

LA10 Bed system

Data Sheet



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Introduction



The LA10 Bed system consists of one or more Linear Actuators LA10, a Bluetooth® dongle, a control unit, and a charging point. A Bluetooth® dongle ensures the wireless connection to the control unit. To complete the design, the charging point is available in different versions.

Features/Options/Compatibility/Usage

Linear Actuator LA10



Features

- 18 to 31 V DC supply with DC cable
- Max load
 - Push: 3500 N
 - Pull: 2500 N
- Max. speed: 16 mm/s
- Max. spindle pitch: 6 mm
- Compact design
- Stroke length:
 - min. 25 mm
 - max. 300 mm
- Installation dimension: stroke + 128 mm
 - Maximum tolerance: 1 mm
- Adjustable BID
 - Up to 2 mm longer
- Weight: Approximately 1 kg.
- Piston rod eye aligns with back fixture direction (adjustable to 45° or 135°)
- Colour: Black (RAL 9005)
- PVC-Free™

Options

- Various pre-set back fixture directions (0°, 45°, 90°, or 135°)
- Mechanical spline
- Customer ID

Compatibility

- SMPS001*, SMPS006 and SMPS007

**: Only SMPS001 devices produced after 7 August 2020 are compatible with the system. The production date is stated as part of the PO number on the label (the last six digits - YYMMDD. For example, PO20119727CY200807 means the production date is 7 August 2020.*

Usage

- Duty cycle: 10 % $\approx$ 1 minutes at continuous use followed by 9 minutes pause
- For indoor use in dry locations

Parameter	Operation	Storage and transportation
Temperature	5 to 40 °C	-10 to 50 °C
Relative humidity	20% to 80% - non-condensing	20% to 80% - non-condensing
Atmospheric pressure	800 to 1060 hPa	700 to 1060 hPa
Altitude	Max. 2000 m	N/A

- Complies with EN 60335-1

Bluetooth® dongle

The Bluetooth® dongle is the “brain” of your LA10 system and allows you to adjust your product wirelessly from an app or a Bluetooth® hand control. Simply plug the dongle into one of the actuators and pair your device to the system.

The dongle is a very compact unit requiring a minimum of space. No mounting is needed, just plug in the dongle and you are ready.



Features

- Bluetooth® Low Energy Technology (Version 4.0 of the Bluetooth® specification)
- Compact
- Simple plug-in, no mounting required
- Easy pairing
- PVC-free™
- Up to four favourite positions
- Weight: Approximately 15 g



Favourite positions functionality is only available with BLE2DC software version 2.03 or newer. It is not possible to make preset favourite positions.

Compatibility

- HOMELINE® wireless hand controls

Usage

- For indoor use in dry locations

Parameter	Operation	Storage and transportation
Temperature	5 to 40 °C	-10 to +50 °C
Relative humidity	20% to 80% - non-condensing	20% to 80% - non-condensing
Atmospheric pressure	800 to 1060 hPa	700 to 1060 hPa
Altitude	Max. 2000 m	N/A

- Complies with EN 60335-1

USB2DC



The USB2DC001 cable ensures communication between a computer and programmable/configurable PLC devices such as the LA10 actuator.

Simply connect the USB2DC001 cable to your computer and to your programmable/configurable device. As soon as communication is established, the device is ready for programming/configuration.

Features

- Cable length: 1800 mm + 100 mm
- Plugs: 2-pole minifit and USB
- LED flashing during programming
- Colour: Black

Compatibility

- LA10

Usage

- For programming of all PLC-based devices via a configurator
- For indoor use in dry locations

Parameter	Operation	Storage and transportation
Temperature	5 to 40 °C	-10 to +50 °C
Relative humidity	20% to 80% - non-condensing	20% to 80% - non-condensing
Atmospheric pressure	800 to 1060 hPa	700 to 1060 hPa
Altitude	Max. 2000 m	N/A

Control Unit BP10

The Control Unit BP10 product series is designed for the control of beds with the LA10 system. The control unit is a small hand-held control which can optionally be placed in a bracket on the bed and used as a panel. The standard control unit is the BP12 version controlling 2 channels. Versions controlling 1 or 3 channels are available.

The Control Unit BP10 product series combines ergonomic design and functionality into a user-friendly control with intuitive buttons.



BP12



BP10 bracket

Features

- Control unit controlling up to three channels
- Ergonomic and elegant design
- Magnetic
- Intuitive use
- Replaceable CR2032 battery
- PVC-Free™
- Weight: Approximately 50 g
- Sleep mode
- Power-saving mode



Sleep mode:

When no key is pressed, the control unit will enter sleep mode 5 seconds after last operation.



Power-saving mode:

If a key (or a key combination) is pressed for more than 2 minutes, the control unit enters power-saving mode even if the control unit at that time is connected to a system. When this happens, the control unit will disconnect from the system (if connected) and enter a power-saving mode where the keys are scanned every 500 ms for changes (the control unit is sleeping the rest of the time). This is done to conserve power if a key becomes stuck during transportation. The power-saving mode is left when all keys are released.

Options

- Customised silk screen print on cover
- Customised colour
- Customised logo on battery cover

Compatibility

- HOMELINE® products with integrated Bluetooth®

Usage

- For indoor use in dry locations

Parameter	Operation	Storage and transportation
Temperature	5 to 40 °C	-10 to +50 °C
Relative humidity	20% to 80% - non-condensing	20% to 80% - non-condensing
Atmospheric pressure	800 to 1060 hPa	700 to 1060 hPa
Altitude	Max. 2000 m	N/A

- Complies with EN 60335-1

Ordering

ACTUATOR TYPE	10	10 = LA10
SPINDLE PITCH	040	040 = 4 mm 060 = 6 mm
STROKE LENGTH	XXX	XXX = xxx mm (INSTALLATION DIMENSION - 128 mm) ¹
SAFETY	00	00 = Standard 0D = Mechanical spline
FEEDBACK	00	00 = PLC HOMELINE
PLATFORM	0	0 = Standard
MOTOR TYPE	B	B = 24 V DC Normal
OPTION	0	0 = Standard
IP	0	0 = None
COLOUR	-	- = Black (RAL 9005)
INSTALLATION DIMENSION *	XXX	XXX = xxx mm ²
BACK FIXTURE DIRECTION **	2	1 = Standard 0° 2 = Turned 90° 3 = Turned 45° 4 = Turned 135°
BACK FIXTURE	1	1 = Slot Ø8.2 2 = Slot Ø10.2 3 = Slot Ø12.2
PISTON ROD	1	1 = Plastic with slot Ø8.2 2 = Plastic with slot Ø10.2
BRAKE	0	0 = No brake
CONFIGURE FOR SW	0A	0A = Standard configuration 0B = Special configuration ³
OPTION	0	0 = Standard
OPTION	0	0 = Standard
FIRE CATEGORY	1	1 = 5 VA
CUSTOMER ID	0	0 = None 1 = Customer ID

10040XXX00000B00-XXX21100A0010

*: See table below

** : See photos below

¹: 4 mm pitch: Min. 25 mm, Max. 200 mm
6 mm pitch: Min. 25 mm, Max. 300 mm

²: 4 mm pitch: Min. 153 mm, Max. 328 mm
6 mm pitch: Min. 153 mm, Max. 428 mm

³: Remember to attach a configuration file when ordering a special item via system spec.

Installation dimension [mm]	153	188	220	228	263	278
Stroke length [mm]	25	60	92	100	135	150

An actuator with a different installation dimension than the ones mentioned in the table above requires a minimum order quantity of 2,500 pcs/year. The stroke length can be configured individually to a shorter length.



0°



45°



90°



135°

Additional items, cables, and SMPS must be ordered separately.

Bed-frame examples:

GTE Spine

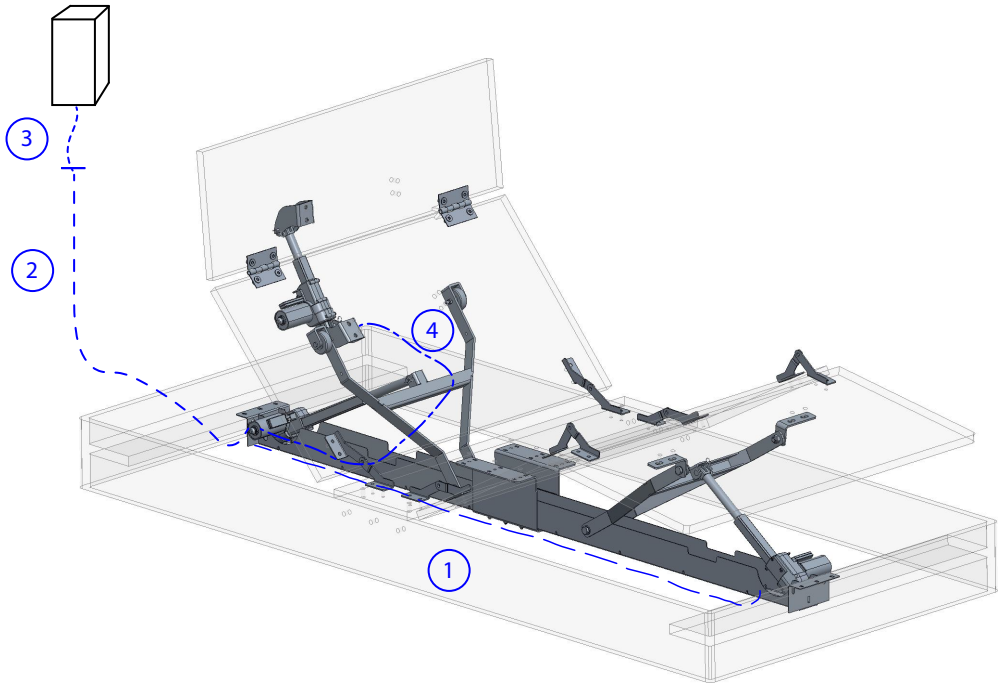


Figure 1 Connection overview for GTE Spine bed frame

GTE PowerFlex

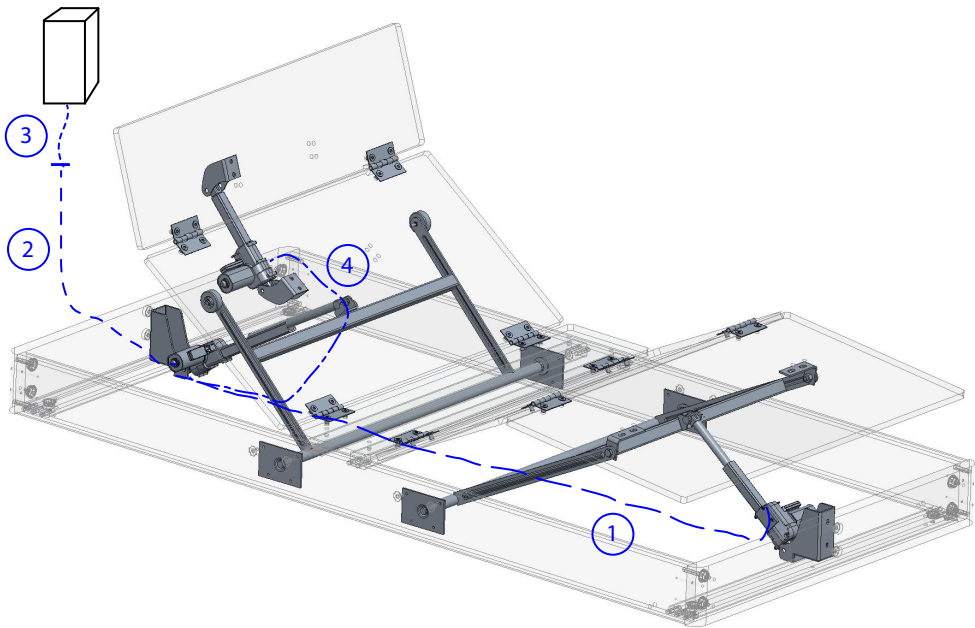


Figure 2 Connection overview for GTE Powerflex bed frame

Recommended cables

Connection	Cable	Cable type
1	CAB0705873-1800	2-poled DC cable
2	CAB0705873-1800	2-poled DC cable
3	CAB1036W7004	ClearLine cable for maintaining signal strength
4	CAB0705887 + CAB0705839	T-splitter cable + 2-poled DC cable

Additional items for the LA10 system

Name	Item number	Description
Bluetooth® dongle	BLE2DC000	Dongle for wireless connection to the control unit
BP11	BP11BL0001	Control unit, 1 channel
BP12	BP12BL0001	Control unit, 2 channels
BP13	BP13BL0001	Control unit, 3 channels
Bracket for BP10 series	MB001	Bracket with metal plate
	MB002	Metal plate for under-cover mounting
Charging point	CP001-0500	Simple charging point with Jack connector; length 500 mm
	CP002-0500	Basic charging point with Jack connector and light; length 500 mm
	CP003-0500	Magnetic charging point with magnetic connector and light; length 500 mm

Minimum order quantity (MOQ) for control units (BP10 series):

- Standard articles: 80 pieces (≈ one box)
- Special articles: 400 pieces (always in multiples of 80 pieces)
- Top part, top cover, and/or battery cover in custom colours: 1040 pieces (always in multiples of 80 pieces)

Cables for the LA10 system

Name	Item number	Description	Length
Safety release cable	CAB1059W7007	Black	250 mm
Connection cable	CAB0965362-400	Black; 2-pole mini-fit cable with angle plug in both ends	400 mm
Connection cable	CAB0965362-800	Black; 2-pole mini-fit cable with angle plug in both ends	800 mm
USB2DC	USB2DC001	USB2DC cable for configuration of products	1800 mm + 100 mm
Charging cable for CP001/CP002	CAB1059W7010	Black	2500 mm
Charging cable for CP003	CAB1059W7012	Black; angled	2500 mm
	CAB1059W7014	Black; straight	2500 mm
ClearLine cable for maintaining signal strength	CAB1036W7004	Black; 2-pole mini-fit with straight plug in both ends	200 mm
2-poled DC cable	CAB0705873-1800	Black; 2-pole mini-fit cable with angle plug in both ends	1800 mm
T-splitter cable	CAB0705887	Black; T-splitter cable for 2-pole mini-fit cables with straight plug in both ends	300 mm
Cable for connection to SMPS	CAB0705839-1350	Black; 2-pole mini-fit with angled plug in both ends	1350 mm

SMPS

SMPS001 = 230 V version ([link](#))

SMPS006 = Universal input 100 to 240 V version ([link](#))

SMPS007 = 120 V version ([link](#))

Dimension drawings

 All dimensions are in mm.

Linear Actuator LA10

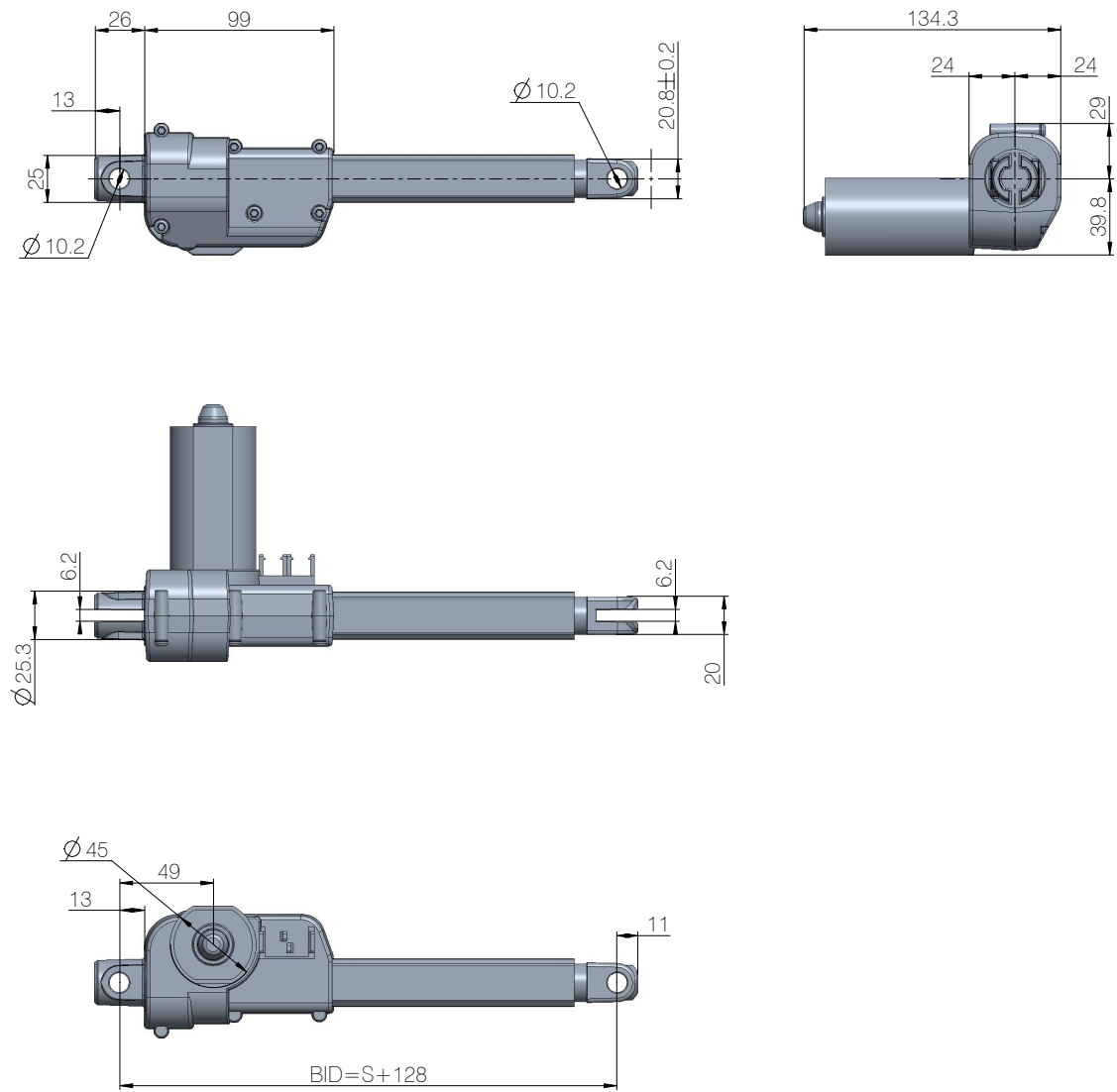
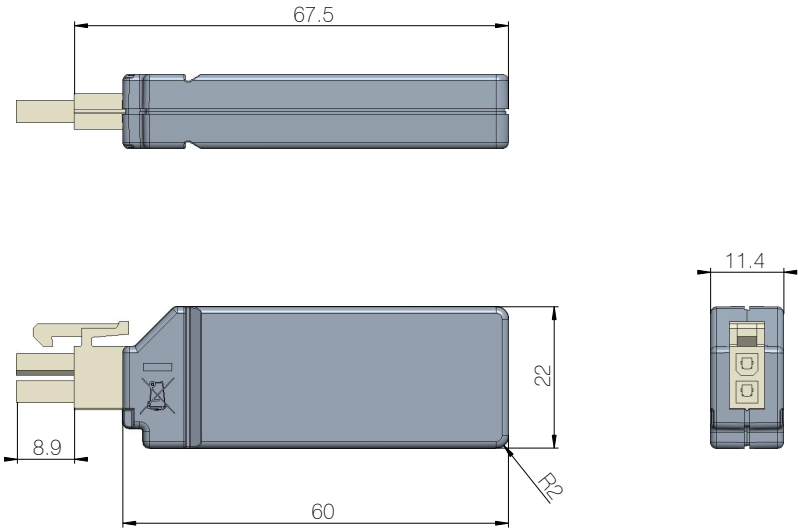


Figure 3 LA10

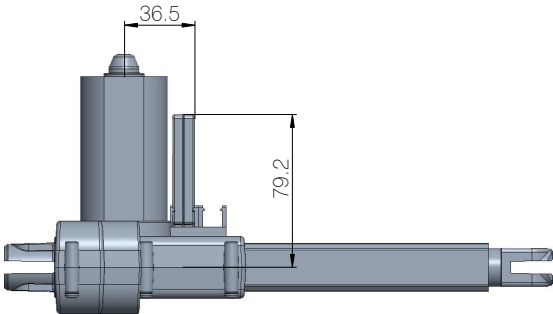
Drawing no. 1036W4000

Bluetooth® dongle



Drawing no. 1057W4004

Figure 4 Bluetooth® dongle



Drawing no. 1036W4000

Figure 5 Bluetooth® dongle mounted in the LA10

USB2DC

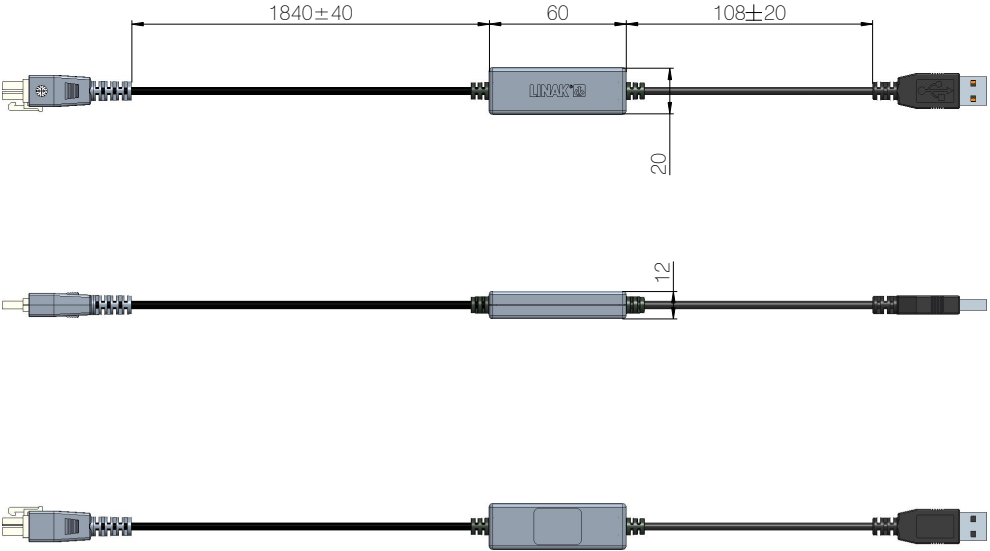


Figure 6 USB2DC

Drawing no. 1058W4000

Control Unit BP10

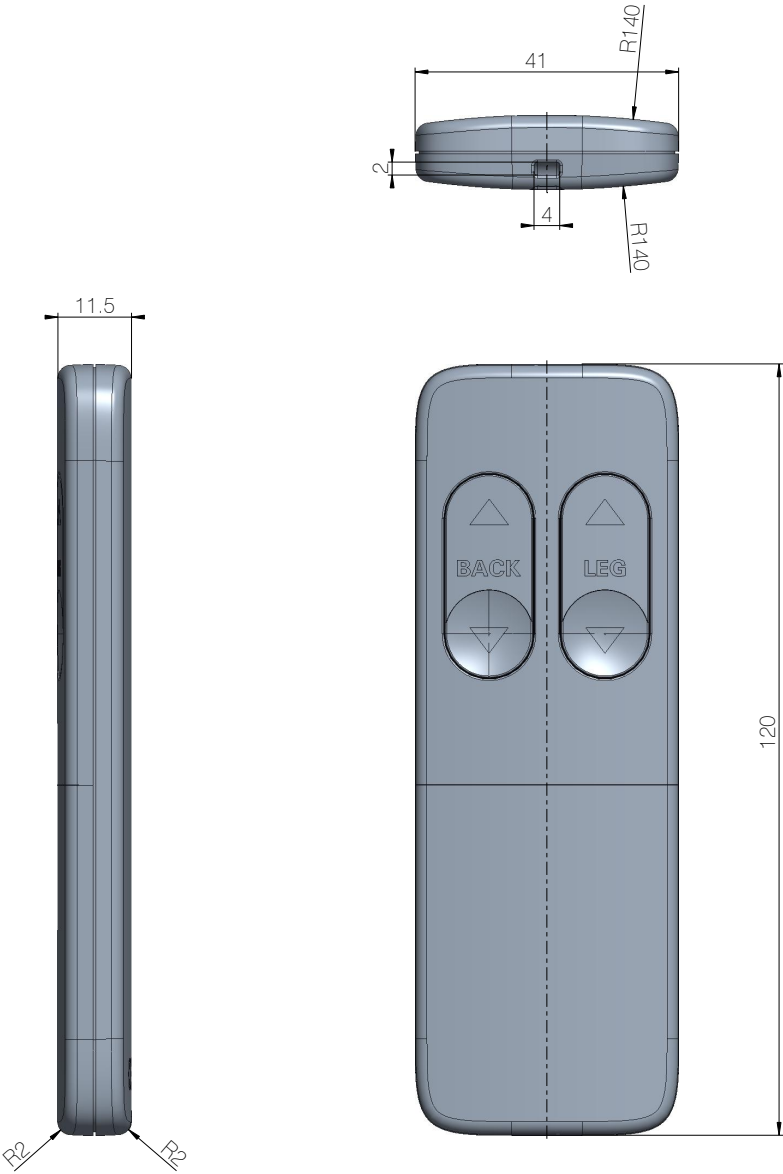
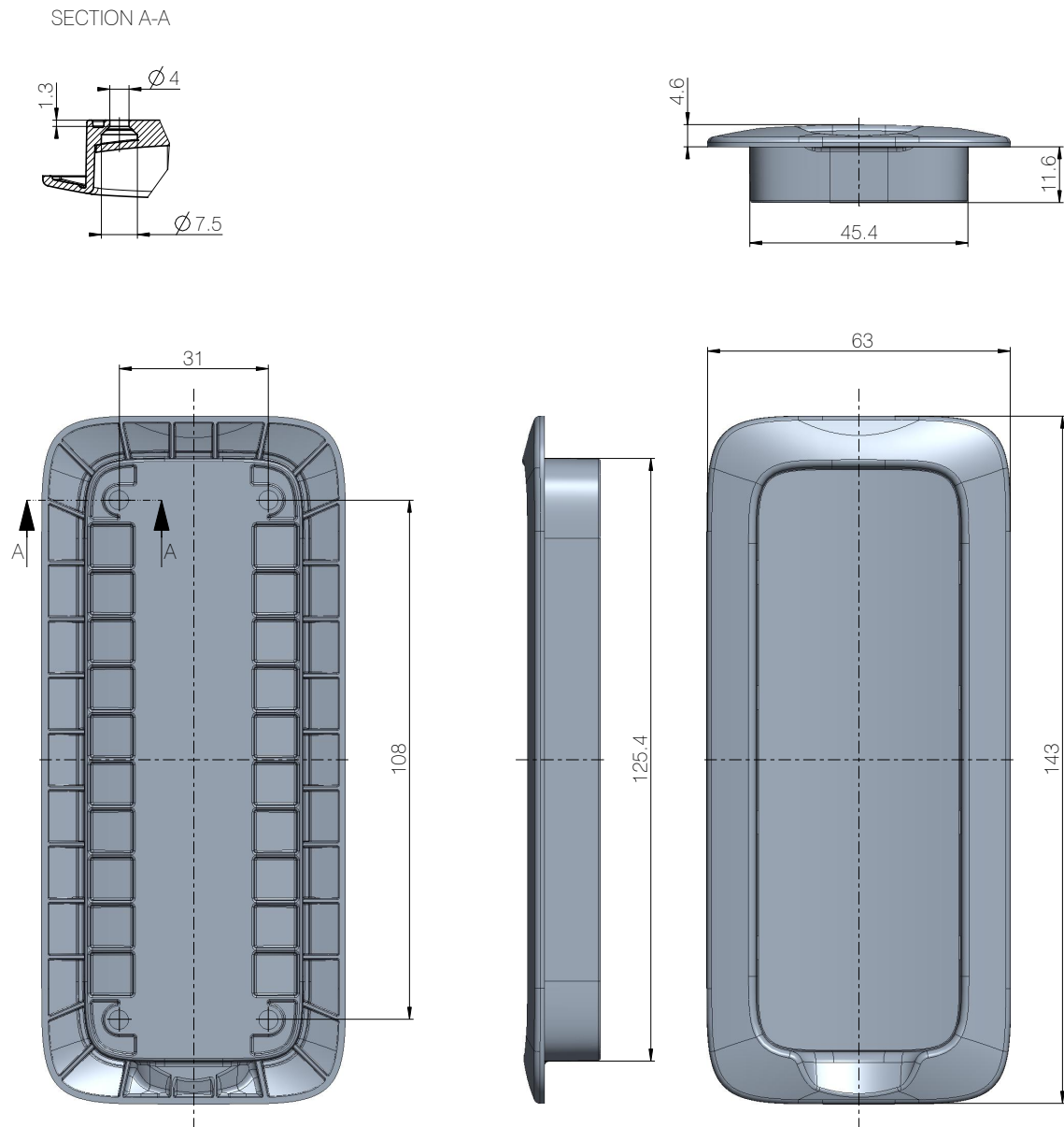


Figure 7 BP12

Drawing no. 1055W4006



Drawing no. 1055W4008

Figure 8 Bracket for the BP10 series

Contacts

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