



# DL19 system with CBD6S User manual

# Contents

<b>Preface</b> .....	3
<b>Valid for</b> .....	4
<b>Important information</b> .....	5
<b>Safety instructions</b> .....	5
General .....	5
Before installation, reinstallation or troubleshooting .....	6
Before start-up .....	6
During operation .....	6
Misc. ....	6
<b>Only for EU markets</b> .....	7
<b>Only for Non EU markets</b> .....	7
<b>Misuse</b> .....	7
<b>Repairs</b> .....	8
<b>Declaration of incorporation of partly completed machinery</b> .....	8
<b>Declaration of conformity</b> .....	9
<b>Misc. on the DESKLINE® DL19 system</b> .....	10
Warranty .....	10
Maintenance .....	10
Service of double-insulated products .....	10
<b>ETL-markering</b> .....	11
<b>Description of the DESKLINE® DL19 system</b> .....	12
Installation .....	13
Mounting DL19 .....	13
Mounting the feet .....	14
Mounting crossbar .....	15
Mounting of the tabletop .....	16
Placing the monitor .....	16
<b>Mounting guidelines CBD6S (SMPS)</b> .....	17
Bottom with cable grooves .....	17
<b>Electric connection of the DL19 system</b> .....	18
<b>Initialisation of the DESKLINE® DL19 parallel systems</b> .....	19
<b>Anti-Collision</b> .....	20
<b>PIEZO™ description (optional)</b> .....	21
<b>Accessories and repair</b> .....	22
<b>Disposal of LINAK product</b> .....	23
<b>Labels</b> .....	24
<b>Drawing appendix</b> .....	25
<b>Addresses</b> .....	28

# 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-user 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 contact. LINAK subsidiaries and some distributors situated all over the world have authorised service centres, which are always ready to help you.

LINAK provides a warranty on all its products. This warranty, however, is 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.

Changes in installation and use of LINAK products/systems can affect the operation and durability of the products/systems. 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)

Columns: 1 single DL19 or 2 in parallel

Control boxes: CBD6S 200 W, CBD6S 300 W

Controls: DP1U/DPF1M (if memory function is required)  
DP1C/DPT/DPF1C (if memory function and display is required)  
or DPA/DPB/DPH/DP1K/DP1V/DPF1K/DPG1K (if only up/down is required)  
or DPF1D (if display is required),  
or DPG1M/DPG1B (if reminder, Bluetooth® and memory is required)  
or DPG1C ("If reminder, Bluetooth®, memory and display is required)

## 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.

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## 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 – there is a 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 to the product, do not install it.



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



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

## **Before installation, re-installation, or troubleshooting:**

- Stop the DL
- Pull out the mains plug.
- Relieve the DL 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 control box is correct before connecting the system to the mains.
- System connection. The individual parts must be connected before connecting the control box to the mains. See the User Manual for LINAK actuators, if necessary.

## **During operation**

- If the control box makes unusual noise or smells, switch off the mains voltage immediately.
- Take care that the cables are not damaged.
- Unplug the mains cable on mobile equipment before moving it.
- The products must only be used in an environment, that corresponds to their IP protection.

## **Misc.**

The actuator system has a sound level below 55dB(A) in typical applications.

Updated manuals and declarations can always be found here:  
[www.linak.com/deskline](http://www.linak.com/deskline)

### **Only for EU markets**



This appliance can be used by children aged from aged 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been 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.



Do not use the actuator system for lifting persons. Do not sit or stand on a table while operating – risk of personal injury.



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

## Repairs

In order to avoid the risk of malfunction, all DESKLINE® repairs must only be carried out by authorised LINAK workshops or repairers, as special tools must be used and special gaskets must be fitted. Lifting units under warranty must also be returned to authorised LINAK workshops.



### Warning!

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



### Warning!

The DESKLINE® systems do not withstand cutting oil.

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## DECLARATION OF INCORPORATION OF PARTLY COMPLETED MACHINERY

LINAK A/S  
Smedevænget 8  
DK - 6430 Nordborg

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

Control Boxes	CBD6S
Linear Actuators	DB5, DB6, DB7, DB9, DB12, DB14, DB16, LA23, LA31
Lifting Columns	DL1A, DL2, DL4S, DL5, DL6, DL7, DL8, DL9, DL10, DL11, DL12, DL14, DL15, DL16, DL17, DL19, BASE1
Desk Panels	DPA, DPB, DPH, DPF, DPG1K, DPG1M, DPG1B, DPG1C, DPT, DP1, DP1CS, DP1K, DP1V, DP1U
RF Controls	HB10RF, HB20RF, RFT, RFRL
Accessories	BA001, SLS, Kick & Click

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, 2017-12-08

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

# DECLARATION OF CONFORMITY

LINAK A/S  
Smødevænget 8  
DK - 6430 Nordborg

hereby declares that LINAK Actuator System composed of:

Control Box(s)            CBD6Sa000b0A-c09,  
(Where -a: can be P, C or H, -b: can be 2, 3 or 4 and -c: can be 0 or 7)

And  
Linear Actuator(s)

31xxxH-xxxxx50S,  
DBabbcdcfghhhiii, (Where: - a: can be 4, 5, 6, 7, 12, 14, or 16; - b: can be 0, 1, 3 or 9; - c:  
can be 0, 1, B, L or S; - d: can be 0, 1 or 2; - e: can be 0, A, B or X; - f: can be 0, or A; - g:  
can be from 0, M, S or E; - hhh: can be from 000 to 675; - iii: can be from 000 to 630);  
LA23, LA31 series        and / or

Lifting Column(s)        DLabbcdcfghhhiii, (Where: - a: can be 1, 2, 4S from 4 to 12, from 14 to 19; - b: can be 0, 1,  
3, 7, A or B; - c: can be 0, 1, 2, 3, A, B, E, G or R; - d: can be 0, 1, C, L, R or X; - e: can be  
0, A, B, C, D or X; - f: can be 0, E, N, or P; - g: can be 0, 4, E, M or S; - hhh: can be from  
000 to 1100; - iii: can be from 000 to 916);  
BASE1 and DL12W series

And

Desk Panel(s)            DP\*(C,K,L,U,V), WDPL1  
(The '\*' in the product description can either be 1, 2, 3, A, B, H, T; thereby defining the  
variation of the product);  
DPG1y0z-000jk6,  
(Where: -y: can be B, C, M or K, -z: can be 0, 1 or 2 -j: can be 0, 1 or 2, -k: can be 0 or 1)

complies with EMC Directive: 2014/30/EU according to following standards:  
EN 61000-6-1:2019, EN 61000-6-3:2007+A1:2011+AC:2012

complies with Low Voltage Directive 2014/35/EU according to the standard:  
EN 60335-1:2012+A11:2014

complies with RoHS2 Directive 2011/65/EU according to the standard:  
EN 50581:2012

Additional information:

The system does also comply with the standard: EN 13849-1:2015 SRP/CS Cat. B, PL = b and SRESW PL = b  
Note 1: Exempted CBD6S with SW03003007 printed on the label.

Nordborg, 2019-09-10

**LINAK A/S**

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

## Misc. on the DESKLINE® DL19 system

This system is a DESKLINE system developed for desks and for indoor use in offices. Do not use it in industrial kitchens or in other environments that have to be cleaned with aggressive detergents.

Do not bolt the legs to the floor so that free movement is prevented. This could cause serious damage to the legs in fault situations.

### Warranty - 60 months on DESKLINE®

This will be valid for all DESKLINE® products produced after 1 May 2015.

Products produced before 1 May 2015 will still be covered by 36 months.

Products used in DESKLINE applications: If these products are used in another application, they will be covered by 18 months warranty.

If there is any doubt that returned products are within the warranty period, this must be treated as if they are covered by the warranty. We recommend that you use the date of the control box or actuator as reference, if possible. We will have our purchase no. printed on the label.

### Maintenance

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

### Service of double-insulated products:



#### Class II

A Class II or **double insulated** electrical appliance is one which has been designed in such a way that it does not require a safety electric earth connection (US: ground).

The basic requirement is that no single failure can result in dangerous voltage becoming exposed so that it might cause an electric shock and that this is achieved without relying on an earthed metal casing. This is usually achieved at least in part by having two layers of insulating material surrounding live parts or by using reinforced insulation.

There is no earthing/grounding means provided on the product, and no earthing/grounding means is to be added to the product.

In Europe, a double insulated appliance must be labelled "Class II", "double insulated" or bear the double insulation symbol (a square inside another square).

Servicing a double-insulated product requires extreme care and knowledge of the system, and is to be done only by qualified service personnel. Replacement parts for a double-insulated product must be identical to the parts they replace.



**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 4008004**

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. C22.2 No. 68-09

ETL Recognized Component mark for Canada and United States

## Description of the DESKLINE® DL19 system

Each DESKLINE® DL19 lifting units is equipped with a motor and parallel/memory drive is ensured by means of software in the CBD6S (SMPS) that also takes account of oblique load on the desk. Soft start and stop are also part of this software, which ensures a soft start and stop when adjusting the desk.

### Application of the DESKLINE® DL19 system:

Irrespective of the load the **duty cycle 10 %  $\approx$  2 minutes continuous use at full load, followed by 18 minutes pause** stated in the data sheets, must **NOT** be exceeded as this will result in a superheating of the motor, the brake and the spindle nut. Exceeding the duty cycle will result in a dramatic reduction of the life of the system.

The DESKLINE® DL19 system range contains the following products:

- 1 control box CBD6S 200 W or CBD6S 300 W (SMPS - Switch Mode Power Supply)
- 1 single DL19 or 2 in parallel
- 1 exchangeable mains cable
- 1 or 2 motor cables
- 1 DP1U/DPF1M (if memory function is required)  
DP1C/DPT/DPF1C (if memory function and display is required)  
or DPA/DPB/DPH/DP1K/DP1V/DPF1K/DPG1K (if only up/down is required)  
or DPF1D (if display is required),  
or DPG1M/DPG1B (if reminder, Bluetooth® and memory is required)  
or DPG1C ("If reminder, Bluetooth®, memory and display is required)

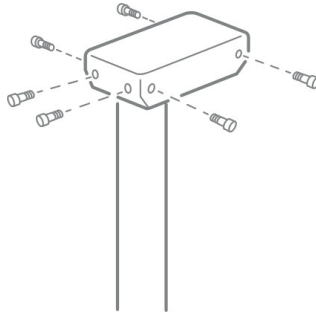
# Installation

## Mounting DL19

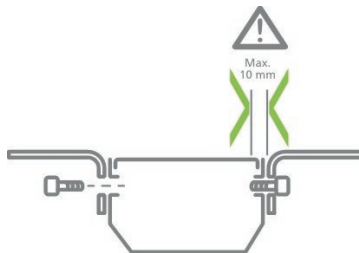
### Mounting the motor housing

The motor housing is supplied with six M6 threaded holes for mounting on the top frame.

1. Mount motor housing on top frame using six M6 screws with the following specifications:  
Quality: Min. grade 8.8  
Length: Max. 10 mm (plus top frame thickness). The screw must not go further than max. 10 mm into the motor housing
2. Fasten screws thoroughly (torque: max. 7.5 Nm).



Always use six M6 screws for mounting the motor housing on the top frame



Mounting screws must not go further than max. 10 mm into the motor housing



Sufficient stability of the desk is only obtained if all six M6 screws are used for mounting the motor housing on the top frame. Tests with fixing the motor housing using only four M6 screws have proved that the torsional stability of the desk this is insufficient.



LINAK recommends using the DL19 DESKLINE® system in push applications with the motor housing mounted upwards.

Alternatively, use the Desk Frame 2 (DF2 columns only) or the Kick & Click™ top frame and avoid screws to get easy desk assembly.

## Mounting the feet

The DL19 bottom plate is supplied with four M6 and two M8 threaded holes.

1. Mount column bottom on desk feet using four M6 or two M8 screws with the following specifications:

Quality: Min. grade 8.8

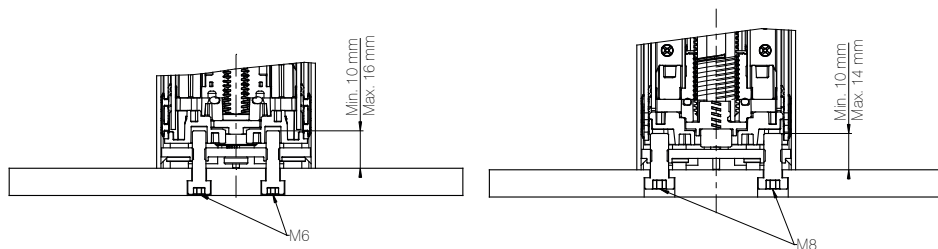
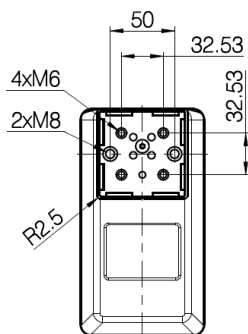
Length: Min. 10 mm (plus foot thickness);

Max. 16 mm (plus foot thickness) for M6

Max. 14 mm (plus foot thickness) for M8

2. Fasten screws thoroughly (torque: max. 10 Nm).

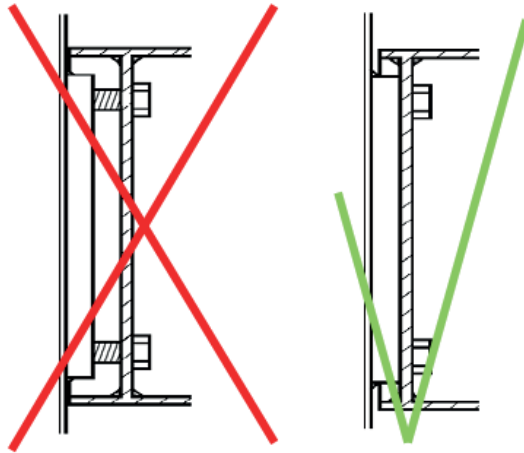
The holes in the foot must be sufficiently larger than  $\varnothing 6/\varnothing 8$  to ensure space for the screw heads to be screwed fully into the foot.



Column bottom mounted on desk foot (left: M6; right: M8)

## Mounting crossbar

We have experienced a few cases where customers have designed a desk with a crossbar with a hidden column bracket, where the bracket has been pulled out when tightening the crossbar. To eliminate this failure, please follow the guidelines below when constructing a desk.



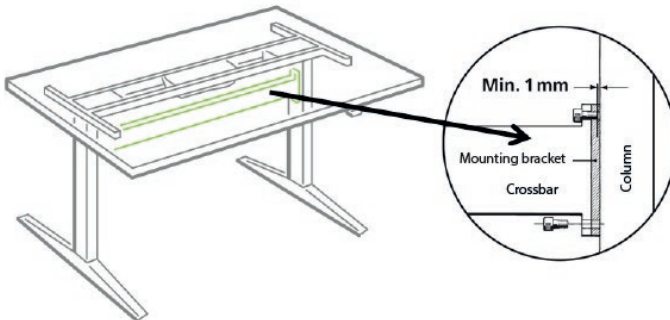
If the crossbar connection is made with a design where the bracket is hidden inside the crossbar profile, make sure that you do not pull out the bracket in the column when tightening the screws for the assembly.



The maximum torque for tightening the 2 x M8 screws in the bracket is 15 Nm.

To avoid damage of the lifting unit there must be at least 1 mm space between the ends of the two M8 screws for the mounting bracket and the lifting unit surface. Screws that are too long will come into contact with the inner parts. This will result in an irregular operation or even damage the lifting unit.

These guidelines also apply to a bench solution.

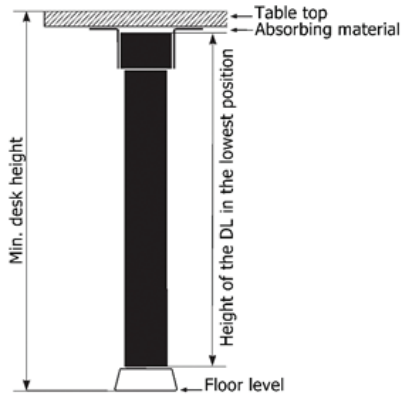


Requirement: Min. 1 mm space between ends of screws and lifting unit surface

## Mounting of the tabletop

The sound from the lifting column spreads as vibrations to the tabletop which amplifies the sound. This can, however, be reduced.

1. Place vibration/shock-absorbing material between tabletop and top frame.

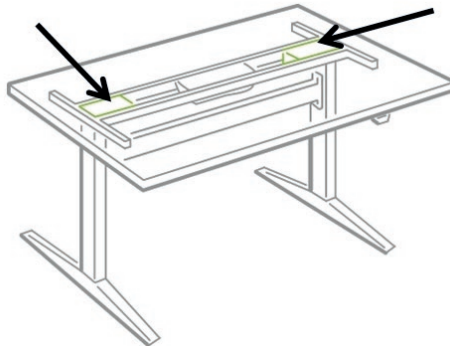


Assembled desk

## Placing the monitor

Placement of a monitor directly above the motor housing may cause malfunction of the monitor.

Magnets inside the motor may interrupt the picture on the monitor depending on distance and type of monitor. If this is the case, the problem may be solved by placing an iron plate/tube or another magnetic material, somewhat larger than the motor housing, between the motor and the tabletop.



## Mounting guidelines CBD6S (SMPS)

The control box is to be fastened with 2 screws with a head diameter between  $\varnothing 8$  and  $\varnothing 10$  mm. With regard to the tension surface  $\varnothing 10$  mm is preferable due to a lower surface tension. See drawing appendix for placing of mounting holes and the space the CBD takes up.

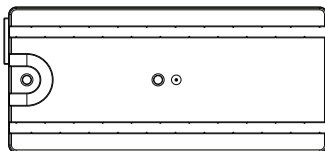


CBD6S 200W and CBD6S 300W

The CBD must not be packed in heat insulating material, but must be placed so that it can emit waste heat into the surroundings. There are no ventilation holes to consider, the CBD emits heat through the surface. The plug must be visible when the CBD is mounted so that the supply to the CBD can be disconnected at replacement, if any. The mounting screws on the control box must be fastened with a max. torque of 1 Nm. The mounting surface to which the control box is attached should have a surface evenness of better than  $\pm 0.5$  mm.

### Bottom with cable grooves

The bottom of the CBD6S (SMPS) is equipped with two cable grooves improving the cable management when mounting. The grooves can be used to bypass the CBD for both motor cables and the mains cable (EU version only) from one side to the other, giving a cleaner design.



Remember to lead the cables through the grooves before mounting the control box.

**For mounting and operation of the desk panel, please see the separate user manual for desk panels.**

## Electric connection of the DL19 system

The DESKLINE® DL19 system is to be connected as shown on figure 5. Each DL19 is to be connected to the sockets on the control box by means of the motor cables, which have a 6-pin plug in each end.

Finally, the mains cable is to be mounted and power switched on.



Please note that the control box must only be connected to the voltage stated on the label.



Figure 4

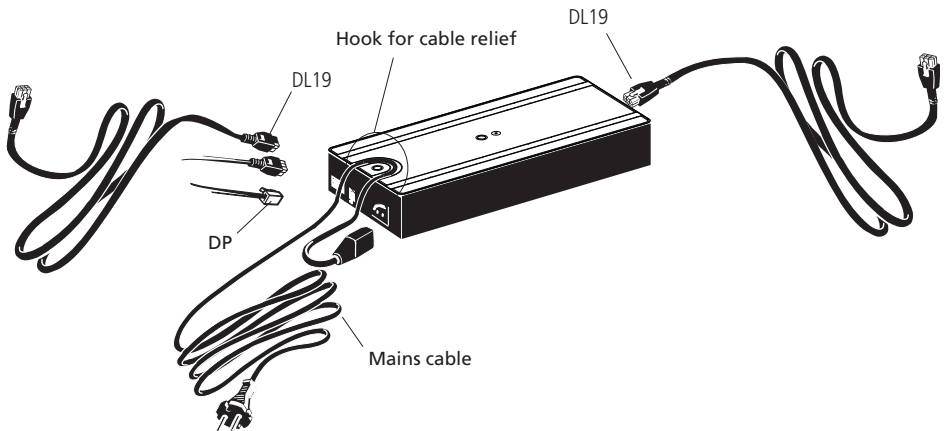


Figure 5

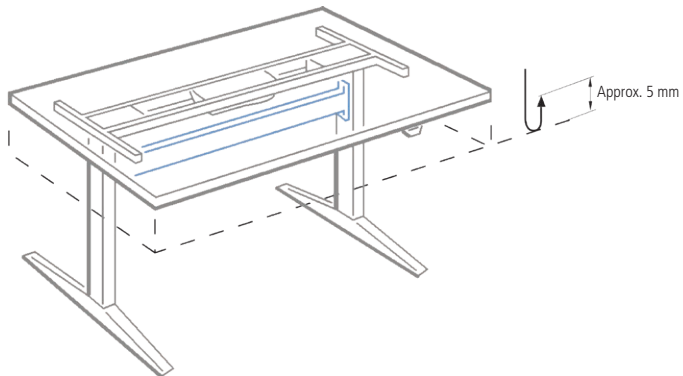
## Initialisation of the DESKLINE® DL19 parallel systems

The DESKLINE system is initialised by pressing the down button once or twice and holding it down until DL19 runs into end stop, it will then automatically run approx. 3 mm out again and hereafter slowly run in again. Only release the down button when the movement has stopped completely.



If the key is released before the sequence is completed then the initialisation is interrupted and must be started again from the beginning.

It is sometimes necessary to press the down button twice to start the initialisation. This is because the system can be in different modes when the initialisation starts.



The CBD6S (SMPS) can control DL19 in 2 parallel.

## Anti-Collision

The function (Anti-Collision) is an option for the standard CBD6S (SMPS) control box. A system with Anti-Collision can limit material damages on a desk if a collision with a solid object should occur.

### Enabling the anti-collision

To enable the Anti-Collision function a little plug called a dongle must be mounted in one of the 2 control ports. The function is only active when the dongle is mounted. – If you remove the dongle again you disable the function.

### Method of operation

When the DL/DBs are running, the CBD6S (SMPS) monitors the current consumption on each channel using a special algorithm. If the current consumption on one channel is increased more than a predefined slope, a collision is assumed and all channels are stopped immediately and all DL/DBs will start to run in the opposite direction (approx. 50 mm). This return drive is done automatically and continues with or without any control key pressed (for max. 2.5 sec.).

The Anti-Collision sensitivity is different in upward and downward direction. Upwards the force is approx. 20 kg. Downwards the load will be approx. 40 kg + the load on the DL/DB (the desk + what is on top of the desk). The 40 kg are needed to activate the Anti-Collision function.

### Situations where the Anti-Collision function does not work

There are situations where the Anti-Collision will not be activated. These situations are:

- If the collision happens during the initialisation phase
- If the collision happens within the first 1000 msec or after the control button has been released
- If the collision happens between the floor and the table and the load on the desk + the weight of the legs are lower than 40 kg
- If the collision happens over too long time, e.g. if the collision is with a soft object.

## PIEZO™ description (optional)

For optimised safety against squeezing and blocking on a desk, LINAK has developed DL columns with an integrated sensor, called PIEZO. The option minimises the risk of damage to a desk caused by squeezing or blocking of obstacles in up and down direction. Examples could be driving down into an office chair or into a container or up into a windowsill. To a certain extent, the system also increases the personal safety, but it does not comply with legislation describing personal safety.

PIEZO allows the DL columns to have the standard built-in dimension and the standard stroke length. There are no visible changes to the column.



Do not use the DL with PIEZO in combination with a crossbar or a foot construction where you place the column in a tube welded on the foot.



Examples where PIEZO avoids squeezing situations.

## Accessories and repair

### Ordering accessories

Order from your nearest LINAK® contact, distributor or subsidiary.

### Accessories

Please contact your nearest LINAK contact, distributor or subsidiary.

### Repairs

Systems should only be repaired by an authorised LINAK service centre or engineer. Systems to be repaired under warranty must be sent to an authorised LINAK service centre.



### Warning!

By unauthorised opening of the system there is a risk that it may malfunction at a later date.

### Spare parts

Please contact your nearest LINAK contact for information on spare parts.

## Disposal of LINAK product

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

### Guide

We recommend our products to 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
<b>Columns/ Actuator :</b>	Spindle and motor Plastic housing Cable PCB boards	Scrap Plastic recycling or combustion Cable scrap or combustion Electronics scrap
<b>Control Box :</b>	PCB boards Plastic housing	Electronics scrap Plastic recycling or combustion
<b>Handset/Control :</b>	Plastic housing Cable PCB board	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 type and fibre content, if any.

## Main groups of disposal

Product main groups	Metal Scrap	Cable scrap	Electronics scrap	Plastic recycling or combustin	Comments
<b>DL19</b>	X	X	X	X	
<b>CBD6S (SMPS)</b>			X	X	
<b>DPXX</b>		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 products, the batteries must be moved immediately to minimise damage to the product. If leaking batteries are left in the product it might become defect.

It is recommended to use plastic gloves when handling of 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 DL19 - 800 N

**LINAK**   
 Designed in Denmark  
 DK - 6430 Nordborg

Item No. : DL19000B00650560  
 Prod. Date : 2017.06.02  
 Max Load : 800 N  
 Power Rate: 18 V $\approx$  / Max. 10.0 A  
 Duty Cycle : 10%, Max 2 min. / 18 min.

NOT TO BE OPENED BY UNAUTHORIZED PERSONNEL  
 NE PAS OUVRIER PAR DU PERSONNEL NON AUTORISÉ

  
 W/O #1234567-0001 MADE IN DENMARK

Label for DL19 - 1200 N

**LINAK**   
 Designed in Denmark  
 DK - 6430 Nordborg

Item No. : DL19100B00650560  
 Prod. Date : 2017.06.02  
 Max Load : 1200 N  
 Power Rate: 18 V $\approx$  / Max. 10.0 A  
 Duty Cycle : 10%, Max 2 min. / 18 min.

NOT TO BE OPENED BY UNAUTHORIZED PERSONNEL  
 NE PAS OUVRIER PAR DU PERSONNEL NON AUTORISÉ

  
 W/O #1234567-0001 MADE IN DENMARK

Label for CBD6S 200W (SMPS)

**LINAK**  GROUP HEADQUARTERS  
 SMEDEVAENGET 8 DK 6430 NORDBORG  
 WE IMPROVE YOUR LIFE  
 DESIGNED IN DENMARK

Item : CBD6SP00020A-009  
 Date : 2012.11.09  
 U In : 230 V $\approx$ , 50 Hz  
 P In : 300 W  
 U Out : 12 V $\approx$  - 40 V $\approx$   
 Op. : Int. 10%, Max. 2 min. / 18 min.  
 S.W. P/N.: 03002000 Ver. B1.00

0.1 W Standby Power

NOT TO BE OPENED BY UNAUTHORIZED PERSONNEL  
 NE PAS OUVRIER PAR DU PERSONNEL NON AUTORISÉ

  
 P.O. 1234567-0001 MADE BY LINAK A/S DENMARK

Label for CBD6S 300W (SMPS)

up to 4 channels

**LINAK**  GROUP HEADQUARTERS  
 SMEDEVAENGET 8 DK 6430 NORDBORG  
 WE IMPROVE YOUR LIFE  
 DESIGNED IN DENMARK

Item : CBD6SP00020A-709  
 Date : 2014.02.07  
 U In : 90 V - 240 V $\approx$ , 48 Hz - 63 Hz  
 P In : 450 W  
 U Out : 12 V $\approx$  - 40 V $\approx$   
 Op. : Int. 10%, Max. 2 min./18 min.  
 S.W. P/N.: 03002000 Ver. XXX

NOT TO BE OPENED BY UNAUTHORIZED PERSONNEL  
 NE PAS OUVRIER PAR DU PERSONNEL NON AUTORISÉ

  
 P.O.-0000

Assembled in China 01

## 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 a new customer application.

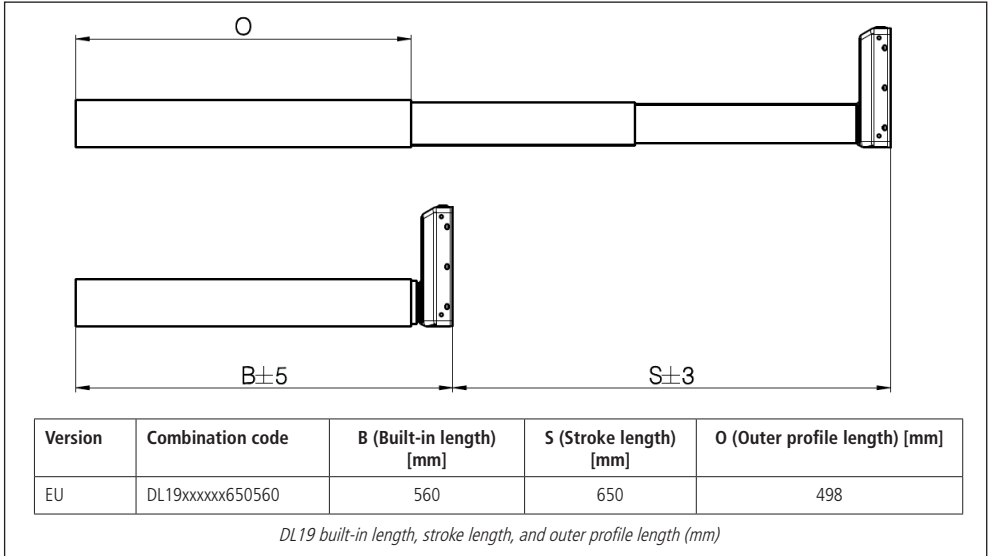
LINAK products, as defined above, are applicable for a wide range of applications within the Medical, Furniture, Desk and Industry areas. Yet, LINAK cannot know all the conditions under which LINAK products will be installed, used, and operated, as each individual application is unique.

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.

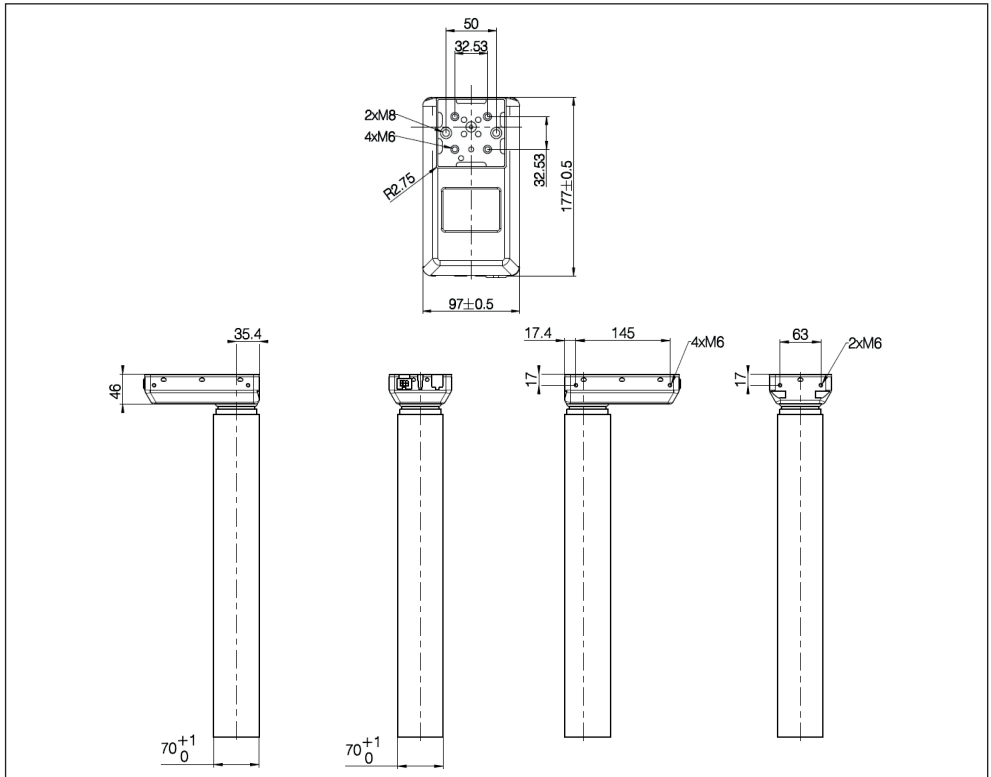
LINAK shall be responsible solely that LINAK products comply with the specifications set out by LINAK and it shall be the responsibility of the LINAK customer to ensure that the specific LINAK product can be used for the application in question.

# DRAWING APPENDIX

DL19

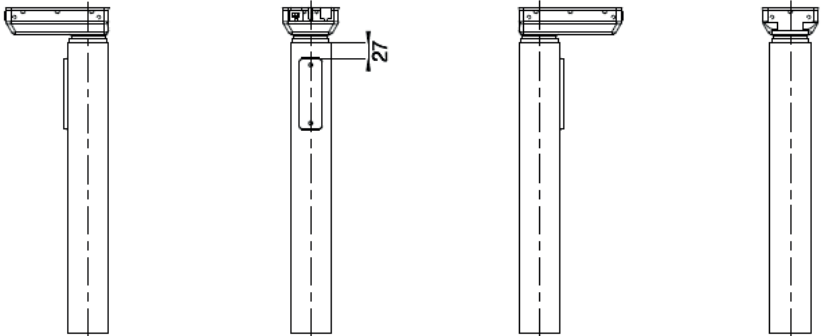


DL19 motor housing and profile dimensions (mm)

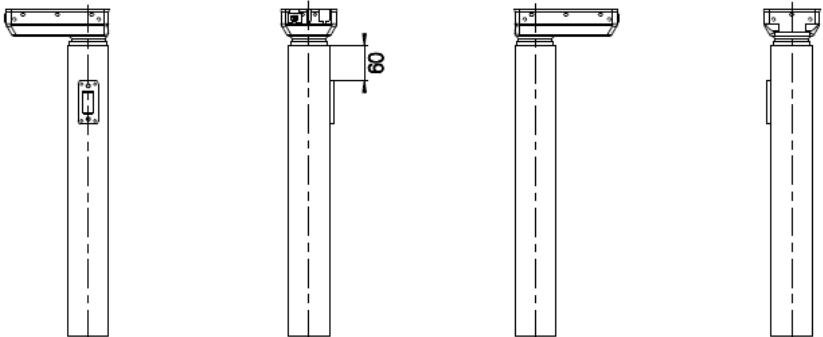


Bracket options

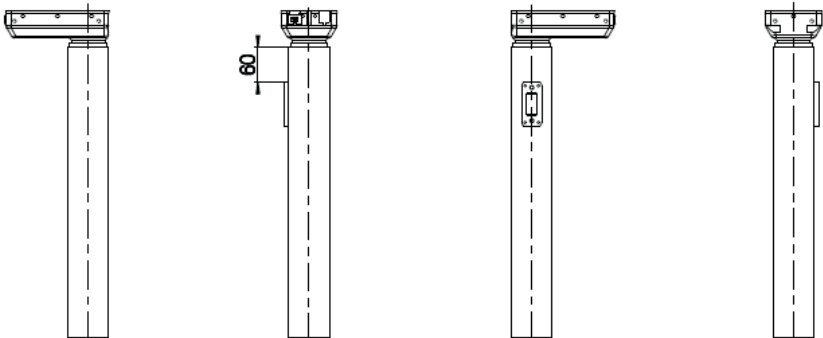
Std bracket



Bench left



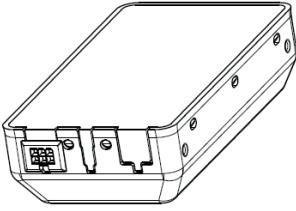
Bench right



Combination code	Std bracket	Bench left	Bench right
DL19xx1xxxxxxxxx	X		
DL19xxLxxxxxxxxx		X	
DL19xxRxxxxxxxxx			X

Bracket options (dimensions in mm)

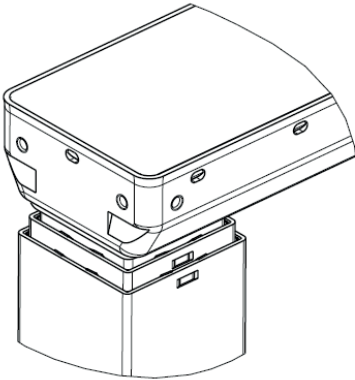
Sockets



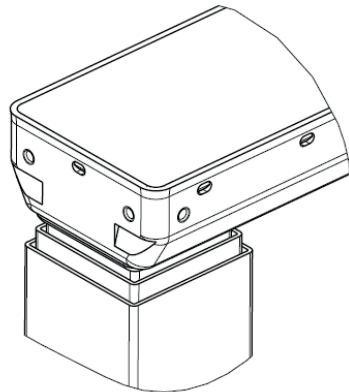
Standard

Combination code	Type
DL19xxxxx0xxxxxx	Standard
DL19xxxxxExxxxxx	Standard

Profile designs

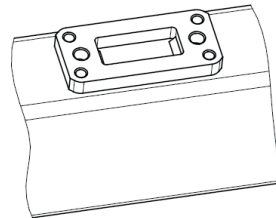
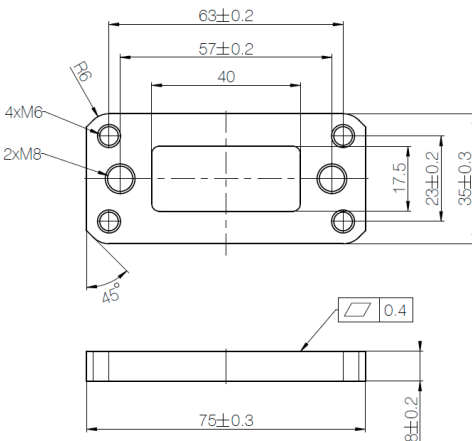


Standard

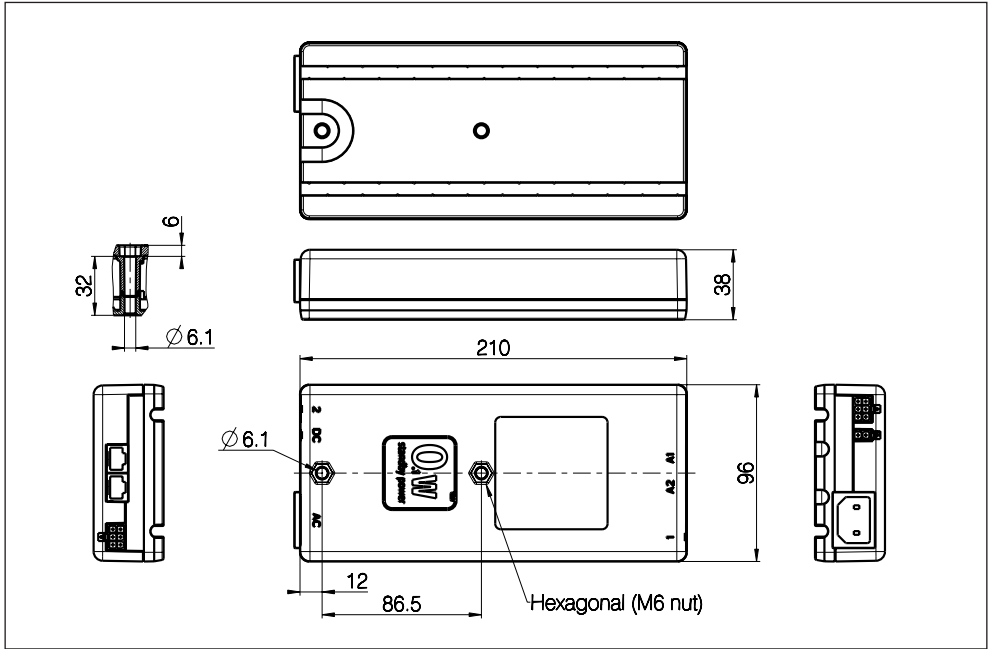


PLUS™

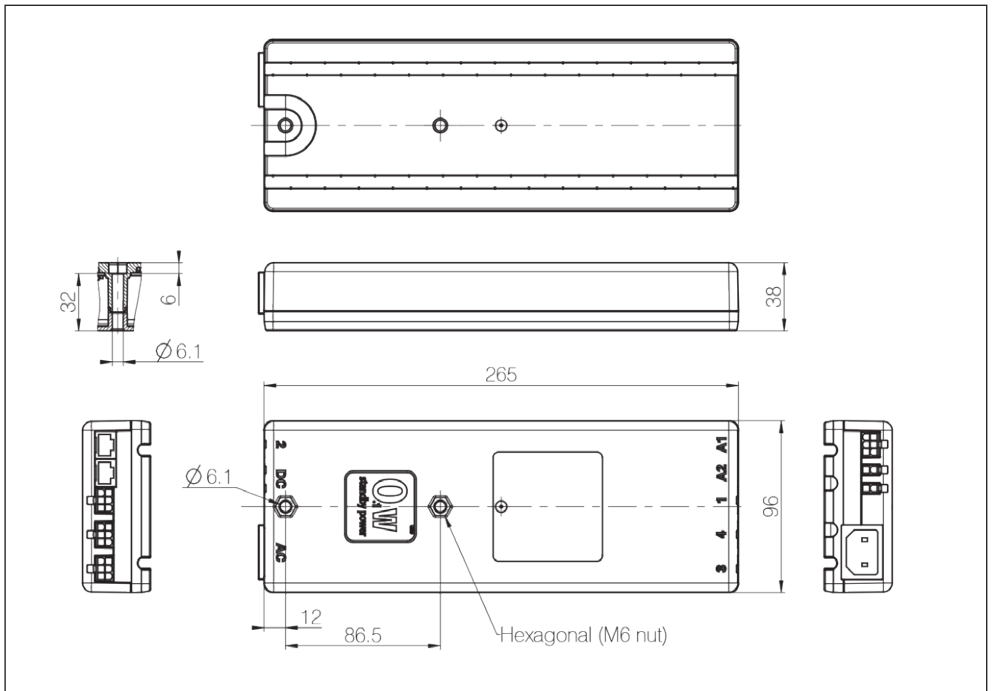
Bench bracket dimensions (mm)



CBD6S 200W (SMPS)



CBD6S 300W (SMPS) up to 4 channels



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