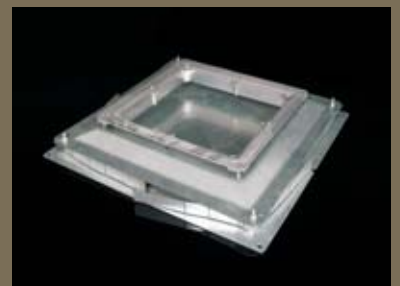


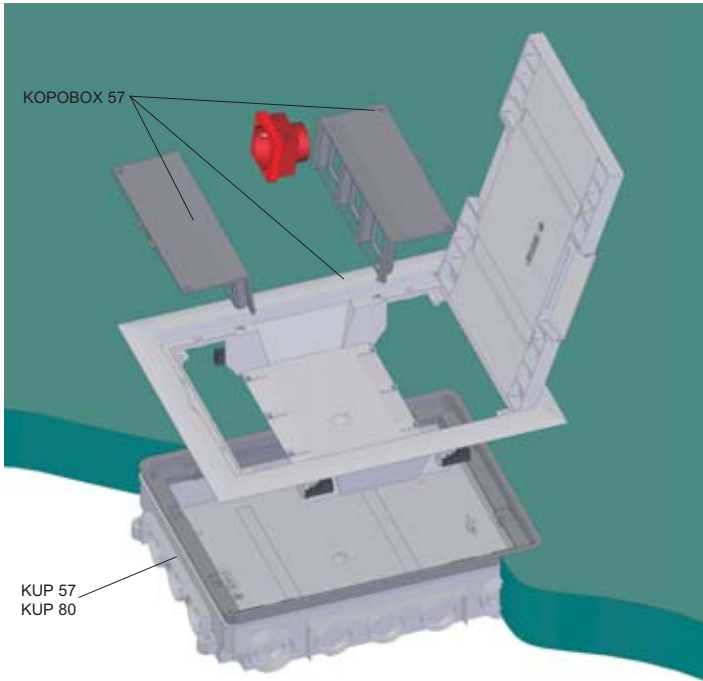


6

FLOOR INSTALLATIONS



KOPOBOX – installation of the system in a concrete floor



KOPOBOX 57 - system

The complete floor box system composed of KOPOBOX 57 and KUP 57 or KUP 80 is designated for the assembly of modular apparatuses 45 x 45 mm. The fastening feet (designated for mounting into double floor) are not used in the installation of the frame KOPOBOX 57 into the box KUP.

Instructions for assembly KOPOBOX 57:

The floor box KUP 57 is designated for a concrete layer height from 57 mm to 75 mm, the floor box KUP 80 is designated for a concrete layer height from 80 mm to 95 mm. It is necessary to attach to box to the floor material. The required height of the box can be adjusted using the bolts of the extension frame in the range from 57 mm to 75 mm (KUP 57) or from 80 mm to 95 mm (KUP 80).

If the concrete layer is higher than 75 mm (KUP 57) or 95 mm (KUP 80) then it is necessary to use the leveling set SN (4 pcs) anchored to the floor material. The leveling set enables to raise the height of the box up to 35 mm.

The universal boxes are adapted for the installation of electrical pipes. The openings can be made using a progressive drill. Individual entrances including the extension frame have to be sealed with a sealant to protect against concrete entering in.

During the course of the concrete pouring it is necessary to use the cover plate (included in the packing KUP) to prevent the box being filled with concrete mix. After the concrete mix hardens and the cover plate is removed, the floor box KUP is fitted with the frame of the floor box KOPOBOX 57. The apparatus cups are installed into the frame and the electrical installation of the modular apparatuses is performed.

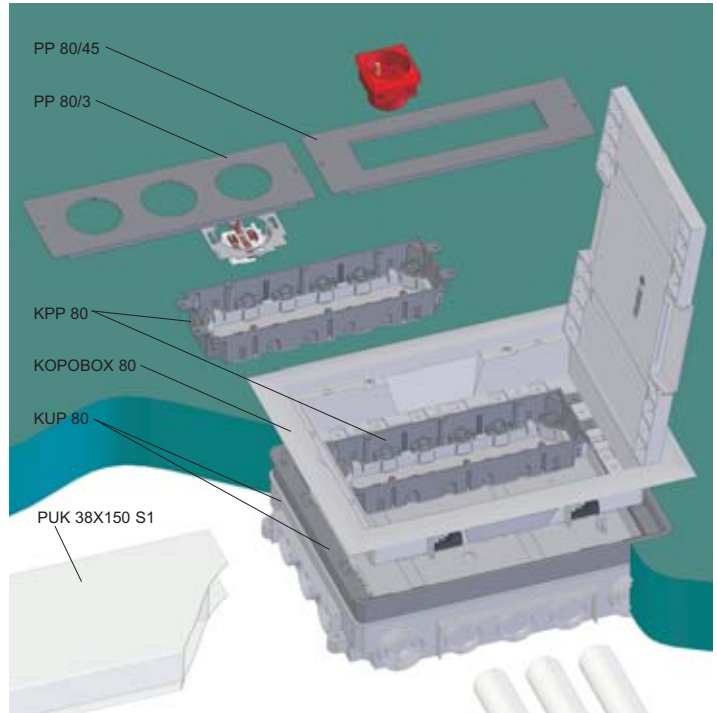
KOPOBOX 57 is mainly designated for the installation of cables with direct plugs. The use of cables with bent plugs or adapters is possible but limited. The use of adapters for powering of devices is limited due to their specific size.

The floor frame cover is designated for flooring with a max. height of 7 mm. With regards to the protection level (IP 30) the box is not designed for wet machine cleaning. Recommended flooring is carpets or floating floors.

To the system is possible assembly modular instrument from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

The system are designed for distribution system with voltage 500 V.

The maximum load of floor boxes KOPOBOX is 1500N.



KOPOBOX 80 - system

The complete floor box system composed of KOPOBOX 80 and KUP 80 is designated for the assembly of classic and also modular apparatuses. The selection of the type of installed apparatuses is given by the type of cover plate for apparatuses. The fastening feet (designated for mounting into double floor) are not used in the installation of the frame KOPOBOX 80 into the box KUP 80.

Instructions for assembly KOPOBOX 80:

The floor box KUP 80 is designated for a concrete layer height from 80 mm to 95 mm. It is necessary to attach to box to the floor material. The required height of the box can be adjusted using the bolts of the extension frame in the range from 80 mm to 95 mm.

If the concrete layer is higher than 95 mm then it is necessary to use the leveling set SN (4 pcs) anchored to the floor material. The leveling set enables to raise the height of the box up to 35 mm.

The KUP 80 is adapted for the installation of electrical pipes. The openings can be made using a progressive drill. Individual entrances including the extension frame have to be sealed with a sealant to protect against concrete entering in.

During the course of the concrete pouring it is necessary to use the cover plate (included in the packing KUP 80) to prevent the box being filled with concrete mix. After the concrete mix hardens and the cover plate is removed, the floor box KUP 80 is fitted with the frame of the floor box KOPOBOX 80. The apparatus boxes KPP 80 are subsequently inserted into the frame. Depending on the selection of the type of installed apparatuses, the box is mounted with the relevant type of cover plate for apparatuses PP 80.

Modular apparatuses:

- installation into KPP 80 + PP 80/45,
- installation directly onto PP 80/45, while using the partition plate PKUP.

Classic apparatuses:

- installation into KPP 80 + PP 80/3, for empty assembly opening use the caps ZPP.

KOPOBOX 80 is mainly designated for the installation of cables with bent plugs. The use of cables with direct plugs or adapters is possible but limited.

The floor frame cover is designated for flooring with a max. height of 7 mm. With regards to the protection level (IP 30) the box is not designed for wet machine cleaning. Recommended flooring is carpets or floating floors.

To the system is possible assembly modular instrument from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

The system are designed for distribution system with voltage 500 V.

The maximum load of floor boxes KOPOBOX is 1500N.



floor box frame

item number	⚙️	👤	📖	⚖️	
KOPOBOX 57	grey RAL 7012	PA	IP30	0,59	●

Designated for installation into the universal floor box KUP 57 or KUP 80.

Enables the assembly of modular apparatuses 45 x 45 mm (max. 6 pcs) from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

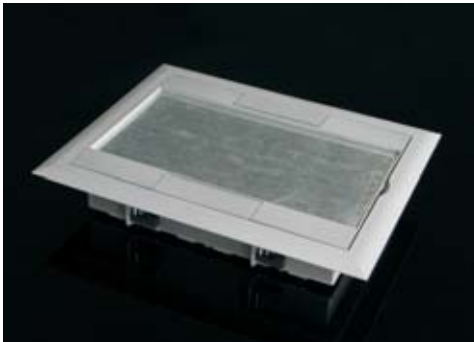
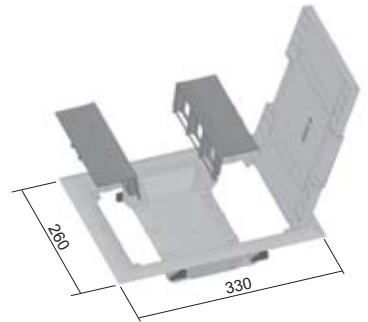
The sheet metal reinforcement of the cover ensures its high mechanical rigidity while maintaining the possibility of inserting the final floor covering.

The cover has 2 tilt flaps enabling the leading out of cables from the box.

The package includes bolts for attaching the frame to the floor box KUP.

KOPOBOX is standardly delivered in dark gray color. With an order of above 500 pcs it is possible to deliver a different color according to the color card RAL (does not apply for the apparatus boxes).

The maximum load of floor box frame is 1500 N.



floor box frame

item number	⚙️	👤	📖	⚖️	
KOPOBOX 80	grey RAL 7012	PA	IP30	0,52	●

Designated for installation into the universal floor box KUP 80.

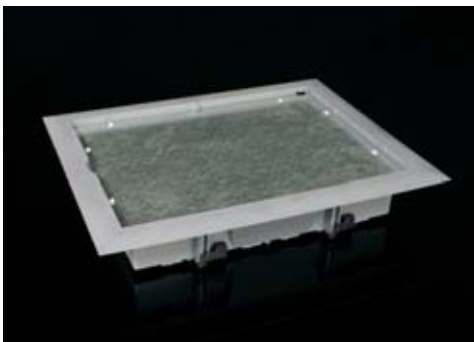
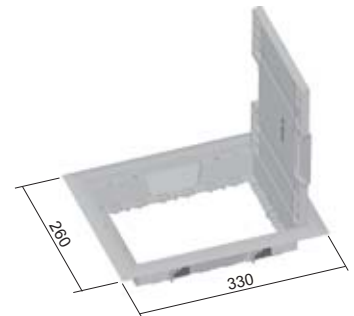
Use of apparatus boxes KPP 80 (max. 2 pcs) with cover plates for apparatuses PP 80/3 it enables the assembly of classic apparatuses (max. 6 pcs), with the cover plates PP 80/45 it enables the assembly of modular apparatuses (max. 8 pcs).

The sheet metal reinforcement of the cover ensures its high mechanical rigidity while maintaining the possibility of inserting the final floor covering.

The cover has 2 tilt flaps enabling the leading out of cables from the box. The package includes bolts for attaching the frame to the floor box KUP 80.

KOPOBOX is standardly delivered in dark gray color. With an order of above 500 pcs it is possible to deliver a different color according to the color card RAL.

The maximum load of floor box frame is 1500 N.



stripping floor box

item number	⚙️	👤	📖	⚖️	
PP 80/K-5	grey RAL 7012	PA	IP30	1,6	●

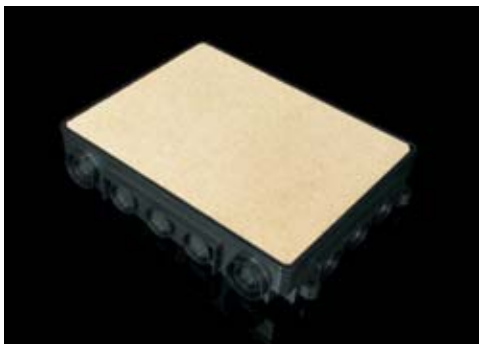
To be used for installation in universal floor box KUP.

It is designated as a blind cove for stripping the cables.

The floor covering is put on the bearing metal plate after installation of frame.

The frame is not suitable to install apparatus. In case to install apparatus, replaced the frame for KOPOBOX 80 and install apparatus.

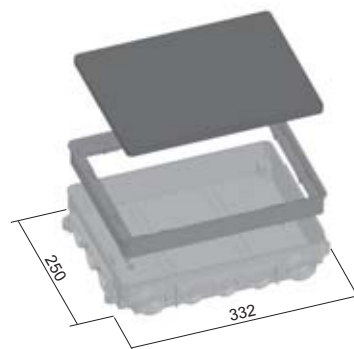
The maximum load of stripping floor box is 1500 N.



universal floor box

item number	⚙️	👤	⚖️	
KUP 57	black RAL 9011	PA	0,6	●
KUP 80	black RAL 9011	PA	0,7	●

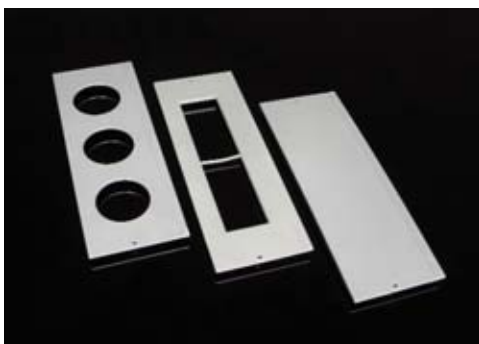
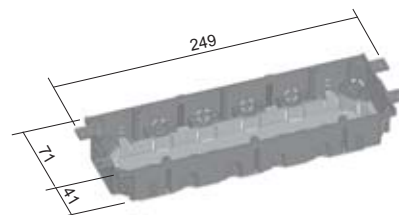
Serves for the assembly into the concrete floor. After the concrete mix hardens it is fitted with the floor box frame KOPOBOX 57 (KUP 57, KUP 80) or KOPOBOX 80 (KUP 80). The package includes a cover board which prevents the box from being filled with concrete during concrete applying. The minimum height of the concrete layer for KUP 57 is 57 mm maximum height is 75 mm, for KUP 80 it is from 80 mm to 95 mm. The required height of the box can be adjusted by raising the insertion with screws. For higher concrete layer than 75 mm or 95 mm it is necessary to use the leveling set SN (1 set). The box is adapted for the installation of electrical pipes, it is fitted with pre-marked passages: 4x Ø25; 4x Ø40; 12x Ø32 a 4x 150x35 mm.



apparatus floor box

item number	⚙️	👤	⚖️	
KPP 80	grey RAL 7012	PA	0,12	●

Universal apparatus box designated for assembly into the box KOPOBOX 80 (max. 2 pcs). The package includes 4 pcs of straps for mechanical anchoring of the cables, 8 pcs of bolts for fastening cables, bolts for attaching apparatuses and for attaching the box to the frame KOPOBOX. The depth of the box can be adjusted by changing position of the bottom.

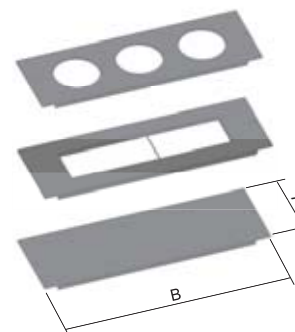


cover plate for apparatus

item number	A	B	⚙️	👤	⚖️	
PP 80/0	89	250	grey RAL 7012	PA	0,07	●
PP 80/3	89	250	grey RAL 7012	PA	0,05	●
PP 80/45	89	250	grey RAL 7012	PA	0,05	●

Cover plate for apparatus is to be installed into the frame of the floor box KOPOBOX 80. Assembly is recommended together with the apparatus box KPP 80.

PP 80/3 - serves for the assembly of up to 3 pcs of classic apparatuses
 PP 80/45 - serves for the assembly of up to 4 pcs of modular apparatuses from companies ABB, PEHA, Legrand, OBO Bettermann and other same design. Is recommended to remove the partition by installation of multiple instrument.
 PP80/0 it is used for blanding unpopulated space in KOPOBOX 80 floor box frame.

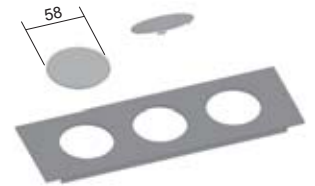




end cap

item number	⚙️	👤	⚖️
ZPP	grey RAL 7012	PA	0,005

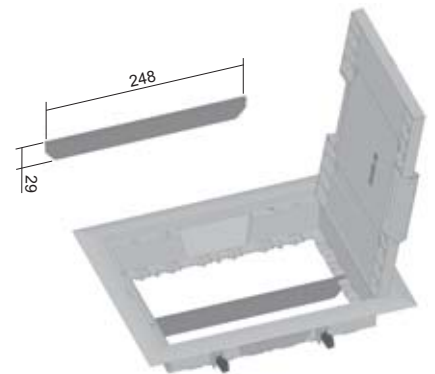
Designated for closing off non-mounted openings on the cover plate for apparatus PP 80/3.



partition

item number	⚙️	👤	⚖️
PKUP	grey RAL 7012	PA	0,015

The partition is designated for dividing the internal area of the box KOPOBOX 80 in the case, that there are not used the apparatus boxes KPP 80 and the installation is performed directly into cover plates for apparatus PP 80/45.



leveling set

item number	⚙️	👤	⚖️
SN	black RAL 9011	PE	0,015

Serves for the setting of the precise height of the universal boxes KUP 57 and KUP 80 during floor concreting. The attached nuts M6 are used as a block of the box against floating during installation. When ordering 1 leveling set you receive the set containing 4 pcs.





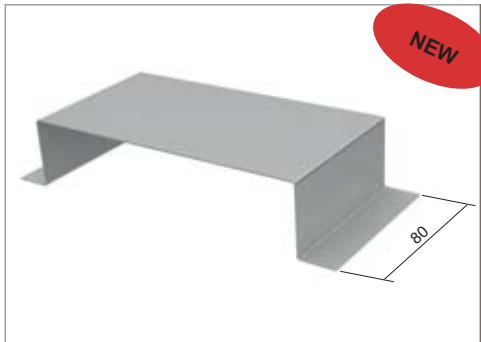
floor trunking

item number	↓	S
PUK 38X150 S1	0,7	●

The floor boxes is suitable to connect several boxes KUP 57, KUP 80.

inner usable cross-section of the channel								
Type number	mm ²	utilization 50% (crosssection mm ²)	data	data	CYKY	CYKY	CYKY	CYKY
			cables	cables	3x1,5	5x1,5	3x2,5	5x2,5
PUK 38X150 S1	5700	2850	Ø 5,5	Ø 7	Ø 8,6	Ø 10,1	Ø 9,5	Ø 11,2
			94	58	39	28	32	23

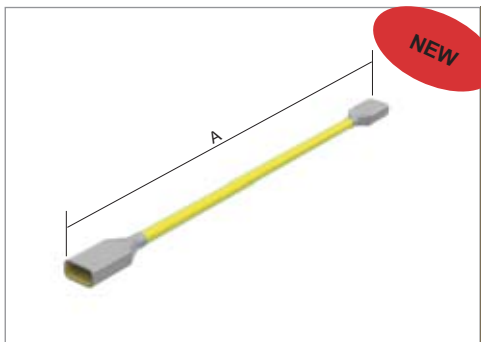
Find in the table quantity of cables for whole canals profile. It is necessary to divide by 2 for each canals chamber. The values state the number of cables with the tray at 50% full. Orientation diameters of the cables CYKY. The values are mathematically calculated. The limit values (small tray x big cable or contrariwise) it is necessary to consider combination of the tray and diameter of the cable and used them with reference to technical conditions.



coupling floor trunking

item number	↓	S
SPUK	0,7	●

For cover the connection of the floor canal and protect the canal from leaking the concrete inside of canal. It is fixed on the floor by screws or with stud nail.



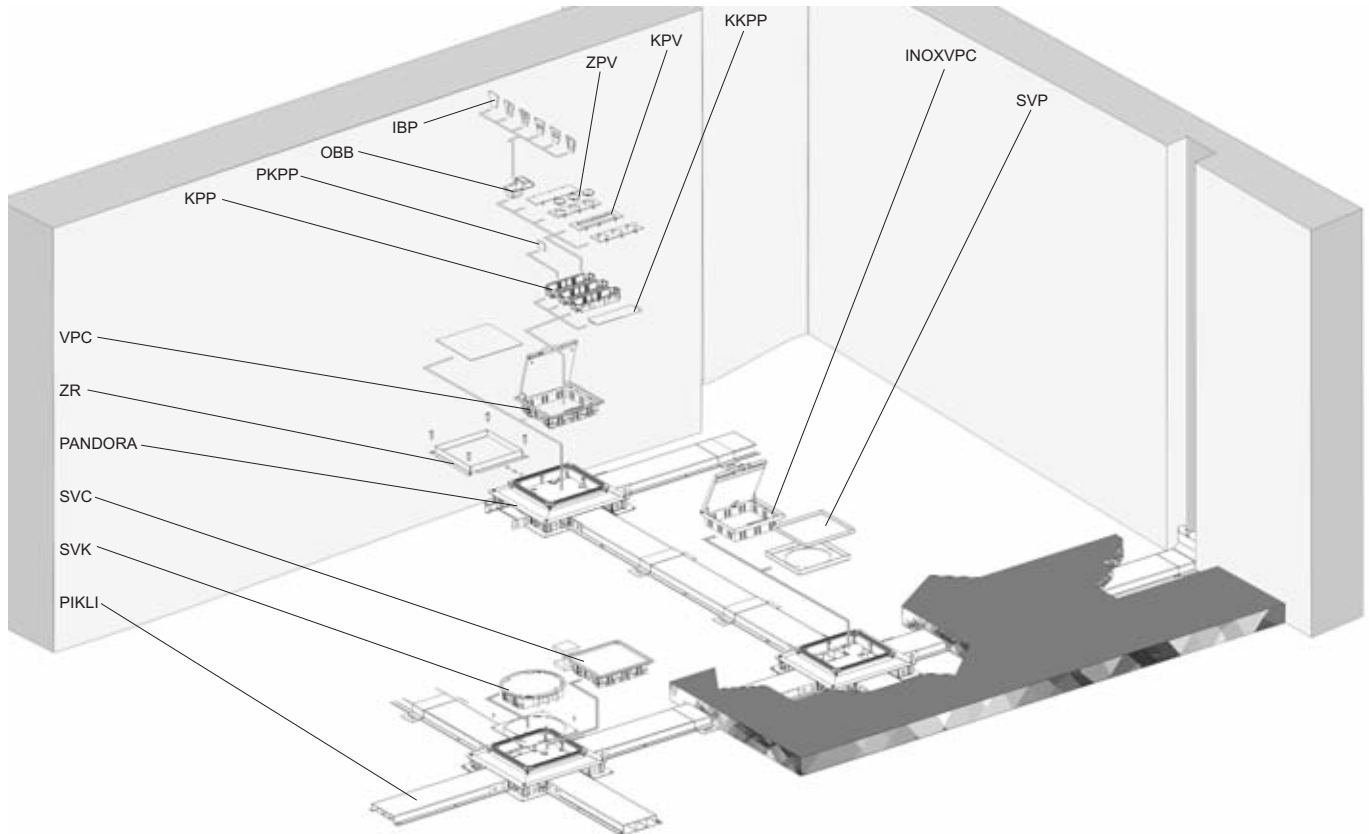
connecting string

item number	profile	A	
PLUK	1,5	250	●
PLUK 1	1,5	550	●

The connecting string covers the bonding of the floor canals. The string PLUK 1 it is used in case of installation train line into box KUP.



OVERVIEW OF SYSTEM ELEMENTS - INSTALLATION IN A CONCRETE FLOOR

**Floor trunkings**

The total height of the floor must be at least 65 mm for a PANDORA 28, 75 mm for a PANDORA 38, and 85 mm for a PANDORA 48, with the aluminium adjustable flange of the floor box must be flush with the top of the floor. The positions of the floor boxes are first marked on the sub-floor after it has been cleaned. If the highly-fluid upper floors (liquid floors) are used, all openings and holes in the floor boxes and floor trunkings must be sealed (e.g. using adhesive tape, dry mortar or plastic foam).

After sawing or grinding the floor trunkings, any burrs or sharp edges must be removed and grinded from the inside in order to prevent damage to the cables when they are pulled through the trunkings. For the floor trunkings PIKLI and PIKLI K it is not necessary to use any other additional parts to secure electrical conductivity and for potential equalization.

Floor box

Before installing the PANDORA floor box, any unevenness must be removed from the sub-floor. The bottom plate of the floor box is equipped with four fixing holes. Four alignment splines are also provided in order to enable the floor boxes to be easily aligned. When the floor box is installed in a floor trunking, the side walls of the floor box are bent open so that they are symmetrically aligned with the centre line. The side walls have small perforations for trunking widths of 170, 250, 350 and 370 mm.

Any side of the floor trunking can be connected, and they are inserted approximately 10 mm into the floor box until the stops are reached. The floor trunking can then be connected to the side walls or to the bottom plate in order to guarantee optimal electrical conductivity. The floor boxes have a vertical adjustment range of 30 mm. The four adjusting screws can be used to adjust the height of the aluminium adjustable flange, and to ensure that it is level. The floor boxes are adjusted to the minimum adjustment height when they are delivered. If the desired height cannot be attained, one or more extensions frames can be used. Before installing an extension frame, the aluminium adjustable flange must be unscrewed from the lower steel box. The extension frame can then be screwed onto the lower box, and the aluminium adjustable flange can then be installed. An extension frame type, according to selection, increases the height by 30 or 40 mm.

The bottom plate is equipped with an earthing block to which a maximum of eight 2.5 mm² earthing cables can be connected.

Hinged cover and accessories

Prior to installation, check that the floor box is earthed. Remove the hinged cover, from the frame for increased ease of installation. Turn the screw thread until the position of the far edge of this thread corresponds to the opening in the frame. Then position a screwdriver (min. 8 mm) on the right-hand side of the access cover in order to remove the access cover from the.

The equipment housings have nine cable inlets (four in the corners, five on the

bases) which can be broken away, four in the corners, and five in the bases. Two pull reliefs are supplied together with four screws for the cable inlets in the corners. Using the partition plate PKPP it is possible to divide the box for better separation of circuits. These are attached to the box after performing the electrical installation of the devices. The boxes are snapped into the frame in the required height. The cover plate is placed onto the box and is secured with the cover plates of individual devices (the frame is not used). To cover the area which is not mounted with device boxes use the cover plate KPVO.

The frame cover is placed back and the frame is closed.

Note: Do not press on the hinges from the top.

marking	description	page
IBP	fixation plate	12
INOXVPC	hinged cover – square	10
KKPP	cap	11
KPP	apparatus cup	11
KPV	cover plate	11
OBB	apparatus box	12
PANDORA	floor box	8
PIKLI	floor trunking	13
PKPP	partition	11
SVC	blind cover – square	9
SVK	blind cover – round	9
SVP	blind cover for tile	10
VPC	hinged cover – square	9
ZPV	cap	12
ZR	extension frame	8



floor box PANDORA

item number	H1 (trunk height)	H2 (box height)	‡	S
PANDORA 28	28	65 - 95	6,00	●
PANDORA 38	38	75 - 105	7,00	●
PANDORA 48	48	85 - 115	8,00	●

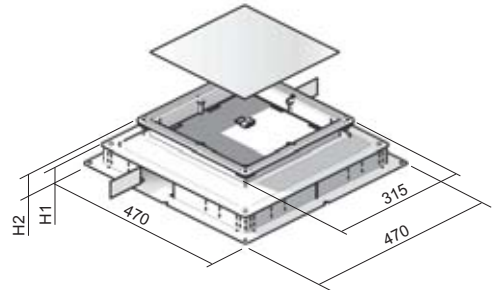
The box is delivered with a site cover which can be removed after the finished floor is finished. Box frame is made from aluminum. The floor box is standard 30mm adjustable (for example: PANDORA 28: 65 to 95 mm).

In case of higher screed, use our raise frame „ZR“, delivered with 4 bolts M 6X30.

Flooring canals are fixed into boxes by fixing pre-divided side plates. It is possible to bend out those side plates to a required width of canal and it is necessary to make a galvanizing equipotential bonding between Pandora and flooring canal. Insertion of flooring canal into a box supposes to be 10 cm.

A minimal height of the covering floor of 80 - 85 mm is necessary for the fitting of the Pandora 28/38. Wide edge for the screed.

Adjustment possible, even after the concrete floor has been installed. Provided with earth terminal (8*2.5 mm²) on the bottom of the floor box. Design of box side enables installation of all widths of floor trunking.



tube adapter PANDORA

item number	H	‡	S
TAP 28*	28	0,37	●
TAP 38*	38	0,47	●
TAP 48*	48	0,57	●

The tube adapter can be used to replace the side walls of the box PANDORA, one tube adapter is designated for one side wall of the box.

The tube adapter is marked with break-away surfaces for pipe sizes EN 16 and 20 (TAP 28 only for EN 16).

TAP is delivered as a set, when ordering 1 piece you receive 4 metal pieces for complete installation on the box PANDORA.

* until the sell-out of stocks

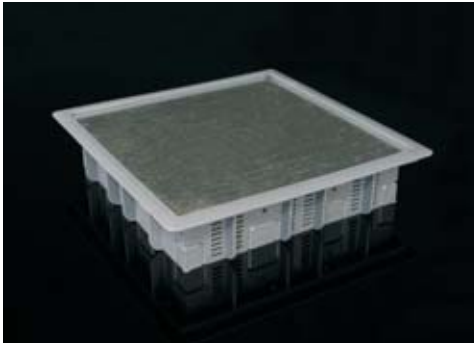


extension frame

item number	H	‡	S
ZR 30	30	0,50	●
ZR 40	40	0,69	⊕

The extension frame enables the modification of the height of the box PANDORA by 30 or 40 mm.

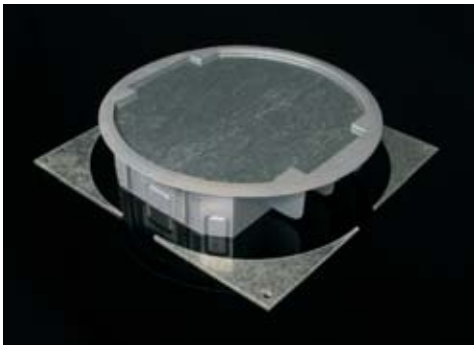
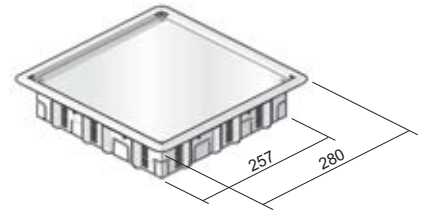




blind cover – square

item number	⚙️	👤	📖	⚖️	
SVC	grey RAL 7011	PP	IP30	1,16	●
SVC 9011	black RAL 9011	PP	IP30	1,16	🕒

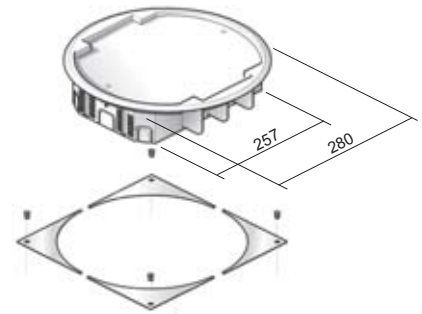
Blind cover is put into the floor box PANDORA to use as a draw-in box for floor channels when no apparatus cups are installed inside.
 The cover is screwed in the bottom box with 4 included bolts.
 The cover is reinforced with a 2 mm thick metal plate, depth saving without cardboard is 8 mm, depth saving can be decreased with cardboard to 5 mm.



blind cover – round

item number	⚙️	👤	📖	⚖️	
SVK	grey RAL 7011	PP	IP30	1,46	🕒
SVK 9011	black RAL 9011	PP	IP30	1,46	🕒

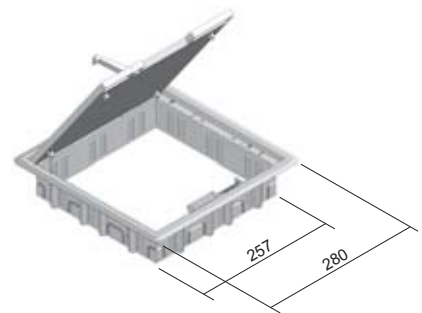
Blind cover is put into the floor box PANDORA to use as a draw-in box for floor channels when no apparatus cups are installed inside.
 The build-in corners are fixed to the floor box with 4 attached bolts, the cover is attached with 2 included bolts.
 The cover is reinforced with a 2 mm thick metal plate, depth saving without cardboard is 8 mm, depth saving can be decreased with cardboard to 5 mm.



hinged cover – square

item number	⚙️	👤	📖	⚖️	
VPC	grey RAL 7011	PP	IP30	1,57	●
VPC 9011	black RAL 9011	PP	IP30	1,57	🕒

The VPC cover is composed of a built - in frame, frame for flooring and cable transmit blocks.
 The frame for flooring and cable transmit blocks can be placed in four directions into the built in frame.
 The frame for flooring is reinforced with a 3 mm thick metal plate. Depth saving for flooring is 5 mm.
 The cover is screwed on the floor box by means of 4 included bolts.
 The cover does not have to be earthed.

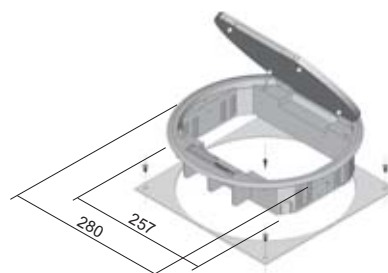




hinged cover – round

item number	color	material	classification	weight kg/pc	
VPK	grey RAL 7011	PP	IP30	1,57	●
VPK 9011	black RAL 9011	PP	IP30	1,57	⊕

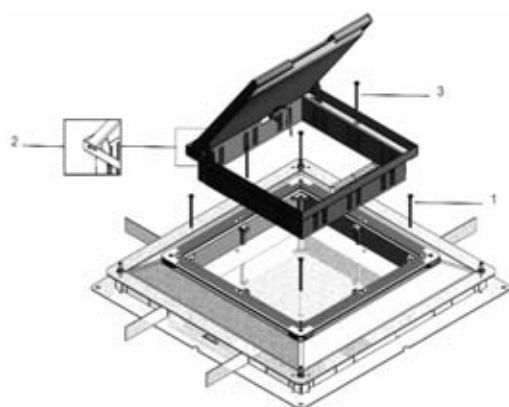
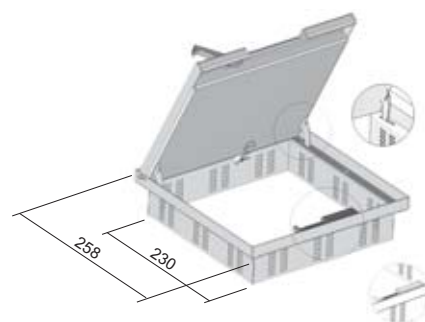
The VPC cover is composed of a built-in frame, frame for flooring and cable transmit blocks. The frame for flooring and cable transmit blocks can be placed in two directions into the built-in frame. The frame for flooring is reinforced with a 3 mm thick metal plate. Depth saving for flooring is 5 mm. The built-in corners are fixed to the floor box with 4 attached bolts, the cover is attached by means of 2 included bolts. The cover does not have to be earthed.



hinged cover, tile floor / parquet – stainless

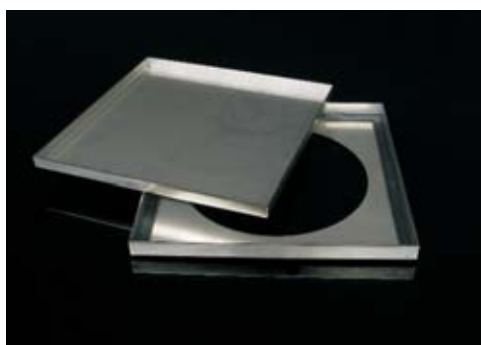
item number	material	classification	weight kg/pc	
INOXVPC	IX	IP30	1,50	⊕
INOXVPC 25	IX	IP30	1,73	⊕

The INOXVPC cover is composed of a built-in frame, frame for flooring and cable transmit blocks. The cover is not water tight, it is suitable for dry environments, it is ideal for parquet floors or tile floors. The frame and the cover are connected for equalization of potentials. The cover is screwed on the floor box by means of 6 included bolts. INOXVPC cover depth saving is 16 mm, INOXVPC 25 is 26 mm.



Instructions for assembly

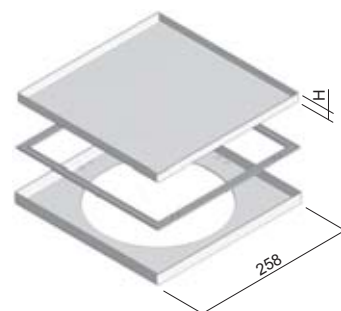
1. Mount 4 long bolts into the corners of the aluminum floor box PANDORA.
2. Level out the INOXVPC. Open the cover and press it forward, to make access to the bolts. Turn the bolts to level out to according height.
3. Fasten 2 short bolts into the middle for mounting the INOXVPC into the PANDORA floor box.



blind cover, tile floor / parquet

item number	H	weight kg/pc	material	classification	weight kg/pc	
SVP	13	1,5	IX	IP55	1,50	●
SVP 25	23	1,5	IX	IP55	1,73	⊕

Blind cover is put into the floor box PANDORA to use as a draw-in box for floor channels when no apparatus cups are installed inside. The cover is attached to the floor box with 4 attached bolts. The SVP cover depth saving is 13 mms, SVP 25 is 23 mm. Protection IP 55 is secured in non-active condition. For level of protection IP 55 it is necessary to use a seal or silicone mastic under blind cover.





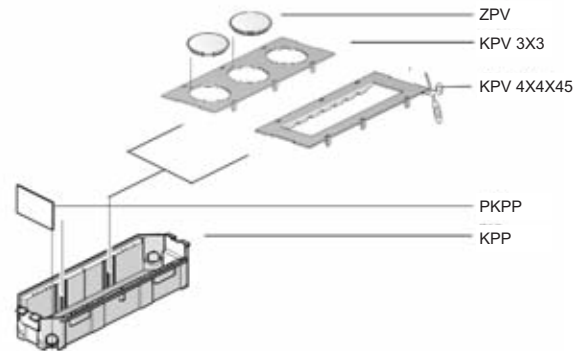
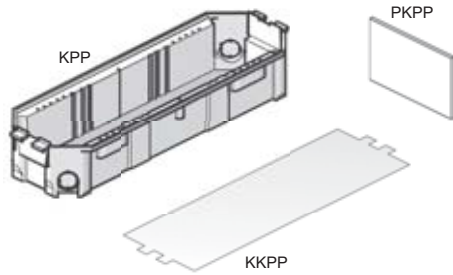
Apparatus cup

item number	⚙️	👤	‡	
KPP	grey RAL 7011	PP	0,08	●
KPP 9011	black RAL 9011	PP	0,018	⌚
PKPP	grey RAL 7011	PP	0,01	●
KKPP	grey RAL 7011	PP	0,03	●

Can be clipped in the frame at different heights and in all directions. Max. 3 apparatus cups can be installed per square or round build-in frame.

Use the blind plate KKPP in case you do not use all the available space for the apparatus cup. In case of usage in the round box, cut the corners away.

The partition plate PKPP enables the division of the apparatus cup area into 2 or 3 compartments.



cover plates

item number	⚙️	👤	‡	
KPV 0	grey RAL 7011	PP	0,03	●
KPV 0 9011	black RAL 9011	PP	0,03	⌚
KPV 3X3	grey RAL 7011	PP	0,02	●
KPV 3X3 9011	black RAL 9011	PP	0,02	⌚
KPV 1K*	grey RAL 7011	PP	0,01	●
KPV 4X4X45	grey RAL 7011	PP	0,03	●
KPV 4X4X45 9011	black RAL 9011	PP	0,03	⌚

The cover plates can be used both with the round and the square box. In case of usage in the round floor box, modify the plate by cutting the two outer corners.

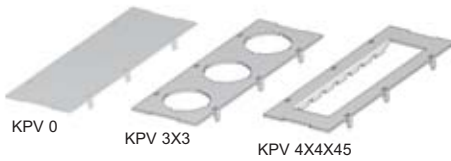
KPV 0 – blind plate

KPV 3X3 - 3 classic apparatuses

KPV 4X4X45 - 4 modular apparatuses

KPV 1K - 1 classic apparatus, plate covers 1/3 of the box

* until supplies are sold out

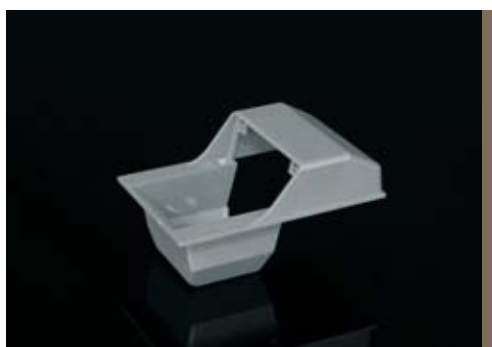




cap

item number	⚙	👤	‡	
ZPV	grey RAL 7011	PP	0,005	⊕
ZPV 9011	black RAL 9011	PP	0,005	⊕

To be used for covering the openings in the cover plate KPV 3X3, which were not fitted with apparatuses.



apparatus box

item number	⚙	👤	‡	
OBB	grey RAL 7011	PP	0,03	●

The apparatus box is to be fixed in the apparatus cup KPP, max. 2 boxes into one up. The box is designed for assembly of various types of fixation plates. It attaches to the apparatus cup by 2 attached bolts.



fixation plate

item number	⚙	👤	‡	
IBP 0*	grey RAL 7011	PP	0,01	●
IBPM 45	grey RAL 7011	PP	0,01	⊕
IBPFO*	grey RAL 7011	PP	0,01	●
IBP 3*	grey RAL 7011	PP	0,01	●
IBPV 2*	grey RAL 7011	PP	0,01	●
IBPH 2	grey RAL 7011	PP	0,01	⊕

Fixation plates are designated for fixing into the 'OBB' apparatus box. They are attached by 2 attached bolts.

IBP 0 - blind plate

IBPM 45 – modular apparatuses 45 mm

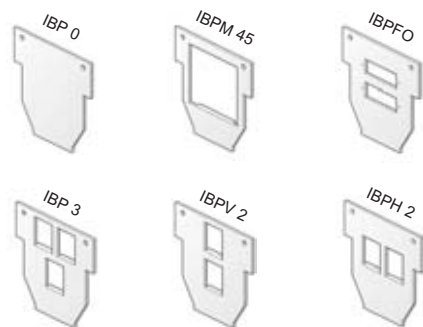
IBP 3 - 3 sockets AMP RJ 45 cat. 5

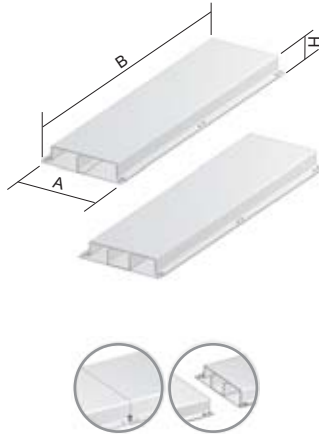
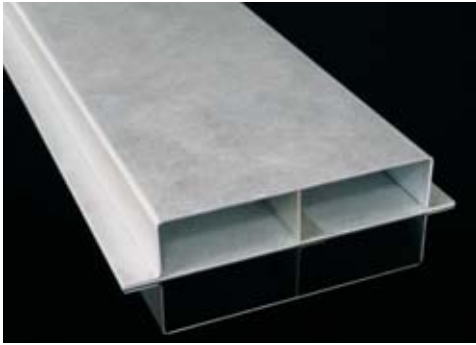
IBPV 2 - 2 sockets AMP RJ 45 cat. 5 vertical placement

IBPH 2 - 2 sockets AMP RJ 45 cat. 5 horizontal placement

IBPFO - for Fiber optic AMP SC - duplex socket X-502776-X

* until supplies are sold out





floor trunking with integrated coupling

item number	A	H	B	↑ (bottom)	↑ (top)	‡	S
2 compartments (S1)							
PIKI 28X170 S1	170	28	3000	1,00	1,50	4,30	⊕
PIKI 28X250 S1	250	28	3000	1,00	1,50	5,80	⊕
PIKI 28X350 S1	350	28	3000	1,00	1,50	8,23	⊕
PIKI 28X370 S1	370	28	3000	1,00	1,50	8,95	⊕
PIKI 38X170 S1	170	38	3000	1,00	1,50	4,97	⊕
PIKI 38X250 S1	250	38	3000	1,00	1,50	6,47	⊕
PIKI 38X350 S1*	350	38	3000	1,00	1,50	8,54	●
PIKI 38X370 S1	370	38	3000	1,00	1,50	8,95	⊕
PIKI 48X170 S1	170	48	3000	1,00	1,50	5,60	⊕
PIKI 48X250 S1	250	48	3000	1,00	1,50	6,30	⊕
PIKI 48X350 S1	350	48	3000	1,00	1,50	8,87	⊕
PIKI 48X370 S1	370	48	3000	1,00	1,50	9,30	⊕

3 compartments (S2)							
PIKI 28X170 S2	170	28	3000	1,00	1,50	4,70	⊕
PIKI 28X250 S2*	250	28	3000	1,00	1,50	6,90	●
PIKI 28X350 S2	350	28	3000	1,00	1,50	8,88	⊕
PIKI 28X370 S2*	370	28	3000	1,00	1,50	9,51	●
PIKI 38X170 S2	170	38	3000	1,00	1,50	5,60	⊕
PIKI 38X250 S2	250	38	3000	1,00	1,50	6,60	⊕
PIKI 38X350 S2	350	38	3000	1,00	1,50	9,00	⊕
PIKI 38X370 S2	370	38	3000	1,00	1,50	9,37	⊕
PIKI 48X170 S2	170	48	3000	1,00	1,50	5,97	⊕
PIKI 48X250 S2	250	48	3000	1,00	1,50	7,67	⊕
PIKI 48X350 S2	350	48	3000	1,00	1,50	10,10	⊕
PIKI 48X370 S2	370	48	3000	1,00	1,50	10,30	⊕

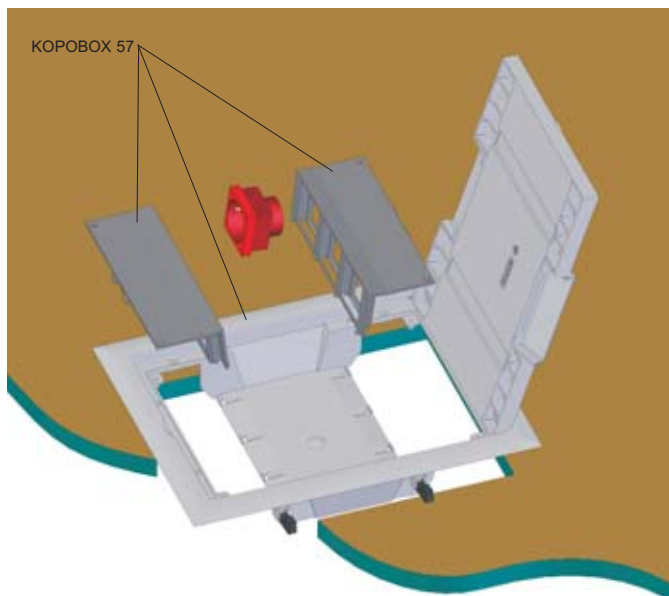
inner usable cross-section of the channel								
Type number	mm ²	utilization 50% (crosssection mm ²)	data cables		CYKY 3x1,5	CYKY 5x1,5	CYKY 3x2,5	CYKY 5x2,5
			Ø 5,5	Ø 7	Ø 8,6	Ø 10,1	Ø 9,5	Ø 11,2
PIKI 28X170	4760	2380	79	49	32	23	26	19
PIKI 28X250	7000	3500	116	71	47	34	39	28
PIKI 28X350	9800	4900	162	100	66	48	54	39
PIKI 28X370	10360	5180	171	106	70	51	57	41
PIKI 38X170	6460	3230	107	66	44	32	36	26
PIKI 38X250	9500	4750	157	97	64	47	53	38
PIKI 38X350	13300	6650	219	136	90	65	74	53
PIKI 38X370	14060	7030	232	143	95	69	78	56
PIKI 48X170	8160	4080	135	83	55	40	45	33
PIKI 48X250	12000	6000	198	122	81	59	67	48
PIKI 48X350	16800	8400	277	171	114	82	93	67
PIKI 48X370	17760	8880	293	181	120	87	98	71

LIGHT - 2 compartments (S1)							
PIKLI 28X170 S1	170	28	3000	1,00	1,00	4,11	⊕
PIKLI 28X250 S1	250	28	3000	1,00	1,00	5,08	⊕
PIKLI 28X350 S1	350	28	3000	1,00	1,00	6,58	⊕
PIKLI 28X370 S1	370	28	3000	1,00	1,00	6,91	⊕
PIKLI 38X170 S1	170	38	3000	1,00	1,00	3,73	⊕
PIKLI 38X250 S1	250	38	3000	1,00	1,00	4,87	⊕
PIKLI 38X350 S1	350	38	3000	1,00	1,00	6,13	⊕
PIKLI 38X370 S1	370	38	3000	1,00	1,00	6,75	⊕
PIKLI 48X170 S1*	170	48	3000	1,00	1,00	4,56	●
PIKLI 48X250 S1	250	48	3000	1,00	1,00	5,53	⊕
PIKLI 48X350 S1	350	48	3000	1,00	1,00	7,03	⊕
PIKLI 48X370 S1	370	48	3000	1,00	1,00	7,40	⊕

LIGHT - 3 compartments (S2)							
PIKLI 28X170 S2	170	28	3000	1,00	1,00	4,50	⊕
PIKLI 28X250 S2	250	28	3000	1,00	1,00	5,68	⊕
PIKLI 28X350 S2	350	28	3000	1,00	1,00	7,40	⊕
PIKLI 28X370 S2	370	28	3000	1,00	1,00	7,48	⊕
PIKLI 38X170 S2	170	38	3000	1,00	1,00	4,61	⊕
PIKLI 38X250 S2	250	38	3000	1,00	1,00	5,78	⊕
PIKLI 38X350 S2	350	38	3000	1,00	1,00	7,40	⊕
PIKLI 38X370 S2	370	38	3000	1,00	1,00	7,80	⊕
PIKLI 48X170 S2	170	48	3000	1,00	1,00	5,20	⊕
PIKLI 48X250 S2	250	48	3000	1,00	1,00	6,30	⊕
PIKLI 48X350 S2	350	48	3000	1,00	1,00	8,00	⊕
PIKLI 48X370 S2	370	48	3000	1,00	1,00	8,53	⊕

The notes shape the quantity of cable with 100% fullness of trays. It is necessary to divide by 2 for each canals chamber (type S1 or type S2). The values state the number of cables with the tray at 50% full. Orientation diameters of the cables CYKY. The values are mathematically calculated. The limit values (small tray x big cable or contrariwise) it is necessary to consider combination of the tray and diameter of the cable and used them with reference to technical conditions.

No additional pieces needed for equipotential connection.
Product is patented.
* until supplies are sold out

KOPOBOX - system installation in double floor**KOPOBOX 57**

KOPOBOX 57 is designed for mounting of modular apparatuses 45 x 45. Installation of the classic apparatuses into this frame is not possible. However it enables the installation into floors already from a depth of 56 mm. The cover plate for apparatus for modular apparatuses is already a part of the frame KOPOBOX 57 and it is not necessary to order it separately.

Before assembly it is suitable to remove the cover and the cover plates for the apparatuses from the frame. This will enable easier mounting of the frame into the floor.

The paper template in the frame package is used for the marking and subsequent cutting out of the opening in the floor.

The inner perforated template enables the cutting out of the flooring into the frame cover. The inserted frame is secured by turning the feet bolts, until the feet firmly grip the frame to the floor. After inserting plate for the apparatuses the electric installation of the modular apparatuses is performed.

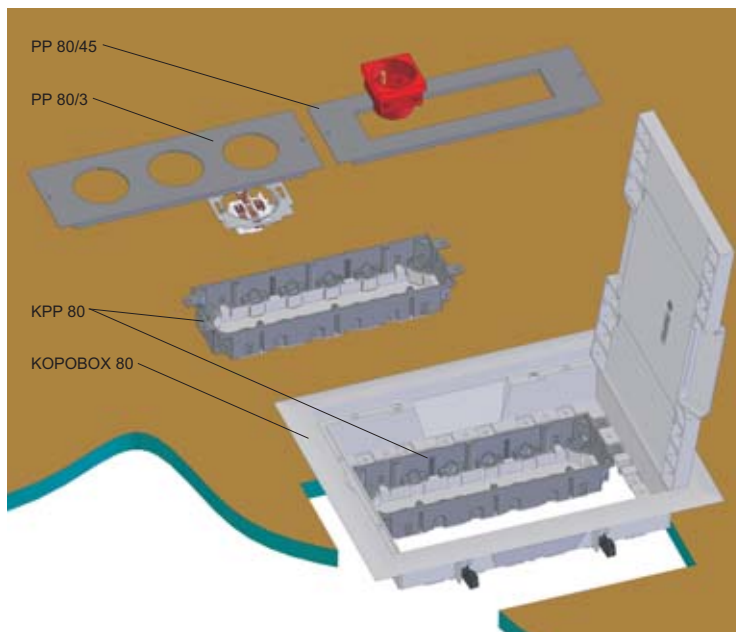
The cover is fitted with flooring with a max. height of 7 mm. With regards to the protection level (IP 30) the box is not designed for wet machine cleaning. Recommended flooring is carpets or floating floors.

KOPOBOX 57 is mainly designated for the installation of cables with direct plugs. The use of cables with bent plugs is possible but limited. The use of adapters for powering of devices is limited due to their specific size.

To the system is possible assembly modular instrument from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

The system are designed for distribution system with voltage 500 V.

The maximum load of striping floor box is 1500 N

**KOPOBOX 80**

KOPOBOX 80 enables installation of classic and also modular apparatuses (the selection is performed by suitable selection of the cover plate for apparatus), however it is possible to use the frame already from a floor depth of 78 mm. For the frame KOPOBOX 80 it is necessary to order the cover plates for apparatus according to the selected types of apparatuses.

Before assembly it is suitable to remove the cover from the frame. This will enable easier mounting of the frame into the floor, and also the performing of the subsequent electrical installation.

The paper template in the frame package is used for the marking and subsequent cutting out of the opening in the floor. The inner perforated template enables the cutting out of the flooring into the frame cover. The inserted frame is secured by turning the feet bolts, until the feet firmly grip the frame to the floor. The KPP 80 box with the relevant broken off cable passages is then inserted into the frame, the cables are secured against mechanical stressing using the straps (part of the package).

The KPP 80 box is then mounted with the cover plates for apparatus according to the selected types of apparatuses, and the connecting of the apparatuses is performed.

The cover is fitted with flooring with a max. height of 7 mm. With regards to the protection level (IP 30) the box is not designed for wet machine cleaning. Recommended flooring is carpets or floating floors.

Modular apparatuses:

- installation into KPP 80 + PP 80/45,
- installation directly onto PP 80/45, while using the partition plate PKUP.

Classic apparatuses:

- installation into KPP 80 + PP 80/3, for empty assembly opening use the caps ZPP.

KOPOBOX 80 is mainly designated for the installation of cables with bent plugs. The use of cables with direct plugs or adapters is possible but limited.

To the system is possible assembly modular instrument from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

The system are designed for distribution system with voltage 500 V.

The maximum load of striping floor box is 1500 N



floor box frame

item number	color	material	classification	weight kg/pc
KOPOBOX 57	grey RAL 7012	PA	IP30	0,59

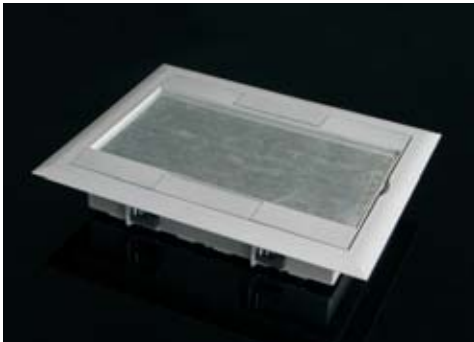
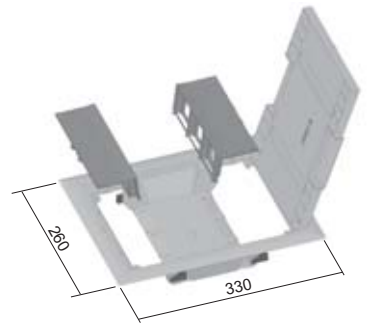
Enables the assembly of modular apparatuses 45 x 45 mm (max. 6 pcs) from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

The sheet metal reinforcement of the cover ensures its high mechanical rigidity while maintaining the possibility of inserting the final floor covering. The cover has 2 tilt flaps enabling the leading out of cables from the box.

Minimum height of double floor for installation is 56 mm. Suited thickness of the floor is from 10 to 40 mm.

KOPOBOX is standardly delivered in dark gray color. With an order of above 500 pcs it is possible to deliver a different color according to the color card RAL (does not apply for the apparatus boxes).

The maximum load of floor box frame is 1500 N.



floor box frame

item number	color	material	classification	weight kg/pc
KOPOBOX 80	grey RAL 7012	PA	IP30	0,52

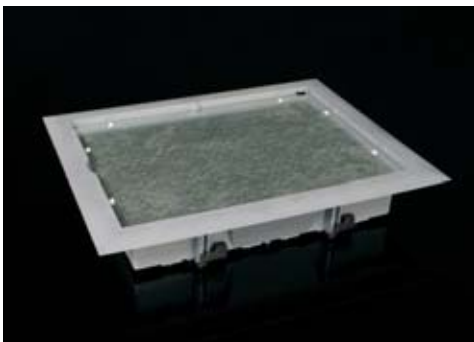
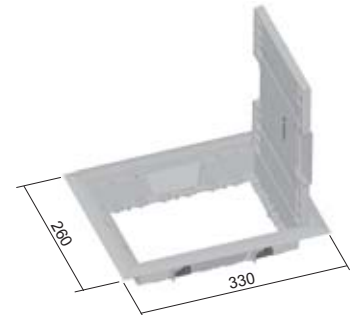
Use of apparatus boxes KPP 80 (max. 2 pcs) with cover plates for apparatuses PP 80/3 it enables the assembly of classic apparatuses (max. 6 pcs), with the cover plates PP 80/45 it enables the assembly of modular apparatuses (max. 8 pcs) from companies ABB, PEHA, Legrand, OBO Bettermann and other same design.

The sheet metal reinforcement of the cover ensures its high mechanical rigidity while maintaining the possibility of inserting the final floor covering. The cover has 2 tilt flaps enabling the leading out of cables from the box.

Minimum height of double floor for installation is 78 mm. Suited thickness of the floor is from 10 to 40 mm.

KOPOBOX is standardly delivered in dark gray color. With an order of above 500 pcs it is possible to deliver a different color according to the color card RAL.

The maximum load of floor box frame is 1500 N.



stripping floor box

item number	color	material	classification	weight kg/pc
PP 80/K-5	grey RAL 7012	PA	IP30	1,6

It is designated as a blind cover for stripping the cables.

The floor covering is put on the bearing metal plate after installation of frame.

The frame is not suitable to install apparatus. In case to install apparatus, replaced the frame for KOPOBOX 80 and install apparatus.

The maximum load of stripping floor box is 1500 N.

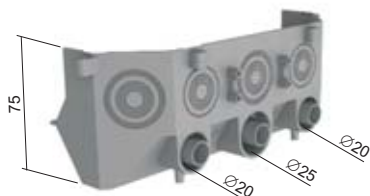


45 modulus cover

item number	⚙️	👤	⚖️	
KM 45	grey RAL 7012	PA	1,6	●

The cover is used to cover installed modular apparatus 45x45 in the floor box frame KOPOBOX 57 into double floors.

The packing includes halogen free pipes, it is possible to make installation to the other side of frame KOPOBOX 57.



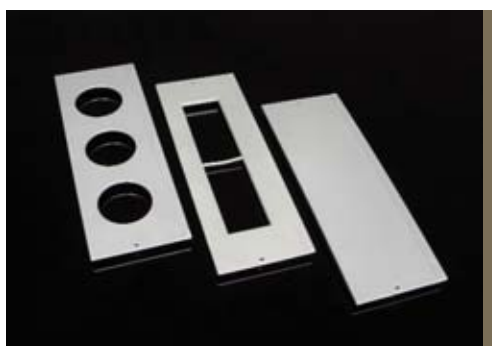
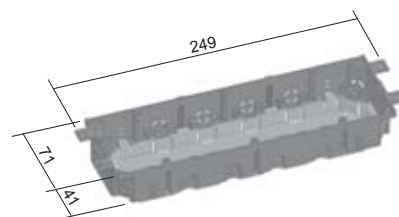
apparatus floor box

item number	⚙️	👤	⚖️	
KPP 80	grey RAL 7012	PA	0,12	●

Universal apparatus box designated for assembly into the box KOPOBOX 80 (max. 2 pcs).

The package includes 4 pcs of straps for mechanical anchoring of the cables, 8 pcs of bolts for fastening cables, bolts for attaching apparatuses and for attaching the box to the frame KOPOBOX.

The depth of the box can be adjusted by changing position of the bottom.



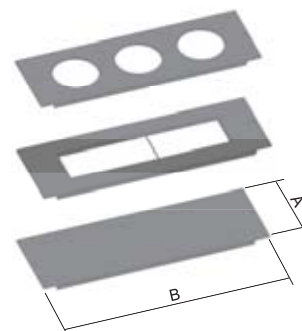
cover plate for apparatus

item number	A	B	⚙️	👤	⚖️	
PP 80/0	89	250	grey RAL 7012	PA	0,07	●
PP 80/3	89	250	grey RAL 7012	PA	0,05	●
PP 80/45	89	250	grey RAL 7012	PA	0,05	●

Cover plate for apparatus is to be installed into the frame of the floor box KOPOBOX 80. Assembly is recommended together with the apparatus box KPP 80.

PP 80/3 - serves for the assembly of up to 3 pcs of classic apparatuses
PP 80/45 - serves for the assembly of up to 4 pcs of modular apparatuses from companies ABB, PEHA, Legrand, OBO Bettermann and other same design. Is recommended to remove the partition by installation of multiple instrument.

PP80/0 it is used for blanding unpopulated space in KOPOBOX 80 floor box frame.

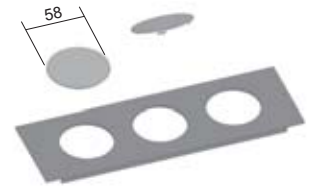




end cap

item number	⚙	👤	⚖
ZPP	grey RAL 7012	PA	0,005

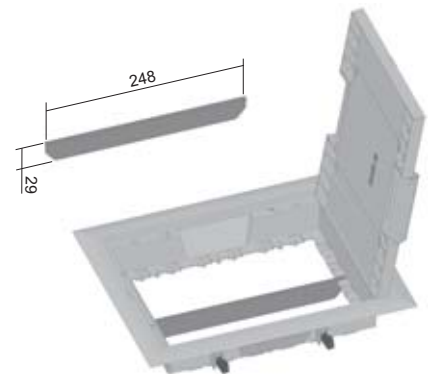
Designated for closing off non-mounted openings on the cover plate for apparatus PP 80/3.



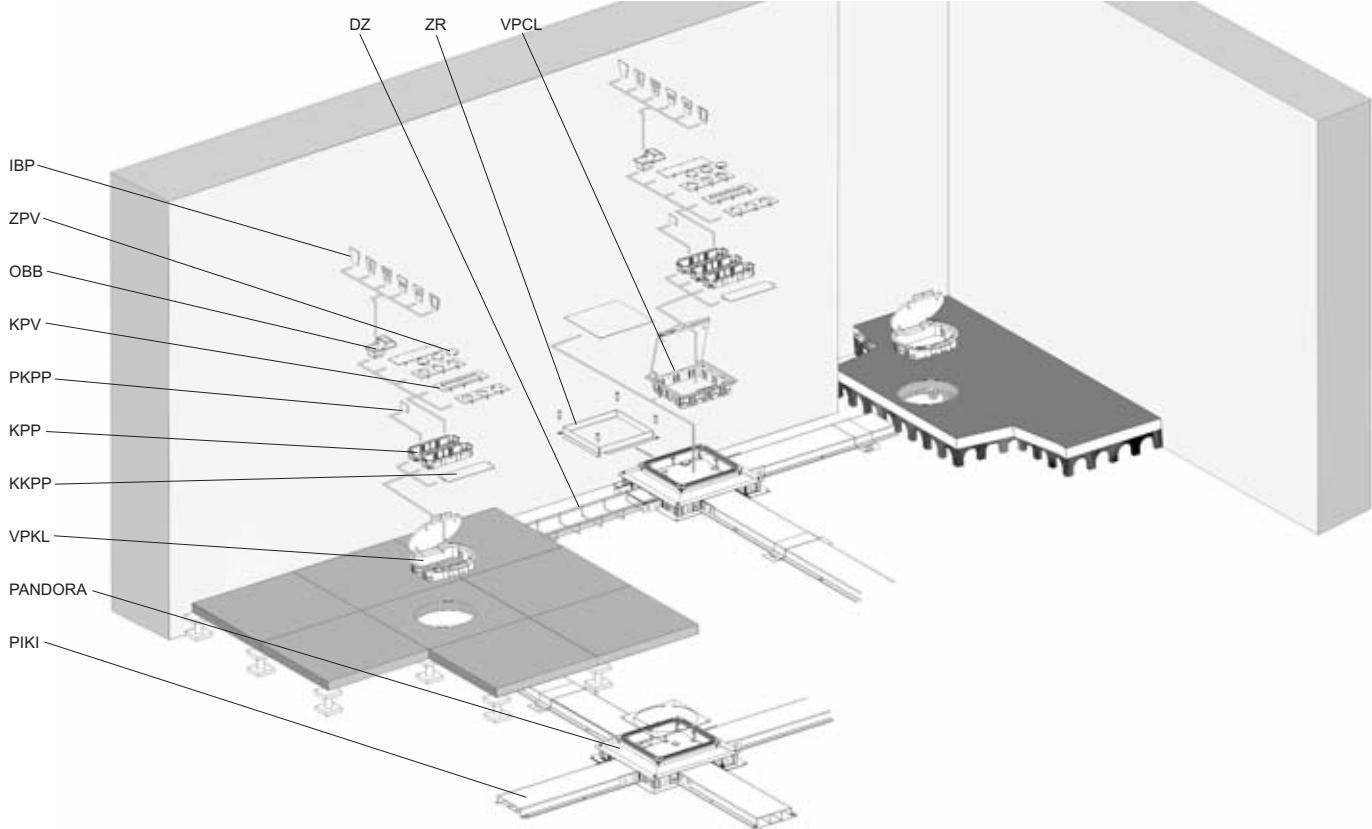
partition

item number	⚙	👤	⚖
PKUP	grey RAL 7012	PA	0,015

The partition is designated for dividing the internal area of the box KOPOBOX 80 in the case, that there are not used the apparatus boxes KPP 80 and the installation is performed directly into cover plates for apparatus PP 80/45.



OVERVIEW OF SYSTEM ELEMENTS – INSTALLATION IN A DOUBLE FLOOR

**General**

In this part of the catalog it is possible to find the products designed for the installation into double floors. They are delivered as sets, into which it is possible to select accessories depending on the type of installed data or power apparatuses.

In order to create cabling in the area between a double floor, there is used the standard cable trunking (page 14, 15) or wire cable trays (chapter wire cable trays page 2). This trunking or trays are placed directly under the top floor. The square covers VPCL are attached to the floor using four bolts and for the round covers VPKL the attachment is performed to the floor using two brackets and bolts. Both types of covers can be used for floors with thicknesses from 30 - 60 mm.

Assembly

For the assembly of the hinged covers it is necessary to create openings in the floor with the following dimensions:

VPCL: 260 x 260 mm

VPKL: diameter 260 mm

INOXVPCL: 260 x 260 mm

Prior to installation remove the hinged cover, from the frame for increased ease of installation. Insert a flat screwdriver to the stud of the cover hinge and slight pushing away of the cover slides it out of the frame. For round boxes, prior to pushing away, it is necessary to use a screwdriver to bend out the red tabs, which prevent the cover from being pushed away and its undesired falling out. The equipment housings have nine cable inlets (four in the corners, five on the bases) which can be broken away. The apparatus box package includes two straps for mechanical anchoring of the cables which pass through the box corners. The remaining bolts are used to fasten classic apparatuses into the box while using the cover plates KPV 3X3. When using the cover plate KPV 45X45 four screws are used to secure the cover plate. Using the partition plate PKPP it is possible to divide the box for better separation of circuits.

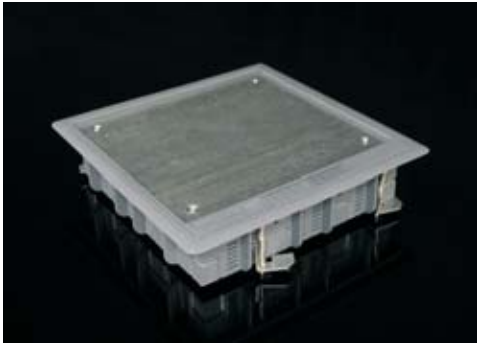
The electrical installation of the devices is performed using the cables which are run through the boxes. These are attached to the box after performing the electrical installation of the devices. The boxes are snapped into the installation in the required height. The cover plate is placed onto the box and is secured with the cover plates of individual devices (the frame is not used). To cover the area which is not mounted with device boxes use the cover plate KPV0.

The hinged cover is secured to the floor using feet (for INOXVPCL the attachment to the floor is performed by construction).

The cable bushing block is placed on the required side of the cover frame and the lid is placed back and is closed.

Note: Do not press on the hinged cover from the top.

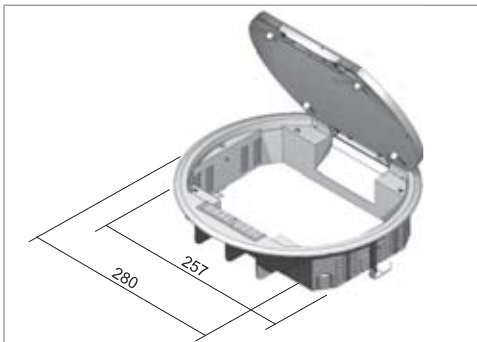
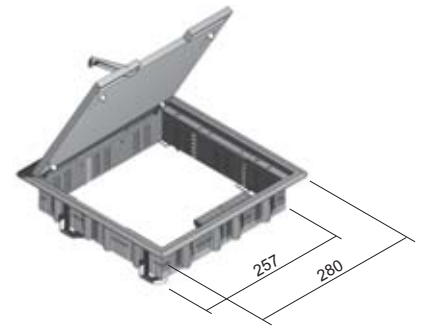
marking	description	page
DZ	wire cable tray	3-2
IBP	fixation plate	21
KKPP	cap	20
KPP	apparatus cup	20
KPV	cover plate	20
OBB	apparatus box	21
PANDORA	floor box	8
PIKI	floor trunking	13
PKPP	partition	20
VPCL	hinged cover – square	19
VPKL	hinged cover – round	19
ZPV	cap	21
ZR	extension frame	8



hinged cover for double floor – square

item number	⚙️	👤	📖	⚖️	
VPCL	grey RAL 7011	PP	IP30	1,57	●
VPCL 9011	black RAL 9011	PP	IP30	1,57	🕒

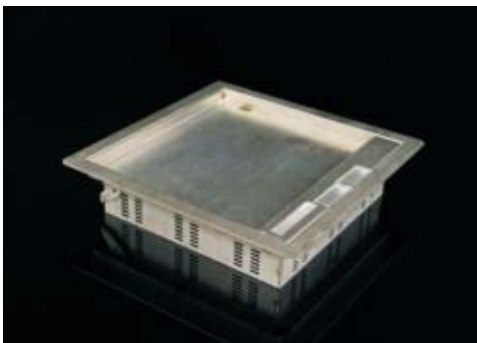
The VPCL cover is composed of a built - in frame, frame for flooring and cable transmit blocks.
 The frame for flooring and cable transmit blocks can be placed into the built - in frame in four directions.
 The built - in frame has feet for attaching to the floor, with a width of 30 mm to 60 mm.
 The frame for the flooring is reinforced with a 3 mm thick metal plate. The depth saving for the flooring is 5 mm.
 Opening for installation is 260 x 260 mm.
 When closed, cover fulfills IP30.



hinged cover for double floor – round

item number	⚙️	👤	📖	⚖️	
VPKL	grey RAL 7011	PP	IP30	1,46	🕒
VPKL 9011	black RAL 9011	PP	IP30	1,46	🕒

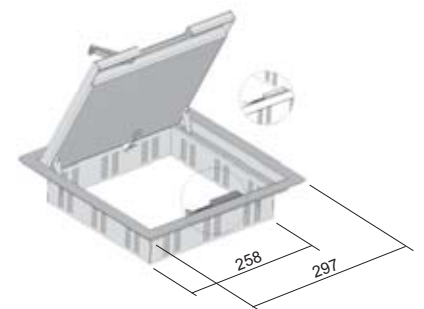
The VPKL cover is composed of a built - in frame, frame for flooring and cable transmit blocks.
 The frame for flooring and cable transmit blocks can be placed into the built - in frame in two directions.
 The built - in frame has feet for attaching to the floor, with a width of 30 mm to 60 mm.
 The frame for the flooring is reinforced with a 3 mm thick metal plate. The depth saving for the flooring is 5 mm.
 Diameter for the opening for installation is 260 mm.
 When closed, cover fulfills IP30.



hinged cover for double floor – stainless

item number	👤	📖	⚖️	
INOXVPCL	IX	IP30	1,68	🕒
INOXVPCL 25	IX	IP30	1,90	🕒

The INOXVPCL cover is composed of a built - in frame, frame for flooring and cable transmit blocks.
 The cover is not water tight, it is suitable for dry environments, it is ideal for parquet floors or tile floors.
 Easy assembly on to the floor is performed by assembly glue. Glued areas have to be degreased. Drying time depends on the type of assembly glue used.
 The frame and the cover are connected for equalization of potentials.
 The lift limiter can be pushed to one side, which will enable the cover to be opened and ease assembly.
 INOXVPCL cover depth saving is 16 mm, INOXVPCL 25 is 26 mm

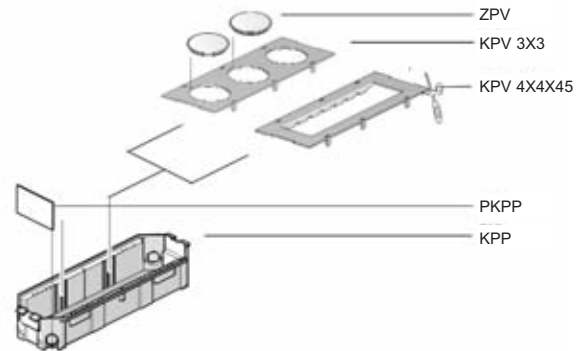
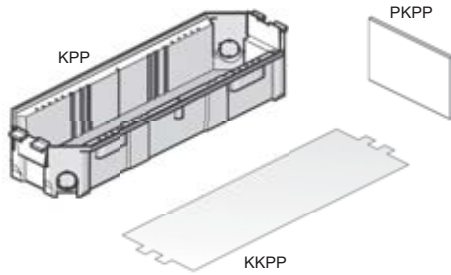




apparatus cup

item number	⚙️	👤	⚖️	
KPP	grey RAL 7011	PP	0,08	●
KPP 9011	black RAL 9011	PP	0,018	⊕
PKPP	grey RAL 7011	PP	0,01	●
KKPP	grey RAL 7011	PP	0,03	●

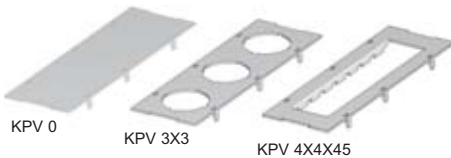
Can be clipped in the frame at different heights and in all directions. Max. 3 apparatus cups can be installed per square or round build-in frame.
 Use the blind plate KKPP in case you do not use all the available space for the apparatus cup. In case of usage in the round box, cut the corners away.
 The partition plate PKPP enables the division of the apparatus cup area into 2 or 3 compartments.



cover plates

item number	⚙️	👤	⚖️	
KPV 0	grey RAL 7011	PP	0,03	●
KPV 0 9011	black RAL 9011	PP	0,03	⊕
KPV 3X3	grey RAL 7011	PP	0,02	●
KPV 3X3 9011	black RAL 9011	PP	0,02	⊕
KPV 1K*	grey RAL 7011	PP	0,01	●
KPV 4X4X45	grey RAL 7011	PP	0,03	●
KPV 4X4X45 9011	black RAL 9011	PP	0,03	⊕

The cover plates can be used both with the round and the square box. In case of usage in the round floor box, modify the plate by cutting the two outer corners.
 KPV 0 – blind plate
 KPV 3X3 - 3 classic apparatuses
 KPV 4X4X45 - 4 modular apparatuses
 KPV 1K - 1 classic apparatus, plate covers 1/3 of the box
 * until supplies are sold out

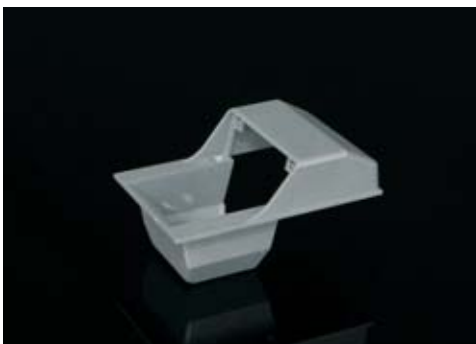




cap

item number	⚙	✋	‡	
ZPV	grey RAL 7011	PP	0,005	🕒
ZPV 9011	black RAL 9011	PP	0,005	🕒

To be used for covering the openings in the cover plate KPV 3X3, which were not fitted with apparatuses.



apparatus box

item number	⚙	✋	‡	
OBB	grey RAL 7011	PP	0,03	●

The apparatus box is to be fixed in the apparatus cup KPP, max. 2 boxes into one up. The box is designed for assembly of various types of fixation plates. It attaches to the apparatus cup by 2 attached bolts.



fixation plate

item number	⚙	✋	‡	
IBP 0*	grey RAL 7011	PP	0,01	●
IBPM 45	grey RAL 7011	PP	0,01	🕒
IBPFO*	grey RAL 7011	PP	0,01	●
IBP 3*	grey RAL 7011	PP	0,01	●
IBPV 2*	grey RAL 7011	PP	0,01	●
IBPH 2	grey RAL 7011	PP	0,01	🕒

Fixation plates are designated for fixing into the 'OBB' apparatus box. They are attached by 2 attached bolts.

- IBP 0 - blind plate
- IBPM 45 – modular apparatuses 45 mm
- IBP 3: 3 sockets AMP RJ 45 cat. 5
- IBPV 2 - 2 sockets AMP RJ 45 cat. 5 vertical placement
- IBPH 2 - 2 sockets AMP RJ 45 cat. 5 horizontal placement
- IBPFO: for Fiber optic AMP SC – duplex socket X-502776-X
- * until supplies are sold out

