



Actuator LA18 IC Standard User manual

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Preface

Dear User,

We are delighted that you have chosen a product from LINAK®.

LINAK systems are high-tech products based on many years of experience in the manufacture and development of actuators, electric control boxes, controls and chargers.

This User Manual does not address the end-user. It is intended as a source of information for the manufacturer of the equipment or system only, and it will tell you how to install, use and maintain your LINAK electronics. It is the responsibility of the manufacturer of the end-use product to provide a User Manual where relevant safety information from this manual is passed on to the end-user.

We are sure that your LINAK product/system will give you many years of problem-free operation.

Before our products leave the factory they undergo full function and quality testing. Should you nevertheless experience problems with your LINAK product/system, you are always welcome to contact your local dealer. LINAK subsidiaries and some distributors situated all over the world have authorised service centres, which are always ready to help you.

LINAK provides a limited warranty on its products. This warranty is, however, subject to correct use in accordance with the specifications, maintenance being done correctly, and any repairs being carried out at a service centre, which is authorised to repair LINAK products. You can review the full terms of the LINAK warranty on the LINAK website www.linak.com/warranty.

Changes in installation and use of LINAK products/systems can affect their operation and durability. The products are not to be opened by unauthorised personnel.

The User Manual has been written based on our present technical knowledge. We are constantly working on updating the information and we therefore reserve the right to carry out technical modifications.

LINAK A/S

Valid for:

This User Manual is valid for the following products:

(See the first 3 - 5 characters on the label)

Actuators:	LA18 IC Standard Master and a LA18 IC Standard Follower
Power supply:	SMPS001, SMPS002 or SMPS006
Wireless controls:	HC05, HC10, HB10, HC40 Standard
Accessories:	LEDLightRail001

Important information

Important information on LINAK® products can be found under the following headings:



Warning!

Failure to comply with these instructions may result in accidents involving serious personal injury.



Failing to follow these instructions can result in the product being damaged or being destroyed.

Safety instruction



General

Safe use of the system is possible only when the operating instructions are read completely and the instructions contained are strictly observed.

Failure to comply with instructions marked with the "NOTE" symbol may result in serious damage to the system or one of its components.



It is important for everyone who is to connect, install, or use the systems to have the necessary information and access to this User Manual. Follow the instructions for mounting – risk of injury if these instructions are not followed.



The appliance is not intended for use by young children or infirm persons without supervision.



If there is visible damage on the product it must not be installed.



Note that during construction of applications, in which the actuator is to be fitted, there must be no possibility of personal injury, for example the squeezing of fingers or arms.



Only the power supply type SMPS001, SMPS002 or SMPS006, shall be used with the system.

The power supply shall not be covered while operating to allow sufficient cooling of this appliance.



Assure free space for movement of application in both directions to avoid blockade.



The appliance is only to be used with the power supply unit provided with the appliance.

Safety issues



The builder of the equipment shall ensure that the use of the component complies with relevant standards – like the Machine Directive. Care must be taken to avoid squeezing of cables as it can cause movement of the system!



The SMPS001/002/006 must not be packed in heat insulating material, but must be placed so that it can emit waste heat to the surroundings. There are no ventilation holes to consider, the SMPS emits heat through its surface.



Only the power supply type SMPS001, SMPS002 or SMPS006, shall be used with the system.

Before installation, re-installation, or troubleshooting:

- Stop the actuators
- Pull out the mains plug.
- Relieve the actuators of any loads, which may be released during the work.

Before start-up:

- Make sure that the system has been installed as instructed in this User Manual.
- Make sure that the voltage of the actuator system/SMPS is correct before the system is connected to the mains.
- System connection. The individual parts must be connected before the actuator system/SMPS is connected to the mains. See the User Manual for LINAK actuators, if necessary.

During operation

- If the actuator system makes unusual noise or smells, switch off the mains voltage immediately.
- Take care that the cables are not damaged.
- The products must only be used in an environment, that corresponds to their IP protection.

Misc.

Updated manuals and declarations can always be found here:
www.linak.com/homeline

Only for EU markets



This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.



Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

Only for Non EU markets



Persons who do not have the necessary experience or knowledge of the product/products must not use the product/products. Besides, persons with reduced physical, sensory or mental abilities must not use the product/products, unless they are under surveillance or they have been thoroughly instructed in the use of the apparatus by a person who is responsible for the safety of these persons.



Moreover, children must be under surveillance to ensure that they do not play with the product.

Misuse



Do not overload the actuators – this can cause danger of personal injury and damage to the system.



When the actuator is in fully retracted position, the load on the actuator must not exceed specified max. self-lock.



Do not use the system in environments other than the intended indoor use

Repairs

In order to avoid the risk of malfunction, all HOMELINE® repairs must only be carried out by authorised LINAK service centres or repairers, as special tools must be used and special gaskets must be fitted. Products under warranty must also be returned to authorised LINAK service centres. Further information on LINAK HOMELINE warranty can be found on the LINAK website www.linak.com/warranty.



Warning!

If any of the HOMELINE® products are opened, there will be a risk of subsequent malfunction.



Warning!

The HOMELINE® systems are not resistant to cutting oil.

**DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY
2006/42/EC ANNEX II B**

LINAK A/S
Smedevænget 8
DK - 6430 Nordborg

Herewith declares that LINAK HOMELINE® products as characterized by the following models and types:

Control Boxes	CB9H, CBH Advanced, CBH Basic
Linear Actuators	LA27, LA29, LA31 HOMELINE
Dual Actuators	TD3, TD4, TD5
Controls	HB10 RF, HB20RF, HB60, HC10, HC10RF, HC20RF, HC40
Accessories	Bluetooth Adapter, DC CONNECTOR, LED Lightbox, Lightplug001, Massage Motor, SMPS001, SMPS001, SMPS002, SMPS006

comply with the following parts of the Machinery Directive 2006/42/EC, ANNEX I, *Essential health and safety requirements relating to the design and construction of machinery*:

1.5.1 Electricity supply

The relevant technical documentation is compiled in accordance with part B of Annex VII and that this documentation or part hereof will be transmitted by post or electronically to a reasoned request by the national authorities.

This partly completed machinery must not be put into service until the final machinery into which it is to be incorporated has been declared in conformity with the provisions of the Machinery Directive 2006/42/EC where appropriate.

Nordborg, 2019-10-21

LINAK A/S
John Kling, B.Sc.E.E.
Regulatory Affairs Manager
Authorized to compile the relevant technical documentation

Original Declaration

Misc. on the HOMELINE® system

Warranty

This HOMELINE product is subject to warranty pursuant to the terms of LINAK HOMELINE Warranty Paper, available on the LINAK website www.linak.com/warranty.

Maintenance

Clean dust and dirt on the outside of the system at appropriate intervals and inspect for damage and breaks. Inspect the connections, cables, and plugs and check for correct functioning as well as fixing points.



The cleaners and disinfectants must not be highly alkaline or acidic (pH value 6-8).

ETL-marking

Due to space limitations, the complete ETL-marking demands are not represented on the marking plates.
The full ETL Recognized Component markings are shown here.



C/N 120690
Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States



C/N 9901916
Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States



C/N 4008003
Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States



C/N 4008005
Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States



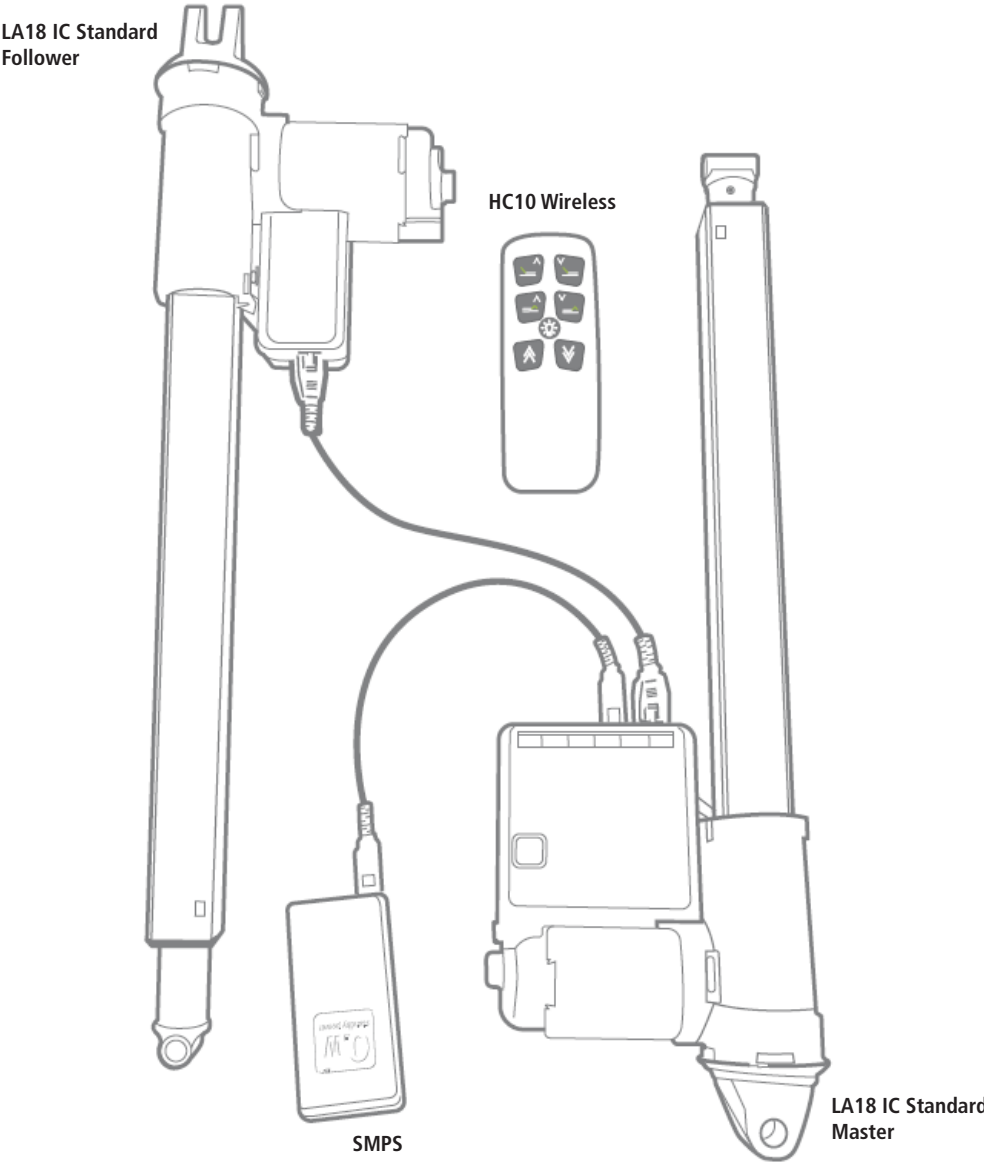
C/N 4008671
Conforms to UL962
Cert. to CSA Std. C22.2 No. 68-09
ETL Recognized Component mark for Canada and United States



C/N 4009507
Conforms to UL962
Cert. to CSA Std. No. 68-09
ETL Recognized Component mark for Canada and United States

System overviews

The LA18 IC Standard system consists of an LA18 IC Standard Master and an LA18 IC Standard Follower. The system is connected to the mains via an SMP5001/002/006 and controlled by a Bluetooth® hand control (HC05 Wireless, HC10 Wireless, HB10 Wireless or HC40 Standard).



How to pair

The system features Bluetooth® Low Energy technology, which makes it capable of being controlled via the wireless LINAK® hand controls. Furthermore, it makes it possible to control the bed via the Bed Control App. However, it can only receive commands from one device at a time, so the user must wait 5 seconds without pushing a button before it is possible to use another control/mobile device.

Pairing

1. Connect the system to the mains via the connection cable.
2. The LA18 is in pairing mode for 3 minutes and the Under Bed Light flashes to indicate this.
Press the two top buttons on the hand control at the same time.



Now the light gives a long flash to indicate that the control and the LA18 are paired up. The LA18 stays in pairing mode and it is possible to connect more controls using the same procedure as above.

Note:

Wait 5 seconds after pairing control 1 before you can pair control 2. To get the system out of pairing mode – simply press any button on an already paired control.

Dual pairing

Pairing one hand control to two LA18 requires a hand control that supports dual pairing.

1. Connect the two LA18 to the mains at the same time.
2. The Under Bed Light starts to flash to indicate pairing mode has started.
3. Take the hand control and press the two upper buttons and both products are paired to the hand control.

Now the light gives a long flash to indicate that the control and both the LA18 systems are paired up.

How to unpair one system

1. Put the LA18 system you want to keep paired into pairing mode and pair the hand control.
2. Send a command from the hand control and the pairing mode stops.
3. The connection between the other LA18 system and the hand control is now deleted.

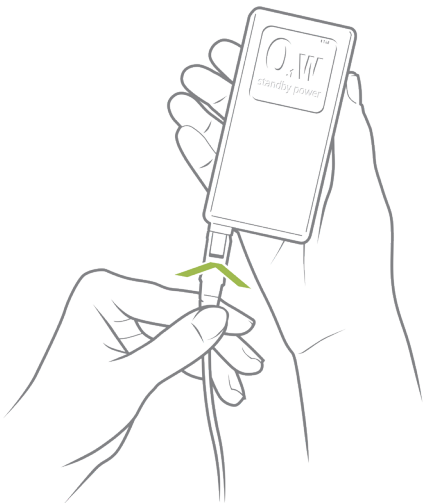
How to mount the locking device (0705889)

To ensure optimal cable relief on the SMP5001/002 a locking device (0705889) should be used. Follow the guide below on how to fix the locking device on the SMPS.

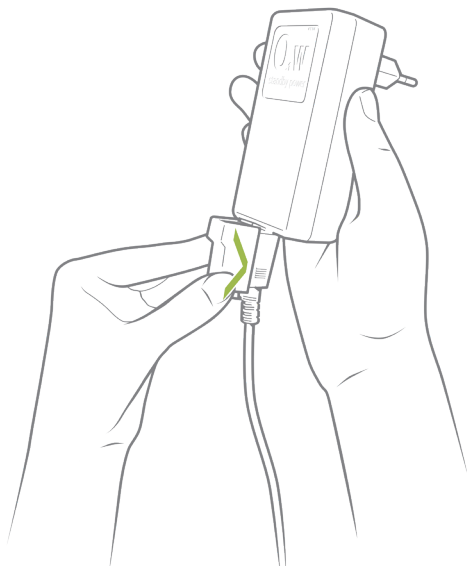
1. Take the SMPS



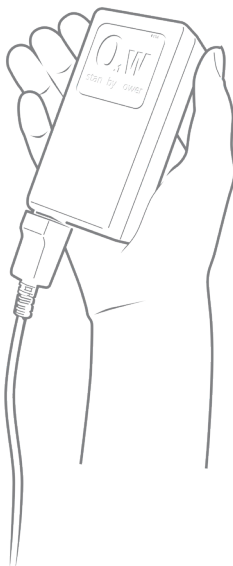
2. Plug the 2-poled DC cable in the SMPS



3. Slide the locking device on



4. The cable is now fully secured.



Disposal of LINAK products

As LINAK customers often ask us how our products can be disposed of or scrapped, we have prepared this guidance that enables a classification to different waste fractions for recycling or combustion.

Guidance

We recommend our products be disassembled as much as possible and divided into different waste groups for recycling or combustion.

For example, waste can be sorted into metals, plastics, cable scrap, combustible material and recoverable resources. Some of these main groups can be further divided into subgroups; e.g. metal can be divided into steel/aluminium/copper and plastic can be divided into ABS/PA/PE/PP.

As an example, the table below breaks down the different components in LINAK products to various recycling groups:

Product	Components	Recycling group
Column/ Actuator :	Spindle and motor Plastic housing Cable PC boards	Metal scrap Plastic recycling or combustion Cable scrap or combustion Electronics scrap
Control Box :	PC boards Plastic housing Cable Transformer	Electronics scrap Plastic recycling or combustion Cable scrap or combustion Metal scrap
Handset/Control :	Plastic housing Cable PC boards	Plastic recycling or combustion Cable scrap or combustion Electronics scrap

By now, almost all our casted plastic parts are supplied with an interior code for plastic types and fibre contents, if any.

Main groups of disposal

Product main groups	Metal scrap	Cable scrap	Electronics scrap	Plastic recycling or combustion	Comments
LA18 IC Standard Master	X	X	X	X	
LA18 IC Standard Follower	X	X	X	X	
SMPS001 / 002 / 006			X	X	
Hand controls		X	X	X	
LED Light Rail		X	X	X	

Disposal of batteries

Details regarding safe disposal of used and leaking batteries:
Batteries should be disposed in accordance with appropriate federal, state and local regulations. LINAK recommends that used or leaking batteries are disposed through local recycling system. Please do not throw used or leaking batteries in normal household waste or in nature. This will cause damage to the enviroment.

How to deal with leaking batteries

Leaking batteries should be disposed as described above.
If leaking batteries are discovered in the product, the batteries must be removed at once to minimise damage to the product. If leaking batteries are left in the product, it become defective.

It is recommended to use plastic gloves when handling leaking batteries. The contents of a leaking batteries can cause chemical burns and respiratory irritation.

If exposed to the contents of a leaking battery, please wash with soap and water. If irritation persists, please seek medical attention. In case of eye contact, please flush eyes thoroughly with water for 15 minutes and seek medical attention.

Labels

Label for LA18 IC Standard Master



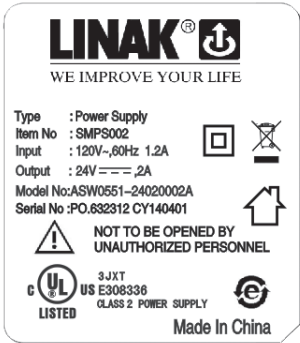
Label for LA18 IC Standard Follower



Label for SMP5001



Label for SMP5002



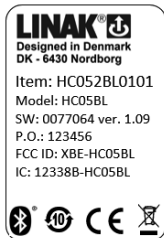
Label for SMP5006



Label for LED Light Rail



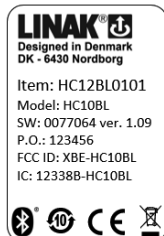
Label for HC05BL



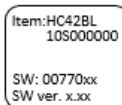
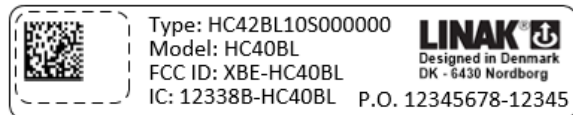
Label for HB10 BL



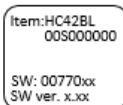
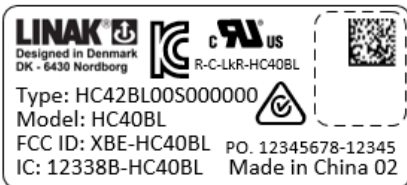
Label for HC10BL



Label for HC40 FRAME Standard

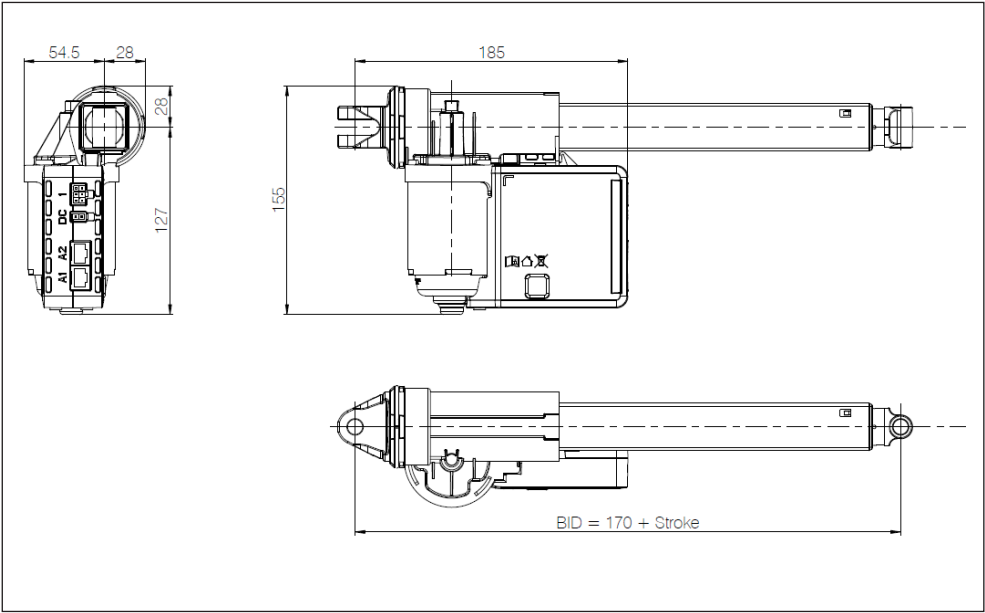


Label for HC40 TWIST Standard

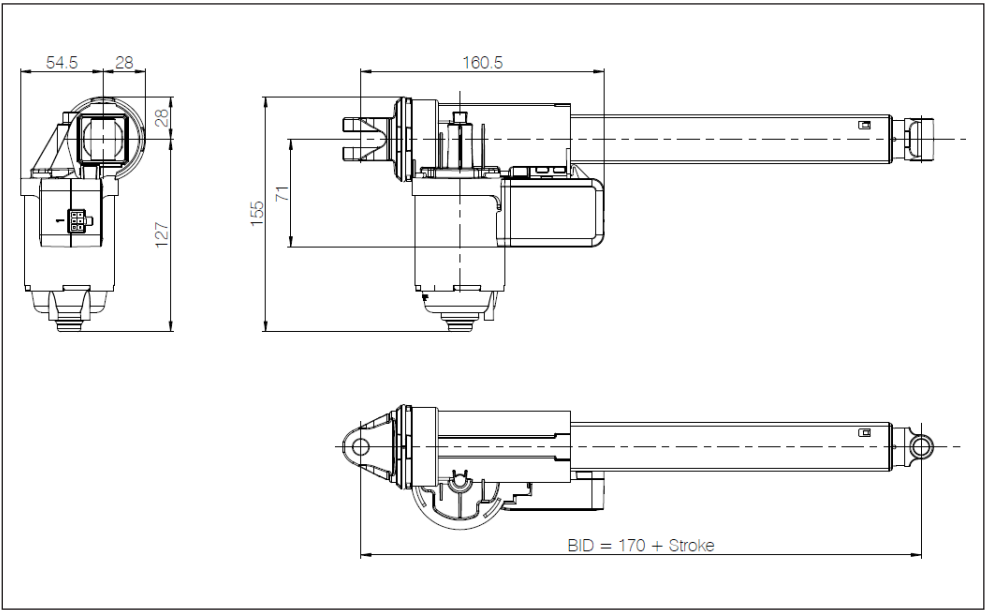


DRAWING APPENDIX

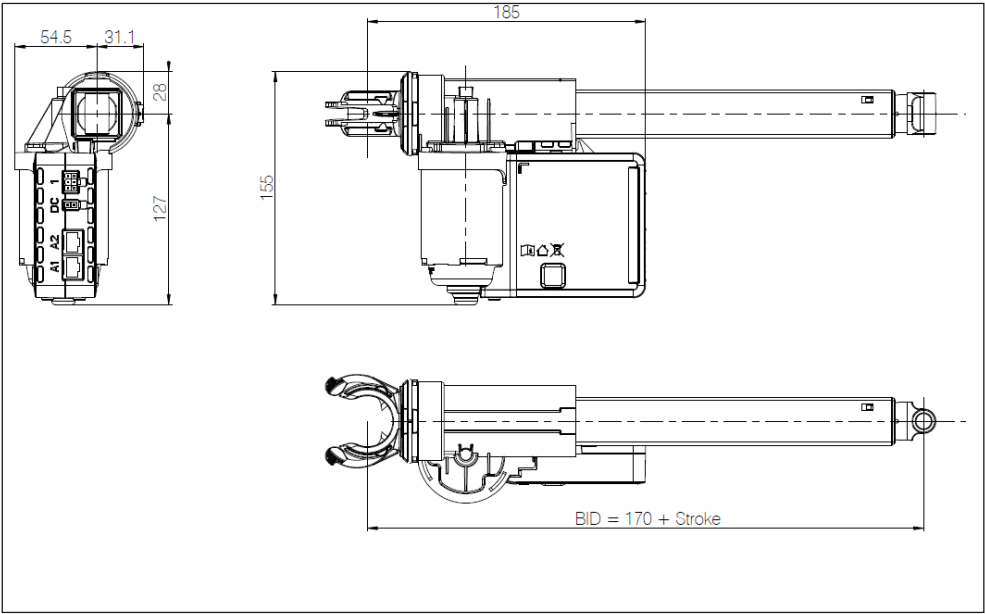
LA18 IC Standard Master



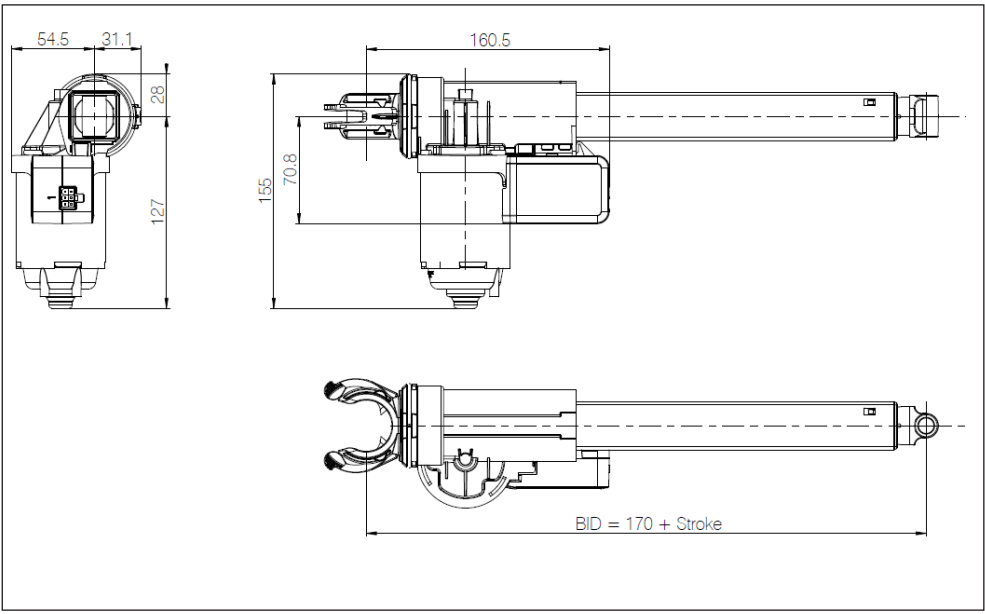
LA18 IC Standard Follower



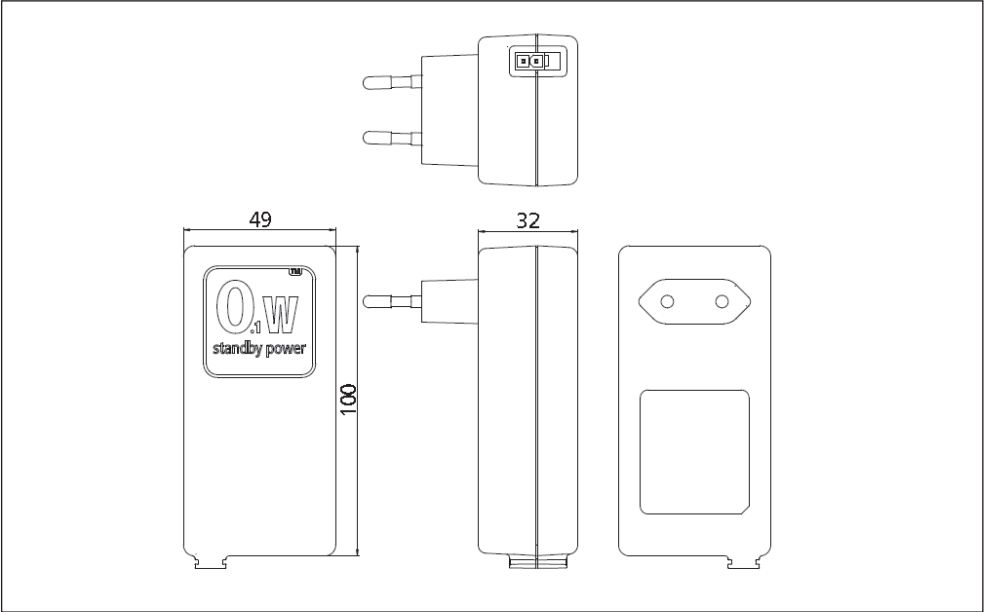
LA18 IC Standard Master Click-on back fixture



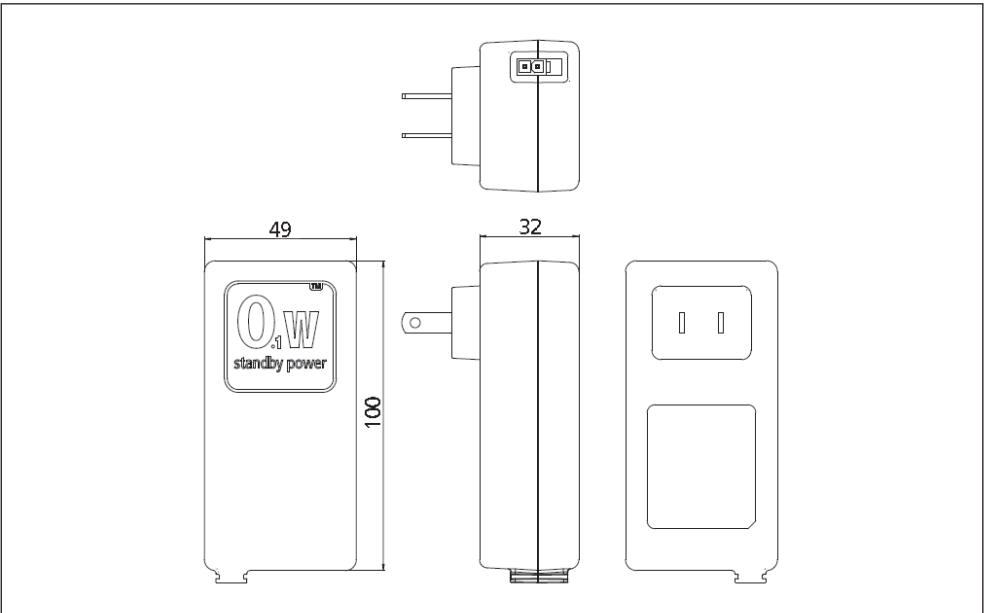
LA18 IC Standard Follower Click-on back fixture

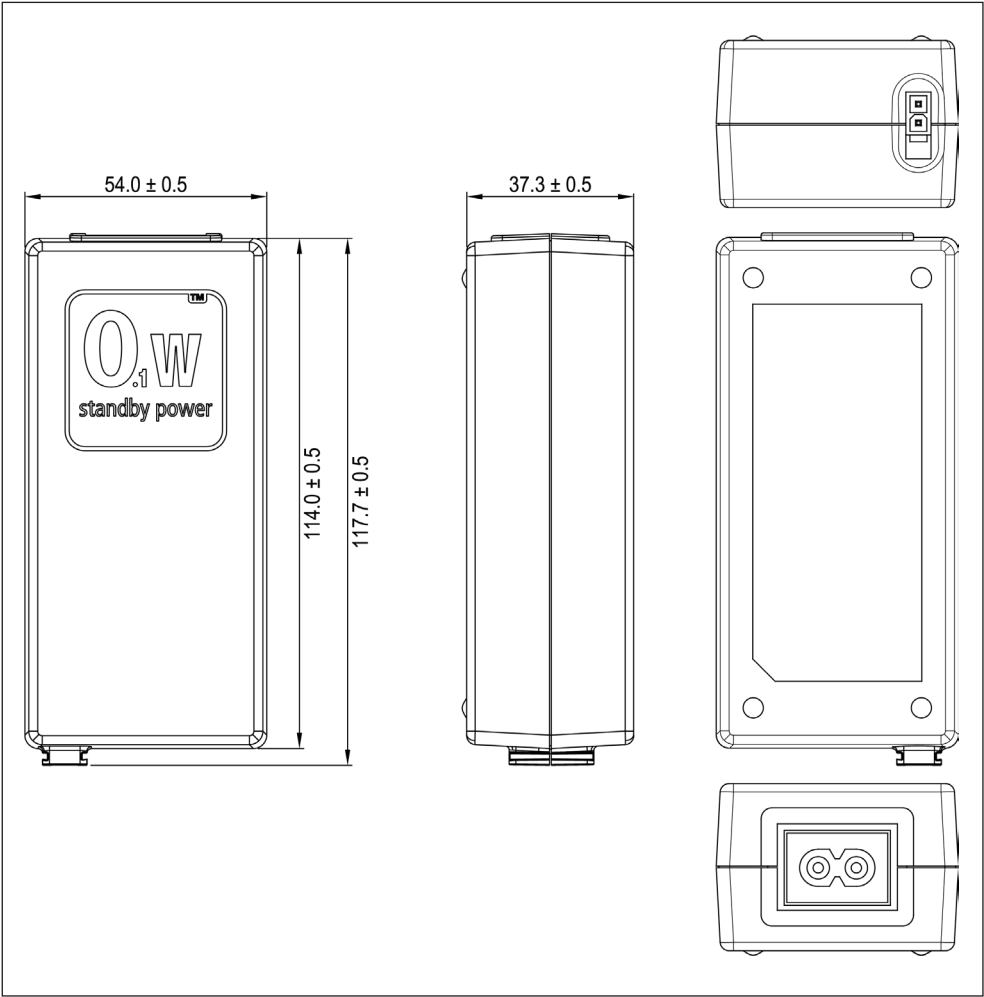


SMPS001

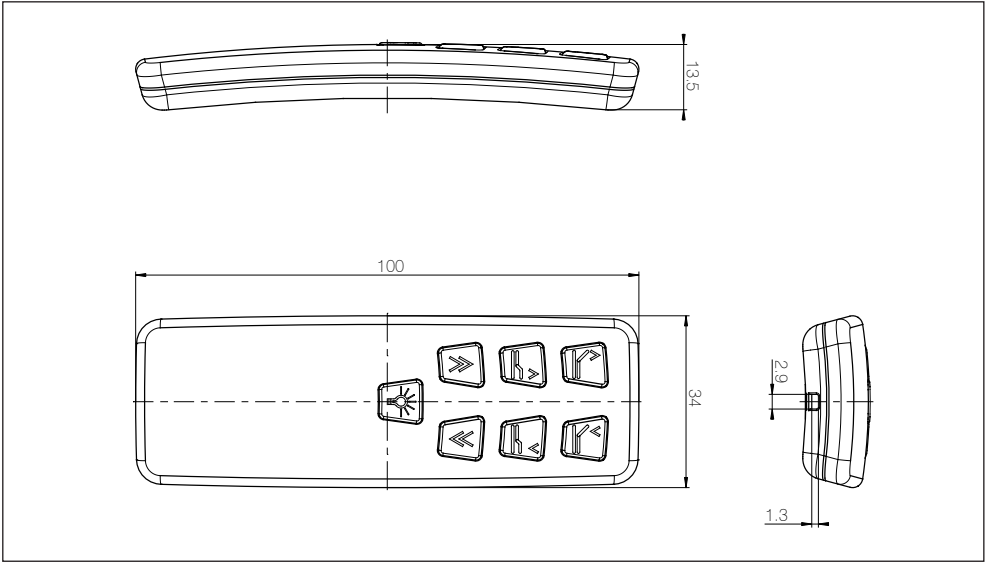


SMPS002

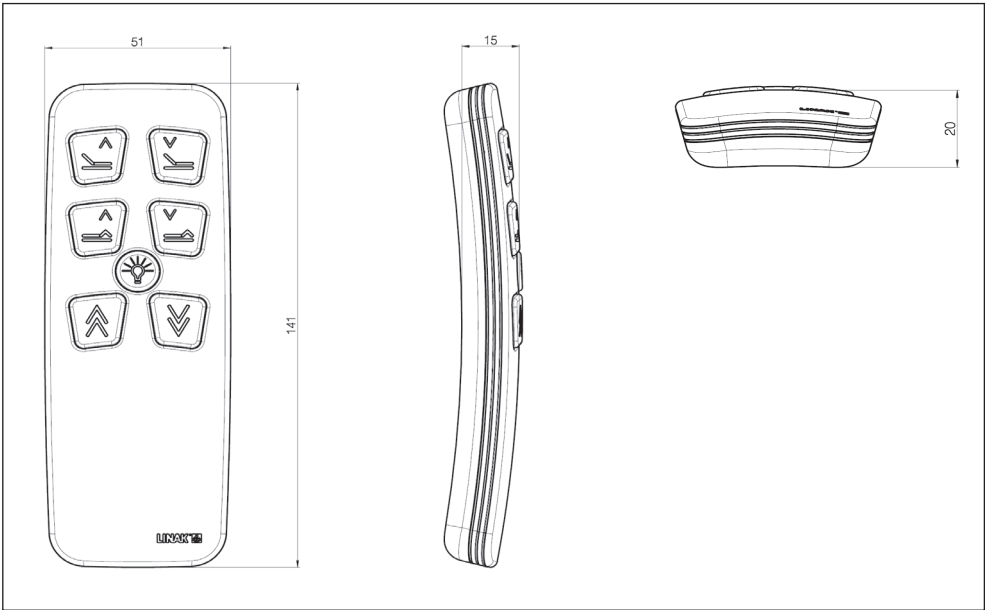




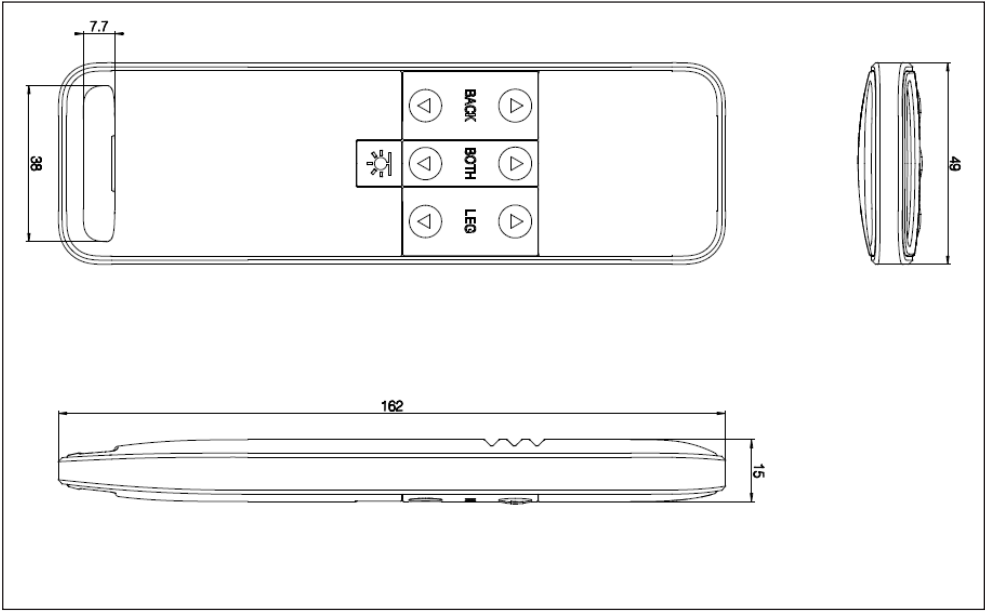
HC05 Wireless



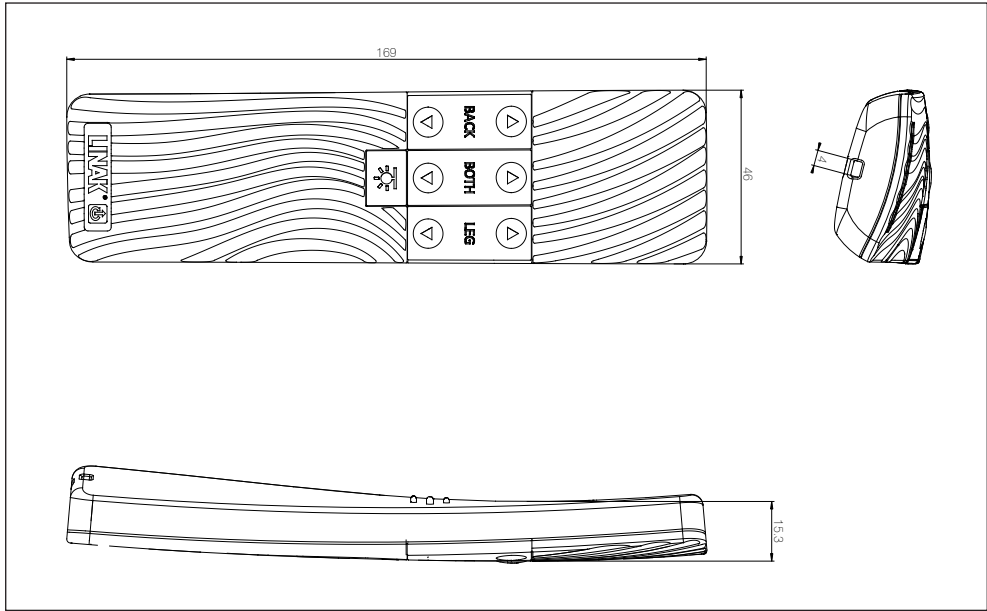
HC10 Wireless

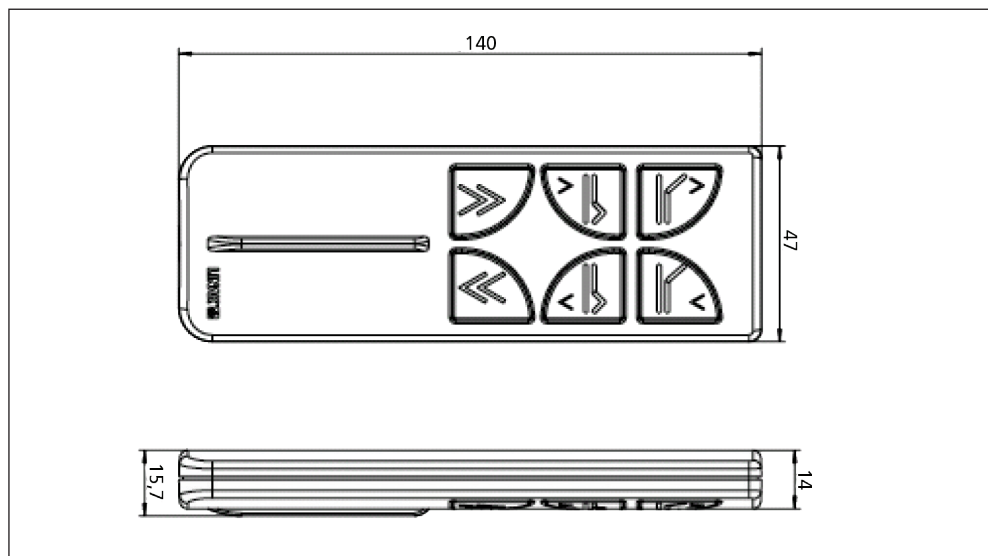


HC40 FRAME™ Standard

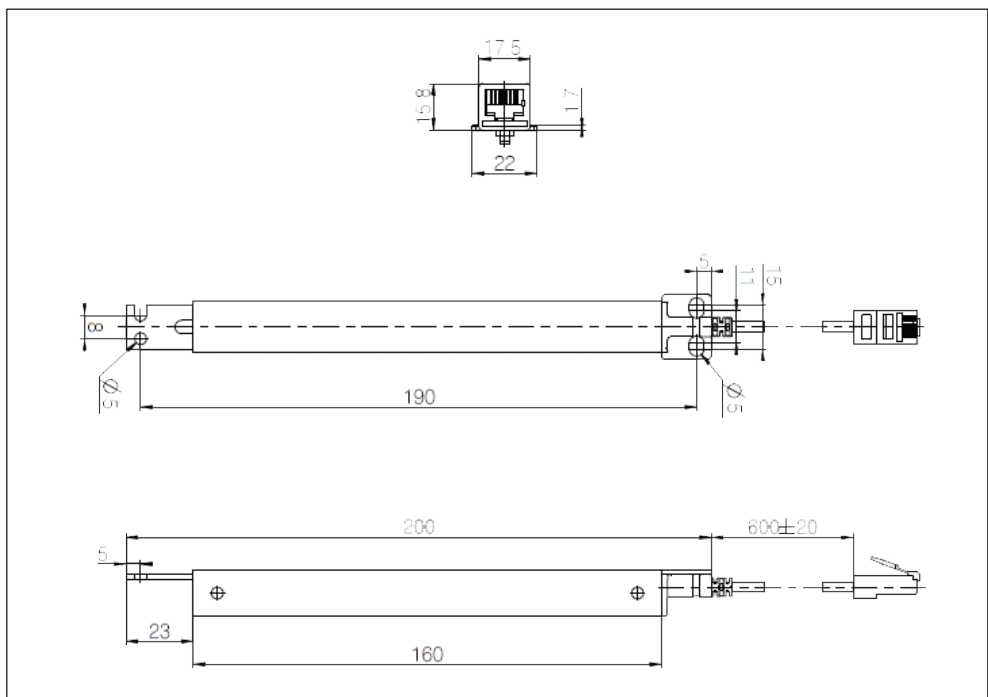


HC40 TWIST™ Standard





LED Light Rail



LINAK APPLICATION POLICY

The purpose of the application policy is to define areas of responsibilities in relation to applying a LINAK product defined as hardware, software, technical advice, etc. related to an existing or new customer application.

LINAK products as defined above are applicable for a wide range of applications within the Medical, Furniture, Desk and Industry areas. Yet, LINAK cannot know all the conditions under which LINAK products will be installed, used, and operated, as each individual application is unique.

The suitability and functionality of the LINAK product and its performance under varying conditions (application, vibration, load, humidity, temperature, frequency, etc.) can only be verified by testing, and shall ultimately be the responsibility of the LINAK customer using any LINAK product.

LINAK shall be responsible solely that the LINAK products comply with the specifications set out by LINAK and it shall be the responsibility of the LINAK customer to ensure that the specific LINAK product can be used for the application in question.

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(Belgium & Luxembourg)
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• Brazil

LINAK Do Brasil Comércio De Atuadores Ltda.
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• Poland

LINAK Polska
LINAK Danmark A/S (Spółka Akcyjna)
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• Slovakia

LINAK Slovakia s.r.o.
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Fax: +34 93 588 27 85
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LINAK AG
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Fax: +41 43 388 31 87
www.linak.ch - www.fr.linak.ch
www.it.linak.ch

• Taiwan

LINAK (Shenzhen) Actuator systems Ltd.
Taiwan Representative office
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Fax: +886 2 27290096
www.linak.tw

• Thailand

LINAK APAC Ltd.
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• Turkey

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• USA

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