



Safety

[LINAK.COM/MEDLINE-CARELINE](https://www.linak.com/MEDLINE-CARELINE)

LINAK® 
WE IMPROVE YOUR LIFE

We Improve Your Life

Linear actuator movement might be the simplest movement in the world. And yet, perfecting something simple is one of the hardest challenges.

Since LINAK® founder, Bent Jensen, came up with the idea for the first electric actuator in order to help a friend in a wheelchair, every engineer and specialist employed by LINAK has aimed to solve real-life challenges for real people.

To this day, our motto; 'We Improve Your Life' is reflected in everything we do. Whether we engage in product development, operation or implementation of technology, we always look for ways to make it easier for our customers to enter into collaborations and partnerships with us and to ultimately improve the lives and working conditions of end users.

Our solutions move people – their work and their lives. We Improve Your Life!

Safety is mandatory at LINAK®

Different healthcare applications need different safety features. Regardless of what application you are designing, LINAK offers a wide variety of standard and optional safety features.

This folder will give you a broader insight into some of our safety features.

Rely on your actuator

Based on many years of experience in developing electrical actuator solutions LINAK® understands the importance of mixing quality with safety, functionality and design.

In order to meet the extremely high standards for healthcare equipment, LINAK actuators contain many different safety features to make sure that you can rely on your actuator at all times.

**If you want to
know more
about Safety,
please contact
us or go to our
websites.**

**Go to
LINAK.COM**



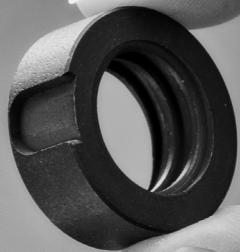


Self-lock:

To avoid actuator drifting, and potentially creating dangerous situations, LINAK® actuators come with a self-lock function. The minimum self-lock always equals the max. thrust lifting performance.

Mechanical end-stop

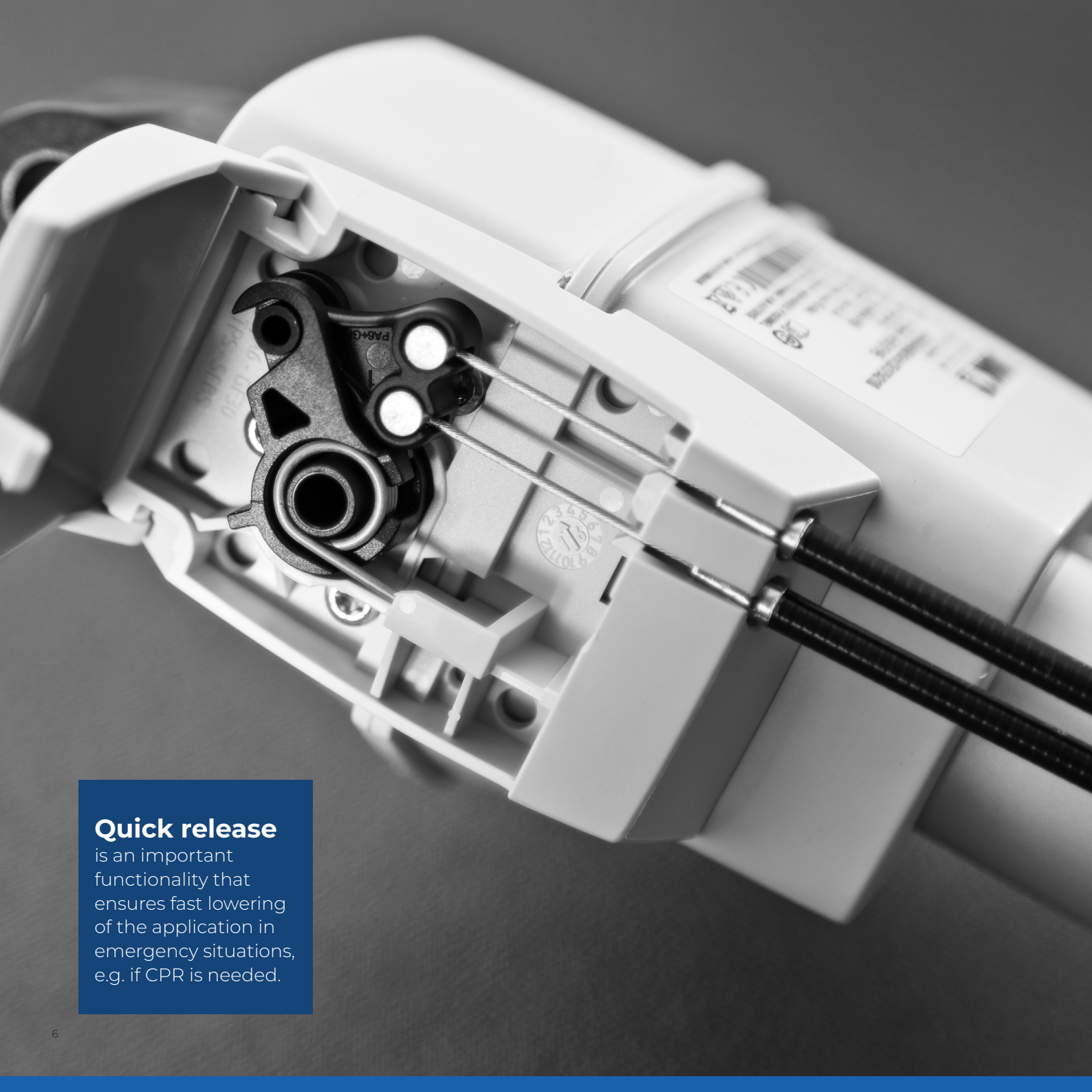
is an extra safety feature, making the actuator first-failure-safe. If the electrical end-stop switch should ever fail, the mechanical end-stop effectively stops all movement.



Safety nut: A safety nut acts as a precaution against potential failure of the main nut. If the main nut breaks, the safety nut will immediately carry the full load and thereby prevent potentially harmful falling.

Spline: LINAK® offers three different types of splines: mechanical, electrical, and ratchet spline*. All three spline types prevent accidental squeezing of limbs between moving parts in an application and prevent the application from being damaged.

* LA40 HP offers Intelligent Ratchet Spline functionality for customised control of the actuator.



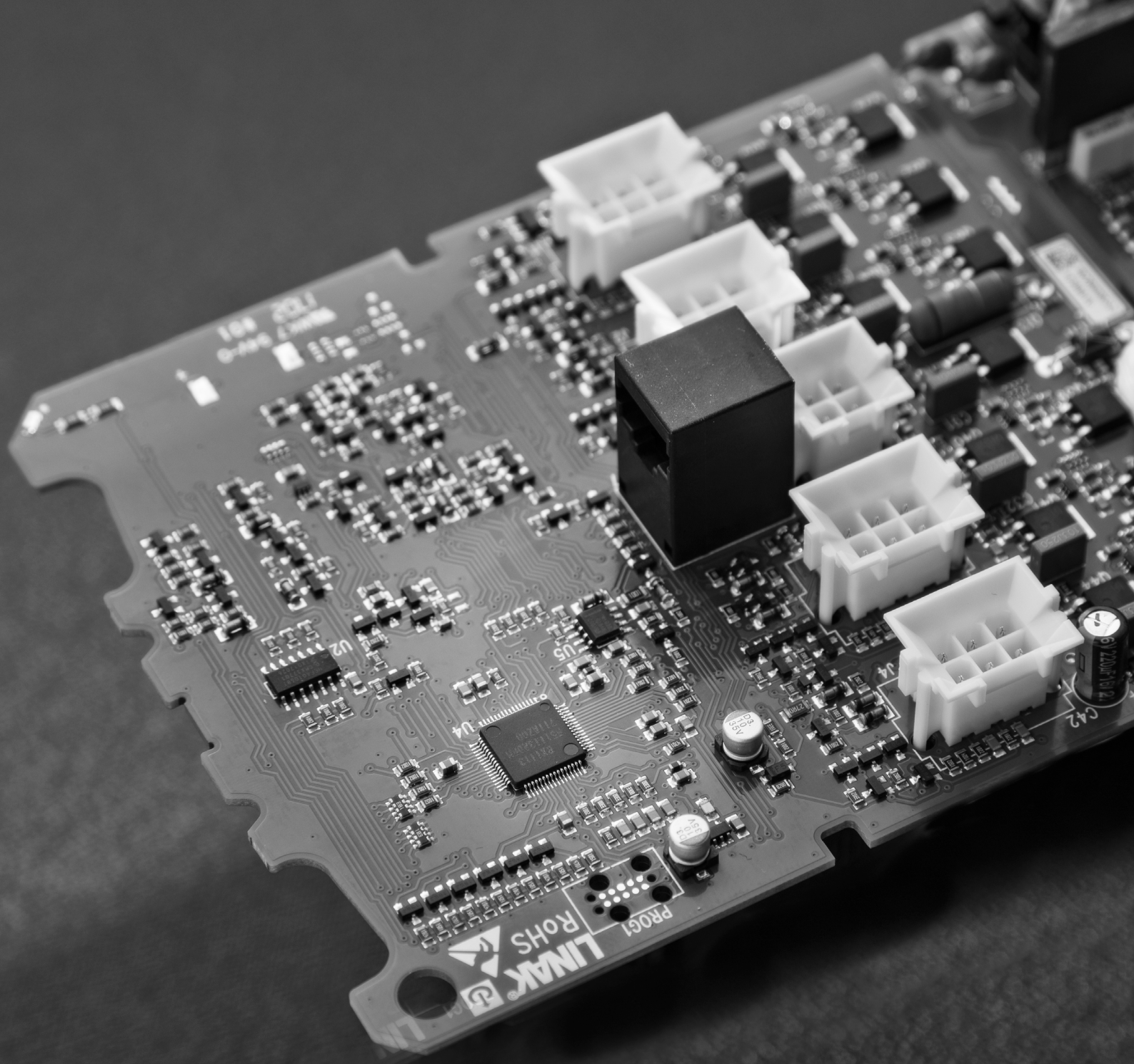
Quick release

is an important functionality that ensures fast lowering of the application in emergency situations, e.g. if CPR is needed.



Manual lowering

is a standard safety feature for lifting actuators in hoists and is used in emergency situations if a power cut occurs.



PROG1
LINAK
ROHS

LINAK® OpenBus™ - safety included

LINAK has a series of intelligent OpenBus™ control boxes. Apart from being able to coordinate multiple actuators to form complex and precise movement patterns, they include several safety-improving features like e.g.

Power Request: The LINAK OpenBus™ technology platform includes a unique safety concept consisting of two separate circuits - data and power request. Both data and power request need to be active to run a function.

This reduces the risk of unintended movement to an extremely low level, increasing the safety of the application.

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service





Mains indicator:

LINAK® control boxes have a mains indicator. This shows that the application is connected to mains, and cannot be moved safely before unplugging the cables. This reduces the risk of damaging the cables.

Brake alarm:

The LINAK OpenBus™ control boxes have a buzzer, which can be used as a brake alarm. When connected to mains, the system will activate an alarm if the wheels are not braked. This helps prevent damage to your healthcare application and increases patient safety.

General safety features

Enhancing safety is often a mix of several initiatives. To make healthcare applications able to be in compliance with the rules in force requires a broad focus.

At LINAK® we have a high focus on specific product safety features. However, we also consider overall perspectives of general safety.

Safety right at hand

The development of LINAK® hand controls for healthcare equipment are based on research and usability studies to ensure proper functionality, intuitive interfaces and ergonomic design. This all increases the safety related to the use of the hand controls.

PU cables are able to retain their shape and are not as vulnerable as traditional PVC cables. This prolongs the cable life and prevents damage to the cable when moving the application.

Locking functionality: According to the IEC 60601-2-52 it is required that control functions can be locked. LINAK hand controls or attendant controls provide the possibility of adjusting and locking the use of specific functions and movements, thus preventing the occurrence of a dangerous position via improper use of the control.



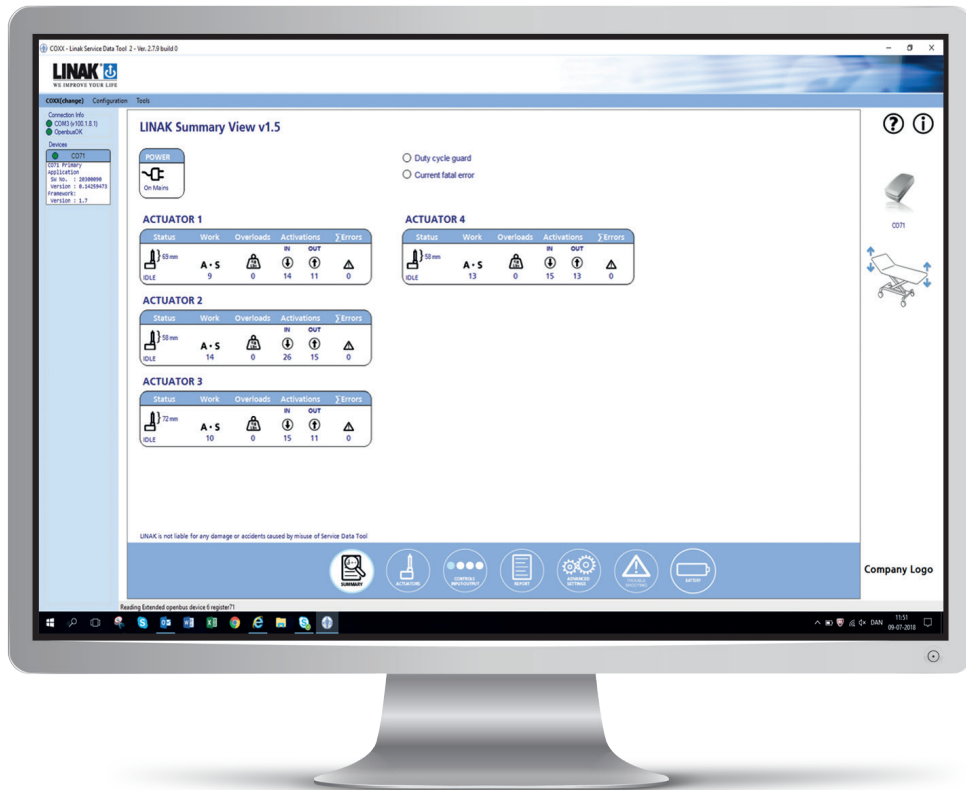


Flammability Classified:

LINAK® products are made of UL94 flammability classified materials – i.e. in compliance with IEC 60601-1 requirements. To minimise the risk of fire hazards, LINAK control boxes are made of UL94 V0 material, an even tougher requirement than stated in IEC 60601-1.

Cable locking:

LINAK products include cable locks to ensure that cables are connected at all times and the application is ready for electrical movement. The control boxes are constructed with a strong cable lock, protecting cables and plugs against physical stress and strong detergents.



Service Data Tool (SDT)

makes it possible to read out service data from the OpenBus™ control box by informing about the use of the actuator system. SDT acts as preventive maintenance by disclosing wear and tear long before the system fails. This ensures minimal downtime as maintenance can be scheduled in due time. Efficient maintenance also helps prevent misuse, thus prolonging the equipment life.

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Water protection:

Many healthcare applications must be able to withstand water and detergents when washed. LINAK® products for healthcare are at least IPX4 rated, however, when required, our systems can rate as high as IPX6 Washable DURATM.



Find more
information
about safety





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QUALITY

Built by market leading experts, using state-of-the-art technologies and perfected production methods, you can expect the same quality worldwide.



INNOVATION

Innovation is in our core. We take the lead and have the courage to make it real.



RESPONSIBILITY

We are responsible in what we do – towards customers, employees and t^rvironment. Creating trust is a natural part of who we are.



**LOCAL
& GLOBAL**

From global presence to local understanding. We believe in world-wide support and being close to our customers.