![HEBOTEC logo]

# General catalogue | 2019/2020

**EMC-SOLUTIONS**
**FASTENING SYSTEMS**

„HEBOTEC stands for special properties, such as: innovative power, ingenuity, diligence, business thinking and reliability. All that experience from the first minute of our partnership."

# 03

# Product lines and contents

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**PRODUCT LINE**

# EMC-solutions

In engine, plant and switch board construction, control and performance components are increasingly complex. As a result, a well thought-out EMC-concept gains in importance. HEBOTEC products for earthing cable shields meet the requirements of low bleeder resistance at high frequencies.
HEBOTEC products are characterised by exceptionally easy handling. Furthermore, we supply customised system solutions.

# System specifications

## EXTENSIVE SHIELD CONTACT



## ADVANTAGES

// resilience ensures constant contact with the cable shield

// high conductance due to surface coating

// extensive cable shield contact allows low-voltage discharging resistance even at high frequencies

## HEBOCLIP-SYSTEM – TOOL-FREE ASSEMBLY

The HEBOCLIP brackets for mounting directly, on 35 mm DIN rails or on busbars can be assembled with the suitable shield clamps without using tools.
The shield clamps are available in different sizes with a clamping range of 1.5 to 30 mm.
A small slot screwdriver suffices to dismantle the shield clamp.

## ASSEMBLY OF THE SHIELD CLAMP WITH THE HEBOCLIP



1 Place shield clamp in position
2 Clip in
3 Dismantling

## HOW TO MOUNT A HEBOCLIP ONTO A 10 X 3 MM BUSBAR



1 Snap on the HEBOCLIP
2 Clip the chosen shield clamp into place
3 Press the cable shield into the HEBOCLIP
4 Reduce strain using cable ties

## ADVANTAGES

// for universal use with 35 mm DIN rails, busbars or for direct mounting

// tool-free assembly

// shield clamps are available in various sizes

// especially flexible

// cost-saving through reduction of stock parts

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# Attenuation of conductance HEBOCLIP-System

**ATTENUATION OF CONDUCTANCE**
The attenuation of conductance indicates by how many dB the existing interferences on the cable shield are attenuated by the shield contact.
A value of 20 dB results in an interference reduction of 90 %, a value of 40 dB in a reduction of even 99 %.
The HEBOCLIP-system offers excellent attenuation of conductance for all assembly modes.

**HHZ-2 EQUIPPED WITH HSK 6–8**
The HEBOCLIP for tool-free assembly on 35 mm DIN rails.



Attenuation in dB

Frequency in MHz

**HDZ EQUIPPED WITH HSK 6–8**
The HEBOCLIP for direct assembly.



Attenuation in dB

Frequency in MHz

**HSZ EQUIPPED WITH HSK 6–8**
The HEBOCLIP for tool-free assembly on 10 x 3 mm busbars.



Attenuation in dB

Frequency in MHz
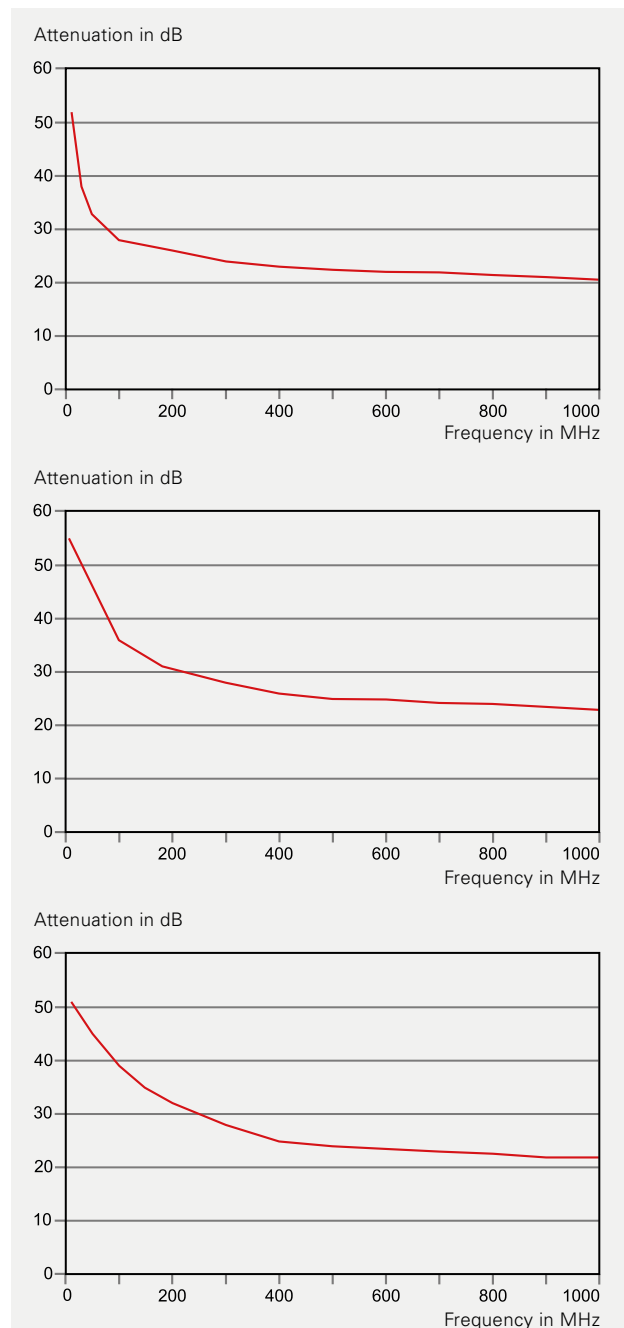
## HSDZ EQUIPPED WITH HSK 6–8

The HEBOCLIP Duo for tool-free assembly on
10 x 3 mm busbars.



Attenuation in dB



Frequency in MHz

## HSKB 16 – 35 DIRECT ASSEMBLY

The shield clamp for large diameters, directly mounted
onto the mounting rail.



Attenuation in dB



Frequency in MHz

## HSKB-S 16 – 35 ON CLIP-FOOT

The shield clamp for large diameters, mounted on clip-
foot for tool-free assembly on 35 mm DIN rails.



Attenuation in dB



Frequency in MHz

## HSKB-F 35 – 65 WITH FLAT TAPE CONNECTOR

The shield clamp for large diameters, for assembly
with flexible flat tape connector.



Attenuation in dB



Frequency in MHz
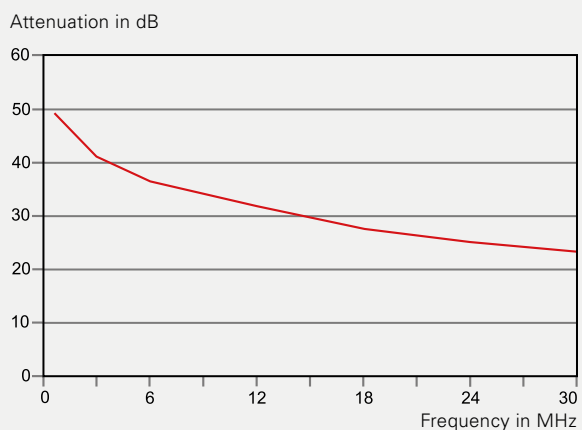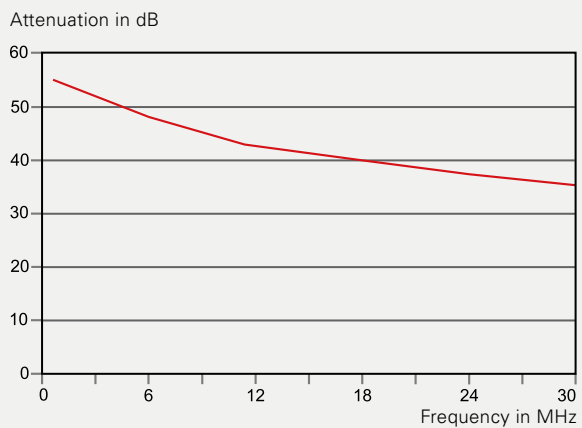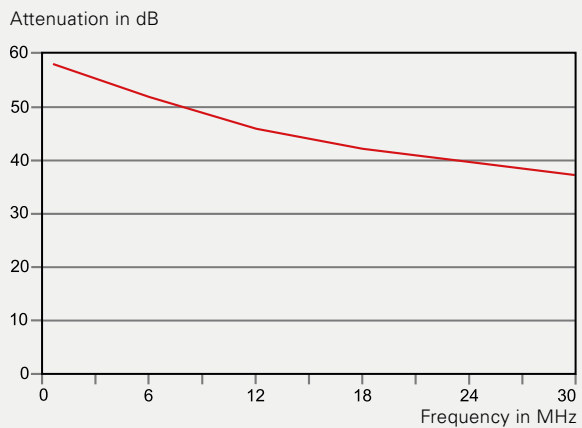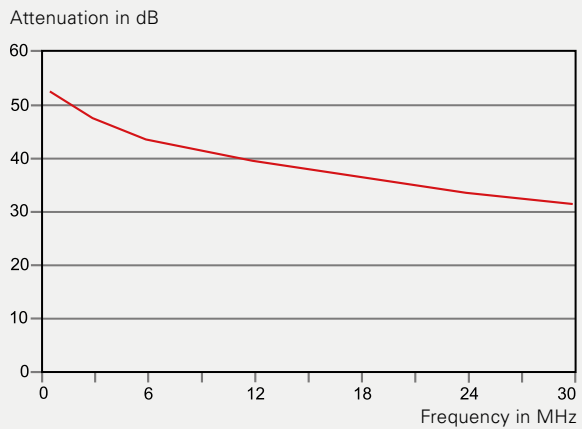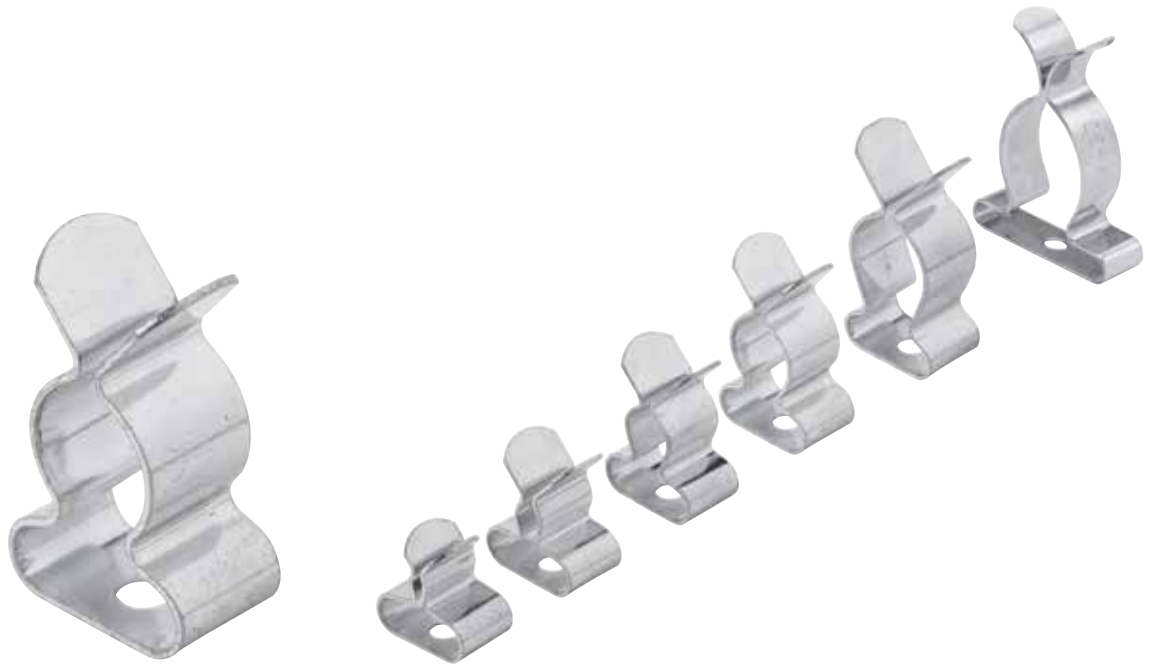
# Shield clamp

## PRODUCT DESCRIPTION

By simply pushing the stripped cable in the shield clamp, there is a permanently high and continuous spring pressure of the cable shield.
The contact areas are large, assuring a very good derivation of interference currents.

The HSK shield clamps can be used with the various HEBOCLIPs for assembling 35 mm DIN rails, busbars or direct mounting. The installation of the appropriate shield clamp for the particular cable diameter can be done by tool-free clipping.

## ADVANTAGES

// permanently high and continuous spring pressure on the cable shield
// high conductivity

// very good derivation of high-frequency interferences
// the six sizes from 1.5 mm to 30 mm shield range can be snapped onto the HEBOCLIP without tools

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// HEBOCLIP for 35 mm DIN rails
// HEBOCLIP for direct assembly
// HEBOCLIP for busbars
// HEBOCLIP clamp assembly

| SHIELD CLAMP | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| HSK 1,5–3 | 1010-001 | 1.5–3 mm | 25 |
| HSK 3–6 | 1010-002 | 3–6 mm | 25 |
| HSK 6–8 | 1010-003 | 6–8 mm | 25 |
| HSK 8–11 | 1010-004 | 8–11 mm | 25 |
| HSK 11–16 | 1010-005 | 11–16 mm | 25 |
| HSK 17–30 | 1010-017 | 17–30 mm | 25 |

# Shield clamp Multi

## PRODUCT DESCRIPTION

The shield clamp Multi differs from the common shield clamp by the special form of both clamp clips. Due to the resilience of the brackets, a very large clamping range is achieved.

By simply pushing the stripped cable into the shield clamp, the constant spring pressure achieves a good contact surface.
Thereby, because of the extensive contact, a greater reliable conductance of interfering currents is made possible.

The shield clamp Multi can be used with the various HEBOCLIPs for assembly with 35 mm DIN rails, busbars or for direct mounting. The assembly of the suitable shield clamp for a particular cable diameter can be effected by tool-free mounting.

## ADVANTAGES

// fewer stock items due to the large clamping range
// permanently high and continuous spring pressure on the cable shield
// high conductance
// excellent derivation of high-frequency interferences
// the two sizes can be installed onto the HEBOCLIP without tools

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// HEBOCLIP for 35 mm DIN rails
// HEBOCLIP for direct assembly
// HEBOCLIP for busbars
// HEBOCLIP clamp assembly

| SHIELD CLAMP MULTI | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| HSKM 3–12 | 1011-001 | 3–12 mm | 25 |
| HSKM 7–18 | 1011-002 | 7–18 mm | 25 |

# Shield clamp BIG for large diameters

## PRODUCT DESCRIPTION

The shield clamp BIG for large diameters features a wide clamping range, thus allows an excellent contact of cable shields with large diameters.

The stripped cable has to be pressed into the shield clamp. The spring pressure of the clamp offers constant contact with the cable shield.

The shield clamp is available for direct assembly with an M4 screw, with clip foot for assembly onto a 35 mm DIN rail and with a flexible flat tape connector with a length of 50 mm. The accessory component mounting adapter allows the assembly onto C-rails.

## ADVANTAGES

// wide clamping range
// constant contact with cable shield due to spring pressure
// high conductance
// flexible earth connection

## TECHNICAL DATA

Material: galvanised spring steel, nickle-plated spring steel, tin-plated copper

## ACCESSORIES

// mounting adapter for C-rails

| SHIELD CLAMP BIG FOR DIRECT ASSEMBLY | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| HSKB 16–35 | 1012-001 | 16–35 mm | 5 |
| HSKB 35–65 | 1012-002 | 35–65 mm | 5 |

| SHIELD CLAMP BIG WITH CLIP FOOT | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| HSKB-S 16–35 | 1012-011 | 16–35 mm | 5 |
| HSKB-S 35–65 | 1012-012 | 35–65 mm | 5 |

| SHIELD CLAMP BIG WITH FLAT TAPE CONNECTOR 50 MM | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| HSKB-F 16–35 | 1012-021 | 16–35 mm | 5 |
| HSKB-F 35–65 | 1012-022 | 35–65 mm | 5 |

# Shield clamp with integrated strain relief

## PRODUCT DESCRIPTION

The shield clamp with integrated strain relief is suitable for contacting cable shields, which are returned over the cable coating and are locked by a shrinking tube and a conducting metal strip. By simply pushing the stripped cable in the shield clamp, there is a permanently high and continuous spring pressure on the cable shield. The contact areas are large, assuring a very good derivation of interference current. The strain relief is realized by incurved spikes.

## ADVANTAGES

// integrated strain relief
// permanently high and continuous spring pressure on the cable shield
// essential higher clamping force
// high conductivity
// very good derivation of high-frequency interferences

## TECHNICAL DATA

Material: galvanised spring steel

| SHIELD CLAMP WITH INTEGRATED STRAIN RELIEF | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| HSKZ 11–18 | 1014-005 | 11–18 mm, 2 x 3.1 mm boring | 25 |

# Shield clamp with strain relief on clip foot

### PRODUCT DESCRIPTION

The shield clamp with integrated strain relief on clip foot can be snapped onto 35 mm Din rails without tools. The cable shield should be turned back over the cable coating and be secured by a shrinking tube and a conducting metal strip.

By simply pushing the stripped cable in the shield clamp, a permanently high and continuous spring pressure on the cable shield ensures a safe contact. The strain relief is realized by incurved spikes.

### ADVANTAGES

// tool-free assembly on 35 mm Din rail
// integrated strain relief
// permanently high and continuous spring pressure on the cable shield
// essential higher clamping force
// high conductivity
// very good derivation of high-frequency interferences

### TECHNICAL DATA

Material: galvanised spring steel

| SHIELD CLAMP WITH STRAIN RELIEF ON CLIP FOOT | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKZH 11–18 | 1031-025 | 11–18 mm | 10 |

# HEBOCLIP with clip foot

## PRODUCT DESCRIPTION

The HEBOCLIP for 35 mm DIN rails serves as a universal carrier for shield clamps with a clamp diameter of 1.5 mm to 30 mm.

Simply snap the clip foot onto the rail, snap the chosen shield clamp into place and push the cable shield into the shield clamp. The alternative, using a strain relief bracket, provides the possibility of assembling with the help of a cable tie.

## ADVANTAGES

// tool-free assembly on 35 mm DIN rails
// universal bracket for shield clamps with a clamping range of 1.5 mm to 30 mm

// fewer stock items needed
// strain relief with cable tie with HHZ-2

## TECHNICAL DATA

Material: galvanised spring steel, nickle-plated spring steel

## ACCESSORIES

// Shield clamp
// Shield clamp Multi

| HEBOCLIP WITH CLIP FOOT | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| HHZ−2 | 1020-020 | with strain relief | 10 |
| HH−2 | 1020-021 | without strain relief | 10 |

# Shield clamp on clip foot

**PRODUCT DESCRIPTION**

The shield clamp on clip foot can be snapped onto a 35 mm DIN rail without the use of tools. Just press the cable shield into the shield clamp to achieve a safe contact.

**ADVANTAGES**

// easy, tool-free assembly
// constant contact with cable shield due to spring pressure

// excellent conductance of high-frequency interferences

**TECHNICAL DATA**

Material: galvanised spring steel, nickle-plated spring steel

| SHIELD CLAMP ON CLIP FOOT | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKH 1,5–3 | 1030-001 | 1,5–3 mm | 10 |
| SKH 3–6 | 1030-002 | 3–6 mm | 10 |
| SKH 6–8 | 1030-003 | 6–8 mm | 10 |
| SKH 8–11 | 1030-004 | 8–11 mm | 10 |
| SKH 11–16 | 1030-005 | 11–16 mm | 10 |
| SKH 17–30 | 1030-006 | 17–30 mm | 10 |
| SKH 3–12 | 1030-011 | 3–12 mm, Shield clamp Multi | 10 |
| SKH 7–18 | 1030-012 | 7–18 mm, Shield clamp Multi | 10 |

# Shield clamp on clip foot with strain relief

**PRODUCT DESCRIPTION**

The shield clamp on clip foot can be snapped onto a 35 mm DIN rail without the use of tools. Just press the cable shield into the shield clamp to achieve a safe contact. The strain relief provides the possibility of reducing strain on the cable sheath by using a cable tie.

**ADVANTAGES**

// easy, tool-free assembly
// constant contact with cable shield due to spring pressure

// excellent conductance of high-frequency interferences
// strain relief by using a cable tie on the cable sheath

**TECHNICAL DATA**

Material: galvanised spring steel, nickle-plated spring steel

| SHIELD CLAMP ON CLIP FOOT WITH STRAIN RELIEF | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKHZ 1,5–3 | 1031-001 | 1,5–3 mm | 10 |
| SKHZ 3–6 | 1031-002 | 3–6 mm | 10 |
| SKHZ 6–8 | 1031-003 | 6–8 mm | 10 |
| SKHZ 8–11 | 1031-004 | 8–11 mm | 10 |
| SKHZ 11–16 | 1031-005 | 11–16 mm | 10 |
| SKHZ 17–30 | 1031-006 | 17–30 mm | 10 |
| SKHZ 3–12 | 1031-011 | 3–12 mm, Shield clamp Multi | 10 |
| SKHZ 7–18 | 1031-012 | 7–18 mm, Shield clamp Multi | 10 |

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# Shield clamp with double-sided strain relief

### PRODUCT DESCRIPTION
The shield clamp on clip foot can be snapped onto
35 mm DIN rail without tools. Just press the cable into
the shield clamp to achieve a safe contact.
The double-sided strain relief provides the particularly
safe possibility of reducing strain on both sides of the
cabel sheath by using cable ties.

### ADVANTAGES
// tool-free assembly on 35 mm Din rail

// constant contact with cable shield due to spring
pressure
// excellent conductance of high-frequency
interferences
// strain relief on both sides of the cable shield by
using cable ties

### TECHNICAL DATA
Material: galvanised spring steel

| SHIELD CALMP WITH DOUBLE-SIDED STRAIN RELIEF | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKHZZ 1,5–3 | 1032-001 | 1,5–3 mm | 10 |
| SKHZZ 3–6 | 1032-002 | 3–6 mm | 10 |
| SKHZZ 6–8 | 1032-003 | 6–8 mm | 10 |
| SKHZZ 8–11 | 1032-004 | 8–11 mm | 10 |
| SKHZZ 11–16 | 1032-005 | 11–16 mm | 10 |
| SKHZZ 17–30 | 1032-006 | 17–30 mm | 10 |
| SKHZZ 3–12 | 1032-011 | 3–12 mm | 10 |
| SKHZZ 7–18 | 1032-012 | 7–18 mm | 10 |

# HEBOCLIP for busbar

## PRODUCT DESCRIPTION

The HEBOCLIP for busbar serves as a universal carrier for shield clamps with a clamp diameter of 1.5 mm to 16 mm.

Simply snap on the 10 x 3 mm busbar and then lock the appropriate shield clamp into place. Push the cable shield into the shield clamp.

The 10 x 1.5 mm type can be used to snap directly onto casing parts with a material thickness of 1.5 mm.
.

## ADVANTAGES

// tool-free assembly on 10 x 3 mm busbars
// 10 x 1.5 mm design to be used e.g. for busbars, integrated within a casing box

// for shield clamps with a clamping range of 1.5 to 16 mm
// smaller range of items due to the variable mounting combinations
// fewer stock items needed
// very compact design
// strain relief with cable tie using the HSZ

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// Shield clamp
// Shield clamp Multi
// HEBOSET set of assorted fittings
// Busbar 10 x 3 x 1.000mm

| HEBOCLIP FOR BUSBAR | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| HSZ 3 | 1024-001 | for busbar 10 x 3, with strain relief | 10 |
| HSZ 1,5 | 1024-002 | for busbar 10 x 1.5, with strain relief | 10 |
| HS 3 | 1024-011 | for busbar 10 x 3, without strain relief | 10 |
| HS 1,5 | 1024-012 | for busbar 10 x 1.5, without strain relief | 10 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |

# HEBOCLIP Uno for busbar or sheet edge

**PRODUCT DESCRIPTION**
Snap the HEBOCLIP Uno into place on the
10 x 3 mm busbar or sheet edge and push the cable
shield into the shield clamp. A secure hold is achieved
because of the special profile.
The clip is also available for 10 x 1.5 mm busbars or
varying sheet thickness.

**ADVANTAGES**
// tool-free assembly on 10 x 3 mm busbar or sheet
 metal edging
// extremely compact design

// strain relief using the HSDZ with cable tie
// also available for 10 x 1.5 mm busbars
// additional sizes available on demand

**TECHNICAL DATA**
Material: galvanised spring steel

**ACCESSORIES**
// Busbar 10 x 3 x 1.000mm

### HEBOCLIP UNO FOR BUSBAR WITH STRAIN RELIEF

| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
|---|---|---|---|
| HSEZ 1,5–3 | 1025-111 | 1,5–3 mm, with strain relief | 10 |
| HSEZ 3–6 | 1025-112 | 3–6 mm, with strain relief | 10 |
| HSEZ 6-8 | 1025-113 | 6–8 mm, with strain relief | 10 |
| HSEZ 8–11 | 1025-114 | 8–11 mm, with strain relief | 10 |
| HSEZ 11–16 | 1025-115 | 11–16 mm, with strain relief | 10 |
| HSEZ 17–30 | 1025-116 | 17–30 mm, with strain relief | 10 |
| HSEZ 3–12 | 1025-118 | 3–12 mm, with strain relief | 10 |
| HSEZ 7–18 | 1025-119 | 7–18 mm, with strain relief | 10 |

### HEBOCLIP UNO FOR BUSBAR WITHOUT STRAIN RELIEF

| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
|---|---|---|---|
| HSE 1,5–3 | 1025-121 | 1,5–3 mm | 10 |
| HSE 3–6 | 1025-122 | 3–6 mm | 10 |
| HSE 6-8 | 1025-123 | 6–8 mm | 10 |
| HSE 8–11 | 1025-124 | 8–11 mm | 10 |
| HSE 11–16 | 1025-125 | 11–16 mm | 10 |
| HSE 17-30 | 1025-126 | 17–30 mm | 10 |
| HSE 3–12 | 1025-128 | 3–12 mm | 10 |
| HSE 7–18 | 1025-129 | 7–18 mm | 10 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |

# HEBOCLIP Duo for busbar or sheet edge

## PRODUCT DESCRIPTION

Simply snap the HEBOCLIP Duo for busbar onto the 10 x 3 mm busbar or sheet edge and then push the cable shield into the shield clamp. The special shape offers a secure hold.

By joining several HEBOCLIPs Duo together, an extremely compact support plate for several cables can be assembled.

The clip is also available for 10 x 1.5 mm busbars or sheet edge.

## ADVANTAGES

// tool-free assembly on 10 x 3 mm busbar or sheet edge
// extremely compact design
// strain relief with cable tie using the HSDZ
// also available for 10 x 1.5 mm busbars or sheet edge

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// Busbar 10 x 3 x 1.000mm

### HEBOCLIP DUO FOR BUSBAR WITH STRAIN RELIEF

| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
|---|---|---|---|
| HSDZ 1.5–3 | 1025-011 | 1.5 – 3 mm, with strain relief | 10 |
| HSDZ 3–6 | 1025-012 | 3–6 mm, with strain relief | 10 |
| HSDZ 6–8 | 1025-013 | 6–8 mm, with strain relief | 10 |
| HSDZ 3–12 | 1025-014 | 3–12 mm, with strain relief | 10 |

### HEBOCLIP DUO FOR BUSBAR WITHOUT STRAIN RELIEF

| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
|---|---|---|---|
| HSD 1.5–3 | 1025-021 | 1.5–3 mm | 10 |
| HSD 3–6 | 1025-022 | 3–6 mm | 10 |
| HSD 6–8 | 1025-023 | 6–8 mm | 10 |
| HSD 3–12 | 1025-024 | 3–12 mm | 10 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |

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## PRODUCT DESCRIPTION

The HEBOCLIP for direct assembly serves as a universal carrier for shield clamps with a clamp diameter of 1.5 mm to 30 mm.

For example, it can be screwed directly onto the mounting plate. Snap the chosen shield clamp into the clip and push the cable shield into the shield clamp.

## ADVANTAGES

// direct assembly with an M4 or M5 screw
// universal bracket for shield clamps with a clamping range of 1.5 mm to 30 mm

// smaller range of items due to the variable mounting combinations
// fewer stock items needed
// very compact design
// strain relief with cable tie with HDZ

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// Shield clamp
// Shield clamp Multi
// HEBOSET set of assorted fittings

| HEBOCLIP FOR DIRECT ASSEMBLY | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| HDZ 4 | 1022-001 | boring for M4, with strain relief | 10 |
| HDZ 5 | 1022-002 | boring for M5, with strain relief | 10 |
| HD 4 | 1022-021 | boring for M4, without strain relief | 10 |
| HD 5 | 1022-022 | boring for M5, without strain relief | 10 |

# Shield clamp with open slotted hole

**PRODUCT DESCRIPTION**

The shield clamp with open slotted hole can be scre-
wed directly, for example, onto the mounting plate.
The open slotted hole of the SKDL is simply pushed
under the screw which then is tightened. Simply push
the cable shield into the shield clamp in order to
achieve secure contact.

**ADVANTAGES**

// direct assembly with an M4 screw
// easy to mount and loosen due to open slotted hole
// mounting onto C-rail with a mounting adapter as an
  accessory part

// very compact design
// small range of items due to the shield clamp Multi
// strain relief by using a cable tie on the cable sheath
// additional sizes available on demand

**TECHNICAL DATA**

Material: galvanised spring steel

**ACCESSORIES**

// Mounting adapter for C-rails

| SHIELD CLAMP FOR DIRECT MOUNTING WITH OPEN SLOTTED HOLE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKDL 3–12 | 1022-511 | 3–12 mm | 10 |
| SKDL 7–18 | 1022-512 | 7–18 mm | 10 |
| SKDL 17–30 | 1022-516 | 17–30 mm | 10 |

| SHIELD CLAMP FOR DIRECT MOUNTING WITH OPEN SLOTTED HOLE AND STRAIN RELIEF | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKDLZ 3–12 | 1022-531 | 3–12 mm | 10 |
| SKDLZ 7–18 | 1022-532 | 7–18 mm | 10 |
| SKDLZ 17–30 | 1022-536 | 17–30 mm | 10 |

## PRODUCT DESCRIPTION

The shield clamp for direct assembly can be screwed directly, for example, onto the mounting plate. Simply push the cable shield into shield clamp in order to achieve secure contact.

## ADVANTAGES

// direct assembly with an M4 or M5 screw
// mounting onto a C-rail with a mounting adapter as an accessory part

// very compact design
// small range of items due to the shield clamp Multi

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// Mounting adapter for C-rails

| SHIELD CLAMP FOR DIRECT ASSEMBLY | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| SKD 4  1,5–3 | 1022-301 | M4, shield diameter 1,5–3 mm | 10 |
| SKD 4  3–6 | 1022-302 | M4, shield diameter 3–6 mm | 10 |
| SKD 4  6–8 | 1022-303 | M4, shield diameter 6–8 mm | 10 |
| SKD 4  8–11 | 1022-304 | M4, shield diameter 8–11 mm | 10 |
| SKD 4  11–16 | 1022-305 | M4, shield diameter 11–16 mm | 10 |
| SKD 4  17–30 | 1022-306 | M4, shield diameter 17–30 mm | 10 |
| SKD 4  3–12 | 1022-311 | M4, shield diameter 3–12 mm | 10 |
| SKD 4  7–18 | 1022-312 | M4, shield diameter 7–18 mm | 10 |
| SKD 5  1,5–3 | 1022-321 | M5, shield diameter 1,5–3 mm | 10 |
| SKD 5  3–6 | 1022-322 | M5, shield diameter 3–6 mm | 10 |
| SKD 5  6–8 | 1022-323 | M5, shield diameter 6–8 mm | 10 |
| SKD 5  8–11 | 1022-324 | M5, shield diameter 8–11 mm | 10 |
| SKD 5  11–16 | 1022-325 | M5, shield diameter 11–16 mm | 10 |
| SKD 5  17–30 | 1022-326 | M5, shield diameter 17–30 mm | 10 |
| SKD 5  3–12 | 1022-331 | M5, shield diameter 3–12 mm | 10 |
| SKD 5  7–18 | 1022-332 | M5, shield diameter 7–18 mm | 10 |
| C16/4 SKD | 3011-210 | Mounting adapter for C-rail, M4 | 10 |

# Shield clamp for direct assembly with strain relief

## PRODUCT DESCRIPTION

The shield clamp for direct assembly can be screwed directly, for example, onto the mounting plate. Simply push the cable shield into the shield clamp in order to achieve secure contact.
The strain relief clamp offers the possibility of reducing strain on the cable sheath by using a cable binder.

## ADVANTAGES

// direct assembly with an M4 or M5 screw
// mounting onto a C-rail with a mounting adapter as an
   accessory part

// very compact design
// small range of items due to the shield clamp Multi
// strain relief by using a cable tie on the cable sheath

## TECHNICAL DATA

Material: galvanised spring steel

## ACCESSORIES

// Mounting adapter for C-rails

| SHIELD CLAMP FOR DIRECT ASSEMBLY WITH STRAIN RELIEF | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| SKDZ 4  1,5–3 | 1022-201 | M4, shield diameter 1,5–3 mm | 10 |
| SKDZ 4  3–6 | 1022-202 | M4, shield diameter 3–6 mm | 10 |
| SKDZ 4  6–8 | 1022-203 | M4, shield diameter 6–8 mm | 10 |
| SKDZ 4  8–11 | 1022-204 | M4, shield diameter 8–11 mm | 10 |
| SKDZ 4  11–16 | 1022-205 | M4, shield diameter 11–16 mm | 10 |
| SKDZ 4  17–30 | 1022-206 | M4, shield diameter 17–30 mm | 10 |
| SKDZ 4  3–12 | 1022-211 | M4, shield diameter 3–12 mm | 10 |
| SKDZ 4  7–18 | 1022-212 | M4, shield diameter 7–18 mm | 10 |
| SKDZ 5  1,5–3 | 1022-221 | M5, shield diameter 1,5–3 mm | 10 |
| SKDZ 5  3–6 | 1022-222 | M5, shield diameter 3–6 mm | 10 |
| SKDZ 5  6–8 | 1022-223 | M5, shield diameter 6–8 mm | 10 |
| SKDZ 5  8–11 | 1022-224 | M5, shield diameter 8–11 mm | 10 |
| SKDZ 5  11–16 | 1022-225 | M5, shield diameter 11–16 mm | 10 |
| SKDZ 5  17–30 | 1022-226 | M5, shield diameter 17–30 mm | 10 |
| SKDZ 5  3–12 | 1022-231 | M5, shield diameter 3–12 mm | 10 |
| SKDZ 5  7–18 | 1022-232 | M5, shield diameter 7–18 mm | 10 |
| C16/4 SKD | 3011-210 | Mounting adapter for C-rail, M4 | 10 |

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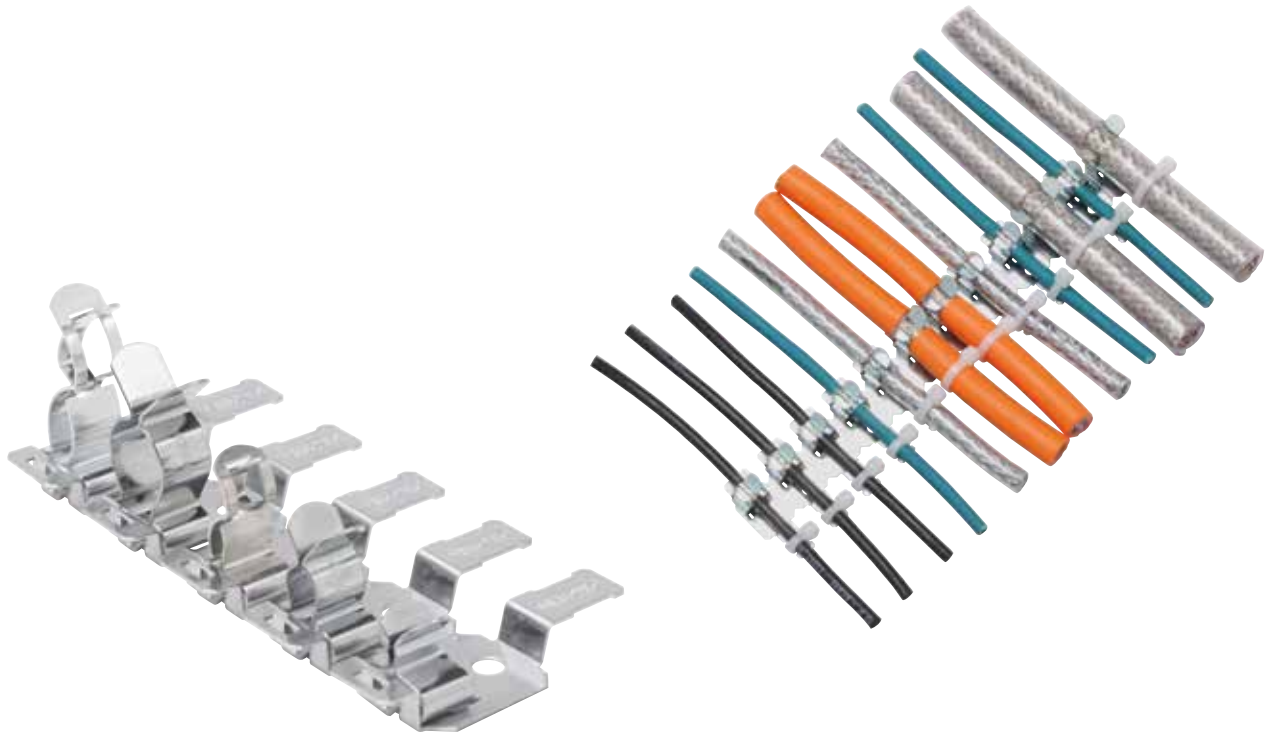
# HEBOCLIP clamp assembly with strain relief

**PRODUCT DESCRIPTION**

The HEBOCLIP clamp assembly for direct mounting serves as a universal carrier for up to 12 shield clamps with a clamp diameter of 1.5 mm to 16 mm.
The clamp assembly can be shortened to the required amount by breaking unwanted clips off at the predetermined breaking points. It is then attached using screws.

**ADVANTAGES**

// connects up to 12 shield clamps per clamp assembly
// space-saving assembly on the mounting plate
// universal carrier for shield clamps with a clamping range of 1.5 mm to 16 mm

// breaking points allow an adaptation to the required number of cables
// fewer stock items needed
// very compact design
// strain relief with cable tie

**TECHNICAL DATA**

Material: galvanised spring steel

**ACCESSORIES**

// Shield clamp
// Shield clamp Multi
// HEBOSET set of assorted fittings

| HEBOCLIP CLAMP ASSEMBLY WITH STRAIN RELIEF | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| HRDZ 4 | 1040-001 | boring for M4, with strain relief | 5 |
| HRDZ 5 | 1040-002 | boring for M5, with strain relief | 5 |

# HEBOCLIP with strain relief for perforated plate

**PRODUCT DESCRIPTION**

The HEBOCLIP for perforated plate serves as a universal carrier for shield clamps ranging from a diameter of 1.5 mm to 30 mm.

It can be snapped onto existing perforated plates with a material thickness of 1.5 mm to 3 mm without the use of tools. Simply snap the adequate shield clamp onto the clip and push the cable shield into place.

**ADVANTAGES**

// tool-free assembly on the perforated plate
// universal carrier for shield clamps with clamping
   ranges from 1.5 mm to 30 mm

// fewer stock items
// extremely compact design
// strain relief by using a cable tie on the cable sheath

**TECHNICAL DATA**

Material: galvanised spring steel

**ACCESSORIES**

// Shield clamp
// Shield clamp Multi
// HEBOSET set of assorted fittings

| HEBOCLIP WITH STRAIN RELIEF FOR PERFORATED PLATE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| HLZ 8/12 | 1035-024 | for perforations 8 x 8 mm, web mesh 4 mm, hole spacing 28 mm | 10 |
| HLZ 8/10 | 1035-022 | for perforations 8 x 8 mm, web mesh 2 mm, hole spacing 42 mm | 10 |

# Shield clamp for perforated plate with strain relief

**PRODUCT DESCRIPTION**

The shield clamp for perforated plate can be snapped onto existing perforated plates with a material thickness of 1.5 mm to 3 mm and a perforation of 8 x 8 mm without the use of tools.

To assure safe contact, the cable shield simply has to be pushed into the shield clamp.

The strain relief provides the possibility of strain relief of the cable sheath by using a cable tie.

**ADVANTAGES**

// tool-free assembly on the perforated plate
// wide clamping range
// fewer stock items
// extremely compact design
// strain relief by using a cable binder on the cable sheath

**TECHNICAL DATA**

Material: galvanised spring steel

| SHIELD CLAMP FOR PERFORATED PLATE WITH STRAIN RELIEF | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| SKLZ 8/12 3–12 | 1035-042 | for shield diameter 3–12 mm, hole spacing 28 mm | 10 |
| SKLZ 8/12 7–18 | 1035-044 | for shield diameter 7–18 mm, hole spacing 28 mm | 10 |
| SKLZ 8/12 17–30 | 1035-046 | for shield diameter 17–30 mm, hole spacing 28 mm | 10 |
| SKLZ 8/10 3–12 | 1035-052 | for shield diameter 3–12 mm, hole spacing 42 mm | 10 |
| SKLZ 8/10 7–18 | 1035-054 | for shield diameter 7–18 mm, hole spacing 42 mm | 10 |
| SKLZ 8/10 17–30 | 1035-056 | for shield diameter 17–30 mm, hole spacing 42 mm | 10 |

# Shield clamp with mounting adapter for C-rails

## PRODUCT DESCRIPTION

The shield clamp for C-rails can be assembled with a 90° turn into C-rail profiles with a 16 mm slot. With the assistance of the M4-fastening screw the mounting adapter is pinched into the C-rail. Simply push the cable shield into shield clamp in order to achieve secure contact. The strain relief provides the possibility of reducing strain on the cable sheath by using a cable tie.

## ADVANTAGES

// small range of items due to the Shield clamp Multi
// strain relief by using a cable tie on the cable sheath
// very compact design

## TECHNICAL DATA

Material: galvanised spring steel

| SHIELD CLAMP WITH MOUNTING ADAPTER FOR C-RAILS | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| SKDZ 4 1,5–3 C16 | 1037-001 | M4, shield diameter 1,5–3 mm | 10 |
| SKDZ 4 3–6 C16 | 1037-002 | M4, shield diameter 3–6 mm | 10 |
| SKDZ 4 6–8 C16 | 1037-003 | M4, shield diameter 6–8 mm | 10 |
| SKDZ 4 8–11 C16 | 1037-004 | M4, shield diameter 8–11 mm | 10 |
| SKDZ 4 11–16 C16 | 1037-005 | M4, shield diameter 11–16 mm | 10 |
| SKDZ 4 17–30 C16 | 1037-006 | M4, shield diameter 17–30 mm | 10 |
| SKDZ 4 3–12 C16 | 1037-011 | M4, shield diameter 3–12 mm | 10 |
| SKDZ 4 7–18 C16 | 1037-012 | M4, shield diameter 7–18 mm | 10 |

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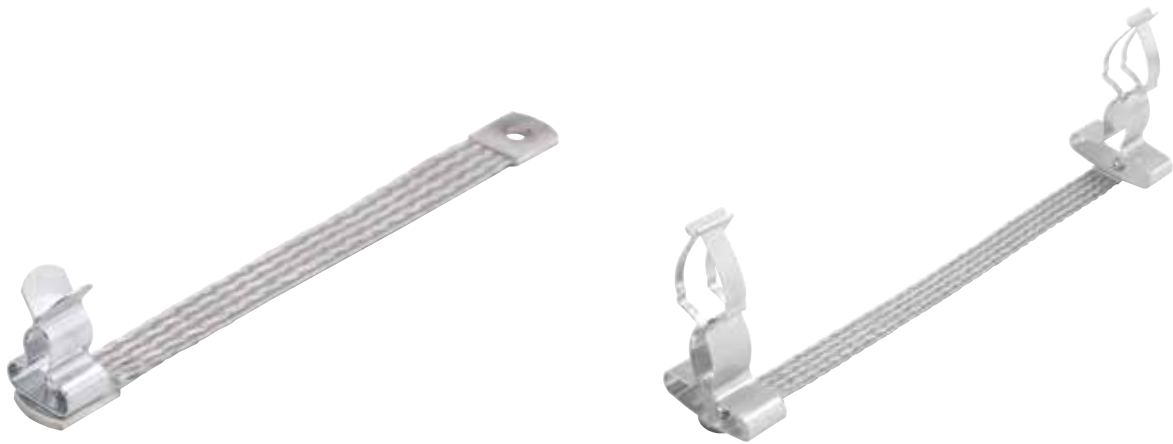
# Shield clamp riveted on earthing tape

**PRODUCT DESCRIPTION**

The shield clamp riveted on earthing tape allows an excellent large contact of cable shields and derivation of interference currents via a flexible earthing tape. The shield clamp is fixed on the cable shield due to its great clamping force and optimally adapts to the cable routing. Optionally, the shield clamp can be secured with cable tie by a strain relief bar.

Optimal solutions can not always be achieved with standardized shield connections.

We will gladly find the perfect solution for you. With us you can freely choose the shield clamp and earthing tape in length, cross section and hole diameter.

**ADVANTAGES**

// technical and economical optimally adapted to your requirements

// for small and large quantities

// flexible earth connection

| SHIELD CLAMP RIVETED ON EARTHING TAPE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER-NO. | DETAILED DESCRIPTION | PU |
| HSKM 3-12 FE 06 100 06 | 1010-133 | shield diameter 3–12 mm, 6 mm², 100 mm, M6 | 10 |
| HSKM 7-18 FE 10 200 08 | 1010-134 | shield diameter 7–18 mm, 10 mm², 200 mm, M8 | 10 |
| HSK XX–XX FE XX XXX XX | XXXX-XXX | freely selectable | 50 |

# HEBOSET Set of assorted fittings

## PRODUCT DESCRIPTION

With HEBOSET you always have the right shield clamp and carrier at hand. We would be pleased to provide a special assortment to fit your specific needs.

## CONTENT HEBOSET SMALL

// 15 x shield clamp HSK 1.5–3
// 15 x shield clamp HSK 3–6
// 15 x shield clamp HSK 6–8
// 15 x shield clamp HSK 8–11
// 5 x shield clamp HSKM 3–12
// 5 x shield clamp HSKM 7–18
// 10 x HEBOCLIP with clip foot HHZ-2
// 10 x HEBOCLIP for direct mounting HDZ 4
// 10 x HEBOCLIP for busbar HSZ 3
// 3 x HEBOCLIP clamp assembly for direct mounting
   HRDZ 4
// 3 x HEBOCLIP Duo 3–6
// 3 x HEBOCLIP Duo 6–8

## ADVANTAGES

// all parts are clearly arranged

// all-purpose usage
// set box in sturdy workshop design
// set box individually filled to reflect your requirements

## CONTENT HEBOSET BIG

// 25 x shield clamp HSK 1.5–3
// 25 x shield clamp HSK 3–6
// 25 x shield clamp HSK 6–8
// 25 x shield clamp HSK 8–11
// 15 x shield clamp HSK 11–16
// 20 x shield clamp HSKM 3–12
// 10 x shield clamp HSKM 7–18
// 10 x HEBOCLIP with clip foot HHZ-2
// 20 x HEBOCLIP for direct mounting HDZ 4
// 20 x HEBOCLIP for busbar HSZ 3
// 3 x HEBOCLIP clamp assembly for direct mounting
   HRDZ 4
// 5 x HEBOCLIP Duo 1,5–3
// 5 x HEBOCLIP Duo 3–6
// 5 x HEBOCLIP Duo 6–8
// 3 x HEBOCLIP Duo 3–12

| HEBOSET SET OF ASSORTED FITTINGS | | |
| --- | --- | --- |
| ITEM DESCRIPTION | ORDER NO. | PU |
| HEBOSET small | 1029-001 | 1 |
| HEBOSET big | 1029-002 | 1 |
| HEBOSET customised | 1029-xxx | 3 |

1



2



3

# Customised shield connections

**PRODUCT DESCRIPTION**

Standard shield connections often do not provides ideal solutions.

We are able to present practical assembly solutions for all requirements. Such an offer would be according to your demand, even in small quantities, without you having to waive the proven advantages of the HEBO-CLIP-system.

**EXAMPLES**

**Picture 1:**

This shield clamp is being pressed onto the cable shield and remains stable due to the high clamping force. A short earth connection can be constructed using a braided wire to the pre-assembled crimp connection.

**Picture 2:**

The shield clamp on mounting bracket is used for the assembly on a 4 mm stud bolt on a control panel door. A second possibility is a cable holder affixed with a bolt-setting tool directly onto a steel construction.

**Picture 3:**

Shield clamp with HEBOCLIP and special surface coating.

**Picture 4:**

This shield connection is fixed with the multi-purpose clamp onto a cylindrical component.
The cable shield of a sensor cable will make contact with the shield clamp.

**Picture 5:**

The shield clamps mounted on a sheet metal mounting bracket enables an ideal adaptation to the mechanical measurements.

**Picture 6:**

This picture shows the HEBOCLIP-System mounted on a shielding plate for 24-pin connection plates.
The HEBOCLIPs can be equipped with shield clamps according to specific requirements.

**Picture 7:**

The Shield clamp Multi used in this shield plate enables particularly flexible assembly.

**Picture 8:**

Specially developed bracket for mounting profiles equipped with the HEBOCLIP system.

**ADVANTAGES**

// technically and economically ideal solutions, made accordingly to your demands

// for small and large scale production series

# Earthing tapes

## PRODUCT DESCRIPTION
Earthing tapes made of flexible copper conductors with seamless pressed sleeves and holes for metric screws.

## ADVANTAGES
// seamless pressed sleeves
// the best conduction of high-frequency interference

// lowest contact resistance
// high tensile strength and durability
// a huge variety of earthing tapes with different lengths, cross sections and holes
// special sizes upon request

## TECHNICAL DATA
Material: tin-coated copper

| EARTHING TAPE | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| Earthing tape | 5-KT004010004 | 4 mm², 100 mm, M4 | 10 |
| Earthing tape | 5-KT006010004 | 6 mm², 100 mm, M4 | 10 |
| Earthing tape | 5-KT006010006 | 6 mm², 100 mm, M6 | 10 |
| Earthing tape | 5-KT006012006 | 6 mm², 120 mm, M6 | 10 |
| Earthing tape | 5-KT006015006 | 6 mm², 150 mm, M6 | 10 |
| Earthing tape | 5-KT006020004 | 6 mm², 200 mm, M4 | 10 |
| Earthing tape | 5-KT006020006 | 6 mm², 200 mm, M6 | 10 |
| Earthing tape | 5-KT006030006 | 6 mm², 300 mm, M6 | 10 |
| Earthing tape | 5-KT006035006 | 6 mm², 350 mm, M6 | 10 |
| Earthing tape | 5-KT006040006 | 6 mm², 400 mm, M6 | 10 |
| Earthing tape | 5-KT006050006 | 6 mm², 500 mm, M6 | 10 |
| Earthing tape | 5-KT006060006 | 6 mm², 600 mm, M6 | 10 |
| Earthing tape | 5-KT010010006 | 10 mm², 100 mm, M6 | 10 |
| Earthing tape | 5-KT010010008 | 10 mm², 100 mm, M8 | 10 |
| Earthing tape | 5-KT010015006 | 10 mm², 150 mm, M6 | 10 |
| Earthing tape | 5-KT010015008 | 10 mm², 150 mm, M8 | 10 |
| Earthing tape | 5-KT010020006 | 10 mm², 200 mm, M6 | 10 |
| Earthing tape | 5-KT010020008 | 10 mm², 200 mm, M8 | 10 |
| Earthing tape | 5-KT01002000608 | 10 mm², 200 mm, M6–M8 | 10 |
| Earthing tape | 5-KT010025006 | 10 mm², 250 mm, M6 | 10 |
| Earthing tape | 5-KT010030006 | 10 mm², 300 mm, M6 | 10 |
| Earthing tape | 5-KT010030008 | 10 mm², 300 mm, M8 | 10 |
| Earthing tape | 5-KT01003000608 | 10 mm², 300 mm, M6–M8 | 10 |
| Earthing tape | 5-KT010035006 | 10 mm², 350 mm, M6 | 10 |
| Earthing tape | 5-KT010040006 | 10 mm², 400 mm, M6 | 10 |
| Earthing tape | 5-KT010040008 | 10 mm², 400 mm, M8 | 10 |

**EARTHING TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| Earthing tape | 5-KT010050006 | 10 mm², 500 mm, M6 | 10 |
| Earthing tape | 5-KT010050008 | 10 mm², 500 mm, M8 | 10 |
| Earthing tape | 5-KT010060006 | 10 mm², 600 mm, M6 | 10 |
| Earthing tape | 5-KT016010006 | 16 mm², 100 mm, M6 | 10 |
| Earthing tape | 5-KT016010008 | 16 mm², 100 mm, M8 | 10 |
| Earthing tape | 5-KT016015006 | 16 mm², 150 mm, M6 | 10 |
| Earthing tape | 5-KT016015008 | 16 mm², 150 mm, M8 | 10 |
| Earthing tape | 5-KT01601500608 | 16 mm², 150 mm, M6–M8 | 10 |
| Earthing tape | 5-KT016020006 | 16 mm², 200 mm, M6 | 10 |
| Earthing tape | 5-KT016020008 | 16 mm², 200 mm, M8 | 10 |
| Earthing tape | 5-KT01602000608 | 16 mm², 200 mm, M6–M8 | 10 |
| Earthing tape | 5-KT016025008 | 16 mm², 250 mm, M8 | 10 |
| Earthing tape | 5-KT016030006 | 16 mm², 300 mm, M6 | 10 |
| Earthing tape | 5-KT016030008 | 16 mm², 300 mm, M8 | 10 |
| Earthing tape | 5-KT01603000608 | 16 mm², 300 mm, M6–M8 | 10 |
| Earthing tape | 5-KT016035008 | 16 mm², 350 mm, M8 | 10 |
| Earthing tape | 5-KT016040006 | 16 mm², 400 mm, M6 | 10 |
| Earthing tape | 5-KT016040008 | 16 mm², 400 mm, M8 | 10 |
| Earthing tape | 5-KT016050006 | 16 mm², 500 mm, M6 | 10 |
| Earthing tape | 5-KT016050008 | 16 mm², 500 mm, M8 | 10 |
| Earthing tape | 5-KT016060008 | 16 mm², 600 mm, M8 | 10 |
| Earthing tape | 5-KT016080008 | 16 mm², 800 mm, M8 | 10 |
| Earthing tape | 5-KT016150008 | 16 mm², 1.500 mm, M8 | 10 |
| Earthing tape | 5-KT025010008 | 25 mm², 100 mm, M8 | 10 |
| Earthing tape | 5-KT025010010 | 25 mm², 100 mm, M10 | 10 |
| Earthing tape | 5-KT025015008 | 25 mm², 150 mm, M8 | 10 |
| Earthing tape | 5-KT025015010 | 25 mm², 150 mm, M10 | 10 |
| Earthing tape | 5-KT025020006 | 25 mm², 200 mm, M6 | 10 |
| Earthing tape | 5-KT025020008 | 25 mm², 200 mm, M8 | 10 |
| Earthing tape | 5-KT025020010 | 25 mm², 200 mm, M10 | 10 |
| Earthing tape | 5-KT025025008 | 25 mm², 250 mm, M8 | 10 |
| Earthing tape | 5-KT025025010 | 25 mm², 250 mm, M10 | 10 |
| Earthing tape | 5-KT025030008 | 25 mm², 300 mm, M8 | 10 |
| Earthing tape | 5-KT025030010 | 25 mm², 300 mm, M10 | 10 |
| Earthing tape | 5-KT025030012 | 25 mm², 300 mm, M12 | 10 |
| Earthing tape | 5-KT025035010 | 25 mm², 350 mm, M10 | 10 |
| Earthing tape | 5-KT025040006 | 25 mm², 400 mm, M6 | 10 |
| Earthing tape | 5-KT025040008 | 25 mm², 400 mm, M8 | 10 |
| Earthing tape | 5-KT025040010 | 25 mm², 400 mm, M10 | 10 |
| Earthing tape | 5-KT025050008 | 25 mm², 500 mm, M8 | 10 |
| Earthing tape | 5-KT025060008 | 25 mm², 600 mm, M8 | 10 |
| Earthing tape | 5-KT025070008 | 25 mm², 700 mm, M8 | 10 |
| Earthing tape | 5-KT025100008 | 25 mm², 1.000 mm, M8 | 10 |
| Earthing tape | 5-KT035040008 | 35 mm², 400 mm, M8 | 10 |
| Earthing tape | 5-KT050025010 | 50 mm², 250 mm, M10 | 10 |
| Earthing tape | 5-KT050030008 | 50 mm², 300 mm, M8 | 10 |
| Earthing tape | 5-KT050040008 | 50 mm², 400 mm, M8 | 10 |
| Earthing tape | 5-KT070030010 | 70 mm², 300 mm, M10 | 10 |
| Earthing tape | 5-KT070050010 | 70 mm², 500 mm, M10 | 10 |
| Earthing tape on reel | 5-KO-0040-10 | 4 mm², 50 m | 1 |
| Earthing tape on reel | 5-KO-0060-10 | 6 mm², 50 m | 1 |
| Earthing tape on reel | 5-KO-0100-20 | 10 mm², 25 m | 1 |
| Earthing tape on reel | 5-KO-0160-20 | 16 mm², 25 m | 1 |
| Earthing tape on reel | 5-KO-0250-20 | 25 mm², 25 m | 1 |

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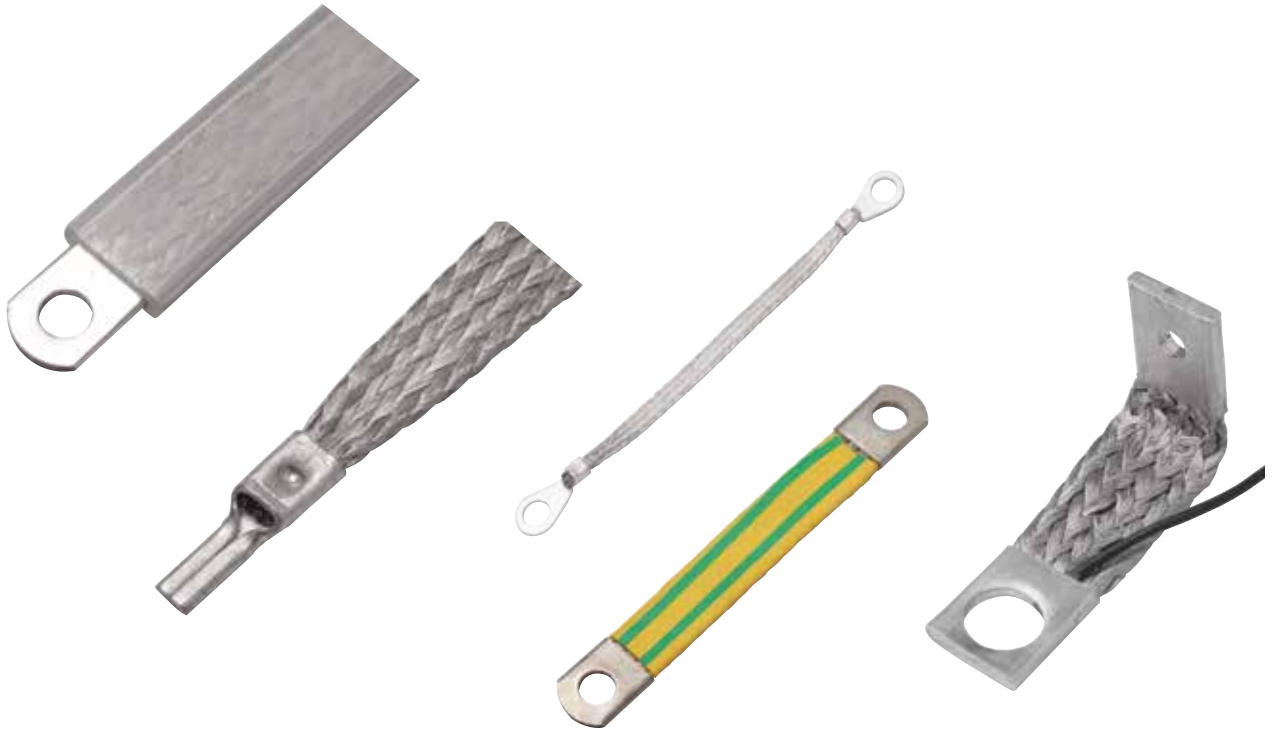
# Customised earthing tapes

**PRODUCT DESCRIPTION**

Standard earthing tapes do not always provide the ideal solution. We are able to offer earthing tapes - even for small batches - which are based on your needs and practical-related requirements.
We can adapt the conducting material, dimensions and contact surface as well as the insulation in order to suit your individual demand.

**ADVANTAGES**

// perfect technical and economical adaptations to
   meet your requirements
// for small and large batches

**TECHNICAL DATA**

Materials: blank copper, tin-plated copper,
           aluminium, stainless steel

Please contact our customer service department with your requests.

## PRODUCT DESCRIPTION

Shielding braid of tin-plated copper wires is perfectly suited to protect pipes and cables from interfering influences from electric fields.

## ADVANTAGES

// high coverage
// very good shielding effect

## TECHNICAL DATA

Material: tin-plated copper
Temperature range: −50 °C up to 200 °C

| SHIELDING BRAID | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | EXTENDABLE MIN – MAX | PU |
| Shielding braid | 2050-001 | 6–12 mm | 100 m |
| Shielding braid | 2050-002 | 8–16 mm | 100 m |
| Shielding braid | 2050-003 | 15–30 mm | 100 m |
| Shielding braid | 2050-004 | 24–48 mm | 100 m |

# HEBOPRESS Cable lugs

## PRODUCT DESCRIPTION

HEBOPRESS Cable lugs for use with endless HEBOTEC earthing tape on reel provides a unique way to design the dimensions of earthing tapes individually. With this technology, the optimal properties of flat conductors in terms of electromagnetic compatibility is maintained.

## ADVANTAGES

// very good derivation of high-frequency interference currents

// small contact resistance

// production according to your requirements

## TECHNICAL DATA

Material: copper ETP tinned

## ACCESSORIES

// press inserts and tools

// Earthing tape on reel

| HEBOPRESS CABLE LUGS | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DIMENSION** | **PU** |
| HPK 10-6 | 2040-011 | 10 mm², M6 | 10 |
| HPK 10-8 | 2040-012 | 10 mm², M8 | 10 |
| HPK 10-10 | 2040-013 | 10 mm², M10 | 10 |
| HPK 16-6 | 2040-001 | 16 mm², M6 | 10 |
| HPK 16-8 | 2040-002 | 16 mm², M8 | 10 |
| HPK 16-10 | 2040-003 | 16 mm², M10 | 10 |
| Earthing tape on reel | 5-KO-0100-20 | 10 mm², 25 m | 1 |
| Earthing tape on reel | 5-KO-0160-20 | 16 mm², 25 m | 1 |

# HEBOPRESS tools

## PRODUCT DESCRIPTION

It is very easy using HEBOPRESS tools to produce individualised earthing tapes.

Both, the hand press and the rechargeable battery press can be equipped with standard inserts, e.g. for circular cable-lugs.

## ASSEMBLY INSTRUCTIONS

// Place inserts into press
// Cut earthing tape from the reel to desired length
// Push HEBOPRESS earthing tape cable-lugs onto the terminal of earthing tape
// Grout HEBOPRESS earthing tape cable-lug

| HEBOPRESS TOOLS | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **MEASUREMENTS** | **PU** |
| Press insert 16 | 2040-032 | for 16 mm² | 1 |
| Press insert 10 | 2040-033 | for 10 mm² | 1 |
| Earthing tape scissors | 2040-041 | for cutting earthing tape to size | 1 |
| Hand press | 2040-042 | | 1 |
| Rechargeable battery press | 2040-043 | | 1 |

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# Patch panel for network cabinets, EMC-conform

## PRODUCT DESCRIPTION

The Patch panel for network cabinets which conform with the EMC standards is designed for industrial operating conditions. It consists of a 19" distribution panel for 24 x RJ 45 modules. The cable shield is optimally contacted using shield clamps.
The strain relief provide the possibility of individual strain relief of the cable sheath by using a cable tie.

## ADVANTAGES

// EMC-conform
// tool-free assembly
// both-sided earth bolt for connection of an
   earthing tape

// constant contact with cable shield due to spring pressure
// strain relief by using a cable tie on the cable sheath
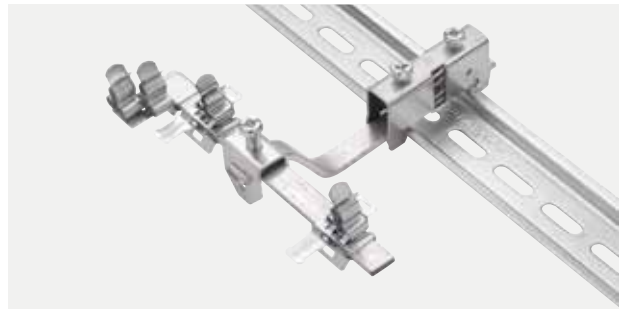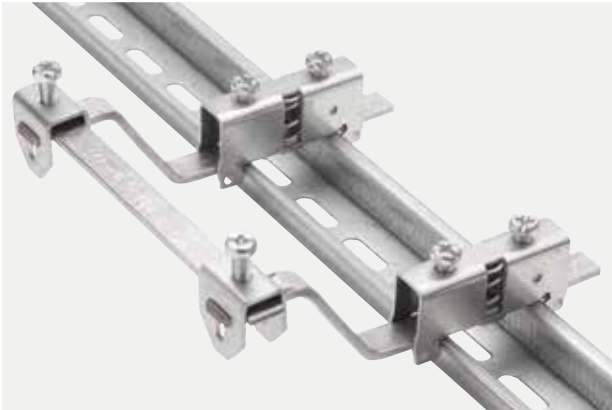
## TECHNICAL DATA

Material: galvanised sheet steel, galvanised spring steel, front surface light grey (RAL 7035), powder-coated

## ACCESSORIES

// Earthing tapes

| PATCH PANEL FOR NETWORK CABINETS, EMC-CONFORM | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| Patch panel | 1060-001 | for 24 x RJ 45 modules | 1 |

# Busbar support for 35 mm DIN rail

**PRODUCT DESCRIPTION**

A 10 x 3 mm busbar can be assembled variably in regard to height, width as well as the distance from the connections of the devices.

By combining the HEBOCLIPs HS(Z) and HSD(Z) and the shield clamps HSK(M), a great variety of possibilities exists which ensures a constantly excellent conductance of high-frequency interferences.

**ADVANTAGES**

// variable assembly regarding to width, height and distance from the connections of the devices
// use of standard busbars 10 x 3 mm

// highly flexible
// high packing density

**TECHNICAL DATA**

Material: galvanised steel, tin-plated copper

**ACCESSORIES**

// HEBOCLIP for busbar
// HEBOCLIP Uno for busbar
// HEBOCLIP Duo for busbar
// Shield clamp
// Busbar 10 x 3 x 1.000 mm
// HEBOSET Set of assorted fittings

| BUSBAR SUPPORT FOR 35 MM DIN RAIL | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| SH | 1092-001 | Busbar support | 10 |
| SV | 1092-002 | Busbar connector | 10 |
| SSG | 1092-003 | Busbar, curved, see sketch | 10 |
| SSTH-Set | 1092-004 | set of 2 x SH, 2 x SV, 2 x SSG | 1 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |



45 mm

65–100 mm
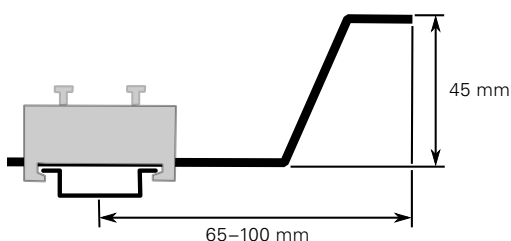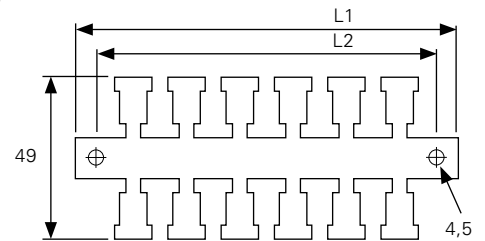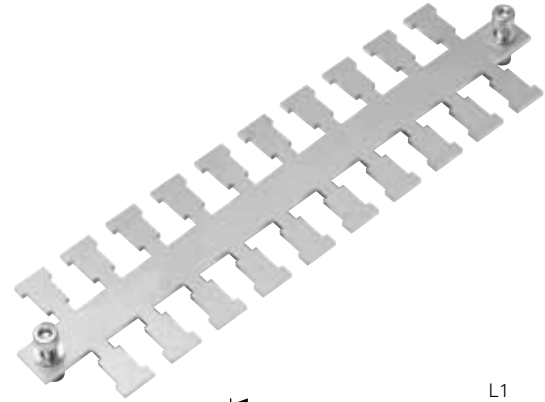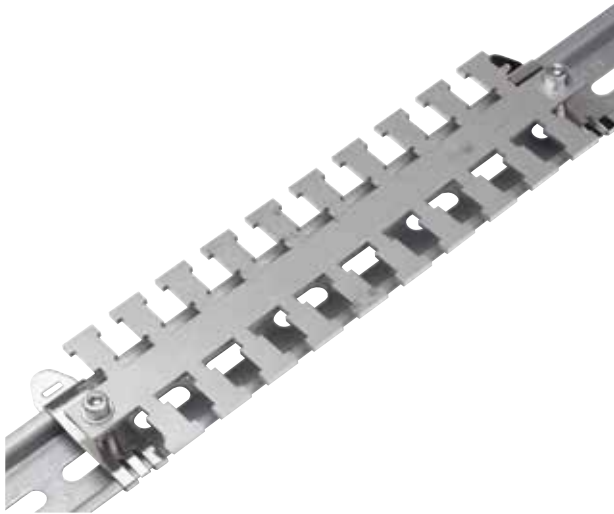
# Cable fixing plate

## PRODUCT DESCRIPTION

The cable fixing plate KAL is suitable for strain relief through cable ties or hook-and-loop tape and derivation of high-frequency interferences on cable shields. The KAL is available for direct mounting, with distance sleeves or clip feet for 35 mm DIN rails.

## TECHNICAL DATA

Material: stainless steel, KAL 59 galvanised steel

## ACCESSORIES

// Clip foot for 35 mm DIN rail, M4
// Spacer 8 mm with screw M4

### CABLE FIXING PLATE

| ITEM DESCRIPTION | ORDER NO. | NUMBER OF TEETH | L1 | L2 | PU |
|---|---|---|---|---|---|
| KAL-2 | 1041-031 | 2 | 50.5 mm | 37.5 mm | 10 |
| KAL-4 | 1041-032 | 4 | 83.5 mm | 70.5 mm | 10 |
| KAL-6 | 1041-033 | 6 | 116.5 mm | 103.5 mm | 10 |
| KAL-8 | 1041-034 | 8 | 149.5 mm | 136.5 mm | 10 |
| KAL-10 | 1041-035 | 10 | 182.5 mm | 169.5 mm | 10 |
| KAL-29 | 1041-037 | 29 | 494.5 mm | 481.5 mm | 10 |
| KAL-59 | 1041-038 | 59 | 990.0 mm | 978.0 mm | 10 |

### CABLE FIXING PLATE ASSEMBLED ON CLIP-FOOT

| ITEM DESCRIPTION | ORDER NO. | NUMBER OF TEETH | L1 | L2 | PU |
|---|---|---|---|---|---|
| KAL-SF 2 | 1041-001 | 2 | 50.5 mm | 37.5 mm | 10 |
| KAL-SF 4 | 1041-002 | 4 | 83.5 mm | 70.5 mm | 10 |
| KAL-SF 6 | 1041-003 | 6 | 116.5 mm | 103.5 mm | 10 |
| KAL-SF 8 | 1041-004 | 8 | 149.5 mm | 136.5 mm | 10 |
| KAL-SF 10 | 1041-005 | 10 | 182.5 mm | 169.5 mm | 10 |
| Clip foot single | 1030-020 | | | | 25 |

### CABLE FIXING PLATE WITH SPACER AND SCREW M4

| ITEM DESCRIPTION | ORDER NO. | NUMBER OF TEETH | L1 | L2 | PU |
|---|---|---|---|---|---|
| KAL-DH 2 | 1041-010 | 2 | 50.5 mm | 37.5 mm | 10 |
| KAL-DH 4 | 1041-011 | 4 | 83.5 mm | 70.5 mm | 10 |
| KAL-DH 6 | 1041-012 | 6 | 116.5 mm | 103.5 mm | 10 |
| KAL-DH 8 | 1041-013 | 8 | 149.5 mm | 136.5 mm | 10 |
| KAL-DH 10 | 1041-014 | 10 | 182.5 mm | 169.5 mm | 10 |
| Spacer 8 mm | 1041-021 | | | | 25 |

MSA

MSB

MSC

MSD

# Supports for 35 mm DIN rail and busbar

**PRODUCT DESCRIPTION**

For easy mounting of busbars and 35 mm DIN rails. There are various supports available. To fix with an M6 screw.

**ADVANTAGES**

// Depending on the application and installation conditions there are several supports available.

// The support MSD even allows the assembly of two rails.

**TECHNICAL DATA**

thread M6
Material: galvanised steel

**ACCESSORIES**

// Busbar 10 x 3 x 1.000 mm

| SUPPORTS FOR 35 MM DIN RAIL AND BUSBAR | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | MEASUREMENTS L X W X H | PU |
| MSA-49 | 1046-010 | 80 x 20 x 49 mm | 10 |
| MSA-68 | 1046-011 | 80 x 20 x 68 mm | 10 |
| MSA-88 | 1046-012 | 80 x 20 x 88 mm | 10 |
| MSB-20 | 1046-020 | 80 x 20 x 20 mm | 10 |
| MSB-30 | 1046-021 | 80 x 20 x 30 mm | 10 |
| MSB-50 | 1046-022 | 80 x 20 x 50 mm | 10 |
| MSB-90 | 1046-023 | 80 x 20 x 90 mm | 10 |
| MSC-40 | 1046-030 | 40 x 18 x 40 mm | 10 |
| MSC-53 | 1046-031 | 40 x 18 x 53 mm | 10 |
| MSD-49 | 1046-040 | 80 x 20 x 49 mm | 10 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |

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# Shield connection for busbar

## PRODUCT DESCRIPTION
The shield connection for busbar SKS is suitable for the easy contacting of cable shields. Through the tool-free assembly and fastening via knurled screw, cable shields with a diameter from 2 mm to 35 mm can be contacted also subsequently.

## ADVANTAGES
// wide clamping range

## TECHNICAL DATA
Material: galvanised steel

## ACCESSOIRES
// busbar 10 x 3 x 1.000 mm

| SHIELD CONNECTION FOR BUSBAR | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | CLAMPING RANGE | PU |
| SKS 2–5 | 1043-001 | 2–5 mm | 10 |
| SKS 3–8 | 1043-002 | 3–8 mm | 10 |
| SKS 3–14 | 1043-003 | 3–14 mm | 10 |
| SKS 3–20 | 1043-004 | 3–20 mm | 10 |
| SKS 5–28 | 1043-005 | 5–28 mm | 10 |
| SKS 20–35 | 1043-006 | 20–35 mm | 10 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |

# Shielding clamp with spring

**PRODUCT DESCRIPTION**

The Shielding clamp with spring is used for the connection of cable shields with the ground level.
The clamp is available for direct mounting, assembly on busbar or 35 mm DIN rails.

**ADVANTAGES**

// through spring pressure steady contact to the cable shield
// wide clamping range

**TECHNICAL DATA**

Material: galvanised steel

**ACCESSORIES**

// Clip foot for 35 mm DIN rail, M4
// Busbar 10 x 3 x 1.000 mm

| SHIELDING CLAMP WITH SPRING AND CLIP FOOT | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SF-SK 3–8 | 1042-001 | 3–8 mm | 10 |
| SF-SK 4–13,5 | 1042-002 | 4–13,5 mm | 10 |
| SF-SK 10–20 | 1042-003 | 10–20 mm | 10 |
| SF-SK 15–32 | 1042-004 | 15–32 mm | 10 |
| Clip foot M4 | 1030-020 | | 25 |

| SHIELDING CLAMP FOR DIRECT MOUNTING | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SK 3–8 | 1042-011 | 3–8 mm | 10 |
| SK 4–13,5 | 1042-012 | 4–13,5 mm | 10 |
| SK 10–20 | 1042-013 | 10–20 mm | 10 |
| SK 15–32 | 1042-014 | 15–32 mm | 10 |

| SHIELDING CLAMP FOR BUSBAR | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | SHIELD DIAMETER | PU |
| SKO 3–8 | 1042-021 | 3–8 mm | 10 |
| SKO 4–13,5 | 1042-022 | 4–13,5 mm | 10 |
| SKO 10–20 | 1042-023 | 10–20 mm | 10 |
| SKO 15–32 | 1042-024 | 15–32 mm | 10 |
| Busbar 10 x 3 | 1046-001 | length 1.000 mm | 5 |

# Grounding clamp

## PRODUCT DESCRIPTION
The EMC grounding clamps with one or two fastening lugs can be used as shield contact directly on the mounting plate or at the electrical equipment.
These open grounding clamps stand out due to their easy and problem-free handling.

## ADVANTAGES
// universally usable

## TECHNICAL DATA
Material: galvanised steel

| GROUNDING CLAMP WITH 1 FASTENING FLAP | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | CLAMPING RANGE, SCREW | PU |
| ESE 7 | 1044-010 | 5.5–7.0 mm, M6 | 100 |
| ESE 9 | 1044-011 | 7.0–9.0 mm, M6 | 100 |
| ESE 13 | 1044-012 | 9.5–13.0 mm, M6 | 100 |
| ESE 15,5 | 1044-013 | 13.0–15.5 mm, M6 | 100 |
| ESE 19 | 1044-014 | 15.5–19.0 mm, M6 | 100 |
| ESE 23 | 1044-015 | 20.0–23.0 mm, M8 | 100 |
| ESE 26 | 1044-016 | 23.0–26.0 mm, M8 | 100 |
| ESE 28,5 | 1044-017 | 26.0–28.5 mm, M8 | 100 |
| ESE 31 | 1044-018 | 28.5–31.0 mm, M8 | 100 |
| ESE 33 | 1044-019 | 31.0–33.0 mm, M8 | 100 |

| GROUNDING CLAMP WITH 2 FASTENING FLAPS | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | CLAMPING RANGE, SCREW | PU |
| ESD 7 | 1044-030 | 5.5–7.0 mm, M5 | 100 |
| ESD 9 | 1044-031 | 7.0–9.0 mm, M5 | 100 |
| ESD 13 | 1044-032 | 9.5–13.0 mm, M5 | 100 |
| ESD 15,5 | 1044-033 | 13.0–15.5 mm, M5 | 100 |
| ESD 19 | 1044-034 | 15.5–19.0 mm, M5 | 100 |
| ESD 23 | 1044-035 | 20.0–23.0 mm, M6 | 100 |
| ESD 26 | 1044-036 | 23.0–26.0 mm, M6 | 100 |
| ESD 28,5 | 1044-037 | 26.0–28.5 mm, M6 | 100 |
| ESD 31 | 1044-038 | 28.5–31.0 mm, M6 | 100 |
| ESD 33 | 1044-039 | 31.0–33.0 mm, M6 | 100 |

**PRODUCT LINE**

# Fastening systems

An increasing number of flexible and multi-purpose fastening systems is required for the cabling of machines and facilities.
The repeatedly reusable HEBOTEC products satisfy these needs.
Furthermore, HEBOTEC also offers solutions using self-extinguishing materials according to the Flammability Test UL94.
These products have been approved by many automobile manufacturers.

# M8-/M12-Mounting clip for direct assembly stackable

## PRODUCT DESCRIPTION

The Mounting clip for direct assembly serves as an installation support for the secure fixing of industrial connectors. It is available in two sizes for M8 or M12 connectors. The clip can be mounted with a cylinder screw. Following this, the M8 or M12 connector is simply pressed in from above.

It should be ensured that the gap of the connector is positioned in the middle of the clip. Nubs in the material dip into the gap and prevent the connectors from moving in the longitudinal direction.

The different sizes are stackable by a dovetail joint.

## ADVANTAGES

// easy handling
// good holding force
// universally applicable
// stackable clip
// high stability
// prevention of longitudinal movement

## TECHNICAL DATA

Material: polyamid, reinforced with glass fibre, self-extinguishing according to UL94-V0

## ACCESSORIES

// mounting accessories

| M8-/M12-MOUNTING CLIP FOR DIRECT ASSEMBLY STACKABLE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| SHD 8 4 | 3014-102 | for M8 connectors, for boring M4 | 10 |
| SHD 12 4 | 3014-104 | for M12 connectors, for boring M4 | 10 |
| SHD 12 5 | 3014-114 | for M12 connectors, for boring M5 | 10 |

# M12-Mounting clip with clamping foot for C11-rails

## PRODUCT DESCRIPTION

The Mounting clip for C11-rails with material thickness of 1.5 mm serves as an installation help for the secure fixing of M12 connectors. The clamping foot can be assembled by a 90° turn into the rabbet of C11-rails, afterwards the M12 connector is simply pressed in from above.

## ADVANTAGES

// easy handling
// good holding force
// universally applicable
// simple mounting without tools into C11-rails
// high stability

## TECHNICAL DATA

Material: polyamid, reinforced with glass fibre, self-extinguishing according to UL94-V0

| M12-MOUNTING CLIP WITH CLAMPING FOOT FOR C11-RAIL | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| SHK 12 C11 | 3014-124 | for M12 connectors, for C11-rails | 10 |

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# M17-/M23-Mounting bracket Big

## PRODUCT DESCRIPTION

The mounting bracket Big for direct assembly serves as an installation help for the secure fixing of M17- and M23-connectors. Two brackets can be mounted with a M6 cylinder screw to insert the connector between the stops of the brackets. Following this the hook-and-loop tape is strapped around the connector, then plugged trough the duct of the bracked and fastened. To simplify the exact assembling, the bracket posses-ses an integrated alignment help at the bottom side. It dips into a optional second drilling on the mounting surface with 3mm diameter. When not using the drilling, the alignment help disappears in the bracket during assembly.

## ADVANTAGES

// easy handling
// good holding force
// integrated alignment help
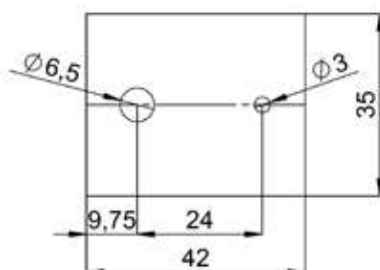// self-extinguishing according to UL94-V0

## TECHNICAL DATA

Material mounting bracket:
polyamid, reinforced with glass fibre, self-extinguishing according to UL94-V0

Material hook-and-loop tape:
polypropylene, self-extinguishing according to UL94-V2

| M17-/M23-MOUNTING BRACKET BIG WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DIMENSION | PU |
| SHBD 17/23 6 | 3014-210-145 | boring for M6, set consists of two brackets | 5 |

## HOLE PATTERN

# Hook-and-loop tape

## PRODUCT DESCRIPTION

Hook-and-loop tape of polypropylene in high quality can be reused hundreds of times.
The tapes are perfect for bundeling, organisation and protection of cables and wires.

## ADVANTAGES

// cable bundles can be extended easily
// self-extinguishing according to UL94-V2
// hook-and-loop tape on reel can be cut to the required length

// reduced risk of injury compared to use of cut off cable binder

## TECHNICAL DATA

Material: polypropylene
reusable hundreds of times

## ACCESSORIES

// HEBOFIX base for hook-and-loop tape

| HOOK-AND-LOOP TAPE ON REEL TO CUT TO SIZE, SELF-EXTINGUISHING ACCORDING TO UL94-V2 | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DIMENSION | PU |
| Hook-and-loop tape on reel FRT | 11-KE07015FRT | 7.5 mm | 15 m |
| Hook-and-loop tape on reel FRT | 11-KE10025FRT | 10 mm | 25 m |
| Hook-and-loop tape on reel FRT | 11-KE13025FRT | 13 mm | 25 m |
| Hook-and-loop tape on reel FRT | 11-KE16025FRT | 16 mm | 25 m |
| Hook-and-loop tape on reel FRT | 11-KE20025FRT | 20 mm | 25 m |
| Hook-and-loop tape on reel FRT | 11-KE25025FRT | 25 mm | 25 m |
| Hook-and-loop tape on reel FRT | 11-KE30025FRT | 30 mm | 25 m |

# Hook-and-loop cable tie

**PRODUCT DESCRIPTION**

Hook-and-loop tape of polypropylene in high quality can be reused hundreds of times.
The tapes are perfect for bundeling, organisation and protection of cables and wires.

**ADVANTAGES**

// cable bundles can be extended easily

// self-extinguishing according to UL94-V2

// hook-and-loop cable ties on reel are perforated to ease tearing off

// reduced risk of injuries compared to the use of cut off cable ties

**TECHNICAL DATA**

Material: polypropylene
reusable hundreds of times

| HOOK-AND-LOOP CABLE TIE, SELF-EXTINGUISHING ACCORDING TO UL94-V2 | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DIMENSION | PU |
| Hook-and-loop cable tie on reel FRT | 11-KK13200FRT | 7 x 200 mm | 750 pcs |
| Hook-and-loop cable tie on reel FRT | 11-KK20150FRT | 13 x 150 mm | 1000 pcs |
| Hook-and-loop cable tie on reel FRT | 11-KK20200FRT | 13 x 200 mm | 750 pcs |
| Hook-and-loop cable tie on reel FRT | 11-KK20330FRT | 13 x 330 mm | 450 pcs |
| Hook-and-loop cable tie on reel FRT | 11-KK25300FRT | 16 x 300 mm | 500 pcs |

# Hook-and-loop strap

**PRODUCT DESCRIPTION**

Hook-and-loop tape with welded plastic eyelet in high quality, can be reused hundreds of times. The hook-and-loop straps are perfect for bundeling, organization and protection of cables and wires.
With the loop side facing outside the strap is pulled through the eyelet, then tightened back and securely fixated on the hook side.

**ADVANTAGES**

// cable bundles can be extended easily
// self-extinguishing according to UL94-V2
// easy handling
// reusable

**TECHNICAL DATA**

Material: polypropylene
reusable hundreds of times

| HOOK-AND-LOOP STRAP, SELF-EXTINGUISHING ACCORDING TO UL94-V2 | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DIMENSION | PU |
| Hook-and-loop strap | 3020-201 | 20 x 170 mm | 10 pcs |
| Hook-and-loop strap | 3020-202 | 20 x 200 mm | 10 pcs |
| Hook-and-loop strap | 3020-203 | 20 x 300 mm | 10 pcs |
| Hook-and-loop strap | 3020-204 | 20 x 400 mm | 10 pcs |
| Hook-and-loop strap | 3020-205 | 20 x 500 mm | 10 pcs |
| Hook-and-loop strap | 3020-206 | 20 x 600 mm | 10 pcs |

# HEBOFIX base for hook-and-loop tape

## PRODUCT DESCRIPTION
The base for hook-and-loop fasteners serves as installation support and provides minimal damage during attachment of pipes, cables and tubes. The base can be equipped, free of tools, with our hook-and-loop tapes in variable lengths.
The base is available for both, direct assembly with flat-head screw or with the mounting accessories for assembly onto C-rails and profile grooves.

## ADVANTAGES
// variable length of the hook-and-loop tape, or already assembled with hook-and-loop tape
// provides a tangle-free and protective cable installation

// reusable
// cable bundles can be extended easily
// easy handling
// reduced risk of injuries compared to the use of cut off cable ties

## TECHNICAL DATA
Material: polyamide, reinforced with glass fibre, self-extinguishing according to UL94-V0

## ACCESSORIES
// hook-and-loop tape on reel
// mounting accessories

| HEBOFIX BASE FOR DIRECT ASSEMBLY FOR HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS 4–20 7,5 | 3011-001 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm, M4 | 10 |
| KBS 4–20 10 | 3011-002 | clamping range 4–20 mm, hook-and-loop tape 10 mm, M4 | 10 |
| KBS 8–35 20 | 3011-004 | clamping range 8–35 mm, hook-and-loop tape 20 mm, M4 or M5 | 10 |
| KBS 10–60 20 | 3011-006 | clamping range 10–60 mm, hook-and-loop tape 20 mm, M4 or M5 | 10 |

| HEBOFIX BASE FOR DIRECT ASSEMBLY EQUIPPED WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS–KE 4–20 | 3011-001-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 7.5 mm, M4 | 10 |
| KBS–KE 4–20 | 3011-002-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm, M4 | 10 |
| KBS–KE 8–35 | 3011-004-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm, M4 or M5 | 10 |
| KBS–KE 10–60 | 3011-006-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm, M4 or M5 | 10 |

# HEBOFIX base Big for hook-and-loop tape

## PRODUCT DESCRIPTION

The base for hook-and-loop fasteners serves as installation support which prevents damage during attachment of pipes, cables and tubes. The base can be equipped, free of tools, with our hook-and-loop tapes in variable lengths.

The base is available for both, direct assembly with an M6 cylinder screw or using the mounting accessories for assembly onto a profile groove.

## ADVANTAGES

// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape

// provides a tangle-free and protective cable installation

// reusable

// cable bundles can be extended easily

// easy handling

// reduced risk of injuries compared to the use of cut off cable ties

## TECHNICAL DATA

Material: polyamide, reinforced with glass fibre, self-extinguishing according to UL94-V0

## ACCESSORIES

// hook-and-loop tape on reel

// mounting accessories

| HEBOFIX BASE BIG FOR DIRECT ASSEMBLY FOR HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| KBS 20–100 30 | 3011-010 | clamping range 20–100 mm, hook-and-loop tape 30 mm, M6 | 10 |

| HEBOFIX BASE BIG FOR DIRECT ASSEMBLY, EQUIPPED WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| KBS–KE 20–100 30 | 3011-010-300 | clamping range 20–100 mm, hook-and-loop tape 300 x 30 mm, M6 | 10 |

## HEBOFIX BIG MOUNTING PROCEDURE

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# HEBOFIX base for aluminium profiles

## PRODUCT DESCRIPTION
The base for hook-and-loop fasteners with clamping foot serves as a gentle installation support of lines, cables and hoses on aluminium profiles.
The clamping foot can be assembled by a 90° turn into the rabbet of aluminium profiles or by pushing into a boring. After that the base can be assembled with our hook-and-loop tape in variable length.

## ADVANTAGES
// simple mounting without tools into popular aluminium profiles
// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape

// provides a tangle-free and protective cable installation
// reusable
// cable bundles can be extended easily
// easy handling
// reduced risk of injuries compared to use of cut off cable ties

## TECHNICAL DATA
Material: polyamide, reinforced with glass fibre, self-extinguishing according to UL94-V0

## ACCESSORIES
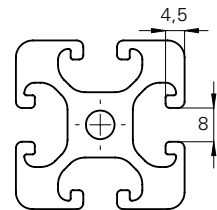// hook-and-loop tape on reel

## MOUNTING PROCEDURE FOR HEBOFIX BASE FOR ALUMINIUM PROFILE

**HEBOFIX BASE FOR ITEM-PROFILE WITH 8 MM-RABBET**

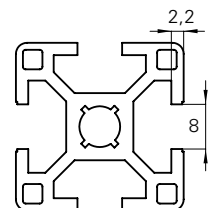| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-I8 4–20 10 | 3011-102 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-I8 8–35 20 | 3011-104 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-I8 10–60 20 | 3011-106 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX BASE FOR ITEM-PROFILE WITH 8 MM-RABBET, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-I8 4–20 10 | 3011-102-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-I8 8–35 20 | 3011-104-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-I8 10–60 20 | 3011-106-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX BASE FOR BOSCH-PROFILE WITH 8 MM-RABBET**

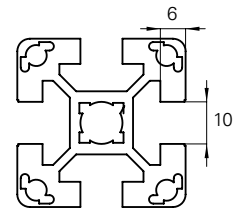| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B8 4–20 10 | 3011-112 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-B8 8–35 20 | 3011-114 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-B8 10–60 20 | 3011-116 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX BASE FOR BOSCH-PROFILE WITH 8 MM-RABBET, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B8 4–20 10 | 3011-112-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-B8 8–35 20 | 3011-114-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-B8 10–60 20 | 3011-116-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX BASE FOR BOSCH-PROFILE WITH 10 MM-RABBET**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B10 4–20 10 | 3011-122 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-B10 8–35 20 | 3011-124 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-B10 10–60 20 | 3011-126 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX BASE FOR BOSCH-PROFILE WITH 10 MM-RABBET, EQUIPPED WITH HOOK-AND-LOOP TAPE**

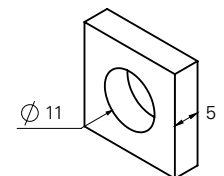| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B10 4–20 10 | 3011-122-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-B10 8–35 20 | 3011-124-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-B10 10–60 20 | 3011-126-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX BASE FOR EGT-PROFILE WITH 11 MM-BORING**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-EGT 4–20 10 | 3011-132 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 100 |
| KBS-EGT 8–35 20 | 3011-134 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 100 |
| KBS-EGT 10–60 20 | 3011-136 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 100 |

**HEBOFIX BASE FOR EGT-PROFILE WITH 11 MM-BORING, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-EGT 4–20 10 | 3011-132-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 100 |
| KBS-EGT 8–35 20 | 3011-134-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 100 |
| KBS-EGT 10–60 20 | 3011-136-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 100 |

# HEBOFIX 45 base for aluminium profiles

**PRODUCT DESCRIPTION**

The base for hook-and-loop fasteners with clamping foot serves as a gentle installation support of lines, cables and hoses. The clamping foot can be assembled by a 45° turn right or left into the rabbet of aluminium profiles. After that the base can be assembled with our hook-and-loop tape in variable length.

**ADVANTAGES**

// simple mounting without tools into popular aluminium profiles

// through a 45° turn possible cable installation parallel or across to the profiles

// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape

// provides a tangle-free and protective cable installation

// reusable

// cable bundles can be extended easily

// easy handling

// reduced risk of injuries compared to use of cut off cable ties

**TECHNICAL DATA**

Material: polyamide, reinforced with glass fibre, self-extinguishing according to UL94-V0
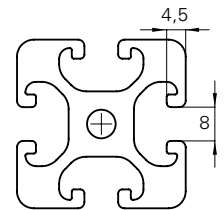
**ACCESSORIES**

// hook-and-loop tape on reel

**HEBOFIX 45 MOUNTING PROCEDURE**

**HEBOFIX 45 BASE FOR ITEM-PROFILE WITH 8 MM-RABBET**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-I8M 4–20 10 | 3011-162 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-I8M 8–35 20 | 3011-164 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-I8M 10–60 20 | 3011-166 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX 45 BASE FOR ITEM-PROFILE WITH 8 MM-RABBET, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-I8M 4–20 10 | 3011-162-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-I8M 8–35 20 | 3011-164-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-I8M 10–60 20 | 3011-166-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX 45 BASE FOR BOSCH-PROFILE WITH 8 MM-RABBET**

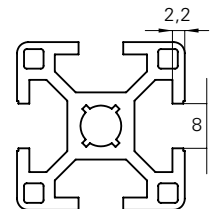| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B8M 4–20 10 | 3011-172 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-B8M 8–35 20 | 3011-174 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-B8M 10–60 20 | 3011-176 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX 45 BASE FOR BOSCH-PROFILE WITH 8 MM-RABBET, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B8M 4–20 10 | 3011-172-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-B8M 8–35 20 | 3011-174-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-B8M 10–60 20 | 3011-176-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX 45 BASE FOR BOSCH-PROFILE WITH 10 MM-RABBET**

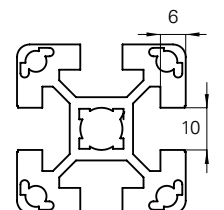| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B10M 4–20 10 | 3011-182 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-B10M 8–35 20 | 3011-184 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-B10M 10–60 20 | 3011-186 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX 45 BASE FOR BOSCH-PROFILE WITH 10 MM-RABBET, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-B10M 4–20 10 | 3011-182-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-B10M 8–35 20 | 3011-184-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-B10M 10–60 20 | 3011-186-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

### HEBOFIX 45 BASE FOR MINITEC30

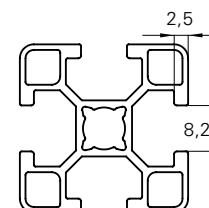| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-MI8M 4–20 10 | 3011-142 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-MI8M 8–35 20 | 3011-144 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-MI8M 10–60 20 | 3011-146 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

### HEBOFIX 45 BASE FOR MINITEC30, EQUIPPED WITH HOOK-AND-LOOP TAPE

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-MI8M 4–20 10 | 3011-142-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-MI8M 8–35 20 | 3011-144-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-MI8M 10–60 20 | 3011-146-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

### HEBOFIX 45 BASE FOR MINITEC45

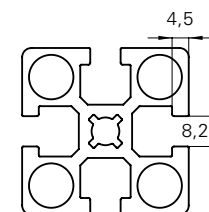| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-I8M 4–20 10 | 3011-162 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-I8M 8–35 20 | 3011-164 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-I8M 10–60 20 | 3011-166 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

### HEBOFIX 45 BASE FOR MINITEC45, EQUIPPED WITH HOOK-AND-LOOP TAPE

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-I8M 4–20 10 | 3011-162-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-I8M 8–35 20 | 3011-164-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-I8M 10–60 20 | 3011-166-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

### HEBOFIX 45 BASE FOR MAYTEC PG16/PG40

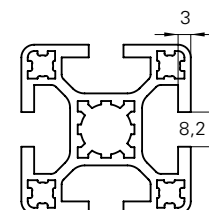| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-MA8M 4–20 10 | 3011-152 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-MA8M 8–35 20 | 3011-154 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-MA8M 10–60 20 | 3011-156 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

### HEBOFIX 45 BASE FOR MAYTEC PG16/PG40, EQUIPPED WITH HOOK-AND-LOOP TAPE

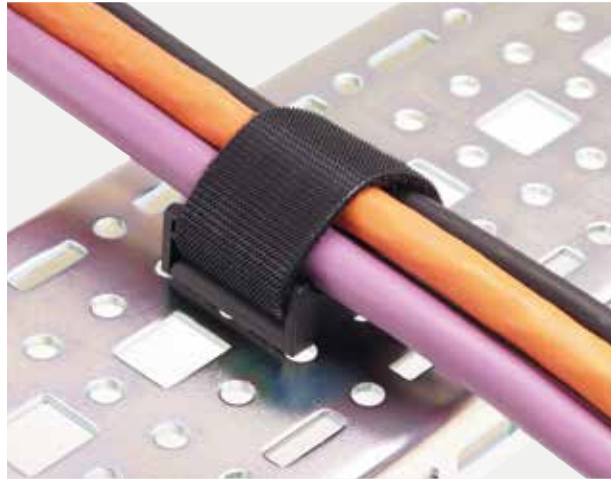| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-MA8M 4–20 10 | 3011-152-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-MA8M 8–35 20 | 3011-154-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-MA8M 10–60 20 | 3011-156-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

# HEBOFIX 45 base for Rittal-VX25

## PRODUCT DESCRIPTION

The base for hook-and-loop fasteners with clamping foot serves as a gentle installation support of lines, cables and hoses. The clamping foot can be assembled by a 45° turn right or left into the Rittal-VX25 (12.5 mm x 10.5 mm). After that the base can be assembled with our hook-and-loop tape in variable length.

## ADVANTAGES

// simple mounting without tools into
   Rittal-VX25 (12.5 mm x 10.5 mm)
// through a 45° turn possible cable installation parallel
   or across to the bar
// variable length of the hook-and-loop tape,
   or already equipped with hook-and-loop tape

// provides a tangle-free and protective cable
   installation
// reusable
// cable bundles can be extended easily
// easy handling
// reduced risk of injuries compared to use of
   cut off cable ties

## TECHNICAL DATA

Material: polyamide, reinforced with glass fibre,
          self-extinguishing according to UL94-V0

## ACCESSORIES

// hook-and-loop tape on reel

| HEBOFIX 45 BASE FOR RITTAL-VX25 | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| KBS-RM 4–20 10 | 3011-252 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-RM 8–35 20 | 3011-254 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |

| HEBOFIX 45 BASE FOR RITTAL-VX25, EQUIPPED WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| KBS-RM 4–20 10 | 3011-252-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-RM 8–35 20 | 3011-254-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |

10,5    1,5

12,5
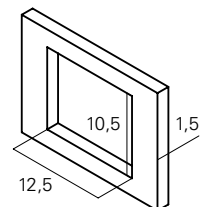
# HEBOFIX base self-adhesive

## PRODUCT DESCRIPTION

The self-adhesive base for hook-and-loop fasteners serves as a gentle installation support of lines, cables and hoses. The base can be mounted on the desired surface with the bond area. After that the base can be equipped with our hook-and-loop tape in variable length.

## ADVANTAGES

// simple, tool-free mounting
// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape
// provides a tangle-free and protective cable installation
// polyurethan-foam to compensate existing irregularities or tolerances of the surface

## TECHNICAL DATA

Base:     polyamide, reinforced with glass fibre, self-extinguishingaccording to UL94-V0
Adhesive: acrylate

## ACCESSORIES

// hook-and-loop tape on reel

## ASSEMBLY INSTRUCTIONS

// clean surface properly and fat-free
// remove protection cover in one piece
// optimal adhesive power by pressing the base with >150N shortly

| HEBOFIX BASE SELF-ADHESIVE | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS-K 4–20 10 | 3011-362 | clamping range 4–20 mm, hook-and-loop tape 7.5 mm and 10 mm | 10 |
| KBS-K 8–35 20 | 3011-364 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |

| HEBOFIX BASE SELF-ADHESIVE, EQUIPPED WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS-K 4–20 10 | 3011-362-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-K 8–35 20 | 3011-364-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |

# HEBOFIX base for C-rail

## PRODUCT DESCRIPTION

The base for hook-and-loop fasteners with clamping foot serves as a gentle installation support of lines, cables and hoses on C-rails. The clamping foot can be assembled tool-free by a 90° turn into the slot of C-rails. After that the base can be equipped with our hook-and-loop tape in variable length.

## ADVANTAGES

// tool-free assembly
// simple mounting into C-rails with 11 mm and 16 mm slot
// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape

// provides a tangle-free and protective cable installation
// reusable
// cable bundles can be extended easily
// easy handling
// budget-friendly
// available for material thickness of 1.5 mm and 2 mm

## TECHNICAL DATA

Material: polyamide, reinforced with glass fibre, self-extinguishing according to UL94-V0

## ACCESSORIES

// hook-and-loop tape on reel

| HEBOFIX BASE FOR C11-RAIL MATERIAL THICKNESS 1.5 MM | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| KBS-C11 1,5 8-35 20 | 3011-504 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-C11 1,5 10–60 20 | 3011-506 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

| HEBOFIX BASE FOR C11-RAIL MATERIAL THICKNESS 1.5 MM, EQUIPPED WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| KBS-C11 1,5 8–35 20 | 3011-504-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-C11 1,5 10–60 20 | 3011-506-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX BASE FOR C11-RAIL MATERIAL THICKNESS 2 MM**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-C11 2,0 8–35 20 | 3011-514 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-C11 2,0 10–60 20 | 3011-516 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX BASE FOR C11-RAIL MATERIAL THICKNESS 2 MM, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-C11 2,0 8–35 20 | 3011-514-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-C11 2,0 10–60 20 | 3011-516-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX BASE FOR C16-RAIL MATERIAL THICKNESS 1.5 MM**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-C16 1,5 8–35 20 | 3011-274 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-C16 1,5 10–60 20 | 3011-276 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX BASE FOR C16-RAIL MATERIAL THICKNESS 1.5 MM, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-C16 1,5 8–35 20 | 3011-274-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-C16 1,5 10–60 20 | 3011-276-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

**HEBOFIX BASE FOR C16-RAIL MATERIAL THICKNESS 2 MM**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-C16 2,0 8–35 20 | 3011-284 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-C16 2,0 10–60 20 | 3011-286 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

**HEBOFIX BASE FOR C16-RAIL MATERIAL THICKNESS 2 MM, EQUIPPED WITH HOOK-AND-LOOP TAPE**

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS-C16 2,0 8–35 20 | 3011-284-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 10 mm | 10 |
| KBS-C16 2,0 10–60 20 | 3011-286-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

# HEBOFIX base with mounting adapter for C-rail

## PRODUCT DESCRIPTION

The base for hook-and-loop fasteners for C-rails serves as a gentle installation support of lines, cables and hoses on C-rails.

The base can be assembled by a 90° turn into C-rail profiles with an 11 mm or 16 mm port. The base can be secured onto the C-rail by tightening the screw.

## ADVANTAGES

// easy 90° mounting, secured with screw
// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape
// provides a tangle-free and protective cable installation

// reusable
// cable bundles can be extended easily
// easy handling
// suitable for all material thickness

## TECHNICAL DATA

Material: galvanised steel,
polyamid reinforced with glass fibre,
self-extinguishing according to UL94-V0
polypropylene

## ACCESSORIES

// hook-and-loop tape on reel

### HEBOFIX BASE FOR C-RAIL

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS 4–20 GM C11 10 | 3011-232 | clamping range 4–20 mm, hook-and-loop tape 10 mm, C11-rail | 10 |
| KBS 8–35 GM C11 20 | 3011-234 | clamping range 8–35 mm, hook-and-loop tape 20 mm, C11-rail | 10 |
| KBS 10–60 GM C11 20 | 3011-236 | clamping range 10–60 mm, hook-and-loop tape 20 mm, C11-rail | 10 |
| KBS 4–20 C16 10 | 3011-022 | clamping range 4–20 mm, hook-and-loop tape 10 mm, C16-rail | 10 |
| KBS 8–35 C16 20 | 3011-024 | clamping range 8–35 mm, hook-and-loop tape 20 mm, C16-rail | 10 |
| KBS 10–60 C16 20 | 3011-026 | clamping range 10–60 mm, hook-and-loop tape 20 mm, C16-rail | 10 |
| KBS 20–100 GM C11/16 | 3011-030 | cl. r. 20–100 mm, hook-and-loop tape 30 mm, C11/C16-rail, 2 x M6 | 10 |

### HEBOFIX BASE FOR C-RAIL, EQUIPPED WITH HOOK-AND-LOOP TAPE

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| KBS 4–20 GM C11 10 | 3011-232-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm, C11-rail | 10 |
| KBS 8–35 GM C11 20 | 3011-234-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm, C11-rail | 10 |
| KBS 10–60 GM C11 20 | 3011-236-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm, C11-rail | 10 |
| KBS 4–20 C16 10 | 3011-022-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm, C16-rail | 10 |
| KBS 8–35 C16 20 | 3011-024-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm, C16-rail | 10 |
| KBS 10–60 C16 20 | 3011-026-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm, C16-rail | 10 |
| KBS 20–100 GM C11/16 | 3011-030-300 | cl. r. 20–100 mm, hook-and-loop tape 300 x 30 mm, C11/C16-rail, 2 x M6 | 10 |

# HEBOFIX base for 35 mm DIN rail

## PRODUCT DESCRIPTION
The base for hook-and-loop fasteners serves as a gentle installation support of lines, cables and hoses. With the clip foot the base can be snapped on a 35 mm DIN rail. After that the base can be equipped with our hook-and-loop tape in variable length.

## ADVANTAGES
// simple mounting without tools onto DIN rails
// variable length of the hook-and-loop tape, or already equipped with hook-and-loop tape
// provides a tangle-free and protective cable installation
// reusable

// cable bundles can be extended easily
// easy handling
// reduced risk of injuries compared to use of cut off cable ties

## TECHNICAL DATA
Material: polyamide, reinforced with glass fibre, self-extinguishing according to UL94-V0

## ACCESSORIES
// hook-and-loop tape on reel

| HEBOFIX BASE FOR DIN RAIL | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS-H 4–20 10 | 3011-042 | clamping range 4–20 mm, hook-and-loop tape 7.5 and 10 mm | 10 |
| KBS-H 8–35 20 | 3011-044 | clamping range 8–35 mm, hook-and-loop tape 20 mm | 10 |
| KBS-H 10–60 20 | 3011-046 | clamping range 10–60 mm, hook-and-loop tape 20 mm | 10 |

| HEBOFIX BASE FOR DIN RAIL, EQUIPPED WITH HOOK-AND-LOOP TAPE | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS-H 4–20 10 | 3011-042-150 | clamping range 4–20 mm, hook-and-loop tape 150 x 10 mm | 10 |
| KBS-H 8–35 20 | 3011-044-180 | clamping range 8–35 mm, hook-and-loop tape 180 x 20 mm | 10 |
| KBS-H 10–60 20 | 3011-046-200 | clamping range 10–60 mm, hook-and-loop tape 200 x 20 mm | 10 |

# HEBOFIX base with expanding rivet

### PRODUCT DESCRIPTION

The HEBOFIX base serves as an installation support and provides minimal damage during attachment of pipes, cables and tubes. By using the added expanding rivet the base can be mounted directly into borings of metal sheets. After that the base can be equipped, free of tools, with our hook-and-loop tape in variable lengths.

### ADVANTAGES

// easy mounting on metal sheets with borings
// variable length of the hook-and-loop tape
// provides a tangle-free and protective cable installation
// reusable

// cable bundles can be extended easily
// easy handling
// reduced risk of injuries compared to use of cut off cable ties

### TECHNICAL DATA

Material: polyamid reinforced with glass fibre, self-extinguishing according to UL94-V0

### ACCESSORIES

// hook-and-loop tape on reel

| HEBOFIX BASE WITH EXPANDING RIVET | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| KBS-SN 4–20 10 | 3011-572 | clamping range 4-20 mm, with expanding rivet 4 mm | 10 |
| KBS-SN 8–35 20 | 3011-574 | clamping range 8-35 mm, with expanding rivet 5 mm | 10 |
| Expanding rivet 4 | 3011-340 | Expanding rivet 4 mm | 100 |
| Expanding rivet 5 | 3011-344 | Expanding rivet 5 mm | 100 |

# HEBOFIX Maintenance Box

**PRODUCT DESCRIPTION**

With the HEBOFIX Maintenance Box, you always have the fitting HEBOFIX base and the appropriate hook-and-loop tape close at hand.

The box is equipped with HEBOFIX bases for the clamping areas 4 - 20 mm, 8 - 35 mm, 10 - 60 mm and 20 - 100 mm for direct mounting and also clamping feet for aluminium profiles.

The matching hook-and-loop tapes in the widths of 10 mm, 20 mm and 30 mm on reel are also included. The hook-and-loop tape, coming in the high-quality FRT-version according to UL94-V2, can easily be cut to the desired length.

**ADVANTAGES**

// all parts are clearly arranged
// set box in sturdy workshop design
// universally usable
// hook-and-loop tape self-extinguishing according to UL94-V2

**CONTENT**

// HEBOFIX base with clamping foot for aluminium profiles
// HEBOFIX base for direct mounting
// hook-and-loop tape in the widths of 10 mm, 20 mm and 30 mm
// mounting adapters and sliding nuts for mounting on C-rails

| HEBOFIX MAINTENANCE BOX | | | |
| --- | --- | --- | --- |
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| HEBOFIX BOX B8 B10 I8 | 3029-002 | Maintenance Box Bosch / Item mixed | 1 |
| HEBOFIX BOX I8M | 3029-004 | Maintenance Box Item 8 mm rabbet | 1 |
| HEBOFIX BOX B8M B10M | 3029-006 | Maintenance Box Bosch 8 mm and 10 mm rabbet | 1 |
| HEBOFIX BOX D | 3029-010 | Maintenance Box direct assembly | 1 |
| HEBOFIX BOX xxx | 3029-xxx | Maintenance Box customised | 3 |

# Mounting accessories for HEBOFIX base

**PRODUCT DESCRIPTION**

The accessories for HEBOFIX base for hook-and-loop tape allows mounting the base onto a variety of mounting rails.

**ADVANTAGES**

// can be combined with the HEBOFIX base for hook-and-loop tape

// self-anchoring slot nut with balls and springs

// mounting adapter for C-rails for 90° mounting

// clip-foot for tool-free assembly onto a 35 mm DIN rail

**TECHNICAL DATA**

Material: galvanised steel,
            nickle-plated steel

| **MOUNTING ACCESSORIES FOR HEBOFIX BASE FOR HOOK-AND-LOOP TAPE** | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| C11/5 GM | 3011-308 | sliding nut M5 for C-rail 11 mm | 10 |
| C16/4 KBS 20 | 3011-204 | mounting adapter for C-rail 16mm for KBS 8–35, KBS 10–60, M4 | 10 |
| C16/4 HSKB 16 | 3011-206 | mounting adapter for C-rail 16mm for KBS 4–20, M4 | 10 |
| Slot nut 8, M4 | 3011-301 | slot nut for 8 mm profile groove, M4 | 10 |
| Slot nut 8, M5 | 3011-305 | slot nut for 8 mm profile groove, M5 | 10 |
| Slot nut 8, M6 | 3011-306 | slot nut for 8 mm profile groove, M6 | 10 |
| Clip foot M4 | 1030-020 | clip foot for 35 mm DIN rail, M4 | 25 |
| Clip foot M5 | 1030-022 | clip foot for 35 mm DIN rail, M5 | 25 |

# Hook-and-loop fastener

## PRODUCT DESCRIPTION

The hook-and-loop fastener is used for a safe and
gentle attachment of pipes, cables and hoses. The
fastener is available for direct mounting with an M5-
screw or for a second use with integrated clamp
mechanism for profiles with a 10 mm slot width.

## ADVANTAGES

// self- extinguishing fasteners according to UL94-V2
// cable bundles can be extended easily

// easy handling
// reduced risk of injuries compared to the use of
   cut off cable ties

## TECHNICAL DATA

Material: base made of polyamide, reinforced with
         glass fibre
         hook-and-loop tape self-extinguishing
         according to UL94-V2

| HOOK-AND-LOOP FASTENER | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DIMENSION** | **PU** |
| KBH 6–20 | 3010-001 | clamping range 6–20 mm | 10 |
| KBH 6–35 | 3010-002 | clamping range 6–35 mm | 10 |
| KBH 6–60 | 3010-003 | clamping range 6–60 mm | 10 |
| KBHP 6–20 | 3010-004 | clamping range 6–20 mm, for profile slot 10 mm | 10 |
| KBHP 6–35 | 3010-005 | clamping range 6–35 mm, for profile slot 10 mm | 10 |
| KBHP 6–60 | 3010-006 | clamping range 6–60 mm, for profile slot 10 mm | 10 |

# Clip foot for 35 mm DIN rail

## PRODUCT DESCRIPTION
The clip foot can be snapped onto a 35 mm DIN rail without the use of tools.
A small slot screwdriver suffices to dismantle the shield clamp.
The clip foot serves as a universal multi-equipment carrier for assembly on 35 mm DIN rails. It is available in single and double design, also with various bore diameters and threads.

## ADVANTAGES
// high conductance
// suitable clip foot for each individual application

## TECHNICAL DATA
Material: nickle-plated spring steel

### CLIP FOOT FOR 35 MM DIN RAIL

| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
|---|---|---|---|
| Clip foot M4 | 1030-020 | with thread boring for M4 | 25 |
| Clip foot 4 | 1030-021 | with boring 3.9 mm | 25 |
| Clip foot M5 | 1030-022 | with thread boring for M5 | 25 |
| Clip foot double M4 | 1030-025 | double, with thread boring for M4 | 25 |
| Clip foot double M5 | 1030-026 | double, with thread boring for M5 | 25 |

# Clip foot Multi for 35 mm DIN rail

## PRODUCT DESCRIPTION

The clip foot Multi can be snapped onto a 35 mm DIN rail without the use of tools. A small slot screwdriver suffices to dismantle.

The clip foot Multi serves as a universal multi-equipment carrier for assembly on 35 mm DIN rails. It is in two widths and each with M4 or M5 thread available. Due to the flat shape, a good contact surface and a good holding force on the DIN rail is achieved.

## ADVANTAGES

// high clamping forces
// high conductance
// suitable clip foot for each individual application

## TECHNICAL DATA

Material: galvanised spring steel

| CLIP FOOT MULTI FOR 35 MM DIN RAIL | | | |
|---|---|---|---|
| **ITEM DESCRIPTION** | **ORDER NO.** | **DETAILED DESCRIPTION** | **PU** |
| HSF 13 M4 | 1030-054 | width 13mm, boring for M4 | 25 |
| HSF 13 M5 | 1030-055 | width 13mm, boring for M5 | 25 |
| HSF 15 M4 | 1030-044 | width 15mm, boring for M4 | 25 |
| HSF 15 M5 | 1030-045 | width 15mm, boring for M5 | 25 |

# Mounting adapter for C-rail

## PRODUCT DESCRIPTION

The mounting adapter serves as a universal device carrier for mounting onto C-rails.

It can be used by a 90° turn into the C-rail profile with a 16 mm port. The mounting adapter can be secured by tightening a M4 screw. In connection with HEBOTEC products, the mounting adapter is available with the appropriate twist-protection.

## ADVANTAGES

// easy 90° turn mounting
// high conductivity
// good contact surface on the C-rail
// twist-protection available

## TECHNICAL DATA

Material: galvanised steel

| MOUNTING ADAPTER FOR C-RAIL | | | |
|---|---|---|---|
| ITEM DESCRIPTION | ORDER NO. | DETAILED DESCRIPTION | PU |
| C16/4 | 3011-202 | without twist-protection, M4 | 10 |
| C16/4 KBS 20 | 3011-204 | with twist-protection for KBS 8–35, KBS 10–60, -M4 | 10 |
| C16/4 HSKB 16 | 3011-206 | with twist-protection for shield clamp Big HSKB 16–35, KBS 4–20, M4 | 10 |
| C16/4 HSKB 35 | 3011-208 | with twist-protection for shield clamp Big HSKB 35–65, M4 | 10 |
| C16/4 SKD | 3011-210 | with twist-protection for shield clamp SKD, SKDZ, M4 | 10 |

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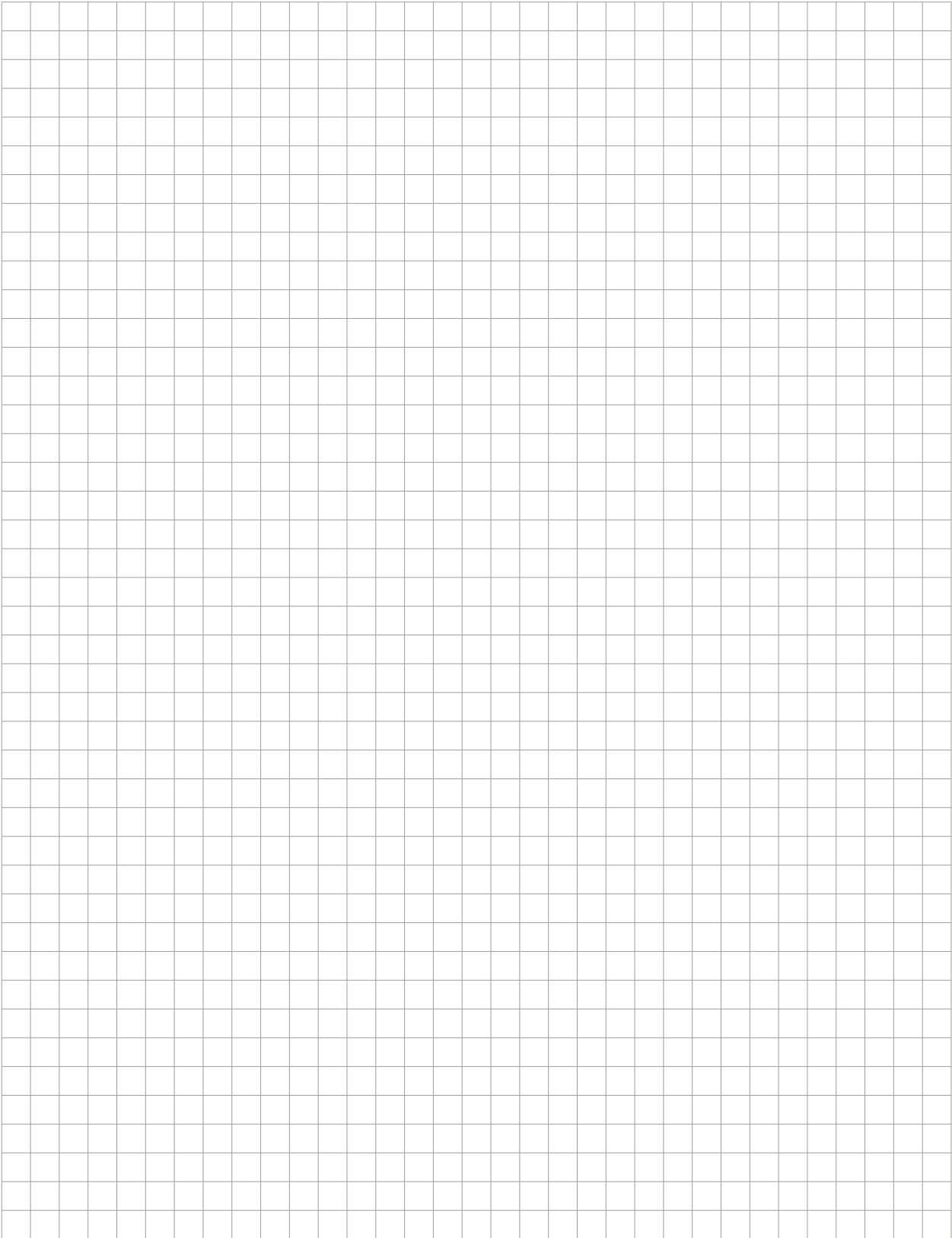
Für Ihre Notizen

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