

Product Range 2012

Boxes, housings and systems
for electrical installation

Branded products for professional electrical installation.



Flush-mounting . Cavity wall . Concrete construction . Installation housing
Earthing . Cable glands . Tools . Energy efficiency
Fire protection . Sound insulation . Radiation protection . Refurbishing

 **KAISER**



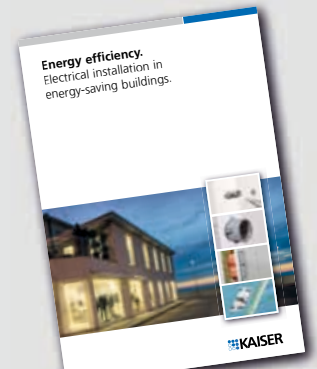
Energy efficiency.

In addition to the users' needs in respect of architecture and function, **building technology which meets the challenges** of the future primarily has to conform to specific building guidelines. Important guidelines define the energy standards. This is where it is important to reduce consumption of primary sources of energy by means of greater efficiency

Innovative KAISER products help you to satisfy the increased demands of the European guidelines and national ordinances such as **Energy-Saving Ordinance (EnEV)**.

For electrical installations without heat bridges in an insulated external facade. KAISER can provide you with suitable products for attaching or installing - and now also for retrofitting.

KAISER has the right solutions - also for retrofitting - for airtight electrical installations, including without heat bridges.



"Energy efficiency" topics & solutions at www.kaiser-elektro.de



Fire protection.

The most important tasks of preventive fire protection are saving human lives and minimising damage to property. To do this, escape routes must be kept free to ensure that human lives can be saved.

KAISER fire-protection systems give you reliable solutions for electrical installations in fire-protection walls and ceilings and which ensure the necessary fire resistance ratings, including in the event of fire. Intelligent products keep the escape routes free - in buildings and ships' walls.



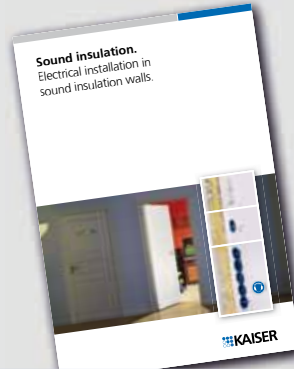
"Fire protection" topics & solutions at www.kaiser-elektro.de



Sound insulation.

Constructional sound insulation in buildings means familiarity and peace and quiet, but also intimacy and the feeling of security. These factors are just as important in the private sector as in public and commercial buildings.

KAISER's innovative sound insulation boxes ensure the constructional demands made of sound insulation walls, even with fitted installations. The specially-developed solid box body with sound insulation sheathing absorbs and reflects sound almost completely.



"Sound insulation" topics & solutions at www.kaiser-elektro.de

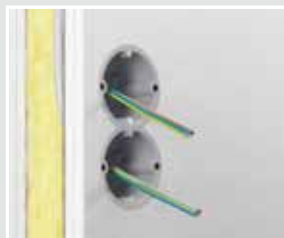


Radiation protection.

Radiation protection walls in X-ray and radiation rooms in doctors' practices, laboratories and hospitals protect patients and employees in these institutions against dangerous X-ray. Installing switches, sockets and accessories interferes with the wall's screening function. In the past, this had to be restored by using complicated screening methods, for example lead sheet or lead aprons. The use of the new radiation protection boxes maintains the wall's radiation protection without any additional screening. Retrofitting is now easily possible.



"Radiation protection" topics & solutions at www.kaiser-elektro.de





Refurbishment.

Electrical installation solutions for redevelopment, renovation and modernisation

Redevelopment, renovation and modernisation are vital factors which are increasingly important for electrical installation work. Specifications such as the energy pass, fire protection or sound insulation measures as well as future communication systems and the consideration of accessibility demand a lot from architects, planners and fitters. KAISER has matching product system solutions which can deal with these problems - safely, consistently and in accordance with building-site practices.



"Refurbishment"
topics & solutions at
www.kaiser-elektro.de



AGRO Cable Glands

For professional cable entries.

AGRO Cable Glands made of plastic or brass represent the best possible quality and practical suitability. The complete range of innovative products includes cable glands for everyday electrical installations, and also special products such as EMC or Ex-cable glands, elbow cable glands, flange angles, connection angles, universal cable entries with all accessories and everything that you need for professional cable entries.

The practical range with optimal quality standards offers you a suitable product for almost every task, or a solution which is developed individually for trade and industry.

From page 236



"Cable glands"
topics & solutions at
www.kaiser-elektro.de





Flush-mounting / masonry

The classic installation range.



14 - 57

FLUSH-MOUNTING



Cavity wall

For all types of cavity wall. Air-tight and halogen-free. Solutions for sound insulation and radiation protection walls



58 - 103

CAVITY WALL



Concrete construction

For on-site mixed and prefabricated concrete. For ceilings and walls.



104 - 155

CONCRETE



Installation housings

For ceilings and walls.
For luminaires, loudspeakers, displays, etc..



156 - 199

HOUSINGS



Fire protection

Box, housing and sealing systems for fire-protection walls and ceilings.



200 - 231

FIRE PROTECTION



Earthing

For equipotential bonding.
Potential equalisation casings and earthing clamps



232 - 235

EARTHING



Cable glands

The Syntec® professional product range in all sizes. Plastic and brass.



236 - 249

CABLE GLANDS



Tools

Top-quality system tools for professional electrical installation



250 - 267

TOOLS



Service

Easy to find. From communication to the article number.



268 - 290

SERVICE

Headquarters: KAISER, Schalksmühle, Germany



For over 100 years, KAISER has been developing and manufacturing products and systems for professional electrical installations at its plant in Schalksmühle, Germany. Together with the experience and product lines of our companies AGRO and HELIA, we can offer you professional solutions for electrical installations in trade and industry. Regional strength for international markets: we combine the synergies from the close cooperation of the companies — every day, with every job and with every solution.

Creating the future together.

The KAISER corporation is built on tradition and progress. We always strive to remain one step ahead by developing innovative ideas and solutions for planners, specialist dealers and users.

Together, we always provide you with the perfect basis for a good installation.

HELIA, Bornem, Belgium



AGRO, Hunzenschwil, Switzerland





At the head of the group is the third generation of the Kaiser family, personally committed to securing and strengthening their locations on site and within the group.

The carefully-developed infrastructure and our highly-trained and experienced employees are guarantees of the consistently high product quality to which we fully commit ourselves in the market. As a partner to the electrical trade, to the market and to industry in general, we continue to guarantee well-conceived, genuine innovations in combination with customer-oriented service and the high level ability to supply the products of a strong electrical brand.

Ulrich Kaiser
KAISER GmbH & Co. KG

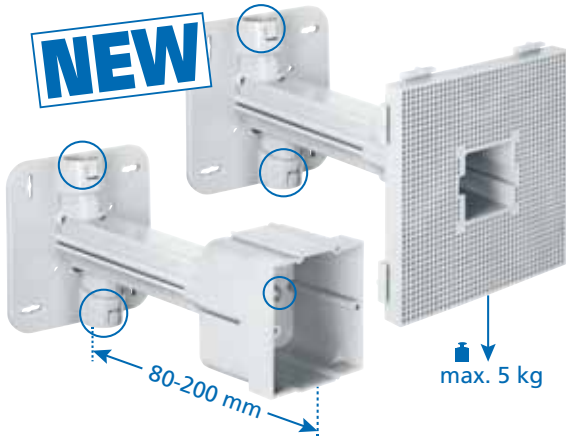
Burkard Kaiser
CEO
KAISER GmbH & Co. KG

Installation systems for insulated external facades

Stability on the wall.

p. 44

Telescope equipment carrier and switch box.



Telescope equipment and switch box for the secure fitting of luminaires, sockets and many other devices to insulated external facades. Optimised for the latest insulation thicknesses, telescope products are ideal for many applications in external facades.

- Equipment carriers for accessories up to a **max. weight of 5 kg**
- **Two conduit entries** on the carrier with internal cable routing
- Integrated measurement indication = easy cutting to insulation thickness
- Front fixing and depth stop prevent incorrect installation
- For insulation thicknesses from 80 mm to 200 mm
- One-gang junction boxes can be combined at a standard combination distance of 71 mm



Stable basis with thermal separation.

p. 42

Universal equipment carrier with combination insert.



The combination insert allows you to fit installation accessories such as intercoms, switches, sockets and much more to an insulated external facade. During installation, the insert is filled so completely with rock wool that almost no heat loss can be measured when compared with uninterrupted insulation.

- For intercoms and single to triple variable combinations
- For future expansions without damaging the external facade
- For insulation thicknesses up to 360 mm



Subsequent secure anchoring. No heat bridge.

p. 52

One-gang junction box ECON® Styro55



The one-gang junction box permits retrofitting of installation accessories such as sockets and switches in organic composite thermal insulation systems. Fast, secure, and without heat bridges. The box can be inserted and anchored in a few simple steps.

- For retrofitting in insulated external facades
- Cutting system prevents damage to cables
- Guarantees installation without heat bridges
- 4 swivels for secure anchoring
- No penetration by moisture



p. 49

The mini equipment carrier permits the precisely-aligned secure wall-flush mounting of accessories such as luminaires, cameras, motion detectors, letter boxes and many other systems which need to be fitted to installed composite thermal insulation systems.

- For retrofitting to insulated external facades
- Exact flush alignment of accessories
- Guarantees installation without heat bridges
- 4 swivels for secure anchoring
- No penetration by moisture



Secure flush fit without heat bridge. Mini equipment carrier.



p. 79

Multiple air-tight sleeve ECON® for the reliable sealing of up to 6 cable or conduit entries through the air-tight building shell - ideal for satellite units.

- Flexible sealing of 1 to 6 cables or conduits
- Low space requirement, powerful adhesion
- Completely toolless installation
- Sealing even when cables are extremely kinked
- Unused feed-throughs are reserved for later installations



Reliable sealing. Fast and flexible. Multiple air-tight sleeve ECON®



p. 21

Sealing plugs with ECON® technology for sealing all standard electrical installation conduits in one-gang boxes or at cable outlets. The long sealing plug with three sealing lips and in different widths adapts itself to the installation conduit in use and guarantees air-tight and smoke-tight closing, even when the conduits are cut at an angle.

- For air-tight empty conduit installations or in fire protection areas
- Elastic sealing membrane for guaranteed air tightness
- Toolless cable feed-through
- For all installation conduits M16 - M40, Pg 9 – Pg 36, 3/4" and 5/8"



Easy closing. Permanently tight. Sealing plugs.



Fire protection

Extra-large terminal compartment. For fire-protection walls.

p. 206

Electronics box HWD 90

NEW



The **electronics box HWD 90** maintains the wall's fire resistance class (F30 - F90) and creates space for electronic switch devices, data boxes, cables and terminals. The electronics box makes possible population with cables and also with installation conduits up to M25.

- For fire-protection walls F30 – F90
- Retrofitting is possible
- Also for use as a double box
- Additional space for electronic components (KNX actuators, relays, radio module, communications technology)



Greater diameter. More possibilities.

p. 221

Box sealing system DS 90 / 120 mm

NEW



The new box sealing system DS 90 / 120 mm covers an additional range of applications in building fire protection. The increased diameter makes it possible to use a larger number of cables and electrical installation conduits and also greater diameters. With this system, it is also possible to mix the installation of conduits and cables.

- Secure, visible, certified fire sealings (EI30 – EI90)
- For wall penetration
- Automatic sealing of the joints and gaps between cables - no filling and smoothing
- Mixed population of conduits/cables and non-destructive retrofitting



Bundled through every wall. Securely and retrofitted

p. 218

Box sealing system DS 90 / 74 mm

Award for product innovation 2011
BAKA
Practice - Old buildings



Europe-wide
ETA Certificate

The **secure sealing** for cable bundles. It is quick and easy to fit the fire-proof and smokeproof box seal by using a Ø 74 mm KAISER cutter and it can also be retrofitted over cables. The innovative KAISER system solution provides certified safety and is easy to install.

- secure, visible, certified fire sealings
- for wall feed-throughs and entries
- without filling and smoothing
- automatic sealing of the joints and gaps between cables
- non-destructive retrofitting
- for cable bundles or individual installation conduits



p. 214

Safe feed-through and entry. Also for retrofitting.

Cable/conduit sealing system LS 90/RS 90.

In accordance with fire prevention regulations, the sealing of feed-throughs for cables and conduits through fire-protection walls creates reliable safety. The certified KAISER seals are easy and quick to install and can easily be retrofitted over cables and conduits.

- Secure, visible, certified fire sealings
- For wall penetrations and entries
- Without filling and smoothing
- Automatic sealing of the joints
- For cables from Ø 5-15 mm
- For conduits M16-M25



Europe-wide
ETA Certificate



Sound insulation technology

p. 84

Extra-large terminal compartment. For sound insulation walls.

Sound insulation electronics box

Sound insulation electronics box for use in walls with increased demands on sound insulation. The sound insulation electronics box maintains the wall's sound insulation function and creates space for electronic switching devices, data boxes, cables and terminals. The electronics box makes possible population with cables and installation conduits up to M25.

- Maintains the wall's sound insulation protection
- Retrofitting is possible
- Also for use as a double box
- Extra-large terminal compartment for communications and network technology
- Additional space for electronic components (KNX actuators, relays, radio module, communications technology)



Multimedial contents on our website.

When you see this icon next to a product, you will find informative product animations about installation and function at www.kaiser-elektro.de

New: QR codes for our product animations on the programme entry pages.

The QR codes give you fast, easy access to our informative product animations via your smartphone. Try it - you'll like it!



Protection against X-rays. Also for retrofitting.

Radiation protection box for lead-free radiation protection walls.

p. 86



KAISER's lead-free radiation protection box protects against radiation used for medical purposes, e.g. in X-ray equipment. The high density of the radiation protection compounds absorbs soft and hard X-rays. The box is especially suitable for lead-free radiation protection walls (e.g. Knauf Safeboard) and corresponds to a lead equivalent value of 1.5 mm Pb for tube voltages in the 60-125 kV range. This means that they absorb radiation similarly to 1.5 mm thick lead. The radiation protection compound is lead-free, so its use presents no health risks.

- Especially suitable for lead-free radiation protection walls
- Lead-free - no health risks
- Retrofitting is possible
- Fast installation without additional screening measures
- Opposing installation is possible
- Installation up to 3 units

Radiation protection box for lead-containing radiation protection walls.

p. 89



The KAISER radiation protection box for use in lead-lined walls protects against radiation used for medical purposes, e.g. in X-ray equipment. The radiation protection materials with an integrated lead function component absorbs the dangerous X-ray radiation with a lead equivalent value of 3 mm Pb as efficiently as 3 mm thick lead. Processing is completely safe because there is no skin contact at all during installation.

- For lead-lined radiation protection walls
- No health risks - no skin contact with lead function component
- Retrofitting is possible
- Fast installation without additional screening measures
- Installation of up to 3 units



Installation system for fixing to the reinforcement

p. 117

Fast prefixing. Secure installation.
Prefix concrete building box.

One-gang junction box and wall lamp connection box with Prefix® installation technology for fast, easy installation onto the opposing formwork without support. With its spring-loaded mounting clamps, the one-piece box with two integrated front parts applies high pressure to the opposing formwork. This ensures exact positioning of the box, and a clean wall appearance.

- Easy, fast installation onto the opposing formwork without support element and abutment
- Prefixing using Prefix® installation technology leaves both hands free for attaching with wires
- For facing concrete installation on the opposing formwork
- Stable combinations for standardised multiple combinations



Installation system for installation of empty conduits

p. 126

Secure transition. Optimal cable pull-in.
End and transition bushes.
Wall and ceiling transitions 30°.

End and transition bushes and wall and ceiling junctions 30° to secure a continuous and functioning empty conduit system at transition points. The especially small shape of the end and transition bushes makes possible the exiting of empty conduits, even when they are between close-fitting reinforcement bars, without the need for complicated processing. The optimal radius of the wall and ceiling transitions, and the exact-fitting conduit receptacle, prevent abutting edges at transitions. This guarantees the flexible pulling-in of cables from both directions.

- Optimal transition radius ensures easy cable pull-in
- Installation onto the opposing formwork with support element and abutment
- 2-piece design with stable catch mechanism
- Easy removal of the plaster skin



Flush-mounting installation



The most important advantages at a glance:

- Complete system for all flush-mounting and masonry applications
- UP-Plus technology with combination connection pieces M20/M25 and up to 15% more installation space
- Installation solutions for insulated external facades (composite thermal insulation systems)
- Air-tight installation in accordance with EnEV energy-saving ordinance
- ECON technology: air-tight one-gang boxes and one-gang junction boxes for tool-free cable and conduit entries
- Fire-protection products for flush-mounting and masonry applications
- Universal installation housing with mineral fibre-board for all standard accessory sizes (e.g. displays, LED luminaires and many more)
- Plasterless mounting with Klemmfix®
- Easy locating of boxes and casings by using signal covers
- International products for accessory installation in accordance with national standards
- Environmentally-friendly installation solutions
- Professional system tools for fast and secure installation
- Wide range of system accessories
- Halogen-free



Flush-mounting | Product lines



Basic installation	p. 16
Electronics box	p. 18
Air-tight versions	p. 19
Luminaire connection boxes, ceiling exits	p. 28
Screened electrical installation	p. 29
Plasterless installation with Klemmfix®	p. 31
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International products	p. 55
Fire-protection products for flush-mounting/masonry applications	p. 213

Tools for flush-mounting installation can be found in the "Tools" section starting on page 226.





	Basic installation	Energy saving air-tight	Screened Environmentally-friendly	International products	Fire-protection buildings
For installation accessories					
One-gang boxes	p. 17	p. 19	-	p. 55	-
One-gang junction boxes	p. 17	p. 20	p. 30	p. 55	-
One-gang boxes for nailing	p. 24	-	-	-	-
Two-gang junction boxes	p. 24	-	-	-	-
Electronics boxes	p. 18	-	-	-	-
Perilex® one-gang boxes	p. 25	-	-	-	-
One-gang boxes CEE	p. 25	-	-	-	-
Universal installation housings	p. 39	-	-	-	-
For cable exits					
Wall light connection	p. 28	-	-	-	-
Luminaire connection	p. 28	-	-	-	-
For cable and conduit feed-throughs					
Sealings	-	-	-	-	p. 213
For cable connections					
Junction boxes	p. 26	-	-	-	-
Junction casings	p. 35	-	p. 93/30	-	-
Potential equalisation casings	p. 37	-	-	-	-
Accessories					
Fixing	p. 32	p. 32	-	-	-
Retrofitting sealing (air-tight)	p. 76/21	-	-	-	-
Sealing of electrical installation conduits (smoke-tight and air-tight)	-	p. 21 NEW	-	-	p. 224
Plaster compensation	p. 33	p. 33	-	p. 56	-
Plaster protection	p. 32	p. 32	-	-	-
End cover	p. 74/153/33	p. 74/153/33	p. 93/30	-	-

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Installation on or in insulated external facades | Product overview



	Universal equipment carrier	Universal equipment carrier with combination insert	Telescope equipment carrier NEW	Telescope switch box NEW	Mini equipment carrier	ISO box set	One-gang junction box ECON® Styro55
	p. 40	p. 42	p. 46	p. 46	p. 49	p. 47	p. 52
Installation option							
Prepared installation	•	•	•	•	-	•	-
Retrofitting	-	-	-	-	•	-	•
Application							
External accessories	•	-	•	-	•	-	-
External corner accessories *	-	-	-	-	•	-	-
Installation accessories 1-unit combination*	-	•	-	•	-	•	•
Installation accessories up to 3-unit combinations	-	•	-	-	-	•	•
Installation accessories up to 5-unit combinations	-	-	-	-	-	•	•

* universal screw-on surface

One-gang boxes, One-gang junction boxes

for flush-mounting installation



UP-PLUS flush-mounting installation

UP-PLUS, the new generation of flush-mounting installation with the innovative combination connection piece for quick and non-distorting combinations. With variable conduit entry for M20/M25 conduits and large installation space.

- Variable combination connection piece for M20/M25 conduits
- Flexible for screw and claw fixing of the accessories
- More installation space
- High torsional strength, guaranteed standard distance of 71 mm for combinations



UPPLUS

Combination entry, interconnecting options



The combination entry permits exact and solid fit for Ø 20 or Ø 25 mm conduits.



Simply break out the reducing bend for Ø 25 mm conduits.



The distance support (1159-34) ensures an exact and safe distance of 91 mm.



The tunnel connector (1159-36) permits fully-insulated floor through-wiring.

Entries for conduits and DIN EN conduits



Secure combination with the new combination connection piece

The audibly secure combination with the new combination connection piece. Put the boxes next to each other. Place centering piece in groove and press together until you hear a „click“. Now you have a non-distorting combination with a standard distance of 71 mm.




One-gang box

- with 4 screw domes and 2 expanding claw fields
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits

UPPLUS




Depth	46 mm	46 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	3	3
Conduit entries M25	2	2
Combination conduit entries M20/25	2	2
	•	•
Art. No.	1055-04	1056-04
Inner packaging/shipping	25 / 500	25 / 500
Price in EUR/100		

One-gang junction box

- with 4 screw domes and 2 expanding claw fields
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits

UPPLUS




Depth	66 mm	66 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	9	9
Conduit entries M25	2	2
Combination conduit entries M20/25	2	2
	•	•
Art. No.	1555-04	1556-04
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

One-gang junction box

- with side cavities for connections
- with 4 screw domes
- from above 4 x multi-lead wiring
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits

UPPLUS



Length x Width x Depth	110 x 71 x 49 mm
Installation opening	60 mm
Device screws	2
Conduit entries M20	6
Conduit entries M25	4
Combination conduit entries M20/25	2
	•
Art. No.	1069-02
Inner packaging/shipping	10 / 100
Price in EUR/100	

One-gang boxes, One-gang junction boxes

for flush-mounting installation



Electronics box

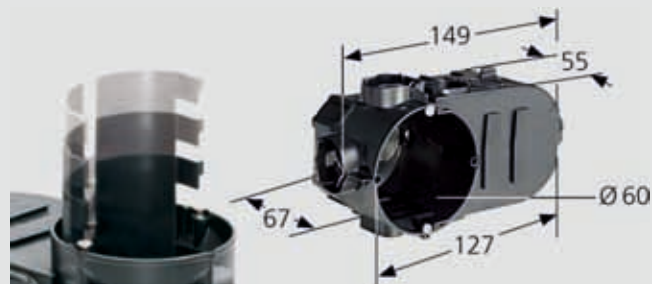
The electronics box has space for electronic components. The accompanying separator wall also enables you to have different kinds of voltages in one box.

- For accessories and electronic components such as EIB actuators, communication and network technology, radio-controlled elements, alarm modules, etc.
- Can be combined with KAISER one-gang boxes via snap-in connector
- Optimal for use as an entry box for combinations
- The separator wall (supplied) turns it into a twin-chamber box



UPPLUS

Application



The range of possibilities is as diverse as their solutions.



Here for example is a relay for central control of several roller blind drives or a flush mounting EIB interface with a conventional button.



For communication equipment, the box volume is ideal for accommodating cable reserves.



Concealed installation of electronic components such as radio-controlled modules, EIB actuators, emergency lighting or cable lengths in data network technology.

Electronics box

- with 4 screw domes
- Twin-chamber box (with separator wall)
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits

UPPLUS



Length x Width	149 x 67 mm
Installation opening	60 mm
Device screws	2
Conduit entries M20	11
Conduit entries M25	2
Combination conduit entries M20/25	4
	•
Art. No.	1068-02
Inner packaging/shipping	10 / 100
Price in EUR/100	

Air-tight flush-mounting boxes

Flush-mounting boxes with ECON technology guarantee air-tight installation. They offer a variety of options for air-tight conduit and cable entries and can be either plastered or installed using Klemmfix®.

- Air-tight design with sealing membranes
- Avoids leaks in exterior facades made from hollow chamber blocks
- Variable and tool-free cable and conduit entries
- Torsion-proof, guaranteed standardised combination distance of 71 mm



Processing instructions



Vertical draughts occur in hollow chamber blocks. The UP boxes with ECON technology prevent air from escaping through the one-gang boxes.



The tool-free cable and conduit entries reduce installation time and make processing easier.



The elastic sealing membrane fits air-tight around the conduit or cable.



Each cable and conduit diameter up to Ø 25 mm can be installed quickly and air-tight.

One-gang box ECON® 10

- Air-tight design with sealing membranes
- with 4 screw domes
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits



Depth	46 mm	46 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	2	2
Conduit entries M25	2	2
Tool-free cable and conduit entries in the connector area up to M25	2	2
Air-tight	•	•
	•	•
Art. No.	1055-21	1056-21
Inner packaging/shipping	25 / 500	25 / 500
Price in EUR/100		

One-gang boxes, One-gang junction boxes

for flush-mounting installation

One-gang junction box ECON® 15

- Air-tight design with sealing membranes
- 4 screw domes, 2 expanding claws fields
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits

UPPLUS ECON AIR-TIGHT
TECHNIK



Depth	66 mm	66 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Tool-free cable and conduit entries up to 11 mm around the box	4	4
Tool-free cable and conduit entries up to 11 mm below the connector	2	2
Tool-free cable and conduit entries up to M25 around the box	4	4
Tool-free cable and conduit entries in the connector area up to M25	2	2
Air-tight	•	•
	•	•
Art. No.	1555-21	1556-21
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		



Sealing inserts

The sealing insert ensures air-tight closing of previously-installed one-gang boxes and one-gang junction boxes. It can be used in both flush-mounting and cavity wall installation. Its low installation depth makes use in one-gang junction boxes possible without restricting the wiring.

- Ensures later air-tight closing of one-gang boxes and one-gang junction boxes
- Toolless connection wire penetration is possible
- Guarantees later and permanent air-tightness



Application



Later air-tight closing of flush-mounting boxes.



Later air-tight closing of cavity wall boxes.



Pre-punched entry markings permit toolless connection wire penetration up to 2.5 mm².



Press sealing insert and installation accessories into the box and tighten with device screws.

Sealing inserts

- for retrofit sealing (air-tightness) of existing one-gang boxes or one-gang junction boxes without flush-mounting removal (masonry) and cavity walls
- permanently flexible plastic



AIR-TIGHT

Depth	36,5 mm
Diameter	60 mm
Air-tight	•
Art. No.	1040-01
Inner packaging/shipping	10 / 100
Price in EUR/100	

Sealing plugs 16-40 for electrical installation conduits

Sealing plugs with ECON® technology for sealing all standard electrical installation conduits in one-gang boxes or at cable outlets. The long sealing plug with three sealing lips and in different widths adapts itself to the installation conduit in use and guarantees air-tight and smoke-tight closing, even when the conduits are cut at an angle. From conduit size M25 and up, the membrane surfaces are separated by reinforcing ribs, which ensure secure cable routing and prevent damage and gaps between cables.

- For empty conduit installations in an air-tight design or in fire protection areas
- Sealing plug with three sealing lips and different widths adapts itself perfectly to the installation conduit and guarantees an air-tight end
- Elastic sealing membrane for guaranteed air-tightness
- Toolless cable entry
- Reinforcing ribs in the membrane ensure air-tightness for the cables
- For all installation conduits M16 - M40, Pg 9 – Pg 36, 3/4" and 5/8"



Product advantages of sealing plugs



When pushed through, the elastic sealing membrane using ECON® technology wraps itself around the cable or individual leads, ...



... and prevents uncontrolled air flow.



From conduit size M25 upwards, the membrane areas are reinforced with ribs ...



... which prevent damage and ensure air-tightness where the cables pass through.

One-gang boxes, One-gang junction boxes

for flush-mounting installation

Processing instructions



The long sealing plug with three sealing lips and different widths adapts itself perfectly to the installation conduit...



... and guarantees an air-tight end even when conduits are cut at an angle.

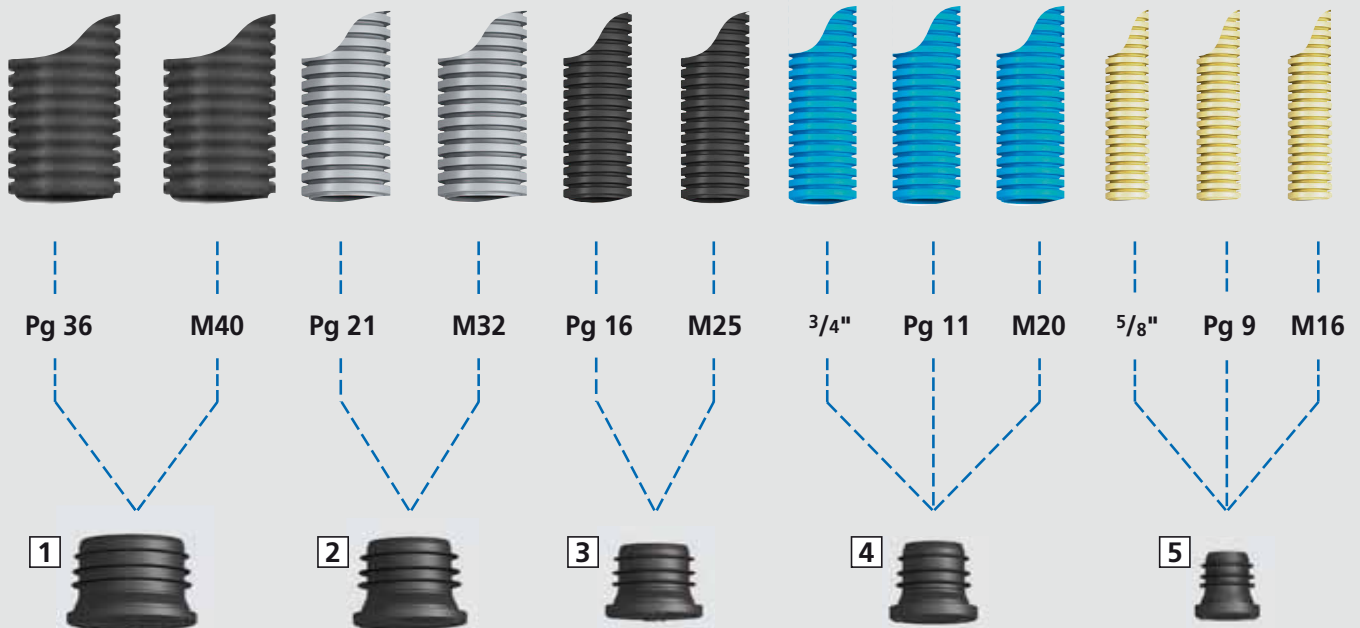


When air-tight installation is necessary, the sealing plugs prevent leakage at the conduit ends.



For installations in the field of fire protection, the sealing plug closes the conduit ends and ensures smoke-tight room separation.

Assignment of conduit sizes and sealing plugs



1 Sealing plug M40 Art. No. 1040-40 | 2 Sealing plug M32 Art. No. 1040-32 | 3 Sealing plug M25 Art. No. 1040-25 | 4 Sealing plug M20 Art. No. 1040-20 | 5 Sealing plug M16 Art. No. 1040-16

Air-tightness certificate

In comprehensive blower-door tests, a neutral institute tested and confirmed the air-tightness of the M16 - M40 sealing plugs.



INNOVATION

Sealing plugs 16-20

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic



Sealing plug	M16	M20
DIN EN conduit Ø	16 mm	20 mm
Art. No.	1040-16	1040-20
Inner packaging/shipping	25 / 100	25 / 100
Price in EUR/100		

INNOVATION

Sealing plugs 25-40

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic



Sealing plug	M25	M32	M40
DIN EN conduit Ø	25 mm	32 mm	40 mm
Art. No.	1040-25	1040-32	1040-40
Inner packaging/shipping	25 / 100	25 / 50	- / 25
Price in EUR/100			

Two-gang junction box

- can also be used as a one-gang junction box (incl. 2 device inserts)
- use separator wall to separate electrical circuits Art. No. 1656-22 (not illustrated)
- dimensions in accordance with German DIN 49073
- for M20 conduits



Length x Width x Depth	140 x 60 x 42 mm	140 x 60 x 42 mm
Screw spacing	71 mm	71 mm
Device screws	-	4
Conduit entries M20	12	12
	•	•
Art. No.	1655-02	1656-02
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		


One-gang boxes, One-gang junction boxes

for flush-mounting installation

One-gang box

- with nail straps as fitting aid
- nail Ø max. 3 mm
- plaster depth min. 6 mm
- dimensions in accordance with German DIN 49073
- for M20 conduits



Depth	42 mm	42 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	7	7
	•	•
Art. No.	1055-62	1056-62
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

One-gang junction box

- with nail straps as fitting aid
- nail Ø max. 3 mm
- plaster depth min. 6 mm
- dimensions in accordance with German DIN 49073
- for M20 conduits




Depth	63 mm	63 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	13	13
	•	•
Art. No.	1555-62	1556-62
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

One-gang box without support

- for use in facing masonry
- for combinations: use supports Art. No. 1159-01
- dimensions in accordance with German DIN 49073
- for M20 conduits




Depth	42 mm	42 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	7	7
	•	•
Art. No.	1050-00	1051-00
Inner packaging/shipping	25 / 500	25 / 500
Price in EUR/100		

One-gang junction box without support

- for use in facing masonry
- for combinations: use supports
Art. No. 1159-01
- dimensions in accordance with German DIN 49073
- for M20 conduits



Depth	63 mm	63 mm
Installation opening	60 mm	60 mm
Device screws	-	2
Conduit entries M20	13	13
	•	•
Art. No.	1550-00	1551-00
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

PERILEX® one-gang box

- for PERILEX® 16 A inserts
- only for screw fixing
- dimensions in accordance with German DIN 49073
- for M20 conduits



Depth	48 mm
Screw spacing	67 mm
Installation opening	70 mm
Device screws	2
Conduit entries M20	8
Art. No.	1076-04
Inner packaging/shipping	10 / 100
Price in EUR/100	

One-gang box CEE

- for CEE 16 A connectors
- only for screw fixing
- with sealing ring, protection class IP3X
- dimensions in accordance with German DIN 49073
- For M20/M25 conduits



Depth	50 mm
Screw spacing	67 mm
Installation opening Ø	70 mm
Raised head accessory screws 4 mm	•
Conduit entries M20	2
Conduit entries M25	2
	•
Art. No.	1075-04
Inner packaging/shipping	- / 100
Price in EUR/100	

Junction boxes

for flush-mounting installation

Junction box

- with nail straps as fitting aid
- nail Ø max. 3 mm
- plaster depth min. 6 mm
- without cover and cover screws
- dimensions in accordance with German DIN 49073
- for M20 conduits




Depth	36 mm
Opening	70 mm
Conduit entries M20	8
For 6 terminals 1.5 mm ² or 5 terminals 2.5 mm ²	•
Art. No.	1172-62
Inner packaging/shipping	- / 100
Price in EUR/100	

Junction box

- Klemmfix® mounting possible
- according to German DIN VDE 0606, junction box covers may only be removable using tools
- dimensions in accordance with German DIN 49073
- for M20 conduits




Depth	36 mm	36 mm	36 mm
Opening	70 mm	70 mm	70 mm
Conduit entries M20	8	8	8
For 6 terminals 1.5 mm ² or 5 terminals 2.5 mm ²	•	•	•
For mounting with Klemmfix® (1159-12)	•	•	•
With cover and 2 cover screws	-	-	•
	-	-	•
Art. No.	1172-02	1172-08	1172-92
Inner packaging/shipping	25 / 500	- / 100	25 / 250
Price in EUR/100			

Junction box

- with plaster disc, cover and cover screw
- Klemmfix® mounting possible
- For M20 conduits and cables up to 5 x 2.5 mm²



Depth	36 mm	36 mm	36 mm	36 mm
Opening	70 mm	70 mm	70 mm	70 mm
Conduit entries M20	8	8	8	8
For 6 terminals 1.5 mm ² or 5 terminals 2.5 mm ²	•	•	•	•
Terminal block, no. of poles	-	4-pole	5-pole	6-pole
without terminal block	•	-	-	-
	•	-	-	-
Art. No.	1172-09	1172-04	1172-05	1172-06
Inner packaging/shipping	25 / 100	10 / 100	10 / 100	- / 100
Price in EUR/100				

Junction box

- for 8 terminals 1.5 mm², for 6 terminals 2.5 mm² or for 5 terminals 4 mm²
- without cover and cover screws
- For M16/M20 conduits




Depth	56 mm
Opening	70 mm
M16-20 combination conduit entry	14
Art. No.	1572-02
Inner packaging/shipping	10 / 250
Price in EUR/100	

In-plaster junction box

- for flat multi-lead wiring (NYIF) 1.5 and 2.5 mm²
- terminal block permanently attached
- with plaster disc, cover and cover screw
- Junction box fire-resistant up to 960°C, cover to 850°C in accordance with DIN EN 60670



Depth	16 mm	16 mm
Opening	80 mm	80 mm
Terminal block, no. of poles	4	5
	•	•
Art. No.	1081-04	1081-05
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Light connection boxes, Ceiling exits

for flush-mounting installation


Wall light connection box

- with integrated cover
- not to be used as a junction box!



Length x Width x Depth 60 x 32 x 30 mm

Break-out openings Ø 20 mm 4

 •

Art. No. 1048-00

Inner packaging/shipping 25 / 250

Price in EUR/100

Cover

- for wall light connection boxes 1048-00 and 9148-00
- with 2 x 15 mm cover screws



Length x Width 75 x 40 mm

Art. No. 1148-90

Inner packaging/shipping 25 / 250

Price in EUR/100

Ceiling light connection box

- for casting into concrete ceilings
- 2 parts with snap-in connection
- sealed against concrete
- delivery unit: 1 ceiling light connection box pre-cut for DIN EN conduits 20 mm Ø, 2 reducers/stoppers for use with cable, 1 sealing plug-in cover, 1 light hook (fully-insulated) max. load 100 N (10 kg) in accordance with German VDE
- Marking for cables and DIN EN conduits up to 25 mm




Depth 55 mm

Light hook length 55 mm

Ceiling exit (CE) Ø 35 mm

Conduit entries M20 1

 •

Art. No. 1248-55

Inner packaging/shipping - / 100

Price in EUR/100

Ceiling exit bush

- for multi-lead wiring (NYIF) 1.5 mm² and 2.5 mm²
- to prevent cable being ripped out



Cable entry 5,5 x 32 mm 5,5 x 32 mm

With light hook and expanding dowel Ø 10 mm - •

with brass wedge nut, max. load 100 N (10kg) to German VDE norm - •

Art. No. 1144-00 1144-05

Inner packaging/shipping 100 / 500 50 / 250

Price in EUR/100

Screened one-gang junction box (bio)

Screened one-gang junction box for flush-mounting installation. The conductive coating suppresses interference with a high alternating field component, whether radiated or received.

- For environmentally viable electrical installation
- With screening and potential conductivity
- The functional earth of the box must only be connected to the potential equalisation and not to the equipment grounding conductor (PE conductor)



Installation



Cut an accurate wall opening (Ø 82 to 84 mm) with the diamond grinding head.



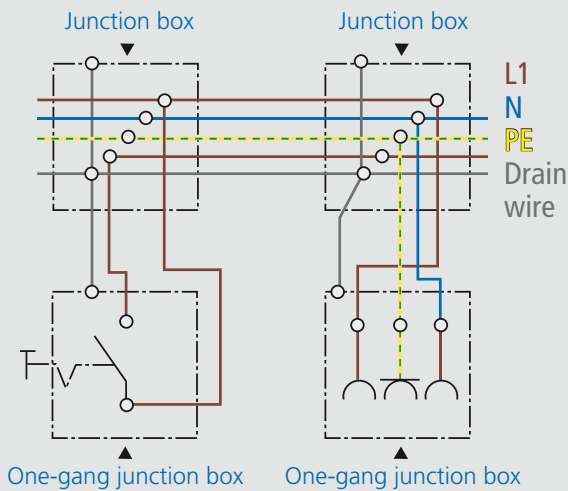
Remove cable sheath and screen with AMZ 2 Art. No. 1190-02. Fit bare tracer wire with transparent insulating hose.



Connect functional earth of the box to tracer wires of screened cable.



One-gang junction box is ready for installation of a socket for biological design.



Technical processing instructions/standards

- dimensions in accordance with German DIN 49073
- for rooms used for medical purposes, environmentally-friendly construction, etc.
- the conductive coating suppresses interference with a high alternating field component, whether radiated or received
- The functional earth of the box must only be connected to the potential equalisation and not to the equipment grounding conductor (PE conductor)
- Not suitable for use in X-ray or radiation rooms!

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Screened one-gang junction box

- with screening and functional earth of the box
- dimensions in accordance with German DIN 49073
- protection class IP 2X



Depth	63 mm
Installation opening	60 mm
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	6
Cable entries 3 x 1.5 mm ²	4
Halogen-free	•
Art. No.	1555-88
Inner packaging/shipping	10 / 100
Price in EUR/100	

Screened cover

- for making screened one-gang junction boxes
- for one-gang junction boxes 9064-88 and 1555-88



Diameter	80 mm
Screw spacing	60 mm
Art. No.	1164-88
Inner packaging/shipping	10 / 100
Price in EUR/100	

Screened junction casing

- for cavity wall and flush-mounting installation
- with screened cover
- with 2 x 15 mm cover screws
- protection class IP 3X



Length x Width x Depth	107 x 107 x 53 mm
Cut hole Ø	4 x 35 mm
Break-out openings Ø 20 mm	8
Cable entries for NYM and low-voltage cabling	•
For terminals up to	4 mm ²
Art. No.	9195-88
Inner packaging/shipping	- / 10
Price in EUR/100	

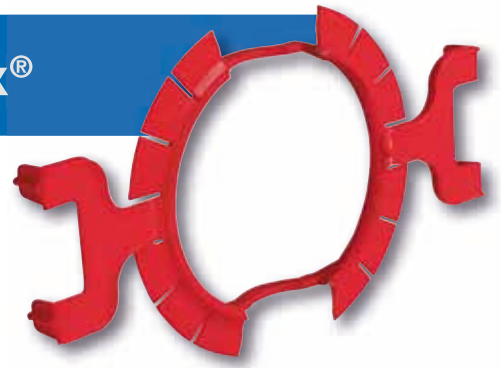
Note

Other installation boxes/housings with screening available on request. Please use our radiation protection box in X-ray areas or areas with ionising radiation.

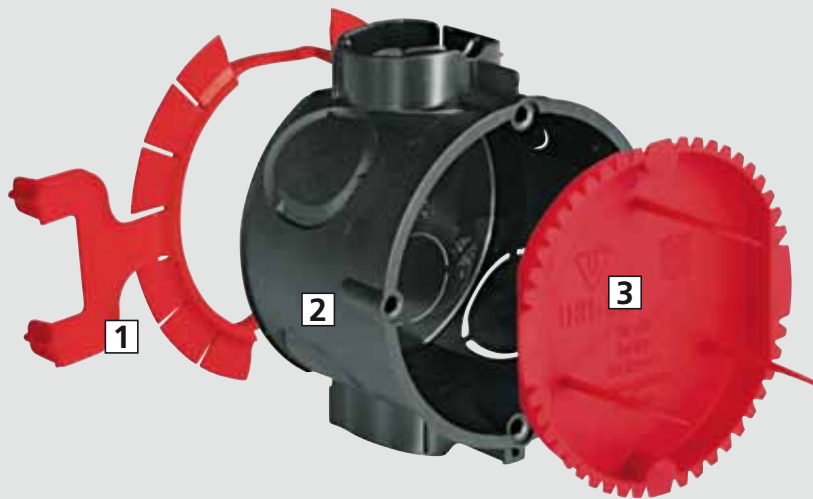
Plaster-free mounting with Klemmfix®

The Klemmfix® system reduces mounting time by up to 50% compared with plastering. Thanks to the signal cover, the assembly position of the one-gang boxes can be seen immediately once plastering has taken place.

- For fitting boxes without plaster
- Efficient, clean and time-saving
- Alignment and secure mounting even before plastering
- Can also be used in sub-zero temperatures. The special plastic remains tough but elastic
- Not suitable for use with lime or thin plaster



Klemmfix® system



1 Klemmfix® | 2 One-gang box | 3 Signal cover

Installation



Creating installation opening.



Push in box with Klemmfix® clipped on.



Fit signal cover.



Fine marker bristles on the signal cover show the exact position of the one-gang box after plastering.

Proof of stability:

Tests carried out with 500 N (50 kg) tension force show that all boxes remain unchanged. Long-term use in practice confirms this result. Deviations in plastering material and application of the plaster have no effect.

Accessories

for flush-mounting installation

Klemmfix®

- for fitting boxes without plaster
- in openings made with Ø 82 mm hole saw
- for all types of masonry



For one-gang boxes and one-gang junction boxes 1055/1056-04, 1555/1556-04, 1055/1056-21, 1555/1556-21, 1555-88

• -

For junction boxes Ø 70 mm (1172-02, -08, -09, -92)

- •

with depth stop

• -

Art. No.	1159-02	1159-12
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Signal cover

- reusable
- protects interior of box, screwing dome and screw heads when plastering



Length x Width	-	-	-	131 x 60 mm
For installation opening	35 mm	60 mm	70 mm	-
For two-gang junction box 1656-02/1655-02	-	-	-	•
For one-gang boxes and one-gang junction boxes 60 mm Ø	-	•	-	-
For junction boxes, PERILEX® boxes and CEE one-gang boxes Ø 70 mm	-	-	•	-
Art. No.	1181-35	1181-60	1181-70	1181-56
Inner packaging/shipping	- / 50	50 / 1000	25 / 250	- / 50
Price in EUR/100				

Signal cover

- reusable
- protects interior of box, screwing dome and screw heads when plastering



Length x Width	80 x 80 mm	100 x 100 mm	60 x 32 mm
For wall light connection boxes 1048-00	-	-	•
Art. No.	1181-94	1181-95	1181-48
Inner packaging/shipping	- / 50	- / 50	- / 100
Price in EUR/100			

Distance supports

- For separate covers, e.g. antenna sockets, telephone boxes or EDP connection boxes with sockets which are not touch-safe.



UPPLUS

Art. No.	1159-34
Inner packaging/shipping	25 / 100
Price in EUR/100	

Tunnel connector

- for fully-insulated floor through-wiring of one-gang junction boxes Art. Nos. 1555/56-04, 1555/56-21, 1068-02, 1069-02

UPPLUS



Art. No.	1159-36
Inner packaging/shipping	- / 10
Price in EUR/100	

Plaster compensation ring

- to compensate for deep-seated boxes
- with 2 screwed-in device screws
- with 2 ring attachment screws
- to maintain IP protection class



Height	12 mm	24 mm	12 mm	24 mm
Screw spacing	60 mm	60 mm	67 mm	67 mm
For all one-gang boxes and one-gang junction boxes Ø	60 mm	60 mm	-	-
For junction boxes Ø	-	-	70 mm	70 mm
	•	•	•	•
Art. No.	1155-61	1155-62	1155-71	1155-72
Inner packaging/shipping	25 / 250	25 / 250	10 / 100	10 / 100
Price in EUR/100				

Universal VDE cover

- for all one-gang, one-gang junction and junction boxes
- with central exit for light hook
- flat cover edge
- surface roughened



Diameter	92 mm	92 mm
Screw spacing	60 / 67 mm	60 / 67 mm
Halogen-free	-	•
Fireproof	850 °C	850 °C
	•	•
Art. No.	1184-90	1184-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Universal waterproof cover

- central entry with stoppers
- for countersunk screws Ø 4 mm



Diameter	90 mm
Screw spacing	67 mm
Fireproof	850 °C
Art. No.	1174-99
Inner packaging/shipping	- / 10
Price in EUR/100	

Accessories

for flush-mounting installation

Spring cover

- with permanent elastic spring



with board Ø	72 mm	85 mm	95 mm
for boxes Ø	60 mm	70 mm	80 mm
Art. No.	1159-25	1174-25	1184-25
Inner packaging/shipping	50 / 500	50 / 500	25 / 250
Price in EUR/100			

Screw box

- suitable for fixing accessories and covers
- self-tapping Ø 3.2 mm
- corrosion-resistant in accordance with German DIN VDE standard
- RoHS-compliant



Length	15, 25, 40 mm
Filled with device screws, 100 of each	•
Art. No.	2471-91
Inner packaging/shipping	- / 8
Price in EUR/100	

Device screws

- surface double-treated
- corrosion-resistant in accordance with German DIN VDE standard



Length	15 mm	20 mm	25 mm	40 mm
Art. No.	2471-15	2471-20	2471-25	2471-40
Inner packaging/shipping	100 / 10000	100 / 10000	100 / 10000	100 / 10000
Price in EUR/100				

Sealing screws

- in pure brass
- self-tapping Ø 3.2 mm
- with cross-hole in the screw head through which sealing wire can be pulled



Length	15 mm	40 mm
Art. No.	2444-15	2444-40
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

Junction casings

Flush-mounting junction casings in all sizes and for almost any kind of jobs. This programme features practical housing sizes as well as robust housing design perfect for building sites.

- As central junction casings for star-shaped cable laying
- Easy to rewire when changing the way rooms are used
- With separator walls to separate electrical circuits
- For installation of DIN terminal strips, TS 35 standard rails for terminal blocks, LSA+ terminal strips etc.
- End cover with screw fastening for VDE-compliant installation



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

Processing instructions



Space for installation of TS 35 standard rails for the installation of terminal blocks, terminal installation devices etc.



Space for installation of LSA+ terminals for distribution of telecommunication equipment.



Several electrical circuits can be safely separated in one casing using separator walls that can be inserted.



After breaking out a side wall, the casings (1092-90) can be clipped together and expanded to twice the size.

HOUSINGS

FIRE PROTECTION

Junction casing 80

- for max. 2 circuits using separator wall
- suitable for installation of DIN terminal strips, TS 35 standard rails for terminal strips, terminal blocks up to 16 mm², etc.
- including cover



Length x Width x Depth	87 x 87 x 60 mm	87 x 87 x 60 mm
Conduit entries M20	8	8
Cable entries from top	16	16
For terminals up to	4 mm ²	4 mm ²
Halogen-free	-	•
	•	-
Art. No.	1094-91	1094-01
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

EARTHING

CABLE GLANDS

TOOLS

SERVICE


Junction casings

for flush-mounting installation

Junction casings 100 / 150

- for max. 2 circuits using separator wall
- suitable for installation of DIN terminal strips, TS 35 standard rails for terminal strips, terminal blocks up to 16 mm², etc.
- including cover




Length x Width x Depth	107 x 107 x 57 mm	107 x 107 x 57 mm	159 x 159 x 75 mm	159 x 159 x 75 mm
M16 conduit entries	4	4	-	-
Conduit entries M20	12	12	16	16
Conduit entries M25	4	4	8	8
M32 conduit entries	-	-	4	4
Cable entries	12	12	12	12
For terminals up to	6 mm ²	6 mm ²	16 mm ²	16 mm ²
Halogen-free	-	•	-	•
	•	-	•	-
Art. No.	1095-91	1095-01	1096-91	1096-01
Inner packaging/shipping	- / 100	- / 100	- / 30	- / 30
Price in EUR/100				

Junction casing

- including cover



Length x Width x Depth	240 x 142 x 87 mm	238 x 208 x 68 mm
Conduit entries M20	24	20
Conduit entries M25	12	8
M32 conduit entries	6	4
Cable entries	12	-
For terminals up to	16 mm ²	16 mm ²
Halogen-free	•	•
Suitable for standard equipment with 70 mm installation height	•	-
Casings can be combined once with each other, dimensions are then	240 x 284 x 87 mm	-
Maximum of 3 electrical circuits with separator walls	-	•
For max. 4 electrical circuits using separator walls	•	-
	•	•
Art. No.	1092-90	1097-92
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Potential equalisation casing 10² and 16²

- for bathrooms or similar
- with potential equalisation rail, protected against corrosion
- including cover



Length x Width x Depth	107 x 107 x 57 mm	238 x 208 x 68 mm
Cables up to 16 ² , single and stranded wire	-	7
Circular conductors Ø 8–10 mm	-	1
Circular conductor 6–16 ² , also uncut	1	-
Cables 1.5–10 ² (for bathrooms or similar)	6	-
Flat strip up to 30 mm wide	-	1
	-	•
Art. No.	1095-73	1097-75
Inner packaging/shipping	- / 10	- / 1
Price in EUR/100		

Replacement cover

- flat cover edge
- surface roughened



For casing size - flush-mounting boxes	For casing size - cavity wall boxes	For casing size - concrete construction boxes	Fireproof	Art. No.	Inner packaging/shipping	Price in EUR/100
87 x 87 mm	-	-	650 °C	1094-13	- / 10	
107 x 107 mm	-	-	650 °C	1095-13	- / 10	
159 x 159 mm	-	-	650 °C	1096-13	- / 10	
107 x 107 mm	107 x 107 mm	128 x 128 mm	850 °C	1095-93	- / 10	
159 x 159 mm	165 x 165 mm	180 x 180 mm	850 °C	1096-93	- / 10	
240 x 142 mm	240 x 142 mm	-	850 °C	1092-93	- / 5	
238 x 208 mm	238 x 208 mm	250 x 220 mm	850 °C	1097-93	- / 5	
240 x 284 mm	-	-	850 °C	1092-95	- / 5	

Separator walls

- for junction casings
- can be retrofitted to separate electrical circuits



for casing size	Halogen-free	Fireproof	Art. No.	Inner packaging/shipping	Price in EUR/100
87 x 87 mm	•	650 °C	1094-20	- / 10	
107 x 107 mm	•	650 °C	1095-20	- / 10	
159 x 159 mm	•	650 °C	1096-20	- / 10	
238 x 208 mm	•	650 °C	1097-22	- / 10	
240 x 142 mm	•	650 °C	1092-20	- / 10	

Universal installation housings

for flush-mounting installation



Universal installation housings

Universal installation housings for a wide range of device installations always ensure optimum installation space for all kinds of devices. The intelligent housing design of all six housings ensures stability and secure hold in the wall.

- For displays, LED lamps and much more
- For installing almost all shapes and sizes
- Mineral fibreboard permits almost all conceivable installation openings



Examples of use



Installation



Make an appropriate wall opening, feed the cables and conduits into the housing and fasten it (using plaster) in the wall.

You can create the installation opening before or after inserting the housing. The equipment is attached by simply clamping it in or screwing it into the mineral fibreboard.

Use only screws that go into but not through the mineral fibreboard when attaching the device! (e.g. SPAX countersunk head screw 3.5 x 15 mm)

Note

Observe the maximum stroke length of the saw blade when sawing the installation opening.

Universal installation housing with mineral fibreboard

- 2 parts, consisting of housing and mineral fibreboard
- all-round groove denotes the maximum opening dimension



Length x Width x Depth	87 x 87 x 75 mm	107 x 107 x 72 mm	159 x 159 x 90 mm
Universal opening size up to max.	57 x 57 mm	77 x 77 mm	129 x 129 mm
For devices with an installation depth of max.	60 mm	60 mm	75 mm
M16 conduit entries	-	4	-
Conduit entries M20	10	14	20
Conduit entries M25	-	4	10
M32 conduit entries	-	-	4
Cable entries	16	12	-
Art. No.	1094-22	1095-22	1096-22
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

Universal installation housing with mineral fibreboard

- 2 parts, consisting of housing and mineral fibreboard
- all-round groove denotes the maximum opening dimension



Length x Width x Depth	240 x 142 x 102 mm	240 x 280 x 102 mm	238 x 208 x 83 mm
Universal opening size up to max.	199 x 102 mm	189 x 240 mm	198 x 168 mm
For devices with an installation depth of max.	90 mm	90 mm	70 mm
Conduit entries M20	24	36	20
Conduit entries M25	12	16	8
M32 conduit entries	6	10	4
Cable entries	16	12	-
Art. No.	1092-27	1092-28	1097-28
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			



Universal equipment carrier

Universal equipment carrier for securely attaching electrical installations in or to heat-insulating external facades. Stable attachment of external lights, sockets, motion detectors, external temperature sensors, radio receivers, anemometers, cameras, letter boxes and much more.

- Secure attachment of various equipment to or in insulated external facades.
- Prevents heat bridges
- Quick installation with snap-in connections
- For insulation thicknesses of 60 to 360 mm

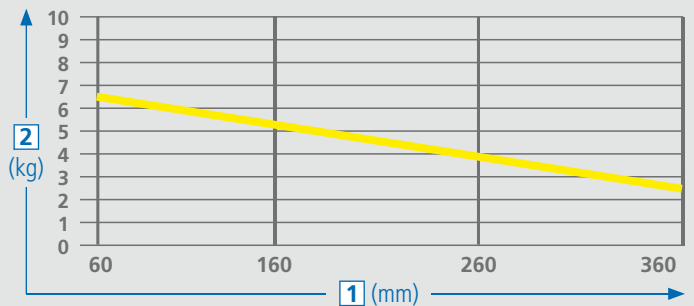
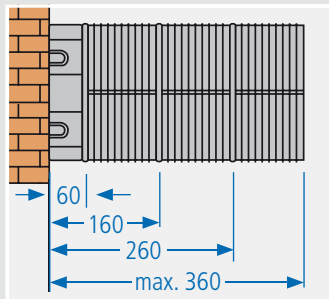
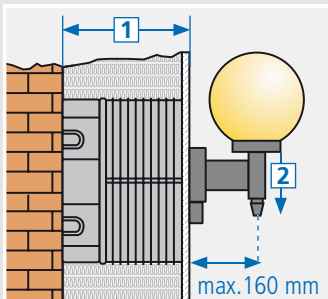


Examples of use



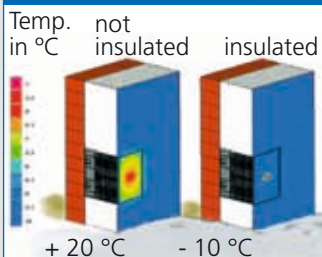
Processing instructions

Weight-bearing load dependent on the insulation thickness. The universal equipment carrier is only for vertical installation (upright)!



1 External insulation - insulation thickness | 2 Permissible load

Heat bridge calculation



When the equipment carrier is correctly installed, hardly any heat losses are measured.

Calculation and source:
PASSIV HAUS INSTITUT
Dr. W. Feist

[mm]	insulated [m ²]	not insulated [m ²]
160	0.027	0.300
360	0.039	0.520

Installation



Screw the housing base to the wall.



If necessary, adjust the extension element to suit the insulation thickness.



Fit the rock wool provided. (supplied)



Fit the mounting plate (closing clip underneath) and close.



If you do not have a universal equipment carrier with combination insert (1159-26), use the rear markings to make the installation opening for the insertion of one-gang boxes.



Fit and close the mounting plate with one-gang boxes.

Universal equipment carrier

- for use with externally-insulated walls
- for secure fixing of lights, intercoms, motion detectors etc.
- can be extended in steps of 100 mm (max. 360 mm) using extension elements 1159-27
- can be reduced in 10 mm steps
- With pre-cut rock wool parts through which the equipment carrier can be fed



Length x Width x Height	220 x 100 x 160 mm
Insulation thickness	60 - 160 mm
Combination conduit entries M20/25	6
Art. No.	1159-24
Inner packaging/shipping	- / 5
Price in EUR/100	

Extension element

- to extend the Universal equipment carrier by 100 mm simply by latching on
- can be reduced in 10 mm steps by cutting
- with rock wool pre-cut parts to fill the extension panel



Length x Width x Depth	220 x 100 x 100 mm
Art. No.	1159-27
Inner packaging/shipping	- / 5
Price in EUR/100	



Universal equipment carrier with combination insert

Universal equipment carrier with combination insert for the installation of entryphones and installation accessories on the insulated external facade. The perfect basis for intercoms, sockets, switches and much more, and also for two-unit and three-unit combinations.

- Guarantees installation without heat bridges
- For entryphones and variable accessory installation combinations of 1 to 3 units
- For future expansion without damaging the external facade
- For insulation thicknesses up to 360 mm



Examples of use



The product is suitable for single, double or triple combinations ...



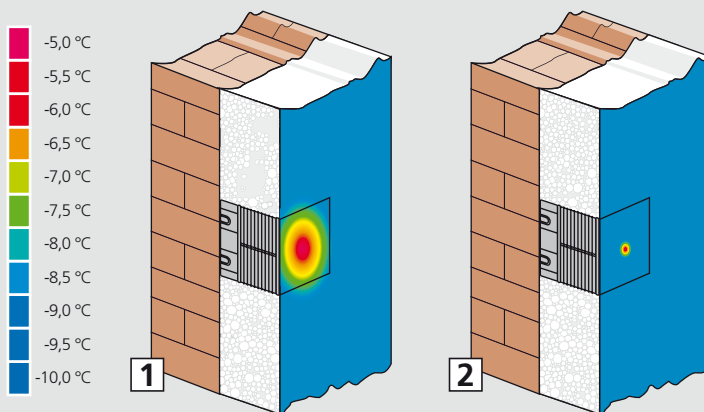
... and also permits future expansion without damaging the facade.



The equipment carrier with combination insert can be mounted horizontally or vertically.

Heat bridge calculation

If installed correctly, heat losses are hardly measurable. Calculation and source: inside: +20°C, outside: -10°C
PASSIV HAUS INSTITUT Dr. W. Feist



1 not insulated | 2 insulated

Installation



Define the location on the wall and mark it.



Screw the housing base to the wall.



If necessary, adjust the extension element to suit the insulation thickness.



Attach the extension element and snap it into place.



Fit the rock wool insulation (supplied).



Position the combination insert (mounting clip at bottom) and snap into place.



The installation can now be fitted and installed.



After applying the plaster, attach the desired accessory.

INNOVATION

Universal equipment carrier with combination insert

- for use with externally-insulated walls
- For secure mounting of intercoms, switches, sockets etc.
- Can be extended in steps of 100 mm using extension element
- With pre-cut rock wool parts through which the equipment carrier can be fed



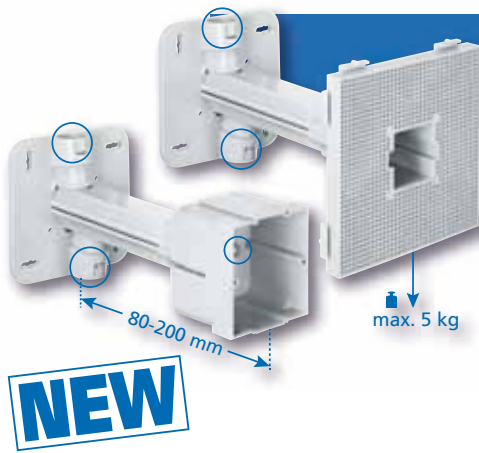
Length x Width x Depth	220 x 100 x 160 mm
Insulation thickness	60 - 160 mm
DIN EN conduit Ø	max. 25 mm
Cable entries	max. Ø 15 mm
Art. No.	1159-26
Inner packaging/shipping	- / 5
Price in EUR/100	

Extension element

- to extend the Universal equipment carrier by 100 mm simply by latching on
- can be reduced in 10 mm steps
- with rock wool pre-cut parts to fill the extension panel



Length x Width x Depth	220 x 100 x 100 mm
Art. No.	1159-27
Inner packaging/shipping	- / 5
Price in EUR/100	



Telescope equipment carrier and switch box.

For the safe installation of luminaires, motion detectors and many other accessories in and on insulated external facades. Optimised for the latest insulation thicknesses, the telescopic products permit a wide range of applications in external faces with insulation thicknesses from 80 to 200 mm. The two conduit entries on the basic carrier guarantee secure conduit connection. The cable routing which is integrated in the carrier ensures a fast, easy cable pull-in.

- Stable fit to walls and ceilings
- For insulation thicknesses from 80 to 200 mm
- Equipment carriers for accessories up to max. 5 kg
- One-gang boxes can be combined with a standardised 71 mm combination distance
- Conduit entries on the carrier with internal cable routing
- Integrated indicated dimension allows easy cutting off to insulation thickness
- Front fixing and depth stop prevent incorrect installation
- Front fixing of the mounting plate/one-gang box



Examples of use



Installing the basic carrier



Prepare the cable routes. Try to avoid direct cable routing through masonry and insulation.



The internal cable routing can easily be broken off to permit cable routing from the rear.



Saw the carrier to the required length. The integrated indicated dimension ensures exact reading of the dimension.



Slotted holes allow precise alignment even when the drill holes are not exact.

Installing the equipment carrier



Push the one-gang box onto the supporting arm as far as the stop.



The new front fixing and the depth stop always ensure exact fitting and prevent incorrect installation.



Side fixings allow the secure positioning of several equipment carriers next to each other ...



... and stable installation for accessories when the attachment points are far apart.

Installing the one-gang box



Push the one-gang box onto the supporting arm as far as the stop.



The new front fixing and the depth stop always ensure exact fitting and prevent incorrect installation.



For multiple combinations, cut out the side separator walls and connect the one-gang boxes.



For multiple combinations, cut out the side separator walls and connect the one-gang boxes.

Product advantages



Dimensions shown on the carrier ensure that the carrier length can easily be sawn off to match the insulation thickness – no need for measuring!



Slotted holes allow precise alignment even when the drill holes are not exact.



The two conduit entries on the carrier guarantee secure conduit support. The integrated cable routing ensures fast, easy cable insertion.



Screw luminaires and many other accessories in the mounting panel through the plaster using screws up to 4 mm Ø.

Front fixing of telescope equipment carrier and box

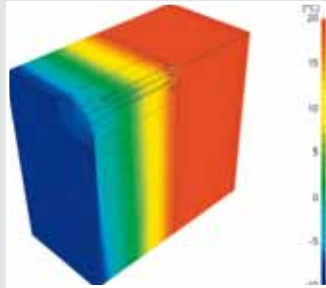


Installation systems

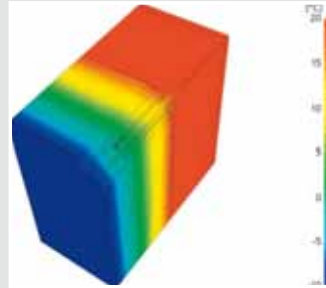
for insulated exterior facades

Heat bridge calculation / weight-bearing load

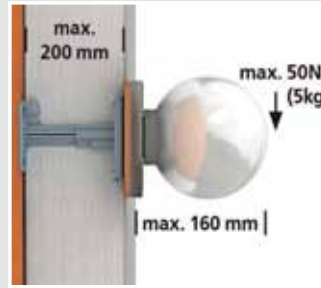
A heat bridge analysis produced by the Passivhaus Institut Dr. Feist, Darmstadt, showed that heat conductivity is only changed to a negligible extent and consequently it is demonstrated that no heat bridges result. When the space between the basic carrier and mounting plate / one-gang box is filled with insulating material, the loss coefficient „x WB“ for the telescope equipment carrier is 0.0085 W/K, and 0.0077 W/K for the telescope switch box.



Telescope equipment carrier



Telescope switch box



When fitting an equipment carrier to a wall, ensure that the cable entries are positioned vertically.

INNOVATION

Telescope equipment carrier

- for secure installation of luminaires and much more
- for use with external insulation of walls and ceilings
- installation area for dowel-free installation of accessories



Length x Width	120 x 120 mm
max. attachment surface for devices	120 x 120 mm
Insulation thickness	80 - 200 mm
Weight when attached to ceiling	5 kg
Weight when attached to wall	5 kg
Conduit entry M20 on the carrier	2
Art. No.	1159-60
Inner packaging/shipping	- / 10
Price in EUR/100	

INNOVATION

Telescope switch box

- for secure fixing of sockets and much more
- for use with external insulation of walls and ceilings
- with 2 screw domes
- standardised combination distance 71 mm



Length x Width x Depth	68 x 70 x 50 mm
Insulation thickness	80 - 200 mm
Cable entries up to Ø 16 mm	2
Conduit entry M20 on the carrier	2
Art. No.	1159-61
Inner packaging/shipping	- / 10
Price in EUR/100	

Combination one-gang box

- for combinations with telescope switch box (Art. No. 1159-61)



Length x Width x Depth	68 x 70 x 50 mm	68 x 70 x 50 mm
Insulation thickness	80 - 200 mm	-
Cable entries up to Ø 16 mm	2	2
Conduit entry M20 on the carrier	2	-
Art. No.	1159-61	1159-62
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

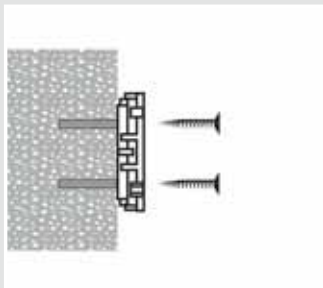
ISO box set

ISO box set for securely attaching one-gang boxes on the masonry in insulated facades.

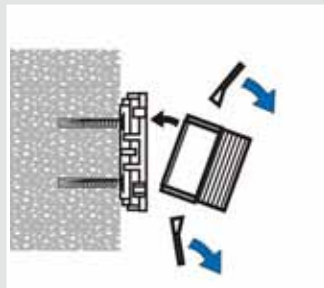
- For securely attaching switches, sockets etc. in the external insulation
- Can be extended as required for high insulation thicknesses
- High torsional strength, and can be combined by means of snap-in connector
- Guaranteed standard combination distance of 71 mm



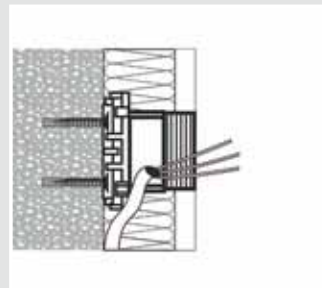
Installation



Secure front part to the wall.



Break off the nail straps of the ISO extension ring and screw the ring to the front part (device screw 40 mm).



Fit ISO extension rings for adaptation to insulation thickness.



Note

Pay attention to cable entry! If necessary, extend cable prior to installation

ISO box set

- mounts on wall surface
- for exterior insulation
- consists of front part, ISO extension ring and 2 ring attachment screws 40 mm
- compensation height 70 mm, can be reduced by 3 x 5 mm to 55 mm
- multiple extensions possible with ISO extension ring



Installation opening	60 mm
Art. No.	1155-03
Inner packaging/shipping	- / 10
Price in EUR/100	

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE



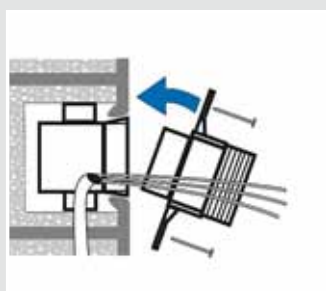
ISO extension ring

ISO extension rings for extending existing one-gang boxes or one-gang junction boxes in insulated facades.

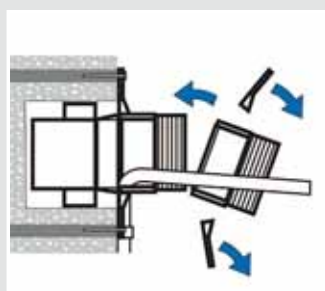
- For extending existing one-gang boxes on the exterior with subsequent insulation
- Can be attached on top of existing one-gang boxes and one-gang junction boxes
- For securely attaching switches, sockets etc.
- Can be extended as required for high insulation thicknesses
- High torsional strength, and can be combined by means of snap-in connector
- Guaranteed standard combination distance of 71 mm



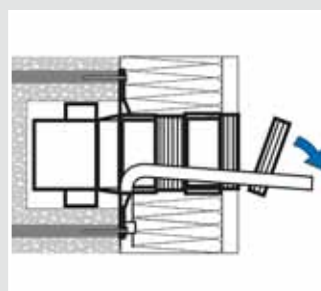
Installation



The existing one-gang box must be fitted to the wall and securely fastened. Using 40 mm device screws, screw the ISO extension ring to the existing box. (If necessary, secure with additional nails.)



For multiple extensions: break off the nail straps on all additional extension rings and connectors. Fit with an offset of 90° and screw to the last ring.



Every extension ring can be shortened to adapt to the insulation thickness. Fill all cavities in the one-gang box and extension rings with insulating material (no heat bridge created)



Note

Pay attention to cable entry! If necessary, extend cable prior to installation

ISO extension ring

- lengthens existing boxes when exterior insulation is used
- can be attached on top of existing one-gang boxes and one-gang junction boxes
- compensation height 50 mm, can be reduced by 3 x 5 mm to 35 mm
- multiple extensions possible
- 2 x 40 mm ring attachment screws needed, Art. No. 2471-40



Installation opening	60 mm
Art. No.	1155-02
Inner packaging/shipping	10 / 50
Price in EUR/100	

Mini equipment carrier



Mini equipment carrier for later attachment of a variety of accessories to insulated and already plastered composite thermal insulation systems. Luminaires, motion detectors, external sensors etc. can be permanently attached easily, quickly, securely and without creating heat bridges.

- For retrofitting in insulated external facades
- Exact flush aligning of attachment devices
- Guarantees installation without heat bridges
- 4 swivels for secure anchoring
- No moisture penetration



Examples of use



The small mini device carriers are concealed by luminaires and smaller accessories.



Secure attachment of motion detectors.



Invisible even when close to edges.



Secure, easy fitting of the corner mounting.



The swivels anchor the KAISER mini equipment carrier in the insulation.



Clamping ribs, sealing lip and holding ring provide additional stability.



The adjustable screw-on surface accommodates a tolerance of up to 10 mm.



The screw-on surface is concealed even when the attachment points are close to the edge.

Hardened metal cutter Ø 20 mm for KAISER mini equipment carrier



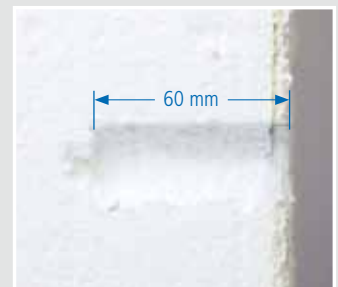
The hardened metal cutter Ø 20 mm with hardened metal cutters for exact installation openings. Art. No. 1088-06



By simply unscrewing the cutter head, the drilled core can be removed quickly using a centering drill.



The depth stop ensures that only the amount of insulation needed to secure the mini equipment carrier is removed.



The insulating capacity remains intact despite the installation opening.

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

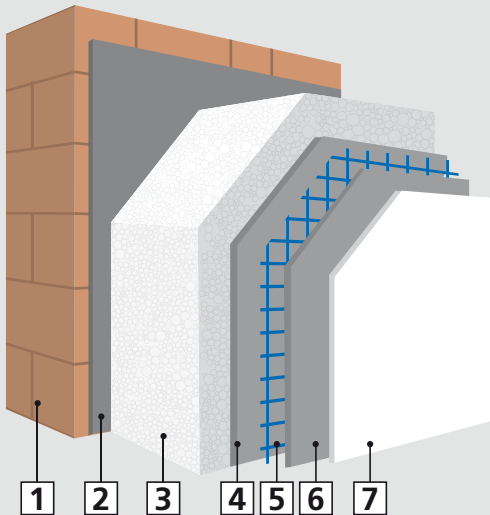
CABLE GLANDS

TOOLS

SERVICE

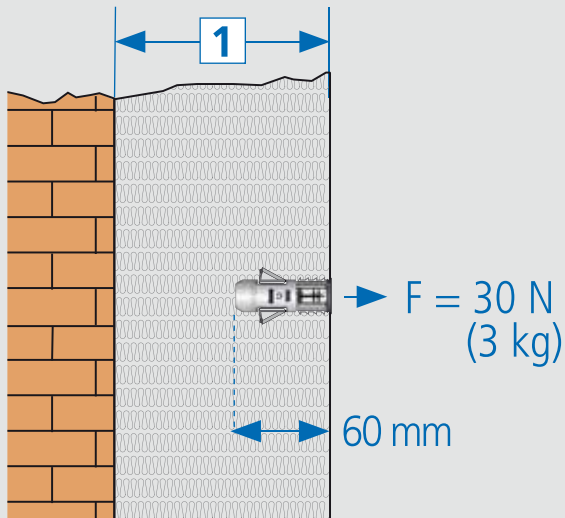
Installation systems for insulated exterior facades

The mini equipment carrier was developed especially for later installation in organic composite thermal insulation systems.



1 Masonry wall | 2 Adhesive | 3 Insulating board | 4 Reinforcement plaster | 5 Reinforcement fabric | 6 Reinforcement plaster | 7 Finish coat of plaster, decorative plaster

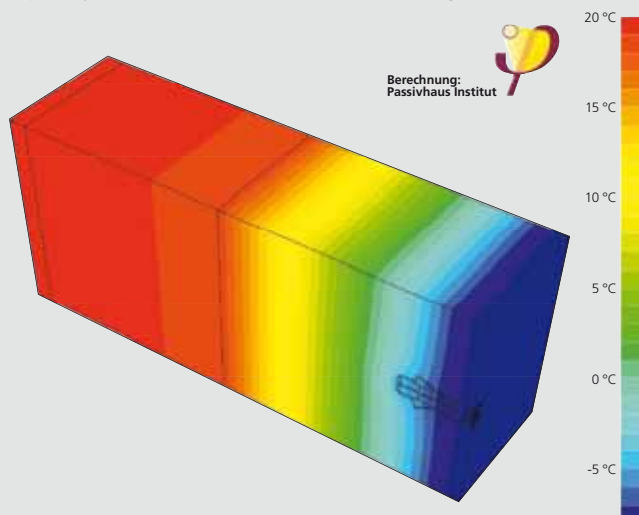
Maximum pull-out force for the mini equipment carrier.



1 External insulation - insulation thickness

Heat bridge calculation

A heat bridge analysis produced by the Passivhaus Institut Dr. Feist, Darmstadt, showed that heat conductivity is only changed to a negligible extent and consequently it is demonstrated that no heat bridges result. The loss coefficient „x WB“ is 0.000054 W/K.



Installation

The two-piece mini equipment carrier can be anchored securely in the insulated external facade in a few simple steps.



Create installation openings of \varnothing 20 mm (e.g. KAISER hardened metal cutter with depth stop).



Release the cutter head and remove the drilled core.



Press the anchor sleeve of the mini equipment carrier into the installation opening so that it is flush with the wall.



Press in the attachment core until it locks into the anchor sleeve.



Pressing in the attachment core anchors the swivels in the insulation material and provides a secure fit for the mini equipment carrier.



The mini equipment carriers now provide stable and wall-flush screw-on surfaces ...



... and provide a tolerance compensation of up to 10 mm. This permits later exact alignment of all installation accessories.



The luminaire is securely and permanently flush-mounted to the wall.

INNOVATION

Mini equipment carrier

- Retrofitting in existing composite thermal insulation systems
- consisting of anchor sleeve and attachment core
- for insulation thicknesses from 80 mm
- Screw-on surface with 10 mm tolerance compensation
- 4 swivel cutters
- 2 ribs
- Sealing lip on all sides
- Weight loading up to 30 N (3 kg)
- equipment attached with self-tapping screws with \varnothing of 3.2 - 4 mm



Length	60 mm
Installation opening	\varnothing 20 mm
Art. No.	1159-50
Inner packaging/shipping	10 / 100
Price in EUR/100	

Accessories: Hardened metal cutter 20 mm, page 255



One-gang junction box ECON® Styro55

One-gang junction box ECON® Styro55 for later attachment of a wide range of installation accessories to insulated and pre-plastered composite thermal insulation systems (EIFS). Switches, sockets, intercoms etc. can be permanently attached easily, quickly, securely and without heat bridges.

- For retrofitting in insulated external facades
- Cutter system prevents damage to cables
- Guarantees installation without heat bridges
- 4 swivels for secure anchoring
- No moisture penetration



Examples of use



Secure attachment to a EIFS without adhesive.



Accessory installation without disrupting the insulation or creating heat bridges.



Secure and flush-mounting installation including multiple combinations.

Technical information



Tool-free and wind-tight cable entry prevents air draughts along the cable.



The swivels anchor the box securely in the insulation material. The ribs at the front also give the box additional support.



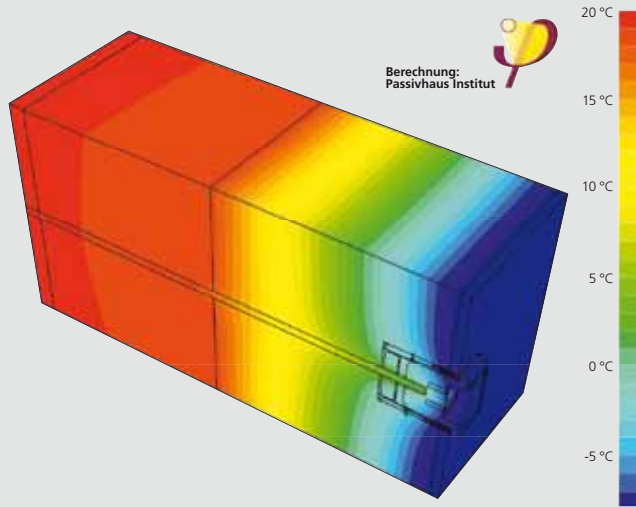
The lip at the back forms a sealing barrier to the insulation material and prevents air draughts along the box.



The all-round sealing lip seals the EIFS, so no moisture can penetrate.

Heat bridge calculation

A heat bridge analysis produced by the Passivhaus Institut Dr. Feist, Darmstadt, showed that heat conductivity is only changed to a negligible extent and consequently it is demonstrated that no heat bridges result. The loss coefficient „x WB“ is 0.005044 W/K.



Installation with an existing cable



Ensure that the cable was fed through the insulation material panel. Shorten the existing cable to approximately 10 cm.



Fasten the KAISER centering aid Ø 68 mm Art. No. 1090-68 to the composite thermal insulation system using steel nails.



Using carbide cutter 180 Art. No. 1088-07, cut the installation opening precisely as far as the depth stop.



Remove the drilled core from the opening.



The opening is now only as deep as necessary. The insulation remains intact and the cable is undamaged.



The ECON technology elastic sealing membrane ensures a wind-tight seal around the cable as it is pushed through.



Simply insert the ECON® Styro55 one-gang junction box in the installation opening.



Press the box in the holding ring until the rim is flush with the wall.



Use KAISER tool Art. No. 1090-21 to position the four swivels in the catch mechanism.



Flush-mounting and secure fit of the one-gang box.



Using the KAISER stripping pliers, Art. No. 1190-02, remove the insulation from the cable.



The swivel sheaths on the box seat themselves securely in the insulation material.

Installation systems

for insulated exterior facades

Installation of combinations



Using the combined cutting aids Art. No. 1090-68, cut installation openings at the standard spacing of 71 mm.



Before inserting the support connector, remove the strap without using a tool.



Fully-insulated through-wiring is accomplished using the KAISER support connector.




Secure and permanent attachment of multi-gang combinations, intercoms and much more.

INNOVATION

One-gang junction box ECON® Styro55

- Retrofitting in existing composite thermal insulation systems
- for insulation thicknesses from 80 mm
- 4 swivel cutters
- Clamping ribs
- Sealing lip on all sides



Depth	60 mm
Installation opening	68 mm
Device screws	2
Tool-free cable entries up to Ø 15 mm	2
	•
Art. No.	1555-51
Inner packaging/shipping	10 / 100
Price in EUR/100	

Accessories: Hardened metal cutter 180 , page 255; Centering aid Ø 68 mm, page 256; Styro55 tool, page 256

International products

For international projects, we offer a large range of products which meet the relevant national standards and regulations.

- Dimensions and approvals based on national standards
- Suitable installation tools
- Many combination options



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS


TOOLS

SERVICE

Universal one-gang boxes for Belgian accessories

- suitable for screw or claw fixing of accessories
- Device screws included



Length x Width x Depth	60 x 60 x 50 mm	60 x 60 x 65 mm
Device screws	2	2
Horizontal conduit entry	4 x 20 mm	4 x 20 mm
Base conduit entry	2 x 20 + 2 x 16 mm	2 x 20 + 4 x 16 mm
Vertical conduit entry	3 x 20 , 3 x 16 mm	3 x 20 , 3 x 16 mm
	•	•
Art. No.	275	276
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

ECON® one-gang box for Belgian accessories

- Air-tight design with sealing membranes
- Centre distance 60 mm horizontally as well as 71 mm horizontally and vertically
- suitable for screw or claw fixing of accessories



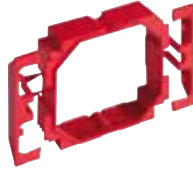
Length x Width x Depth	60 x 60 x 50 mm
Horizontal conduit entry	2 x 20 + 2 x 16 mm
Base conduit entry	2 x 20 + 2 x 16 mm
Vertical conduit entry	2 x 20 + 1 x 16 mm
Art. No.	752
Inner packaging/shipping	10 / 100
Price in EUR/100	

International products

for accessory installation in accordance with national standards

Vario 2.5 plaster compensation frame

- tool-free installation
- adaptor frame adjustable from 2.5 to 15 mm or from 17.5 to 30 mm (by snapping on a second frame)
- suitable for use with a device screw spacing of 60 mm vertical or 71 mm vertical and horizontal
- opening remaining after installation 54 x 54 mm (normally 60 x 60 mm)
- Wide range of applications for installation boxes with or without screws



Art. No.	194
Inner packaging/shipping	- / 100
Price in EUR/100	

One-gang box - Swiss standard

- suitable for screw or claw fixing of accessories
- with injection-moulded signal cover
- for assembling combinations, centre distance 60 mm
- low-lying plaster grips



Depth	59 mm
Diameter	71 mm
Combination conduit entries M20/25	1
Break-out openings Ø 20 mm	10
Art. No.	9921
Inner packaging/shipping	- / 50
Price in EUR/100	

One-gang box - Swiss standard

- suitable for screw attachment of equipment
- to create combinations in both axis directions, centre distance 60 mm
- with separator wall



Length x Width x Depth	72 x 72 x 57 mm
Combination conduit entries M20/25	5
Break-out openings Ø 20 mm	13
Art. No.	99.1234
Inner packaging/shipping	- / 50
Price in EUR/100	

Signal cover

· for one-gang box 99.1234



Length x Width	67 x 67 mm
Art. No.	99.1234.06
Inner packaging/shipping	- / 25
Price in EUR/100	

One-gang box (Italian and American standard)

· with 2 screw domes (without screws)



	100 x 60 x 52 mm	121 x 60 x 52 mm
Screw spacing	83 mm	108 mm
M16 conduit entries	1	1
Conduit entries M20	12	12
Conduit entries M25	3	6
Art. No.	662	663
Inner packaging/shipping	- / 100	5 / 100
Price in EUR/100		

Cavity wall installation



The most important advantages at a glance:

- Complete system for all cavity wall applications
- FX⁴ quick assembly technology for time-saving installation
- Air-tight installation in accordance with EnEV energy-saving ordinance.
- ECON-technology: Air-tight one-gang boxes and one-gang junction boxes for tool-free cable and conduit entries
- HWD fire protection boxes for **fire-protection walls** and ceilings and also shipbuilding walls
- Secure, visible and certified protection without smoothing or filling by using KAISER sealing systems for cables and conduits
- Sound insulation boxes for use in **sound insulation walls**
- Radiation protection boxes for use in lead-containing and lead-free **radiation protection walls**
- Universal installation housings with mineral fibreboard for all standard accessory types (e.g. displays, LED luminaires and many more)
- International products for accessory installation in accordance with national standards
- Air-tight sleeves for air-tight feed-through of cables and conduits
- Professional system tools for fast, secure installation
- Wide range of system accessories
- Halogen-free product range



Cavity wall | Product lines



Basic installation	p. 60
Air-tight installation	p. 68
Air-tight sleeves	p. 77
AFS intelligent fire-protection technology	p. 202
Sound insulation technology	p. 81
Screening and potential conductivity	p. 92
Radiation protection technology	p. 86
Screws, metal plates	p. 94
Junction casings and boxes	p. 95
Universal installation housings	p. 99
International products	p. 101

Tools for cavity wall installation can be found in the "Tools" section starting on page 257.





NEW

	Basic installation	Energy saving Air-tight	Sound insulation	Radiation protection	Screened Environmentally-friendly	International products	Fire protection Buildings	Ship-building
For installation accessories								
One-gang boxes	p. 61	p. 69	-	-	-	p. 101	p. 205	p. 211
One-gang junction boxes	p. 61	p. 70	p. 83	p. 88	p. 92	p. 101	p. 205	p. 212
One-gang boxes for thin boarding	p. 62	-	-	-	-	-	-	p. 211
One-gang junction boxes for thin boarding	p. 63	-	-	-	-	-	-	p. 212
One-gang junction boxes for solid wood	p. 72	-	-	-	-	-	-	-
Two-gang junction boxes	p. 62	-	-	-	-	-	-	-
Electronics boxes	p. 73/64	p. 73/64	p. 85 NEW	-	-	-	p. 207 NEW	-
Perilex® one-gang boxes	p. 63	-	-	-	-	-	-	-
CEE one-gang boxes	p. 63	p. 72	-	-	-	-	-	-
Universal installation housings	p. 99	-	-	-	-	-	-	-
Versions								
Available halogen-free	•	•	•	•	-	•	•	•
For cable exits								
Wall light connection boxes	p. 65	p. 73	-	-	-	-	-	-
Luminaire connection boxes	p. 66	-	-	-	-	-	p. 209	-
For cable entries								
Air-tight sleeves	-	p. 77	-	-	-	-	-	-
Multiple air-tight sleeves ECON®	-	p. 79 NEW	-	-	-	-	-	-
Sealings	-	-	-	-	-	-	p. 213	-
For cable connections								
Junction boxes	p. 63	-	-	-	-	-	-	-
Junction casings	p. 96	-	-	-	p. 93/30	-	-	-
Potential equalisation casings	p. 97	-	-	-	-	-	-	-
Accessories								
Fixing	p. 94	p. 94	p. 94	-	p. 94	p. 94	p. 94	p. 94
Retrofitting sealing air-tight)	p. 76/21	-	-	-	-	-	-	-
Sealing of electrical installations (air-tight and smoke-tight)	-	p. 76	-	-	-	-	p. 76	-
Plaster compensation	p. 67	p. 67	-	-	-	-	-	-
Support connector	p. 67	p. 74	p. 83	p. 88	-	-	p. 205	p. 205
End cover	p. 67	p. 75	p. 83	-	p. 93/30	-	p. 209	p. 209

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

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CABLE GLANDS

TOOLS

SERVICE

One-gang boxes, one-gang junction boxes, accessories for cavity wall installation



FX4 technology - the fastest means of screw attachment

FX4 technology provides the fastest-ever method for screw fixing cavity wall boxes and installation housings. The new thread shape enables up to 40% quicker mounting with high self-locking effect.

- 40% quicker mounting
- Patented thread shape
- High self-locking effect
- In cavity wall boxes and installation housings



Processing instructions

The new patented screws with the steep thread design and the 3-part thread guarantee to reduce the installation time by up to 40%.



Standard screw



KAISER standard



Example of use for universal housing



Example of use for EnoX

Technical processing instructions/standards

- in accordance with DIN EN 60670
- standardised combination distance 71 mm
- fully-insulated through-wiring in combinations of one-gang boxes and one-gang junction boxes for switches and sockets possible
- with holding ring
- break-out openings for sheathed cabling, low-voltage wires and DIN EN conduits
- integrated retention of NYM cables in accordance with DIN 60670/DIN 49073, self-locking of the conduits
- can also be used as junction box in accordance with DIN EN 60670

One-gang boxes, one-gang junction boxes, accessories

for cavity wall installation

One-gang box

· with holding ring



For panel thickness	7 - 40 mm	7 - 40 mm	7 - 28 mm	7 - 28 mm
Depth	47 mm	47 mm	35 mm	35 mm
Cut hole Ø	68 mm	68 mm	68 mm	68 mm
Device screws	2	2	2	2
Break-out openings Ø 20 mm	2	2	-	-
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2	2	-	-
Cable entries 3 x 1.5 mm ²	2	2	4	4
Cable entries for low voltages	2	2	-	-
Support connectors for each package	7	7	-	-
Halogen-free	-	•	-	•
/	• / •	• / -	- / -	- / -
Art. No.	9063-01	9063-77	9061-00	9061-77
Inner packaging/shipping	25 / 250	25 / 250	25 / 250	25 / 250
Price in EUR/100				

Accessories: Support connector, page 74

One-gang junction box

· with holding ring



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	61 mm	61 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Break-out openings Ø 20 mm	4	4
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2	2
Cable entries 3 x 1.5 mm ²	4	4
Cable entries for low voltages	2	2
Support connectors for each package	7	7
Halogen-free	-	•
/	• / •	• / -
Art. No.	9064-01	9064-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Accessories: Support connector, page 74

FLUSH-MOUNTING

CAVITY WALL

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SERVICE



One-gang boxes, one-gang junction boxes, accessories

for cavity wall installation

Two-gang junction box

- for 2 electrical inserts or 1 block insert
- can also be used as a one-gang junction box (incl. 2 device inserts)
- use separator wall to separate electrical circuits Art. No. 9062-22 (not illustrated)
- with holding ring




For panel thickness	7 - 40 mm	7 - 40 mm
Depth	47 mm	47 mm
Cut hole Ø	2 x 68 mm	2 x 68 mm
Device screws	4	4
Centre distance	71 mm	71 mm
Break-out openings Ø 20 mm	6	6
Cable entries 3 x 1.5 mm ²	6	6
Halogen-free	-	•
 / 	• / •	• / -
Art. No.	9062-02	9062-77
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Accessories: Connecting clip for stacking boxes, page 65

One-gang box for thin boardings

- for boardings that do not permit stepped face cutting
- with holding ring
- protection class IP 2X



For panel thickness	0,2 - 40 mm	0,2 - 40 mm
Depth	41 mm	41 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Break-out openings Ø 20 mm	2	2
Cable entries 3 x 1.5 mm ²	4	4
Halogen-free	-	•
	•	•
Art. No.	9068-04	9068-74
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

One-gang junction box for thin boardings

- for boarding that does not permit edge countersinking (e.g. metal-covered boarding)
- with holding ring



For panel thickness	0,2 - 40 mm	0,2 - 40 mm
Depth	61 mm	61 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Break-out openings Ø 20 mm	4	4
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2	2
Cable entries 3 x 1.5 mm ²	4	4
Cable entries for low voltages	2	2
Halogen-free	-	•
	•	•
Art. No.	9068-03	9068-76
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

PERILEX®/CEE One-gang box

- with holding ring
- for device inserts 16 A



For panel thickness	12,5 - 40 mm	12,5 - 40 mm	12,5 - 40 mm	12,5 - 40 mm
Depth	50 mm	50 mm	50 mm	50 mm
Cut hole Ø	74 mm	74 mm	74 mm	74 mm
Halogen-free	-	•	-	•
With sealing ring for protection class IP 34 and 2 raised head 4 mm Ø device screws, length 20 mm, for use with 16 A CEE equipment inserts	-	-	•	•
with 2 countersunk device screws 4 mm Ø, 16 mm in length to facilitate use of 16 A PERILEX inserts	•	•	-	-
/	• / •	• / -	• / -	• / -
Art. No.	9067-01	9067-77	9075-01	9075-77
Inner packaging/shipping	10 / 100	10 / 100	10 / 100	10 / 100
Price in EUR/100				

Junction box

- with universal VDE cover 1184-90
- with holding ring



For panel thickness	12,5 - 40 mm	12,5 - 40 mm
Depth	50 mm	50 mm
Cut hole Ø	74 mm	74 mm
Halogen-free	-	•
	•	•
Art. No.	9071-01	9071-77
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

One-gang boxes, one-gang junction boxes, accessories for cavity wall installation



Electronics box

Cavity wall electronics box for switching units, electronic components, cables and terminals in cavity walls. The box can be subdivided and combined, so it offers a wide range of usage options.

- For different kinds of voltages by using the associated separator wall
- Integrating radio or EIB actuators
- With cover that can be wallpapered and filled
- Can be combined with each other and with one-gang boxes and one-gang junction boxes



Processing instructions



Cut two installation openings with turbo cutter Multi 4000 Ø 74 mm (Art. No. 1084-10) with a centre distance of 71 mm.



You can create a cable entry that is made precisely for air-tight installation with the KAI-SER universal opening cutter (1085-80).



The electronics box offers space for all kinds of installations. Can also be used as a network box with sufficient space for reserve cables.




The cover can also be turned by 180° and mounted and filled. This will reduce possible switching noises.

Electronics box

- air-tight version with additional sealing lip
- tunnel twin-chamber box with separator wall and cover that can be wallpapered (cover can be turned through 180° and plastered to reduce any switching noise).
- for one-gang inserts and electronic components such as EIB actuators, communications equipment (Cat 7), radio control elements, alarm modules, etc.
- with holding ring



Depth	75 mm	75 mm
Cut hole Ø	2 x 68 mm	2 x 68 mm
Centre distance	71 mm	71 mm
Halogen-free	-	•
Air-tight	•	•
	•	•
Art. No.	9062-94	9062-74
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Accessories: Connecting clip for stacking boxes, page 65

Connecting clip for stacking boxes

- for two-gang junction box 9062-02 and electronics box 9062-94



Art. No.	9062-50
Inner packaging/shipping	- / 10
Price in EUR/100	

Wall light connection box

- with inner fitting cover
- not to be used as a junction box!
- with holding ring



For panel thickness	7 - 30 mm	7 - 40 mm	7 - 40 mm
Depth	40 mm	45 mm	45 mm
Cut hole Ø	2 x 35 mm	35 mm	35 mm
Centre distance	30 mm	-	-
Break-out openings Ø 20 mm	1	-	-
Cable entries 3 x 1.5 mm ²	2	1	1
Halogen-free	-	-	•
Air-tight	-	•	•
If necessary use screw cover 1148-90	•	-	-
/	• / •	- / -	- / -
Art. No.	9148-00	9248-01	9248-77
Inner packaging/shipping	25 / 100	25 / 100	25 / 100
Price in EUR/100			

Cover

- for wall light connection boxes 1048-00 and 9148-00
- with 2 x 15 mm cover screws



Length x Width	75 x 40 mm
Art. No.	1148-90
Inner packaging/shipping	25 / 250
Price in EUR/100	

FLUSH-MOUNTING

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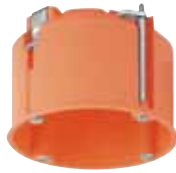
SERVICE

One-gang boxes, one-gang junction boxes, accessories

for cavity wall installation

Ceiling light connection box

- with M5 metal thread for light hooks min. length 55 mm
- maximum load 20 N (2 kg)
- can also be used as ceiling light junction box
- with holding ring
- Important! Always screw in light hook fully.



For panel thickness	7 - 40 mm
Depth	47 mm
Cut hole Ø	68 mm
Break-out openings Ø 20 mm	2
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2
Cable entries 3 x 1.5 mm ²	2
Art. No.	9063-50
Inner packaging/shipping	- / 10
Price in EUR/100	

Light hook

- for retrofitting ceiling boxes (DIN EN 60670)
- with M5 thread, fully-insulated



Length of shank	55 mm	65 mm
Diameter hook	26 mm	26 mm
Thread length	10 mm	10 mm
Overall length	81 mm	91 mm
Art. No.	1226-55	1226-65
Inner packaging/shipping	- / 150	- / 150
Price in EUR/100		

Junction box

- for 10 terminals 1.5 mm², for 8 terminals 2.5 mm² or for 6 terminals 4 mm²
- use separator wall to separate electrical circuits Art. No. 9062-22 (not illustrated)
- including cover



For panel thickness	7 - 40 mm
Depth	47 mm
Cut hole Ø	2 x 68 mm
Centre distance	71 mm
Break-out openings Ø 20 mm	6
Cable entries 3 x 1.5 mm ²	6
/	• / •
Art. No.	9062-21
Inner packaging/shipping	10 / 100
Price in EUR/100	

Accessories: Replacement cover, page 67

Replacement cover

· for junction box 9062-21



Length x Width	145 x 75 mm
Art. No.	9062-90
Inner packaging/shipping	- / 10
Price in EUR/100	

Plaster compensation ring

- to compensate for deep-seated boxes
- plaster compensation rings with same diameter can be stacked
- with 2 screws for attaching equipment and 2 ring attachment screws



Height	10 mm	20 mm	12 mm	24 mm
Screw spacing	60 mm	60 mm	67 mm	67 mm
for boxes with an outer Ø	68 mm	68 mm	74 mm	74 mm
Art. No.	9155-61	9155-62	9155-71	9155-72
Inner packaging/shipping	25 / 250	25 / 250	10 / 100	- / 100
Price in EUR/100				

Support connector

· for through-wiring of combinations to IP 3X standard



Halogen-free	-	•
Art. No.	9060-97	9060-77
Inner packaging/shipping	- / 50	- / 50
Price in EUR/100		

Compensation ring

- for all Ø 68 mm cavity wall boxes
- for oversize drill holes
- compensation up to Ø 71 mm
- can also be used for combinations where the formed surfaces are located next to each other



Art. No.	9060-40
Inner packaging/shipping	25 / 250
Price in EUR/100	

FLUSH-MOUNTING

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Air-tight cavity wall installation

Air-tight cavity wall boxes with ECON technology for energy-efficient electrical installation according to EnEV and for installation in accordance with clean-room and hygiene requirements. The elastic ECON technology sealing membrane permits air-tight electrical installation.

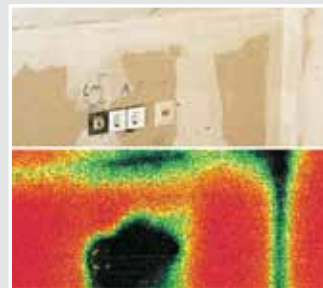
- Elastic sealing membrane for guaranteed air-tightness
- Innovative clamp technology with integrated cable retention
- Tool-free cable and conduit entry
- Air-tight, combined with support connector (9060-98)



Technical information



As a key component of the new German Energy Saving Ordinance (EnEV), the energy performance certificate is a prerequisite for both commercial and residential properties. It creates more transparency for both buyers and tenants regarding the energy efficiency of a property. This factor is set to become more important in the real estate industry, not only for new build projects but also for renovation projects (existing housing).



Thermographic photographs highlight the thermal losses, which occur in conventional electrical installations.



With the help of various test procedures such as thermographic photographs, the blower-door-test and thermo anemometer measurements, we and various neutral institutions have proven the level of air tightness achieved by KAISER installation systems.



Especially in cavity wall construction, an air-tight building shell, guaranteed largely through the moisture barrier foil, plays an important role in complying with permissible energy values. Each conventional installation opening breaks this air-tight shell and results in uncontrolled artificial currents, which often weaken other energy saving measures significantly.

Average heat energy consumption in houses with a living area surface of 100 m²

House type	"Normal house" (housing)	Low-energy house	Passive house	Zero-heating energy house	Energy-autonomous house (special case)
Fuel oil consumption	approx. 2200 l/year	approx. 850 l/year	approx. 180 l/year	approx. 0 l/year	approx. 0 l/year
Use of energy	187 kW h/m ² a	73 kW h/m ² a	15 kW h/m ² a	8.3 kW h/m ² a	0 kW h/m ² a

Air-tight one-gang boxes, one-gang junction boxes, accessories for cavity wall installation

Processing instructions

Air-tight cavity wall box with ECON technology for energy-efficient electrical installation in accordance with the German Energy Saving Ordinance (EnEV), as well as for installation under clean-room or hygiene conditions. The elastic ECON technology sealing membrane permits electrical installation acc. to EnEV.



The ECON technology elastic sealing membrane fits itself around the conduit or cable during piercing. This prevents uncontrolled air flows.



The flexible and tool-free insertion of the conduit or cable significantly simplifies the process and reduces installation time.



The integrated, innovative clamp technology easily meets the requirements of the specified integrated cable retention (acc. to DIN VDE 0606 / DIN EN 60670)



The support connector ensures the air-tight combination of the cavity wall boxes and is inserted via the removable metal plates without the use of tools.

One-gang box ECON® 63

- Air-tight design with sealing membranes
- fully-insulated air-tight through-wiring in combinations of boxes and one-gang junction boxes for switches and sockets through support connectors
- tool-free cable or conduit entries
- integrated strain relief of NYM cables, self-locking of conduits



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	48 mm	48 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Conduit entries M20	2	2
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2	2
Cable entries 3 x 1.5 mm ²	2	2
Support connectors for each package	7	7
Halogen-free	-	•
Air-tight	•	•
⚡ / OVE	• / •	• / •
Art. No.	9263-21	9263-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Accessories: Support connector, page 67

FLUSH-MOUNTING

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Air-tight one-gang boxes, one-gang junction boxes, accessories for cavity wall installation

One-gang junction box ECON® 64

- Air-tight design with sealing membranes
- fully-insulated air-tight through-wiring in combinations of boxes and one-gang junction boxes for switches and sockets through support connectors
- tool-free cable or conduit entries
- integrated strain relief of NYM cables, self-locking of conduits



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	61 mm	61 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Conduit entries M25	2	2
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2	2
Cable entries 3 x 1.5 mm ²	2	2
Support connectors for each package	7	7
Halogen-free	-	•
Air-tight	•	•
⚡ / ⓄVE	• / •	• / •
Art. No.	9264-21	9264-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Accessories: Support connector, page 67

Installation of cavity wall boxes, air-tight version

Installation of cavity wall boxes, air-tight version



Cut all required entry points for cavity wall boxes (except ECON = without the use of tools) with the opening cutter.



Insert cables or conduit with a slight turn. To insert the box with ease, push folding base together towards the centre.



Tighten both screws of the FX4 fast screw attachment.



For combinations: Insert support connectors.

One-gang box for thin boardings

- for boardings that do not permit stepped face cutting
- in combinations, only use the support connector if boxes are equal in height
- with holding ring



For panel thickness	0,2 - 40 mm	0,2 - 40 mm
Depth	47 mm	47 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Cable entries up to max. Ø 10.5 mm can be made using universal opening cutter 1085-80	•	•
Halogen-free	-	•
Air-tight	•	•
	•	•
Art. No.	9068-01	9068-79
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

One-gang junction box

- incl. 10 connection pieces (for every 25 boxes)
- with holding ring



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	65 mm	65 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Cable or conduit entries to max. Ø 25 mm made by means of universal opening cutter 1085-80	•	•
Halogen-free	-	•
Air-tight	•	•
/	• / •	• / -
Art. No.	9066-01	9066-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		
Accessories: Support connector, page 74		

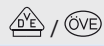
Air-tight one-gang boxes, one-gang junction boxes, accessories for cavity wall installation

One-gang junction box for solid wood

- for clamped attachment in solid wood from 10 mm thickness upwards
- not suitable for use with plasterboard or mineral fibreboard!
- with holding ring



AIR-TIGHT

Depth	65 mm
Cut hole Ø	68 mm
Cable or conduit entries to max. Ø 25 mm made by means of universal opening cutter 1085-80	•
Air-tight	•
	• / •
Art. No.	9066-12
Inner packaging/shipping	25 / 250
Price in EUR/100	


One-gang box CEE

- for use with 16A CEE equipment inserts
- with holding ring



AIR-TIGHT



For panel thickness	12,5 - 40 mm	12,5 - 40 mm
Depth	50 mm	50 mm
Cut hole Ø	74 mm	74 mm
Screw spacing	67 mm	67 mm
Cable entries up to max. Ø 10.5 mm can be made using universal opening cutter 1085-80	•	•
Halogen-free	-	•
Air-tight	•	•
	•	•
Art. No.	9075-12	9075-78
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Electronics box

- air-tight version with additional sealing lip
- tunnel twin-chamber box with separator wall and cover that can be wallpapered (cover can be turned through 180° and plastered to reduce any switching noise).
- for one-gang inserts and electronic components such as EIB actuators, communications equipment (Cat 7), radio control elements, alarm modules, etc.
- with holding ring



Depth	75 mm	75 mm
Cut hole Ø	2 x 68 mm	2 x 68 mm
Centre distance	71 mm	71 mm
Halogen-free	-	•
Air-tight	•	•
	•	•
Art. No.	9062-94	9062-74
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Accessories: Connecting clip for stacking boxes, page 65

Wall light connection box

- with inner fitting cover
- not to be used as a junction box!
- for 3 terminal blocks



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	45 mm	45 mm
Cut hole Ø	35 mm	35 mm
Cable entries 3 x 1.5 mm ²	1	1
Halogen-free	-	•
Air-tight	•	•
Art. No.	9248-01	9248-77
Inner packaging/shipping	25 / 100	25 / 100
Price in EUR/100		

Air-tight one-gang boxes, one-gang junction boxes, accessories for cavity wall installation

Junction box Ø 120 mm

- for 2 electrical circuits through separator wall 9073-20
- receptacle for TS 35 standard rail
- with holding ring
- Making the installation opening with bi-metal cutter 1082-20 or Variocut 1089-00



AIR-TIGHT



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	65 mm	65 mm
Cut hole Ø	120 mm	120 mm
Cable or conduit entries to max. Ø 25 mm made by means of universal opening cutter 1085-80	•	•
Halogen-free	-	•
Air-tight	•	•
/	• / •	• / -
Art. No.	9073-91	9073-77
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Support connector

- for through-wiring of combinations to IP 3X standard air-tight
- for Art. No. 9066-01/12, 9068-01, 9263-..., 9264-...

AIR-TIGHT



Halogen-free	-	•
Air-tight	•	-
Art. No.	9060-98	9060-78
Inner packaging/shipping	- / 25	- / 25
Price in EUR/100		

Universal VDE cover

- for all one-gang, one-gang junction and junction boxes
- with central exit for light hook
- flat cover edge
- surface roughened



Diameter	92 mm	92 mm
Screw spacing	60 / 67 mm	60 / 67 mm
Halogen-free	-	•
Fireproof	850 °C	850 °C
	•	•
Art. No.	1184-90	1184-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Universal waterproof cover

- central entry with stoppers
- for countersunk screws Ø 4 mm



Diameter	90 mm
Screw spacing	67 mm
Fireproof	850 °C
Art. No.	1174-99
Inner packaging/shipping	- / 10
Price in EUR/100	

Internal cover

- for flush closure of one-gang boxes and one-gang junction boxes
- suitable for wallpapering
- for all one-gang boxes and one-gang junction boxes



Diameter	64 mm
Art. No.	1158-90
Inner packaging/shipping	25 / 250
Price in EUR/100	

Sealing foil

Sealing foil for later sealing of over-sized, non-circular or broken-out openings, as often found with combinations in plasterboard, mineral fibreboard or similar materials, which are guaranteed to be sealed air-tight with the sealing foil.



Sealing foil

- for sealing between box edge and boarding material oversized or broken-out drill holes (e.g. in combination areas with plasterboard, mineral fibreboard or similar materials)
- for Art. No. 9066-01/77, 9068-01/79, 9248-01, 9263-..., 9264-...

AIR-TIGHT



Air-tight	•
Art. No.	9060-41
Inner packaging/shipping	- / 25
Price in EUR/100	

Air-tight one-gang boxes, one-gang junction boxes, accessories for cavity wall installation

Sealing inserts

Sealing insert for retrofit sealing of existing one-gang boxes in air-tight building shells. The insert encloses the wiring and creates a guaranteed air-tight installation space.



Sealing inserts

- for retrofit sealing (air-tightness) of existing one-gang boxes or one-gang junction boxes without flush-mounting removal (masonry) and cavity walls
- permanently flexible plastic



AIR-TIGHT

Depth	36,5 mm
Diameter	60 mm
Air-tight	•
Art. No.	1040-01
Inner packaging/shipping	10 / 100
Price in EUR/100	

INNOVATION

Sealing plugs 16-20

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic

ECON **AIR-TIGHT**



Sealing plug	M16	M20
DIN EN conduit Ø	16 mm	20 mm
Art. No.	1040-16	1040-20
Inner packaging/shipping	25 / 100	25 / 100
Price in EUR/100		

INNOVATION

Sealing plugs 25-40

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic

ECON **AIR-TIGHT**



Sealing plug	M25	M32	M40
DIN EN conduit Ø	25 mm	32 mm	40 mm
Art. No.	1040-25	1040-32	1040-40
Inner packaging/shipping	25 / 100	25 / 50	- / 25
Price in EUR/100			

Air-tight sleeve

Air-tight sleeves for sealing conduit and cable entries in the interior of air-tight building shells.

- extremely strong adhesion
- For quick, air-tight feed-through
- 10 types for different conduit and cable diameters
- Sticks to almost all surfaces



Examples of use



Measuring the air-tightness



Note

You can create air-tight conduit entries cleanly and easily by using the self-adhesive KAISER air-tight sleeves. The protective covers create faster, more stable and, above all, more air-tight transitions than improvised methods.

Installation



Push the sleeve over the cable or conduit.



Remove the foil from the sleeve.



Stick on the sleeve and press firmly on to the base, working outwards from the centre.

FLUSH-MOUNTING

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Air-tight sleeves

for air-tight conduit and cable entries

Air-tight sleeves for cables and conduits

- Continuous sealing by means of air-tight layers for penetration of cables
- extremely strong adhesion
- Temperature resistance -30°C to +90°C, in the feed-through area up to +120°C
- UV-resistant, halogen-free



AIR-TIGHT

Length x Width x Height	Number of cables/conduits	Diameter of cable / pipe	Air-tight	Art. No.	Inner packaging/ shipping	Price in EUR/100
150 x 150 x 30 mm	1 item	4 - 8 mm	•	9059-44	10 / 30	
150 x 150 x 30 mm	2 item	4 - 8 mm	•	9059-45	10 / 30	
150 x 150 x 30 mm	1 item	8 - 11 mm	•	9059-46	10 / 30	
150 x 150 x 30 mm	2 item	8 - 11 mm	•	9059-47	10 / 30	
150 x 150 x 30 mm	1 item	15 - 22 mm	•	9059-48	10 / 30	
150 x 150 x 30 mm	1 item	25 - 32 mm	•	9059-49	10 / 30	
230 x 230 x 50 mm	1 item	42 - 55 mm	•	9059-51	- / 8	
230 x 230 x 50 mm	1 item	50 - 75 mm	•	9059-52	- / 4	
230 x 230 x 50 mm	1 item	75 - 90 mm	•	9059-53	- / 4	
320 x 320 x 50 mm	1 item	100 - 110 mm	•	9059-54	- / 4	

Air-tight sleeves	Ø Diameter	Item no.	Dimension illustration (mm)
For coaxial cables	Ø 4-8 mm	9059-44	
For cables	Ø 8-11 mm	9059-46	
Double cable sleeve for coaxial cables	Ø 4-8 mm	9059-45	
Double cable sleeve for cables	Ø 8-11 mm	9059-47	
For conduits	Ø 15-22 mm	9059-48	
	Ø 25-32 mm	9059-49	
For conduits	Ø 42-55 mm	9059-51	
	Ø 50-75 mm	9059-52	
	Ø 75-90 mm	9059-53	
	Ø 100-110 mm	9059-54	

Note

Please ensure that the base is dry and free from dust and grease. The process should be carried out at a temperature of above -5°C. The full adhesive strength is reached after 24 hours. The sleeves have an unlimited shelf life provided that they are stored at room temperature (cool and dry).

Multiple air-tight sleeve ECON®

Cable and conduit sleeve ECON® for reliable sealing of up to 6 cable or conduit entries through the air-tight building shell - ideal for digital satellite units.

- Flexible sealing of 1 to 6 cables or conduits
- Low space requirement, powerful adhesion
- Completely toolless wall installation
- Sealing even when cables are extremely kinked
- Unused entries are reserved for later installations



Examples of use



Connection of a digital satellite receiver unit.



4 coaxial cables are connected here for reception.



The mast which supports the parabolic mirror must also be incorporated in the equipotential bonding.



The cables are fed through the building's air-tight seal. This entry must be permanently sealed air-tight.

Installation



ECON® technology's toolless cable or conduit entry offers maximum ease of installation and permits fast processing.



Before the sleeve can be glued in position, make sure that the surface is free of dust. Then remove the protective foil,...



... glue the sleeve in position and thoroughly smooth it onto the surface, working from the inside to the outside.



The sleeves guarantee permanent sealing of entries, even when cables are extremely kinked. Retrofitting is easy.

Product advantages



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Multiple air-tight sleeve ECON®

for air-tight conduit and cable entries

INNOVATION

Cable-sleeve ECON®

- 1-piece
- extremely strong adhesion
- Temperature resistance from -25°C to +80°C
- UV-resistant, halogen-free



AIR-TIGHT ECON
TECHNIK

Length x Width x Height	230 x 230 x 25 mm
Number of cable entries	1 - 6
Cable diameter	4 - 11 mm
Art. No.	9059-61
Inner packaging/shipping	- / 5
Price in EUR/100	

INNOVATION

Conduit-sleeve ECON®

- 1-piece
- extremely strong adhesion
- Temperature resistance from -25°C to +80°C
- UV-resistant, halogen-free



AIR-TIGHT ECON
TECHNIK

Length x Width x Height	320 x 320 x 30 mm
Number of conduit entries	1 - 6
Conduit diameter	16 - 25 mm
Art. No.	9059-62
Inner packaging/shipping	- / 5
Price in EUR/100	

Sound insulation technology

Sound insulation box for use in walls with increased demands on sound protection. The solid box body with additional sound insulation sheathing absorbs and reflects sound, which prevents disturbances in adjacent rooms. Sound insulation is the same as if no installation boxes were installed.

- Maintains the wall's sound insulation protection
- Also for retrofitting
- Installation up to 5-unit combinations
- Also for opposing installation
- Can be used with sound protection cover as a junction box



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

Examples of use



Example of installation of a switch/socket combination.



Use of an opposing sound insulation box.



Use of a sound insulation box on one side of a double combination.



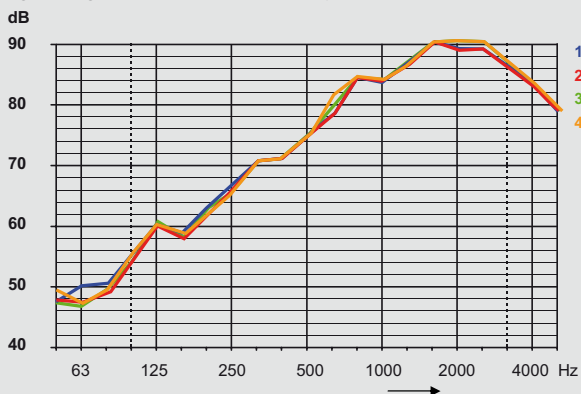
The sound insulation box can be used in up to five opposing combinations without weakening the sound insulation characteristics of the wall.

HOUSINGS

FIRE PROTECTION

Comparison of sound insulation

Lightweight wall (2-shell, each triple-boarded) with sound insulation one-gang junction boxes.



1 Wall, without installations, 77 dB | 2 Sound insulation box 9069-01, single, with accessory, 77 dB | 3 Sound insulation box 9069-01, single, with cover, 77 dB | 4 Sound insulation box 9069-01, 5-way, with accessory, 77 dB

EARTHING

CABLE GLANDS

TOOLS

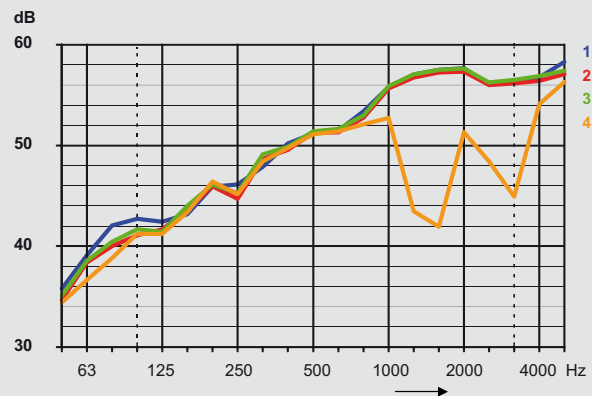
SERVICE

Sound insulation technology

for cavity wall installation

Comparison of sound insulation

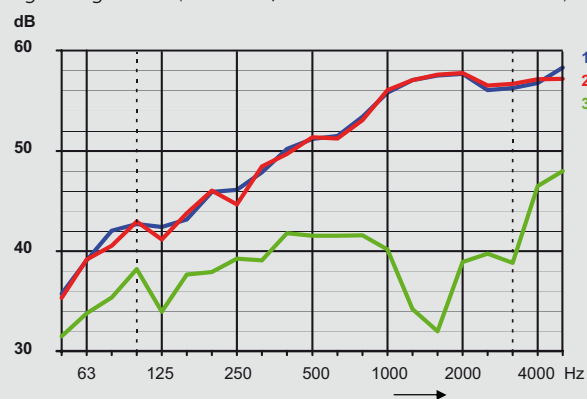
Lightweight wall (two-shell, double-boarded in each case) with sound insulation one-gang junction boxes.



1 Wall, with no installations, 54 dB | 2 Sound insulation box 9069-01, single, with accessory, 54 dB | 3 Sound insulation box 9069-01, single, with cover, 54 dB | 4 One-gang junction box 9064-01, single, with accessory, 48 dB

Comparison of sound insulation

Lightweight wall (two-shell, double-boarded in each case) with sound insulation one-gang junction boxes.



1 Wall, with no installations, 54 dB | 2 Sound insulation box 9069-01, fivefold, with accessory, 54 dB | 3 One-gang junction box 9064-01, fivefold, with accessory, 38 dB

Installation



Use a cutter (e.g. Multi 4000: 1084-10) to make a \varnothing 74 mm opening.



For combinations, cut off the marked edge strip.



Installation then proceeds as with a conventional cavity wall box.



Secure and fast installation thanks to KAISER FX4 technology.



Accurate entries ensured by the universal opening cutter, Art. No. 1085-80.



Combinations at a standard spacing of 71 mm.



Tight and fully-insulated through-wiring is ensured by the support connector.



With the sound-insulation cover, the box can also be used as a junction box.

INNOVATION

Sound-insulation box

- One-gang junction box for sound insulation walls in buildings
- Combination distance of 71 mm through single separation of the pre-embossed edge

SOUND INSULATION



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	54,5 mm	54,5 mm
Cut hole Ø	74 mm	74 mm
Fixing screw spacing	60 mm	60 mm
Cable entries of up to Ø 11.5 mm	4	4
Support connectors for each package	5	5
Halogen-free	-	•
	•	•
Art. No.	9069-01	9069-77
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

INNOVATION

Sound insulation cover

- for sound insulation box
- Sound insulation function in conjunction with sound insulation box

SOUND INSULATION



Diameter	92 mm
Halogen-free	•
	•
Art. No.	1184-69
Inner packaging/shipping	10 / 100
Price in EUR/100	

INNOVATION

Support connector

- for through-wiring of combinations to IP 3X standard air-tight
- for Art. No. 1555-51, 9069-01, 9069-77



Halogen-free	-	•
Art. No.	9060-88	9060-78
Inner packaging/shipping	- / 25	- / 25
Price in EUR/100		

Allocation table for universal opening cutters



Cavity wall installation for sound insulation boxes		Ø setting
NYM cable	3 x 1,5 mm ²	8,5
	5 x 1,5 mm ²	9,5
	3 x 2,5 mm ²	9,5
Support connector	9060-88	Connector
	9060-78	Connector, halogen-free

You can create cable entries with the prescribed strain relief easily and to the exact required size with the universal opening cutter (Art No. 1085-80).

Sound insulation technology

for cavity wall installation



Sound insulation electronics box

Sound insulation electronics box for use in walls with increased demands on sound insulation. The sound insulation electronics box maintains the wall's sound insulation function and creates space for electronic switching devices, data boxes, cables and terminals. The electronics box makes possible population with cables and installation conduits up to M25.

- Maintains the wall's sound insulation protection
- Retrofitting is possible
- Also for use as a double box
- Extra-large terminal area for communications and network technology
- Additional space for electronic components (KNX actuators, relays, radio module, communications technology)



Examples of use



The electronics box provides space for all possible installations e.g. KNX actuators, Venetian blinds relays, alarm modules and many more.



Also ideal for network connections. The generous box volume offers sufficient space for cable reserves.



The electronics box can also be used as a double box, e.g. for switch and socket combinations.



The electronics box can easily be combined with the sound insulation device junction box.

Processing instructions



The electronics box provides 6 ways for conduit entry up to M25 and cable entry up to Ø 11.5 mm.



There are also 6 ways for cable entry up to Ø 11.5 mm.



By removing the cover ...



... and the bridge, can also be used as a double box.

Installation



Cut two installation openings with turbo cutter Multi 4000 Ø 74 mm (Art. No. 1084-10) with a centre distance of 71 mm.



Removal of the bridge.



Using the KAISER universal opening cutter, cut an exact conduit or cable opening for air-tight installation.



Fitting the box using tried-and-tested FX4 technology.



The additional terminal area makes possible the fitting of various electronic components ...



... and creates sufficient space for the cable reserve when communications and network boxes are installed.



By using support connectors, the box can be combined with itself or with a sound insulation box (Art. No. 9069-01).



The cover can also be fitted turned 180° and filled.

INNOVATION

Sound insulation electronics box

- Electronics box for sound insulation walls in buildings
- Also for use as a double box
- For equipment inserts and electronic components
- Can be combined with each other and also with a sound insulation one-gang junction box



SOUND INSULATION



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	70 mm	70 mm
Cut hole Ø	2 x 74 mm	2 x 74 mm
Centre distance	71 mm	71 mm
Conduit entries for DIN EN conduits up to Ø 25 mm	4	4
Cable entries of up to Ø 11.5 mm	4	4
Support connectors for each package	5	5
Halogen-free	-	•
Art. No.	9069-94	9069-74
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		



Radiation-protection one-gang junction box for lead-free radiation protection walls

KAISER's lead-free radiation protection box protects against radiation used for medical purposes, e.g. X-ray equipment. The high density of the radiation protection compounds absorbs soft and hard X-rays. The box is especially suitable for lead-free radiation protection walls (e.g. Knauf Safeboard) and corresponds to a lead equivalent value of 1.5 mm Pb in the range of tube voltages from 60-125 kV. This means that they absorb radiation similarly to 1.5 mm thick lead. The radiation protection compound is lead-free and so presents no health risks.

- Protection against X-rays
- Especially suitable for lead-free radiation protection walls
- Lead-free - no health risks
- Retrofitting is possible
- Fast installation without additional screening measures
- Opposing installation is possible



Examples of use



Example of installation of a switch/socket combination.



Installation of the radiation protection box in the wall.



Opposing use of the radiation protection box.



Use of the radiation protection box in a triple combination.

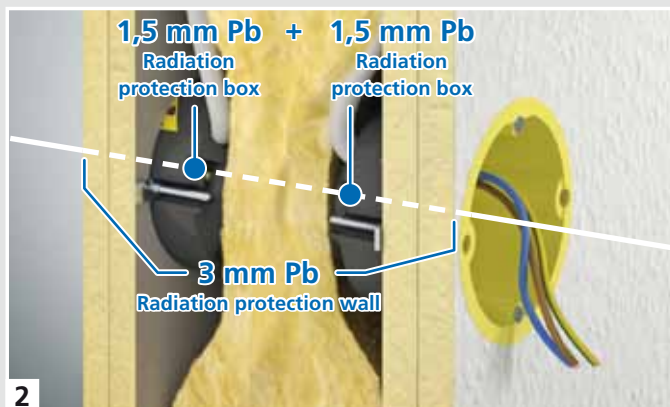
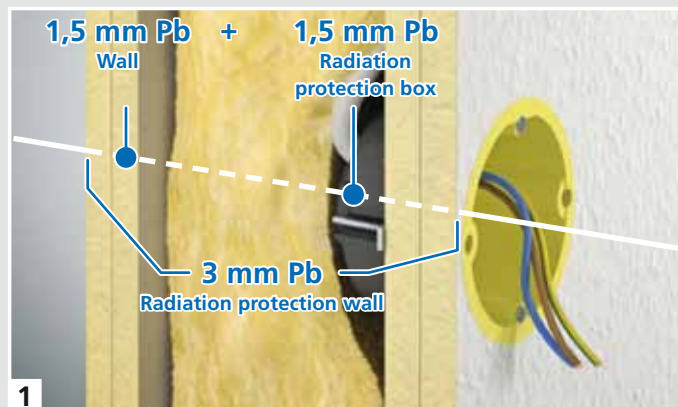
Example of calculation for lead-free radiation protection panels (Knauf Safeboard)

The example shows the number of panels required depending on the tube voltage and the lead equivalent value which has been determined. For example, 2 Safeboard panels must be fitted to ensure a lead equivalent value of 1.5 mm Pb at a tube voltage of 80 kV.

	Number of panels	Overall thickness (mm)	Tube voltage						
			60 kV	70 kV	80 kV	90 kV	100 kV	125 kV	150 kV
Lead equivalent value* (mm Pb)	1	12.5	0.45	0.60	0.75	0.70	0.70	0.50	0.40
	2	25	0.90	1.20	1.50	1.40	1.40	1.00	0.80
	3	37.5	1.35	1.80	2.20	2.10	2.10	1.50	1.10
	4	50	1.80	2.30	2.90	2.80	2.80	2.00	1.40
	5	62.5					3.40	2.40	1.70
	6	75					4.00	2.80	2.00

* Intermediate values can be interpolated linearly, calculation of the lead equivalent values acc. to DIN 6812. In the field of mammography (35 kV), one layer of Safeboard is sufficient for radiation protection.
Source: Knauf Gips KG, Iphofen

Example of calculation for lead-free radiation protection panels



1 If installed on one side, the wall's radiation protection results from that of the radiation protection box (1.5 mm Pb) and that of the closed opposite wall. **2** Every radiation protection box has a lead equivalent value of 1.5 mm Pb, this ensures a lead equivalent value of 3 mm Pb on the opposite installation.

Proof of radiation protection

TÜV-Nord Ensys has demonstrated that in the tube voltage range between 60 and 125 kV, KAISER's lead-free radiation protection box achieves a lead equivalent value of 1.5 mm Pb. This is confirmed by comprehensive series of tests which preceded certification and demonstrated clearly that the wall's radiation protection is completely maintained in this field of application. The certificate can be downloaded as a pdf file from our website.



Installation



Use a cutter (e.g. Multi 4000: 1084-10) to make a Ø 74 mm opening.



Installation then proceeds as with a conventional cavity wall box.



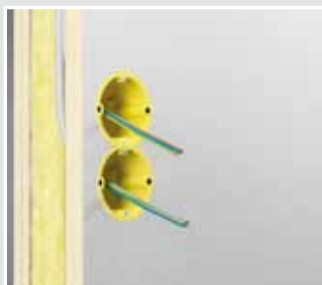
Secure and fast installation thanks to KAISER FX4 technology.



Accurate entries ensured by the universal opening cutter, Art. No. 1085-80.



For combinations, cut off the marked edge strip.



Combinations at a standard spacing of 71 mm.



The fully-insulated through-wiring is carried out with the support connector.



With its lead equivalent value of 1.5 mm Pb, the lead-free radiation protection box is especially suitable for lead-free radiation protection walls e.g. Knauf safeboard.

Radiation protection

for cavity wall installation

INNOVATION


Radiation protection one-gang junction box

- One-gang junction box for lead-free radiation protection boxes in buildings
- Combination distance of 71 mm through single separation of the pre-embossed edge



RADIATION PROTECTION



For panel thickness	7 - 40 mm
Depth	58,5 mm
Cut hole Ø	74 mm
Fixing screw spacing	60 mm
Cable entries of up to Ø 11.5 mm	4
Support connectors for each package	3
Halogen-free	•
Lead-free	•
Lead equivalent value [mm Pb]	1,5
	•
Art. No.	9074-01
Inner packaging/shipping	5 / 10
Price in EUR/100	

Support connector

- for through-wiring of combinations to IP 3X standard air-tight
- for Art. No. 9074-01



Art. No.	9060-74
Inner packaging/shipping	- / 25
Price in EUR/100	

Allocation table for universal opening cutters



Cavity wall installation for radiation protection boxes		Ø setting
NYM cable	3 x 1.5 mm ²	8.5
	5 x 1.5 mm ²	9.5
	3 x 2.5 mm ²	9.5
Support connector	9060-74	Connector

You can create cable entries with the specified strain relief easily and to the exact required size with the universal opening cutter (Art. No. 1085-80).

Radiation protection one-gang junction box for lead-lined radiation protection walls.

The KAISER radiation protection box for use in lead-lined walls protects against radiation used for medical purposes, e.g. in X-ray equipment. The radiation protection material with an integrated lead function component absorbs the dangerous X-ray radiation with a lead equivalent value of 3 mm Pb as effectively as 3 mm thick lead. Processing is completely safe because there is no skin contact at all during installation.

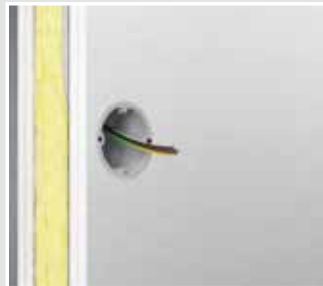
- Protection against X-rays
- For lead-lined radiation protection walls
- No health risks - no skin contact with lead function component
- Retrofitting is possible
- Fast installation without additional screening measures



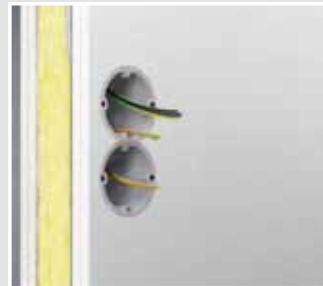
Examples of use



Example of installation of a switch/socket combination.



Using the radiation protection box in the wall.



Single-side use of the radiation protection box in a double combination.



Fitting a triple combination is also easy.

Proof of radiation protection

TÜV-Nord Ensys has demonstrated that in the tube voltage range between 60 and 125 kV, KAISER's lead-free radiation protection box achieves a lead equivalent value of 3 mm Pb. This is confirmed by comprehensive series of tests which preceded certification and demonstrated clearly that the wall's radiation protection is completely maintained in this field of application. The certificate can be downloaded as a pdf file from our website.



Radiation protection

for cavity wall installation

Installation



Use a cutter (e.g. Multi 4000: 1084-10) to make a \varnothing 74 mm opening.



Installation then proceeds as with a conventional cavity wall box.



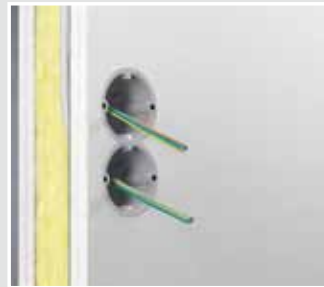
Secure and fast installation thanks to KAISER FX4 technology.



Accurate entries ensured by the universal opening cutter, Art. No. 1085-80.



For combinations, cut off the marked edge strip.



Combinations at a standard spacing of 71 mm.



The fully-insulated through-wiring is carried out with the support connector.



With its lead equivalent value of 3 mm Pb, the radiation protection box with lead function component ensures radiation protection up to 3 mm Pb in walls.

INNOVATION

Radiation protection one-gang junction box

- One-gang junction box for lead-lined radiation protection walls in buildings
- Combination distance of 71 mm through single separation of the pre-embossed edge

RADIATION PROTECTION



For panel thickness 7 - 40 mm

Depth 58,5 mm

Cut hole \varnothing 74 mm

Fixing screw spacing 60 mm

Cable entries of up to \varnothing 11.5 mm 4

Support connectors for each package 5

Halogen-free •

Lead equivalent value [mm Pb] 3

•

Art. No. 9074-02

Inner packaging/shipping 5 / 10

Price in EUR/100

Support connector

- for through-wiring of combinations to IP 3X standard air-tight
- for Art. No. 9074-02



Art. No. 9060-88

Inner packaging/shipping - / 25

Price in EUR/100

Allocation table for universal opening cutters



Cavity wall installation for radiation protection boxes		Ø setting
NYM cable	3 x 1.5 mm ²	8.5
	5 x 1.5 mm ²	9.5
	3 x 2.5 mm ²	9.5
Support connector	9060-88	Connector

You can create cable entries with the prescribed strain relief easily and to the exact required size with the universal opening cutter (Art No. 1085-80).



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE



Screened one-gang junction box (bio)

Screened one-gang junction box for cavity wall installation. The conductive coating suppresses interference with a high alternating field component, whether radiated or received.

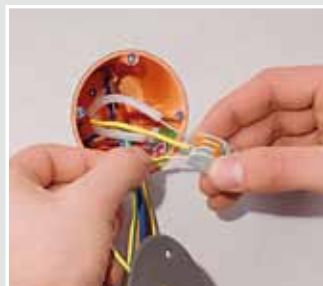
- Environmentally-safe construction for secure electrical installation
- With screening and potential conductivity
- The functional earth of the box must only be connected to the potential equalisation and not to the equipment grounding conductor (PE conductor)



Installation



Remove cable sheath and screen with AMZ 2 Art. No. 1190-02. Fit bare tracer wire with transparent insulating hose.



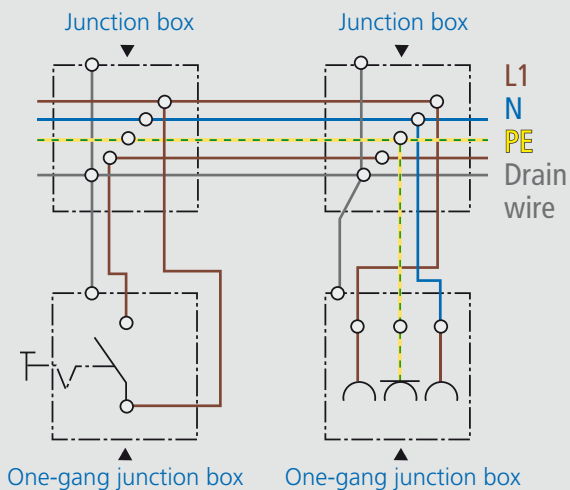
Connect functional earth of the box to tracer wires of screened cable.



As a junction box, connect the box cover's functional earth to the tracer wires of the cables.



Attach cover to box with device screws.



Technical processing instructions/standards

- dimensions in accordance with German DIN 49073
- for rooms used for medical purposes, environmentally-friendly construction, etc.
- the conductive coating suppresses interference with a high alternating field component, whether radiated or received
- The functional earth of the box must only be connected to the potential equalisation and not to the equipment grounding conductor (PE conductor)
- Not suitable for use in X-ray or radiation rooms!

Screened one-gang junction box

· with screening and potential downlead



For panel thickness	7 - 40 mm
Depth	68 mm
Cut hole Ø	68 mm
Device screws	2
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	2
Cable entries 3 x 1.5 mm ²	4
Cable entries for low voltages	2
Art. No.	9064-88
Inner packaging/shipping	10 / 100
Price in EUR/100	

Screened cover

· for making screened one-gang junction boxes
 · for one-gang junction boxes 9064-88 and 1555-88



Diameter	80 mm
Screw spacing	60 mm
Art. No.	1164-88
Inner packaging/shipping	10 / 100
Price in EUR/100	

Screened junction casing

· for cavity wall and flush-mounting installation
 · with screened cover
 · with 2 x 15 mm cover screws
 · protection class IP 3X



Length x Width x Depth	107 x 107 x 53 mm
Cut hole Ø	4 x 35 mm
Break-out openings Ø 20 mm	8
Cable entries for NYM and low-voltage cabling •	
For terminals up to	4 mm ²
Art. No.	9195-88
Inner packaging/shipping	- / 10
Price in EUR/100	

Note

Other installation boxes/housings with screening available on request. Please use our radiation protection box in X-ray areas or areas with ionising radiation.

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Junction box, Accessories

for cavity wall installation

Screws

- for one-gang boxes and one-gang boxes for cavity walls
- for the following articles: 9062-.., 9063-.., 9064-.., 9066-.., 9067-01, 9068-.., 9071-.., 9073-.., 9075-.., 9192-.., 9195-.., 9196-.., 9197-.., 9248-.., 9300-.., 9098-77, 9263-.., 9264-..



Length	44,5 mm
Screws Ø	3 mm
Art. No.	2445-25
Inner packaging/shipping	100 / 2000
Price in EUR/100	

Metal plate

- for one-gang boxes and one-gang boxes for cavity walls
- for the following articles: 9061-.., 9062-.., 9063-.., 9064-.., 9066-.., 9067-01, 9068-.., 9071-.., 9073-.., 9075-.., 9148-00, 9195-.., 9248-.., 9300-.., 9098-77, 9263-.., 9264-..



Length x Width	7 x 13 mm
Art. No.	2445-50
Inner packaging/shipping	100 / 2000
Price in EUR/100	

Device screws

- surface double-treated
- corrosion-resistant in accordance with German DIN VDE standard



Length	15 mm	20 mm	25 mm	40 mm
Art. No.	2471-15	2471-20	2471-25	2471-40
Inner packaging/shipping	100 / 10000	100 / 10000	100 / 10000	100 / 10000
Price in EUR/100				

Sealing screws

- in pure brass
- self-tapping Ø 3.2 mm
- with cross-hole in the screw head through which sealing wire can be pulled



Length	15 mm	40 mm
Art. No.	2444-15	2444-40
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

Junction casings and boxes

Junction casings in all sizes and for almost any kind of installations. This product range features practical housing sizes as well as a robust housing design which is perfect for building sites.

- As central junction casings for star-shaped cable laying
- Easy to rewire when changing the way rooms are used
- With separator walls for safe separation of electrical circuits
- Create precise wall openings using the drilling template supplied
- End cover with screw fastening for VDE-compliant installation



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Installation



Stick drilling template (supplied) to wall. Open four corners with cutter or fretsaw.



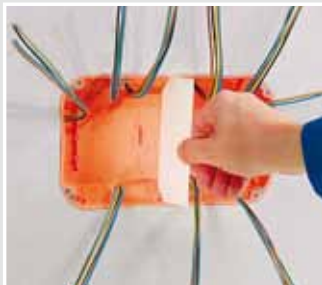
Cut out intermediate parts with cutter or fretsaw.



Break out pre-cut holes, feed in cables, insert casing and attach with the FX4 screws.



Fasten inserted box or casing with FX4 fast screw attachment.



For separation of several electrical circuits, up to three separator walls can be installed, depending on the size of the box.



Junction casings provide a lot of installation space and, with the corresponding covers, ensure VDE-compliant installation.

Junction casings

for cavity wall installation

Junction casing

- for installation: DIN terminal strips, TS 35 standard rails for terminal strips, etc., terminal blocks up to 16 mm²
- with drilling template (supplied)
- including cover



Length x Width x Depth	107 x 107 x 53 mm	107 x 107 x 53 mm	165 x 165 x 72 mm	165 x 165 x 72 mm
Cut hole Ø	4 x 35 mm	4 x 35 mm	4 x 68 mm	4 x 68 mm
with 4 screw domes	•	•	-	-
Break-out openings Ø 20 mm	8	8	8	8
Break-out openings Ø 25 mm	-	-	2	2
Break-out openings Ø 32 mm	-	-	2	2
Cable entries for NYM and low-voltage cabling	•	•	•	•
For terminals up to	4 mm ²	4 mm ²	16 mm ²	16 mm ²
Halogen-free	-	•	-	•
use separator wall for maximum of 2 electrical circuits	•	•	•	•
 / 	• / •	• / -	• / •	• / -
Art. No.	9195-91	9195-77	9196-91	9196-77
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10
Price in EUR/100				

Junction casing

- for installation: DIN terminal strips, TS 35 standard rails for terminal strips, etc., terminal blocks up to 16 mm²
- with drilling template (supplied)
- including cover



Length x Width x Depth	240 x 140 x 72 mm	240 x 140 x 72 mm	235 x 205 x 72 mm	235 x 205 x 72 mm
Cut hole Ø	4 x 68 mm	4 x 68 mm	4 x 68 mm	4 x 68 mm
Break-out openings Ø 20 mm	8	8	8	8
Break-out openings Ø 25 mm	2	2	2	2
Break-out openings Ø 32 mm	2	2	2	2
Cable entries for NYM and low-voltage cabling	•	•	•	•
For terminals up to	16 mm ²	16 mm ²	16 mm ²	16 mm ²
Halogen-free	-	•	-	•
Maximum of 3 electrical circuits with separator walls	•	•	•	•
 / 	• / •	• / -	• / •	• / -
Art. No.	9192-91	9192-77	9197-91	9197-77
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10
Price in EUR/100				

Junction box Ø 120 mm

- receptacle for TS 35 standard rail
- Make cut hole with Variocut 1089-00 in fully extended position or bi-metallic cutter 1082-20
- including cover



Depth	65 mm	65 mm
Cut hole Ø	120 mm	120 mm
Break-out openings Ø 20 mm	4	4
Break-out openings Ø 25 mm	2	2
Cable entries for NYM and low-voltage cabling	•	•
For terminals up to	4 mm ²	4 mm ²
Halogen-free	-	•
For max. 2 electrical circuits through separator wall 9073-20	•	•
	•	•
Art. No.	9073-01	9073-78
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Potential equalisation casing 10²

- for bathrooms or similar
- with potential equalisation rail, protected against corrosion
- with 4 screw domes
- with 2 x 15 mm cover screws
- including cover



Length x Width x Depth	107 x 107 x 53 mm
Cut hole Ø	4 x 35 mm
Connections for 6–16 ² circular conductors (also uncut)	1
Connections for 1.5–10 ² cables	6
Art. No.	9195-73
Inner packaging/shipping	- / 10
Price in EUR/100	

Replacement cover

- flat cover edge
- surface roughened
- countersunk for screw heads



For casing size - flush-mounting boxes	107 x 107 mm	159 x 159 mm	240 x 142 mm	238 x 208 mm
For casing size - cavity wall boxes	107 x 107 mm	165 x 165 mm	240 x 142 mm	238 x 208 mm
For casing size - concrete construction boxes	128 x 128 mm	180 x 180 mm	-	250 x 220 mm
Fireproof	850 °C	850 °C	850 °C	850 °C
Art. No.	1095-93	1096-93	1092-93	1097-93
Inner packaging/shipping	- / 10	- / 10	- / 5	- / 5
Price in EUR/100				

Junction casings

for cavity wall installation

Replacement cover for junction boxes Ø 120 mm

- flat cover edge
- surface roughened
- countersunk for screw heads



Halogen-free

-

•

For Art. No.

9073-01/91

9073-78/77

Art. No.

9073-93

9073-79

Inner packaging/shipping

- / 10

- / 10

Price in EUR/100

Separator walls

- to separate electrical circuits



for casing size

107 x 107 mm

165 x 165 mm

240 x 140 mm

235 x 205 mm

Art. No.

9195-20

9196-20

9192-20

9197-20

Inner packaging/shipping

- / 10

- / 10

- / 10

- / 10

Price in EUR/100

Separator wall

- to separate electrical circuits
- for junction boxes Ø 120 mm



Art. No.

9073-20

Inner packaging/shipping

- / 10

Price in EUR/100

Universal installation housings

Universal installation housings for a wide range of device installations always ensure optimum space for all kinds of devices. The intelligent housing design ensures stability and a secure fit in the wall.

- For displays, LED lamps and much more
- For installing almost all shapes and sizes
- Mineral fibreboard permits almost all conceivable installation openings
- With FX4 quick assembly technology



Installation



Mark installation opening and cut with a fretsaw.



Insert cables or conduits, feed housing into wall and install with FX4 quick-assembly technology.



Lightly smooth edges with filler (use plastic-based filler).



Cover with wallpaper etc. and install the required device.

Mounting instructions



Use only screws that go into but not through the mineral fibreboard when attaching the device! (e.g. SPAX countersunk head screw 3.5 x 15 mm)

Note

Observe the maximum stroke length of the saw blade when sawing the installation opening.

Universal installation housings

for cavity wall installation

Universal installation housing with mineral fibreboard

- with mineral fibreboard for cutting out individual installation holes
- with drilling template (supplied)
- all-round groove denotes the maximum opening dimension



Length x Width x Depth	107 x 107 x 53 mm	107 x 107 x 53 mm	165 x 165 x 72 mm	165 x 165 x 72 mm
Cut hole Ø	4 x 35 mm	4 x 35 mm	4 x 68 mm	4 x 68 mm
maximum opening size	70 x 70 mm	70 x 70 mm	110 x 110 mm	110 x 110 mm
For devices with an installation depth of max.	40 mm	40 mm	50 mm	50 mm
Break-out openings Ø 20 mm	8	8	8	8
Break-out openings Ø 25 mm	-	-	2	2
Break-out openings Ø 32 mm	-	-	2	2
Cable entries for NYM and low-voltage cabling	•	•	•	•
Halogen-free	-	•	-	•
Art. No.	9195-22	9195-27	9196-22	9196-27
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10
Price in EUR/100				

Universal installation housing with mineral fibreboard

- with mineral fibreboard for cutting out individual installation holes
- with drilling template (supplied)
- all-round groove denotes the maximum opening dimension



Length x Width x Depth	240 x 140 x 72 mm	240 x 140 x 72 mm	235 x 205 x 72 mm	235 x 205 x 72 mm
Cut hole Ø	4 x 68 mm	4 x 68 mm	4 x 68 mm	4 x 68 mm
maximum opening size	170 x 105 mm	170 x 105 mm	190 x 150 mm	190 x 150 mm
For devices with an installation depth of max.	55 mm	55 mm	50 mm	50 mm
Break-out openings Ø 20 mm	8	8	8	8
Break-out openings Ø 25 mm	2	2	2	2
Break-out openings Ø 32 mm	2	2	2	2
Cable entries for NYM and low-voltage cabling	•	•	•	•
Halogen-free	-	•	-	•
Art. No.	9192-22	9192-27	9197-22	9197-27
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10
Price in EUR/100				

International products

For international projects, we offer a large range of products which meet the relevant national standards and regulations.

- Dimensions and approvals based on national standards
- Suitable installation tools
- Many combination options



One-gang box - Swiss standard Quickbox

- cutting hole Ø 83 mm with template (included)
- for plate thickness 7 - 40 mm
- for assembling combinations, centre distance 60 mm
- 8 break-out openings Ø 20 mm



One-gang box - Swiss standard Quickbox ECON®

- cutting hole Ø 83 mm with template (included)
- for plate thickness 7 - 40 mm
- for assembling combinations, centre distance 60 mm



Length x Width x Depth	83 x 83 x 65 mm	83 x 83 x 65 mm
Cut hole Ø	83 mm	83 mm
Conduit entries M20	4	4
Conduit entries M25	4	-
Combination	1x1	1x1
Art. No.	9098-77	9298-21
Inner packaging/shipping	20 / 100	- / 100
Price in EUR/100		

Bi-metallic cutter

- for Swiss cavity wall boxes
- hexagonal shank spanner size 10 mm
- fits all electric drills with 13 mm chuck



Cut hole Ø	83 mm
Depth of cutting hole	38 mm
For Quickbox Ø 83 mm	•
Art. No.	1082-84
Inner packaging/shipping	- / 10
Price in EUR/100	

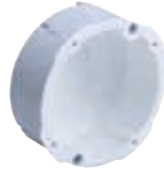
International products

for accessory installation in accordance with national standards

INNOVATION

Sound insulation box for Swiss accessories

- One-gang box for sound insulation walls in buildings
- Maintains the wall's sound insulation protection
- also for opposing installation
- for plate thickness 7 - 40 mm
- matching plug-in cover New Look one Art. No. 9919.10



Length x Width x Depth	83 x 83 x 50 mm
Drill Ø	83 mm
Combination	1x1
Art. No.	9798-77
Inner packaging/shipping	10 / 100
Price in EUR/100	

INNOVATION

Sound insulation box for Swiss accessory combinations

- One-gang boxes for sound insulation walls in buildings
- Maintains the wall's sound insulation protection
- also for opposing installation
- for plate thickness 7 - 40 mm



Length x Width x Depth	145 x 83 x 50 mm	205 x 83 x 50 mm	145 x 145 x 50 mm	205 x 145 x 50 mm
Drill Ø	83 mm	83 mm	83 mm	83 mm
Combination	2x1	3x1	2x2	3x2
Art. No.	9798-77.02	9798-77.03	9798-77.04	9798-77.06
Inner packaging/shipping	- / 5	- / 5	- / 5	- / 5
Price in EUR/100				

One-gang box Belgian standard

- with holding ring



For panel thickness	7 - 35 mm
Depth	45 mm
Diameter	70 mm
Break-out openings Ø 20 mm	2
Cable entries	6
Cable entries for low voltages	2
Break-out openings Ø 16 mm	2
/	• / •
Art. No.	205
Inner packaging/shipping	10 / 100
Price in EUR/100	

Installation in clinics and high-hygiene areas

Hospitals and similar institutions have particular requirements with regard to hygiene standards (German Federal Health Journal 31, no. 7). In rooms which are supplied with filtered air, e.g. operating rooms or intensive care units, particle-protected installation must be guaranteed in accordance with clean-room and hygiene requirements.



Halogen-free cavity wall boxes/fire resistance

All KAISER boxes and casings for cavity wall mounting as well as several accessory parts are available as halogen-free products. The identifying feature of these products is that they are available in white.

- Fire-resistant up to 850°C.
- Heat-resistant up to 105°C.
- Electrically well-insulated, shock and pressure-resistant.
- There are no chemical reactions which cause the oxygen to be bound.
- No corrosive substances such as hydrochloric acid gas or hydrogen bromide are released.



Cavity wall boxes and casings with the VDE symbol have been tested for fire resistance in a glow wire test at 850°C in accordance with VDE 0471/DIN EN 60695-2-11. This test must demonstrate that a fire cannot start in the cavity wall boxes if a fault occurs in the electrical installation. In addition, always ensure compliance with the current fire prevention measures for wall constructions.



The most important advantages at a glance:

- Complete systems for on-site mixed concrete and prefabrication
- Sophisticated colour system for easy assignment of system components
- Extremely time-saving thanks to just a few universal B² system components for installation in horizontal prefabrications
- Innovative KSK technology allows conduit entry without special tools
- Wide range of mounting options on the formwork
- Universal installation housings with mineral fibreboard for all standard device sizes (e.g. displays, LED luminaires and many more)
- Practical solutions for wall and ceiling transitions
- International products for accessory installation in accordance with national standards
- Professional system tools for fast, secure installation
- Wide range of system accessories
- Halogen-free



Concrete construction Product lines



One-gang boxes, one-gang junction boxes for on-site mixed concrete	p. 111
Junction casings and accessories for on-site mixed concrete	p. 114
Ceiling boxes and accessories for on-site mixed concrete	p. 119
Wall-ceiling transitions, ceiling strips, conduit supports for on-site mixed concrete	p. 126
Wire-pull casings and junction casings for on-site mixed concrete	p. 132
Universal installation housings	p. 137
B ² system for horizontal prefabrication	p. 140
International products	p. 150
End cover and separator walls	p. 153
Accessories for on-site mixed concrete	p. 155

Tools for installation in concrete can be found in the "Tools" section starting on page 265.





NEW

	On-site mixed concrete Fixing to the working form-work Fixing to the reinforcement		Prefabrication Installation in horizontal prefabrication	International Installation of international accessories
For installation accessories				
One-gang boxes	p. 111	-	p. 141	p. 150
One-gang junction boxes	p. 112	p. 117	p. 141	p. 150
Large conduit boxes	p. 112	-	p. 141	-
Perilex® one-gang boxes	p. 113	-	-	-
CEE one-gang boxes	p. 113	-	-	-
Universal installation housings	p. 137	-	-	-
For cable exits				
Wall light connection	p. 112	p. 117	-	-
Luminaire connection	p. 120	-	p. 121/146	-
Luminaire connection and junction	p. 119	-	p. 121	-
For cable connections				
Junction boxes	p. 113	-	-	-
Junction casings	p. 114	-	-	p. 150
Potential equalisation casings	p. 115	-	-	-
Accessories				
Fixing	p. 155	-	p. 142	p. 155
Support	p. 116	-	p. 144	p. 115
Sealing of electrical installations (air-tight and smoke-tight)	p. 76/224/131/23	p. 76/224/131/23	p. 76/224/131/23	-
Plaster compensation	-	-	p. 143	-
End cover	p. 153	-	p. 74/153/33	-

FLUSH-MOUNTING

CAVITY WALL

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HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Cable and conduit entry systems | Product overview



	Transitions	Exits	Conduit supports	Wire-pull casings
	p. 127	p. 129	p. 130	p. 133
Conduit sizes				
Ø 20 mm	•	•	•	•
Ø 25 mm	•	•	•	•
Ø 32 mm	•	•	•	•
Ø 40 mm	•	•	•	•
Ø 50 mm	-	-	-	•
Ø 63 mm	-	-	-	•

K.SYS

Planning software for electrical installation in concrete construction.



[K.SYS] Using the [K.SYS] planning software from KAISER, you can plan components for electrical installation in concrete with just a few clicks of your mouse. With clearly laid out selection windows and wizards as well as the simple “drag and drop” function, you will always reach your goal quickly and accurately when planning for on-site mixed concrete and for prefabricated parts.

This software is easy to use and includes detailed product descriptions with illustrations and quotation request texts. The clear circuit symbols and the well laid out, automatically generated legends and parts lists provide clear, time-saving help in manufacturing. Our [K.SYS] planning software offers you security and efficiency when planning and working with concrete constructions.

Planning with [K.SYS] – it couldn't be simpler.



One click on the program icon opens a docking wizard with all the functions in your CAD application. Clear circuit symbols for one-gang boxes, one-gang junction boxes, wall-ceiling transitions or lights and loudspeaker housings can be selected and simply dragged and dropped into your plan. Illustrations and short descriptions help you to select the correct product. You can configure the correct installation housing for luminaires or loudspeakers using the article number of the respective manufacturer.

After selecting the product, simply click on “Insert part”. The circuit symbol for the product is then automatically attached to the mouse pointer, enabling it to be positioned where you wish in the drawing.

In the “Parts lists” area, [K.SYS] offers a special option: the circuit symbols which are entered in the floor plan can be represented in the legend, and you can easily generate a query, an order form and the quotation request texts. These lists are automatically compiled with all the components from your drawing.

The buttons “on-site mixed concrete” and “prefabricated concrete” give you the option of switching from one manufacturing process to another at any time. [K.SYS] then automatically and reliably changes all coordinates.

The [K.SYS] planning software can be downloaded free of charge from our website: www.kaiser-elektro.de

Manufacturer assignment. Online tool.

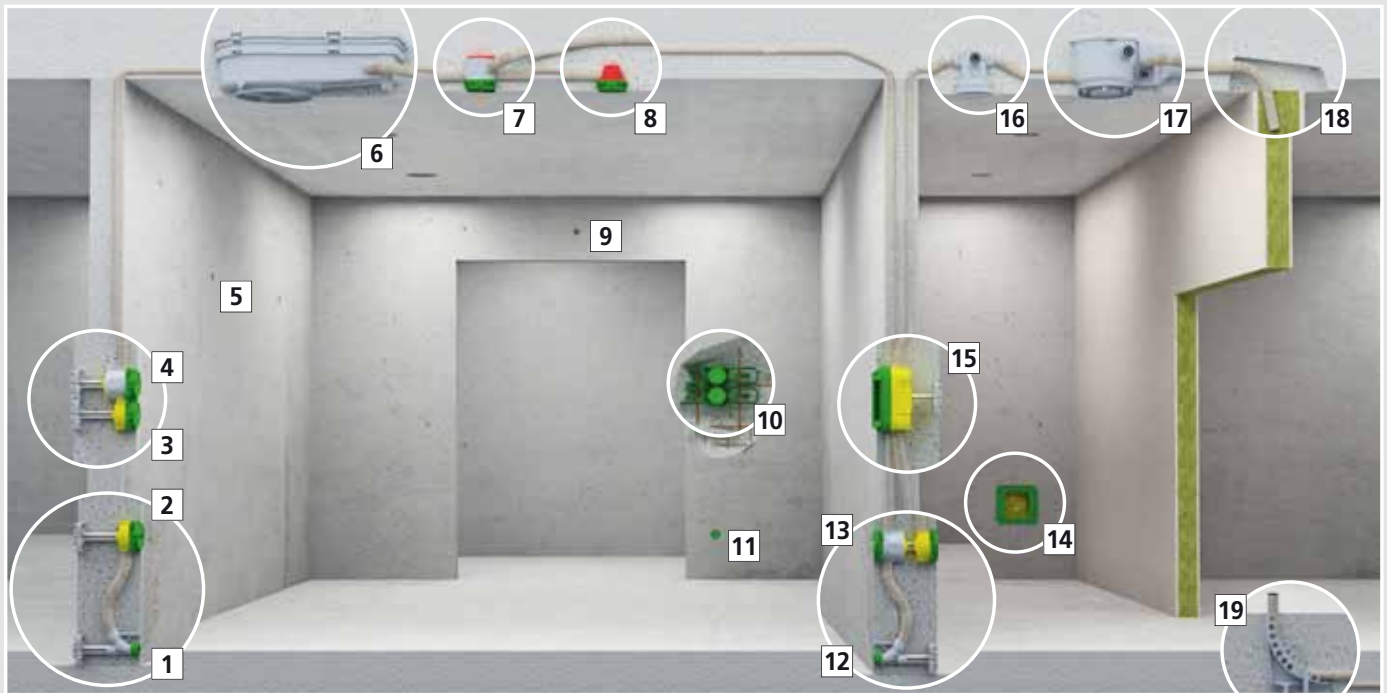
The manufacturers' classification online tool is a planning tool in the form of a database containing luminaires and loudspeakers from all leading manufacturers. In just four easy steps, this platform determines the ideal KAISER housing configuration for your individual product planning.

Further information about the online tool can be found on page 273.



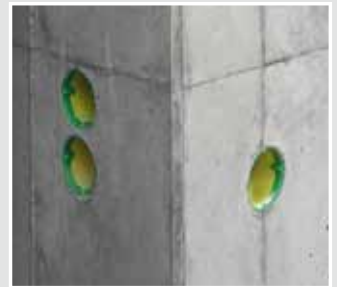
Installation in on-site mixed concrete

The KAISER concrete construction system. For all concrete construction processes and systems. It offers a comprehensive product range with many wall and ceiling boxes as well as practical solutions for wall and ceiling transitions.



1 Wall and ceiling transition 30° with abutment and support element | 2 One-gang box for plug-in A.C. device | 3 One-gang box with abutment and support element | 4 One-gang junction box with abutment and support element | 5 Wall light connection box | 6 System KompaX® | 7 Ceiling junction box | 8 Ceiling box 45° | 9 Prefix concrete building box 35 | 10 Prefix concrete building box 60 | 11 Prefix concrete building box 60 | 12 Wall and ceiling transition 30° with abutment and support element | 13 One-gang box and one-gang junction box with support element | 14 Potential equalisation casing | 15 Junction casing with abutment and support element | 16 Universal wall and ceiling exit | 17 System HaloX-O | 18 Ceiling strip (ceiling exit) | 19 Conduit bend support

Wall installation in on-site concrete



Ceiling installation in on-site concrete



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The KAISER colour system.

The different colours of the individual components make correct installation easier.



Green: Front parts



Yellow: Rear parts for wall installation



Red: Rear parts for ceiling installation

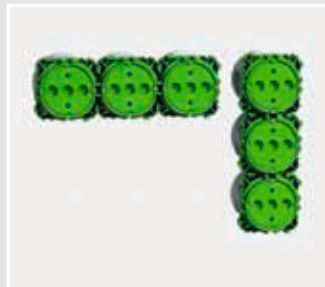


Grey: Intermediate parts and attachment accessories

Combination in accordance with DIN



Single row combinations: The combination distance for one-gang boxes or one-gang junction boxes is 71 mm (DIN 49075). The swallow-tail catches enable the front of the boxes to be joined easily at the



correct distance both horizontally and vertically. Distance piece 91 is used to achieve the 91 mm distance for separated low-voltage covers.



Multi-row combinations: In multi-row installations, the rows are separated...

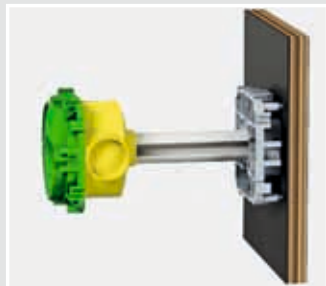


...(multi-row cover frame) using distance pieces 91. (Spacing between rows 91 mm)

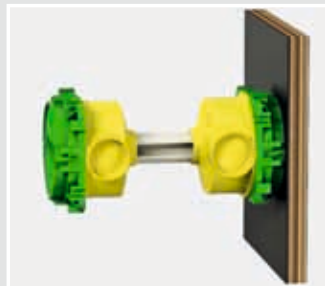
Support technology with support elements:

Concrete walls can be manufactured in upright (vertical) or flat (horizontal) formworks. Horizontal formwork has only one formwork side, while vertical formwork has two formwork sides: the working formwork and the opposing formwork. All installations, reinforcements and all other attachments are always carried out on the same formwork side – on vertical formworks this is on the working formwork. Installation boxes and casings for one side of the wall are fixed directly to the formwork. The boxes and casings intended for the rear side of the wall are mounted using support elements. After completing the installation work, the casting mould is closed. The spring effect of the rear part of the box ensures that the box sits flush to the wall when the concrete is poured (travel of the spring $E = \max. 5 \text{ mm}$). For greater wall thickness (e.g. from 300 mm) or in the case of extreme loads, the support element should be secured to the reinforcement by additional means (e.g. with wires).

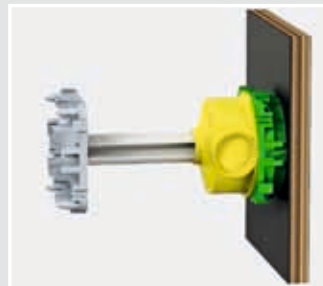
Mounting instructions



Boxes on the opposing formwork are mounted on the working formwork with abutments. This is where the support element is secured which maintains the box on the opposing formwork side.



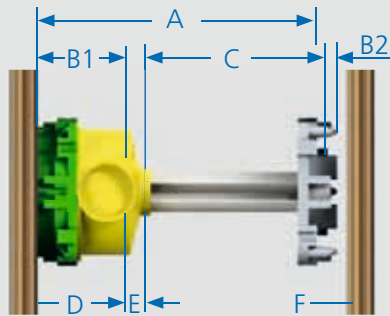
For opposing boxes, a box is mounted on the working formwork, and the second box is set at the required distance using the support element.



Boxes and casings held by a magnet or adhesive foil where no installation is planned for the opposite side must be secured with abutments and support elements.



Calculation for the supporting elements



- A - Wall thickness
- B - Article constant
- C - Support element length
- D - Working formwork
- E - Travel
- F - Opposing formwork

Length of the support elements. (e.g. vertical formwork)

General formula: $C = A - (B1 + B2)$

Wall thicknesses: $A = 200 \text{ mm}$

Article constants for one-gang box 1255-40: $B1 = 38 \text{ mm}$

Abutments 1210-02: $B2 = 5 \text{ mm}$

Length support element $C = 200 \text{ mm} - (38 \text{ mm} + 5 \text{ mm})$

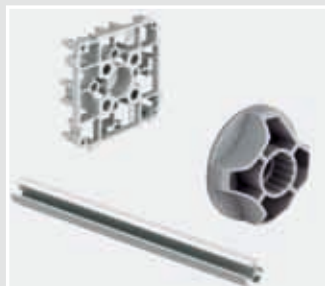
$C = 157 \text{ mm}$

Important: Take formwork inaccuracies as opposed to planned wall thickness into account! Always specify length of support elements accurately in mm when ordering!

Product description	Art. no.	Standard article thickness "B"	
		Vertical	Horizontal
One-gang box	1255-40	38	44
One-gang junction box	1265-40	62	68
Large conduit box	1260-40	59	65
Wall light connection box	1248-40	38	44
Junction casings	1295-02/73	58	64
Junction casings	1296-02	64	70
Junction casings	1297-02/75	60	66
PERILEX® one-gang box	1276-40	45	51
CEE one-gang box	1275-40	45	51
Junction box	1276-70/-71	45	51
Abutment	1210-02	5	7
Abutment with adhesive	1205-02	5	7
One-gang box	1223-41	44	50
Two-gang box	1224-41	47	53
Box for Italian / American standard	1200-00	39	45
Universal installation housings	1223-22	57	63
Universal installation housings	1224-22	60	66
Universal installation housings	1295-22	71	77
Universal installation housings	1296-22	77	83
Universal installation housings	1297-22	73	79
Wall and ceiling transition 30°	1202-04	62	62
Wall and ceiling transition 30°	1202-34	62	62
Wall and ceiling transition 30°	1202-29	62	62

Support technology for one-gang and one-gang junction boxes

The stable support element with star-shaped cross-section and the abutment provide support in the case of boxes that are positioned opposite one another or located on the opposite side of the formwork. The built-in spring travel in installation boxes ensures a secure fit in the support.



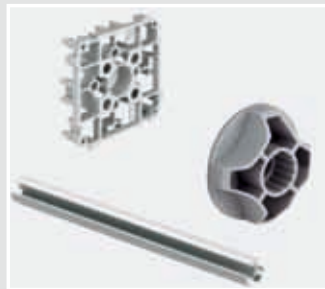
Support element 1212-04 and abutment 1205-02 / 1210-02



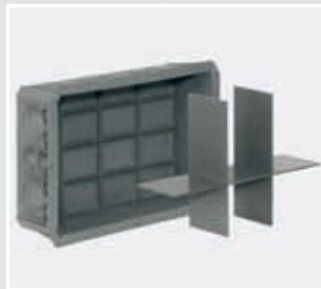
Support technology for boxes and installation housings



The telescope support is used to support opposing housings or housings on the other side of the formwork,



while the support element with star-shaped cross-section and the abutment are used in the case of junction casings with yellow rear part.



Junction casings 1298-01/02/03 must be secured with an internal support when installed in vertical formwork because of the high concrete pressure.



In this case, we offer moulded parts as an internal support element or styrofoam inserts that are adjusted precisely to the interior dimension of the boxes.



With this sturdy support technology, the spacing between the formworks can be maintained reliably and securely.

Ways of attaching to various types of formwork

Product description	For wood formwork			For steel formwork				
	 Nail Ø 2 mm	 Wood screw Ø 4 mm	 M6 threaded dowel	 Expanding dowel	 Magnet	 Adhesive foil	 M6 weld-on screw	 Hot glue
Wall and ceiling box	•	•	•	•	•		•	•
Boxes*	•	•	•	•		•	•	•
Bushes	•	•						•
transitions	•	•						•
Abutment	•	•	•	•		•	•	•
Ceiling strips	•	•						•
Conduit and cable distance spacer	•	•	•	•				•

*After removing the formwork, simply use pliers to pull out of the housing the nails used for fixing through the interior of the casings.

One-gang and one-gang junction boxes

One-gang box and one-gang junction box for installation in vertical formwork. A modular programme with 2-piece or 3-piece boxes, which are easily nailed to the formwork with the flat front parts. The extra-flexible design ensures integrated spring travel and provides secure support between the formwork.

- Suitable for all types of formwork
- High torsional strength, can be combined with a standard distance of 71 mm
- Combinations have fully-insulated cable transitions
- Support in base of box does not block any conduit entry
- Integrated spring travel ensures secure support
- dimensions in accordance with German DIN 49073



Installation



Attach front part to formwork.



Create a conduit or cable entry (punch pliers or opening cutter).



Clip rear part with conduit or cable to front part and concrete.



Open concrete building boxes or casings, then fit equipment or cover.

One-gang box

- with 4 screw domes and 2 expanding claw fields
- suitable for all types of formwork
- combinations have fully-insulated cable transitions
- standardised combination distance 71 mm



Depth	58 mm	41 mm
Installation opening Ø	60 mm	60 mm
Markings for cables and DIN EN conduits to Ø 16 mm	-	2
Markings for cables and DIN EN conduits up to Ø 25 mm	2	-
Rear part with holder for support element	•	-
Number of parts	2	2
	•	-
Art. No.	1255-40	1255-43
Inner packaging/shipping	10 / 250	10 / 100
Price in EUR/100		

FLUSH-MOUNTING

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One-gang boxes, One-gang junction boxes

for on-site mixed concrete

One-gang junction box

- with 4 screw domes and 2 expanding claw fields
- rear part of box with holder for support element
- suitable for all types of formwork
- combinations have fully-insulated cable transitions
- standardised combination distance 71 mm



Depth	82 mm	79 mm
Installation opening Ø	60 mm	60 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	8	2
Markings for cables and DIN EN conduits up to Ø 32 mm	-	2
Number of parts	3	2
	•	•
Art. No.	1265-40	1260-40
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		


Note

According to DIN VDE 0100, Part 559, feed lines for wall lights must terminate in connection boxes. Wall light connection boxes must have at least one option for attaching wall lights. According to DIN VDE 60670, wall and ceiling luminaire connection boxes must provide enough room for 3 individual terminals or be fitted with a 3-pole connector.

Wall light connection box

- space for 3 terminal blocks and associated cables
- not to be used as a junction box!
- suitable for all types of formwork



Exit opening Ø	35 mm
Depth	58 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	2
Rear part with holder for support element	•
Number of parts	2
	•
Art. No.	1248-40
Inner packaging/shipping	10 / 100
Price in EUR/100	

Junction box

- cover screw distance 67 mm
- suitable for all types of formwork



Depth	66 mm	66 mm
Installation opening Ø	70 mm	70 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	•	•
Rear part with holder for support element	•	•
Number of parts	2	2
with cover and cover screws	•	-
Art. No.	1276-70	1276-71
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

One-gang box PERILEX®

- device screws distance 67 mm
- with 2 countersunk device screws Ø 4 mm, length 16 mm
- for use with 16 A PERILEX® inserts
- suitable for all types of formwork



Depth	66 mm
Installation opening Ø	70 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	•
Rear part with holder for support element	•
Number of parts	2
Art. No.	1276-40
Inner packaging/shipping	10 / 100
Price in EUR/100	

One-gang box CEE

- device screws distance 67 mm
- With sealing ring for protection class IP 34 and 2 raised head 4 mm Ø device screws, length 20 mm
- for use with 16A CEE equipment inserts
- suitable for all types of formwork



Depth	66 mm
Installation opening Ø	70 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	•
Rear part with holder for support element	•
Number of parts	3
Art. No.	1275-40
Inner packaging/shipping	10 / 100
Price in EUR/100	

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

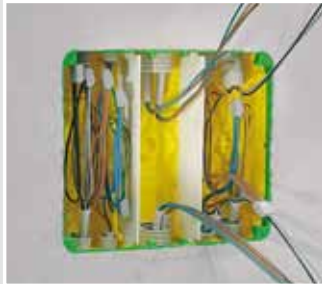
SERVICE

Junction casings and accessories

for on-site mixed concrete

Junction casings

- As central junction casings for star-shaped cable laying.
- Easy to rewire when changing the way rooms are used.
- Separator walls to separate electrical circuits.
- End cover with screw attachment for VDE-compliant installation.



KAISER junction casings offer plenty of space for electrical installation according to DIN 18015-3.

Separator walls ensure that electrical circuits are safely separated.

The junction casing and the support on the working formwork create a stable unit.

Junction casing

- for terminals up to 16 mm²
- suitable for all types of formwork
- rear parts of casing with holder for support element
- for loose terminals up to 4 mm²



Length x Width x Depth	128 x 128 x 80 mm	180 x 180 x 84 mm	250 x 220 x 82 mm
possible DIN EN conduit sizes per entry field: 4 x 16 mm Ø, 3 x 20 mm Ø, 1 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	•	-	-
possible DIN EN conduit sizes per entry field: 4 x 16 mm Ø, 4 x 20 mm Ø, 1 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	-	•	-
possible DIN EN conduit sizes per entry field: 6 x 16 mm Ø, 3 x 20 mm Ø, 2 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	-	-	•
use separator wall for maximum of 2 electrical circuits	-	•	-
Maximum of 3 electrical circuits with separator walls	-	-	•
Number of parts	2	2	2
Entry fields	8	8	8
Art. No.	1295-02	1296-02	1297-02
Inner packaging/shipping	- / 10	- / 10	- / 5
Price in EUR/100			

Potential equalisation casing 10² and 16²

- with potential equalisation rail, protected against corrosion
- for bathrooms or similar
- including cover



Length x Width x Depth	250 x 220 x 82 mm	128 x 128 x 80 mm
Cables 1.5–10 ²	-	6
Cables up to 16 ² , single and stranded wire	7	-
Circular conductors Ø 8–10 mm	1	-
Circular conductor 6–16 ²	-	1
Flat strip up to 30 mm wide	1	-
Entry fields	8	8
possible DIN EN conduit sizes per entry field: 4 x 16 mm Ø, 3 x 20 mm Ø, 1 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	-	•
possible DIN EN conduit sizes per entry field: 6 x 16 mm Ø, 3 x 20 mm Ø, 2 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	•	-
	•	-
Art. No.	1297-75	1295-73
Inner packaging/shipping	- / 1	- / 10
Price in EUR/100		

Abutment for adhesive foil

- for support element 20 mm Ø
- fixing to formwork using 1219-00 adhesive foil



Art. No.	1205-02
Inner packaging/shipping	- / 250
Price in EUR/100	

Abutment

- for support element 20 mm Ø
- can be combined with itself, with one-gang boxes, one-gang junction boxes, junction casing, universal installation housings and distance pieces 91
- attachment to formwork using expanding dowels, nails or screws



Art. No.	1210-02
Inner packaging/shipping	- / 250
Price in EUR/100	

Junction casings and accessories

for on-site mixed concrete

Support conduit Ø 20 mm



Length	Art. No.	Inner packaging/shipping	Price in EUR/100
<= 40 mm	1212-04	- / 1	
41 - 60 mm	1212-06	- / 1	
61 - 80 mm	1212-08	- / 1	
81 - 100 mm	1212-10	- / 1	
101 - 120 mm	1212-12	- / 1	
121 - 140 mm	1212-14	- / 1	
141 - 160 mm	1212-16	- / 1	
161 - 180 mm	1212-18	- / 1	
181 - 200 mm	1212-20	- / 1	
1.000 mm	1212-98	- / 1	
3.000 mm	1212-99	- / 1	

Note

On request we can supply support conduits with Ø 20 mm for wiring through the support element.

Adhesive foil

- for anti-shock fixing of boxes and casings in horizontal formwork
- for vertical formwork, additional support by means of support element and abutments is necessary
- for degreasing formwork
- double-sided adhesion



Art. No.	1219-00
Inner packaging/shipping	200 / 1000
Price in EUR/100	

Distance piece 91

- for separate covers for antenna sockets in combinations with sockets without electric shock protection
- Centre distance 91 mm
- for multiple row combinations
- fits one-gang boxes, one-gang junction boxes, abutments



Length	91 mm
Art. No.	1259-04
Inner packaging/shipping	10 / 100
Price in EUR/100	

Prefix® concrete building box for attaching to the reinforcement

One-gang junction box with Prefix® installation technology for fast, easy installation directly onto the opposing formwork without support. With its flexible installation clamps, the one-piece box with two integrated front parts applies high pressure, by means of the spring-loaded mounting clamps, to the opposing formwork. This ensures exact positioning of the box, and a clean wall appearance.

- Fast, easy installation directly onto the opposing formwork without support element and abutment
- Prefixing using Prefix® installation technology leaves both hands free for attaching with wires
- Suitable for 20-60 mm concrete covers
- For facing concrete installation to the opposing formwork
- Can be combined to create standardised stable multiple combinations



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Installation



Prepared working formwork with reinforcement from the opposing formwork side.



It is easy to make conduit entries using KAISER punch pliers ...



... or the KAISER opening cutter.



Markings on the front part and box ensure correct assembly of the box.



Insert the conduit, then quickly and easily pre-fit the box in the reinforcement using Prefix® installation technology.



The Prefix® concrete building box is now pre-fitted, and you have both hands free ...



... for fast, secure attachment to the reinforcement using wires.



For use on both sides for 20 mm to 60 mm concrete covers.

Note

According to DIN VDE 0100, Part 559, feed lines for wall lights must terminate in connection boxes. Wall light connection boxes must have at least one option for attaching wall lights. According to DIN VDE 60670, wall and ceiling luminaire connection boxes must provide enough room for 3 individual terminals or be fitted with a 3-pole connector.

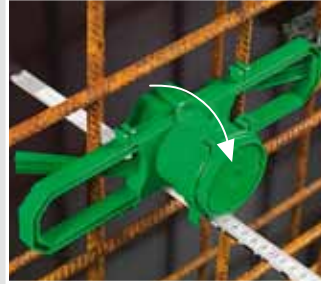
Prefix® concrete building box for attaching to the reinforcement

for on-site mixed concrete

Example of installation on a 24 cm wall



Pre-fix the one-gang junction box to the reinforcement using Prefix® technology, and check the wall thickness on the front side.



The front side of the one-gang junction box must protrude between 5 mm and 20 mm outside the wall thickness. This creates optimal pressure on the opposing formwork.



Prefix® concrete building box 60 one-gang junction box ...




... and Prefix® concrete building box 35 wall light connection box for fixing to the reinforcement.

INNOVATION

Prefix concrete building box 60

- One-gang junction box for attaching to the reinforcement
- One-piece with moulded-on front part
- With 4 screw domes and 2 expanding claw fields on each opening side
- combinations have fully-insulated cable transitions
- standardised combination distance 71 mm




Installation opening Ø	60 mm
Depth	95 mm
for concrete covers	20-60 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	6
	•
Art. No.	1210-60
Inner packaging/shipping	25 / 50
Price in EUR/100	

INNOVATION

Prefix concrete building box 35

- Wall-light connection box for attachment to the reinforcement.
- One-piece with moulded-on front part



Exit opening Ø	35 mm
Depth	95 mm
for concrete covers	20-60 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	6
	•
Art. No.	1210-35
Inner packaging/shipping	25 / 50
Price in EUR/100	

Ceiling junction box

Ceiling junction box to accommodate electrical connections. With the optional light hook, the box is also ideally suited for installing and attaching luminaires. The wide range of ceiling boxes permits almost all conceivable installations.

- Suitable for all types of formwork
- Flat front part for simple and quick nailing
- Integrated cap nut ensures secure fitting of an M5 light hook acc. to DIN EN 60670
- The colour system ensures that the installation can be checked quickly



Processing instructions



Ceiling box 45° with light hook for fixing suspended luminaires.



Ceiling junction box with integrated M5 light hook acc. to DIN EN 60670.



You can very easily open slab ceiling boxes for filigree ceilings with the KAISER punch pliers.



The conduit is inserted tightly and accurately and the box is sealed with the cover.

Ceiling junction box

- with M5 metal nut for light hook (hook length min. 85 mm + plaster thickness)
- suitable for all types of formwork
- maximum light hook load to DIN EN 60670 100 N (10 kg)



Exit opening Ø	35 mm	60 mm
Depth	82 mm	82 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	8	8
Number of parts	3	3
	•	•
Art. No.	1264-50	1265-50
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		


Ceiling boxes and accessories

for on-site mixed concrete / prefabrication

Ceiling large conduit box

- with M5 metal nut for light hook (hook length min. 75 mm + plaster thickness)
- especially suitable for hot glue attachment
- maximum light hook load to DIN EN 60670 100 N (10 kg)




Exit opening Ø	60 mm
Depth	79 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	2
Markings for cables and DIN EN conduits up to Ø 32 mm	2
Number of parts	2
	•
Art. No.	1260-50
Inner packaging/shipping	10 / 100
Price in EUR/100	

Ceiling box 45°

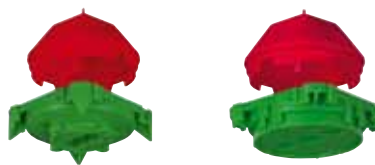
- with M5 metal nut for light hook (hook length min. 55 mm + plaster thickness)
- suitable for all types of formwork
- maximum light hook load to DIN EN 60670 100 N (10 kg)



	35 mm	60 mm
Exit opening Ø	35 mm	60 mm
Depth	55 mm	55 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	4	4
Number of parts	2	2
	•	•
Art. No.	1248-50	1249-50
Inner packaging/shipping	10 / 250	10 / 250
Price in EUR/100		

Domed box 45°

- simple light or ceiling exit
- without hook attachment
- suitable for all types of formwork



	35 mm	60 mm
Exit opening Ø	35 mm	60 mm
Depth	46 mm	46 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	4	4
Number of parts	2	2
Art. No.	1248-44	1249-44
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Slab ceiling large box 115

- for factory fitting
- Installation height 115 mm, with metal nut M5 for light hook (min. hook length: 115 mm + plaster thickness)
- with screw-down cover for onsite fitting of conduits
- suitable for all types of formwork
- maximum light hook load to DIN EN 60670 100 N (10 kg)



Exit opening Ø	60 mm
Depth	115 mm
Diameter	102 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	8
Markings for cables and DIN EN conduits up to Ø 32 mm	4
Number of parts	3
	•
Art. No.	1227-50
Inner packaging/shipping	- / 100
Price in EUR/100	

Slab ceiling box for retrofitting

- for retrofitting on the building site
- installation height 100 mm, with metal nut M5 for light hook (min. hook length 95 mm + plaster thickness)



Depth	100 mm
Number of parts	2
required drilling hole	65 mm
Art. No.	1247-01
Inner packaging/shipping	- / 100
Price in EUR/100	

Light hook

- for retrofitting ceiling boxes (DIN EN 60670)
- maximum light hook load to DIN EN 60670 100 N (10 kg)
- with M5 thread, fully-insulated



Length of shank	Diameter hook	Thread length	Overall length	Art. No.	Inner packaging/shipping	Price in EUR/100
30 mm	26 mm	10 mm	71 mm	1226-30	- / 150	
55 mm	26 mm	10 mm	81 mm	1226-55	- / 150	
65 mm	26 mm	10 mm	91 mm	1226-65	- / 150	
75 mm	26 mm	10 mm	101 mm	1226-75	- / 150	
85 mm	26 mm	10 mm	112 mm	1226-85	- / 100	
95 mm	26 mm	10 mm	121 mm	1226-95	- / 100	
105 mm	26 mm	10 mm	132 mm	1226-97	- / 100	
115 mm	26 mm	10 mm	143 mm	1226-98	- / 100	
125 mm	26 mm	10 mm	151 mm	1226-99	- / 100	

Ceiling boxes and accessories

for on-site mixed concrete / prefabrication



Universal ceiling and wall exit

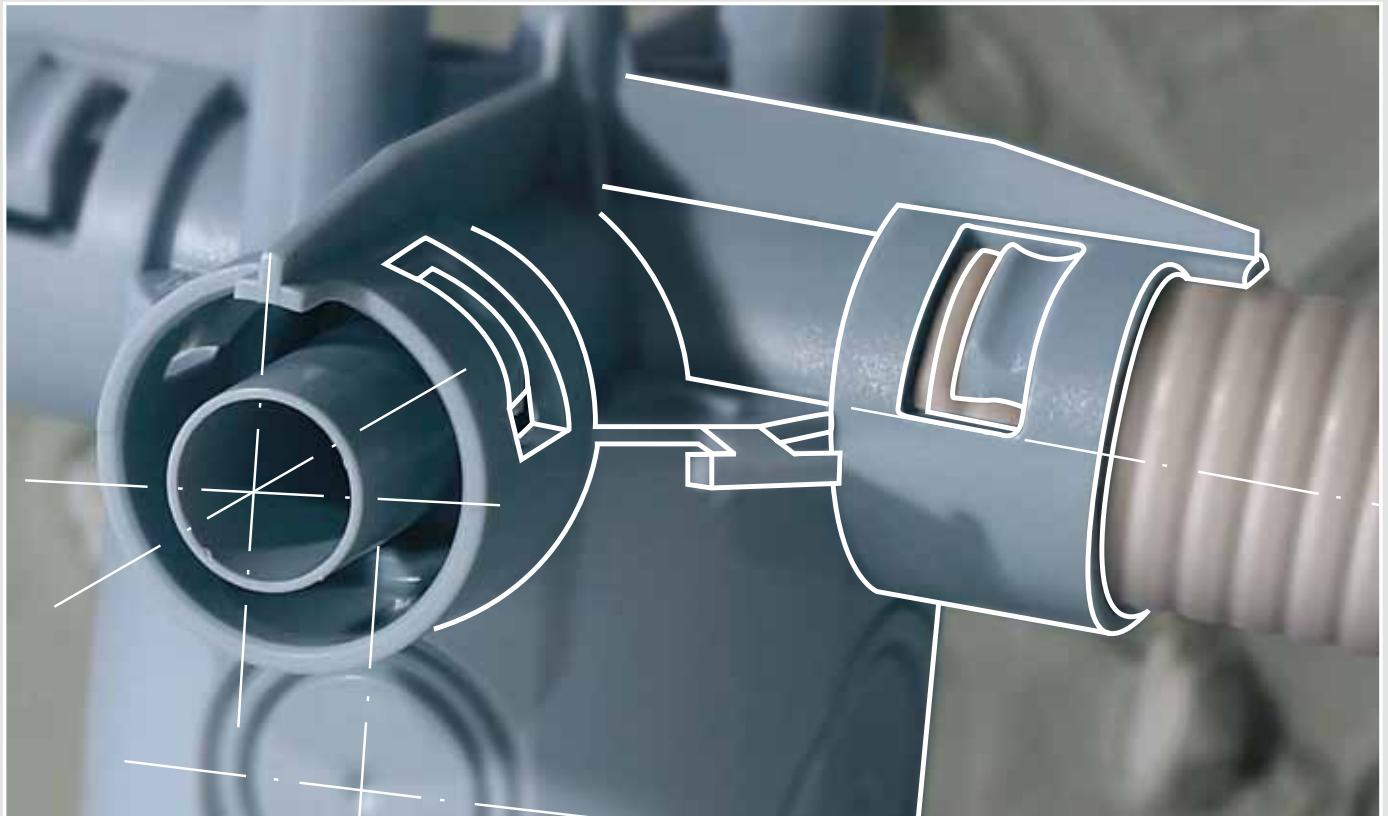
Universal ceiling and wall exit with KSK technology for especially quick and safe installation. The universal \varnothing 85 mm screw-on surface permits the clean installation of luminaires, smoke detectors etc. without the need for drilling.

- Open the conduit entry with a hammer blow
- Combination entry for two conduit sizes
- Thanks to the integrated conduit stopper, it is not necessary to shorten the conduit inside.
- Clean installation of accessories on the universal screw-on surface without the need for drilling or using dowels



KSK TECHNOLOGY

KSK technology, KAISER impact coupling for quick, secure and variable conduit entry in concrete construction. Crimped or unsheathed installation conduits with diameters of 20 or 25 mm can be inserted securely and accurately in a single action. You can open the KSK technology with a single hammer blow offering an integrated conduit limit and extension lock for both conduit sizes.



Universal screw-on surface

The screws for the attachment of the device can be easily screwed into the universal mounting plate.



Front parts

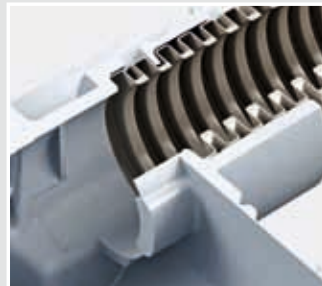
The different front parts offer exit openings of $\varnothing 35$, $\varnothing 48$ or $\varnothing 60$ mm and allow the attachment of a fully-insulated light hook according to DIN EN 60670-21.



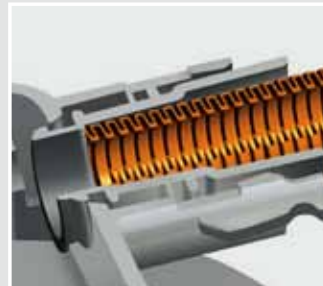
Combi-entry



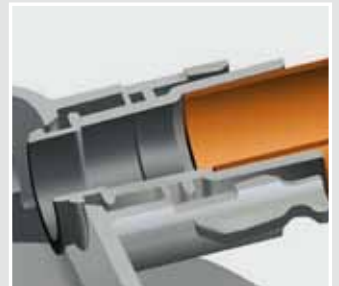
M20 combi-entry



M25 combi-entry



5/8" combi-entry



3/4" combi-entry

Installation



The front part with screw-on surface (1245-60) offers quick and secure support for accessories.



Open the universal conduit entry with one hammer blow.



You can now insert up to four conduits (M20 or M25).



The front part with screw-on surface (1245-60) offers quick and secure hold for accessories.

Ceiling boxes and accessories

for on-site mixed concrete / prefabrication

Universal ceiling and wall exit

- with universal screw-on surface Ø 85 mm
- Conduit entry limit to prevent inside shortening of the conduit
- 2 plaster compensation covers per pack
- suitable for all types of formwork



Depth	105 mm
Outer diameter	85 mm
Ceiling exit (CE) Ø	48 mm
M20/M25 impact couplings	4
Combination conduit entries M20/25	2
Combination conduit entries M25/32	2
Number of nails	2
Art. No.	9959
Inner packaging/shipping	- / 25
Price in EUR/100	

Ceiling junction box

- Conduit entry limit to prevent inside shortening of the conduit
- suitable for all types of formwork
- max. light hooks load in accordance with DIN EN 60670 (50 N)



Exit opening Ø	60 mm	35 mm
Depth	99 mm	99 mm
M20/M25 impact couplings	4	4
Number of parts	2	2
Screw domes for device attachment	4	-
M20/M25 break-out opening	2	2
M25/M32 break-out opening	2	2
Art. No.	1245-63	1245-62
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Light hooks, self-tapping

- for retrofitting ceiling boxes (DIN EN 60670)
- with self-forming thread (similar to German DIN 7998) fully-insulated



Length of shank	Art. No.	Inner packaging/shipping	Price in EUR/100
30 mm	1225-30	- / 100	
40 mm	1225-40	- / 100	
60 mm	1225-60	- / 100	
80 mm	1225-80	- / 100	
100 mm	1225-10	- / 50	
120 mm	1225-12	- / 50	
140 mm	1225-14	- / 50	

Ceiling and wall exit

- for light hook attachment
- 2 entries (support shape) parallel to formwork level for 20 mm or 25 mm DIN EN conduits
- with formwork closing cover for one conduit entry



Length x Width x Depth	90 x 45 x 50 mm
Ceiling exit (CE) Ø	30 mm
Combination conduit entries M20/25	2
Art. No.	9951
Inner packaging/shipping	- / 50
Price in EUR/100	

Ceiling exit

- for light hook attachment and clamping material holder (box shape)
- with large attachment surface for smoke or motion detectors under the ceiling (no need for dowels)
- 4 entries (support shape) parallel to formwork level, 2 entries (support shape) 30° to formwork level, for 20 mm Ø DIN EN conduit



Outer diameter	85 mm
Ceiling exit (CE) Ø	35 mm
Break-out openings Ø 20 mm	8
Art. No.	9955
Inner packaging/shipping	- / 50
Price in EUR/100	

Signal cover

- for wall and ceiling lights connection boxes
- for Art. Nos. 1248-40, 1245-62, 1248-50, 1248-44, 1264-50, 1210-35



For installation opening	35 mm
Art. No.	1181-35
Inner packaging/shipping	- / 50
Price in EUR/100	



End and transition bushes, Wall and ceiling transitions 30°

End and transition bushes and wall and ceiling transitions 30° for securing a continuous empty conduit system at transition points. The very small design of the end and transition bushes allows the feeding of empty conduits even between close-fitting reinforcement bars without the need for time-consuming work. The optimal radius of the wall and ceiling transitions and the exact-fitting conduit holders prevent abutment edges at transitions. This ensures the flexible feeding of cables from both directions.

- Small design for easy installation between close-fitting reinforcement bars
- Optimal transition radius - easy cable insertion
- Installation on the opposing formwork with support element and abutment
- 2-piece design with secure catch mechanism
- Easy removal of the plaster skin
- Small visible area - clean wall and ceiling appearance



End and transition bushes installation



The flat front part ensures easy fixing with only one nail.



The new snap-in connection provides a safe connection between the front and rear parts.



Now insert the empty conduit into the bush holder as far as the stop.



The surrounding conduit lock retains the conduit securely in the holder and ensures the correct function of the empty conduit system

Advantages - End and transition bushes



The new design makes it very easy to feed conduits ...



... even between close-fitting reinforcement bars.



The small design also allows many exits on a small wall or ceiling area.



After striking the formwork, there is only a minimal visible area in the concrete.

Wall-ceiling transitions, ceiling strips, conduit supports, sealing plugs for on-site mixed concrete

Wall and ceiling transition 30° installation



The flat front part ensures easy fixing with only one nail.



The new snap-in connection provides a safe connection between the front and rear parts.



Now insert the empty conduit into the bush holder as far as the stop.



The surrounding conduit lock retains the conduit securely in the holder and ensures the correct function of the empty conduit system

Advantages wall and ceiling transitions 30°



The support element holder for the new wall and ceiling transitions now allows ...



...installation on the opposing formwork with support element and abutment.



After striking the formwork, use a screwdriver for fast, easy opening of the plaster skin.



The optimal radius of the new transitions makes it easy to pull cables in.

INNOVATION

End and transition bushes

- for connecting conduits or as ceiling exit
- closed off on formwork side with plaster skin
- suitable for all types of formwork



Height	32 mm	36 mm	41 mm
Diameter	30 mm	35 mm	41 mm
DIN EN conduit Ø	20 mm	25 mm	32 mm
Number of parts	2	2	2
Visible area Ø	23 mm	28 mm	35 mm
Art. No.	1204-24	1204-34	1204-29
Inner packaging/shipping	50 / 500	25 / 100	25 / 100
Price in EUR/100			

FLUSH-MOUNTING

CAVITY WALL

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SERVICE

Wall-ceiling transitions, ceiling strips, conduit supports, sealing plugs for on-site mixed concrete

INNOVATION

End and transition bushes

- for connecting conduits or as ceiling exit
- closed off on formwork side with plaster skin
- suitable for all types of formwork



Length x Width x Height	95 x 65 x 70 mm
DIN EN conduit Ø	40 mm
Number of parts	1
Visible area Ø	95 x 65 mm
Art. No.	1203-28
Inner packaging/shipping	10 / 40
Price in EUR/100	

INNOVATION

Wall and ceiling transition 30°

- for connecting conduits or as ceiling exit
- closed off on formwork side with plaster skin
- suitable for all types of formwork



Length x Width x Height	70 x 30 x 77 mm	72 x 35 x 78 mm	80 x 41 x 83 mm
DIN EN conduit Ø	20 mm	25 mm	32 mm
Number of parts	2	2	2
Visible area Ø	23 mm	28 mm	35 mm
Art. No.	1202-04	1202-34	1202-29
Inner packaging/shipping	25 / 250	25 / 100	25 / 100
Price in EUR/100			



Ceiling strips

Ceiling strips for intermediate wall feeds, as ceiling exit or for connecting installation conduits. The elongated shape allows for compensation of big tolerances for lightweight intermediate wall feeds.

- For DIN EN conduits Ø 20 to Ø 40 mm
- Large tolerance compensation
- Exiting of two conduits at one exit site
- Can be combined for more than one adjacent exit
- Space for conduit ends for extending with conduit bushes



Installation



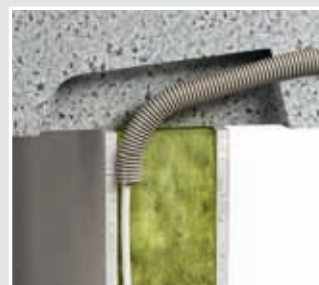
Position the ceiling strip on the formwork and fix with nails.



The ceiling strips can easily be combined, and offer exact, parallel exits.



Ceiling strip Art. No. 4558 can be occupied on two sides using DIN EN conduits Ø 20 or Ø 25 mm.



After striking of the formwork, ceiling strip Art. No. 4552 can easily be removed from the concrete ceiling and re-used for more installations.

Ceiling strip (ceiling exit)

- ceiling exit for intermediate wall feed, exit or conduit connector
- accepts large tolerance compensation
- open on formwork side
- Use wire-pull casing and junction casing 1298-03 for DIN EN conduits up to Ø 63 mm



Length x Width x Height	138 x 36 x 29 mm	138 x 36 x 29 mm	306 x 40 x 29 mm	270 x 90 x 82 mm
For conduits to DIN EN outer Ø	20 mm	25 mm	-	-
Combination conduit entries M20/25	-	-	2	-
Combination conduit entries M20/25/32	-	-	-	1
Combination conduit entries M25/32/40	-	-	-	1
Number of nails	-	-	4	-
Art. No.	1283-33	1283-34	4558	4552
Inner packaging/shipping	25 / 100	25 / 100	- / 50	- / 10
Price in EUR/100				

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

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CABLE GLANDS

TOOLS

SERVICE

Wall-ceiling transitions, ceiling strips, conduit supports, sealing plugs for on-site mixed concrete

Ceiling strip 25° (ceiling exit)

- with 4 nails 3 x 50 mm
- accepts large tolerance compensation
- open on formwork side
- 25° conduit entry for laying conduit on the first reinforcement level
- for intermediate wall feed



Length x Width x Height 300 x 45 x 65 mm

Combination conduit entries M20/25 1

Number of nails 4

Art. No. 4555

Inner packaging/shipping - / 50

Price in EUR/100

Conduit supports

- for secure fixing of conduits from concrete ceiling
- Prevents conduits from kinking



Length x Width x Height 130 x 132 x 210 mm 300 x 300 x 300 mm

DIN EN conduit Ø 16-40 mm -

Steel diameter Ø - 8 mm

Art. No. 4560 11021

Inner packaging/shipping - / 50 - / 25

Price in EUR/100

Conduit bend support

- Prevents conduits from kinking



Length x Width x Height 170 x 107 x 225 mm

Number of nails 3

Radius 160

Art. No. 4561

Inner packaging/shipping - / 25

Price in EUR/100

Conduit sealing cap

- for sealing off conduits
- Halogen-free



DIN EN conduit Ø 20 mm 25 mm 32 mm

Art. No. 1273-43 1273-44 1273-45

Inner packaging/shipping 100 / 1000 50 / 250 50 / 250

Price in EUR/100

Product advantages of sealing plugs



When pushed through, the elastic sealing membrane using ECON® technology wraps itself around the cable or individual leads, ...



... and prevents uncontrolled air flow.



From conduit size M25 upwards, the membrane areas are reinforced with ribs ...



... which prevent damage and ensure air-tightness where the cables pass through.

INNOVATION

Sealing plugs 16-20

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic



Sealing plug	M16	M20
DIN EN conduit Ø	16 mm	20 mm
Art. No.	1040-16	1040-20
Inner packaging/shipping	25 / 100	25 / 100
Price in EUR/100		

INNOVATION

Sealing plugs 25-40

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic



Sealing plug	M25	M32	M40
DIN EN conduit Ø	25 mm	32 mm	40 mm
Art. No.	1040-25	1040-32	1040-40
Inner packaging/shipping	25 / 100	25 / 50	- / 25
Price in EUR/100			

Wire-pull and junction casings

for on-site mixed concrete



Wire-pull and junction casings

Wire-pull and junction casings in all sizes and for almost any kind of job. This product range features practical housing sizes as well as robust housing design perfect for building sites.

- 14 different housing sizes
- Suitable for all types of formwork
- With stable, non-distorting support technology
- End cover with screw fastening for VDE-compliant installation
- Also suitable for masonry installation
- Separator walls to separate electrical circuits



Processing instructions



Open the universal conduit entry of the KSK technology with one hammer blow.



The junction casing and the support on the working formwork create a stable unit.



The telescope support ensures a non-distorting fit even under heavy loads.



KAISER wire-pull and junction casings are tried-and-tested under site conditions and especially robust.

Wire-pull casings

- Easy to pull in cables across long distances.
- Ample space for reserve cables and observing bending radii.
- Wide variety of entry options for DIN EN conduit sizes up to a max. of Ø 63 mm on all sides.
- Easy to subsequently change or expand the installation.



To be able to easily pull in cables later on, pull cables must be included in the installation conduits.



Main feed lines with large cross-sections can be pulled in through wire-pull casings across long distances.



Wire-pull casings allow you to easily change the electrical installation when requirements change, in particular in office buildings.



Smaller wire-pull casing at the end of longer conduit distances with a decreasing amount of cable.

Wire-pull and junction casing

- for wood and steel formwork in on-site mixed concrete as well as flush-mounting (masonry) installations
- with inner fitting cover as adhesive attachment surface
- for vertical formwork attached with adhesive, the casings must be secured with the telescopic support 9957
- for loose terminals up to 4 mm²



Length x Width x Depth	115 x 115 x 76 mm	115 x 115 x 101 mm	115 x 115 x 150 mm	115 x 115 x 105 mm
Combination conduit entries M20/25	4	8	8	4
Combination conduit entries M25/32	-	-	-	2
Break-out openings Ø 20 mm	16	16	16	12
Halogen-free	•	•	•	•
Number of nails	4	4	4	4
Art. No.	9909.01	9908.01	9908.21	9907
Inner packaging/shipping	- / 50	- / 20	- / 5	- / 20
Price in EUR/100				

Accessories: Telescope support, page 139

Upper frame

- extension size 12 mm
- for 4 screws
- multiple extensions possible



Length x Width x Depth	115 x 115 x 13 mm	115 x 115 x 12 mm
Halogen-free	•	•
Art. No.	9908.68	9907.68
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Plug-in cover

- smooth surface with rounded edge



Length x Width x Height	130 x 130 x 7 mm	130 x 130 x 3.5 mm	130 x 130 x 3.5 mm	130 x 130 x 3.5 mm
Art. No.	9909.22	9909.20	9909.10	9909.12
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10
Price in EUR/100				

Screw-in cover

- smooth surface with rounded edge



Length x Width x Height	130 x 130 x 3.5 mm	130 x 130 x 3.5 mm	130 x 130 x 3.5 mm
Number of plastic screws	4	4	-
Number of metal screws	-	-	4
Art. No.	9909.02	9909.02 S	9909.05
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

Wire-pull and junction casings

for on-site mixed concrete

Wire-pull and junction casing

- for wood and steel formwork in on-site mixed concrete as well as flush-mounting (masonry) installations
- Junction casings with inner fitting cover as adhesive attachment surface
- for vertical formwork attached with adhesive, the casings must be secured with the telescopic support 9957
- End cover (plastic): fire resistance 750°C
- for loose terminals up to 4 mm²



Length x Width x Depth	175 x 120 x 64 mm	170 x 115 x 95 mm	240 x 168 x 100 mm	240 x 168 x 185 mm
Combination conduit entries M20/25	14	14	16	32
Combination conduit entries M20/25/32	4	6	4	8
Combination conduit entries M25/32/40	-	-	8	16
Combination conduit entries M32/40/50	-	-	2	4
Break-out openings Ø 20 mm	2	2	-	-
Halogen-free	•	•	-	-
Number of nails	4	4	-	-
Internal support for use in vertical formwork Art. No.	-	-	9913.00.06	-
Art. No.	9912.01	9911.01	9913.00.01	9913.21
Inner packaging/shipping	- / 5	- / 5	- / 10	- / 1
Price in EUR/100				

Cover

- smooth surface with rounded edge
- suitable for Art. Nos. 9912.01 and 9911.01



Length x Width x Height	185 x 130 x 3.5 mm
Art. No.	9911.12
Inner packaging/shipping	- / 5
Price in EUR/100	

Screw-in cover

- smooth surface with rounded edge
- suitable for Art. Nos. 9913.00.01 and 9913.21



Length x Width x Height	185 x 130 x 3.5 mm	255 x 187 x 5 mm
Screws	4	-
Art. No.	9911.02	9913.02
Inner packaging/shipping	- / 5	5 / 1
Price in EUR/100		

Wire-pull and junction casing

- for wood and steel formwork in on-site mixed concrete as well as flush-mounting (masonry) installations
- for vertical formwork attached with adhesive, the casings must be secured with the telescopic support 9957
- End cover (plastic): fire resistance 750°C
- for loose terminals up to 4 mm²
- The internal support can be ordered separately for use in vertical formwork



Length x Width x Depth	392 x 280 x 120 mm	392 x 280 x 223 mm	250 x 105 x 94 mm
Combination conduit entries M20/25	14	28	26
Combination conduit entries M20/25/32	-	-	2
Combination conduit entries M25/32	12	24	-
Combination conduit entries M25/32/40	4	8	-
Combination conduit entries M40/50/63	10	20	2
Number of nails	-	-	4
Internal support for use in vertical formwork Art. No.	9915.00.06	-	-
Art. No.	9915.00.01	9915.21	9914.01
Inner packaging/shipping	- / 10	- / 1	- / 10
Price in EUR/100			

Screw-in cover

- smooth surface with rounded edge
- suitable for Art. Nos. 9915.00.01, 9915.21 and 9914.01



Length x Width x Height	413 x 305 x 5 mm	262 x 112 x 5 mm
Screws	-	-
Art. No.	9915.02	9914.02
Inner packaging/shipping	5 / 1	10 / 1
Price in EUR/100		

Waterproof cover

- aluminium (polished surface)
- with full-surface neoprene seal, thickness 4 mm
- cover fastening with 4 screws, 4 x 45 mm (included), non-rusting
- for Art. Nos. 9909.01, 9908.01, 9908.21, 9907



Length x Width x Height	130 x 130 x 1.5 mm
Screws	4
Art. No.	9909.03
Inner packaging/shipping	- / 1
Price in EUR/100	

Wire-pull and junction casings

for on-site mixed concrete

Waterproof cover

- aluminium (polished surface)
- with full-surface neoprene seal, thickness 4 mm
- cover fastening with 4 screws, , 4 x 45 mm (included), non-rusting
- for Art. Nos. 9912.01, 9911.01



Length x Width x Height 186 x 130 x 1.5 mm

Screws 4

Art. No. 9911.03

Inner packaging/shipping - / 1

Price in EUR/100

Waterproof cover

- aluminium (polished surface)
- with full-surface neoprene seal, thickness 4 mm
- cover fastening with 4 screws, 4 x 45 mm (included), non-rusting



Length x Width x Height 255 x 187 x 2 mm 413 x 305 x 2 mm 265 x 115 x 2 mm

Screws 4 8 4

Art. No. 9913.03 9915.03 9914.03

Inner packaging/shipping - / 1 - / 1 - / 1

Price in EUR/100

Universal installation housings

Universal installation housing for the installation of almost any types and shapes of accessories in concrete walls and ceilings. The housing system consists of nine different installation housings and an extensive range of accessories.

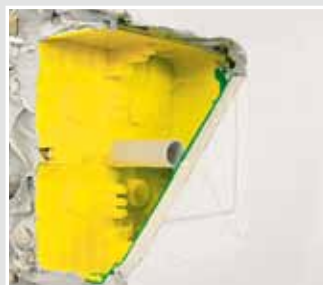
- For displays, LED lamps and much more
- For installing almost all shapes and sizes
- For installation on walls and ceilings
- For on-site mixed concrete and prefabrication
- For horizontal and vertical formwork and masonry



Examples of use



The housing in the concrete is flush-mounted with the mineral fibreboard. The groove in the mineral fibreboard determines the maximum mounting area.



The support in the installation housing prevents it being pressed inward while the concrete is being cast.



Use only screws that go into but not through the mineral fibreboard when attaching the device! (e.g. SPAX countersunk head screw 3.5 x 15 mm)



The front panels are easy to process, and almost any shape can be cut out.

Note

The listed wall thickness refers to walls without a fire-protection function. For fire-protection walls: remaining wall thickness = min. 60 mm. For use with halogen luminaires, note maximum output (see product details)

Universal installation housing with mineral fibreboard

- 2-part, consisting of housing and front ring with mineral fibreboard
- all-round groove denotes the maximum opening dimension
- for loudspeakers, displays and LED lamps



Length x Width x Depth	90 x 90 x 70 mm	150 x 90 x 70 mm	128 x 128 x 86 mm
Installation opening	40 x 40 mm	100 x 40 mm	75 x 50 mm
Device installation depth	60 mm	60 mm	65 mm
Ceiling thickness	>= 140 mm	>= 140 mm	>= 140 mm
Wall thickness	>= 110 mm	>= 110 mm	>= 120 mm
suitable for horizontal formwork	•	•	•
suitable for vertical formwork	•	•	•
Art. No.	1223-22	1224-22	1295-22
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

Universal installation housings

for concrete ceilings and walls

Universal installation housing with mineral fibreboard

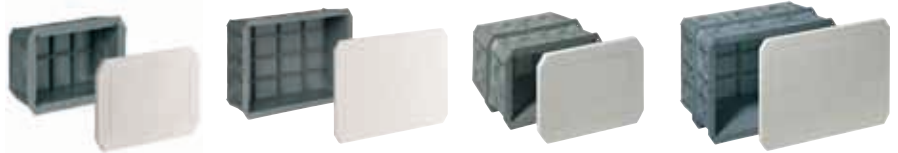
- 2-part, consisting of housing and front ring with mineral fibreboard
- all-round groove denotes the maximum opening dimension
- incl. internal support element to stabilise the housing



Length x Width x Depth	180 x 180 x 90 mm	250 x 220 x 90 mm
Installation opening	120 x 100 mm	200 x 145 mm
Device installation depth	65 mm	65 mm
Ceiling thickness	>= 140 mm	>= 140 mm
Wall thickness	>= 120 mm	>= 120 mm
suitable for horizontal formwork	•	•
suitable for vertical formwork	•	•
Art. No.	1296-22	1297-22
Inner packaging/shipping	- / 10	- / 5
Price in EUR/100		

Universal installation housing with mineral fibreboard

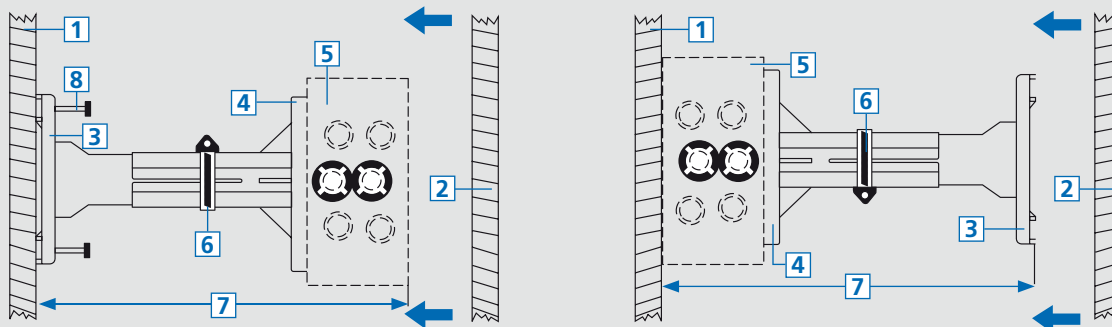
- suitable for installation in horizontal and vertical formwork and in masonry
- all-round groove denotes the maximum opening dimension
- 2 parts, consisting of housing and mineral fibreboard



Length x Width x Depth	240 x 170 x 115 mm	390 x 280 x 136 mm	240 x 170 x 200 mm	390 x 280 x 239 mm
Installation opening	194 x 124 mm	344 x 234 mm	194 x 124 mm	344 x 234 mm
Device installation depth	98 mm	115 mm	180 mm	200 mm
Ceiling thickness	>= 160 mm	>= 180 mm	>= 240 mm	>= 280 mm
Wall thickness	>= 160 mm	>= 180 mm	>= 240 mm	>= 280 mm
DIN EN conduit Ø	M20, M32, M40, M50 mm	M20, M32, M40, M50, M60, M65 mm	M20, M32, M40, M50 mm	M20, M32, M40, M50, M60, M65 mm
Internal support for use in vertical formwork Art. No.	9913.00.06	9915.00.06	-	-
suitable for vertical formwork	•	•	-	-
max. output halogen luminaires	35 QR-CBC, 50 W Alu	50 W QR-CBC, 75 W Alu	50 W QR-CBC, 75 W Alu	1x75 W QR-CBC, 2x50 W QR-CBC, 2x75 W Alu
suitable for horizontal formwork	•	•	•	•
Art. No.	1298-27	1298-28	1297-24	1297-25
Inner packaging/shipping	- / 10	- / 4	- / 10	- / 4
Price in EUR/100				

Support technology for boxes and installation housings

Support technology with telescope support: junction casings and installation housings can also be mounted on both formwork sides during vertical production. This is achieved either by fixing them directly on to the working formwork or by using the telescopic support equipment. If the junction casing is directly attached to the working formwork or if extreme loads are expected (e.g. if the block of concrete is at a great height), extra support is recommended using the telescope support.



1 Working formwork | 2 Opposing formwork | 3 Base plate | 4 Supporting plate | 5 Junction casing | 6 Hose clamp | 7 Wall thickness +2 cm | 8 Nail

Adjusting the telescope support to different wall thicknesses



Wall thickness up to 20 cm. Shorten the 8-sided conduit on base and supporting plate to the necessary length. Wall thickness 20 to 25 cm. Adjust the telescope support to the necessary length.

Wall thickness 25 to 30 cm. Fit the included extension and adjust the telescope support to the necessary length.

Note

When the formwork is closed, the telescope support and the casing are held between the walls of the formwork. The preset excess length of 2 cm ensures sufficient pressure for a secure fit. Always tighten hose clamp fully!

Telescope support

- for support of all casings (99xx.xx without support element attachment) in vertical wooden formwork
- base plate attached with 4 nails (included)
- casing attached by screwing onto supporting plate
- adjustable size without extensions for wall thicknesses of 135 to 205 mm + casing height. Adjustable size of 195 to 265 mm + casing height using extensions included in delivery.



Length x Width x Height	110 x 110 x 150-300 mm
Number of nails	4
Art. No.	9957
Inner packaging/shipping	- / 10
Price in EUR/100	

One-gang junction boxes and system components

for horizontal prefabrication



B2 system

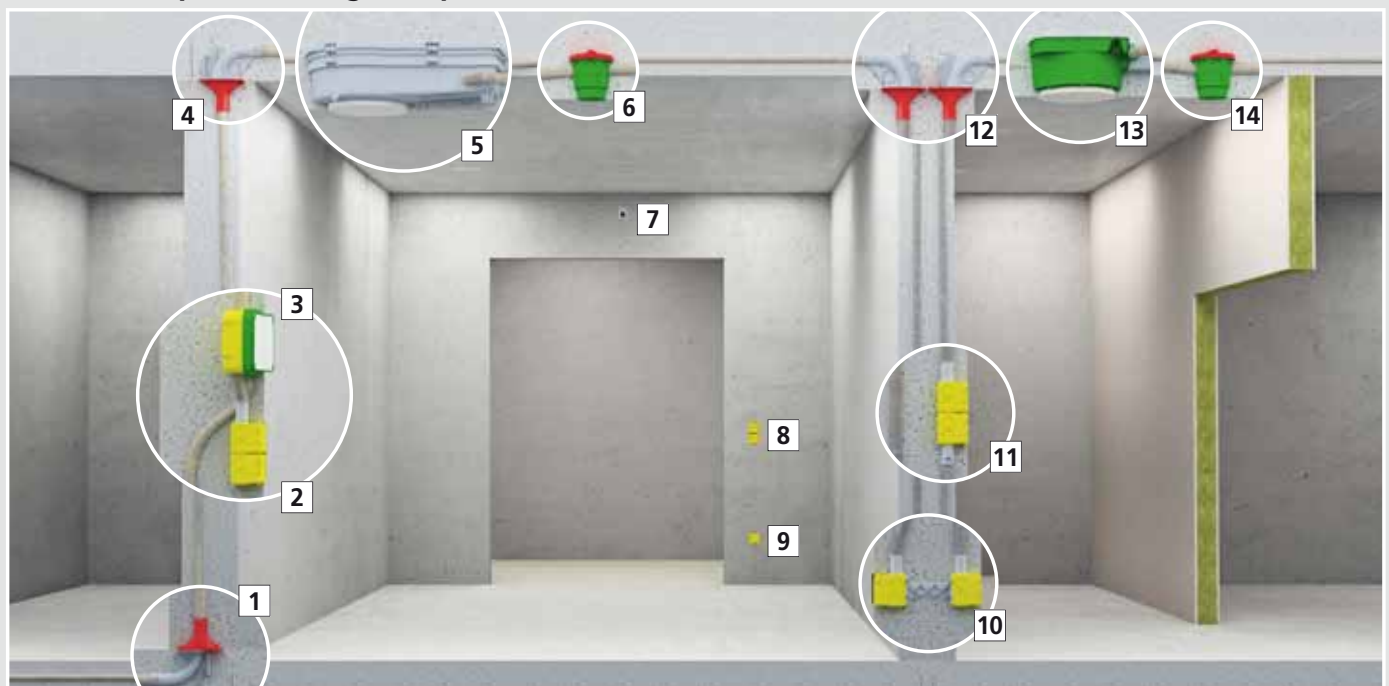
for horizontal prefabrication

B2 system for installation in horizontal prefabrication. All installation requirements can be met with a few components. The one-gang boxes are adhesive and the accessories provide a practice-oriented product range.

- Extremely time-saving
- One-piece unit
- Available with or without plaster skin
- Available prefabricated with special adhesive – no glue residues when removing from formwork
- Easy-clip stacking of combinations or opposing boxes



The KAISER product range for prefabrication



1 Wall-ceiling transition 90° and oval funnel | 2 B² one-gang junction boxes | 3 Universal installation housings | 4 Wall-ceiling transition 90° and oval funnel | 5 System KompaX® | 6 Slab ceiling large box 105 | 7 Wall-ceiling transition 90° as wall exit | 8 B² one-gang junction boxes | 9 B² one-gang junction box | 10 B² one-gang junction boxes with extension element | 11 B² one-gang junction boxes | 12 Wall-ceiling transition 90° and oval funnel | 13 System HaloX-P | 14 Slab ceiling large box 105

Mounting options



The KAISER special adhesive is factory-applied (not for 1264-61/62).



The KAISER adhesive foil is suitable for one-gang junction boxes with plaster skin.



The KAISER B2 magnet is secure and reusable with boxes without plaster skin.



The hot glue is suitable for all versions with plaster skin.

One-gang junction boxes and system components for horizontal prefabrication

Conduit connector Ø 20/25



With built-in conduit lock designed especially for corrugated conduits.



Clip the conduit connector to the one-gang junction box.



Press the connector downwards and completely punch out the feed-through.

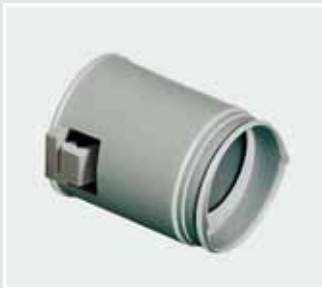


Insert the conduit into the connector.

Note

The large number of markings for DIN EN conduits or conduit connectors with Ø 16, 20, 25, 32 or 40 mm permits a wide range of feed-throughs and offers a large number of combination possibilities for conduits and installation boxes.

Conduit connector Ø 32/40 mm



With built-in conduit lock designed especially for corrugated conduits.



Insert the tip of the conduit connector in the marked position.



Turn the conduit connector with pressure against the one-gang box until the feed-through is cut out.




Clip the connector into place, insert the conduit into the connector.

One-gang junction box with plaster skin

- 4 screw domes, distance 60 mm
- can be attached to formwork using special adhesive, adhesive foil, magnet or hot glue



Depth	48,5 mm	68,5 mm	83,5 mm
Diameter	60 mm	60 mm	60 mm
Markings for cables and DIN EN conduits to Ø 16 mm	4	4	2
Markings for cables and DIN EN conduits up to Ø 25 mm	4	8	-
Markings for cables and DIN EN conduits to Ø 32/40 mm	-	-	4
	• / •	• / •	• / -
Art. No.	1262-60	1263-60	1264-60
Inner packaging/shipping	- / 100	- / 100	- / 100
Price in EUR/100			

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

One-gang junction boxes and system components

for horizontal prefabrication

One-gang junction box with plaster skin and special adhesive

- 4 screw domes, distance 60 mm
- Attachment to formwork via special adhesive is possible



Depth	48.5 mm	68.5 mm
Diameter	60 mm	60 mm
Markings for cables and DIN EN conduits to Ø 16 mm	4	4
Markings for cables and DIN EN conduits up to Ø 25 mm	4	8
With special adhesive	•	•
/	• / •	• / •
Art. No.	1262-70	1263-70
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

One-gang junction box without plaster skin

- 4 screw domes, distance 60 mm
- Attachment to formwork by means of a magnet (1261-80)



Depth	48.5 mm	68.5 mm	83.5 mm
Diameter	60 mm	60 mm	60 mm
Markings for cables and DIN EN conduits to Ø 16 mm	4	4	2
Markings for cables and DIN EN conduits up to Ø 25 mm	4	8	-
Markings for cables and DIN EN conduits to Ø 32/40 mm	-	-	4
/	• / •	• / •	• / -
Art. No.	1262-61	1263-61	1264-61
Inner packaging/shipping	- / 100	- / 100	- / 100
Price in EUR/100			

One-gang junction box without plaster skin, with special adhesive

- 4 screw domes, distance 60 mm
- Attachment to formwork via special adhesive is possible



Depth	48.5 mm	68.5 mm
Diameter	60 mm	60 mm
Markings for cables and DIN EN conduits to Ø 16 mm	4	4
Markings for cables and DIN EN conduits up to Ø 25 mm	4	8
With special adhesive	•	•
/	• / •	• / •
Art. No.	1262-71	1263-71
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

Conduit connector

- for punching out markings without tools
- accepts rigid and flexible DIN EN conduits



DIN EN conduit Ø	20 mm	25 mm	32 mm	40 mm
Art. No.	1261-20	1261-25	1261-32	1261-40
Inner packaging/shipping	- / 100	- / 100	- / 100	- / 100
Price in EUR/100				

Distance piece 142

- for connecting to all one-gang junction boxes at 142 mm centre distance
- for separate covering, e.g. low-voltage in combinations with sockets with protection against accidental contact.
- also for overhead boxes
- with push-stud connector for extension elements



Art. No.	1261-18
Inner packaging/shipping	- / 50
Price in EUR/100	

Magnet

- for clamped attachment in box
- for anti-shock fixing of one-gang junction boxes in horizontal formwork
- adhesive force 900 N
- magnet remains on formwork table after removal of formwork. Not necessary to remove concrete separation material on formwork table.



Art. No.	1261-80
Inner packaging/shipping	- / 5
Price in EUR/100	

Plaster compensation ring

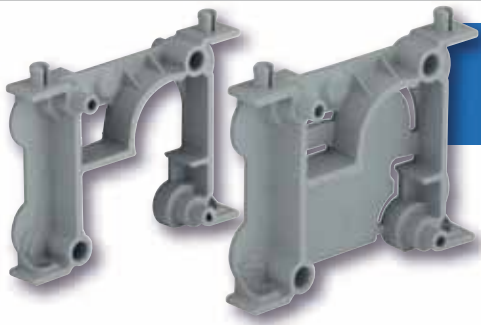
- for latching on the one-gang junction box
- screw distance to equipment attachment 60 mm
- with moulded-in plaster skin to prevent ingress of cleaning material



Height	14.5 mm
Diameter	60 mm
Art. No.	1261-60
Inner packaging/shipping	25 / 250
Price in EUR/100	

One-gang junction boxes and system components

for horizontal prefabrication



10–100 mm extension element

Extension element for bridging wall thicknesses and supporting one-gang boxes during installation on the opposing formwork. Bridging of up to 100 mm (plus box dimensions) can be underpinned securely in increments of 10 or 50 mm.

- For installation of overhead one-gang junction boxes
- Fitting height: vertical 50 mm, horizontal 10 mm
- can be attached to one-gang junction boxes or abutment using push-stud conduit connector
- Clip the connector into place, insert the conduit into the connector.



Processing instructions



Connected crossways, the elements provide stable and non-distorting support.



A wide range of possibilities for adjusting the installation height.



Different installation heights can be created in 10 mm increments.



The abutment is needed for upper boxes as a starter element on the formwork table. It is available with or without special adhesive and can be combined with extension elements and one-gang junction boxes.

Extension element 10 to 50 mm

- for fitting of overhead one-gang junction boxes at greater heights
- can be attached to one-gang junction boxes or abutment using push-stud conduit connector



Installation heights, horizontal	10 mm
Installation heights, vertical	50 mm
Art. No.	1261-10
Inner packaging/shipping	- / 50
Price in EUR/100	

Abutment

- for fitting of overhead one-gang junction boxes at greater heights
- for fixing to formworks

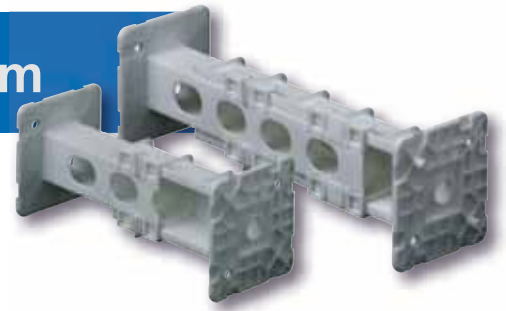


With special adhesive	-	•
Art. No.	1261-11	1261-72
Inner packaging/shipping	- / 50	- / 50
Price in EUR/100		

Universal extension element from 105 mm

Universal extension element for bridging wall thicknesses of more than 105 mm and supporting one-gang boxes during installation on the opposing formwork. Thanks to the various sizes, heights of 105 mm up to 300 mm (plus box dimensions) can be bridged in increments of 5 mm.

- For installation of overhead one-gang junction boxes
- Height adjustable in increments of 5 mm
- Can be attached to one-gang junction boxes using push-button connection



Processing instructions



Connect the universal extension element and the one-gang junction box using the push-button connection.



Attach the universal extension element to the formwork table with hot glue.



The correct height is achieved by simply assembling the two halves.

Note

For lengths of less than 105 mm, the two parts are simply shortened and put back together again.

Universal extension element

- for fitting of overhead one-gang junction boxes at greater heights
- height adjustable in increments of 5 mm



Length (+ box installation height)	105 - 170 mm	175 - 300 mm	105 - 170 mm	175 - 300 mm
attached using hot glue on formwork table	•	•	-	-
can be attached to one-gang junction boxes or abutment using push-stud conduit connector	-	-	•	•
Art. No.	1261-06	1261-07	1261-08	1261-09
Inner packaging/shipping	- / 50	- / 50	- / 50	- / 50
Price in EUR/100				

FLUSH-MOUNTING

CAVITY WALL

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HOUSINGS

FIRE PROTECTION

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Large slab ceiling

Large slab ceiling box for factory installation in prefabricated ceilings. The large slab ceiling boxes are already integrated in the ceilings when these arrive at the building site. This permits fast on-site laying of empty conduits.

- Large adhesive area with rough surface structure for a secure fit on the formwork table
- Installation height guarantees optimal transport conditions for prefabricated ceilings
- Quick-release cover for fast cutting of conduit entries using punch pliers
- Integrated cap nut M5 ensures secure fitting of a light hook.



Slab ceiling large box 115

- for factory fitting
- Installation height 115 mm, with metal nut M5 for light hook (min. hook length: 115 mm + plaster thickness)
- with screw-down cover for onsite fitting of conduits
- suitable for all types of formwork
- maximum light hook load to DIN EN 60670 100 N (10 kg)



Slab ceiling large box 105

- for factory fitting
- installation height 105 mm, with metal nut M5 for light hook (min. hook length 105 mm + plaster thickness)
- for space frame heights up to 11 cm (incl. distance pieces)
- with screw-down cover for onsite fitting of conduits
- suitable for all types of formwork
- maximum light hook load to DIN EN 60670 100 N (10 kg)



Exit opening Ø	60 mm	60 mm
Depth	115 mm	105 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	8	8
Markings for cables and DIN EN conduits up to Ø 32 mm	4	-
Number of parts	2	2
especially suitable for hot glue attachment	•	•
	•	•
Art. No.	1227-55	1227-54
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

Light hook

- for retrofitting ceiling boxes (DIN EN 60670)
- maximum light hook load to DIN EN 60670 100 N (10 kg)
- with M5 thread, fully-insulated



Length of shank	Diameter hook	Thread length	Overall length	Art. No.	Inner packaging/shipping	Price in EUR/100
105 mm	26 mm	10 mm	132 mm	1226-97	- / 100	
115 mm	26 mm	10 mm	143 mm	1226-98	- / 100	
125 mm	26 mm	10 mm	151 mm	1226-99	- / 100	

Wall and ceiling transition

Wall and ceiling transition for uninterrupted conduit connections and wall and ceiling exits. The exact distance to the formwork edgings can be set and fixed in 5 mm increments with the integrated measurement strip.

- For secure conduit connections on prefabricated concrete elements
- For fitting to formwork edging
- For rigid and flexible DIN EN conduits Ø 25 mm
- For locating exact height thanks to integrated measurement strip



Installation



The exact position is achieved with the help of the measurement strip and by gluing it to the formwork edging.



The moulded closing cover protects the opening against dirt and concrete. Simply open it prior to installation.



Insert the conduit into the clean installation opening.



Wall exit of a prefabricated wall as transition to the filigree ceiling.

Wall and ceiling transition

- for fitting to formwork edging
- with moulded-in measurement strip to achieve the exact installation height in 5 mm steps
- with closing cover to prevent ingress of material



DIN EN conduit Ø	25 mm	25 mm
With special adhesive	-	•
Art. No.	1261-12	1261-73
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

One-gang junction boxes and system components

for horizontal prefabrication



90° wall and ceiling transition

90° wall and ceiling transition for uninterrupted conduit connections and wall and ceiling exits. The 90° bend makes it much easier to pull the cables through at a later stage.

- For secure conduit connections on prefabricated concrete elements
- For fitting to formwork edging
- For rigid and flexible DIN EN conduits
- Upper conduit entry above the filigree ceiling, for laying conduits on the building site



Processing instructions



The 90° bend ensures clean transitions and easy cable routing. Just glue the wall and ceiling transition to the formwork edging.



The clip nose is used for securing corrugated conduits with Ø 20 or Ø 25 mm.



Two integrated closing covers protect against dirt and concrete penetration.



Wall and ceiling transition 90°

- for easier drawing of cable through 90° bends
- for fitting to formwork edging
- accepts rigid and flexible DIN EN conduits
- with closing cover to protect against foreign bodies



DIN EN conduit Ø	20 mm	25 mm
Art. No.	1261-16	1261-14
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

Oval funnel

The oval funnel simplifies the exact joining of prefabricated concrete elements with integrated installation conduits. It guarantees safe conduit entry and provides a tolerance compensation of 1 cm or 2 cm during installation.

- Tolerance compensation when joining the concrete elements
- For industrially prefabricated ceiling and wall elements as well as on-site mixed concrete
- For secure connection of installation conduits on transitions of prefabricated concrete elements
- Precise joining of electrical installation conduits
- Tolerance compensation: 2 cm in longitudinal direction and 1 cm in transverse direction.



Tolerance compensation when joining the concrete elements



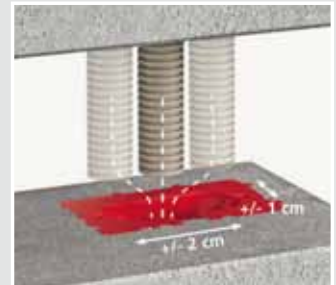
Compensation in longitudinal direction ± 20 mm.



Compensation in transverse direction ± 10 mm.



Wall-ceiling transition 90° using the oval funnel.



Oval funnel

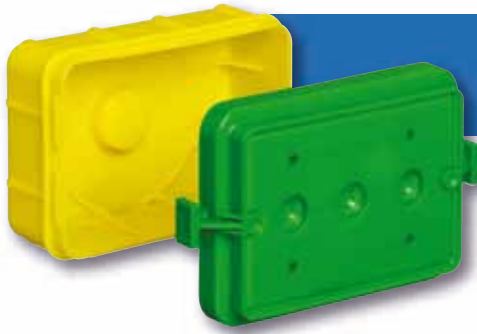
- for the simple connection of DIN EN conduits with tolerance compensation for wall-wall and wall-ceiling transitions
- for installation on the transition edge
- accepts rigid and flexible DIN EN conduits
- with closing cover to prevent ingress of material



DIN EN conduit Ø	20 mm	25 mm
Art. No.	1261-42	1261-43
Inner packaging/shipping	- / 100	- / 100
Price in EUR/100		

International products

for accessory installation in accordance with national standards



International products

For international projects, we offer a large range of products which meet the relevant national standards and regulations.

- Dimensions and approvals based on national standards
- Suitable installation tools
- Many combination options



One-gang box (Italian and American standard)

- for 3 modules in monoblock construction (single row)
- installation opening 60 x 90 mm



Depth	55 mm
Screw spacing	83 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	8
Number of parts	2
Art. No.	1200-00
Inner packaging/shipping	- / 100
Price in EUR/100	

One-gang box (Italian and American standard)

- Screw spacing device 2 x 83.5 mm, for installing Italian and American inserts
- for 2x3 modules in monoblock construction (double row)
- installation opening 72 x 105 mm



Length x Width x Depth	128 x 128 x 80 mm
Number of parts	2
Entry fields	8
possible DIN EN conduit sizes per entry field:	•
4 x 16 mm Ø, 3 x 20 mm Ø, 1 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	
Art. No.	1295-02
Inner packaging/shipping	- / 10
Price in EUR/100	

One-gang box

- equipment can be aligned at any time by using to M 3.5 slide nuts
- Certified to BS 4662



Depth	60 mm
Screw spacing	60,3 mm
Installation opening	68 x 68 mm
Markings for cables and DIN EN conduits up to Ø 32 mm	4
Number of parts	2
Art. No.	1223-41
Inner packaging/shipping	- / 100
Price in EUR/100	

Two-gang box

- equipment can be aligned at any time by using to M 3.5 slide nuts
- Certified to BS 4662



Depth	60 mm
Screw spacing	120,6 mm
Installation opening	68 x 128 mm
Markings for cables and DIN EN conduits up to Ø 32 mm	6
Number of parts	2
Art. No.	1224-41
Inner packaging/shipping	- / 100
Price in EUR/100	

Slide nuts for British accessories inserts

- 2 items required per one-gang box
- for clipping into equipment one-gang boxes 1223-41/1224-41
- protected against corrosion



Art. No.	1224-99
Inner packaging/shipping	- / 100
Price in EUR/100	

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One-gang box combinations (Swiss standard)

· incl. stabilising cover



Length x Width x Depth	78 x 78 x 58 mm	130 x 70 x 70 mm	196 x 70 x 55 mm	250 x 70 x 70 mm
Combination conduit entries M20/25	2	8	4	22
Break-out openings Ø 20 mm	9	-	10	-
Combination	-	2x1	3x1	4x1
Art. No.	9918	9922	9923	9924.40
Inner packaging/shipping	- / 50	- / 50	- / 10	- / 25
Price in EUR/100				

One-gang box combinations (Swiss standard)

· incl. stabilising cover



Length x Width x Depth	130 x 130 x 70 mm	190 x 130 x 70 mm	250 x 130 x 70 mm	190 x 190 x 70 mm
Combination conduit entries M20/25	16	20	24	24
Combination	2x2	3x2	4x2	3x3
Art. No.	9924	9926	9928	9929
Inner packaging/shipping	- / 5	- / 5	- / 5	- / 5
Price in EUR/100				

INNOVATION

Prefix® concrete building box



Exit opening Ø	30 mm
Depth	97 mm
Combination	1x1
Art. No.	9940
Inner packaging/shipping	- / 10
Price in EUR/100	



Separator walls

- for separating junction casings from electrical circuit
- can be retrofitted
- Halogen-free



for casing size	180 x 180 mm	250 x 220 mm
Art. No.	1296-20	1297-20
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Cover

- flat cover edge
- surface roughened
- countersunk for screw heads



For casing size - flush-mounting boxes	107 x 107 mm	159 x 159 mm	238 x 208 mm
For casing size - cavity wall boxes	107 x 107 mm	165 x 165 mm	238 x 208 mm
For casing size - concrete construction boxes	128 x 128 mm	180 x 180 mm	250 x 220 mm
Fireproof	850 °C	850 °C	850 °C
Art. No.	1095-93	1096-93	1097-93
Inner packaging/shipping	- / 10	- / 10	- / 5
Price in EUR/100			

Universal VDE cover

- for all one-gang, one-gang junction and junction boxes
- with central exit for light hook
- flat cover edge
- surface roughened



Diameter	92 mm	92 mm
Screw spacing	60 / 67 mm	60 / 67 mm
Halogen-free	-	•
Fireproof	850 °C	850 °C
	•	•
Art. No.	1184-90	1184-77
Inner packaging/shipping	25 / 250	25 / 250
Price in EUR/100		

Universal waterproof cover

- central entry with stoppers
- for countersunk screws Ø 4 mm



Diameter	90 mm
Screw spacing	67 mm
Fireproof	850 °C
Art. No.	1174-99
Inner packaging/shipping	- / 10
Price in EUR/100	

End covers and separator walls

for on-site mixed concrete

Spring cover

- with unbreakable metal spring
- for Art. Nos. 1245-60 and 1245-63



Length x Width x Height 86 x 86 x 5 mm

Art. No. 12061

Inner packaging/shipping - / 10

Price in EUR/100

Plug-in cover

- with central plug-in connector
- for Art. Nos. 1245-60/-62/-63 and 1246-57
- for mounting wood screw Ø 3.5 mm, head Ø 6.5 - 7 mm, attach centrally in cover exit
- screw not included



Length x Width x Height - x - x 5 mm

86 x 86 x 4 mm

Diameter 98 mm

-

Art. No. 11081

11086

Inner packaging/shipping - / 10

- / 10

Price in EUR/100

Plug-in cover with cable outlet

- with central plug-in connector
- including screw Ø 3.5 mm
- for Art. Nos. 1245-60/-62/-63 and 1246-57
- for mounting wood screw Ø 3.5 mm, head Ø 6.5 - 7 mm, attach centrally in cover exit



Height 5 mm

22 mm

Diameter 98 mm

80 mm

Art. No. 11082

11088

Inner packaging/shipping - / 10

- / 10

Price in EUR/100

Cover with mounting ring

- can also be used as cover for reserve conduit exits
- attach the mounting ring (included) to the exit and place the end cover in position (bayonet fitting)
- for Art. Nos. 1245-60/-62/-63 and 1246-57



Height 15 mm

Outer diameter 100 mm

Art. No. 10100

Inner packaging/shipping - / 10

Price in EUR/100

Conduit and cable distance support

- attachment to formwork using expanding dowels, nails or screws
- Halogen-free



Conduit and cable distance piece for 1270-00 -

For fixing cable and conduit to formwork

Art. No.	1270-00	9060-95
Inner packaging/shipping	- / 1000	1000 / 30000
Price in EUR/100		

Plug-in cover

- breakout openings for wiring and light hook
- plug-in depth min. 3 mm max. 15 mm



Diameter	35 mm	60 mm
Art. No.	1148-93	1259-96
Inner packaging/shipping	25 / 100	25 / 250
Price in EUR/100		

Expanding dowel

- for quick fixing to steel formwork
- 1-piece in plastic
- for boxes, casings, bushes etc.
- drill hole size required \varnothing 5.5 mm



Diameter	5,5 mm
Art. No.	1217-02
Inner packaging/shipping	500 / 2500
Price in EUR/100	

Magnet

- for anti-shock fixing of boxes in horizontal formwork
- for vertical formwork, additional support by means of support element and abutments is necessary
- for degreasing formwork
- for all boxes with \varnothing 60 mm opening, except for the boxes from the B² range



Diameter	60 mm
Art. No.	1220-02
Inner packaging/shipping	- / 5
Price in EUR/100	

Concrete and cavity wall installation housings



The most important advantages at a glance:

- Provides the scope and security for designing, planning and installing modern building technology
- For light, sound and other building functions
- Can be fitted in ceilings and walls
- Modular, universal, flexible
- Ideal for use with the products of leading manufacturers
- Housing systems for fire protection ceilings or energy-efficient buildings
- Shape retention and thermal safety according to the latest guidelines and standards
- Can be installed in prefabrications and with the on-site mixed concrete process or in facing concrete
- Innovative KSK technology allows conduit entry without special tools
- Wide range of system accessories
- Halogen-free



Concrete and cavity wall installation housings | Product lines







HaloX-O system for on-site mixed concrete ceilings and walls	p. 158
HaloX-P system for slab ceilings	p. 166
KompaX® system for on-site mixed concrete and slab ceilings	p. 172
KompaX® accessories	p. 183
EnoX system for insulated cavity ceilings and cavity walls	p. 191
ThermoX® system for insulated cavity ceilings	p. 194
FlamoX® system for cavity ceilings fire-protection class F 30	p. 225

Tools for fitting installation housings in concrete can be found in the "Tools" section starting on page 265.









Concrete installation housings

	 System HaloX for low-voltage and high-voltage built-in luminaires and loudspeakers p. 158/166	 System KompaX1 for built-in luminaires and loudspeakers p. 173	 System KompaX2 for built-in luminaires and loudspeakers p. 176	 System KompaX3 for built-in luminaires and loudspeakers p. 179
Ceiling exit				
up to Ø 100 mm	•	-	-	-
Ø 100 up to Ø 200 mm	-	-	•	•
Ø 160 up to Ø 300 mm	-	•	-	-
Use in facing concrete	•	•	•	•
For universal exit openings	•	•	•	•
Installation option				
Ceiling installation	•	•	•	•
Wall installation	•	-	-	•
Concreting method				
On-site mixed concrete	p. 158	p. 173	p. 176	p. 179
Prefabrication	p. 166	p. 174	p. 177	p. 180

Installation housings for insulated cavity ceilings

	System ThermoX for low-voltage and high-voltage built-in luminaires  p. 194	System EnoX for halogen spotlights, LED luminaires and displays  p. 191
Product details		
For installation level	•	-
For use without installation level	-	•
Housing height	90 mm	60 mm
Installation openings	up to max. Ø 86 mm	up to max. Ø 120 mm
Installation options		
Retrofitting	•	-
Wall installation	-	•

Installation housings for fire-protection ceilings

	System FlamoX H for low-voltage and high-voltage built-in luminaires  p. 225	System FlamoX E for energy-saving lamps  p. 230
Installation dimensions for luminaires and loudspeakers		
up to Ø 100 mm	•	-
up to Ø 240 mm	-	•
For universal exit openings	•	•
Luminaire installation depth	up to max. 85 mm	up to max. 200 mm
Installation		
Retrofitting	•	• *)
In self-supporting sub-ceilings F30	•	•
In category I-III ceilings	•	•

*) Weight forces must be adapted to match the ceiling type

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HaloX-O system for on-site mixed concrete ceilings and walls

for LV and HV built-in luminaires and loudspeakers

HaloX-O system overview

The HaloX-O system is made up of various components which can be individually assembled according to use. Select the required components as follows:

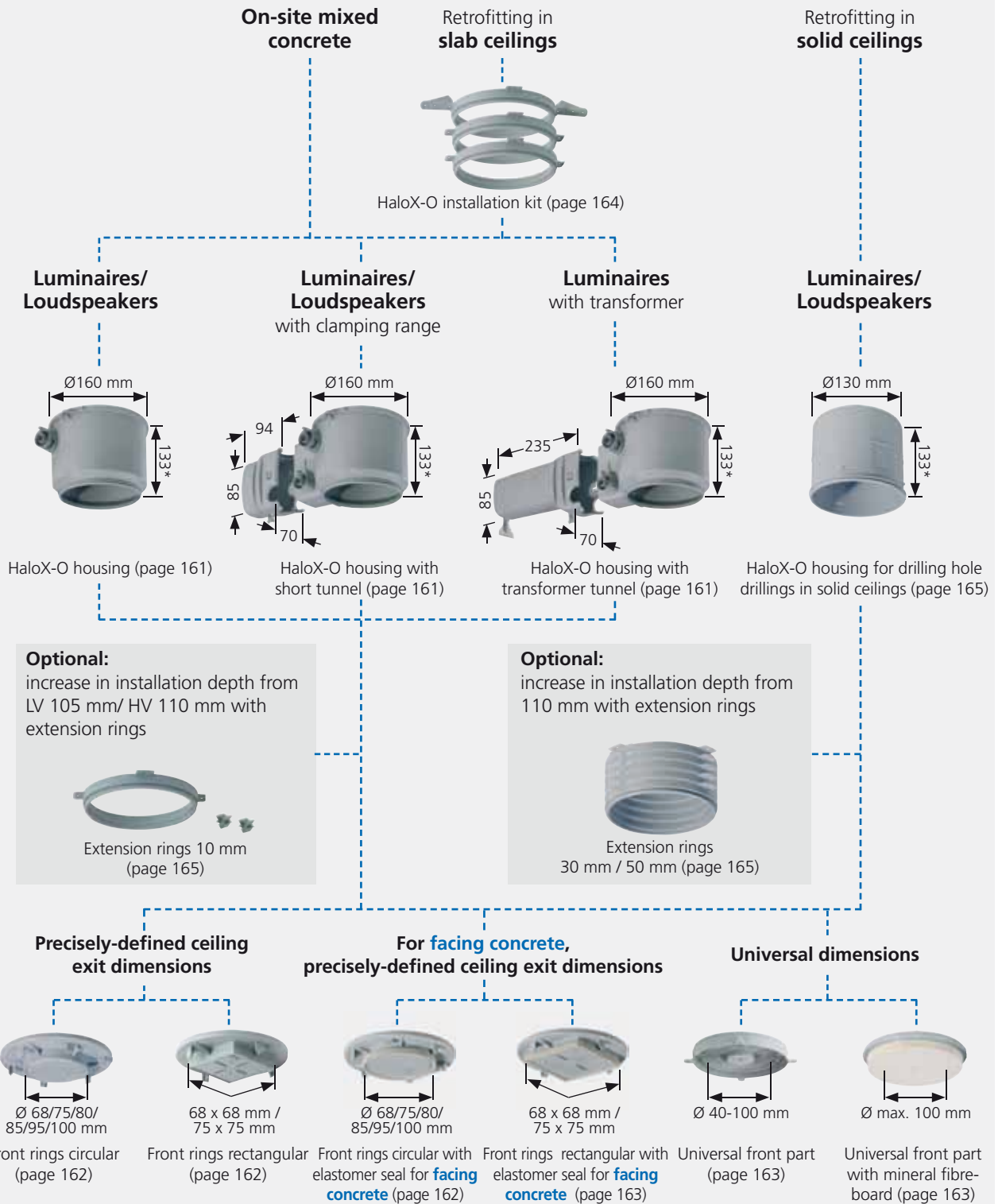


1
Ceiling type
and installation system

2
Accessory type/
application

3
Installation depth

4
Ceiling exit



*Dimensioning incl. front part

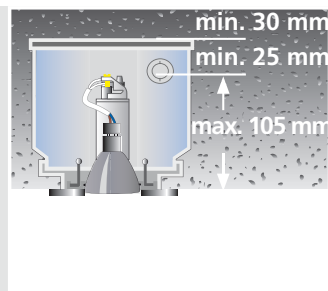
HaloX-O system for on-site mixed concrete ceilings and walls

for LV and HV built-in luminaires and loudspeakers

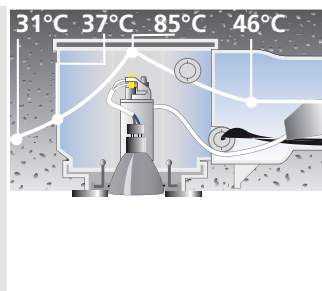
HaloX-O concrete installation housing

HaloX-O concrete installation housing for halogen luminaires and loudspeakers. Round and square front parts, front parts with mineral fibreboards, front parts for facing concrete, short tunnels, transformer tunnels and accessories permit a wide range of installation options.

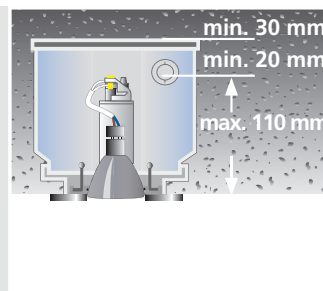
- For ceilings of 16 cm thickness and greater
- 45% more volume than previous model
- HaloX 40 tunnel for optimal statics
- Transformer flap protects from overheating
- For ceiling exits up to Ø 100 mm
- For fixed and swivelling luminaires



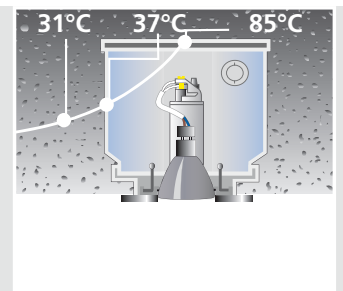
Luminaire selection: halogen, low-voltage (12 V)
Installation depth: max. 105 mm (without extension ring).



Temperature profile: room temperature (23°C)
50 W QR-CBC 51 (cool beam with protective screen).



Luminaire selection: halogen, high-voltage (230 V)
Installation depth max. 110 mm (without extension ring).

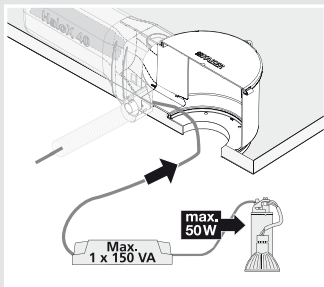


Temperature profile: room temperature (23°C)
50 W lamp with GZ10/GU10 base.

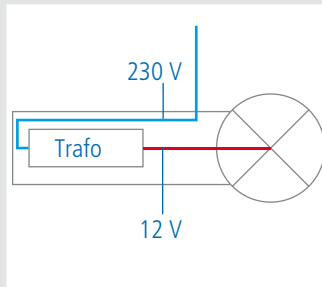
Technical processing instructions/standards

- use only certified (German DIN VDE 0711 or EN 60598) luminaires or those marked ∇ or $\nabla\nabla$
- use heat-resistant cable for the SEC side
- Use of electronic transformers (rounded shape) possible for opening size of Ø 68 mm or larger!
- Installation with front part only.

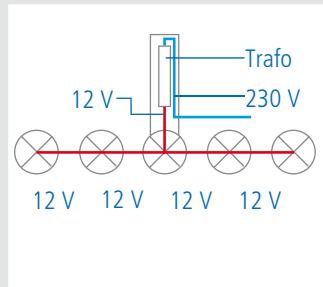
Connection requirements and circuit examples for low-voltage luminaires



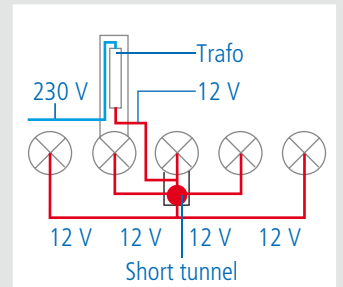
Insert transformer and close separator wall. Lamp power consumption must not exceed 50 W (e.g. QR CBC 51). PRI 200-250 mm NYM cable in tunnel possible SEC (N2GMH 2G) 200-250 mm.



1290-41, 1 x 50 W



With 3–5 junction points, no junction box is needed on the primary side because extra-low voltages and low voltages are safely isolated from each other. 1 x 1290-41 and 4 x 1290-40, 5 x 20 W



Housing with transformer tunnel, 1 housing for connection of secondary side plus 3 luminaire housings. 1 x 1290-41, 1 x 1290-42 and 3 x 1290-40, 5 x 20 W

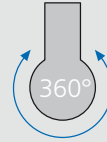
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HaloX-O system for on-site mixed concrete ceilings and walls

for LV and HV built-in luminaires and loudspeakers

Transformer flap

The transformer flap guarantees thermal separation between the luminaire installation compartment and the transformer tunnel, and also protects the electronics against overheating.



Housings can be rotated by 360°

Housing assembly



Use nails to fasten the front part to the formwork.



Fit the housing and open the KSK combination entry with one blow of the hammer.



Insert conduits (Ø 20 mm or Ø 25 mm) as far as they will go.



Then fasten the installed housing to the reinforcement with wires if necessary.

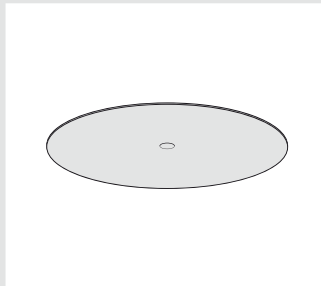
Next assembly steps

The assembly steps following concreting differ according to the front part. With some front parts, no further work is required. Other front parts offer the option of individual installation openings which are processed as required.

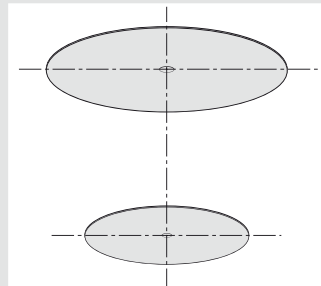
Final assembly of front part with mineral fibreboard



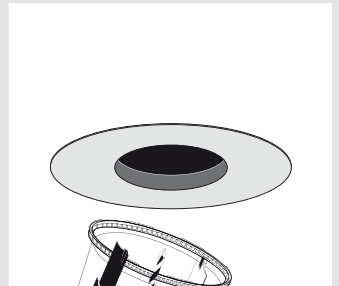
HaloX-O front part with mineral fibreboard



After stripping, the mineral fibreboard is visible in the concrete ceiling



Mark centres of the cut-outs.

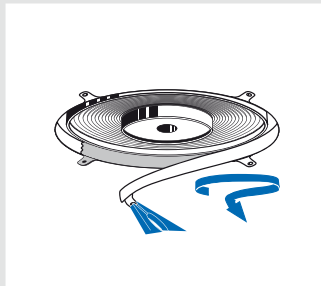


Cut the required ceiling cut-out using VARIOCUT or cavity wall cutter.

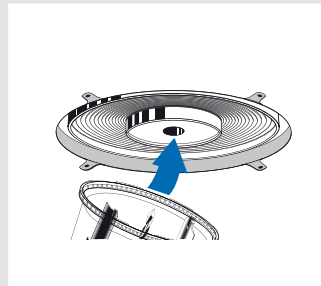
Final assembly of universal front part



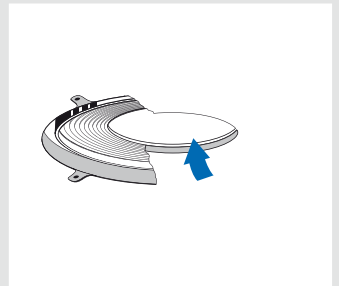
HaloX-O universal front ring



After stripping, cut the outer edge of the front ring and pull off in the direction of the arrow.



Make cut-out at the marked exit or for multi-purpose use with VARIOCUT. Ø: 40, 45, 50, 55, 60, 68, 75, 80, 85, 90, 95 and 100 mm.



Fill in or plaster pre-treated remaining surface (e.g. with thinned Styrofoam adhesive as primer) between concrete ceiling and cut-out. Then install luminaires.

HaloX-O system for on-site mixed concrete ceilings and walls

for LV and HV built-in luminaires and loudspeakers

HaloX-O housing

- 1-piece
- Conduit entry limit to prevent inside shortening of the conduit



Depth incl. front part	133 mm
Diameter	160 mm
max. installation height for low-voltage luminaires	105 mm
max. installation height for high-voltage luminaires	110 mm
Ceiling exit (CE) Ø	≤100 mm
M20/M25 impact couplings	2
Lamp wattage max.	50 Watt
Art. No.	1290-40
Inner packaging/shipping	- / 10
Price in EUR/100	

HaloX-O housing with transformer tunnel

- with HaloX40 tunnel for optimum statics
- 2 parts with snap-in connection
- Conduit entry limit to prevent inside shortening of the conduit
- Transformer tunnel for 1 electronic safety transformer up to 150 VA SELV, slim or rounded shape (e.g. PC mouse shape) with thermal separation from luminaire installation space
- NYM cables can be inserted into the transformer section
- use heat-resistant cable for the SEC side



Depth incl. front part	133 mm
Diameter	160 mm
Length of transformer	235 mm
Width of transformer	70 mm
Depth of transformer tunnel	85 mm
max. installation height for low-voltage luminaires	105 mm
max. installation height for high-voltage luminaires	110 mm
Ceiling exit (CE) Ø	≤100 mm
M20/M25 impact couplings	4
Lamp wattage max.	50 Watt
Art. No.	1290-41
Inner packaging/shipping	- / 10
Price in EUR/100	

HaloX-O housing with short tunnel

- 2 parts with snap-in connection
- combination entry with conduit entry limitation in order to prevent the conduit being shortened on the inside
- Short tunnel as terminal housing, etc., with thermal separation from luminaire installation space
- NYM cables can be inserted into the transformer section
- use heat-resistant cable for the SEC side



Depth incl. front part	133 mm
Diameter	160 mm
Length of transformer	94 mm
Width of transformer	70 mm
Depth of transformer tunnel	85 mm
max. installation height for low-voltage luminaires	105 mm
max. installation height for high-voltage luminaires	110 mm
Ceiling exit (CE) Ø	≤100 mm
M20/M25 impact couplings	4
Lamp wattage max.	50 Watt
Art. No.	1290-42
Inner packaging/shipping	- / 10
Price in EUR/100	

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Front parts for HaloX-O



Ceiling exit (CE) Ø	Min. luminaire covering Ø	Art. No.	Inner packaging/shipping	Price in EUR/100
68 mm	75 mm	1290-47	- / 10	
75 mm	82 mm	1290-44	- / 10	
80 mm	87 mm	1290-45	- / 10	
85 mm	92 mm	1290-48	- / 10	
95 mm	102 mm	1290-46	- / 10	
100 mm	107 mm	1290-49	- / 10	

HaloX-O front parts for facing concrete

- in facing concrete version
- elastomer seal with flexible sealing edge
- prevents ingress of concrete, discolouring and sand blast dust
- for exact flush finishes in facing concrete without additional reworking



FACING CONCRETE

Ceiling exit (CE) Ø	Min. luminaire covering Ø	Art. No.	Inner packaging/shipping	Price in EUR/100
68 mm	80 mm	1290-85	- / 8	
75 mm	87 mm	1290-82	- / 8	
80 mm	92 mm	1290-83	- / 8	
85 mm	97 mm	1290-86	- / 8	
95 mm	107 mm	1290-84	- / 8	
100 mm	112 mm	1290-87	- / 8	

HaloX-O front rings for square ceiling exit (CE)



Ceiling exit (CE) Ø	68 x 68 mm	75 x 75 mm
Min. luminaire covering	75 x 75 mm	82 x 82 mm
Art. No.	1290-70	1290-71
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Front parts with an elastomer seal ensure sharp outline ceiling cutouts in facing concrete.



without elastomer seal



with elastomer seal

HaloX-O system for on-site mixed concrete ceilings and walls

for LV and HV built-in luminaires and loudspeakers

HaloX-O front parts for square ceiling exit (CE), for facing concrete

- in facing concrete version
- elastomer seal with flexible sealing edge
- prevents ingress of concrete, discolouring and sand blast dust

FACING CONCRETE



Ceiling exit (CE) Ø	68 x 68 mm	75 x 75 mm
Min. luminaire covering	80 x 80 mm	87 x 87 mm
Art. No.	1290-92	1290-93
Inner packaging/shipping	- / 8	- / 8
Price in EUR/100		

HaloX-O universal front ring for ceiling exit (CE)

- variable ceiling exit (CE)
- for Ø (mm): 40, 45, 50, 55, 60, 68, 75, 80, 85, 90, 95, 100
- flush finish with ceiling in facing concrete by filling in remaining surface (first treat remaining surface with e.g. diluted Styrofoam glue, Betokontakt)



Ceiling exit (CE) Ø	40-100 mm
Art. No.	1290-51
Inner packaging/shipping	- / 10
Price in EUR/100	

HaloX-O universal front ring for ceiling exit (CE)

- ceiling exit fully variable up to Ø 100 mm
- time-saving. No further working - surface may need to be smoothed
- Substitute mineral fibreboard for HaloX-O (Art. No. 1299-27)



Ceiling exit (CE) Ø	<= 100 mm
Art. No.	1290-22
Inner packaging/shipping	- / 8
Price in EUR/100	

Replacement mineral fibreboard for HaloX-O

- for Art. No. 1290-22



Art. No.	1299-27
Inner packaging/shipping	- / 10
Price in EUR/100	

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HaloX-O system for on-site mixed concrete ceilings and walls

for LV and HV built-in luminaires and loudspeakers



HaloX-O installation kit

Retrofitting in slab ceilings

HaloX-O installation kit can be retrofitted in finished slab ceilings (thickness of 50 mm and greater) with or without a transformer tunnel. Observe the ceiling thickness and the physical construction changes to the ceiling structure (e.g. fire protection and statics).

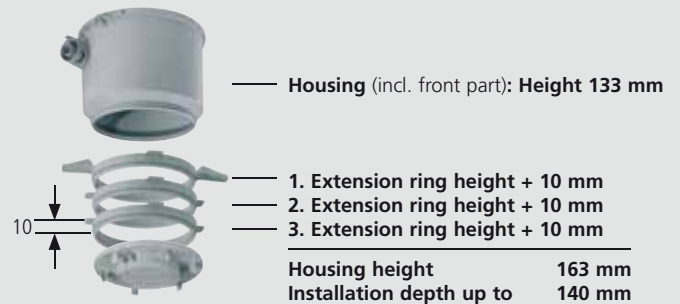
- For retrofitting in filigree ceilings
- Minimal interference with statics
- It is easy to make short-term planning changes
- Large selection of opening sizes up to Ø 100 mm
- Extension rings for bridging the slab ceiling element and for increasing the luminaire installation depth



Note



For slabs thicker than 50 mm, the housing can be expanded in 10 mm steps using the extension ring.



HaloX-O installation kit assembly



Cut drilling hole (Ø 150–160 mm) in the slab ceiling.



Combine the extension ring and front part to correspond to the ceiling thickness and installation depth.



Attach the housing and place in the drilling hole, mark and fasten. Install the conduit in the KSK entry.



The fixed housing (fasten to the reinforcement with wires if necessary) now fits firmly and accurately.

HaloX-O Installation kit

- for retrofitting of HaloX-O housings into slab ceilings
- required hole size Ø 150-160 mm



Art. No.	1290-11
Inner packaging/shipping	- / 10
Price in EUR/100	

HaloX-O in solid concrete ceilings

Retrofitting into solid ceilings

HaloX-O concrete installation housing for solid concrete ceilings can be inserted into existing and retrofitted drilling holes.

- For retrofitting in solid ceilings
- Minimal interference with statics
- Quick installation with snap-in connections
- Robust construction, ideal for use on building sites
- Large selection of opening sizes up to Ø 100 mm



Installation



Use the universal opening cutter to make accurate conduit entries for the appropriate conduit sizes.



Join the housing components to correspond to the ceiling thickness and installation depth.



Now insert the complete housing, including the installation into the opening or drilling hole. Then ...



... fill the free space with concrete and compact it. A form-work board fitted underneath prevents the concrete from running out.

HaloX-O housing for drilling holes in solid ceilings

- for retrofitting in solid ceilings
- 1-piece
- required hole size Ø 150-160 mm
- Take into consideration the ceiling thickness
 - at least 3 cm concrete cover is needed on top of the box



Diameter	130 mm
Art. No.	1290-30
Inner packaging/shipping	- / 10
Price in EUR/100	

HaloX-O extension rings

- for increasing luminaire fitting depth
- to be clipped between the front part and the housing
- multiple extensions possible



Height	10 mm	30 mm	50 mm
Diameter	130 mm	130 mm	130 mm
with 2 distance pieces for tunnel support	•	-	-
Art. No.	1290-14	1290-18	1290-19
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

HaloX-P system for slab ceilings

for LV and HV built-in luminaires and loudspeakers



HaloX-P concrete installation housing

for slab ceilings/prefabrication

HaloX-P concrete installation housing for halogen luminaires and loudspeakers in slab ceilings of 160 mm thickness and greater*. The HaloX-P system is versatile, stable and easy to install.

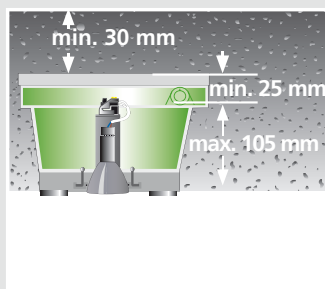
- Concrete installation housing for halogen luminaires (low-voltage/high-voltage) and loudspeakers
- For installation in concrete factories
- With KSK technology
- Transformer flap protects from overheating
- For ceiling exits up to Ø 100 mm with full measurement compensation
- For fixed and swivelling luminaires



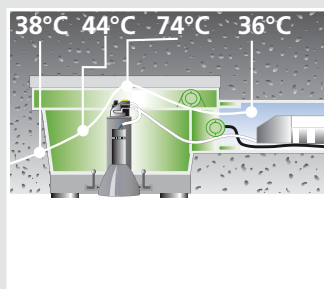
Note

* Overall thickness following completion of the ceiling when the concrete is mixed on site

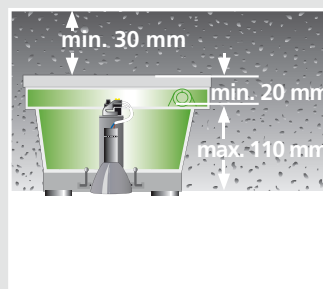
Installation technology for low-voltage and high-voltage luminaires



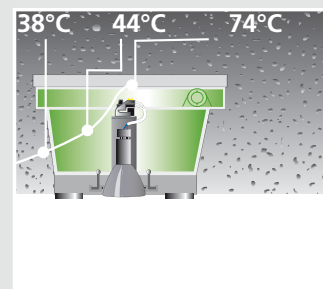
Luminaire selection: halogen, low-voltage (12 V)
Installation depth max. 105 mm.



Temperature profile: room temperature (23°C)
50 W QR-CBC 51 (cool beam with protective screen).



Luminaire selection: halogen, high-voltage (230 V)
Installation depth max. 110 mm.

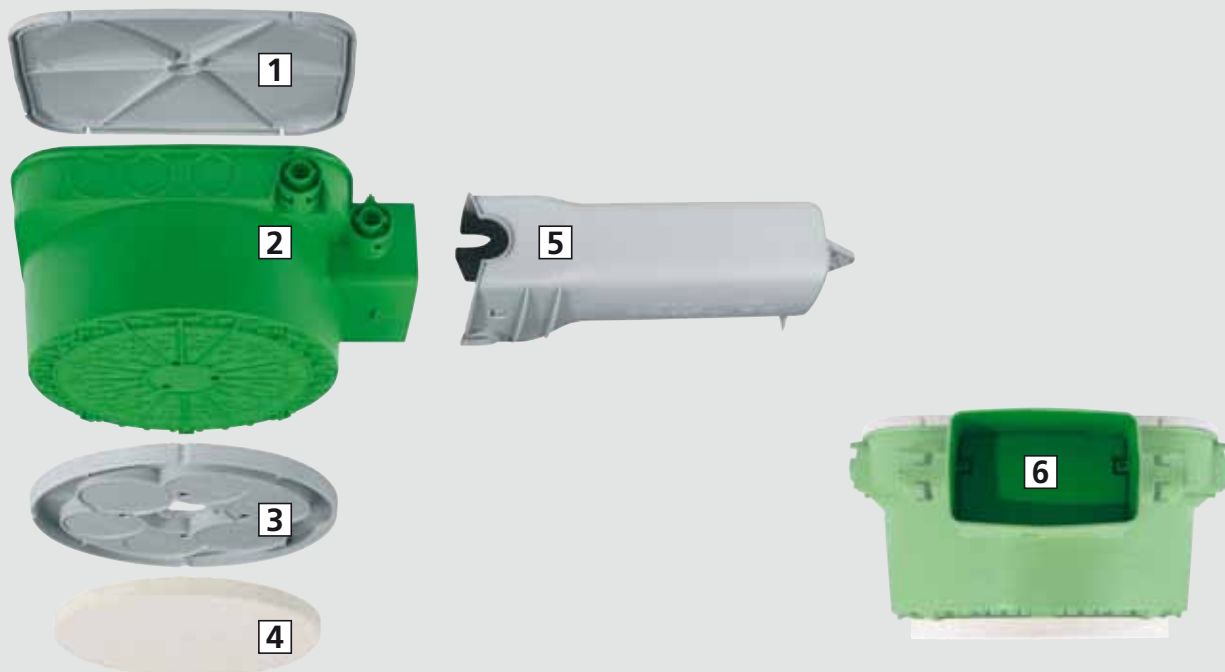


Temperature profile: room temperature (23°C)
50 W lamp with GZ10/GU10 base.

Technical processing instructions/standards

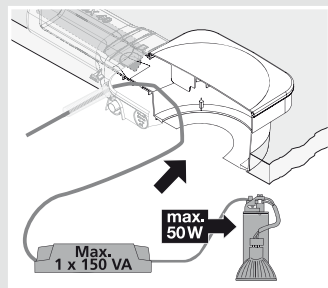
- use only certified (German DIN VDE 0711 or EN 60598) luminaires or those marked ∇ or $\nabla\nabla$
- use heat-resistant cable for the SEC side
- Use of electronic safety transformers possible for opening sizes of 68 mm or higher
- Unevenness between plasterboard sheets in the slab ceiling can be compensated by cutting the openings with the VARIOCUT universal hole cutter.

System components

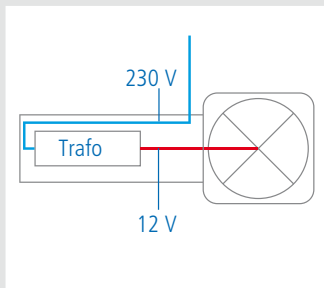


1 Rear part | 2 Housing | 3 Mounting plate | 4 Mineral fibreboard | 5 Transformer tunnel | 6 Transformer flap for thermal separation between luminaire installation area and transformer tunnel. Protects the electronic components against overheating.

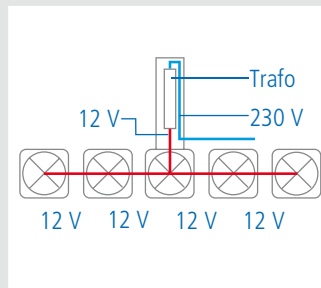
Connection requirements and circuit examples for low-voltage luminaires



Insert transformer and close separator wall. Lamp power consumption must not exceed 50 W (e.g. QR CBC 51). PRI 200-250 mm NYM cable in tunnel possible SEC (N2GMH 2G) 200-250 mm.



1291-16/23/51, 1 x 50 W



1 x 1291-16/23/51 and 4 x 1291-15/22/50, 5 x 20 W

Method 1: Installation with mineral fibreboard

This version is fixed to the formwork table and cast in in the concrete factory. After installation of the conduits and completion of the ceiling on the building site, mark out - correctly aligned - the ceiling cut-outs (CC). Then cut out the installation openings through the mineral fibreboard and the housing base. Luminaires and any necessary transformers can be fitted without further reworking (surface may need to be smoothed).



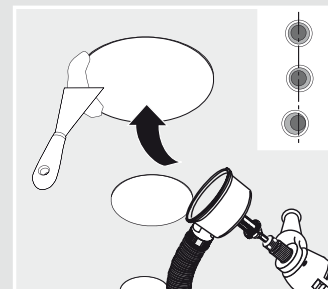
Installation in concrete factory: attach HaloX-P housing with mineral fibreboard to formwork table using hot glue. Apply glue to at least 4 places!



On-site installation: open KSK technology with one blow of the hammer.



Insert conduits and concrete up.



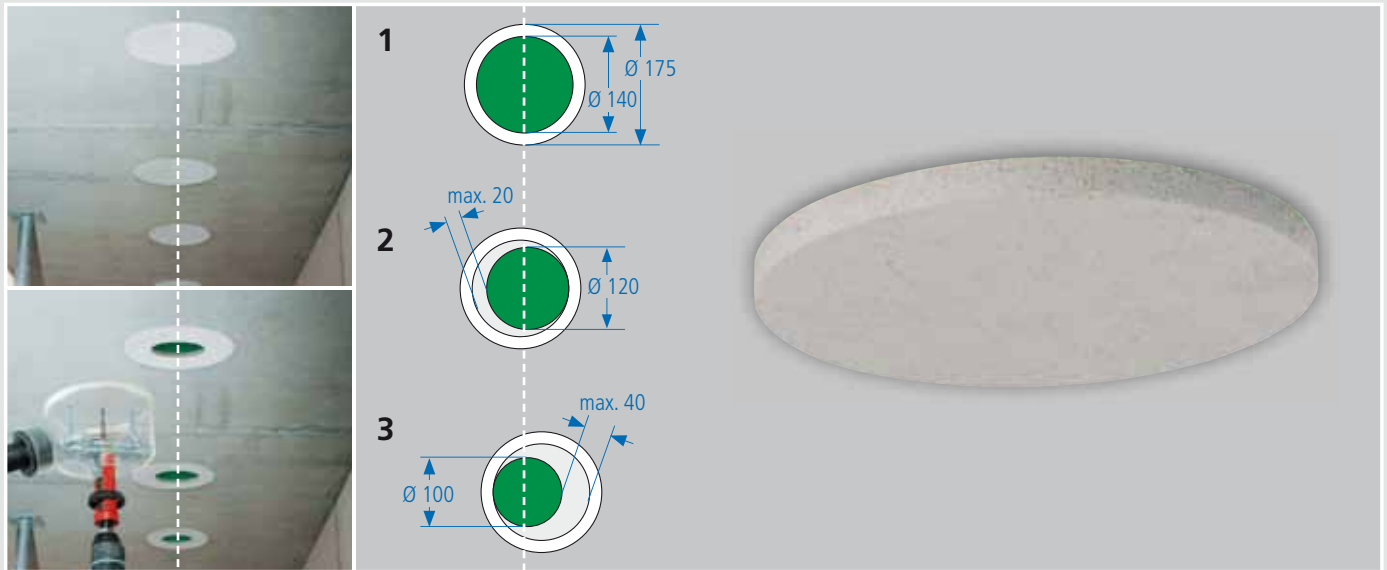
Mark alignment and cut required installation opening in the board.

HaloX-P system for slab ceilings

for LV and HV built-in luminaires and loudspeakers

HaloX-P

The VARIOCUT universal hole cutter lets you cut variable installation openings in the mineral fibre front parts to the exact size required. Depending on the installation diameter, you can later correct inaccuracies which occur during the assembly or installation of slab ceilings.



1 CE max. 140 mm without tolerance compensation | **2** CE max. 120 mm with 20 mm tolerance compensation (2 x 10 mm) | **3** CE max. 100 mm with 40 mm tolerance compensation (2 x 20 mm)

Note

Rectangular or square ceiling exits can also be made. The max. permitted cut-out is based on the diagonal, which must not exceed the above diameters.

HaloX-P housing with mineral fibreboard

- Exit opening up to max. Ø 140 mm possible, for full tolerance compensation when installing slab ceiling elements up to Ø 100 mm
- 2-part
- saves time - no plastering; close joint gap if necessary
- Conduit entry limit to prevent inside shortening of the conduit



Length x Width x Depth 226 x 226 x 133 mm

max. installation height for low-voltage luminaires 105 mm

max. installation height for high-voltage luminaires 110 mm

Ceiling exit (CE) Ø ≤ 100 mm

M20/M25 impact couplings 2

Art. No. 1291-22

Inner packaging/shipping - / 10

Price in EUR/100

Accessories: Replacement mineral fibreboard, page 171

HaloX-P housing with mineral fibreboard and transformer tunnel

- 3-part
- Transformer tunnel for 1 electronic safety transformer up to 150 VA SELV, slim or rounded shape (e.g. PC mouse shape) with thermal separation from luminaire installation space
- NYM cables can be inserted into the transformer section
- saves time - no plastering; close joint gap if necessary
- Exit opening up to max. Ø 140 mm possible, for full tolerance compensation when installing slab ceiling elements up to Ø 100 mm



Length x Width x Depth 226 x 226 x 133 mm

Length of transformer 235 mm

Width of transformer 85 mm

Depth of transformer tunnel 70 mm

max. installation height for low-voltage luminaires 105 mm

max. installation height for high-voltage luminaires 110 mm

Ceiling exit (CE) Ø ≤ 100 mm

M20/M25 impact couplings 4

Art. No. 1291-23

Inner packaging/shipping - / 10

Price in EUR/100

Accessories: Replacement mineral fibreboard, page 171



HaloX-P system for slab ceilings

for LV and HV built-in luminaires and loudspeakers

Method 2: Installation with mounting plate

The housings are fixed to the formwork table and cast into the slab ceiling in the concrete factory. After installation of the conduit and completion of the ceiling on the building site, remove the mounting plates and mark out - correctly aligned - the ceiling cut-outs (CC). Then cut out the installation openings in the housing base and fill in the remaining backing surface.



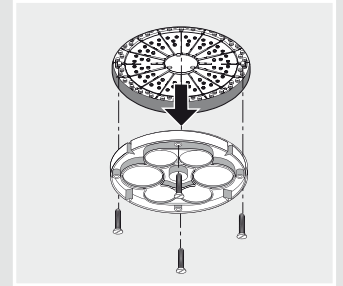
Attach HaloX-P housing with mounting plate to the formwork table using at least 4 pieces of adhesive foil (1219-00).



On-site installation: open KSK technology with one blow of the hammer.



Insert conduits and concrete up.



After completing the ceiling, unscrew the 4 fixing screws and remove the mounting plate.



Mark alignment and cut required installation opening in the board.



Clip the tunnel support onto the distance rod using the enclosed spacer.

HaloX-P Housing

- 2-part
- Exit opening up to max. Ø 140 mm possible, for full tolerance compensation when installing slab ceiling elements up to Ø 100 mm
- Make flush with ceiling by filling the remaining surface (pre-treat e.g. with diluted Styrofoam glue, Beto contact, etc.)
- Conduit entry limit to prevent inside shortening of the conduit



With mounting plate

Length x Width x Depth	226 x 226 x 130 mm	226 x 226 x 133 mm
Exit opening Ø	<= 100 mm	<= 100 mm
M20/M25 impact couplings	2	2
for fitting into existing on-site openings (without mounting plate)	-	•

Art. No. 1291-15 1291-50

Inner packaging/shipping - / 10 - / 10

Price in EUR/100

HaloX-P housing with transformer tunnel

- 3-part
- Exit opening up to max. Ø 140 mm possible, for full tolerance compensation when installing slab ceiling elements up to Ø 100 mm
- Transformer tunnel for 1 electronic safety transformer up to 150 VA SELV, slim or rounded shape (e.g. PC mouse shape) with thermal separation from luminaire installation space
- NYM cables can be inserted into the transformer section
- Make flush with ceiling by filling the remaining surface (pre-treat e.g. with diluted Styrofoam glue, Beto contact, etc.)



With mounting plate

Length x Width x Depth	• 226 x 226 x 133 mm	- 226 x 226 x 130 mm
Length of transformer	• 235 mm	- 235 mm
Width of transformer	• 85 mm	- 85 mm
Depth of transformer tunnel	• 70 mm	- 70 mm
Exit opening Ø	• ≤ 100 mm	- ≤ 100 mm
M20/M25 impact couplings	• 2	- 2
for fitting into existing on-site openings (without mounting plate)	• -	- •
Art. No.	1291-16	1291-51
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Replacement mineral fibreboard

- for Art. Nos. 1291-22 and 1291-23



Art. No.	1299-20
Inner packaging/shipping	- / 10
Price in EUR/100	

KompaX[®] 1 system for concrete ceilings

for built-in luminaires and loudspeakers

KompaX[®] system overview

The KompaX[®] system is made up of various components which can be individually assembled according to use. Select the required components as follows:



1 Accessory type/ application



- Built-in luminaires or loudspeakers + additional components (e.g. ballast device)
- Ceiling exits Ø 160–300 mm



- Built-in luminaires or loudspeakers + additional components (e.g. ballast device)
- Ceiling exits Ø 100–200 mm



- Built-in luminaires or loudspeakers
- Ceiling exits Ø 100–215 mm (prefabrication: Ø 100–200 mm)

2 Installation depth

Optional:
increase in installation
depth to max. 200 mm*



Intermediate frame
25/50 mm

Optional:
increase in installation
depth to max. 200 mm*



Intermediate frame
25/50 mm

Optional:
increase in installation
depth to max. 200 mm*



Intermediate frame
25/50 mm

3 Ceiling type

**On-site mixed
concrete**

Slab ceilings
for installation in
concrete factories

**On-site mixed
concrete**

Slab ceilings
for installation in
concrete factories

**On-site mixed
concrete**
(optional wall
installation
see below)

Slab ceilings
for installation in
concrete factories

4 Ceiling exit

Variable opening and
tolerance compensation
by means of mineral
fibreboard



Variable opening by
plastering the
remaining surface



Variable opening
through the use of
individual front parts



KompaX[®]
front rings



KompaX[®]
front rings with
elastomer seal for
facing concrete



Individual
styrofoam
moulded parts



Individual styrofoam
moulded parts with
elastomer seal for
facing concrete



Replacement
mineral
fibreboards
for KompaX[®]

Optional for KompaX[®] 3:



Installation kit for wall installation
in vertical formwork

*) for 200 mm and greater, please contact us

KompaX® 1 concrete installation housing

for on-site mixed concrete and prefabrication (slab ceilings)

KompaX® 1 housing system for fitted downlights and loudspeakers in concrete ceilings with wide range of accessories for almost all applications. Height-adjustable with intermediate frames. The various front parts make it extremely practical.

- Housing system for fitted downlights and loudspeakers
- For on-site mixed concrete and prefabrication
- For precise installation openings from Ø 160–300 mm
- For device installation depths up to 200 mm*
- For ceiling thicknesses from 180–300 mm*
- Tolerance compensation during slab ceiling installation



Luminaire selection

Installation downlights with TC lamps, lamps max. 90 W* (e.g. 3 x TC-D 26 W or 2 x TC-T 42 W). Use only tested (VDE or EN 60598) luminaires marked with ▽ or ▽▽. Luminaire installation depth without intermediate frame max. 100 mm. Luminaire installation depth with intermediate frame max. 200 mm. (*Even better system performance is possible with intermediate frame)

Technical processing instructions/standards

- for ceiling thicknesses from 18 cm up to 30 cm. Please contact us if the ceiling thickness is greater than 30 cm.
- use only certified (German DIN VDE 0711 or EN 60598) luminaires or those marked ▽ or ▽▽
- luminaire installation heights up to 200 mm; please contact us for heights greater than 200 mm
- allows installation of additional lighting or loudspeaker accessories, EIB components, emergency supply units, etc.
- asymmetric version for low-loss (VVG) and electronic (EVG) ballast devices

Note

*For installation depths > 200 mm and ceiling thicknesses > 300 mm, please contact us. Telephone: +49 (0)2355.809.61

KompaX® 1 housing for on-site mixed concrete

- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front and rear parts
- only in combination with front rings 1293-16 up to 1293-71, in facing concrete with front rings 1293-80 to 1293-87
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth	585 x 440 x 131 mm
Ceiling exit (CE) Ø	160-300 mm
Lamp wattage max.	90 Watt
Art. No.	1293-00
Inner packaging/shipping	- / 5
Price in EUR/100	

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

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EARTHING

CABLE GLANDS

TOOLS

SERVICE

KompaX® 1 system for concrete ceilings

for built-in luminaires and loudspeakers

KompaX® 1 housing for on-site mixed concrete with mineral fibreboard

- for variable ceiling cut-outs up to 300 mm
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front ring, assembled mineral fibreboard and rear part
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth 585 x 440 x 131 mm

Ceiling exit (CE) Ø ≤ 300 mm

Lamp wattage max. 90 Watt

Art. No. 1293-27

Inner packaging/shipping - / 5

Price in EUR/100

Accessories: Replacement mineral fibreboards for KompaX® 1,2,3, page 182

KompaX® 1 housing for slab ceilings

- for factory fitting
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front part, fitted mounting ring and rear part
- for ceilings of 18 cm total thickness upwards
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth 585 x 440 x 131 mm

Ceiling exit (CE) Ø ≤ 300 mm

Lamp wattage max. 90 Watt

Art. No. 1293-15

Inner packaging/shipping - / 5

Price in EUR/100

KompaX® 1 housing for slab ceilings with mineral fibreboard

- for factory fitting
- for variable ceiling cut-outs up to 300 mm
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front ring, assembled mineral fibreboard and rear part
- for ceilings of 18 cm total thickness upwards
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth 585 x 440 x 131 mm

Ceiling exit (CE) Ø ≤ 300 mm

Lamp wattage max. 90 Watt

Art. No. 1293-28

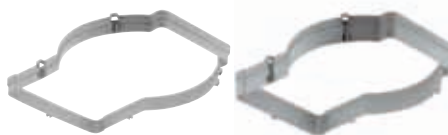
Inner packaging/shipping - / 5

Price in EUR/100

Accessories: Replacement mineral fibreboards for KompaX® 1,2,3, page 182

KompaX® 1 intermediate frame

· is clipped between the front and rear part of the KompaX® 1 housing



Increasing installation height	25 mm	50 mm
with support elements for installation heights of 125/175 mm	•	-
Art. No.	1293-13	1293-14
Inner packaging/shipping	5 / 10	5 / 10
Price in EUR/100		

KompaX® 1 front rings for ceiling exit (CE)

· Other dimensions and shapes (for ceiling exit) are available for fast delivery in the form of Styrofoam moulded parts.



Ceiling exit (CE) Ø	Min. luminaire covering Ø	Height	Art. No.	Inner packaging/shipping	Price in EUR/100
160 mm	167 mm	14 mm	1293-16	- / 10	
165 mm	172 mm	14 mm	1293-66	- / 10	
180 mm	187 mm	14 mm	1293-18	- / 10	
190 mm	197 mm	14 mm	1293-19	- / 10	
200 mm	207 mm	14 mm	1293-20	- / 10	
215 mm	222 mm	14 mm	1293-71	- / 10	
240 mm	247 mm	14 mm	1293-24	- / 10	
300 mm	307 mm	14 mm	1293-30	- / 10	

KompaX® 1 front rings for ceiling exit (CE) in facing concrete design

- elastomer seal with flexible sealing edge
- prevents ingress of concrete, discolouring and sand blast dust
- for exact flush finishes in facing concrete without additional reworking



FACING CONCRETE

Ceiling exit (CE) Ø	Min. luminaire covering Ø	Height	Art. No.	Inner packaging/shipping	Price in EUR/100
160 mm	172 mm	14 mm	1293-80	- / 10	
165 mm	177 mm	14 mm	1293-81	- / 10	
180 mm	192 mm	14 mm	1293-82	- / 10	
190 mm	202 mm	14 mm	1293-83	- / 10	
200 mm	212 mm	14 mm	1293-84	- / 10	
215 mm	227 mm	14 mm	1293-85	- / 10	
240 mm	252 mm	14 mm	1293-86	- / 10	
300 mm	312 mm	14 mm	1293-87	- / 10	

KompaX®2 system for concrete ceilings

for built-in luminaires and loudspeakers



KompaX® 2 concrete installation housing for on-site mixed concrete and prefabrication (slab ceilings)

KompaX® 2 housing system for fitted downlights and loudspeakers in concrete ceilings with wide range of accessories for almost all applications. Height-adjustable with intermediate frames. The various front parts make it extremely practical.

- Housing system for fitted downlights and loudspeakers
- For on-site mixed concrete and prefabrication
- For precise installation openings from Ø 100–200 mm
- For device installation depths up to 200 mm*
- For ceiling thicknesses from 180–300 mm*
- Tolerance compensation during slab ceiling installation



Luminaire selection

Installation downlights with TC lamps, lamps max. 52 W* (e.g. 1 x TC-TEL 42 W or 2 x TC-D 26 W). Use only tested (VDE or EN 60598) luminaires marked with ∇ or $\nabla\nabla$. Luminaire installation depth without intermediate frame max. 100 mm. Luminaire installation depth with intermediate frame max. 200 mm. (*Even better system performance is possible with intermediate frame)

Technical processing instructions/standards

- for ceiling thicknesses from 18 cm up to 30 cm. Please contact us if the ceiling thickness is greater than 30 cm.
- use only certified (German DIN VDE 0711 or EN 60598) luminaires or those marked ∇ or $\nabla\nabla$
- luminaire installation heights up to 200 mm; please contact us for heights greater than 200 mm
- allows installation of additional lighting or loudspeaker accessories, EIB components, emergency supply units, etc.
- asymmetric version for low-loss (VVG) and electronic (EVG) ballast devices

Note

*For installation depths > 200 mm and ceiling thicknesses > 300 mm, please contact us. Telephone: +49 (0)2355.809.61

KompaX® 2 housing for on-site mixed concrete

- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front and rear parts
- only in combination with front rings 1292-01 up to 1293-66, in facing concrete with front rings 1292-80 to 1293-84
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth	470 x 290 x 131 mm
Ceiling exit (CE) Ø	100-200 mm
Lamp wattage max.	52 Watt
Art. No.	1292-00
Inner packaging/shipping	- / 10
Price in EUR/100	

KompaX® 2 housing for on-site mixed concrete with mineral fibreboard

- for variable ceiling cut-outs up to 180 mm
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front ring, assembled mineral fibreboard and rear part
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth 470 x 290 x 131 mm

Ceiling exit (CE) Ø ≤ 180 mm

Lamp wattage max. 52 Watt

Art. No. 1292-27

Inner packaging/shipping - / 10

Price in EUR/100

Accessories: Replacement mineral fibreboards for KompaX® 1,2,3, page 182

KompaX® 2 housing for slab ceilings

- for factory fitting
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front part, fitted mounting plate and rear part
- for ceilings of 18 cm total thickness upwards
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth 470 x 290 x 131 mm

Ceiling exit (CE) Ø ≤ 200 mm

Lamp wattage max. 52 Watt

Art. No. 1292-35

Inner packaging/shipping - / 10

Price in EUR/100

KompaX® 2 housing for slab ceilings with mineral fibreboard

- for factory fitting
- for variable ceiling cut-outs up to 180 mm
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front ring, assembled mineral fibreboard and rear part
- for ceilings of 18 cm total thickness upwards
- incl. support elements for installation heights 100/150/200 mm



Length x Width x Depth 470 x 290 x 131 mm

Ceiling exit (CE) Ø ≤ 180 mm

Lamp wattage max. 52 Watt

Art. No. 1292-28

Inner packaging/shipping - / 10

Price in EUR/100

Accessories: Replacement mineral fibreboards for KompaX® 1,2,3, page 182

FLUSH-MOUNTING

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KompaX®2 system for concrete ceilings

for built-in luminaires and loudspeakers

KompaX® 2 intermediate frame

· is clipped between the front and rear part of the KompaX® 2 housing



Increasing installation height	25 mm	50 mm
with support elements for installation heights of 125/175 mm	•	-
Art. No.	1292-13	1292-14
Inner packaging/shipping	5 / 10	5 / 10
Price in EUR/100		

KompaX® 2 front rings for ceiling exit (CE)

· Other dimensions and shapes (for ceiling exit) are available for fast delivery in the form of Styrofoam moulded parts.



Ceiling exit (CE) Ø	Min. luminaire covering Ø	Height	Art. No.	Inner packaging/shipping	Price in EUR/100
100 mm	107 mm	14 mm	1292-01	- / 10	
125 mm	132 mm	14 mm	1292-06	- / 10	
145 mm	152 mm	14 mm	1292-10	- / 10	
160 mm	167 mm	14 mm	1293-16	- / 10	
165 mm	172 mm	14 mm	1293-66	- / 10	
180 mm	187 mm	14 mm	1293-18	- / 10	
190 mm	197 mm	14 mm	1293-19	- / 10	
200 mm	207 mm	14 mm	1293-20	- / 10	

KompaX® 2 front rings in exposed concrete version

· elastomer seal with flexible sealing edge
 · prevents ingress of concrete, discolouring and sand blast dust
 · for exact flush finishes in facing concrete without additional reworking



Ceiling exit (CE) Ø	Min. luminaire covering Ø	Height	Art. No.	Inner packaging/shipping	Price in EUR/100
100 mm	112 mm	14 mm	1292-80	- / 10	
125 mm	137 mm	14 mm	1292-81	- / 10	
145 mm	157 mm	14 mm	1292-82	- / 10	
160 mm	172 mm	14 mm	1293-80	- / 10	
165 mm	177 mm	14 mm	1293-81	- / 10	
180 mm	192 mm	14 mm	1293-82	- / 10	
190 mm	202 mm	14 mm	1293-83	- / 10	
200 mm	212 mm	14 mm	1293-84	- / 10	

KompaX® 3 concrete installation housing

for on-site mixed concrete and prefabrication (slab ceilings)

KompaX® 3 housing system for fitted downlights and loudspeakers in concrete ceilings and walls with wide range of accessories for practically all applications. Height-adjustable with intermediate frame. The various front parts make it extremely practical.

- Housing system for fitted downlights and loudspeakers
- For on-site mixed concrete and prefabrication
- For walls and ceilings
- For installation openings of Ø 100–215 mm (on-site mixed concrete) and/or of Ø 100–200 mm (prefabrication)
- For device installation depths up to 200 mm*
- For ceiling and wall thicknesses of 160 mm and greater*
- Tolerance compensation during slab ceiling installation



Luminaire selection

Fitted downlights with TC lamps, lamps max. 52 W* (e.g. 1 x TC 42 W or 2 x TC-D 26 W). Use only certified (VDE or EN 60598) luminaires or those marked with ▽ or ▽▽. Luminaire installation depth excluding intermediate frame max. 100 mm. Luminaire installation depth including intermediate frame max. 200 mm. (*Even better system performance is possible with intermediate frame)

Technical processing instructions/standards

- use only certified (German DIN VDE 0711 or EN 60598) luminaires or those marked ▽ or ▽▽
- for ceiling thicknesses from 18 cm up to 30 cm. Please contact us if the ceiling thickness is greater than 30 cm.
- luminaire installation heights up to 200 mm; please contact us for heights greater than 200 mm

Note

*For installation depths > 200 mm and ceiling thicknesses > 300 mm, please contact us. Telephone: +49 (0)2355.809.61

KompaX® 3 housing for on-site mixed concrete

- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front and rear parts
- only in combination with front rings 1292-01 up to 1293-71, in facing concrete with front rings 1292-80 up to 1293-85



Depth	111 mm
Diameter	300 mm
Ceiling exit (CE) Ø	100-215 mm
Lamp wattage max.	52 Watt
Art. No.	1294-00
Inner packaging/shipping	- / 10
Price in EUR/100	

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

KompaX®3 system for concrete ceilings and walls

for built-in luminaires and loudspeakers

KompaX® 3 housing for on-site mixed concrete with mineral fibreboard

- for variable ceiling cut-outs up to 200 mm
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front ring, assembled mineral fibreboard and rear part



Depth	111 mm
Diameter	300 mm
Ceiling exit (CE) Ø	<= 200 mm
Lamp wattage max.	52 Watt
Art. No.	1294-27
Inner packaging/shipping	- / 10
Price in EUR/100	

Accessories: Replacement mineral fibreboards for KompaX® 1,2,3, page 182

KompaX® 3 housing for slab ceilings

- for factory fitting
- consists of front and rear parts
- only in combination with front rings 1292-01 to 1293-71
- installation height for built-in luminaires or loudspeakers max. 100 mm
- for ceilings of 160 mm total thickness and greater



Depth	111 mm
Diameter	300 mm
Ceiling exit (CE) Ø	<= 200 mm
Lamp wattage max.	52 Watt
Art. No.	1294-15
Inner packaging/shipping	- / 10
Price in EUR/100	

KompaX® 3 housing for slab ceilings with mineral fibreboard

- for factory fitting
- for variable ceiling cut-outs up to 200 mm
- installation height for built-in luminaires or loudspeakers max. 100 mm
- consists of front ring, assembled mineral fibreboard and rear part
- for ceilings of 160 mm total thickness and greater



Depth	111 mm
Diameter	300 mm
Ceiling exit (CE) Ø	<= 200 mm
Lamp wattage max.	52 Watt
Art. No.	1294-28
Inner packaging/shipping	- / 10
Price in EUR/100	

Accessories: Replacement mineral fibreboards for KompaX® 1,2,3, page 182

KompaX® 3 system for concrete ceilings and walls

for built-in luminaires and loudspeakers

KompaX® 3 intermediate frame

· is clipped between the front and rear part of the KompaX® 3 housing



Increasing installation height	25 mm	50 mm
Art. No.	1294-13	1294-14
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

KompaX® 3 front rings for ceiling exit (CE) or wall exit

· Other dimensions and shapes (for ceiling exit) are available for fast delivery in the form of Styrofoam moulded parts.



Ceiling exit (CE) Ø	Min. luminaire covering Ø	Height	Art. No.	Inner packaging/shipping	Price in EUR/100
100 mm	107 mm	14 mm	1292-01	- / 10	
125 mm	132 mm	14 mm	1292-06	- / 10	
145 mm	152 mm	14 mm	1292-10	- / 10	
160 mm	167 mm	14 mm	1293-16	- / 10	
165 mm	172 mm	14 mm	1293-66	- / 10	
180 mm	187 mm	14 mm	1293-18	- / 10	
190 mm	197 mm	14 mm	1293-19	- / 10	
200 mm	207 mm	14 mm	1293-20	- / 10	
215 mm	222 mm	14 mm	1293-71	- / 10	

KompaX® 3 front rings in exposed concrete version

· elastomer seal with flexible sealing edge
 · prevents ingress of concrete, discolouring and sand blast dust
 · for exact flush finishes in facing concrete without additional reworking



FACING CONCRETE

Ceiling exit (CE) Ø	Min. luminaire covering Ø	Height	Art. No.	Inner packaging/shipping	Price in EUR/100
100 mm	112 mm	14 mm	1292-80	- / 10	
125 mm	137 mm	14 mm	1292-81	- / 10	
145 mm	157 mm	14 mm	1292-82	- / 10	
160 mm	172 mm	14 mm	1293-80	- / 10	
165 mm	177 mm	14 mm	1293-81	- / 10	
180 mm	192 mm	14 mm	1293-82	- / 10	
190 mm	202 mm	14 mm	1293-83	- / 10	
200 mm	212 mm	14 mm	1293-84	- / 10	
215 mm	227 mm	14 mm	1293-85	- / 10	

FLUSH-MOUNTING

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KompaX®3 system for concrete ceilings and walls

for built-in luminaires and loudspeakers

Replacement mineral fibreboards for KompaX® 1,2,3



For Art. No.	Art. No.	Inner packaging/shipping	Price in EUR/100
1293-27	1293-97	- / 5	
1293-28	1293-98	- / 5	
1292-27	1292-97	- / 5	
1292-28	1292-98	- / 5	
1294-27	1294-97	- / 5	
1294-28	1294-98	- / 5	

Installation in on-site mixed concrete wall (KompaX® 3)

The stabilising installation kit also enables KompaX® 3 housing to be installed in the wall. The housing must be fastened to the working formwork using at least 4 nails (possibility of installation on the opposing formwork must be clarified on-site). Attach the installation kit and any necessary intermediate frame to the housing. For additional security, attach the housing by the three lugs to the formwork using tensioning wire or cable ties, or, in the case of facing concrete, to the reinforcement. After removing the formwork, use a fretsaw to saw into the visible front part and then remove the installation kit to enable the luminaire or the loudspeaker to be mounted.



Pre-mount the housing with the installation kit.



Fasten to the formwork using tensioning wire and nails.



After removing the formwork: remove the bridges and open the front part.



Luminaires or loudspeakers can be installed.



Note: For installation thicknesses of over 150 mm, use as few intermediate frames as possible.

KompaX® 3 Installation kit for wall installation

- Installation kit for fitting into walls in vertical formwork for the KompaX® 3 housings
- 2-piece, consists of support element and seating bearing



For luminaire or loud-speaker installation height	Art. No.	Inner packaging/shipping	Price in EUR/100
100 mm	1294-91	- / 1	
125 mm	1294-92	- / 1	
150 mm	1294-93	- / 1	
175 mm	1294-94	- / 1	
200 mm	1294-95	- / 1	

Styrofoam moulded parts

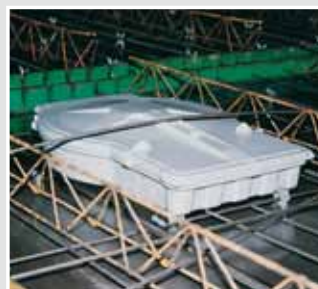
KompaX® housing with Styrofoam moulded part for customised solutions. The mouldings are available in any shape (round, square, rectangular or triangular) and in various thicknesses or to suit your specific needs. They can be supplied ready-mounted to the housing or provided separately. A facing concrete version is also available. The Styrofoam moulded parts for facing concrete have an additional elastomer sheath, and its elasticity prevents the dry concrete from cracking.

- For individual installation openings
- Any shape possible (for round, square, rectangular and other installation openings)
- For on-site mixed concrete and prefabrication
- Prevents discolouring and sand blast dust in facing concrete version
- For exact flush finishes in facing concrete without reworking



Planning instruction

Almost every conceivable shape can be realised using the Styrofoam moulded parts. The maximum dimensions of the front parts (diameter/diagonals) result from the maximum dimensions of the respective housing front rings. Please note that the clamping range of luminaires and loudspeakers must be at least the thickness of the Styrofoam moulded parts plus 8 mm. In the case of Styrofoam moulded parts with a thickness of > 20 mm, take into account the support provided.



KompaX® Styrofoam moulded parts for ceiling exit (CE)

- all sizes and shapes which deviate from the existing KompaX® front rings for ceiling exits are available as Styrofoam moulded parts
- all Styrofoam facing concrete parts are also available in facing concrete design on request.
- the Styrofoam moulded parts can be attached to the housing before delivery or supplied separately with the housings
- Required ceiling cut-out up to max. Ø 300 mm and max. height 50 mm for round, square or rectangular installation openings. Other shapes possible on request.



Art. No.
Price in EUR/100

1292-90

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE



Conduit stopper

Conduit stoppers for secure, precise positioning of installation conduits in installation housings. They prevent conduits from being inserted too far and prevent them from falling out, even under extreme load.

- Guarantees concrete-tight connection of DIN EN conduits
- prevents conduits from being inserted too far
- Prevents conduits from slipping out under high load
- Threaded connecting pieces for inch conduits in conduit stoppers



Installation



Use the universal opening cutter to make accurate conduit entries (Ø 21 mm).



Simply push flexible Ø 20 or Ø 25 mm DIN EN conduits into the conduit stopper.



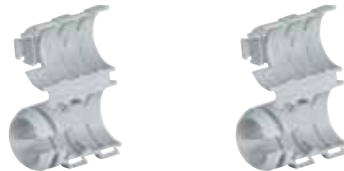
This technology guarantees secure and tight conduit entry in all housings.



For Ø 5/8" or Ø 3/4" conduits, insert the threaded connecting piece into the conduit stopper.

Conduit stopper

- for luminaire or loudspeaker housings
- prevents conduits from being inserted too far
- secures conduit against falling out even under extreme load
- required opening Ø in the housing tunnel: 21 mm (created using universal opening cutter 1085-80)



For conduits to DIN EN outer Ø	20 mm	25 mm
Art. No.	1274-20	1274-25
Inner packaging/shipping	25 / 100	25 / 100
Price in EUR/100		

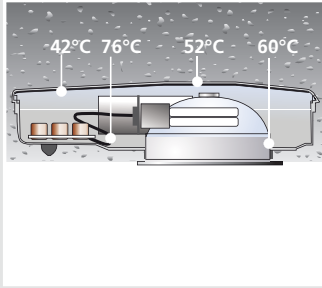
Threaded connecting pieces for inch conduits

- for insertion of smooth and corrugated 5/8" and 3/4" conduits
- For use in HaloX-O and HaloX-P
- in 1274-20 and 1274-25 conduit stoppers

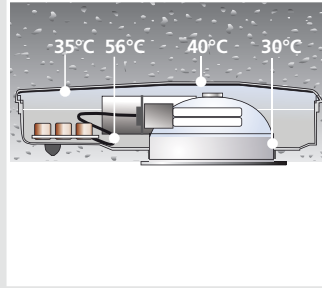


for inserting smooth and corrugated conduits	5/8", 3/4"
Art. No.	1074-04
Inner packaging/shipping	20 / 100
Price in EUR/100	

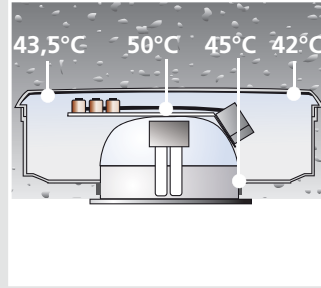
Temperature profile KompaX® 1, 2, 3 (room temperature 23°C)



KompaX® 1
3 x TC-D 26 W, sealed version of luminaires (matt safety glass disc)



KompaX® 2
2 x TC-D 18 W, sealed version of luminaires (matt safety glass disc)



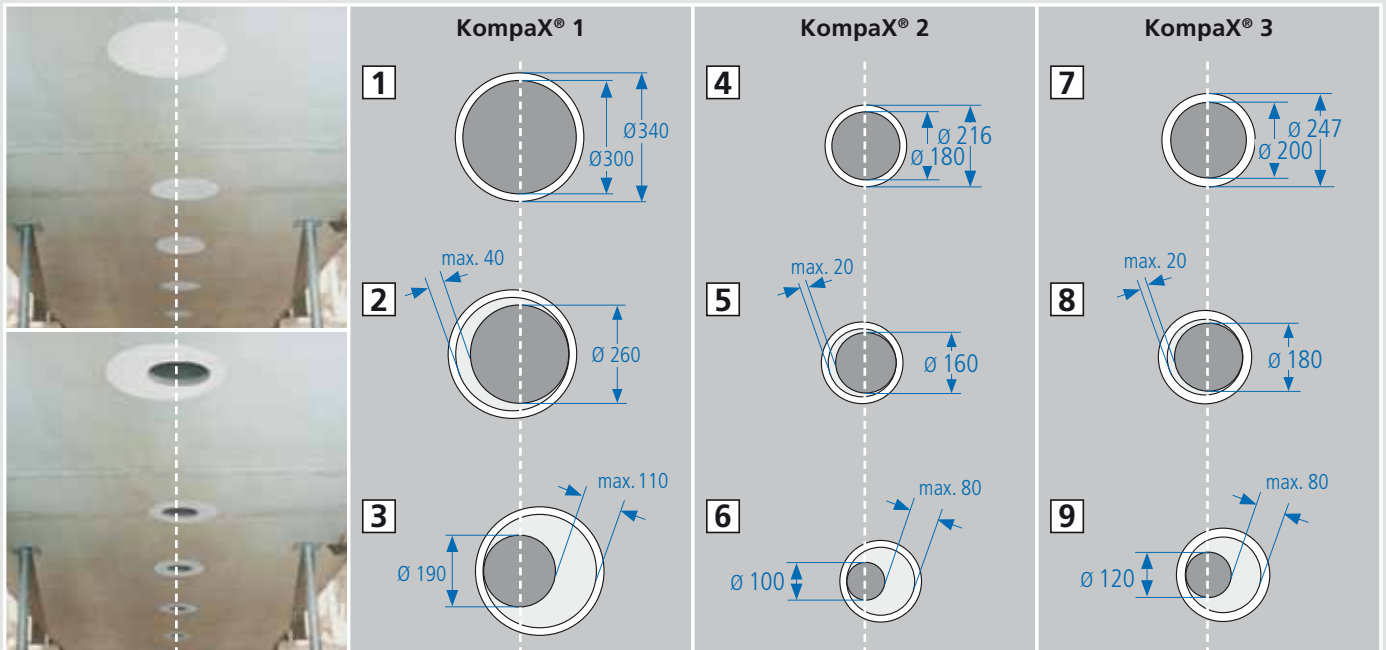
KompaX® 3
1 x TC 42 W: sealed version of luminaires (matt safety glass disc)

KompaX® housing with mineral fibreboard

KompaX® housing with mineral fibreboard permits variable, neutral shape and accurate cut-outs for luminaires and loudspeakers. Inaccuracies arising during the installation of industrially prefabricated slab ceiling elements can be corrected using the mineral fibreboard. The mineral fibreboard always offers sufficient opportunities for adjustment. Depending on the installation diameter, you can retrospectively correct inaccuracies arising during the assembly or installation of slab ceilings.

- For luminaires and loudspeakers
- Accurate, variable installation openings
- Any cut-out shape possible
- Tolerance compensation during slab ceiling installation

KompaX® tolerance compensation with mineral fibreboard

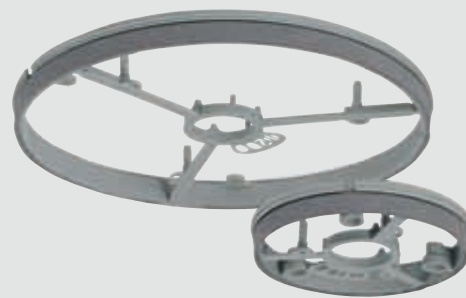


1 = CE max. 300 mm without tolerance compensation | **2** = CE max. 260 mm with 40 mm tolerance compensation (2 x 20 mm) | **3** = CE max. 190 mm with 110 mm tolerance compensation (2 x 55 mm) | **4** = CE max. 180 mm without tolerance compensation | **5** = CE max. 160 mm with 20 mm tolerance compensation (2 x 10 mm) | **6** = CE max. 100 mm with 80 mm tolerance compensation (2 x 40 mm) | **7** = CE max. 200 mm without tolerance compensation | **8** = CE max. 180 mm with 20 mm tolerance compensation (2 x 10 mm) | **9** = CE max. 120 mm with 80 mm tolerance compensation (2 x 40 mm)

Front rings for facing concrete

Front rings with elastomer sheathing for sharp outline ceiling cut-outs in facing concrete. The elasticity of the sheathing prevents the dry concrete from cracking.

- For exact flush finishes in facing concrete without reworking
- Prevents ingress of concrete
- Prevents discolouring and sand blast dust
- As a Styrofoam moulded part for round, square, rectangle and other installation openings



For perfect results, make sure the housing fits correctly, e.g. by bracing on the formwork and inserting an additional joist to restrict the formation of cracks.



without elastomer seal



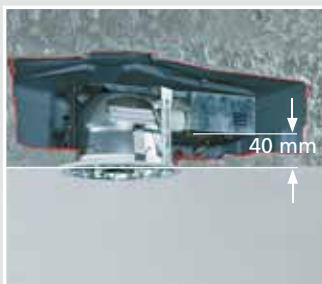
with elastomer seal



Examples of use

Installation notes

For installation of luminaires with an asymmetrical equipment carrier (e.g. for ballast devices) or loudspeakers with audio processors etc., the distance between the bottom edge of the accessory and the bottom edge of the concrete ceiling must be at least 40 mm.



Reducing the ceiling exit (CE) with front rings

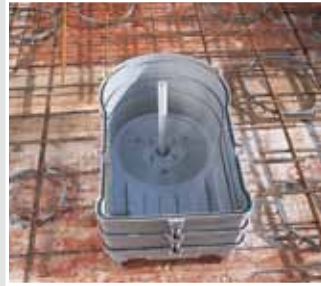
If the required ceiling exit is smaller than the front ring used, please remove the cast-in front ring after removing the formwork, insert a smaller front ring or cut out the required dimension. Prime the remaining surface around the ceiling exit using for example thinned Styrofoam adhesive or Beto-Kontakt, and smooth it off.

Installation in on-site mixed concrete ceilings (KompaX® 1, 2, 3)

Clip the front ring onto the housing and open the required conduit or cable entries. Position the prepared housing and fasten to the formwork using 4 nails. Feed in the conduits and insert the supplied support conduit (KompaX® 1 and 2 only). If necessary, mount the intermediate frame, then clip in the back part. To prevent upward movement, fasten the housing to the reinforcement using wires or cable ties. The ceiling can now be cast. After removing the formwork, use a fretsaw to saw into the visible front part to enable the luminaire or the loudspeaker to be mounted.



Clip the front ring onto the housing.



Attach the housing with 2 intermediate frames and a support conduit to the formwork.



Also secure the housing to the reinforcement.



Secure and firm seating of housings during concreting.



Open front part using a fretsaw.

Installation in slab ceilings

Pre-assembly in the concrete factory. Fasten the housing to the formwork table by applying at least four adhesive points to the housing (adhesive foil or hot glue). To prevent upward movement, fasten the housing to the reinforcement with wires or cable ties or by sliding steel bridges under the space frame. Then concrete up.



Final assembly on-site

After removing the installation instructions and the support element, make the required openings for cables and conduits. If the installation height needs to be increased, fit the intermediate frames. With KompaX® 1 and 2, insert the matching support element before re-closing the housing. Concreting can now take place.



Final assembly using mineral fibreboard

In the case of housings with mineral fibreboard, the ceiling cut-outs are marked out correctly aligned. Then cut installation openings through the mineral fibreboard and the housing base. Now fit the installation devices without any further reworking (smooth the surface if necessary).



Final assembly using mounting ring

For housings with installation rings, remove the formwork and all fixing screws and simply pull out the mounting rings or plates. Now mark the precise position of the installation openings so that the corresponding front rings can be inserted or screwed on. Prime the remaining surface between concrete edge and front ring using thinned Styrofoam adhesive, e.g. Betokontakt, and smooth it off. Use the fretsaw to cut the installation opening. After plastering and/or painting the ceiling, install the luminaires or loudspeakers.



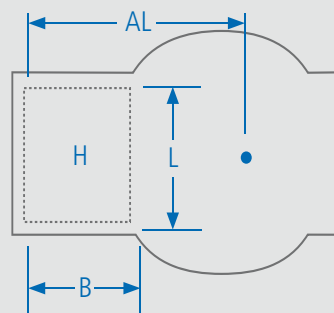
KompaX® for on-site mixed concrete and prefabrication (slab ceilings)



Installation dimensions of KompaX® 1 and 2

When installing luminaires, loudspeakers or electronic components in KompaX® housings, use the data provided by the luminaire or loudspeaker manufacturer to guide you. For the KompaX® housing, the following installation dimensions apply (excluding intermediate frame):

Housing	Installation depth	AL	L	B	H
KompaX® 1	100	330	270	160	60
KompaX® 2	100	290	190	160	60



Lamps

Options for using lamps

Lamp description	Short descriptions of the LBS (ZVEI)	Type of lamp	KompaX® 1	KompaX® 2	KompaX® 3
			max. power in watts		
Compact fluorescent lights	TC-S		≤ 90 W	≤ 52 W	≤ 52 W
	TC-L		≤ 90 W	≤ 52 W	≤ 52 W
	TC-D		≤ 90 W	≤ 52 W	≤ 52 W
	TC-T		≤ 90 W	≤ 52 W	≤ 52 W
	TC-F		≤ 90 W	≤ 52 W	≤ 52 W
	TC-DSE		≤ 90 W	≤ 52 W	≤ 52 W
	TC-DEL		≤ 90 W	≤ 52 W	≤ 52 W
	TC-TEL		≤ 90 W	≤ 52 W	≤ 52 W
	T16-R		≤ 90 W	≤ 52 W	≤ 52 W
Halogen metal halide lamps	HIT		≤ 70 W	≤ 70 W	≤ 70 W
	HIT-DE		≤ 150 W	≤ 150 W	
	HIT-CRI		≤ 70 W	≤ 70 W	≤ 70 W
	HIT-DE-CRI		≤ 150 W	≤ 150 W	
	HIT-CE		≤ 70 W	≤ 70 W	≤ 70 W
Low voltage halogen	QT 9		≤ 100 W	≤ 100 W	≤ 50 W
	QT 12		≤ 100 W	≤ 100 W	≤ 50 W
	QT 14		≤ 100 W	≤ 100 W	≤ 50 W
	QT 16		≤ 100 W	≤ 100 W	≤ 50 W
	QR-CBC		≤ 100 W	≤ 100 W	≤ 50 W
	QR-LP		≤ 100 W	≤ 100 W	≤ 50 W
High voltage halogen	QT 18		≤ 250 W	≤ 250 W	≤ 250 W
	QT 32		≤ 250 W	≤ 250 W	≤ 250 W
	QPAR		≤ 250 W	≤ 250 W	≤ 250 W
LED	all		LED	LED	LED

Higher wattages possible by using intermediate frames.
Other lamp types on request.

Constructional information on concrete ceilings

To install KAISER installation housings in concrete, please refer to our work instructions and our installation instructions.

1. Statics

The dimensions of the universal housings ensure that they have only a small effect on the statics of concrete ceilings. However, when using this housing, always consider its effects on the static calculations. All values regarding number, size and distance between centres of the housings as well as the fire protection class of the ceiling must be agreed on with the structural engineer.

Further points to be taken into account are:

- the housings must be arranged in line with the stress support axis of the reinforcement.
- the distance between centres of the housings must be at least 3 times the housing dimensions.
- supplementary reinforcement (joint beam) must be provided for all housings that break into the existing reinforcement if the statics calculations show that it is required.

2. Fire protection

Fire protection and the fire protection class of a concrete ceiling are only minimally affected by the fitting of luminaire and loudspeaker housings. From the technical fire protection viewpoint, no limitations are necessary on the axial spacing of HaloX and KompaX® housings in F30 ceilings. In F90 ceilings the axial spacing of HaloX housings should be at least 1 m and of KompaX® housings 1.3 m. Additional reinforcement must be put in place next to the housings.

The following table gives an overview of the necessary minimum thicknesses of ceilings and walls for fire protection classes F30 and F90.

All data is based on installation heights of the housing without intermediate frames or extension rings. Use float plaster or plaster of class A building materials. A technical fire protection certification can be provided on request.

3. Transmission of sound

KompaX® housings do not generally resonate since they are never fully open. The solid seating in the concrete ceiling does not amplify any vibrations which are registered. Please contact us if you require technical sound transmission certification.

4. Heat conduction/Heat protection

Heat from luminaires and loudspeakers built into HaloX or KompaX® housings has little or no effect on the concrete and statics of a ceiling. Compared to metal concrete housings, the reflection of heat from the luminaires or loudspeakers is considerably lower. This improves the efficiency and working life of the luminaires and other operating components.

The creation of heat bridges leading to the 'dew point' being reached is avoided by the use of underfloor noise insulation panels and a top plaster layer or through heat insulating measures.

5. Electrical installation

In principle, only VDE approved luminaires and VDE approved fittings should be used; luminaires must conform to DIN VDE 0711/EN60598. The builder of the system retains responsibility for the selection of suitable equipment such as luminaires, ballast devices, loudspeakers or transformers, their materials and their correct installation according to the technical safety standards for installation, lighting and loudspeakers. The manufacturer reserves the right to make changes to the materials, design and product range.

Housing volume (dm³)			
	KompaX® 1	KompaX® 2	KompaX® 3
	18	10	5.6
Volume increase by use of an intermediate frame, in dm³			
Intermediate frame 25	5	2.5	1.4
Intermediate frame 50	10	5	2.8

	KompaX® 1/2	KompaX® 3*	HaloX
F 30 ceiling plastered			
F 30 ceiling unplastered			
F 60 ceiling plastered			
F 60 ceiling unplastered			
F 90 ceiling plastered			
F 90 ceiling unplastered			

*Minimum concrete covering of the housings for 60 mm wall installation.

EnoX installation housing

EnoX housing for luminaires and other devices in ceilings and walls which are produced in a lightweight design with an air-tight building shell. Variable installation space when there is insufficient room to install electrics in the insulation level.

- Air-tight installation in line with EnEV energy-saving ordinance.
- No additional installation level is necessary
- For ceilings and walls in renovated and new buildings
- Tool-free cable and conduit entry
- Thermally-protected installation space 300 x 200 x 55 mm
- ECON technology for air-tight and tool-free insertion
- FX4 technology for fast cavity wall installation



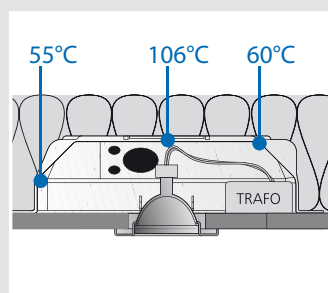
FLUSH-MOUNTING

CAVITY WALL

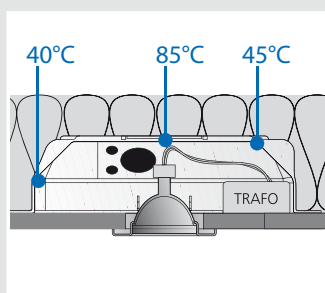
CONCRETE

Installation technology for low-voltage luminaires

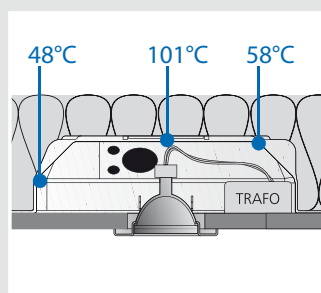
Temperature profile for room temperature 23°C



Low-voltage 35 W cool beam



Low-voltage 35 W Alu



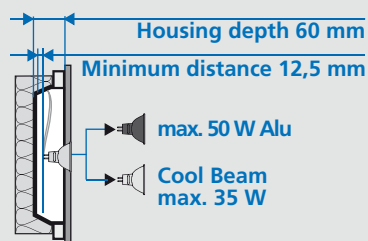
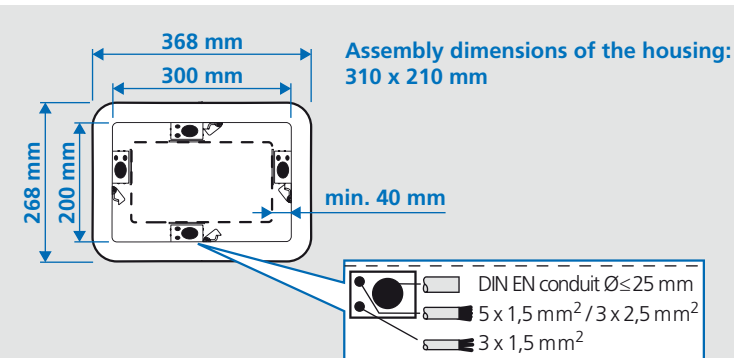
Low-voltage 50 W Alu



Example of installation

HOUSINGS

FIRE PROTECTION



EARTHING

CABLE GLANDS

Technical processing instructions/standards

- for luminaires with low-voltage or high-voltage lamps (to DIN VDE 0711/EN 60598) and with luminaires marked ∇ or $\nabla\nabla$.
- only for insulation material with heat resistance $> 250^\circ\text{C}$
- use only tested heat-resistant cables (N2 GMH 2G) and temperature-resistant terminals (e.g. T100)
- use of electrical safety transformers up to 105 VA
- max. 35 W Cool Beam, 50 W aluminium reflector

TOOLS

Installation

The EnoX housing is installed within or on the rafters using the timber or metal joist. In accordance with the cavity wall box principle, the housing is fixed to the joist or to an OSB panel using the FX4 strap fastening system. The cut-off moisture barrier is made air-tight again using sealing adhesive foil or the KAISER sealing foam frame. Before attaching the boarding, completely remove the moisture barrier foil out of the housing interior. When combined with the moisture barrier, the EnoX housing now forms one unit to ensure air-tight installation in accordance with the EnEV energy-saving ordinance. Tool-free insertion permits secure installation with cable retention in accordance with DIN EN 60670/DIN 49073.

SERVICE

System EnoX for insulated hollow ceilings and cavity walls

Mounting instructions

The EnoX housing is installed within or on the rafters using the timber or metal joist. In accordance with the cavity wall box principle, the housing is fixed to the joist or to an OSB panel using the FX4 strap fastening system. The cut-off moisture barrier is made air-tight again using sealing adhesive foil or the KAISER sealing foam frame. Before attaching the boarding, completely remove the moisture barrier foil out of the housing interior. When combined with the moisture barrier, the EnoX housing now forms one unit to ensure air-tight installation in accordance with the EnEV energy-saving ordinance. Tool-free insertion permits secure installation with cable retention in accordance with DIN EN 60670/DIN 49073.



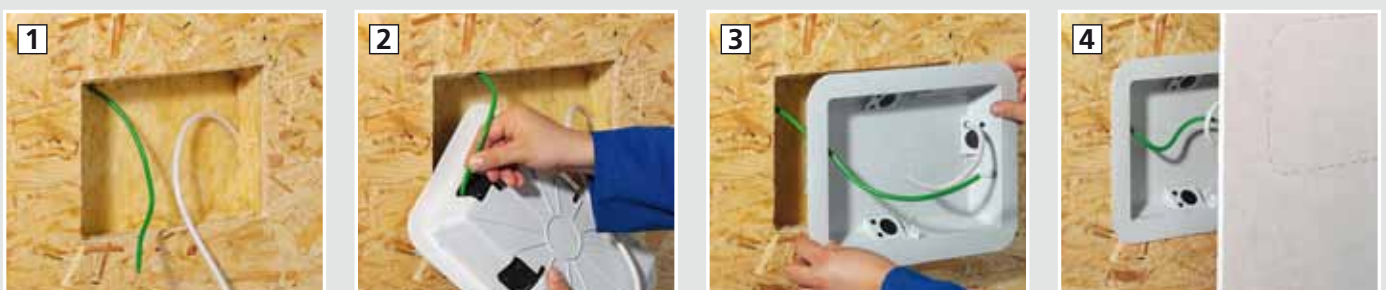
Timber joist on the rafter



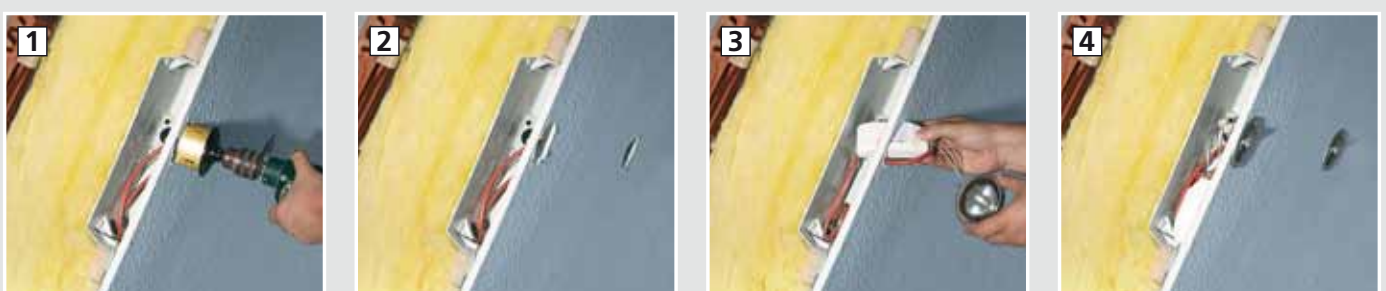
Timber joist inside the rafter



Installation using OSB panel.



Making the installation opening for luminaires



EnoX - luminaire and loudspeaker housing

- for installing luminaires, loudspeakers, displays and much more
- Minimum distance inside: min. 40 mm all round
- integrated stress relief (retention force) in accordance with DIN VDE 0606 / DIN EN 60670-1
- only for insulation material with heat resistance > 250°C
- use only tested heat-resistant cables (N2 GMH 2G) and temperature-resistant terminals (e.g. T100)
- for installation devices up to LxW 120 x 220 mm or Ø 120 mm
- Heat distortion resistant to 220°C
- with 4 screws (FX4)



Length x Width x Depth	368 x 268 x 60 mm
Length on the inside	300 mm
Width on the inside	200 mm
Depth on the inside	57 mm
Conduit entries for DIN EN conduits up to Ø 25 mm	4
Cable entries 3 x 2.5 mm ² or 5 x 1.5 mm ²	4
Cable entries 3 x 1.5 mm ²	4
Art. No.	9350-21
Inner packaging/shipping	- / 10
Price in EUR/100	

EnoX sealing foam frame

- for fixing onto the EnoX housing
- for sealing the moisture barrier to the housing

AIR-TIGHT



Art. No.	9350-99
Inner packaging/shipping	- / 10
Price in EUR/100	

ThermoX® system for insulated hollow ceilings

for LV and HV built-in luminaires



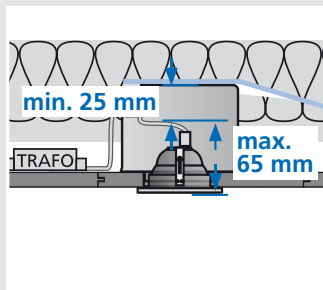
ThermoX® installation housing

ThermoX® installation housing for installing halogen luminaires in various ceiling structures. The housing protects the surrounding material (moisture barrier foil, insulation etc.) from the lamp's extreme operating temperatures and creates an air-tight closure.

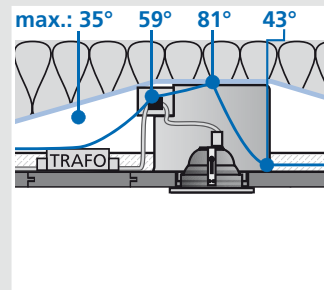
- Installation housing for halogen luminaires (low voltage and high voltage)
- Fire-preventive and air-tight
- For insulated hollow ceilings
- Two different front part types
- Integrated transformer closing cap
- Ceiling exits (CE) up to Ø 86 mm
- Installation from either above or below



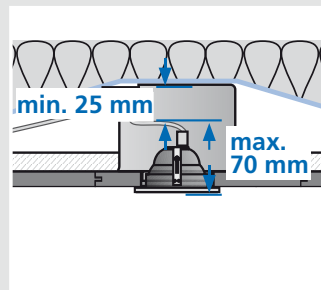
Installation technology for low-voltage and high-voltage luminaires



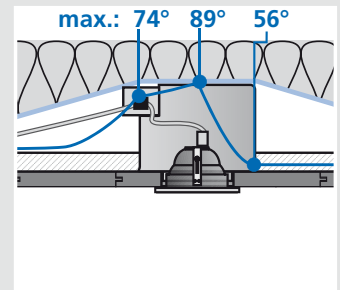
Luminaire selection: halogen, low-voltage (12 V)
Usable lamps: cool beam max. 20 W, aluminium reflector max. 35 W



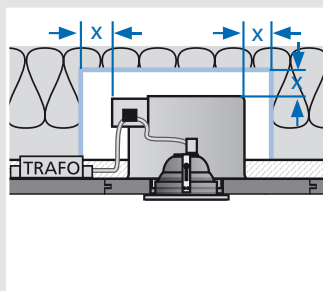
Temperature profile: room temperature (23°C)
Aluminium reflector 35 W



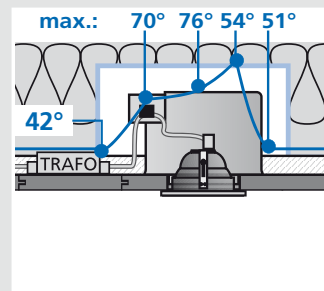
Luminaire selection: halogen, high-voltage (230 V)
Usable lamps: cool beam max. 20 W, aluminium reflector max. 35 W



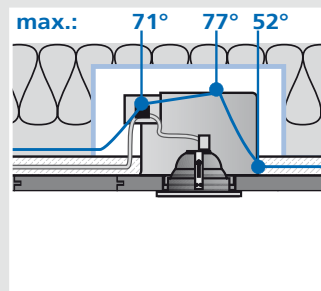
Temperature profile: room temperature (23°C)
Aluminium reflector 35 W



Luminaire selection: halogen (12 V/high-voltage 230 V) x = min. 50 mm
Usable lamps with "x": cool beam max. 35 W, aluminium reflector max. 50 W



Temperature profile: halogen, low voltage (12 V)
Aluminium reflector 50 W



Temperature profile, halogen, high voltage (230 V)
Aluminium reflector 50 W

Technical processing instructions/standards

- use only certified (German DIN VDE 0711 or EN 60598) luminaires or those marked ∇ or $\nabla\nabla$
- use heat-resistant cable for the SEC side
- electronic safety transformers up to 105 VA can be used. Dimensions max. 123 x 37 x 26 mm. A rounded shape is advantageous for installation and removal (e.g. PC mouse shape)
- use heat-resistant terminals (e.g. T 100)
- Distance of holder and cable to the housing min. 10 mm

ThermoX® system for insulated hollow ceilings

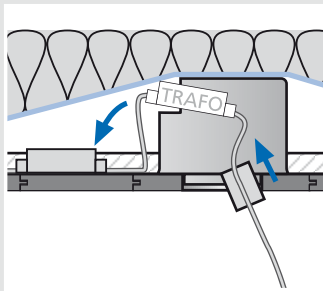
for LV and HV built-in luminaires

System components

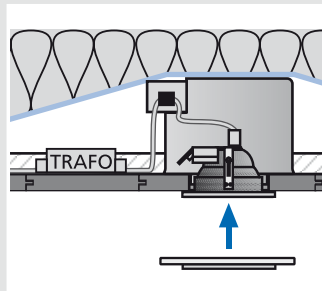


1 Housing | 2 Closing cap for the transformer opening | 3 Quick fastening FX4 for cavity wall installation | 4 Front part with bayonet fitting (both sides can be used) | 5 Mineral fibre front part (for variable installation openings up to Ø 86) | 6 Decorative covering Ø 125 (white, similar to RAL 9016, chrome-plated, matt nickel or gold-plated)

Transformer and luminaire installation



Push the transformer through.....insert the closing cap...



...install luminaires and fit decorative covering if used. Finished.

Air-tight installation and fire-preventive protection

ThermoX® protects the surrounding material against the extreme temperatures that can occur with halogen luminaires (over 200°C). Never install the housing when it is wrapped in insulating material! The distance from the holder and cable to the housing must be at least 25 mm. This protective measure can be taken both in new buildings and later in existing ones. ThermoX® permits air-tight installation as it does not destroy the moisture barrier foil that contributes to the air-tight building shell. Thanks to its air tightness, the ThermoX® housing is also suitable for all suspended ceiling systems where an uncontrolled exchange of air is to be avoided (e.g. air-conditioning or cooling ceilings) and dust-tight installation is required (e.g. avoidance of dirt particles caused by material removal).

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

ThermoX® system for insulated hollow ceilings

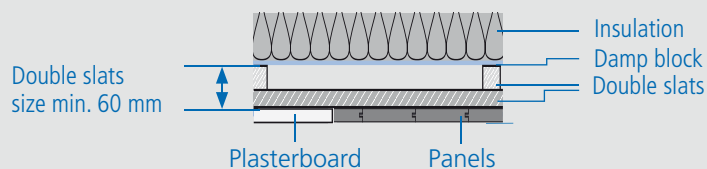
for LV and HV built-in luminaires

Mounting option



Mounting instructions

ThermoX® installation housings can be fitted in slab or tiled ceilings, as well as in seamless sub-ceiling structures made of plasterboard, mineral fibreboard, MDF and plywood with cross-battening and a layer of insulation above. Installation can be carried out from above or below (e.g. retrofitting).



Processing instructions



Use the universal opening cutter to make the precise and airtight opening for the cable entry in the transformer flap.



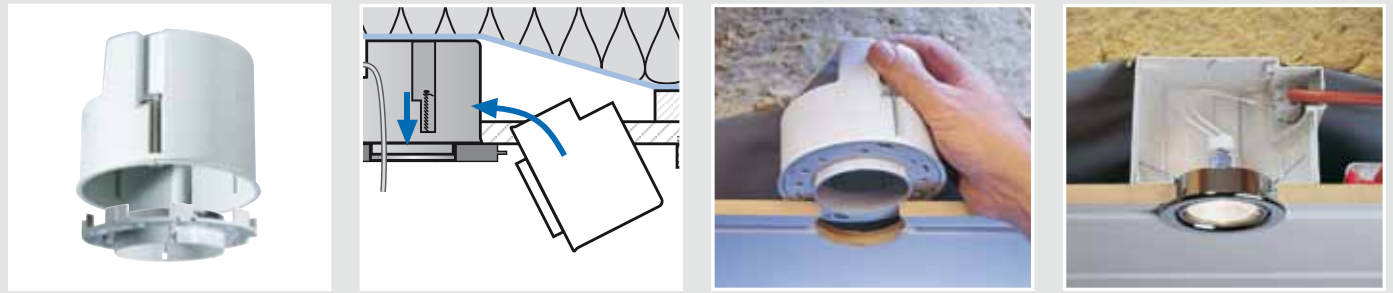
The terminal is fitted firmly in the transformer closing flap so it is protected against the heat from the lamp.



For transformer maintenance, the transformer cap can be removed with a screwdriver or long-nosed pliers even after installation.

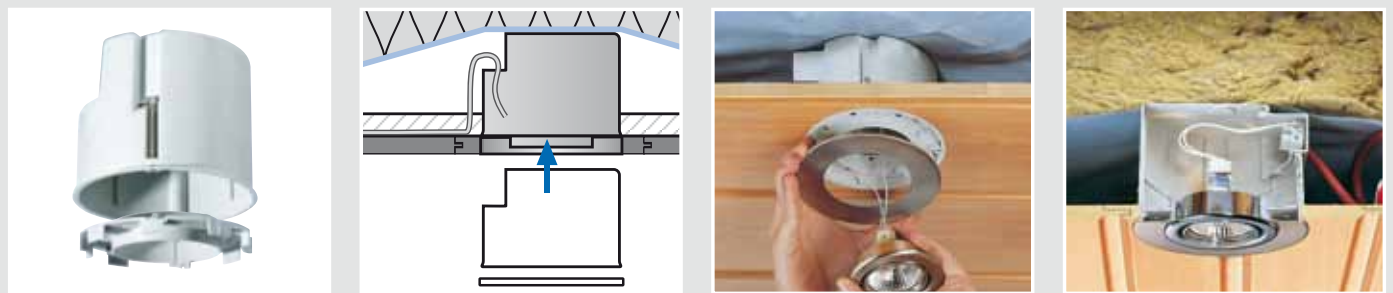
Slab ceiling/installation from above: during ceiling installation

Cut the installation opening and insert the housing from above. The shape of the front part ensures a secure and precise fit in the boarding. After the luminaire has been installed, the opening is completely concealed.



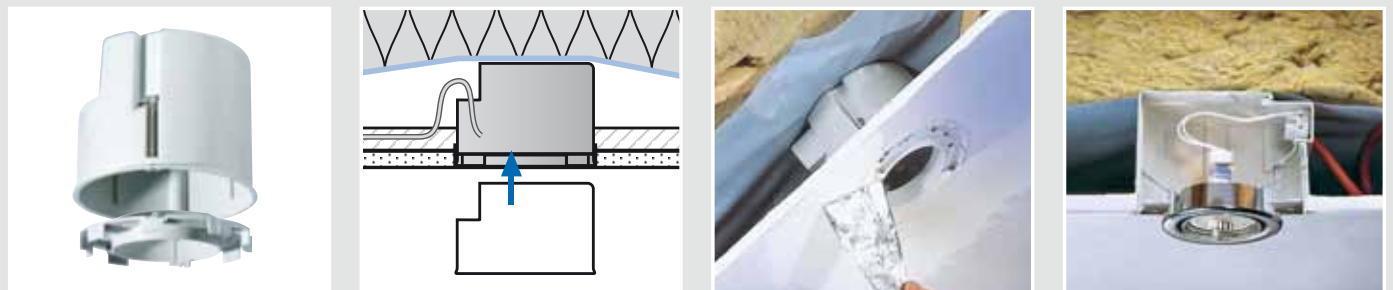
Slab ceilings/installation from below: retrofitting

Cut an installation opening, insert the housing from below and fix in place with a fast screw attachment. The housing is attractively concealed by the KAISER decorative covering and the luminaire.



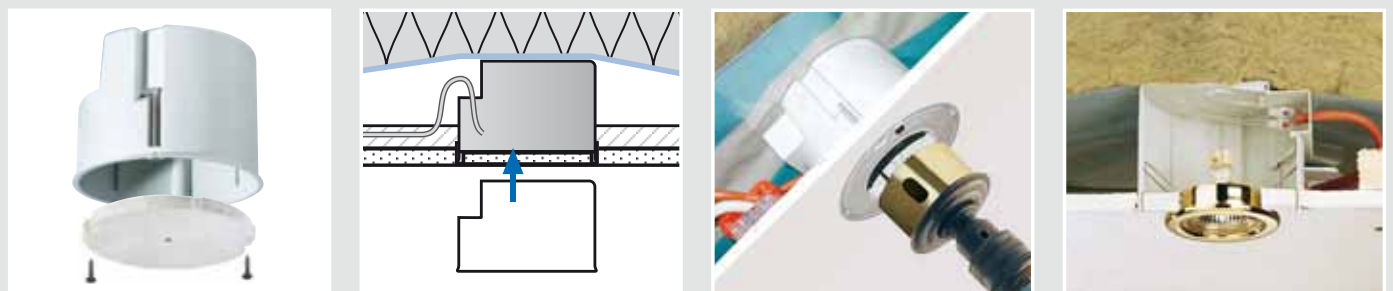
Plasterboard/installation from below: retrofitting/smoothing

Before installation, check the required installation depth! Cut the installation opening, chamfer the bottom edge of the installation opening. Insert the housing from below and fix in place with a fast screw attachment.



Plasterboard/installation from below: retrofitting with mineral fibreboard

Cut and chamfer the installation opening. Insert the housing from below and fix in place with a fast screw attachment. Mark opening for luminaires and cut. Smooth the joint or simply wallpaper the surface.



ThermoX® system for insulated hollow ceilings

for LV and HV built-in luminaires

ThermoX® housing for low and high-voltage luminaires

- for LV and HV luminaires
- for fixed and swivelling lights
- max. installation height for low-voltage luminaire 65 mm, HV luminaire 70 mm
- Heat distortion resistant to 220°C
- lamp wattage LV: max. 35 W with AL reflector / 20 W Cool-Beam
- lamp wattage for HV luminaires max. 35 W with AL reflector (socket GU 10)
- Front can be used on both sides



Depth	90 mm	90 mm	90 mm
installation from front, cut hole Ø	120 mm	120 mm	120 mm
installation from rear, cut hole Ø	74 mm	79 mm	86 mm
Ceiling exit (CE) Ø	68 mm	75 mm	82 mm
Art. No.	9300-01	9300-02	9300-03
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

ThermoX® universal housing with mineral fibreboard

- saves time - no plastering; close joint gap if necessary
- ceiling exit (CE) up to Ø 86 mm possible
- for fixed and swivelling lights
- Heat distortion resistant to 220°C
- max. installation height for low-voltage luminaire 65 mm, HV luminaire 70 mm
- lamp wattage LV: max. 35 W with AL reflector / 20 W Cool-Beam
- lamp power for HV luminaires max. 35 W with AL reflector (base GU 10) / 20 W Cool-Beam



Depth	90 mm
installation from front, cut hole Ø	120 mm
Ceiling exit (CE) Ø	<= 86 mm
Art. No.	9300-22
Inner packaging/shipping	- / 10
Price in EUR/100	

ThermoX® individual front rings

- for retrofitting or as spare part



Ceiling exit (CE) Ø	68 mm	75 mm	82 mm
Art. No.	9300-41	9300-42	9300-43
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

ThermoX® universal front ring

- for retrofitting or as spare part
- Universal front ring



Ceiling exit (CE) Ø <= 86 mm

Art. No. 9300-93

Inner packaging/shipping - / 10

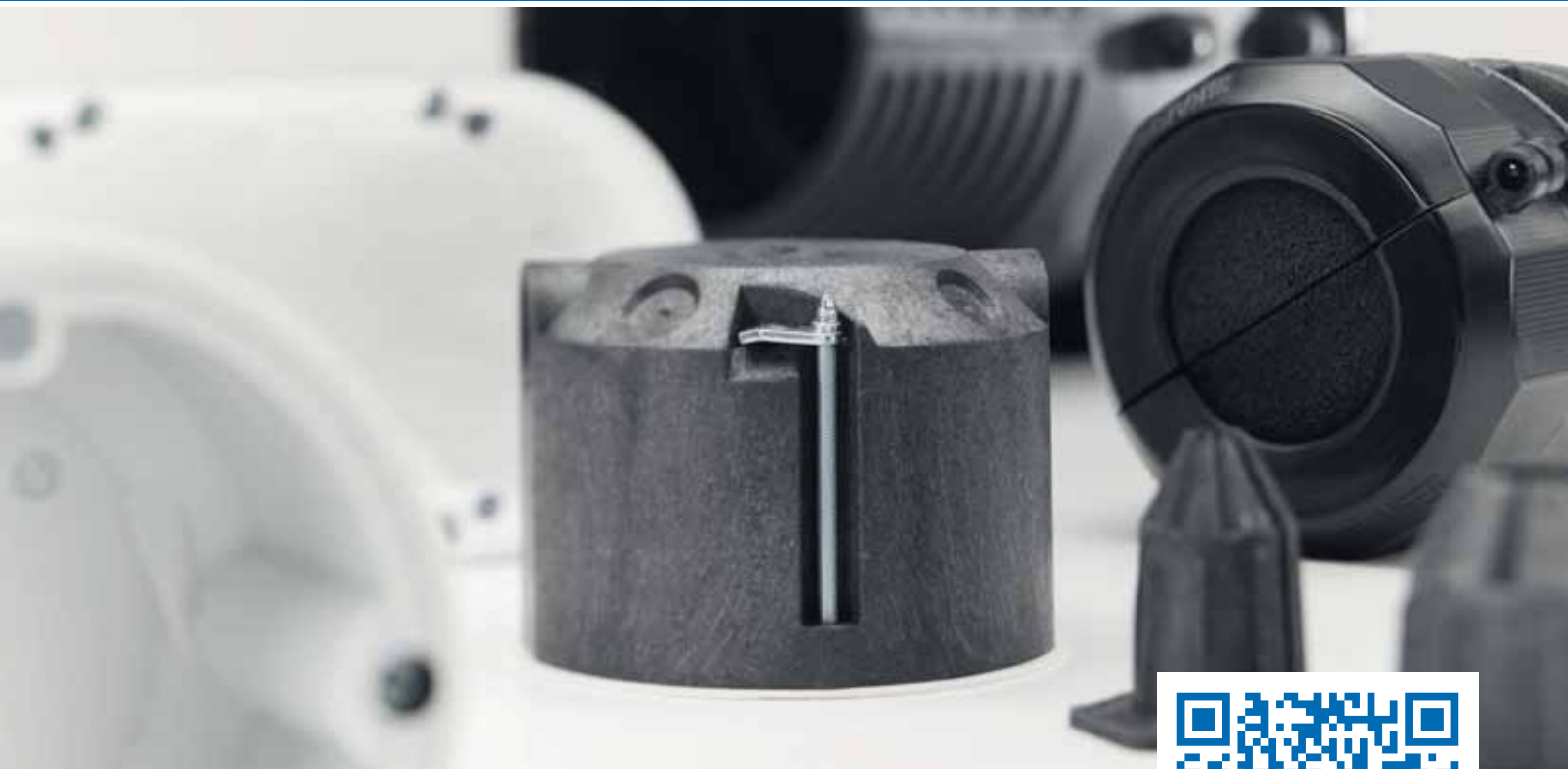
Price in EUR/100

ThermoX® Decorative coverings

- metal with galvanised or powder coating
- only for interiors
- minimum diameter of the luminaire 79 mm with ceiling exit Ø 68 and 75 mm
- Minimum diameter of luminaire covering 86 mm with ceiling exit Ø 82 mm



Outer diameter	Ceiling exit (CE) Ø	Colour	Art. No.	Inner packaging/shipping	Price in EUR/100
125 mm	68 + 75 mm	white	9301-01	- / 10	
125 mm	68 + 75 mm	chrome	9301-02	- / 10	
125 mm	68 + 75 mm	matt nickel	9301-03	- / 10	
125 mm	68 + 75 mm	gold	9301-04	- / 10	
125 mm	82 mm	white	9301-11	- / 10	
125 mm	82 mm	chrome	9301-12	- / 10	
125 mm	82 mm	matt nickel	9301-13	- / 10	
125 mm	82 mm	gold	9301-14	- / 10	



The most important advantages at a glance:

- AFS - Active Fire Stop - guarantees fire protection
- Fire protection boxes HWD for fire protection walls and ceilings, and also shipbuilding walls
- Secure, visible and certified protection by using KAISER sealing systems for cables, conduits and bundled cables and conduits
- Automatic sealing of the joints and the gaps between cables - no filling and smoothing
- Europe-wide approval for fire sealings ETA-11/0188
- Smoke-tight and halogen-free
- Also for retrofitting
- No encasing necessary
- Reliable sealing of installation conduits by using KAISER sealing plugs



Fire protection | Product lines



Fire protection boxes for secure classes up to F90	p. 203
Fire sealings for cavity walls, masonry and concrete	p. 213
Sealing plugs for easy sealing	p. 224
Fire protection boxes for ceilings up to F90	p. 208
Fire protection housings for luminaires and loudspeakers	p. 225
Installation housings for preventive fire protection in insulated ceilings	p. 194
Fire protection boxes for cabin walls in shipbuilding	p. 210
Tools for processing fire protection products can be found in the "Tools" section starting on page 252.	





	Fire protection boxes	Shipbuilding boxes	Sealings	Fire protection housings	
					FLUSH-MOUNTING
For installation accessories					
One-gang boxes	p. 205	p. 211	-	-	CAVITY WALL
One-gang junction boxes	p. 205	p. 212	-	-	
One-gang boxes for thin boarding	-	p. 211	-	-	
One-gang junction boxes for thin boarding	-	p. 212	-	-	
Electronics box	p. 206 NEW	-	-	-	CONCRETE
For cable exits					
Luminaire connection boxes	p. 209	-	-	-	
For luminaires and loudspeakers					
Fire protection housings	-	-	-	p. 227	HOUSINGS
Housings for preventive fire protection in insulated ceilings	-	-	-	p. 198	
For cable feed-throughs					
Feed-through of cables	-	-	p. 216	-	FIRE PROTECTION
Feed-through of conduits	-	-	p. 217	-	
Feed-through of bundled cables and conduits	-	-	p. 221 NEW	-	
Accessories					
Fixing	p. 94	p. 94	-	-	EARTHING
Sealing of electrical installation conduits (air-tight and smoke-tight)	p. 76/224/131/23	p. 76/224/131/23	p. 76/224/131/23	p. 76/224/131/23	
Support connectors	p. 205	p. 205	-	-	
End cover	p. 209	p. 209	-	-	

FLUSH-MOUNTING

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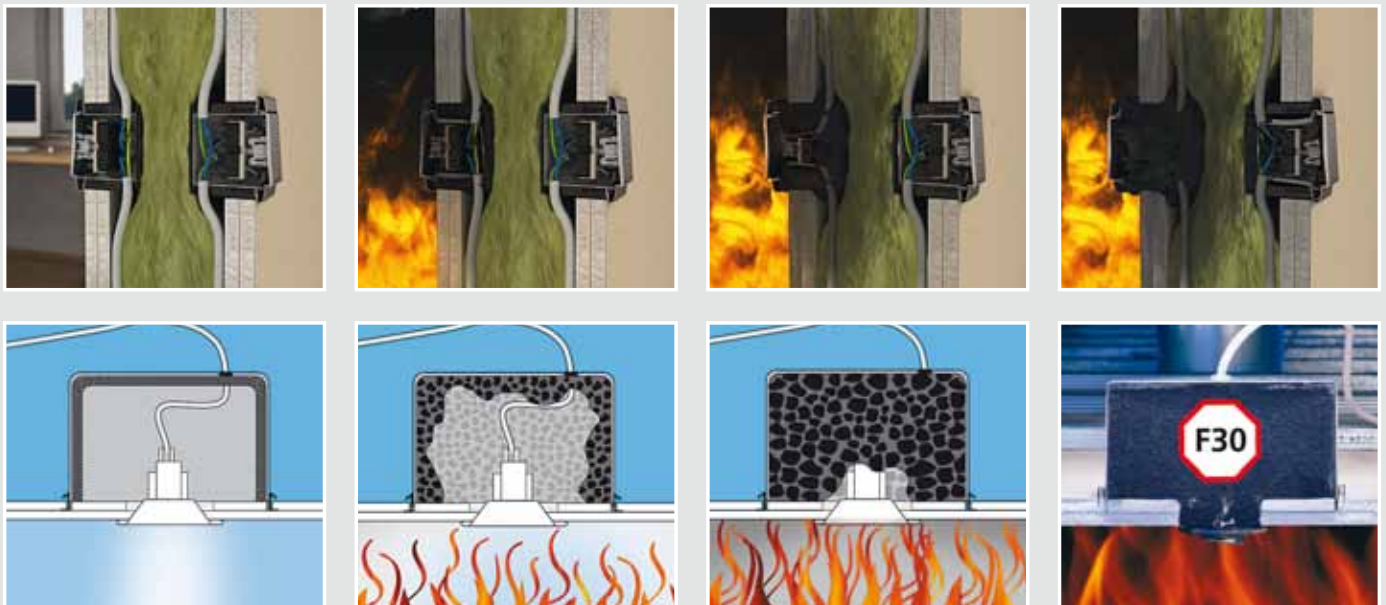
Intelligent fire-protection technology

AFS (Active-Fire-Stop) technology activates the fire-retardant coating immediately in case of a fire, which intumesces and reliably closes off the installation opening. This guarantees the fire-protection class of the ceilings or walls (up to F90) in spite of the installation openings.

- Fire protection — without encasing
- Smokeproof and halogen-free
- For walls and ceilings
- For buildings and ship construction

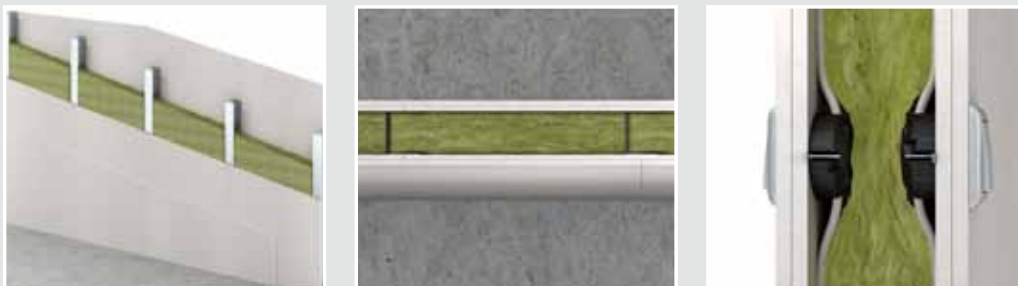


Reaction of the fire-retardant coating if a fire breaks out



Fire-protection walls

Fire-protection walls with fire resistance class F30-F180 in accordance with DIN 4102-4 are single or double shell, non load-bearing, internal separator walls with wall thicknesses of 100 mm or above. The insulating material used is defined in accordance with DIN 4102 part 17. 2 x 12.5 mm GKF plasterboard fire protection panels are often used as boarding. According to DIN 4102, the installation of opposing standard cavity wall boxes is not permitted, and the installation of single installation boxes is only permitted depending on the melting point, the gross density and the thickness of the insulating material. This means that on-site enclosure is required, e.g. with plaster, fibre silicate or similar.



Installation of F90 metal stud walling in compliance with DIN 4102, Part 4

HWD 90 cavity wall box

HWD 90 cavity wall box for F30-F90 fire-protection walls. Intelligent technology reacts immediately to fire and heat and automatically seals the installation openings. This guarantees the fire resistance class of the fire-protection wall, protects escape routes and saves lives.

- For F30-F90 fire-protection walls
- Also for retrofitting
- Can be used with fire-protection cover as a junction box



Installation



Cut installation opening \varnothing 74 mm using the turbo cutter MULTI 4000 Art. No. 1084-10.



The exact opening for the cable is created smokeproof with the KAISER universal opening cutter Art. No. 1085-80. Set the opening cutter to \varnothing 8.5 for 3 x 1.5², to \varnothing 9.5 for 5 x 1.5² and to \varnothing 9.5 for 3 x 2.5².



Attach the boxes with tried-and-tested cavity wall technology using KAISER FX4 technology.



The fully-insulated through-wiring of one-gang junction boxes with each other is created using the support connector (9060-78).

Note

In addition to the general building approvals issued by the DiBt (German Institute of Building Technology), on request we can also provide you with the test report for approval in Austria issued by the „IBS Prüfinstitut für Brandschutztechnik und Sicherheitsforschung in Linz.“

Installation in installation shafts

The HWD 90 cavity wall boxes can also be used in shaft walls for fire protection purposes. The cavity wall boxes fulfil the requirements in combinations of up to five. The boxes are installed from the front in the same way as during conventional wall installation - also during retrofitting.

- I30: without insulation material
- I60: DIN 4102-17 insulation material
- I90: Rockwool/Termarock 100



FLUSH-MOUNTING

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Retrofitting in installation shafts

The HWD 90 cavity wall boxes can also be retrofitted in installation shafts (shaft walls). Since retrofitting partly requires adding mineral wool to the opening, a cut-out of at least 300 x 300 mm is needed to make space for perfect installation. Use the following cut-out dimensions for the relevant combinations:

- 1-time: 300 x 300 mm
- 2 to 3-times: 300 x 400 mm
- 4 to 5 times: 300 x 600 mm



Make a 300 x 300 to 300 x 600 mm cut-out (see above). The insert dimension of the additional mineral wool section must be at least 25 mm larger on all sides.



Chamfer the edges on all sides for subsequent filling.



Insert CW profile and attach by screwing quick-fastening screws through the boarding.



Feed the insert into additional mineral wool into the shaft with the upper CW profile.



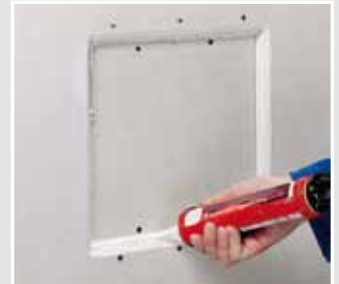
Fasten insert in lower attached CW profile and attach by screwing quick fastening screws through the boarding.



Added mineral wool in CW profiles (rear view).



Add boarding section (according to Fig. 1) and attach on CW profile.



Seal chamfered boarding on transition to wall using KAISER fire-protection putty.



Smooth out using filler to allow the second boarding to be inserted flush to the wall.



Make a Ø 74 mm installation opening and insert the HWD 90 cavity wall box.



Typical installation using KAISER FX4 technology.



Then fill the chamfer of the second boarding layer.

One-gang box HWD 90

- for fire-protection walls F30 - F90 (fire resistance of min. 30 - 90 minutes)
- also for installation shafts/installation channels I30 - I90



One-gang junction box HWD 90

- for fire-protection walls F30 - F90 (fire resistance of min. 30 - 90 minutes)
- also for installation shafts/installation channels I30 - I90



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	44 mm	54,5 mm
Cut hole Ø	74 mm	74 mm
Cable entries of up to Ø 11.5 mm	2	4
Support connectors for each package	-	5
Halogen-free	•	•
DIBt approval	Z-19.21-1788	Z-19.21-1788
Combination distance through single separation of the pre-embossed edge	71 mm	71 mm
alternatively cable entry for three-phase alternating current of up to 5 x 2.5 mm possible	-	•
	• / •	• / •
Art. No.	9463-01	9464-01
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Accessories: Fire-protection cover HWD 30-90, page 209; Support connector, page 205

Support connector

- for through-wiring of combinations to IP 3X standard air-tight
- smoke-tight
- for Art. No. 9464-01, 9464-15, 9464-50



Halogen-free	•
Art. No.	9060-78
Inner packaging/shipping	- / 25
Price in EUR/100	

INNOVATION

Fire-protection box HWD 90 for Swiss accessories

- for fire-protection walls EI 30 - EI 90
- VKF approval 21042
- also for opposing installation
- for plate thickness 7 - 40 mm
- matching plug-in cover for Art. No. 9498-77 New Look one Art. No. 9919.10



Length x Width x Depth	83 x 83 x 50 mm	145 x 83 x 50 mm	205 x 83 x 50 mm
Cut hole Ø	83 mm	83 mm	83 mm
Combination	1x1	2x1	3x1
Art. No.	9498-77	9498-77.02	9498-77.03
Inner packaging/shipping	- / 10	- / 5	- / 5
Price in EUR/100			



Electronics box HWD 90

The electronics box HWD 90 maintains the wall's fire resistance class (F30 - F90) and creates space for electronic switch devices, data boxes, cables and terminals. The electronics box makes possible population with cables and also with installation conduits up to M25.

- For fire-protection walls F30 – F90
- Retrofitting is possible
- Also for use as a double box
- Extra-large terminal area for communications and network technology
- Additional space for electronic components (KNX actuators, relays, radio module, communications technology)



Examples of use



The electronics box provides space for all possible installations e.g. KNX actuators, Venetian blinds relays, alarm modules and many more.



Also ideal for network connections. The generous box volume offers sufficient space for cable reserves.



The electronics box can also be used as a double box, e.g. for switch and socket combinations.



The electronics box can easily be combined with the one-gang junction box HWD 90.

Processing instructions



The electronics box provides 6 ways for conduit entry up to M25 and cable entry up to Ø 11.5 mm.



By removing the cover ...



... and the bridge, can also be used as a double box.

Installation



Cut two installation openings with turbo cutter Multi 4000 Ø 74 mm (Art. No. 1084-10) with a centre distance of 71 mm.



Removal of the bridge.



Using the KAISER universal opening cutter, cut an exact conduit or cable opening for smoke-tight installation.



Fitting the box using tried-and-tested FX4 technology.



The additional terminal area makes possible the fitting of various electronic components ...



...and sufficient space for the cable reserve when communications and network boxes are installed.



By using support connectors, the box can be combined with itself or with a one-gang junction box (Art. No. 9069-01).



The cover can also be turned by 180° and mounted and filled. This will reduce possible switching noises.

INNOVATION

Electronics box HWD 90

- For cables and conduits up to M25
- Also for use as a double box
- For fire-protection walls F30 – F90
- Minimum wall thickness 100 mm
- For equipment inserts and electronic components
- Can be combined with each other and also with HWD 90 one-gang junction boxes



For panel thickness	7 - 40 mm
Depth	70 mm
Cut hole Ø	2 x 74 mm
Centre distance	71 mm
Conduit entries for DIN EN conduits up to Ø 25 mm	4
Cable entries of up to Ø 11.5 mm	4
Support connectors for each package	5
Halogen-free	•
Art. No.	9462-94
Inner packaging/shipping	- / 10
Price in EUR/100	

FLUSH-MOUNTING

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Ceiling box HWD 30

HWD 30 ceiling box guarantees F30 to F90 fire protection. If a fire starts, the integrated fire-retardant coating immediately generates foam and seals the opening in the ceiling. Even when retrofitted, the HWD30 ceiling box provides protection.

- For F30-F90 fire protection ceilings
- Encasing is not necessary
- For installation of smoke detectors, motion detectors, etc.
- Can be used with fire-protection cover as a ceiling junction box
- Also suitable for retrofitting



Examples of use

The HWD 30 ceiling box also lets you install for example presence or smoke detectors or LED emergency route lighting in fire-protection ceilings without changing the fire resistance class.



Processing instructions



Without mineral wool, the installation corresponds to fire resistance class F30.



If mineral wool in accordance with DIN 4102-17 is used, the installation will withstand a fire up to fire resistance class F60, and with Rockwool/Termarock 100 up to fire resistance class F90.

Allocation table for universal opening cutters



Cavity wall installation for HWD 90 fire protection boxes		Ø setting
NYM cable	3 x 1.5 mm ²	8.5
	5 x 1.5 mm ²	9.5
	3 x 2.5 mm ²	9.5
Support connector	9060-78	Connector

You can create smoke-tight cable entries with the prescribed strain relief easily and to the exact required size with the universal opening cutter (art no. 1085-80).

Installation



Cut installation opening Ø 74 mm using the turbo cutter MULTI 4000 Art. No. 1084-10.



Cut the exact opening for the cable with the KAISER universal opening cutter.



Attach the boxes with tried-and-tested cavity wall technology using KAISER FX4 technology.



The fire-protection cover for F30 ceilings has fire resistance class F30, for F90 ceilings it has fire resistance class F90.

Ceiling box HWD 30



- for non-insulated fire protection ceilings F30 (fire resistance of min. 30 minutes)
- For F30 non-insulated fire-protection ceilings
- For F60 fire-protection ceilings with the addition of mineral insulation materials in compliance with DIN 4102-17
- for F90 fire-protection ceilings with Rockwool/ Termarock 100



Ceiling junction box HWD 30

- for non-insulated fire protection ceilings F30 (fire resistance of min. 30 minutes)
- For F30 non-insulated fire-protection ceilings
- For F60 fire-protection ceilings with the addition of mineral insulation materials in compliance with DIN 4102-17
- for F90 fire-protection ceilings with Rockwool/Termarock 100




Depth	44 mm	54.5 mm
Cut hole Ø	74 mm	74 mm
Fixing screw spacing	60 mm	60 mm
Cable entries of up to Ø 11.5 mm	2	4
Halogen-free	•	•
DIBt approval	Z-19.21-1788	Z-19.21-1788
 / 	• / •	• / •
Art. No.	9463-50	9464-50
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Accessories: Fire-protection cover HWD 30-90, page 209

Fire-protection cover HWD 30-90

- for one-gang boxes/one-gang junction boxes and ceiling boxes HWD 90, HWD B15 and HWD 30
- fire resistance class in accordance with ceiling or wall protection F30-F90 (fire resistance of min. 30 - 90 minutes)
- F90 (fire resistance min. 90 minutes) function in conjunction with the one-gang box/one-gang junction box HWD 90
- F30 (fire resistance min. 30 minutes) function in conjunction with ceiling junction box HWD 30



DIBt approval	Z-19.21-1788
	•
Art. No.	1184-94
Inner packaging/shipping	10 / 100
Price in EUR/100	



HWD B15 cavity wall box for shipbuilding walls

HWD B15 cavity wall box for category B15 partitions reacts to a fire very quickly. The integrated fire-retardant coating intumesces and reliably seals the installation opening. The HWD B15 cavity wall boxes protect against fire and smoke in the fire-protection zone and preserve the B15 function of the fire-protection wall for at least 30 minutes of flames.

- For category B15 partitions
- Encasing is not necessary
- Can be used with fire-protection cover as a junction box
- Also suitable for retrofitting



Certified and designed for fast installation

Expensive and time-consuming encasing, i.e. metal, is avoided with the HWD B15 cavity wall box. The user is guaranteed a certified and fast installation.



Installation in mineral-based walls



In walls with mineral-based materials, working with the cutter (Art. No. 1084-10) is quick and simple. It cuts the required \varnothing 74 mm wall hole and creates the basis for an exact box installation that is flush to the wall.



It can be used for a max. of two or four entries of up to \varnothing 11.5 mm as well as for flame retardant cables in accordance with UL-VO. The KAISER universal opening cutter is used to cut the openings for the cable entry.



Fit the HWDB15 cavity wall box in the wall using FX4 screws.



For board thicknesses from 0.2 to 40 mm.

Installation in metal-covered walls



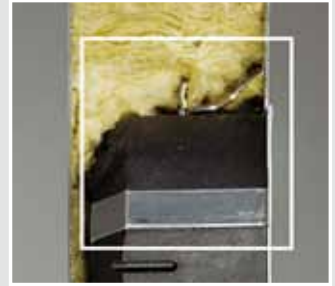
Cut the installation opening in metal plates with the cutter (Art. No. 1083-74).



Open the cable entry with the KAISER universal opening cutter.



Fit the HWDB15 cavity wall box in the wall using FX4 screws.



For thin boarding, one-gang boxes and one-gang junction boxes attached by straps are available for a clamping range of 0.2 mm and higher.

Combinations



It is very easy to combine one-gang junction boxes. After cutting the cutting holes (74 mm) at a standard distance (71 mm), the marked area of the holding ring must be detached.



The fully-insulated through-wiring of one-gang junction boxes with each other is created using the support connector (9060-78). The connection to the one-gang box or between several one-gang boxes is created with the cable described above.



INNOVATION

One-gang box HWD B15

· for shipbuilding walls in the category B 15 interface



For panel thickness	7 - 40 mm	0,2 - 40 mm	7 - 40 mm	0,2 - 40 mm
Depth	44 mm	44 mm	40 mm	40 mm
Cut hole Ø	74 mm	74 mm	74 mm	74 mm
Fixing screw spacing	60 mm	60 mm	60 mm	60 mm
Cable entries of up to Ø 11.5 mm	2	2	2	2
Halogen-free	•	•	•	•
Combination distance through single separation of the pre-embossed edge	71 mm	71 mm	71 mm	71 mm
	• / •	• / •	• / •	• / •
0098 /	• / •	• / •	• / •	• / •
Art. No.	9463-15	9463-14	9461-15	9461-14
Inner packaging/shipping	10 / 100	10 / 100	10 / 100	10 / 100
Price in EUR/100				

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Fire-protection boxes

INNOVATION

One-gang junction box HWD B15

· for shipbuilding walls in the category
B 15 interface



FIRE-PROTECTION



For panel thickness	7 - 40 mm	0,2 - 40 mm
Depth	54.5 mm	54.5 mm
Cut hole Ø	74 mm	74 mm
Fixing screw spacing	60 mm	60 mm
Cable entries of up to Ø 11.5 mm	4	4
Support connectors for each package	5	5
Halogen-free	•	•
Combination distance through single separation of the pre-embossed edge	71 mm	71 mm
/	• / •	• / •
0098 /	• / •	• / •
Art. No.	9464-15	9464-14
Inner packaging/shipping	10 / 100	10 / 100
Price in EUR/100		

Fire protection installation in a building at a glance



Sealing systems in fire-protection walls

Sealings in fire-protection walls are needed when cables or conduits must be fed through walls with a specific fire resistance class. To retain the relevant rating, expert sealing of the opening is needed. KAISER sealings maintain the wall's fire resistance classes (EI30-EI90).



Europe-wide
ETA Certificate



The German Institute for Construction Technology (DIBt) has officially confirmed it: KAISER fire sealings are ideal for professional electrical installations in fire-protection walls. KAISER has received Europe-wide European Technical Approval for the cable sealing system "System LS 90", the conduit sealing system „System RS 90“ and box sealing system Ø 74 mm „System DS 90“. Following successful fire tests, ETA approval for the new box sealing system „System DS 90 / 120 mm“ has been applied for. The fire sealings are certified for installation in drywalls, solid masonry and concrete construction walls. Non-destructive retrofitting is easy. Each of the tested products receives the wall's fire resistance class and does not release any hazardous materials. This means that KAISER fire sealings allow fast, professional and - in every respect - secure sealing in fire-protection walls.



- Entries and feed-throughs in drywalls in accordance with DIN EN 1364-1
- Feed-throughs in solid masonry walls in accordance with DIN 1053
- Feed-throughs in concrete walls in accordance with DIN 1045



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE



Cable sealing system LS 90, conduit sealing system RS 90

Pipe and fire-retardant systems for safe closure of passages and entrances in fire-protection walls. The certified retardants are quick and easy to install and can even be superimposed on cables and pipes retrospectively.

- Secure, visible, certified fire sealings
- For wall feed-throughs and entries
- Without filling and smoothing
- Automatic sealing of the joints
- For cables from \varnothing 5 - 15 mm
- For conduits M16 - M25



Europe-wide
ETA Certificate



Populating the sealing system



The cable sealing system LS 90 is suitable for all cable cross-sections from 5 – 15 mm (up to 5×2.5^2).



The conduit sealing system RS 90 can accommodate the following conduit sizes: M16, M20 and M25.



The conduit sealing system RS 90 can also be used as a reserve seal. For this purpose, the conduits must be sealed with KAISER sealing plugs.



Conduit sealing system RS 90 with combination entry with M16, M20 and M25 conduits.

Examples of applications for cable sealing system LS 90



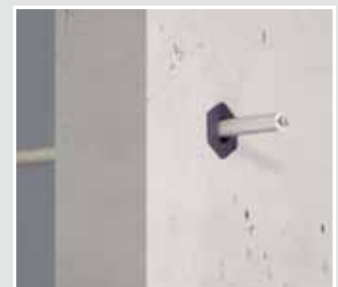
Wall feed-through in plasterboard fire-protection wall.



Wall entry in plasterboard fire-protection wall.



Wall feed-through in a sand-lime brick fire-protection wall.



Wall feed-through in concrete fire-protection wall.

Technical information

Cable and conduit sealing systems provide tested safety for cavity wall, masonry or concrete constructions.



The installation openings can be made in solid walls using conventional drills (20 mm or 32 mm) or in plasterboard walls using a drill or cutter 1082-10 (35 mm).



The cable and conduit sealing systems are manufactured from a permanently durable and flexible material.



By opening the cable and conduit sealing, it can easily be placed around the cable or conduit.



KAISER seals ensure room separation without the need for additional filler.

Installation of cable sealing system LS 90 in cavity walls



Make an installation opening \varnothing 20 mm using a cutter (e.g. KAISER hardened metal cutter 1088-06) or drill.



To install, open the sealing sideways and slide it over the cable.



Press both sides of the sealing into each opening.



Three cable sealings can be arranged vertically or horizontally to form a group with a centre distance of 50 mm.

Mounting cable sealing system LS 90 in solid walls



Make an installation opening using a \varnothing 20 mm drill.



Open the side of the cable sealing system LS 90, slide it over the cable and press into the opening.



Attach the identification tag.



Officially required identification of the cable sealing.

Sealing systems in fire-protection walls

INNOVATION

Cable sealing system LS 90

- for fire-protection walls EI 30 - EI 90
- for wall entries and feed-throughs
- without use of fire-protection foam or putty
- made of intumescent material
- automatic room separation of the installation opening
- unlimited building material shelf life



Min. wall thickness	100 mm
Installation opening (cavity wall)	20 mm
Installation opening (masonry)	20 mm
for cables	5 - 15 mm
ETA approval	ETA-11/0188
Art. No.	9459-01
Inner packaging/shipping	10 / 100
Price in EUR/100	

Accessories: Sealing identification tag, page 224

Examples of applications for conduit sealing system RS 90



Wall feed-through in plaster-board fire-protection wall.



Wall entry with M16–M25 combination entry, in plaster-board fire-protection wall with M25 conduit.



Wall feed-through in sand-lime brick fire-protection wall.



Wall feed-through in concrete fire-protection wall.

Installation of conduit sealing system RS 90 in cavity walls.



Cut a 35 mm installation opening using e.g. a KAISER Multi 4000 cutter (1082-10).



To install, open the sealing sideways and slide over the conduit.



Press both sides of the sealing into each opening.



Three conduit sealings can be arranged vertically or horizontally to form a group with a centre distance of 50 mm.

Installation of conduit sealing system RSS 90 in solid walls



Make an installation opening using a Ø 32 mm drill.



Remove the strap for mounting in masonry (only when installing a conduit sealing in a masonry wall).



After installing the sealing, apply the identification tag.



The sealings can be used in masonry and concrete walls.

INNOVATION

Conduit sealing system RS 90

- for fire-protection walls EI 30 - EI 90
- for wall entries and feed-throughs
- without use of fire-protection foam or putty
- made of intumescent material
- automatic room separation of the installation opening
- unlimited building material shelf life



Min. wall thickness	100 mm
Installation opening (cavity wall)	35 mm
Installation opening (masonry)	32 mm
for conduits	M16 - M25
ETA approval	ETA-11/0188
Art. No.	9459-02
Inner packaging/shipping	10 / 100
Price in EUR/100	

Accessories: Sealing identification tag, page 224



Box sealing system DS 90

The box sealing system DS 90 for cables, cable bundles and conduits. The fire-proof and smoke-proof box sealing is quick and easy to install and can also be retrofitted on cables and conduits. The easy-to-fit product offers certified safety, and ensures the fire resistance class of the wall (EI30-EI90).

- Secure, visible, certified fire sealings
- For wall feed-throughs and entries
- Automatic sealing of the joints and gaps between cables - no filling and smoothing
- Non-destructive retrofitting
- For cable bundles or individual installation conduits



Europe-wide
ETA Certificate



Populating the sealing system



The box sealing system DS 90 provides space for single cables and bundles up to full population.



By choosing individual configurations, power and communication cables can be separated into groups.



The box sealing system DS 90 can be used with all standard sheathed cables currently found in Europe.



Spare sealing, conduits up to M40 and combination of NYM cables.

Examples of use



Use the two-part box sealing system DS 90 to create wall entries and feed-throughs.



Horizontal and vertical arrangement of up to three box sealings with a centre distance of 91 mm is permissible.



The box sealing system DS 90 can also be used as a spare seal (empty).



The sealing can accommodate conduits of up to M40.

Note

Cable population of the box sealing system DS 90 with all sheathed cable types recognised in Europe e.g. installation cables, data cables, telecommunication cables or fibre optic cables, as wiring bundles or as individual cables. Wiring bundles can be populated up to $\varnothing \leq 40$ mm, with a maximum diameter of ≤ 15 mm for a single cable. Single cables can be used up to $\varnothing \leq 21$ mm.

Technical information



For use as a spare sealing (empty) for future installations.



Self-explanatory installation based on the tried-and-tested cavity wall box principle.



Easy insertion of the sealing cylinder into the installation opening.



Automatic room separation - no gaps or filling of joints.

Non-destructive retrofitting of individual cables



Loosen and open the sealing element with a 1/4-turn anti-clockwise.



Open the sealing element and remove it.



Insert the new cables.



Place the sealing element around the cable, close it and secure it with a 1/4-turn clockwise.

Installation

The box sealing system DS 90 consists of two parts which easily fit together.



Cut an installation opening using a Ø 74 mm cutter (e.g. Multi 4000: 1084-10).



Place the two-part sealing cylinder around the cables and press together.



Press the sealing cylinder into the installation opening.



Fasten by tightening the screws (same procedure as for cavity wall boxes).



Place the sealing element around the cables and close it.



Place the sealing element on the seal cylinder and secure it with a 1/4-turn (bayonet fitting).



After installing the sealing, apply the identification tag.



This ensures sealing and the necessary room separation.

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Sealing systems in fire-protection walls

Installation of box sealing system DS 90 in masonry



Cut an installation opening depending on wall thickness with an 82 mm diamond grinding head or with a core drill.



Press the sealing cylinder into the installation opening with plaster, mortar or quick cement and feed the cable through.



Place the sealing element on the seal cylinder and secure it with a 1/4-turn (bayonet fitting).



Horizontal and vertical arrangement of up to three box sealings with a centre distance of 91 mm is permissible.

Installation of box sealing system DS 90 in concrete walls



INNOVATION

Box sealing system DS 90

- for fire-protection walls EI 30 - EI 90
- for wall entries and feed-throughs
- attachment using tried-and-tested FX4 metal plate screws
- with integrated sealing inserts
- ensures smoke-side room separation (seals against cold smoke)
- unlimited building material shelf life



Cut hole Ø	74 mm
Min. wall thickness	100 mm
Cable entries up to max. 5 x 2.5 mm ²	6
ETA approval	ETA-11/0188
Art. No.	9459-03
Inner packaging/shipping	10 / 100
Price in EUR/100	

Accessories: Sealing identification tag, page 224

Box sealing system DS 90 / 120 mm

The new box sealing system DS 90 / 120 mm covers an additional range of applications in building fire protection. The increased diameter makes it possible to use a larger number of cables and electrical installation conduits and also greater diameters. With this system, it is also possible to mix the installation of conduits and cables. In addition, full population, as with the DS 90, allows use of the system in all fields of building technology. Because no additional materials are used, non-destructive retrofitting is also possible. The tried-and-tested screw fixing permits clean, safe and secure installation.

- Secure, visible, certified fire sealings
- Seals wall feed-throughs
- Automatic sealing of the joints and gaps between cables - no filling and smoothing
- Non-destructive retrofitting
- Also for mixed population of bundles of cables and conduits



Examples of use



Can also be used as a reserve sealing.



Full population with sheathed cables up to Ø 29 mm.



Mixing of cables and conduits.



Horizontal alignment is possible with a distance of 50 mm.

Technical information DS 90 / 120 mm



Lamellae arranged on the inside of the sealing cylinder ensure fast closing if a fire breaks out.



The sealing element with integrated cooling ribs guarantees clean cable and conduit routing.



Easy insertion of the sealing cylinder into the installation opening.



Automatic room separation - no gaps or filling of joints.

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Sealing systems in fire-protection walls

Population of box sealing system DS 90 / 120 mm



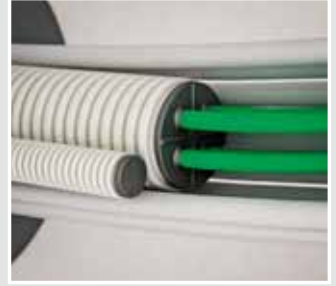
Mixed population of sheathed cables and conduits.



Can also be used as a reserve sealing.



Full population with sheathed cables up to Ø 29 mm and conduits up to M63.



Installation conduits can be fitted as reserve conduits.

Installation

The box sealing system DS 90 / 120 consists of two parts which easily fit together.



Cut installation opening with a cutter Ø 120 mm (e.g. bi-metal cutter 1082-20).



Press the sealing cylinder into the installation opening.



Fix sealing cylinder by tightening the screws (same procedure as with cavity wall boxes).



Feed sheathed cables and conduits through the sealing cylinder.



Close conduit ends smoke-tight (e.g. with KAISER sealing plugs).



Fit the two-part sealing element round the bundle, close it and connect it to the sealing cylinder by means of the bayonet fitting.



The sealing and the necessary room separation can also be used as a reserve sealing.



Horizontal alignment of the sealings is possible with a clearance of 50 mm.

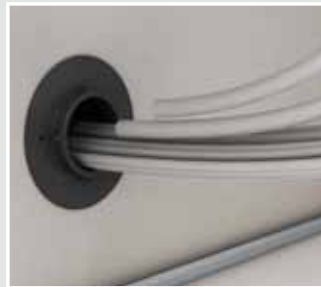
Non-destructive retrofitting of single cables and conduits



Loosen and open the sealing element with a 1/4-turn anti-clockwise.



Open the sealing element and remove it.



Insert the new cables and conduits.



Fit the sealing element and secure with a 1/4 turn to the right.

Installation of box sealing system DS 90 / 120 mm in masonry



Cut installation opening - depending on wall thickness - with a core drill 150 mm.



Using plaster, mortar or fast cement, press the sealing cylinder into the installation opening and feed the cables or conduits through.



The sealing collar ensures tight room separation, even when openings are not clean, and prevents plaster, mortar or fast cement from being pressed out.



Place the sealing element on the sealing cylinder and secure it with a 1/4-turn (bayonet fitting).

Installation of box sealing system DS 90 / 120 mm in concrete walls



Table of max. external diameter of sheathed cables (NYM cables)

The table shows examples of cables which can be used on the basis of the maximum permitted diameter. The main factor is the minimum stated standard diameter acc. to DIN VDE 0250-204.

5 x 6 ²	3 x 10 ²	5 x 10 ²	4 x 16 ²	5 x 25 ²	4 x 35 ²	7 x 2,5 ²
Ø 14,5 - 17,5 mm	Ø 14,7 - 17,7 mm	Ø 17,7 - 21,3 mm	Ø 19,0 - 23,0 mm	Ø 25,7 - 31,1 mm	Ø 25,7 - 31,1 mm	Ø 12,6 - 15,2 mm

Two box sealing systems DS 90 / 120 are required feed-throughs in a fire-protection wall.

INNOVATION

Box sealing system DS 90 / 120 mm

- for fire-protection walls EI 30 - EI 90
- attachment using tried-and-tested FX4 metal plate screws
- with integrated sealing inserts
- ensures smoke-side room separation (seals against cold smoke)
- unlimited building material shelf life



FIRE-PROTECTION



Cut hole Ø	120 mm
Min. wall thickness	100 mm
ETA approval	applied for
Art. No.	9459-04
Inner packaging/shipping	- / 4
Price in EUR/100	

Sealing systems in fire-protection walls

INNOVATION

Sealing identification tag

- universal seal identification tag
- for all KAISER sealings
- can be filled out
- in plastic, with 2 x 4.5 mm drill holes



FIRE-PROTECTION

German	•	•
English	•	•
French	•	•
Dutch	-	•
Italian	•	-
Art. No.	9473-91	9473-92
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

INNOVATION

Sealing plugs 16-20

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic



Sealing plug	M16	M20
DIN EN conduit Ø	16 mm	20 mm
Art. No.	1040-16	1040-20
Inner packaging/shipping	25 / 100	25 / 100
Price in EUR/100		

INNOVATION

Sealing plugs 25-40

- for sealing electrical installation conduits
- ECON® technology for easy cable entry
- permanently flexible plastic



Sealing plug	M25	M32	M40
DIN EN conduit Ø	25 mm	32 mm	40 mm
Art. No.	1040-25	1040-32	1040-40
Inner packaging/shipping	25 / 100	25 / 50	- / 25
Price in EUR/100			

FlamoX® system for hollow ceilings - fire protection class F30

Housings for LV/HV and energy-saving luminaires and loudspeakers

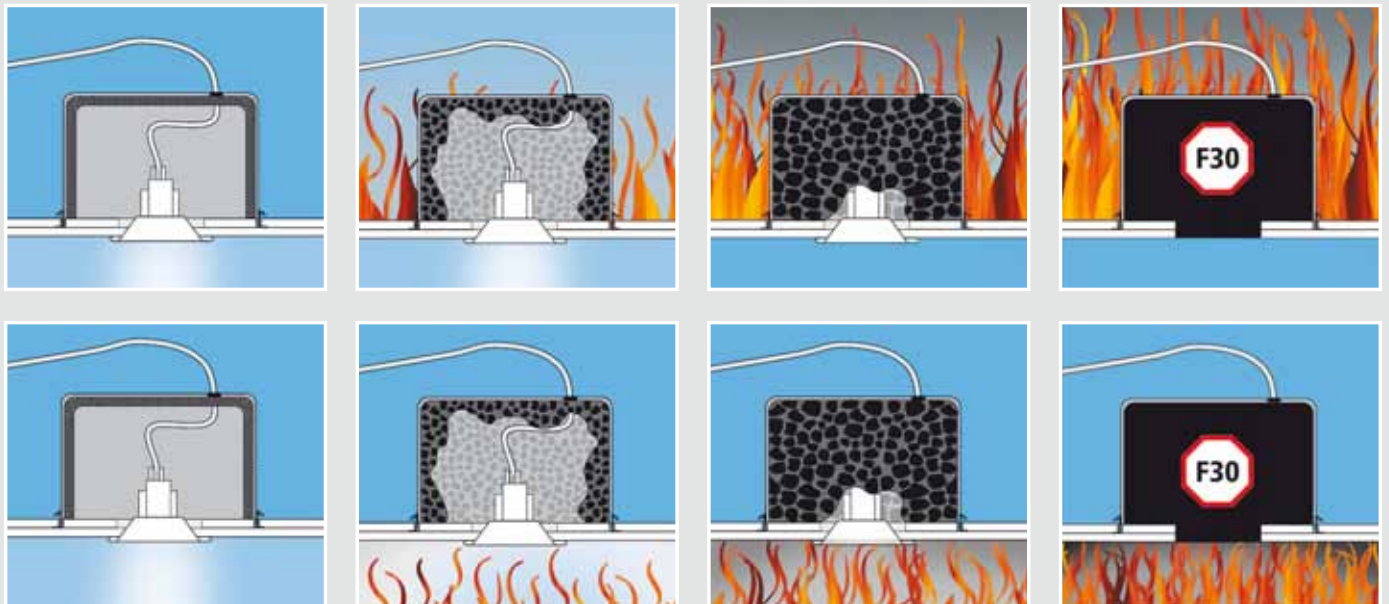
FlamoX®-S 30 H installation housing for suspended fire protection ceilings F30

FlamoX®-S30 H for installing low-voltage and high-voltage halogen luminaires, loudspeakers and other components. The integrated fire-retardant coating maintains fire protection class F30.

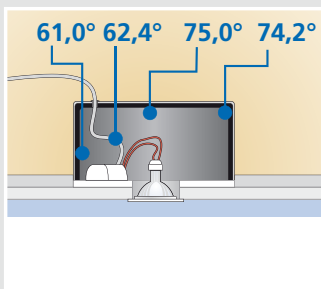
- Fire protection housing system for luminaires and loudspeakers
- For single or double layer suspended F30 fire protection hollow ceilings of construction type I, II, III (to DIN 4102 T.4 and/or DIN EN 1364-2/DIN EN1365-2)
- Fire resistance from above and below
- Intelligent, automatic sealing
- Smokeproof and halogen-free
- For new build or as a fire protection upgrade in existing buildings



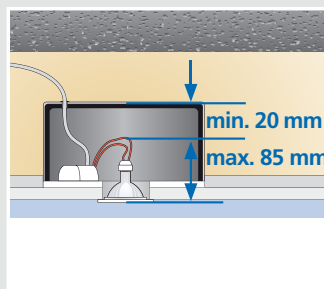
AFS (Active-Fire-Stop) technology activates the fire-retardant coating immediately in case of fire



Temperature profile, luminaire selection



Temperature profile: halogen, low-voltage/high-voltage
Room temperature (23°C), 35 W cool beam



Luminaire selection: halogen, low-voltage/high-voltage

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS



TOOLS

SERVICE

FlamoX® system for hollow ceilings - fire protection class F30

Housings for LV/HV and energy-saving luminaires and loudspeakers

Technical processing instructions/standards

- Exit openings max. Ø 100 mm
- use only certified (DIN VDE 0711/ EN 60598) luminaires or those marked  or .



Information

FlamoX® housings are approved luminaire sealings for low-voltage/high-voltage halogen luminaires, energy-saving lamps or loudspeakers in single or double layer suspended room-wide F30 ceilings, made from various materials with or without insulation. These standardised housings can be installed in single or double layer independent suspended ceilings to DIN 4102 T. 4 and/or DIN EN 1364-2 — fire resistance from above and below. The housings can also be installed in type I, II or III suspended ceilings to DIN 4102 T. 4 and/or DIN EN 1365-2 — fire resistance from below. Both ceiling types have been tested to DIN 4102-2 and/or DIN EN 1363-1. These housings can be used in both types of ceiling in new buildings or as a fire protection upgrade in existing buildings. All FlamoX® products are DIBT-approved (German Institute of Building Technology). In addition, all FlamoX® products are approved by the Provincial Government of Vienna (MA 64-BA 25/2004) and the Centrum voor Brandveiligheid in the Netherlands (2006-CVB-R0118). These approval certificates are available individually on request. Further European certificates are pending.

Delivery condition

In the case of FlamoX®-S30 H, the sealing is glued in using fire-protection putty (Art no. 9400-05). Spring element and/or fixing screws for inserting into the ceiling cut-outs are supplied as standard. Every housing comes with an approval certificate, installation instructions and a label for the sub-distributor.



FlamoX®-S 30 H installation housing



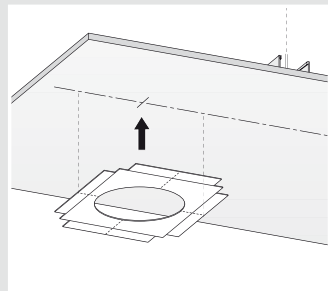
1 Edge joint | 2 Sealing bead

FlamoX® system for hollow ceilings - fire protection class F30

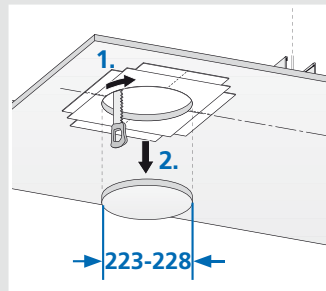
Housings for LV/HV and energy-saving luminaires and loudspeakers

Example of FlamoX-S 30H installation in a two-layer F30 fire protection ceiling (new building)

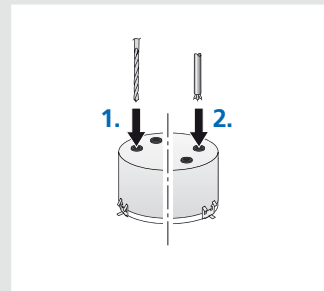
- A = Primary cable
- B = Secondary cable
- C = SELV electronic transformer max. 105 VA



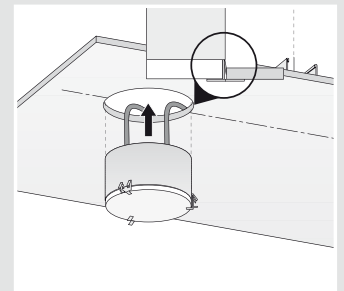
Mark the housing position on the first boarding.



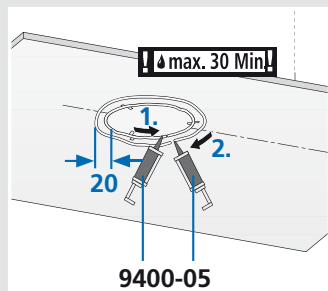
Cut out the ceiling cut-out.



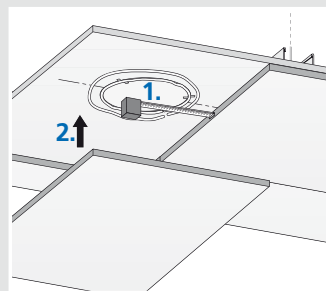
Insert the connection cables. max. 5x2.5² Ø 10.5; 3x1.5² Ø 7.5



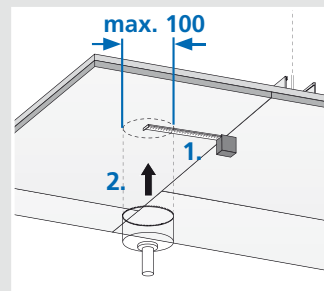
Insert the wired-up housing.



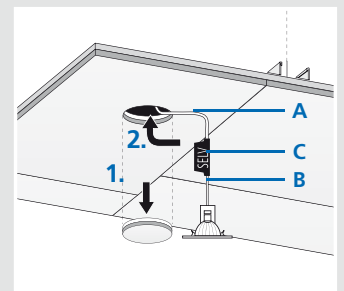
Apply KAISER fire-protection putty to edge joints and sealing bead.



Measure housing position and insert the second boarding layer.



Mark and cut the installation opening.



Connect and insert the luminaire or loudspeaker. max. 50 W Alu, max. 35 W cool beam

FlamoX® housing for hollow ceilings with fire protection class F30

- for LV/HV halogen luminaires 35 W Cool-Beam or 50 W Alu
- made from galvanised plate with fire-retardant coating
- for 1 electronic safety transformer up to max. 105 VA rounded shape (PC mouse shape)
- exit opening with Ø of up to 100 mm in square or rectangular cut-out, max. diagonal: 100 mm
- luminaire and loudspeaker installation height max. 85 mm
- smoke-tight, halogen-free



Exit opening Ø	≤ 100 mm
Depth	125 mm
Diameter	217 mm
DIBt approval	Z-19.15-1582
ABP no.	P-MPA-E.04-033

Art. No. 9430-01

Inner packaging/shipping - / 1

Price in EUR/100

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

FlamoX® system for hollow ceilings - fire protection class F30

Housings for LV/HV and energy-saving luminaires and loudspeakers

Note

Caution: When using the FlamoX® housings, it is absolutely essential to use the KAISER fire-protection putty (Art. No. 9400-05) as adhesive. Otherwise, the approval certificate will become invalid.

FlamoX® fire-protection putty

- fire-retardant material
- for filling joints and gluing board materials
- type 9400
- max. working time 30 mins.
- can be warehoused for up to 12 months



DIBt approval

Z-19.11-1583



•

Art. No.

9400-05

Inner packaging/shipping

- / 20

Price in EUR/100

FlamoX® replacement mineral fibreboard

- Replacement mineral fibreboard for S30 H fire protection housing (Art. No. 9430-01)



Art. No.

9400-02

Inner packaging/shipping

- / 10

Price in EUR/100

FlamoX® replacement spring

- replacement spring for S30 H fire protection housing (Art. No. 9430-01)
- clamping range for sheet thickness of 12.5 mm and higher



Art. No.

9400-03

Inner packaging/shipping

- / 10

Price in EUR/100

FlamoX® replacement wiring cable entry

- cable entry for smoke-tight cable entry
- Halogen-free



Art. No.

9400-04

Inner packaging/shipping

- / 10

Price in EUR/100

FlamoX®-S 30 E installation housing

FlamoX®-S30 E is suitable for the installation of downlights with compact fluorescent lights and for loudspeakers. The integrated fire-retardant coating maintains fire protection class F30.

- Fire protection housing system for luminaires and loudspeakers
- For single or double layer suspended F30 fire protection hollow ceilings of construction type I, II, III (to DIN 4102 T.4 and/or DIN EN 1364-2/DIN EN1365-2)
- Fire resistance from above and below
- Intelligent, automatic sealing
- Smokeproof and halogen-free
- For new build or as a fire protection upgrade in existing buildings



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

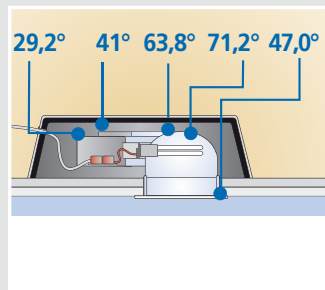
EARTHING

CABLE GLANDS

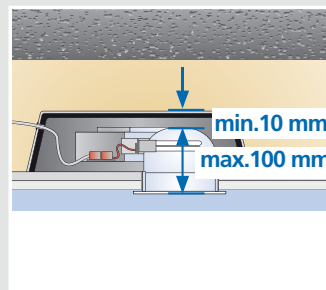
TOOLS

SERVICE

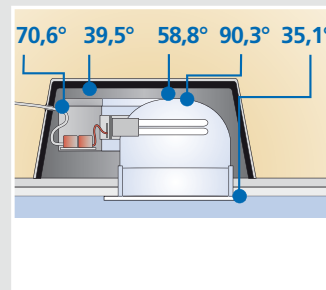
Temperature profile, luminaire selection



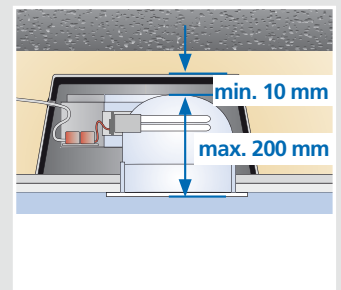
Temperature profile:
TC downlight
Room temperature (23°C),
52 W TC



Luminaire selection:
TC downlight



Temperature profile:
TC downlight
Room temperature (23°C),
52 W TC



Luminaire selection:
TC downlight

Technical processing instructions/standards

- Exit openings max. Ø 240 mm
- Use only certified (DIN VDE 0711/ EN 60598) luminaires or those marked ∇ or $\nabla\nabla$.
- Accepts low-loss (VVG) and electronic (EVG) ballast devices.
- max. installation dimension AL 290 mm

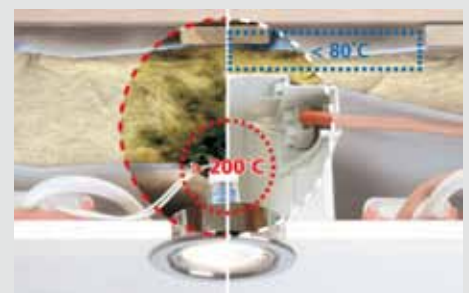


Official approval

Provincial Government of Vienna (MA 64-BA 25/2004), Netherlands Centrum voor Brandveiligheid (2006-CVB-R0118)

Preventive fire protection in insulated hollow ceilings. ThermoX® installation housing.

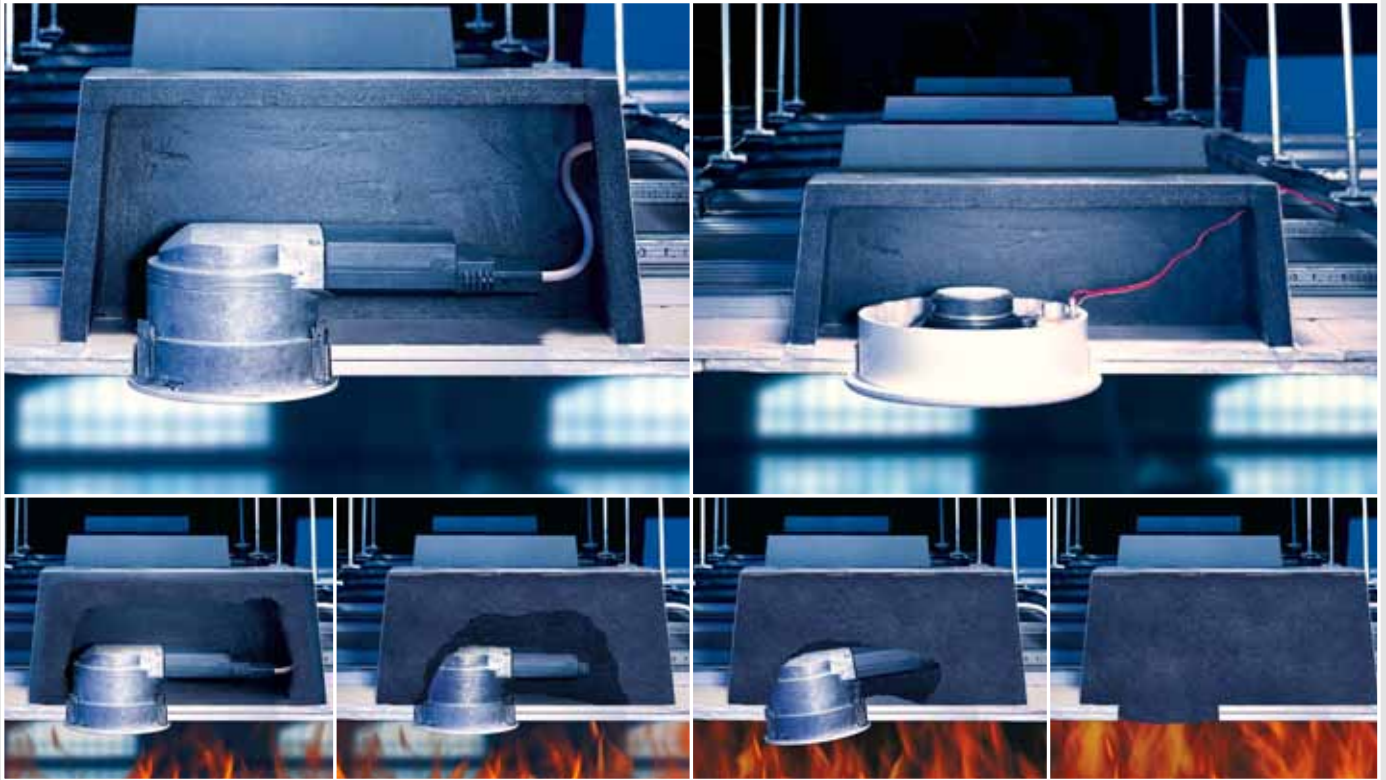
For product information, see Installation housings



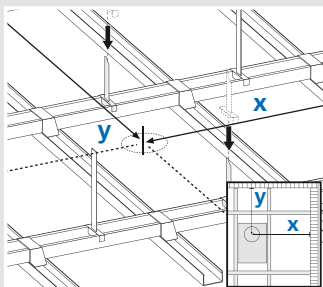
FlamoX® system for hollow ceilings - fire protection class F30

Housings for LV/HV and energy-saving luminaires and loudspeakers

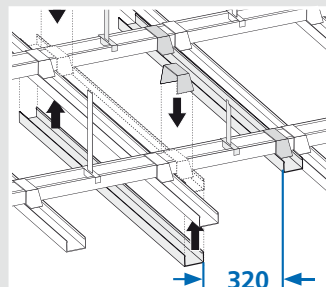
FlamoX®-S 30 E installation housing



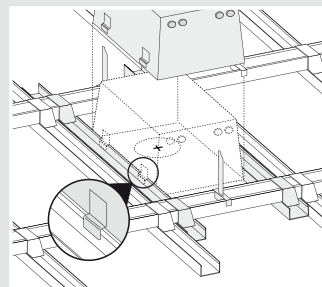
FlamoX®-S30 E installation example in a double-layer F30 fire protection ceiling



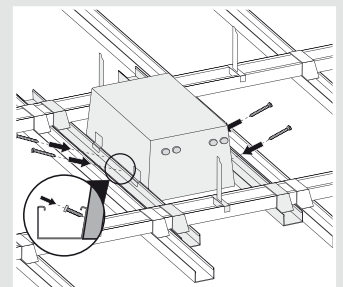
Mark the ceiling cut-out.



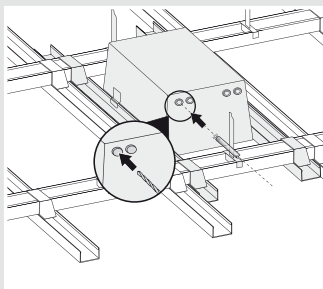
Place the auxiliary frame construction in position.



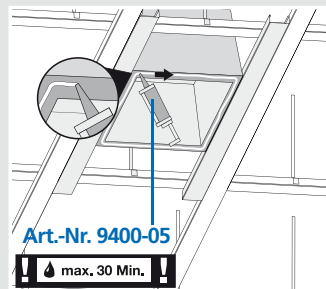
Insert the FlamoX® housing.



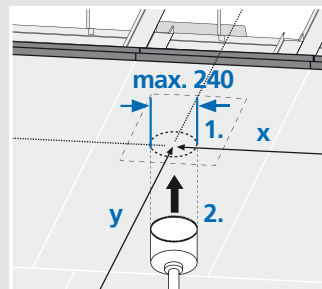
Screw the housing to the profile.



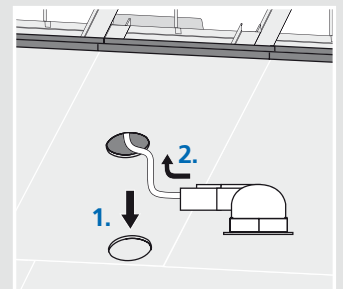
Insert the connection cables.
max. $5 \times 2.5^2 \text{ } \varnothing 10.5$; $3 \times 1.5^2 \text{ } \varnothing 7.5$



Apply KAISER fire-protection putty to the lower edge.
Art.-Nr. 9400-05
max. 30 Min.



Mark and cut the installation opening.



Connect and insert the luminaire or loudspeaker.

Note

The installation of luminaires, loudspeakers etc. depends on the installation dimensions (diameter and height) as specified by their manufacturer. For panel thicknesses of 25 mm and higher and fitted devices with asymmetric equipment carrier, always ensure that the swivel radius and the clamping range are maintained.

FlamoX® system for hollow ceilings - fire protection class F30

Housings for LV/HV and energy-saving luminaires and loudspeakers

FlamoX® housing for hollow ceilings with fire protection class F30

- for energy-saving luminaires, lamp wattage max. 52 W
- made from galvanised plate with fire-retardant coating
- exit opening with Ø of up to 240 mm in square or rectangular cut-out, max. diagonal: 240 mm
- smoke-tight, halogen-free



Length x Width x Depth	500 x 320 x 220 mm	500 x 320 x 120 mm
Exit opening Ø	<= 240 mm	<= 240 mm
Max. luminaire or loudspeaker installation height	200 mm	100 mm
DIBt approval	Z-19.15-1623	Z-19.15-1623
ABP no.	P-MPA-E.04-033	P-MPA-E.04-033
	•	•
Art. No.	9435-01	9435-02
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Note

Caution: When using the FlamoX® housings, it is absolutely essential to use the KAISER fire-protection putty (Art. No. 9400-05) as adhesive. Otherwise, the approval certificate will become invalid.

FlamoX® fire-protection putty

- fire-retardant material
- for filling joints and gluing board materials
- type 9400
- max. working time 30 mins.
- can be warehoused for up to 12 months



DIBt approval	Z-19.11-1583
	•
Art. No.	9400-05
Inner packaging/shipping	- / 20
Price in EUR/100	

FlamoX® replacement wiring cable entry

- cable entry for smoke-tight cable entry
- Halogen-free



Art. No.	9400-04
Inner packaging/shipping	- / 10
Price in EUR/100	

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE



The most important advantages at a glance:

- Basic product for secure equipotential bonding
- Customary KAISER quality
- Satisfies the market's high standards and everyday work on building sites
- Easy retrofitting

Earthing | Product lines



Potential equalisation casing

p. 233

Earthing clamps

p. 235

Potential equalisation casing

Potential equalisation casing for additional potential equalisation in spaces with specific hazards in accordance with DIN VDE 0100, Part 540 or for use as the main potential equalisation point in accordance with DIN VDE, Part 410.

- For rooms with baths or showers
- For rooms used for medical purposes
- With potential equalisation rail for use as the main potential equalisation point



Technical information


DIN VDE 0100, Part 410 regulates the potential equalisation required in buildings. In rooms and areas with more serious hazards, additional local potential equalisation must be provided. Our potential equalisation casing is available for this application. The terminal pole for the potential equalisation conductor must comply with the requirements specified in DIN VDE 0609 (DIN EN 60999).



Potential equalisation casing 10² and 16²

- for bathrooms or similar
- with potential equalisation rail, protected against corrosion
- including end cover



Length x Width x Depth	107 x 107 x 57 mm	238 x 208 x 68 mm
Cables up to 16 ² , single and stranded wire	-	7
Circular conductors Ø 8–10 mm	-	1
Circular conductor 6–16 ² , also uncut	1	-
Cables 1.5–10 ² (for bathrooms or similar)	6	-
Flat strip up to 30 mm wide	-	1
	-	•
Art. No.	1095-73	1097-75
Inner packaging/shipping	- / 10	- / 1
Price in EUR/100		

Potential equalisation casing

Potential equalisation casing 10²

- for bathrooms or similar
- with potential equalisation rail, protected against corrosion
- with 4 screw domes
- with 2 x 15 mm cover screws
- including end cover




Length x Width x Depth	107 x 107 x 53 mm
Cut hole Ø	4 x 35 mm
Connections for 6–16 ² circular conductors (also uncut)	1
Connections for 1.5–10 ² cables	6
Art. No.	9195-73
Inner packaging/shipping	- / 10
Price in EUR/100	

Potential equalisation casing 10² and 16²

- with potential equalisation rail, protected against corrosion
- for bathrooms or similar



Length x Width x Depth	250 x 220 x 82 mm	128 x 128 x 80 mm
Cables 1.5–10 ²	-	6
Cables up to 16 ² , single and stranded wire	7	-
Circular conductors Ø 8–10 mm	1	-
Circular conductor 6–16 ²	-	1
Flat strip up to 30 mm wide	1	-
Entry fields	8	8
possible DIN EN conduit sizes per entry field: 4 x 16 mm Ø, 3 x 20 mm Ø, 1 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	-	•
possible DIN EN conduit sizes per entry field: 6 x 16 mm Ø, 3 x 20 mm Ø, 2 x 25 mm Ø, 1 x 32 mm Ø, 1 x 40 mm Ø	•	-
	•	-
Art. No.	1297-75	1295-73
Inner packaging/shipping	- / 1	- / 10
Price in EUR/100		

Earthing clamps



Earthing clamps made from tin-plated brass ensure safe connection to metallic conduits for water and heating supplies and connect these to the main potential equalisation point.

- For connecting metallic conduits to the main potential equalisation point
- Durable contact between conduit and potential equalisation conductor
- Two contact screws provide large conductor contact surface
- Easy connection of multiple adjacent conduits to the potential equalisation point without interrupting the potential equalisation conductor
- Potential equalisation is not interrupted when removing a conduit

Processing instructions



Easy installation of potential equalisation possible without interrupting the potential equalisation conductor.



Simply strip the wires, insert at the side and tighten the contact screws.



Easy connection of multiple adjacent conduits to the potential equalisation point without interrupting the potential equalisation conductor.



The double clamp for connecting two potential equalisation conductors also features a large conductor contact surface provided by two contact screws.

Single-terminal earthing clamp, open on one side

- For 4 to 50 mm² cables or circular conductors up to Ø 8 mm
- Low contact resistance due to two terminals
- Tinned brass



Nominal size	3/8" - 3/4"	1" - 1 1/4"	1 1/2" - 2"	2 1/2" - 3"
Diameter of tube in mm	16.6-26.5	33.5-41.9	47.9-59.6	75.2-87.9
Art. No.	9605	9610	9620	9630
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10
Price in EUR/100				

Earthing clamp with double clamp, open on one side

- For two 4 to 50 mm² cables or two circular conductors up to Ø 8 mm
- Low contact resistance due to two terminals
- Tinned brass



Nominal size	1" - 1 1/4"	1 1/2" - 2"
Diameter of tube in mm	33.5-41.9	47.9-59.6
Art. No.	9610.02	9620.02
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE



The most important advantages at a glance:

- Superb quality and practical applications
- Perfectly matched range of products for everyday trade needs
- Complete full range with more than 3,500 products in our special "Cable glands" catalogue or at www.kaiser-elektro.de
- Implementation of individual customer solutions
- Tried and tested - millions of times



More information at
www.kaiser-elektro.de



Complete
"Cable glands 3.0" catalogue

Cable glands Product lines



SYNTEC® synthetic cable gland	p. 238
SYNTEC® brass cable gland	p. 242
Counternut synthetic and brass with flange	p. 244
Synthetic and brass closing screws	p. 245
MontaX® mounting plate	p. 248
MontaX® mounting angle	p. 249



Syntec® cable glands with lamellar technology

	Connection threads		
	metric short	metric long	
Synthetic one-piece sealing ring 	p. 239	p. 239	
Synthetic with anti-kink one-piece sealing ring 	p. 241	see AGRO Cable glands catalogue 3.0	
Brass one-piece sealing ring 	p. 243	p. 243	

Accessories for Syntec® cable glands

	Counternuts	Closing screws	
Synthetic 	p. 244		p. 245
Brass 	p. 244		p. 245



New: Progress® EMC easyCONNECT EMC cable gland for interference-free installation.



FLUSH-MOUNTING

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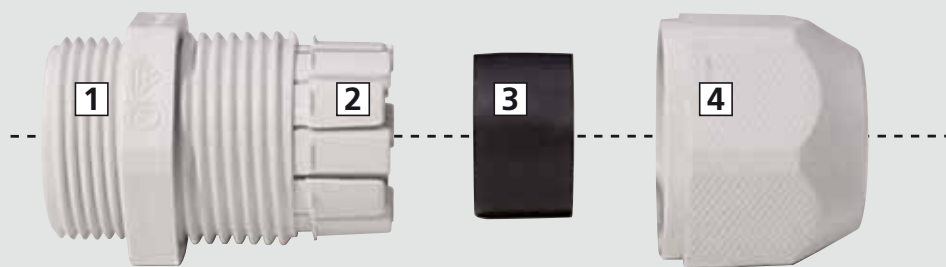
SERVICE



SYNTEC® synthetic cable gland

SYNTEC® synthetic cable gland with innovative lamellar technology including movable jointed lamellae and compression nuts for everyday use (cannot be overtightened).

- Made from high-quality, weather-resistant polyamide
- With short and long metric entry thread
- Standard/reducing sealing rings
- With environmentally resistant TPE sealing ring
- High level of strain relief and simultaneous distortion protection.
- Three colours (light grey, silver grey, black) in stock
- Good chemical resistance
- Protection class IP68, waterproof
- Tested acc. to EN 50262



1 Lower part | 2 Lamellae | 3 Sealing ring | 4 Push-down nut

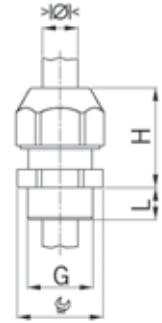
The nut's large-area hexagon always provides a safe and firm grip when turned by hand and tightened with the tool.



Synthetic cable glands Syntec® with lamellar technology

Short entry thread metric

Material: Polyamide PA 6
 Properties: Halogen-free
 Sealing ring: TPE or CR (Neoprene)
 Tested acc. to: EN 50262
 Temperature range: -30°C / +100°C
 Protection class: IP 68



SYNTEC



Light grey RAL 7035
 One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	2.5	6.5	15	21	6	1555.12.06	100
M16x1.5	2.0	6.0	19	25	8	1555.17.06	50
M16x1.5	4.5	10.0	19	25	8	1555.17.10	50
M20x1.5	3.5	8.0	24	29	9	1555.20.08	50
M20x1.5	7.0	13.0	24	29	9	1555.20.13	50
M25x1.5	5.0	11.0	29	38	10	1555.25.11	25
M25x1.5	10.0	17.0	29	38	10	1555.25.17	25
M32x1.5	17.0	25.0	42	36	10	1555.32.25	20



SYNTEC



Dark grey RAL 7001
 One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	2.5	6.5	15	21	6	1556.12.06	100
M16x1.5	2.0	6.0	19	25	8	1556.17.06	50
M16x1.5	4.5	10.0	19	25	8	1556.17.10	50
M20x1.5	3.5	8.0	24	29	9	1556.20.08	50
M20x1.5	7.0	13.0	24	29	9	1556.20.13	50
M25x1.5	5.0	11.0	29	38	10	1556.25.11	25
M25x1.5	10.0	17.0	29	38	10	1556.25.17	25
M32x1.5	17.0	25.0	42	36	10	1556.32.25	20



SYNTEC



Black RAL 9005
 One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	2.5	6.5	15	21	6	1545.12.06	100
M16x1.5	2.0	6.0	19	25	8	1545.17.06	50
M16x1.5	4.5	10.0	19	25	8	1545.17.10	50
M20x1.5	3.5	8.0	24	29	9	1545.20.08	50
M20x1.5	7.0	13.0	24	29	9	1545.20.13	50
M25x1.5	5.0	11.0	29	38	10	1545.25.11	25
M25x1.5	10.0	17.0	29	38	10	1545.25.17	25
M32x1.5	17.0	25.0	42	36	10	1545.32.25	20



FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

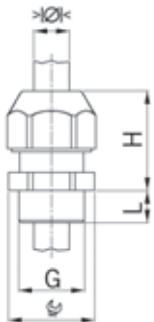
CABLE GLANDS

TOOLS

SERVICE

Synthetic cable glands Syntec® with lamellar technology

Long entry thread metric



Material: Polyamide PA 6
 Properties: Halogen-free
 Sealing ring: TPE or CR (Neoprene)
 Tested acc. to: EN 50262
 Temperature range: -30°C / +100°C
 Protection class: IP 68



SYNTEC

Light grey RAL 7035
 One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.		Price in EUR/100
M12x1.5	2.5	6.5	15	21	12	1555.12.1.06	100	
M16x1.5	2.0	6.0	19	25	15	1555.17.1.06	50	
M16x1.5	4.5	10.0	19	25	15	1555.17.1.10	50	
M20x1.5	3.5	8.0	24	29	15	1555.20.1.08	50	
M20x1.5	7.0	13.0	24	29	15	1555.20.1.13	50	
M25x1.5	5.0	11.0	29	38	15	1555.25.1.11	25	
M25x1.5	10.0	17.0	29	38	15	1555.25.1.17	25	
M32x1.5	17.0	25.0	42	36	15	1555.32.1.25	20	
M40x1.5	22.0	33.0	53	48	15	1555.40.1.33	10	
M50x1.5	28.0	38.0	60	48	15	1555.50.1.38	5	
M63x1.5	32.0	44.0	65	49	16	1555.63.1.44	5	



SYNTEC

Dark grey RAL 7001
 One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.		Price in EUR/100
M12x1.5	2.5	6.5	15	21	12	1556.12.1.06	100	
M16x1.5	2.0	6.0	19	25	15	1556.17.1.06	50	
M16x1.5	4.5	10.0	19	25	15	1556.17.1.10	50	
M20x1.5	3.5	8.0	24	29	15	1556.20.1.08	50	
M20x1.5	7.0	13.0	24	29	15	1556.20.1.13	50	
M25x1.5	5.0	11.0	29	38	15	1556.25.1.11	25	
M25x1.5	10.0	17.0	29	38	15	1556.25.1.17	25	
M32x1.5	17.0	25.0	42	36	15	1556.32.1.25	20	
M40x1.5	22.0	33.0	53	48	15	1556.40.1.33	10	
M50x1.5	28.0	38.0	60	48	15	1556.50.1.38	5	
M63x1.5	32.0	44.0	65	49	16	1556.63.1.44	5	



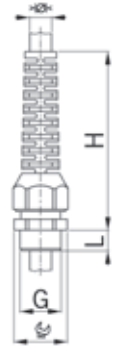
SYNTEC

Black RAL 9005
 One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.		Price in EUR/100
M12x1.5	2.5	6.5	15	21	12	1545.12.1.06	100	
M16x1.5	2.0	6.0	19	25	15	1545.17.1.06	50	
M16x1.5	4.5	10.0	19	25	15	1545.17.1.10	50	
M20x1.5	3.5	8.0	24	29	15	1545.20.1.08	50	
M20x1.5	7.0	13.0	24	29	15	1545.20.1.13	50	
M25x1.5	5.0	11.0	29	38	15	1545.25.1.11	25	
M25x1.5	10.0	17.0	29	38	15	1545.25.1.17	25	
M32x1.5	17.0	25.0	42	36	15	1545.32.1.25	20	
M40x1.5	22.0	33.0	53	48	15	1545.40.1.33	10	
M50x1.5	28.0	38.0	60	48	15	1545.50.1.38	5	
M63x1.5	32.0	44.0	65	49	16	1545.63.1.44	5	

Synthetic Syntec® cable glands with lamellar technology and anti-kink nozzle

Material:	Polyamide PA 6
Properties:	Halogen-free
Sealing ring:	CR (neoprene)
Tested acc. to:	EN 50262
Temperature range:	-30°C / +100°C
Protection class:	IP 68



SYNTEC with anti-kink protection



Light grey RAL 7035

One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.		Price in EUR/100
M12x1.5	2.5	6.5	15	54	6	1576.12.06	50	
M16x1.5	4.0	8.0	19	64	6	1576.17.08	50	
M20x1.5	3.0	7.0	24	88	8	1576.20.07	50	
M20x1.5	5.5	12.0	24	88	8	1576.20.12	50	



SYNTEC with anti-kink protection



Dark grey RAL 7001

One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.		Price in EUR/100
M12x1.5	2.5	6.5	15	54	6	1577.12.06	50	
M16x1.5	4.0	8.0	19	64	6	1577.17.08	50	
M20x1.5	3.0	7.0	24	88	8	1577.20.07	50	
M20x1.5	5.5	12.0	24	88	8	1577.20.12	50	



SYNTEC with anti-kink protection



Black RAL 9005

One-piece sealing ring

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.		Price in EUR/100
M12x1.5	2.5	6.5	15	54	6	1546.12.06	50	
M16x1.5	4.0	8.0	19	64	6	1546.17.08	50	
M20x1.5	3.0	8.0	24	88	8	1546.20.07	50	
M20x1.5	5.5	12.0	24	88	8	1546.20.12	50	



FLUSH-MOUNTING

CAVITY WALL

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CABLE GLANDS

TOOLS

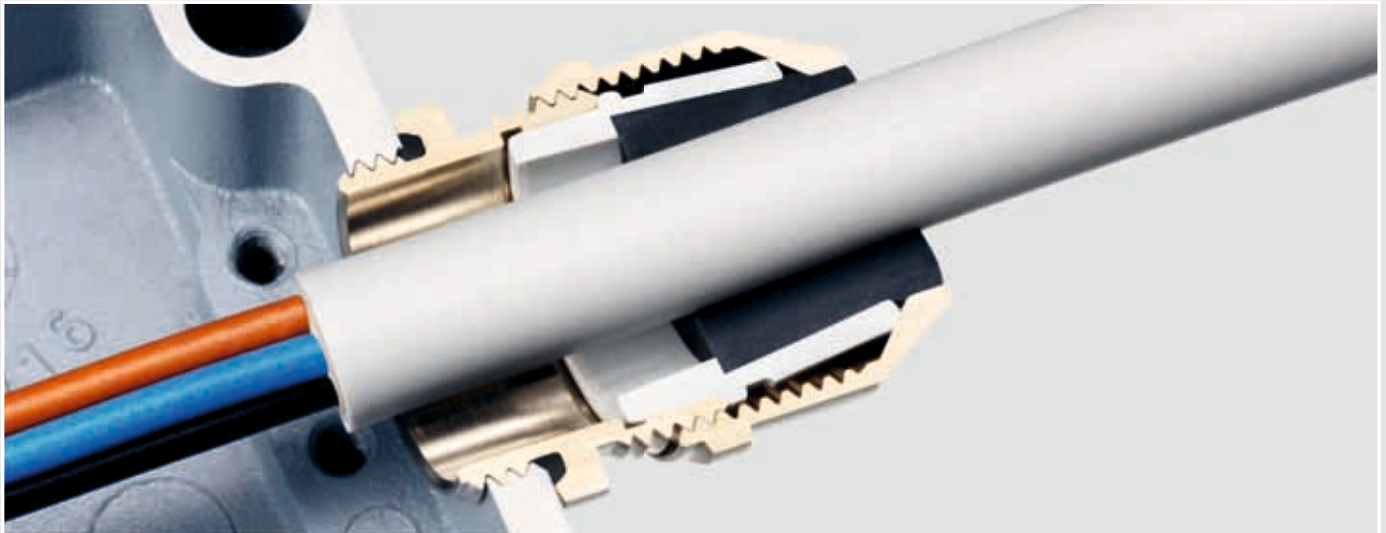
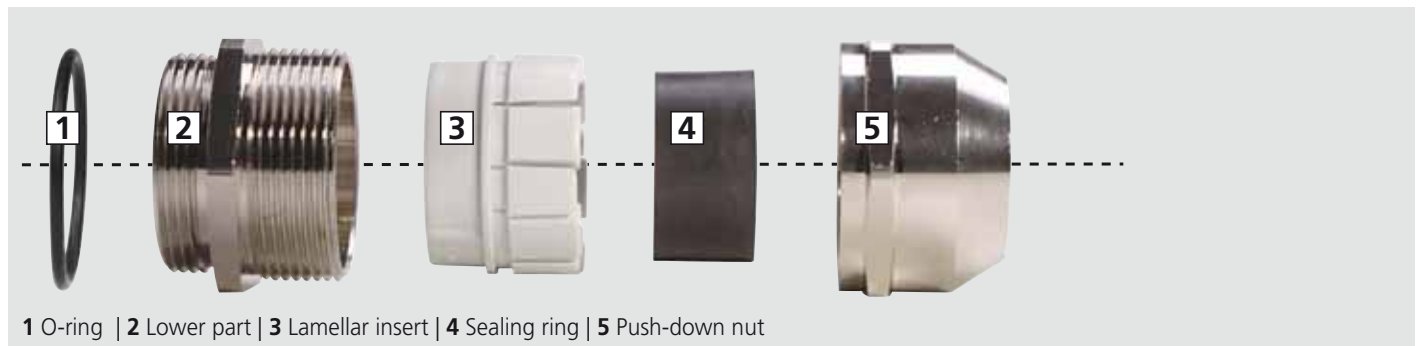
SERVICE



SYNTEC® brass cable gland

SYNTEC® brass cable gland with innovative lamella technology including movable jointed lamellae and overtightening-protected cap nuts for everyday use.

- Lamellae insert made from high-quality polyamide
- With short and long metric entry thread
- With environmentally resistant TPE sealing ring
- Standard and reducing sealing rings
- High level of strain relief and simultaneous distortion protection.
- Protection class IP68, waterproof
- Tested acc. to EN 50262
- Good chemical resistance



Cable glands Syntec® nickel-plated brass with lamellar technology

Short entry thread metric

Material: Nickel-plated brass
 Sealing ring: TPE
 O-ring : NBR
 Lamellar insert: Polyamide PA 6
 Tested acc. to: EN 50262
 Temperature range: -40°C / +100°C
 Protection class: IP 68



SYNTEC MS



One-piece sealing ring
 not overall length insulated

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	1.0	5.0	15	17	5	1045.12.050	50
M12x1.5	3.0	7.0	15	17	5	1045.12.070	50
M16x1.5	2.0	6.0	18	20	5	1045.17.060	50
M16x1.5	4.5	10.0	18	20	5	1045.17.100	50
M20x1.5	3.5	8.0	22	25	6	1045.20.080	50
M20x1.5	7.0	13.0	22	25	6	1045.20.130	50
M25x1.5	5.0	11.0	28	31	7	1045.25.110	25
M25x1.5	10.0	17.0	28	31	7	1045.25.170	25
M32x1.5	7.0	15.0	36	33	8	1045.32.150	25
M32x1.5	13.0	21.0	36	33	8	1045.32.210	25
M40x1.5	15.0	23.0	46	40	8	1045.40.230	10
M40x1.5	19.0	28.0	46	40	8	1045.40.280	10
M50x1.5	20.0	29.0	55	40	9	1045.50.290	5
M50x1.5	25.0	35.0	55	40	9	1045.50.350	5
M63x1.5	28.0	39.0	70	43	10	1045.63.390	5
M63x1.5	35.0	48.0	70	43	10	1045.63.480	5



Long entry thread metric

SYNTEC MS



One-piece sealing ring
 not overall length insulated

G	>Ø< min mm	>Ø< max mm	 mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	1.0	5.0	15	17	12	1145.12.050	50
M12x1.5	3.0	7.0	15	17	12	1145.12.070	50
M16x1.5	2.0	6.0	18	20	12	1145.17.060	50
M16x1.5	4.5	10.0	18	20	12	1145.17.100	50
M20x1.5	3.5	8.0	22	25	12	1145.20.080	50
M20x1.5	7.0	13.0	22	25	12	1145.20.130	50
M25x1.5	5.0	11.0	28	31	12	1145.25.110	25
M25x1.5	10.0	17.0	28	31	12	1145.25.170	25
M32x1.5	7.0	15.0	36	33	15	1145.32.150	25
M32x1.5	13.0	21.0	36	33	15	1145.32.210	25
M40x1.5	15.0	23.0	46	40	15	1145.40.230	10
M40x1.5	19.0	28.0	46	40	15	1145.40.280	10
M50x1.5	20.0	29.0	55	40	15	1145.50.290	5
M50x1.5	25.0	35.0	55	40	15	1145.50.350	5
M63x1.5	28.0	39.0	70	43	15	1145.63.390	5
M63x1.5	35.0	48.0	70	43	15	1145.63.480	5
M63x1.5	44.0	55.0	80	43	15	1145.63.550	5



FLUSH-MOUNTING

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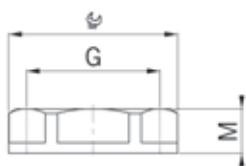
CABLE GLANDS

TOOLS

SERVICE

Synthetic with flange and brass lock nut



Entry thread metric





Synthetic locks nut with flange

Material: Polyamide PA 6
 Execution: Hexagonal design with flange
 Temperature range: -30°C / +100°C



Light grey RAL 7035			Art. No.	 Price in EUR/100
G	 mm	M mm		
M12x1.5	17	5.0	8255.12	100
M16x1.5	22	5.0	8255.17	100
M20x1.5	27	6.0	8255.20	100
M25x1.5	33	6.7	8255.25	100
M32x1.5	42	7.9	8255.32	50
M40x1.5	48	8.4	8255.40	50
M50x1.5	59	9.9	8255.50	10
M63x1.5	73	11.0	8255.63	10





Black RAL 9005			Art. No.	 Price in EUR/100
G	 mm	M mm		
M12x1.5	17	5.0	8245.12	100
M16x1.5	22	5.0	8245.17	100
M20x1.5	27	6.0	8245.20	100
M25x1.5	33	6.7	8245.25	100
M32x1.5	42	7.9	8245.32	50
M40x1.5	48	8.4	8245.40	50
M50x1.5	59	9.9	8245.50	10
M63x1.5	73	11.0	8245.63	10

For brass cable glands

Lock nut nickel-plated brass

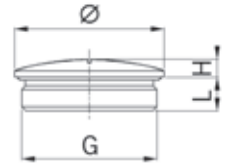


Entry thread metric			Art. No.	 Price in EUR/100
G	 mm	M mm		
M12x1.5	15	3.0	8000.12	100
M16x1.5	19	3.0	8000.17	100
M20x1.5	24	3.5	8000.20	100
M25x1.5	30	4.0	8000.25	50
M32x1.5	36	4.0	8000.32	25
M40x1.5	46	5.0	8000.40	25
M50x1.5	55	5.5	8000.50	10
M63x1.5	70	6.0	8000.63	10

Metric thread

Synthetic locking plug

Material: Polyamide PA 6
 Temperature range: -30°C / +100°C
 Protection class: IP 54
 Protection type addition: IP 68, if the entry thread is sealed



Light grey RAL 7035
 without O-Ring

G	Ø mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	15	4.5	6	8855.12	100
M16x1.5	20	4.5	6	8855.17	100
M20x1.5	24	4.5	6	8855.20	100
M25x1.5	30	5.0	8	8855.25	100
M32x1.5	37	5.5	8	8855.32	50
M40x1.5	46	6.0	8	8855.40	50
M50x1.5	56	6.0	10	8855.50	10
M63x1.5	70	6.0	12	8855.63	10



Black RAL 9005
 without O-Ring

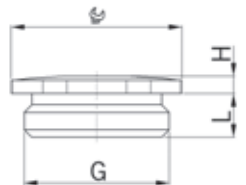
G	Ø mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	15	4.5	6	8845.12	100
M16x1.5	20	4.5	6	8845.17	100
M20x1.5	24	4.5	6	8845.20	100
M25x1.5	30	5.0	8	8845.25	100
M32x1.5	37	5.5	8	8845.32	50
M40x1.5	46	6.0	8	8845.40	50
M50x1.5	56	6.0	10	8845.50	10
M63x1.5	70	6.0	12	8845.63	10



Short entry thread metric

Locking plug nickel-plated brass

Material: Nickel-plated brass
 Temperature range: -40°C / +200°C
 Protection class: IP 54
 Protection type addition: IP 68, if the entry thread is sealed



Hexagonal design
 without O-Ring

G	mm	H mm	L mm	Art. No.	Price in EUR/100
M12x1.5	14	2.5	5	8745.12	100
M16x1.5	18	2.5	5	8745.17	100
M20x1.5	22	2.5	6	8745.20	100
M25x1.5	27	3.0	7	8745.25	50
M32x1.5	34	3.5	8	8745.32	25
M40x1.5	42	4.0	8	8745.40	25
M50x1.5	52	4.0	9	8745.50	10
M63x1.5	65	4.0	10	8745.63	10



FLUSH-MOUNTING

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Progress® EMV easyCONNECT EMC cable gland for interference-free installation.

Now new in our AGRO cable glands catalogue 3.0.



Products	Nickel-plated brass	PA	TPE	CR
Description	CuZn39Pb3 Copper/zinc alloy Galvanically nickel-plated surface	Polyamide PA 6	Thermoplastic elastomer	Chloroprene rubber
Colour		As per catalogue	Black	Black
Corrosive properties Chem. resistance	Good resistance in dry atmospheres, fresh water, steam, mineral oils, fuels, coolants/lubricants and various organic emulsions	Resistant to diluted organic acids, lyes, aqueous solutions of inorganic salts, mineral oils, fuels, cooling/cutting oils	Resistant to diluted acids and lyes, aqueous solutions of inorganic salts	Resistant to diluted acids and lyes, aqueous solutions of inorganic salts, mineral oils, cooling/cutting oils
Limited or no resistance	Sea water, brackish water, damp atmospheres, acids, lyes, chloride, ammoniac	Mineral acids, concentrated organic acids, formic acid, phenols, halogens	Concentrated acids and lyes, solvents	Concentrated acids and lyes, fuels, solvents, hot water, ozone
Weather-resistance	Very good weather and ageing resistance	Good weather resistance	Good weather, ozone and ageing resistance	Good weather resistance
Constant thermal values	-40°C/+200°C	-30°C/+100°C	-40°C/+100°C	-30°C/+100°C
Combustibility	Not combustible	UL 94 V-2 halogen-free	Comparable to UL 94 HB halogen-free	Comparable to UL 94 V-2 halogen-free

1st digit Degree of protection against contact/foreign body protection		2nd digit Degree of protection against ingress of water	
IP testing		IP testing	
	0 No protection		0 No protection
<p>∅ 52,5 mm</p>	1 Protection against ingress of solid foreign bodies larger than 50 mm (unintentional touching by hand).		1 Protection against water dripping from above.
<p>∅ 12,5 mm</p>	2 Protection against ingress of solid foreign bodies larger than 12 mm (touching with fingers).		2 Protection against dripping water falling at an angle of up to 15°.
<p>∅ 2,5 mm</p>	3 Protection against ingress of solid foreign bodies larger than 2.5 mm (touching with tools, wires etc. thicker than 2.5 mm).		3 Protection against spray falling at any angle up to 60°.
<p>∅ 1 mm</p>	4 Protection against ingress of solid foreign bodies larger than 1 mm (touching with tools, wires etc. thicker than 1 mm).		4 Protection against splashes from any direction.
	5 Complete protection against contact. Protection against harmful dust deposits — penetration of dust is not completely prevented.		5 Protection against jets of water from any direction.
	6 Complete protection against contact. Protection against dust penetration.		6 Protection against temporary flooding e.g. by high seas.
			7 Protection against submersion in water at a specified pressure for an unspecified time.
			8 Protection against submersion in water at increased pressure for an unspecified time.
			9K Protection against the penetration of water during high-pressure (80-100 bars), high-temperature washdown applications (80° C)

IP**: Protection class in accordance with EN 60529 up to 1000 V » and 1500 V = (UTE Standard C 200 10) or acc. to DIN 40059-9
 We carry out tests for protection class IPx8 (pressure water) with a test plug, which does not provide any information about the maximum pressure with a cable. Please contact us if you want us to calculate this value in our laboratory using your cable.



MontaX® mounting plate

MontaX® mounting plate for attaching all types of devices and components in building interiors. May be used in plant engineering, machine construction and switchboard plants and for heating, ventilation and air conditioning applications etc.

- More than 200 attachment possibilities
- Secure and fast installation of many devices



Processing instructions

May be arranged to form large mounting surfaces with an infinite number of threaded attachment points or also as a mounting rail for devices on a distribution panel. The mounting magnet is secured beneath the mounting plate. The plates can then be placed wherever devices need to be attached.



Mounting plate

- over 200 fixing methods for accessories
- Injection-moulded connectors allow surfaces to be joined together effortlessly to form larger units
- Mounting plate can be split into two identical halves
- Attachment to cable ducts, round or square conduits, TS 35 standard profiles, etc.
- Magnet attached for adjustable mounting

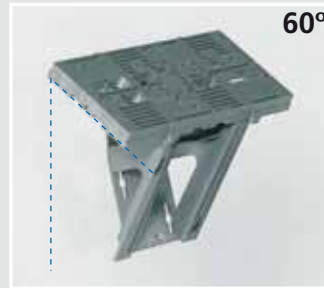
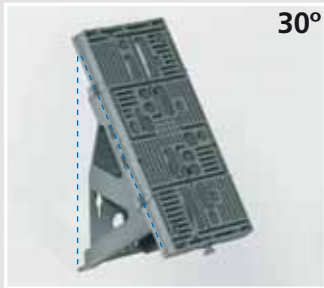


Width x Length x Height	90 x 180 x 13 mm
Art. No.	2000-00
Inner packaging/shipping	10 / 100
Price in EUR/100	

MontaX® mounting angle

MontaX® mounting angle for secure attachment in almost all orientations and angles. With only one element, the MontaX® mounting angle gives you 200 attachment possibilities in four different angular positions on standard profiles, square or round conduits, steel beams etc.

- For easy visual inspection of counters, indicator light etc.
- For easy and safe operation of switches etc.
- No voltage transfer as all plastic



Mounting angle for MontaX®

- for 30°, 45°, 60° & 90° angular attachment of MontaX® to vertical axis
- simple straightening and attaching with 4.5 mm Ø raised head screws through keyholes
- mounting plate can be attached using self-tapping 3.9 mm Ø flat-head screws in mounting grooves



Art. No.	2000-80
Inner packaging/shipping	- / 5
Price in EUR/100	

MontaX® - Magnet

- for adjustable mounting
- comes with fixing screw



Art. No.	2000-90
Inner packaging/shipping	- / 5
Price in EUR/100	

FLUSH-MOUNTING
CAVITY WALL
CONCRETE
HOUSINGS
FIRE PROTECTION
EARTHING
CABLE GLANDS
TOOLS
SERVICE



The most important advantages at a glance:

- High-quality system tools for professional electrical installation
- Perfectly tailored to the processing and installation of our electrical installation systems
- Tried-and-tested quality and technology
- Extremely time-saving and durable
- Wide range of accessories

Tools | Product lines



Diamond grinding head and drilling template for masonry installation	p. 252
Cover with spirit level	p. 254
Hardened metal cutter for composite thermal insulation systems	p. 255
Cutter for cavity wall installation	p. 257
Profix distance cutter	p. 258
Hardened metal cutter for cavity wall installation	p. 259
VARIOCUT universal hole cutter	p. 263
General tools	p. 265

	Recommended RPM												
Material	p. 252	p. 253	p. 257	p. 259	p. 260	p. 259	p. 259	p. 260	p. 260	p. 261	p. 263	p. 263	
	Diamond grinding head for dust extraction	Diamond grinding head	Turbo cutter MULTI 4000	MULTI 2000 HIM	Hardened metal cutter	Hardened metal cutter	Hardened metal cutter for sheet metal boarding	Hardened metal cutter for composite thermal insulation systems Ø 20 mm	Standard cutter	Bi-metallic cutter	Bi-metallic cutter Ø 120 mm	VARIOCUT universal hole cutter 24-68	VARIOCUT universal hole cutter 65 - 120
Plasterboard	-	-	1.000	-	-	1.000	500	1.000	500	800 - 1.400	700 - 1.400		
Plywood (up to V20), uncoated	-	-	600	600	-	800	450	-	450	800 - 1.400	800 - 1.400		
Plywood, coated	-	-	-	450	-	700	400	-	450	800 - 1.400	800 - 1.400		
OSB Boards	-	-	-	650 ¹	-	600	400	-	-	300 - 400 ¹	200 - 400 ¹		
Wood, soft	-	-	850	850	-	1.000	500	850	550	800 - 1.400	800 - 1.400		
Wood, hard	-	-	-	650	-	600	400	-	450	800 - 1.400	800 - 1.400		
Laminated material (Pertinax etc.)	-	-	-	450	-	500	350	-	450	-	-		
Mineral fibreboard	-	-	-	600	-	800	500	-	500	800 - 1.400	800 - 1.400		
MDF boards	-	-	-	-	700	-	-	-	450	800 - 1.400	800 - 1.400		
Sheet steel	-	-	-	-	-	150 ²	-	-	200 ²	300 - 600 ³ Ø 20 - 64 mm	200 - 600 ³ Ø 65 - 120 mm		
Aluminium sheet	-	-	-	-	-	350	-	200	-	300 - 600 ³ Ø 20 - 64 mm	200 - 600 ³ Ø 65 - 120 mm		
Multiplex boards	-	-	-	-	700	-	-	-	-	-	-		
Panels	-	-	-	-	-	-	-	-	-	800 - 1.400 ⁴	700 - 1.400 ⁴		
Ceiling modules	-	-	-	-	-	-	-	-	-	800 - 1.400	800 - 1.400		
Wall tiles	-	-	-	-	-	-	-	-	-	400 ⁴	250 ⁴		
Hard rubber	-	-	-	-	-	-	-	-	-	1.200 ⁵	1.200 ⁵		
Solid masonry (lime sand brick, Poroton, Ytong and many more)	1.600 - 2.000	1.600 - 2.000	-	-	-	-	-	-	-	-	-		
Insulated and plastered external facade	-	-	-	-	-	1.000	500	-	-	-	-		
Technical requirement													
Required drill output	1.000 W	1.000 W	600 W	600 W	600 W	1.000 W	600 W	600 W	600 W	600/1.000 W	max. 700 W	max. 700 W	
Cut hole Ø													
20 mm	-	-	-	-	-	-	•	-	-	-	-	-	-
35 mm	-	-	•	-	-	-	-	-	-	-	-	-	-
68 mm	•	•	•	•	•	•	-	•	•	-	-	-	-
74 mm	-	-	•	-	-	•	-	-	-	-	-	-	-
82 mm	•	•	-	-	-	-	-	-	-	-	-	-	-
120 mm	-	-	-	-	-	-	-	-	-	•	-	-	-
Variable 24 - 68 mm	-	-	-	-	-	-	-	-	-	-	•	-	-
Variable 65 - 120 mm	-	-	-	-	-	-	-	-	-	-	-	•	-
Technical characteristics													
with dust extraction	-	-	-	-	-	-	-	-	-	-	•	•	-
with direct collet	•	•	-	-	-	-	-	-	-	-	-	-	-
with drill chuck collet	•	•	•	•	•	•	-	-	•	•	•	•	-
with drill depth limit	-	-	-	-	-	-	•	•	-	-	-	-	-
Accessories (optional)													
Dust extraction	252	•	-	-	-	-	-	-	-	-	-	-	-
ProfIX distance cutter	259	-	-	•	•	•	•	-	-	•	•	-	-
ProfIX distance cutter with dust extraction	259	-	-	•	•	•	•	-	-	•	•	-	-
Centring aid	256 / 232	-	-	•	-	-	•	•	-	-	-	-	-
Centering aid Multi 4000	256 / 232	-	-	•	-	-	-	-	-	-	-	-	-

¹ Ventilate frequently; ² Use cutting oil; ³ up to 1 mm; ⁴ with restrictions; ⁵ up to 10 mm



Diamond grinding head and drilling template

Diamond grinding head for precise and quick installation openings for one-gang boxes and one-gang junction boxes in all types of walls. Clean and low-dust handling due to dust extraction.

- Quick creation of installation openings in all types of walls
- For electric drills with direct attachment or 13 mm chuck
- With optional dust extraction
- Drilling template for exact marking of the centering hole

Installation



Pre-drilling. Create centering hole at a combination distance for multiple boxes using drilling template.



Fit diamond grinding head and diamond cut \varnothing 68 mm or \varnothing 82 mm holes.



Chisel out drilled core.



Clean and even installation openings for quick further processing with plaster or Klemmfix®.

Diamond grinding head with dust extractor

· M 18 x 1.5 thread to screw on the direct or chuck attachment



Drill \varnothing	82 mm	68 mm
Cutting depth	max. 70 mm	max. 70 mm
Art. No.	1088-02	1088-03
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Dust extraction with direct attachment / Chuck attachment

· for diamond grinding heads \varnothing 82 + \varnothing 68 mm, fits vacuum cleaner hoses from \varnothing 31 - 36 mm



Thread for Bosch and Flex	5/8"	-	-
UN thread for AEG and Baier	-	M18 x 2,5	-
Chuck attachment with hexagonal spanner	-	-	12 mm
Art. No.	1088-21	1088-16	1088-41
Inner packaging/shipping	- / 1	- / 1	- / 1
Price in EUR/100			

Diamond grinding head without dust extractor

- M 18 x 1.5 thread to screw on the direct or chuck attachment



Cutting depth	max. 70 mm	max. 70 mm
Drill Ø	82 mm	68 mm
Art. No.	1088-00	1088-01
Inner packaging/shipping	- / 10	- / 10
Price in EUR/100		

Direct attachment / Chuck attachment

- for screwing onto the electric drill spindle



Thread for Bosch and Flex	5/8"	-	-
UN thread for AEG and Baier	-	M18 x 2,5	-
Chuck attachment with hexagonal spanner	-	-	12 mm
Art. No.	1088-20	1088-15	1088-40
Inner packaging/shipping	- / 1	- / 1	- / 1
Price in EUR/100			

Centering drill

- for all direct and chuck attachments



Diameter	6 mm
Art. No.	1088-30
Inner packaging/shipping	- / 1
Price in EUR/100	

Drilling template

- for vertical and horizontal pre-drilling of combination distances
- 71 mm for standard combinations
- 91 mm for separate covers on low-voltage devices
- with hardened drilling bushes
- with fold-out guide pin for first drill hole



Art. No.	1190-65
Inner packaging/shipping	- / 1
Price in EUR/100	

FLUSH-MOUNTING

CAVITY WALL

CONCRETE

HOUSINGS

FIRE PROTECTION

EARTHING

CABLE GLANDS

TOOLS

SERVICE

Flush-mounting and masonry tools

for masonry installation



Spirit level cover

Spirit level cover for quick and exact positioning of one-gang boxes and one-gang junction boxes in the masonry.

- For all KAISER one-gang boxes and one-gang junction boxes
- Guaranteed horizontal or vertical fit of the screw domes
- Quick assembly in a single action

Installation



Prepare the wall opening with plaster as usual.



Insert the spirit level cover into the upper box.



Push the box combination into the wall opening and align.



The spirit level immediately indicates the perfect fit.

Spirit level cover

- Box spirit level
- To straighten one-gang boxes and one-gang junction boxes for horizontal and vertical assembly with plaster



Art. No.

1190-60

Inner packaging/shipping

5 / 100

Price in EUR/100

Marking chalk

- for marking of switch symbols and wiring instructions
- colour: blue, waterproof



Art. No.

1190-55

Inner packaging/shipping

- / 12

Price in EUR/100

Hardened metal cutter Ø 20 mm for KAISER mini equipment carrier



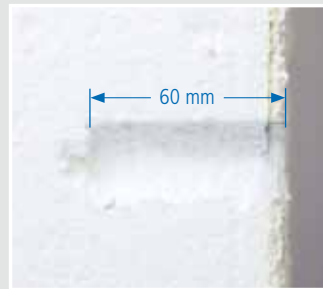
The hardened metal cutter Ø 20 mm with hardened metal cutters for exact installation openings. Art. No. 1088-06



By simply unscrewing the cutter head, the drilled core can be removed quickly using a centering drill.



The depth stop ensures that only the amount of insulation needed to secure the mini equipment carrier is removed.



The insulating capacity remains intact despite the installation opening.

Hardened metal cutter 180 for one-gang junction boxes ECON® Styro55



If a cable is present, you can drill 68 mm installation openings using the hardened metal cutter 180.



The centering aid Ø 68 mm and depth stop on the cutter ensure a precise opening without damaging the existing cable.



The depth stop ensures minimal interference with the insulation, which prevents the creation of heat bridges.



KAISER carbide metal cutter 180 with depth stop, Art. No. 1088-07.

Processing instructions

Make sure that the cable has been fed through the insulation material panel. The hardened metal cutter 180 must not be used with cables which are directly under the plaster layer of the external insulation.

INNOVATION

Hardened metal cutter 20 mm

- Making installation openings in existing composite thermal insulation systems or lightweight walls
- Ø 20 mm, for the KAISER mini equipment carrier and for KAISER cable seals
- with bit stop to prevent heat bridges
- with centering drill for precise positioning
- fits all battery-powered drills and electric drills with 10 mm chuck
- removable cutter head for easy removal of the drilled core



Hardened metal cutter 180

- Creating installation openings in existing thermal insulation composite systems for an existing cable
- for ECON Styro55 one-gang junction boxes
- fits all electric drills with 10 mm chuck
- with bit stop to prevent heat bridges
- 2 centering aids Ø 68 mm (Art. No. 1090-68) for exact cutter guiding



Length	80 mm	180 mm
Drill Ø	20 mm	68 mm
Cutting depth	max. 60 mm	max. 70 mm
Art. No.	1088-06	1088-07
Inner packaging/shipping	- / 48	- / 1
Price in EUR/100		

Flush-mounting and masonry tools

for masonry installation

Technical information on centering aid Ø 68 mm



KAISER centering aid Ø 68 mm for nailing on Art. No. 1090-68.



For combinations position the centering aid at a distance of 71 mm.



Use KAISER tool Styro55 for fast, easy fitting of the swivels.



KAISER tool Styro55 Art. No. 1090-21.

INNOVATION

Centering aid Ø 68 mm

- for exact installation openings in existing composite thermal insulation system
- Exact guiding of the hardened metal cutter 180 (Art. No. 1088-07)
- can be combined for standard combinations of 71 mm
- for attachment and exact positioning on the composite thermal insulation system



Diameter	68 mm
Art. No.	1090-68
Inner packaging/shipping	10 / 100
Price in EUR/100	

INNOVATION

Styro55 tool

- for fast and secure attaching of the ECON Styro55 one-gang junction box



Art. No.	1090-21
Inner packaging/shipping	10 / 100
Price in EUR/100	

Turbo cutter MULTI 4000

MULTI 4000 turbo cutter for faster cutting speeds, due to new geometry with especially high endurance in three different sizes. Advantages compared to previous model (MULTI 2000):

- 40% faster due to new cutting geometry
- 20% higher endurance than conventional cutters
- With countersink hole cutter and plate ejector
- Cutting diameter 35 mm/68 mm/74 mm



Technical information on MULTI 4000 turbo cutter



Turbo cutter MULTI 4000

- long life
- high cutting power
- for all cavity wall materials
- fits all electric drills with 13 mm chuck
- Removable countersink hole cutters



Cut hole Ø	35 mm	68 mm	74 mm
Depth of cutting hole	36 mm	36 mm	36 mm
with countersink hole cutter and plate ejector	-	•	•
with countersink hole saw, without plate ejector	•	-	-
Art. No.	1082-10	1083-10	1084-10
Inner packaging/shipping	- / 10	- / 10	- / 10
Price in EUR/100			

Cutter head MULTI 4000

- long life
- high cutting power
- for all cavity wall materials



Cut hole Ø	35 mm	68 mm	74 mm
Depth of cutting hole	36 mm	36 mm	36 mm
with plate ejector	-	•	•
without ejector of the drilling core	•	-	-
Art. No.	1082-09	1083-09	1084-09
Inner packaging/shipping	- / 5	- / 5	- / 5
Price in EUR/100			

Cavity wall tools

for cavity wall installation

Countersink hole cutter MULTI 4000

- for flush-mounting box and casing installation
- inductively hardened



Cut hole Ø	35 mm	68 mm	74 mm
Art. No.	1082-05	1083-05	1084-05
Inner packaging/shipping	- / 1	- / 1	- / 1
Price in EUR/100			

INNOVATION

Centering insert 68/74

- for expanding existing installation openings from Ø 68 mm to Ø 74 mm
- exact guide for cavity wall cutter MULTI 4000
- for single and multi-layer boarded lightweight walls



INNOVATION

Diameter	68 mm
Art. No.	1083-99
Inner packaging/shipping	- / 10
Price in EUR/100	



Spacing cutter, Profix

Profix, the bit for electric drills for quick and precise cutting of installation openings at the standard distance. Can be used in cut openings or existing cavity wall boxes. Available with and without dust extractor.

- Creating Ø 68 mm installation openings
- With three spirit levels for exact insertion of horizontal and vertical combinations
- Standard distance of 71 mm or 91 mm without time-consuming measuring and marking
- For expansion of existing cavity wall box combinations
- For electric drills with Ø 43 mm clamping collar

Spacing cutter, Profix



Distance 71 mm: Cut first opening as usual. Insert centering plate into first opening and cut second opening.



Adjust from 71 to 91 mm: Pull back clip nose with spring and turn centering plate by 180°.



Move centering plate to new position and lock centering plate.



Distance 91 mm: Insert centering plate into existing hole or box, align and cut additional opening.

Profix spacing cutter with dust extraction

- Distance 71 mm: Cut first opening as usual. Insert centering plate into first opening and cut second opening.
- Adjust from 71 to 91 mm: Pull back clip nose with spring and turn centering plate by 180°.
- Move centering plate to new position and lock centering plate.
- Distance 91 mm: Insert centering plate into existing hole or box, align and cut additional opening.



Spacing cutter, Profix

- for the cutting of cavity wall installation openings with dimensionally accurate combination distances of 71 mm, optionally adaptable to a distance of 91 mm, for horizontal and vertical combinations
- centering plate can also be used in existing cavity wall boxes for the expansion of existing equipment



Up to 13 mm chuck	•	-	•	-
for SDS-plus quick-change chuck	-	•	-	•
with dust extractor	-	-	•	•
Art. No.	1083-25	1083-28	1083-27	1083-29
Inner packaging/shipping	- / 10	- / 1	- / 1	- / 1
Price in EUR/100				

MULTI 2000 HM

- hardened metal-tipped cutting head and countersink hole cutter
- Removable countersink hole cutters



Cut hole Ø	68 mm
Depth of cutting hole	36 mm
with countersink hole cutter and plate ejector	•
Art. No.	1083-70
Inner packaging/shipping	- / 10
Price in EUR/100	

Hardened metal cutter

- for metal plates



Cut hole Ø	68 mm	74 mm
Depth of cutting hole	15 mm	60 mm
Art. No.	1083-95	1083-74
Inner packaging/shipping	- / 10	- / 1
Price in EUR/100		

Cavity wall tools

for cavity wall installation

Hardened metal cutter

- for medium density fibreboard (MDF) and multiplex boards
- after removal of countersink hole saw, cutting depth up to 140 mm possible
- Replacement drill (not shown) 1083-53
- Removable countersink hole cutters



Cut hole Ø	68 mm
Depth of cutting hole	55 mm
with countersink hole saw	•
Art. No.	1083-51
Inner packaging/shipping	- / 10
Price in EUR/100	

Standard cutter

- without countersink



Cut hole Ø	68 mm
Depth of cutting hole	18 mm
Art. No.	1086-00
Inner packaging/shipping	- / 10
Price in EUR/100	

Saw blades

- closed version
- hardened cutting teeth



Cut hole Ø	35 mm	68 mm	74 mm
Depth of cutting hole	18 mm	18 mm	18 mm
Art. No.	1085-09	1086-09	1087-09
Inner packaging/shipping	- / 5	- / 5	- / 5
Price in EUR/100			

Saw blades

- closed version
- hardened cutting teeth



Cut hole Ø	68 mm	74 mm
Depth of cutting hole	40 mm	40 mm
Art. No.	1086-08	1087-08
Inner packaging/shipping	- / 4	- / 4
Price in EUR/100		

Bi-metallic cutter Ø 120 mm

- fits all electric drills with 13 mm chuck
- for cavity wall junction box
- Art. No. 9073-01/-77/-78/-91



Cut hole Ø	120 mm
for frontal fitting of ThermoX®	•
Art. No.	1082-20
Inner packaging/shipping	- / 1
Price in EUR/100	

MULTI 4000 cutter set

- stable plastic case
- Contents: 3 Multi 4000 cutters with countersink hole cutter, Ø 35, 68, 74 mm (1082/83/84-10), 1 set of insulation stripping pliers for sheathed cables
- Accessories: yardstick



Art. No.	1083-20
Inner packaging/shipping	- / 1
Price in EUR/100	

MULTI 2000 HM cutting head

- hardened metal tipped



Cut hole Ø	68 mm
with plate ejector	•
Art. No.	1083-69
Inner packaging/shipping	- / 10
Price in EUR/100	

MULTI 2000 HM countersink hole cutter

- hardened metal tipped
- for flush-mounting box and casing installation



Cut hole Ø	68 mm
Art. No.	1083-65
Inner packaging/shipping	- / 1
Price in EUR/100	

Collets



for 10 mm chuck with twist drill	•	-	-
for 13 mm chuck with twist drill	-	•	-
for SDS-plus quick-change chuck without twist drill	-	-	•
Art. No.	1083-31	1083-32	1083-35
Inner packaging/shipping	- / 1	- / 1	- / 1
Price in EUR/100			

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SERVICE

Twist drill

- with clamping shank



Twist drill

- with hexagonal shank
- with clamping faces for 18 and 40 mm cutting depths



Diameter	6 mm	8 mm
Art. No.	1083-30	1086-30
Inner packaging/shipping	- / 5	- / 5
Price in EUR/100		

Countersink hole cutter

- for flush-mounting box and casing installation
- inductively hardened



Plate ejector

- Mounting instructions: fit cutter, pull out old ejector using tool. Use tool to press new ejector over collar on base of cutter



for cut hole Ø	68 mm	-
Art. No.	1086-05	1083-37
Inner packaging/shipping	- / 1	- / 5
Price in EUR/100		

Bi-metal cutter for ThermoX® housings

- fits all electric drills with 13 mm chuck



Cut hole Ø	74 mm	79 mm	86 mm	120 mm
for rear fitting of ThermoX® (ceiling exit 68 mm)	•	-	-	-
for rear fitting of ThermoX® (ceiling exit 75 mm)	-	•	-	-
for rear fitting of ThermoX® (ceiling exit 82 mm)	-	-	•	-
for frontal fitting of ThermoX®	-	-	-	•
Art. No.	1084-00	1082-79	1082-86	1082-20
Inner packaging/shipping	- / 10	- / 1	- / 1	- / 1
Price in EUR/100				

Cavity wall box template

- for marking cutting-out distances for combinations
- standard combination distance 71 mm to German DIN 49 075 as well as 91 mm distance for separate covers for low-voltage equipment



Art. No.	1085-99
Inner packaging/shipping	- / 100
Price in EUR/100	

VARIOCUT

VARIOCUT universal hole cutter for clean circular cut-outs in cavity wall materials. The hardened metal cutter inserts can cut variable openings with a cutting depth of 45 mm.

- Making clean circular cut-outs using protective cover with dust extractor
- For light installation openings and circular cut-outs 24-120 mm in diameter
- Continuously adjustable cutter inserts
- centering cutter aid making it easy to guide the centering drill



Operation



Set and lock required diameter and prescribed cutting depth.



Mark the centre point for drilling (use centering cutter if necessary). Set appropriate speed on electric drill. Pre-drill plates to Ø 6 mm before cutting.



Use VARIOCUT centering drill. Start drilling, push the protective cover down flat on the surface and cut opening applying light pressure.



As soon as a hole has been drilled, turn off the electric drill immediately. Wait until the machine has fully stopped before removing the VARIOCUT and removing the cut-out material.

VARIOCUT universal hole cutter for cavity wall building materials

· with hardened metal cutter inserts



Cut hole Ø	24 - 68 mm	65 - 120 mm
Depth of cutting hole	45 mm	45 mm
for frontal fitting of ThermoX®	-	•
for cavity wall junction box Art. No. 9073-01/-77/-78/-91	-	•
Art. No.	1089-10	1089-00
Inner packaging/shipping	- / 5	- / 5
Price in EUR/100		

VARIOCUT box

- robust metal case
- Contents: 1 Variocut 1089-00 (Ø 65-120 mm), 1 cutter unit 1089-01 (Ø 24-68 mm), 1 cutter centering aid 1089-31 (incl. 10 adhesive foils)



Art. No.	1089-25
Inner packaging/shipping	- / 1
Price in EUR/100	

Cavity wall tools

for cavity wall installation

Cutter unit for metal

- for VARIOCUT universal hole saw
- for light installation openings and circular cut-outs of any kind



Cut hole Ø	24 - 68 mm	65 - 120 mm
for cavity wall junction box Art. No. 9073-01/-77/-78/-91	-	•
for frontal fitting of ThermoX® Art. No. 9300-01/-02/-03/-22	-	•
Art. No.	1089-01	1089-02
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Cutter unit for metal

- for VARIOCUT universal hole saw
- for thickness up to 1 mm
- for light installation openings and circular cut-outs of any kind



Cut hole Ø	20 - 64 mm	61 - 116 mm
Art. No.	1089-91	1089-92
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Hardened metal cutter inserts



For cavity wall building materials	•	-
For metal	-	•
Art. No.	1089-33	1089-34
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Twist drill for VARIOCUT

- for VARIOCUT universal hole saw
- with clamping shank



Diameter	6 mm
Art. No.	1089-30
Inner packaging/shipping	- / 5
Price in EUR/100	

Cutter centering aid

- centering aid for VARIOCUT
- for hard-to-work materials
- for Ø 6 mm drills
- with 10 pieces of adhesive foil



Adhesive foil

- for locating centering aid
Art. No. 1089-31
- double-sided adhesion
- for multiple use



Art. No.	1089-31	1219-10
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Universal opening cutter



Universal opening cutter for creating exact openings for cable and conduit entries in plastics. Creating exact openings for boxes and housings always results in exact air-tight, smoke-tight and concrete-tight entries.

- For conduit and cable entries
- For air-tight and smoke-tight openings
- For strain-relieved openings
- For all types of plastic

Operation



Depending on the use, find the required diameter in the corresponding table and locate on tool.



Press snap-in button. Turn the handle and push to required position until the arrow point is visible in the opening. Turn handle back and click into place.



Push the point into the housing and cut out required opening by turning to the right.



TIP: To cut several openings or work with hard plastic, you can fit the opening cutter on the 1/4" bit of a battery-powered drill.

Assignment table for universal cavity wall opening cutter

Air-tight cavity wall installation		Ø setting
NYM cable	3 x 1.5 mm ²	7.5
	4 x 1.5 mm ²	8.5
	5 x 1.5 mm ² ; 3 x 2.5 mm ²	9.5
	7 x 1.5 mm ² ; 5 x 2.5 mm ²	10.5
Low-voltage cables	Integrated heavy current and MSR-Bus cable (N)Y(Y(St)Y)M-J 3 x 1.5 mm ²	10.5
	EDP cable, S/STP 4 x 2 AWG23/1	7.5
	EDP cable, 100 Mb, S/STP 4 x 2 x AWG23/1	6.0
	Coaxial cable, double screening	6.0
	Coaxial cable, single screening	5.0
	BUS cable YCYM 2 x 2 x 0.8	5.0
	Screened EDP cable, plus external screening	5.0
	Cable for telephone and signal transmission with screening	4.0
Telephone cable without screening	4.0	
Support connector	9060-98	Connector
Flexible conduits (crimped) in acc. with DIN EN 60423	DIN EN 16 - Ø 16 mm	14.0
	DIN EN 20 - Ø 20 mm	17.0
	DIN EN 25 - Ø 25 mm	21.0
Cavity wall installation for fire-protection boxes HWD 30, HWD 90 and HWD B15		Ø setting
NYM cable	3 x 1.5 mm ²	8.5
	5 x 1.5 mm ²	9.5
	3 x 2.5 mm ²	9.5

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Assignment table for universal concrete construction opening cutter

Concrete construction		Ø setting*
NYY cable	3 x 1.5 mm ²	10.5
	4 x 1.5 mm ²	10.5
	5 x 1.5 mm ² ; 3 x 2.5 mm ²	10.5
	7 x 1.5 mm ² ; 5 x 2.5 mm ²	14.5
Conduits flexible (corrugated) in acc. with DIN EN 60423	DIN EN 20 — Ø 20 mm	19.5
	DIN EN 25 — Ø 25 mm	22.5
Conduits flexible (corrugated with smooth sheath) in acc. with DIN EN 60423	DIN EN 20 — Ø 20 mm	19.0
	DIN EN 25 — Ø 25 mm	22.5

Universal opening cutter for plastics

- for manufacture of exact entry size
- for low-voltage wiring of Ø 4 - 7.5 mm
- for sheathed cabling up to 5 x 2.5 or 7 x 1.5
- for cable NYY up to 5 x 2.5
- for DIN EN conduits (flexible) with outer Ø of up to 20/25 mm
- with 1/4" chuck size for battery-powered drills



For exact openings 4 - 22,5 mm

Art. No. 1085-80

Inner packaging/shipping - / 10

Price in EUR/100

AMZ 2 stripping pliers

- for longer cables: integrated knife for longitudinal cutting
- ergonomic design - easy-to-use
- hardened and polished cutting knife



For stripping NYM cables 3 x 1,5, 5 x 2,5 mm²

Art. No. 1190-02

Inner packaging/shipping - / 10

Price in EUR/100

Hole punch and expanding dowel fitting tool

- for concrete construction installation
- for fixing to steel formwork with expanding dowel 1217-02
- for all boxes, casings, bushes, etc.



Length 150 mm 340 mm

Art. No. 1284-62 1284-63

Inner packaging/shipping - / 1 - / 1

Price in EUR/100

Nail inserter

- for concrete construction installation
- for fixing to wooden formwork with steel nails max. head Ø 4 mm
- for all boxes, casings, bushes, etc.



Length	150 mm	340 mm
Art. No.	1284-69	1284-68
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Punch pliers

- for concrete construction installation
- for exact entries for cables and conduits
- with plate ejector
- punch bits exchangeable



DIN EN conduit Ø	20 mm	25 mm
Art. No.	1286-33	1286-34
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Punch bit inserts for punch pliers

- consists of cutter plate and cutting punch, hardened and polished



DIN EN conduit Ø	20 mm	25 mm
Art. No.	1285-33	1285-34
Inner packaging/shipping	- / 1	- / 1
Price in EUR/100		

Reamer

- for concrete construction installation
- for enlarging pre-cut holes



DIN EN conduit Ø	25 mm	32 mm	40 mm
Art. No.	1284-34	1284-35	1284-36
Inner packaging/shipping	- / 1	- / 1	- / 1
Price in EUR/100			

Step drill

- for concrete construction installation
- for manufacturing conduit entry openings Ø M10 - M40
- can be adapted for battery-powered drills



DIN EN conduit Ø	10 - 40 mm
Art. No.	1284-32
Inner packaging/shipping	- / 10
Price in EUR/100	

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Fire protection. AFS technology. Fire protection for more safety

- Fire protection - no encasing
- Smoke-tight and halogen-free
- For buildings and shipbuilding



B² system for extra-fast and efficient installation in horizontal prefabrication.

- Saves time
- One-piece design
- Available with or without plaster skin
- Available pre-fitted with special adhesive; no adhesive residue when formwork is struck
- Easy connections for combinations or opposing boxes



Air-tight installation. ECON technology.

- Guaranteed air-tight installation space
- Tool-free cable/conduit entry
- Integrated strain relief



The fastest cavity wall installation of all time. FX⁴ technology.

- 40% faster installation
- Patented thread design
- High level of self-locking



KSK technology.

The revolution in concrete building installation.

- Innovative impact coupling
- Combination entries M20/M25
- No internal shortening of the conduits
- Integrated conduit stopper



Multimedial contents on the internet

Just one click takes you to www.kaiser-elektro.de.



Multimedial contents for your smartphone.

Scan and look - instantly!



Lead-free

Use of lead-free materials.



Sound insulation technology – sound insulation boxes for use in walls with increased demands on sound insulation.

- Maintains the wall's sound insulation function
- Also for retrofitting



Radiation protection technology - radiation protection boxes and housings for use in lead-free and lead-containing radiation protection walls.

- Protection against X-rays
- Retrofitting is possible
- Fast installation without additional screening measures



UPPlus. The new generation for flush-mounting installation.

- Variable combination connection piece for M20/M25 conduits
- Flexible for screw and expanding claw fitting of the accessories
- More space for installation
- More torsion-proof, guaranteed 71 mm standardised distance for combinations

Max. number of terminals per one-gang box, one-gang junction box, junction box and junction casing, according to DIN EN 60670

For safety reasons (avoidance of overheating in junction boxes) the DIN EN 60670 standard limits the number of terminals and conductors in a junction box.

A certain cubic volume is required for every terminal pole (terminal volumetric unit). This volume includes the space for the connection terminals, conductors and for movement of wiring in the junction box.

Values in () are with fitted accessories.

Art. No.	Wire cross-section (in mm ²)					
	1.5	2.5	4	6	10	16

10...						
1050-00	6	5				
1051-00	6	5				
1055-..	6	5				
1056-..	6	5				
1068-02	9 (7)	7 (6)	6 (4)			
1069-02	8 (7)	6 (5)				
1081-..	6	6				
1092-..	18	15	12	8	6	5
1094-..	9	7	5			
1095-..	11	9	7	5		
1096-..	18	15	12	8	6	5
1097-..	18	15	12	8	6	5

11...						
1172-..	6	5				

12...						
1210-35	7	6				
1210-60	7 (5)	6 (4)				
1227-50	11	9				
1227-55	10	8				
1245-62	7	5	4			
1245-63	7	5	4			
1248-50	4	3				
1248-55	4	3				
1249-44	5	5				
1249-50	5	5				
1255-40	6 (3)	5				
1255-43	6	5				
1255-45	6	5				
1260-40	8 (6)	6 (5)				
1260-50	8	6	5			
1262-..	7 (4)	6 (5)	5 (4)			
1263-..	8 (7)	6 (5)	5 (4)			
1264-50	8	6	5			
1264-60/61	8 (7)	6 (5)	5 (4)			
1265-40	8 (5)	6 (5)				
1265-50	8	6	5			
1276-70	8	6	5			
1295-02	18	15	12	8		
1296-02	18	15	12	8	6	5
1297-02	18	15	12	8	6	5
1297-87	17	14	11	7	5	4
1298-00	18	15	12	8	6	5
1298-01	18	15	12	8	6	5
1298-02	18	15	12	8	6	5
1298-03	18	15	12	8	6	5



Art. No.	Wire cross-section (in mm ²)					
	1.5	2.5	4	6	10	16

1298-04	18	15	12	8	6	5
1298-05	18	15	12	8	6	5
1298-06	12	10	8	5	4	3
1298-07	17	10	11	7	5	4
1298-08	18	15	12	8	6	5
1298-09	18	15	12	8	6	5

15...						
1550-..	6 (5)	5 (4)				
1551-..	6 (5)	5 (4)				
1555-..	6 (5)	5 (4)				
1555-12	6 (5)	5 (4)				
1556-..	6 (5)	5 (4)				
1572-02	8	6	5			

16...						
1656-02	9 (6)	7 (5)				

17...						
1756-02						

90...						
9061-..	5	4				
9062-..	10 (7)	8 (5)	6			
9062-74/94	10 (12)	8 (10)	6 (8)	5 (6)	4 (5)	
9062-21	10	8	6			
9063-..	6	5				
9063-50	6	5				
9064-..	7 (5)	5 (4)				
9064-..	6 (4)	4 (3)				
9068-01/79	6 (3)	5				
9068-04/74	6	5				
9068-03/76	7 (5)	5 (4)				
9069-01	6 (3)	4				
9071-..	7	5				
9073-..	11	9	7			

91...						
9192-..	18	15	12	8	6	5
9195-..	10	8	6	5		
9196-..	18	15	12	8	6	5
9197-..	18	15	12	8	6	6

92...						
9263-..	6	5				
9264-..	7 (5)	5 (4)				
9463-01	4	3				
9464-01	6 (3)	4				
9464-15	6 (3)	4				

Conduits and cables

DIN 60423 contains the dimensions for electrical conduits. DIN EN 61386 regulates the designations and characteristics. This standard contains specific information about the dimensions, designations and qualities of the conduits. Seven different external diameters are available – suitable for any kind of installation from flush-mounting to concrete construction: outer Ø 16, 20, 25, 32, 40, 50 and 63 mm.

The following conduit types and cables can be used for each individual type of construction:

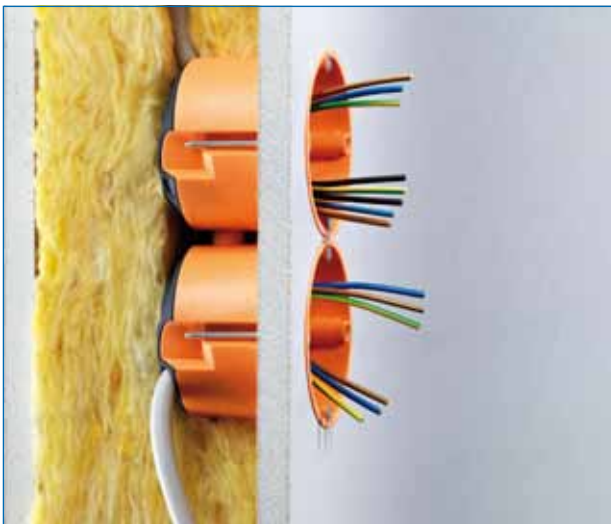


Flush-mounting (masonry) construction

Sheathed cables e.g. NYM, cables e.g. NYY and flat-lead cables e.g. NYIF can be used in dry rooms with the so-called set-in-plaster technique. For light-weight conduits in class 2 (min. pressure resistance of 320N/5 cm) or higher, single core wires of type HO7V... (insulated individual leads) and also sheathed cables, e.g. NYM, can be used.

Manufacturer's designation of conduits, e.g.

Fränkische Rohrwerke:	FBY-EL (flexible) FBY-EL-F (smooth, flexible)
Hegler:	Heglerflex EYL (flexible) Heglerplast EL (rigid)
PIPELIFE:	FB-E-L (flexible) IPM-E-LF (rigid)



Cavity wall construction

The following are permitted: wires and cables without a protective conduit if their sheaths are made from flame-resistant plastic, e.g. PVC for sheathed NYM wires. Flat-lead cables are not permitted.

For lighter design conduits - class 2 (min. pressure resistance 320 N/5cm) or higher, and if additionally fire-protected, cable of type of HO7V... (insulated individual leads) and sheathed cables such as NYM can be used.

Manufacturer's designation of conduits, e.g.

Fränkische Rohrwerke:	FBY-EL-F (flexible) FFKu-EL-F-HO (flexible)
Hegler:	Heglerflex-EYLF (flexible) Heglerflex-EL (flexible) Heglerplast-EL (rigid)
PIPELIFE:	FB-E-LF (flexible) KuMS-E-MF (flexible)



Concrete construction

The following are permitted: cables without a protective conduit, e.g. NYY or NYZXY. Feed-throughs or connections at joints (e.g. wall-ceiling) can only be made in accordance with DIN EN 60670 in concrete construction installation boxes or casings if the outer sheath of the cables or wires has been removed. For medium-design conduits - class 3 (min. pressure resistance 750 N/5 cm) or higher, cables of type HO7V... (insulated individual leads) or sheathed cables, e.g. NYM can be used.

Manufacturer's designation of conduits, e.g.

Fränkische Rohrwerke:	FFKuS-EM-F (flexible) FFKuS-EM-F105 (flexible)
Hegler:	Heglerflex-ESPM (flexible) Heglerflex-ESPM105 (flexible) Heglerplast-EPKM (rigid)
PIPELIFE:	Ku-P-AS-E-MF-105 (flexible) RP-E-SF-UV (flexible) KuMS-E-MF (flexible) PSM-v-E-SF (rigid)

Since there are currently no definitions contained in the standard for minimum pressure resistance that relate to the type of installation, the manufacturer's specifications must be followed, especially for concrete constructions.

Note: The maximum temperature of the pouring process for our concrete building installation boxes with VDE certification is -5 to 90°C.

KNX building system technology













Special one-gang boxes (electronic boxes) for installation in flush-mounting and cavity walls are shown in the appropriate product sections.

Disposal

KAISER products are not subject to the regulations relating to the disposal of electrical/electronic waste, so currently they do not need to be marked accordingly. KAISER's trade partners in Germany (electrical wholesalers) offer the installer and/or end user a packaging return service (= returning it for recycling).

Fire resistance acc. to DIN EN 60670

The test takes place acc. to DIN EN 60695 T. 2-11. It is a glowing wire test using the following test temperatures.

650° C		Flush-mounting	
650° C		Concrete construction	
650° C		In plaster	
650° / 850° C		Covers	 / 
850° C		Cavity wall	
850° C		Terminals	



Electrical installations in hygienically important areas such as hospitals, medical practices, ambulances, outpatient clinics, etc.

For reasons of cost, the interiors of such buildings are often built using lightweight or plasterboard materials. The resulting cavities can very easily become a refuge for harmful insects. Because of the almost total gas proofness, the air-tight versions of the cavity wall boxes prevent both transfer of bacteria caused by insects and undesirable intake or outflow of filtered air (for example in operating theatres or intensive care stations). A corresponding certificate of proof is available on request.

Maintaining functionality of cables and wiring systems

Functionality is maintained in an electrical system when, during a fire test, no short circuit and no interruption to current flow take place in the cable/wiring system.

Maintenance of functionality is divided into classes from E30 - E90 in accordance with DIN 4102 T.12. This means that the systems must be able to withstand fire for a period of between 30 and 90 minutes. The materials used for these measures must be made of non-flammable materials (materials class A).

One-gang junction boxes

In addition to space for equipment, one-gang junction boxes **have space for at least 3 connection terminals**. All KAISER one-gang junction boxes can be used as a junction box if a screw-on cover with fire resistance of 650°/850°C according to DIN EN 60670 is used as a junction box.




Halogen-free materials (preventive fire protection)

In order to prevent injury to persons or property damage, the use of halogen-free materials may be specified. All KAISER flush-mounting and concrete installation boxes, casings, luminaires and loudspeaker housings are halogen-free. Boxes and casings for cavity wall installation as well as several accessory parts are available as halogen-free articles in the product range.



Cavity wall boxes

According to DIN EN 60670, cavity wall boxes are subject to special safety tests and must be marked with the symbol .

Combinations

Combinations for multiple masking frames of the accessories are created by lining up one-gang boxes and/or one-gang junction boxes. The combination spacing for this is 71 mm according to DIN 49075. Combinations of 3-phase and low voltage devices, for example antenna sockets, can be used together only when sockets with electric shock protection are used.

If sockets without electric shock protection are used (these may still be available), then they must have separate covers. The distance between the installation boxes is normally 91 mm (more if necessary) and is created by using distance pieces or suitable tools.



Light hooks

According to **DIN EN 60670 P. 21 / DIN VDE 0100 P. 559**, hanging appliances for luminaires, e.g. light hooks, must be able to carry 50 N or a safety load of five times the specified weight of the light.



Equipotential bonding

Every building must have a main equipotential bonding point. In accordance with DIN VDE 0100 T.701, rooms with baths or showers and covered swimming baths must have additional equipotential bonding.

To ensure easy accessibility for later disconnection and measurement, it is advisable to place the additional equipotential bonding point in an appropriate housing containing an equipotential bonding terminal strip. In accordance with DIN VDE 0100 Part 710, rooms used for medical purposes must have special equipotential bonding installed.



Protection of plasterwork

According to DIN 18382, protection of an installation and any equipment necessary to provide protection of the installation are additional responsibilities of the installation engineer providing this service. Installation boxes are normally closed off with so-called plaster or signal covers.



Protection types

In accordance with DIN EN 60670, the minimum protection class of flush-mounting and concrete installation boxes must be IP 2X, and cavity wall boxes must conform to IP 3X. These offer protection against foreign bodies and contact as required by EN 60529/DIN VDE 0470. For installation boxes that have been plastered in too deeply or later tiled over, boxes can be extended in accordance with the required protection class by the fitting of plaster compensation rings.

Areas to be protected

When installation boxes are installed in bathrooms etc., the requirements of DIN VDE 0100 P.701 must be met.

Telephone boxes

In accordance with standard datasheet FTZ 731 TR1 of the German Federal Telecommunications Office in Darmstadt, only one-gang boxes conforming to DIN 49073 may be used for installing telecommunications inserts.

Environmental friendliness - RoHS

Restriction on the use of certain hazardous substances according to EU directive 2002/95/EC (RoHS) and EU directive 76/769/EWG: The materials which we supply comply with the valid "Directives for the use of harmful substances" and satisfy the legal regulations regarding the putting into circulation of substances. Emissions are not known in normal use.



Flush-mounting product range:

Impact-resistant polystyrene-polyethylene



Cavity wall product range:

Polypropylene



Concrete construction product range:

Polyethylene



Lights and loudspeaker housing product range:

polyethylene/polyamide, galvanised steel plate, fire retardant coating



Fire-protection product range:

Galvanised sheet steel, fire-retardant coating



Cable glands:

Polyamide, nickel-plated brass



Wall light connection boxes

According to DIN VDE 0100 Part 559, wall light connection boxes must be used wherever feed wiring for wall lights terminates. KAISER wall light connection boxes have space for at least 3 terminal blocks and a reserve cable, with a screw attachment for fitting luminaires.

Additional technical information on our solutions and products is available on our website.

The builder of the installation retains responsibility for selection of suitable box types or housings and for their correct installation according to technical safety standards. (See table on page 180 for overview of test markings) Any technical advice given by us is according to the best of our current knowledge and is without responsibility on our part. This also applies to any protective rights of third parties.

Manufacturer assignment. Online tool.

Database-supported planning aid for luminaires and loudspeakers.



The **manufacturer assignment** online tool is a database-supported planning aid for luminaires and loudspeakers from all leading manufacturers.

In four easy steps, this platform determines the perfect KAISER housing configuration for your individual product planning by means of four screens. In screen 1, enter technical details e.g. the type and thickness of the ceiling, and the fire-protection class. Screen 2 asks for details of the manufacturer and specific product data. In screen 3 you can define specifications for the installation housing. Screen 4 displays all the data and product recommendations which you require for your planning.

You can also omit individual points and, for example, determine which luminaires or loudspeakers fit in the housing which you have chosen. For loudspeaker planning you can give details of transmission technology or volume.

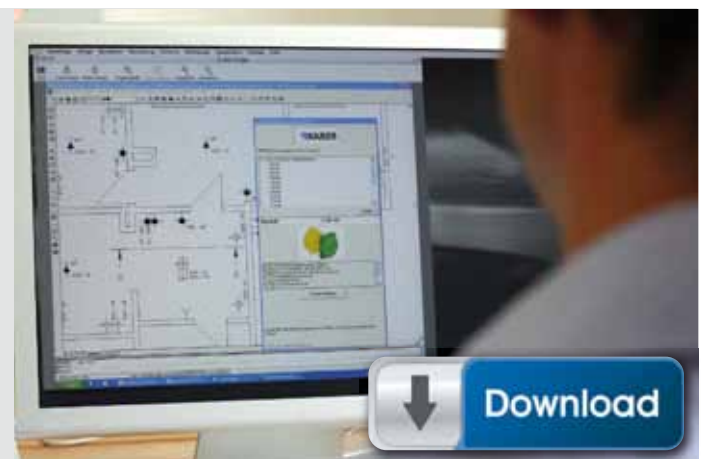
Manufacturer assignment is available on our website, with details of ceilings, luminaires, loudspeakers, fire-protection classes and, of course, KAISER installation housings.

www.kaiser-elektro.de



By using KAISER's [K.SYS] planning software you can plan components for electrical installation in concrete with just a few clicks of your mouse. With clearly laid out selection screens and wizards as well as the simple "drag and drop" function, you will always reach your goal quickly and accurately when planning for on-site mixed concrete and for prefabricated parts.

Additional information on [K.SYS] is available on page 106





KAISER's website at www.kaiser-elektro.de offers you a wide-ranging and attractive selection of services. Its modern, user-friendly design and logical functionality make intuitive operation possible. Our website contains all the information on our products, and also interesting facts and the latest news about the KAISER company.

In our "Topics and solutions" section, we offer architects and planners product solutions for modern, secure, safe and efficient installation technology.

The intelligent search function with filtering according to a range of parameters will quickly and safely lead you to the suitable product. In the cable glands section, you can also filter directly for the cable diameter which you have entered.

In product detail view you can find suitable accessory parts, tools, tender specifications and 3D data.

Using the notepad, you can compare the products which you have selected, or send them directly by email. With just a few mouse clicks you can also generate your individual pdf catalogue with the information which is important to you.

Informative product animations showing function and installation are also part of the multimedia offer.

Discover KAISER's new world of information!!

Notepad



Product comparison

Product	Product 1	Product 2	Product 3
Length	87 mm	107 mm	175 mm
Width	27 mm	40 mm	50 mm
Depth	25 mm	25 mm	40 mm
Load in the cable (N)	50	100	200
Load capacity	50	100	200
Maximum operating temp. (°C)	100	100	100
Temp. for storage (°C)	100	100	100
Installation depth (mm)	20 mm	20 mm	20 mm
MSD compatible	Yes	Yes	Yes
Load in the cable (N)	50	100	200
MSD compatible	Yes	Yes	Yes

Product search



Processing information



Product videos



CAD download



Tender specifications

Our www.kaiser-elektro.de and www.ausschreiben.de websites include detailed tender specifications for all relevant KAISER products and in standard file formats.

Within the watch list, you can easily download, in the most up-to-date formats (e.g. GAEB 90, ÖNORM, DATANORM, PDF etc.), the specification texts on all the products which you have selected.

www.kaiser-elektro.de



Manufacturer assignment. Online tool.

You can find database-supported manufacturer assignment directly on our website. With information on ceilings, luminaires, loudspeakers, fire protection classes and, of course, on KAISER installation housings.

www.kaiser-elektro.de

Further information on the online tool can be found on page 247.



[K.SYS] planning software for electrical installation in concrete.

With KAISER's K.SYS planning software you can plan components for electrical installation in concrete with just a few mouse clicks. The clearly-arranged pop-up windows and wizards and the simple drag and drop function let you make plans, quickly and precisely, for on-site mixed concrete or also prefabricated parts.

www.kaiser-elektro.de

Further information on [K.SYS] can be found on page 106.



Product training

We regularly organise training courses on KAISER product and system solutions. We can also offer such courses at your premises if you wish. Please contact us for further information.

Technical hotline:

Telephone: +49(0)22355.809.61

Email: technik@kaiser-elektro.de



Active partnership and cooperation means that we accompany our "product cycle" from determining requirements up to the next generation. We are at your side in everything to do with building installation. We accompany you in the planning phases, we develop functioning solutions together with you, giving you advice on all matters of installation, including on the building site, and we provide you with the right tools at all times. Our digital and printed media answer many of your questions and provide realistic information and solutions.

www.kaiser-elektro.de

Email: info@kaiser-elektro.de

Telefon: +49(0)2355.809.0



Service

Test marks

KAISER products are manufactured in accordance with DIN, VDE, EN and IEC regulations. Insofar as required by regulations, approval certificates from the VDE Testing and Certification Centre as well as a number of other European testing centres have been issued for the products contained in this catalogue.

	Germany	VDE VERBAND DER ELEKTROTECHNIK ELEKTRONIK INFORMATIONSTECHNIK	
	Austria	ÖSTERREICHISCHER VERBAND FÜR ELEKTROTECHNIK	
	Belgium	COMITE ELECTROTECHNIQUE BELGE asbl	
	Czech Republic	ELEKTROTECHNICKÝ REPUBLIK ZKUSEBNÍ ÚSTAV	
	Hungary	MAGYAR ELÉKTROTECHNIKAI ELLENŐRZŐ INTÉZET	
	Slovenia	SLOVENSKI INSTITUT ZA KAKOVOST IN MEROSLOVJE	
	Switzerland	VERBAND FÜR ELEKTRO-, ENERGIE- UND INFORMATIONSTECHNIK	
	UK	BRITISH STANDARD	

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The version of the "General Terms and Conditions of Delivery of the ZVEI for Products and Services in the Electrical Industry" which is in force at the time in question shall apply as well as the following supplementary regulations of KAISER GmbH & Co.KG.

The place of performance shall be Schalksmühle and the place of jurisdiction Lüdenscheid.

1. Scope of deliveries or services

The written declarations of both parties shall carry equal weight in all matters relating to the scope of deliveries or services. If a contract has been concluded without such mutual declaration, either the written order confirmation from the supplier or service provider (hereinafter: supplier), shall be decisive. If such a document has not been issued, the written order from the purchaser shall be decisive.

Supplementary agreements shall only be valid if confirmed in writing.

2. Prices

The gross prices are recommended retail prices in Euro and exclusive of sales tax. The prices for brass products are subject to certain variations that follow the respective DEL quotations. These prices are based on a DEL quotation of 150 Euro for brass MS 58. Changes to this quotation of more than 15 Euro (upwards or downwards) will be invoiced with a 5% surcharge or a 5% reduction. The basis for the calculation will be the DEL-quotation on the date the order is received on our premises.

3. Passing of risk

The risk shall pass to the purchaser, even when carriage freight paid delivery has been agreed:

1. When the delivery package has been brought to the shipping department or been collected, if assembly or mounting are not included in the delivery package. The goods shall be packaged with the utmost care. The goods shall be shipped in the manner deemed most appropriate by the supplier. At the request of the purchaser, the supplier shall insure the shipment against breakages and damage caused in transit or by fire.
2. Should the shipping, delivery, start or performance of installation or mounting be delayed at the request of the purchaser or for reasons for which he is responsible, the risk shall pass to the purchaser for the duration of the delay. However, the supplier shall be obliged to take out insurance cover if requested to do so by the purchaser. The costs for such cover shall be borne by the purchaser.

4. Retention of title

The goods shall remain the property of the supplier until the purchaser has satisfied all claims which the supplier can make on him under the terms of the business relationship. Prior to this time, pledging the goods or transfer by way of security shall be forbidden, and the goods may only be resold to the trade in the normal course of business subject to the proviso that the reseller receives payment from his customers. Any intervention costs shall be borne by the purchaser. If the combined value of the security interests of the supplier exceeds the value of all secured claims by more than 20%, the supplier shall release a corresponding portion of the security rights if so requested by the purchaser.

Should the purchaser breach the contract (in particular if it defaults on payment), the supplier shall be entitled to take back the goods under his ownership or, if necessary, enforce assignment or claims for return against third parties. All costs arising from the return and recycling of the goods shall be borne by the purchaser. Should the supplier take back goods to which he still retains ownership rights, this shall not be interpreted as terminating the contract.

Should external warehousing facilities be used for goods from the supplier to which the supplier still retains ownership rights, the supplier must be informed of this. In such cases, the purchaser must conclude an individual agreement with the warehouse company in order to ensure that no liens will be executed on the goods to which the supplier still retains ownership rights. When such goods are delivered, the warehouse company must be informed in writing that the goods in question are the property of the supplier and are only being stored with the warehouse company on the proviso that it does not acquire a lien on the goods.

5. Terms of payment

1. Payment is to be made in Euros and free of transaction charges to the designated account of the supplier.
2. The purchaser may only offset those claims that are uncontested or have been recognised by declaratory judgement.
3. Unless otherwise agreed, the purchaser shall have 30 days to effect net payment, with a 3% discount if payment is made within 10 days, both counted from the date the invoice is issued.

6. Shipping costs

The prices shall apply for terms of delivery ex works for the acceptance of sealed shipping cartons for which no packaging costs are levied. If cartons are broken open, a surcharge of 5 EUR shall be levied per carton, irrespective of the value of the order.

7. Free delivery

Orders for sealed delivery within the Federal Republic of Germany which have a net value of 800 EUR or more shall be delivered free to the purchaser's address.

8. Returns

Goods may only be returned in exceptional circumstances and must first be approved by us. If we are not notified in advance, returns will not be accepted by our distribution warehouse and shall be returned at the expense of the consignor.

9. Acceptance

1. Even if they exhibit minor defects, the delivery items must be accepted by the purchaser.
2. Part-deliveries are permitted.

10. Liability for defects

The supplier shall be liable for defects as follows (if the delivered goods do not exhibit the warranted characteristics, this shall also be deemed a defect):

1. If parts or services become unserviceable or if their serviceability becomes seriously impaired within 12 months (regardless of the operation period) of the day of the passing of the risk, and if such unserviceability is due to factors which date from a time prior to the passing of the risk (in particular faulty construction, poor quality material or faulty workmanship), the supplier must either repair or replace the parts or perform the services again free of charge. Should such defects be discovered, the supplier must be informed in writing without delay.
2. The purchaser must comply with his contractual obligations, in particular the agreed terms of payment. If a complaint in respect of defects is lodged, the purchaser may withhold payments to a value considered appropriate in light of said defects. If, however, the contract concerns the operation of trade, the purchaser may only withhold payment if there is absolutely no doubt as to the legitimacy of the complaint that has been lodged.

General information

1. The issue of this catalogue renders all previous editions null and void.
2. This edition only contains KAISER standard product ranges. Special product ranges and developments on request.
3. KAISER catalogues in other foreign languages are available on request.
4. We make every effort to ensure that technical advice given by us is correct. Such advice is given on a purely non-binding basis. The installer of electrical installation systems shall be responsible for the selection of suitable installation boxes, the materials for such boxes and performing installation in a safe manner.

January 2012

>> Subject to technical changes. No liability for errors.

The current term and conditions of delivery and payment can be found on our website: www.kaiser-elektro.de

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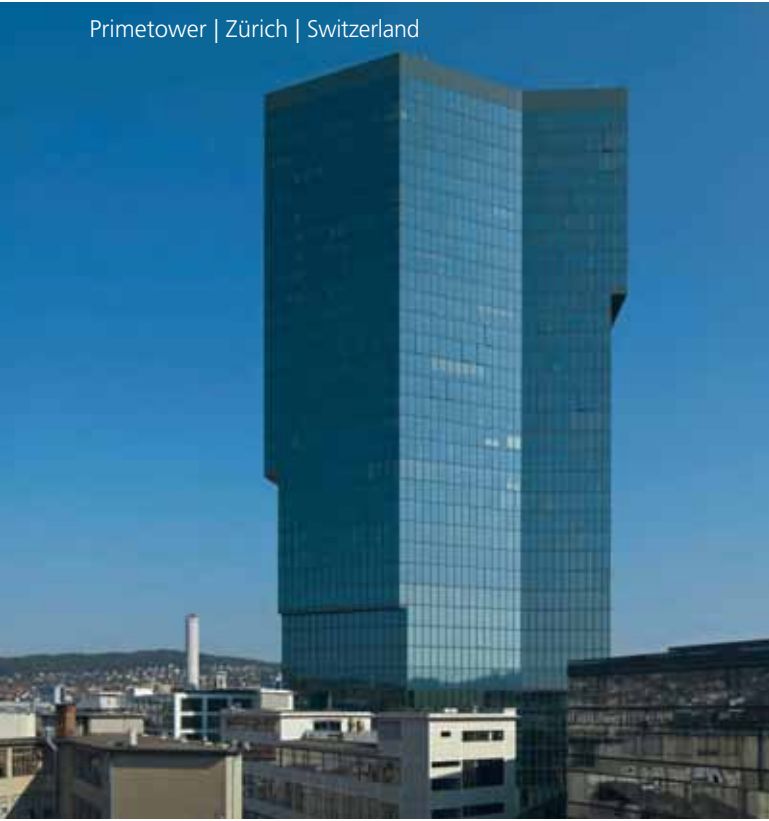
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References

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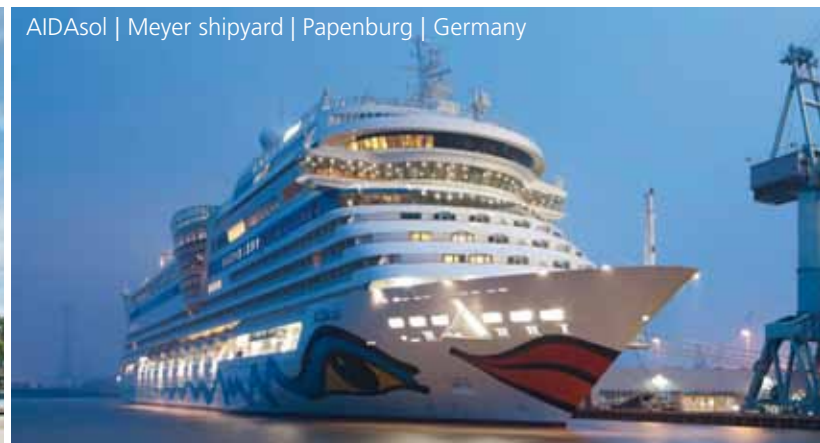


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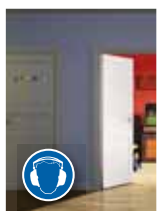
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