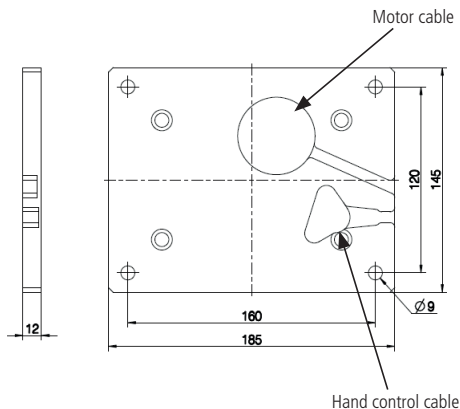


Top plate dimensions:



Hand control cable

12

150

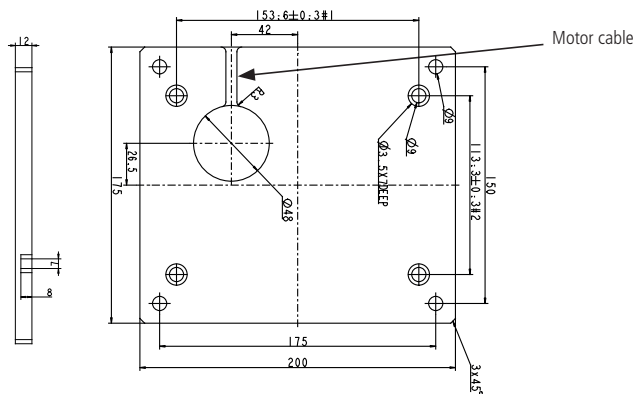
175

175

200

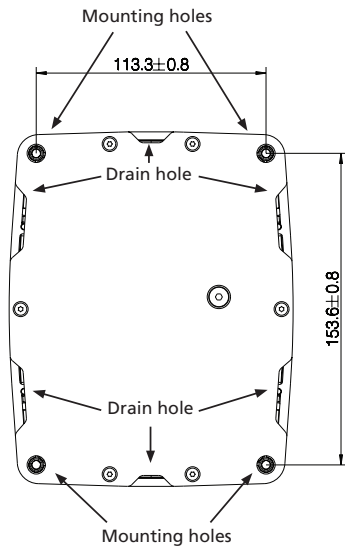
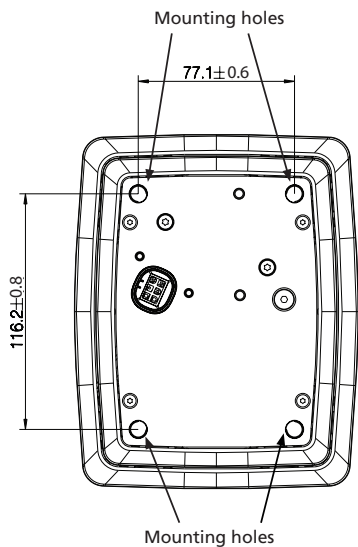
Ø 9

Bottom plate dimensions:



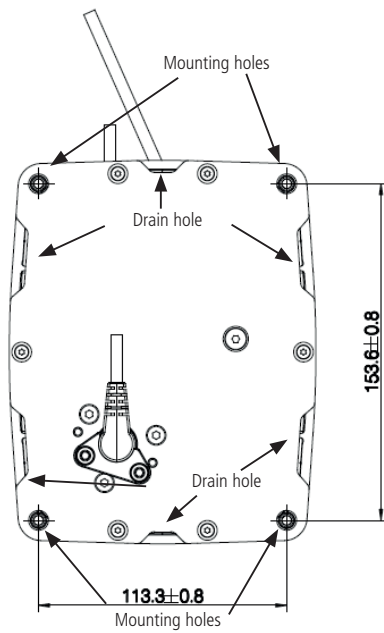
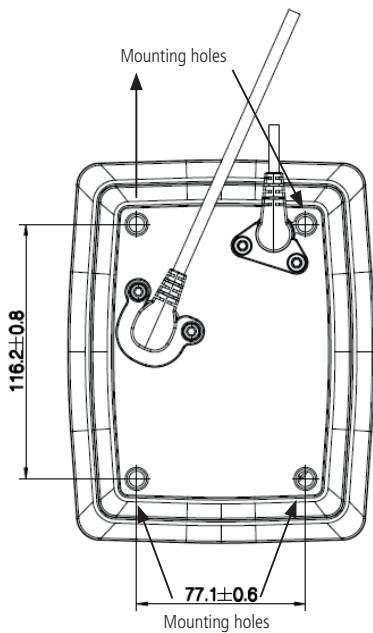
BL1 Mounting guidelines:

- Page 81 of 264



Drawing no.: 0807000-1

Mounting of BL1 with cable through:



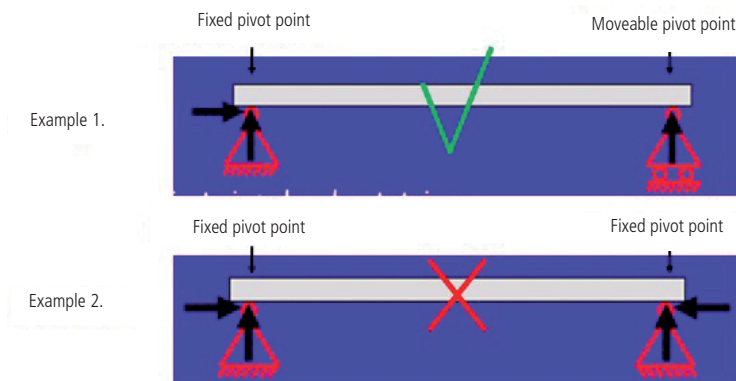
Drawing no.: 0807001-1



Recommendations

- The mounting plate in the application must cover the entire top plate of the BL1 and be strong enough to carry the load.
- Remember to secure the cable mounted in the top of the column to the application, so that it cannot be pulled out of the column.
We recommend to use LINAK Cable:
 - Lock kit for BL1 with motor cable: 0808040
 - Lock kit for BL1 with hand control cable through: 0808046Use only the screws included in the kit.
- For motor cable mounted at the top, use the long screw with the coarse thread.
Screw torque 1.7 Nm.
- For motor cable mounted at the bottom and for cable through, use the short screw with the fine thread. Screw torque 2.7 Nm.
- Electro Static Discharges!
There is no electrical connection through the length of the BL1 column. Therefore, to avoid ESD issues, consider external potential alignment between the top and bottom of the bed frame.
To connect for further earth wiring in the application, use an appropriate $\varnothing 8$ mm cable shoe under one of the 8 mm screws at both the top plate and the bottom plate.
- Remember to mount the blind plugs in the top plate if the motor cable is connected from the bottom plate to ensure the IPX6 protection.

When mounting more than one BL1 you need to consider the fixation:

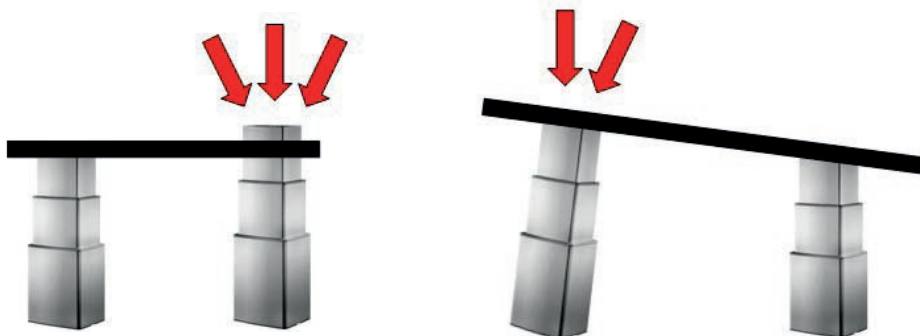


The reason why it is important only to fix one column, is that the columns will not move exactly in parallel – even if you have positioning such as hall.

If more than one column is fixed it can lead to dangerous situations.

If you have a trend/anti-trend function in your application, you need to mount one or more BL1s with a slider.

Having sliders prevents the column from bending as illustrated below.



LINAK®

Designed in Denmark
DK - 6430 Nordborg

Type : LC3100400T0000M0320G114-000

Item No. : J90315

Prod. Date : 2018.07.03

Max Load : Push 4000 N IPX4

Power Rate: 24 V~, Max. 13.8 A

Duty Cycle : 10%, Max. 2 min. / 18 min.

NOT TO BE OPENED BY UNAUTHORIZED PERSONNEL

NE PAS OUVRIR PAR DU PERSONNEL NON AUTORISÉ



W/O# - 0001



The LC3 2-stage and 3-stage set the standard for vertical lifting columns to high-end medical applications. This compact lifting column fulfils the market requirements for a solid and stable lifting column.

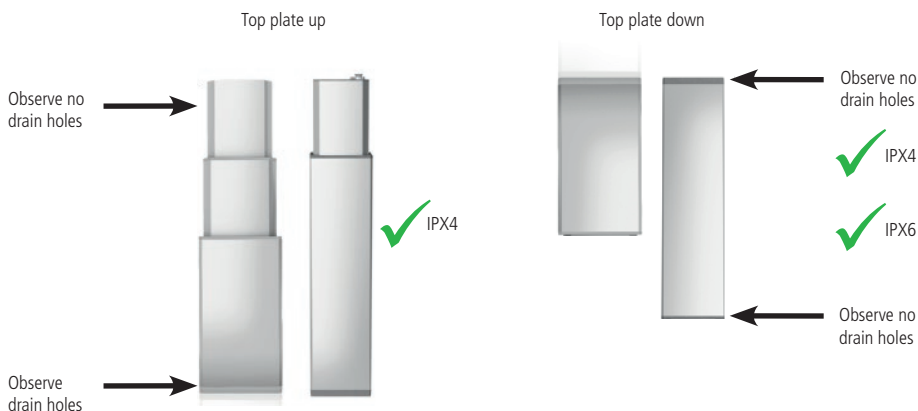
Usage:

- Duty cycle: 10%, 2 minutes continuous use followed by 18 minutes not in use
- Operation temperature: +5 °C to + 40 °C
- Storage temperature: -40 °C to + 70 °C
- Compatibility: Compatible with LINAK control boxes. Please contact LINAK.
- Relative humidity: 20% to 80% - non-condensing
- Atmospheric pressure: 700 to 1060 hPa
- Meters above sea level: Max. 3000 meters
- Approvals: IEC 60601-1
IEC 60601-1-6
ANSI/AAMI ES60601-1
CAN/CSA-C22.2 No. 60601-1

LC3 mounting guidelines

LC3 is for use in push or pull applications and can be mounted in both directions – largest profile down or largest profile up. LC3 must be specified for specific mounting direction.

Mounting direction according to item number nomenclature.



IPX6 is only available when LC3 is mounted with the largest profile up.

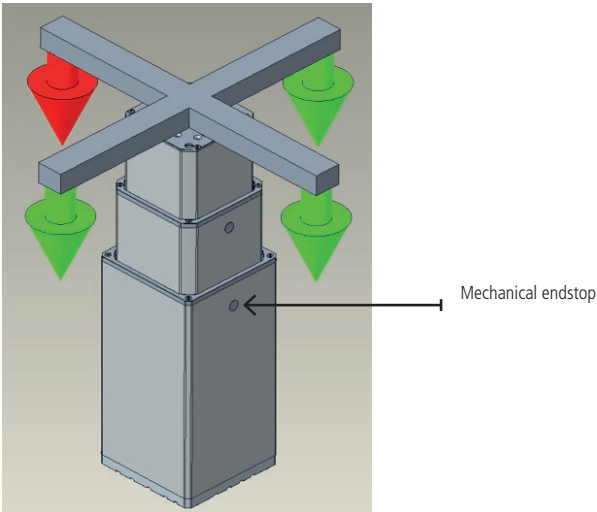
IPX6 is only applicable when the LC3 column is fully retracted.

Note: The cable outlet for motor connection can be positioned at the top (smallest profile) or from the side of the column.

LC3 mounting guidelines

If you want to use the column with a high off-center load, we recommend that you install the weight in one of the 3 ways illustrated by the green symbols. It is not recommended to install the weight on the opposite side of the mechanical endstop as illustrated with the red symbol.

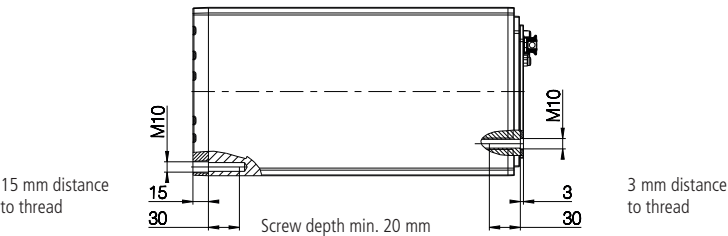
This installation can create an uneven movement when the lifting column reaches the endstop position.



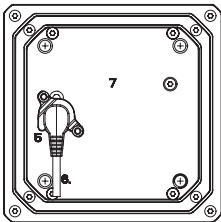
Use 4 pcs. M10 8.8 screws, in each end, for mounting to the application. The screw depth must be min. 20 mm and max. 30 mm in aluminum profile.

Screw torque: 35 Nm.

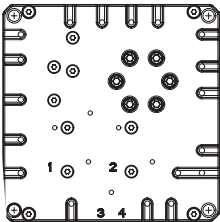
LC3 3-Stage



Mounting holes, top



Mounting holes, bottom

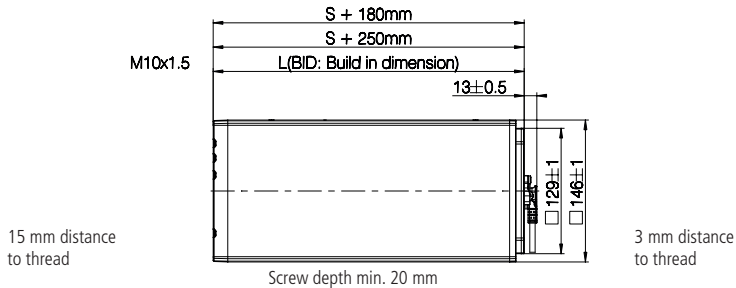


Drawing no.: 1002W9005

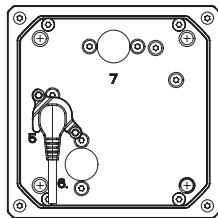
Use 4 pcs. M10 8.8 screws, in each end, for mounting to the application. The screw depth must be min. 20 mm and max. 30 mm in aluminum profile.

Screw torque: 35 Nm.

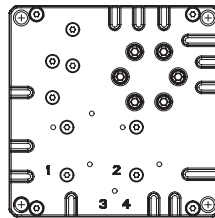
LC3 2-Stage



Mounting holes, top



Mounting holes, bottom



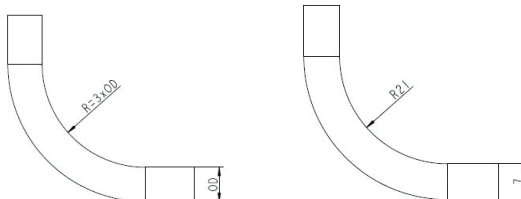
Drawing no.: 1002W9008

Notice that the cable plug must be mounted correctly. The cable slot must fit into the socket.

-  Remember to secure the cable mounted in the top of the column to the application, so that it cannot be pulled out of the column. We recommend to use LINAK Cable:
- Lock kit for minifit cable: 1002W8136-A.
 - Lock kit for hand control cable through: 1002W8137-A

Use only the screws included in the kit. Screw torque: 2 Nm

The cables coming out of the side of the column should follow below guidelines. The internal radius should not be more than 3 times the outer dimension – OD - of the cable. For instance if the outer cable dimension is Ø7, the internal radius of the maximum cable bending is 21 mm.

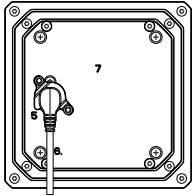
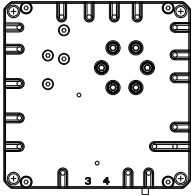
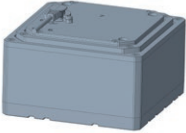
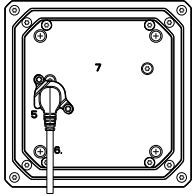
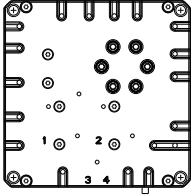
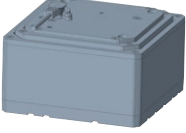
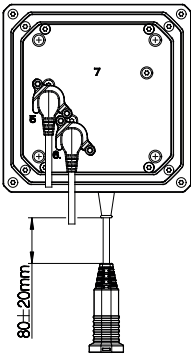
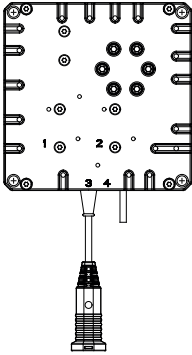
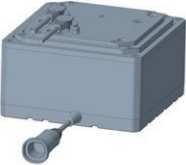
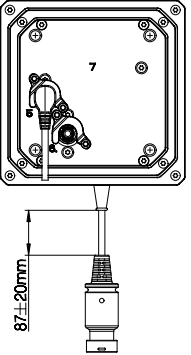
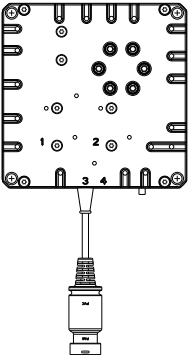
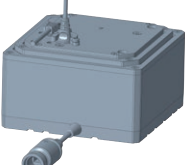


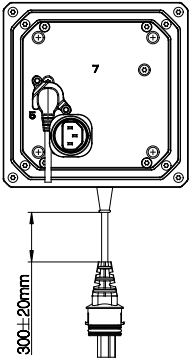
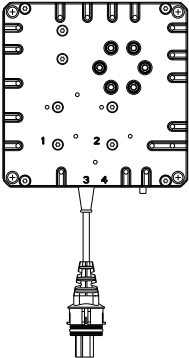
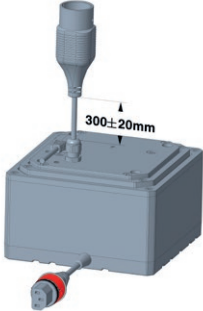
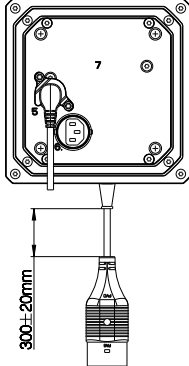
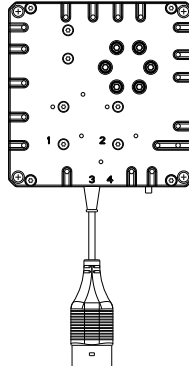
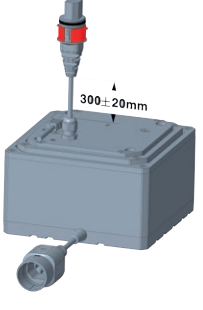
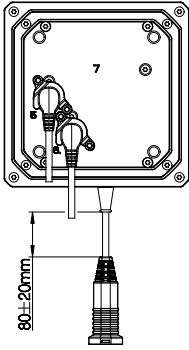
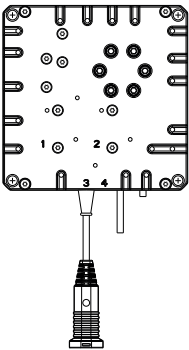
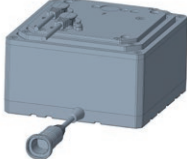
-  LC3 3-stage - protective grounding cable
LC3 has potential equalization between top and bottom plate but the middle profile is not grounded.

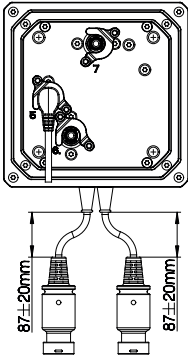
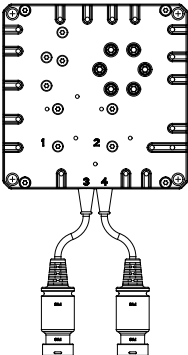
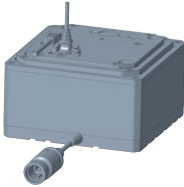
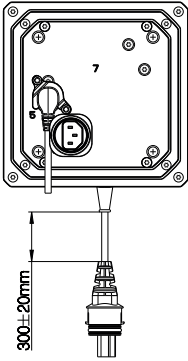
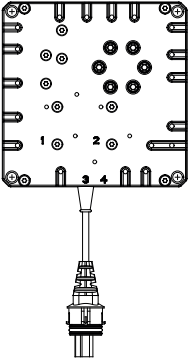
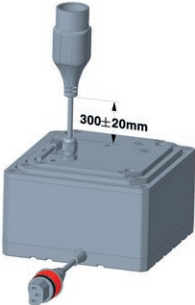
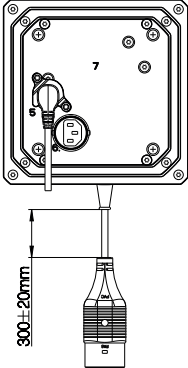
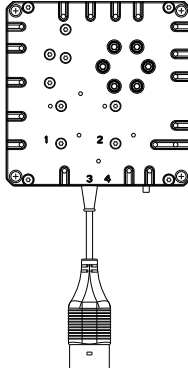
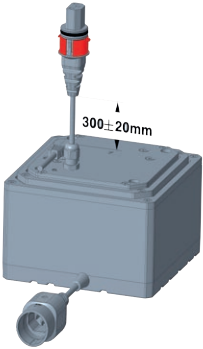
-  It is recommended to use screws with thread-lock adhesive
Screws of high quality steel 8.8 or 10.9 must be used to secure safe mounting of the LC3 to the application.

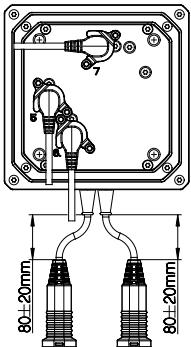
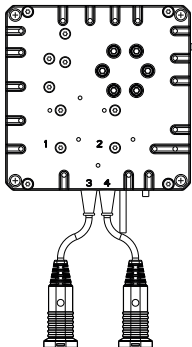
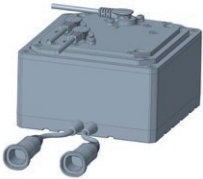
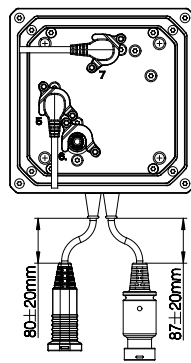
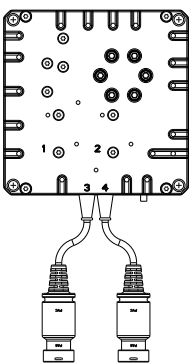
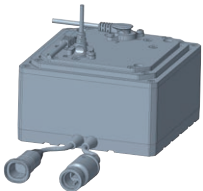
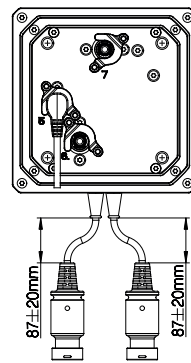
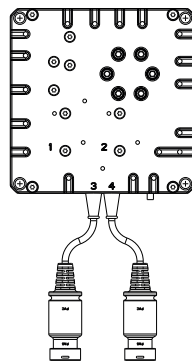
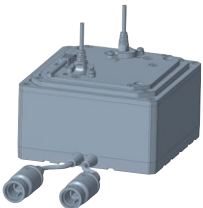
Cable connections overview

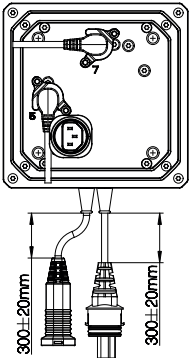
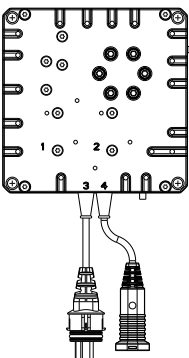
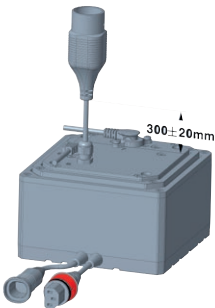
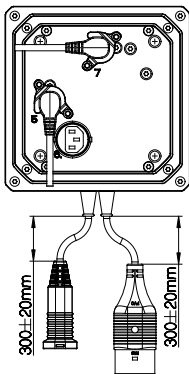
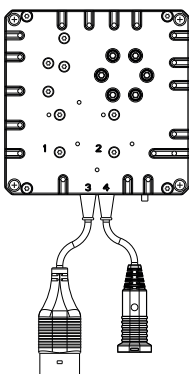
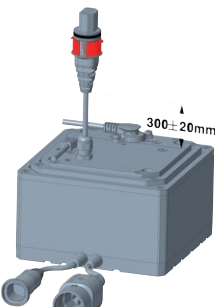
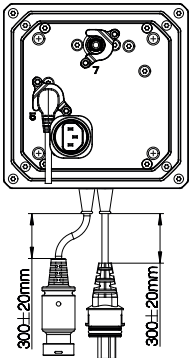
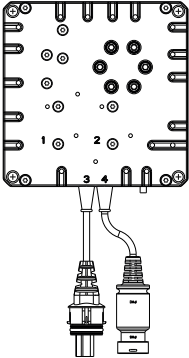
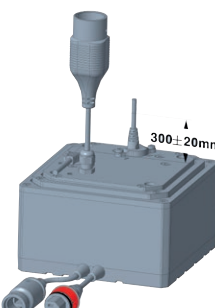
3-stage is used as examples but variants are also applicable for 2-stage. This overview shows all possible cable connections, but please notice that some variants are upon request.

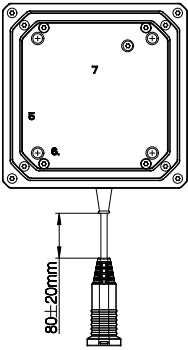
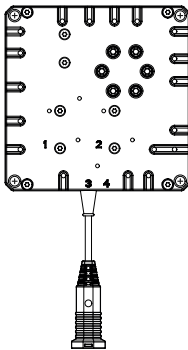
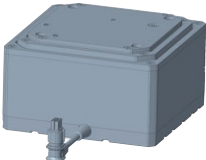
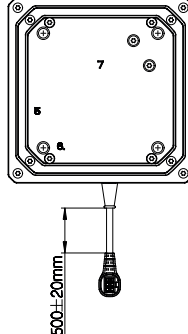
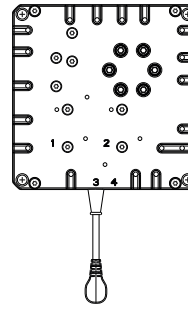
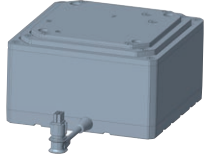
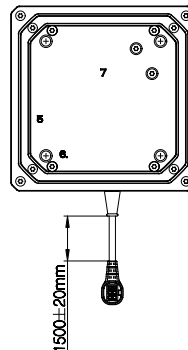
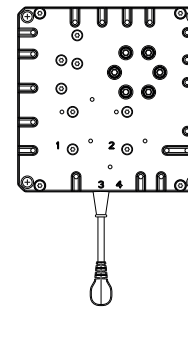
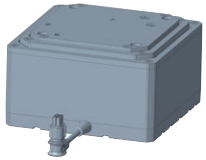
Variant	Top plate Drawing no.:1002W9005	Side entry Drawing no.:1002W9005	Model view
T000			
Connections	5: Motor		
T001			
Connections	5: Motor		Including protective grounding cable
T100			
Connections	5: Motor 6: Minifit through	←→ 3: Minifit through	
T200			
Connections	5: Motor 6: HB through	←→ 3: HB through	

T030			
Connections	5: Motor 6: Mains through 1 Female connection top entry, male connection side entry	←→ 3: Mains through 1 Female connection top entry, male connection side entry	
T040			
Connections	5: Motor 6: Mains through 2 Male connection top entry, female connection side entry	←→ 3: Mains through 2 Male connection top entry, female connection side entry	
T101			
Connections	5: Motor 6: Minifit through	←→ 3: Minifit through	Including protective grounding cable

T201 Connections	 5: Motor 6: HB through	 ←→ 3: HB through	 Including protective grounding cable
T031 Connections	 5: Motor 6: Mains through 1 Female connection top entry, male connection side entry	 ←→ 3: Mains through 1 Female connection top entry, male connection side entry	 Including protective grounding cable
T041 Connections	 5: Motor 6: Mains through 2 Male connection top entry, female connection side entry	 ←→ 3: Mains through 2 Male connection top entry, female connection side entry	 Including protective grounding cable

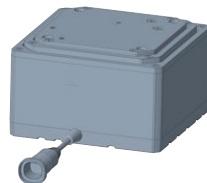
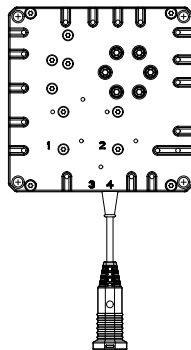
T110	 5: Motor 6: Minifit through (top) 7: Minifit through (top)	 3: Minifit through (side) 4: Minifit through (side)	
T120	 5: Motor 6: HB through 7: Minifit through	 3: HB through 4: Minifit through	
T220	 5: Motor 6: HB through (top) 7: HB through (top)	 3: HB through (side) 4: HB through (side)	

T130 Connections	 5: Motor 6: Mains through 1 Female connection top entry, male connection side entry 7: Minifit through	 3: Mains through 1 Female connection top entry, male connection side entry 4: Minifit through	
T140 Connections	 5: Motor 6: Mains through 2 Male connection top entry, female connection side entry 7: Minifit through	 3: Mains through 2 Male connection top entry, female connection side entry 4: Minifit through	
T230 Connections	 5: Motor 6: Mains through 1 Female connection top entry, male connection side entry 7: HB through	 3: Mains through 1 Female connection top entry, male connection side entry 4: HB through	

S500 Connections		 3: Motor supply	
S301 Connections		 3: Motor supply	 Including protective grounding cable
S401 Connections		 3: Motor supply	 Including protective grounding cable

S501

Connections

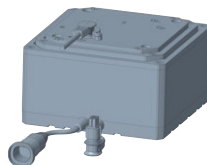
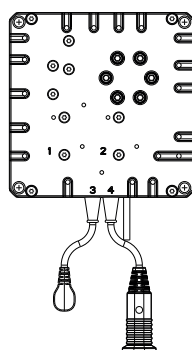
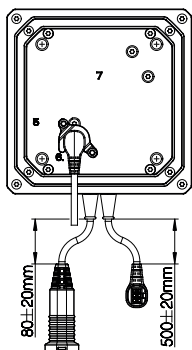


3: Motor supply

Including protective grounding cable

S310

Connections



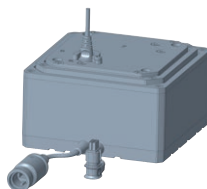
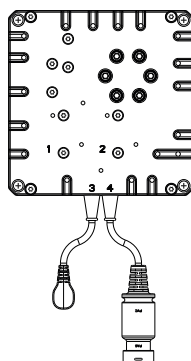
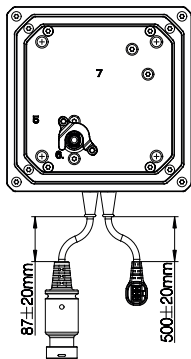
6: Minifit through

3: Motor supply

➔ 4: Minifit through

S320

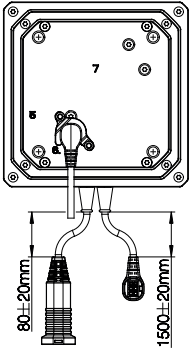
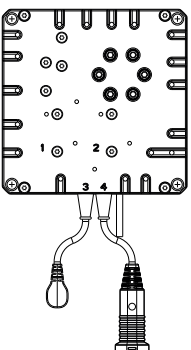
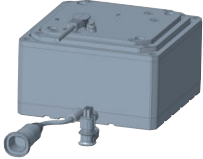
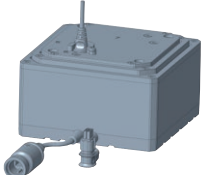
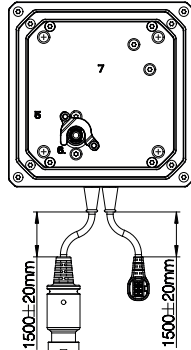
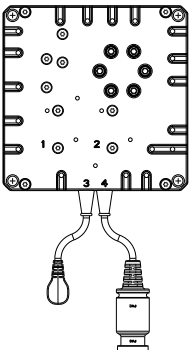
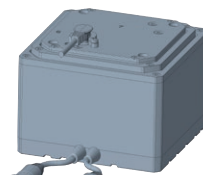
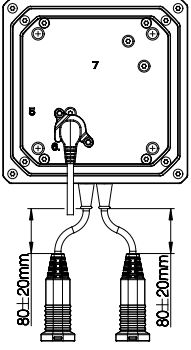
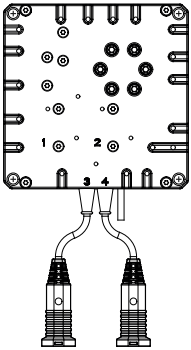
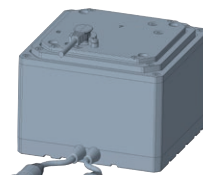
Connections

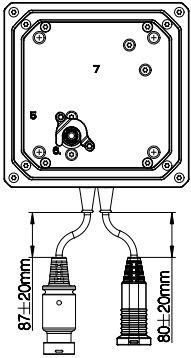
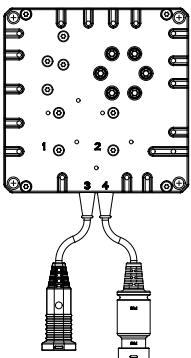
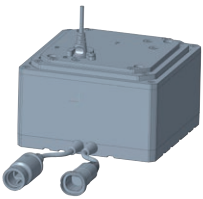
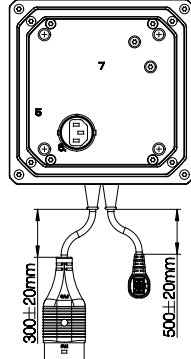
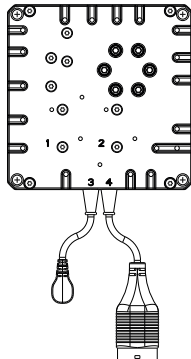
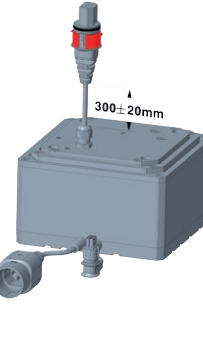


6: HB through

3: Motor supply

➔ 4: HB through

S410			
Connections	6: Minifit through	3: Motor supply 4: Minifit through	
S420			
Connections	6: HB through	3: Motor supply 4: HB through	
S510			
Connections	6: Minifit through	3: Motor supply 4: Minifit through	

S520			
Connections	6: HB through	3: Motor supply 4: HB through	
S330			
Connections	6: Mains through 1 Female connection top entry, male connection side entry	3: Motor supply 4: Mains through 1 Female connection top entry, male connection side entry	
S340			
Connections	6: Mains through 2 Male connection top entry, female connection side entry	3: Motor supply 4: Mains through 2 Male connection top entry, female connection side entry	