

# TECHLINE® Product overview

# Actuators

## LA37



Tough applications require equally tough actuator solutions. The actuator LA37 is specifically developed for heavy-duty applications in harsh environments, where there is a need for high lifting capacity and holding force. The LA37 offers the well-known LINAK quality, guaranteeing you a maintenance-free product with a long lifetime.

### Features:

Thrust:	10,000 N - 15,000 N
Speed:	3.5 mm/s
Stroke length:	600 mm
Duty Cycle:	15 % at -30° C to +70° C
Voltage:	12 or 24 V DC
Endstop:	Built-in electrical endstop
IP rating:	IP66 dynamic and IP69K static

### Options:

- Trunnion mounting
- Hall effect sensor
- Endstop signals
- Analogue or digital feedback for precise positioning
- Possible IC options for LA37: IC Basic, IC Advanced, LINbus, CAN bus, Modbus and Parallel

### Scope of application:

- Agricultural applications
- Mobile "off-highway" applications
- Forestry and construction machines
- Hood lifting
- Cabin tilt
- Solar tracking

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Easy to use interface – with integrated power electronics
- Hall sensors or potentiometer for relative or absolute feedback
- Hand crank for manual operation
- Salt spray and chemical tested
- High-pressure cleaner proof
- Designed for outdoor use

## LA36



The actuator LA36 is one of the most solid and powerful LINAK actuators, designed to operate under extreme conditions. The LA36 is a maintenance-free product with a long lifetime and a high IP degree. This high-quality actuator offers a very strong alternative to hydraulic solutions.

### Features:

Thrust:	10,000 N
Speed:	Up to 160 mm/s
Stroke length:	100 - 999 mm
Duty Cycle:	20 %
Voltage:	12, 24 or 36 V DC
Endstop:	Slip clutch or built-in limit switches
IP rating:	IP66 dynamic and IP69K static

### Options:

- Potentiometer
- Hall effect sensor
- Endstop signals
- Possible IC options for LA36: IC Basic, IC Advanced, LINbus, CAN bus, Modbus and Parallel
- IECEx/ATEX certification

### Scope of application:

- Agricultural applications
- Mobile "off-highway" applications
- Floorsweeper and scrubber
- Industrial automation
- Solar tracking

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Solid metal construction
- Hand crank for manual operation
- Salt spray and chemical tested
- High-pressure cleaner proof
- Designed for outdoor use

## LA35

IC INTEGRATED CONTROLLER



The actuator LA35 is a powerful actuator with a low noise level. It is designed for a variety of both indoor and outdoor applications and provides a practical, cost-effective solution with low power consumption.

### Features:

Thrust:	Up to 6,000 N in push and 4,000 in pull
Speed:	Max. 19 mm/s
Stroke length:	600 mm
Duty Cycle:	10 %
Voltage:	12 or 24 V DC
Endstop:	Built-in limit switches and brake
IP rating:	IP66 dynamic and IP69K static

### Options:

- Hall effect sensor
- Potential free endstop signals
- Safety nut in push
- Possible IC options for LA35: IC Basic and Modbus

### Scope of application:

- Agricultural applications
- Mobile "off-highway" applications
- Floorsweeper and scrubber
- Industrial automation
- Solar tracking

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Easy to use interface – with integrated power electronics for direct connection to control system
- Hall sensors or potentiometer for relative or absolute feedback, regardless of the stroke length
- Designed for outdoor use

## LA33

IC INTEGRATED CONTROLLER



The actuator LA33 is a true mid-size actuator that combines compact design and high power in one solution, fit for use in the most extreme environments. A thorough and demanding testing programme forms the basis for the maintenance-free and long lasting performance of this solid and high-quality actuator.

### Features:

Thrust:	Max. 5,000 N
Speed:	30 mm/s
Stroke length:	100 - 600 mm
Duty Cycle:	20 %
Voltage:	12 or 24 V DC
Endstop:	Built-in limit switches
IP rating:	IP66 dynamic and IP69K static

### Options:

- Hall effect sensor
- Endstop signals
- Possible with extra socket
- Possible IC options for LA33: IC Basic, IC Advanced, Proportional control, CANbus, Parallel and LINbus

### Scope of application:

- Agricultural applications
- Construction machines
- Grain- and bulk handling
- Industrial automation
- Marine
- Mobile "off-highway" applications
- Outdoor power equipment
- Ventilation and farming solutions

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Solid metal construction
- Hand crank for manual operation
- Salt spray and chemical tested
- High-pressure cleaner proof
- Designed for outdoor use

# Actuators

LA32



The actuator LA32 is a powerful actuator that be supplied with a ball screw spindle to give outstanding performance. The ideal choice for a wide range of applications.

#### Features:

Thrust: Max. 6,000 N  
Speed: 5,5 - 15 mm/s  
Stroke length: 100 - 400 mm  
Duty Cycle: Max. 10 %  
Voltage: 12, 24 V DC  
Endstop: Current cut-off

#### Options:

- Powerful strong motor
- Potentiometer
- Reed switch
- IP66 housing
- Ball screw spindle
- Safety nut

#### Scope of application:

- Agricultural applications
- Lawn and garden equipment
- Floor sweepers
- Factory automation

#### Facts:

- Powerful and quiet operation
- Only for "push" applications

LA30



The actuator LA30 is a powerful actuator yet small enough to fit to most applications. The actuator can be supplied with options such as built-in potentiometer for servo operation or an extra powerful motor for increased speed and strength (S-motor).

#### Features:

Thrust: Max. 6,000 N  
Speed: Up to 65 mm/s  
Stroke length: 50 - 500 mm  
Duty Cycle: Up to 20 %  
Voltage: 12, 24 or 36 V DC  
Endstop: LS/LSD or current cut-off

#### Options:

- Powerful strong motor
- Potentiometer
- Reed switch
- IP66 housing
- Ball screw spindle
- Safety nut

#### Scope of application:

- Agricultural applications
- Lawn and garden equipment
- Floor sweepers
- Industrial automation

#### Facts:

- Solid metal construction
- Compact and powerful
- Suitable for harsh conditions
- Stainless steel piston rod
- Self-locking ability



## LA28



The actuator LA28 (with standard or fast motor) is a very quiet and powerful actuator, designed for use in furniture, rehabilitation, and hospital bed industries. Agricultural machinery and other outdoor equipment are also other main areas of application.

### Features:

Thrust:	Max. 3,500 N
Speed:	3 - 46 mm/s
Stroke length:	100 - 500 mm
Duty Cycle:	10 %
Voltage:	12, 24 V DC
Endstop:	Current cut-off

### Options:

- Powerful strong motor
- Reed switch
- IP66 housing
- Safety nut

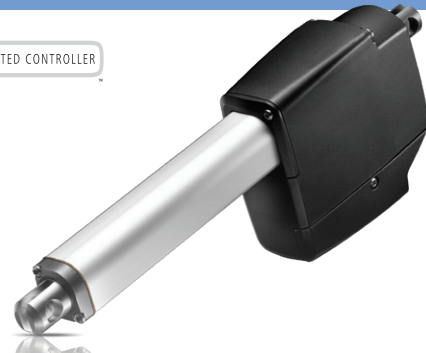
### Scope of application:

- Agricultural applications
- Lawn and garden equipment
- Floor sweepers
- Factory automation

### Facts:

- Powerful and quiet operation
- Reinforced glass fibre
- Only for "push" applications

## LA25



With its robust design, high IP degree and aluminium housing, the actuator LA25 is ideal for harsh environments where operation under extreme conditions is required. Furthermore, the compact dimensions of the LA25 make it applicable for confined spaces.

### Features:

Thrust:	Max. 2,500 N
Speed:	Max. 13 mm/s
Stroke length:	20 - 300 mm
Duty Cycle:	20 %
Voltage:	12 or 24 V DC
Endstop:	Built-in endstop switches
IP rating:	IP66 dynamic and IP69K static

### Options:

- Hall effect sensor
- Endstop signals
- Safety nut in push or pull
- Possible IC options for LA25: IC Basic, IC Advanced, CAN bus and Parallel
- IECEx/ATEX certification

### Scope of application:

- Agricultural applications
- Outdoor Power Equipment
- Pergola and louvre
- Marine
- Industrial automation
- Ventilation and farming solutions

### Facts:

- Heavy duty aluminium housing for harsh conditions
- Compact design
- Small and strong

# Actuators

## LA23

IC INTEGRATED CONTROLLER



The actuator LA23 is a small and strong push or pull actuator with a high lifting force up to 2500N. The LA23 can be used in various applications where size is important.

### Features:

Thrust:	Max. 2,500 N
Speed:	9.4 mm/s
Stroke length:	20 - 300 mm
Duty Cycle:	10 %
Voltage:	12, 24 V DC
Endstop:	Electrical and mechanical end-stop

### Options:

- Exchangeable cable
- Potential free endstop signals
- Safety nut
- Mechanical spline
- IPX6
- Possible IC option for LA23: IC Basic

### Scope of application:

- Agricultural applications
- Ventilation and farming solutions
- Industrial automation
- Wind turbines

### Facts:

- Small and strong
- Compact design
- High lifting force
- Designed for outdoor use

## LA22



The actuator LA22 is an inline actuator specially designed with a small overall dimension for easy use in Industrial automation, agricultural machinery and rehabilitation applications. Thanks to its small outer dimensions and linear design, the LA22 is well suited for applications where installation space is limited, such as on wheelchairs.

### Features:

Thrust:	Up to 400 N
Speed:	13 - 37 mm/s
Stroke length:	Max. 200 mm
Duty Cycle:	10 %
Voltage:	12 or 24 V DC
Endstop:	LS/LSD or current cut-off

### Options:

- IP65 housing
- Different back fixtures
- Various piston rod eyes

### Scope of application:

- Agricultural applications
- Wheelchairs
- Industrial automation

### Facts:

- Solid metal construction
- Unique space saving design
- Low noise level

## LA14

IC INTEGRATED CONTROLLER



The actuator LA14 is a very tough actuator with a high IP degree and aluminium housing, making it ideal for use in harsh and demanding environments.

The LA14 offers top quality in every detail and ensures reliable performance in temperatures ranging from -40° to +85 °C. With its small size the LA14 is well suited for applications that require short linear movements.

### Features:

Thrust:	Max. 750 N
Speed:	Max. 45 mm/s
Stroke length:	20 - 130 mm
Duty Cycle:	Up to 20 %
Voltage:	12 or 24 V DC
Endstop:	Built-in limit switches
IP rating:	IP66 dynamic and IP69K static

### Options:

- Potentiometer
- Reed switch
- Possible IC options for LA14:  
IC Basic, IC Advanced, CAN bus and Parallel
- IECEx/ATEX certification

### Scope of application:

- All kinds of mobile applications, especially fertiliser spreaders and salt gritters
- Industrial automation
- Ventilation
- Valves
- Dosage

### Facts:

- Heavy-duty aluminium housing for harsh conditions
- Stainless steel inner tube and piston rod
- Designed for outdoor use

## LA12

IC INTEGRATED CONTROLLER



Thanks to its small size and outstanding performance, the actuator LA12 provides a practical and cost-effective alternative to small-scale traditional hydraulic and pneumatic systems. The LA12 is ideal for applications requiring short linear movements.

After many years on the market, the actuator LA12 demonstrated that it is a very reliable and robust actuator that can handle almost any situation and challenge.

### Features:

Thrust:	Max. 750 N
Speed:	Max. 40 mm/s
Stroke length:	40 - 130 mm
Duty Cycle:	Up to 20 %
Voltage:	12 or 24 V DC
Endstop:	Built-in limit switches

### Options:

- Potentiometer
- Reed switch
- IP66 housing
- Possible IC option for LA12: IC Basic

### Scope of application:

- All kinds of mobile applications
- Industrial automation
- Ventilation
- Valves
- Dosage

### Facts:

- Compact and lightweight
- Reinforced glass fibre piston rod
- Designed for outdoor use

# Lifting columns

DL2



The lifting column DL2 is designed for workstations and is the ideal choice for duties such as height adjustment on computer workstations, work benches or a wide selection of other duties. Inside each column is a modified LA31 actuator.

**Features:**

Thrust: Max. 2,500 N  
Speed: 43 mm/s  
Stroke length: 500 mm  
Duty Cycle: 5 %

**Options:**

- Mounting bracket (order number 0578006)
- Hall sensors to ensure memory drive and parallel drive

**Scope of application:**

- Computer workstations
- Work benches
- Platforms

**Facts:**

- Low noise level
- Compact and mounting friendly design
- Single drive
- Parallel drive

BL1



The 3-part lifting column BL1 is specially designed for applications where compact lifting is necessary in connection with a long stroke length. With its strong stability it is suited for boat applications and recreational vehicles.

**Features:**

Thrust: Max. 2,000 N  
Speed: Max. 18 mm/s  
Duty Cycle: 10 %

**Options:**

- Dual Hall for positioning
- Safety nut

**Scope of application:**

- Recreational vehicles (RV)
- Boats
- Pet/Veterinary equipment

**Facts:**

- High degree of stability
- Esthetic and compact design
- Synchronised movement of profiles in column
- Easy cleaning and low maintenance
- Low noise level, increased comfort

## LP2



The lifting column LP2 is the ideal choice for height adjustment of examination tables, work benches and industrial applications. It can be operated with two, three or four columns in parallel.

### Features:

Thrust: Max. 6,300 N  
Stroke length: 100 - 400 mm  
Duty Cycle: 10 %

### Options:

- Reed switch
- Safety nut
- Mounting bracket
- Gas spring for increased lifting capacity (only LP2-5)

### Scope of application:

- Height adjustment on computer workstations
- Work benches

### Facts:

- Advanced design
- High quality design
- Ideal for operation with up to a max. of 4 units

## LP3



The lifting column LP3 is ideal for applications where there is a demand for both lifting height and small installation dimensions. The telescopic column is compatible with LINAK control units and can operate individually or in parallel.

### Features:

Thrust: Max. 2,400 N  
Stroke length: 300 - 600 mm  
Duty Cycle: 10 %

### Options:

- Reed switch
- Mounting bracket
- Safety nut

### Scope of application:

- Height adjustable conveyors
- Factory automation
- Ergonomic work spaces
- Workstations

### Facts:

- Very compact 3-stage column
- Robust anodised aluminium surface
- Extremely low noise level

# Accessories

## SMPS-T160



The SMPS-T160 is a powerful Switch Mode Power Supply typically used for outdoor applications within the TECHLINE® segments. SMPS-T160 is an eco-friendly solution due to a low standby power consumption compared to traditional transformer solutions. The universal input voltage makes the SMPS adaptable to the worldwide market irrespective of the input voltage.

### Features:

- Nominal input voltage (mains voltage): 100VAC - 240VAC +10/-15%
- Nominal input frequency: 50 Hz/60 Hz
- Typical standby power consumption: Approx. 0.1 W
- IP rating: IP66
- Compatible with: LA12 IC™, LA14 IC, LA23 IC, LA25 IC and LA35 IC

### Scope of application:

- Pergola
- Farming solutions
- Food and beverage
- Valves
- Traffic management
- Energy solutions

### Facts:

- Exchangeable mains and output cables
- Light weight and compact design
- Plug & Play solution

## Flange Mounting Bracket



The Flange Mounting Bracket serves an easy flange mounting of LINAK electric actuators on industrial valves typically used in wastewater treatment facilities. The bracket interface dimensions are in accordance with the industry standards ISO 5210 and ISO 5211, and it fits with the flange types F07 and F10.

### Features:

- Flange mounting possibilities
- Surface treatment: Stainless steel
- Compatible with: LA36, LA37

### Scope of application:

- Valves

### Facts:

- Bracket for flange mounting of actuators
- In accordance with ISO 5210 and ISO 5211
- Flanges F07 and F10

# Controls

HB40



The TECHLINE HB40 handset is intended to be used with the SMPS-T160. This sturdy compact unit is ergonomically designed and ideal for a vast range of applications.

**Facts:**

- Ergonomic, compact design
- Robust plastic housing
- IP rating: IP66
- Compatible via SMPS-T160 with:  
LA12 IC, LA14 IC, LA23 IC, LA25 IC, LA35 IC
- Compatible with: LA33 IC, LA36 IC, LA37 IC

DP



The DP has a compact design and can control up to three actuators independently.

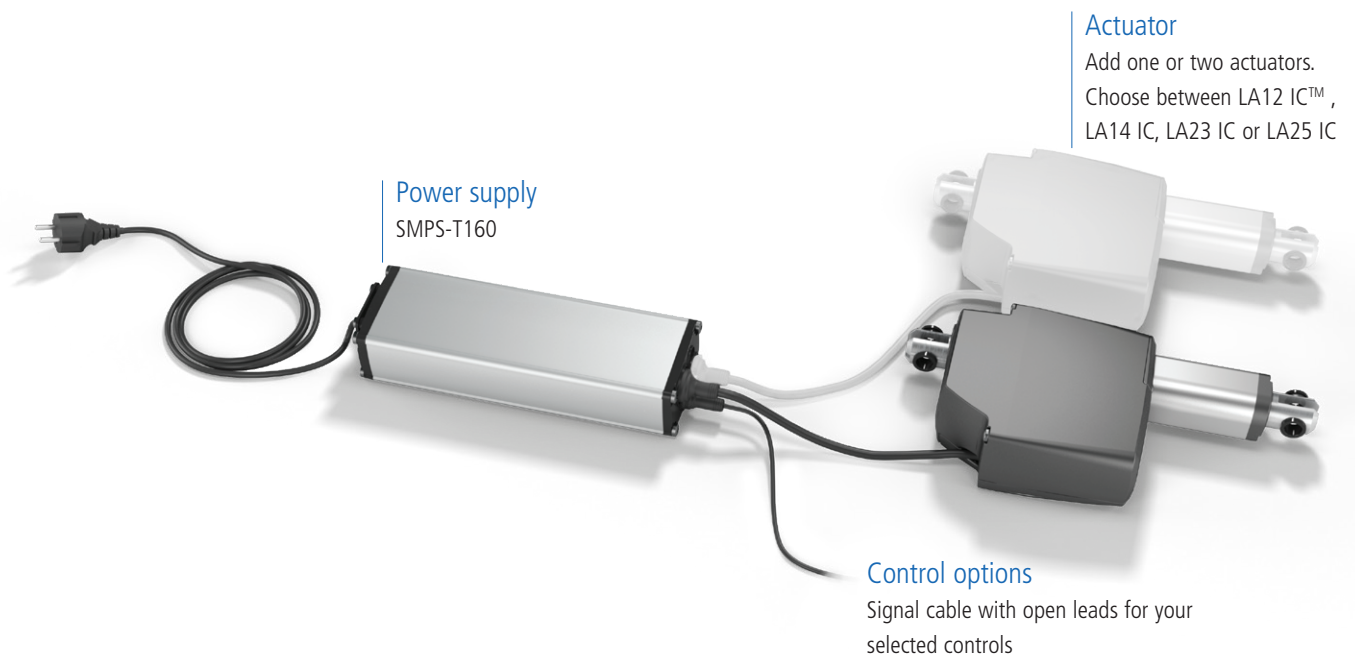
**Facts:**

- IP rating: IP30
- Compatible via SMPS-T160 with:  
LA12 IC, LA14 IC, LA23 IC, LA25 IC, LA35 IC
- Compatible with: LA33 IC, LA36 IC, LA37 IC



# System solutions

## Plug & Play™



Power supply  
SMPS-T160

### Actuator

Add one or two actuators.  
Choose between LA12 IC™ ,  
LA14 IC, LA23 IC or LA25 IC

### Control options

Signal cable with open leads for your  
selected controls

OR

LINAK controls:

- Hand control (HB)
- Remote control (RF)
- Desk panel (DP)

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 actuators at a time with individual or simultaneous run

## LINAK offers service worldwide

Please contact your local LINAK office with your enquiry



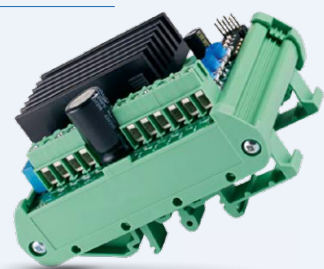
# Enhance the performance of your actuators

## LINAK **third-party** products

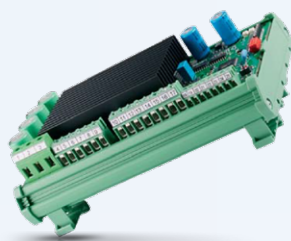
To tailor actuator solutions for almost any need, LINAK offers a range of third-party products compatible with our actuators.

### External control boxes

TR-EM-208



TR-EM-273



WCU



### Controllers

Rocker switch



RF control  
EVO



TP1



[www.linakthirdparty.com](http://www.linakthirdparty.com)





Resting on the pillars of the LINAK values







**PARTNERSHIP**  
Strategic partnerships within R&D, after-sales, logistics, marketing and manufacturing



**INNOVATION**  
Meaningful value by converting great new ideas into solutions of tomorrow



**WORLD-CLASS PRODUCTION**  
Process automation built on newest technology and run by LEAN principles



**GLOBAL PRESENCE**  
Updated market insights and local support offered to every customer



**KNOWLEDGE**  
In-depth knowledge of the market and the market trends makes LINAK a true solutions provider.



# Explore the rich technology behind actuators

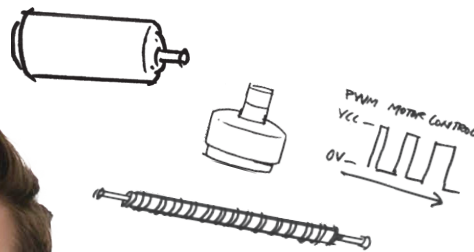
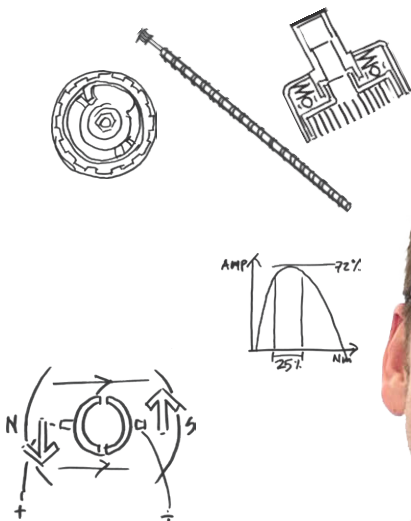


At the Actuator Academy™, you will find a library of videos and information about actuator components, actuator testing, and intelligent actuator control.

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.

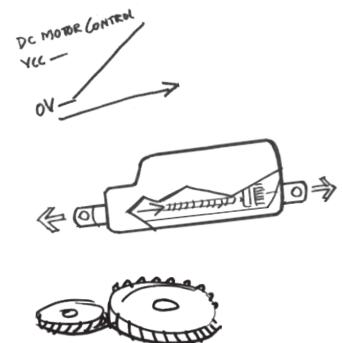
We hope to inspire you and ultimately make you wiser on the moving electric revolution we are all part of.

**Happy exploring!**

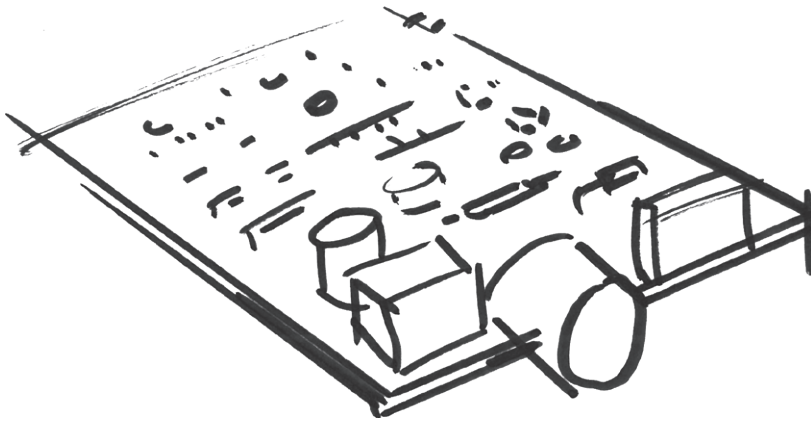


Check out the  
Actuator Academy

[LINAK.COM/  
ACTUATOR-ACADEMY](http://LINAK.COM/ACTUATOR-ACADEMY)



# Intelligent movement



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.

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

## IC INTEGRATED CONTROLLER™

- Plug & Play and customisation
- Parallel run
- BUS communication (CAN, MOD and LIN)

For more information on IC, please visit [LINAK.COM](http://LINAK.COM) or scan the QR code



# Testing programme

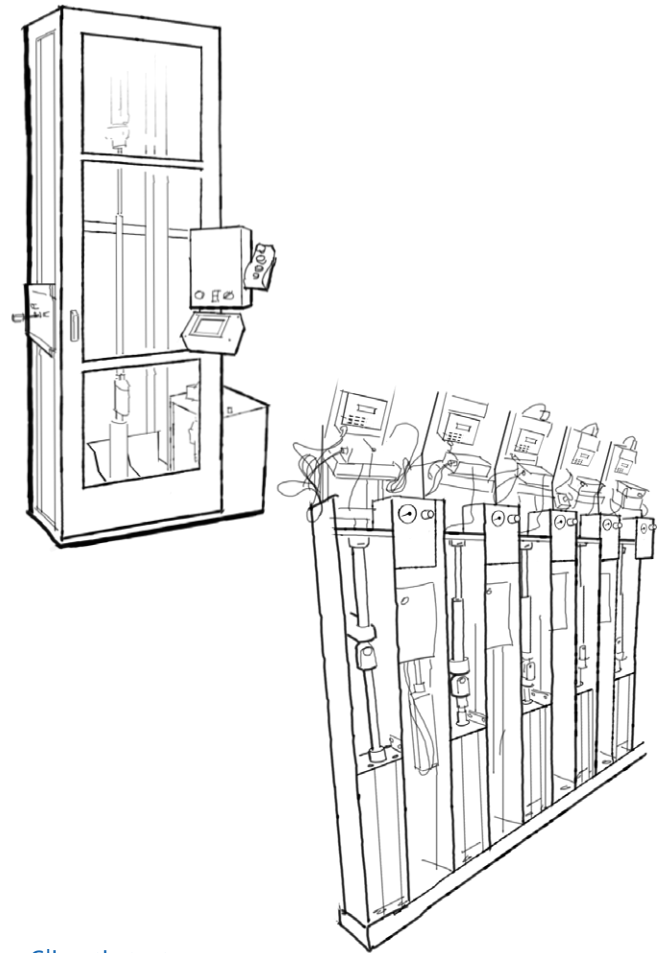
In each industrial application, the actuator is just one component of many, but at LINAK® we fully appreciate that it is of utmost importance to you and your customers. Not a single actuator leaves the factory until it has undergone a 100% function test.

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.

- |                                |                          |
|--------------------------------|--------------------------|
| <b>EN60529-IP6X</b>            | - Dust                   |
| <b>EN60529-IPX6</b>            | - Water                  |
| <b>ISO16750- IP69K</b>         | - High pressure cleaning |
| <b>IEC60068-2-3</b>            | - Moisture storage       |
| <b>IEC60068-2-30</b>           | - Operation in moisture  |
| <b>ISO16750-4:2010</b>         | - Dunk test              |
| <b>EN60068-2-52</b>            | - Salt spray             |
| <b>BS7691 Section 6.11.2.4</b> | - Chemicals              |

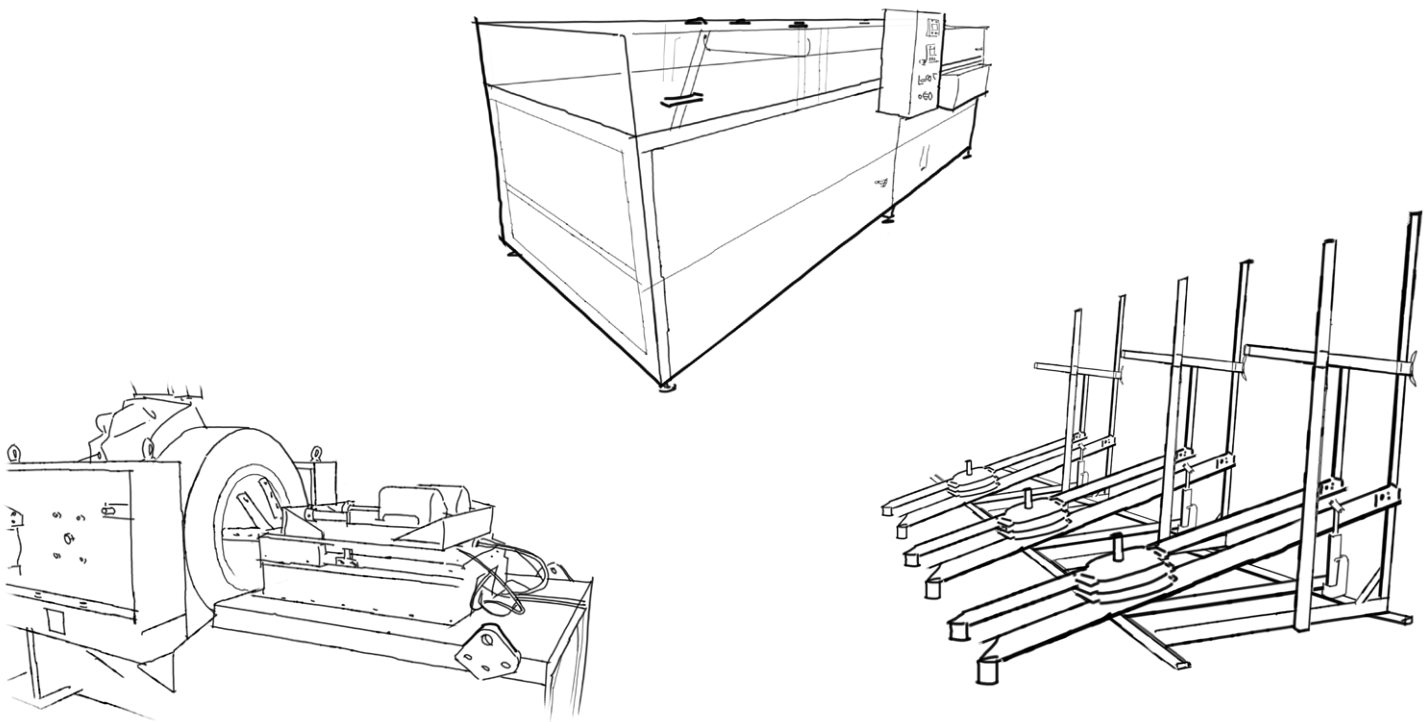
## Actuator testing

See how LINAK industrial actuators are tested:

[LINAK.COM/SEGMENTS/TECHLINE/TECH-TRENDS/TESTING/](https://www.linak.com/segments/techline/tech-trends/testing/)







### 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/](http://linak.com/segments/techline/tech-trends/testing/)





For further information about TECHLINE:  
[LINAK.COM/SEGMENTS/TECHLINE/](https://www.linak.com/segments/techline/)



## Global presence

LINAK has a well-developed sales and service organisation in Europe, Americas, Asia and Australia. Therefore, we can assist you and your customers locally, under the global sales concept idea:  
Be global, act local

### 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 hereof, 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](https://www.linak.com)

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WE IMPROVE YOUR LIFE