





- grounding plug for earthed sockets (Schuko)
- grounding system for use with versatile different grounding cables
- connection of up to four grounding cables





Order-No.: 711076 Short-Desc.: **ESR-SA** 

#### **Grounding system ESR Grounding plug ESR-SA**

Technical data	
colour:	white
diameter:	37 mm
height without cover:	21 mm
height with cover:	29 mm
overhang / projection above socket:	8 mm

#### Scope of delivery

grounding plug Schuko adapter ESR-SA

- 2 x countersunk screw Torx T20 M4 x 8 mm
- 4 x panhead screw Torx T20 M4 x 6 mm
- 4 x toothed lock washer M4
- 1 x slotted cheese head screw M3 x 37 mm
- 1x slotted cheese head screw M2.5 x 37 mm

#### Scope of application

desk furniture, cable ducts, small metal trim strips, shielding textiles, shielding fleeces, notebooks, routers,

to be used in combination with ESR cables ST, USB, DK, K







711068 Order-No.: Short-Desc.: ESR-ST-Cable

711076-068-DATA.ITEC-V2.0.0-050922

#### **Grounding system ESR**

#### **Grounding cable ESR-ST-Cable**

Technical date		
colour:	transparent	
length:	350 cm ± 2 %	
cable:	H07V-K 2,5 mm <sup>2</sup>	
ring eyelets:	M4 / 2,5 mm <sup>2</sup> M5 / 2,5 mm <sup>2</sup>	

#### Scope of delivery

grounding cable ESR-ST cable

1 x grommet - rim: 1 mm

outer diameter: 8 mm; inner diameter: 3 mm

1 x cable binder - length: 100 mm; width: 2.5 mm

2 x screw - pan head screw cross self-tapping - 3.5 x 13 mm

1 x cable clamp open

diameter: 3.2 mm; Hole: 4.0 mm

1 x grounding marker - diameter: 15 mm



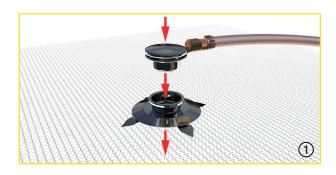
#### **Grounding push-button**

#### **General assembly Grounding push button**

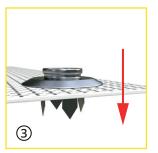
#### **Products**

For stationary use:

Grounding sets: ESB, ESB-K, ESR-DK













#### Installation

- 1. Specify the position of the ground connection.
  - See Fig. 1. When using two sheets, it is recommended to set the grounding point in the overlap area. If more than two strips of fleece or fabric are used, the grounding strap AEB 3.0 is required for the connection. In this case, the push-button base is butted through the grounding strap and shielding material.
- 2. Bend the tips of the push button base 90° and carefully push them through the shielding material at the intended point. See fig. 2 + 3.
- 3. Then bend the tips a further 90° to permanently attach the push button base to the shielding material. See fig. 4.
- 4. Stick the supplied protective pad onto the bent-over tips of the push-button bottom part. Connect the top part of the push button to the bottom part attached to the material. See fig. 5.
- 5. Now the lower part of the push button can be connected to the upper part of the push button of the respective grounding set. See fig. 6.



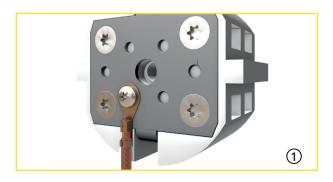


#### **General installation grounding plug ESR-SA**

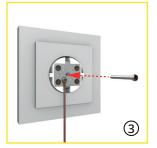
#### **Products**

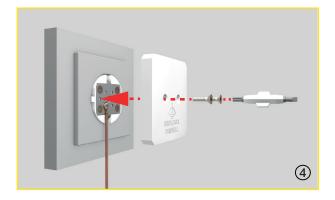
#### For stationary use:

Grounding sets: ESR-ST, ESR-USB









#### Installation

- 1. Using the screw aid, connect one of the supplied M4 x 6 mm Torx screws to the M4 ring eye of the connection cable to the adapter (Torx T20). See fig. 1.
- 2. Turn off the circuit of the socket by means of the fuse.
- 3. Remove the centre screw of the socket. See fig. 2.
- 4. Connect the plug to the socket by first placing the adapter. Depending on your needs, you can use the supplied longer M2.5 or M3 x 35 mm centre screw to fix the plug. See fig. 3.
- 5. Secure the cover with the two M4 x 8 mm Torx screws supplied. **See fig. 4**.
- 6. Now the other side of the respective grounding set can be mounted and connected.

The socket is no longer available for the use of electrical consumers.

For temporary use, the schuko grounding adapter can also be used in Schuko socket strips or other Schuko distributors.

- Unlock
- Secure against being switched on again
- Check that no voltage is present
- Ground and short-circuit
- Cover or isolate neighbouring live parts.



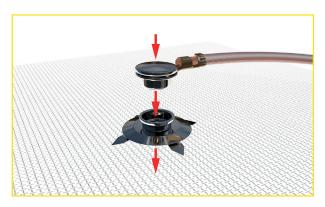
#### ESB - Push button → Wire end sleeve - Art.no.: 710069

#### **Grounding set B - ESB**

#### Scope of delivery

- 1 x Grounding cable transparent 350 cm incl. mounted push-button top
- 1 x Push-button base to pierce the shielding material
- 1 x Protection pad

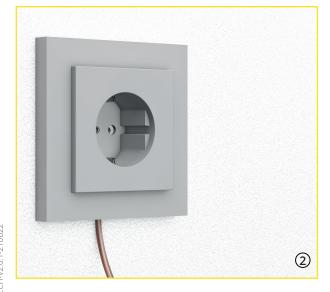
#### For stationary use: Rubens Light (loose placing) Adamantan 003 (loose placing) Picasso Dali



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#### Installation

- Push-button installation.
   See page 1.
- 2. The open end is now firmly connected to the potential bonding by a qualified electrician.
- 3.To do this, the socket insert is removed and the open end is inserted into the appliance box and connected to the PE terminal. **See fig. 1**.
- 4. The socket can now still be used for electrical consumers. **See fig. 2**.



- Unlock
- Secure against being switched on again
- Check that no voltage is present
- Ground and short-circuit
- Cover or isolate neighbouring live parts.



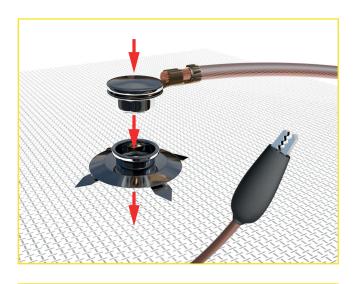
#### ESB-K - Push button → Pick-up clamp - Art.Nr.: 710554

#### **Grounding set ESB-K**

#### Scope of delivery

- 1 x Grounding cable transparent 350 cm incl. mounted push-button upper part and Pick-up clamp
- 1 x Push-button bottom part for piercing the shielding material
- 1 x Protection pad

For temporary application: Rubens Light (Loose placing) Adamantan 003 (Loose placing) Picasso Dali



#### Installation

- 1. Push-button mounting. See page 1.
- 2. The opposite tapping terminal can now be temporarily connected to the potential bonding as with PE terminals of sockets or suitable earthed pipes. See Fig. 1.



#### Attention:

For temporary use only.

- Unlock
- Secure against being switched on again
- Check that no voltage is present
- Ground and short-circuit
- Cover or isolate neighbouring live parts.



#### ESB-AK - Pick-up terminal → Pick-up terminal - Art.Nr.: 711165

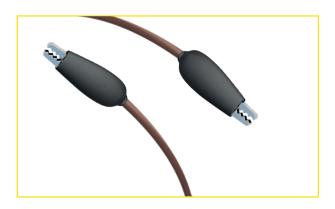
#### **Grounding set ESB-AK**

#### Scope of delivery

1 x Grounding cable transparent 350 cm incl. mounted tapping clamps

#### For temporary use:

Rubens Light (Loose placing) Adamantan 003 (Loose placing) Picasso Dali



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#### Installation

- 1. Determine the position of the ground connection. When using two sheets of shielding material, it is recommended to set the grounding point in the overlap area. If more than two strips of fleece or fabric are used, the grounding strap AEB 3.0 is required for the electrically conductive connection. In this case, the grounding set is connected directly to the grounding strap and the material with the help of the pick-up clamp.
- 2. Attach a pick-up clamp with the shielding material. **See fig. 1.**
- 3. The opposite tapping terminal can now be temporarily connected to the potential bonding as with PE terminals of sockets or suitable earthed pipes.

  See fig. 2.

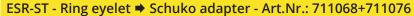


#### **Attention:**

For temporary use only.

- Unlock
- Secure against being switched on again
- Check that no voltage is present
- Ground and short-circuit
- Cover or isolate neighbouring live parts.





#### Comfort desk grounding set - ESR-ST

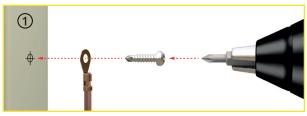
#### Scope of delivery

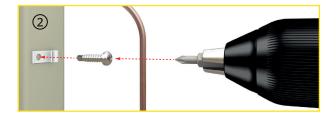
- 1 x Grounding cable transparent 350 cm incl. mounted ring eyelets (M4 + M5)
- 1 x Schuko adapter (grounding plug) for installation on socket outlet
- 1 x Adapter
- 1 x Cover (lid)
- 1 x Screwing tool for installation
- 4 x Screw Eyelet M4 x 5 mm
- 2 x Screw fixation plug M2.5 + M3 x 35 mm
- 1 x Self-tapping screw
- 1 x Cable clamp
- 1 x Cable tie 100 mm

#### For stationary use:

Grounding of desk frames or other electrically conductive parts.







#### Installation

- 1. Adapter mounting. See page 2.
- 2. To attach the ring eyelet to desk or bed frames and other electrically conductive parts, screw the self-tapping screw supplied through the ring eyelet at the previously determined grounding point using a cordless screwdriver. See fig. 1.
- 3. If the cable is to be fed through a wall, drill a hole with a diameter of 5 mm, cut off the existing ring eye and put the cable first through the grommet, then through the wall. Crimp the supplied ring eye 2.5 mm<sup>2</sup> M4 to the end of the cable.
- 4. Define the point of the cable clamp (approx. 5 10 cm from the ring eyelet) and also screw it in through the cable clamp with a cordless screwdriver. **See fig. 2**.





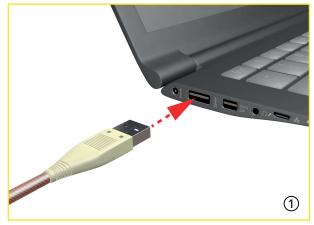
#### **Grounding set Comfort USB - ESR-USB**

#### Scope of delivery

- 1 x Grounding cable transparent 350 cm incl. mounted ring eye (M4) and USB TYPE A plug
- 1 x Schuko adapter (grounding plug) for installation on socket outlet
- 1 x Adapter
- 1 x Cover (lid)
- 1 x Screwing tool for installation
- 2 x Screw fixation plug M2.5 + M3 x 35 mm
- 4 x Screw Eyelet M4

For stationary and mobile use: Grounding of notebooks, routers and other USB-enabled devices.





#### Installation

- 1. Adapter mounting. See page 2.
- 2. Insert the USB A grounding plug into a suitable USB socket in your notebook. See fig. 1.
- 3. Other devices equipped with USB A sockets, such as routers, can also be grounded in this way.

Grounding plugs conduct only the earth contact, not the mains voltage or data! A prerequisite for the dissipation of the alternating electric fields is that the existing electrical installation and 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 electrical alternating fields on notebooks is reduced from 50-300 V/m to mostly 1-6 V/m.

If necessary (not prescribed), the grounding plug can be mechanically fixed with the enclosed screw.



#### ESR-SYS - System connector → Ring eyelet - Art.Nr.: 301000

#### **Desk system grounding set - ESR-MSDS-ST**

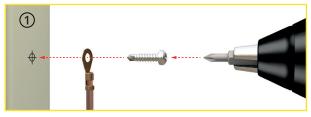
#### Scope of delivery

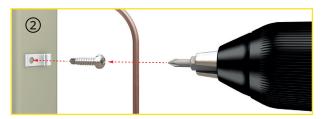
1 x Grounding cable transparent 350 cm incl. mounted ring eyelets (M4 + M5)

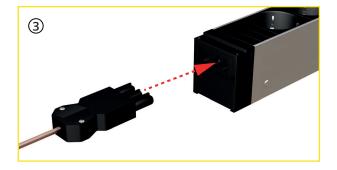
#### For stationary use:

Grounding of desk frames or other electrically conductive parts.









#### Installation

- 1. To attach the ring eyelet to desk or bed frames and other electrically conductive parts, screw the self-tapping screw supplied through the ring eyelet at the previously determined grounding point using a cordless screwdriver. See fig. 1.
- 2. If the cable is to be fed through a wall, drill a hole with a diameter of 5 mm, cut off the existing ring eye and put the cable first through the grommet, then through the wall. Crimp the supplied ring eye 2.5 mm<sup>2</sup> M4 to the end of the cable.
- 3. Define the point of the cable clamp (approx. 5 10 cm from the ring eyelet) and also screw it in through the cable clamp with a cordless screwdriver. See fig. 2.
- 4. Plug the system connector into a free system socket of your MSDS system. See Fig. 3.

#### **Attention:**

Always check the grounding of the existing electrical installation first! This can be done with a commercially available conventional socket tester.



#### ESR-SYS - System connector ⇒ USB - Art.Nr.: 301105

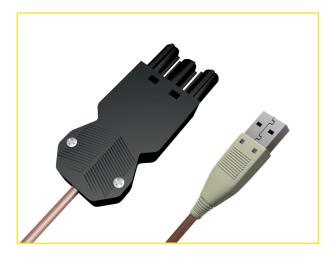
#### **Grounding set System USB - ESR-MSDS-USB**

#### Scope of delivery

1 x Grounding cable transparent 350 cm with system plug incl. mounted ring eye (M4) and USB TYPE A plug

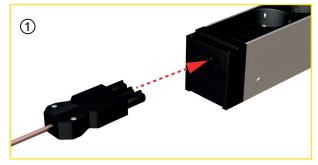
#### For stationary use:

Grounding of notebooks, routers and other USB-enabled devices.



#### Installation

- 1. Plug the system connector into a free system socket of your MSDS system. See Fig. 1.
- 2. Insert the USB type A grounding plug into a suitable USB socket in your notebook. See fig. 2.
- 3. Other devices fitted with USB type A sockets, such as routers, can also be grounded in this way.



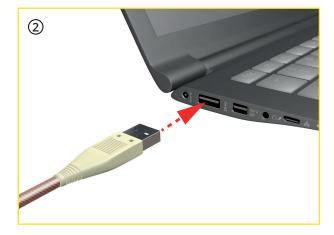
# Further reduction of EWF in the workplace area:

Use of shielded connection and extension cables, socket strips and task lamps.

You can find these in our online shop at: www.biologadanell.com

As these are movable and pluggable and pluggable connection and consumption devices, this measure can usually be

This measure can usually be carried out by a layperson. The use of these connection and consumption devices is also possible and sensible in other areas/rooms where people stay for a longer period of time.



ESR-TECH-V2.0.1-210622