Focus on mobility
Understanding your needs

Understanding your needs

Physical disability does not necessarily mean reduced activity, but simply reduced mobility. Persons with disabilities face many challenges when it comes to mobility, e.g. in their homes, in the office, in the shopping mall, in the cinema or in their cars. It is an everyday occurrence. However, with the technological development, a wide range of aids to increase mobility are available for persons with disabilities today.

LINAK® has many years of experience as a subsupplier within this business and knows what it takes to supply reliable actuator systems that put self-reliance, people’s safety and quality of life first.

Fittings for cars
As an example, LINAK can provide a wide range of low voltage actuators for all kinds of movement in vehicle fittings for persons with disabilities. So why is LINAK the perfect partner for this exact application?

LINAK actuators:
• Are very easy to install and they fit immediately to the electrical system of the vehicle
• Can be supplied with extra safety features
• Lift up to 1000 kg fast and steadily
• Are easy and fast to operate by means of hand controls, remote controls or switches
• Are designed to operate under harsh and rugged conditions with vibrations etc.
• Are maintenance-free products
• Offer a high degree of flexibility

“LINAK provides a wide range of low voltage actuators for all kinds of movement in vehicle fittings for persons with disabilities. The actuators can lift up to 1000 kg fast and steadily.”

LINAK offers service worldwide
Please contact your local LINAK office with your enquiry
What LINAK actuators do for the car

TECHLINE® actuator solutions provide easy electric linear movement for a wide range of vehicles especially designed to increase mobility for persons with disabilities. Their light weight, precise and smooth motion control as well as reliable performance in rough conditions make LINAK® actuators an ideal choice for these applications.

For the car, LINAK actuators offer improved ergonomics, easy access and exit of the vehicle, as well as easy loading of small mobility solutions such as wheelchairs etc.

**Rear door opener**
Remote opening/closing of the rear door. Simple operation of the rear door will be mandatory for a wheelchair user

**Lift**
Easily loading wheelchairs or scooters into boots. A lift like this can increase the independency of the user and make travelling easier
Electrical seat
Gaining easy access to the driver’s seat from a wheelchair with electric turntable seats
LINAK® actuators ensure user-friendly operation as well as high-quality and long lasting performance in various mobility solutions for minivans.

Due to their high flexibility the actuators can easily be customised for a specific mobility solution. Also, their small size and ability to interface with programmable control systems makes installation into applications even easier.
Foldout ramp
Folding or unfolding of the wheelchair ramp for easy exit/entry for users of wheelchairs or scooters
What LINAK actuators do for the van and small cars for wheelchair users

Within vans and small cars for wheelchair users, LINAK® actuators will help enhance safety and reliability while providing easy adjustment for ergonomic, self-reliance and comfort purposes.

- **Steering wheel adjustment**
- **Support railing**
  - Adjustment of the support railing for safer entry/exit
- **Adjustable car seat**
- **Door automation**
- **Gearshift retraction**
- **Clutch and brake control**
- **Platform lift**
  - Steady lifting of the rear mounted platform for wheelchair or scooter transport
- **Rear end lowering**
Automated door
Remote control of the sliding side doors for easy access
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 mobility applications, 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.
Actuators for mobility applications

LINAK® industrial actuators offer a versatile array of movement solutions for mobility applications.

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**.
Accessories for mobility

Motor controller TR-EM-208 - Complete control

- Variable power supply 12-36 V DC
- Overload protection - adjustable current limit 1-20 A
- Adjustable soft start and stop
- Several versions for different applications
- Integrated brake

(*)

Rocker switch - easy operation

- For all actuators with limit switches
- Easy operation of actuators without use of further electronics
- IP66 for outdoor use
- Easy to install
- Tested with an LA36 12 V DC for 50,000 operations

(*)

Remote control - digital radio control

- Remote control transmitting up to 100 metres
- Dual channel receiver
- Several transmitters can be programmed for the same receiver
- Simple to use and install
- Dynamic codes ensure a high security level
- Supply voltage 12 or 24 V DC

(*) “The specified product is a third party product that is produced by third party and distributed by LINAK® as a supplement to the LINAK existing product range. It is the responsibility of the product user to determine the suitability of the product for a specific application. LINAK will at point of delivery replace/repair defective products covered by the warranty if promptly returned to LINAK.”

If you use IC there is no need for these accessories!
On the cooperational side, it must be easy for our customers to do business with LINAK®. Therefore, we offer both standard components and customised solutions according to demand. In close cooperation with our sales engineering team you can develop an optimal solution that fits perfectly to your task and demands.

Our LINAK TECHLINE® division is committed to offering innovative solutions that help improve life for you and for the end-user of the system.
Resting on the pillars of the LINAK values
Strategic partnerships within R&D, after-sales, logistics, marketing and manufacturing

Meaningful value by converting great new ideas into solutions of tomorrow

Process automation built on newest technology and run by LEAN principles

Updated market insights and local support offered to every customer

In-depth knowledge of the market and the market trends makes LINAK a true solutions provider.
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 Type</th>
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<tbody>
<tr>
<td>EN60529-IP6X</td>
<td>Dust</td>
</tr>
<tr>
<td>EN60529-IPX6</td>
<td>Water</td>
</tr>
<tr>
<td>ISO16750- IP69K</td>
<td>High pressure cleaning</td>
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<tr>
<td>IEC60068-2-3</td>
<td>Moisture storage</td>
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<tr>
<td>IEC60068-2-30</td>
<td>Operation in moisture</td>
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<tr>
<td>ISO16750-4:2010</td>
<td>Dunk test</td>
</tr>
<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>
</table>
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/
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

TERMS OF USE
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