



Product Presentation Ø48 steel suspension system

CS-480 B.fle^x

**... whether round or square,
always flexible and inexpensive**

Updated Aug-2020

CS-480 B.flex



Suspension system for connection

of housing systems on machines, plants and building areas

Connection possibilities

- control enclosure with flange size of min. Ø 81mm
- encapsulated IPCs with fixed Ø 48mm round tube connectivity
- encapsulated IPCs with rotatable Ø 48mm round tube connectivity



CS-480 B.flex

CS-480 B.flex



Product Advantages at a glance

- simplest and most cost-effective solution for hanging and standing operator stations
- quick and easy ergonomic adjustment
- continuous earthing possible
- maximum cable opening: Ø 40 mm
- flexible and cost-effective connection from round to square tube
- easy to retrofit - no complete replacement of the previous suspension system necessary



CS-480 B.flex

CS-480 B.flex



BERNSTEIN's smallest suspension system solution for encapsulated IPCs and control enclosures

Typical environmental conditions

- Temperature range -5°C to $+70^{\circ}\text{C}$
- The suspension system meets protection class IP65 according to EN 60529
- The suspension system shall only be used under a rated voltage of max. 400 V AC or 48 V DC or for general indoor applications

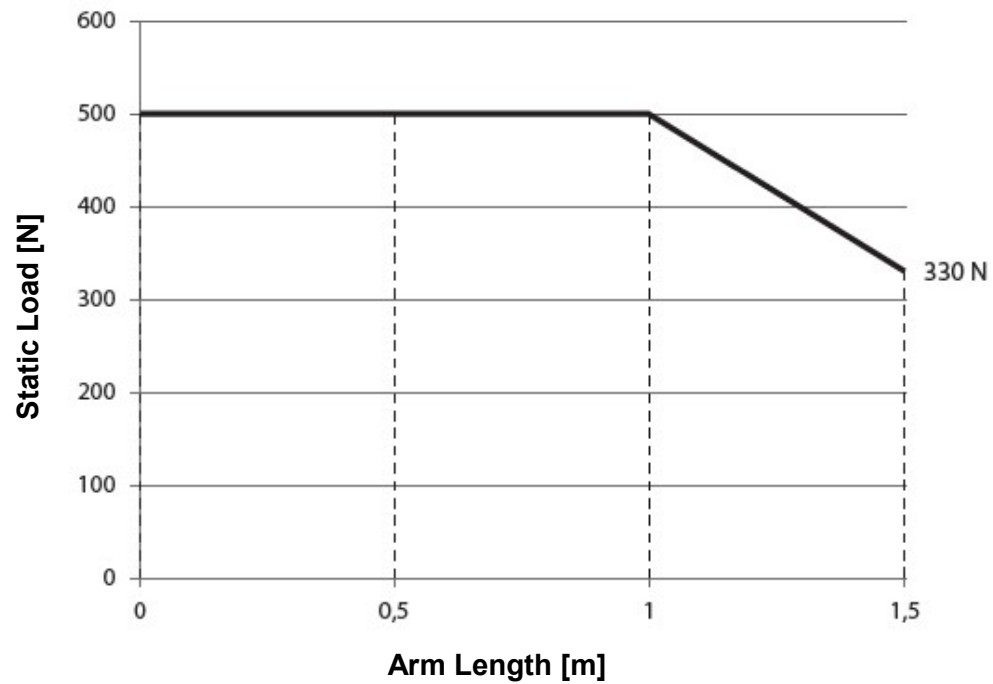


CS-480 B.flex

CS-480 B.flex



Load Diagram Static Load of the CS-480 B.flex



CS-480 B.flex

System Overview



- Straight coupling**
1014800001 RAL 9006 white-aluminium*
1014800015 RAL 7016 anthracite-grey
- Aluminium die-casting
 - Angle of rotation 300° with stop
 - Weight: 957 g
 - Connection for equipotential bonding



- Panel coupling S for VESA-Adaption**
1014800003 RAL 9006 white-aluminium*
1014800029 RAL 7016 anthracite-grey



- Base/ Wall flange**
1014800013 RAL 9006 white-aluminium*
1014800027 RAL 7016 anthracite-grey
- Aluminium die-casting
 - Weight: 1273 g
 - Connection for equipotential bonding



- Elbow, rotary**
 from CS-3000neXt to tube Ø48 mm
1014800008 RAL 9006 white-aluminium*
1014800022 RAL 7016 anthracite-grey



- Rotatable base**
1014800014 RAL 9006 white-aluminium*
1014800028 RAL 7016 anthracite-grey
- Aluminium die-casting
 - Angle of rotation 300° with stop
 - Optional swivel angle limitation
 - Weight: 1917 g
 - Connection for equipotential bonding



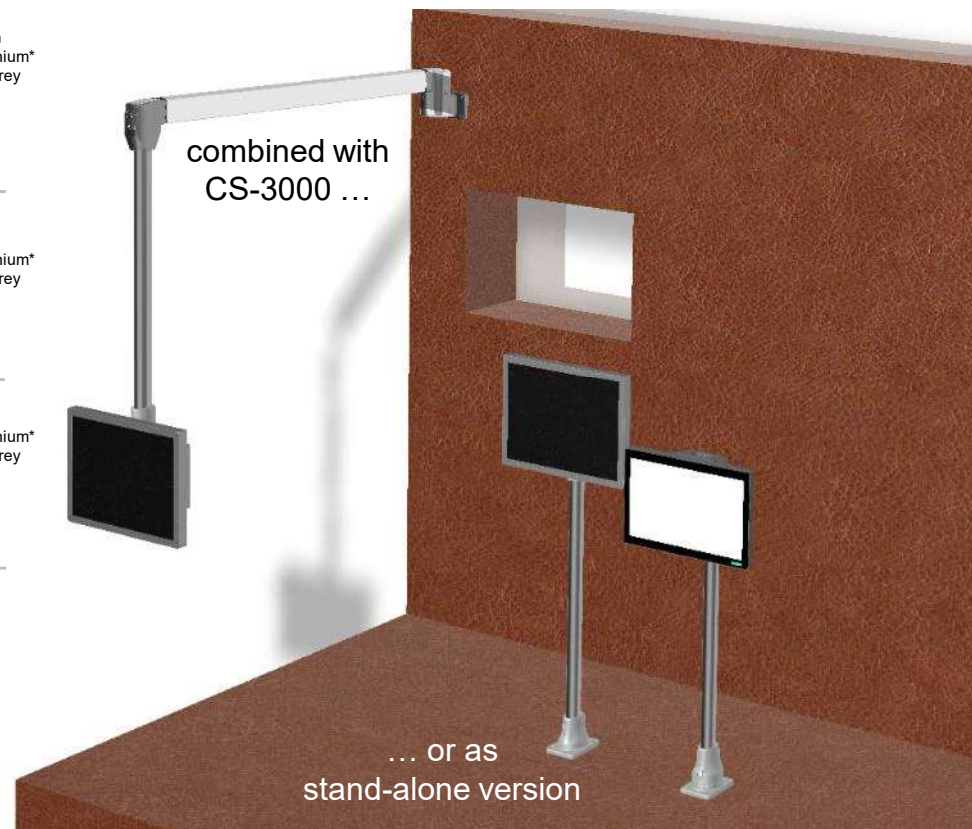
- Wall joint S**
1014800011 RAL 9006 white-aluminium*
1014800025 RAL 7016 anthracite-grey



- Elbow, reduced RD 48**
 From suspension system CS-3000 to tube 48 mm
1015300197 RAL 9006 white-aluminium*
1015300020 RAL 7016 anthracite-grey
- Reducar elbow from the square tube to 48 mm round tube
 - Aluminium die-casting
 - Weight: 1920 g



- Suspension tube Ø 48 mm**
- Galvanized steel
 - Maximum cable diameter Ø 40 mm
 - Lengths can be selected



CS-480 B.flex

CS-480 B.flex

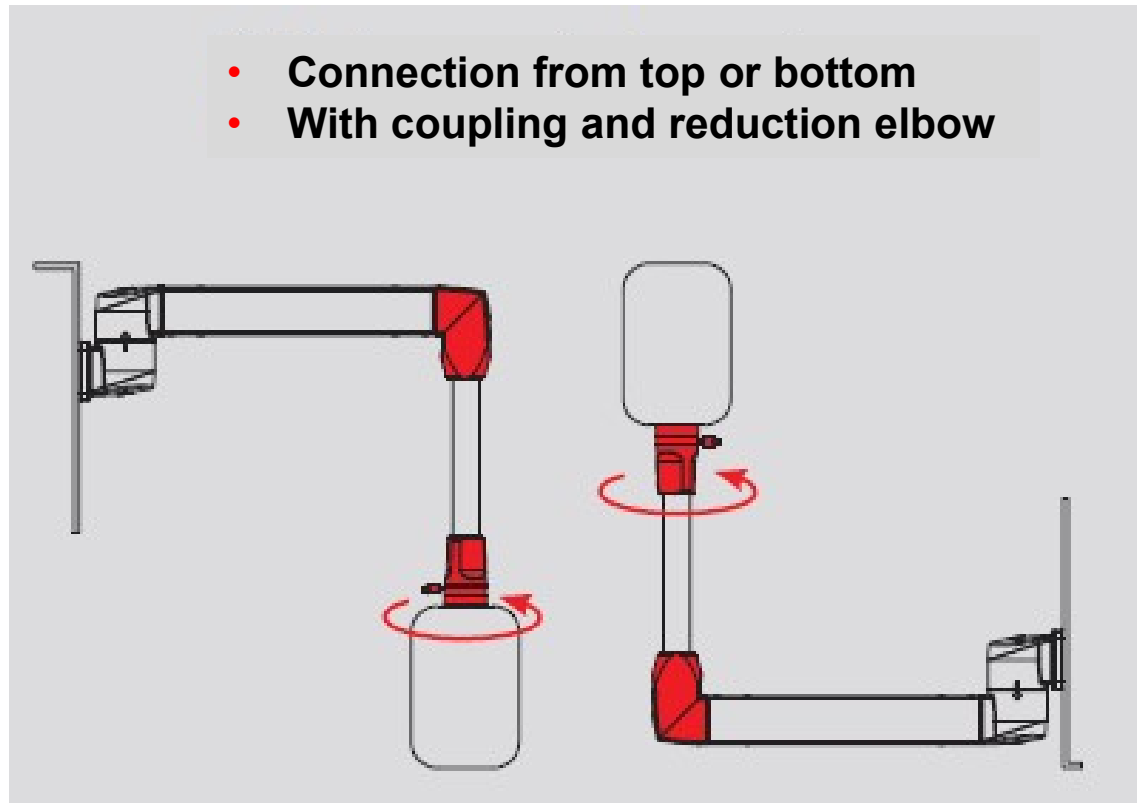
Connection Options



Components

- Coupling (CS-480 B.flex)
- Ø48 Tube (CS-480 B.flex)
- Reduction Elbow (CS-3000)
- Profile Tube (CS-3000)
- Wall Joint W (CS-3000)

- Connection from top or bottom
- With coupling and reduction elbow



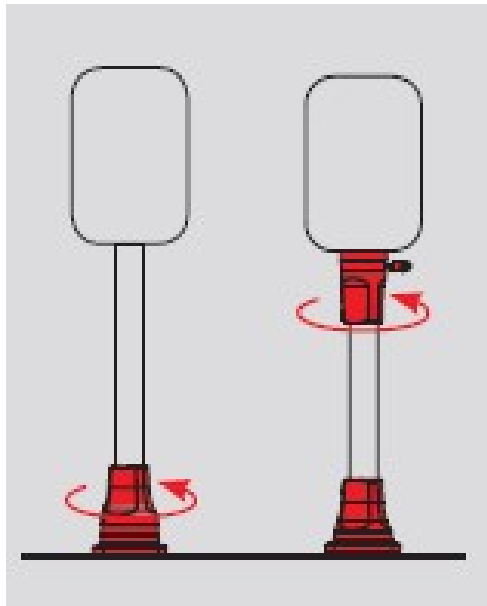
CS-480 B.flex

CS-480 B.flex

Connection Options



Connection from bottom



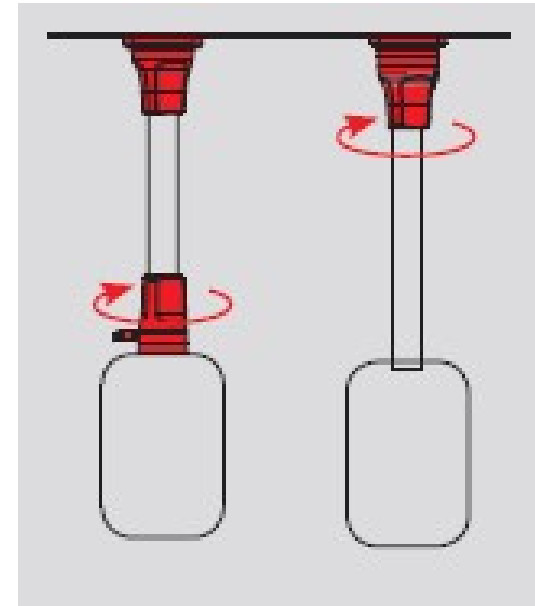
Option 1

- rotatable base
- Ø48 tube

Option 2

- fixed base
- Ø48 tube
- rotatable coupling

Connection from top



Option 1

- fixed base
- Ø48 tube
- rotatable coupling

Option 2

- rotatable base
- Ø48 tube

CS-480 B.flex

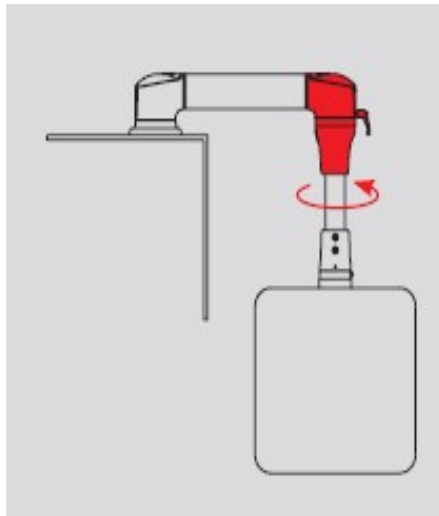
CS-480 B.flex

Connection Options



Connection

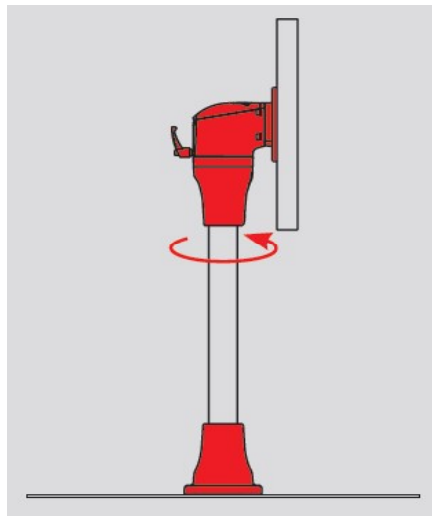
... with rotary elbow



Components

- Coupling, rotary (CS-480 B.flex)
- Ø48 Tube (CS-480 B.flex)
- Elbow Reduction (CS-3000neXt)
- Profile Tube (CS-3000neXt)
- Top Joint (CS-3000neXt)

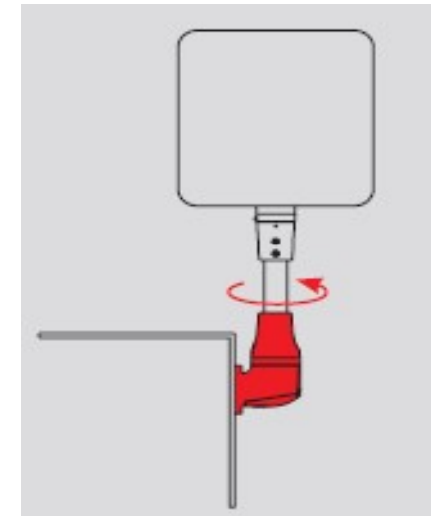
... with panel coupling S



Components

- Coupling, rotary (CS-480 B.flex)
- Ø48 Tube (CS-480 B.flex)
- Panel Coupling S (CS-480 B.flex)

... with wall joint S



Components

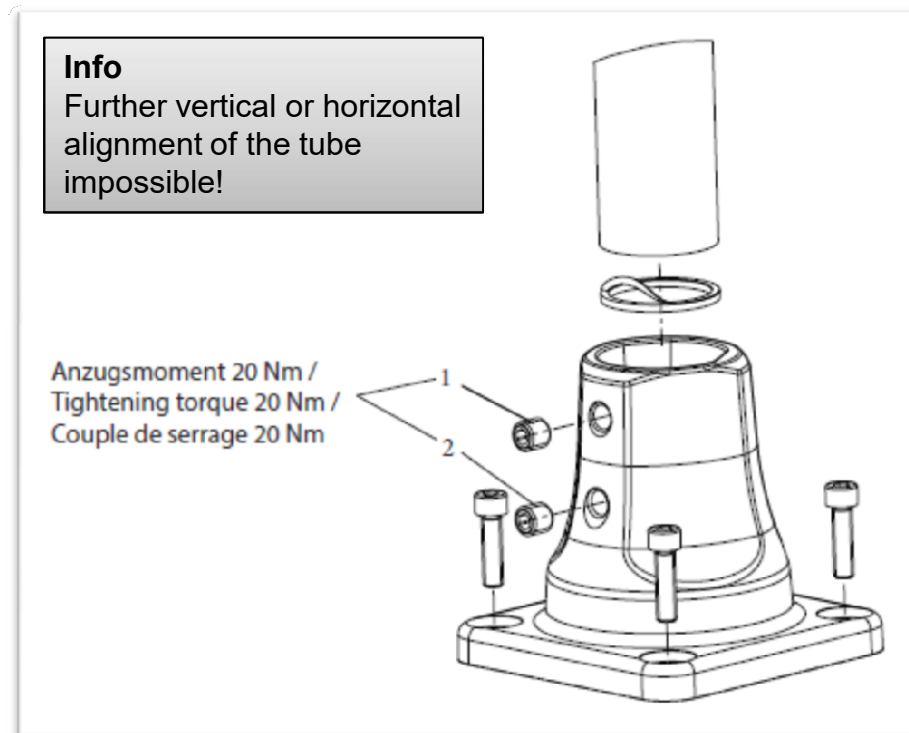
- Wall Joint S (CS-480 B.flex)
- Ø48 Tube (CS-480 B.flex)
- Coupling, rotary (CS-480 B.flex)

CS-480 B.flex

CS-480 B.flex Tube Installation



- Screw the set screws (1+2) into the components
- Flush up to the respective inner surface
- Cut the suspension tube to the required length if it does not fit
- Pull the protective film off the self-adhesive seal and press smoothly onto the front face of the tube
- Insert the tube into the components as far as possible (press seal together lightly during assembly)
- Tighten the set screws alternately with **20 Nm**



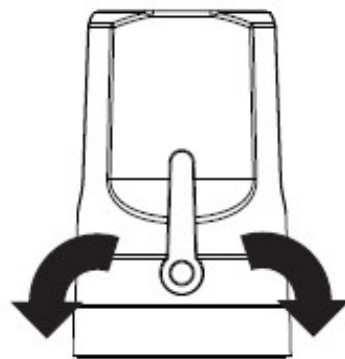
CS-480 B.flex

Friction

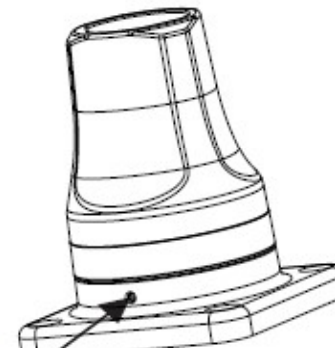


INFO

A basic friction is inherent to the design and cannot be avoided.



- Screw the clamping lever in to increase friction
- Loosen the clamping lever to decrease friction



Einstellschraube M6 /
Adjustment screw M6 /
La vis de réglage M6

- Screw the adjustment screw in to increase friction
- Loosen the adjustment screw to reduce friction

CS-480 B.flex

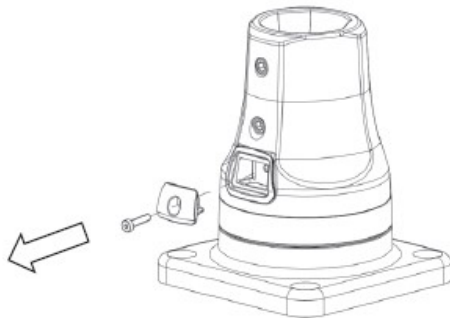
Swivel Angle Limitation



NOTE

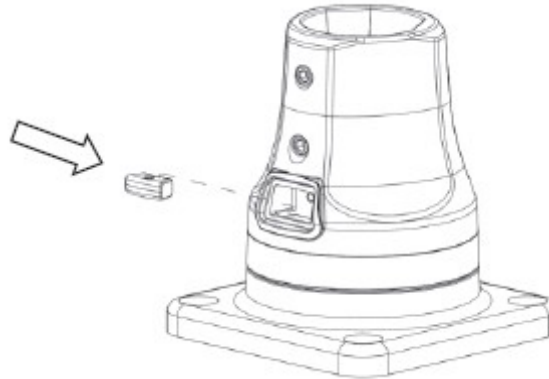
Mounting of the swivel angle limiter is only possible with the component "Base, rotary".

1.



Dismounting of the cover

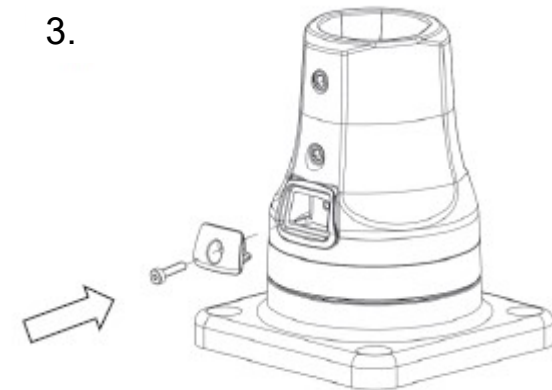
2.



Insert the limiter brackets!
Depending on the number of limiter
brackets, the angle can be limited in
increments of 30°.

CS-480 B.flex

3.



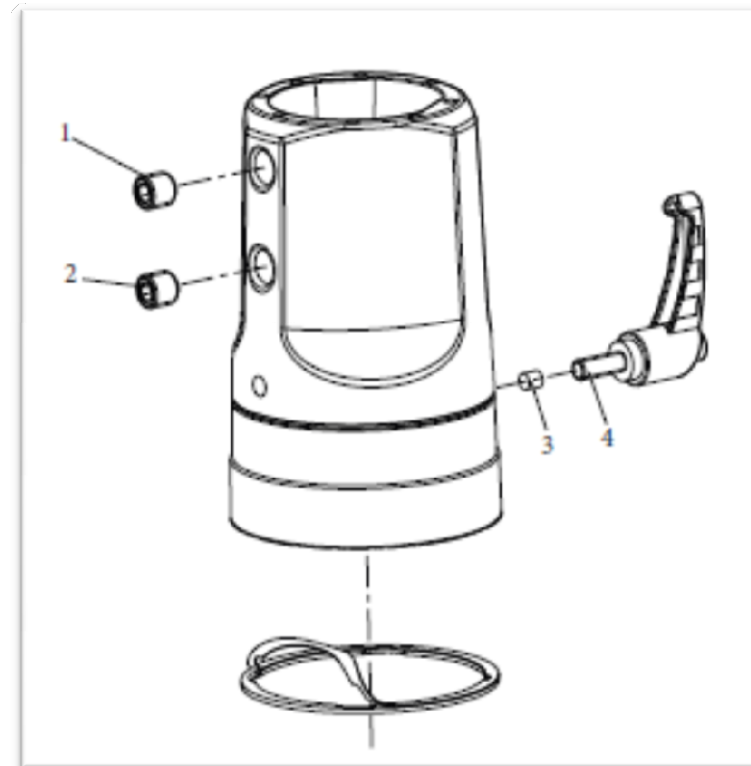
If the required angle limitation is set,
the cover must be mounted again.

CS-480 B.flex

Coupling Installation



- Pull the protective film off the self-adhesive seal and press smoothly onto the front face of the coupling
- Pay attention to the alignment of the seal
- Screw in the set screws (1+2) into the suspension tube flush up to the respective inner surface
- Insert the braking pole (3) into the threaded hole and screw in the clamping lever (4)



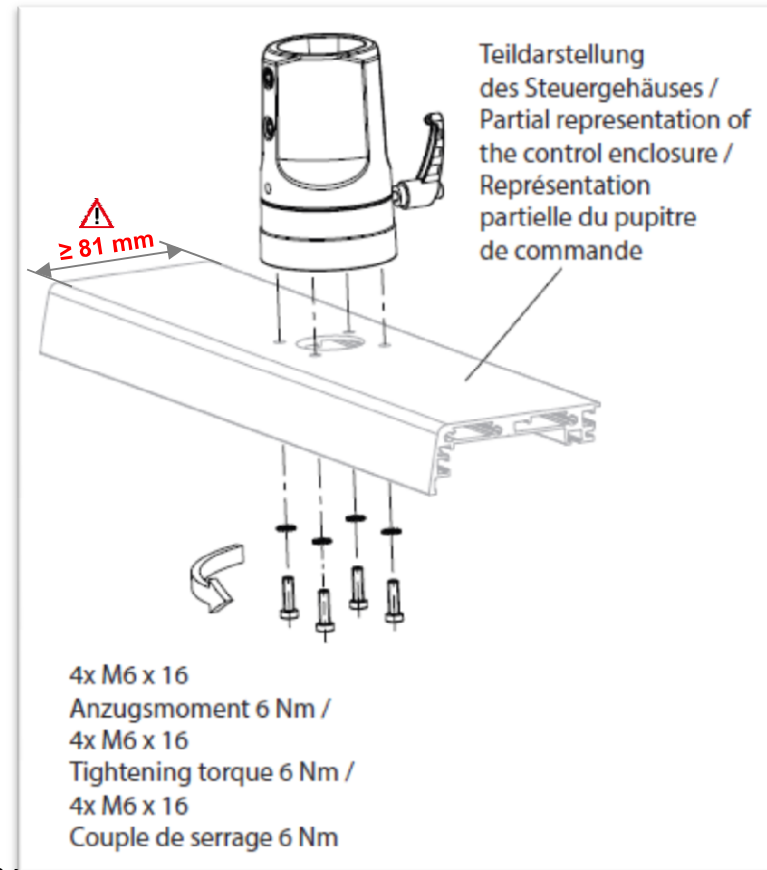
CS-480 B.flex

CS-480 B.flex

Coupling Installation



- Position the coupling on the control enclosure
- Place the lock washers onto the screws, push the screws through the horizontal profile and screw them into the coupling and tighten to **6 Nm**



CS-480 B.flex

Panel Coupling with VESA-Adapter



CS-480 B.flex

CS-480 B.flex

Elbow rotary



CS-480 B.flex

CS-480 B.flex

Wall Joint S



CS-480 B.flex

CS-480 B.flex Earthing



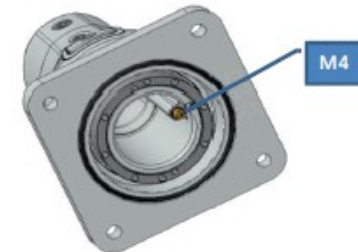
- BERNSTEIN system components are characterised by internal equipotential bonding and a separate protective conductor connection.
- The separate protective conductor connection differentiates us from our competitors.
- **BERNSTEIN is the only company offering such a comprehensive earthing concept**



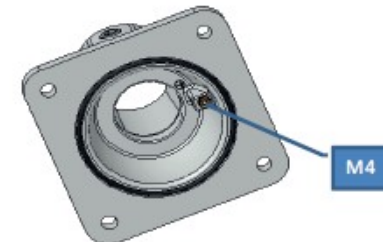
Kupplung /
Coupling /
Couplage



Standfuß drehbar
Base, rotary /
Pied support rotatif

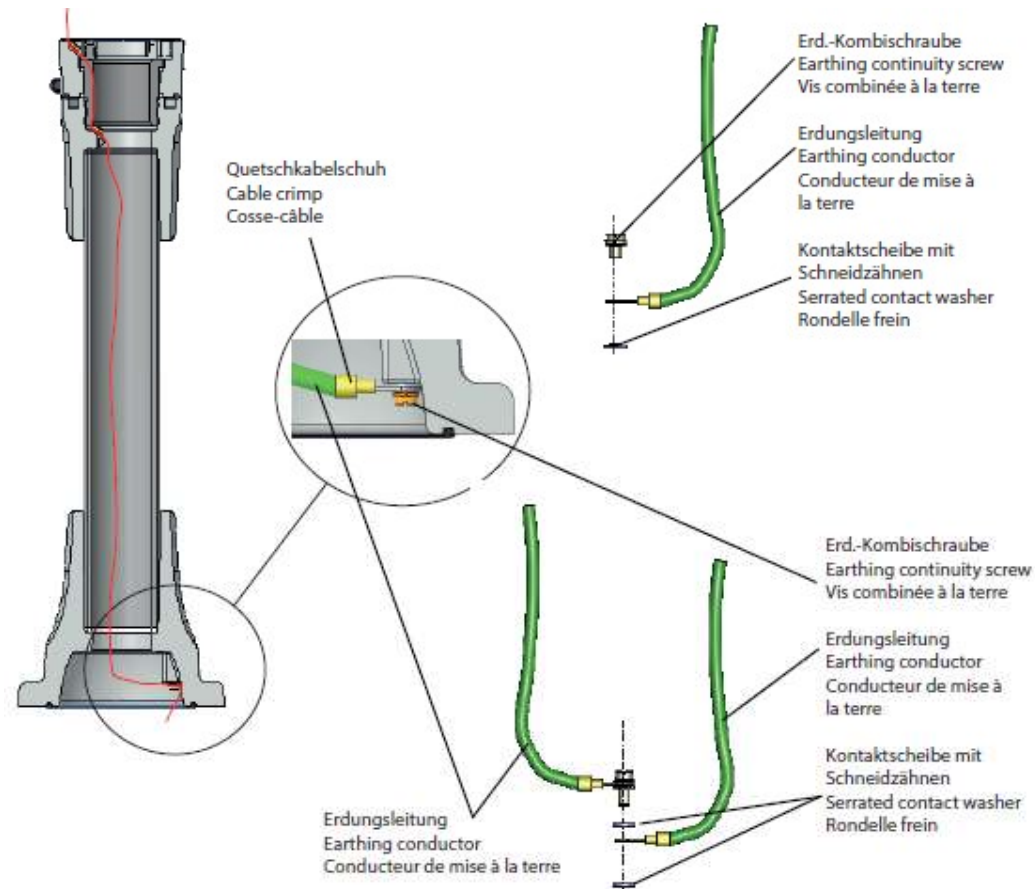


Standfuß /
Base /
Pied support

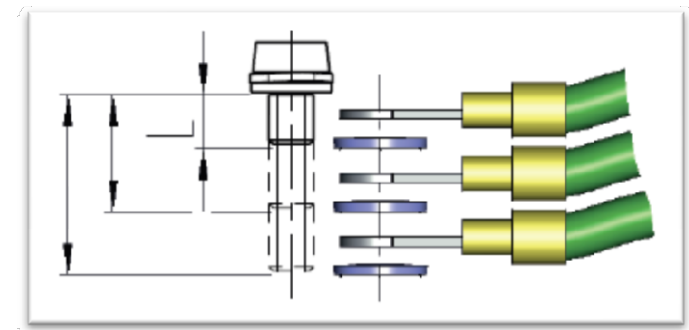


CS-480 B.flex

Earthing Example



The screw included can only be used for one cable crimp. A greater number of cable crimps require longer screws. The screw length is then to be determined by the user.



CS-480 B.flex AND ergo.slide

- ergo.slide used to mount additional components to the CS-480 B.flex
- such as:
 - keyboard
 - display
- a corresponding brochure is in preparation

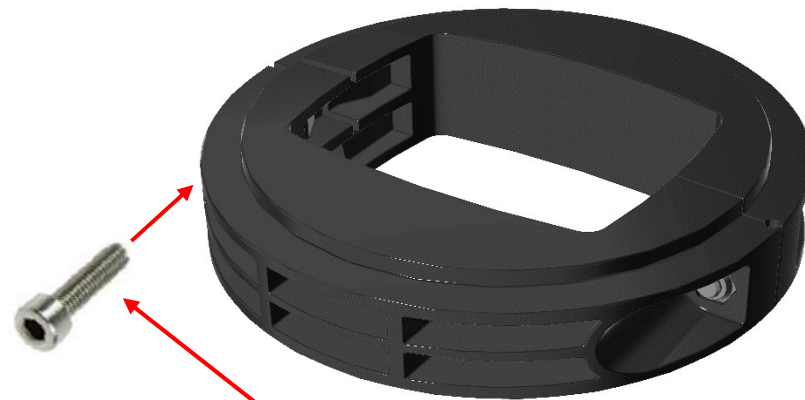
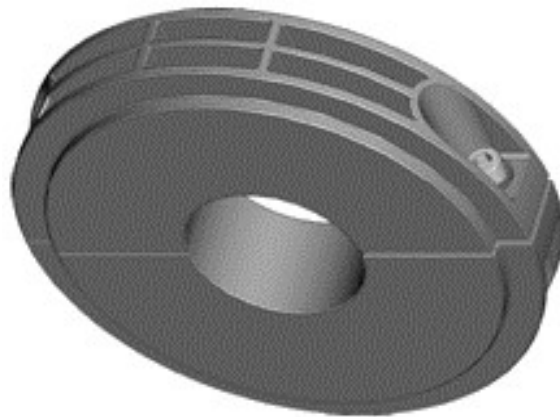


CS-480 B.flex

CS-480 B.flex AND ergo.slide



How does it work?



The ergo.slide will be fixed to the tube with the help of two clamping screws

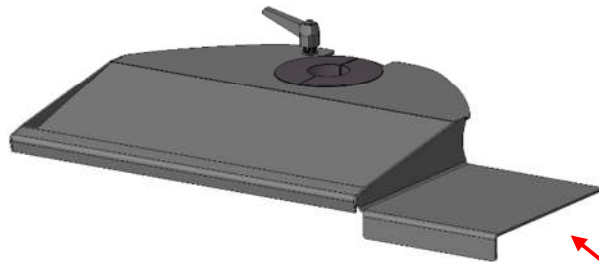
CS-480 B.flex

CS-480 B.flex AND ergo.slide

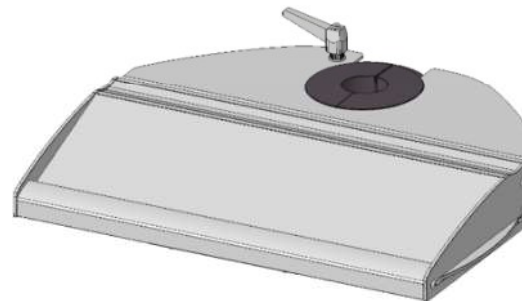


The ergo.slide will only be sold in a set with an additional component, such as:

Steel tray
Article#: 9806000114



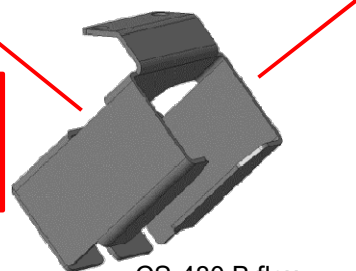
Keyboard tray
Article#: 9806000111



VESA adapter
Article#: 9806000140



Optional: Mouse holder
Article#: 9806000141

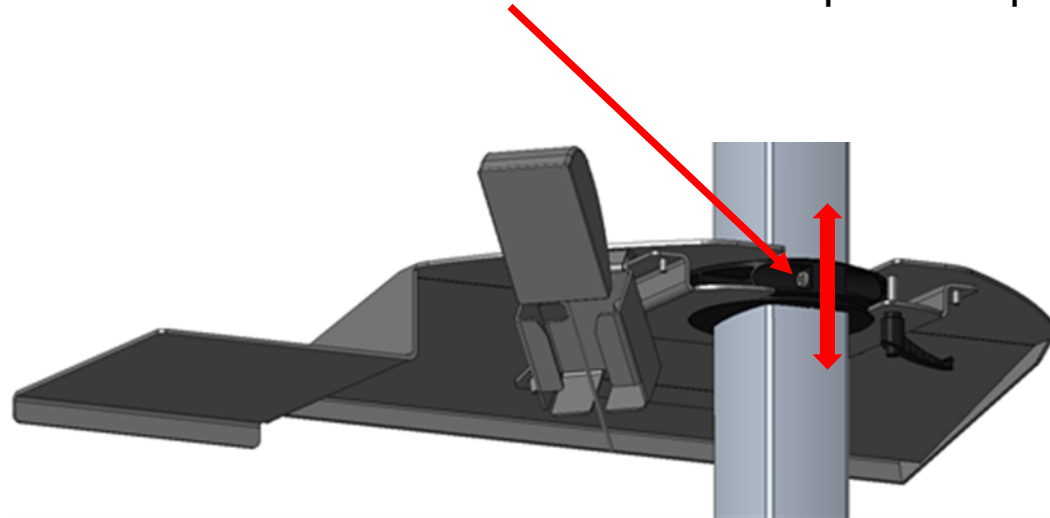


CS-480 B.flex

CS-480 B.flex AND ergo.slide



Loosing this one screw will allow to move the entire component up and down

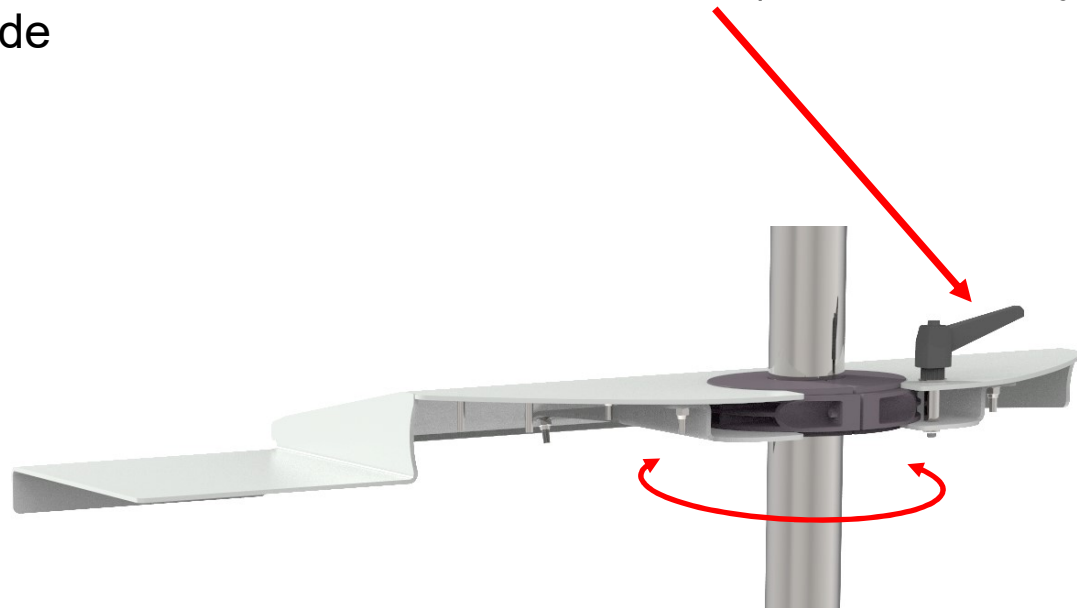


CS-480 B.flex

CS-480 B.flex AND ergo.slide



Loosing this one screw will allow to rotate the component (here: steel tray) adapted to the ergo.slide



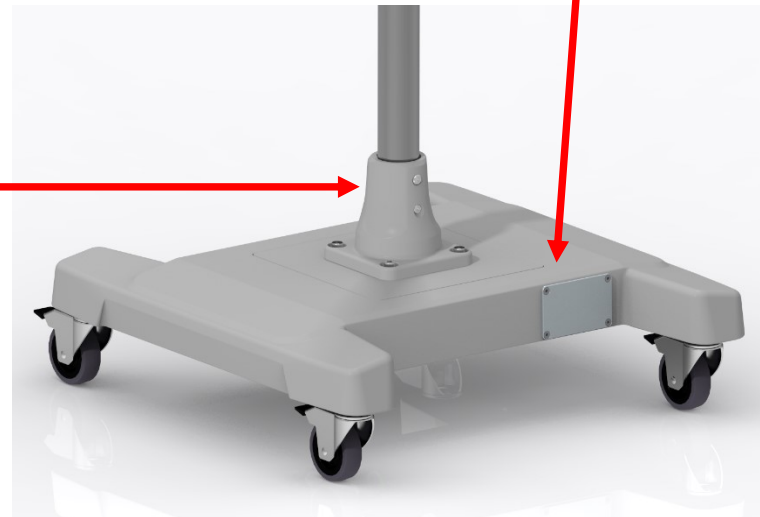
CS-480 B.flex

CS-480 B.flex AND ergo.slide AND flex.base



To complete the system, we also offer a new base plate: flex.base

- Recommended Article#: 1014800013 (fixed)
or
- Possible Article#: 1014800014 (rotatable)
only reasonable with
flex.base# 1016562200

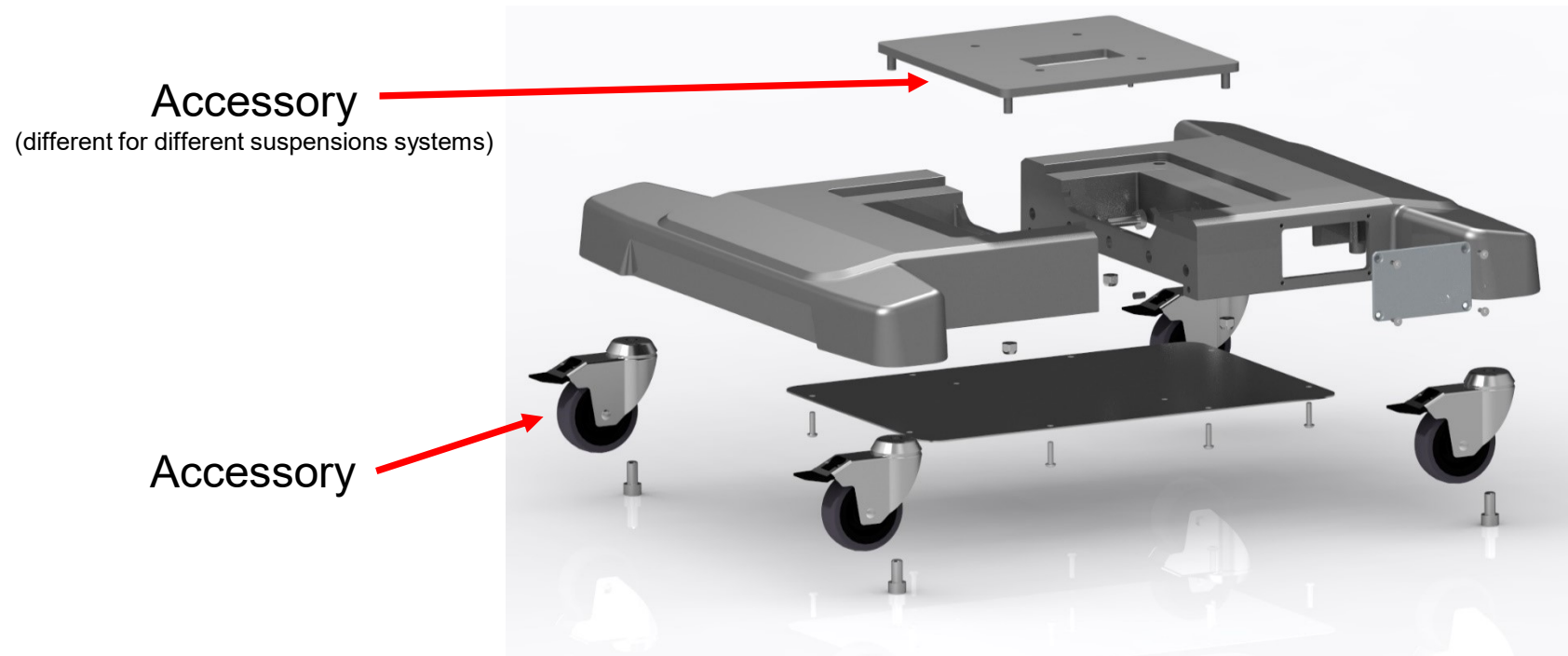


CS-480 B.flex

CS-480 B.flex AND ergo.slide AND flex.base



flex.base general design

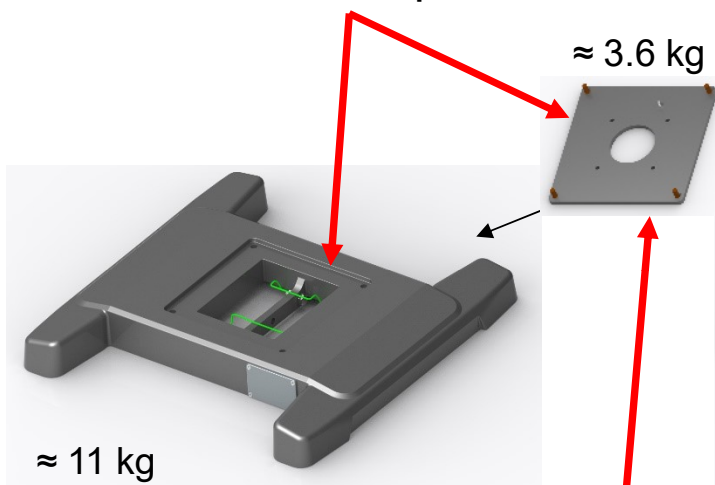


CS-480 B.flex

CS-480 B.flex AND ergo.slide AND flex.base



flex.base Components

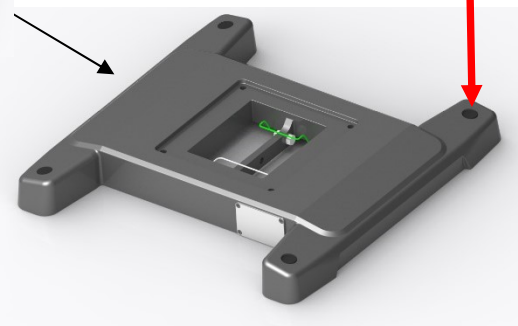


Article#: 1016552200

Mounting bracket for
CS-480 B.flex
Article#: 9806000101

flex- Base Option:

- Additional holes to bolt plate down



Article#: 1016562200

CS-480 B.flex

Flex.Base Options for Article# 1016552200

Adjustable Bolts



Article#: 9808012900

Standard Castor Set



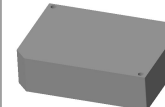
Article#: 9808012800

Heavy Duty Castor Set



Article#: 9808015300

Additional Weight 2 kg each



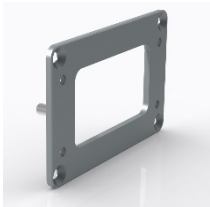
Article#: 9806000145

CS-480 B.flex AND ergo.slide AND flex.base



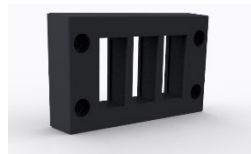
Mounting bracket (adapter plate) for CS-480 B.flex, Article#: 9806000101

This interface plate can certainly be changed to customer requirement, e.g.: ICOTEK interface

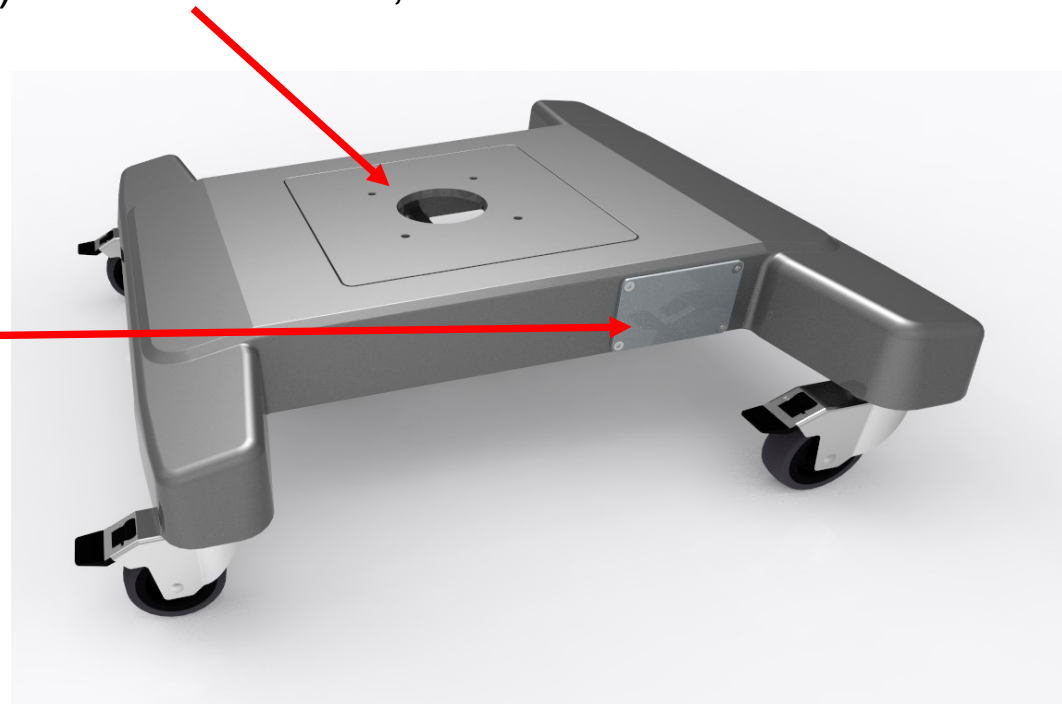


Article#: 9806000153

+



Article#: 9432799000



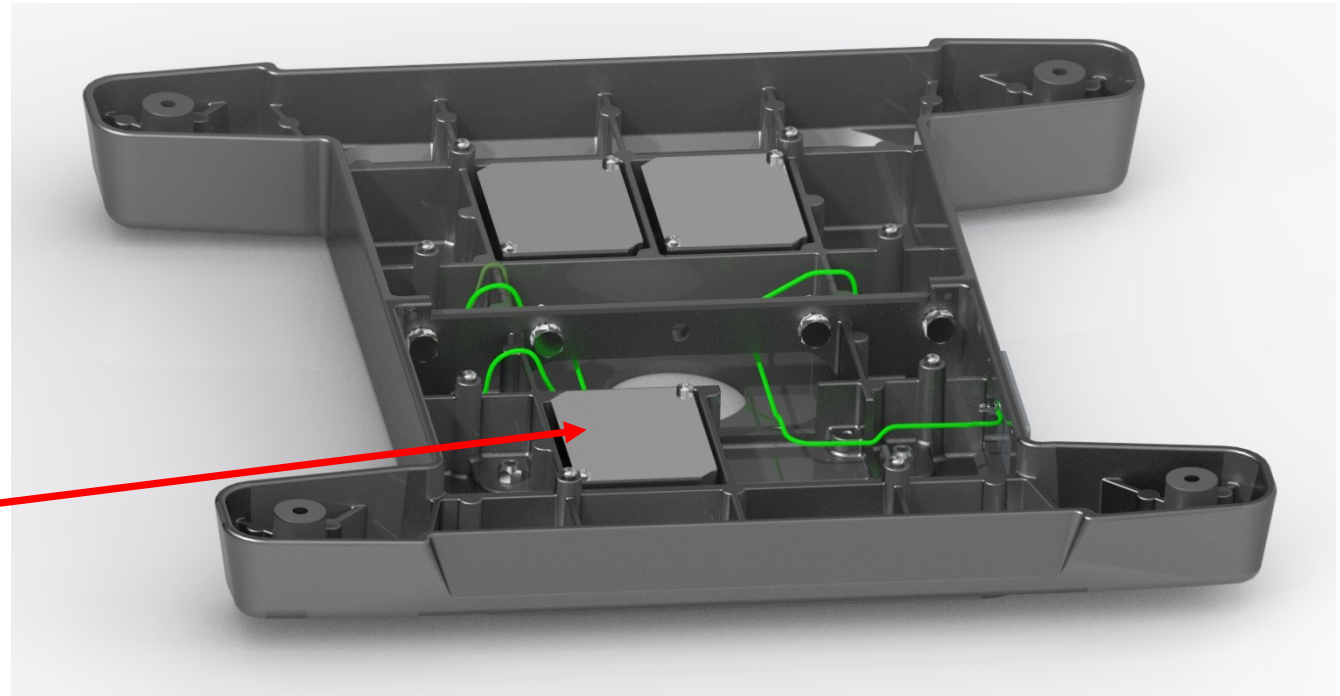
CS-480 B.flex

CS-480 B.flex AND ergo.slide AND flex.base



Earthing Concept

Depending on cable size, possibly
room for only 3 additional weights
available



CS-480 B.flex

Thank you very much for your attention.

**Markus Wilde / Uwe Wiemer
BERNSTEIN AG**