissions with an improvement up to 12 dBA compared with previous models.



DN63V 2 pole long casing
measured with inlet bell-mouth
in installation type A according
to ISO 5801

With the same fan size, you get up to 25% more pressure than with the previous generation. In some cases the same pressures can be attained by using a smaller motor size, which reduces initial investment costs.

Thanks to the unique high performance composite material **ZAmid®**, these lighter blades are corrosion-free and allow up to 2200 Pa of static pressure.

ZIEHL-ABEGG – Eco-friendly and economical

Heavy emphasis was placed on achieving the highest efficiency, enabling the achievement of efficiency increases up to 25%. As a result, the related energy cost savings translate into a Return on Investments of less than 2 years in some cases.



The new high-tech fan with a unique bionic profile in **ZAmid® Technology** for the highest demands of the industry, the highest pressure ranges and uncompromising utilisation opportunities.

„extremely efficient, flexible, reliable, silent“

- The highest efficiencies, up to 25% better efficiency
- Modular use for both AC and ECblue motors
- Extremely quiet in use – enormous noise reduction (up to eight times quieter)
- Tremendously reduced operating costs
- System competence from a single source
- Factory adjustable blade pitch angle

Compliant with ERP 2015 Directive



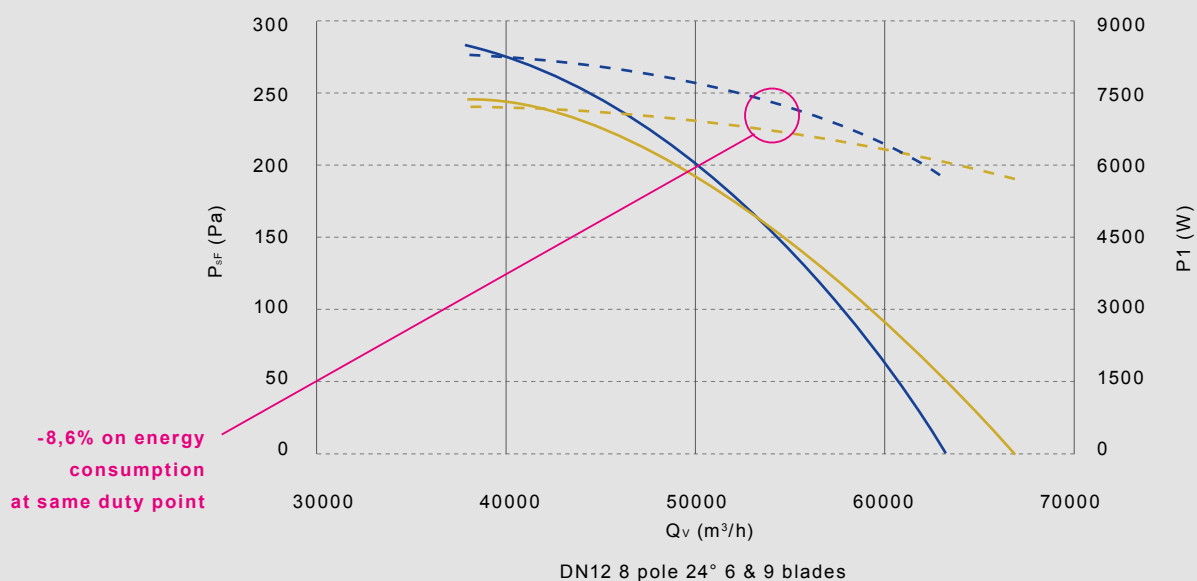
Designed for flexibility – because integration matters

MAXvent owlet portfolio has been designed to offer the high level of adaptation requested by the wide range of applications covered.



3 and 6 blades impeller: One step beyond!

- Suitable for the moderate pressure range
- Extra noise reduction
- Lower energy consumption
- Lower weight
- Increased efficiency
- Potential motor size reduction at given duty point
- Lower price



Different impeller materials



Aluminium



Polypropylene

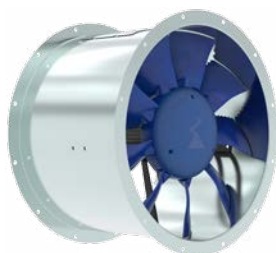


ZAmid

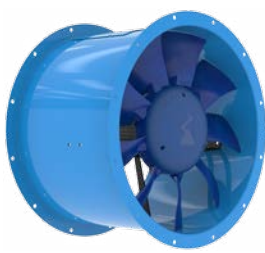
Complete flexibility in construction and materials:

- Wide choice of impeller materials according duty point and application
- Customized color painting under demand
- Several housing corrosion protection levels : stainless steel 304L and 316L, complete hot dip galvanization
- Customized fixations
- Remote terminal boxes also in different materials

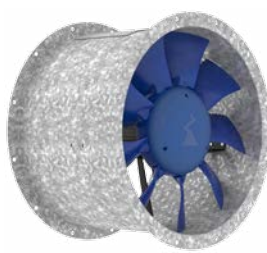
Different housing treatments



Stainless steel AISI 304L and 316L



Painted galvanized steel



Hot dip galvanized steel

Highest level of customization – Because details make the difference

Unique motors know-how

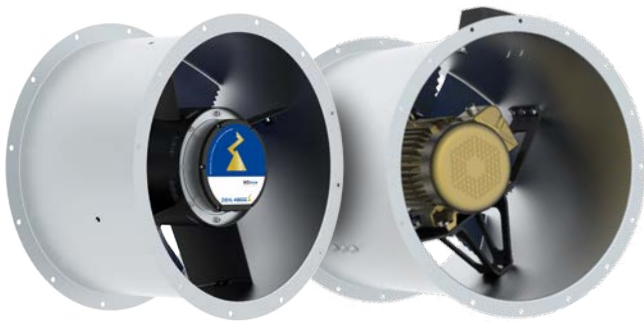
From the experience of a world leader motor manufacturer.
A wide choice of internal rotor motor options.

- Different supply voltages
- 50 or 60 Hz
- IEC, NEMA and ANVT versions
- Different IP protections available
- OPSB (Open Slotted Band) or TEFC models
- Low and high temperature resistant motors
- H class/tropicalized windings
- Special anticorrosion motor coatings
- High efficiency solutions (EC motor and PM motors)

Application-specific ATEX range

Designed, produced and tested in compliance with
ATEX 2014/34/EU.

- Suitable for operation in zones 1 and 2 as well as 21/22
- Owllet bionic profile also for ATEX execution
- Special ZAmid antistatic material
- No need for internal brass ring: no risk of spark production between ZAmid ATEX blades and housing
- Controllable through frequency inverter (option depending motor choice)
- Special rating plate
- Same options as standard range



MAXvent with EC motor MAXvent with NEMA motor



Suitable for extreme environments

Wide temperatures range from -60°C up to +120°C

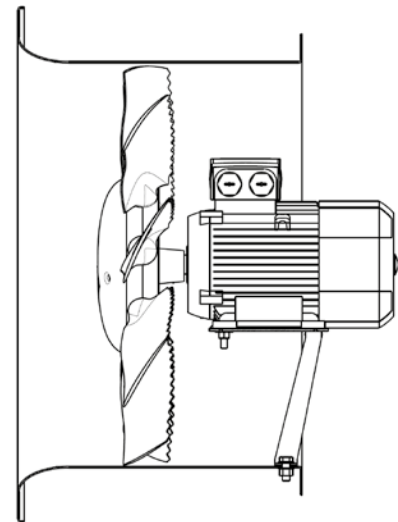


High flexibility with state of the art performance

MAXvent owlet is a highly flexible family of axial fans with no compromise on specification.

Standard features include:

- 13 fan diameters ranging from 315 to 1400 mm
- Different length housings for better adaptation to different installations
- IE2/IE3 efficiency motors in 2, 4, 6, 8 and 10 poles
- IP 55 motors thermally protected by PTC
- Unique composite material blades ZAmid
- Factory adjustable blade pitch angle to meet the exact duty point requirements
- Standard operating temperature range from -20 °C to 50 °C
- Higher/lower temperatures on request: range from -60 °C up to 120 °C



Different housing constructions



Long casing



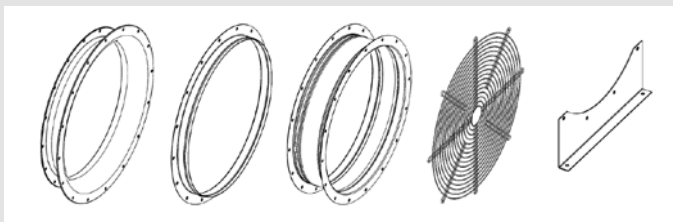
Short casing



Ultrashort casing

Accessories

Numerous options for a maximal modularity: matching flanges, supporting feet, flexible connections; inlet bell mouths and guard grills:



Please contact us for additional options: square plates, remote terminal boxes, special mounting supports, antivibration mountings etc.



MAXvent owlet are 100% speed controllable

Wide range of applications

Refrigeration technologies:

Coolers, Heat exchangers, Water coolers, Blast freezers, Radiators and Oil coolers

Industrial applications:

Motor and turbine cooling, Container cooling and Test climate chambers, Dry coolers, Transformers and machine cooling, Water treatment, Wood drying, Paper and Textile applications, chemical and metallurgy production, ATEX and offshore applications

Agricultural, food industry applications:

Cereal/Crop drying, Fruits and vegetables, Pasta drying, Meat cooling, Tobacco drying

Other applications: motor and transformer cooling, windmills, machinery, chemical and metallurgic production, railway and offshore applications .

With subsidiaries in 30 countries, ZIEHL-ABEGG offers the world-wide coverage requested by OEM industrial customers.



Food industry



Transformers



Heat exchangers



Power industry / offshore



Chemical application

The Royal League

