Improve energy efficiency and indoor climate with building louvres

There is an increasing focus on energy conservation in domestic and commercial buildings. In some countries, governments provide tax concessions for buildings with high energy ratings. Therefore, there is an increased demand for use of natural light, which means more use of glass. And to utilise this, it becomes necessary to control the level of light and heat entering the building.

Building louvre systems provide better indoor climate and better control of temperature with less use of expensive heating or cooling systems. Fully automated louvres driven by LINAK® actuator solutions function as natural ventilation systems, natural cooling systems as well as complete solar shading systems. LINAK actuators can be incorporated into the design of the building and they have the ability to interface with building management control systems.

Aluminium louvres can control and regulate the heat load and minimise exposure from the sun by providing solar shading. Glass louvres can improve building ventilation by letting in fresh air on warm days.

The use of LINAK® actuator solutions to adjust louvres as well as entire building automation systems, results in an overall energy reduction with use of fewer resources for both heating and cooling.

LINAK offers service worldwide

Please contact your local LINAK office with your enquiry
What LINAK actuators do for building louvres

LINAK® actuators can be used to operate aluminium louvres mounted externally on the building. These louvres serve the purpose of determining how much light should enter the building. Likewise, LINAK actuators can be used to operate glass louvres for better ventilation and natural cooling as well as for view purposes, allowing for a clear uninterrupted view of the scenery.

The louvres can be controlled by an electrically operated switch mounted on the inside wall of the building. This allows staff to adjust the louvre, and accordingly the level of light or air entering the building, depending on the time and/or temperature of the day.

The use of LINAK actuator solutions to adjust louvres as well as entire building automation systems, results in an overall energy reduction with use of fewer resources for both heating and cooling. With a fully automated system, the adjustment of louvres is easy and quick ensuring a better indoor climate.

Solar shading and heat control with automatic opening and closing of aluminium louvres in rooftop windows
Actuator solutions ensure easy and quick opening and closing of aluminium louvres for solar shading

Natural ventilation with smooth and quick controlling of glass louvres, driven by LINAK actuator solutions
Explore the rich technology behind actuators

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!

Check out the Actuator Academy
LINAK.COM/ACTUATOR-ACADEMY
Intelligent movement for building louvres

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 building louvres, 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 please visit LINAK.COM or scan the QR code
LINAK® industrial actuators offer a versatile array of movement solutions for building louvres.

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.

By using an integrated controller, industrial actuators are **configurable** and offer **relative or absolute position feedback** as well as **performance monitoring**.
TECHLINE® system solutions improve functionality and add value to your application.

Our systems offer:
- Choose your own unique control solution
- Easy integration into your application
- Time saving installation
- Possibility of running up to two applications at a time with simultaneous run

Control options
Signal cable with open leads for your selected controls

OR
LINAK controls:
- Hand control (HB)
- Remote control (RF)
- Desk panel (DP)
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.

- EN60529-IP6X - Dust
- EN60529-IPX6 - Water
- ISO16750-IP69K - High pressure cleaning
- IEC60068-2-3 - Moisture storage
- IEC60068-2-30 - Operation in moisture
- ISO16750-4:2010 - Dunk test
- EN60068-2-52 - Salt spray
- BS7691 Section 6.11.2.4 - Chemicals
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.com/segments/techline/tech-trends/testing/
For further information, please visit our website:
LINAK.COM/BUSINESS-AREAS/SOLAR-SHADING/LOUVRES/

TERMS OF USE

The user is responsible for determining the suitability of LINAK products for a specific application. LINAK takes great care in providing accurate and up-to-date information on its products. However, due to continuous development in order to improve its products, LINAK products are subject to frequent modifications and changes without prior notice. Therefore, LINAK cannot guarantee the correct and actual status of said information on its products. While LINAK uses its best efforts to fulfil orders, LINAK cannot, for the same reasons as mentioned above, guarantee the availability of any particular product. Therefore, LINAK reserves the right to discontinue the sale of any product displayed on its website or listed in its catalogues or other written material drawn up by LINAK.

All sales are subject to the Standard Terms of Sale and Delivery for LINAK. For a copy thereof, please contact LINAK.

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