Focus on Ventilation and Farming Solutions
Understanding your needs

For many years, LINAK® has been a sub-supplier to several ventilation equipment manufacturers and stable designers all over Europe. Our reference list is long and we are proud of our good reputation. However, we also know that an image like this does not create itself. Therefore, we work even harder when designing solutions and we know what it takes to supply actuator systems where flexibility and reliability are the top priority.

Ventilation equipment manufacturers and suppliers realise significant improvements by using linear actuators from LINAK. Easy installation, excellent feedback and integration are some of the features that may provide your business with a competitive advantage in the marketplace.

An electric actuator from LINAK is an obvious choice for harsh environments with moisture, dust and temperature changes; we know how essential a well-operating ventilation system is for the farmer.

“For more than 20 years, LINAK has supplied maintenance-free products with a long lifetime for several ventilation equipment manufacturers and stable designers all over Europe.”

What LINAK has done for the ventilation industry for more than 20 years:

- Supplied maintenance-free products with a long lifetime
- Excellent feedback and positioning
- Supplied solutions where a high degree of protection-IP is required
- Designed customised solutions for the end-users
- Provided systems with battery backup, alarm and safety options etc.
- Supplied actuators that are easy to install and operate
- Offered close cooperation with our well-educated sales and application engineers, represented in more than 30 countries
LINAK offers service worldwide

Please contact your local LINAK office with your enquiry
What LINAK® actuators do for ventilation and farming solutions

Reliable and adequate ventilation in animal houses is essential to farmers. The ventilation system takes care of adjusting the temperature and the humidity of the air as well as regulating the indoor climate by cleaning out dust, fumes and natural gasses. An insufficient or malfunctioning ventilation system can cause serious - even fatal - problems for livestock.

LINAK® electric actuator systems are very well suited for a lot of applications that could improve the working conditions for a modern farmer. Automatic adjustment of the feed flow, control of valves and cover lifts or adjustment of the windows are just a few examples.

Inlet valves
Stepless adjustment of inlet valves to ensure an acceptable and healthy indoor climate in order to increase the productivity and to avoid diseases.
**Climate cover**

Young pigs need warm and protected places where they can rest during the day. However, the farmer needs to check their condition occasionally. With electrical cover lifts he can gain an overview of the complete stable within minutes.

**Feed units**

In modern farming industries the amount of feed is measured very carefully. By using an actuator it is possible to adjust the feed flow proportionately according to the particular feeding programme required.

**Ventilation dampers**

The actuator can be used for stepless opening and closing of ventilation dampers for air outlet, depending on temperature level, humidity or vacuum etc.

**Agriculture valves**

For example slurry valves and fodder valves are often placed in positions where access can be limited; therefore, electrical solutions can be very beneficial for the user.
At the Actuator Academy™, you will find a library of videos and information about actuator components, actuator testing, and intelligent actuator control.

Find out what you should expect of a good industrial actuator, what affects its performance and efficiency, and how to best utilise your linear motion actuator.

We hope to inspire you and ultimately make you wiser on the moving electric revolution we are all part of.

Happy exploring!
Enhance the value and performance of your application with the intelligent movement of IC actuators.

LINAK® actuators with Integrated Controllers (IC) present you with various feedback outputs, smart actuator control, customisation, and monitoring possibilities.

IC actuators unlock the benefits of a true Plug & Play™ solution, making external control boxes and relays superfluous and reducing the wiring complexity.

A comprehensive testing programme ensures that the integrated electronics are well protected for use in tough environments.

If you are looking for a movement solution that will help you stay competitive in the future, then go for LINAK actuators with integrated controller, and Move for the Future.

For ventilation and farming, actuators with IC provide intelligent and cost-effective performance:

- Simple installation with built-in electronics.
- Precise control of actuator movement
- Feedback and movement customisation
- On-site configuration
- Easy actuator status monitoring

For more information on IC, please visit LINAK.COM or scan the QR code
Linak® industrial actuators offer a versatile array of movement solutions for ventilation and farming.

With **thrusts up to 15,000 N, max speeds up to 160 mm/s, and strokes between 20 and 999 mm**, the actuators are highly adaptable for a wide variety of applications.

Industrial actuators with **heavy-duty aluminium housings** are very suitable for use in corrosive environments. Having been thoroughly salt spray and **chemical resistance tested** and approved for ratings up to **IP66 and IP69K static**, these actuators will work reliably for years, even when exposed to salt, water, wind, and sun.

**Operating temperatures between -40°C to +85°C** make them fit for work in numerous settings. Also, the actuators LA36, LA25 and LA14 are certified according to IECEx and ATEX and can be operated in dust explosive atmospheres.

By using an integrated controller, industrial actuators are **configurable** and offer **relative or absolute position feedback** as well as **performance monitoring**.

**Actuator LA36**

**Actuator LA35**

**Actuator LA33**
Accessories for ventilation and farming

Actuator LA25

Actuator LA14

Actuator LA12

SMPS-T160
Testing programme

In each industrial application, the actuator is just one component of many, but at LINAK® we fully appreciate that it is of utmost importance to you and your customers. Not a single actuator leaves the factory until it has undergone a 100% function test.

Depending on the actuator type, various tests have been carried through. Please consult your local LINAK office or take a look at the actuator data sheet in question to get a thorough test overview.

This is your guarantee that a solution based on LINAK TECHLINE electric actuator systems is a solution that will work reliably for years and years.

“Our actuators must never malfunction. Therefore, it is important that all our products are tested inside and out, and to the extreme in a wide range of tests.”

- Claus H. Sørensen, Director R&D

Climatic tests:
In the climatic test the actuators are tested to operate in extreme temperatures as well as to endure rapid changes in temperature. In a dunk test, the actuators have to withstand repeating temperature fluctuations between +85°C to -40°C and still maintain full functionality and ingress protection.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Test</th>
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<tbody>
<tr>
<td>EN60529-IP6X</td>
<td>Dust</td>
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<tr>
<td>EN60529-IPX6</td>
<td>Water</td>
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<tr>
<td>ISO16750-IP69K</td>
<td>High pressure cleaning</td>
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<tr>
<td>IEC60068-2-3</td>
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<tr>
<td>IEC60068-2-30</td>
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<td>ISO16750-4:2010</td>
<td>Dunk test</td>
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<tr>
<td>EN60068-2-52</td>
<td>Salt spray</td>
</tr>
<tr>
<td>BS7691 Section 6.11.2.4</td>
<td>Chemicals</td>
</tr>
</tbody>
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Electrical tests:
All electrical parts are tested i.e. power supply, power and signals cables, control signals etc. Electrical immunity is tested according to industrial standards i.e. for radio noise, electrical discharge and burst.*

- **EN/IEC 61000-6-4** - Generic standard emission industry
- **EN/IEC 60204** - Electrical equipment of machinery
- **EN 50121-3-2** - Railway applications - Rolling stock apparatus
- **94/25/EC** - Recreational crafts directive
- **EN/ISO 13766** - Earth moving machinery
- **EN/IEC 61000-6-2** - Generic standard immunity industry
- **2004/104/EC** - Automotive Directive
- **EN/ISO 14982** - Agricultural and forestry machines
- **EN/ISO 13309** - Construction machinery

Mechanical tests:

**Vibration:** The actuator must withstand continuous vibration in three directions.

**Shock:** The shock test puts the actuator through 3 shocks of up to 50 G in each of six directions.

**Bump:** The actuator receives bumps of up to 30 G in each of six directions several hundred times.

- **EN60068-2-64 (Fh)** - Random vibration
- **EN60068-2-27 (Ea)** - Shock
- **EN60068-2-29 (Eb)** - Bump

* These tests do not apply to third party products!

Find out more about how we test actuators to the extreme:

LINAK has a world-class sales and service organisation. 
Today we are present in 35 countries all over the world. 
For further information, please visit our website: LINAK.COM