Focus on
Building Louvres
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.
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.
IC movement for building louvres

IC - Integrated Controller™ is the range of integrated control options for TECHLINE® actuators that present you with almost unlimited possibilities for superior control and monitoring, to enhance the value and performance of your application.

For building louvres, actuators with IC provide cost-effective performance and innovative technology:

- Simple installation with built-in electronics
- Easy overview and precise control of the actuator movement
- The actuator can be customised on site to fit multiple solutions in a single application
- Easy monitoring of the actuator’s condition which ensures a minimum of downtime
- All IC options are based on the same welltested interface, which is covered by the actuator’s IP degree

For more information on IC, please go to LINAK.COM/SEGMENTS/TECHLINE/TECH-TRENDS/INTEGRATED-CONTROL/
Move for the future

Step into the future world of movement and enhance your competitive edge. Do you want cost-effective performance, innovative technology and a competitive edge?

Go for IC™ and Move for the Future™
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.

Actuator LA37

Actuator LA36

Actuator LA33
LINAK® products are reliable products, made to last! High quality is the trademark of LINAK, and an element of the highest importance to us.
TECHLINE system solutions improve functionality and add value to your application.

Our systems offer:

- Simple Plug & Play functionality
- Easy integration into your application
- Time saving installation
- Significant minimisation of installation failures
- Possibility of running up to two applications at a time with simultaneous run

RF receiver

The small and compact RF receiver enables easy control of the actuator with the two below remote controls. Its small form factor makes this device easy to implement into your application.

Features:
- Operating temperature: -20 °C +45 °C
- Working frequency: 868.3 Mhz (EU) / 916 Mhz (US)
- Range in open space: up to 80 metres
- Protection Class: IP66
- Housing material: polycarbonate
- Cables: integrated
- Cable length: 1500 mm
- Compatible via SMPS-T160 with LA12 IC™, LA14 IC, LA23 IC, LA25 IC, LA35 IC
- Compatible with LA33 IC, LA36 IC, LA37 IC

RF controls

TEVO
- Dimensions: 125 x 40 x 10 mm
- Compatible with RF receiver

TXP
- Dimensions: 60 x 30 x 10 mm
- Compatible with RF receiver
TECHLINE® system solutions

Simultaneous run Solution

Compatible with RF or other alternative controls.

The cable(s) between the SMPS-T160 and the actuators LA14 and LA25 can be either 300 mm or 1500 mm.
The cable(s) between the SMPS-T160 and the actuators LA12, LA23 and LA35 are 1500 mm.
TECHLINE® system solutions

RF Solution

Actuator
LA12 IC™, LA14 IC, LA23 IC, LA25 IC or LA35 IC

Actuator
LA33 IC, LA36 IC or LA37 IC

Power supply
SMPS-T160

RF receiver

RF control
Flying wire solution

Actuator
LA12 IC™, LA14 IC, LA23 IC, LA25 IC or LA35* IC

Power supply
SMPS-T160

Signal cable with open leads for alternative control options

* Please note that with an LA35 flying wire solution, the signal cable is connected to the actuator itself, and not the SMPS.
100% function tests

In each application, the actuator is just one component of many, but at TECHLINE® we fully appreciate that it is of utmost importance to you and your customers. Not a single actuator leaves LINAK® 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.

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

* These tests do not apply to third party products!
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 some tests, the actuator has to withstand going from a +100°C environment to -30°C repeatedly and still maintain full functionality.

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 100 G in each of 6 directions.
Bump: The actuator receives bumps of up to 40 G in each of six directions several hundred times.

EN60068-2-1 (Ab) - Cold test
EN60068-2-2 (Bb) - Dry heat:
EN60068-2-14 - Change of temperature
EN60068-2-30 - Damp heat
EN60068-2-52 - Salt spray
EN60529-IP66 - Degrees of protection
BS7691/96 hours - Chemicals

EN60068-2-36 (Fdb) - Vibration
EN60068-2-29 (Eb) - Bump
EN60068-2-27 (Ea) - Shock
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