

# Floor installation systems and underfloor applications

# Building Connections

Digitalisation, the Energiewende (energy transition), mobility – the future is gathering speed. At OBO Bettermann, we're proud to be a driving force. And as a facilitator, we make connections. Today, we are already developing the innovative electrical infrastructure systems and solutions of tomorrow. Reliably, flexibly, sustainably.

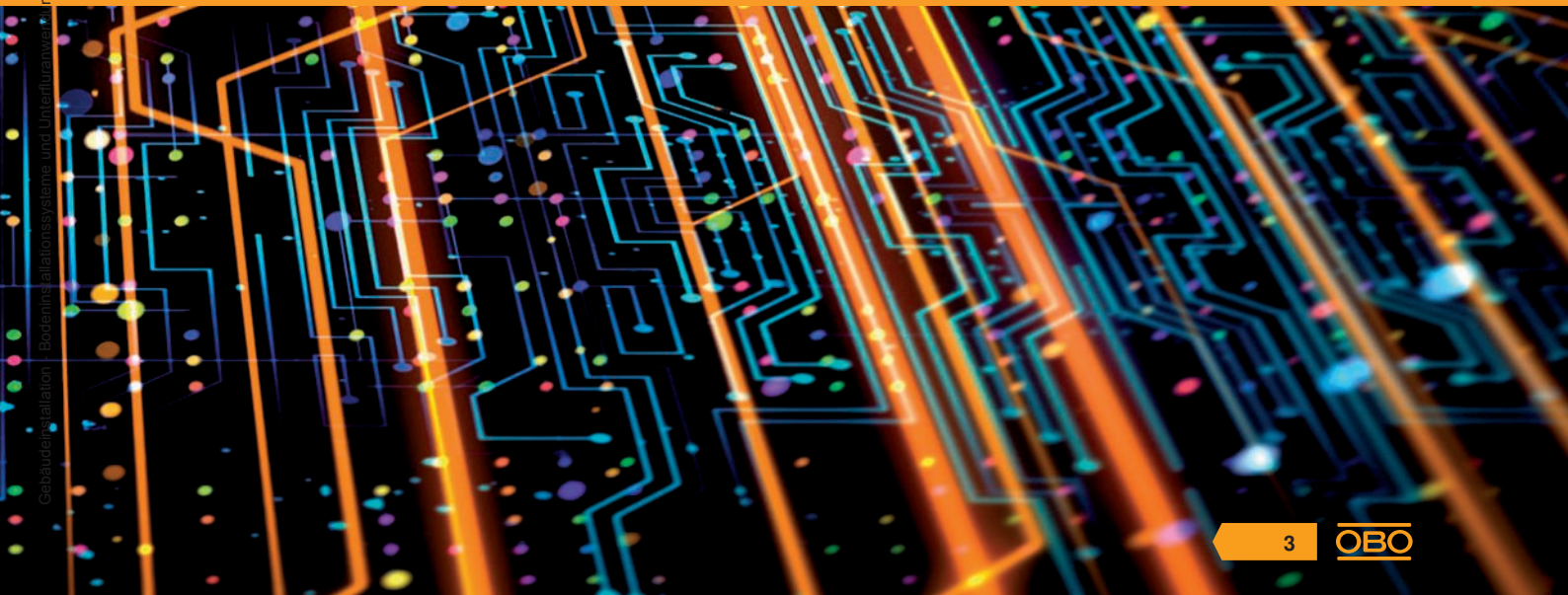
Already today, OBO is one of the leading manufacturers of installation systems for the electrical infrastructure in buildings and plants. When it comes to the friction-free flow of power, energy and data, engineers and tradespeople worldwide rely on the comprehensive range from OBO.



ngen/en/2023/07/27 15:27:32 15:27:32 (LLExpert\_03606)/

OBO applies its slogan "Building Connections" to around 30,000 high-quality branded electrical products and services, which are used in application solutions for projects in industry, business and infrastructure.

OBO operates a global network and employs more than 4,200 people in more than 60 countries. The headquarters of the family company, which was founded in 1911, is located in Menden, Germany. In addition, more than 40 subsidiaries are present in markets on all continents.



Gebäudeinstallation - Bodeninstallationsysteme und Unterflurver...

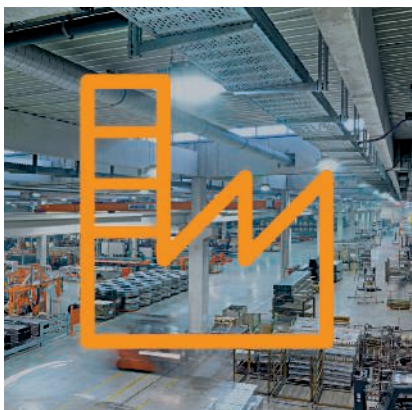
# Improved structure, sharpened profile



Each of our products carries a benefit which only the OBO brand can offer. Products are developed, manufactured and tested with a high level of competence – from the idea through to the final check. From flawless logistics through to practical information – we can provide support at every level. We can offer additional security through certificates on the conformity of our products with the most important standards and directives. In a nutshell – OBO helps you more. In every location and in every phase of a project.

To maintain this, we continually challenge ourselves. Not as an end in itself but for the better processing of each customer's requests – fast, reliably and future-oriented. That is the reason we have not only established our three central application areas, but also reworked our catalogue structure. In this way, we can display our service offers more clearly, highlight the product benefits more effectively and illustrate the respective application areas more tangibly.

# OBO Product Worlds



## Industrial installations

- Cable support systems
- Connection and routing systems
- Fastening material



## Building installations

- Cable routing systems
- Device installation ducts, trunking and poles
- Floor installation systems and underfloor applications
- Installation systems



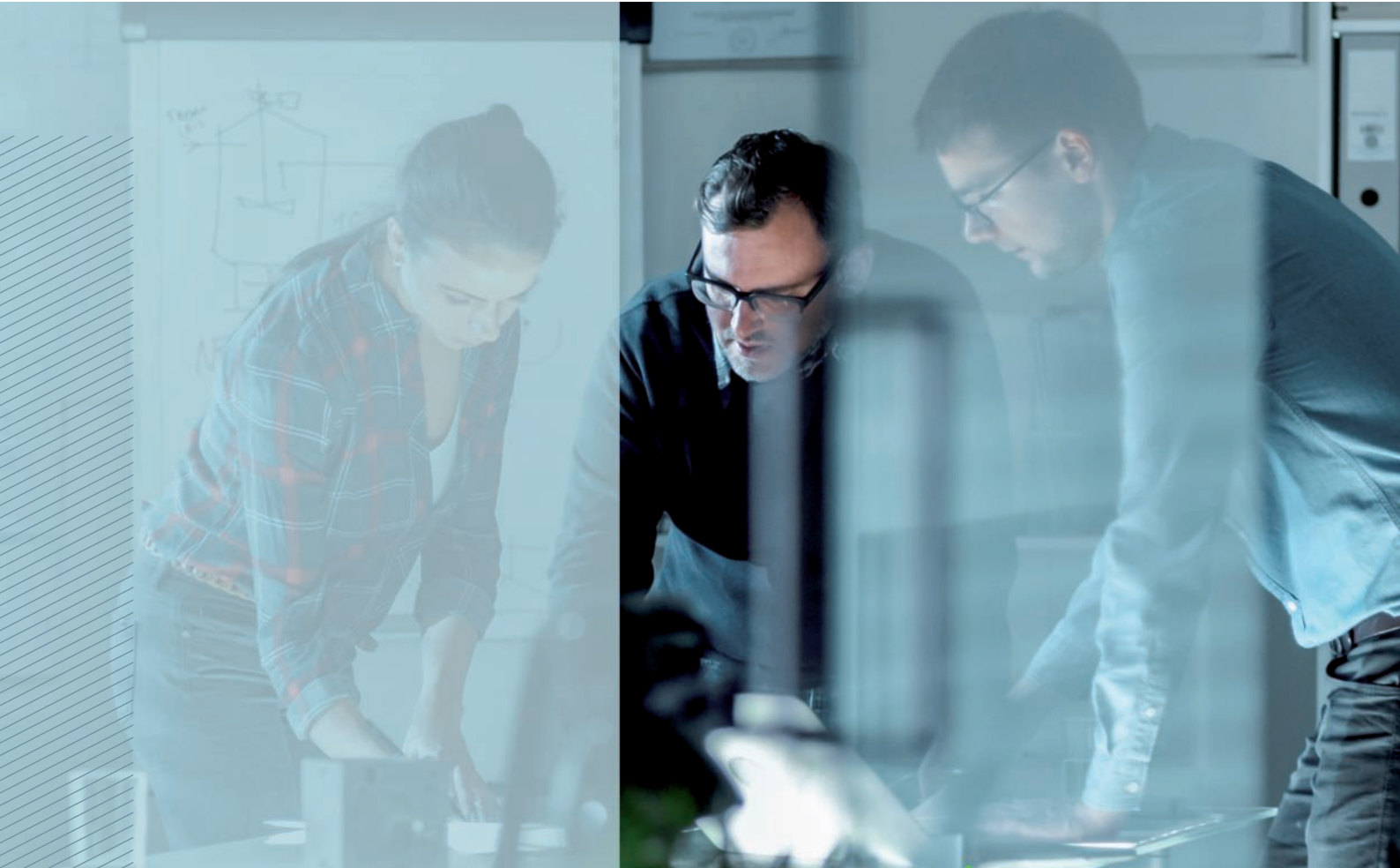
## Safety and protection installations

- Surge protection
- External lightning protection
- Equipotential bonding and earthing
- Insulation and cable bandages
- Fire-tested support and routing systems
- Fire protection ducts



It's your choice – from now on there's a catalogue for each OBO product category. Simply select the catalogues and order together with a collection case.

# OBO Support & *contact*



***You have a  
problem?  
We have the  
solution!***

OBO Bettermann is more than the sum of its products. In any situation, we are the reliable partner right by your side. You have a problem? We have the solution!

It doesn't matter in which area of industry our support is needed – from industrial and plant engineering to private, public and administrative buildings, as well as in the areas of mobility and renewable energies – we have everything that you need.

OBO can not only provide the entire electro-technical infrastructure with the best possible products. We can also support you with sound expert knowledge and more than 100 years of experience, right from the planning phase through to the realisation of your projects. OBO – solutions you can rely on.

## What is OBO Support?

Every OBO product carries a plus inside it, which only a branded product can offer. It is developed, manufactured and tested with a high level of competence, from the idea right through to the final check. In addition, our specialists are available for consultation and can offer you assistance and training courses for products at any time.

Together with you, we plan your project and help you choose the right products, and are also available to you at any time should you need us. From flawless logistics through to practical information – we can provide support at every level. We can offer security through certificates on the conformity of our products with the most important standards and directives.

We are as flexible as you are – because we know how practical people work and what is important to them. Each step is a plus – that is the OBO Support concept.

You can contact our Customer Service department on:

**Customer Service**

**Tel.:+49 23 73 89 - 17 00**

**Monday–Thursday**  
07.30–17.00

**Friday**  
07.30–15.00

**export@obo.de**



Service



Training



Handling



Certification

### Service – OBO can help

Everywhere and in every project phase:

- Highly competent hotline
- Product and system information, digitally or printed
- Selection and planning aids on the web, as an app, as a CAD application or in printed form
- 2D and 3D product data for planning
- Field service, branch offices and subsidiaries in 60 countries
- Engineering services for major projects

### Training courses from OBO

- Seminars and workshops
- Local consultation and training courses
- Planner days

### Handling – OBO delivers reliably

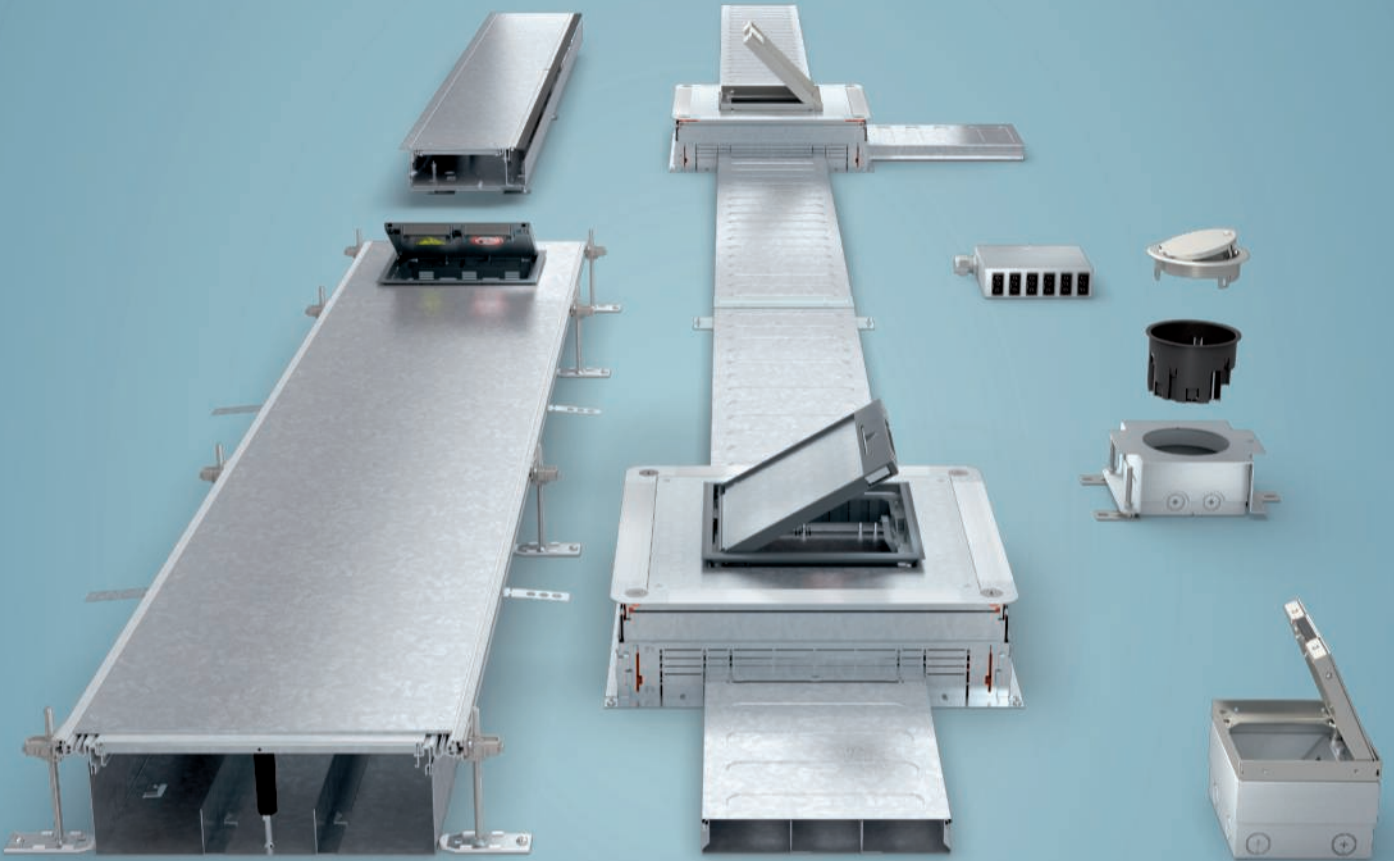
With optimised delivery processes:

- Reliable logistics
- Practical transport systems and packaging
- Loading gear handling and disposal concepts

### Certification and guarantee

OBO offers safety. Our products fulfil the most important country-specific regulations:

- Conformity (e.g. IEC, VDE, CE, KEMA, KEUR, UL)
- Certification (e.g. DIN EN, DGNB)
- 5-year guarantee for surge protection products
- Guarantee management





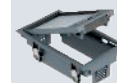
**Planning aids**

Page 10



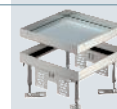
**Service outlets**

Page 28



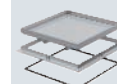
**Cassettes**

Page 46



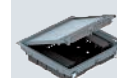
**Heavy duty**

Page 72



**System 55**

Page 88



**Device installation units above the floor**

Page 96



**Universal supports**

Page 102



**UDHOME**

Page 112



**GESR2**

Page 118



**Underfloor boxes**

Page 130



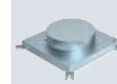
**OKA and OKB**

Page 142



**IBK**

Page 166



**Connect – connectable technology**

Page 176



**Directories**

Page 194





Gebäudestallator - Bodeninstallationsysteme und Unterflurverwendungen | en | 2023/07/27 15:27:32 (L15:400x1060px)

# Planning aids

---

**Planning and selection of underfloor systems**

---

**Inter-unit work**

---

**Underfloor duct and trunking systems**

---

**Screed structure**

---

**Device installation units**

---

**Selection of the right device installation units**

---

**Protection ratings to IP and IK for device installation units**

---

**Standardisation and testing**

---

**Installation specifications**

---

**Equipotential bonding in underfloor systems**

---

**Noise prevention and impact noise**

---

**Planning checklist**

---



# Planning and selection of underfloor systems



## Installation requirements

The following belong to the installation requirements to be taken into account when planning and selecting an underfloor system:

- Number of services (power, communications, data)
- Filling factor of the electrical installation trunking or ducts
- Cable bend radii
- Reserve
- Concurrency factors
- Planned for indoor use

## Requirements from construction planning

The architectural building planning produces, amongst other things, the following preconditions:

- Type of room (dry or wet)
- Floor covering version (dry or wet-cleaned)
- Thickness of the floor covering
- Type and version of the screed
- Traffic loads
- Ambient temperature (underfloor heating)
- Indoor areas

Areas of application and user requirements with regard to electrical installations determine the organisational requirements for an underfloor system. This produces, among other things, the following criteria:

- Flexibility of use (e.g. simple adaptation to changing use specifications)
- Easy changing of device equipment
- Use of fixed or movable installations

## Safety requirements

The topic of safety is playing an ever-more important role, particularly in the data technology sector. Therefore, when selecting and designing an underfloor installation, this point can also be of importance. This is the case, for example, when data networks must be protected against unauthorised access.

# Inter-unit work



The electrical installation engineer should arrange the coordination of inter-unit work with the responsible construction management, in order to guarantee flawless mounting of the electrical installation trunking systems, along with quality across all the construction sections.

## Screed work

Screed-flush trunking systems and the underfloor boxes of the screed-covered duct system serve as a binding draw-off gauge for the screed. The adjustment height of the system components is aligned to the structural specifications of the construction management.

In the area of the draw boxes and the ducts, the person laying the screed must carefully work, compact and draw-off the screed.

Screed can be destroyed by crack formation. To avoid crack formation, adjacent screed-flush systems and system components may not be subjected to loads before final hardening.

## Floor covering work

The company laying the floor covering is responsible for ensuring that the floor covering is cut out exactly and adjusted to the sockets and outlet points of the duct system. The joint dimensions must be matched with the construction management. The lids of the screed-flush underfloor boxes and trunking must be covered with floor covering. Carpets used must be securely laid and resistant to cuts.

## Building cleaning

Particularly during initial cleaning of the floor areas, device installation units must be carefully cleaned free of building dust and other impurities, in order to prevent impairment of their function.

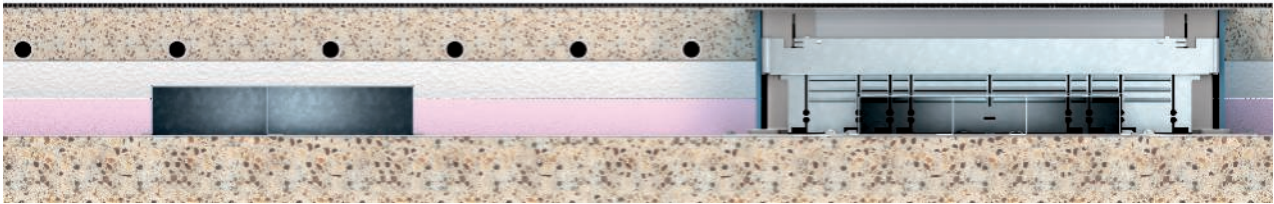
During the use phase, device installation units must be checked for correct use and possible damage, in order to avoid subsequent damage.

In particular, device installation units for wet-cleaned floors (e.g. tube body cassettes, GRAF9 or GES R2) must be maintained regularly and the function of the seal checked. For this, regular lubrication of the seal is required.



# Underfloor duct and trunking systems

The cables are routed in electrical installation duct and trunking systems. OBO can offer various systems, which are suited to different applications and structural requirements.



## EÜK screed-covered duct system

The screed-covered duct system is suitable for all screed types in all routing types, also in hot screed. The electrical installation duct forms a tight, hidden cable routing grid in

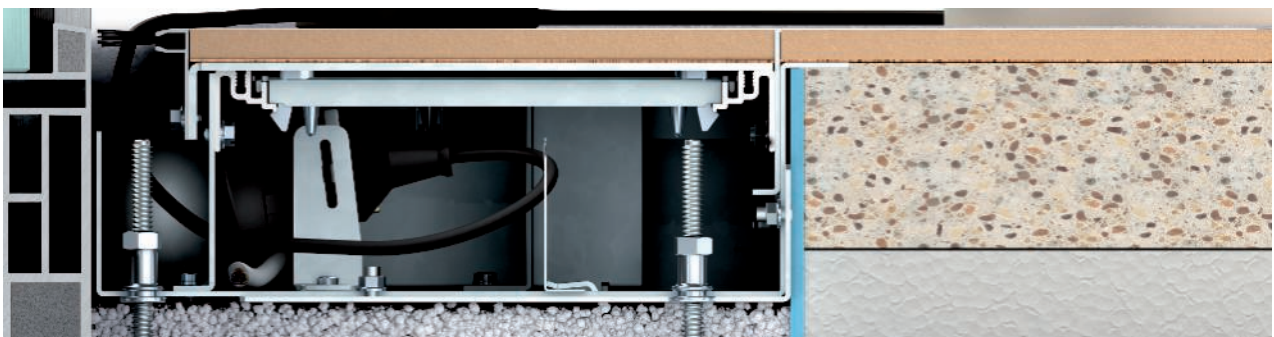
the screed. Underfloor boxes allow the expansion with device installation units and access to the electrical installation.



## OKA open trunking system

The electrical installation trunking can be adjusted to the millimetre to the upper edge of the screed. OKA trunking is suitable for screeds in all routing types, with the exception of heated screed. The benefit when changing the use of the room: The screed-flush electrical

installation trunking can be opened along its entire length, allowing flexible cable routing. Depending on the screed height, device installation units are either installed in the trunking route or in extension units that are mounted at the side.



## Open trunking system OKB

The OKB trunking system uses the trunking sections for cable routing and as installation space for electrical installations. The OKB trunking is suitable for routing in front of floor-height windows or walls. Cables exit via a

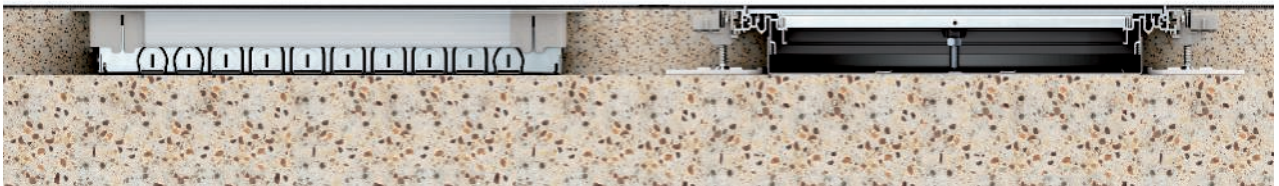
surrounding brush bar. The trunking can be set exactly at the top edge of the screed, to the millimetre, and can be opened along the entire length.



**In-concrete system IBK**

The IBK system is used in buildings with concrete core activation or direct use of the concrete surface, for example with high loads. The IBK duct system is installed

in the raw building when creating the floor plates or raw concrete screed.



**System 55 for thin screed layers**

Low floor structure heights require special solutions for underfloor installations. System 55 is used for screed

heights of 55 mm or higher.

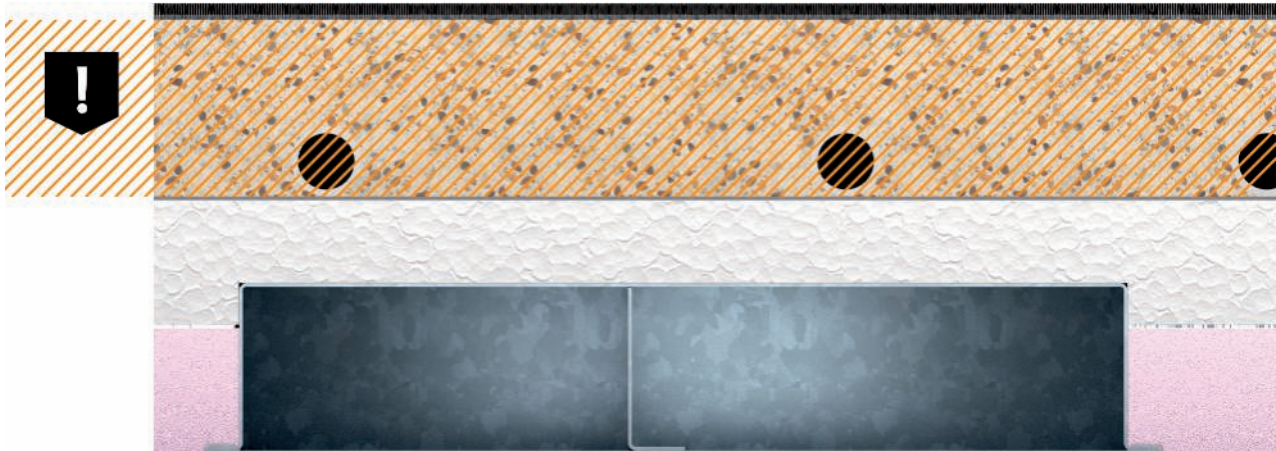


**On-floor trunking system AIK**

The AIK on-floor trunking system is installed on the finished floor. The system is particularly useful in places where classic underfloor systems cannot be installed, such as during building renovation, particularly in listed

buildings. Device installation units above the floor (Telitanks) are used for the installation of electrical devices.

# Screed structure



Nominal screed thickness for EÜK screed-covered duct system

An important precondition for a proper underfloor installation is the screed structure. In the case of a screed-covered system, it is important that the screed thickness over the duct corresponds to the values in the standard, to avoid the formation of cracks. The nominal screed thickness is dependent on the insulation layer, the individual load and the screed type. More detailed information on the nominal thickness of the screed in Germany can be found in DIN 18560.

Here, under certain circumstances, chemical or thermal loads may occur, which require special additional measures to protect the mounted system.

The OKA and OKB screed-flush trunking systems, as well as the UZD underfloor box, only obtain their load capacity for correct use when jointed to the neighbouring screed.

The following points are, therefore, important:

- The duct system may not be walked upon or subjected to similar loads after it has been mounted on the raw concrete
- The duct system must form a composite system with the adjacent screed

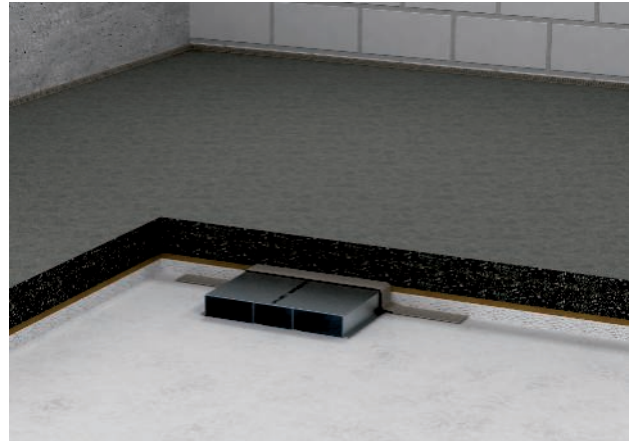
The following points should particularly be taken into account with the OKA and OKB system:

- Line the side profiles with screed to achieve good static support in the screed. The screed should be worked and compacted carefully
- The opened trunking system may not be walked upon nor subjected to similar loads. Measures to provide suitable protection should be agreed with the works supervisor

### Aggressive screed (e.g. magnesia screed)

All the metallic parts coming into contact with an aggressive screed must be protected during construction using a tested epoxy resin-based corrosion protection agent. A second coating is required.





### Use in floating screed

When using screed-covered duct and screed-flush trunking systems in float finishes, seal off any openings in the duct and trunking systems using suitable agents (e.g. adhesive tape). In so doing, ensure that the sealing process does not create any cavities between the components and the screed.

With screed-covered duct systems, openings may be created through duct joints on connecting shackles and vertical bends and on the underfloor box bodies. In addition, the top ends such as the mounting protection lid, mounting lid and the blanking lid should be covered or stuck down using suitable means.

With screed-flush trunking systems, openings may be created through joints of the trunking units, at junctions, extension units and end sections and at the transition of the trunking bases to the side profiles. The side profiles and lid joints on the trunking covers should also be covered.

### Use in poured asphalt

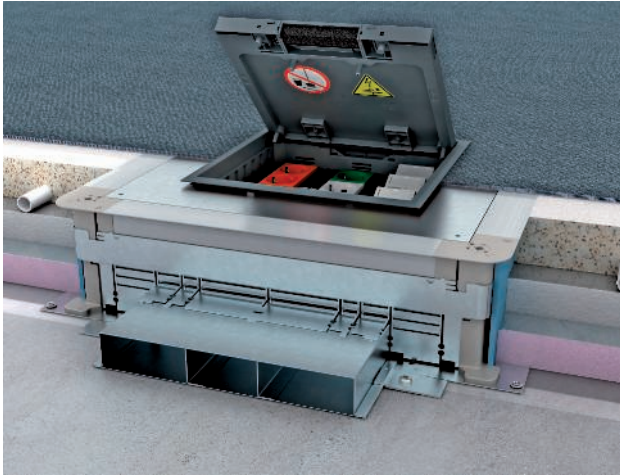
When using electrical installation trunking systems in poured asphalt, it is important to protect the trunking system against the impact of heat.

The screed-covered trunking may not, under any circumstances, have a direct connection with the poured asphalt. The high installation temperature of approximately 250 °C means that changes to the shape of metallic parts cannot be ruled out. An insulation layer, e.g. made of Fasoperl plates or bitumen corrugated card, protects the trunking sections from the impact of heat.

Also, the screed-flush trunking may not, under any circumstances, have a direct connection with the poured asphalt. Screed anchors are the exception here. An approximately 15–20 mm thick insulation strip is fastened to both sides of the trunking before the poured asphalt is added. After cooling, the insulation strip between the trunking and the screed plate is removed and filled using a suitable casting compound.

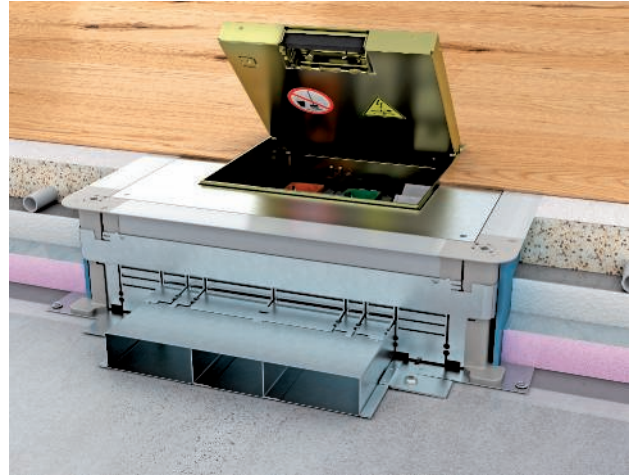
# Device installation units

Device installation units offer installation space for power, data and multimedia connections in the floor structure. Various solutions are available, depending on the application.



## GES service outlets

The GES service outlets are the tried-and-trusted solution for office installations with carpeted floors. They are available in plastic or metal. The service outlets possess countless intelligent details, such as cable routing clips, carpet protection frames, reliable edge protection and a locking cover closure system with automatic cover opening.



## Cassettes

The compact, flush-floor cassettes can be adjusted to the height of the floor and can be completely decoupled from the socket base. Cassettes are particularly suitable for floor coverings such as tiles or parquet. There are various versions for dry, moist and wet-cleaned floor coverings. Stainless steel and brass not only look good, they also provide lasting quality.



**GES R2 floor sockets**

The OBO GES R2 floor sockets are an ideal underfloor solution when a discreet appearance, a high load capacity and varied functionality are required. Their handling is simple: Pipelines are inserted in the compact installation space and that space is closed off with a cover. The installation socket of the GES R2 floor sockets is pre-equipped with two sockets. As an option, to the side of the socket there is space for up to two connection sockets for data technology applications.

**UDHOME floor boxes and floor sockets**

Completely pre-equipped mounting units are available under one order number. The floor sockets and floor boxes of the UDHOME family are mounted directly on the raw concrete and connected with flexible installation pipes – it couldn't be simpler.



**Modul 45® devices**

For maximum flexibility, the device installation units can, depending on requirements, be equipped with the comprehensive Modul 45® series from OBO Bettermann or with standard accessories. Both the sockets and data and multimedia technology of the Modul 45® series are simply snapped in, without tools, making work quicker and thus cheaper.

# Selection of the right device installation units



## IP protection class to EN 50085-2-2

Electrical installation duct and trunking systems and device installation units can be used only in interior areas of buildings and, depending on the construction type, in dry, moist or wet-cleaned floors. The cleaning type of the floor covering is the decisive criterion for the selection of the matching device installation unit. The matching of the device installation unit to the floor care type ensures that the electrical installation is protected against the ingress of moisture and dirt.

Ackermann made by OBO device installation units are tested according to EN 50085 and labelled appropriately. With a protection rating of at least IPX4 when closed, all the device installation units for wet-cleaned floors completely fulfil the requirements of EN 50085-2-2.

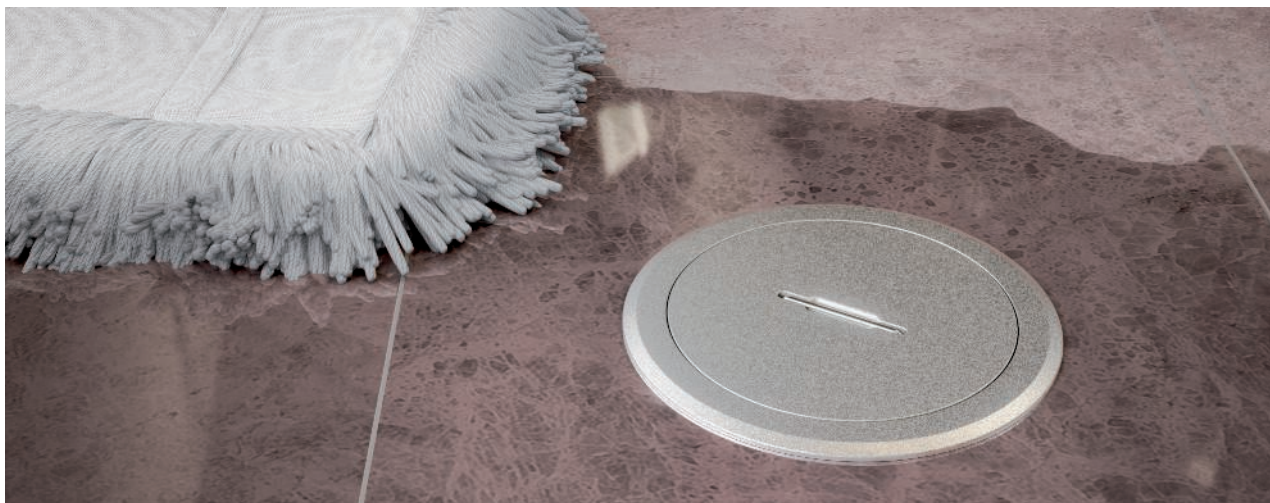
Device installation units with tube body also protect the electrical installation against the ingress of water when used – despite a reduced protection level of IP20. The tube body ring meets the standard requirements to EN 50085-2-2 and protrudes 10 mm above the top edge of the floor covering. Up to this height, puddles or waves of water cannot ingress into the installation compartment.

## IK protection types

The IK classification to EN 50102 grades the mechanical stability of electrical installation duct and trunking systems.



# Protection ratings to IP and IK for device installation units



	IP when used	IP when unused	IK
Plastic GES	20	40	08th
Stainless steel GESM	20	40	10th
Metal GRAF9	20	45	10th
Cassette, cord outlet RKS	20	40	10th
Cassette, tube body RKF	20	44	10th
Cassette, blank	20	44	10th
UDHOME	20	40	10th
UDHOME tube body	20	44	10th
GES R2 metal	20	66	10th
GES R2 plastic	20	40	10th

## Dry care

Textile floor coverings, cleaned by sucking up the dirt with no, or only a little, fluid are considered as dry-cleaned. If a cleaning solution is used, then the dosage must be so low that there is no chance of puddle formation or saturation of the floor covering.

## Moist care

Smooth floor coverings such as linoleum, PVC, sealed wooden floors or polished stone floors fulfil the requirements for moist care. The building cleaning trade defines this type of cleaning as a dust-collecting wipe using moist or prepared cleaning textiles.

## Wet care

Wet care occurs primarily with stone floors, tiles, ceramic floors, linoleum and PVC. This cleaning method removes particularly tough and bonded soiling.

In the first step, cleaning textiles apply as much cleaning fluid as is necessary to soften and dissolve strongly adhering soiling. In the second step, the remaining fluid and soiling are wiped up using cleaning textiles.

# Standardisation and testing

## Responsibilities in standardisation

Standards can be divided into two categories: Erection specifications and device testing specifications. The installation engineer is primarily responsible for compliance with the erection specifications. In Germany, the standards of the DIN VDE 0100 series define the most important requirements for electrical installations.

## European standardisation

Device testing specifications are product standards, which specify the testing criteria for specific products. The manufacturer is responsible for compliance with these regulations. Conformity with a specific testing specification is often documented by a symbol approval certificate. This confirms that an independent testing and certification institute has carried out the appropriate tests and documented the results.

Device testing specifications are particularly important for:

- Safety (protection against electric shocks)
- The definition of the areas of application
- The function definition
- The evaluation of load capacities

The standard EN 50085 defines the requirements for electrical installation duct systems. Part 2-2 deals with underfloor and on-floor systems and was published in July 2009. Underfloor systems from OBO meet EN 50085-2-2 and have the corresponding VDE certificates of approval.

### Classification for underfloor systems

EN 50085-1, as a general part for electrical installation duct and trunking systems, and EN 50085-2-2, as a system-specific part for underfloor systems, both require classification of the products. This means there is a standard Europe-wide specification of product properties. For the first time, a standard for installation systems also contains optional load tests for vertical loads, which affect a large area (heavy load).

## Classification to EN 50085-1

6.1	According to material
6.2	According to impact resistance
6.3	According to temperatures
6.4	According to the resistance to flame propagation
6.5	According to the electrical conductivity
6.6	According to electrical insulation capability
6.7	According to the protection ratings offered by the housing or casing to EN 60529:1991
6.8	According to protection against corrosive or impure substances
6.9	According to the fastening type of the system duct cover
6.10	According to the electrical protection separation

## Classification to EN 50085-2

6.101	Depending on the type of floor care
6.102	According to resistance to vertical loads affecting a small surface area
6.103	Optional classification according to resistance to vertical loads affecting a large surface area



# Installation specifications

Erection regulations are used particularly for:

- Safety (protection against electric shocks)
- Maintaining the electrical function
- Electromagnetic compatibility
- Preventing fires

The erection specifications according to DIN VDE describe numerous points, which the electrical installation engineer must take into account when setting up and mounting an underfloor system. Here are some of the most important points:

## Mechanical loads of cables

According to DIN VDE 0298, with heavy current and data cables, it must be ensured that specific values for strain loads and bend radii are not exceeded. The standard also describes the approved cable fastening types with clips and strain reliefs.

## Protective measure and equipotential bonding

Metallic duct systems must be included in the protective measure and the equipotential bonding. This should thus ensure the protection against electric shocks to DIN VDE 0100-410 and the electromagnetic compatibility to EN 50310, EN 50173, EN 50174-2.

## Separation of different services

According to DIN VDE 0100-520, cables of different current types may be installed together in a routing system if all the cables are insulated against the next highest occurring voltage.

## Fire protection

The main cause of fire in heavy current cables are

- high-resistance short circuits or faults to earth, e.g. on mechanically or thermally damaged cables
- faulty electrical connections, e.g. due to a loose contact
- heat build-ups

The spreading of fire and smoke into other fire sections must always be prevented over a sufficiently long period of time. This supports both attempts to escape and also extinguishing measures. This also applies to underfloor systems which run under fire section and emergency and escape routes. The cable system directives (M)LAR and the system floors directive (M)SysBöR regulate this in greater detail.

## Heavy current cables and other electrical resources in underfloor installations

Select the size of the electrical installation trunking so that the required number of cables can be routed without damage.

When selecting the heavy current cables for routing in electrical installation trunking, observe DIN VDE 0100, particularly Part 520. With regard to the current carrying capacity of heavy current cables, see DIN VDE 0100 Part 430 and Part 523 and DIN VDE 0298, particularly Part 4.

# Equipotential bonding in underfloor systems



According to EN 50085, electrically conductive electrical installation duct systems and their expansion components must offer the connection options to be included in the equipotential bonding of a building.

The inclusion in the equipotential bonding prevents dangerous potential differences according to DIN EN 50310. All the underfloor systems from OBO are equipped in such a way that inclusion in the protection measure is possible without a great amount of work.

The protective conductor connection bracket 8AWR, for example, can be used to include a duct system in the equipotential bonding. The protective conductor connection bracket is inserted in the existing installation markings or in appropriate grooves. The fastening screw must be tightened with a torque of at least 1.2 NM. The clamping range is designed for two connection cables of 1.5 to 4 mm<sup>2</sup>.

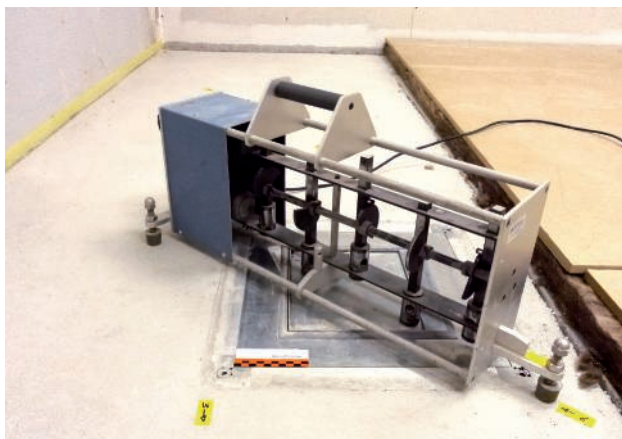
DIN EN 50174-2 (VDE 0800-174-2) "Information technology – Cabling installation" requires the inclusion of conductive installation systems in the additional functional equipotential bonding up to the connection point. This equipotential bonding does not serve as protective equipotential bonding, but serves as functional equipotential bonding for EMC protection.

The electrical planner and the electrical installation engineer are responsible for the implementation of the protective measure and compliance with the erection requirements valid on-site.





# Noise prevention and impact noise



The underfloor systems from OBO are, amongst other things, intended for installation in floating wet screeds. Normally, there are requirements for the transmission of air and footfall sound, both for vertical sound transmission, i.e. from storey to storey, and for horizontal sound transmission, i.e. from adjacent rooms.

As the underfloor systems are also run under partitions, there is frequently the question of the influence of the system on noise transmission. These influences were evaluated in qualified tests to determine the transmission of air and footfall sound carried out together with the MÜLLER BBM GmbH testing institute in Planegg, Munich, for the EÜK duct and OKA, OKB trunking systems and the UDHOM4 floor boxes.

For office buildings, a distinction must be made between the binding construction law requirements to DIN 4109 [4], which must be observed with regard to air and footfall sound insulation between foreign areas of use, and between the recommendations for protection against air and footfall sound in the same office, e.g. to Supplementary Sheet 2 for DIN 4109 [4] or the VDI directive 2569 [5]. The VDI directive 2569 is currently being revised.

The following table summarises the requirements of DIN 4109 [4] and the recommendations according to Supplementary Sheet 2 of DIN 4109.

Component	Evaluated noise insulation dimension R'w in dB to DIN 4109 and Supplementary Sheet 2 to DIN 4109	Evaluated noise insulation dimension R'w in dB to DIN 4109 and Supplementary Sheet 2 to DIN 4109
<b>Ceilings</b>		
Separating ceilings within own use areas	52...55	46...53
Separating ceilings between other use areas (construction law requirement)	54...55	53
<b>Walls<sup>1</sup></b>		
Walls between rooms with normal office activities or between corridors and such rooms	37...42	-
Walls between training rooms or similar and between corridors and such rooms	47	-
Walls of rooms for concentrated mental work or for dealing with confidential matters or walls between corridors and such rooms	45...52	-
<b>Doors<sup>2</sup></b>		
Doors in corridor partitions of rooms with usual office activity	27	-
Doors in corridor partitions of training rooms	32	-
Doors in corridor partitions of rooms for concentrated mental work or for dealing with confidential matters	37	-

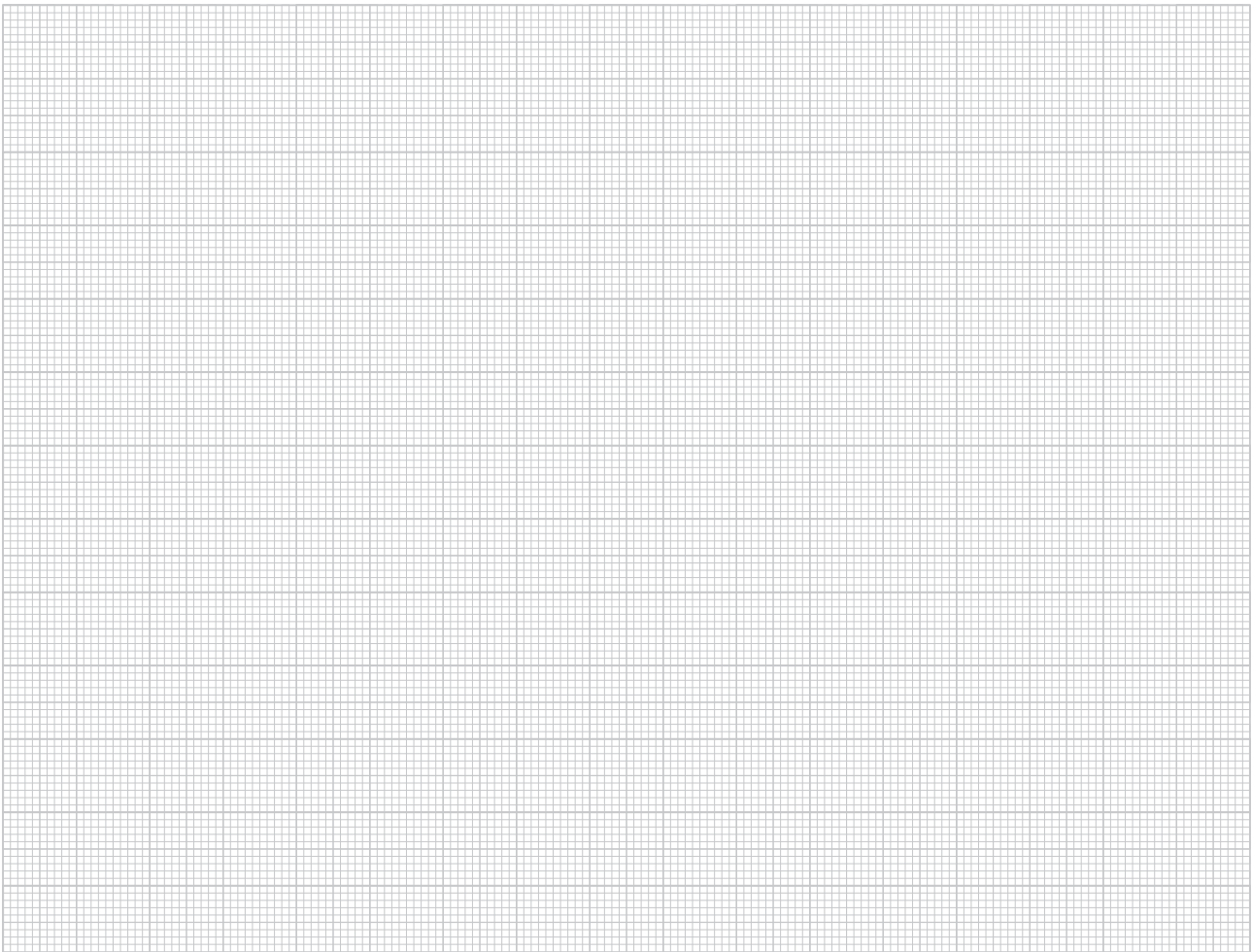
<sup>1</sup> Without taking doors into account.

<sup>2</sup> With doors, the evaluated sound insulation dimension R'w applies as the value for sound insulation for sole transmission through the door in a function, installed state.

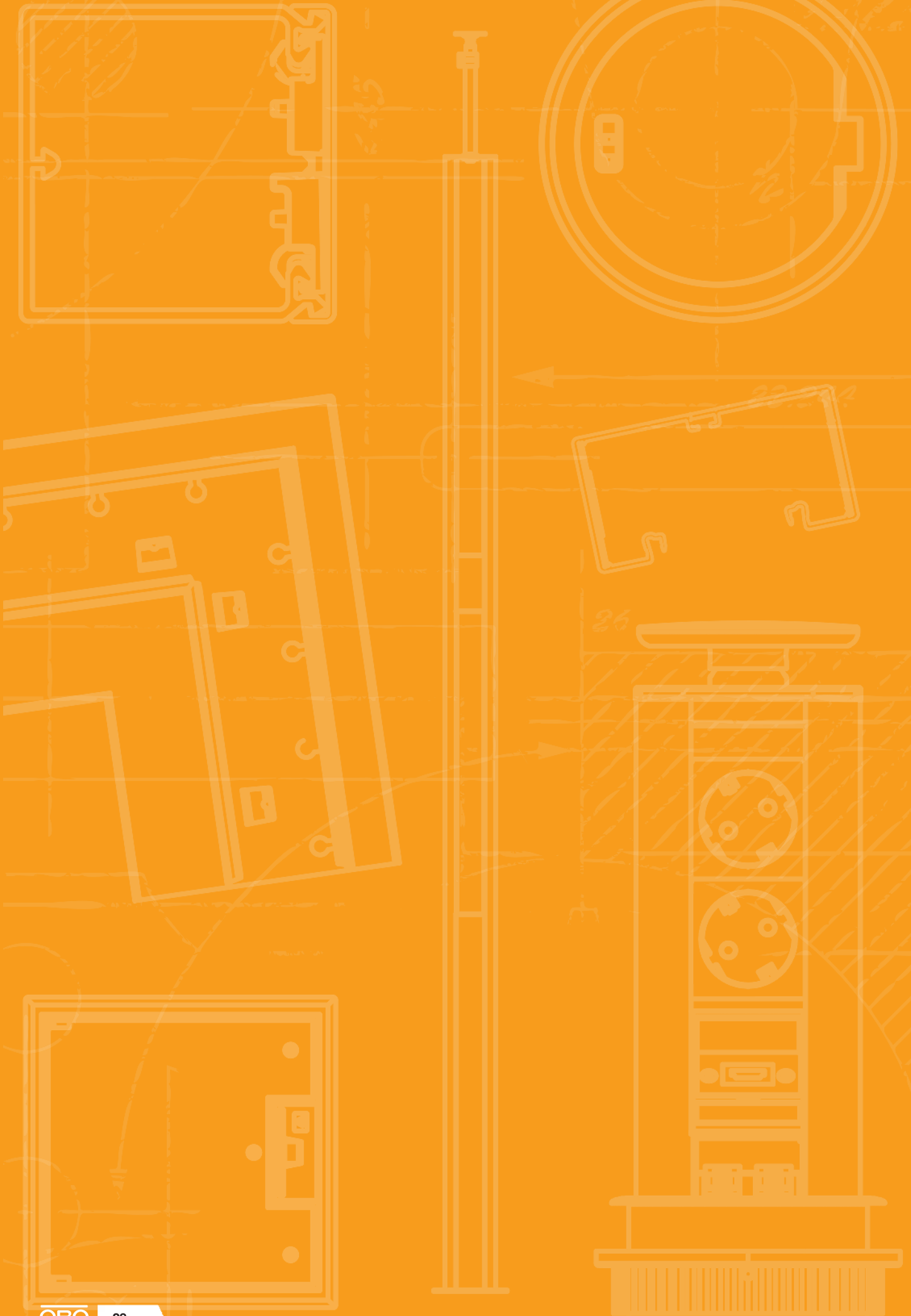
# Planning checklist

The following topics should be observed for the correct installation of an underfloor system and may need to be agreed with different units:

- ✓ Agreement of the specified metre setting out points with the construction company for checking the building shell dimensions and for adjustment of the trunking system's height
- ✓ Testing of the mounting surface for unevenness to DIN 18202 Tab. 3
- ✓ The mounting area must be protected from the weather and free of building debris and foreign material, i.e. swept clean
- ✓ Observation of fire protection directives, load requirements and impact sound measures
- ✓ Detailed routing diagram including positioning of the necessary system components
- ✓ Parameters for floor structure, floor type and cleaning, screed height
- ✓ Parts list of the articles used in the project
- ✓ Floor design of the responsible architect







# Service outlets



Service outlets, rectangular

30



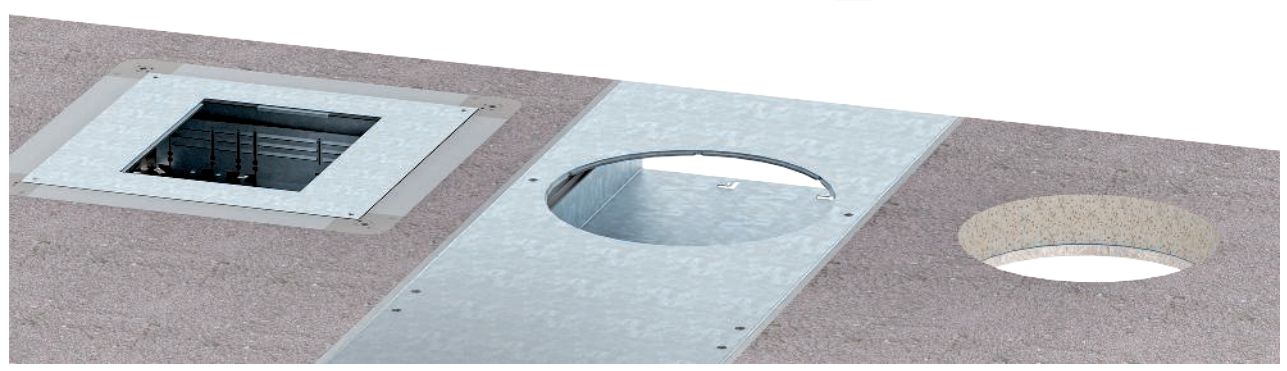
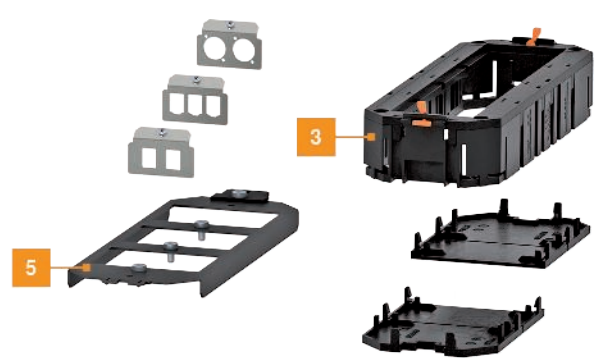
Service outlets, round

40



# Installation principle

- 1 Service outlet, rectangular
- 2 Service outlet, round
- 3 Universal support
- 4 Cover plates
- 5 Mounting support



## System description

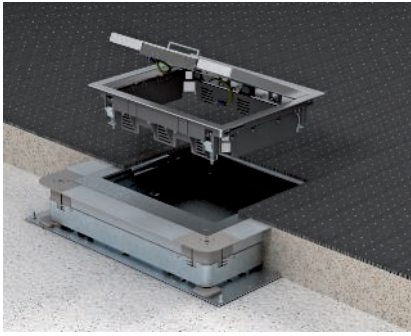


Service outlets supply workstations and other areas in the centre of the room with power and data connections via the floor. There are versions for dry- and wet-care floors, in both round and square designs. Plastic or metal are used as materials. Service outlets are suitable for installation in screed-flush and screed-covered underfloor

systems, as well as in system floors. They are compatible with various underfloor systems, including the EÜK screed-covered system and the open OKA screed-flush system.

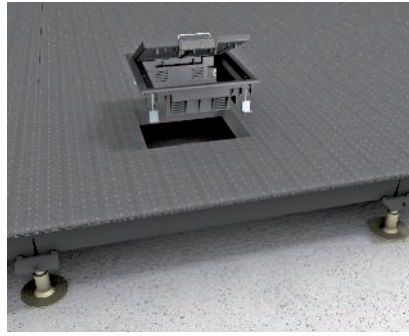


## Mounting aid



### Fixing in underfloor systems

When used in empty underfloor boxes and trunking systems, the fixing unit reaches under the mounting lid and locks the installation unit in place.



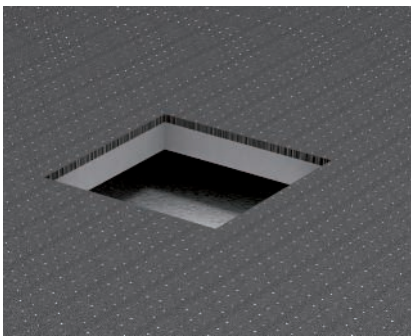
### Fixing in raised floors

When used in raised floors, the fixing bracket reaches under the raised floor plate (max. raised floor plate thickness = 50 mm), fixing the installation unit.



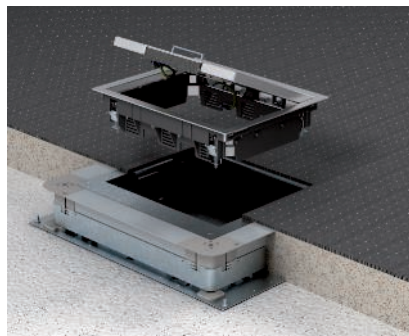
### Installation of accessories

The accessories for power supply, telecommunications and data technology are mounted in separate universal supports or universal support sections made of insulation material.



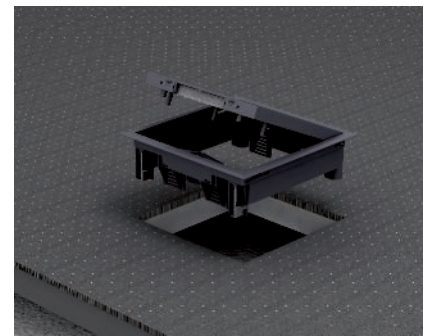
### Laying the floor covering

Lay the floor covering up to the installation opening of the service outlet.



### GES mounting in duct systems

Insert the service outlet into the blanking lid from above and screw it tight. The fixing unit grips under the blanking lid.



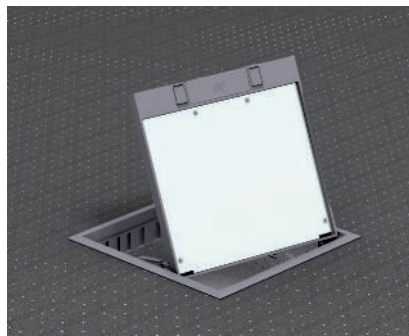
### GES mounting in raised floor

When used in raised floors, the fastening bracket reaches under the raised floor plate, fastening the service outlet.



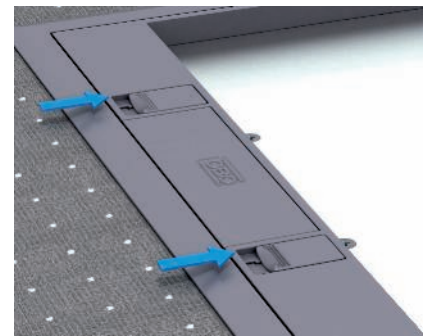
### Removal of the hinged cover

Before mounting accessories, turn the lid out of the frame on one side and remove it. When device mounting is complete, insert the cover again.



### Turning the hinged cover through 180°

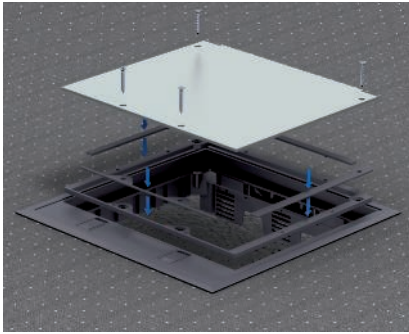
Remove the hinged cover and insert it on the opposite side of the frame.



### Opening of the hinged lid

Actuate both locking sliders. The fitters push the hinged lid upwards. Lift the lid using the cord outlet.





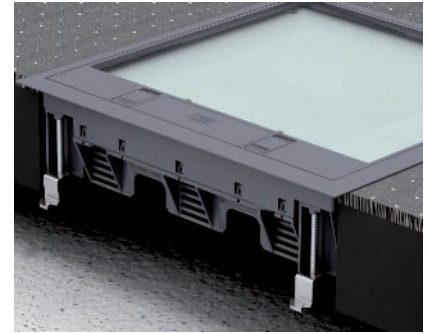
#### Height adjustment of the floor covering recess for GES9-3

The floor covering recess is supplied with a depth of 5 mm and can be extended to 10 mm. For height adjustment, remove the BA5 spacers from the hinged covers and replace them with BA10 spacers.



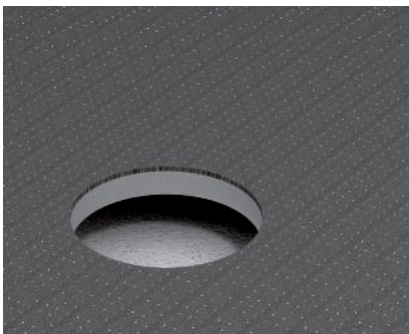
#### GES9-2U universal fastening, double base mounting

The clamping range of the retaining profile is suitable for raised floor plates of a thickness of up to 45 mm.



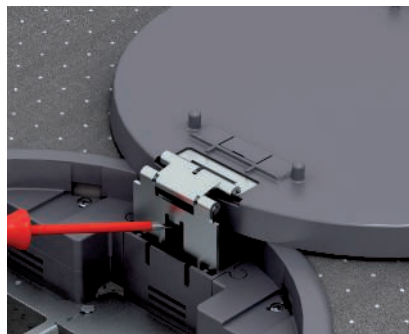
#### GES9-2U universal fastening, double base mounting, $s = > 47$ mm

Slacken the retaining profile from the screw and turn it round. Turn the screw back into the retaining profile. In this position, the clamping range is 37 to 75 mm.



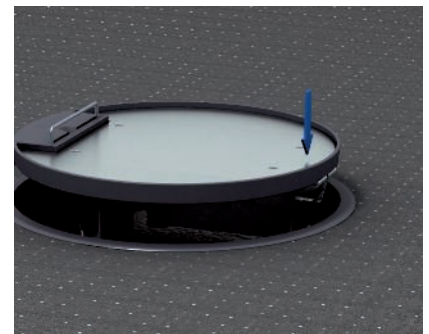
#### Laying the floor covering for duct systems

Lay the floor covering up to the installation opening of the service outlet.



#### Expansion of the hinged lid for GESR round service outlet

Lift the locking lug in the hinge seat of the frame using a screwdriver. Lift the lid out of the holder.



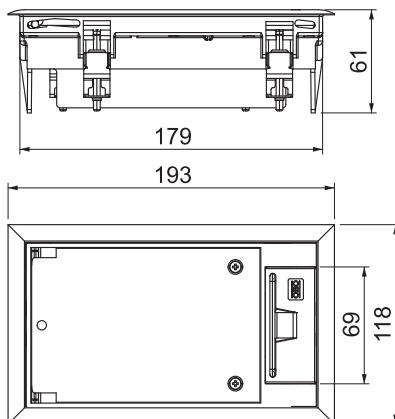
#### Installation of the hinged lid for GESR round service outlet

Insert the lid hinge in the bracket. Close the lid. Press on the lid above the lid hinge until the end position is reached.

## GES2 service outlet with handle clamp



Type	Colour	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GES2 U 7011	Iron grey	5	1	61.300	7405116

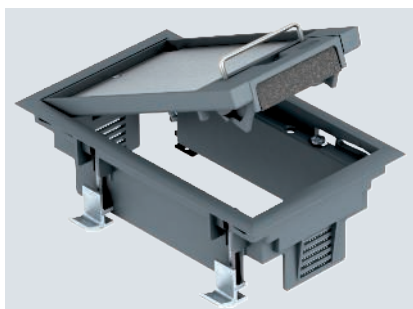


Service outlet with handle clamp for up to 3 individual Modul 45 devices in one UT3 universal support, use in duct systems and system floors for indoor use.

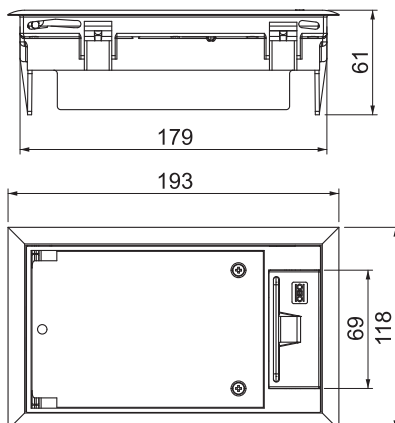
Service outlet with handle clamp, 1-compartment, for the installation of MT2 mounting support.

Up to two installation devices with 50 mm central plate can be inserted.

## GES2DB service outlet with handle clamp



Type	Colour	Floor covering thickness mm	Dim. h mm	Pack Piece	Weight kg/100 pc.	Item no.
GES2 DB 7011	Iron grey	5	-	1	66.400	7405100



Service outlet with handle clamp for up to 3 individual Modul 45 devices in one UT3 universal support, use in duct systems and system floors for indoor use.

Service outlet with handle clamp, 1-compartment, for the installation of MT2 mounting support.

Up to two installation devices with 50 mm central plate can be inserted.



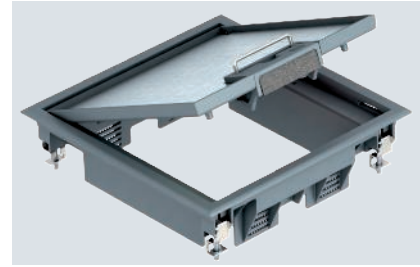
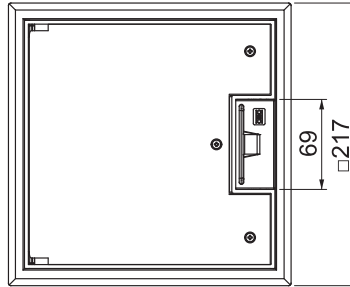
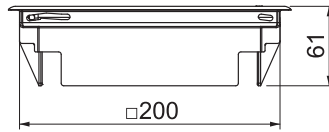
## GES service outlets for dry-cleaned floors, nominal size 4

PA



### GES4 service outlet with handle clamp

Type	Colour	Floor covering thickness mm	Dim. h mm	Pack Piece	Weight kg/100 pc.	Item no.
GES4 U 7011	Iron grey	5	-	1	139.500	7405196
GES4 U 9011	Graphite black	5	-	1	139.500	7405200



Service outlet with handle clamp for up to 6 individual Modul 45 devices in 2 UT3 universal supports, use in duct systems and system floors for indoor use.

Service outlet with handle clamp, 2-compartment, for the installation of MT4 mounting support. Two type APMT2 cover plates can be installed.

Up to 4 installation devices with 50 mm central plate can be inserted.

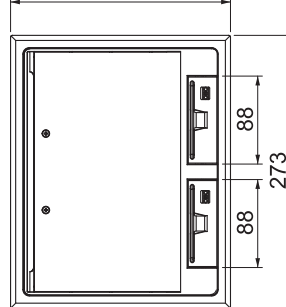
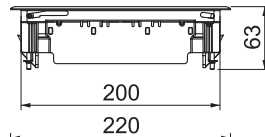
## GES service outlets for dry-cleaned floors, nominal size 6

PA



### GES6 service outlet with handle clamp

Type	Colour	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GES6 U 9011	Graphite black	5	1	150.000	7405312



Service outlet with handle clamp for up to 9 individual Modul 45 devices in three UT3 universal supports, use in trunking systems and system floors for indoor use.

Service outlet with handle clamp, 3-compartment, for the installation of MT6 mounting support. Three type APMT2 cover plates can be installed.

Separate fastening brackets must be ordered for raised floor mounting. Up to 6 installation devices with 50 mm central plate can be inserted.

## GES6 service outlet with locking slider

PA



Service outlet with locking slider for up to 9 individual Modul 45 devices in 3 UT3 universal supports, use in trunking systems and system floors for indoor use.

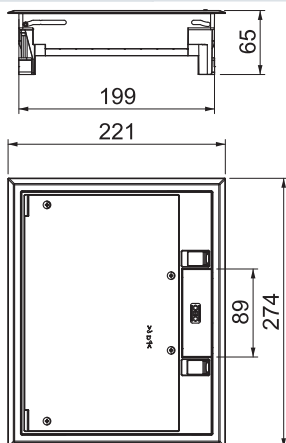
Floor covering recess in the hinged cover pre-adjusted to 5 mm, if necessary adjustable to 3, 8 or 10 mm.

Service outlet with locking slider, 3-compartment, for the installation of MT6 mounting support.

Three type APMT2 cover plates can be installed. Floor covering recess in the hinged cover pre-adjusted to 5 mm, if necessary adjustable to 3, 8 or 10 mm.

Up to 6 installation devices with 50 mm central plate can be inserted.

Type	Colour	Floor care	Screed height mm	Installation depth mm	Pack Piece	Weight kg/100 pc.	Item no.
GES6-2U10T 7011	Iron grey	Dry	73	73	1	138.000	7405321



## GES6M-2 service outlet with handle clamp

A2



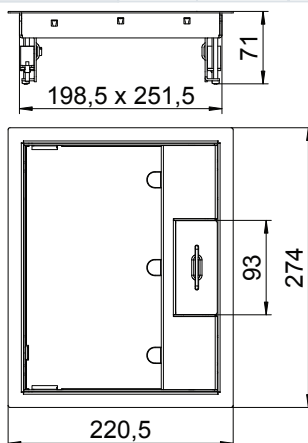
Service outlet with handle clamp for up to 9 individual Modul 45 devices in 3 UT3 universal supports, use in trunking systems and system floors for indoor use.

Locking ladder made of galvanised sheet steel.

Service outlet with handle clamp, 3-compartment, for the installation of MT6 mounting support.

Three type APMT2 cover plates can be installed. Up to 6 installation devices with 50 mm central plate can be inserted.

Type	Material	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GES6M-2 10U	A2	10	1	320.000	7405299

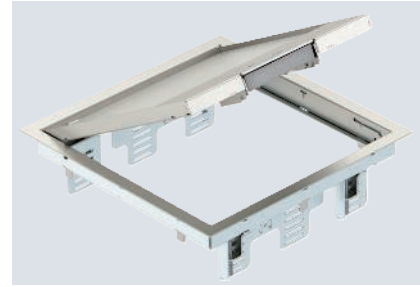
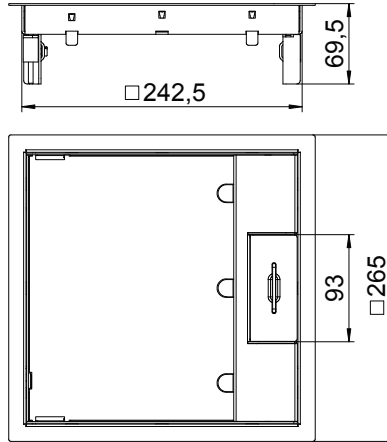


A2



## GES9M-2 service outlet with handle clamp

Type	Material	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GES9M-2 10U	A2	10	1	360.000	7405371



Service outlet with handle clamp for up to 12 individual Modul 45 devices in 3 UT4 universal supports, use in trunking systems and system floors for indoor use.

Locking ladder made of galvanised sheet steel.

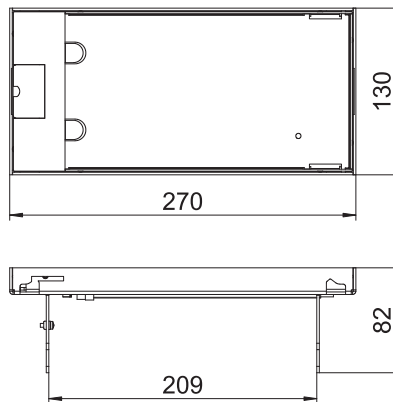
Service outlet with handle clamp, 3-compartment, for the installation of MT9 mounting support. 3 type APMT5 cover plates can be installed.

Up to 9 installation devices with 50 mm central plate can be inserted.

A2

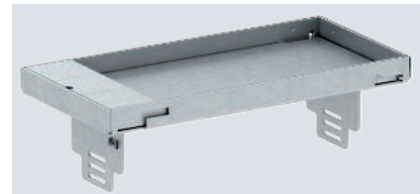


Type	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
UKL 4	15	1	167.000	7428531



## UKL service outlet

### UKL4 service outlet



Height-adjustable cassette with one cord outlet. Suitable to accept a UT universal support. Stainless cassette and cord outlet.

Suitable for installation in a UKSB screed box. Also suitable for installation in false ceilings when combined with a mounting lid for indoor use. 15 mm floor covering recess in the cassette.

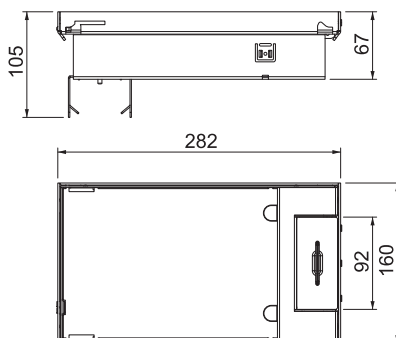
## Service outlet - UKL 8

A2



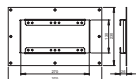
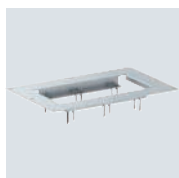
Height-adjustable cassette with cord outlet for direct installation in false ceilings for indoor use.

Type	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
UKL 8	20	1	274.000	7428533



## Mounting lid UKL4

St FS

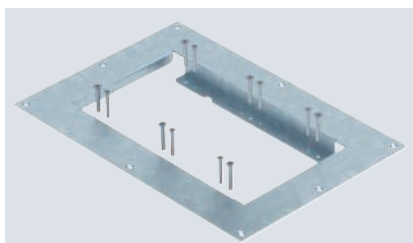


Type	Width mm	Length mm	Pack Piece	Weight kg/100 pc.	Item no.
DUG UKL4	230	370	1	114.000	7428538

Cavity floors are usually equipped with round flush-mount units. The installation openings required for this are created either using crown drills or using a screed protection cover. Beneath the screed plate, the cables are run freely to the service outlets and cassettes without cable routing systems.

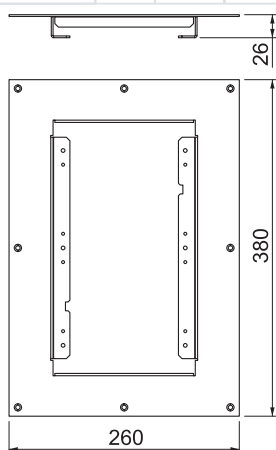
## Mounting lid for UKL8

St FS



Mounting lid for height-adjustable cassette with cord outlet for direct installation in false ceilings for indoor use.

Type	Width mm	Length mm	Pack Piece	Weight kg/100 pc.	Item no.
DUG UKL8	380	260	1	130.000	7428540





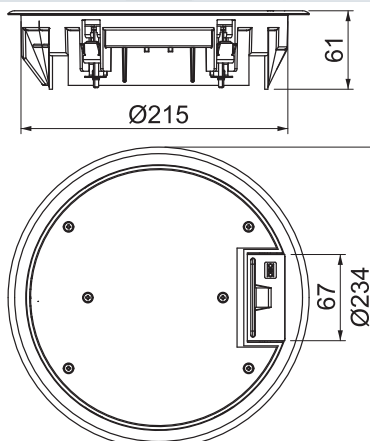
## GES service outlets for dry-cleaned floors, nominal size R4

### GESR4 service outlet with handle clamp

PA



Type	Colour	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GESR4 U 7011	Iron grey	5	1	140.000	7405436



Service outlet with handle clamp for up to 6 individual Modul 45 devices in 2 UT3 universal supports, use in duct systems and system floors for indoor use.

Service outlet with handle clamp, 2-compartment, for the installation of MT4 mounting support. Two type APMT2 cover plates can be installed.

Up to 4 installation devices with 50 mm central plate can be inserted.

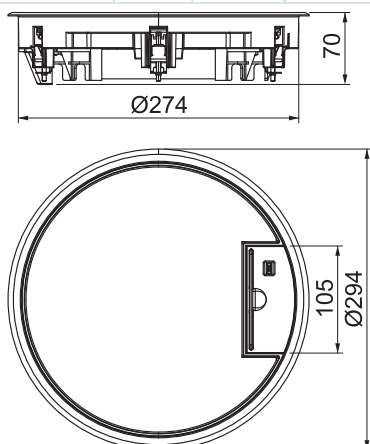
## GES service outlets for dry-cleaned floors, nominal size R7

### GESRA7/10 service outlet with handle clamp

AIG



Type	Material	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GESRA7 10U	AIG	5	1	206.500	7405544



Service outlet with handle clamp for up to 10 individual Modul 45 devices in 2 UT3 and one UT4 universal support, use in duct systems and system floors for indoor use.

Cord outlet made from polyamide RAL 9011.

10 mm floor covering recess in hinged cover can be reduced to 5 mm using enclosed pressboard filler.

Up to 7 installation devices with 50 mm central plate can be inserted.

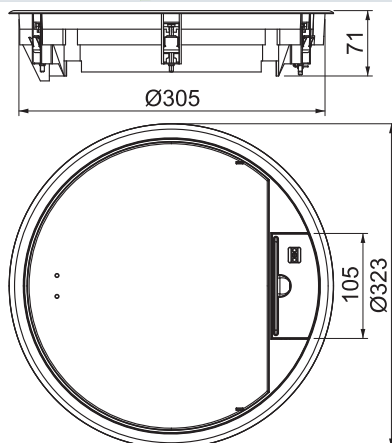


AIG



## GESRA9/10 service outlet with handle clamp

Type	Material	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
GESRA9 10U	AIG	10	1	120.500	7405580



Service outlet with handle clamp for up to 12 individual Modul 45 devices in 3 UT4 universal supports, use in duct systems and system floors for indoor use.

Service outlet with handle clamp, 3-compartment, for the installation of MT9 mounting support. Three type APMT5 cover plates can be installed.

Up to 9 installation devices with 50 mm central plate can be inserted.

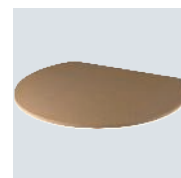
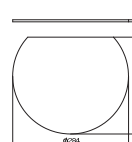
HP



## Filler for GESRA9/10 round service outlet

Type	Material	Pack Piece	Weight kg/100 pc.	Item no.
FS RA9 10 5	HP	1	23.500	7407216

Filler to reduce the floor covering recess in the hinged cover of a GESRA9/10 service outlet to 5 mm. One-sided coating with double-sided adhesive surface.



## System description

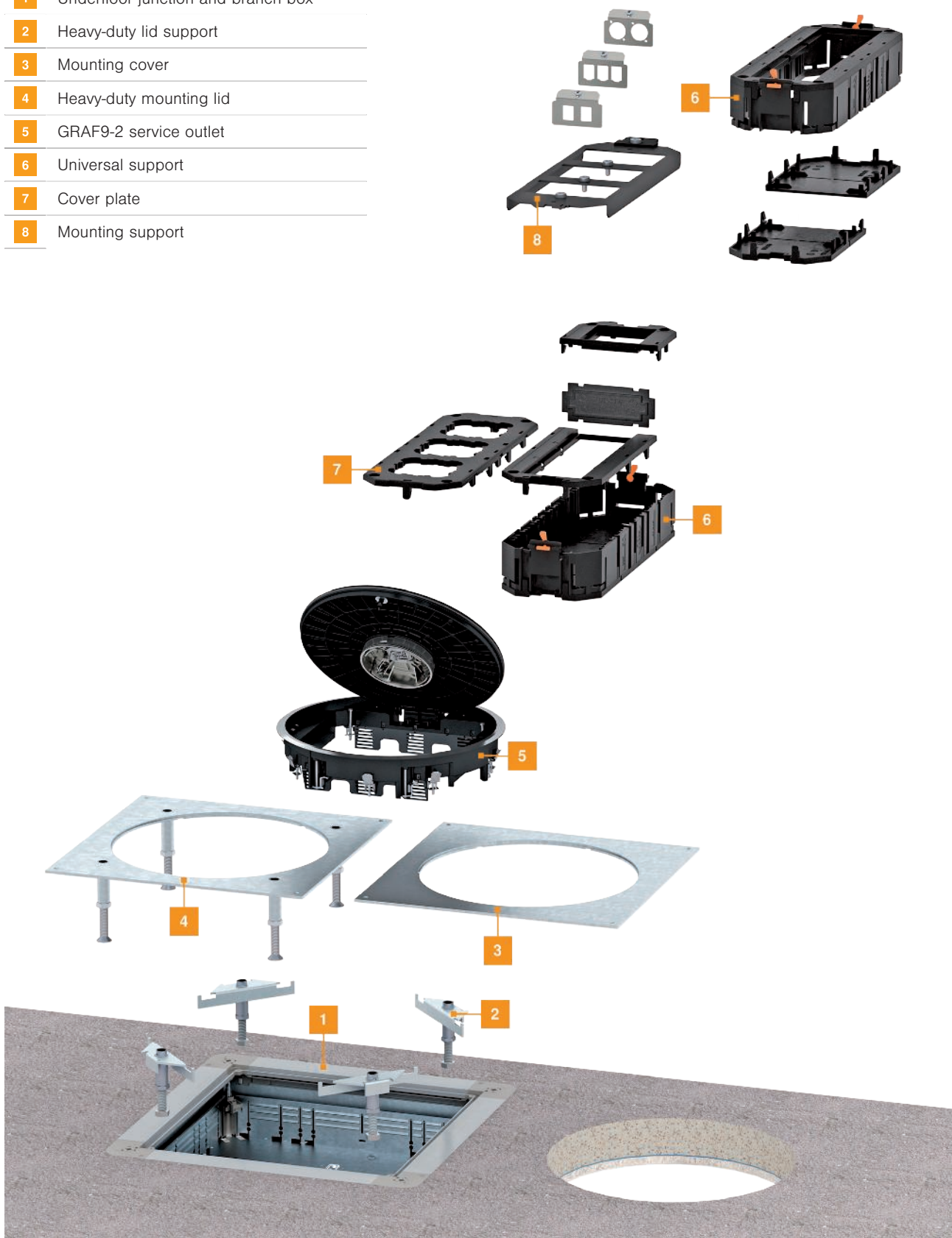


The solution for wet-cleaned floors: The GRAF9 service outlet is ideally suited for wet-cleaned floors. The GRAF9 is made completely of metal and offers a high load capacity. A variant is available with a ring-shaped

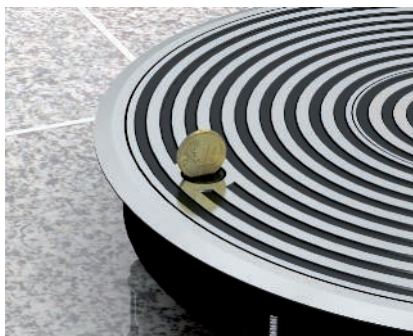
structure in the lid surface, along with a variant with a 4 mm floor covering recess in the hinged cover.

# Installation principle

- 1 Underfloor junction and branch box
- 2 Heavy-duty lid support
- 3 Mounting cover
- 4 Heavy-duty mounting lid
- 5 GRAF9-2 service outlet
- 6 Universal support
- 7 Cover plate
- 8 Mounting support



## Mounting aid



### Lid closing

A sash lock closes the cover in the frame. After release (e.g. with a small coin), the lid is raised by spring force and can be opened simply.



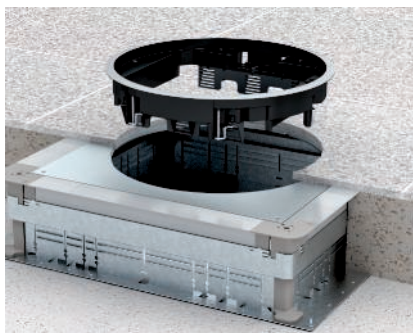
### Cable infeed

The consumer cables are inserted through the opened tube body with the opened lid and then connected in the installed connection sockets. Then the lid is pushed down and locked and the tube body cover attached.



### Removing the hinged lid

Push the hinge together and lift the lid upwards out of the holder.



### Mounting in duct systems

Insert the service outlet into the mounting lid from above and screw it tight. The fastening unit grips under the mounting lid.



### Mounting in raised and cavity floor

When used in raised and cavity floors, the universal fixing bracket acts as an expansion claw. Tighten the screw with max. 4 rotations. The claws fasten the service outlet in the mounting opening.



### Installation of the hinged cover

Push the hinge together and insert in the holder in the frame.



### Lifting, tube body

Press the tube body out from the inside and lock it by turning it left from the top.



### Lower the tube body

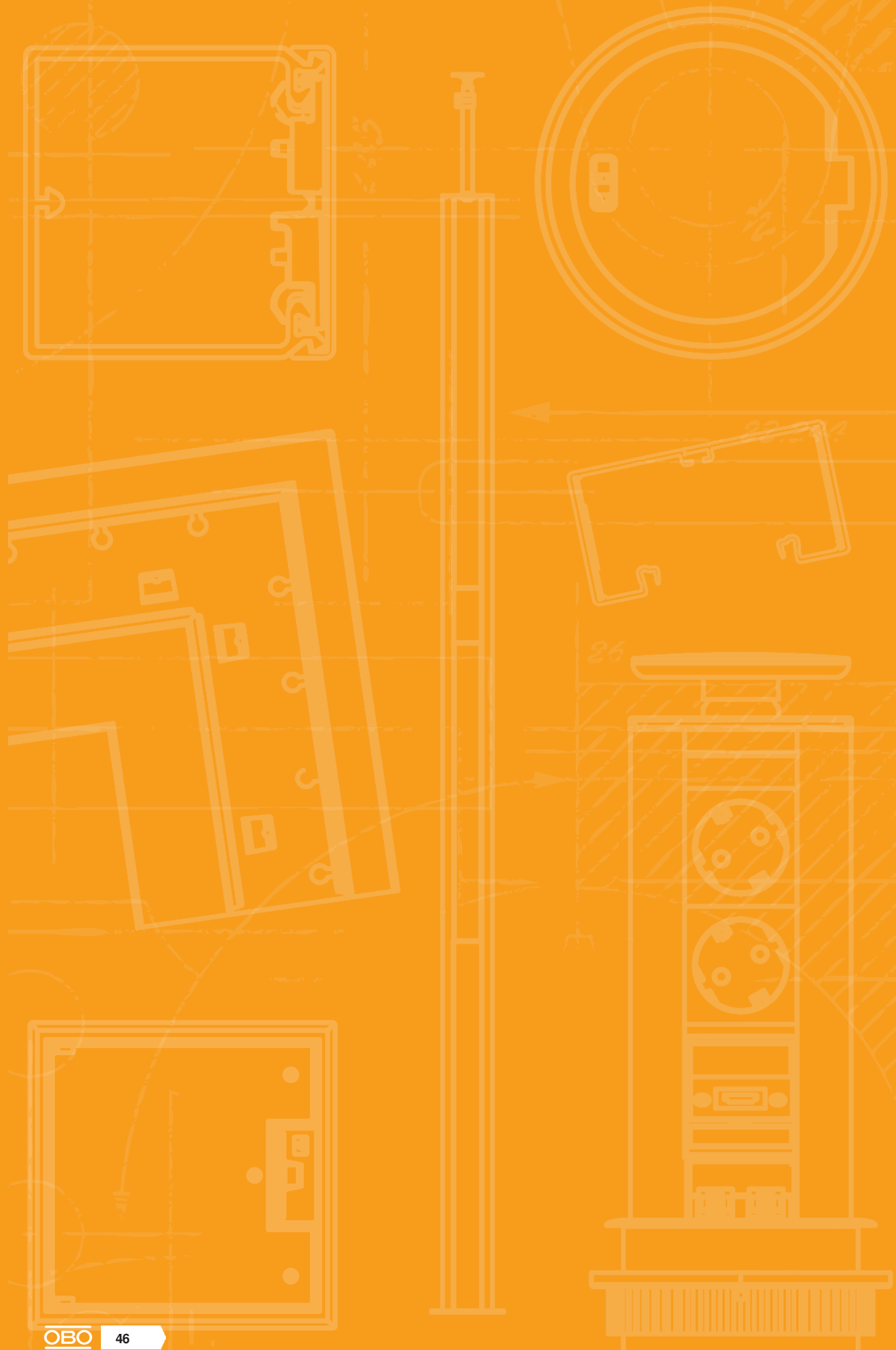
Lower the tube body cover by pressing the two pressure surfaces at the side, unlock it by turning it to the right and lower it completely.







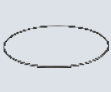
### Opening of the tube body

Release the tube body cover from the base by pressing the two pressure surfaces at the side and lift it out.



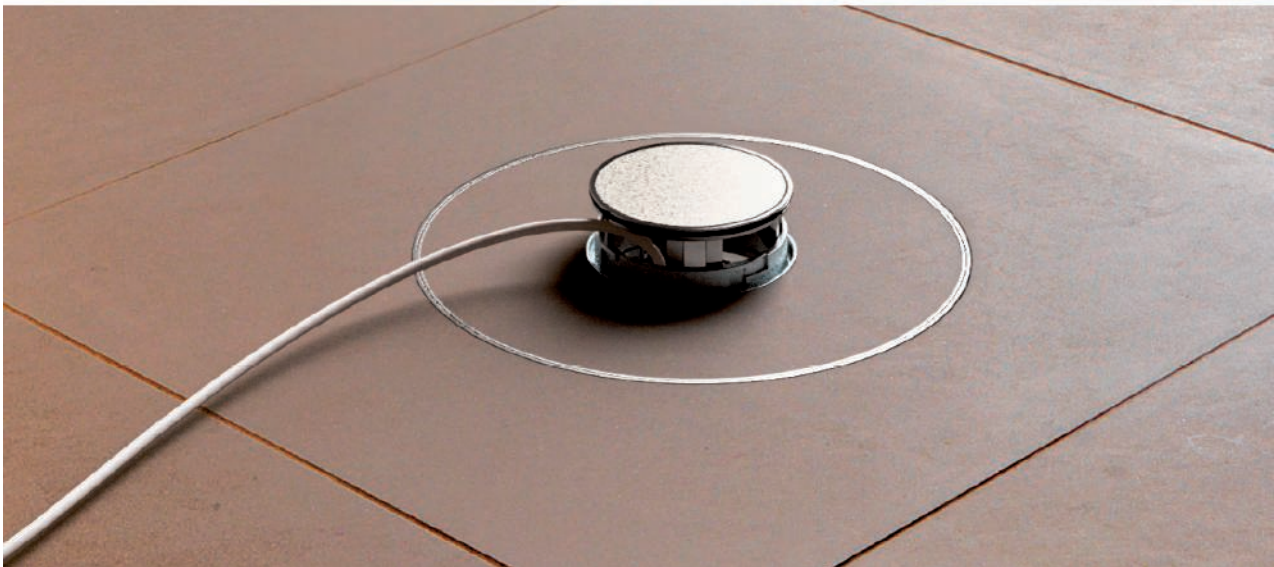
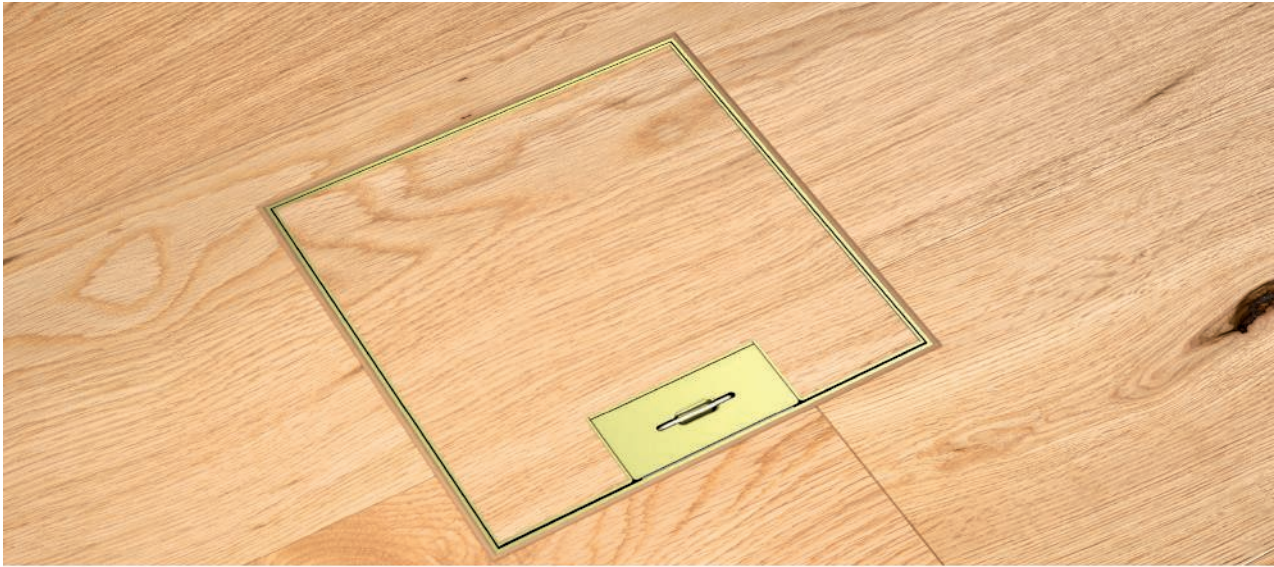


# Cassettes

	Height-adjustable square cassettes	48
	Height-adjustable round cassettes	62
	Height-adjustable and decouplable square cassettes	64
	Tube bodies	68
	General cassette accessories	70



## System description



The compact, flush-floor cassettes from OBO provide power, data and multimedia connections in a high-quality design. The cassettes can be adjusted to the height of the floor and can be installed completely decoupled as a special construction type. They are available in round and rectangular versions. There are versions for dry, moist and wet-care floor coverings. Cassettes are suitable for raised and cavity floors and all kinds of screed-flush underfloor systems.

Frame cassettes are suitable for the top closure of an underfloor draw and junction box in dry, moist or wet-cleaned floors. They contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads.





# Installation principle

- 1** Height-adjustable square cassette with cord outlet
- 2** Height-adjustment bracket
- 3** Height-adjustable and decouplable square cassette
- 4** Cassette for tube body
- 5** Tube body
- 6** Cassette for inspection opening
- 7** Threaded sleeve

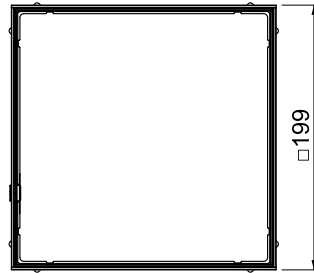
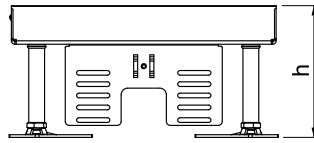


## Height-adjustable cassette for inspection opening, RKN, stainless steel

A2



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 4 VS 20	4	105	20	105-150	1	2,300	7408950



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

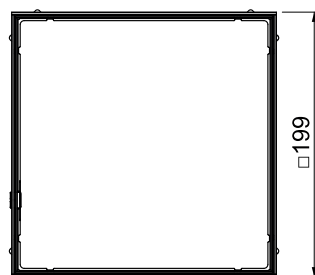
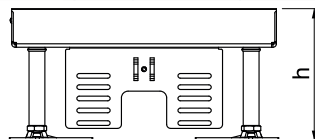
Height-adjustable cassette as a blind cassette, two-compartment. 2 APMT2 cover plates can be installed. For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

A2



## Height-adjustable cassette for inspection opening, RKN, stainless steel

Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 4 VS 25	4	110	25	110-155	1	2.400	7408954



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

Height-adjustable cassette as a blind cassette, two-compartment. 2 APMT2 cover plates can be installed. For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

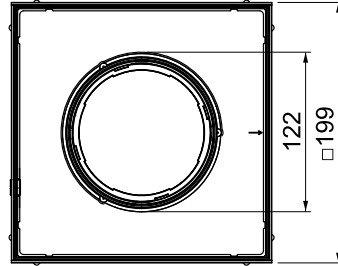
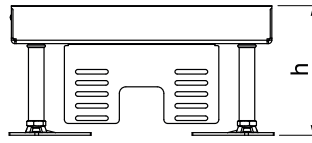


## Height-adjustable cassette for tube body, RKFN, stainless steel

A2



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKFN3 4 VS 20	4	105	20	105-150	1	2.600	7408960



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

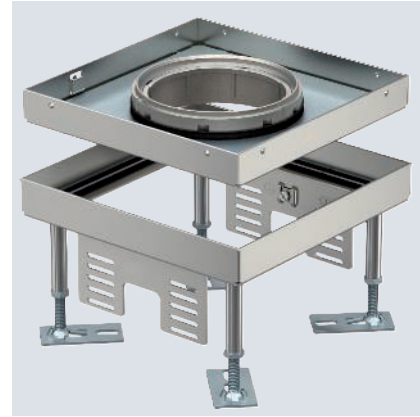
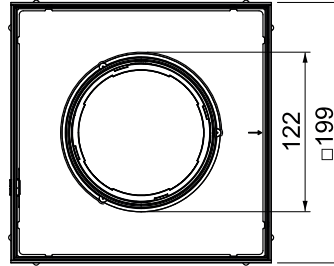
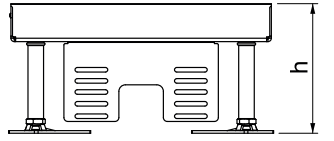
For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

A2



## Height-adjustable cassette for tube body, RKFN, stainless steel

Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKFN3 4 VS 25	4	110	25	110-155	1	2.700	7408962



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

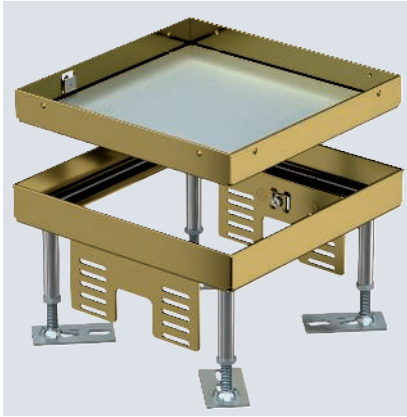
For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.



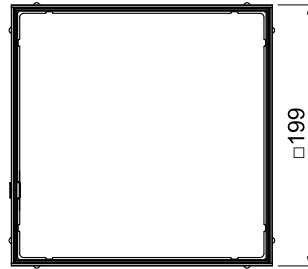
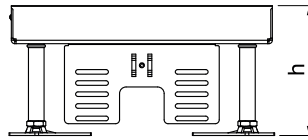
## Square, height-adjustable cassettes, nominal size 4

### Height-adjustable cassette for inspection opening, RKN, brass

CuZn  
37



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 4 MS 25	4	110	25	110-155	1	2.400	7408956



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

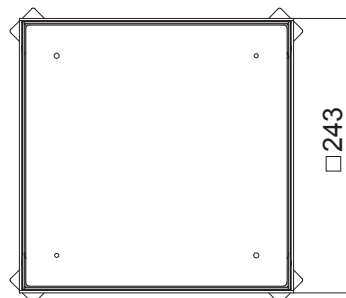
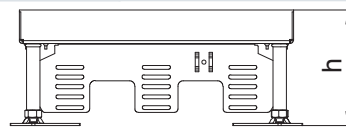
## Square, height-adjustable cassettes, nominal size 9

### Height-adjustable cassette for inspection opening, RKN, stainless steel

A2



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN2 9 VS 20	9	100	20	100-150	1	440.000	7409044



Height-adjustable "blank" cassette for the creation of an inspection opening of nominal size 9 in dry or wet-cleaned floors for indoor use. Only suitable for smooth floor coverings.

For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.

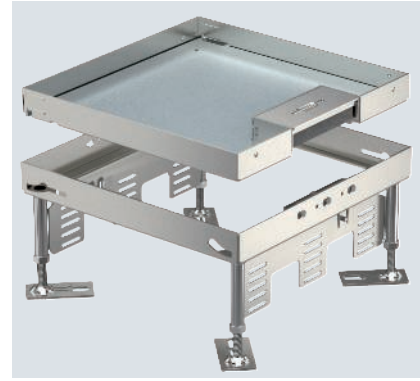
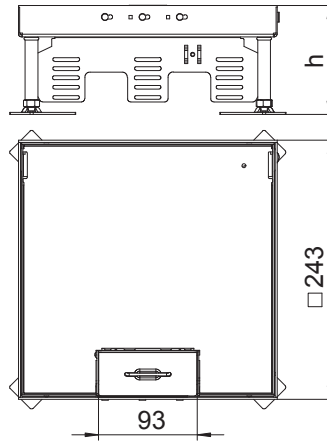


A2



### Height-adjustable cassette with cord outlet, RKSN, stainless steel

Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKSN2 9 VS 20	9	105	20	105-150	1	430.000	7409218



Height-adjustable cassette of nominal size 9 with cord outlet for installation of accessories in dry-care floors for indoor use .

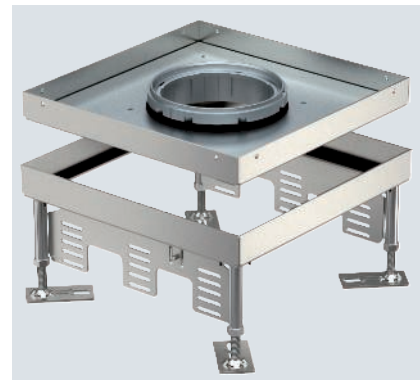
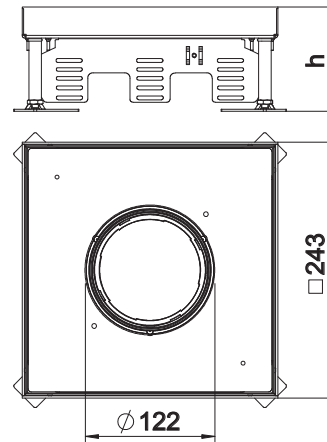
For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45® devices.

A2



### Height-adjustable cassette for tube body, RKFN, stainless steel

Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKFN2 9 VS 20	9	105	20	105-150	1	407.100	7409368



Height-adjustable cassette of nominal size 9 for tube body for installation of accessories in dry or wet-cleaned floors for indoor use .

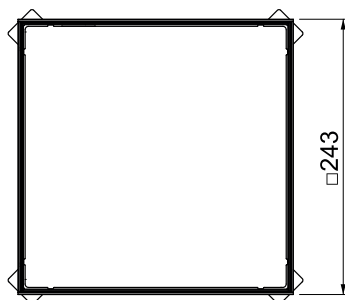
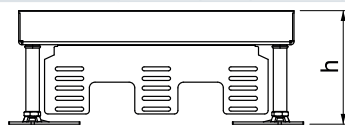
For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45® devices.



## Height-adjustable cassette for inspection opening, RKN, stainless steel



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 9 VS 20	9	105	20	105-150	1	3.600	7408970



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.



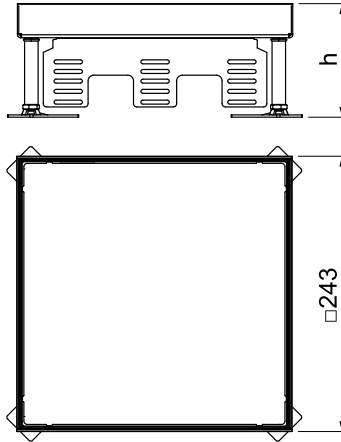


A2



## Height-adjustable cassette for inspection opening, RKN, stainless steel

Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 9 VS 25	9	110	25	110-155	1	3.700	7408974



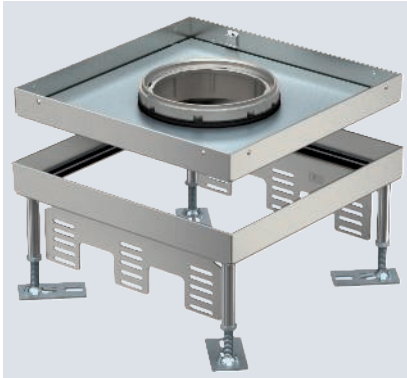
Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.

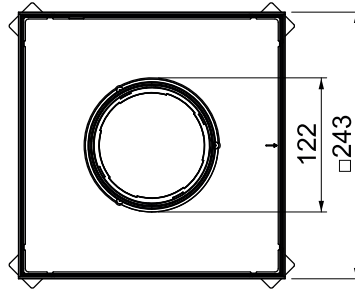
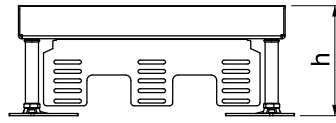


## Height-adjustable cassette for tube body, RKFN, stainless steel

A2



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKFN3 9 VS 20	9	105	20	105-150	1	3.550	7408980



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

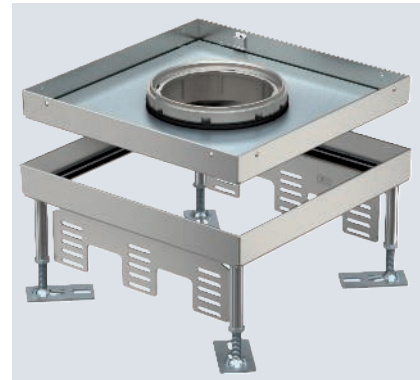
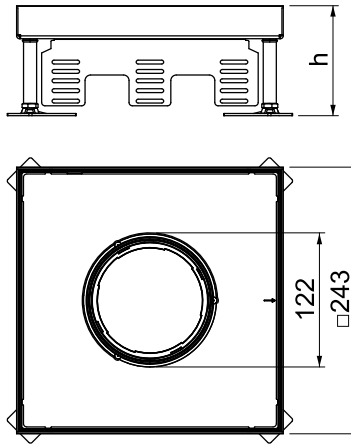
For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.

A2



## Height-adjustable cassette for tube body, RKFN, stainless steel

Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKFN3 9 VS 25	9	110	25	110-155	1	3.750	7408982

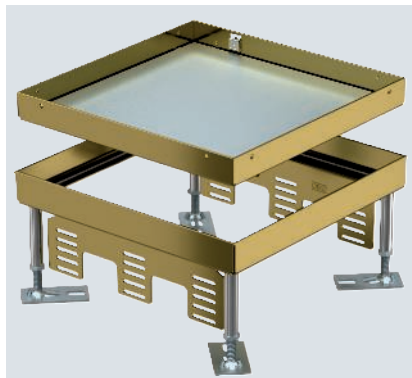


Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

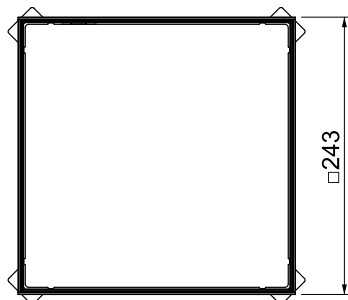
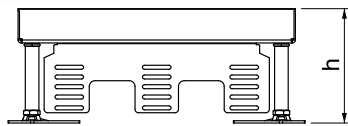
For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.



## Height-adjustable cassette for inspection opening, RKN, brass



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 9 MS 25	9	110	25	110-155	1	3.900	7408976



Height-adjustable square cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems. Depending on the design, they are suitable for dry, moist or wet-cleaned floors. The interior height adjustment allows exact adjustment of the top edge of the cassette to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. An underfloor connection box requires a blanking lid with an appropriate installation opening. The cassettes are made from stainless steel or brass. All the cassettes contain a 4 mm thick sheet steel plate, for safe absorption of the traffic loads. The cassettes are available for different floor covering thicknesses of 20 and 25 mm.

For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.





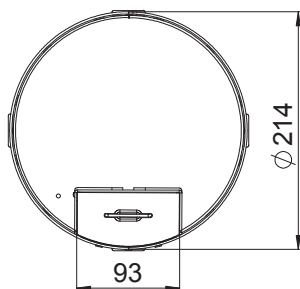
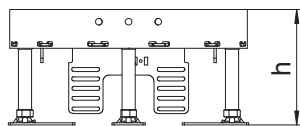
## Round, height-adjustable cassettes, nominal size R4

### Height-adjustable cassette with cord outlet, RKS2, stainless steel

A2



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKS2 R4 V20	R4	110	20	110-155	1	233.000	7409258



Height-adjustable cassette of nominal size R4 with cord outlet for installation of accessories in dry-care floors for indoor use.

Height-adjustable cassette for cord outlet, 2-compartment. 2 APMT2 cover plates can be installed. For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

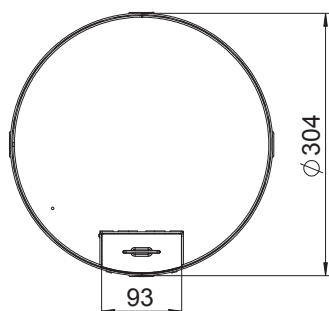
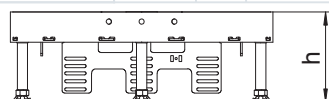
## Round, height-adjustable cassettes, nominal size R9

### Height-adjustable cassette with cord outlet, RKS2, stainless steel

A2



Type	Nominal size	Dim. h mm	Floor covering thickness mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
RKS2 R9 V25	R9	110	25	110-155	1	420.000	7409280



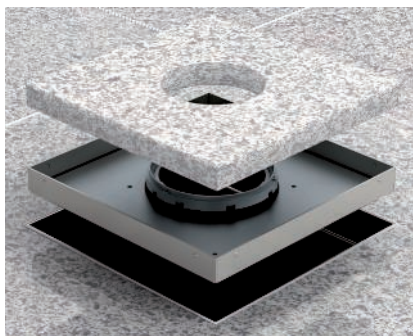
Height-adjustable cassette of nominal size R9 with cord outlet for installation of accessories in dry-care floors for indoor use.

Height-adjustable cassette for cord outlet, 3-compartment. 3 APMT5 cover plates can be installed. For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.





## Mounting aid



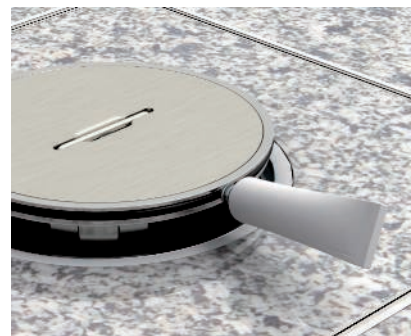
### Laying the floor covering in the RKFN cassette

Lay the floor covering in the cassette and stick it down. Seal the remaining gap between the floor covering and the cassette with suitable materials.



### Mounting of tube body

Insert the tube body cover into the tube body seat and lower it. Unlock the tube body by turning it to the right and close it flush to the floor.



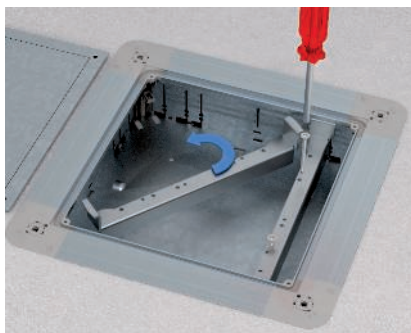
### Cleaning of the seals

To complete the mounting work, clean the interior of the cassette and the seals of the cassette and tube body. Apply Vaseline to the seals (contained in the scope of delivery).



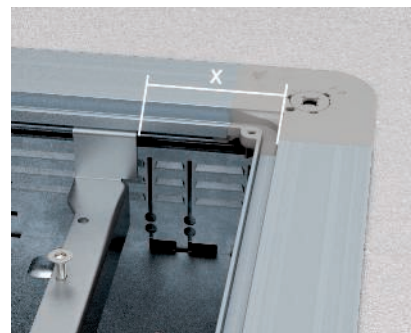
### Mounting of a threaded sleeve

This work step takes place before the floor covering is laid in the cassette. Drill a fastening hole for the threaded sleeve ( $\varnothing$  8 mm). Insert the threaded sleeve and fasten it.



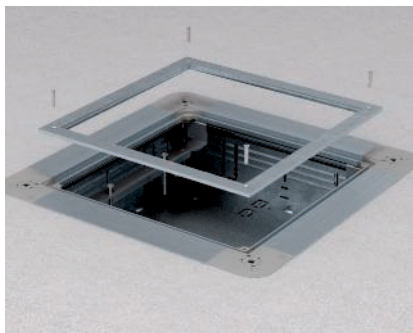
### Preparation of a height-adjustment bracket

Screw the support screws M5x40 (WAF 3) into the levelling profile.



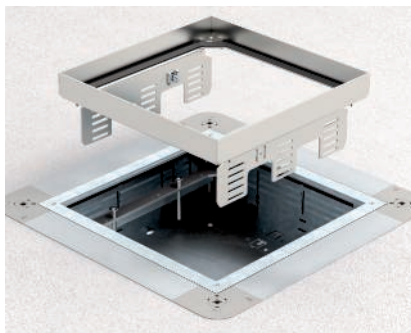
### Mounting of height-adjustment bracket

Insert the two levelling profiles in the underfloor box. The distance X is the result of the mounting opening of the blanking lid.



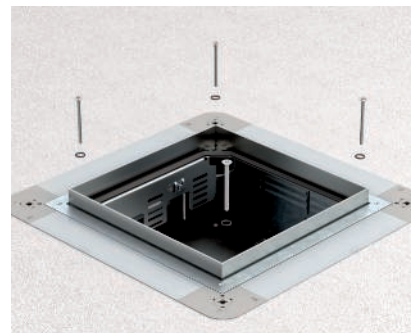
### Installation of blanking lids

Fasten the blanking lid on the underfloor box. The levelling profile must be visible in the mounting opening.



### Mounting of cassette frame

Place the cassette frame on the levelling profile, align it and adjust it to the top edge of the floor covering using the support screw.



### Use of the sealing rings

With the RKFN and RKN cassette version, place the O rings under the fastening screws M4x40 PZ 2 and screw the cassette frame tight.



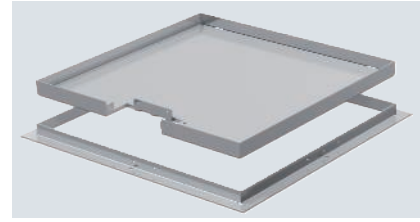
A2



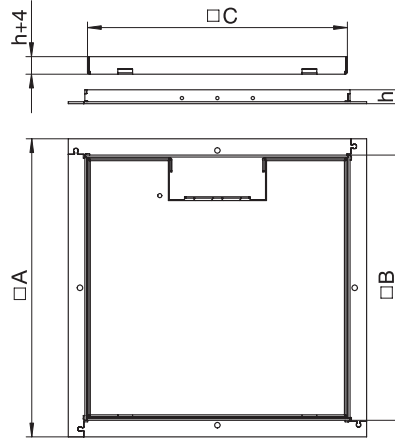
### Frame cassette for cord outlet, RKS, nominal size 250-3, stainless steel

Type	Dim. A mm	Dim. B mm	Dim. C mm	Dim. h mm	Floor covering thickness mm	Material	Pack Piece	Weight kg/100 pc.	Item no.
RKS 2V2 25	324	288	282	25	23	A2	1	432.800	7406558

**CuZn** Brass Available on request



Frame cassette for cord outlet, for UZD250-3, for the installation of accessories in dry or wet-cleaned floors for indoor use.



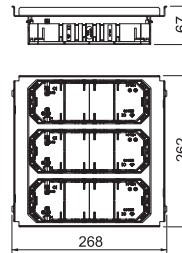
St FS



### Mounting set for frame cassettes – MS250-3 3UT4

Type	Pack Piece	Weight kg/100 pc.	Item no.
MS250-3 3UT4	1	73.700	7407643

Mounting set with three universal supports of type UT3 for suspended installation in the underfloor junction and branch box UZD250-3.



### Expansion and additional parts

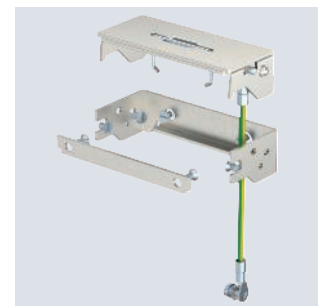
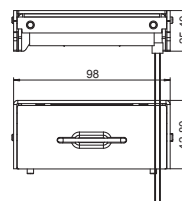
A2



### Cord outlet SAK-2, stainless steel

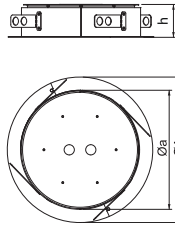
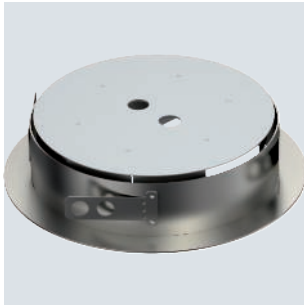
Type	Material	Pack Piece	Weight kg/100 pc.	Item no.
SAK-2 V2A	A2	1	27.500	7407995

Cord outlet for installation in RKS frame cassettes. Use only in dry-cleaned floors.



**Terrazzo lined body for height-adjustable cassettes, nominal size R4**

St FS

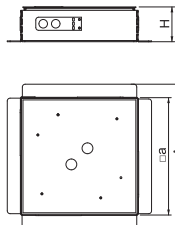
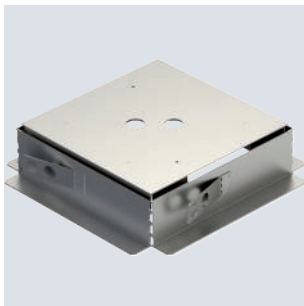


Type	Dim.	Dim.	Dim.	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
	a	A	H				
<b>SK RK4R</b>	218	270	55	R4	1	210.000	<b>7404382</b>

Lined body, suitable for polishing, for the direct and jointless installation of round height-adjustable cassettes, nominal size 4, into surface-finished screeds/terrazzo floorings. The casing is laid floatingly onto underfloor boxes with mounting lids of nominal size 4, closing the gaps between underfloor box and cassette frame. The protection cover made from aluminium sheet is put into the cassette frame as a dummy before the screed work is done and can be polished over with the screed or terrazzo.

**Terrazzo lined body for height-adjustable cassettes, nominal size 4**

St FS

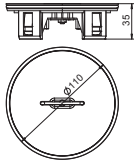


Type	Dim.	Dim.	Dim.	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
	a	A	H				
<b>SK RK4</b>	198	253	55	4	1	135.500	<b>7404380</b>

Lined body, suitable for polishing, for the direct and jointless installation of height-adjustable cassettes, nominal size 4, into surface-finished screeds/terrazzo floorings. The casing is laid floatingly onto underfloor boxes with mounting lids of nominal size 4, closing the gaps between underfloor box and cassette frame. The protection cover made from aluminium sheet is put into the cassette frame as a dummy before the screed work is done and can be polished over with the screed or terrazzo.



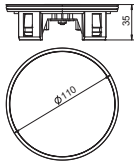
## Tube body with cover plate, with handle clamp, for frame cassette and height-adjustable cassette



Type	Pack Piece	Weight kg/100 pc.	Item no.
TUK2 GV	1	59.000	7428140

Height-adjustable cord outlet for installation in RKF frame cassettes and in height-adjustable round and square RKFR and RKFN cassettes. Raised height when used, flushfloor when unused. Use in wet-care floors. Tube body cover and handle made of V2A.

## Tube body with cover plate, without handle clamp, for frame cassette and height-adjustable cassette

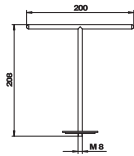


Type	Pack Piece	Weight kg/100 pc.	Item no.
TUK2 V	1	59.000	7428141

Height-adjustable cord outlet for installation in RKF frame cassettes and in height-adjustable round and square RKFR and RKFN cassettes. Raised height when used, flushfloor when unused. Use in wet-care floors. Tube body cover made of V2A.



## Mounting key with threaded sleeve



**Type**  
WZ 1022

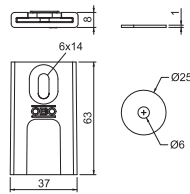
Pack Piece	Weight kg/100 pc.	Item no.
1	21.350	7408626

For lifting out cassettes equipped with a threaded sleeve.

## Sound decoupling cassettes

### Noise protection slipper

TPE



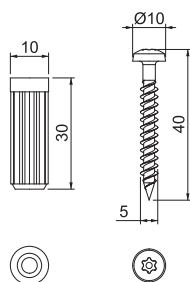
Type	Length mm	Width mm	Height mm	Pack Piece	Weight kg/100 pc.	Item no.
SRS 4	63	37	8	4	0.072	7405798

Noise protection slipper to minimise the transmission of footfall sound by up to 4 dB. Is pushed onto the height-adjustment base of the cassettes. The noise protection slipper increases the minimum installation depth by approx. 3 mm.

Can be supplemented with the noise protection anchor (item no. 7405799 SRD 3) for additional reduction of the footfall noise transmission.

### Noise protection anchor

TPE



Type	Length mm	Width mm	Pack Piece	Weight kg/100 pc.	Item no.
SRD 3	30	10	4	0.028	7405799

Noise protection anchor to minimise the transmission of the footfall noise during mounting with noise protection slippers (item no. 7405798 SRS 4) by an additional 3 dB. The noise protection anchor is used instead of standard or knock-in anchors.

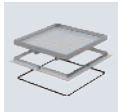






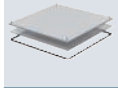


# Heavy duty



Heavy-duty cassettes

74

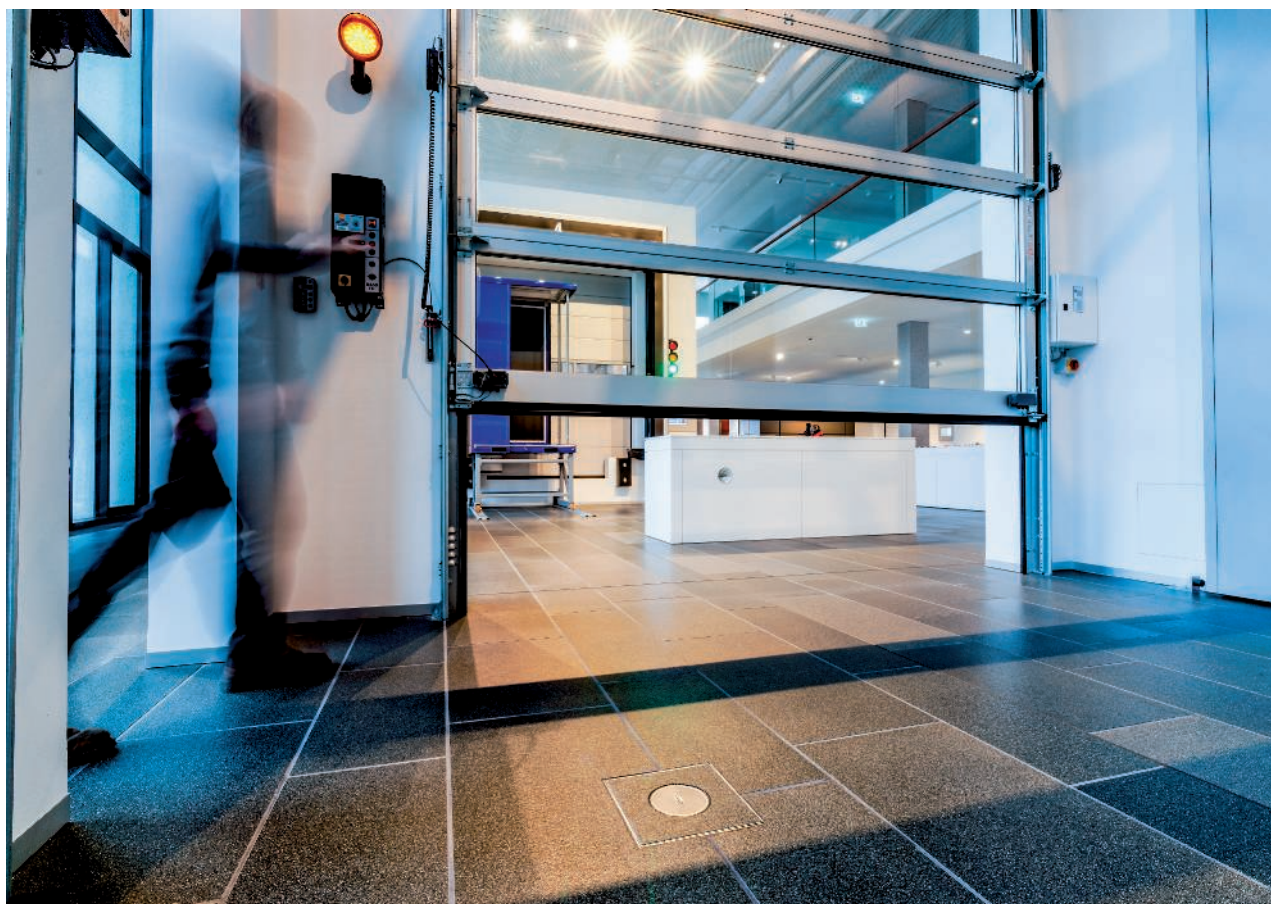


Accessories

86



## System description



Heavy-duty systems reliably supply areas with high load requirements with power, data and multimedia technology via the floor. Car dealerships, museums, airports, stations or hotels are typical areas of application. The construction and the material thickness is specially matched to the high load requirements. With the heavy-duty system, OBO guarantees a particularly robust, safe and long-lasting installation solution. The DIN EN 50085-2-2 standard determines the load specifications for electrical installation systems. According to this norm, cassettes may sag by a maximum of 6 mm under a load (up to max.

15 kN). With hard floor coverings such as stone or tiles, a sag of 6 mm however leads to breakages. This is why OBO has increased its internal requirements on quality and is going even further with the OBO testing standard. Both the maximum sag for heavy-load systems has been reduced from 6 mm to 2 mm and the load exposure has been increased from 15 kN to 20 kN. The tests following the OBO testing standard take place at OBO's BET Test Centre.

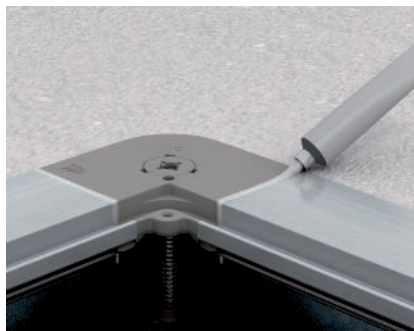


# Installation principle

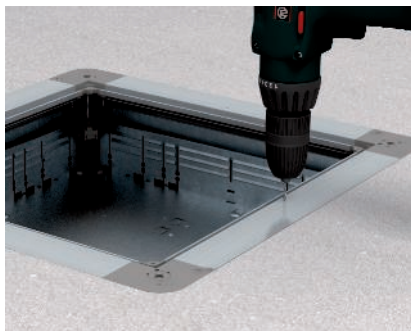
- 1 Heavy-duty support
- 2 Heavy-duty mounting lid
- 3 Heavy-duty cassette for tube body
- 4 Tube body
- 5 Heavy-duty cassette, blank
- 6 Threaded sleeve



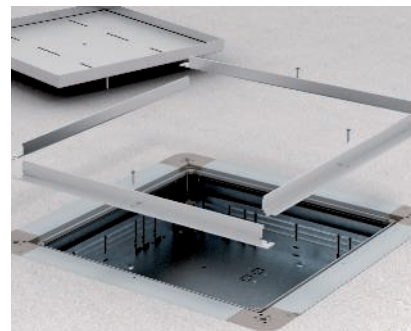
## Mounting aid Heavy-duty cassettes



**Sealing of the underfloor box with silicone**  
Seal the frame of the underfloor box in the corners using silicone (silicone is included in the scope of delivery of the cassette).



**Fasten the cassette frame to the underfloor box**  
Drill the fastening holes ( $\varnothing$  3 mm) for the cassette frame at the marked points.



**Mount the cassette frame to the underfloor box**  
Combine the cassette frame and mount it on the box body (fastening screws contained in the scope of supply).



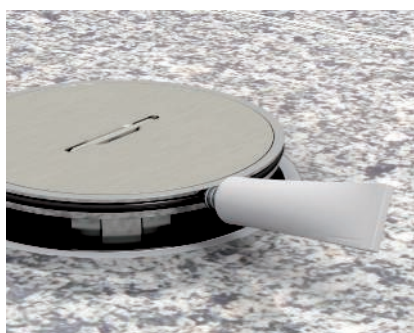
**Mounting of lid heavy-duty support**  
Insert the four heavy-duty lid supports in the corners of the underfloor box and adjust them to the required height. Lock the support screw with a locknut.



**Laying the floor covering on the cassette frames**  
Work the floor covering to the cassette frame. Seal the remaining gap between the floor covering and the cassette frame with suitable materials.



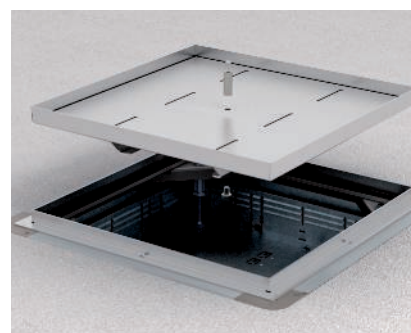
**Insertion of the seal**  
Before sticking in the sealing ring, clean the mounting area.



**Cleaning of the seals**  
To complete the mounting work, clean the interior of the cassette and the seals of the cassette and tube body. Apply Vaseline to the seals (contained in the scope of delivery).



**Device mounting beneath the cassette**  
Lay the mounting set in the underfloor box and fasten it on the floor.



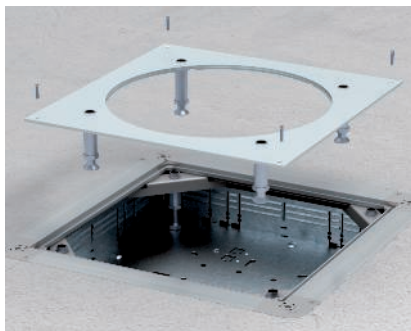
**Mounting of a threaded sleeve**  
This work step takes place before the floor covering is laid in the cassette. Drill a fastening hole for the threaded sleeve ( $\varnothing$  8 mm). Insert the threaded sleeve and fasten it.

## Mounting aid Height-adjustable round heavy-duty cassettes



### Preparation of an underfloor system

Insert the four heavy-duty lid supports in the corners of the underfloor box and adjust them to the required height. Lock the support screw with a locknut.



### Preparation of an underfloor system

Mount the heavy-duty blanking lid on the underfloor box. Adjust the support feet to the right height and secure with a locknut.



### Mounting of cassette frame

Fasten the levelling units of the cassette on the raw floor.



### Adjustment of the cassette height

Adjust the cassette frame to the top edge of the floor covering. Secure the height adjustment of the height-adjustment screws with locknuts.



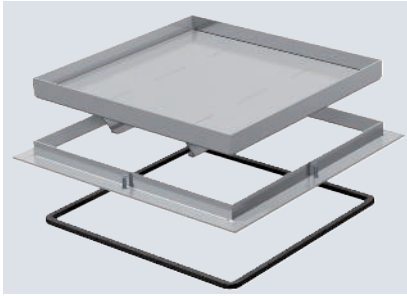
### Laying the floor covering on the cassette frames

Work the floor covering to the cassette frame. Seal the remaining gap between the floor covering and the cassette frame with suitable materials.



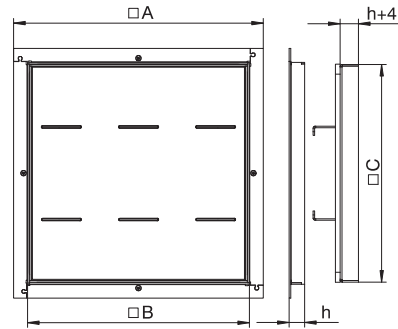
## Heavy-duty frame cassette, blank, RKSL, nominal size 250-3

A2



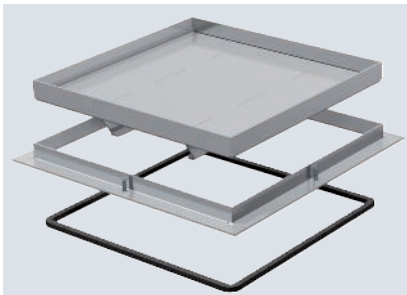
"Blank" heavy-duty frame cassette for the creation of an inspection opening in the UZD250-3 in dry or wet-cleaned floors. Load class 2 to 20 kN. Only suitable for smooth floor coverings for indoor use.

Type	Dim. A mm	Dim. B mm	Dim. C mm	Dim. h mm	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
RK SL2 V2 25	324	288	282	25	19	1	775.000	7405936
RK SL2 V2 30	324	288	282	30	24	1	794.000	7405940



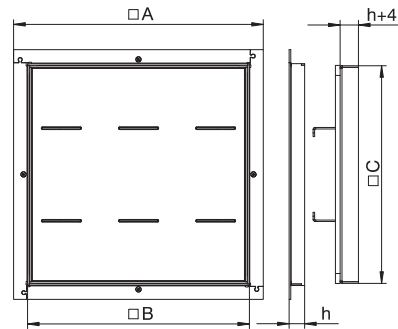
## Heavy-duty frame cassette, blank, RKSL, nominal size 350-3

A2



"Blank" heavy-duty frame cassette for the creation of an inspection opening in the UZD350-3 in dry or wet-cleaned floors. Load class 2 to 20 kN. Only suitable for smooth floor coverings for indoor use.

Type	Dim. A mm	Dim. B mm	Dim. C mm	Dim. h mm	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
RK SL2 V3 40	424	388	382	40	34	1	1,466.000	7405968

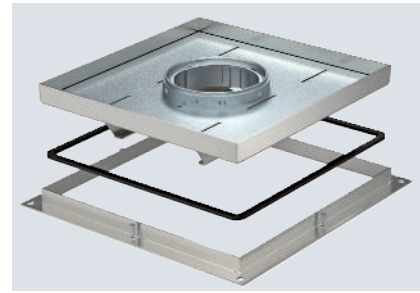
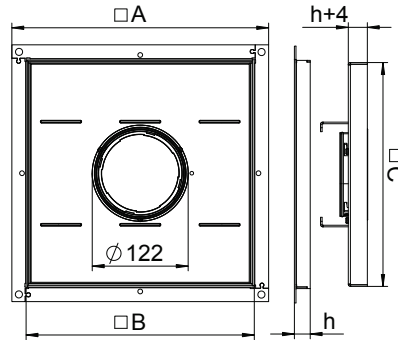


A2



### Heavy-duty frame cassette for tube body, RKFSL, nominal size 250-3

Type	Dim.	Dim.	Dim.	Dim.	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	B mm	C mm	h mm				
RKF2 SL2 V2 25	324	288	282	25	19	1	719.000	7409524
RKF2 SL2 V2 30	324	288	282	30	24	1	738.000	7409526



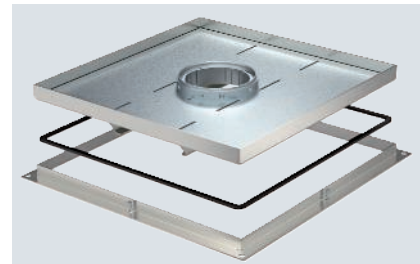
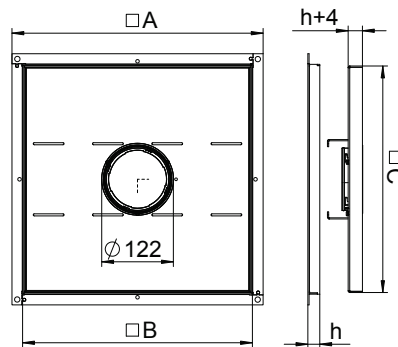
Heavy-duty frame cassette for tube body for the installation of accessories in the UZD250-3 in dry or wet-cleaned floors for indoor use. Load class 2 to 20 kN.

A2



### Heavy-duty frame cassette for tube body, RKFSL, nominal size 350-3

Type	Dim.	Dim.	Dim.	Dim.	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	B mm	C mm	h mm				
RKF2 SL2 V3 30	424	388	382	30	24	1	1,334.000	7409546

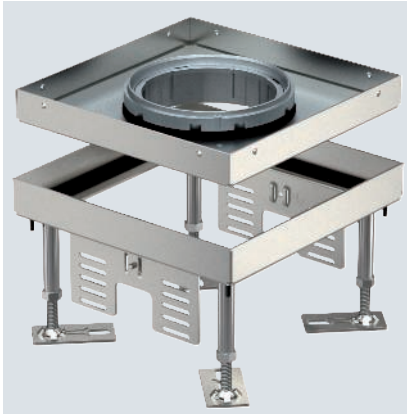


Heavy-duty frame cassette for tube body for the installation of accessories in the UZD350-3 in dry or wet-cleaned floors for indoor use. Load class 2 to 20 kN.

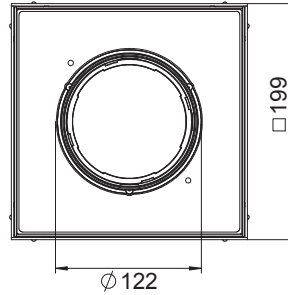
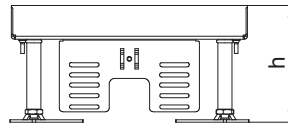


**Height-adjustable heavy-duty cassette for tube body  
RKFNSL, nominal size 4, stainless steel**

A2



Type	Dim. h mm	Floor covering thickness mm	Floor height mm	Material	Pack Piece	Weight kg/100 pc.	Item no.
RKFNSL 4 VMSL1N20	105	20	105-155	A2	1	367.000	7409384



Heavy-duty square cassette for tube body of nominal size 4 for the installation of accessories in trunking systems, raised or cavity floors, in dry or wet-cleaned floors for indoor use. Load class 1 to 10 kN.

Height-adjustable heavy-duty cassette with tube body with a load bearing capacity of 1–10 kN, 2-compartment. 2 APMT2 cover plates can be installed. For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

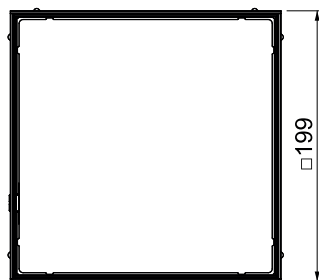
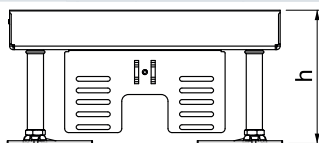


A2



## Height-adjustable heavy-duty cassette, blank, RKNSL, nominal size 4, stainless steel

Type	Dim. h mm	Floor covering thickness mm	Floor height mm	Material	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 4 V SL1 15	105	15	105-150	A2	1	3.700	7408920
RKN3 4 V SL1 20	110	20	110-155	A2	1	3.800	7408922



Rectangular, height-adjustable heavy-duty cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems in dry or wet-cleaned floors with high traffic loads. The cassettes are designed for static loads of up to 10 kN (class SL1). The internal height-adjustment means that the top edge of the cassette can be adjusted exactly to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. For this reason, an under-floor junction and branch box requires an appropriate blanking lid with height-adjustable heavy-duty supports and separate heavy-duty supports in the corner areas. The cassettes are made from stainless steel. All the cassettes contain a 8 mm thick sheet steel plate, for safe absorption of the traffic loads.

Suitable cassettes are available for different floor covering thicknesses of 20 and 25 mm.

Height-adjustable heavy-duty cassette as a blind cassette with a load bearing capacity of 1–10 kN, 2-compartment. 2 APMT2 cover plates can be installed. For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

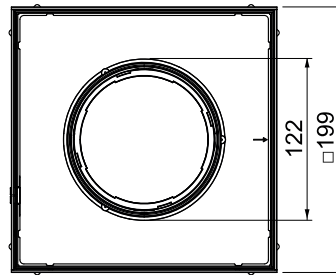
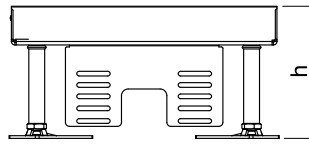


## Height-adjustable heavy-duty cassette for tube body RKFNSL, nominal size 4, stainless steel

A2



Type	Dim. h mm	Floor covering thickness mm	Floor height mm	Material	Pack Piece	Weight kg/100 pc.	Item no.
RKFNSL 4 V SL1 15	105	15	105-150	A2	1	3.340	7408926
RKFNSL 4 V SL1 20	110	20	110-155	A2	1	3.450	7408928



Rectangular, height-adjustable heavy-duty cassettes are suitable for flushfloor device installation in raised and cavity floors and in all kinds of screed-flush installation systems in dry or wet-cleaned floors with high traffic loads. The cassettes are designed for static loads of up to 10 kN (class SL1). The internal height-adjustment means that the top edge of the cassette can be adjusted exactly to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. For this reason, an under-floor junction and branch box requires an appropriate blanking lid with height-adjustable heavy-duty supports and separate heavy-duty supports in the corner areas. The cassettes are made from stainless steel. All the cassettes contain a 8 mm thick sheet steel plate, for safe absorption of the traffic loads.

Suitable cassettes are available for different floor covering thicknesses of 20 and 25 mm.

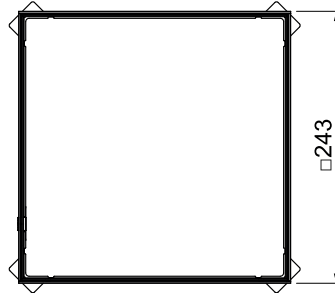
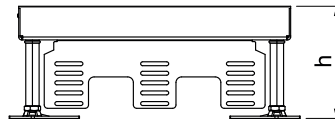
Height-adjustable heavy-duty cassette with tube body with a load bearing capacity of 1–10 kN, 2-compartment. 2 APMT2 cover plates can be installed. For the installation of 2 UT3 universal supports for 4 individual installation devices with support ring/support clamp or 6 Modul 45 devices.

A2



## Height-adjustable heavy-duty cassette, blank, RKNSL, nominal size 9, stainless steel

Type	Dim. h mm	Floor covering thickness mm	Floor height mm	Material	Pack Piece	Weight kg/100 pc.	Item no.
RKN3 9 V SL1 16	105	16	105-150	A2	1	5.300	7408932
RKN3 9 V SL1 21	110	21	110-155	A2	1	5.400	7408934



Rectangular, height-adjustable heavy-duty cassettes are suitable for flush floor device installation in raised and cavity floors and in all kinds of screed-flush installation systems in dry or wet-cleaned floors with high traffic loads. The cassettes are designed for static loads of up to 10 kN (class SL1). The internal height-adjustment means that the top edge of the cassette can be adjusted exactly to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. For this reason, an under-floor junction and branch box requires an appropriate blanking lid with height-adjustable heavy-duty supports and separate heavy-duty supports in the corner areas. The cassettes are made from stainless steel. All the cassettes contain a 8 mm thick sheet steel plate, for safe absorption of the traffic loads.

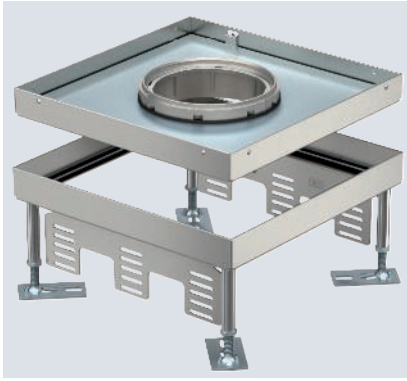
Suitable cassettes are available for different floor covering thicknesses of 20 and 25 mm.

Height-adjustable heavy-duty cassette as a blind cassette with a load bearing capacity of 1–10 kN, 3-compartment. 3 APMT5 cover plates can be installed. For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.

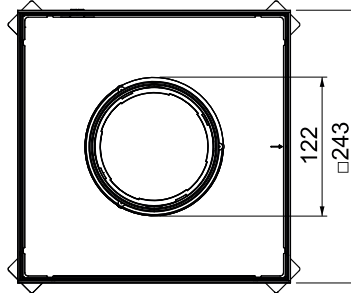
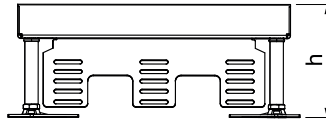


## Height-adjustable heavy-duty cassette for tube body RKFNSL, nominal size 9, stainless steel

A2



Type	Dim. h mm	Floor covering thickness mm	Floor height mm	Material	Pack Piece	Weight kg/100 pc.	Item no.
RKFNSL 9 V SL1 16	105	16	105-150	A2	1	4.900	7408938
RKFNSL 9 V SL1 21	110	21	110-155	A2	1	5.100	7408940



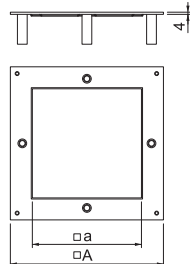
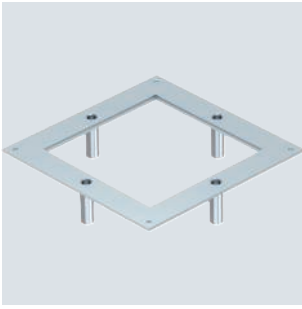
Rectangular, height-adjustable heavy-duty cassettes are suitable for flush floor device installation in raised and cavity floors and in all kinds of screed-flush installation systems in dry or wet-cleaned floors with high traffic loads. The cassettes are designed for static loads of up to 10 kN (class SL1). The internal height-adjustment means that the top edge of the cassette can be adjusted exactly to the top edge of the surrounding floor covering. When mounted in a duct system, the system must have an appropriate installation opening. For this reason, an under-floor junction and branch box requires an appropriate blanking lid with height-adjustable heavy-duty supports and separate heavy-duty supports in the corner areas. The cassettes are made from stainless steel. All the cassettes contain a 8 mm thick sheet steel plate, for safe absorption of the traffic loads.

Suitable cassettes are available for different floor covering thicknesses of 20 and 25 mm.

Height-adjustable heavy-duty cassette with tube body with a load bearing capacity of 1–10 kN, 3-compartment. 3 APMT5 cover plates can be installed. For the installation of 3 UT4 universal supports for 9 individual installation devices with support ring/support clamp or 12 Modul 45 devices.



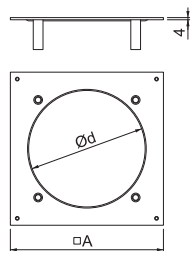
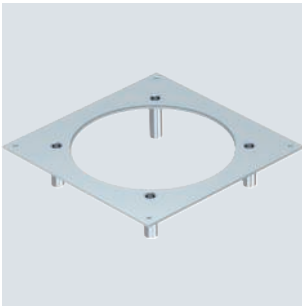
### Heavy-duty mounting lid for 250, nominal size 4



Type	Dim.	Dim.	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	a mm			
<b>DUG 250-3 4SL</b>	282	201	1	146.500	<b>7401404</b>

The heavy-duty mounting lid for the type UZD250 underfloor box is suitable for installation in a square heavy-duty cassette of nominal size 4. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate. The height adjustment units must be ordered separately.

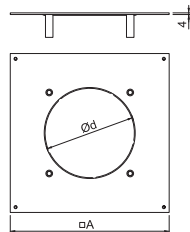
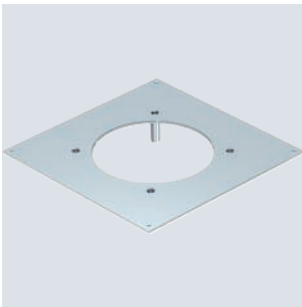
### Heavy-duty mounting lid for 250, nominal size R4



Type	Dim.	Dim.	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	d Ø mm			
<b>DUG 250-3 R4SL</b>	282	215	1	159.300	<b>7401406</b>

The heavy-duty mounting lid for the UZD250 underfloor box is suitable for the installation of a round heavy-duty cassette of nominal size R4. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate. The height adjustment units must be ordered separately.

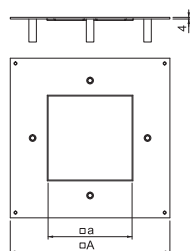
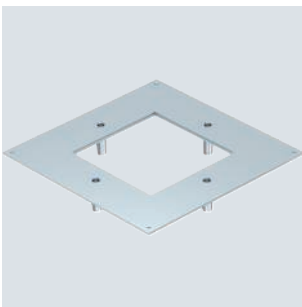
### Heavy-duty mounting lid for 350, nominal size R4



Type	Dim.	Dim.	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	d Ø mm			
<b>DUG 350-3 R4SL</b>	383	215	1	370.400	<b>7401412</b>

The heavy-duty mounting lid for the UZD350 underfloor box is suitable for the installation of a round heavy-duty cassette of nominal size R4. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate. The height adjustment units must be ordered separately.

### Heavy-duty mounting lid for 350, nominal size 4



Type	Dim.	Dim.	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	a mm			
<b>DUG 350-3 4SL</b>	383	201	1	355.600	<b>7401408</b>

The heavy-duty mounting lid for the type UZD350 underfloor box is suitable for installation in a square heavy-duty cassette of nominal size 4. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate. The height adjustment units must be ordered separately.

St FS

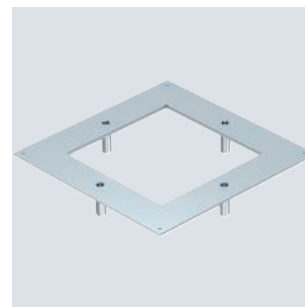
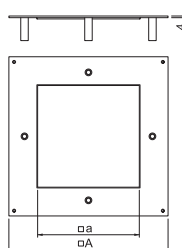


### Heavy-duty mounting lid for 350, nominal size 9

Type	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
	A mm	a mm			
<b>DUG 350-3 9SL</b>	383	244	1	294.400	<b>7401410</b>

The heavy-duty mounting lid for the type UZD350 underfloor box is suitable for installation in a square heavy-duty cassette of nominal size 9. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate.

The height adjustment units must be ordered separately.



St FS

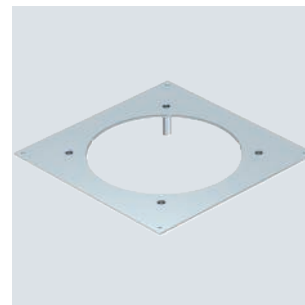
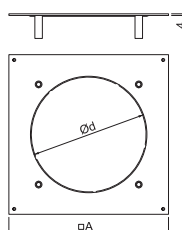


### Heavy-duty mounting lid for 350, nominal size R7

Type	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
	A mm	d Ø mm			
<b>DUG 350-3 R7SL</b>	383	275	1	370.400	<b>7401414</b>

The heavy-duty mounting lid for the UZD350 underfloor box is suitable for the installation of a round heavy-duty cassette of nominal size R7. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate.

The height adjustment units must be ordered separately.



St FS

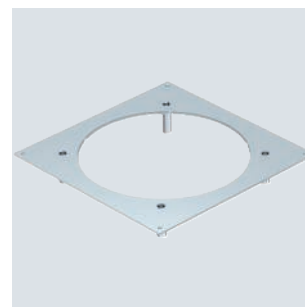
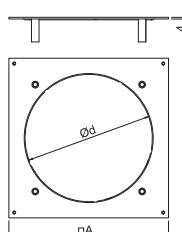


### Heavy-duty mounting lid for 350, nominal size R9

Type	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
	A mm	d Ø mm			
<b>DUG 350-3 R9SL</b>	383	305	1	252.500	<b>7401416</b>

The heavy-duty mounting lid for the UZD350 underfloor box is suitable for the installation of a round heavy-duty cassette of nominal size R9. The installation opening is recessed by 3 mm and can be closed subsequently by a lid blanking plate.

The height adjustment units must be ordered separately.



St FS

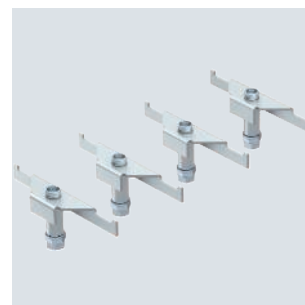
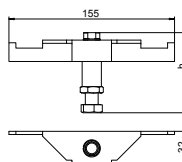


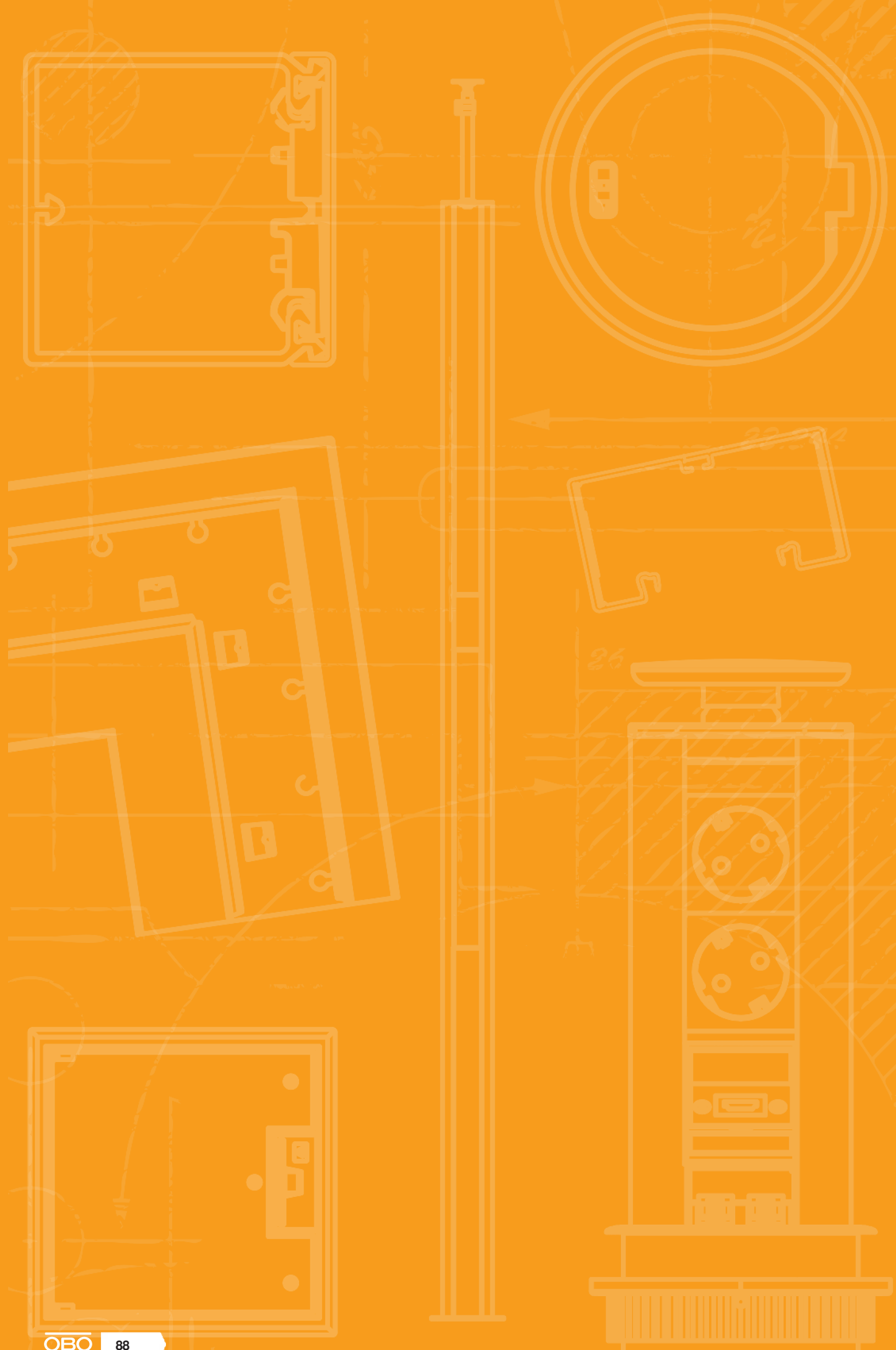
### DSSL heavy-duty support

Type	Screed height mm	Pack PU	Weight kg/100 PUs	Item no.

The heavy-duty supports reinforce the corner areas of the type UZD-3 underfloor box for increased load requirements.

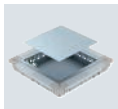
The VPE consists of four heavy-duty supports.





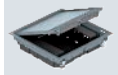


# System 55



Underfloor boxes

90



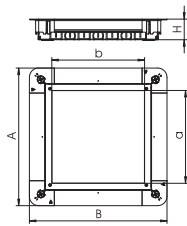
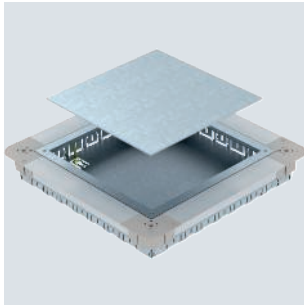
Service outlets

92



## UGD250-3 underfloor box for GES9/55

St FS



Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Dim. H mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
<b>UGD55 250-3 9R</b>	367	367	244	244	55	55-80	1	430.000	<b>7410060</b>

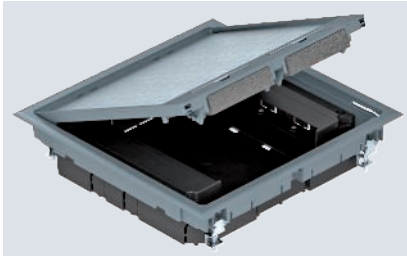
Underfloor accessory box with mounting lid and lid blanking plate with sheet steel side walls. For the installation of a square GES9 55 service outlet in screed heights of 55 mm or more. Height can be infinitely adjusted to the nominal screed height and the screed can be worked flush to the screed scraping edge. With 7 x M20, 3 x M25, 4 x M32 pipe insertion openings on each side. Usable pipe size at a system height of 55 mm: M20.



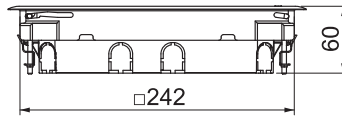


## Service outlet, square, for screed height 55 mm

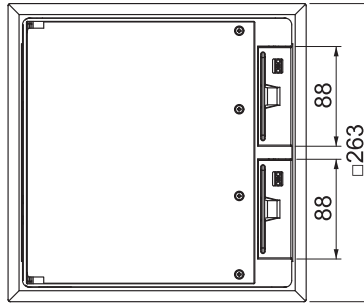
PA



Type	Colour	Floor covering thickness mm	Dim. h mm	Pack Piece	Item no.
GES9 55U V 7011	Iron grey	5	55	1	7405037
GES9 55U V 9011	Graphite black	5	55	1	7405039



GES9 service outlet with a fixed construction height of 55 mm for use in installation trunking systems in dry rooms with dry-care floors in interior areas. With two installation housings for vertical mounting of Modul 45 devices and four strain reliefs. Two installation frames are required to mount Modul 45 devices. The data modules are mounted using a maximum of two optional MPMT45 mounting plates. The service outlet is equipped with universal fastening brackets.

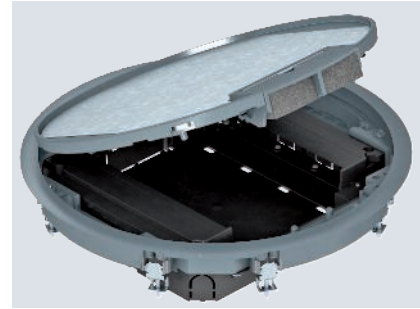
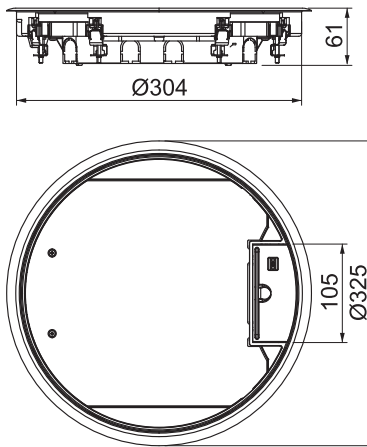


PA



## Service outlet, round, for screed height 55 mm

Type	Colour	Floor covering thickness mm	Pack Piece	Item no.
GESR9 55U V 7011	Iron grey	5	1	7405047
GESR9 55U V 9011	Graphite black	5	1	7405049



GESR9 service outlet with a fixed construction height of 55 mm for indoor use. With two fitted plug housings for vertical mounting of Modul 45 devices and four strain reliefs. Two installation frames are required to mount Modul 45 devices. The data modules are mounted using an optional mounting plate MPMT45. The service outlet is equipped with universal fastening brackets.

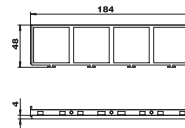
## System 55 installation frame, screed height 55 mm

PC/ABS

### Installation frame for four single Modul 45® devices

Type	Material	Pack Piece	Weight kg/100 pc.	Item no.
MT45V 4	PC/ABS	5	1.200	7408670

For the installation of 4 individual Modul 45 devices for System 55 service outlets with mounting support for vertical installation of Modul 45 devices. The installation frame is designed for use with 0° sockets (normal installation position, contact openings on right and left) and their use in conjunction with straight connectors (not angled connectors).

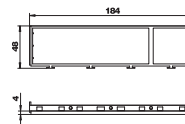


PC/ABS

### Installation frame for combination of 3x and 1x Modul 45® devices

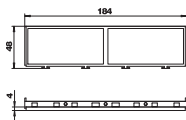
Type	Material	Pack Piece	Weight kg/100 pc.	Item no.
MT45V 3+1	PC/ABS	5	0.900	7408680

For the installation of a combination of triple and single Modul 45 sockets for System 55 service outlets with mounting support for vertical installation of Modul 45 devices. The installation frame is designed for use with 0° sockets for straight connectors (not angled connectors).



## Installation frame for combination of 2x and 2x Modul 45® devices

PC/ABS



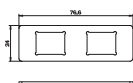
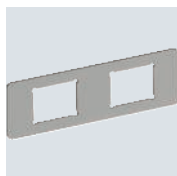
Type	Material	Pack Piece	Weight kg/100 pc.	Item no.
MT45V 2+2	PC/ABS	5	0.900	7408682

For the installation of a combination of double and double Modul 45 sockets for System 55 service outlets with mounting support for vertical installation of Modul 45 devices. The installation frame is designed for use with 0° sockets for straight connectors (not angled connectors).

# System 55 mounting plates, screed height 55 mm

## Mounting plate 2 x data socket type C for System 55

A2



Type	Pack Piece	Weight kg/100 pc.	Item no.
MPMT45 2C	1	1.440	7408705

Mounting plate to accept two connection sockets for data technology of the following types: Brand-Rex: shielded module; EKU: E-Stone module; Dätwyler: KS-T, MS-K and KU-T module; R&M: Snap-In and Keystone module; Rutenbeck: UM and UMflex module; SETEC: MKJ, UKJ and XKJ module; Siemon TERA; Telegärtner: AMJ and UMJ module.  
Dimensions of a mounting opening in mm: 19.30 x 14.80.







# Device installation units above the floor



Telitank T4B

98



Telitank T4L and T8NL

100



## Telitank variants

According to DIN EN 50085-2-2, Telitanks can be used in dry rooms with dry or wet-care floors. All Telitank housings are made of shock-resistant polyamide and thus have a very high load capacity.

Telitank T4L

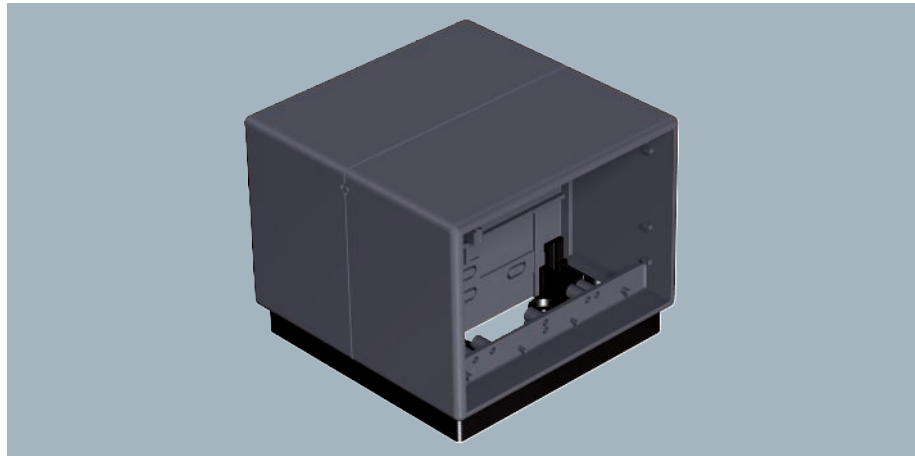
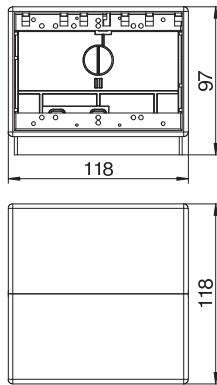
Telitank T8NL

Telitank T4B

Telitank T12L

PA

## Telitank T4B



For combined installation of four individual accessories with support bracket (four accessories of one current type or two accessories each for two current types). The different current types are insulated against each other by a partition. Screw fixing groove for accessories: 60 mm vertical.

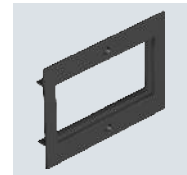
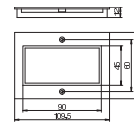
Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
T4B 00C 7011	Iron grey	1	32.200	7408288

PA

## Cover plate, Telitank T4B, Modul 45® installation opening

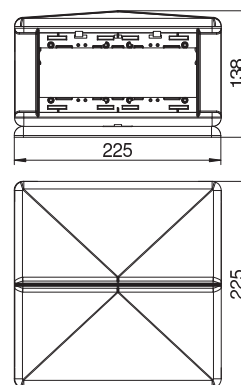
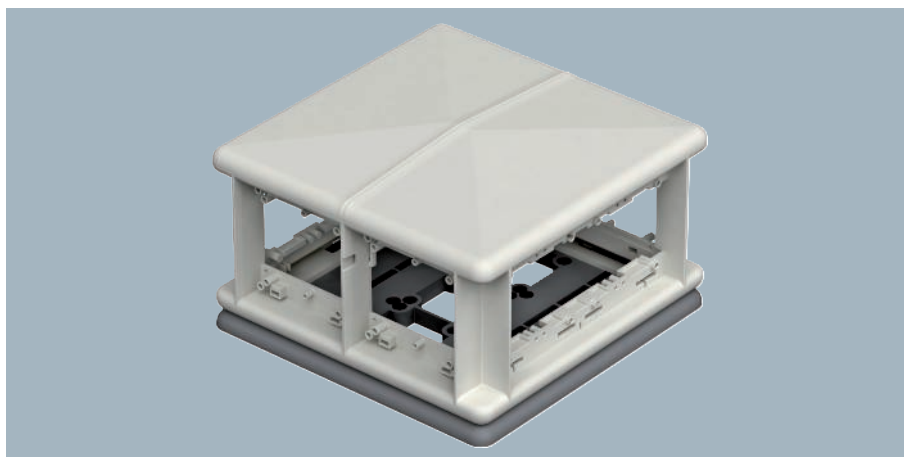
Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
T4B P7 9011	Graphite black	1	1.648	7408276

Cover plate with rectangular opening for a double Modul 45 socket, suitable for T4B lengthwise side (1/1 cover).



Telitank T8NL

PA

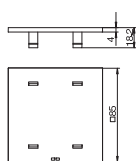
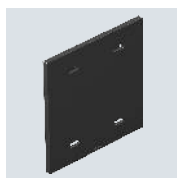


Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
T8NL 00C 9011	Graphite black	1	123.330	7408494

Raised-height installation unit for the installation of eight individual accessories with a support ring or support bracket on four sides. The current types (4 + 4) are separated using a partition. When multiple accessories are used, the connection capacity can be increased. Screw fixing groove for accessories: 60 mm, vertical.

Cover plate, Telitank T4L/T8NL, blank

PA

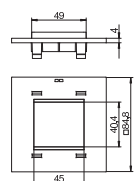
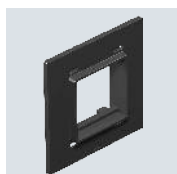


Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
T8NL P01 9011	Graphite black	1	1.716	7408436

Cover plate "blank", suitable for narrow side of T4L and T8NL or for T4L and T8NL lengthwise side (1/2 cover).

Cover plate, Telitank T4L/T8NL, Modul 45® installation opening

PA

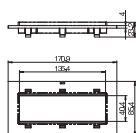
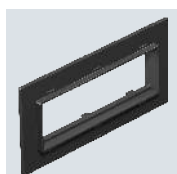


Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
T8NL P45 9011	Graphite black	1	2.058	7408474

Cover plate with rectangular opening for a single Modul 45 socket, suitable for narrow side of T4L and T8NL or for lengthwise side of T4L and T8NL (1/2 cover).

Cover plate, Telitank T4L/T8NL, Modul 45® installation opening

PA



Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
T8NL P105 9011	Graphite black	1	3.760	7408452

Cover plate with rectangular opening for a triple Modul 45 socket, suitable for lengthwise side of T4L and T8NL (1/1 cover).



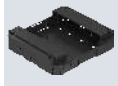


# Universal supports



Universal supports

104

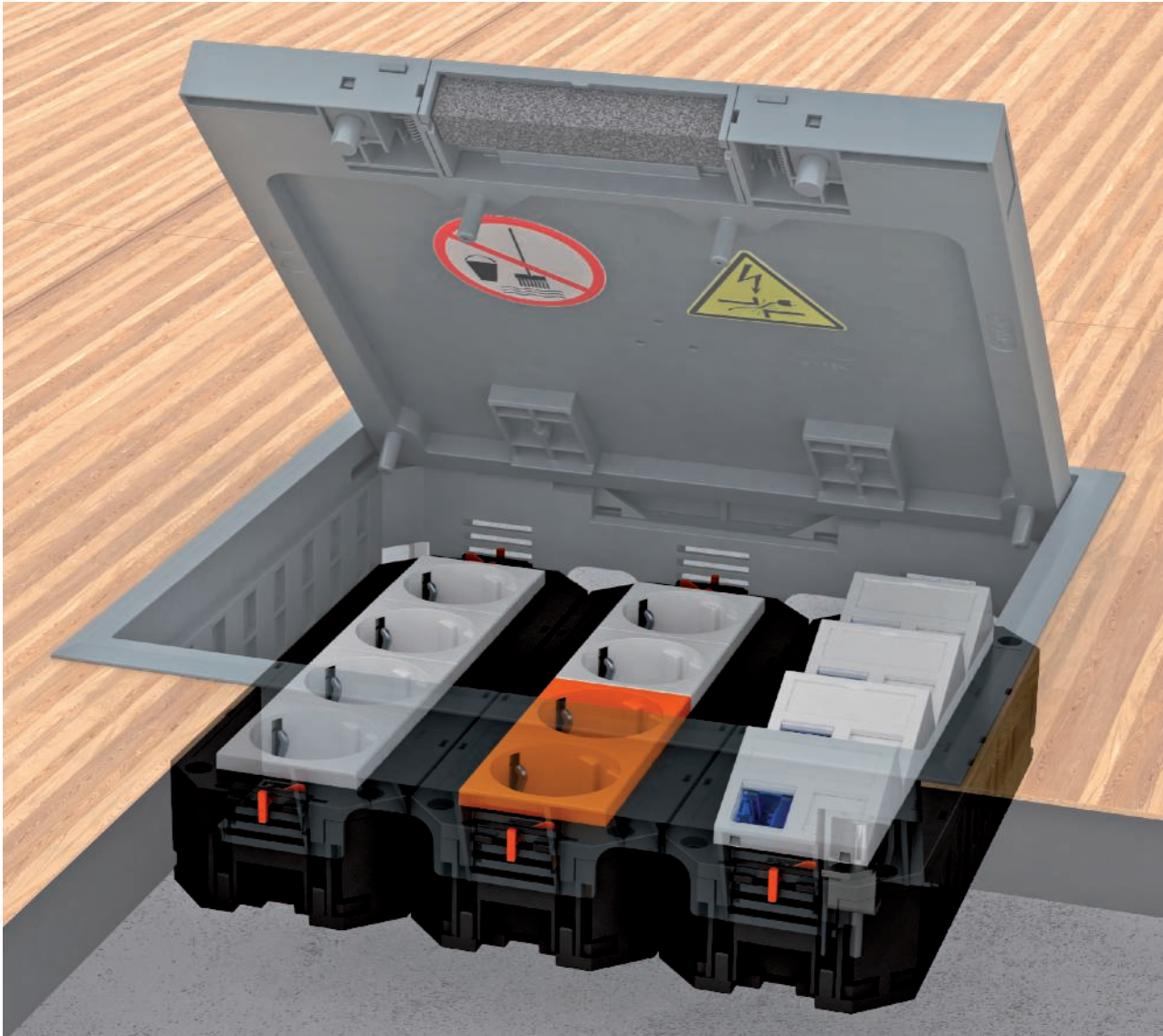


Module support

110



## System description



The universal support is designed for the installation of Modul 45® devices and standard accessories with a 50 mm central plate. It offers countless combination options for sockets, data and multimedia technology.





# Installation principle

The type of cover plate determines which installation devices can be inserted in the universal support and which device distribution is possible. When specifying the device equipment, the different sizes and combination options of the cover plates in the universal support must be taken into account.

## Universal support UT3

1. Combination with two cover plates 1/2 division (2x 82.5 mm)
2. Combination of cover plates with 1/3 and 2/3 division (61 mm + 104 mm)
3. Cover plate with 3/3 division (165 mm)



# Installation principle

## Universal support UT4

1. Combination of cover plates with 1/4 and 3/4 division (61 mm + 147 mm)
2. Combination with two cover plates 2/4 division (2 x 104 mm)
3. Cover plate with 4/4 division (208 mm)



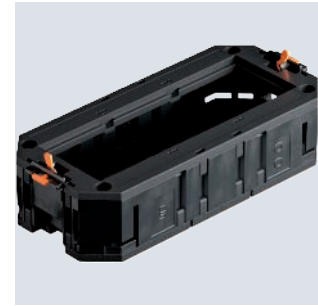
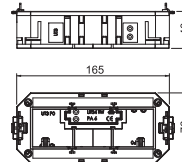
\*Can be shortened

PA

### UT3 universal support, with cover plate for Modul 45® de- vices, system length 165 mm

Type	Length mm	Width mm	Height mm	Pack Piece	Weight kg/100 pc.	Item no.
<b>UT3 45 3</b>	165	76	40	1	10.600	<b>7408723</b>

Universal support with two strain reliefs, mounting bridges, partition and cover plate UT3 P3 for the installation of 3 Modul 45 devices in device installation units of the nominal sizes 2, R4, 4 and R7.



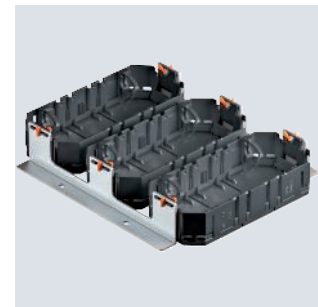
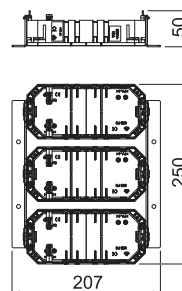
### Universal support mounting set

St FS

#### Mounting set for UZD250

Type	Pack Piece	Weight kg/100 pc.	Item no.
<b>MS3 3UT3</b>	1	49.400	<b>7407651</b>

Mounting set with three universal supports of type UT3 for installation in the underfloor junction and branch box UZD250.  
Cover plates should be ordered separately.

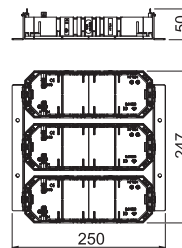


St FS

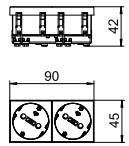

#### Mounting set for UZD350

Type	Pack Piece	Weight kg/100 pc.	Item no.
<b>MS3 3UT4</b>	1	55.000	<b>7407655</b>

Mounting set with three universal supports of type UT4 for installation in the underfloor junction and branch box UZD350.  
Cover plates should be ordered separately.



### 33° socket, protective contact, double

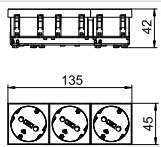




<b>Type</b>	<b>STD-D3S RW2</b>
Colour	Pure white
Pack Piece	1
Weight kg/100 pc.	7.700
<b>Item no.</b>	<b>6120103</b>

PC Polycarbonate

Protective contact socket, double 33°, with increased touch protection, with screwless terminals, 2-pin, 16 A, 250 V~, with connection terminals to IEC 60884-1.

### 33° socket, protective contact, triple

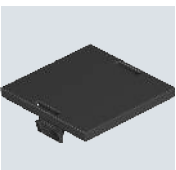
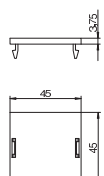
<b>Type</b>	<b>STD-D3S RW3</b>
Colour	Pure white
Pack Piece	1
Weight kg/100 pc.	11.000
<b>Item no.</b>	<b>6120123</b>

PC Polycarbonate

Protective contact socket triple 33°, with increased touch protection, with screwless terminals, 2-pin, 16 A, 250 V~, with connection terminals to IEC 60884-1.

## Accessories for universal support

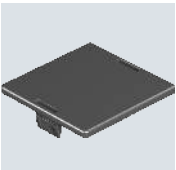
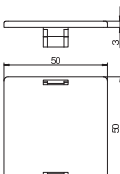
### Blanking cover for Modul 45® installation opening PA

Type	Pack Piece	Weight kg/100 pc.	Item no.
<b>LP 45</b>	10	0.424	<b>7407584</b>

Blanking cover for closing off a square Modul 45 mounting opening in a mounting box cover plate.

### Blanking cover for round installation opening PA

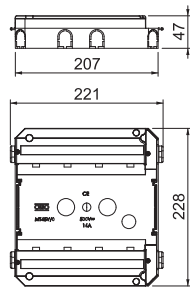
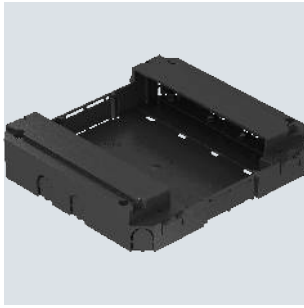
Type	Pack Piece	Weight kg/100 pc.	Item no.
<b>LP R</b>	10	0.497	<b>7407580</b>

Blanking cover for closing off a square mounting opening of Ø 45 mm in a mounting box cover plate.



## Module support for vertical installation Modul 45® devices

PA



Type	Material	Pack Piece	Weight kg/100 pc.	Item no.
MT45V 0	PA	1	29.000	7408698

Module support for the installation of up to eight Modul 45 devices in an empty standard device insert or in an empty height-adjustable cassette of the nominal sizes 9 or R9. The module support is snapped into the locking ladders. MT45V installation frames for the installation of Modul 45 devices and the MPMT45 mounting plates for data sockets can be ordered separately. The holes on the side wall for the pipe entry have a diameter of 21 mm.

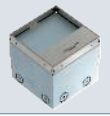








# UDHOME



Floor sockets

114



Floor boxes

116



## System description



The range of UDHOME complete units can position power, data and multimedia technology exactly where they are required. Floor sockets and floor boxes of the UDHOME range are mounted directly on the raw floor and connected with flexible installation pipes – it couldn't be simpler.

A2

**UDHOME2 floor socket, with floor covering recess, double VDE, stainless steel**

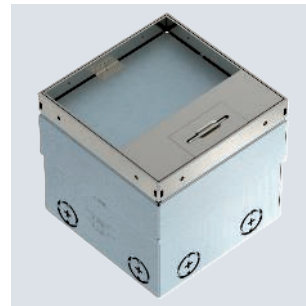
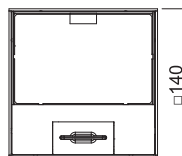
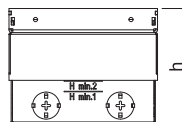
Type	Dim. h mm	Floor height mm	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
UDHOME2 GV15V	110	110-135	15	1	230.000	7368324

Square floor socket for use in dry-care cavity and screed floors in indoor areas. Installation housing with pre-marked insertion openings for pipes (M20/M25). Cover adjustable to top edge of floor covering using four height-adjustment supports. The minimum installation depth is 110 mm, the height-adjustment range is +25 mm.

Frame and cover made of stainless steel and visible in the floor covering. The load-bearing capacity of 15 kN is only guaranteed when in an unused state.

The scope of delivery contains a double protective contact socket.

Up to two modular data sockets can be installed in the optional mounting support.



A2

**UDHOME2 floor socket, without floor covering recess, double VDE, stainless steel**

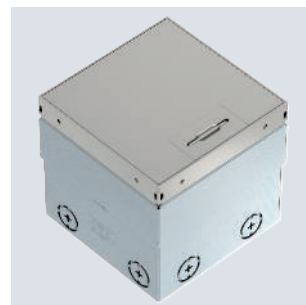
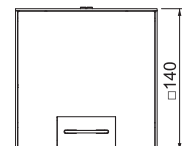
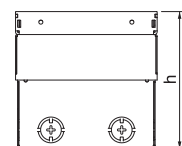
Type	Dim. h mm	Floor height mm	Pack Piece	Weight kg/100 pc.	Item no.
UDHOME2 GVV	100	100-135	1	220.000	7368326

Square floor socket for use in dry-care cavity and screed floors in indoor areas. Installation housing with pre-marked insertion openings for pipes (M20/M25). Cover adjustable to top edge of floor covering using four height-adjustment supports. The minimum installation depth is 100 mm, the height-adjustment range is +35 mm.

Frame and cover made of stainless steel and visible in the floor covering. The load-bearing capacity of 15 kN is only guaranteed when in an unused state.

The scope of delivery contains a double protective contact socket.

Up to two modular data sockets can be installed in the optional mounting support.



## Accessories for UDHOME2 floor sockets for dry cleaning

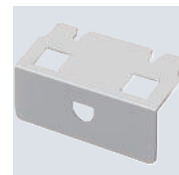
A2

**UDHOME2 data technology support type C**

Type	Pack Piece	Weight kg/100 pc.	Item no.
DT UH2 C	1	9.300	7368474

Mounting support to accommodate two data connection modules of type C: Brand-Rex: shielded; EKU: E-Stone; Dätwyler: KS-T, MS-K and KU-T; R&M: Snap-In and Keystone; Rutenbeck: UM and UMflex; SETEC: MKJ, UKJ and XKJ; Siemon TERA; Telegärtner: AMJ and UMJ.

Dimensions of a mounting opening in mm: 19.30 x 14.80.



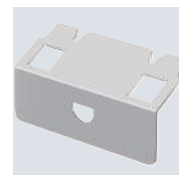
A2

**UDHOME2 data technology support type LE**

Type	Pack Piece	Weight kg/100 pc.	Item no.
DT UH2 LE	1	9.300	7368478

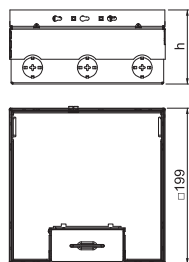
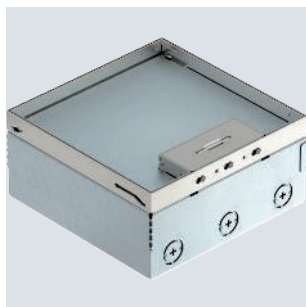
Mounting support to accommodate two data connection modules of type LE: LexCom 125 and 250.

Dimensions of a mounting opening in mm: 18.30 x 17.20.



**UDHOME4 floor box, with universal support UT3 45 3, triple VDE, stainless steel**

A2  
 



Type	Dim. h mm	Floor height mm	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
UDHOME4 2V UT V	95	95-125	15	1	413.000	7427216

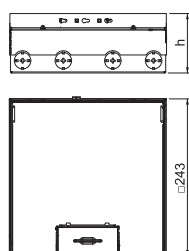
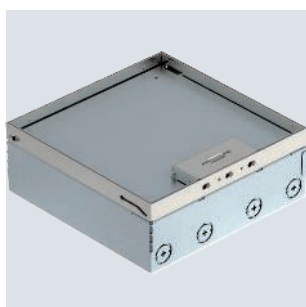
Square floor box for use in dry-cleaned cavity and screed floors for indoor use. Installation housing with pre-marked insertion openings for pipelines (M25). Cover adjustable to the top edge of the floor covering using four height-adjustment supports. The minimum installation depth is 95 mm, the height-adjustment range + 30 mm.

Surfaces made of stainless steel and visible in the floor covering.

The scope of delivery contains two universal supports UT3 45 3 and a triple protective contact socket. Up to three additional M45 devices can be installed.

**Floor box UDHOME9, two double VDE, stainless steel**

A2  
 



Type	Dim. h mm	Floor height mm	Floor covering thickness mm	Pack Piece	Weight kg/100 pc.	Item no.
UDHOME9 2V UT45V	95	95-125	15	1	520.000	7427308

Square floor box for use in dry-cleaned cavity and screed floors for indoor use. Installation housing with pre-marked insertion openings for pipelines (M25). Cover adjustable to the top edge of the floor covering using four height-adjustment supports. The minimum installation depth is 95 mm, the height-adjustment range + 30 mm.

Surfaces visible in the floor covering made of stainless steel.

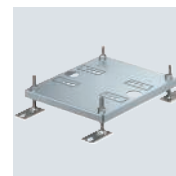
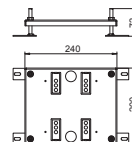
The scope of supply contains three universal supports UT4 45 4 for direct mounting of Modul 45 devices. Of these, one is equipped with two double protective contact sockets in pure white.

St FS



### Height extension for UDHOME4 floor box

Type	Height adjustment range mm	Pack Piece	Weight kg/100 pc.	Item no.
HE60 UDHOME4	10-60	1	109.800	7427440



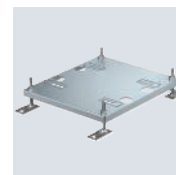
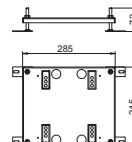
Height-adjustable expansion for UDHOME4 floor box.

St FS



### Height extension for UDHOME9 floor box

Type	Height adjustment range mm	Pack Piece	Weight kg/100 pc.	Item no.
HE60 UDHOME9	10-60	1	145.700	7427444



Height-adjustable expansion for UDHOME9 floor box.





# GESR2



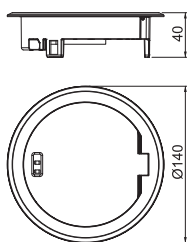
Screed box and installation sockets for GES R2

120



## GES R2 service outlet with locking slider

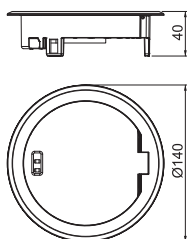
### Service outlet with hinged cover and locking slider, GES R2, nickel



Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2 Ni	1	58.500	7408850

Service outlet with hinged cover and locking slider for GES R2 floor socket for direct installation in the MT R2 installation socket.  
When closed, the floor socket can be wet-cleaned.

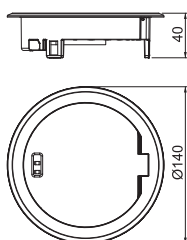
### Service outlet with hinged cover and locking slider, GES R2, old brass



Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2 CuZn	1	58.500	7408852

Service outlet with hinged cover and locking slider for GES R2 floor socket for direct installation in the MT R2 installation socket.  
When closed, the floor socket can be wet-cleaned.

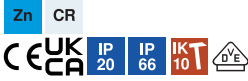
### Service outlet with hinged cover and locking slider, GES R2, old copper



Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2 Cu	1	58.500	7408854

Service outlet with hinged cover and locking slider for GES R2 floor socket for direct installation in the MT R2 installation socket.  
When closed, the floor socket can be wet-cleaned.

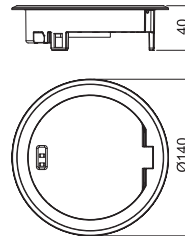




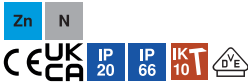
## Service outlet with hinged cover and locking slider, GES R2, chrome

Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2 Cr	1	58.500	7408856

Service outlet with hinged cover and locking slider for GES R2 floor socket for direct installation in the MT R2 installation socket.  
When closed, the floor socket can be wet-cleaned.



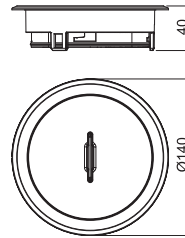
# GES R2 floor socket with handle clamp



## Service outlet with tube body with handle clamp, GES R2, nickel

Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2T Ni	1	114.100	7408860

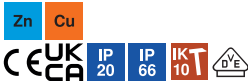
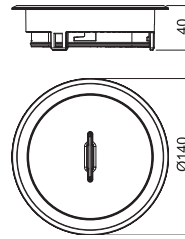
Service outlet with tube body and handle clamp for GES R2 floor socket for direct installation in the MT R2 installation socket for indoor use.  
The tube body fulfils the requirements of EN 50085-2-2 for wet-cleaned floors, also when in use.



## Service outlet with tube body with handle clamp, GES R2, old brass

Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2T CuZn	1	114.100	7408862

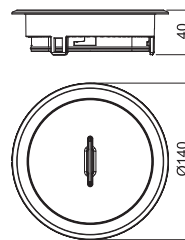
Service outlet with tube body and handle clamp for GES R2 floor socket for direct installation in the MT R2 installation socket for indoor use.  
The tube body fulfils the requirements of EN 50085-2-2 for wet-cleaned floors, also when in use.



## Service outlet with tube body with handle clamp, GES R2, old copper

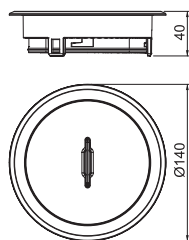
Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2T Cu	1	114.100	7408864

Service outlet with tube body and handle clamp for GES R2 floor socket for direct installation in the MT R2 installation socket for indoor use.  
The tube body fulfils the requirements of EN 50085-2-2 for wet-cleaned floors, also when in use.



## GES R2 floor socket with handle clamp

### Service outlet with tube body with handle clamp, GES R2, chrome

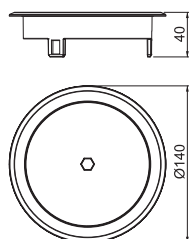
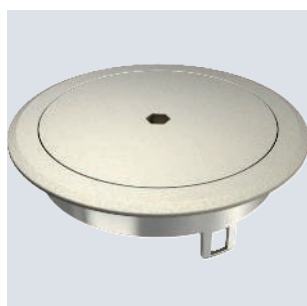


Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2T Cr	1	114.100	7408866

Service outlet with tube body and handle clamp for GES R2 floor socket for direct installation in the MT R2 installation socket for indoor use.  
The tube body fulfils the requirements of EN 50085-2-2 for wet-cleaned floors, also when in use.

## GES R2 floor socket with Allen slot

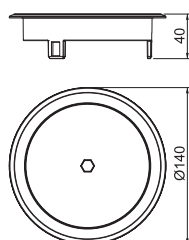
### Service outlet with blanking cover and Allen slot, GES R2, nickel



Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2B Ni	1	58.200	7408870

Service outlet with blanking cover and Allen slot for GES R2 floor socket for direct installation in the MT R2 installation socket in indoor areas.  
The cover version can be used as a cable outlet.  
When closed, the floor socket can be wet-cleaned.

### Service outlet with blanking cover and Allen slot, GES R2, old brass



Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2B CuZn	1	58.200	7408872

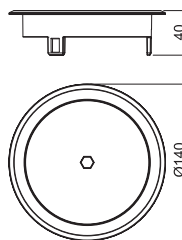
Service outlet with blanking cover and Allen slot for GES R2 floor socket for direct installation in the MT R2 installation socket in indoor areas.  
The cover version can be used as a cable outlet.  
When closed, the floor socket can be wet-cleaned.



**Service outlet with blanking cover and Allen slot, GES R2, old copper**

Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2B Cu	1	58.200	7408874

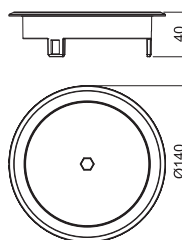
Service outlet with blanking cover and Allen slot for GES R2 floor socket for direct installation in the MT R2 installation socket in indoor areas.  
The cover version can be used as a cable outlet.  
When closed, the floor socket can be wet-cleaned.



**Service outlet with blanking cover and Allen slot, GES R2, chrome**

Type	Pack Piece	Weight kg/100 pc.	Item no.
GES R2B Cr	1	58.200	7408876

Service outlet with blanking cover and Allen slot for GES R2 floor socket for direct installation in the MT R2 installation socket in indoor areas.  
The cover version can be used as a cable outlet.  
When closed, the floor socket can be wet-cleaned.



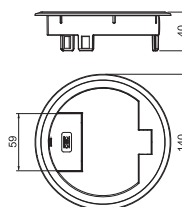
GES R2 floor socket with cord outlet



**Service outlet with hinged cover and cord outlet, GES R2**

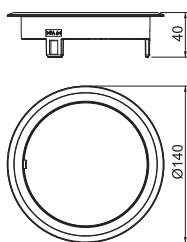
Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
GES R2 9011	Graphite black	1	8.800	7405084
GES R2 7011	Iron grey	1	8.800	7405082

Service outlet with hinged cover and cord outlet for GES R2 floor socket for direct installation in the MT R2 installation socket.  
For use in dry-cleaned floors for indoor use.



## GES R2 floor socket without floor covering recess

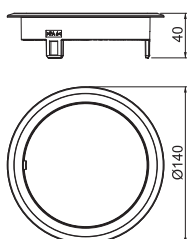
### Service outlet with blanking cover and opening contour, GES R2



Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
GES R2B 7011	Iron grey	1	8.150	7405086

Service outlet with blanking cover and cord outlet for GES R2 floor socket for direct installation in the MT R2 installation socket.  
For use in dry-cleaned floors for indoor use.

### Service outlet with blanking cover and opening contour, GES R2

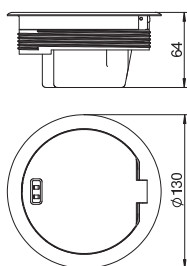


Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
GES R2B 9011	Graphite black	1	8.150	7405088

Service outlet with blanking cover and cord outlet for GES R2 floor socket for direct installation in the MT R2 installation socket.  
For use in dry-cleaned floors for indoor use.

## Floor socket with floor covering protection frame

### GESRM2 with protective frame - USB type



Type	Surface	Pack Piece	Weight kg/100 pc.	Item no.
GESRMS2	Brass-coated	1	75.200	7405663

Round installation unit with floor covering protection frame for direct installation in the connection socket UDL2-120 for indoor use. When closed, the installation unit can be wet-cleaned. The minimum installation depth is 70 mm.  
Cover plate and socket of the Modul 45 series should be ordered separately.

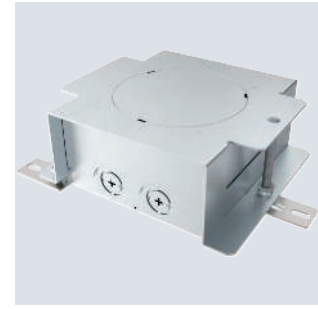
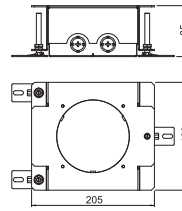
St FS



## Screed box for GES R2

Type	Screed height mm	Installation diameter mm	Pack Piece	Weight kg/100 pc.	Item no.
UD GES R2	85-130	122	1	218.000	7428526

Height-adjustable screed box for the installation of the installation socket of the GES R2 floor socket.  
With 2x2 insertion openings for installation pipes (M20/M25).



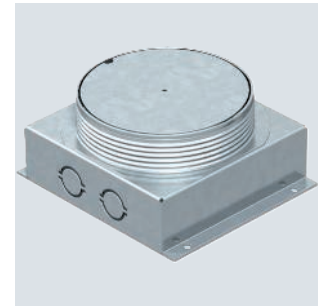
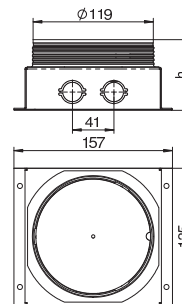
St FS



## Underfloor outlet box for GESRM2 mounting

Type	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UDL2-120 70	70-85	1	77.200	7408558

Underfloor outlet box for the installation of a GESRM2 service outlet. With 2 x 2 openings for M20 or Pg16 pipe installation.



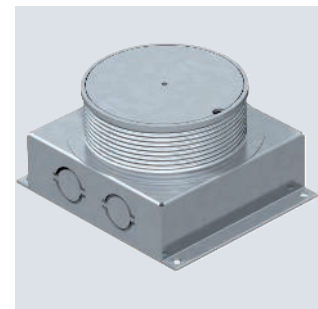
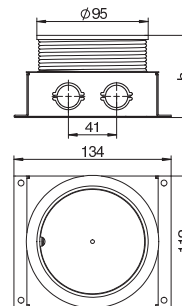
St FS



## Underfloor outlet box for US80 components

Type	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UDL2-80 70	70-85	1	60.630	7408566

Underfloor outlet box for the installation of an accessory or the setup of a Telitank. For conduit installation 2x2 M20 or Pg16.



## Installation sockets

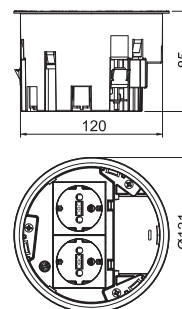
PA



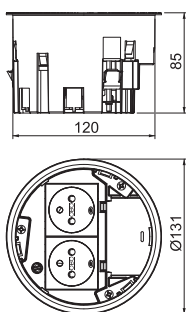
## Installation socket, double, VDE

Type	Installation depth mm	Installation diameter mm	Pack Piece	Weight kg/100 pc.	Item no.
MT R2 VDE	85	122	1	26.800	7408832

Installation socket for GES R2 floor socket for mounting in UD GES R2 screed box and in raised floor plates with an installation opening diameter of 122 mm.  
The scope of delivery contains a double protective contact socket (VDE). Up to two modular data sockets (Keystones) can be installed with optional mounting plate.



## Installation socket, double, NF

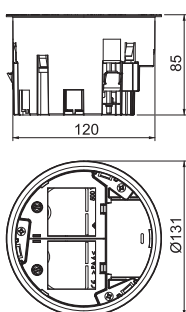


Type	Installation depth mm	Installation diameter	Pack Piece	Weight kg/100 pc.	Item no.
MT R2 NF	85	122	1	21.000	7408834

Installation socket for GES R2 floor socket for mounting in UD GES R2 screed box and in raised floor plates with an installation opening diameter of 122 mm.

The scope of delivery contains a double socket (NF). Up to two modular data sockets (Keystones) can be installed with optional mounting plate.

## Installation socket, 1+1 empty

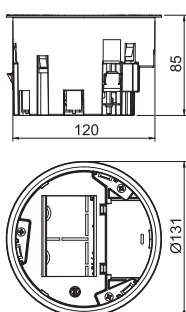


Type	Installation depth mm	Installation diameter	Pack Piece	Weight kg/100 pc.	Item no.
MT R2 1-1	85	122	1	19.800	7408838

Installation socket for GES R2 floor socket for mounting in UD GES R2 screed box and in raised floor plates with an installation opening diameter of 122 mm.

The scope of supply contains a partition and two cover plates for the installation of individual Modul 45 devices. Up to two modular data sockets (Keystones) can be installed with optional mounting plate.

## Installation socket, 1.5 empty



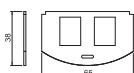
Type	Installation depth mm	Installation diameter	Pack Piece	Weight kg/100 pc.	Item no.
MT R2 1.5	85	122	1	19.500	7408836

Installation socket for GES R2 floor socket for mounting in UD GES R2 screed socket and in raised floor plates with an installation opening diameter of 122 mm.

Included in the delivery is a cover plate for the installation of 1.5x Modul 45 sockets (BS, SA). Up to two modular data sockets (Keystones) can be installed with optional mounting plate.

## Mounting plates

### Mounting plate for data technology, type A



Type	Pack Piece	Weight kg/100 pc.	Item no.
MP R2 2A	1	1.960	7408802

Mounting plate to accept two data connection modules of the following types: AMP TYCO: Standard 110Connect, SL Series 110Connect and Toolless, AMP-Twist; Brand-Rex: unshielded; GG45; TKM RJ MOD; Nexans: LAN-mark with Adapter-Clip; Siemon CAT6; 3M K6 and K10.  
Dimensions of a mounting opening in mm: 20.10 x 14.80.

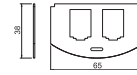
A2



### Mounting plate for data technology, type B

Type	Pack Piece	Weight kg/100 pc.	Item no.
MP R2 2B	1	1.940	7408804

Mounting plate to accept two connection modules for data connection modules of the following types BTR: E-DAT; Dätwyler: MS and MS-N; Kerpen: VarioKeystone.  
Dimensions of a mounting opening in mm: 19.35/21.55 x 14.85.



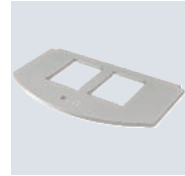
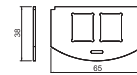
A2



### Mounting plate for data technology, type C

Type	Pack Piece	Weight kg/100 pc.	Item no.
MP R2 2C	1	1.950	7408806

Mounting plate to accept two data connection modules of the following types: Brand-Rex: shielded; EKV: E-Stone; Dätwyler: KS-T, MS-K and KU-T module; R&M: Snap-In and Keystone; Rutenbeck: UM and UMflex; SETEC: MKJ, UKJ and XKJ; Siemon TERA; Telegärtner: AMJ and UMJ.  
Dimensions of a mounting opening in mm: 19.30 x 14.80.



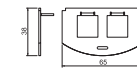
A2



### Mounting plate for data technology, type F

Type	Pack Piece	Weight kg/100 pc.	Item no.
MP R2 2F	1	2.190	7408808

Mounting plate to accept two data connection modules, type Avaya/Systemax: M series.  
Dimensions of a mounting opening in mm: 17.40 x 16.60.



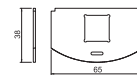
A2



### Mounting plate for data technology, type LE

Type	Pack Piece	Weight kg/100 pc.	Item no.
MP R2 LE	1	2.250	7408810

Mounting support to accept two data connection modules of the following types: LexCom 125 and 250.  
Dimensions of a mounting opening in mm: 18.30 x 17.20.



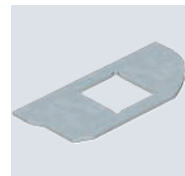
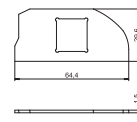
A2



### Mounting plate for the installation of data sockets in GESRM2, 1 x type LE

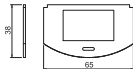
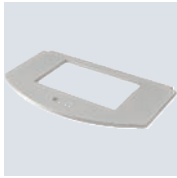
Type	Pack Piece	Weight kg/100 pc.	Item no.
MPRM2 1LE	1	1.600	7407628

Mounting plate to accept a data connection module of the following type: LexCom 125 and 250 Kat 5e (shielded).  
Dimensions of a mounting opening in mm: 19.30 x 14.80.



## Mounting plate for data technology, type LJUC

A2

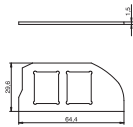


Type	Pack	Weight	Item no.
	Piece	kg/100 pc.	
<b>MP 2R LJUC</b>	1	1.700	<b>7408812</b>

Mounting plate for receiving a data connection module type LJU6C.  
Dimensions of a mounting opening in mm: 36.2 x 22.0.

## Mounting plate for the installation of data sockets in GESRM2, 2 x type C

A2

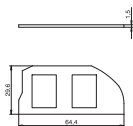


Type	Pack	Weight	Item no.
	Piece	kg/100 pc.	
<b>MPRM2 2C</b>	1	1.300	<b>7407624</b>

Mounting plate to accept two data connection modules of the following types: Brand-Rex: shielded; EKU: E-Stone; Dätwyler: KS-T, MS-K and KU-T module; R&M: Snap-In and Keystone; Rutenbeck: UM and UMflex; SETEC: MKJ, UKJ and XKJ; Siemon TERA; Telegärtner: AMJ and UMJ.  
Dimensions of a mounting opening in mm: 19.30 x 14.80.

## Mounting plate for the installation of data sockets in GESRM2, 2 x type A

A2

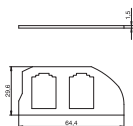


Type	Pack	Weight	Item no.
	Piece	kg/100 pc.	
<b>MPRM2 2A</b>	1	1.300	<b>7407620</b>

Mounting plate to accept two data connection modules of the following types: AMP TYCO: Standard 110Connect, SL series 110Connect and Toolless, AMP-Twist; Brand-Rex: unshielded; GG45; TKM RJ MOD; Nexans: LANmark with Adapter-Clip; Siemon CAT6; 3M K6 and K10.  
Dimensions of a mounting opening in mm: 20.10 x 14.80.

## Mounting plate for the installation of data sockets in GESRM2, 2 x type B

A2



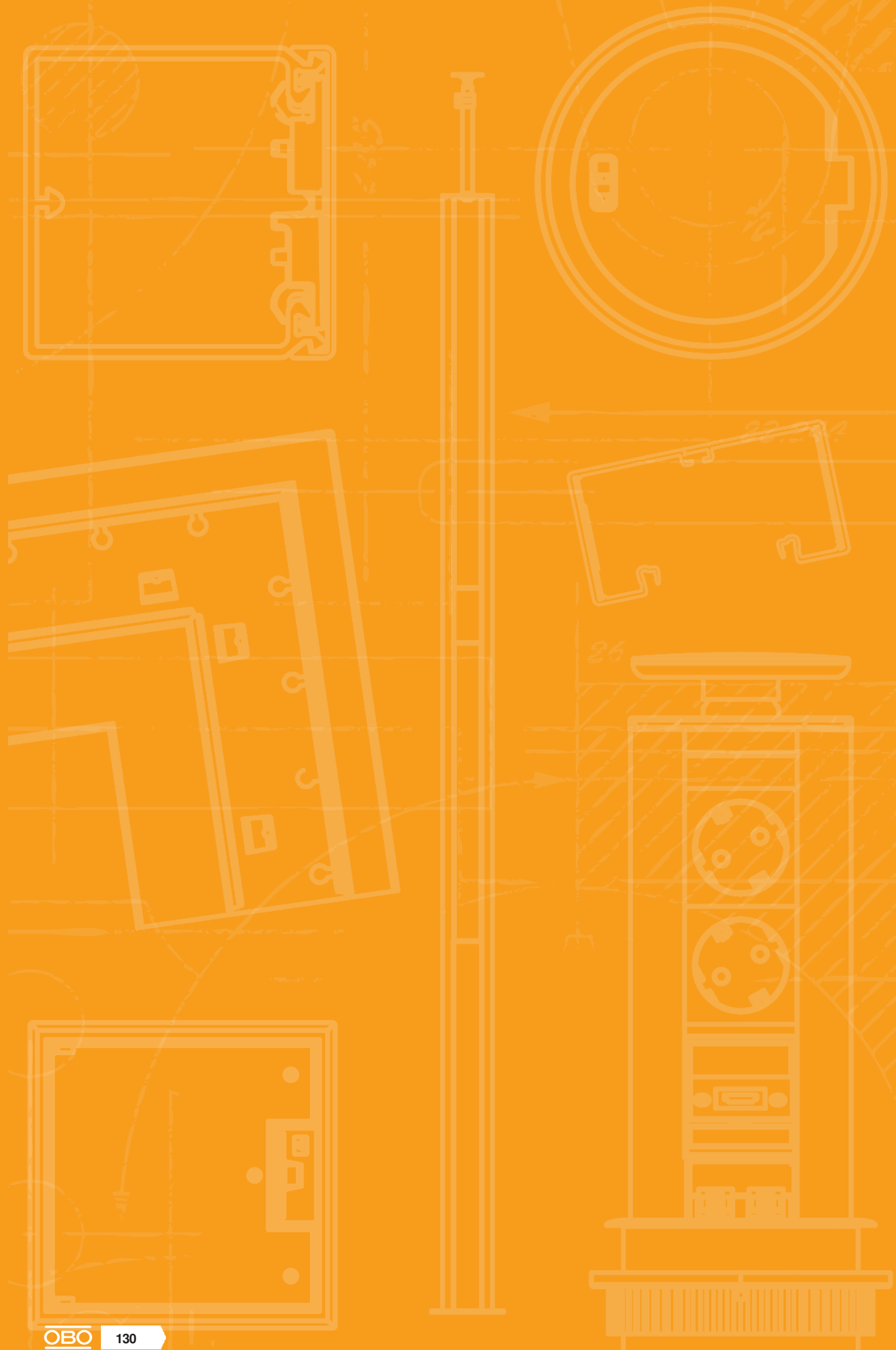
Type	Pack	Weight	Item no.
	Piece	kg/100 pc.	
<b>MPRM2 2B</b>	1	1.300	<b>7407622</b>

Mounting plate to accept two connection modules for data connection modules of the following types BTR: E-DAT; Dätwyler: MS and MS-N; Kerpen: VarioKeystone.  
Dimensions of a mounting opening in mm: 19.35/21.55 x 14.85.

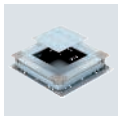
GESR2







# Underfloor boxes



Underfloor boxes, screed covered EÜK

132

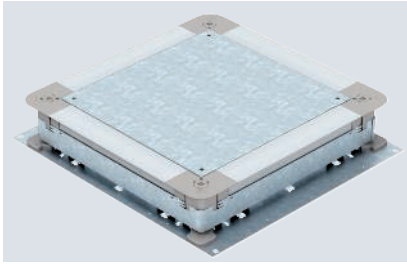


Accessories, underfloor boxes, screed covered EÜK

140

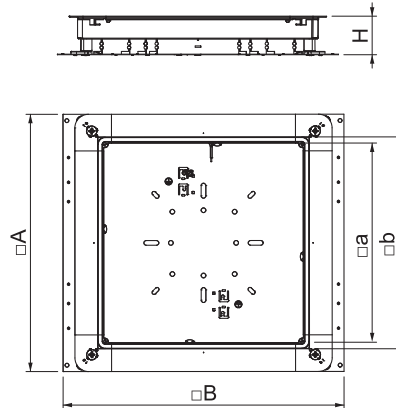


## UZD250-3 for screed height 70–125 mm

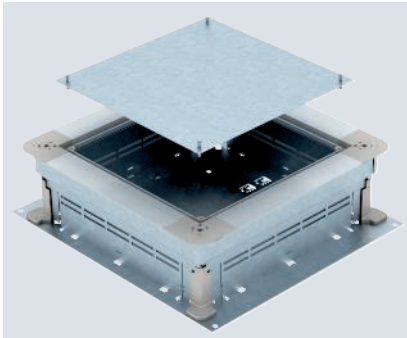


Underfloor junction and branch box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Duct height mm	Duct width mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 250-3	367	410	262	283	28-48	190-250	70-125	1	420.000	7410030

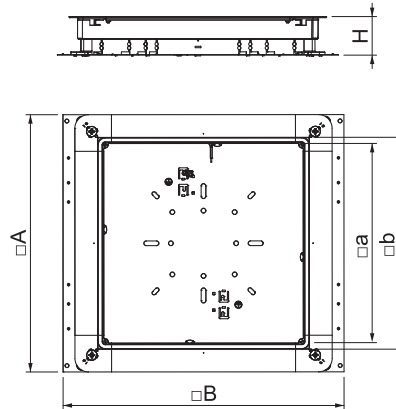


## UZD250-3 for screed height 115–170 mm



Underfloor junction and branch box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Duct height mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 115170 250-3	367	410	262	283	28-48	115-170	1	480.000	7410043

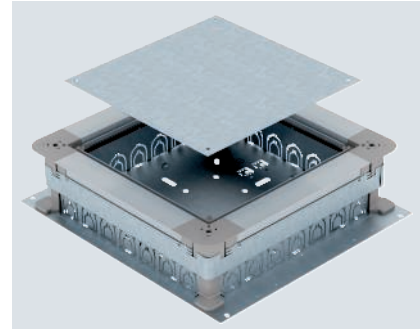
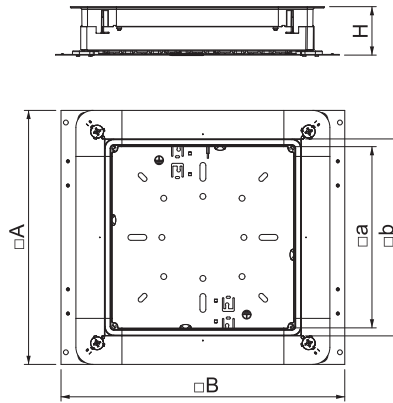


St FS



### UZD250-3 with pipe entry for screed height 70–125 mm

Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 250-3 R	367	410	262	283	70-125	1	436.000	7410031



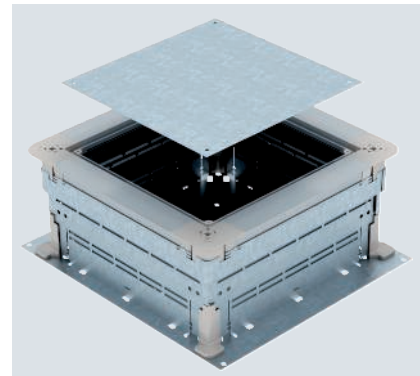
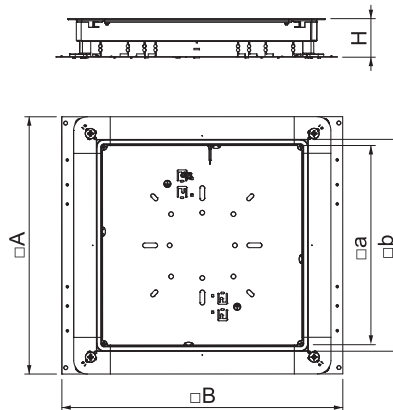
Underfloor junction and branch box for 7 installation pipes on each side (M20 or M32) with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

St FS



### UZD250-3 for screed height 165–220 mm

Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Duct height mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 165220 250-3	367	410	262	283	28-48	165-220	1	530.000	7410052



Underfloor junction and branch box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

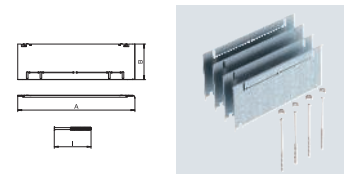
St FS



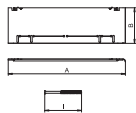
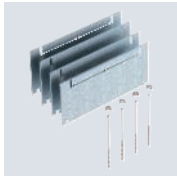
### Height compensation set for UZD250-3 with height 115–170 mm

Type	Screed height mm	Dim. A mm	Dim. B mm	Dim. I mm	Pack Piece	Weight kg/100 pc.	Item no.
ASH250-3 165220	165-220	330	80	162	1	82.000	7410146

Height compensation set for underfloor boxes UZD250-3 with a construction height of 115 to 170 mm for construction stacking of the UZD, consisting of four fall plates, four height adjustment screws and four rotary locks.



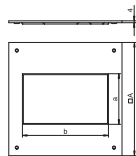
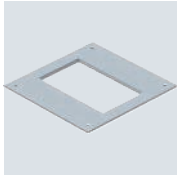
## Height compensation set for UZD250-3 with height 165–220 mm



Type	Screed height mm	Dim. A mm	Dim. B mm	Dim. l mm	Pack Piece	Weight kg/100 pc.	Item no.
ASH250-3 215270	215-270	330	80	212	1	85.000	7410158

Height compensation set for underfloor boxes UZD250-3 with a construction height of 165 to 220 mm for construction stacking of the UZD, consisting of four fall plates, four height adjustment screws and four rotary locks.

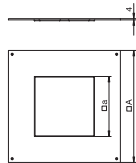
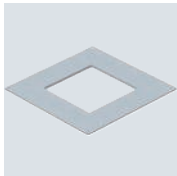
## Mounting lid 250, nominal size 2



Type	Dim. A mm	Dim. a mm	Dim. b mm	Dim. Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
DUG 250-3 2	282	105	181	2	1	180.000	7400455

Mounting lid for underfloor junction and branch box of type UZD250-3 for the installation of an installation unit of nominal size 2. Installation opening 3 mm recessed for later blanking lock with lid blind plate.

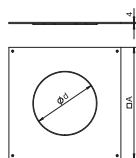
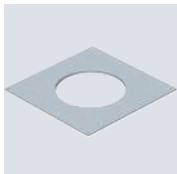
## Mounting lid 250, nominal size 4



Type	Dim. A mm	Dim. a mm	Dim. Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
DUG 250-3 4	282	201	4	1	121.000	7400459

Mounting lid for underfloor junction and branch box of type UZD250-3 for the installation of an installation unit of nominal size 4. Installation opening 3 mm recessed for later blanking lock with lid blind plate.

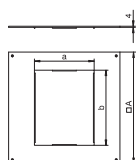
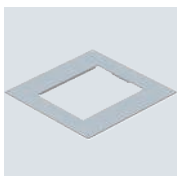
## Mounting lid 250 for installation units of nominal size R4



Type	Dim. A mm	Dim. d Ø mm	Dim. Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
DUG 250-3 R4	282	215	R4	1	131.000	7400471

Mounting lid for underfloor junction and branch boxes of type UZD350-3 for the installation of an installation unit of nominal size R4. Installation opening 3 mm recessed as a later blanking lock with lid blind plate.

## Mounting lid 250, nominal size 6



Type	Dim. A mm	Dim. a mm	Dim. b mm	Dim. Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
DUG 250-3 6	282	201	253	6	1	89.000	7400463

Mounting lid for underfloor junction and branch box of type UZD250-3 for the installation of an installation unit of nominal size 6. Installation opening 3 mm recessed for later blanking lock with lid blind plate.

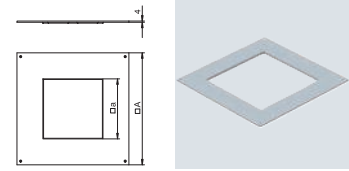
St FS



### Mounting lid 250 for installation units of nominal size 9

Type	Dim.	Dim.	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	a mm				
DUG 250-3 9	282	244	9	1	62.000	7400467

Mounting lid for underfloor junction and branch box of type UZD250-3 for the installation of an installation unit of nominal size 9. Installation opening 3 mm recessed for later blanking lock with lid blind plate.



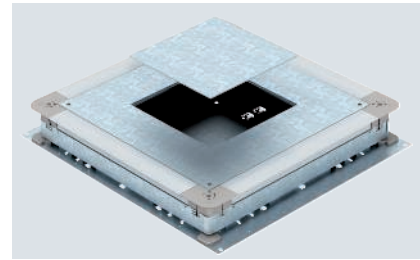
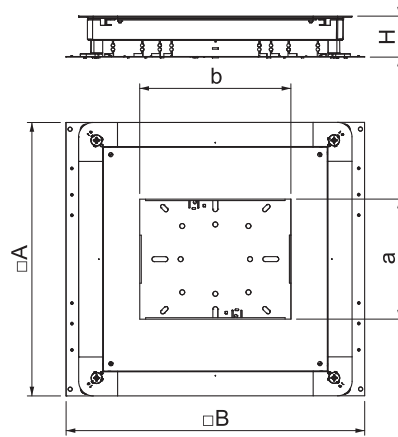
### EÜK underfloor boxes 350

St FS



### UGD350-3 for rectangular installation units, for screed height 70–125 mm

Type	Dim.	Dim.	Dim.	Dim.	Duct height	Screed height	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	B mm	a mm	b mm	mm	mm			
UGD 350-3 9	467	510	244	244	28-48	70-125	1	895.000	7410112



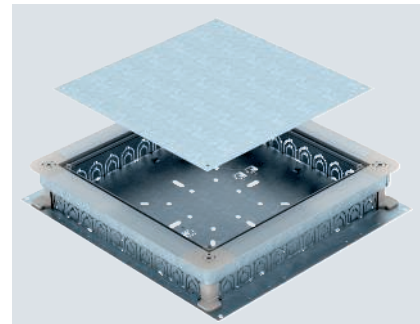
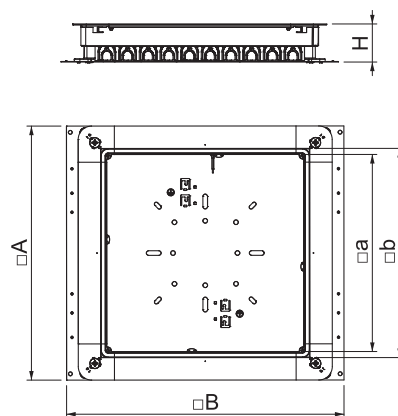
Underfloor accessory box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units of the selected nominal size. Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

St FS



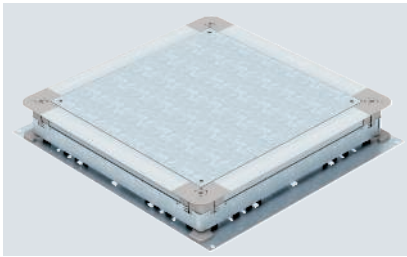
### UZD350-3 with pipe entry for screed height 70–125 mm

Type	Dim.	Dim.	Dim.	Dim.	Screed height	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	B mm	a mm	b mm	mm			
UZD 350-3 R	467	510	362	383	70-125	1	590.000	7410035

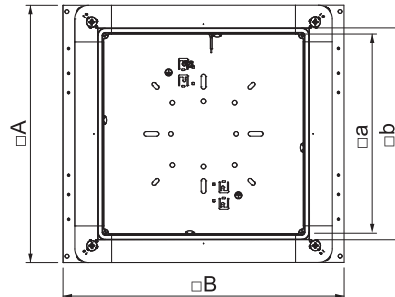
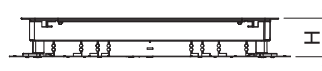


Underfloor junction and branch box for 10 installation pipes on each side (M20 or M32) with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

## UZD350-3 for screed height 70–125 mm

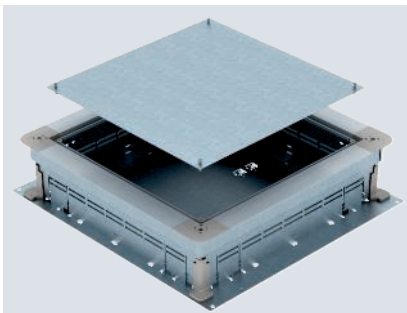


Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Duct height mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 350-3	467	510	362	383	28-48	70-125	1	590.000	7410034

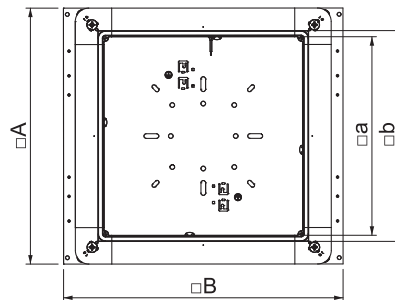


Underfloor junction and branch box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

## UZD350-3 for screed height 115–170 mm



Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Duct height mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 115170 350-3	467	510	362	383	28-48	115-170	1	665.000	7410047



Underfloor junction and branch box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

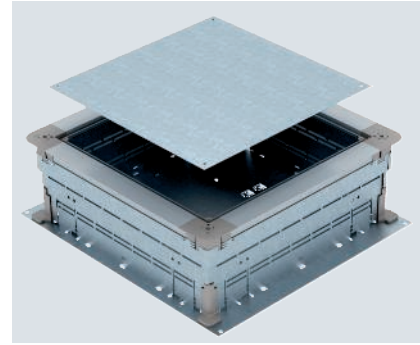
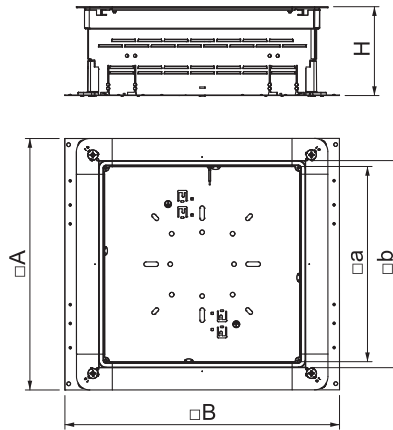


St FS



### UZD350-3 for screed height 165–220 mm

Type	Dim. A mm	Dim. B mm	Dim. a mm	Dim. b mm	Duct height mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UZD 165220 350-3	467	510	362	383	28-48	165-220	1	740.000	7410056



Underfloor junction and branch box for screed-covered underfloor installation ducts with sheet steel side walls. To mount installation units in the mounting lid (to be ordered separately). Height can be infinitely adjusted to the nominal screed height (rapid adjustment possible) and the screed can be worked flush to the screed scraping edge. With noise decoupling option after screed laying and can be used with system accessories, also for heavy-duty application.

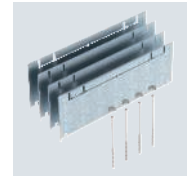
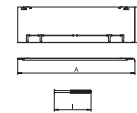
St FS



### Height compensation set for UZD350-3 with height 115–170 mm

Type	Screed height mm	Dim. A mm	Dim. B mm	Dim. l mm	Pack Piece	Weight kg/100 pc.	Item no.
ASH350-3 165220	165-220	430	80	162	1	102.500	7410154

Height compensation set for underfloor boxes UZD350-3 with a construction height of 115 to 170 mm for construction stacking of the UZD, consisting of four fall plates, four height adjustment screws and four rotary locks.



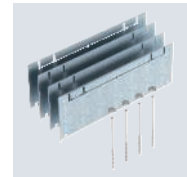
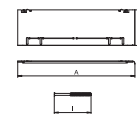
St FS



### Height compensation set for UZD350-3 with height 165–220 mm

Type	Screed height mm	Dim. A mm	Dim. B mm	Dim. l mm	Pack Piece	Weight kg/100 pc.	Item no.
ASH350-3 215270	215-270	430	80	212	1	105.000	7410164

Height compensation set for underfloor boxes UZD350-3 with a construction height of 165 to 220 mm for construction stacking of the UZD, consisting of four fall plates, four height adjustment screws and four rotary locks.



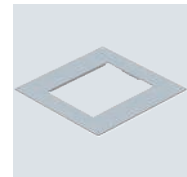
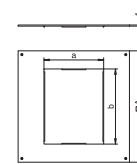
St FS



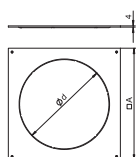
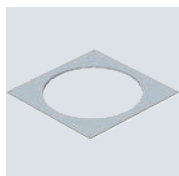
### Mounting lid 350, nominal size 6

Type	Dim. A mm	Dim. a mm	Dim. b mm	Dim. Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
DUG 350-3 6	383	201	253	6	1	290.000	7400509

Mounting lid for underfloor junction and branch box of type UZD350-3 for the installation of an installation unit of nominal size 6. Installation opening 3 mm recessed for later blanking lock with lid blanking plate.



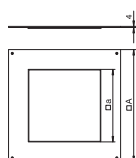
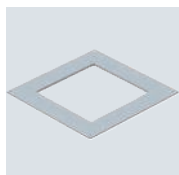
## Mounting lid 350, nominal size R7



Type	Dim.	Dim.	Nominal size	Pack	Weight	Item no.
	A	d Ø		Piece	kg/100 pc.	
<b>DUG 350-3 R7</b>	383	275	R7	1	260.000	<b>7400533</b>

Mounting lid for underfloor junction and branch boxes of type UZD350-3 for the installation of an installation unit of nominal size R7. Installation opening 3 mm recessed as a later blanking lock with lid blanking plate.

## Mounting lid 350, nominal size 9



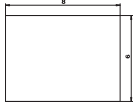
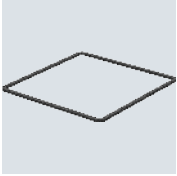
Type	Dim.	Dim.	Nominal size	Pack	Weight	Item no.
	A	a		Piece	kg/100 pc.	
<b>DUG 350-3 9</b>	383	244	9	1	267.000	<b>7400513</b>

Mounting lid for underfloor junction and branch box of type UZD350-3 for the installation of an installation unit of nominal size 9. Installation opening 3 mm recessed for later blanking lock with lid blanking plate.



## Frame seal

MGUM

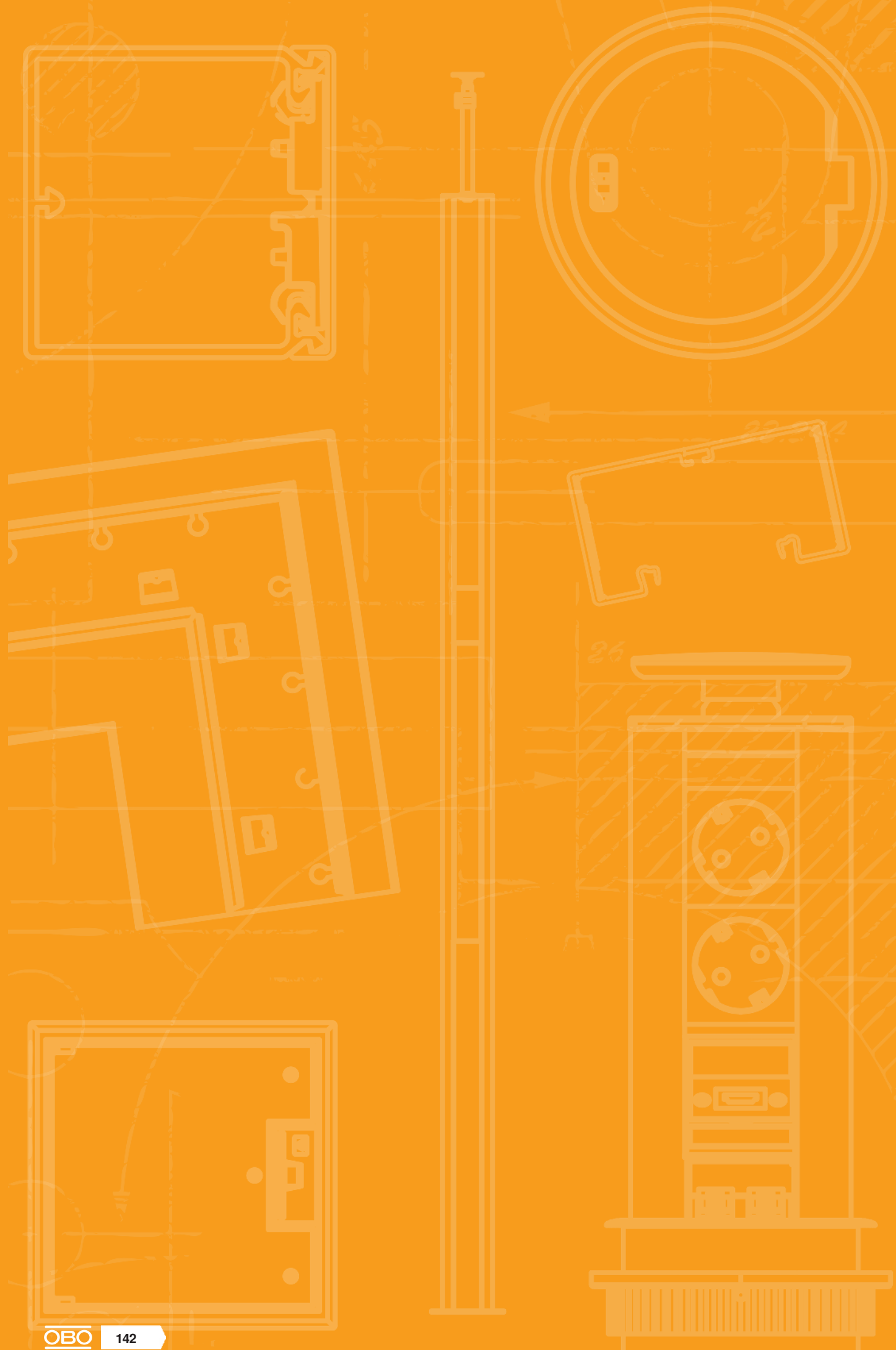


Type	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
FD 250-2	250	1	4.400	7400784








Frame seal as flat seal of nominal size 250-2 and 250-3 for UZD/UGD underfloor sockets.







# OKA and OKB

	OKA-G screed-flush trunking	144
	OKA-W screed-flush trunking	150
	OKA-W screed-flush extension unit	154
	Accessories, OKA-W	156
	Accessories for OKA-G and OKA-W	158
	OKB brush bar trunking	160
	Accessories, OKB brush bar trunking	164

## System description

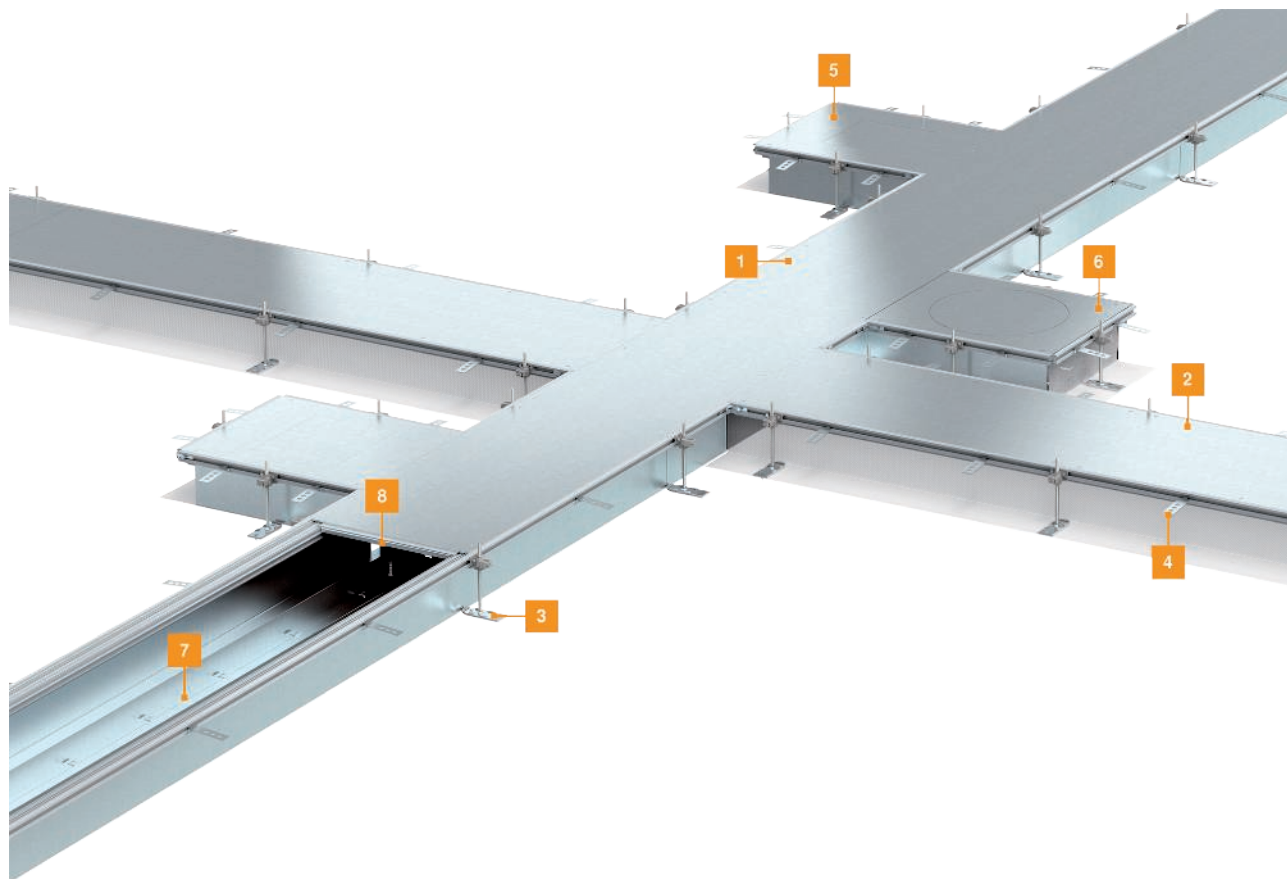


The OKA open trunking system is a flexible system for in-screed cable routing. The trunking lids can also be opened along the whole length – even when installed with a floor covering. This means that the electrical installation in the trunking can be adapted at any time. Additional

mounting benefits, such as lowerable floor covering profiles or rapid height-adjustment units, offer a great deal of flexibility and security for professional underfloor installations.



# Installation principle



1	OKA-W installation trunking
2	OKA-G installation trunking
3	Height adjustment unit
4	Screed anchor
5	OKA-W extension unit with blank, closed mounting opening
6	OKA-G extension unit with blank, closed mounting opening
7	Separating retainer
8	Lid butt support

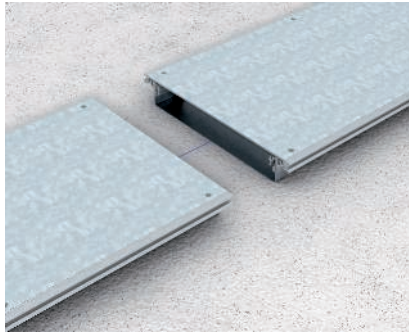


# Mounting aid



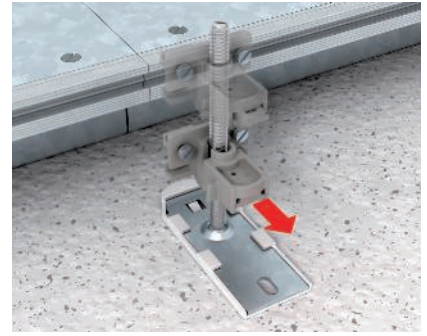
### Preparations for mounting

The exact course of the OKA-G/OKA-W trunking section is measured and specified by tensioning a cord. Trunking branches are also marked on the raw screed.



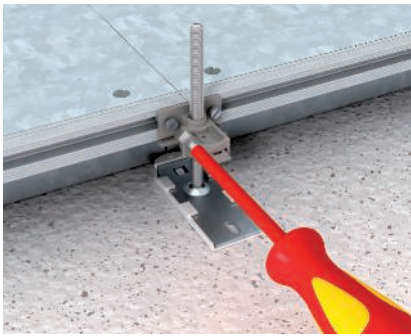
### Positioning of the trunking units

Positioning of the trunking units according to the measured and marked route. The blanking and function lids only need to be arranged during cabling.



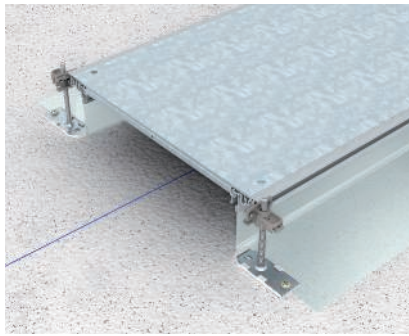
### Combine trunking units

When joining trunking units, ensure that all the metallic parts of the trunking system are included in the protective measure against indirect contact.



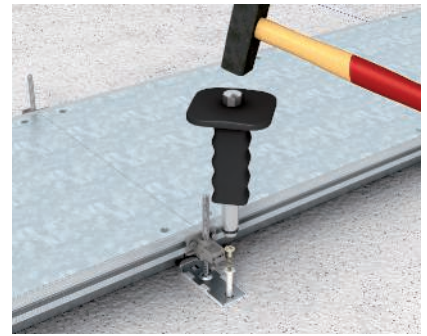
### Mount levelling units

The fastening brackets with height-adjustment screws contained in the delivery are adjusted approximately to the given screed height and are then applied to the trunking units.



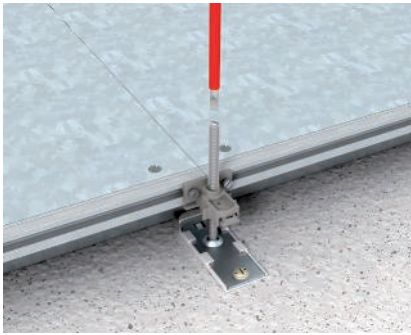
### Version with fabric

With the OKA-G version, the side mesh apron should be run beneath the footplate of the levelling unit.



### Fixing the trunking units

Fix the aligned trunking section to the raw screed using the fixing bracket.



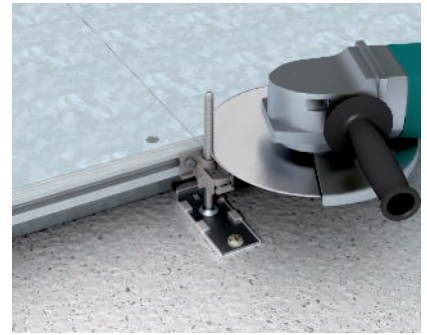
### Height adjustment

The height of previously aligned and fastened OKA trunking units can be adjusted to the screed height using their fastening brackets. This mounting step should be carefully agreed with the screed layer. After height adjustment, do not place any loads on the trunking system.



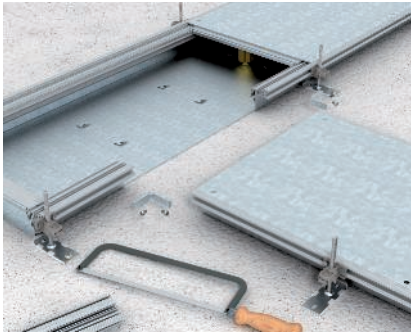
### Mounting the screed anchor

The supplied screed anchors provide the joint between the screed and the trunking and are suspended in the aluminium side profile of the trunking units.



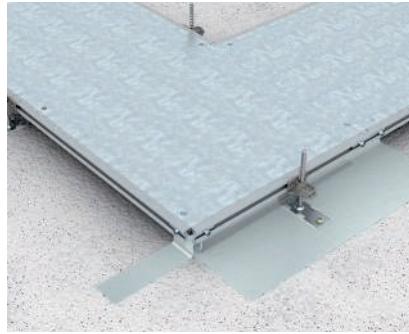
### Adjusting the height adjustment supports

Before applying the screed, shorten any height-adjustment bolts protruding over the top edge of the trunking (at least 5 mm beneath screed height).



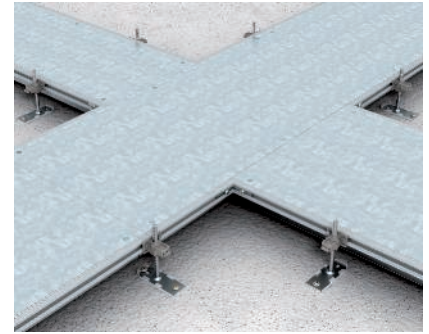
#### Create trunking junction

The fitting set OKAFB2TX allows easy creation of trunking branches (T branch). The mesh of the OKA-G can be processed using shears or a knife and the floor trough of the OKA-W can be processed using the single-handed angle grinder.



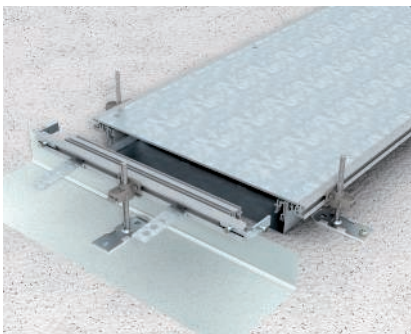
#### Create 90° angle

Fitting sets are available for 90° angles to the left or right. They contain all the parts required for mounting.



#### Create crossing

Intersections can be created like the junctions above using the fitting set OKAFB2TX. Two fitting sets are required. The work corresponds to two opposing junctions.



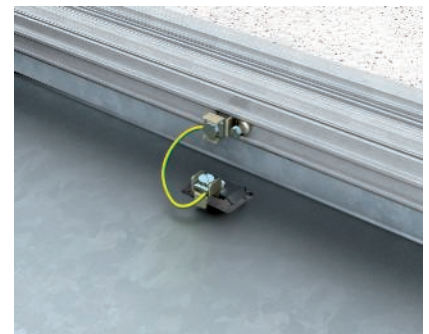
#### End piece mounting

There are standardised end pieces available for the OKA-G and OKA-W trunking systems, which can be adjusted to the appropriate trunking height and which are simple to mount.



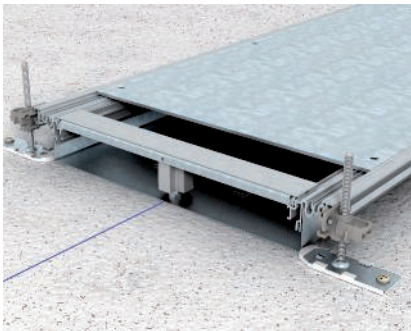
#### Application of the screed

The screed should be installed directly after the OKA trunking system. The screed layer is obliged to line the side profiles well and to work the screed carefully and cleanly. Loads may not be placed on the trunking until the screed has hardened.



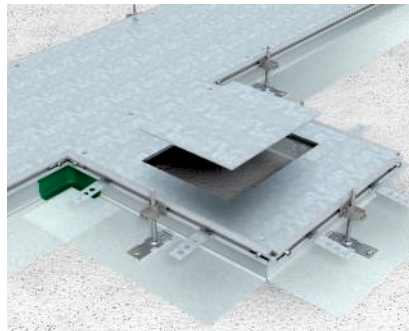
#### Setup equipotential bonding

All the metallic parts of the trunking system must be included in the protective measure against indirect contact with parts carrying voltage and are therefore equipped with the appropriate connection options for the earth conductor clamp.



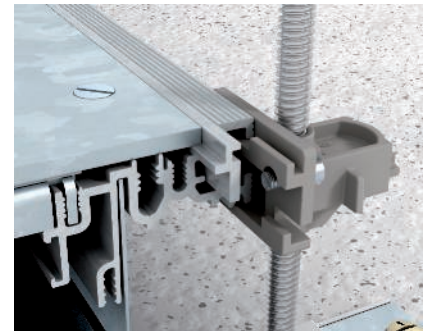
#### Cover joint support mounting

For nominal trunking sizes of 400 or greater, cover joint supports are used for static support of the trunking lid. In the OKA-W system, they are equipped with the appropriate levelling units for safe absorption of the traffic loads. Mounting is freely positionable along the aluminium side profiles of the trunking systems.



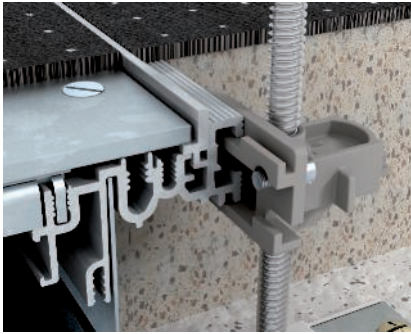
#### Expansion unit

The expansion units mean that the trunking system maintains its cross-section, even when service outlets are used – a great benefit, in particular for small trunking widths.

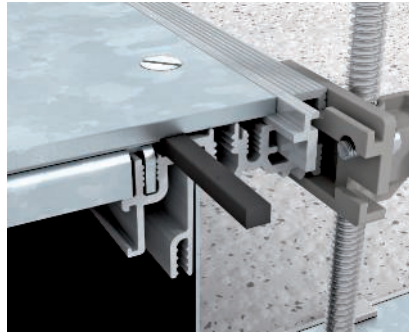


#### Insertion of floor covering contact profile

Floor covering contact profiles are used to protect the neighbouring floor covering cutting edges. In the delivered state, these profiles are flush, to allow finishing of the screed.



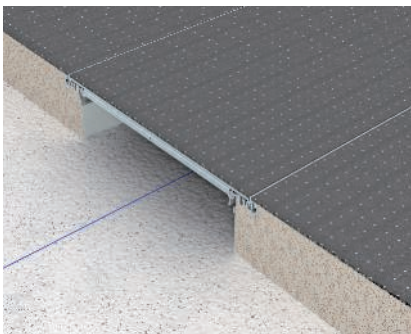
**Laying of the floor covering guide profile**  
If the floor covering contact profile is required, then it can simply be mounted in the opposite direction. The profile is designed in such a way as to ensure the required lid play in the finished state.



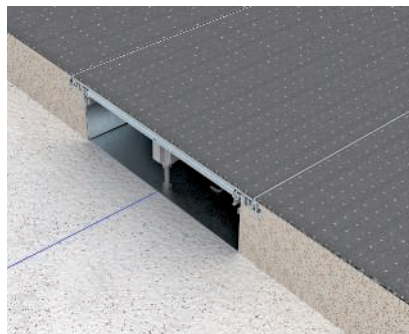
**Insert moisture protection**  
The use of the OKAFD seal together with the OKARK... insertion cassettes permits the use of the OKA-G and OKA-W trunking systems for wet-cleaned hard floors. The OKAFD seal is inserted into the aluminium profile in the lengthwise direction at the position indicated.



**Position cassette frame**  
The OKARK... insertion cassette fitted with the floor covering is laid on the trunking, which is pre-mounted with the OKAFD seal, thus forming an even floor with the remaining floor covering.



**OKA-G trunking system with flexible side wall**  
The trunking system with the flexible side wall made of metal mesh can offer the greatest flexibility. It is particularly suited for applications with large height differences in the screed and the crossing of pipelines of other services.



**OKA-W trunking system with floor trough**  
The trunking system with the closed floor trough can offer optimum safety for EMC-compatible cable routing and all-round cabling protection.



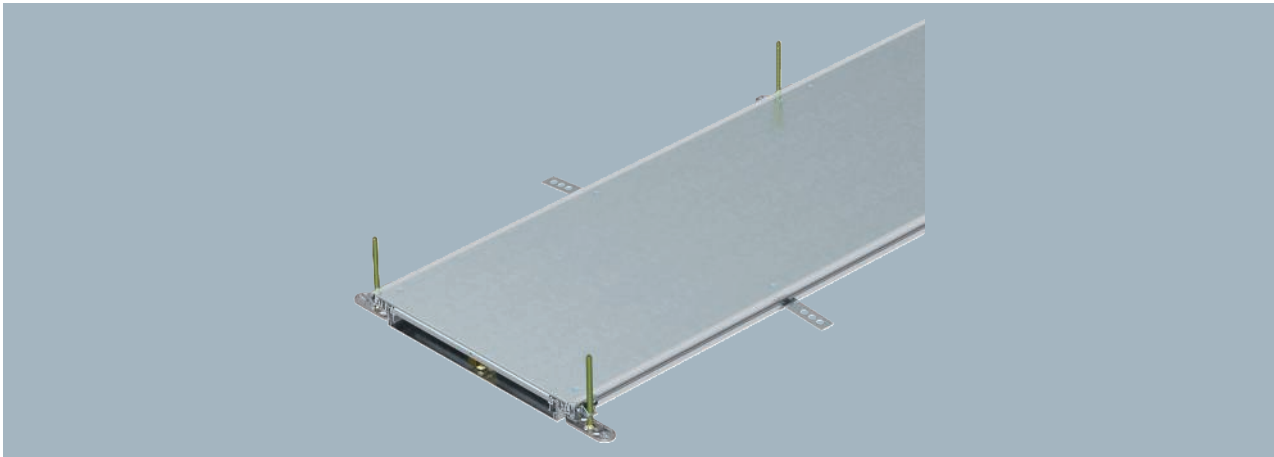
**Solutions for every application**  
The correctly selected OKA trunking system offers a high level of flexibility and security for professional installation.



**Use of cassettes**  
Mount the contact profiles and place the cassettes on the closed trunking.

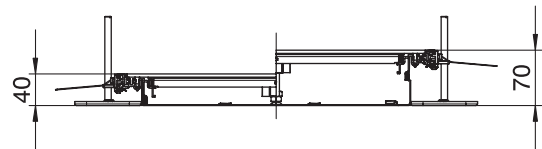


## Trunking unit, blank, height 40–70 mm



Type	Width		Length		Duct		Covers	Pack	Weight	Item no.
	mm	mm	mm	mm	height	pc.				
OKA-W2004030	200	2400	40-70	3			2.4	966.700	7424400	
OKA-W4004030	400	2400	40-70	3			2.4	1,775.000	7424404	

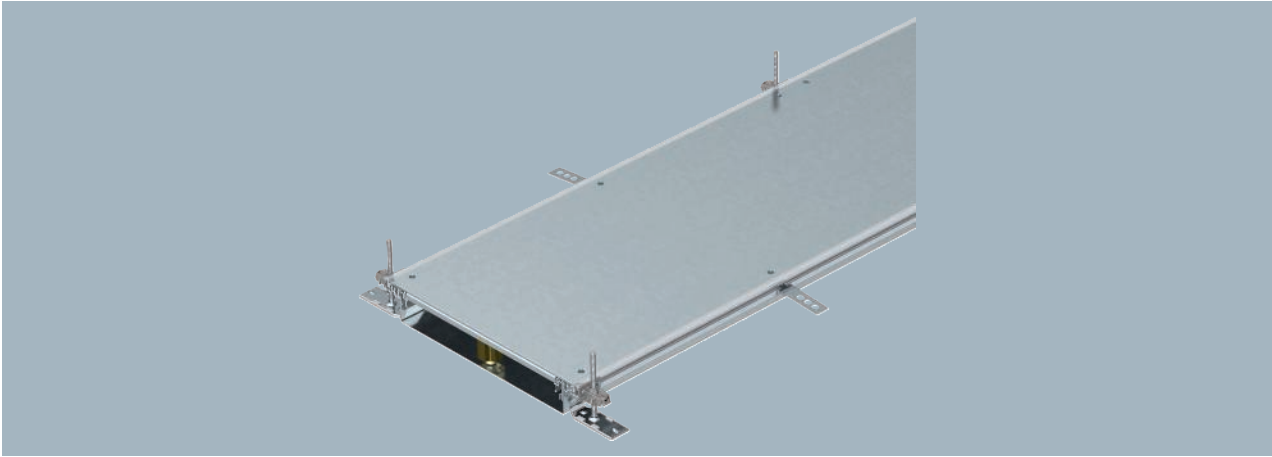
Ready-to-mount trunking unit with three blanking lids for cable laying, consisting of the trunking base (floor trough with side and floor covering contact profiles) and trunking lid. Floor trough with holding straps for self-contacting mounting of separating retainers. The scope of delivery contains 6 height-adjustable fixing brackets, 6 screed anchors and lid butt seals (3x for nominal trunking widths of 200 and 300) or height-adjustable lid butt supports: 3x for nominal trunking width 400 and 6x for nominal trunking widths 500 and 600. Trunking lid screwed on for delivery.



St FS

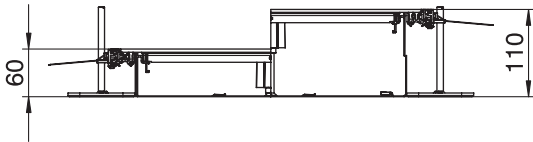


Trunking unit, blank, height 60–110 mm

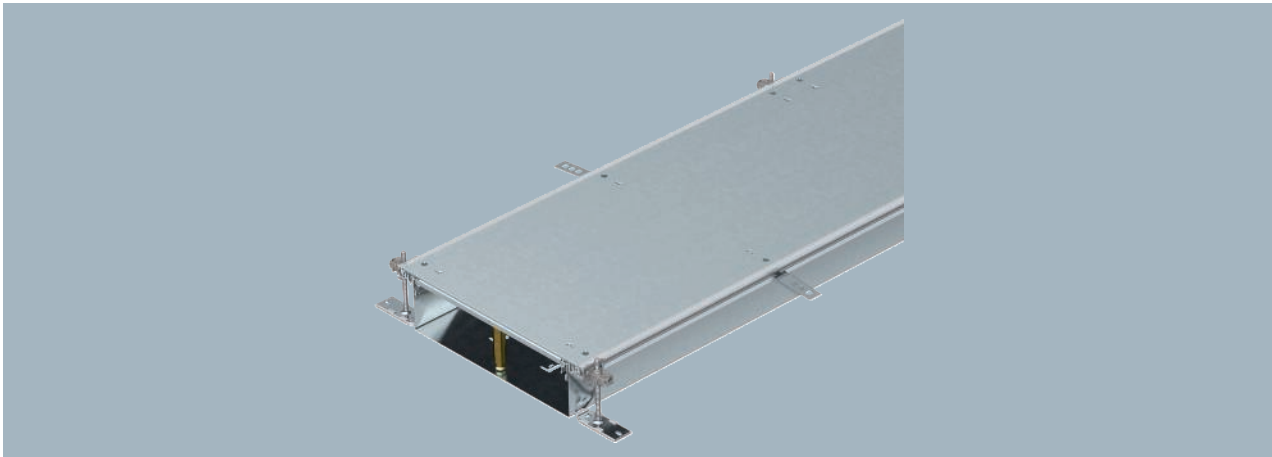


Ready-to-mount trunking unit with three blanking lids for cable laying, consisting of the trunking base (floor trough with side and floor covering contact profiles) and trunking lid. Floor trough with holding straps for self-contacting mounting of separating retainers. The scope of delivery contains 6 height-adjustable fixing brackets, 6 screed anchors and lid butt seals (3x for nominal trunking widths of 200 and 300) or height-adjustable lid butt supports: 3x for nominal trunking width 400 and 6x for nominal trunking widths 500 and 600. Trunking lid screwed on for delivery.

Type	Width mm	Length mm	Duct height mm	Covers pc.	Pack m	Weight kg/100 m	Item no.
OKA-W2006050	200	2400	60-110	3	2.4	1,004.200	7424420

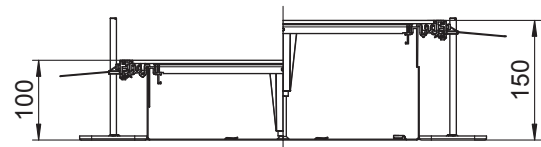


## Trunking unit, blank, locking, height 100–150 mm



Type	Width mm	Length mm	Duct height mm	Covers pc.	Pack m	Weight kg/100 m	Item no.
OKA-W30010050R	300	2400	100-150	3	2.4	1,475.000	7424502

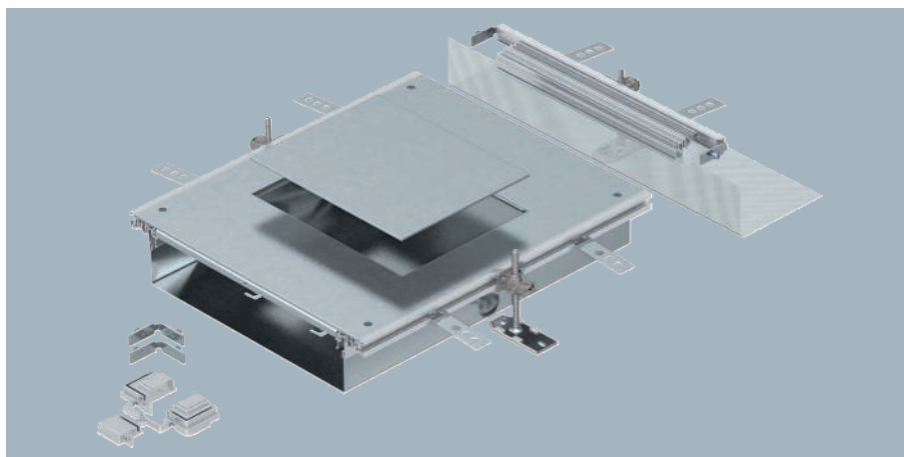
Ready-to-mount trunking unit with three self-locking blanking covers for cable laying, consisting of the trunking base (floor trough with side and floor covering guide profiles) and trunking lid. Floor trough with holding shackles for self-contacting mounting of dividers. The scope of supply contains six height-adjustable wall fixing brackets, six screed anchors and three cover joint supports (for nominal trunking widths 200 and 300) or three height-adjustable cover joint supports (for nominal trunking widths 400, 500 and 600). Trunking lid screwed down when delivered.







## Extension unit for GES6, height 60–110 mm



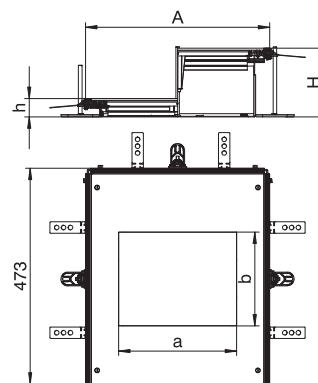
Type	Duct height mm	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
OKA-W A 6050 6	60-110	6	1	922.000	7424902

Ready-to-mount trunking extension unit with a device installation lid for the installation of a flush-mount unit of nominal size 6, consisting of the trunking base (floor trough with side and floor covering contact profiles), trunking lid with blank mounting opening and a flushfloor end cover. The scope of delivery contains 3 height-adjustable fixing brackets, 3 screed anchors, 1 lid butt support and 1 construction set for 90° angle.

Size of the mounting unit suitable for the installation of a rectangular installation unit of nominal size 6.

Type	Dim. a mm	Dim. b mm	Dim. A mm	Dim. h mm	Dim. H mm
OKA-W A 6050 6	201	253	400	60	110

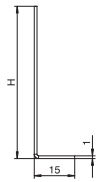
### Dimensions





## Separating retainer, trunking height 40 mm

St FS



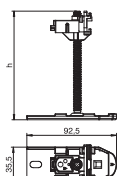
Type	Length mm	Height mm	Duct height mm	Pack m	Weight kg/100 m	Item no.
<b>OKA2 TW 40</b>	2400	26.5	40	2.4	31.300	<b>7401988</b>

Divider for use in the floor trough of the previously prepared OKA-W trunking unit.



# OKA-G and OKA-W height-adjustment units

## Height adjustment unit

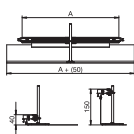


Type	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
	h mm	Duct height mm			
OKA NEVE 150	150	40-150	6	15.300	7425972

Complete levelling unit with express height adjustment for connecting, fastening and adjusting the height of trunking units of the OKA-G and OKA-W systems. For additional requirements.

## End pieces OKA-G

### Trunking end piece, height 40–150 mm

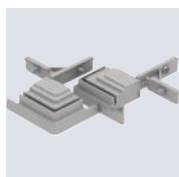


Type	Width mm	Duct height mm	Pack Piece	Weight kg/100 pc.	Item no.
OKA-G30040150ES	300	40-150	1	45.000	7424282
OKA-G40040150ES	400	40-150	1	57.000	7424284

Ready-to-mount trunking end piece, consisting of a flexible apron with side and floor covering guide profiles. The scope of delivery contains trunking connection brackets and a height-adjustable fixing bracket.

## Construction set, OKA-G and OKA-W bracket junction

### Construction set for trunking T branch and intersection

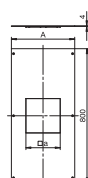
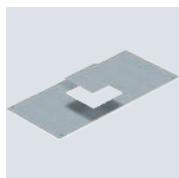


Type	Pack Piece	Weight kg/100 pc.	Item no.

For construction-side creation of a trunking junction as a T piece or intersection. With all the parts necessary for mounting. Suitable for the OKA-G and OKA-W trunking systems. 2 construction sets are required to create an intersection.

## Mounting lid OKA-G and OKA-W

### Mounting lid for GES4, 800 mm



Type	Width mm	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
		A mm	a mm			
OKA DG4 300	300	277	201	1	669.000	7402040

With mounting opening for the installation of an installation unit of nominal size 4. Mounting opening closed with blanking lid plate. Lid fixing screws contained in scope of delivery.

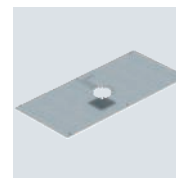
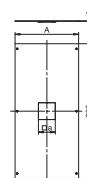
St FS



## Mounting lid for Telitank top, 800 mm

Type	Width mm	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
		A mm	a mm			
<b>OKA DAT 300</b>	300	277	100	1	686.000	<b>7401912</b>

With mounting opening for the setup of a Telitank. Mounting opening closed with blanking plate lid. Lid fixing screws contained in scope of delivery.



## Lid butt support OKA-G

St FS



## Lid butt seal for trunking width 200 and 300 mm

Type	Dim. A mm	Pack Piece	Weight kg/100 pc.	Item no.
<b>DSD2 300</b>	300	1	18.450	<b>7424992</b>

For underlaying and sealing joints of nominal trunking widths of 200 or 300 mm.



## System description

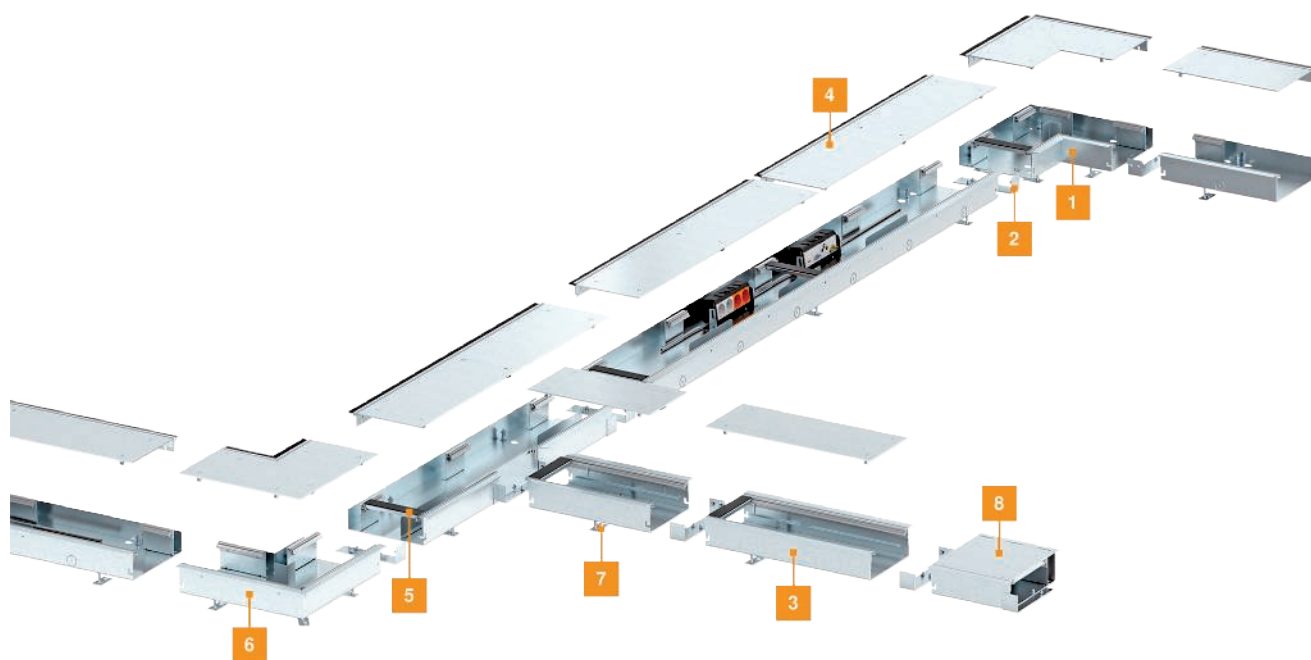


The OKB brush bar trunking system runs along the wall and has an opening along its entire length. A brush bar covers this opening and serves as visually attractive sight and dust protection. The cables can be run out of the trunking at any location. The system can be adapted to the appropriate room situation at any time: The mounted

trunking can be opened easily and re-equipped. The combination with additional OBO products is very simple: Installation pipes can be used to connect floor sockets (GES R2 or UDHOME) with the trunking system. Use with other trunking systems to supply the area is also possible.



# Installation principle



- |   |                              |
|---|------------------------------|
| 1 | External corner              |
| 2 | Connector for trunking unit  |
| 3 | Supply trunking              |
| 4 | Trunking unit with brush bar |
| 5 | Lid butt seal                |
| 6 | Internal corner              |
| 7 | Height-adjustment unit       |
| 8 | Wall penetration             |

# Mounting aid



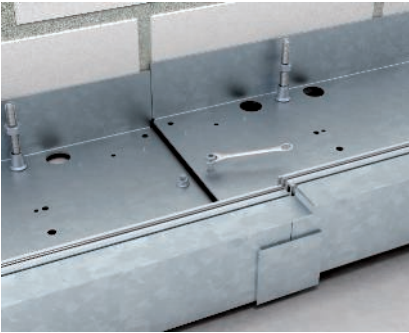
**Cable routing in the compartment**  
The OKB trunking system is run directly in front of a wall, allowing cable routing and covered device installation. Connection cables can be run out of the trunking at any point. The system is marked by simple handling and its load capacity.



**Free use of sockets**  
Devices are either installed in closed mounting boxes or module supports, which are installed laying on their side. In this way, sockets can be used with straight connectors or angular connectors.



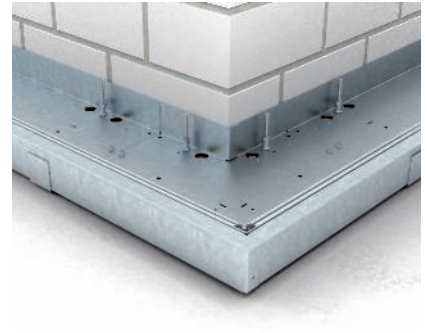
**Safe cabling concept with Modul 45connect@**  
The OKB trunking system offers a high level of flexibility and security for professional installation. The Modul 45connect@ system allows safe and quick implementation of heavy current cabling systems.



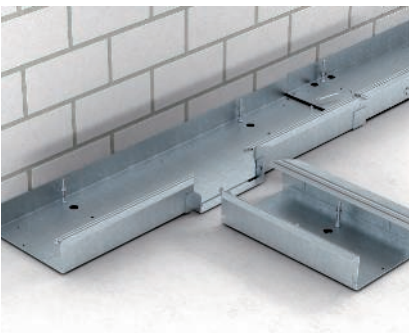
**Preparations for mounting**  
Screw in the height-adjustment units. Interconnect the trunking bases using the connector. Safety: The connector creates the conductive connection between the trunking bases.



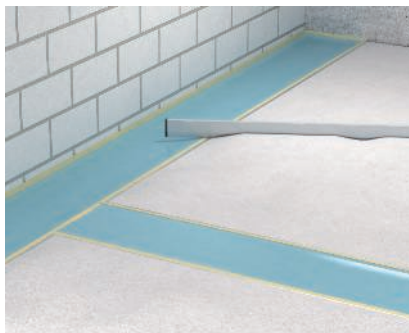
**Adjustment of the system height**  
Fasten the floor plates of the height-adjustment units on the raw floor. Adjust the trunking units to the top edge of the screed. Secure the height adjustment using a locknut. Fasten the trunking base on the raw floor.



**Mounting of internal corner or external corner**  
Place fitting on the trunking unit and fasten it. Adjust the required system height and secure it with a locknut.



**Mounting of T piece**  
Install and fasten the T piece at the intended point in the trunking course. Adjust the required system height and secure it with a locknut.



**Laying the screed**  
If necessary, seal the trunking joints. A 3–5 mm separation layer is permitted. Lay the screed. Note: Unstick the trunking system for the period of screed laying. Do not walk on it during screed laying.



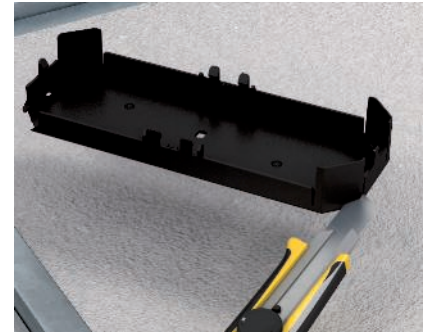
**Adjustment to finished floor height**  
Adjust the floor covering contact edge to the top edge of the finished floor.



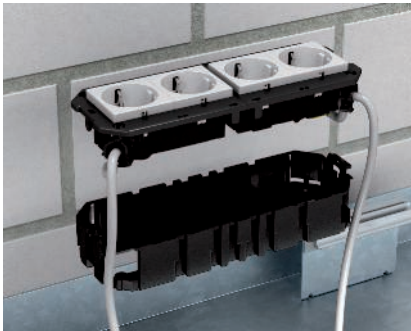
**Cover lid with floor covering**  
Cover each individual lid with floor covering.



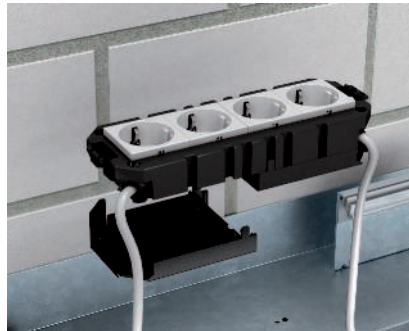
**Adjust the height of the brush bar**  
Adjust the brush bar to the top edge of the finished floor.



**Preparation of mounting box and module support**  
Prepare the mounting box and module support for cable in-feed (cut out the cable entry opening).



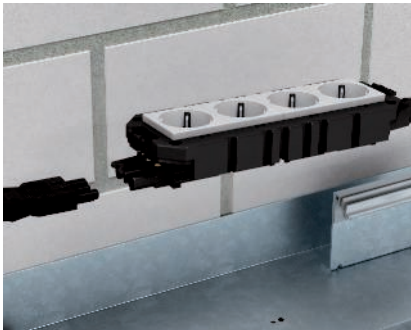
**Socket mounting in mounting boxes**  
Connect the connection cable to the socket. Lock the cover plate on the mounting box.



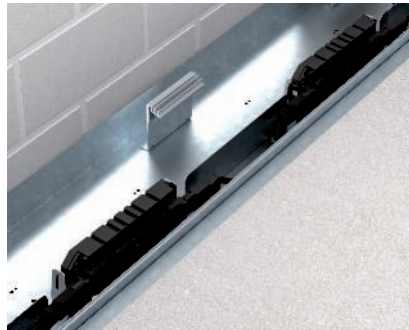
**Socket mounting in module support**  
Connect the connection cable to the socket and cover it with the protective housing. Safety: Use a protective housing.



**Mounting of mounting box and module support in trunking base**  
After connection of the accessories, mount the device support on the module support or mounting box. Screw the complete unit into the trunking base.



**Socket mounting with Modul 45connect®**  
Connect two double sockets using Modul 45connect® connectors and lock them into the module support. Lock the connector and socket part adapters onto the socket combination.



**Connection of sockets**  
Insert the connection cables in the socket. Safety: Do not connect more than three socket combinations to any circuit.



**Mounting of separating retainers**  
Only insert separating retainers after mounting of the fully wired mounting box and module support.



**Use of the wall penetration**  
Connect the wall penetration to the trunking systems on both sides using the supplied connector.

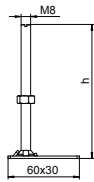
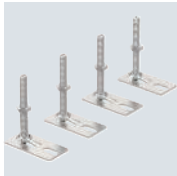


**Use of the screed limitation profile**  
When the screed is laid on both sides, mount the screed limitation profile on the wall side of the trunking system.



**Trunking unit with blanking lid**  
Trunking unit with blanking lid for areas in which a cable outlet opening is not required.

## Height adjustment unit RKNEV2

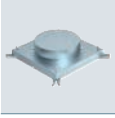


Type	Height adjustment range		Pack	Weight	Item no.
	mm	mm	PU	kg/100 PUs	
<b>RK NEV2 190</b>	190	230-270	1	35.567	<b>7405817</b>

For flushfloor height adjustment of the height adjustable cassette units and the OKB screed-flush trunking system. The VPE consists of 4 height adjustment units.







In-concrete duct system

168



Accessories, In-concrete duct system

174



## System description

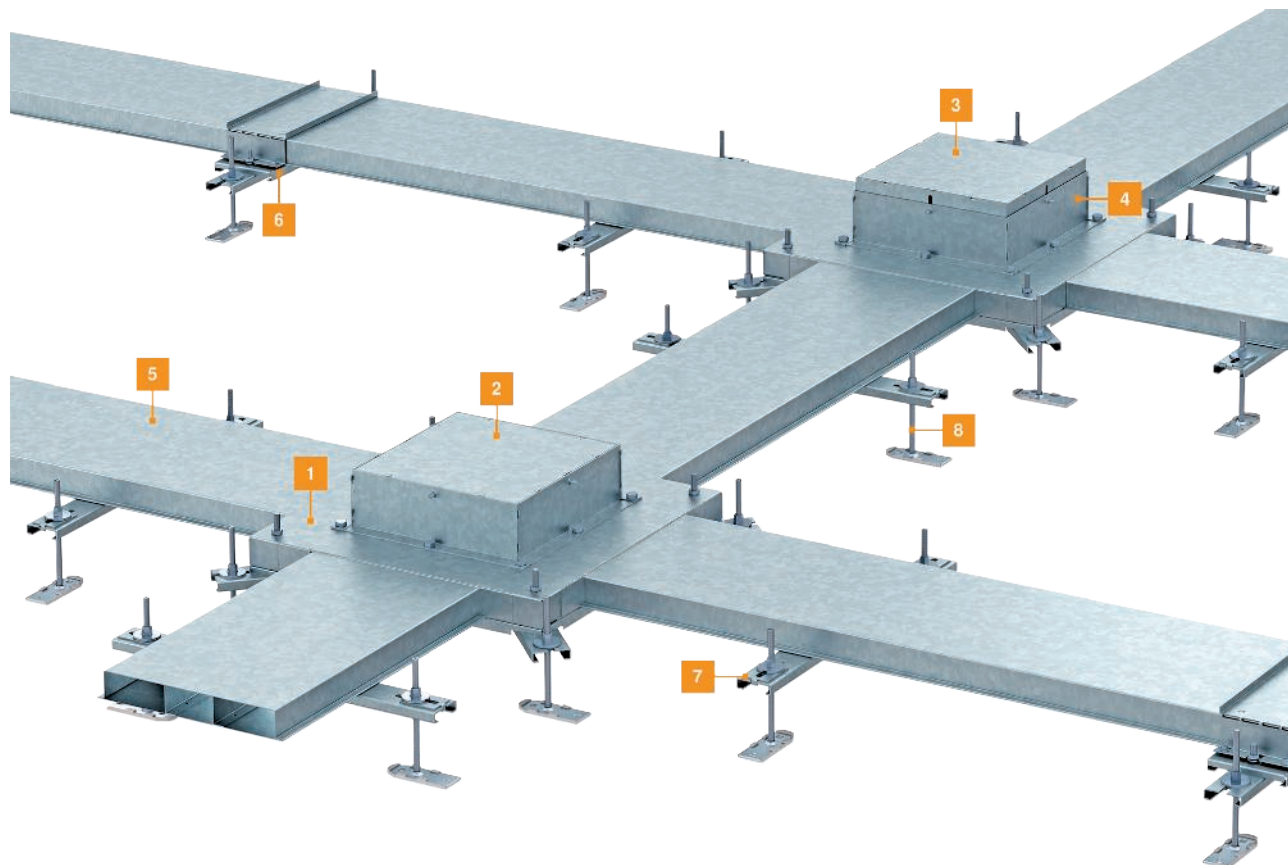


Easy mounting, robustness and perfect integration in the building – all of these are offered by the new in-concrete system. It is matched to the latest developments and trends in construction – both to the technology of concrete core activation and to current fire protection guidelines.

Thanks to many years of experience in development and project planning for underfloor installations, OBO knows the requirements for in-concrete systems. This is just one of the reasons OBO is the market leader in this field.



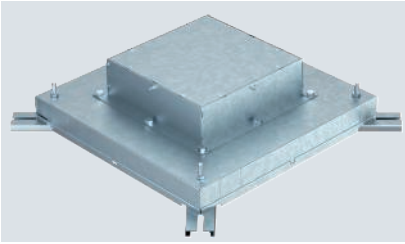
## Installation principle



- |   |  |
|---|--|
| 1 | In-concrete box  |
| 2 | Cover box for device installation                                  |
| 3 | Mounting protection cover  |
| 4 | Inner lined body   |
| 5 | Electrical installation duct, 2 or 3-compartment, 38 or 48 mm high |
| 6 | Connection strap with equipotential bonding                        |
| 7 | Duct support   |
| 8 | Height adjustment unit   |

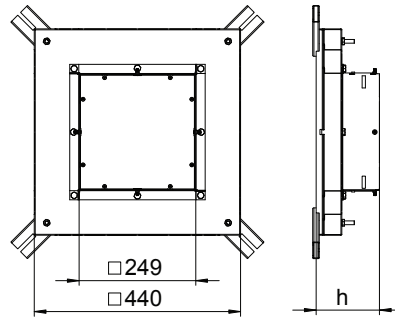
## In-concrete box for installation units of nominal size 9

St FS



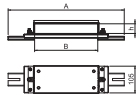
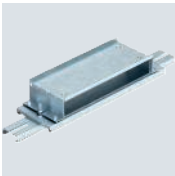
In-concrete box for duct height 48 mm, prepared for duct widths 250 and 350 mm. With four adjustable placements for height-adjustment units. The integrated lined body can be adjusted to a maximum of 65 mm for compensating screed work.

Type	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
	h mm	Nominal size			
IBD 35048 9	145	9	1	872.500	7399852



## Connection element 48 mm

St FS



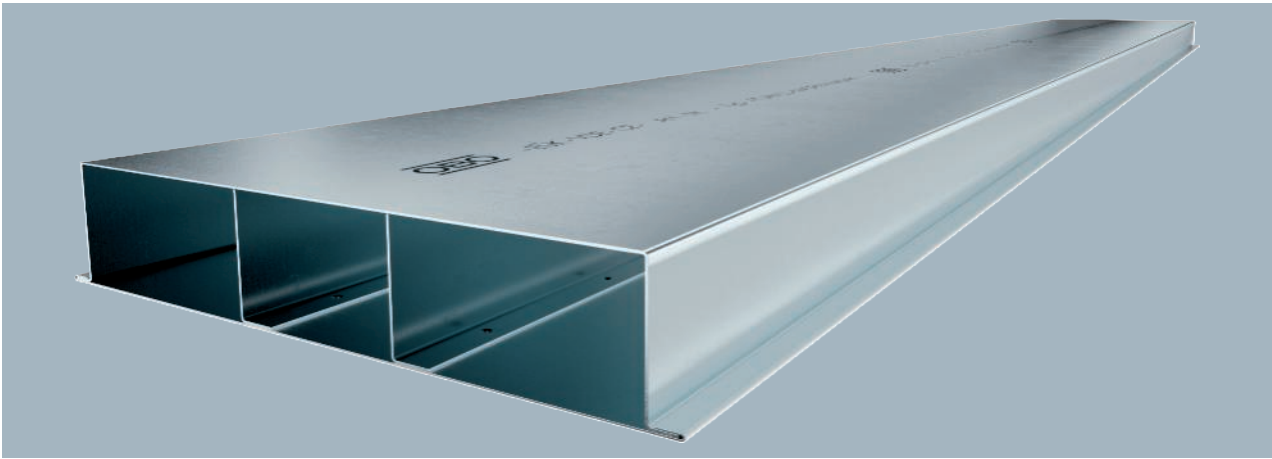
Type	Dim.	Dim.	Dim.	Pack Piece	Weight kg/100 pc.	Item no.
	A mm	B mm	h mm			
IBVE 25048	332	250	48	1	133.800	7399892

To connect underfloor installation ducts with in-concrete applications. With two adjustable placements for IBNEV height-adjustment units.

St FS



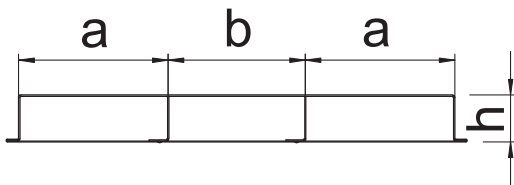
## Underfloor installation duct, 3-compartment



Underfloor installation duct for laying cables under the floor.

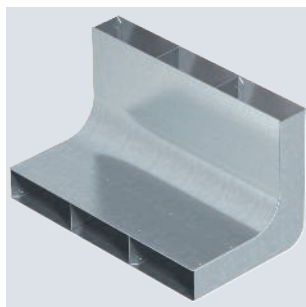
Type	Width mm	Length mm	Height mm	Number of compart- ments pc.	Pack m	Weight kg/100 m	Item no.
S3 25048	250	2000	48	3	2	500.000	7400332
S3 35048	350	2000	48	3	2	607.000	7400344

### Dimensions



Type	Dim. a mm	Dim. b mm	Dim. h mm	Cross- section draw a mm <sup>2</sup>	Cross- section draw b mm <sup>2</sup>
S3 25048	90	70	48	4048	3174
S3 35048	120	110	48	5428	5014

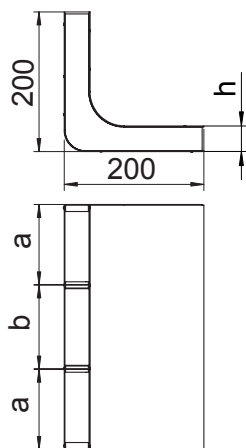
Vertical bend, three-compartment, height 48 mm



Type	Width mm	Number of compartments pc.	Height mm	Pack Piece	Weight kg/100 pc.	Item no.
KV3 25048	250	3	48	1	233.000	7400652

For vertical direction changes of screed-covered underfloor installation ducts (wall connections, supplies).

Dimensions



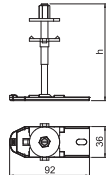
Type	Dim. a mm	Dim. b mm	Dim. h mm	Cross-section draw a mm <sup>2</sup>	Cross-section draw b mm <sup>2</sup>
KV3 25048	90	70	48	4048	3174



## Height adjustment unit

St FS

### Height adjustment unit



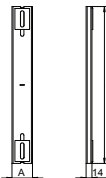
Type	Height adjustment range mm	Dim. h mm	Pack Piece	Weight kg/100 pc.	Item no.
IBNEV 110	35-105	110	10	15.000	7399920
IBNEV 230	155-225	230	10	20.000	7399929

Height adjustment kit for IBK system components.  
For levelling boxes, connectors and supports.

## Supports

St FS

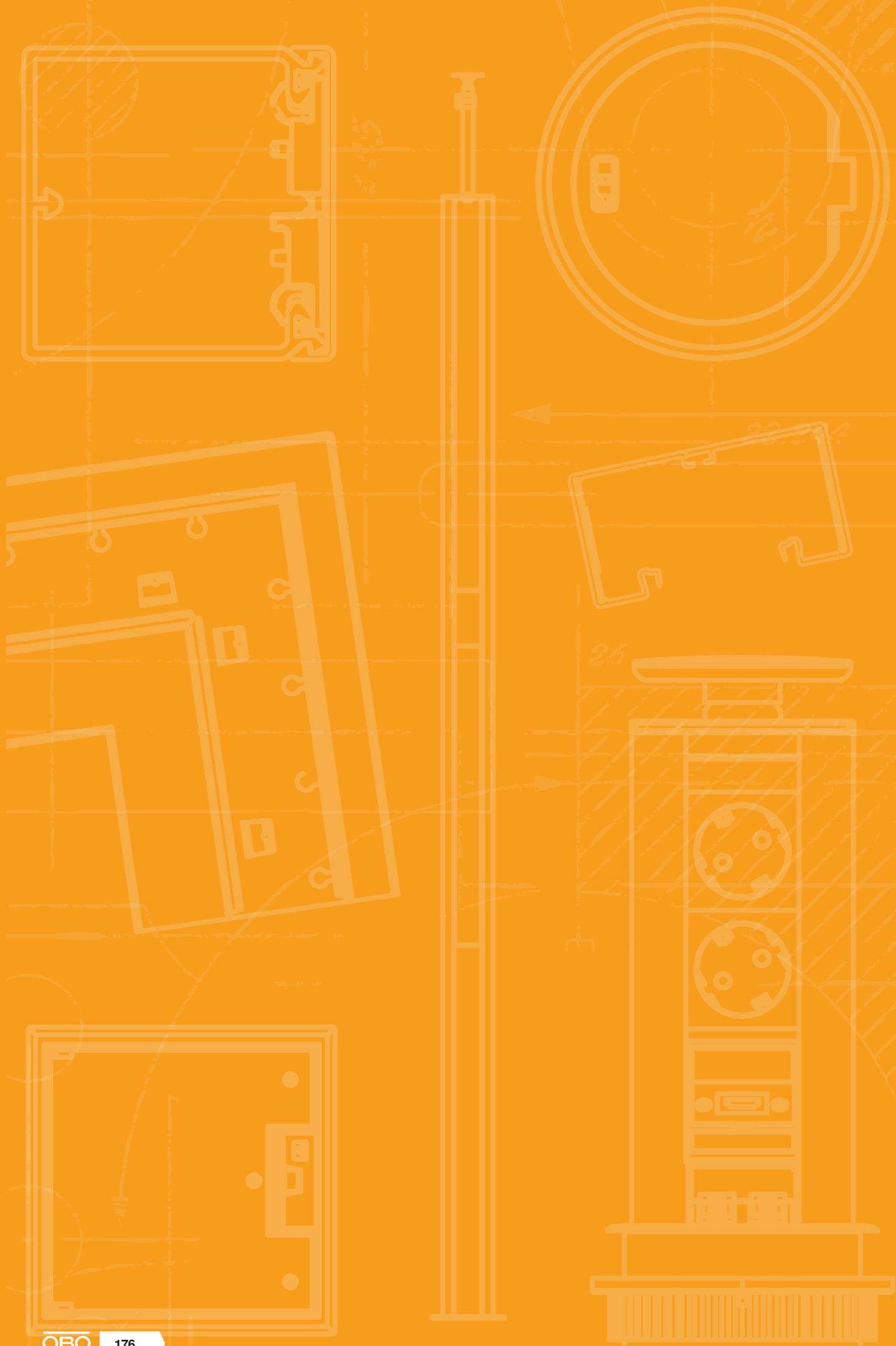
### Support for 250 mm duct



Type	Dim. A mm	Dim. L mm	Duct width mm	Pack Piece	Weight kg/100 pc.	Item no.
IBST 250	49	374	250	1	64.200	7399910




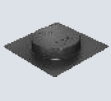

To support and elevate underfloor installation ducts. With two adjustable placements for levelling units.







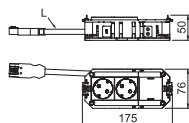
# Connect – connectable technology

	Connect WAGO WINSTA®	178
	Connect Wieland GST18®	186
	Raised and cavity floor outlets	188
	Lined body for cavity floors	190
	Sockets, Modul 45connect®	192



## UTC3 W with 2 protective contact sockets

PA



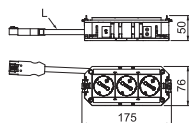
Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC3 W W2	1	WINSTA® MIDI	Double pure white	1	26.900	7404610

The ready-for-connection UTC3 universal support has 2 pre-installed 33° protective contact sockets in white of 16 A and one blanking cover for reinstallation of an installation device of the Modul 45 or Modul 45connect series. Suitable for VL connection cables and device installation units of nominal size 2, 4, R4 and R7.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.

## UTC3 W with 3 protective contact sockets

PA



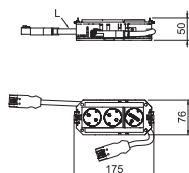
Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC3 W W3	1	WINSTA® MIDI	Triple pure white	1	29.900	7404611

The ready-for-connection UTC3 universal support possesses 3 pre-installed 33° protective contact sockets in white of 16 A. Suitable for VL connection cables and device installation units of nominal size 2, 4, R4 and R7.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.

## UTC3 W with 2+1 protective contact sockets

PA



Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC3 W W2OR1	2	WINSTA® MIDI	Double pure white/ single pure orange	1	39.800	7404609

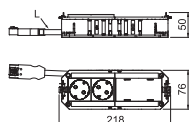
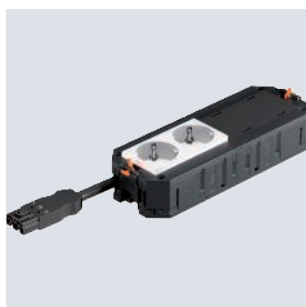
The ready-for-connection UTC3 universal support possesses 2 pre-installed 33° protective contact sockets in white of 16 A and one pre-installed 33° protective contact socket in orange of 16 A. Suitable for VL connection cables and device installation units of nominal size 2, 4, R4 and R7.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.

# Ready-for-connection universal support with WINSTA MIDI

## UTC4 W with 2 protective contact sockets

PA



Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W2	1	WINSTA® MIDI	Double pure white	1	30.700	7404615
UTC4 W OR2	1	WINSTA® MIDI	Double pure orange	1	30.700	7404613

The ready-for-connection UTC4 universal support has 2 pre-installed 33° protective contact sockets in white and 2 blanking covers for reinstallation of 2 installation devices of the Modul 45 series. Suitable for VL connection cables and device installation units of nominal size R7, R9 and 9.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.

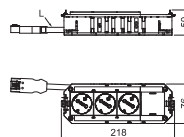
PA

## UTC4 W with 3 protective contact sockets

Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W3	1	WINSTA® MIDI	Triple pure white	1		7404618

The ready-for-connection UTC4 universal support has 3 pre-installed 33° protective contact sockets in white and one blanking cover for reinstallation of an installation device of the Modul 45 series.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.



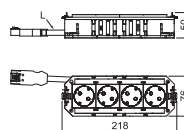
PA

## UTC4 W with 4 protective contact sockets

Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W4	1	WINSTA® MIDI	4x pure white	1	37.400	7404619
UTC4 W OR4	1	WINSTA® MIDI	4x pure orange	1	37.800	7404614

The ready-for-connection UTC4 universal support possesses 4 pre-installed 33° protective contact sockets in white, 250 V~, 16 A. Suitable for the VL connection cables and device installation units of nominal size R7, R9 and 9.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.



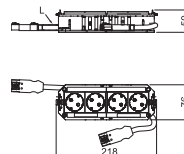
PA

## UTC4 W with 2+2 protective contact sockets

Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W2OR2	2	WINSTA® MIDI	Double pure white/ double pure orange	1	46.100	7404616

The ready-for-connection UTC4 universal support possesses 2 pre-installed 33° protective contact sockets in white and 2 pre-installed 33° protective contact sockets in orange, 250 V~, 16 A. Suitable for VL connection cables and device installation units of nominal size R7, R9 and 9.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.



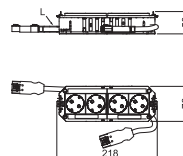
PA

## UTC4 W with 2+2 protective contact sockets, 2 sockets with surge protection

Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W2OR2 Ü	2	WINSTA® MIDI	Double pure white/ double pure orange	1	47.800	7404617

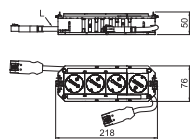
The ready-for-connection UTC4 universal support possesses 2 pre-installed 33° protective contact sockets in white and 2 pre-installed 33° protective contact sockets in orange (with surge protection module, type 3, according to DIN EN 61643-11), 250 V~, 16 A. Suitable for VL connection cables and device installation units of nominal size R7, R9 and 9.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.



## UTC4 W with 3+1 protective contact sockets

PA



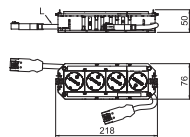
Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W3OR1	2	WINSTA® MIDI	Triple pure white/ single pure orange	1	46.500	7404621

The ready-for-connection UTC4 universal support has 3 pre-installed 33° protective contact sockets in white and one pre-installed 33° protective contact socket in orange, 250 V~, 16 A. With halogen-free connection cable. Suitable for VL connection cables and device installation units of nominal size R7, R9 and 9.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.

## UTC4 W with 3+1 protective contact sockets, 1 socket with surge protection

PA



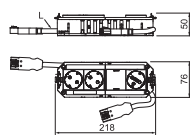
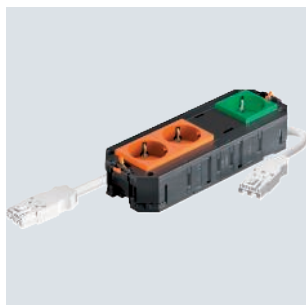
Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W W3OR1 Ü	1	WINSTA® MIDI	Triple pure white/ single pure orange	1	48.200	7404622

The ready-for-connection UTC4 universal support possesses 3 pre-installed 33° protective contact sockets in white and 1 pre-installed 33° protective contact socket in orange (with surge protection module, type 3, according to DIN EN 61643-11), 250 V~, 16 A. Suitable for VL connection cables and device installation units of nominal size R7, R9 and 9.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI.

## UTC4 W with 2+1 protective contact sockets

PA



Type	Circuit	Plug-in system	Version for	Pack Piece	Weight kg/100 pc.	Item no.
UTC4 W OR2GN1	2	WINSTA® MIDI	Double pure orange/ single mint green	1	43.800	7404623

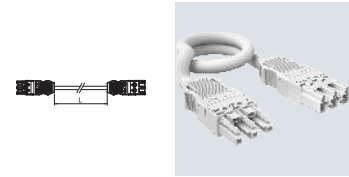
The ready-for-connection UTC4 universal support has 2 pre-installed 33° protective contact sockets in orange and one pre-installed 33° protective contact socket in mint green and one blanking cover for retroinstallation of an installation device of the Modul 45 or Modul 45connect series, 250 V~, 16 A.

PVC connection cable with connector, 3-pin, type WINSTA® MIDI. Suitable for VL connection cables and device installation units of nominal size R7, R9 and 9.

PA

## 3-wire connection cable, halogen-free, cross-section 2.5 mm<sup>2</sup>, white

Type	Cable length mm	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VL-WIN 3P2.5H1W	1000	White	1	16.500	6108732
VL-WIN 3P2.5H3W	3000	White	1	46.200	6108736
VL-WIN 3P2.5H5W	5000	White	1	78.370	6108740
VL-WIN 3P2.5H8W	8000	White	1	120.260	6108744



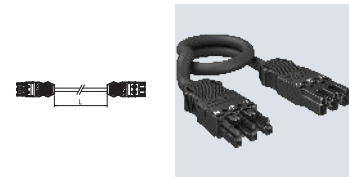
Connection cable 3 x 2.5 mm<sup>2</sup> in the version socket-connector, type WINSTA® MIDI.

Hose pipe: H05Z1Z1-F 3 x 2.5 mm<sup>2</sup>

PA

## 3-wire connection cable, halogen-free, cross-section 2.5 mm<sup>2</sup>, black

Type	Cable length mm	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VL-WIN 3P2.5H1SW	1000	Black	1	16.500	6108730
VL-WIN 3P2.5H3SW	3000	Black	1	46.200	6108734
VL-WIN 3P2.5H5SW	5000	Black	1	78.000	6108738
VL-WIN 3P2.5H8SW	8000	Black	1	120.280	6108742



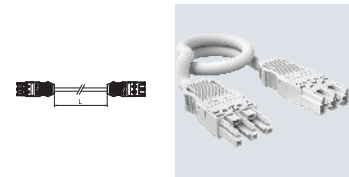
Connection cable 3 x 2.5 mm<sup>2</sup> in the version socket-connector, type WINSTA® MIDI.

Hose pipe: H05Z1Z1-F 3 x 2.5 mm<sup>2</sup>

PA

## 3-wire connection cable, PVC, cross-section 2.5 mm<sup>2</sup>, white

Type	Cable length mm	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VL-WIN 3P2.5 1W	1000	White	1	17.820	6108712
VL-WIN 3P2.5 3W	3000	White	1	49.880	6108716
VL-WIN 3P2.5 5W	5000	White	1	82.000	6108720
VL-WIN 3P2.5 8W	8000	White	1	127.570	6108724



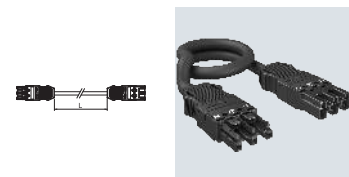
Connection cable 3 x 2.5 mm<sup>2</sup> in the version socket-connector, type WINSTA® MIDI.

PVC hose pipe: H05VV-F 3 x 2.5 mm<sup>2</sup>

PA

## 3-wire connection cable, PVC, cross-section 2.5 mm<sup>2</sup>, black

Type	Cable length mm	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VL-WIN 3P2.5 1SW	1000	Black	1	17.820	6108710
VL-WIN 3P2.5 3SW	3000	Black	1	46.800	6108714
VL-WIN 3P2.5 5SW	5000	Black	1	82.000	6108718
VL-WIN 3P2.5 8SW	8000	Black	1	130.170	6108722

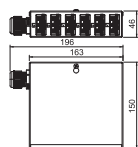


Connection cable 3 x 2.5 mm<sup>2</sup> in the version socket-connector, type WINSTA® MIDI.

PVC hose pipe: H05VV-F 3 x 2.5 mm<sup>2</sup>

**UVS-WIN energy distributor with fixed connection, normal circuit**

St



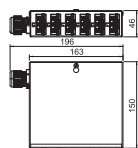
Type	Number of input circuits	No. of outlets	Pack Piece	Weight kg/100 pc.	Item no.
UVS-WIN F6S	1	6	1	76.300	6107980

Energy distributor for heavy current technology with fixed connection, equipped and pre-wired.

Input: 1x three-phase circuit via a screwless terminal block, 5-pin, for cable cross-sections of 0.5–4 mm<sup>2</sup>.  
Output: 6 self-locking plug connectors, 3-pin, in black, 25 A, type WINSTA (socket part: 2x L1, 2x L2, 2 x L3)  
Internal wiring: H07V-U2.5

**UVS-WIN energy distributor with fixed connection, special circuit**

St



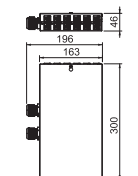
Type	Number of input circuits	No. of outlets	Pack Piece	Weight kg/100 pc.	Item no.
UVS-WIN F6W	1	6	1	76.300	6107982

Energy distributor for heavy current technology with fixed connection, equipped and pre-wired.

Input: 1x three-phase circuit via a screwless terminal block, 5-pin, for cable cross-sections of 0.5–4 mm<sup>2</sup>.  
Output: 6 self-locking plug connectors, 3-pin, in white, 25 A, type WINSTA (socket part 2x L1, 2x L2, 2 x L3)  
Internal wiring: H07V-U2.5

**UVS-WIN energy distributor with fixed connection, normal and special circuit**

St



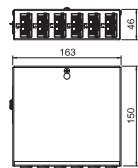
Type	Number of input circuits	No. of outlets	Pack Piece	Weight kg/100 pc.	Item no.
UVS-WIN F6S6W	2	12	1	143.000	6107984

Input: 2x three-phase circuit via a screwless terminal block, 5-pin, for cable cross-sections of 0.5–4 mm<sup>2</sup>.  
Output: 12 self-locking plug connectors, 3-pin, in white (6x) and black (6x), 25 A, type WINSTA® MIDI (socket part: 2x L1, 2x L2, 2x L3 for each rotary current circuit).  
Internal wiring: PVC non-sheathed cable H07V-U2.5.

Energy distributor with WINSTA MIDI connector system, plug connection

**UVS energy distributor with plug connection, normal circuit**

St

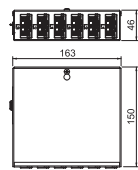


Type	Number of input circuits	No. of outlets	Pack Piece	Weight kg/100 pc.	Item no.
UVS-WIN 6S	1	6	1	73.766	6107986

Input: 1x three-phase circuit using a self-locking plug connector, 5-pin, type WINSTA® MIDI (connector part).  
Output: 6 self-locking plug connectors, 3-pin, in black, 25 A, type WINSTA® MIDI (socket part: 2x L1, 2x L2, 2x L3).  
Internal wiring: PVC non-sheathed cable H07V-U2.5.

**UVS energy distributor with plug connection, special circuit**

St



Type	Number of input circuits	No. of outlets	Pack Piece	Weight kg/100 pc.	Item no.
UVS-WIN 6W	1	6	1	73.800	6107988

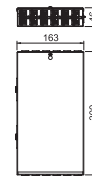
Input: 1x three-phase circuit using a self-locking plug connector, 5-pin, type WINSTA® MIDI (connector part).  
Output: 6 self-locking plug connectors, 3-pin, in white, 25 A, type WINSTA® MIDI (socket part: 2x L1, 2x L2, 2x L3).  
Internal wiring: PVC non-sheathed cable H07V-U2.5.

St

## UVS energy distributor with plug connection, normal and special circuit

Type	Number of input circuits	No. of outlets	Pack Piece	Weight kg/100 pc.	Item no.
UVS-WIN 6S6W	2	6	1	137.046	6107990

Input: 2x three-phase circuit using a self-locking plug connector, 5-pin, type WINSTA MIDI (connector part).  
 Output: 12 self-locking plug connectors, 3-pin, in white (6x) and black (3x), 25 A, type WINSTA MIDI (socket part: 2 x L1, 2 x L2, 2 x L3 for each rotary current circuit).  
 Internal wiring: PVC non-sheathed cable H07V-U2.5.



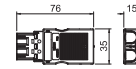
## Installation accessories for WINSTA MIDI connector system

PA

### Connector part 3-pin

Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
ST-WIN 3P SW	Black	1	2.000	6108954
ST-WIN 3P W	White	1	1.999	6108956

Connector 3-pin, type WINSTA® MIDI with clamp connection.

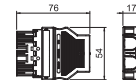


PA

### Connector part, 5-pin

Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
ST-WIN 5P SW	Black	1	2.970	6108964
ST-WIN 5P W	White	1	2.948	6108966

Connector 5-pin, type WINSTA® MIDI with clamp connection.

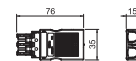


PA

### Socket section 3-pin

Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
BT-WIN 3P SW	Black	1	2.000	6108950
BT-WIN 3P W	White	1	1.965	6108952

Socket section 3-pin, type WINSTA® MIDI with clamp connection.

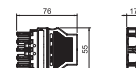


PA

### Socket section 5-pin

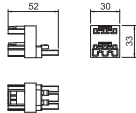
Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
BT-WIN 5P SW	Black	1	2.904	6108960
BT-WIN 5P W	White	1	2.885	6108962

Socket section 5-pin, type WINSTA® MIDI with clamp connection.



## Distributor block, 3-pole, 1I/2O

PA

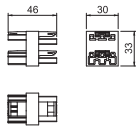


Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VB2-WIN 3P	Black	1	2.283	6108970

2x distributor, 3-pin, type WINSTA® MIDI.

## Distributor block 3-pin, 1E/3A

PA

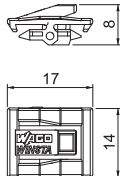


Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VB3-WIN 3P	Black	1	2.510	6108972
VB5-WIN 3P	White	1	3.700	6108974

3x distributor, 3-pin, type WINSTA® MIDI.

## Locking lever for WINSTA® MIDI.

PA



Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VK-WIN	Black	25	0.056	6108700

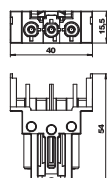
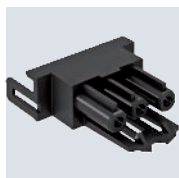
Locking lever for plug connector system WINSTA® MIDI.





## Connection adapter, straight, socket part

PA

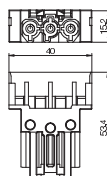


Type	Colour	Pack	Weight	Item no.
		Piece	kg/100 pc.	
BTA-SKS S1 SW	Black	10	1.200	6117190
BTA-SKS S1 W	White	10	1.200	6117191

Connector part adapter, straight, for connection to an STD-D0C / STD-D3C or STD-F0C / STD-F3C socket from the side, for VL extension cable with Wieland connector GST 18i 3p.

## Connection adapter, straight, connector part

PA

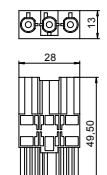
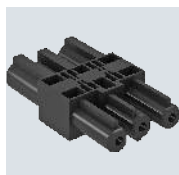


Type	Colour	Pack	Weight	Item no.
		Piece	kg/100 pc.	
STA-SKS S1 SW	Black	10	1.200	6117192

Connector part adapter, straight, for connection to an STD-D0C / STD-D3C or STD-F0C / STD-F3C socket from the side, for VL extension cable with Wieland connector GST 18i 3p.

## Connection adapter, GST18i, straight

PA

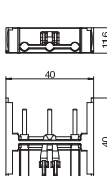


Type	Colour	Pack	Weight	Item no.
		Piece	kg/100 pc.	
VB-G GST18i3p	Black	10	1.760	6108045

Connection adapter GST18i for combining STD-D0C / STD-D3C or STD-F0C / STD-F3C sockets together with straight connection adapters, pluggable connection with integrated strain relief. Suitable for device connections in the device installation trunking systems Rapid 45 and Rapid 80 and in ISS service poles.

## Modul 45connect® connector

PA

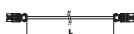


Type	Colour	Pack	Weight	Item no.
		Piece	kg/100 pc.	
VB-SKS S	Black	10	0.590	6117198

Connection adapter for combining STD-D0C / STD-D3C or STD-F0C / STD-F3C sockets.

## Connection cables

### 3-wire connection cable, halogen-free, cross-section 2.5 mm<sup>2</sup>, black

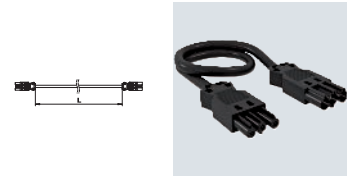


Type	Cable length mm	Cross-section mm <sup>2</sup>	Number of poles	Colour	Pack	Weight	Item no.
					Piece	kg/100 pc.	
VL-3Q2.5 H1 SW	1000	2.5	3	Black	1	16.000	6108450
VL-3Q2.5 H3 SW	3000	2.5	3	Black	1	48.000	6108452
VL-3Q2.5 H5 SW	5000	2.5	3	Black	1	80.000	6108454
VL-3Q2.5 H8 SW	8000	2.5	3	Black	1	128.000	6108457
VL-3Q2.5 H10 SW	10000	2.5	3	Black	1	160.000	6108459

Halogen-free connection cables 3 x 2.5 mm<sup>2</sup> in the version socket – connector with GST18i connection system.

### 3-wire connection cable, PVC, cross-section 2.5 mm<sup>2</sup>, black

Type	Cable length mm	Cross-section mm <sup>2</sup>	Number of poles	Colour	Pack Piece	Weight kg/100 pc.	Item no.
VL-3Q2.5 1 SW	1000	2.5	3	Black	1	18.000	6108150
VL-3Q2.5 3 SW	3000	2.5	3	Black	1	54.000	6108152
VL-3Q2.5 5 SW	5000	2.5	3	Black	1	90.000	6108154
VL-3Q2.5 8 SW	8000	2.5	3	Black	1	144.000	6108157
VL-3Q2.5 10 SW	10000	2.5	3	Black	1	180.000	6108159



Connection cable 3 x 2.5 mm<sup>2</sup> in the version socket – connector with GST18i connection system.

## Installation accessories for Connect Wieland GST18®

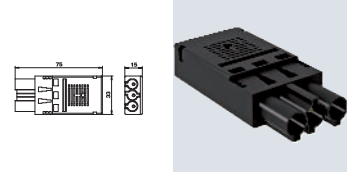
### Connector part 3-pin, spring power connection

Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
ST-F GST18i3p SW	Black	1	2.600	6108050

Connector part, 3-pin, type GST18i with spring power connection for rigid cables of 1.5–2.5 mm<sup>2</sup>, single-wire and ultrasonically welded, fine wire cables 1.5 mm<sup>2</sup> with end sleeves, unmounted with strain relief, can be terminated in situ, 250 V, 16 A.

Two connections per pole, for cables H05VV, NYM (Ø 7.8–10.33 mm), lockable, a lock should be provided for strain relief according to VDE 0628.

Stripping length: 45 mm  
Stripped length: 9 mm

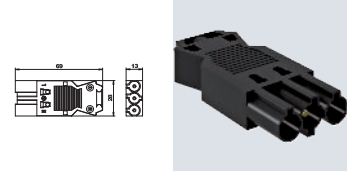


### Connector part, 3-pin, screw connection

Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
ST-S GST18i3p SW	Black	1	2.030	6108054

Connector part, 3-pin, type GST18i with screw connection, low height (no slot loss in combination with distributor blocks), for cross-sections of 0.75–2.5 mm<sup>2</sup>, single- and fine-wire cables connectable without end sleeve, for cable diameters between 6.5–10.5 mm (H05VV, NYM), unmounted with strain relief, terminable in situ, 250 V, 16 A.

Stripping length: 31 mm  
Insulation removal length: 7 mm

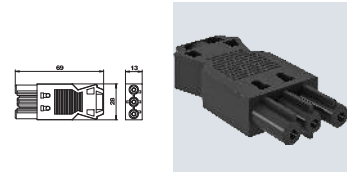


### Socket section 3-pin, screw connection

Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
BT-S GST18i3p SW	Black	1	2.150	6108056

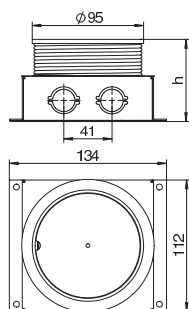
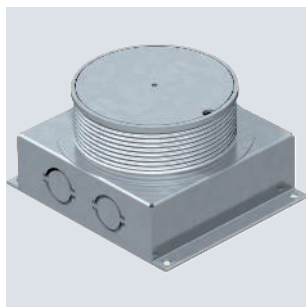
Socket part, 3-pin, type GST18i with screw connection, low height (no slot loss in combination with distributor blocks), for cross-sections of 0.75–2.5 mm<sup>2</sup>, single- and fine-wire cables connectable without end sleeve, for cable diameters between 6.5–10.5 mm (H05VV, NYM), unmounted with strain relief, terminable in situ, 250 V, 16 A.

Stripping length: 31 mm  
Insulation removal length: 7 mm



Underfloor outlet box for US80 components

St FS



Type	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
UDL2-80 70	70-85	1	60.630	7408566

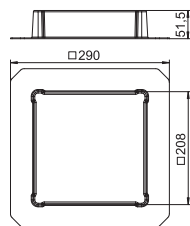
Underfloor outlet box for the installation of an accessory or the setup of a Telitank. For conduit installation 2x2 M20 or Pg16.



## Lined body for rectangular installation units

### Lined body for rectangular installation unit of nominal size 4

PS

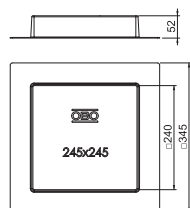
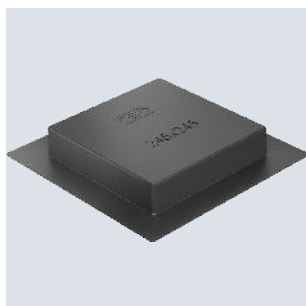


Type	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
SK HB 201X201	50	1	15.000	7425600

Screed protection cover for cavity floor with screed topping for height-adjustable square casettes of nominal size 4.

### Lined body for rectangular installation unit of nominal size 9

PS



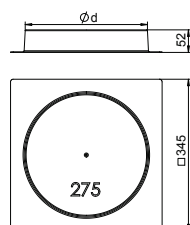
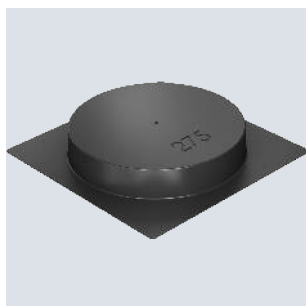
Type	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
SK HB 245X245	50	1	19.500	7404412

Screed protection cover for cavity floor with screed topping for height-adjustable square casettes of nominal size 9.

## Lined body for round installation units

### Lined body for round installation unit of nominal size R7

PS



Type	Dim. d Ø mm	Screed height mm	Pack Piece	Weight kg/100 pc.	Item no.
SK HB R275	275	50	1	22.000	7404404

Screed protection cover for cavity floor with screed topping for round service outlets and height-adjustable cassettes of nominal size R7.



# Modul 45 connect 33° sockets for underfloor installations and service poles

## Socket 33°, Connect 45, protective contact, double



<b>Type</b>	<b>STD-D3SC RW2</b>
Colour	Pure white
Pack Piece	1
Weight kg/100 pc.	8.500
<b>Item no.</b>	<b>6120483</b>
	<b>PC</b> Polycarbonate

Protective contact socket double 33°, with increased touch protection, with screwless terminals, 2-pin, 16 A, 250 V~, with connection terminals to IEC 60884-1.

## Socket 33°, Connect 45, protective contact, triple



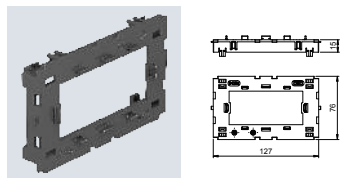
<b>Type</b>	<b>STD-D3SC RW3</b>
Colour	Pure white
Pack Piece	1
Weight kg/100 pc.	12.200
<b>Item no.</b>	<b>6120503</b>
	<b>PC</b> Polycarbonate

Protective contact socket triple 33°, with increased touch protection, with screwless terminals, 2-pin, 16 A, 250 V~, with connection terminals to IEC 60884-1.

## Mounting support

### Mounting support 71MT2 45, double, for Modul 45®

**PA**



<b>Type</b>	<b>71MT2 45</b>	Colour	Light grey	Pack Piece	5	Weight kg/100 pc.	3.050	<b>Item no.</b>	<b>6288576</b>
-------------	-----------------	--------	------------	------------	---	-------------------	-------	-----------------	----------------

Front-locking, double mounting support for Modul 45 data technology systems and Modul 45connect protective contact sockets.

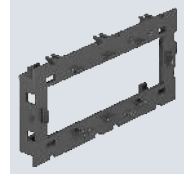
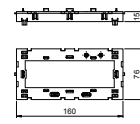


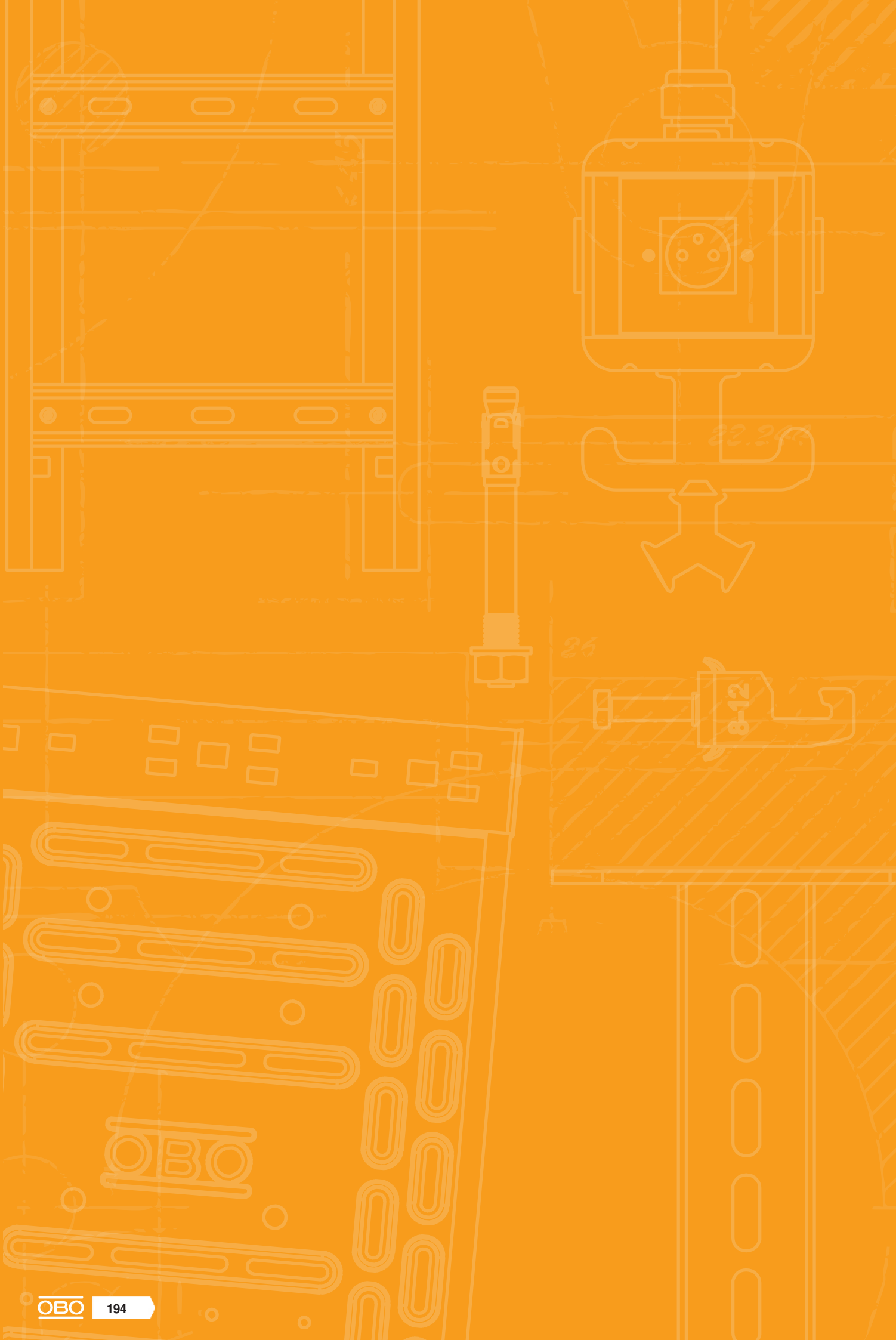
PA

### Mounting support 71MT3, triple, for Modul 45®







Type	Colour	Pack Piece	Weight kg/100 pc.	Item no.
71MT3 45-2	Light grey	5	3.200	6288574

Front-locking, triple mounting support for Modul 45 data technology systems and Modul 45connect protective contact sockets.












































# Directories

	Test marks	196
	Pictogram explanation	198
	Alphabetical table of contents	202
	Numeric directory	204
	Type listing	206
	For the latest general conditions of sale and delivery please see <a href="http://www.obo.global/general-purchasing-conditions/">www.obo.global/general-purchasing-conditions/</a>	


























## Test marks

	American Bureau of Shipping, USA		Underwriters Laboratories Inc., USA + CSA, Canada
	AENOR, Producto Certificado, Spain		Österreichischer Verband für Elektrotechnik, Austria
	STOWARZYSZENIE ELEKTRYKÓW POLSKICH, Poland		ISTITUTO ITALIANO DEL MARCHO DI QUALITÀ, Italy
	Lightning current-tested		RINA 1861, Ship Classification, Certification and Services
	Lightning current-tested, Class H (100 kA)		Underwriters Laboratories Inc., USA
	CEBEC, Belgium		SEMKO An Inchcape Testing Services Company, Sweden
	Canadian Standards Association, Canada		Eidgenössisches Starkstrominspektorat, Switzerland
	DEMKO, Danmarks Elektriske Materielkontrol, Denmark		South African Bureau of Standards
	Deutsches Institut für Bautechnik Berlin, Germany		Shock-tested, Bundesamt für Zivilschutz, Germany
	Det Norske Veritas		Sähkötarkastuskeskus Elinspektionscentralen Electrical Inspectorate, Finland
	ENEC Austria		Underwriters Laboratories Inc., USA
	ATEX certificate for explosive areas		Underwriters Laboratories Inc., USA
	ELEKTROTECHNICKÝ ZKUŠEBNÍ ÚSTAV, Czech Republic		Verband der Elektrotechnik, Elektronik, Informationstechnik e.V., Germany
	FIMKO, Finland		German Association of Electricians, tested safety
	Forschungs- und Materialprüfungsanstalt, Germany		5-year warranty
	Russia, GOST The State Committee for Standards		
	Test marks for technical resources, VDE Prüf- und Zertifizierungsinstitut Offenbach, Germany		
	Halogen-free; without chlorine, fluorine and bromine		
	INMETRO, Brazil		
	KEMA-KEUR, Netherlands		
	Indication of metric products		
	MAGYAR ELEKTROTECHNIKAI ELLENŐRZŐ INTÉZET Budapest, Hungary		
	NEMKO, Norway		
	AFNOR Quality symbol of the French standardisation institute		





# Pictogram explanation






## Surfaces

 FS	Strip galvanised
 FSK	Strip galvanised/plastic-coated
 DD	Strip galvanised zinc/aluminium, double dip
 BK	Bright
 2B	Bright, reworked
 EL	Anodised
 F	Hot-dip galvanised
 G	Electrogalvanised
 GK	Electrogalvanised/plastic-coated
 GCL	Electrogalvanised, yellow-chromatised
 GGP	Electrogalvanised, yellow passivated
 GTP	Electrogalvanised, transparently passivated
 GR	Primed
 L	Painted
 SG	Welding primed
 FT	Hot-dip galvanised
 FT SO	Hot-dip galvanised 85 µm
 Cu	Copper-plated
 N	Nickel-plated
 ZD	Galvanised, Deltatone 500
 ZDM	Galvanised, MAGNI 565
 GA	Zinc-aluminium coated, Galfan
 ZL	Zinc scale






## Conformity symbol

	Communautés Européennes, EC declaration of conformity according to EC directives
	RoHS-conformant



















## Quality marks

	Halogen-free; without chlorine, fluorine and bromine
	Flame resistant 650 °C
	Flame resistant 750 °C
	Flame resistant 960 °C
	UV-resistant




## Specific product symbols

	Diameter 60 mm
	Diameter 68 mm
	Protection device to DIN EN 61643-11 or IEC 61643-11
	Transition from LPZ 2 to LPZ 3
	Acoustic signalling



## Applications

	Remote signalling
	Acoustic signalling
	Integrated Service Digital Network, ISDN applications
	Digital Subscriber Line, DSL applications
	Analogue telecommunication
	Category 5 TwisterPair
	Channel Performance to American EIA/TIA standard
	Measuring, controlling and regulating systems
	TV applications
	SAT-TV applications
	MultiBase base
	LifeControl
	Intrinsically safe protection device for potentially explosive areas
	Channel Performance to ISO/IEC 11801
	Power over Ethernet
	230/400 V system
	Protection rating IP 54
	Protection rating IP 65







## Lightning protection classes

	Protection device to DIN EN 61643-11 or IEC 61643-11
	Combination protection device made of type 1 and type 2
	Protection device to DIN EN 61643-11 or IEC 61643-11






## Lightning protection classes

	Protection device to DIN EN 61643-11 or IEC 61643-11
	Protection device to DIN EN 61643-11 or IEC 61643-11



## Lightning protection zone

	Transition from LPZ 0 to LPZ 1
	Transition from LPZ 0 to LPZ 2
	Transition from LPZ 0 to LPZ 3
	Transition from LPZ 1 to LPZ 2
	Transition from LPZ 1 to LPZ 3
	Transition from LPZ 2 to LPZ 3



## BSS maintenance of electrical function installation

	Fire-tested systems
	Escape route ceiling mounting with pressure clip
	OBO Grip, wall routing type
	OBO Grip, ceiling routing type
	Pressure clip for maintenance of electrical function, ceiling mounting




## BSS anchor

	Fire protection anchor
	Fire protection bolt tie


## BSS test marks/material class

	Maintenance of electrical function class E30
	Maintenance of electrical function class E90














## Clamp clip base shapes

	Clamp clip for C profile rail, slot width 11–12 mm
	Clamp clip for C profile rail, slot width 16–17 mm
	Clamp clip for C profile rail, slot width 18–22 mm



## Diameter

	Diameter 60 mm
	Diameter 68 mm
	Diameter 70 mm
	Diameter 74 mm





## Entries

	4 cable entries
	6 cable entries
	7 cable entries
	8 cable entries
	9 cable entries
	10 cable entries
	12 cable entries
	10 cable entries ECO
	12 cable entries ECO
	14 cable entries ECO
	16 cable entries
	18 cable entries ECO
	24 cable entries






## Gland thread

	Thread metric
	Thread Pg





## Entry size

	M20 entry
	M25 entry
	M32 entry
	M40 entry

## KTS side heights










	Cable tray, side height 35 mm
	Cable tray, side height 60 mm
	Cable tray, side height 85 mm
	Mesh cable tray, side height 35 mm
	Mesh cable tray, side height 55 mm

## Materials




	Flat steel
	Angular steel
	U steel
	Round material

# Pictogram explanation






## Nominal cross-section

	Nominal cross-section 1.5 mm <sup>2</sup>
	Nominal cross-section 1.5–2.5 mm <sup>2</sup>
	Nominal cross-section 2.5 mm <sup>2</sup>
	Nominal cross-section 2.5–4 mm <sup>2</sup>
	Nominal cross-section 4 mm <sup>2</sup>
	Nominal cross-section 4–6 mm <sup>2</sup>
	Nominal cross-section 6 mm <sup>2</sup>
	Nominal cross-section 10 mm <sup>2</sup>
	Nominal cross-section 16 mm <sup>2</sup>













## Nominal voltage

	Nominal voltage 400 V
	Nominal voltage 500 V
	Nominal voltage 660 V





## Polarity

	3-pole
	5-pole
	7-pole
	8-pole
	10-pole
	12-pole



## Slot widths

	Slot width 7.5 mm
	Slot width 11 mm
	Slot width 11–12 mm
	Slot width 12 mm
	Slot width 15 mm
	Slot width 16 mm
	Slot width 16.5 mm
	Slot width 16–17 mm
	Slot width 17 mm
	Slot width 18 mm
	Slot width 22 mm
	Slot width 35 mm











## Screw heads

	Phillips screw
	Torx screw
	Phillips screw
	Pozidriv








## Firing devices

	Bolt-firing tool
	Nail device





## Protection rating

	Protection rating IP 20
	Protection rating IP 30
	Protection rating IP 31
	Protection rating IP 44
	Protection rating IP 54
	Protection rating IP 55
	Protection rating IP 65
	Protection rating IP 66
	Protection rating IP 67
	Protection rating IP 68

## Metals

	Aluminium
	Aluminium/steel
	Stainless steel, rustproof
	Stainless steel, rustproof
	Stainless steel, rustproof
	Copper
	Brass
	Steel
	Malleable iron
	Die-cast zinc

## Plastics

	Acrylonitrile butadiene styrene
	Duroplast, Aminoplast, type 131.5
	Duroplast, melamine resin, type 150
	Ethylene vinyl acetate



## Plastics

<b>FA</b>	Fibre-proof material DIN 28091
<b>GFK</b>	Fibreglass-reinforced plastic
<b>NBR SBR</b>	Rubber mixture
<b>NBR</b>	Nitrile rubber
<b>PETR</b>	Petrolatum
<b>PA</b>	Polyamide
<b>PA/ GF</b>	Polyamide, fibreglass reinforced
<b>PBPT</b>	Polybutylene terephthalate
<b>PC</b>	Polycarbonate
<b>PE</b>	Polyethylene
<b>PP</b>	Polypropylene
<b>PP/ GF</b>	Polypropylene, fibreglass reinforced
<b>PS</b>	Polystyrene
<b>PVC</b>	Polyvinylchloride
<b>ZELL PC</b>	Cellular polyethylene



# Alphabetical table of contents

## 3

- 33° socket, protective contact, triple; 108
- 3-wire connection cable, halogen-free, cross-section; 181, 186  
2.5 mm<sup>2</sup>, black
- 3-wire connection cable, halogen-free, cross-section; 181  
2.5 mm<sup>2</sup>, white
- 3-wire connection cable, PVC, cross-section 2.5 mm<sup>2</sup>; 181, 187  
black
- 3-wire connection cable, PVC, cross-section 2.5 mm<sup>2</sup>; 181  
white

## B

- Blanking cover for Modul 45® installation opening; 108
- Blanking cover for round installation opening; 108

## C

- Connection adapter, GST18i, straight; 186
- Connection adapter, straight, connector part; 186
- Connection adapter, straight, socket part; 186
- Connection element 48 mm; 170
- Connector part 3-pin; 183, 187
- Connector part 3-pin, spring power connection; 187
- Connector part, 3-pin, screw connection; 187
- Connector part, 5-pin; 183
- Construction set for trunking T branch and intersection; 158
- Cord outlet SAK-2, stainless steel; 65
- Cover plate, Telitank T4B, Modul 45 installation; 99  
opening
- Cover plate, Telitank T4L/T8NL, blank; 100
- Cover plate, Telitank T4L/T8NL, Modul 45 installation; 100  
opening

## D

- Distributor block, 3-pole; 184
- Distributor block, 3-pole, 1E/2A; 184
- DSSL heavy-duty support; 87

## E

- Extension unit for GES6, height 60–110 mm; 154

## F

- Filler for round service outlet GESRA9 10U; 41
- Frame cassette for cord outlet, RKS, nominal size 250-; 65  
3, stainless steel
- Frame seal; 140

## G

- GES2 service outlet with handle clamp; 34
- GES2DB service outlet with handle clamp; 34
- GES4 service outlet with handle clamp; 35
- GES6 service outlet with handle clamp; 35
- GES6 service outlet with locking slider; 36
- GES6M-2 service outlet with handle clamp; 36
- GES9M-2 service outlet with handle clamp; 37
- GESR4 service outlet with handle clamp; 40
- GESRA7/10 service outlet with handle clamp; 40
- GESRA9/10 service outlet with handle clamp; 41
- GESRM2 with protective frame - USB type; 124

## H

- Heavy-duty frame cassette for tube body, RKFSL; 79  
nominal 250-3, load class 2
- Heavy-duty frame cassette for tube body, RKFSL; 79  
nominal 350-3, load class 2
- Heavy-duty frame cassette, blank, RKSL, nominal 250-; 78  
3, load class 2
- Heavy-duty frame cassette, blank, RKSL, nominal 350-; 78  
3, load class 2

- Heavy-duty mounting lid for UZD 250-3, nominal size 4; 86
- Heavy-duty mounting lid for UZD 250-3, nominal size; 86  
R4
- Heavy-duty mounting lid for UZD 350-3, nominal size 4; 86
- Heavy-duty mounting lid for UZD 350-3, nominal size 9; 87
- Heavy-duty mounting lid for UZD 350-3, nominal size; 86  
R4
- Heavy-duty mounting lid for UZD 350-3, nominal size; 87  
R7
- Heavy-duty mounting lid for UZD 350-3, nominal size; 87  
R9
- Height adjustment unit; 158, 164, 174
- Height adjustment unit RKNEV2; 164
- Height compensation set for UZD250-3 with height; 133  
115–170 mm
- Height compensation set for UZD250-3 with height; 134  
165–220 mm
- Height compensation set for UZD350-3 with height; 137  
115–170 mm
- Height compensation set for UZD350-3 with height; 137  
165–220 mm
- Height extension for UDHOMÉ4 floor box; 117
- Height extension for UDHOMÉ9 floor box; 117
- Height-adjustable cassette for inspection opening; 52-53  
RKFN, stainless steel
- Height-adjustable cassette for inspection opening; 54, 60  
RKN, brass
- Height-adjustable cassette for inspection opening; 50-51, 54,  
RKN, stainless steel 56-57
- Height-adjustable cassette for tube body, RKFN; 55, 58-59  
stainless steel
- Height-adjustable cassette with cord outlet, RKSJN; 55  
stainless steel
- Height-adjustable cassette with cord outlet, RKSJN; 62  
stainless steel
- Height-adjustable heavy-duty cassette for tube body; 82  
RKFNSL, nominal size 4, stainless steel
- Height-adjustable heavy-duty cassette for tube body; 84  
RKFNSL, nominal size 9, stainless steel
- Height-adjustable heavy-duty cassette, blank, RKNSL; 81  
nominal size 4, stainless steel
- Height-adjustable heavy-duty cassette, blank, RKNSL; 83  
nominal size 9, stainless steel
- Height-adjustable heavy-duty cassettes for tube body; 80  
RKFNSL, nominal size 4, stainless steel
- Hinged cover with cord outlet; 123
- Hinged cover with locking slider; 120-121

## I

- In-concrete socket for installation units of; 170  
nominal size 9
- Installation box, double, NF; 126
- Installation box, double, VDE; 125
- Installation frame for combination of 2x and 2x Modul; 94  
45® devices
- Installation frame for combination of 3x and 1x Modul; 93  
45® devices
- Installation frame for four single Modul 45® devices; 93
- Installation socket, 1.5 empty; 126
- Installation socket, 1+1 empty; 126

## L

- Lid butt seal for trunking width 200 and 300 mm; 159
- Lined body for rectangular installation unit of nominal; 190  
size 4
- Lined body for rectangular installation unit of nominal; 190  
size 9
- Lined body for round installation unit of nominal size; 190  
R7
- Locking latch for WINSTA® MIDI; 184

## M

Modul 45connect® connector; 186  
 Module support for vertical installation Modul 45®; 110 devices  
 Mounting key with threaded sleeve; 70  
 Mounting lid 250, for installation units of nominal size 2; 134  
 Mounting lid 250, for installation units of nominal size 4; 134  
 Mounting lid 250, for installation units of nominal size 6; 134  
 Mounting lid 250, for installation units of nominal size 9; 135  
 Mounting lid 250, for installation units of nominal size; 134 R4  
 Mounting lid 350, for installation units of nominal size 6; 137  
 Mounting lid 350, for installation units of nominal size 9; 138  
 Mounting lid 350, for installation units of nominal size; 138 R7  
 Mounting lid for GES4, 800 mm; 158  
 Mounting lid for Telitank top, 800 mm; 159  
 Mounting lid for UKL8; 38  
 Mounting lid UKL4; 38  
 Mounting plate 2 x data socket type C for System 55; 94  
 Mounting plate for data technology, type A; 126  
 Mounting plate for data technology, type B; 127  
 Mounting plate for data technology, type C; 127  
 Mounting plate for data technology, type F; 127  
 Mounting plate for data technology, type LE; 127  
 Mounting plate for data technology, type LJUC; 128  
 Mounting plate for the installation of data sockets in; 127  
 GESRM2, 1 x Type LE  
 Mounting plate for the installation of data sockets in; 128  
 GESRM2, 2 x Type A  
 Mounting plate for the installation of data sockets in; 128  
 GESRM2, 2 x Type B  
 Mounting plate for the installation of data sockets in; 128  
 GESRM2, 2 x Type C  
 Mounting set for frame cassettes – MS250-3 3UT4; 65  
 Mounting set for UZD250-3; 107  
 Mounting set for UZD350-3; 107  
 Mounting support, double, for Modul 45®; 192  
 Mounting support, triple, for Modul 45®; 193

## N

Noise protection anchor; 70  
 Noise protection slipper; 70

## P

Protective contact socket, 33°, double; 108

## S

Screed box for GES R2; 125  
 Separating retainer; 156  
 Service outlet, blank, with Allen slot; 122-123  
 Service outlet, blank, without floor covering recess; 124  
 Service outlet, round, for screed height 55 mm; 93  
 Service outlet, square, for screed height 55 mm; 92  
 Service unit - UKL 8; 38  
 Service unit UKL4; 37  
 Socket 33°, Connect 45, protective contact, double; 192  
 Socket 33°, Connect 45, protective contact, triple; 192  
 Socket section 3-pin; 183, 187  
 Socket section 3-pin, screw connection; 187  
 Socket section 5-pin; 183  
 Support for 250 mm duct; 174

## T

Telitank T4B; 98-99  
 Telitank T8NL; 98, 100

Terrazzo lined body for height-adjustable cassettes; 66 nominal size 4  
 Terrazzo lined body for height-adjustable cassettes; 66 nominal size R4  
 Trunking end piece, height 40–150 mm; 158  
 Trunking unit, blank, height 40–70 mm; 150  
 Trunking unit, blank, height 60–110 mm; 151  
 Trunking unit, blank, locking, height 100–150 mm; 152  
 Tube body with cover plate, with handle clamp, for; 68  
 frame cassette and height-adjustable cassette  
 Tube body with cover plate, without handle clamp, for; 68  
 frame cassette and height-adjustable cassette  
 Tube body with handle clamp; 121-122

## U

UDHOME2 data technology support type C; 115  
 UDHOME2 data technology support type LE; 115  
 UDHOME2 floor socket, with floor covering recess; 115  
 double VDE, stainless steel  
 UDHOME2 floor socket, without floor covering recess; 115  
 double VDE, stainless steel  
 UDHOME4 floor box, with UT3 45 3 universal support; 116  
 triple VDE, stainless steel  
 UDHOME9 floor box, two double VDE, stainless steel; 116  
 UGD250-3 underfloor accessory socket for GES9/55; 90  
 UGD350-3 for rectangular installation units, for screed; 135  
 height 70–125 mm  
 Underfloor installation duct, 3-compartment; 171  
 Underfloor outlet box for GESRM2 mounting; 125  
 Underfloor outlet box for US80 components; 125, 188  
 Universal support UT3, system length 165 mm; 107  
 UTC3 W with 2 protective contact sockets; 178  
 UTC3 W with 2+1 protective contact sockets; 178  
 UTC3 W with 3 protective contact sockets; 178  
 UTC4 W with 2 protective contact sockets; 178  
 UTC4 W with 2+1 protective contact sockets; 180  
 UTC4 W with 2+2 protective contact sockets; 179  
 UTC4 W with 2+2 protective contact sockets, 2; 179  
 sockets with surge protection  
 UTC4 W with 3 protective contact sockets; 179  
 UTC4 W with 3+1 protective contact sockets; 180  
 UTC4 W with 3+1 protective contact sockets, 1 socket; 180  
 with surge protection  
 UTC4 W with 4 protective contact sockets; 179  
 UVS energy distributor with plug connection, normal; 183  
 and special circuit  
 UVS energy distributor with plug connection, normal; 182  
 circuit  
 UVS energy distributor with plug connection, special; 182  
 circuit  
 UVS-WIN energy distributor with fixed connection; 182  
 normal and special circuit  
 UVS-WIN energy distributor with fixed connection; 182  
 normal circuit  
 UVS-WIN energy distributor with fixed connection; 182  
 special circuit  
 UZD250-3 for screed height 115–170 mm; 132  
 UZD250-3 for screed height 165–220 mm; 133  
 UZD250-3 for screed height 70–125 mm; 132  
 UZD250-3 with pipe entry for screed height 70–125; 133  
 mm  
 UZD350-3 for screed height 115–170 mm; 136  
 UZD350-3 for screed height 165–220 mm; 137  
 UZD350-3 for screed height 70–125 mm; 136  
 UZD350-3 with pipe entry for screed height 70–125; 135  
 mm

## V

Vertical bend, three-compartment, height 48 mm; 172







# Type listing

Type	GTIN	Item no.	Page	Type	GTIN	Item no.	Page
71MT2 45	5889106	/pc. 6288576	192	GESR4 U 7011	5103684	/pc. 7405436	40
71MT3 45-2	5915027	6288574	193	GESR9 55U V 7011	5674450	7405047	93
ASH250-3 165220	5431855	7410146	133	GESR9 55U V 9011	5674467	7405049	93
ASH250-3 215270	5473275	7410158	134	GESRA7 10U	5104261	7405544	40
ASH350-3 165220	5431879	7410154	137	GESRA9 10U	5104445	7405580	41
ASH350-3 215270	5473299	7410164	137	GESRMS2	6605200	7405663	124
BTA-SKS S1 SW	5438069	6117190	186	HE60 UDHOME4	5919308	7427440	117
BTA-SKS S1 W	5483540	6117191	186	HE60 UDHOME9	5919315	7427444	117
BT-S GST18i3p SW	5273653	6108056	187	IBD 35048 9	6331741	7399852	170
BT-WIN 3P SW	6688203	6108950	183	IBNEV 110	6331918	7399920	174
BT-WIN 3P W	6688210	6108952	183	IBNEV 230	6331963	7399929	174
BT-WIN 5P SW	6688241	6108960	183	IBST 250	6331895	7399910	174
BT-WIN 5P W	6688258	6108962	183	IBVE 25048	6331840	7399892	170
DSD2 200	5245339	/pc. 7424990	159	KV3 25048	5090427	7400652	172
DSD2 300	5245346	7424992	159	LP 45	5112440	7407584	108
DSSL2 195	6540952	price/pac 7410589	87	LP R	5112433	7407580	108
DT UH2 C	6692552	7368474	115	MP 2R LJUC	6460779	7408812	128
DT UH2 LE	6692590	7368478	115	MP R2 2A	6460670	7408802	126
DUG 250-3 2	5431220	/pc. 7400455	134	MP R2 2B	6460687	7408804	127
DUG 250-3 4	5431251	7400459	134	MP R2 2C	6460724	7408806	127
DUG 250-3 4SL	6539000	7401404	86	MP R2 2F	6460731	7408808	127
DUG 250-3 6	5431268	7400463	134	MP R2 LE	6460748	7408810	127
DUG 250-3 9	5431275	7400467	135	MPMT45 2C	5693482	7408705	94
DUG 250-3 R4	5431282	7400471	134	MPRM2 1LE	5695646	7407628	127
DUG 250-3 R4SL	6539017	7401406	86	MPRM2 2A	5372486	7407620	128
DUG 350-3 4SL	6539024	7401408	86	MPRM2 2B	5372523	7407622	128
DUG 350-3 6	5431404	7400509	137	MPRM2 2C	5372530	7407624	128
DUG 350-3 9	5431435	7400513	138	MS250-3 3UT4	6552948	7407643	65
DUG 350-3 9SL	6539031	7401410	87	MS3 3UT3	6552962	7407651	107
DUG 350-3 R4SL	6539048	7401412	86	MS3 3UT4	6552979	7407655	107
DUG 350-3 R7	5431503	7400533	138	MT R2 1.5	6460625	7408836	126
DUG 350-3 R7SL	6539055	7401414	87	MT R2 1-1	6460663	7408838	126
DUG 350-3 R9SL	6539062	7401416	87	MT R2 NF	6460618	7408834	126
DUG UKL4	5709848	7428538	38	MT R2 VE	6460601	7408832	125
DUG UKL8	6436125	7428540	38	MT45V 0	5759393	7408698	110
FD 250-2	5090847	7400784	140	MT45V 2+2	5674528	7408682	94
FS RA9 10 5	5110958	7407216	41	MT45V 3+1	5674511	7408680	93
GES R2 7011	6459582	7405082	123	MT45V 4	5674498	7408670	93
GES R2 9011	6459599	7405084	123	OKA DAT 300	5093664	7401912	159
GES R2 Cr	6459315	7408856	121	OKA DG4 300	5094067	7402040	158
GES R2 Cu	6459292	7408854	120	OKA FB2 TX	5651574	7424821	158
GES R2 CuZn	6459285	7408852	120	OKA NEVE 150	5434764	7425972	158
GES R2 Ni	6459278	7408850	120				
GES R2B 7011	6459605	7405086	124				
GES R2B 9011	6459643	7405088	124				
GES R2B Cr	6460830	7408876	123				
GES R2B Cu	6460809	7408874	123	OKA2 TW 40	5093909	price/m 7401988	156
GES R2B CuZn	6460793	7408872	122				
GES R2B Ni	6460786	7408870	122				
GES R2T Cr	6459124	7408866	122	OKA-G20040150ES	5243816	/pc. 7424280	158
GES R2T Cu	6459063	7408864	121	OKA-G30040150ES	5243823	7424282	158
GES R2T CuZn	6459049	7408862	121	OKA-G40040150ES	5243830	7424284	158
GES R2T Ni	6458981	7408860	121	OKA-W A 6050 6	5245186	7424902	154
GES2 DB 7011	5102113	7405100	34				
GES2 U 7011	5102182	7405116	34	OKA-W2004030	5244127	price/m 7424400	150
GES4 U 7011	5102588	7405196	35	OKA-W2006050	5244196	7424420	151
GES4 U 9011	5102595	7405200	35	OKA-W30010050R	5244486	7424502	152
GES6 U 9011	5103110	7405312	35	OKA-W4004030	5244141	7424404	150
GES6-2U10T 7011	5883616	7405321	36				
GES6M-2 10U	6028733	7405299	36	RK NEV2 190	5891239	price/pac 7405817	164
GES9 55U V 7011	5674436	7405037	92				
GES9 55U V 9011	5674443	7405039	92	RK SL2 V2 25	5105992	/pc. 7405936	78
GES9M-2 10U	6028740	7405371	37	RK SL2 V2 30	5106005	7405940	78
				RK SL2 V3 40	5106111	7405968	78
				RKF2 SL2 V2 25	5870043	7409524	79

Type	GTIN	Item no.	Page	Type	GTIN	Item no.	Page
RKF2 SL2 V2 30	5870050	7409526	79	TUK2 GV	5858270	7428140	68
RKF2 SL2 V3 30	5870166	7409546	79	TUK2 V	5858287	7428141	68
RKFN2 4 VMSL1N20	5869207	7409384	80	UD GES R2	6459483	7428526	125
RKFN2 9 VS 20	5869047	7409368	55	UDHOME2 GV15V	6692446	7368324	115
RKFN3 4 V SL1 15	7278250	7408926	82	UDHOME2 GVV	6692453	7368326	115
RKFN3 4 V SL1 20	7278267	7408928	82				
RKFN3 4 VS 20	7278137	7408960	52	UDHOME4 2V UT V	5916482	7427216	116
RKFN3 4 VS 25	7278144	7408962	53	UDHOME9 2V UT45V	5916741	7427308	116
RKFN3 9 V SL1 16	7278298	7408938	84	UDL2-120 70	5116325	7408558	125
RKFN3 9 V SL1 21	7278304	7408940	84	UDL2-80 70	5116349	7408566	125
RKFN3 9 VS 20	7278175	7408980	58	UDL2-80 70	5116349	7408566	188
RKFN3 9 VS 25	7278182	7408982	59				
		/pc.		UGD 350-3 9	5431787	7410112	135
RKN2 9 VS 20	5867777	7409044	54	UGD55 250-3 9R	5678724	7410060	90
RKN3 4 MS 25	7278205	7408956	54	UKL 4	5709831	7428531	37
RKN3 4 V SL1 15	7278236	7408920	81	UKL 8	6436132	7428533	38
RKN3 4 V SL1 20	7278243	7408922	81	UT3 45 3	6435289	7408723	107
RKN3 4 VS 20	7278113	7408950	50	UTC3 W W2	6687725	7404610	178
RKN3 4 VS 25	7278120	7408954	51	UTC3 W W2OR1	6687718	7404609	178
RKN3 9 MS 25	7278229	7408976	60	UTC3 W W3	6687732	7404611	178
RKN3 9 V SL1 16	7278274	7408932	83	UTC4 W OR2	6687749	7404613	178
RKN3 9 V SL1 21	7278281	7408934	83	UTC4 W OR2GN1	6687831	7404623	180
RKN3 9 VS 20	7278151	7408970	56	UTC4 W OR4	6687756	7404614	179
RKN3 9 VS 25	7278168	7408974	57	UTC4 W W2	6687763	7404615	178
		/pc.		UTC4 W W2OR2	6687770	7404616	179
RKS 2V2 20	5108801	7406554	65	UTC4 W W2OR2 Ü	6687787	7404617	179
RKS 2V2 25	5108818	7406558	65	UTC4 W W3	6687794	7404618	179
RKS2 R4 V20	5867395	7409258	62	UTC4 W W3OR1	6687817	7404621	180
RKS2 R9 V25	5867609	7409280	62	UTC4 W W3OR1 Ü	6687824	7404622	180
RKS2 9 VS 20	5867227	7409218	55	UTC4 W W4	6687800	7404619	179
		price/m		UVS-WIN 6S	6688173	6107986	182
S3 25048	5089377	7400332	171	UVS-WIN 6S6W	6688197	6107990	183
S3 35048	5089407	7400344	171	UVS-WIN 6W	6688180	6107988	182
		/pc.		UVS-WIN F6S	6688142	6107980	182
SAK-2 V2A	6040476	7407995	65	UVS-WIN F6S6W	6688166	6107984	182
SK HB 201X201	5246435	7425600	190	UVS-WIN F6W	6688159	6107982	182
SK HB 245X245	5099901	7404412	190				
SK HB R275	5099888	7404404	190	UZD 115170 250-3	5431640	7410043	132
SK RK4	6633937	7404380	66	UZD 115170 350-3	5431671	7410047	136
SK RK4R	6633944	7404382	66	UZD 165220 250-3	5431688	7410052	133
SRD 3	7353025	7405799	70	UZD 165220 350-3	5431695	7410056	137
SRS 4	7353001	7405798	70	UZD 250-3	5430964	7410030	132
		/pc.		UZD 250-3 R	5475507	7410031	133
STA-SKS S1 SW	5438090	6117192	186	UZD 350-3	5431633	7410034	136
STD-D3S RW2	7255787	6120103	108	UZD 350-3 R	5475545	7410035	135
STD-D3S RW3	7256173	6120123	108	VB2-WIN 3P	6688289	6108970	184
STD-D3SC RW2	7256494	6120483	192	VB3-WIN 3P	6688296	6108972	184
STD-D3SC RW3	7256821	6120503	192	VB5-WIN 3P	6688302	6108974	184
		/pc.		VB-G GST18i3p	5896975	6108045	186
ST-F GST18i3p SW	5273530	6108050	187	VB-SKS S	5438113	6117198	186
ST-S GST18i3p SW	5273608	6108054	187	VK-WIN	6688623	6108700	184
ST-WIN 3P SW	6688227	6108954	183				
ST-WIN 3P W	6688234	6108956	183	VL-3Q2.5 1 SW	5123064	6108150	187
ST-WIN 5P SW	6688265	6108964	183	VL-3Q2.5 10 SW	5123248	6108159	187
ST-WIN 5P W	6688272	6108966	183	VL-3Q2.5 3 SW	5123118	6108152	187
		/pc.		VL-3Q2.5 5 SW	5123163	6108154	187
T4B 00C 7011	5114956	7408288	99	VL-3Q2.5 8 SW	5123224	6108157	187
T4B P7 9011	5114895	7408276	99	VL-3Q2.5 H1 SW	5124368	6108450	186
T8NL 00C 9011	5115984	7408494	100	VL-3Q2.5 H10 SW	5124542	6108459	186
T8NL P01 9011	5115687	7408436	100	VL-3Q2.5 H3 SW	5124382	6108452	186
T8NL P105 9011	5115786	7408452	100	VL-3Q2.5 H5 SW	5124436	6108454	186
T8NL P45 9011	5115908	7408474	100	VL-3Q2.5 H8 SW	5124498	6108457	186
				VL-WIN 3P2.5 1SW	6688463	6108710	181
				VL-WIN 3P2.5 1W	6688470	6108712	181



# Type listing

Type	GTIN	Item no.	Page
VL-WIN 3P2.5 3SW	6688487	6108714	181
VL-WIN 3P2.5 3W	6688494	6108716	181
VL-WIN 3P2.5 5SW	6688500	6108718	181
VL-WIN 3P2.5 5W	6688517	6108720	181
VL-WIN 3P2.5 8SW	6688524	6108722	181
VL-WIN 3P2.5 8W	6688531	6108724	181
VL-WIN 3P2.5H1SW	6688548	6108730	181
VL-WIN 3P2.5H1W	6688555	6108732	181
VL-WIN 3P2.5H3SW	6688562	6108734	181
VL-WIN 3P2.5H3W	6688579	6108736	181
VL-WIN 3P2.5H5SW	6688586	6108738	181
VL-WIN 3P2.5H5W	6688593	6108740	181
VL-WIN 3P2.5H8SW	6688609	6108742	181
VL-WIN 3P2.5H8W	6688616	6108744	181
WZ 1022	5116639	/pc. 7408626	70









© OBO Bettermann 07/2023 NO

**OBO Bettermann AS**  
Hvamveien 4  
2013 Skjetten

[www.obo-bettermann.no](http://www.obo-bettermann.no)

**Kundeservice Norge**  
Tlf.: +47 64 80 22 22  
[info@obo-bettermann.no](mailto:info@obo-bettermann.no)

---

**Building Connections**

**OBO**  
BETTERMANN