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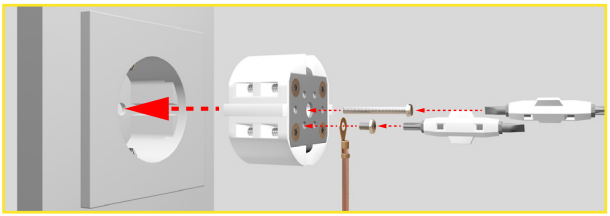
Building Biology Products
and services



Order-No.: 711150
Short-Desc.: ESR-USB-Cable

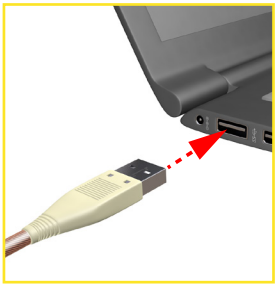
Grounding system ESR
Grounding cable ESR-USB-Cable

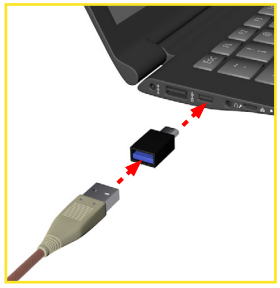
Technical data

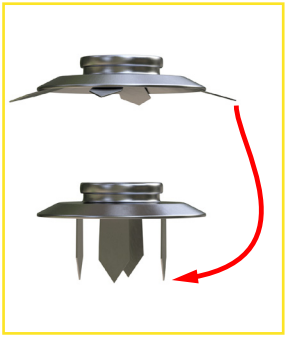
colour:	transparent
length:	350 cm ± 2 %
cable:	H07V-K 2,5 mm²
ring eyelet:	M4 / 2,5 mm²
USB-plug:	type A + type C adapter

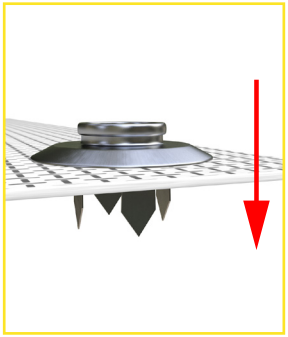
Scope of delivery

grounding cable ESR-USB-Cable + USB-C adapter









Order-No.: 711070
Short-Desc.: ESR-DK-Cable

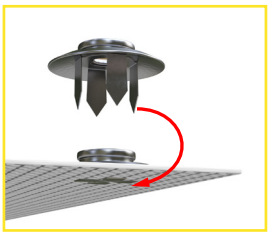
Grounding system ESR
Grounding cable ESR-DK-Cable

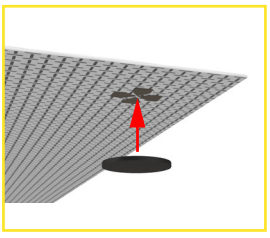
Technical data

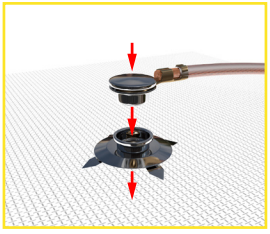
colour:	transparent
length:	350 cm ± 2 %
cable:	H07V-K 2,5 mm²
ring eyelet:	M4 / 2,5 mm²
push button:	inner part: Ø 12 mm support: Ø 25 mm

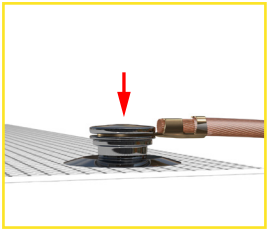
Scope of delivery

grounding cable ESR-DK-Cable
push-button base
protection pad









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Building Biology Products
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NF- Grounding accessories

Technical data sheet - Grounding cable ESR-USB + ESR-SA

Shielded lamps and connecting cables are a step to healthier living and working.

Shielding and grounding to reduce alternating electric fields (ELF) in the desk and workstation area

Computer monitors are purchased in accordance with the internationally recognised TCO standard for workstations to keep radiation exposure as low as possible.
If the actual field exposure at and around a desk or workstation is measured, the limit value for alternating electric fields (ELF), which should be less than 10 V/m according to the TCO standard, is often significantly or very significantly higher. This is because the power cables, extensions, power strips and desk lamps are required for the devices at the office workstation.

Reduction of the EWF of the desk or workstation

Replacing unshielded connection / extension cables, socket strips and lamps with shielded products. These are movable and pluggable connection and consumption devices, and can be be done by non-professionals.
It is also possible to use these connection and consumption devices in other areas / rooms where people spend a long period of time.
Regular inspection of the wall sockets, connecting cables and multiple socket outletss necessary, and is required every 2 years in a professional environment.

Possibilities of grounding

Grounding of electrical conductive metal parts of office equipment or electrically conductive textiles.

- possible with the grounding / connection cable (ESR-ST cable) in combination with a the grounding plug for wall sockets (ESR-SA)
- possible with the earthing / grounding conductor (ESR-DK-Cable) in conjunction with the grounding plug for the wall socket (ESR-SA)
- possible with the earthing/grounding conductor (ESB) for fixed wiring in existing Schuko sockets

Grounding of the USB port of notebooks by using a grounding plug

- possible with the grounding cable (ESR-USB-Cable) with eyelet, USB-A plug and USB-C adapter in combination with the grounding plug for wall sockets (ESR-SA)

More products in our Onlineshop

- shielded extension cable
- shielded socket strips
- shielded device- and IEC connection cables

Important / Please note!

Before the installation of the grounding systems are the following actions are required

The field load (EWF) at the desk or workstation must be determined by an expert or a qualified electrician (with appropriate knowledge of measurement technology) by taking measurements. If an earthing measure is taken, it is necessary for personal protection to use a residual current device (RCD) with a rated residual current IN ≤ 30 mA in addition to the overcurrent protective device (fuse / automatic circuit breaker).
If necessary, other socket circuits in the direct proximity should also be included in the protective system. This is to prevent the user/ person from inserting these grounding / connection systems into a nearby socket outlet that is not protected by an RCD. An RCD is generally used in the circuit breaker, whereby the overcurrent protection device can be replaced with an RCD with an integrated overprotection device for a single circuit.

Personal protection (general requirement in electrical engineering):

According to DIN VDE 0100-410:2007-6 (1.2.2009), all socket circuits up to 20 A that can be used by non-professionals and final circuits up to 32 A (for portable outdoor equipment) must be protected by an RCD (residual current device, with a rated residual current IN ≤ 30 mA).

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NF- Grounding accessories

Technical data sheet - Grounding cable ESR-USB + ESR-SA

Included in delivery ESR-USB

1 x Transparent 350 cm grounding cable
incl. mounted eyelet (M4) and
USB TYPE A plug
1 x USB type C adapter

Included in delivery ESR-SA

1 x Schuko adapter (grounding plug)
for installation in socket outlet
1 x adapter
1 x cover (lid)
1 x Screwdriver for installation
2 x screw for fixing plug
M2.5 + M3 x 35 mm
4 x screw ring eye M4

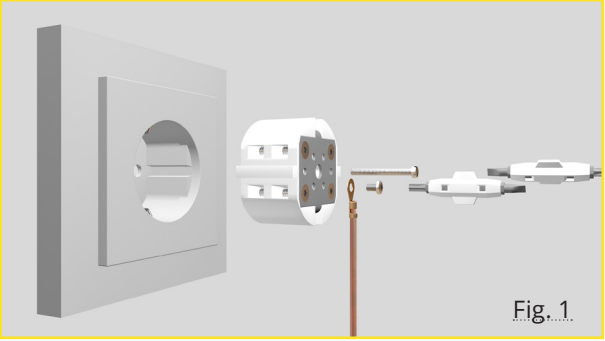

Fig. 1

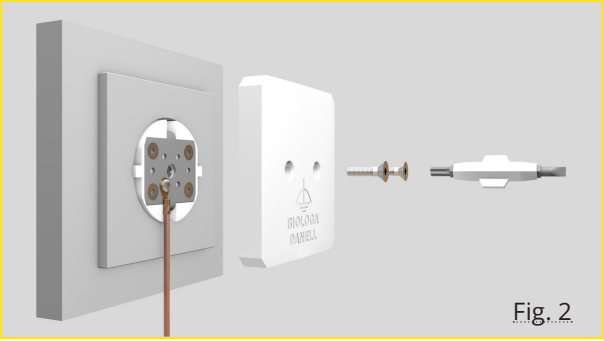

Fig. 2

Installation

1. Adapter installation. **Look at fig. 1 and 2.**
2. Insert the USB-A grounding plug into a suitable USB socket in your notebook. **Look at Fig. 3.**
3. If only one USB-C socket is available, use the enclosed USB-C adapter. **Look at fig. 4.**
4. Other devices with USB-A or USB-C sockets, such as routers, can also be grounded in this way.

Grounding plugs only conduct the earth contact, not the mains voltage or data!
A requirement for the shielding of alternating electrical fields is the correct functioning of the existing electrical installation and the protective equipotential bonding (consult a qualified electrician). Experience shows that (depending on the measuring method) the value of the alternating electrical fields on notebooks is reduced from 50-300 V/m to 1-6 V/m in most cases.
If necessary (not a regulation), the grounding plug can be mechanically fixed with the enclosed screw. **Look at fig. 1.**

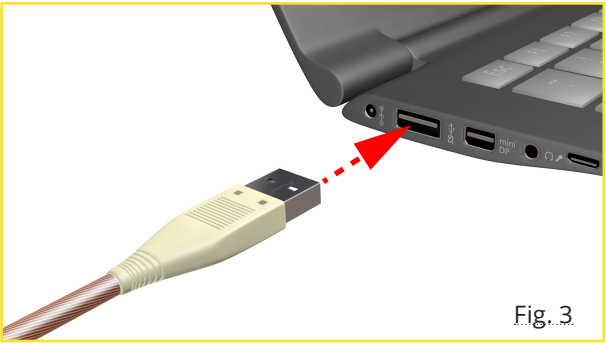

Fig. 3

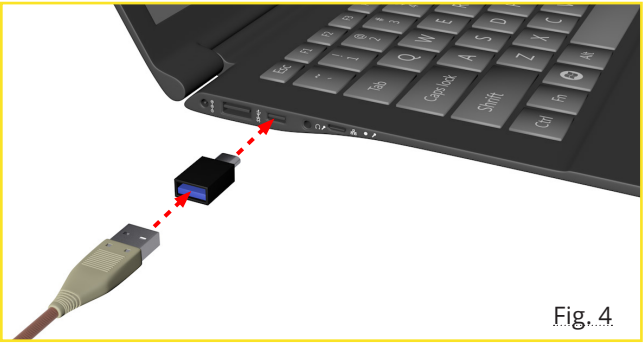

Fig. 4

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