



Actuator systems for hospital beds

Perfection in movement

[LINAK.COM/MEDLINE-CARELINE](https://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!

Meet the healthcare challenges of tomorrow

The ageing population and fewer hands to take care of the patients drive the need for hospital beds. Using LINAK® actuator solutions allows for optimal movement, connectivity to the hospital information facility and digital services - all increasing caregiver efficiency.

System solutions for hospital beds

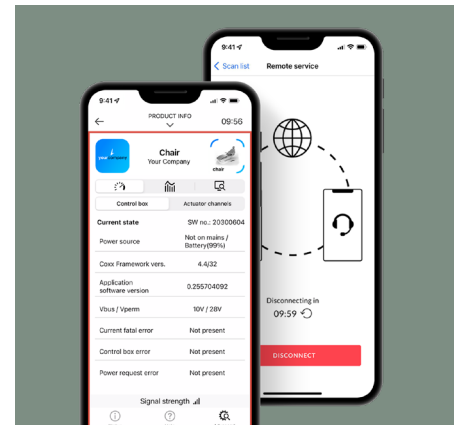
Any type of hospital bed must optimise patient comfort and safety and at the same time ensure ideal ergonomic working conditions for caregivers.

Hospital beds designed with a wide range of movement options and functionality can help relieve the strains on caregivers. LINAK offers multi-adjustable options of backrest, leg rest and/or knee rest and height.

The powerful movement options improve caregiver ergonomics with ideal working height and easy bed positioning. Movement supported by electric LINAK actuators contribute to job satisfaction.

Discover the digital potential of your healthcare business

Whether the need is remote troubleshooting, connection to third-party products or external system connectivity - LINAK is ready to start the digital journey with you.





Electric adjustment for any demand

The LINAK® product portfolio is extensive, making the number of system combinations almost endless. Whether you are introducing electric adjustment for the first time or you are updating your actuator system with OpenBus™ software, LINAK products are in full compliance with the required norms and standards in your market. This will make it easier for you to obtain the necessary medical approvals that your hospital bed needs.

Analogue actuator systems

LINAK provides complete basic analogue actuator systems, when you upgrade the manual system of your hospital bed to electric movement.

Digital systems with OpenBus options

Introducing LINAK OpenBus communication to your actuator system opens a whole new world of options – regarding control, performance as well as safety.

Intelligent Care Solutions™

Increase the intelligence of your hospital bed by adding for example extra actuators to create advanced coordinated movement patterns or by adding intelligent features such as a weighing system, Out Of Bed detection and interface to other accessories.

Scan for
more
information



LINAK.COM/BUSINESS-AREAS/HOSPITAL/ICU-BEDS/



Products for hospital beds

Linear actuators



LA20

- Max. thrust 2,500 N push/ 800 N pull
- Max. speed: 8.9 mm/s
- IPX6



LA40

- Max. thrust: 8,000 N push/ 2,000 N pull
- Max. speed: 19.2 mm/s
- IPX6 Washable DURA™



LA40 QR

- Max. thrust: 4,000 N push
- Max. speed: 9.0 mm/s
- PX6 Washable DURA™



LA34

- Max. thrust: 10,000 N push/ 4,000 N pull
- Max. speed: 18.0 mm/s
- IPX6

Lifting columns



LA44

- Max. thrust 12,000 N push/ Max. speed: 14.0 mm/s
- IPX6



BL1

- Dynamic/static bending moment: 250 Nm/500 Nm
- Max. speed: 18.0 mm/s at 2,000 N
- IPX6



LC1

- Dynamic/static bending moment: 1,320 Nm/1,600 Nm
- Max. speed: 18.0 mm/s at 4,000 N
- Max. speed: 30.0 mm/s at 2,000 N



Products for hospital beds

Batteries



BA16

- Capacity: 1.3 Ah
- Lead acid
- IPX6



BA18

- Capacity: 1.3 Ah
- Lead acid
- IPX6



BA19

- Capacity: 1.2 Ah
- Lead acid
- PX6 Washable DURA™



BA21

- Capacity: 2.9 Ah
- Li-Ion battery
- IPX6 Washable DURA™

Accessories



MJB2

- Modular Junction Box
- Analogue or OpenBus™
- IPX6 Washable DURA™



MJB5

- Modular Junction Box
- For use with OpenBus™ control boxes
- IPX6 Washable DURA™



UBL2

- OpenBus™ version
- Powerful light with 3 LEDs
- Software-controlled light intensity



Products for hospital beds

Control boxes



CO53

- 5-channel, 2-channel, OpenBus™ input ports
- Power: 200 W Switch Mode Power Supply
- IPX6



CA63

- 4-channel, analogue/digital control box with wireless functionality
- Power: 200 W Switch Mode Power Supply
- IPX6 Washable DURA™



CO61

- 4-channel, OpenBus™
- Power: 200 W Switch Mode Power Supply
- IPX6 Washable DURA™



CO65

- 4-channel, OpenBus™
- Power: 280 W Switch Mode Power Supply
- IPX6 Washable DURA™



CO71

- 4-channel, OpenBus™ with Bluetooth®
- Power: 350 W Switch Mode Power Supply
- IPX6 Washable DURA™



CA20

- 4-channel, analogue
- Power: 90 W Switch Mode Power Supply
- IPX6



PJ2

- 2-channel port extension
- Compact design for easy application mounting
- IPX6 Washable DURA™

IPX6 Washable DURA™

To meet the increasing hygiene demands in hospitals, LINAK® provides complete washable systems. Because we test far more than norms and standards require, we have set our own high standard – IPX6 Washable DURA™. This means that your hospital bed application can withstand repetitive machine washing far beyond current market requirements.

Choose the right control box for your healthcare equipment





Products for hospital beds

Hand controls



HB70

- OpenBus™ or analogue
- Up to 10 buttons
- IPX6 Washable



HL70

- OpenBus™ or analogue
- Up to 10 buttons, lockable
- Up to IPX6



HB400

- Magnet locking and backlight
- Up to 6 rows, 12 buttons, 6 LEDs
- IPX6 Washable DURA™



HL400

- OpenBus™ or analogue
- Up to 10 buttons, lockable
- IPX6



HB80

- OpenBus™
- Up to 12 buttons
- IPX6 Washable DURA™



HD80

- OpenBus™
- Up to 12 buttons, lockable, LEDs
- IPX6 Washable DURA™



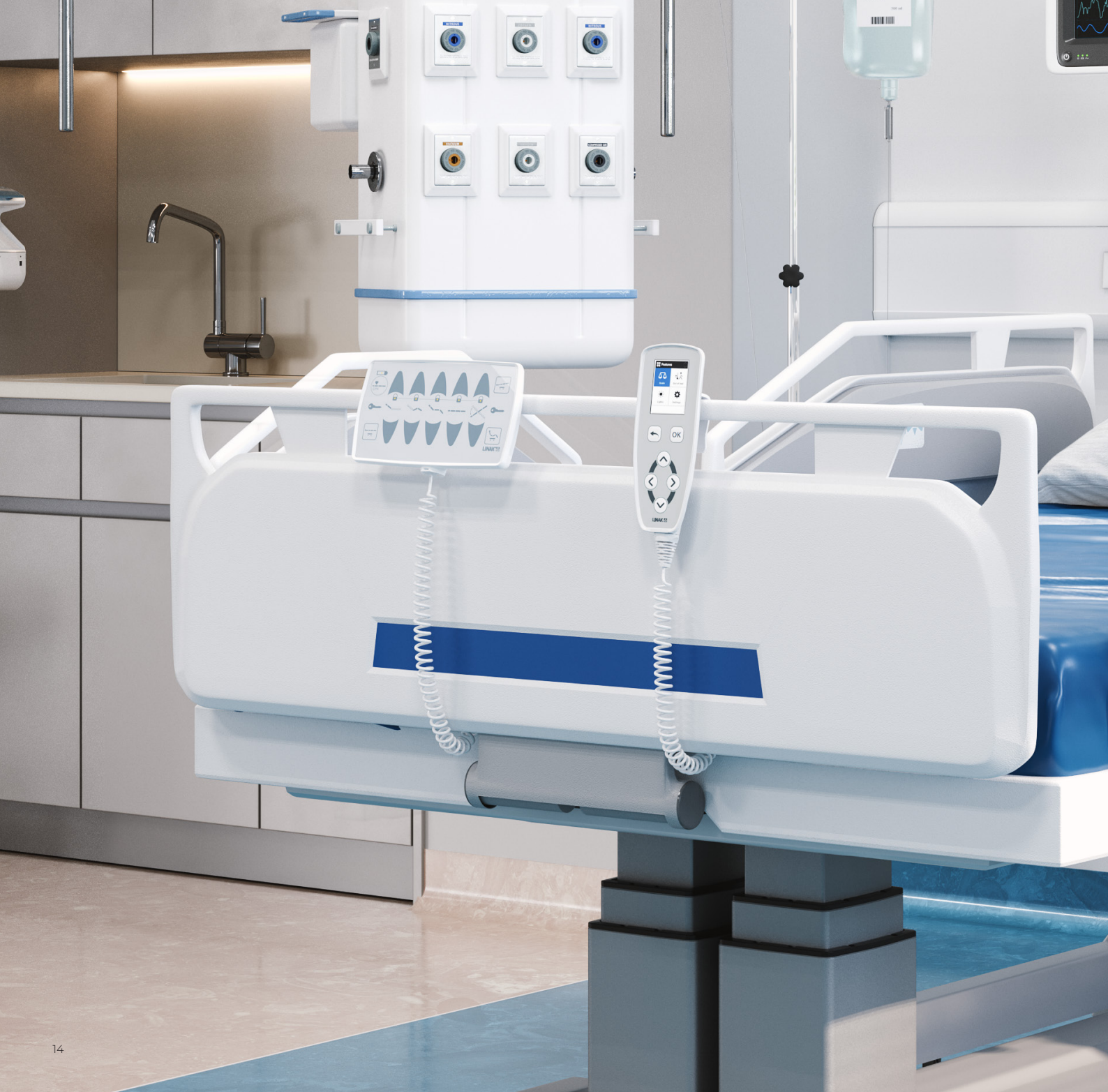
HB100

- LINAK® Weighing solution
- Intuitive user interface
- IPX6 Washable DURA™



HB200

- Wireless Bluetooth®
- Low Energy
- Lightweight
- IPX6



Products for hospital beds

Attendant controls



ACO

- OpenBus™
- Up to 21 buttons
- IPX6 Washable DURA™



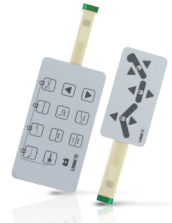
ACOM

- OpenBus™
- Up to 13 buttons, LEDs
- IPX6



ACC

- OpenBus™
- Up to 11 buttons, lockable
- IPX6



ACK

- OpenBus™
- Up to 11 buttons, lockable
- Single or double control

Foot switch



FPP

- OpenBus™
- Up to 20 buttons
- IPX6



FS3

- Analogue, OpenBus™ or wireless
- Unique design
- Bed or floor model



Intelligent Care Solutions™

Across the world, the number of people in need of care is growing. At the same time, there are fewer hands to do the caring. LINAK® develops systems to support the challenge – Intelligent Care Solutions™.

The LINAK intelligent OpenBus™ system is based on a modular platform and enables a wide range of accessories for increased functionality and comfortable solutions like the weighing solution and Out Of Bed detection.

With the intelligent LINAK OpenBus system, you can add a long range of features to the actuator systems such as advanced movement patterns, service data information and intelligent sensors such as weighing solution, Out Of Bed detection and more. All to improve efficiency for healthcare professionals, comfort for patients and general safety for both.

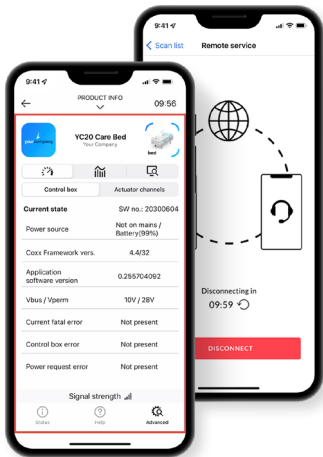
External system connectivity is made easy with LINAK Communication Interface LCI™. LCI can make Out Of Bed or cleaning notifications available on a smartphone, PC or central nurse panels, improving caregiver efficiency. With LCI and OneConnect™, the digital journey has just begun.

OneConnect™



OneConnect™

OneConnect is your ONE digital solution from LINAK®. **One app** for your customers and service technicians, **One cloud** for help content and remote troubleshooting, and **One portal** where you manage it all. Simply choose a LINAK control box with built-in Bluetooth® and you are ready to join OneConnect.



Remote
access to
system data

View
system
status
on the fly



Access to
system
data via
Bluetooth®



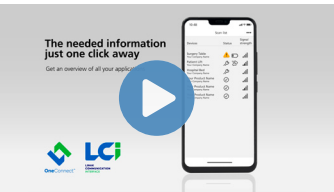
Customise
your help
content

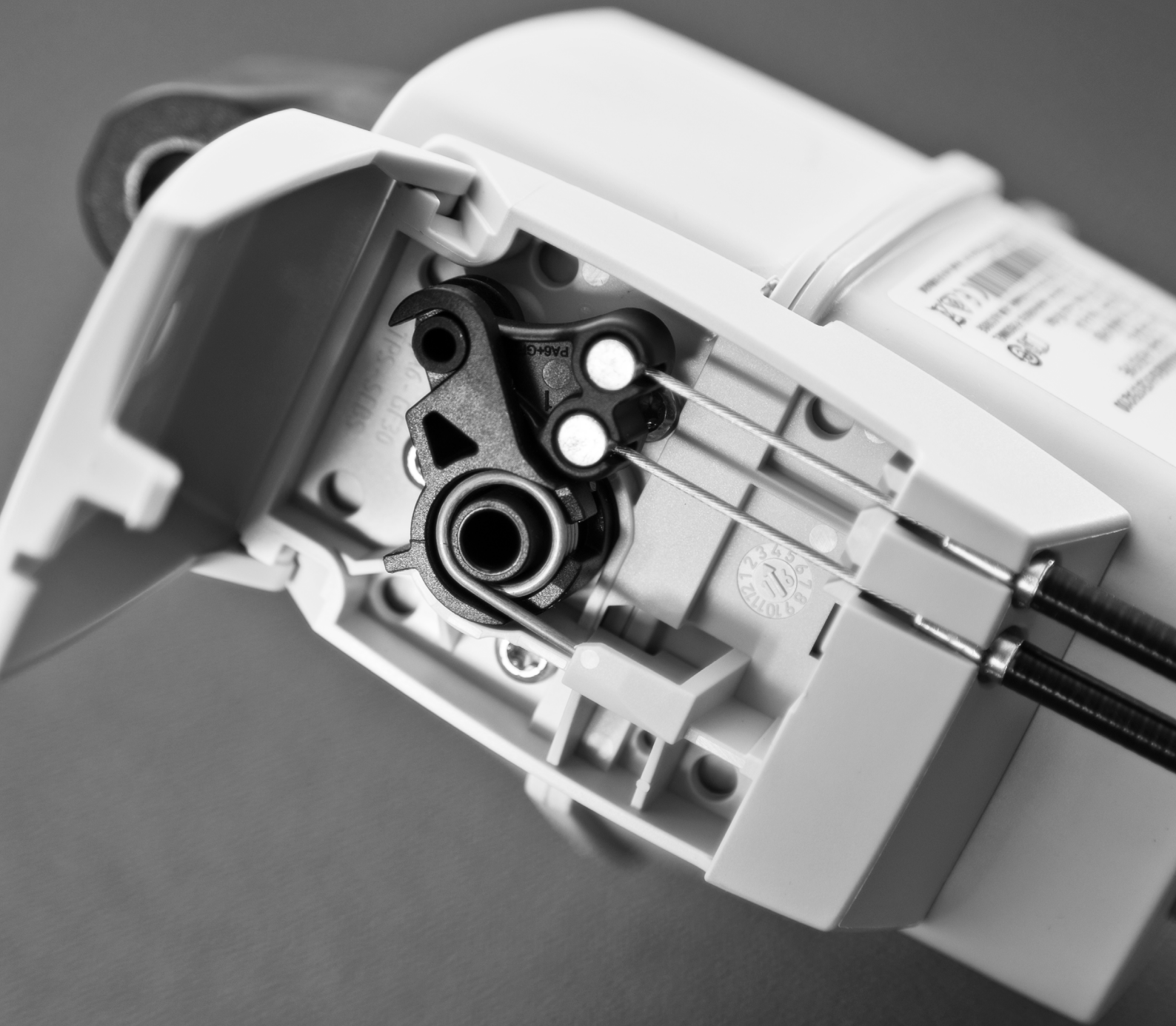


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company's
aesthetics



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Safety is mandatory

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. Based on many years of experience

in developing electric actuator system solutions, LINAK understands the importance of mixing quality with functionality, safety and design. Below is a selection of some of the LINAK safety features.

Self-locking	To avoid actuator drifting and potentially creating dangerous situations.
Mechanical end-stop	This is an extra safety feature, making the actuator first-failure safe.
Safety nut	A safety nut acts as a precaution against potential failure of the main nut.
Spline	This is an extra safety feature, making the application safe. LINAK offers four different spline types: mechanical, electrical, ratchet spline and intelligent ratchet spline.
Quick Release	This is an important functionality that ensures fast lowering of the application in emergency situations, e.g. if CPR is needed.
Mains indicator	LINAK control boxes have a mains indicator.
Brake alarm	The LINAK OpenBus™ control boxes have a buzzer which can be used as a brake alarm.
PU cables	PU cables retain their shape and are not as vulnerable as traditional PVC cables.
Locking functionality	In accordance with IEC 60601-2-52, it is required that control functions can be locked.
Water protection	LINAK systems can rate as high as IPX6 Washable DURA™.

Find more information here



Enhancing safety is often a mix of several initiatives

Enabling healthcare applications to comply with applicable rules requires a broad and dedicated focus.



Flexibility with your system data

LINAK® Communication Interface (LCi™) is an extraordinarily flexible communication protocol, designed for advanced communication with LINAK OpenBus™ control boxes. Develop solutions for your LINAK systems that optimise your healthcare workflows and improve the lives of nurses, doctors and service technicians. Simply choose a compatible LINAK control box and you are ready for LCi.



- Pull live system data from LINAK systems
- Wireless Bluetooth® or wired (UART) communication
- Transfer status of all healthcare beds in a facility to a database



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



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



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



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