

2009



# PRODUCTCATALOGUE

UNDERFLOOR INSTALLATION TECHNOLOGY

WWW.ELECTRAPLAN-SOLUTIONS.COM



	SCREED EMBEDDED TRUNKING SYSTEM - Underfloor trunking - Bracket, clamp, vertical elbow and end bracket - Universal junction box - Pipe inlet - Fitting frame - Service outlet box round and square
	FLUSH FLOOR TRUNKING SYSTEM - ESS trunking for dry cleaned floor - EFS trunking for damp cleaned floor - Connection socket - Blind cover - Installation opening - Partition wall, protective conductor, connector
	FLOOR MOUNTING SYSTEM - Trunking bottom part - Trunking end piece - Blind cover - Installation opening - Partition wall, Protective conductor, Connector - Accessories
	TRUNKING SYSTEM IN CONCRETE - Product overview
	RAISED FLOOR - CAVITY FLOOR - Cable outlet for dry cleaned floor - Cable outlet for wet cleaned floor - Casing element - Devise casing, assembled - Distributor - Power cable
	INSTALLATION UNITS - Supply unit round, rectangular and square - Supply unit for wet cleaned floors - Supply unit made of aluminium - Cassette cover - Pedestal box - Accessories
	DEVICE CASING / INSTALLATION EQUIPMENT - Device casing for power sockets - Device casing for apparatus with brackets - Device casing for data technology - Device casing for "ultra-flat installation depth" - Power socket - Flexible wire cover, round chain and accessories
INFORMATIONEN	INFORMATION - General technical information - Instructions for the composition floor layer - Index for model numbers - Index for article numbers - General sales condition - Overview agencies national / international
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# REFERENCES

# **RADIO BREMEN**



The big architectural challenge in constructing "Radio Bremen New" was to build three separate houses on three different sites bridging two small streets ("Geerenstraße" and "Großenstraße") connecting them to one broadcasting centre. At the same time, the functional requirements of a modern broadcasting centre had to be fully met. The architectural task was solved by creating transparency with glass, by establishing so called "optical lines of sight" and by connecting the houses via bridges.

### APPLIED ELECTRAPLAN SOLUTIONS PRODUCTS:

- 324 m Underfloor trunking UK 340.48-2
- 1420 pcs Hinged cover KD0 R3R5 A made of Aluminium
- 158 pcs Cassette cover HBKK Q292LE E30 G3
- 97 pcs Cassette cover HBKK R305LE E30 GA3



# LEIPZIG CITY HALL

Since 1905, the new Leipzig City Hall has been the seat of the Leipzig City Council. It is located in the centre of Leipzig opposite today's Martin-Luther-Ring. The City of Leipzig has assigned the technical responsibility for the complete refurbishment of the underfloor system to Electraplan Solutions. The refurbishment is divided into several construction phases. With a floor space of about 10,000 m<sup>2</sup>, a 110-m tower and with almost 600 rooms, the City Hall counts among the biggest City Hall buildings in the world.

#### APPLIED ELECTRAPLAN SOLUTIONS PRODUCTS:

- 150 m Underfloor trunking in several size
- 140 m Floor mounted trunking in several size
- 170 m Flush floor trunking in several size
- 150 pcs Hinged cover KDR Q3







# REFERENCES

# OFFICE BUILDING: "AN DER ALSTER 1"



The estate "An der Alster 1" is an interesting interface between the busy St. George quarter and the beautiful tranquil and comforting area of the Außenalster. It provides the unique opportunity to put up an office building with a 60 m front offering an unobstructable view of the Alster.

been built, which owes its striking appearance to its woven façade. The areas have been built with a ceiling height of about 3m and can be individually divided into sectors or, respectively, used as open-plan offices.

A clear and expressive structure with a generous two-story entrance lobby has

APPLIED ELECTRAPLAN SOLUTIONS PRODUCTS: - 300 pcs Hinged cover KD0 R3R5 A made of aluminium

# OFFICE BUILDING: SKYLINE IN VIENNA



At one of Vianna's most interesting crossroads, at the "Döblinger Gürtel" in the 19th district, an extraordinary office building named SKYLINE has been constructed. With its dynamic architecture SKYLINE sets modern standards on the historic Vienna Stadtbahnbögen. Here, about 13,700 m<sup>2</sup> of office space and business area have been developed. With its excellent location, its distinctive design and the charm of combining a high-tech office building with historical structure SKYLINE is a unique real estate with an extraordinary character.

APPLIED ELECTRAPLAN SOLUTIONS PRODUCTS:- 600 pcsHinged cover KDR Q3- 205 pcsDistributor VFK6/6 SW/W

# SPECIAL SOLUTIONS? NO PROBLEM!

# TRAVERSABLE HEAVY DUTY TRUNKING



#### REQUIREMENT:

A flush floor trunking system was required by a development department of the University of Hamburg. A mechanical load of 20000 Newton was requested. Furthermore the covers should feature an antislip surface in a noncorrosive version.

#### SOLUTION:

In order to install the requested amount of cables the trunking was manufactured with a clear width of 300 mm. The bottom trough is made of canted sheet steel and is having a length of 2000 mm. The support for the covers is applied with a cellular rubber. This avoids unexpected noise at crossing over. At the side the trunking is equipped with screed anchor in order to keep the trunking grounded in the screed. For covers chequer plates were used with a length of 1000 mm. The whole flush floor trunking is hot-dip galvanised according EN ISO 1461 against corrosion protection.

# CEE MOUNTING PLATE 16 AMP CONNECTOR, ASLANT



#### REQUIREMENT:

Due to the growing demand for three phase power supply installed in the ground floor we have had the idea to develop a mounting plate for CEE attachment sockets in supply units, hinged covers and cassettes. This solution, however, can only be applied if the installation depth between the top edge of the floor and the bare concrete floor is about 170 mm.

#### SOLUTION:

To find an effective solution it has been decided to build a metal sheet model. It has been constructed so that it is possible to plug in the connectors at a slant. Protection against contact from below is provided by fastening a casing device with strain relief on the mounting plate.

# SONDERLÖSUNGEN

# ADAPTER HANDLE VR12 FOR GES9B



#### REQUIREMENT:

In the building project "Magazinstrasse" in Berlin all hinged covers were to be exchanged during refurbishment. The products used were from one of our competitors. The existent casing devices, however, were not to be removed. Since our competitor's casing device was slightly smaller, an adapter solution had to be developed for supply unit VR12.

#### SOLUTION:

To insert the already existent casing devices into supply unit VR12, an adapter handle made from send.galv. sheet steel has been developed. This adapter handle has been installed into the supply unit near the snap-in ladder and fastened with two screws. With this adapter handle it is possible to use our competitor's casing devices 3 x GES as well as Tehalit casing devices.



# MOUNTING PLATE FOR OPUS SOCKETS FOR VR12 OR VQ12

#### **REQUIREMENT:**

A Danish customer required to equip supply units VR12 and VQ12 with two double sockets produced by OPUS. Furthermore, it should be possible to install data modules for network engineering.

### SOLUTION:

A mounting plate has been developed which could be installed instead of the standard device casings. It contains two installation openings for OPUS double sockets measuring 146 mm x 61 mm. Besides that, 6 openings for Lexom data modules have been added on the mounting plate. The supply unit can be fixed via a shifting bar which fits into the snap-on contact of the supply unit.



# CABLE VOLUME CALCULATION



In order to define the right trunking size you do need the cable capacity. As the cable never lay space-saving next to each other and never lay optimal parallel here you can calculate with the following formula:  $(d)^2$  diameter squared. In order to be prepared for later refitting of cables the trunkings should be filled 50% only. Thereby the cable can be pulled easier through the trunkings.

Additionally you have to consider that at the calculation no floor boxes or cable outlets has been included who could disturb the cable way. In practice power and data cable are layed separate in the trunkings. Divider walls are dividing the trunkings into several compartments. Is this the case at your place, please calculate the demand for your cables separately.



The cable configurator assist you at your calculation. You will find it under: www.electraplan-solutions.com at the column "Service/ news".

This calculation is a general reference value. At a heavy current load the heating of the cables has to be considered. At the same time all prevailing regulation e.g. DIN VDE 0100, has receive attention.

At the following side you will find an overview of the current types of cables. These list contains the cable diameter and the space demand. The data are average values, exact data you will get from the respective manufacturer.



### POWER LINE



Type of cable	Diameter	Requested space
	mm	cm <sup>2</sup>
1 x 4	6,5	0,42
1 x 6	7,0	0,49
1 x 10	8,0	0,64
1 x 16	9,5	0,90
1 x 25	12,5	1,56
3 x 1,5	9,1	0,83
3 x 2,5	10,4	1,08
3 x 4	11,0	1,21
4 x 1,5	9,0	0,81
4 x 2,5	10,5	1,10
4 x 4	12,5	1,56
4 x 6	13,5	1,82
4 x 10	16,5	2,72
4 x 16	19,0	3,61
4 x 25	23,5	5,52
4 x 35	26,0	6,76
5 x 1,5	10,8	1,17
5 x 2,5	12,2	1,49
5 x 4	13,5	1,82
5 x 6	14,5	2,10
5 x 10	18,0	3,24

### POWER CABLE



Type of cable	Diameter	Requested space cm <sup>2</sup>
4 40	mm	
1 x 10	10,5	1,10
1 x 16	11,5	1,32
1 x 25	12,5	1,56
1 x 35	13,5	1,82
1 x 50	15,5	2,40
1 x 70	16,5	2,72
1 x 95	18,5	3,42
1 x 120	20,5	4,20
1 x 150	22,5	5,06
3 x 1,5	11,5	1,32
3 x 2,5	12,5	1,56
3 x 10	17,5	3,06
3 x 16	19,5	3,80
3 x 50	26,0	6,76
3 x 70	30,0	9,00
3 x 120	36,0	12,96
4 x 1,5	12,5	1,56
4 x 2,5	13,5	1,82
4 x 6	16,5	2,72
4 x 10	18,5	3,42
4 x 16	21,5	4,62
4 x 25	25,5	6,50
4 x 35	28,0	7,84
4 x 50	30,0	9,00
4 x 70	34,0	11,56
4 x 95	39,0	15,21
4 x 120	42,0	17,64
4 x 150	47,0	22,00
5 x 1,5	13,5	1,82
5 x 2,5	14,5	2,10
5 x 6	18,5	3,42
5 x 10	20,5	4,20
5 x 16	22,5	5,06
5 x 25	27,5	7,56
5 x 35	34,0	11,56
5 x 50	40,0	16,00
	,	,

### TELEPHONE LINE



Type of cable	Diameter	Requested space
	mm	cm <sup>2</sup>
2 x 2 x 0,6	5,0	0,25
4 x 2 x 0,6	6,9	0,48
6 x 2 x 0,6	7,2	0,52
10 x 2 x 0,6	7,5	0,56
20 x 2 x 0,6	9,0	0,81
40 x 2 x 0,6	11,0	1,12
60 x 2 x 0,6	13,0	1,69
100 x 2 x 0,6	17,0	2,89
200 x 2 x 0,6	23,0	5,29
2 x 2 x 0,8	6,0	0,36
4 x 2 x 0,8	7,0	0,49
6 x 2 x 0,8	8,5	0,72
10 x 2 x 0,8	9,5	0,90
20 x 2 x 0,8	13,0	1,69
40 x 2 x 0,8	16,5	2,72
60 x 2 x 0,8	20,0	4,00
100 x 2 x 0,8	25,5	6,50
200 x 2 x 0,8	32,0	10,24

### KOAX-LINE



Type of cable	Diameter mm	Requested space cm <sup>2</sup>
RG-59	6,5	0,42
10Base5	12,5	1,56

#### DATA LINE



Type of cable	Diameter mm	Requested space cm <sup>2</sup>
CAT 5	8,2	0,67
CAT 6	8,2	0,67

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Who rather would like to understand figure by figure or do need still detailed information for the precise installation of the article will find echo at our installation instructions.

At our download area under installation instruction you may find the installation instructions described figure by figure and with an explanatory text up to the detail. Additionally you have the possibility to print out the always up dated installation instructions.

As well in our download area you may find data sheets to the respective article. There you get all the technical details e.g. weight, installation measurements and other measurements.



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# NEWSLETTER

Please keep you always up to date. With our newsletter service you do have the possibility to get always up dated information around the Electraplan Solutions.

Automatically you receive worth knowing information per e-mail at the beginning of each month.

Information about new products, nonstandard special solutions, extravagant references, dates about trade fairs, information about Electraplan Solutions or other interesting themes you can get them easily.

# YOUR OPINION COUNTS ...

Please assist us in organising our customer service more practice-oriented. Or support us actively the development with your opinion of the product as a client.

Please let us know your praise, suggestions, ideas for improvement as well as your criticism to the different areas.

Please fill into the prepared forms under "Services/News – Your opinion is important to us"

Who would like to get directly in contact with us finds all contact persons, all important addresses and agents nationally and internationally at the area "Contact".





# SOLUTIONS

In the area of solutions you will find a big range of already implemented special solutions. Browse through our data bank in order to get inspired or to find exactly your solution.

Even in the range of special solutions are hardly any limits. If cassette solutions in special sizes, nonstandard types of cassette e.g. triangle design or individuals engravings. In case you do have unusual wishes in the future, please contact us.

# **FLOORING MATERIAL**

# DRY CLEANED FLOORS

Under the term "dry cleaned floors" are flooring materials who are cleaned normally due to evacuating with a vacuum cleaner.

The standard indicates: "liquid less cleaning method", "puddle of water respectively wetting" of the flooring material is not permissible.

Supply units, cable outlets and pedestal outlets are falling e.g. into the category "dry cleaned floors".



# DAMP CLEANED FLOORS

At "damp cleaned floors" normally tiles, polished stone floorings, parquet, linoleum or PVC floorings are used.

Under the cleaning methods are falling dust binding mopping with damp mopping textiles.

The flush floor trunking EFS is one of the Electraplan Solution article who are suitable for damp cleaned floors.

# WET CLEANED FLOORS

If the a.m. cleaning methods not applicable the floors have to be cleaned wet. Cleaning liquids who should dissolve the persistent dirt have to be applied on the floor. After a short time of soaking, the liquid inclusive of the dirt has to be mopped.

This cleaning method is been applied at tiles, especially stone floorings, linoleum or PVC floorings.

Suitable Electraplan Solutions article are the supply units VAN R12 and the new stainless steel cassette covers.





# NOTES

# SCREED EMBEDDED TRUNKING SYSTEM

Underfloor trunking UK 190.38-2 Vertical elbow Vertical elbow

Universal junction box UDH3 120 - 170

> Clamp UKS 240.38

Bracket UKB 340.48

End bracket UKE 340.48 Underfloor trunking UK 340.48-3

Universal junction box UDS3 70 - 120

Pipe inlet UDS3 RE20-50

Fitting frame UDM3 R12

> Service outlet square S080 R1AK

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# ADVANTAGES AT A GLANCE:

### - Fast and Simple Installation

The prefabricated underfloor trunkings including accessories allow a fast and simple installation on the site.

### - Sturdy Quality

All underfloor trunkings and junction boxes are made of galvanised sheet steel according to DIN EN 10142 thus being corrosion-resistant.

## - Easy Cable Installation

The covers of the underfloor trunkings are snapped on and can be removed before the screed is laid. Therefore, cables can be installed in the open trunking from the top. Complicated procedures to insert the cables are no longer necessary. With this system, it is possible to lay cables easily, space-savingly, in a neat and orderly manner or in bundles.

**Device casing** 

GBV4

Supply unit VR12 R5 9005

Universal junction box UDS3 70 - 120

Fitting frame

Underfloor trunking UK 340.48-3



# SELECTION OF SEVERAL POSSIBLE COMBINATIONS







# CABLE VOLUME CALCULATION



In order to define the right trunking size you do need the cable capacity. As the cable never lay space-saving next to each other and never lay optimal parallel here you can calculate with the following formula:  $(d)^2$  diameter squared. In order to be prepared for later refitting of cables the trunkings should be filled 50% only. Thereby the cable can be pulled easier through the trunkings.

Additionally you have to consider that at the calculation no floor boxes or cable outlets has been included who could disturb the cable way. In practice power and data cable are layed separate in the trunkings. Divider walls are dividing the trunkings into several compartments. Is this the case at your place, please calculate the demand for your cables separately.

Further information for the calculation of cable volumes you can find at the beginning of this catalogue. Alternatively you will find under the rubric "Services/News" of the www.electraplan-solutions.de a configurator for calculation of cable volumes.

Partition	Nominal	Utility cross							Cat	oel diam	neter in	mm						
width mm	height mm	section cm <sup>2</sup>	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	28	16,8	33	23	17	13	10	8	6	5	4	4	3	3	2	2	2	2
60	38	22,8	45	31	23	17	14	11	9	7	6	5	5	4	3	3	3	2
	48	28,8	57	40	29	22	17	14	11	10	8	7	6	5	4	4	3	3
	28	19,6	39	27	20	15	12	9	8	6	5	5	4	3	3	3	2	2
70	38	26,6	53	36	27	20	16	13	10	9	7	6	5	5	4	4	3	3
	48	33,6	67	46	34	26	20	16	13	11	9	8	7	6	5	5	4	4
	28	21,0	42	29	21	16	12	10	8	7	6	5	4	4	3	3	2	2
75	38	28,5	57	39	29	22	17	14	11	9	8	7	6	5	4	4	3	3
	48	36,0	72	50	36	28	22	18	14	12	10	9	8	7	6	5	4	4
	28	23,8	47	33	24	18	14	11	9	8	7	6	5	4	4	3	3	2
85	38	32,3	64	44	32	25	19	16	13	11	9	8	7	6	5	4	4	4
	48	40,8	81	56	41	31	25	20	16	14	12	10	9	7	7	6	5	5
	28	28,0	56	38	28	21	17	14	11	9	8	7	6	5	4	4	3	3
100	38	38,0	76	52	38	29	23	19	15	13	11	9	8	7	6	5	5	4
	48	48,0	96	66	48	37	29	24	19	16	14	12	10	9	8	7	6	6
	28	30,8	61	42	31	24	19	15	12	10	9	7	6	6	5	4	4	3
110	38	41,8	83	58	42	32	25	20	17	14	12	10	9	8	7	6	5	5
	48	52,8	105	73	53	41	32	26	21	18	15	13	11	10	9	8	7	6
	28	32,2	64	44	32	25	19	16	13	11	9	8	7	6	5	4	4	4
115	38	43,7	87	60	44	34	26	21	18	15	12	11	9	8	7	6	6	5
	48	55,2	110	76	56	43	34	27	22	19	16	14	12	10	9	8	7	6
	28	39,2	78	54	40	30	24	19	16	13	11	10	8	7	6	6	5	4
140	38	53,2	106	73	54	41	32	26	21	18	15	13	11	10	9	8	7	6
	48	67,2	134	93	68	52	41	33	27	23	19	17	14	13	11	10	9	8
	28	56,0	112	77	57	43	34	28	23	19	16	14	12	10	9	8	7	7
200	38	76,0	152	105	77	59	46	38	31	26	22	19	16	14	13	11	10	9
	48	96,0	192	133	97	75	59	48	39	33	28	24	21	18	16	14	13	12

# FUNCTIONALITY & APPLICATION



The most frequently used system excels through variable application possibilities, which are simple to use. Junction boxes are interconnected via underfloor trunkings. They provide a structured supply of power, data and telephone services and offer the possibility to access cables coming out of the floor. A big range of different trunking cross sections ensures an optimum adaptation to the respective application. Afterwards, the screed is laid so that it is flush with the top edge of the junction boxes. Depending on the condition of the underground (mostly bare concrete floor) boxes with pre-punched trunking inlets completely made of sheet steel or junction boxes with flexible casing and factory-made footfall sound insulation can be used. Both types of junction boxes allow a stepless alignment via set screws accessible from the top. After the screed has been laid, the underfloor trunkings are invisible. Now, supply units or cassettes including outlets and data processing technology can be installed in the junction boxes.

#### **APPLICATION:**

The screed embedded trunking system can be used for any kind of screed including monolithic cement screed, floating and flowing screed or mastic asphalt/hot screed.

The screed embedded trunking system can be installed in office or administrative buildings, exhibition rooms but also in residential construction. The system can be applied anywhere a sturdy construction is required.





# **Underfloor trunking UK**



Model number	Version	Dimensions	Dimensions	Article-	Packing
		WxH	compartments	number	unit
		mm	mm		
UK 190.28-2	2 compartments	190 x 28	75 / 115	110 131 610	2 m
UK 190.38-2	2 compartments	190 x 38	75 / 115	110 141 610	2 m
UK 190.48-2	2 compartments	190 x 48	75 / 115	110 151 610	2 m
UK 190.28-3	3 compartments	190 x 28	60 / 70 / 60	110 132 610	2 m
UK 190.38-3	3 compartments	190 x 38	60 / 70 / 60	110 142 610	2 m
UK 190.48-3	3 compartments	190 x 48	60 / 70 / 60	110 152 610	2 m
UK 240.28-2	2 compartments	240 x 28	100 / 140	110 331 610	2 m
UK 240.38-2	2 compartments	240 x 38	100 / 140	110 341 610	2 m
UK 240.48-2	2 compartments	240 x 48	100 / 140	110 351 610	2 m
UK 240.28-3	3 compartments	240 x 28	85 / 70 / 85	110 332 610	2 m
UK 240.38-3	3 compartments	240 x 38	85 / 70 / 85	110 342 610	2 m
UK 240.48-3	3 compartments	240 x 48	85 / 70 / 85	110 352 610	2 m
UK 340.28-2	2 compartments	340 x 28	140 / 200	110 531 610	2 m
UK 340.38-2	2 compartments	340 x 38	140 / 200	110 541 610	2 m
UK 340.48-2	2 compartments	340 x 48	140 / 200	110 551 610	2 m
UK 340.28-3	3 compartments	340 x 28	115 / 110 / 115	110 532 610	2 m
UK 340.38-3	3 compartments	340 x 38	115 / 110 / 115	110 542 610	2 m
UK 340.48-3	3 compartments	340 x 48	115 / 110 / 115	110 552 610	2 m

Trunking UK according DIN VDE 0634 part 2, for embedding in screed. Bottom part with snap-on cover

Material: sheet steel, gal. according DIN EN 10142

Material thickness: Upper part 1,25 mm, bottom part 0,75 mm, as from trunking width 340 mm material thickness bottom part 0,90 mm.

Standard length of delivery: 2000 mm.

Installation instruction available at the end of this chapter

Model number	Dimensio W x H mm		Packing unit
UKB 190.28	190 x 2	8 111 130 610	1 pc
UKB 190.38	190 x 3	8 111 140 610	1 pc
UKB 190.48	190 x 4	8 111 150 610	1 pc
UKB 240.28	240 x 2	8 111 330 610	1 pc
UKB 240.38	240 x 3	8 111 340 610	1 pc
UKB 240.48	240 x 4	8 111 350 610	1 pc
UKB 340.28	340 x 2	8 111 530 610	1 pc
UKB 340.38	340 x 3	8 111 540 610	1 pc
UKB 340.48	340 x 4	8 111 550 610	1 pc

Bracket UKB for fastening of trunkings to the bare floor. For each trunking inlet of junction boxes one bracket is needed. Additional requirements due to structural condition has to be calculated separately and to be ordered.

Material: sheet steel, gal. according DIN EN 10142 Material thickness: 0,90 mm



Installation instruction available at the end of this chapter

#### Example of installation:



two compartments



### **Bracket UKB**





# **Electrap**|an **So** utions

# **Clamp UKS**





Model number	Dimensions W x H mm	Article- number	Packing unit
UKS 190.28	190 x 28	112 130 610	1 pc
UKS 190.38	190 x 38	112 140 610	1 pc
UKS 190.48	190 x 48	112 150 610	1 pc
UKS 240.28	240 x 28	112 330 610	1 pc
UKS 240.38	240 x 38	112 340 610	1 pc
UKS 240.48	240 x 48	112 350 610	1 pc
UKS 340.28	340 x 28	112 530 610	1 pc
UKS 340.38	340 x 38	112 540 610	1 pc
UKS 340.48	340 x 48	112 550 610	1 pc

Clamp UKS for the connection of trunkings at the joint and for the fastening of the trunkings.

Recommended: 0,5 clamps for each metre of trunking is to be calculated.

Additional requirements due to structural condition has to be calculated separately and to be ordered. Material: sheet steel, gal. according DIN EN 10142

Material thickness: 0,90 mm



Installation instruction available at the end of this chapter

# Vertical elbow UKK





Model number	Version	Dimensions W x H	Dimensions compartments	Article- number	Packing unit
		mm	mm		
UKK 190.28-2	2 compartments	190 x 28	75 / 115	117 131 610	1 pc
UKK 190.38-2	2 compartments	190 x 38	75 / 115	117 141 610	1 pc
UKK 190.48-2	2 compartments	190 x 48	75 / 115	117 151 610	1 pc
UKK 190.28-3	3 compartments	190 x 28	60 / 70 / 60	117 132 610	1 pc
UKK 190.38-3	3 compartments	190 x 38	60 / 70 / 60	117 142 610	1 pc
UKK 190.48-3	3 compartments	190 x 48	60 / 70 / 60	117 152 610	1 pc
UKK 240.28-2	2 compartments	240 x 28	100 / 140	117 331 610	1 pc
UKK 240.38-2	2 compartments	240 x 38	100 / 140	117 341 610	1 pc
UKK 240.48-2	2 compartments	240 x 48	100 / 140	117 351 610	1 pc
UKK 240.28-3	3 compartments	240 x 28	85 / 70 / 85	117 332 610	1 pc
UKK 240.38-3	3 compartments	240 x 38	85 / 70 / 85	117 342 610	1 pc
UKK 240.48-3	3 compartments	240 x 48	85 / 70 / 85	117 352 610	1 pc
UKK 340.28-2	2 compartments	340 x 28	140 / 200	117 531 610	1 pc
UKK 340.38-2	2 compartments	340 x 38	140 / 200	117 541 610	1 pc
UKK 340.48-2	2 compartments	340 x 48	140 / 200	117 551 610	1 pc
UKK 340.28-3	3 compartments	340 x 28	115 / 110 / 115	117 532 610	1 pc
UKK 340.38-3	3 compartments	340 x 38	115 / 110 / 115	117 542 610	1 pc
UKK 340.48-3	3 compartments	340 x 48	115 / 110 / 115	117 552 610	1 pc

Vertical elbow UKK for swivelling wiring from the horizontal into the vertical level. Vertical elbow and trunking are connected with a clamp.

Material: sheet steel, gal. according DIN EN 10142 Material thickness: 0,75 mm



Installation instruction available at the end of this chapter

#### Example of installation:



2009

# End bracket UKE







Closure cap for screed embedded trunkings.

Material: sheet steel, gal. according DIN EN 10142 Material thickness: 0,90 mm

Installation instruction available at the end of this chapter

Model number	Levelling range N mm	Article- number	Packing unit
UDB2 50-80	50-80	252 050 920	1 pc
UDB2 75-125	75-125	252 075 920	1 pc
UDB2 120-170	120-170	252 120 920	1 pc
UDB2 165-215	165-215	252 165 920	1 pc
UDB2 215-265	215-265	252 215 920	1 pc
UDB3 50-80	50-80	253 050 920	1 pc
UDB3 75-125	75-125	253 075 920	1 pc
UDB3 120-170	120-170	253 120 920	1 pc
UDB3 165-215	165-215	253 165 920	1 pc
UDB3 215-265	215-265	253 215 920	1 pc

Universal junction box according DIN VDE 0634 part 2 with bottom plate and flexible screed casing for the installation in screed.

For the accommodation of installation units over a fitting frame (order separately).

With factory-made installed impact sound insulation and levelling pins.

Minimum built-in height according to the installation unit 50 or 70 mm.

Installation instruction available at the end of this chapter

Data sheet available at the internet

Model number	Levelling range N mm	Article- number	Packing unit
UDH2 50-80	50-80	252 050 820	1 pc
UDH2 75-125	75-125	252 075 820	1 pc
UDH2 120-170	120-170	252 120 820	1 pc
UDH2 165-215	165-215	252 165 820	1 pc
UDH2 215-265	215-265	252 215 820	1 pc
UDH3 50-80	50-80	253 050 820	1 pc
UDH3 75-125	75-125	253 075 820	1 pc
UDH3 120-170	120-170	253 120 820	1 pc
UDH3 165-215	165-215	253 165 820	1 pc
UDH3 215-265	215-265	253 215 820	1 pc

Universal junction box according DIN VDE 0634 part 2 with retaining claw and flexible screed casing for the installation in screed.

For the accommodation of installation units over a fitting frame (order separately).

With factory-made installed impact sound insulation and levelling pins.

Minimum built-in height according to the installation unit 50 or 70 mm.



Installation instruction available at the end of this chapter

Data sheet available at the internet

Universal junction box with retaining claw UDH2 size 2 UDH3 size 3





Universal junction box with bottom plate

UDB2 size 2 UDB3 size 3

Universal junction box
with bottom place
UDS3 size 3

Model numberLevelling range<br/>N<br/>numberArticle-<br/>numberPacking<br/>unitUDS3 70-12070-120253 070 9251 pc

Universal junction box according DIN VDE 0634 part 2 with bottom plate and screed casing made of sheet steel for the installation in screed.

For the accommodation of installation units over a fitting frame (order separately).

The sheet steel walls are perforated in the cross section grid of the lower edge of the trunking. Cut the sheet along the perforation and push the trunking into the cutout.

Minimum built-in height 70 mm.

Levelling above 120 mm possible with levelling frame only!

Installation instruction available at the end of this chapter

Data sheet available at the internet

### Top view UDB2 and UDH2:

For maximum 4 trunking with a nominal width of 240 mm



### Top view UDB3, UDH3 and UDH3:

For maximum 4 trunking with a nominal width of 340 mm



Levelling frame UDA2 size 2 UDA3 size 3



Model number	Outer dimension A mm	Inner dimension I mm	Article- number	Packing unit
UDA2 35	296 x 296	290 x 290	252 324 926	1 pc
UDA3 35	366 x 366	360 x 360	253 324 926	1 pc

Levelling frame made out of aluminium.

Adapting to greater screed heights by around 35 mm.



Installation instruction available at the end of this chapter

#### Example of installation:



2009



# Fitting frame UDM2 size 2



Model number	Size of punched hole mm	Article- number	Packing unit
UDM2 BL	-	252 920 610	1 pc
UDM2 GBZ	Ø 50	252 927 610	1 pc
UDM2 R06	Ø 215	252 951 610	1 pc
UDM2 Q06	200 x 200	252 952 610	1 pc
UDM2 E09	200 x 253	252 954 610	1 pc
UDM2 Q12	244 x 244	252 956 610	1 pc

Fitting frame for installation units and for pedestal outlet boxes or as blind closures.

Material: sheet steel, gal. according DIN EN 10142

Material thickness: 4 mm

Dimensions: 290 x 290 mm

## Fitting frame UDM3 size 3



Model number	Size of punched hole mm	e Article- number	Packing unit
UDM3 BL	-	253 920 610	1 pc
UDM3 GBZ	Ø 50	253 927 610	1 pc
UDM3 R06	Ø 215	253 951 610	1 pc
UDM3 Q06	200 x 200	253 952 610	1 pc
UDM3 E09	200 x 253	253 954 610	1 pc
UDM3 R10	Ø 275	253 953 610	1 pc
UDM3 R12	Ø 306	253 955 610	1 pc
UDM3 Q12	244 x 244	253 956 610	1 pc

Fitting frame for installation units and for pedestal outlet boxes or as blind closures.

Material: sheet steel, gal. according DIN EN 10142

Material thickness: 4 mm

Dimensions: 360 x 360 mm

Installation instruction available at the end of this chapter

# Pipe inlet



Model number	Material	Dimensions mm H x W x T	Article- number	Packing unit
UDS3 RE20-50	Polyamide	54,5 x 398 x 25	253 011 925	1 pc

Pipe inlet made of plastic with perforated closing plugs for pipe diameters of 20 mm, 32 mm, 40 mm, and 50 mm for the connection onto the junction box type UDS3.



- Data sheet available at the internet
- 3D installation videos available at the internet
- Product innovation

#### Example of installation:



# Service outlet box round



### Service outlet box square



## Cable outlet





Model number	Material	Article- number	Packing unit
S080 R1AK	aluminium	201 210 730	1 pc
S080 R1MK	brass	201 210 700	1 pc

Service outlet box S080... for dry rooms with dry or wet cleaned floors, for installation flush with the finished floor.

For maximum 30 mm thick floor coverings including adhesive, e.g. for wood, stone or tiles. As appliance outlet box for an installation unit, for connecting max. 4 tubes M20/25 on two opposite sides.

Complete with cover, wear strip and tube inlet.

Inclusive support ring for one installation unit with bracket standard.

Material:

Upper part made of cast aluminium or brass. Lower part made of plastic.

Built-in height: 90 - 115 mm

Model number	Material	Article- number	Packing unit
S080 Q1AK	aluminium	201 200 730	1 pc
S080 Q1MK	brass	201 200 700	1 pc

Service outlet box S080... for dry rooms with dry or wet cleaned floors, for installation flush with the finished floor.

For maximum 30 mm thick floor coverings including adhesive, e.g. for wood, stone or tiles.

As appliance outlet box for an installation unit, for connecting max. 4 tubes M20/25 on two opposite sides.

Complete with cover, wear strip and tube inlet.

Inclusive support ring for one installation unit with bracket standard.

#### Material:

Upper part made of cast aluminium or brass. Lower part made of plastic. Built-in height: 90 - 115 mm

Model number	Outer diameter	Inner Diameter	Article- number	Packing unit
	mm	mm		
S080 HADA	94	70	201 251 739	1 pc

Cable outlet for service outlet box S080... in exchange of the existing blind cover.

With hinged cover and with notch for cable outlet.

Material: plastic, shock-resistant

#### Example of installation:



# INSTALLATION INSTRUCTION SCREED EMBEDDED TRUNKING SYSTEM

## GENERAL INFORMATION:

Please observe for screed overlap of trunkings according DIN 18560 "Screeds of building industry".

Include system units in earthing measures according DIN VDE 0100.

Protect trunkings and junction boxes against entering of screed.

Do not walk or put any mechanical load onto the trunkings before the screed is hardened.

Remove protection lid of the junction box directly before you lay the flooring material and exchange it against the fitting frame.

Please observe our general information and the information of the conterminal trades (screed layer).



#### Mounting in monolithic screed



Disperse the cement screed directly onto the concrete slab and onto the underfloor trunkings.





The cement screed will be lay of an isolating course. The underfloor trunkings become integrated into the isolating course.

Mounting in floating screed



The installation of trunking and junction boxes in floating screed is similar as in cement screed. The system have to be protected against entering of floating screed.





At the use of hot screed/melted asphalt temperatures of approx. 280° C are reached. Due to this reason trunking and junction boxes have to be covered and isolated with bitumen coated corrugated cardboard. The laying of cables can be carry out after completely cooling down of the hot screed.

Position junction boxes according lay out



Set junction boxes onto the concrete slab according to the lay-out. The flexible screed casing must lie outside.

Notching of junction box UDS3



If you want to connect the trunking at the junction box UDS3 the respective side part has to be notched. Therefore you use a side cutter and cut along the perforation of the plate.

# INSTALLATION INSTRUCTION SCREED EMBEDDED TRUNKING SYSTEM

#### Connect the trunking onto UDS3



Insert the trunking through the notched side part and move it up to the back stop of the bottom plate.

#### Connect the trunking onto UDB...



Insert the trunking under the flexible screed casing. Cut the flexible screed casing that the trunking is enclosed with the foil. Seal carefully all joints at the junction box and at the trunking against entering of screed.

#### Bevel joint possible



Bevel joint are possible at the junction box UDB and UDH up to the stated angle. Due to this laying the drawing of cable are becoming more difficult.

#### Lay the trunking



The trunking have to be lay edge to edge. The partition walls have to be aligned.

#### Cut the trunking as required



If necessary the trunking can be cut to the required length. Sharpe edges have to be deburr.

Fixing of clamps



Connect the two trunking edge with a clamp. The clamp will be doweled onto the concrete slab. The mounting of the clamp is as well necessary as the clamp act as electrical connection between the trunking according DIN VDE 0100.

#### Brackets for additional requirement



For additional requirement brackets can be fixed between the trunking edges.

#### Connect vertical elbow



Connect the vertical elbows as wall connection with a clamp onto the trunking.

#### Connect feed channel



For an additional cable guiding a feed channel BKE can be connect onto the vertical elbow. This connect underfloor trunking with dado trunking.

# INSTALLATION INSTRUCTION SCREED EMBEDDED TRUNKING SYSTEM

### Fix end cap



If the trunking ends in the middle of the room the edge has to be closed due to inserting of an end cap. No screwing is necessary.

#### Earthing measurement



The trunking pieces will be mechanical and electrical connected due to clamping of the clamp. All areas of contact must be clean and greaseless.

### ALTERNATIVE FIXING POSSIBILITY:

Fixing of lower trunking part



Thus the lid can be removed the trunking can be fixed fast and comfortable onto the concrete slab. This can be carried out with nail plugs, screws or others.





Cables can be lay from the top into the open trunking. No circumstantial drawing of cables necessary. Thereby cables can pass comfortable and space-saving bundled to order. Attention, due to too high temperature the laying of cable in asphalt screed is not possible.

Cover lids



Apply lids on the trunking and let it snapped in.

#### Fixing of clamps



Connect the two trunking edge with a clamp. The clamp will be doweled onto the concrete slab. The mounting of the clamp is as well necessary as the clamp act as electrical connection between the trunking according DIN VDE 0100.

Position junction box UDH...



As the junction box UDH... is not having a bottom plate the junction box can be set from the top over the trunking onto the concrete slab.

# INSTALLATION INSTRUCTION UNIVERSAL JUNCTION BOX

### **GENERAL INFORMATION:**

Please observe for screed overlap of trunkings according DIN 18560 "Screeds of building industry".

Include system units in earthing measures according DIN VDE 0100.

Protect trunkings and junction boxes against entering of screed.

Do not walk or put any mechanical load onto the trunkings before the screed is hardened.

Remove protection lid of the junction box directly before you lay the flooring material and exchange it against the fitting frame.

Please observe our general information and the information of the conterminal trades (screed layer).



#### Mounting in monolithic screed



Disperse the cement screed directly onto the concrete slab and onto the underfloor trunkings.

### Mounting in floating floor screed



The cement screed will be lay of an isolating course. The underfloor trunkings become integrated into the isolating course.

Mounting in floating screed



The installation of trunking and junction boxes in floating screed is similar as in cement screed. The system have to be protected against entering of floating screed.

Mounting in hot screed (only UDS3)



At casting of hot-screed temperature of approx. 280°C occurs. Due to this reason trunkings and junction boxes have to be covered by a bitumen paper and insulated. The laying of cables may take place when the hot screed has been completely chilled.

Position junction boxes according lay out



Set junction boxes onto the concrete slab according to the lay-out. The flexible screed casing must lie outside.

Check the levelling area



Please check the levelling area of the concrete slab. If needed, you can change the set screws at the junction boxes. The set screws can be separate from the sound absorbing bearing by turning anti-clockwise. Don't pull or beat-in.

# INSTALLATION INSTRUCTION UNIVERSAL JUNCTION BOX

Screed level above 120 mm at UDS3



At a screed height above 120 mm a levelling frame UDA3 can be used at the junction box UDS3 in order to raise the height for the junction box of 35 mm. For this purpose the levelling frame has to be set onto the frame of the junction box and four times screwed together.

#### Fix junction box UDH



Dowel the junction box UDH ... at all four fixing set onto the concrete slab. Holes of  $1 \times 6$  mm and  $1 \times 7$  mm are exist at each fixing set.

Fix UDB... or UDS3



Dowel the junction box UDB... or UDS3 at all four corners of the bottom plate onto the concrete slab. Holes of 6,5 mm are exist at each corner.





Level the frame of the junction box to the required height. Therefore use the set screws on all corners with a screw driver. The elastic bearing of the frame minimize the fissuring at the screed.





Cut the flexible screed casing in height and width of the trunking. Lift the foil ear and insert the trunking up to the back stop of the bottom plate or approx. 40 mm under the junction box.

Bevel joint possible



Bevel joint are possible at the junction box UDB and UDH up to the stated angle. Due to this laying the drawing of cable are becoming more difficult.

### Fixing of trunking



Clamp the foil ear between the trunking and the bracket. Dowel the bracket onto the concrete slab.

#### Staple together foil



Staple together the flexible screed casing at all four corners with a tacker.

Sealing the foil



Fix the flexible screed casing around the junction box onto the concrete slab eg. with adhesive tape or through nails. Seal carefully all joints at the junction box and at the trunking against entering of screed.

Screed embedded trunking system

# INSTALLATION INSTRUCTION UNIVERSAL JUNCTION BOX

#### Notching of junction box UDS3



If you want to connect the trunking at the junction box UDS3 the respective side part has to be notched. Therefore you use a side cutter and cut along the perforation of the plate.

#### Insert the trunking



Insert the trunking through the notched side part and move it up to the back stop of the bottom plate.

Fix the trunking



Fix the trunking at the junction box with a bracket.

Earthing measurement at UDS / UDB...



Due to pressure of the trunking onto the bottom plate using brackets, the junction box with the trunking will be electrical connected. The areas of contact must be clean and greaseless. The earth protective wires have to be integrated into the earthing measurements.





The earth protective wire of the junction box UDH has to be clamped at the end of the trunking in order to be electrical connected. The earth protective wires have to be integrated into the earthing measurements.

Lay the screed



The screed will be lay up to the upper edge of the junction box. The protective cover serves as protection against impurity and may not be driven over nor shall be loaded.



Remove the protective just before laying the flooring material and exchange it against the fitting frame. Fix the fitting frame with screws at the frame of the junction box or at the levelling frame.

Install supply unit



After laying of the flooring material cut the flooring material from the opening of the mounted fitting frame. Install supply unit or cassette cover.

# INSTALLATION INSTRUCTION PIPE INLET UDS3 RE20-50

# ALLGEMEINE HINWEISE:

Due to breaking-out of the perforated connectors conduits with the standard diameters of 20 mm, 32 mm, 40 mm, and 50 mm can be used.

No additional needs for reductions or adapters

The excentric arrangement of the connectors allows a throughout support of the conduit on the bare concrete floor. Through this a constant screed thickness up to the side walls of the junction box is possible.

Due to snap in of the pipe inlets at the building site an individual use of trunkings respectively conduits is possible.



### Cut side wall



Detach the side wall with a side cutter along the outermost perforation.

### Remove side wall



Remove the detached sheet metal from the side wall.

Snap in place pipe inlet



Snap in place pipe inlet UDS3 RE20-50 from the front side into the specific lugs. Connection keeps without screws.

### Notch the pipe inlet



Notch the perforated closing plugs according to the requested diameter with a side cutter or utility knife from the perforated openings.

Insert cable conduit



Insert the cable conduit into the pre-notched opening.

Positioning cable conduit



Overlap the cable conduit approx. 1-2 cm inside the junction box. Afterwards fix the cable conduit outside the junction box on the bare concrete floor and protect against bloating.





# FLUSH FLOOR TRUNKING SYSTEM

Trunking ESS 400 WK090

Connection socket ESS AO R12

Angle branch piece EFS W400 K090 Screed anchor ZEO A

Underfloor trunking UK 340.48-3

# ADVANTAGES AT A GLANCE

# - High flexibility

Other contract work sections such as screed embedded trunkings running across the floor or heating pipes are no problem thanks to the flexible screed foil.

### Flat screeds

Due to their flat construction flush floor trunkings can be even installed in very flat screeds.

## - Plenty of space for cables

Extremely wide trunkings with a width of up to 600 mm offer plenty of space to properly bundle the cables and conduits.

EFS 400 K090

# Supply unit VR12 R5 9005

Device casing GBV4

# THE DIFFERENT TRUNKINGS

### FUNCTIONALITY:

Electrapian Solutions

The flush floor trunking system is characterized by coverings that can be opened along the entire length of the trunkings. As the name already suggests, the screed is laid flush with the trunking. The entire flush floor trunking system is infinitely adjustable in height. When it is finished, the trunking covers can be opened at any time. So it is possible to subsequently insert cables without problems. Installation units or pedestal boxes can be fitted using the service outlets in the covers. The application of trunking connection sockets offers the advantage that a smaller trunking cross section can be selected, since the entire inner space remains free for laying the cables. Flush floor trunking is available for dry and wet cleaned floorings, with flexible screed foil or sheet steel tank. In addition, this system meets the highest demands in flexibility due to the factory-provided footfall sound absorption and the possibility to use any kind of flooring material.

# FLUSH FLOOR TRUNKING TYPE ESS WITH FLEXIBLE SCREED CASING FOR DRY CLEANED FLOORS



#### FEATURES:

- Suitable for dry cleaned floors
- Easy and flexible laying compatibility
- Flexible over other crafts e.g. crosswise laying heating pipes or trunking
- Complete inner space available for laying of cables

# FLUSH FLOOR TRUNKING TYPE ESS WITH BOTTOM TROUGH FOR DRY CLEANED FLOORS



### FEATURES:

- Suitable for dry cleaned floors
- Easy draw possibility for cables
- Neat installation possible, cables are protected against dust and dirt


#### APPLICATION:

This system, adjustable in height, is favoured, when "the final finishes" are not yet clear or else to ensure the highest possible flexibility. Different trunking widths of up to 600 mm allow the trunking to be applied where a lot of cables have to be laid. In production areas with bare concrete floor, but also in office and administrative buildings, where the trunking covers are already covered with flooring, this flush floor trunking system is used. Due to its low height the trunking is also suitable for flat screeds from 55 mm upwards.

# FLUSH FLOOR TRUNKING TYPE EFS WITH FLEXIBLE SCREED CASING FOR WET CLEANED FLOORS



#### FEATURES:

- Suitable for wet cleaned floors
- Easy and flexible laying compatibility
- Flexible over other crafts e.g. crosswise laying heating pipes or trunking
- Complete inner space available for laying of cables

# FLUSH FLOOR TRUNKING TYPE EFS WITH BOTTOM TROUGH FOR WET CLEANED FLOORS



#### FEATURES:

- Suitable for wet cleaned floors
- Easy draw possibility for cables
- Neat installation possible, cables are protected against dust and dirt

# **READY-MADE FITTING**

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#### AVAILABLE ON REQUEST!

Ready-made fittings are available on request. These will be assembled with the standard trunking similarly alike a modular system. The different sizes are derivable from the standard trunking. Ready-made fittings will be delivered with mounted levelling brackets, mufflers and set screws in an accessory box.

#### Configuration of model number: ESS W400 (W)K105

K = Cross piece	<u>— Width:</u> 150	— K = with flexible screed casing – – WK = with bottom trough – – –	Height: 045 065 105 145
W = Angle piece	200	L _	- 040
T = Tee piece	250		050
	300		060
	350		070
ESS - for dry cleaned floors	400		080
EFS - for wet cleaned floors	500 600		090

Flush floor trunking system

## CABLE VOLUME CALCULATION



In order to define the right trunking size you do need the cable capacity. As the cable never lay space-saving next to each other and never lay optimal parallel here you can calculate with the following formula:  $(d)^2$  diameter squared. In order to be prepared for later refitting of cables the trunkings should be filled 50% only. Thereby the cable can be pulled easier through the trunkings.

Additionally you have to consider that at the calculation no floor boxes or cable outlets has been included who could disturb the cable way. In practice power and data cable are layed separate in the trunkings. Divider walls are dividing the trunkings into several compartments. Is this the case at your place, please calculate the demand for your cables separately.

Model number	Height	Utility cross							Cab	el diam	neter in	mm						
	max. mm	section cm <sup>2</sup>	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ESS 150 K045	70	77,0	154	106	78	60	47	38	31	26	22	19	17	15	13	11	10	9
ESS 150 K065	110	121,0	242	168	123	94	74	60	50	42	35	30	26	23	20	18	16	15
ESS 150 K105	150	165,0	330	229	168	128	101	82	68	57	48	42	36	32	28	25	22	20
ESS 150 K145	190	209,0	418	290	213	163	129	104	86	72	61	53	46	40	36	32	28	26
ESS 200 K045	70	112,0	224	155	114	87	69	56	46	38	33	28	24	21	19	17	15	14
ESS 200 K065	110	176,0	352	244	179	137	108	88	72	61	52	44	39	34	30	27	24	22
ESS 200 K105	150	240,0	480	333	244	187	148	120	99	83	71	61	53	46	41	37	33	30
ESS 200 K145	190	304,0	608	422	310	237	187	152	125	105	89	77	67	59	52	46	42	38
ESS 250 K045	70	147,0	294	204	150	114	90	73	60	51	43	37	32	28	25	22	20	18
ESS 250 K065	110	231,0	462	320	235	180	142	115	95	80	68	58	51	45	39	35	31	28
ESS 250 K105	150	315,0	630	437	321	246	194	157	130	109	93	80	70	61	54	48	43	39
ESS 250 K145	190	399,0	798	554	407	311	246	199	164	138	118	101	88	77	69	61	55	49
ESS 300 K045	70	182,0	364	252	185	142	112	91	75	63	53	46	40	35	31	28	25	22
ESS 300 K065	110	286,0	572	397	291	223	176	143	118	99	84	72	63	55	49	44	39	35
ESS 300 K105	150	390,0	780	541	397	304	240	195	161	135	115	99	86	76	67	60	54	48
ESS 300 K145	190	494,0	988	686	504	385	304	247	204	171	146	126	109	96	85	76	68	61
ESS 350 K045	70	217,0	434	301	221	169	133	108	89	75	64	55	48	42	37	33	30	27
ESS 350 K065	110	341,0	682	473	347	266	210	170	140	118	100	86	75	66	58	52	47	42
ESS 350 K105	150	465,0	930	645	474	363	287	232	192	161	137	118	103	90	80	71	64	58
ESS 350 K145	190	589,0	1178	818	601	460	363	294	243	204	174	150	130	115	101	90	81	73
ESS 400 K045	70	252,0	504	350	257	196	155	126	104	87	74	64	56	49	43	38	34	31
ESS 400 K065	110	396,0	792	550	404	309	244	198	163	137	117	101	88	77	68	61	54	49
ESS 400 K105	150	540,0	1080	750	551	421	333	270	223	187	159	137	120	105	93	83	74	67
ESS 400 K145	190	684,0	1368	950	697	534	422	342	282	237	202	174	152	133	118	105	94	85
ESS 500 K045	70	322,0	644	447	328	251	198	161	133	111	95	82	71	62	55	49	44	40
ESS 500 K065	110	506,0	1012	702	516	395	312	253	209	175	149	129	112	98	87	78	70	63
ESS 500 K105	150	690,0	1380	958	704	539	425	345	285	239	204	176	153	134	119	106	95	86
ESS 500 K145	190	874,0	1748	1213	891	682	539	437	361	303	258	222	194	170	151	134	121	109
ESS 600 K045	70	392,0	784	544	400	306	241	196	161	136	115	100	87	76	67	60	54	49
ESS 600 K065	110	616,0	1232	855	628	481	380	308	254	213	182	157	136	120	106	95	85	77
ESS 600 K105	150	840,0	1680	1166	857	656	518	420	347	291	248	214	186	164	145	129	116	105
ESS 600 K145	190	1064,0	2128	1477	1085	831	656	532	439	369	314	271	236	207	184	164	147	133





Further information for the calculation of cable volumes you can find at the beginning of this catalogue. Alternatively you will find under the rubric "Services/News" of the www.electraplan-solutions.de a configurator for calculation of cable volumes.

Model number	Height	Utility cross							Cab	el diam	neter in	mm						
	mm	section cm <sup>2</sup>	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ESS 150 WK040	28	37,5	75	52	38	29	23	18	15	13	11	9	8	7	6	5	5	4
ESS 150 WK050	38	50,9	101	70	51	39	31	25	21	17	15	12	11	9	8	7	7	6
ESS 150 WK060	48	64,3	128	89	65	50	39	32	26	22	19	16	14	12	11	9	8	8
ESS 150 WK070	58	77,7	155	107	79	60	47	38	32	26	22	19	17	15	13	11	10	9
ESS 200 WK060	48	88,3	176	122	90	69	54	44	36	30	26	22	19	17	15	13	12	11
ESS 200 WK070	58	106,7	213	148	108	83	65	53	44	37	31	27	23	20	18	16	14	13
ESS 200 WK080	68	125,1	250	173	127	97	77	62	51	43	37	31	27	24	21	19	17	15
ESS 200 WK090	78	143,5	287	199	146	112	88	71	59	49	42	36	31	28	24	22	19	17
ESS 250 WK060	48	112,3	224	156	114	87	69	56	46	39	33	28	24	21	19	17	15	14
ESS 250 WK070	58	135,7	271	188	138	106	83	67	56	47	40	34	30	26	23	20	18	16
ESS 250 WK080	68	159,1	318	221	162	124	98	79	65	55	47	40	35	31	27	24	22	19
ESS 250 WK090	78	182,5	365	253	186	142	112	91	75	63	54	46	40	35	31	28	25	22
ESS 300 WK060	48	136,3	272	189	139	106	84	68	56	47	40	34	30	26	23	21	18	17
ESS 300 WK070	58	164,7	329	228	168	128	101	82	68	57	48	42	36	32	28	25	22	20
ESS 300 WK080	68	193,1	386	268	197	150	119	96	79	67	57	49	42	37	33	29	26	24
ESS 300 WK090	78	221,5	443	307	226	173	136	110	91	76	65	56	49	43	38	34	30	27
ESS 350 WK060	48	160,3	320	222	163	125	98	80	66	55	47	40	35	31	27	24	22	20
ESS 350 WK070	58	193,7	387	269	197	151	119	96	80	67	57	49	43	37	33	29	26	24
ESS 350 WK080	68	227,1	454	315	231	177	140	113	93	78	67	57	50	44	39	35	31	28
ESS 350 WK090	78	260,5	521	361	265	203	160	130	107	90	77	66	57	50	45	40	36	32
ESS 400 WK060	48	184,3	368	256	188	144	113	92	76	64	54	47	40	36	31	28	25	23
ESS 400 WK070	58	222,7	445	309	227	174	137	111	92	77	65	56	49	43	38	34	30	27
ESS 400 WK080	68	261,1	522	362	266	204	161	130	107	90	77	66	58	51	45	40	36	32
ESS 400 WK090	78	299,5	599	416	305	234	184	149	123	104	88	76	66	58	51	46	41	37
ESS 500 WK060	48	232,3	464	322	237	181	143	116	96	80	68	59	51	45	40	35	32	29
ESS 500 WK070	58	280,7	561	389	286	219	173	140	116	97	83	71	62	54	48	43	38	35
ESS 500 WK080	68	329,1	658	457	335	257	203	164	136	114	97	83	73	64	56	50	45	41
ESS 500 WK090	78	377,5	755	524	385	294	233	188	156	131	111	96	83	73	65	58	52	47
ESS 600 WK060	48	280,3	560	389	286	219	173	140	115	97	82	71	62	54	48	43	38	35
ESS 600 WK070	58	338,7	677	470	345	264	209	169	139	117	100	86	75	66	58	52	46	42
ESS 600 WK080	68	397,1	794	551	405	310	245	198	164	137	117	101	88	77	68	61	55	49
ESS 600 WK090	78	455,5	911	632	464	355	281	227	188	158	134	116	101	88	78	70	63	56

# ESS trunking with flexible screed casing dry cleaned





AB = Outer width

LI = Clear inner trunking width

LE = Clear entrance opening

K045 = levelling range 45 - 70 mm K065 = levelling range 65 - 110 mm K105 = levelling range 105 - 150 mm K145 = levelling range 145 - 190 mm

Trunking side profile:

#### Extruded-aluminium-sheath

#### Cover:

impacts

Sheet steel, gal. according DIN EN 10142, 3 mm thick, 800 mm long, holes countersunk on one side

#### Covering butt edge: Plastic (PVC), 0 or 4 mm high, colour grey, flush

mounted Flexible screed casing: Plastic (PVC), UV-resistant, highly resistant to

Trunking levelling height from 30 mm, with sound absorbing bearing from 45 mm.

For reinforcement load bearing cross bars are placed under the blind covers.

Optionally: Snap fastener on blind covers

Model number	Nominal	Outer width	Width	Width	Article	Packing
	width	AB	LI	LE	number	unit
	N	mm	mm	mm		
ESS 150 K045	150	166	110	75	301 15K0 045	2,4 m
ESS 150 K065	150	166	110	75	301 15K0 065	2,4 m
ESS 150 K105	150	166	110	75	301 15K0 105	2,4 m
ESS 150 K145	150	166	110	75	301 15K0 145	2,4 m
ESS 200 K045	200	216	160	125	301 20K0 045	2,4 m
ESS 200 K065	200	216	160	125	301 20K0 065	2,4 m
ESS 200 K105	200	216	160	125	301 20K0 105	2,4 m
ESS 200 K145	200	216	160	125	301 20K0 145	2,4 m
ESS 250 K045	250	266	210	175	301 25K0 045	2,4 m
ESS 250 K065	250	266	210	175	301 25K0 065	2,4 m
ESS 250 K105	250	266	210	175	301 25K0 105	2,4 m
ESS 250 K145	250	266	210	175	301 25K0 145	2,4 m
ESS 300 K045	300	316	260	225	301 30K0 045	2,4 m
ESS 300 K065	300	316	260	225	301 30K0 065	2,4 m
ESS 300 K105	300	316	260	225	301 30K0 105	2,4 m
ESS 300 K145	300	316	260	225	301 30K0 145	2,4 m
ESS 350 K045	350	366	310	275	301 35K0 045	2,4 m
ESS 350 K065	350	366	310	275	301 35K0 065	2,4 m
ESS 350 K105	350	366	310	275	301 35K0 105	2,4 m
ESS 350 K145	350	366	310	275	301 35K0 145	2,4 m
ESS 400 K045	400	416	360	325	301 40K0 045	2,4 m
ESS 400 K065	400	416	360	325	301 40K0 065	2,4 m
ESS 400 K105	400	416	360	325	301 40K0 105	2,4 m
ESS 400 K145	400	416	360	325	301 40K0 145	2,4 m
ESS 500 K045	500	516	460	425	301 50K0 045	2,4 m
ESS 500 K065	500	516	460	425	301 50K0 065	2,4 m
ESS 500 K105	500	516	460	425	301 50K0 105	2,4 m
ESS 500 K145	500	516	460	425	301 50K0 145	2,4 m
ESS 600 K045	600	616	560	525	301 60K0 045	2,4 m
ESS 600 K065	600	616	560	525	301 60K0 065	2,4 m
ESS 600 K105	600	616	560	525	301 60K0 105	2,4 m
ESS 600 K145	600	616	560	525	301 60K0 145	2,4 m

ESS - Complete trunking system with flexible screed casing for flush floor installation for dry or wet cleaned floors.

From 55 mm built-in depth flush floor installation units can be built in.

The trunking standard length is 2400 mm with 3 movable blind covers each 800 mm of length.

The walls of the trunking existing of a flexible screed casing, which can be adapted to all uneven floors and which allows step less levelling.

Along the trunking, branches of screed embedded trunking or pipes/conduits canbe tapped without considerable time and cost expenditure.

The midden support can be mounted straight onto the bare concrete floor from a width of 350 mm onwards. Additional procedures e.g. firring and punching of the trunking bottom can be cancelled. The complete interior space of the flush floor trunking is available from the top edge of the screed up

to the bottom of the bare concrete floor for the laying of the cables.

The load acquirement of flush-mounted floor components is 1500 N. Slight deflection is permissible. Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as acces-

sory back.

Installation instruction available at the end of this chapter

3D installation videos available at the internet

# ESS Closure piece with flexible screed casing dry cleaned



K045 = levelling range 45 - 70 mm K065 = levelling range 65 - 110 mm K105 = levelling range 105 - 150 mm K145 = levelling range 145 - 190 mm

Covering butt edge: Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted

Flexible screed casing: Plastic (PVC), UV-resistant, highly resistant to

Trunking side profile: Extruded-aluminium-sheath

impacts

Flush floor trunking system

Model number	Nominal	Width	Width	Article	Packing
ineast number	height	B	A	number	unit
	mm	mm	mm		
ESS V150 -045	150	126	66	301 15KV 045	1 pc
ESS V150 -065	150	126	66	301 15KV 065	1 pc
ESS V150 -105	150	126	66	301 15KV 105	1 pc
ESS V150 -145	150	126	66	301 15KV 145	1 pc
ESS V200 -045	200	176	116	301 20KV 045	1 pc
ESS V200 -065	200	176	116	301 20KV 065	1 pc
ESS V200 -105	200	176	116	301 20KV 105	1 pc
ESS V200 -145	200	176	116	301 20KV 145	1 pc
ESS V250 -045	250	226	166	301 25KV 045	1 pc
ESS V250 -065	250	226	166	301 25KV 065	1 pc
ESS V250 -105	250	226	166	301 25KV 105	1 pc
ESS V250 -145	250	226	166	301 25KV 145	1 pc
ESS V300 -045	300	276	216	301 30KV 045	1 pc
ESS V300 -065	300	276	216	301 30KV 065	1 pc
ESS V300 -105	300	276	216	301 30KV 105	1 pc
ESS V300 -145	300	276	216	301 30KV 145	1 pc
ESS V350 -045	350	326	266	301 35KV 045	1 pc
ESS V350 -065	350	326	266	301 35KV 065	1 pc
ESS V350 -105	350	326	266	301 35KV 105	1 pc
ESS V350 -145	350	326	266	301 35KV 145	1 pc
ESS V400 -045	400	376	316	301 40KV 045	1 pc
ESS V400 -065	400	376	316	301 40KV 065	1 pc
ESS V400 -105	400	376	316	301 40KV 105	1 pc
ESS V400 -145	400	376	316	301 40KV 145	1 pc
ESS V500 -045	500	476	416	301 50KV 045	1 pc
ESS V500 -065	500	476	416	301 50KV 065	1 pc
ESS V500 -105	500	476	416	301 50KV 105	1 pc
ESS V500 -145	500	476	416	301 50KV 145	1 pc
ESS V600 -045	600	576	516	301 60KV 045	1 pc
ESS V600 -065	600	576	516	301 60KV 065	1 pc
ESS V600 -105	600	576	516	301 60KV 105	1 pc
ESS V600 -145	600	576	516	301 60KV 145	1 pc

Flush floor trunking system

Closure piece ESS V, as closure for flush floor trunking ESS, for attaching to the trunking end.

# Electrap

#### ESS trunking with bottom trough dry cleaned





LI = Clear inner trunking width

LE = Clear entrance opening

Trunking Nominal height	Levelling area mm	Height mm
K040	40 - 60	28
K050	50 - 70	38
K060	60 - 100	48
K070	70 - 110	58
K080	80 - 120	68
K090	90 - 130	78

#### Trunking side profile:

Extruded-aluminium-sheath

#### Cover:

Sheet steel, gal. according DIN EN 10142, 3 mm thick, 800 mm long, holes countersunk on one side

Covering butt edge: Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted

#### Bottom trough:

1 mm sheet steel, gal. according DIN EN 10142

For reinforcement load bearing cross bars are placed under the blind covers.

Optionally: Snap fastener on blind covers

ESS 150 WK040 150 166 134 75 301 W15K 040 2,4 m   ESS 150 WK060 150 166 134 75 301 W15K 050 2,4 m   ESS 150 WK060 150 166 134 75 301 W15K 070 2,4 m   ESS 150 WK060 200 216 184 125 301 W20K 060 2,4 m   ESS 200 WK080 200 216 184 125 301 W20K 070 2,4 m   ESS 200 WK080 200 216 184 125 301 W20K 080 2,4 m   ESS 200 WK080 250 266 234 175 301 W20K 090 2,4 m   ESS 250 WK060 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 070 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m	Model number	Nominal width N	Outer width AB mm	Width LI mm	Width LE mm	Article number	Packing unit
ESS 150 WK060 150 166 134 75 301 W15K 060 2,4 m   ESS 150 WK070 150 166 134 75 301 W15K 070 2,4 m   ESS 200 WK060 200 216 184 125 301 W20K 060 2,4 m   ESS 200 WK070 200 216 184 125 301 W20K 070 2,4 m   ESS 200 WK080 200 216 184 125 301 W20K 080 2,4 m   ESS 250 WK060 250 266 234 175 301 W25K 060 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 300 WK060 300 316 284 225 301 W30K 080 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m	ESS 150 WK040	150	166	134	75	301 W15K 040	2,4 m
ESS 150 WK070 150 166 134 75 301 W15K 070 2,4 m   ESS 200 WK060 200 216 184 125 301 W20K 060 2,4 m   ESS 200 WK070 200 216 184 125 301 W20K 070 2,4 m   ESS 200 WK080 200 216 184 125 301 W20K 080 2,4 m   ESS 200 WK090 200 216 184 125 301 W20K 090 2,4 m   ESS 250 WK060 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK070 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK070 250 266 234 175 301 W35K 080 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 300 WK080 350 366 334 275 301 W35K 080 2,4 m <th>ESS 150 WK050</th> <th>150</th> <th>166</th> <th>134</th> <th>75</th> <th>301 W15K 050</th> <th>2,4 m</th>	ESS 150 WK050	150	166	134	75	301 W15K 050	2,4 m
ESS 200 WK060 200 216 184 125 301 W20K 060 2,4 m   ESS 200 WK070 200 216 184 125 301 W20K 070 2,4 m   ESS 200 WK080 200 216 184 125 301 W20K 080 2,4 m   ESS 200 WK090 200 216 184 125 301 W20K 080 2,4 m   ESS 250 WK060 250 266 234 175 301 W25K 060 2,4 m   ESS 250 WK070 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 300 WK060 300 316 284 225 301 W30K 060 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W30K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W35K 070 2,4 m <th>ESS 150 WK060</th> <th>150</th> <th>166</th> <th>134</th> <th>75</th> <th>301 W15K 060</th> <th>2,4 m</th>	ESS 150 WK060	150	166	134	75	301 W15K 060	2,4 m
ESS 200 WK070 200 216 184 125 301 W20K 070 2,4 m   ESS 200 WK080 200 216 184 125 301 W20K 080 2,4 m   ESS 200 WK090 200 216 184 125 301 W20K 080 2,4 m   ESS 250 WK060 250 266 234 175 301 W25K 060 2,4 m   ESS 250 WK070 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 300 WK060 300 316 284 225 301 W30K 060 2,4 m   ESS 300 WK070 300 316 284 225 301 W30K 070 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W30K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W35K 080 2,4 m <th>ESS 150 WK070</th> <th>150</th> <th>166</th> <th>134</th> <th>75</th> <th>301 W15K 070</th> <th>2,4 m</th>	ESS 150 WK070	150	166	134	75	301 W15K 070	2,4 m
ESS 200 WK080200216184125301 W20K 0802.4 mESS 200 WK090200216184125301 W20K 0902.4 mESS 250 WK060250266234175301 W25K 0602.4 mESS 250 WK070250266234175301 W25K 0802.4 mESS 250 WK080250266234175301 W25K 0802.4 mESS 250 WK080250266234175301 W25K 0802.4 mESS 250 WK080250266234175301 W25K 0802.4 mESS 300 WK060300316284225301 W30K 0602.4 mESS 300 WK080300316284225301 W30K 0702.4 mESS 300 WK080300316284225301 W30K 0802.4 mESS 300 WK080300316284225301 W30K 0802.4 mESS 300 WK080350366334275301 W35K 0602.4 mESS 350 WK080350366334275301 W35K 0702.4 mESS 350 WK080350366334275301 W35K 0802.4 mESS 400 WK060400416384325301 W40K 0602.4 mESS 400 WK080400416384325301 W40K 0802.4 mESS 400 WK080400416384325301 W40K 0802.4 mESS 500 WK080500516484425301 W50K 0702	ESS 200 WK060	200	216	184	125	301 W20K 060	2,4 m
ESS 200 WK090 200 216 184 125 301 W20K 090 2,4 m   ESS 250 WK060 250 266 234 175 301 W25K 060 2,4 m   ESS 250 WK070 250 266 234 175 301 W25K 070 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK090 250 266 234 175 301 W25K 080 2,4 m   ESS 300 WK060 300 316 284 225 301 W30K 060 2,4 m   ESS 300 WK070 300 316 284 225 301 W30K 070 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 300 WK090 300 316 284 225 301 W30K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W35K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W35K 080 2,4 m <th>ESS 200 WK070</th> <th>200</th> <th>216</th> <th>184</th> <th>125</th> <th>301 W20K 070</th> <th>2,4 m</th>	ESS 200 WK070	200	216	184	125	301 W20K 070	2,4 m
ESS 250 WK060 250 266 234 175 301 W25K 060 2,4 m   ESS 250 WK070 250 266 234 175 301 W25K 070 2,4 m   ESS 250 WK080 250 266 234 175 301 W25K 080 2,4 m   ESS 250 WK090 250 266 234 175 301 W25K 080 2,4 m   ESS 300 WK060 300 316 284 225 301 W30K 060 2,4 m   ESS 300 WK070 300 316 284 225 301 W30K 060 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 300 WK080 300 316 284 225 301 W30K 080 2,4 m   ESS 350 WK080 350 366 334 275 301 W35K 060 2,4 m   ESS 350 WK080 350 366 334 275 301 W35K 080 2,4 m   ESS 400 WK060 400 416 384 325 301 W40K 060 2,4 m <th>ESS 200 WK080</th> <th>200</th> <th>216</th> <th>184</th> <th>125</th> <th>301 W20K 080</th> <th>2,4 m</th>	ESS 200 WK080	200	216	184	125	301 W20K 080	2,4 m
ESS 250 WK070250266234175301 W25K 0702,4 mESS 250 WK080250266234175301 W25K 0802,4 mESS 250 WK090250266234175301 W25K 0902,4 mESS 300 WK060300316284225301 W30K 0602,4 mESS 300 WK070300316284225301 W30K 0702,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK090300316284225301 W30K 0802,4 mESS 300 WK090350366334275301 W35K 0602,4 mESS 350 WK070350366334275301 W35K 0702,4 mESS 350 WK080350366334275301 W35K 0802,4 mESS 400 WK060400416384325301 W40K 0602,4 mESS 400 WK070400416384325301 W40K 0802,4 mESS 400 WK080500516484425301 W50K 0602,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0802	ESS 200 WK090	200	216	184	125	301 W20K 090	2,4 m
ESS 250 WK080250266234175301 W25K 0802,4 mESS 250 WK090250266234175301 W25K 0902,4 mESS 300 WK060300316284225301 W30K 0602,4 mESS 300 WK070300316284225301 W30K 0702,4 mESS 300 WK080300316284225301 W30K 0702,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK090300316284225301 W30K 0802,4 mESS 300 WK090300316284225301 W30K 0802,4 mESS 350 WK060350366334275301 W35K 0602,4 mESS 350 WK070350366334275301 W35K 0802,4 mESS 350 WK080350366334275301 W35K 0802,4 mESS 400 WK060400416384325301 W40K 0702,4 mESS 400 WK070400416384325301 W40K 0802,4 mESS 400 WK080500516484425301 W40K 0902,4 mESS 500 WK080500516484425301 W50K 0702,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 600 WK080600616584525301 W60K 0602	ESS 250 WK060	250	266	234	175	301 W25K 060	2,4 m
ESS 250 WK090250266234175301 W25K 0902,4 mESS 300 WK060300316284225301 W30K 0602,4 mESS 300 WK070300316284225301 W30K 0702,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK090300316284225301 W30K 0902,4 mESS 350 WK060350366334275301 W35K 0602,4 mESS 350 WK080350366334275301 W35K 0702,4 mESS 350 WK080350366334275301 W35K 0902,4 mESS 350 WK080350366334275301 W35K 0902,4 mESS 400 WK060400416384325301 W40K 0602,4 mESS 400 WK070400416384325301 W40K 0802,4 mESS 400 WK080400416384325301 W40K 0802,4 mESS 500 WK080500516484425301 W50K 0702,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0902,4 mESS 600 WK060600616584525301 W60K 0602,4 mESS 600 WK080600616584525301 W60K 0802	ESS 250 WK070	250	266	234	175	301 W25K 070	2,4 m
ESS 300 WK060300316284225301 W30K 0602,4 mESS 300 WK070300316284225301 W30K 0702,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK090300316284225301 W30K 0902,4 mESS 350 WK090300316284225301 W30K 0902,4 mESS 350 WK060350366334275301 W35K 0602,4 mESS 350 WK070350366334275301 W35K 0702,4 mESS 350 WK080350366334275301 W35K 0902,4 mESS 350 WK080350366334275301 W35K 0902,4 mESS 400 WK060400416384325301 W40K 0602,4 mESS 400 WK060400416384325301 W40K 0702,4 mESS 400 WK080400416384325301 W40K 0802,4 mESS 400 WK080400416384325301 W40K 0902,4 mESS 500 WK080500516484425301 W50K 0702,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0902,4 mESS 600 WK060600616584525301 W60K 0602,4 mESS 600 WK080600616584525301 W60K 0802	ESS 250 WK080	250	266	234	175	301 W25K 080	2,4 m
ESS 300 WK070300316284225301 W30K 0702,4 mESS 300 WK080300316284225301 W30K 0802,4 mESS 300 WK090300316284225301 W30K 0902,4 mESS 350 WK060350366334275301 W35K 0602,4 mESS 350 WK070350366334275301 W35K 0702,4 mESS 350 WK070350366334275301 W35K 0702,4 mESS 350 WK080350366334275301 W35K 0802,4 mESS 350 WK080350366334275301 W35K 0902,4 mESS 400 WK060400416384325301 W40K 0602,4 mESS 400 WK070400416384325301 W40K 0702,4 mESS 400 WK080400416384325301 W40K 0802,4 mESS 400 WK080400416384325301 W40K 0802,4 mESS 400 WK080500516484425301 W50K 0602,4 mESS 500 WK080500516484425301 W50K 0702,4 mESS 500 WK080500516484425301 W50K 0802,4 mESS 500 WK080500516484425301 W50K 0902,4 mESS 600 WK080600616584525301 W60K 0602,4 mESS 600 WK080600616584525301 W60K 0702	ESS 250 WK090	250	266	234	175	301 W25K 090	2,4 m
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ESS 350 WK090 350 366 334 275 301 W35K 090 2,4 m   ESS 400 WK060 400 416 384 325 301 W40K 060 2,4 m   ESS 400 WK070 400 416 384 325 301 W40K 060 2,4 m   ESS 400 WK070 400 416 384 325 301 W40K 070 2,4 m   ESS 400 WK080 400 416 384 325 301 W40K 080 2,4 m   ESS 400 WK080 400 416 384 325 301 W40K 080 2,4 m   ESS 500 WK090 400 416 384 325 301 W40K 090 2,4 m   ESS 500 WK060 500 516 484 425 301 W50K 070 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 090 2,4 m   ESS 600 WK060 600 616 584 525 301 W60K 060 2,4 m <th>ESS 350 WK070</th> <th>350</th> <th>366</th> <th>334</th> <th>275</th> <th>301 W35K 070</th> <th>2,4 m</th>	ESS 350 WK070	350	366	334	275	301 W35K 070	2,4 m
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ESS 400 WK080 400 416 384 325 301 W40K 080 2,4 m   ESS 400 WK090 400 416 384 325 301 W40K 090 2,4 m   ESS 500 WK060 500 516 484 425 301 W40K 090 2,4 m   ESS 500 WK070 500 516 484 425 301 W50K 060 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 070 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 600 WK090 500 516 484 425 301 W50K 080 2,4 m   ESS 600 WK060 600 616 584 525 301 W60K 060 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK080 600 616 584 525 301 W60K 080 2,4 m <th>ESS 400 WK060</th> <th>400</th> <th>416</th> <th>384</th> <th>325</th> <th>301 W40K 060</th> <th>2,4 m</th>	ESS 400 WK060	400	416	384	325	301 W40K 060	2,4 m
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ESS 500 WK060 500 516 484 425 301 W50K 060 2,4 m   ESS 500 WK070 500 516 484 425 301 W50K 070 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 070 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 500 WK090 500 516 484 425 301 W50K 080 2,4 m   ESS 600 WK090 600 616 584 525 301 W60K 060 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK080 600 616 584 525 301 W60K 070 2,4 m	ESS 400 WK080	400	416	384	325	301 W40K 080	2,4 m
ESS 500 WK070 500 516 484 425 301 W50K 070 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 500 WK090 500 516 484 425 301 W50K 090 2,4 m   ESS 600 WK060 600 616 584 525 301 W60K 060 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK080 600 616 584 525 301 W60K 070 2,4 m	ESS 400 WK090	400	416	384	325	301 W40K 090	2,4 m
ESS 500 WK080 500 516 484 425 301 W50K 080 2,4 m   ESS 500 WK090 500 516 484 425 301 W50K 090 2,4 m   ESS 600 WK060 600 616 584 525 301 W60K 060 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK080 600 616 584 525 301 W60K 070 2,4 m	ESS 500 WK060	500	516	484	425	301 W50K 060	2,4 m
ESS 500 WK090 500 516 484 425 301 W50K 090 2,4 m   ESS 600 WK060 600 616 584 525 301 W60K 060 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m	ESS 500 WK070	500	516	484	425	301 W50K 070	2,4 m
ESS 600 WK060 600 616 584 525 301 W60K 060 2,4 m   ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK080 600 616 584 525 301 W60K 070 2,4 m	ESS 500 WK080	500	516	484	-		2,4 m
ESS 600 WK070 600 616 584 525 301 W60K 070 2,4 m   ESS 600 WK080 600 616 584 525 301 W60K 080 2,4 m	ESS 500 WK090	500	516	484	425	301 W50K 090	2,4 m
ESS 600 WK080 600 616 584 525 301 W60K 080 2,4 m	ESS 600 WK060	600	616	584	525	301 W60K 060	2,4 m
	ESS 600 WK070	600	616	584	525	301 W60K 070	2,4 m
ESS 600 WK090 600 616 584 525 301 W60K 090 2,4 m	ESS 600 WK080	600	616	584		301 W60K 080	2,4 m
	ESS 600 WK090	600	616	584	525	301 W60K 090	2,4 m

ESS - Complete trunking system with bottom trough for flush floor installation for dry cleaned floors. From 55 mm built-in depth flush floor installation units can be built in.

The trunking standard length is 2400 mm with 3 movable blind covers each 800 mm of length.

The trunking walls exists of a 1 mm sheet steel trough.

Along the trunking, branches of screed embedded trunking or pipes/conduits can be tapped without considerable time and cost expenditure.

The trunking stability is achieved with flexible screed casing over the side elevations, as with the model ESS. The trunking bottom has no supporting effect. Avoid having the trunking bottom hang freely in the air. Put underlays below the trunking bottom when laying the screed.

With floating screeds, the trunking bottom and trunking elevation must not form any metallic sound bridges to the bare floor.

The load acquirement of flush-mounted floor components is 1500 N. Slight deflection is permissible. Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as accessory back.



Installation instruction available at the end of this chapter



3D installation videos available at the internet

#### Electrap an utions So

#### ESS End piece with bottom trough dry cleaned



AB = Outer width

LI = Clear inner trunking width

LE = Clear entrance opening

Trunking Nominal height	Levelling area mm	Height mm
K040	40 - 60	28
K050	50 - 70	38
K060	60 - 100	48
K070	70 - 110	58
K080	80 - 120	68
K090	90 - 130	78

Trunking side profile:

#### Extruded-aluminium-sheath

#### Cover:

Sheet steel, gal. according DIN EN 10142, 3 mm thick, 800 mm long, holes countersunk on one side

Covering butt edge: Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted

Bottom trough:

1 mm sheet steel, gal. according DIN EN 10142

Model number	Nominal width	Outer width AB	Width LI	Width LE	Article number	Packing unit
	N	mm	mm	mm		
ESS E150 WK040	150	166	134	75	301 W15K E40	1 pc
ESS E150 WK050	150	166	134	75	301 W15K E50	1 pc
ESS E150 WK060	150	166	134	75	301 W15K E60	1 pc
ESS E150 WK070	150	166	134	75	301 W15K E70	1 pc
ESS E200 WK060	200	216	184	125	301 W20K E60	1 pc
ESS E200 WK070	200	216	184	125	301 W20K E70	1 pc
ESS E200 WK080	200	216	184	125	301 W20K E80	1 pc
ESS E200 WK090	200	216	184	125	301 W20K E90	1 pc
ESS E250 WK060	250	266	234	175	301 W25K E60	1 pc
ESS E250 WK070	250	266	234	175	301 W25K E70	1 pc
ESS E250 WK080	250	266	234	175	301 W25K E80	1 pc
ESS E250 WK090	250	266	234	175	301 W25K E90	1 pc
ESS E300 WK060	300	316	284	225	301 W30K E60	1 pc
ESS E300 WK070	300	316	284	225	301 W30K E70	1 pc
ESS E300 WK080	300	316	284	225	301 W30K E80	1 pc
ESS E300 WK090	300	316	284	225	301 W30K E90	1 pc
ESS E350 WK060	350	366	334	275	301 W35K E60	1 pc
ESS E350 WK070	350	366	334	275	301 W35K E70	1 pc
ESS E350 WK080	350	366	334	275	301 W35K E80	1 pc
ESS E350 WK090	350	366	334	275	301 W35K E90	1 pc
ESS E400 WK060	400	416	384	325	301 W40K E60	1 pc
ESS E400 WK070	400	416	384	325	301 W40K E70	1 pc
ESS E400 WK080	400	416	384	325	301 W40K E80	1 pc
ESS E400 WK090	400	416	384	325	301 W40K E90	1 pc
ESS E500 WK060	500	516	484	425	301 W50K E60	1 pc
ESS E500 WK070	500	516	484	425	301 W50K E70	1 pc
ESS E500 WK080	500	516	484	425	301 W50K E80	1 pc
ESS E500 WK090	500	516	484	425	301 W50K E90	1 pc
ESS E600 WK060	600	616	584	525	301 W60K E60	1 pc
ESS E600 WK070	600	616	584	525	301 W60K E70	1 pc
ESS E600 WK080	600	616	584	525	301 W60K E80	1 pc
ESS E600 WK090	600	616	584	525	301 W60K E90	1 pc

Trunking end piece ESS E... WK.., as closure for flush floor trunking ESS with bottom trough, for attaching to the trunking end.

Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as accessory back.

Installation instruction available at the end of this chapter



3D installation videos available at the internet

#### ESS Blind cover standard length 800 mm



#### ESS Blind cover approximate length up to 799 mm



#### ESS Blind cover approximate length up to 400 mm



#### ESS Blind cover approximate length up to 200 mm



Model number	Nomina width N		Length L mm	Article number	Packing unit
ESS BK150	150	120	800	135 710 800	1 pc
ESS BK200	200	170	800	135 720 800	1 pc
ESS BK250	250	220	800	135 730 800	1 pc
ESS BK300	300	270	800	135 740 800	1 pc
ESS BK350	350	320	800	135 750 800	1 pc
ESS BK400	400	370	800	135 760 800	1 pc
ESS BK500	500	470	800	135 770 800	1 pc
ESS BK600	600	570	800	135 780 800	1 pc

Blind cover ESS BK... as additional cover for trunking ESS, holes countersunk on one side, including fixing screws.

Material: 3 mm sheet steel, gal. according DIN EN 10142

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Installation instruction available at the end of this chapter

3D installation videos available at the internet

Model number	Nomina width N	al Width B mm	Length L mm	Article number	Packing unit
ESS BK150.8	150	120	401-799	135 711 800	1 pc
ESS BK200.8	200	170	401-799	135 721 800	1 pc
ESS BK250.8	250	220	401-799	135 731 800	1 pc
ESS BK300.8	300	270	401-799	135 741 800	1 pc
ESS BK350.8	350	320	401-799	135 751 800	1 pc
ESS BK400.8	400	370	401-799	135 761 800	1 pc
ESS BK500.8	500	470	401-799	135 771 800	1 pc
ESS BK600.8	600	570	401-799	135 781 800	1 pc

Blind cover ESS BK... as additional cover for trunking ESS, holes countersunk on one side, including fixing screws. Fixed length according length specification. Length between 401 mm and 709 mm possible.

Material: 3 mm sheet steel, gal. according DIN EN 10142

Model number	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
ESS BK150.4	150	120	201-400	135 711 400	1 pc
ESS BK200.4	200	170	201-400	135 721 400	1 pc
ESS BK250.4	250	220	201-400	135 731 400	1 pc
ESS BK300.4	300	270	201-400	135 741 400	1 pc
ESS BK350.4	350	320	201-400	135 751 400	1 pc
ESS BK400.4	400	370	201-400	135 761 400	1 pc
ESS BK500.4	500	470	201-400	135 771 400	1 pc
ESS BK600.4	600	570	201-400	135 781 400	1 pc

Blind cover ESS BK... as additional cover for trunking ESS, holes countersunk on one side, including fixing screws. Fixed length according length specification. Length between 401 mm and 709 mm possible.

Material: 3 mm sheet steel, gal. according DIN EN 10142

Model number		ominal vidth N	Width B mm	Length L mm	Article number	Packing unit
ESS BK150.2		150	120	1-200	135 711 200	1 pc
ESS BK200.2	:	200	170	1-200	135 721 200	1 pc
ESS BK250.2	:	250	220	1-200	135 731 200	1 pc
ESS BK300.2	:	300	270	1-200	135 741 200	1 pc
ESS BK350.2	:	350	320	1-200	135 751 200	1 pc
ESS BK400.2		400	370	1-200	135 761 200	1 pc
ESS BK500.2		500	470	1-200	135 771 200	1 pc
ESS BK600.2		600	570	1-200	135 781 200	1 pc

Blind cover ESS BK... as additional cover for trunking ESS, holes countersunk on one side, including fixing screws. Fixed length according length specification. Length between 401 mm and 709 mm possible.

Material: 3 mm sheet steel, gal. according DIN EN 10142



#### ESS Cross member



Model number	Width B mm	Article number	Packing unit
ESS -T 150	120	135 201 610	1 pc
ESS -T 200	170	135 202 610	1 pc
ESS -T 250	220	135 203 610	1 pc
ESS -T 300	270	135 204 610	1 pc
ESS -T 350	320	135 205 610	1 pc
ESS -TN250	220	135 213 610	1 pc
ESS -TN300	270	135 214 610	1 pc
ESS -TN350	320	135 215 610	1 pc
ESS -TN400	370	135 216 610	1 pc
ESS -TN500	470	135 217 610	1 pc
ESS -TN600	570	135 218 610	1 pc

Cross member for absorbing additional load under covers of the trunking ESS.

Fastening with screws in the trunking side profile.

ESS -T ...: without levelling sleeve

ESS -TN ...: with levelling sleeve, delivery without set screw

Note:

In order to prevent sagging which is not permissible, the customer must fit the cross members ESS TN with set screws NS M8. Please order these separately.

Installation instruction available at the end of this chapter

#### Example for installation:



## ESS trunking with flexible screed casing wet cleaned





#### AB = Outer width

LI = Clear inner trunking width

LE = Clear entrance opening

#### K045 = levelling range 45 - 70 mm K065 = levelling range 65 - 110 mm K105 = levelling range 105 - 150 mm K145 = levelling range 145 - 190 mm

Trunking side profile: Extruded-aluminium-sheath

#### Cover:

Sheet steel, gal. according DIN EN 10142, 3 mm thick, 800 mm long, holes countersunk on one side

#### Covering butt edge:

Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted Flexible screed casing:

Plastic (PVC), UV-resistant, highly resistant to impacts

#### Seal:

Plastic foam, impregnated, self-adhesive

For reinforcement load bearing cross bars are placed under the blind covers.

Optionally: Snap fastener on blind covers

At delivery the sealing is layed by as rolls separately. It should be installed after completing of screed laying in order to avoid leak tightness due to uncleanness.

Model number	Nominal width N	Outer width AB mm	Width Ll mm	Width LE mm	Article number	Packing unit
EFS 150 K045	150	170	115	63	302 15K0 045	2,4 m
EFS 150 K065	150	170	115	63	302 15K0 065	2,4 m
EFS 150 K105	150	170	115	63	302 15K0 105	2,4 m
EFS 150 K145	150	170	115	63	302 15K0 145	2,4 m
EFS 200 K045	200	220	165	113	302 20K0 045	2,4 m
EFS 200 K065	200	220	165	113	302 20K0 065	2,4 m
EFS 200 K105	200	220	165	113	302 20K0 105	2,4 m
EFS 200 K145	200	220	165	113	302 20K0 145	2,4 m
EFS 250 K045	250	270	215	163	302 25K0 045	2,4 m
EFS 250 K065	250	270	215	163	302 25K0 065	2,4 m
EFS 250 K105	250	270	215	163	302 25K0 105	2,4 m
EFS 250 K145	250	270	215	163	302 25K0 145	2,4 m
EFS 300 K045	300	320	265	213	302 30K0 045	2,4 m
EFS 300 K065	300	320	265	213	302 30K0 065	2,4 m
EFS 300 K105	300	320	265	213	302 30K0 105	2,4 m
EFS 300 K145	300	320	265	213	302 30K0 145	2,4 m
EFS 350 K045	350	370	315	263	302 35K0 045	2,4 m
EFS 350 K065	350	370	315	263	302 35K0 065	2,4 m
EFS 350 K105	350	370	315	263	302 35K0 105	2,4 m
EFS 350 K145	350	370	315	263	302 35K0 145	2,4 m
EFS 400 K045	400	420	365	313	302 40K0 045	2,4 m
EFS 400 K065	400	420	365	313	302 40K0 065	2,4 m
EFS 400 K105	400	420	365	313	302 40K0 105	2,4 m
EFS 400 K145	400	420	365	313	302 40K0 145	2,4 m
EFS 500 K045	500	520	465	413	302 50K0 045	2,4 m
EFS 500 K065	500	520	465	413	302 50K0 065	2,4 m
EFS 500 K105	500	520	465	413	302 50K0 105	2,4 m
EFS 500 K145	500	520	465	413	302 50K0 145	2,4 m
EFS 600 K045	600	620	565	513	302 60K0 045	2,4 m
EFS 600 K065	600	620	565	513	302 60K0 065	2,4 m
EFS 600 K105	600	620	565	513	302 60K0 105	2,4 m
EFS 600 K145	600	620	565	513	302 60K0 145	2,4 m

EFS - Complete trunking system with flexible screed casing for flush floor installation for dry or wet cleaned floors.

From 55 mm built-in depth flush floor installation units can be built in.

The trunking standard length is 2400 mm with 3 movable blind covers each 800 mm of length.

The walls of the trunking existing of a flexible screed casing, which can be adapted to all uneven floors and which allows step less levelling.

Along the trunking, branches of screed embedded trunkings or pipes/conduits can be tapped without considerable time and cost expenditure.

The midden support can be mounted straight onto the bare concrete floor from a width of 350 mm onwards. Additional procedures e.g. firring and punching of the trunking bottom can be cancelled.

The complete interior space of the flush floor trunking is available from the top edge of the screed up to the bottom of the bare concrete floor for the laying of the cables.

The load acquirement of flush-mounted floor components is 1500 N. Slight deflection is permissible.

Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as accessory back.



Installation instruction available at the end of this chapter

# EFS End piece with flexible screed casing wet cleaned



K045 = levelling range 45 - 70 mm K065 = levelling range 65 - 110 mm K105 = levelling range 105 - 150 mm K145 = levelling range 145 - 190 mm

Trunking side profile:

Extruded-aluminium-sheath

#### Cover:

Sheet steel, gal. according DIN EN 10142, 3  $\,$  mm thick, 800 mm long, holes countersunk on one side

Covering butt edge: Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted

#### Flexible screed casing:

Plastic (PVC), UV-resistant, highly resistant to impacts

#### Seal:

Plastic foam, impregnated, self-adhesive

Model number	Nominal width	Outer width AB	Width B	Article number	Packing unit
	N	mm	mm		
EFS E150 K045	150	166	125	302 15KE 045	1 pc
EFS E150 K065	150	166	125	302 15KE 065	1 pc
EFS E150 K105	150	166	125	302 15KE 105	1 pc
EFS E150 K145	150	166	125	302 15KE 145	1 pc
EFS E200 K045	200	216	125	302 20KE 045	1 pc
EFS E200 K065	200	216	125	302 20KE 065	1 pc
EFS E200 K105	200	216	125	302 20KE 105	1 pc
EFS E200 K145	200	216	125	302 20KE 145	1 pc
EFS E250 K045	250	266	125	302 25KE 045	1 pc
EFS E250 K065	250	266	125	302 25KE 065	1 pc
EFS E250 K105	250	266	125	302 25KE 105	1 pc
EFS E250 K145	250	266	125	302 25KE 145	1 pc
EFS E300 K045	300	316	125	302 30KE 045	1 pc
EFS E300 K065	300	316	125	302 30KE 065	1 pc
EFS E300 K105	300	316	125	302 30KE 105	1 pc
EFS E300 K145	300	316	125	302 30KE 145	1 pc
EFS E350 K045	350	366	125	302 35KE 045	1 pc
EFS E350 K065	350	366	125	302 35KE 065	1 pc
EFS E350 K105	350	366	125	302 35KE 105	1 pc
EFS E350 K145	350	366	125	302 35KE 145	1 pc
EFS E400 K045	400	416	125	302 40KE 045	1 pc
EFS E400 K065	400	416	125	302 40KE 065	1 pc
EFS E400 K105	400	416	125	302 40KE 105	1 pc
EFS E400 K145	400	416	125	302 40KE 145	1 pc
EFS E500 K045	500	516	125	302 50KE 045	1 pc
EFS E500 K065	500	516	125	302 50KE 065	1 pc
EFS E500 K105	500	516	125	302 50KE 105	1 pc
EFS E500 K145	500	516	125	302 50KE 145	1 pc
EFS E600 K045	600	616	125	302 60KE 045	1 pc
EFS E600 K065	600	616	125	302 60KE 065	1 pc
EFS E600 K105	600	616	125	302 60KE 105	1 pc
EFS E600 K145	600	616	125	302 60KE 145	1 pc

Trunkin end piece EFS E... K..., as closure for flush floor trunking EFS, for attaching to the trunking end.

Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as accessory back.

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## EFS trunking with bottom trough wet cleaned





AB = Outer width
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LI = Clear inner trunking width

LE = Clear entrance opening

Trunking Nominal height	Levelling area mm	Height mm
K040	40 - 60	28
K050	50 - 70	38
K060	60 - 100	48
K070	70 - 110	58
K080	80 - 120	68
K090	90 - 130	78

#### Trunking side profile:

Extruded-aluminium-sheath

#### Cover:

Sheet steel, gal. according DIN EN 10142, 3  $\,$  mm thick, 800 mm long, holes countersunk on one side

Covering butt edge:

Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted

#### Bottom trough:

1 mm sheet steel, gal. according DIN EN 10142 Seal:

Plastic foam, impregnated, self-adhesive

For reinforcement load bearing cross bars are placed under the blind covers.

Optionally: Snap fastener on blind covers

At delivery the sealing is layed by as rolls separately. It should be installed after completing of screed laying in order to avoid leak tightness due to uncleanness.

Model number	Nominal width	Outer width AB	Width LI	Width LE	Article number	Packing unit
	N	mm	mm	mm		
EFS 150 WK040	150	170	111	63	302 W15K 040	2,4 m
EFS 150 WK050	150	170	111	63	302 W15K 050	2,4 m
EFS 150 WK060	150	170	111	63	302 W15K 060	2,4 m
EFS 200 WK060	200	220	161	113	302 W20K 060	2,4 m
EFS 200 WK070	200	220	161	113	302 W20K 070	2,4 m
EFS 200 WK080	200	220	161	113	302 W20K 080	2,4 m
EFS 200 WK090	200	220	161	113	302 W20K 090	2,4 m
EFS 250 WK060	250	270	211	163	302 W25K 060	2,4 m
EFS 250 WK070	250	270	211	163	302 W25K 070	2,4 m
EFS 250 WK080	250	270	211	163	302 W25K 080	2,4 m
EFS 250 WK090	250	270	211	163	302 W25K 090	2,4 m
EFS 300 WK060	300	320	261	213	302 W30K 060	2,4 m
EFS 300 WK070	300	320	261	213	302 W30K 070	2,4 m
EFS 300 WK080	300	320	261	213	302 W30K 080	2,4 m
EFS 300 WK090	300	320	261	213	302 W30K 090	2,4 m
EFS 350 WK060	350	370	311	263	302 W35K 060	2,4 m
EFS 350 WK070	350	370	311	263	302 W35K 070	2,4 m
EFS 350 WK080	350	370	311	263	302 W35K 080	2,4 m
EFS 350 WK090	350	370	311	263	302 W35K 090	2,4 m
EFS 400 WK060	400	420	361	313	302 W40K 060	2,4 m
EFS 400 WK070	400	420	361	313	302 W40K 070	2,4 m
EFS 400 WK080	400	420	361	313	302 W40K 080	2,4 m
EFS 400 WK090	400	420	361	313	302 W40K 090	2,4 m
EFS 500 WK060	500	520	461	413	302 W50K 060	2,4 m
EFS 500 WK070	500	520	461	413	302 W50K 070	2,4 m
EFS 500 WK080	500	520	461	413	302 W50K 080	2,4 m
EFS 500 WK090	500	520	461	413	302 W50K 090	2,4 m
EFS 600 WK060	600	620	561	513	302 W60K 060	2,4 m
EFS 600 WK070	600	620	561	513	302 W60K 070	2,4 m
EFS 600 WK080	600	620	561	513	302 W60K 080	2,4 m
EFS 600 WK090	600	620	561	513	302 W60K 090	2,4 m

EFS - Complete trunking system with bottom trough for flush floor installation for dry and wet cleaned floors.

From 55 mm built-in depth flush floor installation units can be built in.

The trunking standard length is 2400 mm with 3 movable blind covers each 800 mm of length.

The trunking walls exists of a 1 mm sheet steel trough.

Along the trunking, branches of screed embedded trunking or pipes/conduits can be tapped without considerable time and cost expenditure.

The trunking stability is achieved with flexible screed casing over the side elevations, as with the model EFS. The trunking bottom has no supporting effect. Avoid having the trunking bottom hang freely in the air. Put underlays below the trunking bottom when laying the screed.

With floating screeds, the trunking bottom and trunking elevation must not form any metallic sound bridges to the bare floor.

The load acquirement of flush-mounted floor components is 1500 N. Slight deflection is permissible. Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as accessory back.



Installation instruction available at the end of this chapter

# EFS End piece with bottom trough dry cleaned



Trunking Nominal height	Levelling area mm	Height mm
K040	40 - 60	28
K050	50 - 70	38
K060	60 - 100	48
K070	70 - 110	58
K080	80 - 120	68
K090	90 - 130	78

#### Trunking side profile:

Extruded-aluminium-sheath

#### Cover:

Sheet steel, gal. according DIN EN 10142, 3 mm thick, 800 mm long, holes countersunk on one side

EFS E500 WK070

EFS E500 WK080

EFS E500 WK090

EFS E600 WK045

EFS E600 WK070

EFS E600 WK080

EFS E600 WK090

#### Covering butt edge:

Plastic (PVC), 0 or 4 mm high, colour grey, flush mounted

#### Bottom trough:

1 mm sheet steel, gal. according DIN EN 10142

Seal:

Plastic foam, impregnated, self-adhesive

Trunking end piece EFS E... WK.., as closure for flush floor trunking EFS with bottom trough, for attaching to the trunking end.

500

500

500

600

600

600

600

Inclusive factory-made mounted levelling brackets. Sound-absoring bearings and set screws as accessory back.

520

520

520

620

620

620

620

125

125

125

125

125

125

125

302 W50K E70

302 W50K E80

302 W50K E90

302 W60K E60

302 W60K E70

302 W60K E80

302 W60K E90

1 pc

Flush floor trunking system

Model number	Nominal	Outer width	Width	Article	Packing
	width N	AB mm	B mm	number	unit
EFS E150 WK040	150	170	125	302 W15K E40	1 pc
EFS E150 WK050	150	170	125	302 W15K E50	1 pc
EFS E150 WK060	150	170	125	302 W15K E60	1 pc
EFS E200 WK045	200	220	125	302 W20K E60	1 pc
EFS E200 WK070	200	220	125	302 W20K E70	1 pc
EFS E200 WK080	200	220	125	302 W20K E80	1 pc
EFS E200 WK090	200	220	125	302 W20K E90	1 pc
EFS E250 WK045	250	270	125	302 W25K E60	1 pc
EFS E250 WK070	250	270	125	302 W25K E70	1 pc
EFS E250 WK080	250	270	125	302 W25K E80	1 pc
EFS E250 WK090	250	270	125	302 W25K E90	1 pc
EFS E300 WK045	300	320	125	302 W30K E60	1 pc
EFS E300 WK070	300	320	125	302 W30K E70	1 pc
EFS E300 WK080	300	320	125	302 W30K E80	1 pc
EFS E300 WK090	300	320	125	302 W30K E90	1 pc
EFS E350 WK045	350	370	125	302 W35K E60	1 pc
EFS E350 WK070	350	370	125	302 W35K E70	1 pc
EFS E350 WK080	350	370	125	302 W35K E80	1 pc
EFS E350 WK090	350	370	125	302 W35K E90	1 pc
EFS E400 WK045	400	420	125	302 W40K E60	1 pc
EFS E400 WK070	400	420	125	302 W40K E70	1 pc
EFS E400 WK080	400	420	125	302 W40K E80	1 pc
EFS E400 WK090	400	420	125	302 W40K E90	1 pc
EFS E500 WK045	500	520	125	302 W50K E60	1 pc

#### EFS Blind cover approximate length up to 800 mm



#### EFS Blind cover approximate length up to 799 mm



#### EFS Blind cover approximate length up to 400 mm



#### EFS Blind cover approximate length up to 200 mm



Model number	Nomin width N		Length L mm	Article number	Packing unit
EFS BK150	150	120	800	145 710 800	1 pc
EFS BK200	200	170	800	145 720 800	1 pc
EFS BK250	250	220	800	145 730 800	1 pc
EFS BK300	300	270	800	145 740 800	1 pc
EFS BK350	350	320	800	145 750 800	1 pc
EFS BK400	400	370	800	145 760 800	1 pc
EFS BK500	500	470	800	145 770 800	1 pc
EFS BK600	600	570	800	145 780 800	1 pc

Blind cover EFS BK... as additional cover for trunking EFS, holes countersunk on one side, including fixing screws.

Material: 3 mm sheet steel, gal. according DIN EN 10142

1

Installation instruction available at the end of this chapter

Model number	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
EFS BK150.8	150	120	401-799	145 711 800	1 pc
EFS BK200.8	200	170	401-799	145 721 800	1 pc
EFS BK250.8	250	220	401-799	145 731 800	1 pc
EFS BK300.8	300	270	401-799	145 741 800	1 pc
EFS BK350.8	350	320	401-799	145 751 800	1 pc
EFS BK400.8	400	370	401-799	145 761 800	1 pc
EFS BK500.8	500	470	401-799	145 771 800	1 pc
EFS BK600.8	600	570	401-799	145 781 800	1 pc

Blind cover EFS BK... as additional cover for trunking EFS, holes countersunk on one side, including fixing screws. Fixed length according length specification. Length between 401 mm and 799 mm possible.

Material: 3 mm sheet steel, gal. according DIN EN 10142

Model number	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
EFS BK150.4	150	120	201-400	145 711 400	1 pc
EFS BK200.4	200	170	201-400	145 721 400	1 pc
EFS BK250.4	250	220	201-400	145 731 400	1 pc
EFS BK300.4	300	270	201-400	145 741 400	1 pc
EFS BK350.4	350	320	201-400	145 751 400	1 pc
EFS BK400.4	400	370	201-400	145 761 400	1 pc
EFS BK500.4	500	470	201-400	145 771 400	1 pc
EFS BK600.4	600	570	201-400	145 781 400	1 pc

Blind cover EFS BK... as additional cover for trunking EFS, holes countersunk on one side, including fixing screws. Fixed length according length specification. Length between 401 mm and 799 mm possible.

Material: 3 mm sheet steel, gal. according DIN EN 10142

Model number	1	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
EFS BK150.2		150	120	1-200	145 711 200	1 pc
EFS BK200.2		200	170	1-200	145 721 200	1 pc
EFS BK250.2		250	220	1-200	145 731 200	1 pc
EFS BK300.2		300	270	1-200	145 741 200	1 pc
EFS BK350.2		350	320	1-200	145 751 200	1 pc
EFS BK400.2		400	370	1-200	145 761 200	1 pc
EFS BK500.2		500	470	1-200	145 771 200	1 pc
EFS BK600.2		600	570	1-200	145 781 200	1 pc

Blind cover EFS BK... as additional cover for trunking EFS, holes countersunk on one side, including fixing screws. Fixed length according length specification. Length between 401 mm and 799 mm possible.

Material: 3 mm sheet steel, gal. according DIN EN 10142



#### **EFS Cross member**



	Width B mm	Article number	Packing unit
EFS -T 150	120	145 201 610	1 pc
EFS -T 200	170	145 202 610	1 pc
EFS -T 250	220	145 203 610	1 pc
EFS -T 300	270	145 204 610	1 pc
EFS -T 350	320	145 205 610	1 pc
EFS -TN250	220	145 213 610	1 pc
EFS -TN300	270	145 214 610	1 pc
EFS -TN350	320	145 215 610	1 pc
EFS -TN400	370	145 216 610	1 pc
EFS -TN500	470	145 217 610	1 pc
EFS -TN600	570	145 218 610	1 pc

Cross member for absorbing additional load under covers of the trunking EFS.

Fastening with screws in the trunking side profile.

EFS -T ...: without levelling sleeve

EFS -TN ...: with levelling sleeve, delivery without set screw

Note:

In order to prevent sagging which is not permissible, the customer must fit the cross members EFS TN with set screws NS M8. Please order these separately.



Installation instruction available at the end of this chapter

#### Example for installation:



# ESS Connection socket with flexible screed casing





Trunking bottom for connection socket



Model number	Maß der Ausstanzung mm	Article number	Packing unit
ESS AB	ohne	131 680 400	1 pc
ESS AO GBZ	Ø 50	131 681 400	1 pc
ESS AO R06	Ø 215	131 689 510	1 pc
ESS AO Q06	200 x 200	131 689 520	1 pc
ESS AO E09	200 x 253	131 689 540	1 pc
ESS AO R10	Ø 275	131 689 530	1 pc
ESS AO R12	Ø 306	131 689 550	1 pc
ESS AO Q12	244 x 244	131 689 560	1 pc

 $\label{eq:connection} \begin{array}{l} \mbox{Connection socket ESS A... for side attachment onto the trunking ESS / EFS for accommodation installation units flush with the floor or projecting above the floor above the installation cover. \end{array}$ 

Connection sockets avoid reductions in cross section in the trunking which are produced when installation units are fitted directly.

A levelling clamp of the existing trunking and the levelling set ZE-NSA  $\ldots$  (order separately) are required for assembly.

3D installation videos available at the internet

Model number	Article number	Packing unit
ESS AW 040	131 68W 040	1 pc
ESS AW 050	131 68W 050	1 pc
ESS AW 060	131 68W 060	1 pc
ESS AW 070	131 68W 070	1 pc
ESS AW 080	131 68W 080	1 pc
ESS AW 090	131 68W 090	1 pc

Trunking bottom in exchange of flexible screed casing, against surcharge. Order the appropriate height.

Material: 1 mm sheet steel, gal. according DIN EN 10142

# Levelling set for connection socket



Model number	Nivellierbereich	Article number	Packing unit
ZE- NSA 045	45 - 70	131 68K 045	1 pc
ZE- NSA 065	65 - 110	131 68K 065	1 pc
ZE- NSA 105	105 - 150	131 68K 105	1 pc
ZE- NSA 145	145 - 190	131 68K 145	1 pc

Levelling set existing of: 3 levelling clamps, 4 set screws with muffler bearing, 3 screed anchor

#### Example for installation:



#### Electrap|an utions So

#### Installation opening **MES GBZ**





#### Installation opening MES Q06



#### Installation opening **MES E09**



Model number Size of pun- ched hole mm Nominal width N Width B mm Length L mm Article number Packing unit   MES GBZ 15 Ø 50 150 120 800 136 101 980 1 pc   MES GBZ 20 Ø 50 200 170 800 136 201 980 1 pc   MES GBZ 25 Ø 50 250 220 800 136 301 980 1 pc   MES GBZ 30 Ø 50 300 270 800 136 401 980 1 pc   MES GBZ 35 Ø 50 350 320 800 136 501 980 1 pc   MES GBZ 40 Ø 50 400 370 800 136 601 980 1 pc   MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc   MES GBZ 60 Ø 50 600 570 400 136 801 980 1 pc							
MES GBZ 20 Ø 50 200 170 800 136 201 980 1 pc   MES GBZ 25 Ø 50 250 220 800 136 301 980 1 pc   MES GBZ 30 Ø 50 250 220 800 136 401 980 1 pc   MES GBZ 30 Ø 50 300 270 800 136 401 980 1 pc   MES GBZ 35 Ø 50 350 320 800 136 501 980 1 pc   MES GBZ 40 Ø 50 400 370 800 136 601 980 1 pc   MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc	Model number	ched hole	width	В	Ľ		
MES GBZ 25 Ø 50 250 220 800 136 301 980 1 pc   MES GBZ 30 Ø 50 300 270 800 136 401 980 1 pc   MES GBZ 35 Ø 50 350 320 800 136 501 980 1 pc   MES GBZ 40 Ø 50 400 370 800 136 601 980 1 pc   MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc	MES GBZ 15	Ø 50	150	120	800	136 101 980	1 pc
MES GBZ 30 Ø 50 300 270 800 136 401 980 1 pc   MES GBZ 35 Ø 50 350 320 800 136 501 980 1 pc   MES GBZ 40 Ø 50 400 370 800 136 601 980 1 pc   MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc	MES GBZ 20	Ø 50	200	170	800	136 201 980	1 pc
MES GBZ 35 Ø 50 350 320 800 136 501 980 1 pc   MES GBZ 40 Ø 50 400 370 800 136 601 980 1 pc   MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc	MES GBZ 25	Ø 50	250	220	800	136 301 980	1 pc
MES GBZ 40 Ø 50 400 370 800 136 601 980 1 pc   MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc	MES GBZ 30	Ø 50	300	270	800	136 401 980	1 pc
MES GBZ 50 Ø 50 500 470 400 136 701 980 1 pc	MES GBZ 35	Ø 50	350	320	800	136 501 980	1 pc
	MES GBZ 40	Ø 50	400	370	800	136 601 980	1 pc
MES GBZ 60 Ø 50 600 570 400 136 801 980 1 pc	MES GBZ 50	Ø 50	500	470	400	136 701 980	1 pc
	MES GBZ 60	Ø 50	600	570	400	136 801 980	1 pc

Installation opening MES... for accommodation installation units projecting above the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory. The installation opening is closed with a protective cover. The centre of the opening is 200 mm from the edge of the cover. From nominal dimension 500, the punch is not in the centre. The standard blind cover is supplied in 2 pieces, each 400 mm.

Service performance only: Punching. Blind covers are not scope of delivery.



N N N N N N N

N

Installation instruction available at the end of this chapter

Model number	Size of pun- ched hole mm	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
MES R06 300	Ø 215	300	270	800	136 951 030	1 pc
MES R06 350	Ø 215	350	320	800	136 951 035	1 pc
MES R06 400	Ø 215	400	370	800	136 951 040	1 pc
MES R06 500	Ø 215	500	470	800	136 951 050	1 pc
MES R06 600	Ø 215	600	570	800	136 951 060	1 pc

Installation opening MES... for accommodation installation units flush with the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory. The installation opening is closed with a protective cover. The centre of the opening is 200 mm from

the edge of the cover.

Service performance only: Punching. Blind covers are not scope of delivery.



Model number	Size of pun- ched hole mm	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
MES Q06 300	200 x 200	300	270	800	136 952 030	1 pc
MES Q06 350	200 x 200	350	320	800	136 952 035	1 pc
MES Q06 400	200 x 200	400	370	800	136 952 040	1 pc
MES Q06 500	200 x 200	500	470	800	136 952 050	1 pc
MES Q06 600	200 x 200	600	570	800	136 952 060	1 pc

Installation opening MES... for accommodation installation units flush with the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory.

The installation opening is closed with a protective cover. The centre of the opening is 200 mm from the edge of the cover.

Service performance only: Punching. Blind covers are not scope of delivery.



Model number	Size of pun- ched hole mm	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
MES E09 300	200 x 253	300	270	800	136 954 030	1 pc
MES E09 350	200 x 253	350	320	800	136 954 035	1 pc
MES E09 400	200 x 253	400	370	800	136 954 040	1 pc
MES E09 500	200 x 253	500	470	800	136 954 050	1 pc
MES E09 600	200 x 253	600	570	800	136 954 060	1 pc

Installation opening MES... for accommodation installation units flush with the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory. The installation opening is closed with a protective cover. The centre of the opening is 200 mm from

Service performance only: Punching. Blind covers are not scope of delivery.

the edge of the cover.

#### **Electrap**|an utions So

#### Installation opening MES R10



#### Installation opening **MES R12**



#### Installation opening **MES Q12**



Model number	Size of pun- ched hole mm	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
MES R10 350	Ø 275	350	320	800	136 953 035	1 pc
MES R10 400	Ø 275	400	370	800	136 953 040	1 pc
MES R10 500	Ø 275	500	470	800	136 953 050	1 pc
MES R10 600	Ø 275	600	570	800	136 953 060	1 pc

Installation opening MES... for accommodation installation units flush with the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory.

The installation opening is closed with a protective cover. The centre of the opening is 200 mm from the edge of the cover.

Service performance only: Punching. Blind covers are not scope of delivery.

NEU Product innovation

Model number	Size of pun- ched hole mm	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
MES R12 400	Ø 306	400	370	800	136 955 040	1 pc
MES R12 500	Ø 306	500	470	800	136 955 050	1 pc
MES R12 600	Ø 306	600	570	800	136 955 060	1 pc

Installation opening MES... for accommodation installation units flush with the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory. The installation opening is closed with a protective cover. The centre of the opening is 200 mm from the edge of the cover.

Service performance only: Punching. Blind covers are not scope of delivery.

Installation instruction available at the end of this chapter

3D installation videos available at the internet

Model number	Size of pun- ched hole mm	Nominal width N	Width B mm	Length L mm	Article number	Packing unit
MES Q12 350	244 x 244	350	320	800	136 956 035	1 pc
MES Q12 400	244 x 244	400	370	800	136 956 040	1 pc
MES Q12 500	244 x 244	500	470	800	136 956 050	1 pc
MES Q12 600	244 x 244	600	570	800	136 956 060	1 pc

Installation opening MES... for accommodation installation units flush with the floor. Openings punched in blind covers of trunking ESS / EFS or in blind covers ESS BK / EFS BK at the factory.

The installation opening is closed with a protective cover. The centre of the opening is 200 mm from the edge of the cover.

Service performance only: Punching. Blind covers are not scope of delivery.



Product innovation

#### Example for installation:





#### Partition wall, plastic



Model number	Nominal height N mm	for trunking height mm	Material	Article number	Packing unit
ZEP TW16	16	30	PVC	135 311 150	2 m
ZEP TW31	31	45	PVC	135 312 150	2 m
ZEP TW46	46	60	PVC	135 313 150	2 m
ZEP TW61	61	75	PVC	135 314 150	2 m
ZEP TW76	76	90 - 100	PVC	135 315 150	2 m
ZEP TW91	91	105 - 120	PVC	135 316 150	2 m

Partition wall for dividing into trunking channels, as an accessory for flush floor trunking, including 4 wall feet for dowelling to the bare floor.

Total height with partition wall foot = N + 2,5 mm

Installation instruction available at the end of this chapter

Model number	Material	Article number	Packing unit
ZEP TWF	PVC	135 305 000	1 pc

Partition wall foot for additional requirement.

Model number	Nominal height N mm	for trunking height mm	Material	Article number	Packing unit
ZES TW20	20	45	Sheet steel	135 321 610	2,4 m
ZES TW35	35	60	Sheet steel	135 322 610	2,4 m
ZES TW50	50	75	Sheet steel	135 323 610	2,4 m
ZES TW65	65	90	Sheet steel	135 324 610	2,4 m
ZES TW80	80	100	Sheet steel	135 325 610	2,4 m
ZES TW95	95	105	Sheet steel	135 326 610	2,4 m
ZES TW110	110	120	Sheet steel	135 327 610	2,4 m

Partition wall for dividing into trunking channels, as an accessory for flush floor trunking, for dowelling to the bare floor.

Material: 1 mm sheet steel, gal. according DIN EN 10142



Installation instruction available at the end of this chapter

Model number	Nominal height N mm	for trunking	Material	Article number	Packing unit
ZMS TWE25	25	K040	Sheet steel	135 300 025	2,4 m
ZMS TWE35	35	K050	Sheet steel	135 300 035	2,4 m
ZMS TWE45	45	K060	Sheet steel	135 300 045	2,4 m
ZMS TWE55	55	K070	Sheet steel	135 300 055	2,4 m
ZMS TWE65	65	K080	Sheet steel	135 300 065	2,4 m
ZMS TWE75	75	K090	Sheet steel	135 300 075	2,4 m

Partition wall for dividing into trunking channels, in the bottom trough. Spot-welded at factory:

2-compartments ratio: 1/3 : 2/3

3-compartments ratio: 1/3 : 1/3 : 1/3

Other partitioning on request.

Material: 1 mm sheet steel, gal. according DIN EN 10142

#### Example for installation:



#### Partition wall, metal



#### Partition wall, metal for trunking with bottom trough



# Electrap

#### **Protective conductor ZE-SAKA**



#### Protective conductor ZE-SKKA



#### Model number Packing Article number unit ZE-SAKA 688 011 090 1 pc

Protective conductor ZE-SAKA, for the earth connection of the trunking system, screw connection on the straight trunking connector, flexible cable 2,5 mm<sup>2</sup>, 200 mm long, green-yellow, 1 x annular cable lug, 1 x core and sleeve.



Installation instruction available at the end of this chapter

Model number	Article number	Packing unit
ZE-SKKA	688 019 610	1 pc

Protective conductor ZE-SKKA, for the earth connection of the trunking system. Connection clamp in inner profile slot, flexible cable 4,0 mm<sup>2</sup>, 200 mm long, green-yellow.



ZM-SABD

Installation instruction available at the end of this chapter

Protective conductor ZM-SABD	Model number	

Protective conductor ZM-SABD, for the earth connection of the trunking cover (when using snap fasteners) for protecting the trunking cover on straight trunking connectors, flexible cable 2,5 mm<sup>2</sup>, 200 mm long, green-yellow, fitted to the cover at the factory, 1x core and sleeve.



Installation instruction available at the end of this chapter

Model number	Dimensions H x B mm	Article number	Packing unit
ZEG M20.3 R10	20 x 3	130 975 980	10 m

Cellular rubber strips ZEG M... to absorb expansion forces. self-adhesive, for the side profiles to be installed by the customer.

2 metres of cellular rubber required for each trunking metre.

It is essential to agree on use with the person laying the screed.



Installation instruction available at the end of this chapter

#### Example for installation:



Flush floor trunking system

Article

number

135 987 610

Packing

unit

1 pc

#### **Cellular rubber strips**



#### **Cover snap fastener**



#### **Covering butt edge**

**Covering butt cover** 



Model number	Article number	Packing unit
ZMO EDS+P	135 983 999	1 pc

Flush floor trunking system

Cover snap fastener ZMO EDS, for snap fastening 3 mm blind covers in the trunking ESS, factory-made installed. Requirement: 6 units ea. Cover (800 mm).

Including protective conductor for earth connection of the blind cover at the trunking profile. In the course of transit the blind covers are screwed at the side profile. (transit support). Note:

At the utilisation of flush floor or pedestal outlets the blind covers have to be screwed according DIN VDE 0694 part 2.

Model number	Colour	Article number	Packing unit
ZEP BSK4 7011	iron grey	135 117 011	2,4 m
ZEP BSK4 9005	jet black	135 119 005	2,4 m

For additional requirement.

Covering butt edge visible (height 4 mm) or used as covered flooring material.

For each trunking metre 2 m of covering butt edge is needed.

Covering butt edge height 3,2 mm on request.

Model number	Colour	Article number	Packing unit
ZEP BSA 7011	iron grey	135 127 011	2,4 m

For additional requirement.

Factory-made covering butt edge removing.

For each trunking metre 2 m of covering butt edge is needed.

#### Screed anchor



Model number	Colour	Article number	Packing unit
ZEO A	jet black	135 421 010	2,4 m

Screed anchor ZEO A for stabilisation the trunking side profile in the screed., for engaging into the trunking side profile.

The maximum installation distance between the screed anchors is 800 mm along the side profile. Material: Plastic



#### **Connection set**



#### **Trunking connector**



#### Levelling clamp



#### Flush floor trunking system

Model number	Article number	Packing unit
ZES VS090	131 920 980	1 pc

Connection set ZES VS090 as installation material for creating of 90° branches by the customer with existing trunking ESS.

Consisting of 2 angle connectors (external 18 mm) and 2 straight trunking connectors and 2 screws M5 x 12.



Installation instruction available at the end of this chapter

Model number	Version	Article number	Packing unit	
ZES VK180 -512	straight	131 930 980	1 pc	
ZES VK090 I512	angled	131 931 980	1 pc	

For additional requirement.



Installation instruction available at the end of this chapter

Model number	from trunking height without muffler mm	from trunking height with muffler mm	Article number	Packing unit
ZES S3	30	45	135 403 610	1 pc
ZES S5	50	65	135 405 610	1 pc

Levelling clamp ZES S for accommodation of set screws.

Installed on the outside on the side profile of flush floor trunking, with straight trunking connectors and 2 screws.

Levelling height

Maximum installation distance between the levelling clamp 800 mm along the trunking side profile. Material: steel, gal.



Model number

Installation instruction available at the end of this chapter

#### Ν number mm NS M8x25 25 135 054 610 **NS M8x30** 30 135 055 610 NS M8x35 35 135 056 610 NS M8x40 40 135 057 610 NS M8x45 45 135 058 610 NS M8x50 50 135 059 610 NS M8x55 55 135 060 610 NS M8x60 60 135 061 610 **NS M8x65** 65 135 062 610 NS M8x70 70 135 063 610 NS M8x75 75 135 064 610 NS M8x80 80 135 065 610 NS M8x85 85 135 066 610 NS M8x90 90 135 067 610 100 NS M8x100 135 069 610 NS M8x120 120 135 073 610

Set screw NS M8... for vertical support of the flush floor trunking for screwing into the levelling clamp or cross member.

140

160

Note: Set screws projecting above the upper edge of the screed or cross member must be shortened. Other length on request.



NS M8x140

NS M8x160

Installation instruction available at the end of this chapter

Set screw



Packing

unit

1 pc

Article

135 077 610

135 080 610

#### **Counternut M8**



# Retaining tab with muffler bearing



#### **Muffler bearing**



#### **Suction lifter**



**Claw lifter** 



Model number	Article number	Packing unit
SM M8F	135 900 610	1 pc

Nut SM M8 for locking set screws in cross members.

Model number	Article number	Packing unit
ZES HD	135 411 610	1 pc

Retaining tab with muffler bearing ZES HD for fastening of the flush floor trunking onto the bare floor. For accommodation of set screws NS M8 so as insulate against the footfalls.

Material: Retaining tab made of steel, gal. according DIN EN 10142 Muffler bearing made of plastic

Note:

The installation height of trunking type ESS/EFS is at the use of retaining tab with muffler bearing minimum 45 mm.



Installation instruction available at the end of this chapter

3D installation videos available at the internet

Model number	Article number	Packing unit
ZE- D	135 230 010	1 pc

Muffler bearing ZE-D for accommodation of set screws NS M8 in cross members ESS -TN / EFS -TN so as insulate against the footfalls.

Muffler bearings increase the levelling height by 5 mm.



Installation instruction available at the end of this chapter

Model number	Maximum load	Article number	Packing unit
	kg		
WSH 20	20	990 070 900	1 pc
WSH 30	30	990 072 900	1 pc

For the lifting of blind covers.

Model number	Maximum load	Article number	Packing unit	
	kg			
WKH 30	30	990 074 900	1 pc	

For the lifting of blind covers.

## INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING SYSTEMS

#### GENERAL INSTRUCTIONS:

Incorporate system components into earthing measures according to VDE 0100. In case trunking bottoms are used put underlays to prevent deformation. Seal joints against screeding compound. Flexible screed casing must not come into contact with hot screed. Consult composition floor layer for protection measures. Until the screed has hardened do not walk on the trunking system, do not remove cross members and do not apply mechanical load. Do not remove protective cover for service outlet until immediately before the flooring is laid.

Before the flooring is laid, it is imperative to observe the installation instructions for composition floor layers (T 001) and for the laying of floorings (T002) forwarding them to the responsible trades.







Mark course of trunking on the bare floor as shown in the installation plan, e.g. using chalk or string. Check actual levelling heights on the bare floor

#### Assembling the levelling sets



Screw set screws M8 into levelling clamps. Put retaining tabs with muffler bearing on an even, hard underground pressing in set screws.

Positioning the levelling sets



Levelling clamps should be positioned at a maximum distance of 800 mm along the trunking side profile. Roughly adjust levelling height.

#### Positioning the screed casing



Screed casing is outside the trunking protruding vertically down to the bare floor, on top of which it is then curved outwards. Retaining tabs are positioned on this horizontal part of the foil pressing it to the bare floor.

Putting underlays under trunking bottoms



If trunking bottoms are used, put underlays. In any case, please inform screed layer of this measure. If cross members with levelling support are installed the trunking bottom has to be perforated on the site so that the set screw has a firm supporting stand on the bare floor.

Assembling the trunking sections



At butt joints of trunking sections push preassembled cross members half way under the cover of the adjacent trunking section. There, slightly loosen cover retaining screws and join trunking sections butt to butt.

## INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING SYSTEMS

#### Fastening the trunking sections



Connect trunking sections using trunking connector, levelling clamp and screws M5. Tighten cover retaining screws. Flexible screed casing is overlapping at trunking joints.

#### Snapping in the screed anchor



To stabilize trunking side profiles let snap-in screed anchor into profile slot at a maximum distance of 800 mm along the trunking side profile.

Levelling the trunking



Level upper edge of trunking side profile to required height.



Plug retaining tabs on bare floor.

Fastening the screed casing



Fasten screed casing on bare floor (using nails or adhesive).

Shortening the foil



Cut off superfluous foil lying on the bare floor.

Sealing the joints



Thoroughly seal joints of trunking to prevent screeding compound from entering the system.

#### Expansion movement of screed



During hardening screed might expand pressing against trunking. This pressure varies according to size of screed slab and composition of screed. The cellular rubber strip may be attached to profile to reduce pressure. Please consult screed layer.

Positioning the cross members



Each cover butt joint has to be reinforced by a cross member. For trunking nominal widths of more than 300 mm covers have to be additionally reinforced between butt joints. The centre to centre distance of cross members should be equal.

## INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING SYSTEMS

Cross members with threaded sleeve



Screw set screws into threaded sleeve. Fasten counter nut SM M8 and muffler bearing ZE-D on set screw. Turn cross member with set screw slightly towards bare floor until it is secured. Fasten set screw with counter nut SM M8 under levelling sleeve.

#### Shorten set screws



If necessary, shorten set screws so that they are flush with top edge of cross member

Trunking partition wall ZEP



Plug feet of trunking partition wall ZEP on bare floor every 500 mm. Insert partition wall into feet.

Trunking partition wall ZES



Plug partition wall ZES directly on bare floor. Customer must provide for holes in partition wall. Incorporate partition wall in earthing measure by fastening the earthing clamps supplied.

Earthing measures for ESS trunking



When laying trunkings, push connector from the side into inner profile slot. Remove blind cover from trunking tightening screw at connector. Incorporate protective earth conductor cable with sleeve (optional available) into earthing measure.

Earthing measures for EFS trunking



When laying trunkings, push connector clamps (optional available) from the side into inner profile slot. Remove blind cover from trunking tightening screw M 3 at connector clamp. Incorporate protective earth conductor connector clamp into earthing measure.



Factory-made protective earth conductor (optional available) is welded to blind cover with cover snap fastener. After trunkings have been laid remove blind cover from trunking fixing protective earth conductor cable with an eye at profile.

Lay screed



Lay screed so that it is flush with top edge of trunking profiles. It is possible to affix flooring to blind cover.

Insert installation units



Installation units such as supply units or floor mounting pedestal boxes can be inserted into trunking replacing blind cover with cover having respective opening.

## INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING SYSTEMS EFS WETNESS PROTECTED

#### **GENERAL INSTRUCTIONS:**

The sealing will be delivered as a sealing band on a roll. It is a pre compressed cellular rubber with water proofed wax plastic impregnation. After rolling up the sealing band the material expand temporally delayed. It will be pressed by itself between the trunking cover and the trunking side profile. The sealing band can be handled at a room temperature between 15° C and 25° C. Before using them the material has been stored for minimum 24 hours at an average room temperature.



#### Preparations



Before applying the sealing band the trunking system has to be opened and be cleaned in and outside. The slot for the accommodation of the sealing band must be clean and free of grease. The trunking system may be opened after complete hardening of the screed only.





Cutting to the required length.

Clueing the sealing band



Peel away the masking paper of the adhesive layer approx. 20 - 30 cm. Lay in and press slightly the sealing band into the slot of the trunking side profile.

# To add pieces

Push the joints of the sealing band slightly exact together. Do not slope and do not overlap the ends of the sealing band.

#### To form the corners:



Do not lay the sealing band in one piece around the corner. Add the ends of the pieces like to add pieces.

Cross members



Clue two sealing strips in the middle of the cross members. At the ends you proceed like assembling of  $90^{\circ}$  - branches. Apply the joints of the cross members with sealing band.

# INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING CONNECTION SOCKET

#### GENERAL INSTRUCTIONS:

Connection socket ESS A ... for side attachment to trunking ESS/EFS to insert flush floor or floor mounting installation units via an adequate installation opening. Sockets are used to avoid reductions in cross section in the trunking resulting if the installation units are directly installed in the trunking. For proper installation, a levelling clamp of the existing trunking and a levelling set ZE-NSA ... should be available.



Cutting open the screed casing



Cut the screed casing open at one side so that it is possible to mount the connection socket.

#### Preparing the levelling set



Fit nut SM M8 and muffler bearing ZE-D to set screw. Screw set screw into support bracket.

Fastening the levelling set



Screw support bracket to side profile using trunking connector. Turn set screw so that it is securely clamped to bare floor. Lock set screw with nut SM M8 from below against threaded sleeve. If necessary, shorten support bracket so that it is flush with top edge of support bracket.

#### Mounting the levelling set



Insert trunking connector into outer slot of trunking side profile. Screw set screw NS M8 into levelling clamp. Fit retaining tab with muffler bearing ZES-HD.

#### Moving the levelling set



Loosen existing levelling clamp at the trunking from trunking connector. Move both parts to the place where the connecting socket is being installed.

Mount levelling set of connection socket



Place trunking connector in outer slot of connecting socket. Screw levelling clamp to profile of connecting socket using trunking connector. Insert set screw NS M8 into levelling clamp. Fit retaining tab with muffler bearing ZES-HD.

# INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING CONNECTION SOCKET

Flange-mounting the connecting socket



Flange-mount connecting socket to trunking side profile. Mount angle connection. Tighten screws. Screed casing has to be on the outside.

#### Plugging the retaining tabs



Plug retaining tabs on bare floor

Engaging the screed anchor



Engage screed anchor with profile of connecting socket

Laying the screed



After the screed has been laid the affixed protective cover can be removed.

Inserting the supply unit



Place supply unit into opening and fasten it. Due to the connection socket the total cross section of the main trunking is maintained.

### INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING SYSTEM 90° ANGLE BRANCH TO BE INSTALLED BY CUSTOMER

#### **GENERAL INSTRUCTIONS:**

Please also order:

- 1 connecting set ZES VS090
- 1 end piece ESS V...

As an alternative, it is possible to order formed parts that have already been mounted!



Cutting the screed casing



Cut off the screed casing at the branch, so that it is possible to install a flush floor trunking

#### Screwing the end piece



Screw end piece on the end of trunking using an angle connector

Fasten angle connector to the outer side



Screw angle connector to the outer side of the side profile and to the inner angle connector

#### Fixing the trunking sections



Link trunking sections via angle connector to the outer side

Fastening the cross member



Fasten cross member to trunking side profile of trunking section. Cross member is to support the butt joint of the cover. For trunking width of more than 350 mm add levelling support to cross member.

Positioning the levelling set



Along the side profiles, levelling clamps should be positioned at a maximum distance of 800 mm and fastened to the trunking using an angle connector.

# INSTALLATION INSTRUCTION FLUSH FLOOR TRUNKING SYSTEM T-BRANCH TO BE INSTALLED BY CUSTOMER

#### **GENERAL INSTRUCTIONS:**

Please also order: 1 connecting set ZES VS090

As an alternative, it is possible to order formed parts that have already been mounted!



#### Cutting the screed casing



Cut out the screed casing at the branch, so that it is possible to install a flush floor trunking

#### Screwing the angle connector



Screw angle connector to the outer side of the end of trunking

Fastening the trunking sections



Attach branching trunking section to trunking section fastening it using an angle connector.





Fasten cross member to trunking side profile of trunking section. Cross member is to support the butt joint of the cover. For trunking widths of more than 350 mm add levelling support to cross member.

Positioning the levelling set



Along the side profiles, levelling clamps should be positioned at a maximum distance of 800 mm and fastened to the trunking using an angle connector.



# FLOOR MOUNTING SYSTEM

Blind cover internal corner 90° ABS W350.70 104

Supply unit VR12 R5 9005

Pedestal box GBZ O2 9005

Trunking end piece ABS E350.70 -04

Partition wall

ZMS TW65

Trunking bottom part two-side AUS 350.70 K0

Blind cover two-sided 45° ABS 400.70 K44 with special painting Blind cover two-sided 45° ABS 250.70 K44 with special painting

2009

Blind cover branch ABS T350.70 A44

Pedestal box

GBZ 08 7011

#### ADVANTAGES AT A GLANCE

#### - Flexible Subsequent Installation

If the floor has already been finished or is not to be re-opened, the floor mounted trunking ensures a fast and flexible installati on. Besides that, subsequent modifications are no problem, if this trunking system is used. In this position, covers can always be changed.

#### - Sturdy Quality

Due to the blind covers made from 3mm galvanised sheet steel according to DIN EN 10142 the floor mounted trunkings offer high stability.

#### - Easy Installation

Due to the pre-formed components an easy on-site installation according to the modular principle is possible.

Pedestal box GBZ O4 7011

Installation wall GBZ OM4 9005

Power socket ISM2 45 2--Q 9010

22 22

Supply unit VE09 R5 7011

09 R5 7011

Blind cover one-sided 45° + 100mm excess width ABS 200.70 K4U1

Blind cover two-sided 45° ABS 150.70 K44 with special painting

## CALCULATE CABLE VOLUME



In order to define the right trunking size you do need the cable capacity. As the cable never lay space-saving next to each other and never lay optimal parallel here you can calculate with the following formula:  $(d)^2$  diameter squared. In order to be prepared for later refitting of cables the trunkings should be filled 50% only. Thereby the cable can be pulled easier through the trunkings.

Additionally you have to consider that at the calculation no floor boxes or cable outlets has been included who could disturb the cable way. In practice power and data cable are layed separate in the trunkings. Divider walls are dividing the trunkings into several compartments. Is this the case at your place, please calculate the demand for your cables separately.

Model number		Cabel diameter in mm																
	width mm	section cm <sup>2</sup>	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
AUS 150.40	150	60,0	120	83	61	46	37	30	24	20	17	15	13	11	10	9	8	7
AUS 200.40	200	80,0	160	111	81	62	49	40	33	27	23	20	17	15	13	12	11	10
AUS 250.40	250	100,0	200	138	102	78	61	50	41	34	29	25	22	19	17	15	13	12
AUS 300.40	300	120,0	240	166	122	93	74	60	49	41	35	30	26	23	20	18	16	15
AUS 150.70	150	105,0	210	145	107	82	64	52	43	36	31	26	23	20	18	16	14	13
AUS 200.70	200	140,0	280	194	142	109	86	70	57	48	41	35	31	27	24	21	19	17
AUS 250.70	250	175,0	350	243	178	136	108	87	72	60	51	44	38	34	30	27	24	21
AUS 300.70	300	210,0	420	291	214	164	129	105	86	72	62	53	46	41	36	32	29	26
AUS 350.70	350	245,0	490	340	250	191	151	122	101	85	72	62	54	47	42	37	33	30
AUS 400.70	400	280,0	560	388	285	218	172	140	115	97	82	71	62	54	48	43	38	35

Further information for the calculation of cable volumes you can find at the beginning of this catalogue.

Alternatively you will find under the rubric "Services/News" of the www.electraplan-solutions.de a configurator for calculation of cable volumes.
# FUNCTIONALITY & APPLICATION



#### FUNCTIONALITY:

As the name already suggests, the floor mounted trunking system is installed on the finished floor. Without great installation efforts the floor mounted trunkings of Electraplan Solutions harmonically fit into the interior design of the rooms. Tried-and-tested installation units and pedestal boxes permit a flexible floor plan visually completing the installation. The floor mounted trunking consists of a trunking lower part (bottom trough) which is mounted on the floor. Radiator niches or other wall projections are of no importance. They are simply filled with adequate material (e.g. screed) and covered with the new flooring. The trunking cover consists of a blind cover chamfered towards the floor, which can also be covered with flooring material. It is possible to mount installation and supply units as well as interconnecting pedestal boxes into the blind covers via the service outlets.

#### **APPLICATION:**

This trunking system is appropriate for retrofits as well as for the refurbishment and extension of building wiring installations. It is mainly applied in the refurbishment of office and administrative buildings as well as in any kind of quick electrical installation on finished floors. In case it is not possible to install screed embedded underfloor trunkings, because the building structure is protected, due to static reasons or if the building is placed under historical protection, floor mounted trunkings are installed on the finished floor.

The sturdy floor mounted trunkings are also used in assembly areas, laboratories or industrial buildings.





# **Electrap**an utions

## Trunking bottom part one-side



Model number	Width B mm	Height H mm	Width A mm	Width Ll mm	Article- number	Packing unit
AUS 150.40 K1	150	40	195,5	106	610 154 024	2,4 m
AUS 200.40 K1	200	40	245,5	156	610 204 024	2,4 m
AUS 250.40 K1	250	40	295,5	206	610 254 024	2,4 m
AUS 300.40 K1	300	40	345,5	256	610 304 024	2,4 m
AUS 150.70 K1	150	70	225,5	106	610 157 024	2,4 m
AUS 200.70 K1	200	70	275,5	156	610 207 024	2,4 m
AUS 250.70 K1	250	70	325,5	206	610 257 024	2,4 m
AUS 300.70 K1	300	70	375,5	256	610 307 024	2,4 m
AUS 350.70 K1	350	70	425,5	306	610 357 024	2,4 m
AUS 400.70 K1	400	70	475,5	356	610 407 024	2,4 m

Trunking bottom part AUS... for laying on the existing floor in dry rooms with dry cleaned floorings. For guiding cables and for equipping of flush floor installation unit and pedestal box.

Bottom part height (H) 40 / 70 mm:

Sheet steel, gal. according DIN EN 10142, 1 mm thick, 2400 mm long

Side profile:

Extruded-aluminium-profile, 1 x 2400 mm length, 6 x 100 mm long

Screws, dowels and other material for the installation of the floor mounted trunking system on the bare floor are not scope of delivery.



Installation instruction you will find at the end of this chapter

## Trunking bottom part two-side



С

Model number	Width B mm	Height H mm	Width A mm	Width C mm	Width LI mm	Article- number	Packing unit
AUS 150.40 K0	150	40	235,5	292,5	106	620 154 024	2,4 m
AUS 200.40 K0	200	40	285,5	342,5	156	620 204 024	2,4 m
AUS 250.40 K0	250	40	335,5	392,5	206	620 254 024	2,4 m
AUS 300.40 K0	300	40	385,5	442,5	256	620 304 024	2,4 m
AUS 150.70 K0	150	70	295,5	322,5	106	620 157 024	2,4 m
AUS 200.70 K0	200	70	345,5	372,5	156	620 207 024	2,4 m
AUS 250.70 K0	250	70	395,5	422,5	206	620 257 024	2,4 m
AUS 300.70 K0	300	70	445,5	472,5	256	620 307 024	2,4 m
AUS 350.70 K0	350	70	495,5	522,5	306	620 357 024	2,4 m
AUS 400.70 K0	400	70	545,5	572,5	356	620 407 024	2,4 m

Trunking bottom part AUS... for laying on the existing floor in dry rooms with dry cleaned floorings. For guiding cables and for equipping of flush floor installation unit and pedestal box.

Bottom part height (H) 40 / 70 mm:

Sheet steel, gal. according DIN EN 10142, 1 mm thick, 2400 mm long

Side profile:

Extruded-aluminium-profile, 12 x 100 mm long

Screws, dowels and other material for the installation of the floor mounted trunking system on the bare floor are not scope of delivery.





# Blind cover 800 mm one-sided 45°





# Blind cover 800 mm two-sided 45°







## Blind cover 800 mm one-sided 45° + 100 mm excess width





Model number	Nominal N mr	H	Article- number	Packing unit
ABS 150.40 K04	150	) 40	611 154 045	1 pc
ABS 200.40 K04	200	) 40	611 204 045	1 pc
ABS 250.40 K04	250	) 40	611 254 045	1 pc
ABS 300.40 K04	300	) 40	611 304 045	1 pc
ABS 150.70 K04	150	) 70	611 157 045	1 pc
ABS 200.70 K04	200	) 70	611 207 045	1 pc
ABS 250.70 K04	250	) 70	611 257 045	1 pc
ABS 300.70 K04	300	) 70	611 307 045	1 pc
ABS 350.70 K04	350	) 70	611 357 045	1 pc
ABS 400.70 K04	400	) 70	611 407 045	1 pc

Blind cover ABS.... for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 800 mm



Installation instruction you will find at the end of this chapter

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS 150.40 K44	150	40	621 154 045	1 pc
ABS 200.40 K44	200	40	621 204 045	1 pc
ABS 250.40 K44	250	40	621 254 045	1 pc
ABS 300.40 K44	300	40	621 304 045	1 pc
ABS 150.70 K44	150	70	621 157 045	1 pc
ABS 200.70 K44	200	70	621 207 045	1 pc
ABS 250.70 K44	250	70	621 257 045	1 pc
ABS 300.70 K44	300	70	621 307 045	1 pc
ABS 350.70 K44	350	70	621 357 045	1 pc
ABS 400.70 K44	400	70	621 407 045	1 pc

Blind cover ABS.... for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142 Delivery length: 800 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS 150.40 K4U1	150	40	631 154 045	1 pc
ABS 200.40 K4U1	200	40	631 204 045	1 pc
ABS 250.40 K4U1	250	40	631 254 045	1 pc
ABS 300.40 K4U1	300	40	631 304 045	1 pc
ABS 150.70 K4U1	150	70	631 157 045	1 pc
ABS 200.70 K4U1	200	70	631 207 045	1 pc
ABS 250.70 K4U1	250	70	631 257 045	1 pc
ABS 300.70 K4U1	300	70	631 307 045	1 pc
ABS 350.70 K4U1	350	70	631 357 045	1 pc
ABS 400.70 K4U1	400	70	631 407 045	1 pc

Blind cover ABS.... for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 800 mm

# Blind cover connection one-sided 45°







# Blind cover branch two-sided 45°







# Blind cover 400 mm one-sided 45°





Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS T150.40 O04	150	40	618 154 045	1 pc
ABS T200.40 O04	200	40	618 204 045	1 pc
ABS T250.40 O04	250	40	618 254 045	1 pc
ABS T300.40 O04	300	40	618 304 045	1 pc
ABS T150.70 O04	150	70	618 157 045	1 pc
ABS T200.70 O04	200	70	618 207 045	1 pc
ABS T250.70 O04	250	70	618 257 045	1 pc
ABS T300.70 O04	300	70	618 307 045	1 pc
ABS T350.70 O04	350	70	618 357 045	1 pc
ABS T400.70 O04	400	70	618 407 045	1 pc

Blind cover ABS T.... connection opening 100 x 40 for screwing onto the trunking bottom. Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 800 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS T150.40 A44	150	40	629 154 045	1 pc
ABS T200.40 A44	200	40	629 204 045	1 pc
ABS T250.40 A44	250	40	629 254 045	1 pc
ABS T300.40 A44	300	40	629 304 045	1 pc
ABS T150.70 A44	150	70	629 157 045	1 pc
ABS T200.70 A44	200	70	629 207 045	1 pc
ABS T250.70 A44	250	70	629 257 045	1 pc
ABS T300.70 A44	300	70	629 307 045	1 pc
ABS T350.70 A44	350	70	629 357 045	1 pc
ABS T400.70 A44	400	70	629 407 045	1 pc

Blind cover ABS T... for 90° T-branches, for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 800 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS 150.40 K044	150	40	612 154 045	1 pc
ABS 200.40 K044	200	40	612 204 045	1 pc
ABS 250.40 K044	250	40	612 254 045	1 pc
ABS 300.40 K044	300	40	612 304 045	1 pc
ABS 150.70 K044	150	70	612 157 045	1 pc
ABS 200.70 K044	200	70	612 207 045	1 pc
ABS 250.70 K044	250	70	612 257 045	1 pc
ABS 300.70 K044	300	70	612 307 045	1 pc
ABS 350.70 K044	350	70	612 357 045	1 pc
ABS 400.70 K044	400	70	612 407 045	1 pc

Blind cover ABS.... for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142 Delivery length: 400 mm

# Blind cover 400 mm two-sided 45°



## Blind cover 400 mm one-sided 45° + 100 mm excess width



## Blind cover 800 mm Internal corner 90°



Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS 150.40 K444	150	40	622 154 045	1 pc
ABS 200.40 K444	200	40	622 204 045	1 pc
ABS 250.40 K444	250	40	622 254 045	1 pc
ABS 300.40 K444	300	40	622 304 045	1 pc
ABS 150.70 K444	150	70	622 157 045	1 pc
ABS 200.70 K444	200	70	622 207 045	1 pc
ABS 250.70 K444	250	70	622 257 045	1 pc
ABS 300.70 K444	300	70	622 307 045	1 pc
ABS 350.70 K444	350	70	622 357 045	1 pc
ABS 400.70 K444	400	70	622 407 045	1 pc

Blind cover ABS.... for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 400 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS 150.40 K4U14	150	40	632 154 045	1 pc
ABS 200.40 K4U14	200	40	632 204 045	1 pc
ABS 250.40 K4U14	250	40	632 254 045	1 pc
ABS 300.40 K4U14	300	40	632 304 045	1 pc
ABS 150.70 K4U14	150	70	632 157 045	1 pc
ABS 200.70 K4U14	200	70	632 207 045	1 pc
ABS 250.70 K4U14	250	70	632 257 045	1 pc
ABS 300.70 K4U14	300	70	632 307 045	1 pc
ABS 350.70 K4U14	350	70	632 357 045	1 pc
ABS 400.70 K4U14	400	70	632 407 045	1 pc

Blind cover ABS.... for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 400 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS W150.40 K4U1	150	40	613 154 045	1 pc
ABS W200.40 K4U1	200	40	613 204 045	1 pc
ABS W250.40 K4U1	250	40	613 254 045	1 pc
ABS W300.40 K4U1	300	40	613 304 045	1 pc
ABS W150.70 K4U1	150	70	613 157 045	1 pc
ABS W200.70 K4U1	200	70	613 207 045	1 pc
ABS W250.70 K4U1	250	70	613 257 045	1 pc
ABS W300.70 K4U1	300	70	613 307 045	1 pc
ABS W350.70 K4U1	350	70	613 357 045	1 pc
ABS W400.70 K4U1	400	70	613 407 045	1 pc

Blind cover ABS... as 90° internal corner, for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 2 x 800 mm

## Blind cover 800 mm External corner 90°



### Blind cover 800 mm Internal corner 90° + 100 mm excess width



### Blind cover 800 mm External corner 90° 100 mm excess width



Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS W150.40 A04	150	40	614 154 045	1 pc
ABS W200.40 A04	200	40	614 204 045	1 pc
ABS W250.40 A04	250	40	614 254 045	1 pc
ABS W300.40 A04	300	40	614 304 045	1 pc
ABS W150.70 A04	150	70	614 157 045	1 pc
ABS W200.70 A04	200	70	614 207 045	1 pc
ABS W250.70 A04	250	70	614 257 045	1 pc
ABS W300.70 A04	300	70	614 307 045	1 pc
ABS W350.70 A04	350	70	614 357 045	1 pc
ABS W400.70 A04	400	70	614 407 045	1 pc

Blind cover ABS... as 90° external corner, for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 2 x 800 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS W150.40 I4U1	150	40	633 154 045	1 pc
ABS W200.40 I4U1	200	40	633 204 045	1 pc
ABS W250.40 I4U1	250	40	633 254 045	1 pc
ABS W300.40 I4U1	300	40	633 304 045	1 pc
ABS W150.70 I4U1	150	70	633 157 045	1 pc
ABS W200.70 I4U1	200	70	633 207 045	1 pc
ABS W250.70 I4U1	250	70	633 257 045	1 pc
ABS W300.70 I4U1	300	70	633 307 045	1 pc
ABS W350.70 I4U1	350	70	633 357 045	1 pc
ABS W400.70 I4U1	400	70	633 407 045	1 pc

Blind cover ABS... as 90° internal corner, for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 2 x 800 mm

Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS W150.40 A4U1	150	40	634 154 045	1 pc
ABS W200.40 A4U1	200	40	634 204 045	1 pc
ABS W250.40 A4U1	250	40	634 254 045	1 pc
ABS W300.40 A4U1	300	40	634 304 045	1 pc
ABS W150.70 A4U1	150	70	634 157 045	1 pc
ABS W200.70 A4U1	200	70	634 207 045	1 pc
ABS W250.70 A4U1	250	70	634 257 045	1 pc
ABS W300.70 A4U1	300	70	634 307 045	1 pc
ABS W350.70 A4U1	350	70	634 357 045	1 pc
ABS W400.70 A4U1	400	70	634 407 045	1 pc

Blind cover ABS... as  $90^\circ$  external corner, for screwing onto the trunking bottom.

Holes are not countersunk. At blind covers with powder coating screw head sinking AZS has to ordered separately.

Material: sheet steel 3 mm, gal. according DIN EN 10142

Delivery length: 2 x 800 mm

## Installation opening MAS GBZ



## Installation opening MAS R06



# Installation opening MAS Q06



## Installation opening MAS E09



Model number	Nominal width		Article-	Packing
	N	punched hole	number	unit
	mm	mm		
MAS GBZ 15	150	Ø 50	617 101 980	1 pc
MAS GBZ 20	200	Ø 50	617 201 980	1 pc
MAS GBZ 25	250	Ø 50	617 301 980	1 pc
MAS GBZ 30	300	Ø 50	617 401 980	1 pc
MAS GBZ 35	350	Ø 50	617 501 980	1 pc
MAS GBZ 40	400	Ø 50	617 601 980	1 pc

Installation opening MAS GBZ ... pedestal boxes, as factory-made punching at the blind cover. The opening is closed with a protective cover.

The installation opening MAS GBZ 40 are supplied in two pieces each 400 mm long. Thereof 1 x blind cover and 1 x with installation opening.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.

Model number	Nominal width N mm	Size of punched hole mm	Article- number	Packing unit
MAS R06 300	300	Ø 215	617 951 030	1 pc
MAS R06 350	350	Ø 215	617 951 035	1 pc
MAS R06 400	400	Ø 215	617 951 040	1 pc

Installation opening MAS R06 ... ffor flush floor installation units, as factory-made punching at the blind cover.

The opening is closed with a protective cover.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.

Product innovation

Model number	Nominal width N mm	Size of punched hole mm	Article- number	Packing unit
MAS Q06 250	250	200 x 200	617 952 025	1 pc
MAS Q06 300	300	200 x 200	617 952 030	1 pc
MAS Q06 350	350	200 x 200	617 952 035	1 pc
MAS Q06 400	400	200 x 200	617 952 040	1 pc

Installation opening MAS Q06 ... ffor flush floor installation units, as factory-made punching at the blind cover.

The opening is closed with a protective cover.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.



MAS E09 350

MAS E09 400

Model number Nominal width Size of Article-Packing Ν punched hole number unit mm mm MAS E09 250 250 200 x 253 617 954 025 1 pc MAS E09 300 300 200 x 253 617 954 030 1 pc

350

400

Installation opening MAS E09 ... ffor flush floor installation units, as factory-made punching at the blind cover.

200 x 253

200 x 253

617 954 035

617 954 040

The opening is closed with a protective cover.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.

Product innovation

Floor mounting system

2009

1 pc

1 pc

# Installation opening MAS R10



# Installation opening MAS R12



# Installation opening MAS Q12



Model number	1	Nominal width N mm	Size of punched hole mm	Article- number	Packing unit
MAS R10 350		350	Ø 275	617 953 035	1 pc
MAS R10 400		400	Ø 275	617 953 040	1 pc

Installation opening MAS R10 ... ffor flush floor installation units, as factory-made punching at the blind cover.

The opening is closed with a protective cover.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.

Product innovation

Model number	Nominal width N mm	Size of punched hole mm	Article- number	Packing unit
MAS R12 350	350	Ø 306	617 955 035	1 pc
MAS R12 400	400	Ø 306	617 955 040	1 pc

Installation opening MAS R12 ... ffor flush floor installation units, as factory-made punching at the blind cover.

The opening is closed with a protective cover.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.

Product innovation

Model number	Nominal width N mm	Size of punched hole mm	Article- number	Packing unit
MAS Q12 350	300	244 x 244	617 956 030	1 pc
MAS Q12 350	350	244 x 244	617 956 035	1 pc
MAS Q12 400	400	244 x 244	617 956 040	1 pc

Installation opening MAS Q12 ... ffor flush floor installation units, as factory-made punching at the blind cover.

The opening is closed with a protective cover.

Trunking of 40 mm height are suitable for pedestal boxes (MAS GBZ) only.

The article contains the service performance punching. Delivery take place without blind covers.







## Trunking - end piece one-side



Model number	Nor	minal width N mm	Height H mm	Article- number	Packing unit
ABS E150.40 -04		150	40	615 154 045	1 pc
ABS E200.40 -04		200	40	615 204 045	1 pc
ABS E250.40 -04		250	40	615 254 045	1 pc
ABS E300.40 -04		300	40	615 304 045	1 pc
ABS E150.70 -04		150	70	615 157 045	1 pc
ABS E200.70 -04		200	70	615 207 045	1 pc
ABS E250.70 -04		250	70	615 257 045	1 pc
ABS E300.70 -04		300	70	615 307 045	1 pc
ABS E350.70 -04		350	70	615 357 045	1 pc
ABS E400.70 -04		400	70	615 407 045	1 pc

Trunking - end piece ABS E... for closing of trunking bottom part at the front end, for the screw connexion at the bottom part, suitable for right and left front end.

Material: sheet steel 3 mm, gal. according DIN EN 10142

For trunking with or without excess width, bevel, one-sided



Installation instruction you will find at the end of this chapter

## Trunking - end piece two-side



Model number	Nominal width N mm	Height H mm	Article- number	Packing unit
ABS E150.40 -44	150	40	625 154 045	1 pc
ABS E200.40 -44	200	40	625 204 045	1 pc
ABS E250.40 -44	250	40	625 254 045	1 pc
ABS E300.40 -44	300	40	625 304 045	1 pc
ABS E150.70 -44	150	70	625 157 045	1 pc
ABS E200.70 -44	200	70	625 207 045	1 pc
ABS E250.70 -44	250	70	625 257 045	1 pc
ABS E300.70 -44	300	70	625 307 045	1 pc
ABS E350.70 -44	350	70	625 357 045	1 pc
ABS E400.70 -44	400	70	625 407 045	1 pc

Trunking - end piece ABS E... for closing of trunking bottom part at the front end, for the screw connexion at the bottom part, suitable for right and left front end. Material: sheet steel 3 mm, gal. according DIN EN 10142

For trunking with two-sided bevel, one-sided countersunk



Model number	Delivery length	Article- number	Packing unit
	mm		
APA K24	2400	610 107 024	2,4 m
APA O01	100	610 108 001	1 pc

For additional demand.





## Partition wall, plastic



Model number	Nominal height N mm	for Trunking- height mm	Material	Article- number	Packing unit
ZEP TW31	31	40	PVC	135 312 150	2 m
ZEP TW61	61	70	PVC	135 314 150	2 m

Partition wall for dividing into trunking channels, including 4 wall feet. Total height with foot = N + 2,5 mm



Installation instruction you will find at the end of this chapter

Model number	Material	Article- number	Packing unit
ZEP TWF	PVC	135 305 000	1 pc

Partition wall foot for additional requirement.

## Partition wall, metal



Model number	Nominal height N mm	Article- number	Packing unit
ZMS TW35	35	615 941 610	2,4 m
ZMS TW65	65	615 971 610	2,4 m

Partition wall for dividing into trunking channels, in the bottom trough.

Spot-welded at factory:

2-compartments ratio = 1/3 : 2/3

3-compartments ratio = 1/3 : 1/3 : 1/3

Other partitioning on request.

Material: 1 mm sheet steel, gal. according DIN EN 10142

Delivery length: 2400 mm



Installation instruction you will find at the end of this chapter



# Trunking connector



### Protective connector ZE-SA- ÖÖM4 135



# Model number Version Articlenumber Packing unit

ZES VK180 -512	straight	131 930 980	1 pc
ZES VK090 I512	angled	131 931 980	1 pc

For additional requirement



Installation instruction you will find at the end of this chapter

Model number	Article- number	Packing unit
ZE-SA- ÖÖM4 135	135 986 135	1 pc

Protective conductor ZE-SA-ÖÖM4 135, for the earth connection of the trunking system, screw connection on the straight trunking connector, flexible cable 2,5 mm<sup>2</sup>, 135 mm long, green-yellow, 2x ring terminal.

Main stallation instruction you will find at the end of this chapter

## Protective connector ZM-SABD



Model number	Article- number	
ZM-SABD	135 987 6	610 1 pc

Protective conductor ZM-SABD, for the earth connection of the trunking cover, flexible cable 2,5 mm<sup>2</sup>, 250 mm long, green-yellow, fitted to the cover at the factory, 1x sleeve.

## Screw head sinking



Model number	Article- number	Packing unit
AZS	610 110 001	1 pc

Service only.

Factory-made fixing holes with countersunk in blind cover.



# INSTALLATION INSTRUCTION FLOOR MOUNTED TRUNKING SYSTEM

## **GENERAL INSTRUCTIONS:**

Make wall breaks before the installation of the trunking.

Installation surface must be clean swept and even.

To avoid sharp corners and edges. Install the trunking bottom parts before laying the floor coverings.

Lay the floor coverings up to the trunking bottom parts.

Incorporate the system components into the earth measures according VDE 0100. Screw down the trunking covers sure-footed and permanently to the bottom parts.



#### Fix the trunking bottom parts



Join together the trunking bottom parts in the wanted position and fix them onto the bare floor.

### Push in the side profile (long)



Push the side profile (long) at the rear adjusted wall onto to the leg of the trunking bottom part.

Push in the side profile (short)



Push the side profile (short) onto to the front the leg of the trunking bottom part. Adjust the profile pieces in order that the profile lay later exact under the fixing holes of the cover. Distance approx. 400 mm.



At trunking bottom parts AUS... K0 (twosided bevelled blind cover) there will used side profiles (short) for the rear adjusted wall legs.

Fasten the trunking connectors



Fasten the side profiles (long) together with the trunking connectors.

Trunking partition wall ZEP...



Glue the feet of the trunking partition wall ZEP ... at a distance of 500 mm into the trunking bottom part. Slot-in the partition wall into the feet.

# INSTALLATION INSTRUCTION FLOOR MOUNTED TRUNKING SYSTEM

### Trunking partition wall ZMS...



Trunking partition wall ZMS... is spot-welded at factory.

#### Trunking end pieces



Screw down the trunking end pieces in to the side profiles according to the picture.

#### Earthing



The protective conductor ZE-SASÄ fixing at the trunking conductor. The conductive connection from the trunking profile to the trunking bottom part has to be carried out by the customer. Drill through the trunking profile and screw in a self-tapping screw until it get pressed against the bottom trough. Floor mounting system

## Lay a angle



Lay the trunking bottom parts edgeless together. To saw to mitre the side profiles (long) and screw together it with the angle connector.

### Screw the angle connector



Screw together the side profiles (short) with the angle connector.

Fix the blind cover



Factory-made 90° to mitre cut blind cover internal corners or blind cover external corners to be screwed together at the side profile.

#### Lay the flooring



Lay the flooring up to the trunking bottom part of the installed system.

#### Flooring onto blind cover



Cover completely the blind cover with the flooring. Afterwards cut out if required installation openings in flooring.

Screw down the blind cover



Screw down the blind cover onto the trunking bottom parts. To align side profiles (short) under the holes. Sting the screws through the flooring. Screw in screw into the slot of the profile and fasten it. Due to this screws will be trouble-free accessible for subsequent inspection work.

# **TRUNKING SYSTEM IN CONCRETE**

In-concrete box RDB3Q

> Vertical elbow UKK 340.38-3

In-concrete box frame RDR3Q

CHIL

In-concrete trunking RK 240.38-3

In-concrete box RDB3Q

In-concrete trunking RK 340.38-3

Clamp RKS 340.38 Floor stand with knurl RK SR

# ADVANTAGES AT A GLANCE:

## - Sturdy Quality

Since the in-concrete trunking sytem is installed before the structural work is finished, the trunkings have to be of sturdy quality. All sheet steel parts are galvanised according to DIN EN 10142.

### - Suitable for flat screeds or non-existent screeds

In-concrete boxes are cast in the raw concrete. Thus, it is possible to use this system when the screed is flat or even if there is no screed at all.

## - Height Levelling

The trunking is elevated via levelling feet which make it possible to adapt to any height .

In-concrete box frame RDR3Q020B

> In-concrete box RDB3Q250R

In-concrete box RDB3Q250R



# AVAILABLE ON REQUEST



#### IN-CONCRETE SOLUTIONS ARE AVAILABLE ON REQUEST

Data sheets of different in-concrete boxes and in-concrete frames are available on our homepage. If further information are required, please contact us.

#### FUNCTIONALITY:

As the name discribes - this trunking system will be integrated into the bare concrete floor, i.e. cast-in.

No easy task, as the times are becoming shorter between laying of the lagging, to laying of the core iron and casting of the bare floor. But according to the popular saying of the technicians and engineers - won't work - is not possible. You can be sure with Electraplan

Solutions the right partner be chosen as well as for completion of tricky job definitions.

Trunkings and boxes are tightly rastered.

In-the-concrete boxes are available either for subsequent additional screed laying or without subsequent screed laying.

#### **APPLICATION:**

In case the screed is flat or even non-existent, the junction boxes are directly integrated into the bare concrete. Thus it is possible to supply office and administrative buildings with installation units in the floor even if the screed is not thick enough.



# INSTALLATION INSTRUCTIONS IN-CONCRETE TRUNKING SYSTEM

## GENERAL INFORMATION:

The in-concrete junction boxes exist of a Styrofoam body, wooden plate and the bottom plate.

Set screws for elevating of the junction box onto the boarding.

The flush adjustment to the concrete slab occurs with the knurled nuts.

Counter nuts are fixing the levelling height.

The stand where the set screws are set will be fixed onto the boarding and fixing the junction box.

The place of the in-concrete junction boxes, size and position of the trunking has to be coordinated with the structural designer.



#### Concrete slab without screed laying



No screed is laid on the concrete slab. The frame of the in-concrete junction box is flush with the concrete slab.

## Concrete slab with screed laying



Screed is laid additional on the concrete slab. The frame of the in-concrete junction box is flush with upper edge of the screed. Prepare the levelling-stand



Provide set screw M8 with stand and knurled nut. Therefore you push the set screw M8 with a fibre hammer into the stand. Screw the knurled nut approx. 15mm onto the set screw.

Provide junction box with levelling-stand



Provide the bottom plate of the junction box on the four corners with the elevation (set screws M8, levelling-stand, knurled nut). The set screw has to be secured from the top with a counter nut against dropping.

Position junction box according layout plan



Lay the junction box onto the boarding according the layout plan. Nail the levelling stand onto the boarding.

Levelling of junction box



Level the upper edge of the junction box (chip board) to the upper edge of the concrete slab due to turning the knurled nuts. Tighten counter nut.

# INSTALLATION INSTRUCTIONS IN-CONCRETE TRUNKING SYSTEM

#### Connect trunking



Connect the trunking due to applying onto the bottom plate of the in-concrete junction box. Push the trunking ends against the Styrofoam block. The trunking has to be securely fixed due to deforming of the upper and lower part of the elevated trunking clamp.

#### Seal transitions



Protect all transition range between Styrofoam and the trunking or between trunking end against entering of concrete. Concrete sludge is aggressive and is leading to corrosion. Setting up trunking



Lay down the trunking pieces onto the boarding according to the layout plan. Connect the trunking ends with a clamp. Clamps become elevated, nailed and levelled onto the boarding as the bottom plate of the junction box.

### Support trunking



Provide the trunking every 60 cm with a clamp.

#### Remove protection cover



After laying the concrete remove the protection cover from the junction box. Therefore unscrew the four hexagon-screws from the chip board and remove it.

Remove Styrofoam body



Remove Styrofoam body from the concrete slab. In case of need destroy the Styrofoam body.

### Prepare frame of the junction box



Screw in four set screws in the corners of the frame of the junction box. The shoulder bolt features to the top.

#### Screw in frame of the junction box



Screw in set screws at the frame of the junction box into the plastic bearings of the bottom plate of the junction box.

Level frame of the junction box



Level the upper edge of the frame of the junction box to the upper edge of the screed respectively concrete slab. This is to be done by screwing the set screws in the corners of the frame with a screwdriver.

# INSTALLATION INSTRUCTIONS IN-CONCRETE TRUNKING SYSTEM

## Filling joints



Fill out the joints between the frame of the junction box and the concrete slab with screed respectively concrete flush with the upper edge. The joints have to be sealed before filling screed in order to avoid the entering of screed into the inner part of the junction box.

#### Earthing measures



The existing ground wire with cable lug which is at the frame of the junction box has to be plugged onto one of the four idle grounding connections The second supplied ground wire has to be plugged onto the bottom plate and to be integrated in the earthing measures at the building site. Exchange the protective cover



Immediate before laying the flooring material the protective cover has to be exchanged against the fitting frame.

### Install supply units



After laying of the flooring material cut the flooring material from the opening of the mounted fitting frame and install supply unit or cassette cover.

# **RAISED FLOOR - CAVITY FLOOR**



# ADVANTAGES AT A GLANCE:

# - Fast installation

In the finishing phase it is possible to merely connect the power distribution devices due to the ready-made cables and casing devices.

## - High flexiblity

The plug and play system makes it possible to react to any changes in a fast and flexible manner.

Consolidation Point CP--

> Casing elemen MHK R12

Supply unit VR12 R5 9005



Distributor VFK-12 SW/-

2009

in

# FUNCTIONALITY & APPLICATION



#### FUNCTIONALITY:

Uncomplicated, time saving installation; an installation result which fits perfectly and is quite impressive. With an underfloor system which brings electricity and data easy and safely to their destination. Easy laying of ready-made cables and conduits via plug and play; the cables can be easily exchanged within a short time, since bottom plates can be removed thus offering free access over the whole length. Distribution and splitting of the cables is done via various consolidation points. These flexible, decentralized and freely combinable consolidation points are splitting the power supplies in up to six self-locking plug-ins. Pre-formed device casings complete the system. The device casings are directly connected to the consolidation points. It is not necessary to fix them on the ground. Afterwards, the supply units with casing devices and sockets are installed in raised floor plates with pre-fabricated service outlets.

#### **APPLICATION:**

Open plan offices or call centers with big surface areas, which are divided into numerous cubicles for computer workstations and should remain flexible for restructuring purposes, simply cannot do without this flexible system.

Likewise, this applies to computer server rooms containing raised floors which offer utmost flexibility due to their construction method. Thus, completely cross-linked power and data systems are integrated into show rooms or exhibition stands, which are modified according to necessities.



## Casing element MHK VR06/50



Casing element MHK VQ06/50



Casing element MHK VE09/50



Casing element MHK VR10/50



Casing element MHK VR12/50



Casing element MHK VQ12/50



Raised floor - Cavity floor

Model number	Dimensions	Height H mm	Installation opening mm	Article- number	Packing unit
MHK VR06/50	344 x 344	50	Ø 215	677 951 050	1 St.

Casing element for the installation unit VR06 and cassette cover KER06...

Installation instruction you will find at the end of this chapter

Product innovation

Model number	Dimensions mm	Height H mm	Installation opening mm	Article- number	Packing unit
MHK VQ06/50	344 x 344	50	200 x 200	677 952 050	1 St.

Casing element for the installation unit VQ06 and cassette cover KEQ06...

Installation instruction you will find at the end of this chapter

Product innovation

Model number	Dimensions mm	Height H mm	Installation opening mm	Article- number	Packing unit
MHK VE09/50	344 x 344	50	200 x 253	677 954 050	1 St.

Casing element for the installation unit VE09.



Product innovation

Model number	Dimensions mm	Height H mm	Installation opening mm	Article- number	Packing unit
MHK VR10/50	344 x 344	50	Ø 275	677 953 050	1 St.

Casing element for the installation unit VR10.

Main Stallation instruction you will find at the end of this chapter

Product innovation

Model number	Dimensions	Height H	Installation opening	Article- number	Packing unit
	mm	mm	mm		
MHK VR12/50	344 x 344	50	Ø 306	677 955 050	1 St.

Casing element for the installation unit VR12 and cassette cover KER12...

Installation instruction you will find at the end of this chapter

Product innovation

Model number	Dimensions mm	Height H mm	Installation opening mm	Article- number	Packing unit
MHK VQ12/50	344 x 344	50	244 x 244	677 956 050	1 St.

Casing element for the installation unit VQ12 and cassette cover KEQ12...

Installation instruction you will find at the end of this chapter

## Cable outlet for dry cleaned floors floor thickness > 20 mm



## Cable outlet for dry cleaned floors floor thickness > 20 mm



## Cable outlet for wet cleaned floors floor thickness > 20 mm



## Blind cover for dry cleaned floors floor thickness > 20 mm



Model number	Colour	Installation opening mm	Article- number	Packing unit
LAFK G20 7011	iron grey	Ø 112	800 840 001	1 St.
LAFK G20 9005	jet black	Ø 112	800 840 009	1 St.

Cable outlet with universal fixing and carpet protective frame made of polyamide (non-halogen) for raised and cavity floors.

The cable outlet is having double-sided arrangable cable outlets with foam sealing. The cover with the outlets is pivoted snapped in.

The cover can be removed in order to have access to the cables through the opening. At the outlets a flat chain FK can be snapped in.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a minimum of 20 mm.

Installation instruction you will find at the end of this chapter

Model number	Colour	Installation opening mm	Article- number	Packing unit
LARK G20 7011	iron grey	Ø 112	800 840 101	1 St.
LARK G20 9005	jet black	Ø 112	800 840 109	1 St.

Cable outlet with universal fixing and carpet protective frame made of polyamide (non-halogen) for raised and cavity floors.

The centre bar may be removed in order to put the cables trough. The round chain (RK) can be connected onto the centre bar.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a minimum of 20 mm.



Installation instruction you will find at the end of this chapter

Model number	Colour	Installation opening mm	Article- number	Packing unit
LATU G20 7011	iron grey	Ø 112	800 840 201	1 St.
LATU G20 9005	jet black	Ø 112	800 840 209	1 St.

Cable outlet with universal fixing and splushproof protection made of polyamide (non-halogen) for raised and cavity floors.

In an unused condition the cable outlet is flush with the floor. The integrated splushproof protection prevent the entering of water in used condition.

Cables can be taken out through the outlets in four directions.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a minimum of 20 mm.



Installation instruction you will find at the end of this chapter

Model number	Colour	Installation opening mm	Article- number	Packing unit
LABL G20 7011	iron grey	Ø 112	800 840 601	1 St.
LABL G20 9005	jet black	Ø 112	800 840 609	1 St.

Blind cover with steel plate inlay for 5mm flooring material. With universal fixing and carpet protective frame made of polyamide (non-halogen) for raised and cavity floors.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a minimum of 20 mm.

## Cable outlet for dry cleaned floors floor thickness < 20 mm



## Cable outlet for dry cleaned floors floor thickness < 20 mm



## Cable outlet for wet cleaned floors floor thickness < 20 mm



## Blind cover for dry cleaned floors floor thickness < 20 mm



Model number	Colour	Installation opening mm	Article- number	Packing unit
LAFK K20 7011	iron grey	Ø 112	800 840 301	1 St.
LAFK K20 9005	jet black	Ø 112	800 840 309	1 St.

Cable outlet with universal fixing and carpet protective frame made of polyamide (non-halogen) for raised and cavity floors.

The cable outlet is having double-sided arrangable cable outlets with foam sealing. The cover with the outlets is pivoted snapped in.

The cover can be removed in order to have access to the cables through the opening. At the outlets a flat chain FK can be snapped in.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a maximum of 20 mm.

Installation instruction you will find at the end of this chapter

Model number	Colour	Installation opening mm	Article- number	Packing unit
LARK K20 7011	iron grey	Ø 112	800 840 401	1 St.
LARK K20 9005	jet black	Ø 112	800 840 409	1 St.

Cable outlet with universal fixing and carpet protective frame made of polyamide (non-halogen) for raised and cavity floors.

The centre bar may be removed in order to put the cables trough. The round chain (RK) can be connected onto the centre bar.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a maximum of 20 mm.



Installation instruction you will find at the end of this chapter

Model number	Colour	Installation opening mm	Article- number	Packing unit
LATU K20 7011	iron grey	Ø 112	800 840 501	1 St.
LATU K20 9005	jet black	Ø 112	800 840 509	1 St.

Cable outlet with universal fixing and splushproof protection made of polyamide (non-halogen) for raised and cavity floors.

In an unused condition the cable outlet is flush with the floor. The integrated splushproof protection prevent the entering of water in used condition.

Cables can be taken out through the outlets in four directions.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a maximum of 20 mm.



Installation instruction you will find at the end of this chapter

Model number	Colour	Installation opening mm	Article- number	Packing unit
LABL K20 7011	iron grey	Ø 112	800 840 701	1 St.
LABL K20 9005	jet black	Ø 112	800 840 709	1 St.

Blind cover with steel plate inlay for 5mm flooring material. With universal fixing and carpet protective frame made of polyamide (non-halogen) for raised and cavity floors.

Outside diameter = Ø 132 mm.

The required installation depth is approx. 55mm, in which the floor thickness should be at a maximum of 20 mm.

# Electrap

# **Distributor with 6 connectors**





Model number	Jacks Number	Jacks Colour	Jacks Manufacturer	Article- number	Packing unit
VFK-/6/W	6	white	Wieland	660 060 050	1 St.
VFK-/6 SW/-	6	black	Wieland	660 060 090	1 St.
VFKW-/6/W	6	white	Wago	668 060 050	1 St.
VFKW-/6 SW/-	6	black	Wago	668 060 090	1 St.

Distributors for power engineering at the underfloor range for the connection of flush floor installation units in cavity or raised floors via connectors

For maximum 2 supply lines from 9-17 mm diameter via screwed cable glands M25 with strain relief and 6 alternating current outgoing lines for 230 Volt supply lines 16A with "Wieland" - plug connexion system GST 18i/3 respectively "WAGO WINSTA"

Feeding: 400V AC3 / 16A double clamp 5 x 4 mm<sup>2</sup> elastic force.

Dimension: L x W x H: 325 x 195 x 45 mm.

Data sheet available at the internet

Version: plastic, non halogen

Material: Housing made of 1 mm sheet steel, gal., DIN EN 10142

Protection class: IP20

Approval: VDE

# **Distributor with 12 connectors**



Model number	Jacks Number	Jacks Colour	Jacks Manufacturer	Article- number	Packing unit
VFK-12/W	12	white	Wieland	660 120 050	1 St.
VFK-12 SW/-	12	black	Wieland	660 120 090	1 St.
VFKW-12/W	12	white	Wago	668 120 050	1 St.
VFKW-12 SW/-	12	black	Wago	668 120 090	1 St.

Distributors for power engineering at the underfloor range for the connection of flush floor installation units in cavity or raised floors via connectors.

For maximum 2 supply lines from 9-17 mm diameter via screwed cable glands M25 with strain relief and 12 alternating current outgoing lines for 230 Volt supply lines 16A with "Wieland" - plug connexion system GST 18i/3 respectively "WAGO WINSTA"

Feeding: 400V AC3 / 16A double clamp 5 x 4 mm<sup>2</sup> elastic force.

Dimension: L x W x H: 325 x 195 x 45 mm.

Version: plastic, non halogen

Material: Housing made of 1 mm sheet steel, gal., DIN EN 10142

Protection class: IP20

Approval: VDE



Data sheet available at the internet

## Distributor with 2 x 6 connectors

325



Model number	Jacks Number	Jacks Colour	Jacks Manufacturer	Article- number	Packing unit
VFK6/6 SW/W	2 x 6	black / white	Wieland	660 660 059	1 St.
VFKW6/6 SW/W	2 x 6	black / white	Wago	668 660 059	1 St.

Distributors for power engineering at the underfloor range for the connection of flush floor installation units in cavity or raised floors via connectors.

For maximum 4 supply lines from 9-17 mm diameter via screwed cable glands M25 with strain relief and 12 alternating current outgoing lines for 230 Volt supply lines 16A with "Wieland" - plug connexion system GST 18i/3 respectively "WAGO WINSTA"

Feeding: 400V AC3 / 16A double clamp 5 x 4 mm<sup>2</sup> elastic force.

Dimension: L x W x H: 325 x 195 x 45 mm.

Version: plastic, non halogen

Material: Housing made of 1 mm sheet steel, gal., DIN EN 10142

Protection class: IP20

Approval: VDE

Data sheet available at the internet



## Connecting cable, black



Model number	Plug	Length	Cable	Article-	Packing
	Jacks Manufacturer	m	cross section mm	number	unit
LSB 31010 WW 9005	Wago	1	1,5²	788 130 101	1 St.
LSB 32010 WW 9005	Wago	1	2,5 <sup>2</sup>	788 230 101	1 St.
LSB 31030 WW 9005	Wago	3	1,5²	788 130 301	1 St.
LSB 32030 WW 9005	Wago	3	2,5 <sup>2</sup>	788 230 301	1 St.
LSB 31050 WW 9005	Wago	5	1,5²	788 130 501	1 St.
LSB 32050 WW 9005	Wago	5	2,5²	788 230 501	1 St.
LSB 31080 WW 9005	Wago	8	1,5²	788 130 801	1 St.
LSB 32080 WW 9005	Wago	8	2,5²	788 230 801	1 St.
LSB 31100 WW 9005	Wago	10	1,5²	788 131 001	1 St.
LSB 32100 WW 9005	Wago	10	2,5²	788 231 001	1 St.
LSB 31010 WI 9005	Wieland	1	1,5²	778 130 101	1 St.
LSB 32010 WI 9005	Wieland	1	2,5²	778 230 101	1 St.
LSB 31030 WI 9005	Wieland	3	1,5²	778 130 301	1 St.
LSB 32030 WI 9005	Wieland	3	2,5 <sup>2</sup>	778 230 301	1 St.
LSB 31050 WI 9005	Wieland	5	1,5²	778 130 501	1 St.
LSB 32050 WI 9005	Wieland	5	2,5²	778 230 501	1 St.
LSB 31080 WI 9005	Wieland	8	1,5²	778 130 801	1 St.
LSB 32080 WI 9005	Wieland	8	2,5 <sup>2</sup>	778 230 801	1 St.
LSB 31100 WI 9005	Wieland	10	1,5²	778 131 001	1 St.
LSB 32100 WI 9005	Wieland	10	2,5 <sup>2</sup>	778 231 001	1 St.

Connecting cable for the connection of prewired device casing GBV3K or GBV4K to the distributor VFK. The connecting cable can be used optionally as extension cable.

1 x plug and 1 x jack

Connecting cable black

Plug and jack: Wieland GST 18i/3 or Wago Winsta



### Connecting cable, white



Model number	Plug Jacks	Length	Cable cross section	Article- number	Packing unit
	Manufacturer	m	mm		
LSB 31010 WW 9010	Wago	1	1,5²	788 130 102	1 St.
LSB 32010 WW 9010	Wago	1	2,5 <sup>2</sup>	788 230 102	1 St.
LSB 31030 WW 9010	Wago	3	1,5²	788 130 302	1 St.
LSB 32030 WW 9010	Wago	3	2,5 <sup>2</sup>	788 230 302	1 St.
LSB 31050 WW 9010	Wago	5	1,5²	788 130 502	1 St.
LSB 32050 WW 9010	Wago	5	2,5 <sup>2</sup>	788 230 502	1 St.
LSB 31080 WW 9010	Wago	8	1,5 <sup>2</sup>	788 130 802	1 St.
LSB 32080 WW 9010	Wago	8	2,5 <sup>2</sup>	788 230 802	1 St.
LSB 31100 WW 9010	Wago	10	1,5²	788 131 002	1 St.
LSB 32100 WW 9010	Wago	10	2,5 <sup>2</sup>	788 231 002	1 St.
LSB 31010 WI 9010	Wieland	1	1,5²	778 130 102	1 St.
LSB 32010 WI 9010	Wieland	1	2,5 <sup>2</sup>	778 230 102	1 St.
LSB 31030 WI 9010	Wieland	3	1,5 <sup>2</sup>	778 130 302	1 St.
LSB 32030 WI 9010	Wieland	3	2,5 <sup>2</sup>	778 230 302	1 St.
LSB 31050 WI 9010	Wieland	5	1,5 <sup>2</sup>	778 130 502	1 St.
LSB 32050 WI 9010	Wieland	5	2,5 <sup>2</sup>	778 230 502	1 St.
LSB 31080 WI 9010	Wieland	8	1,5²	778 130 802	1 St.
LSB 32080 WI 9010	Wieland	8	2,5²	778 230 802	1 St.
LSB 31100 WI 9010	Wieland	10	1,5²	778 131 002	1 St.
LSB 32100 WI 9010	Wieland	10	2,5²	778 231 002	1 St.

Connecting cable for the connection of prewired device casing GBV3K or GBV4K to the distributor VFK. The connecting cable can be used optionally as extension cable.

1 x plug and 1 x jack

Connecting cable white

Plug and jack: Wieland GST 18i/3 or Wago Winsta





### Device casing GBV4, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV4K WA15 2X2W 05ST	Wago	4 x white	1,5²	917 312 525	1 St.
GBV4K WA25 2X2W 05ST	Wago	4 x white	2,5 <sup>2</sup>	917 322 525	1 St.
GBV4K WI15 2X2W 05ST	Wieland	4 x white	1,5 <sup>2</sup>	927 312 525	1 St.
GBV4K WI25 2X2W 05ST	Wieland	4 x white	2,5²	927 322 525	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 2 x twin white, ISL2 2SE 9010

Plug: Wieland GST 18i/3 or Wago Winsta

Product innovation

### Device casing GBV4, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV4K WA15 2X2O 05ST	Wago	4 x orange	1,5²	917 312 727	1 St.
GBV4K WA25 2X2O 05ST	Wago	4 x orange	2,5 <sup>2</sup>	917 322 727	1 St.
GBV4K WI15 2X2O 05ST	Wieland	4 x orange	1,5²	927 312 727	1 St.
GBV4K WI25 2X2O 05ST	Wieland	4 x orange	2,5 <sup>2</sup>	927 322 727	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 2 x twin orange, ISL2 2SE 2004

Plug: Wieland GST 18i/3 or Wago Winsta



### Device casing GBV4, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV4K WA15 2W2O 05ST	Wago	2 x ws / 2 x or	1,5²	917 312 527	1 St.
GBV4K WA25 2W2O 05ST	Wago	2 x ws / 2 x or	2,5 <sup>2</sup>	917 322 527	1 St.
GBV4K WA15 2W2O 05ST	Wieland	2 x ws / 2 x or	1,5 <sup>2</sup>	927 312 527	1 St.
GBV4K WA25 2W2O 05ST	Wieland	2 x ws / 2 x or	2,5²	927 322 527	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 1 x twin white, ISL2 2SE 9010 and 1 x twin orange, ISL2 2SE 2004 Plug: Wieland GST 18i/3 or Wago Winsta



## Device casing GBV4, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV4K WA15 3W10 05ST	Wago	3 x ws / 1 x or	1,5 <sup>2</sup>	917 313 517	1 St.
GBV4K WA25 3W1O 05ST	Wago	3 x ws / 1 x or	2,5 <sup>2</sup>	917 323 517	1 St.
GBV4K WA15 3W1O 05ST	Wieland	3 x ws / 1 x or	1,5²	927 313 517	1 St.
GBV4K WA25 3W1O 05ST	Wieland	3 x ws / 1 x or	2,5 <sup>2</sup>	927 323 517	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 1 x triple white, ISL3 2SE 9010 and 1 x single orange, ISL1 2SE 2004 Plug: Wieland GST 18i/3 or Wago Winsta

# Device casing GBV3, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV4K WA15 1W3O 05ST	Wago	1 x ws / 3 x or	1,5²	917 311 537	1 St.
GBV4K WA25 1W3O 05ST	Wago	1 x ws / 3 x or	2,5 <sup>2</sup>	917 321 537	1 St.
GBV4K WA15 1W3O 05ST	Wieland	1 x ws / 3 x or	1,5²	927 311 537	1 St.
GBV4K WA25 1W3O 05ST	Wieland	1 x ws / 3 x or	2,5²	927 321 537	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 1 x single white, ISL1 2SE 9010 and 1 x triple orange, ISL3 2SE 2004 Plug: Wieland GST 18i/3 or Wago Winsta

Product innovation

## Device casing GBV3, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV3K WA15 3W 05ST	Wago	3 x white	1,5²	917 213 500	1 St.
GBV3K WA25 3W 05ST	Wago	3 x white	2,5 <sup>2</sup>	917 223 500	1 St.
GBV3K WI15 3W 05ST	Wieland	3 x white	1,5²	927 213 500	1 St.
GBV3K WI25 3W 05ST	Wieland	3 x white	2,5 <sup>2</sup>	927 223 500	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 1 x triple white, ISL3 2SE 9010

Plug: Wieland GST 18i/3 or Wago Winsta



Device casing GBV3, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV3K WA15 30 05ST	Wago	3 x orange	1,5 <sup>2</sup>	917 213 700	1 St.
GBV3K WA25 3O 05ST	Wago	3 x orange	2,5 <sup>2</sup>	917 223 700	1 St.
GBV3K WI15 3O 05ST	Wieland	3 x orange	1,5²	927 213 700	1 St.
GBV3K WI25 3O 05ST	Wieland	3 x orange	2,5²	927 223 700	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 1 x triple orange, ISL3 2SE 2004

Plug: Wieland GST 18i/3 or Wago Winsta



## Device casing GBV3, assembled



Model number	Plug Manufac- turer	Power sockets	Cable Cross section mm	Article- number	Packing unit
GBV3K WA15 2W10 05ST	Wago	2 x Ws / 1 x Or	1,5 <sup>2</sup>	917 212 517	1 St.
GBV3K WA25 2W1O 05ST	Wago	2 x Ws / 1 x Or	2,5 <sup>2</sup>	917 222 517	1 St.
GBV3K WA15 2W1O 05ST	Wieland	2 x Ws / 1 x Or	1,5²	927 212 517	1 St.
GBV3K WA25 2W1O 05ST	Wieland	2 x Ws / 1 x Or	2,5 <sup>2</sup>	927 222 517	1 St.

Device casing complete equipped with Schuko-power socket. Length of connecting cable: 50 cm Schuko power socket: 1 x twin white, ISL2 2SE 9010 and 1 x single orange, ISL1 2SE 2004 Plug: Wieland GST 18i/3 or Wago Winsta

# INSTALLATION INSTRUCTIONS CABLE OUTLET FOR DRY CLEANED FLOORS

## **GENERAL INFORMATION:**

This installation instruction applies for cable outlets for dry cleaned floors with a floor thickness bigger than 20 mm (LAFK G20, LARK G20 and LABL G20) as well as for floor thickness smaller 20 mm (LAFK K20, LARK K20 and LABL K20). All cable outlets are having a minimum built-in height of 55 mm.

The cable outlet is for the installation in the floor but can be used as well as table outlet.



Dismantle LAFK G20



Lever the middle part of the cable outlet LAFK G20 with a screwdriver and remove it upwards.

#### Insert the LAFK G20 into the opening



Insert the cable outlet LAFK G20 from the top into the opening. The installation opening is having a diameter of 112 mm.

Fixing the LAFK G20



Turn on the four fixing screws. Thereby the fixing ring is being forced apart and is fixing the cable outlet LAFK G20 in the installation opening.

#### Dismantle LAFK K20



Lever the lid of the cable outlet LATU K20 with a screwdriver and remove it upwards. Unscrew fixing ring (nut) and remove it downwards.

#### Insert the LAFK K20 into the opening



Insert the cable outlet LAFK K20 from the top into the opening. The installation opening is having a diameter of 112 mm. The fixing ring (nut) will be connected from the bottom.

Screw the LAFK K20



The fixing ring (nut) will be set from the bottom onto the thread of the cable outlet and be tighten. Therefore the cable outlet LAFK K20 is being fixed in the installation opening.

# INSTALLATION INSTRUCTIONS CABLE OUTLET FOR DRY CLEANED FLOORS

### Lay the cable



Insert the cable from the bottom through the cable outlet.

#### Install the middle part of the LAFK



The middle part of the LAFK will be insert from the top onto the cable outlet. Cables will be put through the upturned opened flaps.

Connect flexible wire cover onto LAFK



The cable outlet LAFK is designed for the connection of the flexible wire cover FK. Therefore push the flexible wire cover onto the cable outlet and plug into the lug of the flap.

#### Install the middle part of the LARK



Should be the round chain connected onto the cable outlet the middle part of the LARK will be insert from the top into the cable outlet. Cables will be carried on the side of the middle part.

### Connect round chain onto LARK



The round chain RK will be connected from the top onto the cable outlet.

Feed in cable



The round chain can be opened in order to feed in cables. Additional the cable outlet LARK can be cased with the rosette RSRK.

## Mount blind cover LABL



The blind cover LABL will be insert from the top into the cable outlet.

#### Screw blind cover LABL



Screw the blind cover of LABL with two screws into the cable outlet.

Glue in flooring material



Now you can glue in the flooring material e.g. carpet onto the blind cover.

# INSTALLATION INSTRUCTIONS CABLE OUTLET FOR WET CLEANED FLOORS

## **GENERAL INFORMATION:**

This installation instruction applies for cable outlets for wet cleaned floors with a floor thickness bigger than 20 mm (LATU G20) as well as for floor thickness smaller 20 mm (LATU K20).

All cable outlets are having a minimum built-in height of 55 mm.

The cable outlet is for the installation in the floor but can be used as well as table outlet.



## Open LATU G20



Lever the lid of the cable outlet LATU G20 with a screwdriver.

### Dismantle LATU G20



Remove upwards the middle part and the lid of the cable outlet LATU G20.

Insert the LATU G20 into the opening



Insert the cable outlet LATU G20 from the top into the opening and glue in with a suitable sealing compound. The installation opening is having a diameter of 112 mm.

#### Fixing the LATU G20



Turn on the four fixing screws. Thereby the fixing ring is being forced apart and is fixing the cable outlet LATU G20 in the installation opening.

#### Dismantle LATU K20



Lever the lid of the cable outlet LATU K20 with a screwdriver and remove it upwards. Unscrew fixing ring (nut) and remove it downwards.

Insert the LATU K20 into the opening



Insert the cable outlet LATU K20 from the top into the opening and glue in with a suitable sealing compound. The installation opening is having a diameter of 112 mm. The fixing ring (nut) will be connected from the bottom.

# INSTALLATION INSTRUCTIONS CABLE OUTLET FOR WET CLEANED FLOORS

### Screw the LATU K20



The fixing ring (nut) will be set from the bottom onto the thread of the cable outlet and be tighten. Therefore the cable outlet LATU K20 is being fixed in the installation opening.

#### Lay the cable



Insert the cable from the bottom through the cable outlet.

#### Install the middle part of the LATU



The middle part of the LATU will be turn through 180° and put from the top onto the cable outlet. Cables will be put through the middle part. With two screws the middle part is being fixed in the cable outlet.

#### Put the lid on



The lid of the LATU is being put on from the top onto the middle part.

#### Snap-in lid



Due to a circular motion the lid with the middle part is being snap-in. Cables are being pass out through the openings.

# INSTALLATION MANUAL CASING ELEMENT FOR CAVITY FLOOR

# COMMON SIZES:

MHK VQ12/50	244 mm x 244 mm
MHK VR12/50	Ø 306 mm
MHK VR10/50	Ø 275 mm
MHK VE09/50	200 mm x 253 mm
MHK VQ06/50	200 mm x 200 mm
MHK VR06/50	Ø 215 mm







Adjust the casing element on the cavity floor before casting the screed.

#### Trim the casing element



If necessary trim the supported edge of the casing element that the direct bordering trough can be filled completely with screed.

Masking the casing element



The casing element on the cavity floor (by the costumer) with adhesive tape. Attention! Troughs who can be permeate from outside by screed into the casing element has to be closed, e.g. due to masking with textile adhesive tape.

#### Castin of screed



Screed will be casted and the cavity structure is being filled in.

#### Overlaying parts cutting off



After achievement of the target stability of the screed the overlaying parts of the casing element cutting off.

Insert supply unit



After laying of the flooring material the supply unit will be set into the installation opening and being fixed.



# NOTES

# SUPPLY UNITS

Supply unit VR10 R5 7011 Supply unit VR06 R5 7011

Flexible wire cover adapter FKA 7011

Flexible wire cover FK -- 9005

> Supply unit VR12 R5 9005


# A FIXING SET FOR EVERYTHING

It does not matter in what kind of floor system you use the supply units you get assisted by the same fixing set. No choice is necessary for the selection of the different fixing sets. All supply units are equipped with this fixing set with the exception of the VAN R12 for wet cleaned floors. Due to a tilt mechanism it is guaranteed that the force of the claws are always in correct use. At the use at junction boxes the claw is been pushed up to the fitting frame. At the use in raised floors the claws are getting pressed with its shark similar teeth from the side and from

bottom up into the raised floor. Are the floor panels bigger than 50 mm or at the use in cavity floors the claws are getting pressed form the side into the installation opening.

# USE IN JUNCTION BOX



## **USE IN RAISED FLOOR**



# **USE IN CAVITY FLOOR**



# **INSTALLATION DEPTH**

Electrapian Solutions

Is the screed height big enough or is the height 55 mm? The supply units of the Electraplan solutions offer you for any situation an appropriate solution. Should the screed height be sufficient the standard device casings come in use. From a screed height of 70 mm the GBV4 respectively GBV3 for power sockets, GBVT3T respectively GBV2T for apparatus with brackets and the GBV3D respectively GBV2 for data technology can be installed. Is the screed height above 100 mm it is possibly to lower the device casing by means of a click ladder extension. Therefore more space for comfortable plug possibilities is available in the supply unit. Is the screed height very narrow, device casings for ultra-flat installation depth from a screed height of 55 mm can be mount. In this connection power sockets will be plugged into the device casing GBV8F in a horizontal direction.

# DEVICE CASING FOR "ULTRA-FLAT INSTALLATION DEPTH"



INSTALLATION DEPTH: ab 55 mm

DEVICE CASING: GBV8F bzw. GBV4F



# DEVICE CASING IN HIGHEST CLICK POSITION



INSTALLATION DEPTH: ab 70 mm

DEVICE CASING: GBV4 bzw. GBV3 GBV3T bzw. GBV2T GBV3D bzw. GBV2D



# **DEVICE CASING IN BOTTOM POSITION**



INSTALLATION DEPTH: ab 90 mm

DEVICE CASING: GBV4 bzw. GBV3 GBV3T bzw. GBV2T GBV3D bzw. GBV2D



# DEVICE CASING WITH CLICK LADDER EXTENSION



INSTALLATION DEPTH: ab 100 mm

DEVICE CASING: GBV4 bzw. GBV3 GBV3T bzw. GBV2T GBV3D bzw. GBV2D



# DIMENSION FOR FLOORING MATERIAL CUT-OUTS AND INSTALLATION OPENINGS

# SUPPLY UNITS RECTANGULAR AND SQUARE







# SUPPLY UNITS ROUND







# SUPPLY UNITS MADE OF ALUMINIUM







# MAXIMUM EQUIPMENT OF POWER SOCKETS

### SUPPLY UNITS RECTANGULAR AND SQUARE Supply unit VE09

Supply unit VQ12



Number of power sockets: max. 12 St. (6 x ISL2 2-SE)

Equipment of device casings: 3 x GBV4

Supply unit VR12



Number of power sockets: max. 9 St. (3 x ISL3 2-SE)

Supply unit VR10

Equipment of device casings: 3 x GBV3



Equipment of device casings: 2 x GBV3

Supply unit VR06

# SUPPLY UNITS ROUND

Number of power sockets: max. 12 St. (6 x ISL2 2-SE)

Equipment of device casings: 3 x GBV4



Number of power sockets: max. 10 St. (2 x ISL3 2-SE + 2 x ISL2 2-SE) Equipment of device casings: 1 x GBV4 + 2 x GBV3



Number of power sockets: max. 6 St. (2 x ISL3 2-SE)

Equipment of device casings: 2 x GBV3

### SUPPLY UNITS MADE OF ALUMINIUM Supply unit VAR12

Supply unit VAN R12



Number of power sockets: max. 12 St. (6 x ISL2 2-SE)

Equipment of device casings: 3 x GBV4

Number of power sockets: max. 12 St. (6 x ISL2 2-SE)

Equipment of device casings: 3 x GBV4

#### Supply unit VQ12





Model number	Colour	Installation opening mm	Article- number	Packing unit
VQ12 R5 7011	Iron grey	244 x 244	956 420 010	1 pc
VQ12 R5 9005	Jet black	244 x 244	956 420 090	1 pc
VQ12 R12 7011	Iron grey	244 x 244	956 440 010	1 pc
VQ12 R12 9005	Jet black	244 x 244	956 440 090	1 pc

Supply unit made of polyamide according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, device casings stepwise retractable up to 18 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Inclusive cable fastener.

For up to 12 apparatus within 3 device casings GBV4, GBVT or GBV3D

Outside dimension: 263 mm x 263 mm

Installation opening: 244 mm x 244 mm

Minimum built-in depth with 5 mm flooring height: 70 mm

Minimum built-in depth with 12 mm flooring height: 77 mm

RAL 7011 iron grey

RAL 9005 dark black

Installation instruction you will find at the end of this chapter



3D installation videos available at the internet

Product innovation

#### Inlay for lid for VQ12



#### Cover lid VDQ12



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VQ12 P1	1	185,3 x 230	956 901 001	1 pc
VQ12 P2	2	185,3 x 230	956 901 002	1 pc

Inlay made of cardboard for lining of the flooring material in the lid.

Product innovation

Model number	Colour	Installation opening mm	Article- number	Packing unit
VDQ12 R5 7011	Iron grey	244 x 244	956 120 010	1 pc
VDQ12 R5 9005	Jet black	244 x 244	956 120 090	1 pc
VDQ12 R12 7011	Iron grey	244 x 244	956 140 010	1 pc
VDQ12 R12 9005	Jet black	244 x 244	956 140 090	1 pc

Cover lid made of polyamide according DIN VDE 0634 part1 for dry rooms with dry cleaned floors, with carpet protective frame for flooring material 5 mm or 12 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Outside dimension: 263 mm x 263 mm

Installation opening: 244mm x 244 mm

RAL 7011 Iron grey

RAL 9005 Jet black



Inlay for cover	lid VDQ12
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Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VDQ12 P1	1	236 x 236	956 902 001	1 pc
VDQ12 P2	2	236 x 236	956 902 002	1 pc

Inlay made of cardboard for lining of the flooring material in the cover lid.

Product innovation

#### Supply unit VR12





#### Inlay for lid for VR12



#### **Cover lid VDR12**



### Inlay for cover lid VDR12



Model number	Colour	Installation opening mm	Article- number	Packing unit
VR12 R5 7011	Iron grey	Ø 306	955 420 010	1 pc
VR12 R5 9005	Jet black	Ø 306	955 420 090	1 pc
VR12 R12 7011	Iron grey	Ø 306	955 440 010	1 pc
VR12 R12 9005	Jet black	Ø 306	955 440 090	1 pc

Supply unit made of polyamide according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, device casings stepwise retractable up to 18 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Inclusive cable fastener.

For up to 12 apparatus within 3 device casings GBV4, GBVT or GBV3D

Outside dimension: Ø 325 mm

Installation opening: Ø 306 mm

Minimum built-in depth with 5 mm flooring height: 70 mm

Minimum built-in depth with 12 mm flooring height: 77 mm

RAL 7011 iron grey

RAL 9005 dark black

- Installation instruction you will find at the end of this chapter
- Data sheet available at the internet
- 3D installation videos available at the internet
- Product innovation

Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VR12 P1	1	Ø 291	955 901 001	1 pc
VR12 P2	2	Ø 291	955 901 002	1 pc

Inlay made of cardboard for lining of the flooring material in the lid.

Product innovation

Model number	Colour	Installation opening mm	Article- number	Packing unit
VDR12 R5 7011	Iron grey	Ø 306	955 120 010	1 pc
VDR12 R5 9005	Jet black	Ø 306	955 120 090	1 pc
VDR12 R12 7011	Iron grey	Ø 306	955 140 010	1 pc
VDR12 R12 9005	Jet black	Ø 306	955 140 090	1 pc

Cover lid made of polyamide according DIN VDE 0634 part1 for dry rooms with dry cleaned floors, with carpet protective frame for flooring material 5 mm or 12 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Outside dimension: Ø 325 mm

Installation opening: Ø 306 mm

RAL 7011 Iron grey RAL 9005 Jet black

RAL 9005 Jet black



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VDR12 P1	1	Ø 297	955 902 001	1 pc
VDR12 P2	2	Ø 297	955 902 002	1 pc

Inlay made of cardboard for lining of the flooring material in the cover lid.

Product innovation

### Electrap|an utions

#### Supply unit VR10





Model number	Colour	Installation opening mm	Article- number	Packing unit
VR10 R5 7011	Iron grey	Ø 275	953 420 010	1 pc
VR10 R5 9005	Jet black	Ø 275	953 420 090	1 pc
VR10 R12 7011	Iron grey	Ø 275	953 440 010	1 pc
VR10 R12 9005	Jet black	Ø 275	953 440 090	1 pc

Supply unit made of polyamide according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, device casings stepwise retractable up to 18 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Inclusive cable fastener.

For up to 10 apparatus within 3 device casings 1x device casing GBV4, GBV3T or GBV3D (middle)

and 2x device casing GBV3, GBV2T or GBV2D (right and left)

Outside dimension: Ø 294 mm

Installation opening: Ø 275 mm

Minimum built-in depth with 5 mm flooring height: 70 mm

Minimum built-in depth with 12 mm flooring height: 77 mm

RAL 7011 iron grey RAL 9005 dark black



Installation instruction you will find at the end of this chapter

Data sheet available at the internet

3D installation videos available at the internet

Product innovation IEI.

Model number

#### Inlay for lid for VR10



#### **Cover lid VDR10**



#### thickness number unit mm mm VR10 P1 1 Ø 260 953 901 001 1 pc VR10 P2 2 Ø 260 953 901 002 1 pc

Material

Dimension

Inlay made of cardboard for lining of the flooring material in the lid.

NEL Product innovation

Model number	Colour	Installation opening mm	Article- number	Packing unit
VDR10 R5 7011	Iron grey	Ø 275	953 120 010	1 pc
VDR10 R5 9005	Jet black	Ø 275	953 120 090	1 pc
VDR10 R12 7011	Iron grey	Ø 275	953 140 010	1 pc
VDR10 R12 9005	Jet black	Ø 275	953 140 090	1 pc

Cover lid made of polyamide according DIN VDE 0634 part1 for dry rooms with dry cleaned floors, with carpet protective frame for flooring material 5 mm or 12 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors.

Outside dimension: Ø 294 mm Installation opening: Ø 275 mm

RAL 7011 Iron grey RAL 9005 Jet black



Inlay for cover lid VDR10



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VDR10 P1	1	Ø 266	953 902 001	1 pc
VDR10 P2	2	Ø 266	953 902 002	1 pc

Inlay made of cardboard for lining of the flooring material in the cover lid.

NEU Product innovation Packing

Article-

#### Electrap|an utions So

#### Supply unit VE09





Model number	Colour	Installation opening mm	Article- number	Packing unit
VE09 R5 7011	Iron grey	200 x 253	954 420 010	1 pc
VE09 R5 9005	Jet black	200 x 253	954 420 090	1 pc
VE09 R12 7011	Iron grey	200 x 253	954 440 010	1 pc
VE09 R12 9005	Jet black	200 x 253	954 440 090	1 pc

Supply unit made of polyamide according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, device casings stepwise retractable up to 18 mm

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Inclusive cable fastener.

For up to 9 apparatus within 3 device casings GBV3, GBV2T or GBV2D

Outside dimension: 219 mm x 272 mm

Installation opening: 200 mm x 253 mm Minimum built-in depth with 5 mm flooring height: 70 mm

Minimum built-in depth with 12 mm flooring height: 77 mm

RAL 7011 iron grey

RAL 9005 dark black

Installation instruction you will find at the end of this chapter

Data sheet available at the internet

3D installation videos available at the internet

Product innovation VEL

#### Inlay for lid for VE09

**Cover lid VDE09** 



#### Model number Material Dimension Article-Packing thickness number unit mm mm VE09 P1 141,3 x 239 954 901 001 1 1 pc **VE09 P2** 2 141,3 x 239 954 901 002 1 pc

Inlay made of cardboard for lining of the flooring material in the lid

Product innovation

Model number	Colour	Installation opening mm	Article- number	Packing unit
VDE09 R5 7011	Iron gre	y 200 x 253	954 120 010	1 pc
VDE09 R5 9005	Jet black	x 200 x 253	954 120 090	1 pc
VDE09 R12 7011	Iron gre	y 200 x 253	954 140 010	1 pc
VDE09 R12 9005	Jet black	< 200 x 253	954 140 090	1 pc

Cover lid made of polyamide according DIN VDE 0634 part1 for dry rooms with dry cleaned floors, with carpet protective frame for flooring material 5 mm or 12 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors. Outside dimension: 219 mm x 272 mm

Installation opening: 200 mm x 253 mm

RAL 7011 Iron grey

RAL 9005 Jet black



#### Inlay for cover lid VDE09



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VDE09 P1	1	192 x 245	954 902 001	1 pc
VDE09 P2	2	192 x 245	954 902 002	1 pc

Inlay made of cardboard for lining of the flooring material in the cover lid.

NEU Product innovation

#### Supply unit VQ06





Model number	Colour	Installation opening mm	Article- number	Packing unit
VQ06 R5 7011	Iron grey	200 x 200	952 420 010	1 pc
VQ06 R5 9005	Jet black	200 x 200	952 420 090	1 pc
VQ06 R12 7011	Iron grey	200 x 200	952 440 010	1 pc
VQ06 R12 9005	Jet black	200 x 200	952 440 090	1 pc

Supply unit made of polyamide according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, device casings stepwise retractable up to 18 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors.

For up to 6 apparatus within 2 device casings GBV3, GBV2T or GBV2D

Outside dimension: 219 mm x 219 mm

Installation opening: 200 mm x 200 mm

Minimum built-in depth with 5 mm flooring height: 70 mm

Minimum built-in depth with 12 mm flooring height: 77 mm

RAL 7011 iron grey

RAL 9005 dark black

Z Installation instruction you will find at the end of this chapter



Data sheet available at the internet

3D installation videos available at the internet

Product innovation

#### Inlay for lid for VQ06



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VQ06 P1	1	145,3 x 187	952 901 001	1 pc
VQ06 P2	2	145,3 x 187	952 901 002	1 pc

Inlay made of cardboard for lining of the flooring material in the lid.

NEU Product innovation

#### **Cover lid VDQ06**



Model number	Colour	Installation opening mm	Article- number	Packing unit
VDQ06 R5 7011	Iron grey	200 x 200	952 120 010	1 pc
VDQ06 R5 9005	Jet black	200 x 200	952 120 090	1 pc
VDQ06 R12 7011	Iron grey	200 x 200	952 140 010	1 pc
VDQ06 R12 9005	Jet black	200 x 200	952 140 090	1 pc

Cover lid made of polyamide according DIN VDE 0634 part1 for dry rooms with dry cleaned floors, with carpet protective frame for flooring material 5 mm or 12 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors.

Outside dimension: 219 mm x 219 mm

Installation opening: 200 mm x 200 mm

RAL 7011 Iron grey

RAL 9005 Jet black



Deckeleinlage für Verschlußdeckel VDQ06



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VDQ06 P1	1	192 x 192	952 902 001	1 pc
VDQ06 P2	2	192 x 192	952 902 002	1 pc

Inlay made of cardboard for lining of the flooring material in the cover lid.

Product innovation



#### Supply unit VR06





Model number	Colour	Installation opening mm	Article- number	Packing unit
VR06 R5 7011	Iron grey	Ø 215	951 420 010	1 pc
VR06 R5 9005	Jet black	Ø 215	951 420 090	1 pc
VR06 R12 7011	Iron grey	Ø 215	951 440 010	1 pc
VR06 R12 9005	Jet black	Ø 215	951 440 090	1 pc

Supply unit made of polyamide according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, device casings stepwise retractable up to 18 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors.

For up to 6 apparatus within 2 device casings GBV3, GBV2T or GBV2D

Outside dimension: Ø 234 mm

Installation opening: Ø 215 mm

Minimum built-in depth with 5 mm flooring height: 70 mm

Minimum built-in depth with 12 mm flooring height: 77 mm

RAL 7011 iron grey

RAL 9005 dark black

Installation instruction you will find at the end of this chapter



Data sheet available at the internet

3D installation videos available at the internet

**VEU** Product innovation

#### Inlay for lid for VR06



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VR06 P1	1	Ø 201	951 901 001	1 pc
VR06 P2	2	Ø 201	951 901 002	1 pc

Inlay made of cardboard for lining of the flooring material in the lid.

NEU Product innovation

#### **Cover lid VDR06**



Model number	Colour	Installation opening mm	Article- number	Packing unit
VDR06 R5 7011	Iron grey	Ø 215	951 120 010	1 pc
VDR06 R5 9005	Jet black	Ø 215	951 120 090	1 pc
VDR06 R12 7011	Iron grey	Ø 215	951 140 010	1 pc
VDR06 R12 9005	Jet black	Ø 215	951 140 090	1 pc

Cover lid made of polyamide according DIN VDE 0634 part1 for dry rooms with dry cleaned floors, with carpet protective frame for flooring material 5 mm or 12 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors.

Outside dimension: Ø 234 mm Installation opening: Ø 215 mm

installation opening. Ø 215 min

RAL 7011 Iron grey RAL 9005 Jet black



Deckeleinlage für Verschlußdeckel VDR06



Model number	Material thickness mm	Dimension mm	Article- number	Packing unit
VDR06 P1	1	Ø 207	951 902 001	1 pc
VDR06 P2	2	Ø 207	951 902 002	1 pc

Inlay made of cardboard for lining of the flooring material in the cover lid.

Product innovation

2009



# Supply unit VAR12 made of aluminium



#### Model number Installation opening mm Articlenumber Packing unit VAR12 R5 Ø 306 955 420 180 1 pc

Supply unit made of aluminium according DIN VDE 0634 part 1, for dry rooms with dry cleaned floors, with carpet protective frame for flooring heights of 5 mm or 12 mm, devise casings stepwise retractable up to 18 mm.

Universal fixing set for mounting in junction boxes, trunking systems, raised or cavity floors.

For up to 12 apparatus within 3 devise casings GBV4, GBVT or GBV3D

Outside dimension: Ø 325 mm

Installation opening: Ø 306 mm

Minimum built-in depth with 5 mm flooring height: 70 mm

Deliverable from middle 2009 onwards.

Installation instruction you will find at the end of this chapter

Data sheet available at the internet

NEU Product innovation

# Inlay for lid for für VAR12 made of aluminium



Model number		Article- number	Packing unit
VAR12 DA		955 904 180	1 pc

Inlay made of aluminium with a chequer structure for supply unit VAR12. Deliverable from middle 2009 onwards.

Product innovation



# NOTES


Installation units

# SUPPLY UNITS FOR WET CLEANED FLOORS



Supply unit

VAN R12 DKRTTH RGS 9005

Supply unit VAN R12 DKRTUM RGS 9005

Underfloor trunking UK 240.28-2

> Fitting frame UDM3 R3

Pipe inlet UDS RE 20-50

Junction box UDS3 70-120

es



Supply unit. VAN R12 DK3TTH 9005 RGS

### ADVANTAGES AT A GLANCE:

- Supply unit for wet cleaned floors for applying of flooring material of 3 mm thickness (e.g. PVC, linoleum, or chequer plate made of aluminium) or with concentrical grooving structure
- Depending on the built-in depth 3 device casings of the type GBR3 respectively GB3D with up to 12 apparatus can be installed
- A homogeneously design, without nuisance discontinuations set the standard version with their aluminium grooving structure apart
- Lid and carpeting protective frame complete made of aluminium
- The design with tube cable outlet made of aluminium is traversable and designed for higher loads

Supply unit VAN R12 DK3TUM RGS

Tube cable outlet, lid engraved ZE- TU GRAVUR

For clue in of different flooring material

Tube cable outlet ZEA TUL 55

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# Supply unit for wet cleaned floors for mounting of the tubecable outlet made of aluminium





Supply unit for wet cleaned floors for mounting of the tubecable outlet made of aluminium





Model number	Coloured stepped grooves	max. flooring height mm	Article- number	Packing unit
VAN R12 DKRTUM RGS	-	5	955 495 760	1 pc
VAN R12 DKRTUM RGS 9005	black	5	955 495 769	1 pc

Supply unit with carpeting protective frame made of aluminium for wet cleaned floors.

Lid complete made of aluminium with grooving structure.

Depending on the built-in depth 3 device casings of the type GBR3 respectively GB3D with up to 12 apparatus can be installed.

The described device casing GBV4, GBV3, GBV3T, GBV2T, GBV3D and GBV2D on the previous pages are at the time not yet combinable. The tube cable outlet made of aluminium has to be ordered if required.

In order to close the lid properly at the use of long and big power or data plugs, the device

casings can be step-wise lowered down up to 30 mm due to the click-ladder system.

Outside dimension: Flooring frame Ø 325 mm

Installation dimension: Ø 306 mm Installation height: from 70 mm

Installation instruction you will find at the end of this chapter

Data sheet available at the internet

3D installation videos available at the internet

Product innovation

Model number	max. lid flooring height mm	max. flooring height mm	Article- number	Packing unit
VAN R12 DK3TUM RGS	3	5	955 495 960	1 pc

Supply unit with carpeting protective frame made of aluminium for wet cleaned floors.

Lid complete made of aluminium and for applying of flooring material (e.g. PVC, linoleum, or chequer plate made of aluminium) with material thickness of 3 mm.

Depending on the built-in depth 3 device casings of the type GBR3 respectively GB3D with up to 12 apparatus can be installed.

The described device casing GBV4, GBV3, GBV3T, GBV2T, GBV3D and GBV2D on the previous pages are at the time not yet combinable. The tube cable outlet made of aluminium has to be ordered if required.

In order to close the lid properly at the use of long and big power or data plugs, the device casings can be step-wise lowered down up to 30 mm due to the click-ladder system.

The tube cable outlet made of aluminium has to be ordered if required.

Outside dimension: Flooring frame Ø 325 mm Installation dimension: Ø 306 mm

Installation height: from 70 mm

- Installation instruction you will find at the end of this chapter
- Data sheet available at the internet
- 3D installation videos available at the internet

Product innovation

# ADEQUATE DEVICE CASINGS AND ACCESSORIES ARE AVAILABLE AT THE INTERNET.

# Supply unit for wet cleaned floors with tube-cable outlet made of polyamide





# Supply unit for wet cleaned floors with tube-cable outlet made of polyamide





Model number	Coloured stepped grooves	max. flooring height mm	Article- number	Packing unit
VAN R12 DKRTTH RGS	-	5	955 495 860	1 pc
VAN R12 DKRTTH RGS 9005	black	5	955 495 869	1 pc

Supply unit with carpeting protective frame made of aluminium for wet cleaned floors. Lid complete made of aluminium with grooving structure.

Depending on the built-in depth 3 device casings of the type GBR3 respectively GB3D with up to 12 apparatus can be installed.

The described device casing GBV4, GBV3, GBV3T, GBV2T, GBV3D and GBV2D on the previous pages are at the time not yet combinable. The tube cable outlet made of aluminium has to be ordered if required.

In order to close the lid properly at the use of long and big power or data plugs, the device casings can be step-wise lowered down up to 30 mm due to the click-ladder system.

A tube cable outlet made of polyamide is integrated into the lid and can be used as cable outlet due to a conversion of  $180^\circ$ 

Outside dimension: Flooring frame Ø 325 mm Installation dimension: Ø 306 mm

Installation height: from 105 mm

- Installation instruction you will find at the end of this chapter
- Data sheet available at the internet

3D installation videos available at the internet

Product innovation

Model number	max. lid flooring height mm	max. flooring height mm	Article- number	Packing unit
VAN R12 DK3TTH 9005 RGS	3	5	955 495 909	1 pc

Supply unit with carpeting protective frame made of aluminium for wet cleaned floors.

Lid complete made of aluminium and for applying of flooring material (e.g. PVC, linoleum, or chequer plate made of aluminium) with material thickness of 3 mm.

Depending on the built-in depth 3 device casings of the type GBR3 respectively GB3D with up to 12 apparatus can be installed.

The described device casing GBV4, GBV3, GBV3T, GBV2T, GBV3D and GBV2D on the previous pages are at the time not yet combinable. The tube cable outlet made of aluminium has to be ordered if required.

In order to close the lid properly at the use of long and big power or data plugs, the device casings can be step-wise lowered down up to 30 mm due to the click-ladder system.

A tube cable outlet made of polyamide is integrated into the lid and can be used as cable outlet due to a conversion of  $180^\circ$ 

Outside dimension: Flooring frame Ø 325 mm Installation dimension: Ø 306 mm Installation height: from 105 mm



- Data sheet available at the internet



Product innovation

# ADEQUATE DEVICE CASINGS AND ACCESSORIES ARE AVAILABLE AT THE INTERNET.

CASSETTE COVER





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# DIMENSION FOR FLOORING MATERIAL CUT-OUTS AND INSTALLATION OPENINGS

# CASSETTE COVER SQUARE





#### Cassette cover KEQ12 K23 LE



# CASSETTE COVER ROUND

Cassette cover KER12 K23 BL





Cassette cover KER12 K23 TUM



Cassette cover KER12 K23 LE



# HEAVY DUTY CASSETTE HBKK Q405



# DIMENSION FOR FLOORING MATERIAL CUT-OUTS AND **INSTALLATION OPENINGS**

# CASSETTE COVER SQUARE





Cassette cover KEQ06 K23 LE				
	00 0102			
Outside dimension: 199 mm x 199 mm	Installation dimension: 200 mm x 200 mm			
Thickness of flooring mate	erial:			
23 mm				

# CASSETTE COVER ROUND

Cassette cover KER06 K23 BL Cassette cover KER06 K23 TUM Cassette cover KER06 K23 LE 204 Outside dimension: Outside dimension: Outside dimension: Installation dimension: Installation dimension: Installation dimension: Ø 214 mm Ø 214 mm Ø 214 mm Ø 215 mm Ø 215 mm Ø 215 mm Thickness of flooring material: Thickness of flooring material: Thickness of flooring material: 23 mm 23 mm 23 mm



# MAXIMUM EQUIPMENT OF POWER SOCKETS

# CASSETTE COVER SQUARE

Cassette cover KEQ12



Number of power sockets: max. 12 St. (6 x ISL2 2-SE)

Equipment of device casings: 3 x GBV4



Equipment of device casings:

2 x GBV3

# CASSETTE COVER ROUND



3 x GBV4

Equipment of device casings: 2 x GBV3

# HEAVY DUTY CASSETTE HBKK Q405

Heavy duty cassette HBKK Q405



Number of power sockets: max. 12 St. (6 x ISL2 2-SE)

Equipment of device casings: 3 x GBV4

#### Installation units

### Electrapian Solutions

#### Heavy duty cassette HBKK Q405







#### Levelling set M12



Model number	Version	Article- number	Packing unit
HBKK Q405BL E44	blind	292 404 429	1 pc
HBKK Q405TUM E44	tube mounting set	292 404 459	1 pc

Stand-alone, rugged floor box system with traversable cassette cover for dry rooms with dry or wet cleaned floors.

Maximum load-carrying capacity: 20000 Newton.

The box exist out of angle iron profiles which are welded to a frame and equipped with four screw sockets M12. The screw sockets are equipped with set screws M12 which are supplied with sound absorbing caps.

The box may be delivered with a flexible foil as screed casing.

Alternatively with a pre-perforated sheet metal casing (e.g. mastic asphalt) on request.

The cassette with the cassette cover consist of stainless steel and is available of the type blind and with tube mounting set.

For the stabilisation of the cassette the cover is provided with a steel plate.

Due to the side alignment of the parts a later levelling is possible.

For the use of apparatus an apparatus holder BD0 G3 for maximum 9 apparatus with three apparatus boxes can be installed under the cassette frame. The refitting of an apparatus holder is possible in conjunction with the dismantling of the cassette frame only.

The minimum built-in height of this cassette is 100 mm plus the height of the applied trunking.

For each cassette a levelling set ZE-NSSK... has to be ordered optionally.

Outer dimension: 405 mm x 405 mm

Outer cassette height: 44 mm Inner height of the cover: 28 mm



Installation instruction you will find at the end of this chapter

Data sheet available at the internet

Model number	Levelling range	Article- number	Packing unit
	mm		
ZE- NSSK 070	115 - 150	290 99K 070	1 pc
ZE- NSSK 100	150 - 180	290 99K 100	1 pc
ZE- NSSK 120	170 - 200	290 99K 120	1 pc

Levelling set for heavy duty cassette consisting of: 4x set screw M12 with an insulation cap. The levelling range is related to the upper edge of the screed height.

#### Cassette cover, stainless steel Height-adjustable Version: Blind Square



Model number Installation Packing Articleopening number unit mm KEQ12 K23/34,5 BL 244 x 244 956 Q23 922 1 pc KEQ06 K23/34,5 BL 200 x 200 952 Q23 922 1 pc

Height-adjustable stainless steel cassette cover as version: Blind.

For wet cleaned floors usable.

Load up to 1500 Newton according DIN VDE 0634

For each cassette a levelling set ZE-NSK... has to be ordered optionally.

Height of cassette, inside = 23 mm

Height of cassette, outside = 34,5 mm

Minimum installation depth: 100 mm

Data sheet available at the internet

Product innovation

#### Cassette cover, stainless steel Height-adjustable Version: Tube mounting set Square



Model number	Installation opening mm	Article- number	Packing unit
KEQ12 K23/34,5 TUM	244 x 244	956 Q23 952	1 pc
KEQ06 K23/34,5 TUM	200 x 200	952 Q23 952	1 pc

Height-adjustable stainless steel cassette cover as version: Tube mounting set (Tube cable outlet is not included in delivery.)

For wet cleaned floors usable.

KEQ12 K23/34,5 TUM: For up to 12 apparatus in 3 device casings GBV4, GBV3T or GBV3D. KEQ06 K23/34,5 TUM: For up to 6 apparatus in 2 device casings GBV3, GBV2T or GBV2D.

Devices casing can be step-wise lowered down up to 18 mm.

Additional a support of a click ladder extension is possibly.

Load up to 1500 Newton according DIN VDE 0634

For each cassette a levelling set ZE-NSK... has to be ordered optionally.

Height of cassette, inside = 23 mm

Height of cassette, outside = 34,5 mm Minimum installation depth: 100 mm



Data sheet available at the internet



Product innovation

#### Cassette cover, stainless steel Height-adjustable Version: Cable outlet Square



Model number	Version Cable outlet	Installation opening mm	Article- number	Packing unit
KEQ12 K23/34,5 LE	square	244 x 244	956 Q23 912	1 pc
KEQ06 K23/34,5 LE	square	200 x 200	952 Q23 912	1 pc
KEQ12 K23/34,5 LR	round	244 x 244	956 Q23 972	1 pc
KEQ06 K23/34,5 LR	round	200 x 200	952 Q23 972	1 pc

Height-adjustable stainless steel cassette cover as version: Cable outlet

For dry cleaned floors usable.

KEQ12 K23/34,5 LE or LR: For up to 12 apparatus in 3 device casings GBV4, GBV3T or GBV3D. KEQ06 K23/34,5 LE or LR: For up to 6 apparatus in 2 device casings GBV3, GBV2T or GBV2D.

Devices casing can be step-wise lowered down up to 18 mm.

Additional a support of a click ladder extension is possibly.

Load up to 1500 Newton according DIN VDE 0634

For each cassette a levelling set ZE-NSK... has to be ordered optionally.

Height of cassette, inside = 23 mm

Height of cassette, outside = 34,5 mm Minimum installation depth: 100 mm

vinimum installation depth: 100 m



Product innovation

# Electrap|an

#### Cassette cover, stainless steel Height-adjustable Version: Blind Round



#### Cassette cover, stainless steel Height-adjustable Version: Tube mounting set Round



Model number	Installation opening mm	Article- number	Packing unit
KER12 K23/35,5 BL	Ø 306	955 R23 922	1 pc
KER06 K23/35,5 BL	Ø 215	951 R23 922	1 pc

Height-adjustable stainless steel cassette cover as version: Blind.

For wet cleaned floors usable.

Load up to 1500 Newton according DIN VDE 0634

For each cassette a levelling set ZE-NSK... has to be ordered optionally.

Height of cassette, inside = 23 mm

Height of cassette, outside = 35,5 mm

Minimum installation depth: 100 mm

Data sheet available at the internet

Product innovation

Model number	Installation opening mm	Article- number	Packing unit
KER12 K23/35,5 TUM	Ø 306	955 R23 952	1 pc
KER06 K23/35,5 TUM	Ø 215	951 R23 952	1 pc

Height-adjustable stainless steel cassette cover as version: Tube mounting set (Tube cable outlet is not included in delivery.)

For wet cleaned floors usable.

KER12 K23/35,5 TUM: For up to 12 apparatus in 3 device casings GBV4, GBV3T or GBV3D. KER06 K23/35,5 TUM: For up to 6 apparatus in 2 device casings GBV3, GBV2T or GBV2D.

Devices casing can be step-wise lowered down up to 18 mm.

Additional a support of a click ladder extension is possibly.

Load up to 1500 Newton according DIN VDE 0634

For each cassette a levelling set ZE-NSK... has to be ordered optionally.

Height of cassette, inside = 23 mm Height of cassette, outside = 35,5 mm

Minimum installation depth: 100 mm





Product innovation

#### Cassette cover, stainless steel Height-adjustable Version: Cable outlet Round





Model number	Version Cable outlet	Installation opening mm	Article- number	Packing unit
KER12 K23/35,5 LE	square	Ø 306	955 R23 912	1 pc
KER06 K23/35,5 LE	square	Ø 215	951 R23 912	1 pc
KER12 K23/35,5 LR	round	Ø 306	955 R23 972	1 pc
KER06 K23/35,5 LR	round	Ø 215	951 R23 972	1 pc

Height-adjustable stainless steel cassette cover as version: Cable outlet

For dry cleaned floors usable.

KER12 K23/35,5 LE or LR: For up to 12 apparatus in 3 device casings GBV4, GBV3T or GBV3D. KER06 K23/35,5 LE or LR: For up to 6 apparatus in 2 device casings GBV3, GBV2T or GBV2D.

Devices casing can be step-wise lowered down up to 18 mm. Additional a support of a click ladder extension is possibly.

Load up to 1500 Newton according DIN VDE 0634

For each cassette a levelling set ZE-NSK... has to be ordered optionally.

Height of cassette, inside = 23 mm

Height of cassette, outside = 35,5 mm Minimum installation depth: 100 mm

Data sheet available at the internet

Product innovation

#### Installation units



#### **Snap-in ladder extension**



#### Snap-in ladder extension



Model number	Colour	Article- number	Packing unit
V-12 RV	Jet black	905 956 955	1 pc

Snap-in ladder extension for additional lowering the device casings stepwise up to maximum 30 mm. Several snap-in ladder extension can be mount below each other.

For the installation by the customer the snap-in ladder extension will be delivered in two parts. Click-ladder fit for VQ12..., VR12..., VAR12..., VAN R12..., KEQ12..., KER12... and HBKK Q405...

NEU Product innovation

Model number	Colour	Article- number	Packing unit
VR10 RV	Jet black	905 953 000	1 pc

Snap-in ladder extension for additional lowering the device casings stepwise up to maximum 30 mm. Several snap-in ladder extension can be mount below each other.

For the installation by the customer the snap-in ladder extension will be delivered in two parts. Click-ladder fit for VR10...



#### **Snap-in ladder extension**



### Model number Colour Articlenumber Packing unit VE09 RV Jet black 905 954 000 1 pc

Snap-in ladder extension for additional lowering the device casings stepwise up to maximum 30 mm. Several snap-in ladder extension can be mount below each other.

For the installation by the customer the snap-in ladder extension will be delivered in two parts. Click-ladder fit for VE09...



#### Snap-in ladder extension



 
 Model number
 Colour
 Articlenumber
 Packing unit

 V-06 RV
 Jet black
 905 952 951
 1 pc

Snap-in ladder extension for additional lowering the device casings stepwise up to maximum 30 mm. Several snap-in ladder extension can be mount below each other.

For the installation by the customer the snap-in ladder extension will be delivered in two parts. Click-ladder fit for VQ06..., VR06..., KEQ06... and KER06...



#### \_ . . . . . . .



#### Tube cable outlet



### Tube cable outlet, lid engraved



Model number	Diameter	Material	Article- number	Packing unit
	mm			
ZE- TU GRAVUR	100	Aluminium	681 180 080	1 pc

Diameter

Inside

mm

80

Tube lid made of aluminium with engraving on request (e.g. own company logo) Price and motif on request.

Diameter

Outside

mm

105

Raising cable outlet made of aluminium. Without tube blind cover.



Model number

ZEA TUL 55

#### Pin wrench



Model number	Spacing of hole	Material	Article- number	Packing unit
	mm			
WSS 65/70	65 / 70	Steel, gal.	991 052 980	1 pc

For screw in and unscrew of the tube blind cover.

Levelling set



Model number	Thread length mm	Levelling range mm	Article- number	Packing unit
ZE- NSK 120	70	100 - 150	290 98K 075	1 pc
ZE- NSK 120	115	145 - 195	290 98K 120	1 pc
ZE- NSK 165	160	190 - 240	290 98K 165	1 pc

Levelling set for cassette cover consisting of: 4x set screw M8, 4x counter nut M8, 4x retaining tab with muffler bearing.

The levelling range is related to the upper edge of the screed height.

#### Example for installation:



Packing

unit

1 pc

Article-

number

681 182 555

#### **Electrap**an utions So

#### Pedestal box 2



#### Pedestal box 4



Model number	Dimension W x L x H mm	Colour	Article- number	Packing unit
GBZ O2 7011	109 x 109 x 95	iron grey	622 101 010	1 pc
GBZ O2 9005	109 x 109 x 95	jet black	622 101 090	1 pc

Pedestal box made of polyamide for installation projecting the floor.

Two installation fields: one field in the front, one in the rear. For maximum two type of voltages.



Installation instruction you will find at the end of this chapter

Model number	Dimension W x L x H mm	Colour	Article- number	Packing unit
GBZ O4 7011	109 x 212 x 95	iron grey	622 111 010	1 pc
GBZ O4 9005	109 x 212 x 95	jet black	622 111 090	1 pc

Pedestal box made of polyamide for installation projecting the floor.

Two installation fields: two field in the front, two in the rear. For maximum two type of voltages. Inclusive 2 partition walls.



Installation instruction you will find at the end of this chapter

#### Pedestal box 8



Model number	Dimension W x L x H mm	Colour	Article- number	Packing unit
GBZ 08 7011	109 x 212 x 179	iron grey	622 141 010	1 pc
GBZ O8 9005	109 x 212 x 179	jet black	622 141 090	1 pc

Pedestal box made of polyamide for installation projecting the floor.

Two installation fields: four field in the front, four in the rear. For maximum two type of voltages. Inclusive 4 partition walls.



#### Example for installation:



### Electrapjan utions

#### Installation wall blind



#### Installation wall Standard D



#### Installation wall 2 x system 45



#### Installation wall 4 x system 45



#### Installation wall CEE



#### **Clamping ring**



Model number	Colour	Dimension W x H x T mm	Article- number	Packing unit
GBZ OB 7011	iron grey	103 x 78,5 x 3	622 900 010	1 pc
GBZ OB 9005	jet black	103 x 78,5 x 3	622 900 090	1 pc

Installation walls for each installation flied of the pedestal boxes. Blind.



Installation instruction you will find at the end of this chapter

Model number	Colour	Dimension W x H x T mm	Article- number	Packing unit
GBZ ON1 7011	iron grey	103 x 78,5 x 3	622 901 010	1 pc
GBZ ON1 9005	jet black	103 x 78,5 x 3	622 901 090	1 pc

Installation walls for each installation flied of the pedestal boxes. For the accommodation of installation devises with bracket.



Installation instruction you will find at the end of this chapter

Model number	Colour	Dimension W x H x T mm	Article- number	Packing unit
GBZ OM2 7011	iron grey	103 x 78,5 x 3	622 911 010	1 pc
GBZ OM2 9005	jet black	103 x 78,5 x 3	622 911 090	1 pc

Installation walls for each installation flied of the pedestal boxes. For the accommodation of installation devises of type system 45.



Installation instruction you will find at the end of this chapter

Model number	Colour	Dimension W x H x T mm	Article- number	Packing unit
GBZ OM4 7011	iron grey	103 x 78,5 x 3	622 912 010	1 pc
GBZ OM4 9005	jet black	103 x 78,5 x 3	622 912 090	1 pc

Installation walls for each installation flied of the pedestal boxes. For the accommodation of installation devises of type system 45.



Installation instruction you will find at the end of this chapter

Model number	Colour	Dimension W x H x T mm	Article- number	Packing unit
GBZ OC1 7011	iron grey	103 x 78,5 x 3	622 903 012	1 pc
GBZ OC1 9005	jet black	103 x 78,5 x 3	622 903 092	1 pc

Installation walls for each installation flied of the pedestal boxes. For the accommodation of installation devises of type CEE.



Installation instruction you will find at the end of this chapter

Model number	Diameter	Article- number	Packing unit
	mm		
S080 KK	90	211 910 980	1 pc

Use for the installation of the base of the pedestal boxes on a screed embedded trunking system, cavity floor or double floors.

For the hole on the screed: Boring cylinder =  $\emptyset$  90 mm For the hole at the trunking cover: Ring-type saw =  $\emptyset$  70 mm



Installation instruction you will find at the end of this chapter

# INSTALLATION INSTRUCTIONS SUPPLY UNITS

#### ADVANTAGES AT A GLANCE:

- Uniform fixing set for all flooring systems
- Undetachably handle within the lid
- Different flooring heights up to 12 mm
- Pluggable click ladder extension
- Connectable flexible wire cover with elastically supported cable outlet



The following installation instruction refers to the installation of the supply unit VR12 and applies analogously for all supply units.

#### Installation in junction box



Exchange the screed protection cover against the required fitting frame UDM3 R3.

#### Installation in raised floor



Drill a hole of a diameter of 306 mm (tolerance + 1 mm) into the raised floor.

Lay flooring material



Hard coverings as wood, PVC or tiles should be worked onto the supply unit in consideration of an expansion joint.





Fit in the supply unit into the installation opening.

Align supply unit



Align the supply unit according to the premises. The direction of the lid opening has to be considered.

Fixing of the supply unit



Turn to cross on the inner screws (cross slot H2).

# INSTALLATION INSTRUCTIONS SUPPLY UNITS

#### Glue in flooring material



Cut out the flooring material accurate to size and glue in it into the supply unit.

#### Optimal removing of the lid



For easing of the installation the lid can be removed optimal from the frame. Opening lid and pull it reverse to the hinge. Thereby the screws of the fixing set and a slot hole of the hinge is accessible.

#### Release the snap in function



Insert the screw driver into the slot hole of the hinge sheet until resistance is noticeable. Apply pressure onto the screw driver and pivot them at the same time in the direction of the lid. Movement loose with a slightly flip the catch mechanism.

#### Pull upturn the lid



Pull upturn the lid. At the same time work out the hinge sheet from the hub due to topple movements from left to right.

Loosen square lid



Loosen the square lid at the latch of the lid with a screwdriver and a rotation.

Apply device casing



Apply the device casing from a horizontal position into the supply unit. The corners of the device casing are turned down.

#### Apply screwdriver



Put the screwdriver into the opening of the lug. Therefore the lug of the device casing can be optimal guided.

#### Bend the lug inside



Bend the lug of the device casing inward with the aid of the screwdriver.

Position device casing



Bring the device casing with the aid of the screwdriver to the required height.

# INSTALLATION INSTRUCTIONS SUPPLY UNITS

Click-into device casing



Click-into place the lug of the device casing with the aid of the screwdriver to the required height. The latch has to engage audible.

#### Click-into opposite side



Like the same principle as the steps before the device casing on the opposite side has to be click into place of the supply unit.

#### Loosen device casing



Set the screwdriver tilted into the perforation and loosen the latch of the device casing due to a upwards rotation from the supply unit.

Pull the latch of the device casing



Tilt inwards the latch of the device casing with the aid of the screwdriver and therefore pull it from the perforation of the supply unit.

Put lower device casing



Bring the device casing with the aid of the screwdriver to the required height.

Click-into device casing



Click-into place the lug of the device casing with the aid of the screwdriver to the required height. The latch has to engage audible.

# **INSTALLATION INSTRUCTIONS VAN R12**

#### ADVANTAGES AT A GLANCE:

- Supply unit for wet cleaned floors with concentrical grooving structure or for applying of flooring material of 3 mm thickness (e.g. PVC, linoleum, or chequer plate made of aluminium)
- Depending on the built-in depth 3 device casings of the type GBR3 respectively GB3D with up to 12 apparatus can be installed.
- A homogeneously design, without nuisance discontinuations set the standard version with their aluminium grooving structure apart.
- Optionally flooring material (e.g. PVC, linoleum, or chequer plate made of aluminium) with material thickness of 3 mm can be applied.



#### Installation in junction box



Exchange the screed protection lid against the required fitting frame UDM3 R3.

#### Installation in raised floor



Drill a hole of a diameter of 306 mm (tolerance + 1 mm) into the raised floor.

#### Lay flooring material



Hard coverings as wood, PVC or tiles should be worked onto the supply unit in consideration of a expansion joint.

#### Seal supply unit



Apply the lower area of the carpet protection frame with a suitable sealing compound.

#### Check the fixing set



Check the distance of the fixing set in regard of the respective height of the floor construction and push the supply unit into the installation opening. Should the supply unit not be pushed easily into the opening, please screw further out the inner screws of the fixing set until the fixing set is gripping under the floor panel. Align supply unit



Align the supply unit according to the premises. The direction of the lid opening has to be considered.

# INSTALLATION INSTRUCTIONS VAN R12

#### Fixing of the supply unit



Turn on the inner screws.

#### Optimal removing of the lid



For easing of the installation the lid can be removed optimal from the frame. Opening lid and pull it reverse to the hinge. Thereby the screws of the fixing set and a slot hole of the hinge is accessible.

#### Release the snap in function



Insert the screw driver into the slot hole of the hinge sheet until resistance is noticeable. Apply pressure onto the screw driver and pivot them at the same time in the direction of the lid. Movement loose with a slightly flip the catch mechanism.

#### Pull upturn the lid



Pull upturn the lid. At the same time work out the hinge sheet from the hub due to topple movements from left to right.

#### Insert device casings



Insert the device casing tilted at one side into the intended click ladder. Afterwards click-in the other side into the latch. Loosen the device casing



The device casings can be lowered stepwise up to 30 mm due to the click ladder system. Loosen of the holder of the device casing due to pressure on the latch and remove the device casing upwards.

#### Shift device casing supports



Device casing supports pulling out from the click-ladder. Insert into required height. Moving of the device casing onto the holder until latch is clicked-in. Pay attention to the horizontal hub of the device casing. Install device casing



Snap in preferable left or right device casing. Afterwards positioning of the middle device casing.

Supply unit with flooring material



Optional the supply unit is available for glue in of flooring material of 3 mm thickness. Therefore cut out the flooring material accurate to size. Outside- $\emptyset$  = 293 mm Inside- $\emptyset$  at aluminium tube = 107,5 mm Inside- $\emptyset$  at polyamide tube = 129,5 mm

# INSTALLATION INSTRUCTIONS VAN R12

#### Glue in polyamide tubus



At the supply unit VAN R12 DK3TTH after gluing in of the flooring material the upper surface of the flooring frame of the polyamide tubus has to be applied with sealing compound.

#### Lifting of polyamide tube lid



Push with a screw driver into the perforation of the VAN with polyamide tube lid one after the other and press out the lid due to a lever action.

Turn polyamide tube middle part



Take out the middle part of the tube cable outlet. Put it upside down (180° -turned) again on. The lid of the supply unit can be opened due to reaching the hand into the opening and pull it out.





Fix the tube middle part on the lid of the supply unit with the two screws which are clicked into the tube lid. Therefore the tube is protected against side load and remains in his position.





Opening lid and feed the cable through the opening of the polyamide tube into a power socket. At closing all sealing areas have to be cleaned carefully.

Close polyamide tube



Close the lid of the supply unit carefully. Tube lid with bayonet fitting snap onto the tube middle part and close it. Therefore the supply unit is protected against of 30 mm splash proofed (according DIN VDE 0634).



Unscrew the aluminium tube lid with the pin wrench WSS65/70 of the supply unit with aluminium tube and remove the aluminium tube lid. The lid of the supply unit can be

opened by reaching with the hand through

the opening and pulling up.

Screw in aluminium tube



Screw in the aluminium tube cable outlet ZEA TUL 55 into the tread of the lid of the supply unit.

Feed in cable



Opening lid and feed the cable through the opening of the aluminium tube into a power socket. At closing all sealing areas have to be cleaned carefully.

# INSTALLATION INSTRUCTION HEAVY DUTY CASSETTE HBKK Q405

#### **GENERAL INFORMATION:**

Please observe the standard DIN 18560 "Screeds of building industry" for screed overlap of trunkings.

Include system units in earthing measures according DIN VDE 0100.

Please observe our general information and the information of the conterminal trades (screed layer, floorer).



#### Level cassette frame



For the installation the angle frame with the cassette frame is being positioned on the concrete slab. The angle frame is being levelled with the set screws to the required height.

#### Fix the cassette frame



The fixing claws will be fixed onto the concrete slab.

#### Insert trunking



Cut the flexible screed casing in height and width of the trunking. Lift the foil ear and insert the trunking approx. 40 mm under the cassette frame.

#### Seal the cassette frame



Seal all gaps and transition with adhesive tape.

Earthing measurement at cassette frame



The earth protective wires have to be integrated into the earthing measurements.

Lay screed and flooring material



Lay the screed and the flooring material with an appropriate expansion joint to the cassette cover. Pay attention to cleanliness around the cassette cover.
## INSTALLATION INSTRUCTION HEAVY DUTY CASSETTE HBKK Q405

#### Seal the expansion joints



Seal the expansion joints around the cassette frame with an elastic sealing compound.

#### Apply cassette with apparatus



Insert the device casings with respective power sockets and data technology into the snap-in ladder.

Apply cover with flooring material



Apply cassette cover with flooring material. Please take care that the glue is distributed equally and the flooring material is seat solidly otherwise the flooring material can be broken.

#### Mount cassette cover



After hardening of the screed and the flooring material the cassette cover can be insert into the cassette frame by means of a suction lifter (e.g. WSH 30).

#### Earthing measure at the cassette cover



Connect the earth protective wire of the cassette cover with the cassette frame.

Cassette cover with tube cable outlet



Should cables be lead through the cassette cover (with tube mounting set) a tube cable outlet made of aluminium will be screwed on.

Suitable for high loads



The heavy duty cassette cover is designed for high loads up to 20.000 Newton due to his rugged design.

## INSTALLATION INSTRUCTION PEDESTAL OUTLET

### GENERAL INFORMATION:

Pedestal box made of polyamide for installation projecting the floor.

For maximum two type of voltages and eight installation fields for up to 16 installation devices.



#### Remove the protective lids



Before laying the flooring remove the protective lids at the blind covers with installation openings (MES GBZ / MAS GBZ ordering separately) of the respective trunking system.

#### Cut clear the installation opening



After laying flooring, cut clear the installation opening of the above laying flooring.

#### Fix the base



The base of the pedestal outlet box will be fixed onto the installation opening with the enclosed two screws M4x40 mm.

#### Insert cable



Put the cable from the trunking through the installation opening and the base.

Drill a hole through the screed



Drill a hole through the screed up to the underneath laying trunking with a carbide drill.

Cut a hole into the trunking



Cut a hole into the trunking with a hole saw.

## INSTALLATION INSTRUCTION PEDESTAL OUTLET

Insert cable through spot drilling outlet



Put cable from the trunking through the spot drilling outlet (ordering separately) so that the bolt heads are above.

#### Bracing spot drilling outlet



Insert the spot drilling outlet into the drill hole and fasten it by bracing.

Cut clear drill hole



After laying the flooring cut clear the drill hole.

#### Fix the base



Fix the base of the pedestal outlet box with two screws M4 x 40 mm in the spot drilling outlet.

#### Insert cable



Put the cable from the bottom through the pedestal outlet box (take care of the allocation of the installation location and the type of voltages). At pedestal outlet boxes with 4 or 8 installation fields insert the partition walls.

Fasten pedestal outlet box



Set up the pedestal outlet box onto the base and fasten it with four screws M4 x 12 mm.

#### Fix the blind plate



Fix the blind plate with two screws in the pedestal outlet box.

#### Installation wall for 1 x Standard D



Connect the cable at the installation device and fix it with two screws in the pedestal outlet box. Insert the installation walls and screw down the central plate of the installation device.

Installation wall for für 1 x CEE



Put the cable through the installation wall and the rubber (rubber included in delivery of CEE-power socket). Fix the installation wall with two screws in the pedestal outlet box. Connect the cable at CEE-power socket and screw down the CEE-power socket with four screw M4 x16 mm onto the installation wall.

## INSTALLATION INSTRUCTION PEDESTAL OUTLET

Installation wall for 1 x system 45



Put the cable through the installation wall and fix the installation wall with two screws in the pedestal outlet box. Connect the cable at the installation device and let snap in the installation device in the installation wall.

#### Installation wall for 1 x system 45



E.g. telephone or data sockets have to installed before into the respective mounting plates.

Installation wall for 2 x system 45



Cut the two outer screwed ends with an edge cutter as close as possible at the rear wall.

Installation wall for 2 x system 45



Put the cable through the installation wall and fix the installation wall with two screws in the pedestal outlet box. Connect the cable at the installation device and let snap in the installation device in the installation wall.

Installation wall for 2 x system 45



E.g. telephone or data sockets have to installed before into the respective mounting plates.

Installation wall for twin-type system 45



At the use of twin-type sockets of type system 45 the middle base at the installation wall has to be removed with an edge cutter.



## NOTES


Installation units

## **DEVICE CASING - INSTALLATION DEVICES**



GBV2D

**Device casing** 

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## ADVANTAGES AT A GLANCE:

#### - Snap-in connection

Device casings, power sockets and other accessories are easy to be plugged together. Due to exact latches circumstantial screwing is not necessary.

#### - Compatibility

All parts are optimum coordinated. For nearly each situation are different solution feasible.

## Round chain RK-- 7035

### - Easy installation

Power sockets or data sockets are easy to be installed. Afterwards the modules can be snapped into the device casings and cover plates.

Rosette RSRK 7035

in K

Flexible wire cover FK-- 9005

> Support plate TP01M2

Blind plate system 45 IDM1 B45x45 9010

Power socket 20° system 45 ISM4 45 2--E 9010



Adapter data technology ARTP 2M 45/45

Device casing GBV8F

Power socket 33° system 45 ISMPH 45.90/33° 6029 Power socket 33° system 45 ISMPH 45.135/33° 9010

## **Device casing GBV4**



### **Device casing GBV3**



## Device casing partition wall GBVT



Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBV4	jet black	41 x 75 x 225	905 703 010	1 pc

Device casing for supply unit VQ12, VR12 or VR10 (middle)

For 4 power sockets ISL ... or

for 4 installation system 45 (e.g. 4 power sockets) or 3 apparatus with brackets

Inclusive 4 strain relief and 1 partition wall.

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Installation instruction you will find at the end of this chapter

Data sheet available at the internet

3D installation videos available at the internet

Product innovation

Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBV3	jet black	41 x 75 x 171	905 702 010	1 pc

Device casing for supply unit VQ06, VR06, VE09 or VR10 (right and left)

For 3 power sockets ISL ... or

for 3 installation system 45 (e.g. 3 power sockets) or

2 apparatus with brackets. Inclusive 4 strain relief and 1 partition wall.

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Installation instruction you will find at the end of this chapter

Data sheet available at the internet

Product innovation

Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBVT	jet black	32,5 x 70 x 2,5	905 700 010	1 pc

For device casing GBV3, GBV4, GBV2T and GBV3T, for additional demand

Installation instruction you will find at the end of this chapter



- 3D installation videos available at the internet
- Product innovation



## Power socket with protection against contact



### Blind plate



## Overvoltage protective device



Device casing	- Installation de	vices
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Model number	Colour	Version	Article- number	Packing unit
ISL1 2-SE 9016	traffic white	single / 1 module	881 204 350	1 pc
ISL1 2-SE 2004	pure orange	single / 1 module	881 204 370	1 pc
ISL1 2-SE 6029	mint green	single / 1 module	881 204 330	1 pc
ISL2 2-SE 9016	traffic white	twin / 2 module	881 205 350	1 pc
ISL2 2-SE 2004	pure orange	twin / 2 module	881 205 370	1 pc
ISL2 2-SE 6029	mint green	twin / 2 module	881 205 330	1 pc
ISL3 2-SE 9016	traffic white	triple / 3 module	881 206 350	1 pc
ISL3 2-SE 2004	pure orange	triple / 3 module	881 206 370	1 pc
ISL3 2-SE 6029	mint green	triple / 3 module	881 206 330	1 pc

Power socket with, 2-pole + earth 16A/250 Volt, with protection against integrated protection against contact.

Fully surface covered. No separate cover plate necessary.

Installation instruction you will find at the end of this chapter

3D installation videos available at the internet

Model number	Colour	Dimension L x W mm	Article- number	Packing unit
IDL B1 9016	traffic white	54 x 70	881 152 050	1 pc

For covering empty spaces in device casings.

Model number	Connecting lines	Article- number	Packing unit
IS1-US	3	689 201 800	1 pc
IS2- US	6	689 202 800	1 pc

The overvoltage protection adapter IS1- US and IS2- US is designed for mains wise fine protection of electronic users and for the installation into the device casings. With acoustics fault advice. IS1- US Overvoltage protection module with 3x connection wire 1,5 mm<sup>2</sup>.

6 Overvoltage protection module with 3x connection wire 1,5 mm<sup>2</sup>. For the connection of a single or multiple power socket.

IS2- US Overvoltage protection module with 6x connection wire 1,5 mm<sup>2</sup>. For through wiring several single or multiple power sockets.

Installation instruction you will find at the end of this chapter

3D installation videos available at the internet

Product innovation



## Device casing GBV3T



## Device casing GBV2T



### **Device casing bottom**



Device	casing	- In	stall	ation	dev	ices
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Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBV3T	jet black	33 x 75 x 225	905 703 020	1 pc

Device casing for supply unit VQ12, VR12 or VR10 (middle) For 3 apparatus with brackets, bottom complete open Inclusive 4 strain relief.

Installation instruction you will find at the end of this chapter

Data sheet available at the internet

3D installation videos available at the internet

VEU Product innovation

Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBV2T	jet black	33 x 75 x 171	905 702 020	1 pc

Device casing for supply unit VQ03, VR06, VE09 or VR10 (right and left) For 2 apparatus with brackets, bottom complete open Inclusive 4 strain relief.

Installation instruction you will find at the end of this chapter

Data sheet available at the internet

Product innovation

Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBV3B	jet black	8,5 x 75 x 225	905 703 000	1 pc
GBV2B	jet black	8,5 x 75 x 171	905 702 000	1 pc

Device casing for additional demand.





#### **Cover plates**



### Blind plate



### Cover plates for system 45



Model number	Colour	Version	Article- number	Packing unit
GBVTN1	jet black	1-Loch	905 711 050	1 pc
GBVTN2	jet black	2-Loch	905 712 050	1 pc
GBVTN3	jet black	3-Loch	905 713 050	1 pc

Cover plates for the mounting of apparatus with brackets in device casing GBV3T or GBV2T

GBVTN1 covers: 2/3 GBV2T or 1/2 GBV3T GBVTN2 covers: 1/1 GBV2T or 3/4 GBV3T

GBVTN3 covers: 1/1 GBV3T

Opening 48 mm x 48 mm

RAL 9005 Jet black.



Product innovation

Model number	Colour	Article- number	Packing unit
GBVTB	jet black	905 710 010	1 pc

For covering empty spaces in device casings, for opening 48 mm x 48 mm. RAL 9005 Jet black.

3D installation videos available at the internet

Product innovation

Model number	Colour	Version	Article- number	Packing unit
GBVMM2	jet black	2-modules	905 722 050	1 pc
GBVMM4	jet black	4-modules	905 724 050	1 pc
GBVMM6	jet black	6-modules	905 726 050	1 pc

Cover plates for the mounting of Mosaic system 45 in device casing GBV3T or GBV2T

GBVMM2 covers: 1/3 GBV2T or 1/4 GBV3T Op GBVMM4 covers: 2/3 GBV2T or 1/2 GBV3T Op GBVMM6 covers: 1/1 GBV2T or 3/4 GBV3T Op RAL 9005 Jet black.

Opening: 45 mm x 45 mm Opening: 45 mm x 90 mm Opening: 45 mm x 135 mm



3D installation videos available at the internet





## **Electrap|**an **So** utions

### Blind plate system 45



### Power socket 20° system 45



### Power socket 20° system 45 with earthing pin



Model number	Colour	Version	Article- number	Packing unit
IDM1 B45x22,5 9010	pure white	1-module	681 151 045	1 pc
IDM2 B45x45 9010	pure white	2-modules	681 152 045	1 pc

Blind plate for system 45

Dimension 1-module: 45 mm x 22,5 mm Dimension 2-modules: 45 mm x 45 mm



Product innovation

Model number	Colour	Version	Article- number	Packing unit
ISM2 45 2Q 9010	pure white	single	681 404 350	1 pc
ISM2 45 2Q 2004	pure orange	single	681 404 370	1 pc
ISM2 45 2Q 6001	emerald green	single	681 404 330	1 pc
ISM4 45 2E 9010	pure white	twin	681 405 350	1 pc
ISM4 45 2E 2004	pure orange	twin	681 405 370	1 pc
ISM4 45 2E 6001	emerald green	twin	681 405 330	1 pc

Power socket system 45, 2-pole - 16A / 250V

Connecting terminals srewable

Dimension module single: 45 mm x 45 mm

Dimension module twin: 45 mm x 90 mm



3D installation videos available at the internet

Model number	Colour	Version	Article- number	Packing unit
IEM2 45 2Q 9010	pure white	single	681 434 350	1 pc
IEM2 45 2Q 2004	pure orange	single	681 434 370	1 pc
IEM2 45 2Q 6001	emerald green	single	681 434 330	1 pc
IEM4 45 2E 9010	pure white	twin	681 435 350	1 pc
IEM4 45 2E 2004	pure orange	twin	681 435 370	1 pc
IEM4 45 2E 6001	emerald green	twin	681 435 330	1 pc

Power socket system 45 with earthing pin, 2-pole - 16A / 250V

Connecting terminals srewable

Dimension module single: 45 mm x 45 mm Dimension module twin: 45 mm x 90 mm

Product innovation NEU



#### Power socket 33° system 45



Model number	Colour	Version	Article- number	Packing unit
ISMPH 45/33° 9010	pure white	single	681 404 950	1 pc
ISMPH 45/33° 2004	pure orange	single	681 404 970	1 pc
ISMPH 45/33° 6029	mint green	single	681 404 930	1 pc
ISMPH 45.90/33° 9010	pure white	twin	681 405 950	1 pc
ISMPH 45.90/33° 2004	pure orange	twin	681 405 970	1 pc
ISMPH 45.90/33° 6029	mint green	twin	681 405 930	1 pc
ISMPH 45.135/33° 9010	pure white	triple	681 406 950	1 pc
ISMPH 45.135/33° 2004	pure orange	triple	681 406 970	1 pc
ISMPH 45.135/33° 6029	mint green	triple	681 406 930	1 pc

Power socket system 45, 2-pole - 16A / 250V Terminal, spring-loaded

Dimension module single: 45 mm x 45 mm Dimension module twin: 45 mm x 90 mm

Dimension module triple: 45 mm x 135 mm



Product innovation

### Power socket 33° system 45 with earthing pin



Model number	Colour	Version	Article- number	Packing unit
IEMPH 45/33° 9010	pure white	single	681 434 950	1 pc
IEMPH 45/33° 2004	pure orange	single	681 434 970	1 pc
IEMPH 45/33° 6029	mint green	single	681 434 930	1 pc
IEMPH 45.90/33° 9010	pure white	twin	681 435 950	1 pc
IEMPH 45.90/33° 2004	pure orange	twin	681 435 970	1 pc
IEMPH 45.90/33° 6029	mint green	twin	681 435 930	1 pc
IEMPH 45.135/33° 9010	pure white	triple	681 436 950	1 pc
IEMPH 45.135/33° 2004	pure orange	triple	681 436 970	1 pc
IEMPH 45.135/33° 6029	mint green	triple	681 436 930	1 pc

Power socket system 45 with earthing pin, 2-pole - 16A / 250V

Terminal, spring-loaded

Dimension module single: 45 mm x 45 mm Dimension module twin: 45 mm x 90 mm Dimension module triple: 45 mm x 135 mm



Product innovation

### Data module RJ 45 Kat. 6



14,6	42,3	
A		
<b>澤</b>		
(BD)	<sup>™</sup>    <b>™</b>	

Model number	Version	Article- number	Packing unit
ID-G EUMFLEX-REAL 1G CAT6	shielded	688 890 201	1 pc
ID-G EUMFLEX-REAL 1U CAT6	unshielded	688 890 101	1 pc

Data module Rutenbeck UMflex-real.Cat.6a shielded and unshielded.

Installation instruction you will find at the end of this chapter

- Data sheet available at the internet
- Product innovation NEU

## **DEVICE CASING GBVD3D & GBV2D FOR DATA TECHNOLOGY**

The new device casing for for data and media technology is characterized due to the inclined arranged compartments where mounting plates of any type can be slide in. Ideal for all conference and multi media rooms. Flexible system configuration possible due to modular construction. For example you can combine data technology with audio and video connectors in any device casing.

Simple installation. The mounting plates will be inserted from the top into a fixture and be fixed due to a click mechanism.

It does not matter what kind of hole pattern is wanted, nearly everything is possible! Whether for all hole pattern of data technology, LWL optic fibre, audio cinch, audio 3,5mm stereo jack, audio XLR, monitor connector VGA 15pol or DVI-D digital, S-video, BNC, USB, PS2 for keyboard and mouse, data communication serial D-sub 9pol ... etc.

On the following pages you will find some mounting plates with popular hole pattern. If you do not find your hole pattern, please let us know.

## ONE PRICE FOR ALL MOUNTING PLATES !

It does not matter how your hole pattern looks like or if you do need a special opening, the price of the mounting plate will not change.

2009



## Device casing GBV3D



### **Device casing GBV2D**



### Mounting plate



Device casing	- Installation	devices
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Model number	Colour	Dimension H x W x T mm	Article- number	Packing unit
GBV3D	jet black	45 x 75 x 225	905 703 030	1 pc

Device casing for supply unit VQ12, VR12 or VR10 (middle).

For acceptance of 3 mounting plates of data technology, bottom complete open.

- Data sheet available at the internet
- 3D installation videos available at the internet
- Product innovation

Model number	Colour	Dimension	Article- number	Packing unit
		mm		
GBV2D	jet black	45 x 75 x 171	905 702 030	1 pc

Device casing for supply unit VQ03, VR06, VE09 or VR10 (right and left). For acceptance of 2 mounting plates of data technology, bottom complete open.

Data sheet available at the internet

Product innovation

Model number		Material	Hole size H x W mm	Article- number	Packing unit
MP01M3		Metal	19,3 x 14,8	905 600 103	1 pc
Mounting plates for a BTR BTR Setec Telegärtner Rutenbeck Dätwyler Dätwyler Dätwyler Brand-Rex R&M Nexans Kerpen	E-DAT m UTP mod SeSix Ke AMJ-mod UM-real. Unilan R Unilan R Unipatch Snap-in o Connecto LANmark	odule coupling 90 <sup>°</sup> (o dule 8(8) Cat.5e (or C yystone Jack RJ45 Ka dule Cat. 6+ Cat.6a J45-module MS-K 1/8 J45-module KST 1/8 (	at.6) it.6 Cat.6a Cat.6a Tool-less t.6 -in	acturer and modul	es:
TKM	RJ-MOD	- Cat.6			

Suitable blind cap: Rutenbeck code-no: 000-321-0



Quante Krone

# Model numberMaterialHole size<br/>H x W<br/>mmArticle-<br/>numberPacking<br/>unitMP02M2Metal20,4 x 27,7905 600 2021 pc

Mounting plates for acceptance of data technology of the following manufacturer and modules: R&M freenet Connector RJ45 module support

**NEU** Product innovation

Mounting plate



#### Electrap an utions So

### Mounting plate



Model number		Material	Hole size H x W mm	Article- number	Packing unit
MP03M4		Metal	19,35/21,55 x 14,85	905 600 304	1 pc
Mounting plates for BTR BTR BTR BTR BTR BTR Dätwyler	E-DAT m E-DAT m UAE mo OpDAT n KOAX m Blind mo	nodule 8(8) Cat.6A nodule coupling 90 dule 8(8) Cat.5e / nodule LCMM (or odule F-jack (or I	D° (or 180°) 8(8) Cat.6 Cat.6 LC SM, or ST SM/MM) EC-jack, or IEC-plug)	acturer and modul	es:

Suitable blind cap: BTR code-no: 130898-00-I

#### Mounting plate



### Mounting plate



## Mounting plate



### Mounting plate



### Mounting plate



Product inno	ovation
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Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP04M2	Metal	17,3 x 18,2	905 600 402	1 pc

Mounting plates for acceptance of data technology of the following manufacturer and modules: ID-G EWTL Lexcom



Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP05M3	Metal	19,9 x 14,6	905 600 503	1 pc

Mounting plates for acceptance of data technology of the following manufacturer and modules: AMP AMP

SL 110 connect jack Cat.6 AMP-TWIST-6S SL jack Cat.6

AMP-TWIST-7AS SL jack Cat.7

TopKey Keystone Cat.6 RJ45

CobiNet Suitable blind cap: AMP code-no: 0-1116412-1



AMP

Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP06M3	Metal	18 x 22,8	905 600 603	1 pc

Mounting plates for acceptance of data technology of the following manufacturer and modules: Corning LANscape S250 module RJ45 Cat.6

Suitable blind cap: Corning code-no: WAXWSM-00101-C001



Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP07M2	Metal	21,7 x 22,4	905 600 702	1 pc

Mounting plates for acceptance of data technology of the following manufacturer and modules: Kerpen E-line with mounting clip 9ZE30021



Model number	Material	Hole size mm	Article- number	Packing unit
MPBLM0	Metal	-	905 600 000	1 pc

Mounting plates for covering not used inclined slide-in compartments

Product innovation NEU

### Mounting plate



### Mounting plate



## Mounting plate



## Mounting plate



## Mounting plate



## Mounting plate



Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP20M2	Metal	9,8 x 8	905 602 002	1 pc

Mounting plates for acceptance of optic fibre technology type ST



Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP21M4	Metal	9,7 x 13,3	905 602 104	1 pc

Mounting plates for acceptance of optic fibre technology type SC-Simplex, LSH / E2000 or LC-Duplex

Product innovation

Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP22M4	Metal	9,7 x 26	905 602 204	1 pc

Mounting plates for acceptance of optic fibre technology type SC-Duplex



Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP30M1	Metal	12,8 x 21	905 603 001	1 pc

Mounting plates for acceptance of data technology, audio or video technology type D-Sub 9



Model number	Material	Hole size Ø mm	Article- number	Packing unit
MP31M1	Metal	24	905 603 101	1 pc

Mounting plates for acceptance of audio technology type XLR



Model number	Material	Hole size H x W mm	Article- number	Packing unit
MP32M1	Metal	32 x 54	905 603 201	1 pc

Mounting plates for acceptance of power sockets type FLF

#### Product innovation

## FURTHER MOUNTING PLATES OF YOUR CHOICE ARE POSSIBLE ON REQUEST.



## **ULTRA-FLAT INSTALLATION DEPTH**



The device casing GBV8F is specially developed for screed up to a height of 55 mm. Thanks due to the horizontal arranged support possibility for system 45 apparatus, this type of device casing is suitable wherever very low screed heights are available. All apparatus of type system 45 can be installed into the device casing. It does not matter if power sockets or data technology.

The device casing GBV8F is suitable for the supply unit VQ12, VR12 as well as for cassette cover KEQ12 and KER12. In the device casing you may install 8 power sockets. Additional you have the possibility to install two single modules (22,5 mm x 45 mm) for data technologies.



### Device casing for "ultra-flat installation depth"



#### Mounting plate system 45 R&Mfreenet



Device of	casing	Installation	devices
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Model number	Number system 45 power sockets maximum	Number system 45 modules maximum	Article- number	Packing unit
GBV8F	8 power sockets	18-modules	905 703 080	1 pc

Device casing for ultra-flat installation depth from 55 mm.

For this device casing we recommend only power sockets ISM2... or IEM2... with 20° arrangement. Device casing GBV8F fits for supply unit VR12 and VQ12.

The device casing is deliverable from middle of 2009 onwards.



Suitable for application:

Model number	Material	Dimension H x W mm	Article- number	Packing unit
IDM45 MACS 2 9010	Polyamidee	45 x 45	681 845 250	1 pc

Mounting plates 45 x 45 mm for 2 x single connecting module RJ 45 Reichle & De-Massari.

Connector module, Cat. 5e, 1 x RJ45/s R925370 Connector module, Cat. 6, 1 x RJ45/s R302372

Connector module, Cat. 6, 1 x RJ45/s R302372 Connector module, Cat. 5e, 1 x RJ45/u R925371

Connector module, Cat. 6, 1 x RJ45/u R302373

The original accessories of RDM & IBM as coding, dust caps etc. are attachable.

## Adapter system 45 data technology



## Support plate



Model number	Material	Dimension H x W mm	Article- number	Packing unit
ARTP 2M 45/45	Polyamide	45 x 45	905 599 950	1 pc

Adapter for data technology in system 45

Support possibility for support plates of data technology



Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP01M2	Metal	19,3 x 14,8	905 590 102	1 pc

Support plate for installation of data technology of the following manufacturer and modules: E-DAT module coupling 90° (or 180°) 8(8) Cat.6 UTP module 8(8) Cat.5e (or Cat.6) BTR BTR SeSix Keystone Jack RJ45 Kat.6 Setec Telegärtner AMJ-module Cat. 6+ Rutenbeck UM-real. Cat.6a Dätwyler Unilan RJ45-module MS-K 1/8 Cat.6a Dätwyler Unilan RJ45-module KST 1/8 Cat.6a Tool-less Dätwyler Unipatch TERA Brand-Rex Snap-in connector module Cat.6 R&M Connector module RJ45 Snap-in Nexans LANmark-7 GG45 Snap-in socket Eline 600 GG45-socket Kerpen ткм RJ-MOD - Cat.6 Quante Krone

Suitable blind cap: Rutenbeck code-no: 239-100-01

Product innovation

#### Support plate



### Support plate



**Device casing - Installation devices** 

Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP02M1	Metal	20,4 x 27,7	905 590 201	1 pc

Support plate for installation of data technology of the following manufacturer and modules: R&M freenet Connector RJ45 module support

Product innovation NEU

Model number		Material	Hole size H x W mm	Article- number	Packing unit
TP03M2		Metal	19,35/21,55 x 14,85	905 590 302	1 pc
BTR BTR BTR BTR BTR BTR BTR	E-DAT m E-DAT m UAE mod OpDAT r KOAX m Blind mo	odule 8(8) Cat.6A odule coupling 90° dule 8(8) Cat.5e / C nodule LCMM (or Lu odule F-jack (or IEC dule	C SM, or ST SM/MM) C-jack, or IEC-plug)	urer and modules:	
Dätwyler	Unilan m	odule MS 1/8 Cat.6			

Hole size

 $H \times W$ 

mm

17,3 x 18,2

Hole size

HxW

mm

19,9 x 14,6

Article-

number

905 590 401

Article-

number

905 590 502

Packing

unit

1 pc

Packing

unit

1 pc

Material

Metal

Material

Metal

Support plate for installation of data technology of the following manufacturer and modules:

Support plate for installation of data technology of the following manufacturer and modules:

Suitable blind cap: BTR code-no: 130898-00-I



Model number

Model number

TP05M2

TP04M1

Lexcom

## Support plate



### Support plate



#### AMP SL 110 connect jack Cat.6 AMP AMP-TWIST-6S SL jack Cat.6 AMP AMP-TWIST-7AS SL jack Cat.7 CobiNet TopKey Keystone Cat.6 RJ45

ID-G EWTL

Suitable blind cap: AMP code-no: 0-1116412-1



## Product innovation

Product innovation

Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP06M2	Metal	18,0 x 22,8	905 590 602	1 pc

Support plate for installation of data technology of the following manufacturer and modules: LANscape S250 module RJ45 Cat.6 Cornina

Suitable blind cap: Corning code-no: WAXWSM-00101-C001



Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP07M1	Metal	21,7 x 22,4	905 590 701	1 pc

Support plate for installation of data technology of the following manufacturer and modules: E-Line mit Montageclip 9ZE30021 Kerpen

Product innovation NEU

## Support plate

Support plate



### Support plate



|--|

Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP20M2	Metal	9,8 x 8	905 592 002	1 pc

Support plates for acceptance of optic fibre technology type ST

NEU Product innovation

### Support plate



Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP21M2	Metal	9,7 x 13,3	905 592 102	1 pc

Support plates for acceptance of optic fibre technology type SC-Simplex, LSH / E2000 or LC-Duplex



### Support plate



Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP22M2	Metal	9,7 x 26	905 592 202	1 pc

Support plates for acceptance of optic fibre technology type SC-Duplex

Product innovation NEL

#### Support plate



Model number	Material	Hole size H x W mm	Article- number	Packing unit
TP30M1	Metal	12,8 x 21	905 593 001	1 pc

Support plates for acceptance of data technology, audio or video technology type D-Sub 9



### Support plate



Model number	Material	Hole size Ø mm	Article- number	Packing unit
TP31M1	Metal	24	905 593 101	1 pc

Support plates for acceptance of audio technology type XLR



## FURTHER SUPPORT PLATES OF YOUR CHOISE ARE POSSIBLE ON REQUEST

## SUPLY CONTINUE

#### Flexible wire cover



### Flexible wire cover adapter



### Floor distributor, complete



Model number	Colour	Material	Article- number	Packing unit
FK 7011	iron grey	Polyamide PA6	800 713 001	1 pc
FK 9005	jet black	Polyamide PA6	800 713 009	1 pc

Flexible wire cover for conduits onto the floor, accessible. Adherence to the bending radius of LWL or copper wires. Two snap positions thus fixed connexions are possible.

Two compartments for the accommodation of data and power cables. Bending radius of 250 mm will be adhered. Adaptation to BR netway or to room distribution system (see Tehalit main catalogue) possible.

Wire configuration: 8 x 3 x1 ,5 mm<sup>2</sup>

Extracted length: 1 m

Installation instruction you will find at the end of this chapter

Data sheet available at the internet

3D installation videos available at the internet

Model number	Colour	Material	Article- number	Packing unit
FKA 7011	iron grey	Polyamide PA6	950 900 010	1 pc

Flexible wire cover adapter for the connection of the flexible wire cover onto the cable outlet of the supply unit.

Z Installation instruction you will find at the end of this chapter

3D installation videos available at the internet

Product innovation

Model number	Material	Article- number	Packing unit
BVK- 7011	steel plate	800 713 501	1 m
BVK- 9005	steel plate	800 713 509	1 m

For crossing of wire at the floor, as well as in combination with floor-mounted trunking system made of aluminium.





## Pace protection



Model number	Material	Article- number	Packing unit
BGS- 7011	steel plate	800 713 701	1 m
BGS- 9005	steel plate	800 713 709	1 m

For additional protection at an increased load. Length: 1 m., special length on request

## Bottom support



Model number	Material	Article- number	Packing unit
BH 7011	steel plate	800 713 401	1 m
BH 9005	steel plate	800 713 409	1 m

For fixing of flexible wire cover onto the floor. Length: 0,5 m  $\,$ 

#### Support with strain relief



Model number	Material	Article- number	Packing unit
HMZ-	Polyamide PA6	800 713 801	1 pc

Support for fixing at wall or floor.



## Electrap|an So utions

#### **Round chain**





#### Rosette



## **Connecting adapter**



### Wall support



Model number	Colour	Material	Article- number	Packing unit
RK 7035	Light grey	Polypropylen	800 711 006	1 pc

Round conduit chain for the connection from the floor cable outlet LARK to the connection at the desk. Safety protection of the cables. Easy to open and to close due to the snap mechanism. Acceptance of several different cables. Compliance of the bend radius of LWL or copper wires. Flexible into all directions or as rigid connection.

Two compartments for the accommodation of data and power cables.

Standard length: 1 m = 18 chain link

Wire configuration: 16 x 3 x 1,5 mm<sup>2</sup>



Installation instruction you will find at the end of this chapter

Data sheet available at the internet

Product innovation

Model number	Colour	Material	Article- number	Packing unit
RSRK 7035	Light grey	Polypropylen	800 207 006	1 pc

For covering of the cable outlet LARK at connection of the round chain.



Product innovation

Model number	Colour	Material	Article- number	Packing unit
AARK 7035	Light grey	Polypropylen	800 711 706	1 pc

Connecting adapter with strain relief for connecting at the floor or ceiling.



Installation instruction you will find at the end of this chapter

Product innovation

Model number	Colour	Material	Article- number	Packing unit
WHRK	Light grey	Polypropylen	800 711 806	1 pc

Wall support for safety fixing of the round chain at the wall.



Product innovation



## INSTALLATION INSTRUCTION DEVICE CASINGS GBV4 / GBV3

#### GENERAL INSTRUCTIONS:

In device casing GBV4 system specific protective earth contact sockets according to DIN VDE 0620 with child protection ISL can be installed. Alternatively, it is possible to mount system 45 protective earth contact sockets using mounting plates. As an option, overvoltage protective modules can be inserted.



Routing the cable into the device casing



Route cable through side opening of device casing.

#### Removing the cable insulation



Strip insulation of the individual wires for a length of 10-13 mm.

#### Wiring the cable to base



Insert massive conductors into plug terminals. At socket ISL... 2 plug terminals each for L, N and PE are available for massive conductors up to max.  $2.5 \text{ mm}^2$ .

#### Optional overvoltage protection



As an option, it is possible to attach overvoltage protection IS1-US or else IS2-US. In this case, insert the 3 conductors L, N and PE into respective plug terminals.

Snapping-in the socket base



Snap socket base into device casing

Tightening the strain relief



Pull back surplus cables and tighten screw of respective strain relief.

## INSTALLATION INSTRUCTION DEVICE CASINGS GBV4 / GBV3

#### Inserting the partition wall



Insert partition wall at one side into respective guide fixing it at the other side by rotating it slightly.

#### Snapping-in the socket cover plate



Insert cover plate of socket ISL ... from the top into guide of device casing until tappets snap in.

Snap-in the mounting plate for system 45



Sockets system 45 are installed into device casings via mounting plate. For this, insert mounting plate from the top into guide of device casing until tappets snap in.

Connecting socket system 45



Connect socket for system 45. Wires are routed through opening of mounting plate.

#### Snapping-in socket system 45



Socket for system 45 is pressed from the top into mounting plate and locked.

Optional turning the corners upwards



If the device casing is not installed in the middle of the supply unit, the corners of the device casing are turned up- or downwards. Thus, the cumbersome procedure of cutting off the corners is no longer necessary.

#### Removing the cover



To simplify the installation procedure it is recommended to remove the cover prior to installation. Rotate screwdriver to loosen tappets.

#### Arranging device casing



Arrange device casing horizontally in supply unit, Corners of device casing are turned up- or downwards.

Applying the screwdriver



Put screwdriver into lug opening. Thus, the lug can be optimally guided.

## INSTALLATION INSTRUCTION DEVICE CASINGS GBV4 / GBV3

#### Bending the lug inward



Bend lug of device casing inwards using screwdriver.

#### Positioning of the device casing



Lift device casing to required height using screwdriver.

#### Snapping-in the device casing



Snap-in lug of device casing in required height using screwdriver. Tappet has to produce a clearly audible snap-in noise.

Locking of the opposite side



Lock device casing at the opposite side in supply unit according to aforementioned procedure.

Loosening the device casing



Insert screwdriver slantly into perforation moving it upwards with a circular movement thus loosening tappet of device casing from supply unit.

Pulling out the lug of device casing



Use screwdriver to bend lug of device casing inwards thus pulling it out of the perforation of the supply unit.

Lowering the device casing



Lower device casing to required height using screwdriver.

Snapping-in the device casing



Snap-in lug of device casing in required height using screwdriver. Tappet has to produce a clearly audible snap-in noise.

## **INSTALLATION INSTRUCTION ROUND CHAIN**

### ADVANTAGES AT A GLANCE:

- Round conduit chain for the connection from the floor to the connection at the desk
- Safety protection of the cables
- Easy to open and to close due to the snap mechanism
- Acceptance of several different cables
- Compliance of the bend radius of LWL or copper wires. Flexible into all directions or as rigid connection



Push in round chain



Push in at the side of the round chain.

#### Open round chain



Due to push in of the sidewise perforation the round chain is getting opened due to a snap mechanism. Feed in cables



Lay in cable from the top into the opening.

#### Close round chain



Close upper lid of the round chain due to back pushing. Lid springs back into the closed position.

#### Set up rigid connection



In order to set up a rigid connection stick the single round chain links together.

Set up flexible connection



Due to pull out the catch mechanism the round chain enables flexibility. The round chain is therefore movable in all directions.

## INSTALLATION INSTRUCTION ROUND CHAIN

#### Loosen round chain



Due to a circular / pull motion two round chain links can be moved from each other.

#### Mount wall support



Fix wall support with a screw at the wall. The wall support has to be mounted in such a way that the guide slot is closed at the bottom.

Join the round chain



Feed the round chain link with the axial slide from the top into the wall support.

#### Snap in round chain



Insert the complete round chain bottom-up into the guide slot.

#### Mount connection adapter



In order to mount the round chain under a desk the connection adapter has to be fixed bottom-up at the desk top.

Plug in round chain



Insert the round chain bottom-up with the opposing latch into the connection adapter.

#### Snap in round chain



Push the round chain from the side into the middle position. Through this the round chain is locked and secured against loosening.

Connect onto the cable outlet



According to the same principle of the connection adapter the round chain will be connected onto the cable outlet. Insert and push it from the side into the middle position.

Mount rosette cover



Mount the 2-part rosette cover from both sides and insert them into each other.

## INSTALLATION INSTRUCTIONS FLEXIBLE WIRE COVER

### ADVANTAGES AT A GLANCE:

- Flat flexible wire cover for running of cables on the floor
- Compliance of the bending radius of 250 mm for LWL or copper wires
- Two indexed position therefore rigid connection are possible
- Two compartments for accommodation of data or power lines
- Solid tread



#### Insert flexible wire cover adapter



Insert the flexible wire cover adapter from the top into the middle groove.

#### Connect flexible wire cover



Clip in flexible wire cover with the groove into the latch of the flexible wire cover adapter.

Pull out optional the flexible wire cover



In order to give the flexible wire cover flexibility the single connectors can be pulled out so that they can be kept in the second holder.

#### To lay curves



Are the single elements of the flexible wire cover been pulled out curves can be layed.

Feed in cables



Put in the plug into the power socket. Push in the cable from the top into the flexible wire cover. The side perforation of the element of the flexible wire cover can be pressed down.

Close lid



Close the lid of the supply unit. The cable outlet of the supply unit is being kept open.



## NOTES

## **INFORMATION**



## AT A GLANCE:

- General technical information
- Instructions for the composition floor layer
- Index for model numbers
- Index for article numbers
- General sales condition

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Seite 15

Overview agencies national / international

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#### TRANSPORT DAMAGE:

Any transport damage must be noted immediately on the waybill and must be countersigned by the deliverer. We can only exchange or take back contractually delivered goods in exceptional cases. If we agree (subject to an inspection of the goods) to exchange or take back the goods, the following is regarded as agreed: The exchange or taking-back must be agreed with us in writing before the goods are returned. The goods concerned may not be used, already assembled, defective, dirty or obsolete materials or special products. The goods must be returned to the warehouse stipulated by us, freight-free, carriage-free and at the sender's risk. Following the receiving inspection and our agreement to take back the goods, we shall grant a credit to be offset against the customer's account, minus a collection fee of at least 30% of the value of the exchanged or returned goods.

## **GENERAL TECHNICAL INFORMATION**

#### MECHANICAL LOAD:

Underfloor trunking systems, floor boxes and accessories must have the sufficient stability. The trunking system, floor sockets and hinged covers are manufactured to the technical requirements of DIN VDE 0634 Part 1 and Part 2. For flush-mounted floor components, the required load-bearing capability is 1500 N. Slight sagging is permissible.

#### MANUFACTORING:

At the manufacturing of underfloor trunking systems the behaviour of different expansion and shrinkage of the adjoining materials (screed, floorings) has to be taken into account.

The underfloor trunking system has to be protected against these movements (variation of volume) with suitable measurements. In order to avoid cracks at thin floorings (stone, tiles), it has to be proofed, if the flooring is suitable for these application.

#### PROTECTIVE MEASUREMENTS, POTENTIAL EQUALIZATION:

Underfloor trunking systems, floor boxes and accessories out of metal and metal parts of a composite construction have to be integrated of the protective measurements according DIN VDE 0100.

The components are to be considered as sufficient conductive if the connection points either welded, soldered, riveted, bolted or if the connections are made under pressure at metallic clean surfaces.

At building-site made expansion joints the connection for the protective measurement has to be made through a flexible cable.

The protective conductor terminal must accommodate the required number of conductors of a rated cross-section of 1,5 - 4mm<sup>2</sup>.

At inactive metal parts, e.g. bolts, rivets, labels, the protective conductor terminal can be ignored, if these parts are to small as their surface is to small to be connected.

#### SOUND PROTECTION:

Sound protection in buildings is described in DIN 4109. The transmission of sound inside trunking can be restricted by the customer using suitable muffler materials. Fire safety regulations must be observed when selecting the muffler materials.

The transfer of solid.borne sound through ceilings that is caused by the sound of footsteps is reduced by using screed-covered trunking with

muffler mats. Electraplan trunking systems mounted flush with the screed are supplied with muffler bearings on request. These muffler bearings reduce the transmission of solid-borne sound through the ceilling.

#### FIRE PROTECTION:

General statements relating to fire safety are outlined in DIN 4102. Cable compartments with cable bushings must be approved. Special regulations are contained in the regional fire protection ordinances.

#### GENERAL TOLERANCES:

General tolerances from article made of metal according DIN 2768 part 1 middle. General tolerances from article made of polyamide according DIN 16901.

#### FURTHER STANDARDS, GUIDELINES AND RULES:

For the erection and use of underfloor installations the requirements of the following DIN-standards, VDE-statuary requirements and rules of the respectively valid edition are obligatory:

- DIN VDE 0634 Teil 1 (Underfloor electrical installation build-in units)
- DIN VDE 0634 Teil 2 (Underfloor electrical installation trunkings and accessories)
- DIN VDE 0100 (especially part 250)
- DIN VDE 0105
- DIN VDE 0107
- DIN VDE 0108 (see as well annex 1 of part 1)
- DIN VDE 0298
- DIN VDE 0800
- DIN 31000/VDE 01000
- FTZ-guideline 731TR1
- TAB (Technical connecting condition of the responsible electric power station)
- BGV A2 (Electric plants and devices)
- AVB Elt. V (General condition for electric supply of tariff customer)
- VOB (Service rule for construction services)
- Safety regulations for offices
- Guideline: Construction and equipment for schools
- Guidelines for fire protection, form 2013 (Vds)

Information

## LAYING OF FLOOR COVERINGS

#### PREPARATION:

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The screed must be cured before the installation.

Floor coverings that become detached from the surface (screed) constitute a trip hazard. Trip hazards must be avoided in accordance with section 4.9 ",Safety regulations for office workplaces" of the Administration Professional Liability Insurers Association. In this case and if the carpet ruffles significantly, we recommend the installation of a butt-joint cover.

Note: The company laying the floor covering is responsible for cutting and laying the floor covering accurately at the exit points of the trunking system (VOB Part C/DIN 18365). Trunking covers made of wood materials must be bonded on both sides otherwise, the trunking covers may distort. If bonded on one side, we recommend the use of double-sided adhesive carpet tape.

#### COVERING BUTT EDGE / CONNECTION OF FLOOR COVERING AT FLUSH FLOOR TRUNKING SYSTEM:

The trunking covers have to be lifted up before laying the floor coverings.

A plastic PVC profile is installed at the factory in the left side and right side profile of the trunking. The plastic profile can be fitted flush (bonded over) for raised (visible) as a covering butt joint edge.

#### FLUSH COVERING BUTT EDGE (RAISED 0 MM):

This type of installation is recommended if the trunking covers are rarely lifted. This is not suitable for fraying carpets. We recommend covering butt cover. Insert the plastic profile in a flush position inside the trunking side profile and glue it. After the bonding is hardened, lay the textile floor covering over the trunking, cut off the floor covering on the inside of the plastic profile. Do not damage the plastic profile. The cut-off floor covering should be used for covering the trunking blind covers. At hard floor coverings as wood or tiles the coverings should be worked up to the inside of the PVC-profile. An appropriate expansion joint has to be considered.

#### RAISED COVERING BUTT EDGE (RAISED 4 MM, OPTIONALLY AS WELL IN 3,2 MM AVAILABLE):

This type of installation is recommended if the trunking covers are often lifted. This is not suitable for fraying carpets. We recommend covering butt cover. Remove the plastic profile from the trunking side profile. Lay the textile floor covering over the trunking, cut off the floor covering on the inside of the plastic profile. The cut-off floor covering should be used for covering the trunking blind covers. Insert the plastic profile in the trunking side profile in a raised position and glue it. A PVC floor covering can be welded with the butt edge. At hard floor coverings as wood or tiles the coverings should be worked up to the inside of the PVC-profile. An appropriate expansion joint has to be considered.

#### NOT VISIBLE SCREW HEADS (RARELY LIFTING OF TRUNKING COVERS):

Set clean trunking covers with countersink side above into the trunking and screw in the fastening screws. Cover and glue each trunking cover with floor coverings. Take care of the right direction of the web of the carpet. (Attention! Before opening of the trunking cover the floor covering has to be unfastened from the trunking cover in order to reach the fastening screws.)

#### VISIBLE SCREW HEADS (OFTEN LIFTING OF TRUNKING COVERS):

Paste up the clean trunking cover on the un-countersink side with the floor covering. Take care of the right direction of the web of the carpet. Inlay the trunking cover into the trunking. Screw the fastening screws of the trunking cover through the carpet into the trunking side profile. The web of the carpet covers and lines the screw heads.
# LAYING OF FLOOR COVERINGS

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#### COVERING BUTT COVER / CONNECTION OF FLOOR COVERING AT FLUSH FLOOR TRUNKING SYSTEM:

Covering butt cover is recommended at easy frayed textile floor covering.

Please order model-no. ZEP BSA... separately. They are supplied loose in 2,4 meter lengths.

Lift up the trunking covers before laying the floor coverings. On the left and on the right side of the trunking cover a plastic profile is layed in the trunking side profile. Remove the plastic profile from the trunking side profile. Lay the textile floor covering over the trunking, cut off the floor covering on the inside of the plastic profile. The cut-off floor covering should be used for covering the trunking blind covers. At hard floor coverings as wood or tiles the coverings should be worked up to the inside of the trunking side profile. An appropriate expansion joint has to be considered.

Press the butt-joint cover into the slot between the trunking covers and the trunking side profile. Do not pull the covering butt cover longitudinally.

### NOT VISIBLE SCREW HEADS (RARELY LIFTING OF TRUNKING COVERS):

Set clean trunking covers with countersink side above into the trunking and screw in the fastening screws. Cover and glue each trunking cover with floor coverings. Take care of the right direction of the web of the carpet. (Attention! Before opening of the trunking cover the covering butt cover has to be removed carefully from the slot. Afterwards the floor covering has to be unfastened from the trunking cover in order to reach the fastening screws.)

#### VISIBLE SCREW HEADS (OFTEN LIFTING OF TRUNKING COVERS):

Paste up the clean trunking cover on the un-countersink side with the floor covering. Take care of the right direction of the web of the carpet. Inlay the trunking cover into the trunking. Screw the fastening screws of the trunking cover through the carpet into the trunking side profile. The web of the carpet covers and lines the screw heads. (Attention! Before opening of the trunking cover the covering butt cover has to be removed carefully from the slot.)

#### FLOOR BOXES AND INSTALLATION OPENINGS IN TRUNKING COVERS:

Remove the factory-installed protective cover.

At universal junction boxes the protective cover has to exchanged against a fitting frame UDM2 ... or UDM3... (order separately) according the respective size of the applied hinged cover or blind cover. At junction boxes e.g. of type UDH E2/Q2 fitting frames are not necessary as the installation openings can accommodate the hinged covers and blind covers directly.

#### AT HINGED COVER OR BLIND COVER WITH CARPET FRAME:

Lay the textile floor covering over the respective installation opening and cut off at the inside of the installation opening. At hard floor coverings as wood or tiles the coverings an appropriate expansion joint to the installation opening has to be considered.

#### AT HINGED COVER OR BLIND COVER WITH CARPET EDGE:

Lay the textile floor covering over the respective installation opening and cut off approx. 3 mm bigger at the inside of the installation opening. At hard floor coverings as wood or tiles the hinged cover has to be installed before laying the coverings. An appropriate expansion joint has to the hinged cover has to be considered.

The cut-out textile floor covering should be used for the respective lid of the applied hinged cover or blind cover. Templates for carpets for cutting the floor coverings of the respective lid has to be ordered separately. At the laying of the lids with textile floor covering it has to taken care at the right direction of the web of the carpet. At hard floor coverings an appropriate expansion joint in the lid has to be considered.

# INSTRUCTIONS FOR THE COMPOSITION FLOOR LAYER

#### **GENERAL INSTRUCTIONS:**

The trunking system when levelled to the required screed height must not be subjected to loads, walked on or opened before the required screed strength has been reached. In the case of covers with snap fastenings, the screws securing the cover must not be removed until after the screed has been applied.

The flush floor trunking and junction boxes must be levelled to the correct height before the screed is laid (meter rules provided by the customer). The person laying the screed should check the levelling height.

Lay the screed in such a way that it is compacted in the areas bordering the trunking system in order to perform its supporting function. All trunking openings that are larger than the screed aggregate used must be sealed.

#### FLOWING SCREED:

Before the screed is applied, the trunking and sockets must be weighted down to prevent them floating up.

The customer must protect the trunking system and sockets against the penetration of screed while still fluid. Sufficient screed must run under the side profiles and against the films. Cavities must be avoided.

#### AGGRESIVE SCREEDS:

The customer must insulate all metal parts coming into contact with the screed using a chloride-free and alkali-free bitumen coating or suitable measures (VOB Part C).

### CORROSION:

The corrosion on metal underfloor components is reduced to a minimum, if the maximum humidity of screed (according DIN 4725 part 4) has been complied. Trunkings have to be sufficient ventilated for drying.

#### HOT SCREED:

Flush floor trunking and junction boxes with flexible screed casing must not come into direct contact with hot screeding compound. An approximately 10 cm wide layer must be worked onto the components for thermal insulation, e.g. cement screed.

Trunking with a trunking bottom and floor sockets with metal casing may not come into direct contact with the hot screeding compound. The components must be thermally insulated, e.g. with bitumen paper.

Electraplan Solutions GmbH will not be liable for any damage caused by incorrect installation on the trunking system or the junction boxes in contact with hot screed.

### EXPANSION PRESURE OF THE SCREED PLATFO RM:

The screed can expand during the hardening phase and press against the trunking and the junction box. This is depending of the size of the screed slab and of the composition of the screed.

Upon recommendation of screed companies we offer a true to size selfadhesive soft rubber which can be fixed at the upper part of the profile that the expansion pressure of the screed slab to the trunking can be minimized.

The decision about the use of soft rubber has to be co-ordinated with the composition floor layer.

#### FOOTFA LL SOUND INSULATIO N AND SCREED CASING:

It is essential that the footfall sound insulation mat be brought up to the flexible screed casing of the trunking and socket. Metallic conductive sound bridges from the trunking to the bare floor must be avoided.

#### FLEXIBLE SYSTEM SUSPENSION:

The flexible system suspension enables the expansion of the screed slab to be compensated for. To prevent the formation of cracks, rigid connections between the trunking and bare floor are undesirable.



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# GENERAL TERMS AND CONDITIONS

#### 1. Obligation

Our quotations are non-binding. All quotations and agreements including all future business, are based on our conditions. All concluded sales and agreements shall not become binding on us until we have issued our written acceptance of the order or our separate confirmation. Our conditions shall be sent to the customer together with the order confirmation. The ordering party declares his agreement with our conditions by accepting the goods unequivocally. We do not recognise contradictory delivery conditions even if we have not expressly contested such different conditions. Additional agreements or deviations from the agreements made shall only become effective if confirmed in writing. The contract shall remain binding even if individual points of its conditions are legally invalid, unless adhering to the contract would mean unreasonable hardship.

#### 2. Prices

The sales prices valid on the date of delivery apply to all concluded business.

#### 3. Delivery, transfer of risk

The contractually agreed delivery periods apply. It is permissible for these deadlines to be slightly exceeded. Observance of the delivery deadline requires that we receive on time all documents to be provided by the ordering party, the necessary approvals and releases, clarification in good time, approval of the plans and also observance of the agreed payment conditions and other obligations. If these requirements are not fulfilled, the deadline shall be extended as appropriate. The delivery deadline shall be regarded as met when the operational consignment is sent for dispatch within the agreed delivery period or performance period or has been collected. If delivery is delayed for reasons attributable to the ordering party, this period shall be regarded as met provided that readiness for dispatch was reported within the agreed period.

The delivery deadline shall be extended as appropriate if unforeseeable events occur that are beyond the seller's control, irrespective of whether such problems arise within the seller's company itself or with a subcontractor. Examples of such problems include force majeure, official measures and also war, rebellion, partial or general mobilisation, strikes, lock-outs, epidemics, operational problems and delays in the delivery of important materials (provided that such problems can be proven to have a significant influence on production or on the delivery of the order)

In case of impossibility of the supply due to the aforementioned events we are authorised to withdraw in all or part from the contract. Such problems are also not attributable to the seller if they arise during an already existing delay. If the ordering party is considering lodging damage claims due to a delay (including delays resulting from accidental incorrect deliveries that are the fault of the supplier), he shall be entitled to demand damages for delayed delivery, with the exclusion of further claims. For each full week of the delay, this shall amount to half of one percent (but in total maximum 5%) of the value of the respective part of the overall delivery that, as a result of the delay, cannot be used on time or in accordance with the contract.

The ordering party can also demand the payment of damages for delays if the aforementioned circumstances do not arise until the originally agreed deadline has been passed. Claims for damages by the ordering party that exceed the stated limit of 5% shall not be possible in any case of delayed delivery, including after the expiry of a period of grace set for the supplie This shall not apply if liability arises in cases of intent or gross negligence. The ordering party's right to withdraw from the contract following the fruitless expiry of a period of grace set for the supplier shall not be affected by this.

The consignment shall in any case be sent on the account of the ordering party and at the ordering party's risk, even if dispatch does not take place from the place of fulfilment. Unless we have particular specifications from the purchaser, the method of dispatch shall be at our discretion, and we shall accept no responsibility for selecting the cheapest method. Any insurances requested by the purchaser shall be charged to him. Goods reported as being ready for dispatch and whose contractually delivery deadline has arrived must be called forward and accepted immediately. Otherwise (or if dispatch is impossible), we shall be entitled to store them at our discretion and at the expense and risk of the ordering party, and shall also be entitled to regard them as delivered from the plant and to invoice them accordingly. If dispatch or delivery is delayed at the ordering party's request, a storage charge amounting to half of one percent of the invoiced amount shall be billed for each commenced month, starting one month after announcement that the goods are ready for dispatch. The ordering party may not reject part deliveries.

#### 4. Liability

We shall be liable as follows for problems, including the absence of assured properties: All parts or services that have become unusable or whose use has been severely restricted within the legal warranty period as from the transfer of risk and irrespective of the period operation as a result of a problem that existed prior to the transfer of risks - especially due to faulty design, poor material or incorrect configuration - shall be repaired or replaced free of charge at our discretion. If such defects are found, the purchaser must inform us no later than on the 8th day.

The ordering party must observe his contractual obligations, particularly the agreed payment conditions. If a defect compliant is lodged, the ordering party's payments may be withheld to the extent that is appropriate in relation to the defect in question. However, if the contract forms part of his commercial enterprise, the ordering party may withhold payments only if a de-fect compliant is lodged the justification of which cannot be in doubt. The ordering party must grant us the appropriate necessary time and opportunity to remedy the defect. If he refuses to do this, we shall be freed of our liability for the defect.

If we allow a period of grace granted to us to pass without remedying the defect, the purchaser shall be entitled to demand cancellation of the contract (repudiation) or a reduction in the payment. The right of detention of the ordering party does not exist, if his claims of defects after the expiration of the legal period of warranty is time-barred. If damage claims are lodged, these shall be limited to a maximum of the value of the supplied components. Further claims on the part of the client shall not be possible. Liability damages shall be regulated within the framework of the contractor's liability insurance. The ordering party's right to lodge claims arising from damages shall in any case expire from the day of complaint within the legal period of lapse of the time of the complaint. The same applies for claims of the ordering party in connexion with action against property damage (e.g. callback). If no agreement is reached within this period, the supplier and the ordering party can agree to extend this time limit.

Liability for defects does not apply to natural wear or to damages arising following the transfer of risk as a result of incorrect or negligent handling, excessive stress, unsuitable equipment, faulty construction work, unsuitable building ground and such chemical, electrochemical or electrical influences that are not prerequisites according to the contract.

Any incorrect modifications and repair work performed by the ordering party or by third parties shall relieve us of our liability for the resulting damage. For remedying defects, replacement deliveries or replacement services the legal warranty periods. It shall run at least until the original warranty period for the delivery objects expires. The period for remedying defects shall be extended by the duration of the operational interruption arising because remedies, replacement deliveries or replacement services become necessary for those parts that cannot be used for their intended purpose due to the interruption.

The above warranty periods do not apply if legislation stipulates longer periods. There shall be no possibility of further claims by the ordering

The above paragraphs apply accordingly to claims by the ordering party for repairs, replacement deliveries or damages arising from proposals or consultations conducted within the framework of the contract or from the infringement of secondary contractual obligations. Other damage claims by the ordering party arising from positive contract infringement, the infringement of obligations in the contract negotiations or from impermissible action shall not be possible. This does not apply unless there is definite liability in cases of intent or gross negligence on the part of the supplier, one of his legal representatives or one of his vicarious agents. This liability limitation shall apply accordingly to the ordering party. Replacement deliveries of or replacement services on components or subassemblies supplied by us with items or services not obtained from us (apart from small materials) may not be undertaken by the ordering party or third parties without our express approval.

If the supplied goods are trading products that do not originate from our own production, warranty claims may only be made against the respective manufacturer with our mediation. In such cases, we only exercise the function of a commercial representative.

#### 5. Special fabrication

There shall be no possibility of exchanging specially produced items or articles not kept in stock.

Payment shall be made within 30 days from the date of invoice, net and without any reduction. There shall be no possibility of offsetting on the basis of any counter-claims of the purchaser, unless this involves undisputed or legally binding accounts receivables. If the payment deadline and the reminder with a period of grace are exceeded, interest shall be charged as deemed appropriate by the major banks for uncovered credits. In any case, if the purchaser cannot provide sufficient security, we shall be entitled to demand security for the purchase price or payment in advance.

If this demand is not met, we shall be entitled (after setting a period of grace) to withdraw from the contract or to demand damages for non-fulfilment. If the goods have already been de-livered and if our demand for security on the purchase price or immediate payment is not meet, the goods must be returned immediately in their original condition and at the purchaser's expense. In addition to the return of the goods, we can also demand damages due to non-fulfilment. If part-deliveries of components or subassemblies are made that cannot be used due to a delivery stoppage arising from non-payment of due bills, substitute deliveries or substitute services on these part-deliveries may not be made by the ordering party or by third parties with items or services not obtained from us without our express approval.

#### 7. Reservation of ownership

Our deliveries shall remain our property until payment of all accounts receivables, irrespective of the legal basis and even if the purchase price has been paid for specially designated goods. In the case of an outstanding bill, the reserved ownership is the security for our outstanding balance.

If the purchaser is in arrears or if our interests are jeapordised by the position or behaviour of the purchaser, we have the right to repossess the material of which we reserve ownership from the purchaser or his customer either in whole or part and to dispose of it as we see fit. The goods must be returned to the place of fulfilment freight-free and at the expense and risk



of the ordering party. The contractual relationship shall be deemed dissolved, when we state explicitly the right of repossession or respectively the assertion of the retention of title. The purchaser shall reimburse us for the damages arising from non-fulfilment of the contract. The purchaser must inform us without delay about any levy of execution or other obstacle from a third party.

The goods are worked and processed without this meaning that the purchaser gains ownership (as defined by Article 950 of the German Civil Code) and without placing us under any obligation. The processed goods shall serve as security for us to the amount of the invoice value for the goods on which ownership is reserved. If the purchaser processes our goods together with other goods not belonging to us, we shall acquire joint ownership of the new material in relation to the value of the goods on which we reserve ownership with respect to the other processed goods at the time of the processing. Otherwise, the same applies to the new material resulting from the processing as applies to the goods on which we reserve ownership. These new goods shall be regarded as goods on which ownership is reserved in the sense of these conditions. The same applies for the connexion of conditional goods with land and buildings.

The purchaser may process and sell on our property only within normal business transactions and only if he is not in arrears; there shall be no possibility of pledging, transfer of the security or other disposal. The purchaser is only entitled and authorised to sell on the reserved ownership goods with the stipulation that the purchase price from the selling-on is transferred to us in accordance with the following conditions.

The purchaser's claim arising from the selling-on of the reserved ownership goods shall be immediately assigned to us, irrespective of whether the reserved ownership goods are sold on without being processed or after processing, or whether they are sold to one or more buyers. The assigned claim is for our security to the value of the respective sold reserved ownership goods. In the event that the reserved ownership goods are sold by the seller with other goods that do not belong to us (either processed or unprocessed), the assignment of the purchase price claim shall only be to the value of the reserved ownership goods which form the subject of this purchase contract or part of the purchased items together with other goods. The purchaser shall be obligated on demand to announce the assignment to the third party for the purpose of payment to us. If the value of the securities that exist for us exceeds our claim by more than 10% in total, we shall be obligated at the purchaser's request to release the corresponding amount of securities at our discretion.

#### 8. Data protection

We are authorised to process and save according to the German Data Protection Law the data concerning our customers which relates to or is relevant to the business relationships, irrespective of whether this information originates from the customer or from third parties. This notice applies as notification of the first saving as defined by Article 26 of the German Data Protection Law.

9. Assignment of claims

In order to become effective, our prior approval is required for an assignment or pledging of claims against third parties arising from our orders to the contractor.

#### 10. Place of fulfilment and place of jurisdiction

The place of fulfilment for delivery and payment, and also all other claims arising from the contractual relationship, shall be Schenefeld. If the ordering parties is a fully qualified merchant, the sole place of jurisdiction for all indirect or direct disputes arising from the contractual relationship shall be Pinneberg District Court or the Itzehoe Regional Court, at our discretion and depending on the disputed value. German law shall apply to all contractual relationships, including contracts involving other countries.

#### 11. Binding nature of the contract

The other parts of contracts remain binding even if individual clauses are legally invalid. In this case, we shall be entitled to adapt the invalid clause according to Article 315 of the German Civil Code

- Stand: 2006-01 -

# INTERNATIONAL AGENTS

### CENTRAL SALES EUROPA

Electraplan Solutions GmbH Asbacher Straße 141 D-53545 Linz am Rhein Telefon 0049-2644/5606-739 Telefax 0049-2644/5606-90 Kontakt Hans Drechsel hans.drechsel@electraplan-solutions.de www.electraplan-solutions.com

## BULGARIA

Niedax Bulgarien EOOD Losenetz Filip Kutev Strasse 137 BG-1407 Sofia Phone 00359-2-9624504 Telefax 00359-2-9624574 Contact Zdravko Yordanev Rusev office@niedax.bg www.niedax.bg

## FINLAND

AC Express Oy Laitatsillantie 3, PL 4 FI-57170 Savonlinna Phone 00358-15-5178143 Telefax 00358-15-5178144 Contact Jukka Tuunanen jukka.tuunanen@expressfinland.com www.expressfinland.com

## HUNGARY

Electraplan Termelö Kft. Budafoki u. 10 HU-2030 Erd Phone 0036-23521300 Telefax 0036-23390489 Contact Janos Kincses electraplan@electraplan.hu www.electraplan.hu

## LATVIA

Jauda A/S Energofirma Krustpils Street 119 LV-1057 Riga Phone 00371-7725-755 Telefax 00371-7725-740 Contact Maris Kolesnikovs info@jauda.lv www.jauda.com

## POLAND

Electraplan SMT Sp.z.o.o. UI. Kordiana 35 PL- 05-502 Piaseczno Phone 0048-22-3314750-54 Telefax 0048-22-3314755 Contact Stanislaw Sarnecki s.sarnecki@electraplan.pl www.electraplan.pl

## SLOVAK REPUBLIC

Electraplan Slovensko s.r.o. Stara Vajnorska 4 SK-83104 Bratislava Phone 00421-2-446-30934 Telefax 00421-2-446-30935 Contact Milan Stranovsky niedax@niedax.sk www.electraplan.hu/sk

#### AUSTRALIA

Cableduct Systems Pty Ltd 4 Burgay Court P.O.Box 341 AU-6017 Osborne Park/WA Phone 0061-8-9204 4445 Telefax 0061-8-9204 4445 Contact Greg Williams gregw@cableduct.com.au www.cableduct.com.au

## CZECH REPUBLIC

Niedax Kleinhuis s.r.o. Palackeho 701 CZ-27746 Veltrusy Phone 00420-315781116 Telefax 00420-315781118 Contact Max Hillebrand electraplan@electraplan.cz

## FRANCE

Niedax Kleinhuis France S.A.R.L. 7, Rue Calmette FR-69740 Genas Phone 0033-4-72478222 Telefax 0033-4-72478220 Contact Christian Besnard niedax-kleinhuis@club-internet.fr

## ICELAND

Smith & Norland Noatuni 4 IS-18105 Reykjavik Phone 00354-520-3000 Telefax 00354-520-3001 Contact Jon Norland sminor@sminor.is www.sminor.is

### LUXEMBOURG

Minusines S.A. 8, rue de Hogenburg LU-1022 Luxemburg Phone 0035-2-495858-1 Telefax 0035-2-495866-67 Contact Erny Frank info@minusines.lu www.minusines.lu

### PORTUGAL

TECNICON S.A. Rua Joao Saraiva 16, n° 16 PT-1700-250 Lisboa Phone 00351-21-7991000 Telefax 00351-21-7964086 Contact Antonio Pedro commercial@tecnicon.pt www.tecnicon.pt

## SPAIN

Niedax Kleinhuis Iberica S.L. Italia 5 y 7 ES-28971 Grinon-Madrid Phone 0034-91810-3197 Telefax 0034-91810-3889 Contact Eugenio Lopez Aldea eugenio.lopez@niedax.com

### AUSTRIA

Niedax Kabelverlegesysteme GmbH Industriezentrum NÖ-Süd Straße 2a, Objekt M9 AT-2351 Wiener Neudorf Phone 0043-2236-659290 Telefax 0043-2236-6592920 Contact Alfred Skaral office@niedax.at www.niedax.at

### EGYPT

Building Automation Consultation 4 Tahran Sq.- Dokki EG-Kairo Phone 002-02-7489842 Telefax 002-02-7487220 Contact Mohamed Shalabi bacshal@tedata.net.eg

### **GREAT BRITAIN & IRELAND**

KHP Products Ltd. Clash Industrial Estate Tralee Co. Kerry Phone 00353-66-7180300 Telefax 00353-66-71803001 Contact Rory Kilgallen info@khpproduts.com www.khpproducts.com

### IRAN

PTN Company 44, Koutosh Alley, Shahid Beheshti Shariati Ave. IR-Tehran Phone 00982-188736138 Telefax 00982-188767563 Contact Saeed Khanjani ptn.rak.irmineral.box@gmail.com

## MIDDLE EAST

Niedax Middle East FZE Sheikh Zayed Road LOB 18, Office 3209 Jebel Ali, Dubai United Arab Emirates Telefon 00971-507724383 Telefax 00971-48865442 Kontakt Jojo Trinidad jojo.trinidad@niedax.com

### ROMANIA

Electraplan Romania SRL Calea Grivitei nr. 51, ap 6 RO- Bukarest, Sector 1 Phone 0040-21-6680280 Telefax 0040-21-6680280 Contact Lazlo Lurtz office@electraplan.ro www.electraplan.ro

## SWEDEN

MP Bolagen Industri AB Storgatan 25, box 3 SE-57421 Vetlanda Phone 0046-383-763613 Telefax 0046-383-12250 Contact Ulf Birath ulf@mpbolagen.se www.mpbolagen.se

### BELGIUM

Niedax Kleinhuis N.V. Tulpenstraat 2 BE-9810 Eke-Nazareth/Gent Phone 0032-9-2200790 Telefax 0032-9-2200791 Contact Geert Demeyer info@niedax.be

## DENMARK

Knud Wexoe A/S Skaettekaeret 11 DK-2840 Holte Phone 0045-4546 5800 Telefax 0045-4070 1431 Contact Erlich Bech eb@wexoe.dk www.wexoe.dk

### GREECE

Elektra Hellas A.G. Katsimicha/Postbox 136 GR-19002 Paiania - Athen Phone 0030-210-6646780 Telefax 0030-210-6646902 Contact George Strapatsakis info@elektrahellas.gr www.elektrahellas.gr

### ISRAEL

Katzenstein Adler & Co Ltd P.O.Box 2416 2, Hasadna St IL-43106 Ràanana Phone 00972-9-7475777 Telefax 00972-9-7440360 Contact Avigdor Eksztain avigdorE@k-a.co.il www.k-a.co.il

## NETHERLANDS

Niedax-Kleinhuis B. V. Bijsterhuizen 21-03 NL-6604 LE Wijchen/Nijmegen Phone 0031-24-3788533 Telefax 0031-24-3788390 Contact Wim van Wijk info@niedax.nl www.niedax.nl

### RUSSIA

Electrotechnical Trading Company Lenisskaya sloboda str. 23/16 RU-115280 Moscow Telefon 007-495-956-3404 Telefax 007-495-956-3404 Kontakt Valery Skitev info@eltorgcom.ru www.eltorgcom.ru

## SWITZERLAND

Niedax Kleinhuis AG Wehreyering 21 CH-3930 Visp Phone 0041-27-9456868 Telefax 0041-27-9456869 Contact Adrian Lowiner info@niedax.ch www.niedax.ch



# NOTES



Electraplan Solutions GmbH Osterbrooksweg 69 D-22869 Schenefeld

Tel.: +49 (0) 40 83990-0 Fax: +49 (0) 40 83990-109

info@electraplan-solutions.de www.electraplan-solutions.com

# WWW.ELECTRAPLAN-SOLUTIONS.COM