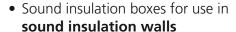
## **Cavity wall installation**



### The most important advantages at a glance:

- Complete system for all cavity wall applications
- FX<sup>4</sup> 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 toolless 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



- Radiation protection boxes for use in leadcontaining 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



Product film www.kaiser-elektro.org/cavitywall

Cavity wall   Product lines	
Basic installation	p. 78
Air-tight installation	p. 88
Air-tight sleeves	p. 102
AFS intelligent fire-protection technology	p. 246
Sound insulation technology	p. 110
Screening and potential conductivity	p. 125
Radiation protection technology	p. 119
Screws, metal plates	p. 127
Junction casings and boxes	p. 128
Universal installation housings	p. 132
International products	p. 134
Tools for cavity wall installation can be found in the "Tools" section starting on page 305.	

Realize   Real	Cavity wan   11								
Part			saving			Environmen-		•	Ship-
Part									
One-gang junction boxes         p. 80         p. 90         p. 112         p. 121         p. 125         p. 134         p. 251/256         p. 261           One-gang boxes for thin boarding         p. 82	For installation accessories	WEAA	WEVV						
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One-gang junction boxes for solid wood for	One-gang junction boxes	p. 82	-	-	-	-	-	-	p. 261
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Nousings   P. 132   P. 133   P. 134   P. 132   P. 135	CEE one-gang boxes	p. 83	p. 97	-	-	-	-	-	-
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Por cable exits   Post   Pos	_								
Wall light connection boxes         p. 85         p. 98         -	Available halogen-free	•	•	•	•	-	•	•	•
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Sealings         -         -         -         -         -         p. 262         -           For cable connections           Junction boxes         p. 83         - <td>For cable entries</td> <td>1</td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td>	For cable entries	1				1			
For cable connections   Junction boxes   p. 83   -   -   -   -   -   -   -   -   -	Air-tight sleeves	-	p. 102	-	-	-	-	-	-
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casings         p. 130         - <td>Junction casings</td> <td>p. 129</td> <td>-</td> <td>-</td> <td>-</td> <td>p. 36/126</td> <td>-</td> <td>-</td> <td>-</td>	Junction casings	p. 129	-	-	-	p. 36/126	-	-	-
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	End cover	p. 81	p. 99	p. 21/113	-	p. 36/126	-	p. 258	p. 258

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

for cavity wall installation



## Plus-minus device screw

The new screw allows the installer to fit screws and devices screws with the same screwdriver. In addition, the new screw drive can be used with many other components, e.g. switches, sockets, terminal blocks, etc. Optimal shape for +/- or PZ1 screwdrivers, and at the same time a slot screwdriver up to max. 4mm width can be used. A closed long-slot ensures that the blade does not slip out.

### **Processing instructions**



Device screw with extra-flat countersunk head for low installation height.



Combination drive Pozidrive1/ slot provides the best grip.



Suitable for fitting using cordless screwdriver.



Optimal for fitting with +/- screwdriver.



# FX<sup>4</sup> technology - the fastest means of screw attachment

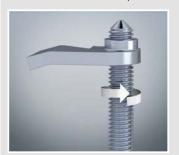
FX<sup>4</sup> technology provides the fastest-ever screw fixing for cavity wall boxes and installation housings. The special thread shape enables up to 40% quicker mounting with simultaneous high self-locking effect.

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



### **Processing instructions**

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



Standard screw



KAISER standard



Example of use for universal housing



Example of use of EnoX®

## **Cavity wall installation boxes**

O-range® – The new KAISER cavity wall installation boxes with proven mounting lug technology and improved product features. A practical design and a large selection of cable and conduit entries allow a large number of applications. Additional boxes for installation in thinly boarded walls or solid wood walls complete the wide range. VDE certification documents the high level of quality.



- Installation in Ø 68 mm cut hole
- Screws ensure permanent fixing
- Entries can be broken out for cables and conduits
- Combinable and through-wiring by using support connectors
- Fixing of devices by means of pre-mounted device screws





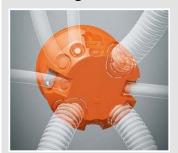








### **Processing instructions**



New boxes provide a large number of entry options.



Marking of the openings simplifies the assignment of the correct diameter.



Combination entry for cable and conduits up to max. Ø 25



Specific openings can be made simply by breaking out.



Bending of the conduit up to 90° is easily possible in the case of slim wall constructions or in the installation level



Cable and conduit retention prevents slipping-out of live



Standardised round support connector for fast installation.



Easy-to-fit device fixing thanks to new +/- screw.

### 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

### **INNOVATION**

### O-range® one-gang box

- · with holding ring
- · Art. No. 9063-02 replaces Art. No. 9063-01, Art. No. 9063-78 replaces Art. No. 9063-77











3D animation

For panel thickness	7 - 40 mm	7 - 40 mm
Depth	49 mm	49 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Ø 20 / 25 mm combination entries	2	2
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	2	2
Cable entries for low voltages	2	2
Support connectors for each package	7	7
halogen-free	-	•
<b>A</b> / <b>©</b>	• / •	•/•
Art. No.	9063-02	9063-78
Inner packaging/shipping	25 / 250	25 / 250
Accessories: Support connector, page 87		

### **INNOVATION**

## O-range® one-gang junction box

- · with holding ring
- · Art. No. 9064-02 replaces Art. No. 9064-01, Art. No. 9064-78 replaces Art. No. 9064-77











3D animation

For panel thickness	7 - 40 mm	7 - 40 mm
Depth	62 mm	62 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Ø 20 / 25 mm combination entries	2	2
Conduit entries Ø 20 mm	1	1
Cable entries 5 x 2.5 mm <sup>2</sup> or 7 x 1.5 mm <sup>2</sup>	1	1
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	3	3
Cable entries 3 x 1.5 mm <sup>2</sup>	3	3
Cable entries for low voltages	2	2
Support connectors for each package	7	7
halogen-free	-	•
<u></u> / <del>(ve)</del>	• / •	•/•
Art. No.	9064-02	9064-78
Inner packaging/shipping	25 / 250	25 / 250
Accessories: Support connector, page 87		

### One-gang box

· with holding ring







For panel thickness	7 - 28 mm	7 - 28 mm
Depth	35 mm	35 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	4	4
halogen-free	-	•
Art. No.	9061-00	9061-77
Inner packaging/shipping	25 / 250	25 / 250
Accessories: Support connector, page 87		

### Two-gang junction box

- · for 2 electrical inserts or 1 block insert
- $\cdot$  with cover (Art. No. 9062-90), for use as a junction box
- $\cdot$  use separator wall to separate electrical circuits Art. No. 9062-22
- · 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		
Conduit entries Ø 20 mm	6	6		
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2	2		
Cable entries 3 x 1.5 mm <sup>2</sup>	4	4		
halogen-free	-	•		
<b>A</b> / <b>®</b>	• / •	• / -		
Art. No.	9062-02	9062-77		
Inner packaging/shipping	10 / 100	10 / 100		
Accessories: Connecting clip for stacking boxes, page 85; Support connector, page 87				

### Replacement cover

· for junction box Art. No. 9062-02



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

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

for cavity wall installation

## One-gang box for thin boardings

- $\cdot$  for boardings that do not permit stepped face cutting
- $\cdot$  with thin holding ring
- · protection class IP 2X







For panel thickness	0,5 - 40 mm	0,5 - 40 mm
Depth	41 mm	41 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Conduit entries Ø 20 mm	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	4	4
halogen-free	-	•
<u></u>	•	•
Art. No.	9068-04	9068-74
Inner packaging/shipping	25 / 250	25 / 250

## One-gang junction box for thin boardings

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







For panel thickness	0,5 - 40 mm	0,5 - 40 mm
Depth	61 mm	61 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Conduit entries Ø 20 mm	4	4
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	4	4
Cable entries for low voltages	2	2
halogen-free	-	•
	•	•
Art. No.	9068-03	9068-76
Inner packaging/shipping	25 / 250	25 / 250

### PERILEX®/CEE One-gang box

- · with holding ring
- · for device inserts 16 A











For panel thickness	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 2 countersunk device screws 4 mm Ø, 16 mm in length to facilitate use of 16 A PERILEX inserts	•	•	-	-
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	<del>-</del>	-	•	•
<u></u> 1 € 1	• / •	• / -	• / -	• / -
Art. No.	9067-01	9067-77	9075-01	9075-77
Inner packaging/shipping	10 / 100	10 / 100	10 / 100	10 / 100

### **Junction box**

- · with universal VDE cover Art. No. 1184-90
- · with holding ring
- $\cdot$  with 2 Ø 4 x 16 mm countersunk head screws







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	-	•
<u></u>	•	•
Art. No.	9071-01	9071-77
Inner packaging/shipping	10 / 100	10 / 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**



Using turbo cutter Multi 4000 Ø 68 mm (Art. No. 1083-10), cut two installation openings with a centre distance of 71 mm.



You can cut a precision cable entry for air-tight installation with the KAISER universal opening cutter (Art. No. 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 any possible switching sounds.

### **Electronics box**

- · air-tight version with additional sealing lip
- Tunnel twin-chamber box with enclosed separator wall and cover that can be wallpapered over.
- · for one-gang inserts and electronic components such as EIB actuators, communications equipment (Cat 7), radio control elements, alarm modules, etc.
- · with holding ring





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	MK-II	( - M
		9

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	•	•	
ŌVE	•	•	
Art. No.	9062-94	9062-74	
Inner packaging/shipping	10 / 100	10 / 100	
Accessories: Connecting clip for stacking boxes, page 85; Support connector, page 87			

### Cover ready for papering and filling

The cover can be fitted flush with the wall for papering over or turned 180° for filling.









## Connecting clip for stacking boxes

· for horizontal combination of two-gang junction boxes 9062-02 or electronics boxes 9062-94



Art. No.	9062-50
Inner packaging/shipping	-/10

### Wall light connection box

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







IFW/	AID		
	AIR	ан	

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	-	-
Conduit entries Ø 20 mm	1	-	-
Cable entries 3 x 1.5 mm <sup>2</sup>	2	1	1
halogen-free	-	-	•
Air-tight	-	•	•
If necessary use screw cover 1148-90	•	-	-
€ / ((VE)	• / •	-/-	-/-
Art. No.	9148-00	9248-01	9248-77
Inner packaging/shipping	25 / 100	25 / 100	25 / 100

#### Cover

- · for wall light connection boxes Art. No. 1048-00 and Art. No. 9148-00
- $\cdot$  With Ø 3.2 x 15 mm cover screws



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

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

for cavity wall installation

### **Ceiling light connection box**

- $\cdot$  with M5 metal thread for light hooks min. length 55 mm
- · maximum load 20 N (2 kg)
- $\cdot$  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
Conduit entries Ø 20 mm	2
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2
Cable entries 3 x 1.5 mm <sup>2</sup>	2
Art. No.	9063-50
Inner packaging/shipping	-/10

### **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	

### 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

### **Support connector**

- · for through-wiring of combinations to IP 3X standard air-tight
- · to make air-tight combinations
- · Support connectors for new boxes
- · for Art. Nos. 9062-94/74, 9063-02, 9064-02, 9066-01/12, 9068-01, 9263-..., 9264-..., 9062-02/77, 9268-94/74, 9266-22/77





### **AIR-TIGHT**

halogen-free	-	•
Art. No.	9060-98	9060-78
Inner packaging/shipping	25 / 100	25 / 100

### **Support connector**

- $\cdot$  for through-wiring of combinations to IP 30 standard
- · Support connectors for old boxes
- · for Art. Nos. 9061-00/-77, 9068-03/-76





halogen-free	-	•
Art. No.	9060-97	9060-77
Inner packaging/shipping	50 / 250	- / 50

### **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

for cavity wall installation



## Air-tight cavity wall installation

O-range®— The new cavity wall box! Air-tight O-range® cavity wall boxes with ECON® technology for energy-efficient electrical installation according to EnEV and for installations under clean-room and hygiene conditions. The elastic ECON® technology sealing membrane allows airtight 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













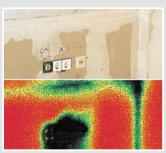
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### **Technical information**



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).



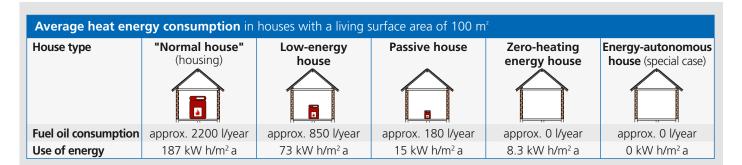
Thermographic photographs highlight the thermal losses, which occur in conventional electrical installations.



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 KAI-SER 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.



# 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 allows 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.



Reinforcement around the opening prevents tearing of the membrane.



Easy opening of the conduit entry by means of pre-defined opening tab.



Permanently air-tight conduit entry up to conduit size M25.



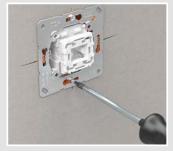
The conduit can be angled in the entry by up to 90° ...



... which is ideal for use in slim wall constructions and installation levels.



The marking of the entry openings simplifies the correct choice of opening size.



Easy-to-fit device fixing thanks to new +/- screw.



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.

for cavity wall installation

### **INNOVATION**

### O-range ECON® 63 one-gang box

- · Air-tight design with sealing membranes
- · fully-insulated air-tight through-wiring for combinations using support connectors
- · tool-free cable or conduit entries
- · integrated strain relief of NYM cables, selflocking of conduits
- · Art. No. 9263-22 replaces Art. No. 9263-21, Art. No. 9263-78 replaces Art. No. 9263-77









3D animation

## AIR-TIGHT ECON



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	49 mm	49 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Tube entries up to M25	2	2
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	2	2
Support connectors for each package	7	7
halogen-free	-	•
Air-tight	•	•
<u>A</u> / (WE)	• / •	•/•
Art. No.	9263-22	9263-78
Inner packaging/shipping	25 / 250	25 / 250

### **INNOVATION**

### O-range ECON® 64 one-gang junction box

- · Air-tight design with sealing membranes
- · fully-insulated air-tight through-wiring for combinations using support connectors
- · tool-free cable or conduit entries
- · integrated strain relief of NYM cables, selflocking of conduits
- · Art. No. 9264-22 replaces Art. No. 9264-21, Art. No. 9264-78 replaces Art. No. 9264-77









3D animation

## AIR-TIGHT ECON



For panel thickness	7 - 40 mm	7 - 40 mm
Depth	62 mm	62 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Tube entries up to M25	2	2
Cable entries 5 x 2.5 mm <sup>2</sup> or 7 x 1.5 mm <sup>2</sup>	1	1
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	3	3
Cable entries 3 x 1.5 mm <sup>2</sup>	3	3
Support connectors for each package	7	7
halogen-free	-	•
Air-tight	•	•
<u></u>	• / •	•/•
Art. No.	9264-22	9264-78
Inner packaging/shipping	25 / 250	25 / 250

Subject to modifications www.kaiser-elektro.de

FLUSH-MOUNTING

CAVITY WALL

HOUSINGS

FIRE PROTECTION

CABLE GLANDS

## **Electronics box ECON® Flex**

Air-tight ECON® Flex electronics box with ECON® technology for energy-efficient electrical installation in accordance with EnEV and for installation under clean room or enhanced hygiene conditions. Fast installation is ideal for modernising or extending existing systems. The flexible tunnel makes it easy to install, and creates space for electronic components, cable reserves and terminals.

- Additional sideway terminal compartment for communications and network technology
- Elastic sealing membrane for guaranteed air-tightness
- Tool-free cable and conduit entry
- Integrated cable retention
- Can be combined with support connectors, air-tight and fully-insulated







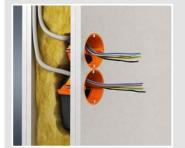








### **Examples of use**



Combination with ECON® cavity wall boxes is possible.



Additional space for connection terminals



Accepts electronic components e.g. actuators



Space for cable reserves.

### **Processing instructions**



Existing Ø 68 mm installation openings can be used.



Air-tight and fully-insulated combination using support connector Art. No. 9060-98.



Standardised cable retention. Elastic sealing membrane permits toolless cable entry...



... and conduit entries up to M25 in an air-tight version

for cavity wall installation

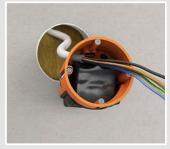
### Installation



Cut Ø 68 mm installation opening; for refurbishing, centre distance 71 mm, using Profix.



Feed cable or conduit air-tight through the elastic sealing membrane



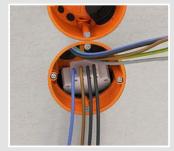
For easy installation, fold in the elastic tunnel



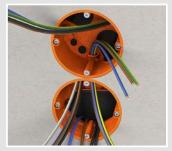
Insert the box into the component opening.



Tighten box lug screws and fold out the tunnel.



Insert electronic component into the tunnel



Through-wiring takes place by means of support connector Art. No. 9060-98.



Guaranteed airtight - secure terminal compartment for electronic components.

### **INNOVATION**

### **Electronics box ECON® Flex**

- · for accessories and electronic components
- · Air-tight design with sealing membranes
- · Elastic tunnel
- · Combinable with ECON® one-gang junction boxes







3D animation



### **ECON** AIR-TIGHT

For panel thickness	7 - 30 mm	7 - 30 mm
Length x Width x Depth	122 x 71 x 75 mm	122 x 71 x 75 mm
Cut hole Ø	68 mm	68 mm
Device screws	2	2
Tube entries up to M25	2	2
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	2	2
halogen-free	-	•
Air-tight	•	•
<u>♠</u> / <del>(NE)</del>	• / •	•/•
Art. No.	9268-94	9268-74
Inner packaging/shipping	10 / 100	10 / 100

Air-tight one-gang junction box with ECON® technology especially for installation with electrical installation conduit. The box is VDE-certified and suitable for energy-efficient electrical installation acc. to EnEV. 4 entries are optimal for continuous conduit installation e.g. in prefabricated house construction or with data networks. Extremely easy fitting thanks to toolless conduit insertion with opening tab. The sealing membrane guarantees permanent air-tightness and at the same time retention of the conduit.

- Installation in Ø 68 mm cut hole
- Elastic sealing membrane for guaranteed air-tightness
- Toolless conduit entry
- Can be combined with support connectors, air-tight and fully-insulated

















### **Processing instructions**



Easy opening of the conduit entry by means of the opening tab - without any tearing of the membrane.



Air-tight conduit entry up to conduit size M25.



Bending of the conduit up to 90° is easily possible in the case of slim wall constructions or in the installation level



M25

Air-tight and fully-insulated combination using support connector Art. No. 9060-98.

### **INNOVATION**

### O-range ECON® conduit one-gang junction box

- · Air-tight design with sealing membranes
- · fully-insulated through-wiring for combinations of one-gang junction boxes with support connectors
- · toolless conduit entries
- · available from 3rd quarter 2018



9266-22

25 / 250







3D animation

## AIR-TIGHT ECON



For panel thickness
Depth
Cut hole Ø
Device screws
Tube entries up to M20
Tube entries up to M25
Support connectors for each package
halogen-free

7 - 40 mm
62 mm
68 mm
2
2
2
7
•
•
9266-77
25 / 250

Inner packaging/shipping

Air-tight

Art. No.

FIRE PROTECTION

CABLE GLANDS

for cavity wall installation



## Junction box 120 mm air-tight

Air-tight Ø 120 mm junction box with ECON® technology for an energy-efficient electrical installation in accordance with EnEV. Extremely easy fitting thanks to toolless cable and conduit entry. The sealing membranes guarantee permanent air-tightness and at the same time retention of the cable or conduit. The large box volume provides plenty of installation space for various cable connections.

- Installation in Ø 120 mm cut hole
- Elastic sealing membrane for guaranteed air-tightness
- Tool-free cable and conduit entry



















### **Processing instructions**



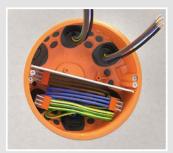
Cut installation opening with bi-metal cutter Art. No. 1082-



Elastic sealing membrane allows toolless cable and conduit entries in air-tight version.



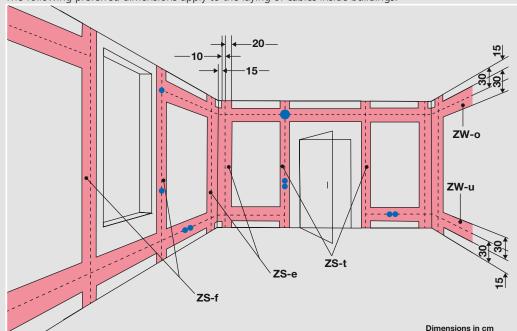
Fitting of fixing adapter for connection terminals on tophat rail.



For separation of 2 electrical circuits, use separator wall Art. No 9073-20

#### Installation zones in accordance with DIN 18015-3:2016-09

The following preferred dimensions apply to the laying of cables inside buildings.



#### Legend

- **ZS-t** vertical installation zones at doors: from 10 cm to 30 cm next to the constructional edges
- ZS-f vertical installation zones at windows: from 10 cm to 30 cm next to the constructional edges
- ZS-e vertical installation zones at wall corners: from 10 cm to 30 cm next to the constructional corners
- **ZW-u** lower horizontal installation zone: from 15 cm to 45 cm above the floor
- **ZW-o** upper horizontal installation zone: from 15 cm to 45 cm below the ceiling covering

Subject to modifications www.kaiser-elektro.de

3D animation

### **INNOVATION**

### Junction box Ø 120 mm O-range ECON®

- · Air-tight design with sealing membranes
- · for 2 electrical circuits through separator wall 9073-20
- · receptacle for TS 35 standard rail
- · with stable holding ring
- · Cutting the installation opening with bi-metal cutter 1082-20 or Variocut 1089-00
- · including cover and screws
- · available from 3rd quarter 2018

AIR-TIGHT ME ECON









For panel thickness	7 - 40 mm	7 - 40 mm
Depth	65 mm	65 mm
Cut hole Ø	120 mm	120 mm
Tube entries up to M25	6	6
Cable entries 5 x 2.5 mm <sup>2</sup> or 7 x 1.5 mm <sup>2</sup>	4	4
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	6	6
Cable entries 3 x 1.5 mm <sup>2</sup>	6	6
halogen-free	-	•
Air-tight	•	•
<u></u> / 👀	• / •	•/•
Art. No.	9273-91	9273-77
Inner packaging/shipping	-/10	- / 10
Accessories: Separator wall, page 131		



for cavity wall installation

## One-gang box for thin boardings

- · for boardings that do not permit stepped face cutting
- $\cdot$  Combinations only possible with boxes with the same Art. No.
- $\cdot$  with thin holding ring



### **AIR-TIGHT**





For panel thickness	0,5 - 40 mm	0,5 - 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 Art. No. 1085-80	•	•
halogen-free	-	•
Air-tight	•	•
<u></u>	•	•
Art. No.	9068-01	9068-79
Inner packaging/shipping	10 / 100	10 / 100

### **One-gang junction box**

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



### **AIR-TIGHT**





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 cut using universal opening cutter Art. No. 1085-80	•	•
halogen-free	-	•
Air-tight	•	•
<u></u> ∕ (((((((((((((((((((((((((((((((((((	• / •	• / -
Art. No.	9066-01	9066-77
Inner packaging/shipping	25 / 250	25 / 250
Accessories: Support connector, page 87; Su	ipport connector, page	98

### 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 cut using universal opening cutter Art. No. 1085-80	•
Air-tight	•
<u>♠</u> / <del>◎</del> / <del>◎</del>	•/•
Art. No.	9066-12
Inner packaging/shipping	25 / 250

### 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 Art. No. 1085-80	•	•
halogen-free	-	•
Air-tight	•	•
<b></b>	•	•
Art. No.	9075-12	9075-78
Inner packaging/shipping	10 / 100	10 / 100

### Cavity wall boxes, air-tight version, without sealing membrane

Air-tight making of cable or conduit entries and of box combinations.



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.

for cavity wall installation

### **Electronics box**

- · air-tight version with additional sealing lip
- · Tunnel twin-chamber box with enclosed separator wall and cover that can be wallpapered over.
- · for one-gang inserts and electronic components such as EIB actuators, communications equipment (Cat 7), radio control elements, alarm modules, etc.
- · with holding ring

**AIR-TIGHT** 





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	•	•	
Ø\E	•	•	
Art. No.	9062-94	9062-74	
Inner packaging/shipping	10 / 100	10 / 100	
<b>Accessories:</b> Connecting clip for sta	cking boxes, page 85		

### Wall light connection box

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

**AIR-TIGHT** 





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 <sup>2</sup>	1	1	
halogen-free	-	•	
Air-tight	•	•	
Art. No.	9248-01	9248-77	
Inner packaging/shipping	25 / 100	25 / 100	

### **Support connector**

- · for through-wiring of combinations to IP 3X standard air-tight
- $\cdot$  to make air-tight combinations
- $\cdot$  Support connectors for new boxes
- for Art. Nos. 9066-01/12, 9068-01, 9263-..., 9264-..., 9062-02/-77, 9062-94/-74, 9268-94/-74, 9266-22/-77





#### **AIR-TIGHT**

halogen-free	-	•	
Art. No.	9060-98	9060-78	
Inner packaging/shipping	25 / 100	25 / 100	

**CAVITY WALL** 

### **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
<u></u>	•	•
Art. No.	1184-90	1184-77
Inner packaging/shipping	25 / 250	25 / 250

### 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

### Internal cover

- · for flush closure of one-gang boxes and onegang 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

for cavity wall installation

### **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 with oversized, non-circular 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

### **Sealing inserts**

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







### **Sealing inserts**

- · for retrofit sealing of all existing one-gang boxes and one-gang junction boxes
- · permanently flexible plastic



#### **AIR-TIGHT**

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

HOUSINGS

### Sealing plugs 16-20

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

ECON AIR-TIGHT







3D animation

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

### Sealing plugs 25-40

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

ECON AIR-TIGHT









3D animation

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

Reliable sealing of installation feed-throughs.



## **Sealing sleeves**

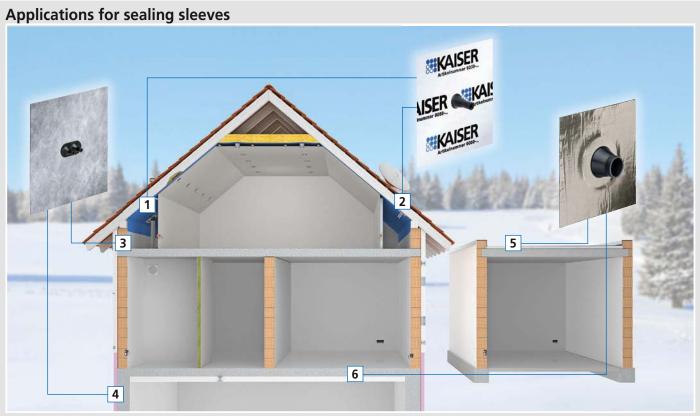
The KAISER range of sealing sleeves offers perfect sealing for all standard cable and conduit sizes, both indoors and outdoors. The range consists of single and double sleeves for one or two cables or conduits respectively, and of two multiple air-tight sleeves for up to six cables or conduits. The self-adhesive KAISER sealing sleeves can be fitted without the need for any tools. Talcum is applied to the sleeves before they leave the factory. They ensure easy cable or conduit feed-through, and fast processing on the building site. In contrast to the conventional improvised method, KAISER sealing sleeves guarantee the permanent air-tight sealing of installation penetrations.

- For cables Ø 4 12 mm and conduits Ø 15 110 mm
- Large contact area to cables and conduits
- Anti-kink sleeve also permanently seals very kinked cables
- Completely toolless wall installation
- Extremely good adhesion









1 Sealing of a ventilation conduit through the vapour or moisture barrier | 2 Sealing of more than one cable through the vapour or moisture barrier | 3 Sealings in plastered walls | 4 Sealings in the cellar area | 5 Sealings in flat roof areas | 6 Sealing of the cellar ceiling or the foundation baseplate







Air-tight sleeve

Fleece-butyl sealing sleeve

Aluminium butyl sealing sleeve

			Applications	Indoors	Indoors & outdoors	Indoors & outdoors
	LxB	Н	Ø mm	Art. No.	Art. No.	Art. No.
	oaxial, NYM, underg	ground, solar,	etc.)			
Single	150		4 - 8 mm	9059-44	9089-44	9079-44
	¥ 130	→301←	8 - 12 mm	9059-46	9089-46	9079-46
Double	150		4 - 8 mm	9059-45	9089-45	9079-45
		→ 30 ←	8 - 12 mm	9059-47	9089-47	9079-47
6 combi- nations	1 230 1 230	<b>→</b> 25 <b> </b> ←	4 - 11 mm	9059-61	-	-
	(electrical installation	n, waste wat	er, ventilation, heati	ng, etc.)		
Single	150	<u>L</u>	15 - 22 mm	9059-48	9089-48	9079-48
	¥ 130	→301←	25 - 32 mm	9059-49	9089-49	9079-49
Double	150	→30 ←	15 - 22 mm	9059-55	9089-55	9079-55
Single	<u> </u>		42 - 55 mm	9059-51	9089-51	9079-51
	230		50 - 75 mm	9059-52	9089-52	9079-52
	₹	→ 50 ←	75 - 90 mm	9059-53	9089-53	9079-53
			100 - 110 mm	9059-54	9089-54	9079-54
6 combi- nations		301€	16 - 25 mm	9059-62	-	-









Reliable sealing of installation feed-throughs.



## Air-tight sleeve

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

- extremely strong adhesion
- For guaranteed air-tight feed-throughs, especially in the attic
- 10 types for different conduit and cable diameters
- Suitable for moisture barrier foils, sarking membranes, OSB boards \*







### **Examples of use**









### Measuring the air-tightness





### **Processing instructions**

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

Please ensure that the base is dry and free from dust and grease. Processing should be carried out at a temperature higher than -5°C, and full adhesive strength is achieved after 24 hours. The sleeves have an unlimited shelf life when stored cool and dry at room temperature. \* For fibreboard, we recommend a pre-coat using primer

#### 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.

### 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 +80°C, in the feed-through area up to +120°C
- · UV-resistant, halogen-free



#### **AIR-TIGHT**

Length x Width x Height	Number of ca- bles/conduits	Diameter of cable / pipe	Air-tight	Art. No.	Inner packaging/ shipping	
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	7,5 - 12 mm	•	9059-46	10 / 30	
150 x 150 x 30 mm	2 item	7,5 - 12 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	2 item	15 - 22 mm	•	9059-55	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	

## Multiple air-tight sleeves 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.



**KAIS** 

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**#KAISER** 

**KAISER** 

**#KAISER** 

building's air-tight seal. This entry must be permanently sealed air-tight.

**\*\*\*KAISER** 



## **Sealing sleeves**

Reliable sealing of installation feed-throughs.

### Installation



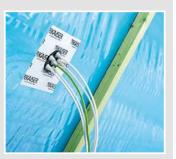
ECON® technology's toolless cable or conduit entry offers maximum ease of installation and permits fast processing.



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**









### Cable-sleeve ECON®

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





3D animation

### AIR-TIGHT ECON

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

### **Conduit-sleeve ECON®**

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





3D animation

## AIR-TIGHT ECON





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	

## Fleece-butyl sealing sleeves

For permanent, secure sealing of installation penetrations in masonry, concrete or wood materials, etc. The highly-elastic sleeves are fitted with fleece-butyl flanges as plaster bases and provide maximum adhesion. Some surfaces must be pre-treated with KAISER primer.

- Permanently moisture-proof for use indoors and outdoors
- The fleece sleeve can be plastered over, and is for use in plastered walls and behind composite thermal insulation systems
- Waterproofing effect with non-pressing water, e.g. against soil moisture







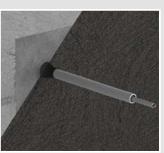
### Installation



If necessary, pre-treat the base, pull the sleeve over the cable/



... remove the protective foil and press the sleeve into posi-



The adhesive flange can be plastered over and ensures permanent sealing of the masonry penetration.

### Note

To ensure secure adhesion of all KAISER air-tight sleeves, the bases must be free of dust and grease, and also dry and load-bearing. In particular, mineral and organic bases such as stone, concrete, plasterboard or fibreboard must be pre-treated with KAISER primer.

### Fleece-butyl sealing sleeves

- $\cdot$  For cables Ø 4 12 mm and conduits Ø 15 110 mm
- · Fleece-butyl sealing sleeve can be plastered over
- · adhesive
- · 1-piece



Length x Width x Height	Number of ca- bles/conduits	Diameter of cable / pipe	Air-tight	Art. No.	Inner packaging/ shipping	
150 x 150 x 30 mm	1 item	4 - 8 mm	•	9089-44	10 / 30	
150 x 150 x 30 mm	2 item	4 - 8 mm	•	9089-45	10 / 30	
150 x 150 x 30 mm	1 item	8 - 12 mm	•	9089-46	10 / 30	
150 x 150 x 30 mm	2 item	8 - 12 mm	•	9089-47	10 / 30	
150 x 150 x 30 mm	1 item	15 - 22 mm	•	9089-48	10 / 30	
150 x 150 x 30 mm	2 item	15 - 22 mm	•	9089-55	10 / 30	
150 x 150 x 30 mm	1 item	25 - 32 mm	•	9089-49	10 / 30	
230 x 230 x 50 mm	1 item	42 - 55 mm	•	9089-51	- / 4	
230 x 230 x 50 mm	1 item	50 - 75 mm	•	9089-52	- / 4	
230 x 230 x 50 mm	1 item	75 - 90 mm	•	9089-53	- / 4	
320 x 320 x 50 mm	1 item	100 - 110 mm	•	9089-54	- / 4	

Reliable sealing of installation feed-throughs.



## **Aluminium-butyl sealing sleeves**

For permanent, secure sealing of installation penetrations through masonry, concrete or wooden materials. The highly-elastic sleeves are fitted with non-tear aluminium butyl adhesive flanges and provide maximum adhesion. Some surfaces must be pre-treated with KAISER primer.

- Permanently moisture-proof for use indoors and outdoors
- Water-sealing effect with non-pressing water up to 0.02 bar
- Especially suitable for sealing in the cellar socle
- Large contact area to cables and conduits
- Anti-kink sleeve also permanently seals very kinked cables
- Completely toolless wall installation
- Extremely good adhesion







### Installation



Pre-treat mineral bases and fibreboards with primer.



Pull the sleeve over the cable/ conduit and remove the protective foil



Press the adhesive flange of the sleeve firmly into position

### Aluminium-butyl sealing sleeves

- · For cables Ø 4 12 mm and conduits Ø 15 110 mm
- · pressing water up to 0.02 bar
- · adhesive
- · 1-piece



Length x Width x Height	Number of ca- bles/conduits	Diameter of cable / pipe	Air-tight	Art. No.	Inner packaging/ shipping	
150 x 150 x 30 mm	1 item	4 - 8 mm	•	9079-44	10 / 30	
150 x 150 x 30 mm	2 item	4 - 8 mm	•	9079-45	10/30	
150 x 150 x 30 mm	1 item	8 - 12 mm	•	9079-46	10 / 30	
150 x 150 x 30 mm	2 item	8 - 12 mm	•	9079-47	10/30	
150 x 150 x 30 mm	1 item	15 - 22 mm	•	9079-48	10/30	
150 x 150 x 30 mm	2 item	15 - 22 mm	•	9079-55	10/30	
150 x 150 x 30 mm	1 item	25 - 32 mm	•	9079-49	10/30	
230 x 230 x 50 mm	1 item	42 - 55 mm	•	9079-51	-/4	
230 x 230 x 50 mm	1 item	50 - 75 mm	•	9079-52	-/4	
230 x 230 x 50 mm	1 item	75 - 90 mm	•	9079-53	-/4	
320 x 320 x 50 mm	1 item	100 - 110 mm	•	9079-54	-/4	

## **KAISER** primer

KAISER primer is a high-quality, solvent-free coating which optimises adhesion for all KAISER sealing sleeves on absorbent, mineral surfaces, for example masonry, concrete, plasterboard or wood materials. The self-adhesive primer is water and heat resistant. It can also be used on Styrofoam, EPS or XPS etc.



### Installation



The base must be dry and free of grease, oil and dust. Stir the primer thoroughly before working. Apply smoothly (apply twice to porous surfaces).



Before pressing the adhesive flange on, allow the primer to air until transparent. Thickened primer can be thinned with water.

### **KAISER** primer

• The self-adhesive primer is water and heat resistant. It can also be used on Styrofoam, EPS, XPS etc.



Contents	250 ml
Art. No.	9000-02
Inner packaging/shipping	-/1

### Sound insulation technology

for cavity wall installation



## Sound-insulation box

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



index R'w up to











### **Examples of use**



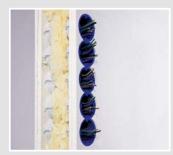
Example of installation of a switch/socket combination.



Use of an opposing sound insulation box.



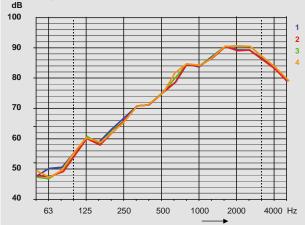
Use of a sound insulation box on one side of a double combination.

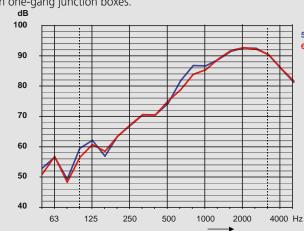


The sound insulation box can be used in up to five opposing combinations without weakening the sound insulation characteristics of the wall.

### **Comparison of sound insulation**

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



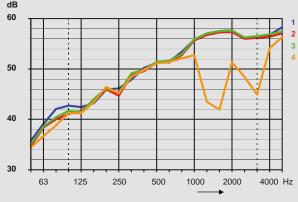


1 Wall, without installations, 77 dB | 2 Sound insulation box 9069-01, single, with accessory, 77 dB | 3 Sound insulation box 9069-01, single, with cover, 77 dB | 4 Sound insulation box 9069-01, 5-way, with accessory, 77 dB | 5 Wall, without installations, 78 dB | 6 with sound insulation electronics box, 9069-94/9069-74, 78 dB

# Sound insulation technology for cavity wall installation

### Comparison of sound insulation

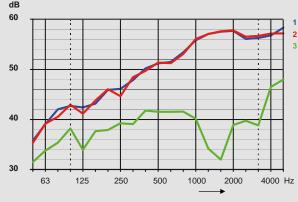
Lightweight wall (two-shell, double-boarded in each case) with sound insulation one-gang junction boxes.



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

### Sound insulation technology

for cavity wall installation

#### Installation



Use a cutter (e.g. Multi 4000: Art. No. 1084-10) to make a Ø 74 mm opening.



For combinations, cut off the marked edge strip.



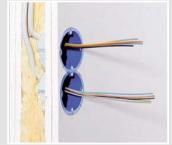
Installation then proceeds as with a conventional cavity wall



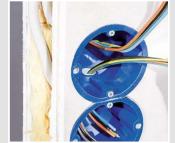
Secure and fast installation thanks to KAISER FX4 technol-



Accurate entries ensured by using 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.

#### **Sound-insulation box**

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







3D animation

#### **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	-	•
for sound insulation walls up to	77 dB	77 dB
VDE	•	•
Art. No.	9069-01	9069-77
Inner packaging/shipping	10 / 100	10 / 100

CONCRETE

#### **Sound insulation cover**

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



#### **SOUND INSULATION**

Diameter	92 mm
halogen-free	•
VDE	•
Art. No.	1184-69
Inner packaging/shipping	10 / 100

#### **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 / 100	25 / 100

### Allocation table for universal opening cutters



Cavity wall installation for sound insulation boxes		Ø setting
NYM cable	3 x 1,5 mm <sup>2</sup>	8,5
	5 x 1,5 mm <sup>2</sup>	9,5
	3 x 2,5 mm <sup>2</sup>	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**



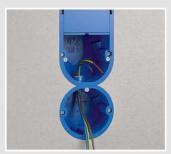
The electronics box provides space for all possible installations e.g. KNX actuators, Venetian blinds relays, alarm modules and many more.



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  $\varnothing$  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 using turbo cutter Multi 4000 Ø 74 mm (Art. No. 1084-10) with a centre distance of 71



Removal of the bridge.



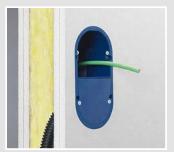
Using the KAISER universal opening cutter, cut an exact conduit or cable opening for air-tight installation.



Fitting the box using tried-andtested FX4 technology.



The additional terminal space 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 the 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







#### 3D animation

#### SOUND INSULATION M



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
halogen-free	-	•
for sound insulation walls up to	77 dB	77 dB
VDE	•	•
Art. No.	9069-94	9069-74
Inner packaging/shipping	5 / 50	5 / 50

### Sound insulation technology

for cavity wall installation



### **Sound-insulation box 68**

Thanks to their solid box body in combination with the sound-absorbing surface on the base of the box, sound insulation 68 one-gang and one-gang junction boxes guarantee the wall's sound insulation. This function is completely maintained even with directly opposing installation. The easy opening process and the 68 mm installation opening ensure fast mounting and also easy retrofitting in existing electrical installations.

- Maintains the wall's sound insulation protection
- Also for retrofitting
- For Ø 68 mm installation openings
- For directly opposing installation
- Easy entry for cables up to Ø 11.5 mm and conduits up to Ø M25









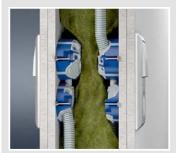








#### **Examples of use**



For sound insulation walls with a sound insulation value of up to 69 dB.



Also for directly opposing installation up to a 5-way combination.



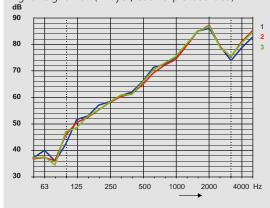
Can be combined with onegang and one-gang junction boxes.



With a sound insulation cover (Art. No. 1184-69), it can also be used as a junction box.

#### Comparison of sound insulation

Lightweight wall (2-layer, each triple-boarded)







1 Wall, without installations, 69 dB | 2 Sound insulation box 9069-03 / 9069-75, single, with accessory, 69 dB | 3 Sound insulation box 9069-04 / 9069-76, single, with accessory, 69 dB | 4 The solid box body and the sound-absorbing surface on the base of the box guarantee sound insulation up to 69 dB.

# Sound insulation technology for cavity wall installation

#### **Processing instructions**



Can be used in Ø 68 mm installation openings



Up to 6  $\emptyset$  4 - 11.5 mm cable entries and 2 conduit entries up to M25.



Easy cable and conduit entry with cable retention acc. to DIN EN 60670.



Fully-insulated through-wiring of one-gang and one-gang junction boxes using the support connector (Art. No. 9060-88).

#### Installation



Cut Ø 68 mm installation opening using MULTI 4000 turbo cutter (Art. No. 1083-10). Cut combinations with a centre distance of 71 mm.



Easy opening for the installation of data and power cables or electrical installation conduits.



Fix the box using tried-and-tested KAISER FX4 technology.



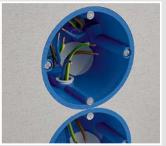
Opposing installation - possible for one-gang boxes with a minimum wall thickness of 100 mm and one-gang junction boxes for a minimum of 125 mm.



For combinations, create installation openings  $\varnothing$  68 mm in centre distance 71 mm.



Conduit entry ensures tighter fit of the conduits to the boarding.



Ensure fully-insulated throughwiring by using support connector (Art. No. 9060-88).



One-gang boxes and one-gang junction boxes can be combined.

### Sound insulation technology

for cavity wall installation

#### **INNOVATION**

## One-gang box sound insulation

- · for sound insulation walls
- · also for directly opposing installation
- · minimum wall thickness 100 mm
- · can be combined with each other and with the one-gang junction box







Produkt-Film





#### **SOUND INSULATION**

Depth	49 mm	49 mm	
Cut hole Ø	68 mm	68 mm	
Tube entries up to M25	2	2	
Cable entries of up to Ø 11.5 mm	4	4	
Support connectors for each package	5	5	
halogen-free	-	•	
For panel thicknesses up to	40 mm	40 mm	
for sound insulation walls up to	69 dB	69 dB	
€ / ((VE)	• / •	• / •	
Art. No.	9069-03	9069-75	
Inner packaging/shipping	10 / 100	10 / 100	

#### **INNOVATION**

#### One-gang junction box sound insulation 68

- · for sound insulation walls
- · also for directly opposing installation
- · minimum wall thickness 125 mm
- · combinable with each other and with the one-gang box







Produkt-Film







Depth	61 mm	61 mm
Cut hole Ø	68 mm	68 mm
Tube entries up to M25	2	2
Cable entries of up to Ø 11.5 mm	6	6
Support connectors for each package	5	5
halogen-free	-	•
For panel thicknesses up to	40 mm	40 mm
for sound insulation walls up to	69 dB	69 dB
<u>♠</u> / <del>©</del>	• / •	•/•
Art. No.	9069-04	9069-76
Inner packaging/shipping	10 / 100	10 / 100

### Safety for X-ray rooms. One-gang junction box for radiation protection walls.

KAISER's innovative radiation protection box protects against radiation used for medical purposes, e.g. in X-ray facilities. The high density of the radiation protection compound absorbs soft and hard X-rays. The box is especially suitable for lead-free radiation protection walls (e.g. Knauf Safeboard) and - because of its dose-reducing effect in the tube voltage range between 40 - 150 kV - guarantees a lead-equivalent value for the wall of up to 3 mm Pb even with opposing installation. In addition, the box can easily be used in lead-lined walls. In this case, the radiation protection box achieves a lead-equivalent value of 1.5 mm Pb with walls which are leadlined on one side.



- Protection against X-rays
- 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









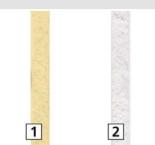








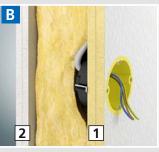
#### Use in lead-free radiation protection walls



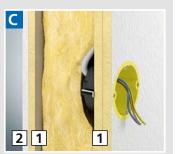
1 lead-free radiation protection panel (e.g. Knauf Safeboard) 2 plasterboard panel



Lead equivalent: up to 0.6 mm Pb wall construction: 2 layers of boarding on both sides



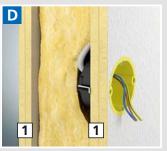
Lead equivalent: up to 1.1 mm Pb Wall construction: 2 layers of boarding on both sides



equivalent: uр 1.75 mm Pb Wall construction: 2 layers of boarding on both

0,3 - 0,6	А
1,0 - 1,1	В
~ 1,75	С
~ 2,75	D
~ 3,0	Е

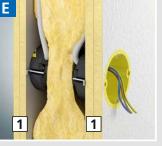
Lead equivalent in mm Pb / illustration



Lead equivalent: up to 2.75 mm Pb Wall construction: 2 layers of boarding on both



Two opposing radiation protection boxes achieve a equivalent of 3 mm Pb



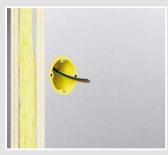
### **Radiation protection**

for cavity wall installation

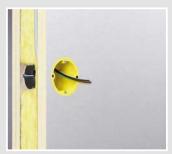
#### **Examples of use**



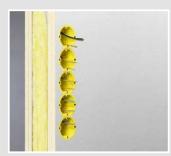
Example of installation of a switch/socket combination.



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.

#### **Proof of radiation protection**

TÜV-Nord Ensys has demonstrated that in the tube voltage range between 40 and 150 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 area of application. The certificate can be downloaded as a pdf file from our website.



zertifiziert



#### Installation



Use a cutter (e.g. Multi 4000: Art. No. 1084-10) to make a  $\emptyset$  74 mm opening.



Installation then proceeds as with a conventional cavity wall box.



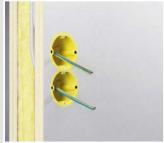
Secure and fast installation thanks to KAISER FX4 technology.



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



For combinations, cut off the marked edge strip.



Combinations at a standard spacing of 71 mm.



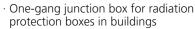
The fully-insulated throughwiring is carried out with the support connector.



Depending on the wall construction, the radiation protection box protects the wall up to a lead equivalent of 3 mm Pb.

#### **INNOVATION**

## Radiation protection one-gang junction box



· Combination distance of 71 mm through single separation of the pre-embossed edge





3D animation

## 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	2
Support connectors for each package	3
halogen-free	•
Lead-free	•
Lead equivalent value [mm Pb]	bis 3*
VDE	•
Art. No.	9074-01
Inner packaging/shipping	5/10

#### Note

\*Depending on the wall construction (see p. 98), lead equivalents up to 3 mm Pb can be achieved.

### **Radiation protection**

for cavity wall installation

#### **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 / 100

#### Allocation table for universal opening cutters



Cavity wall installation for radiation protection boxes		Ø setting
NYM cable	3 x 1.5 mm <sup>2</sup>	9.5
	5 x 1.5 mm <sup>2</sup>	10.5
	3 x 2.5 mm <sup>2</sup>	9.5
Support connector	9060-74	Cut up to the marking of the connector entry

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 2,5 mm Pb as effectively as 2,5 mm thick lead.

- 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**

The German TÜV-Nord Ensys demonstrated that within a range of tube voltages between 90 and 150 kV, KAISER's radiation protection box with lead-function component achieves a lead equivalent of 2.5 mm Pb. This was confirmed by a series of comprehensive tests which preceded certification and it was clearly demonstrated that the wall's radiation protection in this range of applications is completely maintained.



certified

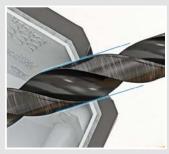
#### Installation



Use a cutter (e.g. Multi 4000: Art. No. 1084-10) to make a  $\emptyset$  74 mm opening.



By using the HSS drill, it is easy for you to ...



... to create an exact-fitting cable entry with the specified cable retention.



Use the universal opening cutter (Art. No. 1085-80) to cut the matching conical opening.



Details of suitable drill settings for the universal opening cutter in respect of cable sizes are shown in the table.

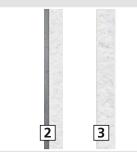


Insert the cables, then fit the box into the installation opening

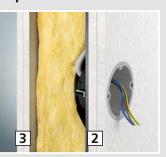


The one-gang junction box is now ready for use.

#### Use in lead-lined radiation protection walls



2 lead-lined plasterboard panels; 3 plasterboard panels



Up to 2.5 mm Pb on both sides, 2-layer boarding, lead-lining on one side



### **Radiation protection**

for cavity wall installation

#### **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





3D animation

### RADIATION PROTECTION

	07777
(F)( <mark>4</mark>	0
	10/10/10/

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	2
Support connectors for each package	3
halogen-free	•
Lead equivalent value [mm Pb]	2,5
VDE	•
Art. No.	9074-03
Inner packaging/shipping	5/10

#### **Support connector**

- · for through-wiring of combinations to IP 3X standard air-tight
- · For Art. Nos. 1159-90, 1555-51 and 9074-03



Art. No.	9060-88
Inner packaging/shipping	25 / 100

#### Assignment table for Universal opening cutter and HSS drill



Cavity wall installation for radiation protection boxes		es Ø setting	HSS drill Ø
NYM cable	3 x 1,5 mm <sup>2</sup>	9,5	8,0
	5 x 1,5 mm <sup>2</sup>	9,5	9,5
	3 x 2,5 mm <sup>2</sup>	9,5	9,5
	5 x 2,5 mm <sup>2</sup>	Connector	9,5
Support connector	9060-88	Cut up to the marking of the connector entry.	12

Making an exact-fitting cable entry with the specified cable retention is easy - just use an HSS drill together with the universal opening cutter (Art. No. 1085-80).

The matching drills and universal opening cutter settings are shown in the tables.

## **Screened one-gang junction box**

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

- For environmentally-safe electrical installation, biological construction
- 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)

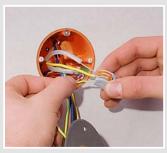




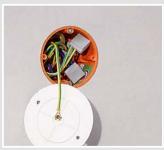
#### Installation



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



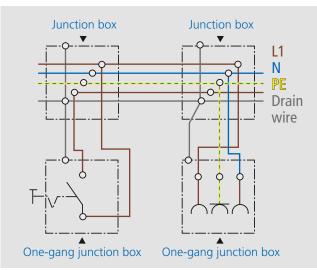
Connect functional earth of the box to tracer wires of screened cable.



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 electrical installation**

## Screened one-gang box / one-gang junction box

 $\cdot$  with screening and potential downlead









For panel thickness	7 - 40 mm	0,2 - 40 mm	7 - 40 mm
Depth	47 mm	61 mm	68 mm
Cut hole Ø	68 mm	68 mm	68 mm
Device screws	2	2	2
Break-out openings Ø 20 mm	2	4	4
Cable entries 3 x 2.5 mm <sup>2</sup> or 5 x 1.5 mm <sup>2</sup>	2	2	2
Cable entries 3 x 1.5 mm <sup>2</sup>	2	4	4
Cable entries for low voltages	2	2	2
Art. No.	9063-88	9068-88	9064-88
Inner packaging/shipping	10 / 100	10 / 100	10 / 100

#### **Screened cover**

- · for making screened one-gang junction boxes
- $\cdot$  for one-gang junction boxes Art. No. 9064-88 and Art. No. 1555-88



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

#### Screened junction casing

- · for cavity wall and flush-mounting installation
- · with screened cover
- · With Ø 3.2 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 ca	bling •
For terminals up to	4 mm <sup>2</sup>
Art. No.	9195-88
Inner packaging/shipping	- / 10

#### **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.

#### 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

#### Metal lugs for screws

- $\cdot$  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-..



FX4

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

#### Device screws +/-



- · self-tapping Ø 3.2 mm
- · Countersunk head with PZ1/S combination drive
- · surface double-treated
- · corrosion-resistant in accordance with German DIN VDE standard

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Length	15 mm	20 mm	25 mm	40 mm	
Art. No.	2472-15	2472-20	2472-25	2472-40	
Inner packaging/shipping	100 / 1000	100 / 1000	100 / 1000	100 / 1000	

#### **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 / 1000	



### 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











#### Installation



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



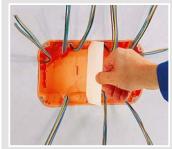
Cut out intermediate parts with cutter or fretsaw.



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 attach-



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



tion.

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

#### **Junction casing**

- for installation: DIN terminal strips, TS 35 standard rails for terminal strips, etc., terminal blocks up to 16 mm<sup>2</sup>
- · with drilling template (supplied)
- · including cover











Length x Width x Depth	105 x 105 x 53 mm	105 x 105 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 <sup>2</sup>	4 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>
halogen-free	-	•	-	•
use separator wall for maximum of 2 electrical circuits	•	•	•	•
€ / ©VE	• / •	• / -	•/•	• / -
Art. No.	9195-91	9195-77	9196-91	9196-77
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10

#### **Junction casing**

- · for installation: DIN terminal strips, TS 35 standard rails for terminal strips, etc., terminal blocks up to 16 mm<sup>2</sup>
- · with drilling template (supplied)
- $\cdot \ \text{including cover} \\$











Length x Width x Depth	238 x 140 x 72 mm	238 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	g •	•	•	•
For terminals up to	16 mm²	16 mm <sup>2</sup>	16 mm <sup>2</sup>	16 mm <sup>2</sup>
halogen-free	-	•	-	•
Maximum of 3 electrical circuits with separator walls	r •	•	•	•
<u></u> /	• / •	• / -	• / •	• / -
Art. No.	9192-91	9192-77	9197-91	9197-77
Inner packaging/shipping	-/10	-/10	-/10	-/10

#### 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
- $\cdot \ \text{including cover} \\$







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	g •	•
For terminals up to	4 mm <sup>2</sup>	4 mm <sup>2</sup>
halogen-free	-	•
For max. 2 electrical circuits through separator wall Art. No. 9073-20	•	•
<u></u>	•	•
Art. No.	9073-01	9073-78
Inner packaging/shipping	-/10	- / 10

## Potential equalisation casing 10<sup>2</sup>

- · for bathrooms or similar
- · with potential equalisation rail, protected against corrosion
- · with 4 screw domes
- $\cdot$  With Ø 3.2 x 15 mm cover screws
- $\cdot \ \text{including cover} \\$





Length x Width x Depth	105 x 105 x 53 mm
Cut hole Ø	4 x 35 mm
Connections for 6–16 <sup>2</sup> circular conductors (also uncut)	1
Connections for 1.5–10 <sup>2</sup> cables	6
Art. No.	9195-73
Inner packaging/shipping	- / 10

#### **Note**

Other earthing products can be found at our website.

#### Replacement cover

- $\cdot \text{ flat cover edge}$
- · 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	105 x 105 mm	165 x 165 mm	238 x 142 mm	235 x 205 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 / 500	10 / 200	-/5	5 / 100

## 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

#### **Separator walls**

 $\cdot$  to separate electrical circuits



#### **Separator wall**

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

Art. No.	9073-20
Inner packaging/shipping	g -/10

### **Universal installation housings**

for cavity wall installation



## **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 allows individual installation opening
- 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	105 x 105 x 53 mm	105 x 105 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	g •	•	•	•
halogen-free	-	•	-	•
Art. No.	9195-22	9195-27	9196-22	9196-27
Inner packaging/shipping	-/10	-/10	-/10	-/10

## Universal installation housing with mineral fibreboard

- $\cdot$  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			
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	g •	•	•	•
halogen-free	-	•	-	•
Art. No.	9192-22	9192-27	9197-22	9197-27
Inner packaging/shipping	- / 10	- / 10	- / 10	- / 10

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 - Swiss standard

- $\cdot$  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 for Swiss accessories ECON®

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



ons,		
<b>ECON</b> TECHNIK	+	

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
CE	•	•
Art. No.	9098-77	9298-21
Inner packaging/shipping	20 / 100	20 / 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	

#### **INNOVATION**

## Sound insulation box for Swiss accessories

- $\cdot$  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
- $\cdot$  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
CE	•
Art. No.	9798-77
Inner packaging/shipping	10 / 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
CE	•	•	•	•
Art. No.	• 9798-77.02	• 9798-77.03	• 9798-77.04	• 9798-77.06

### **International products**

for accessory installation in accordance with national standards

#### **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	83 x 83 x 73.5 mm
Cut hole Ø	83 mm
Tube entries up to M25	2
Combination	1x1
Art. No.	9799-77
Inner packaging/shipping	10 / 100

#### **INNOVATION**

## Sound insulation box for Swiss accessory combinations

- $\cdot$  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 73.5 mm	205 x 83 x 73.5 mm	145 x 145 x 73.5 mm	205 x 145 x 73.5 mm
Cut hole Ø	83 mm	83 mm	83 mm	83 mm
Tube entries up to M25	2	2	4	4
Combination	2x1	3x1	2x2	3x2
Art. No.	9799-77.02	9799-77.03	9799-77.04	9799-77.06
Inner packaging/shipping	-/5	-/5	-/5	-/5

## One-gang box (Belgian standard)

 $\cdot \text{ with holding ring} \\$ 





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

### **Technical information**

#### 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 theatres or intensive care units, particle-protected installation must be guaranteed in accordance with clean-room and hygiene requirements. The uncontrolled exchange of air must be avoided. As these areas are often made with cavity wall constructions, these requirements also affect the electrical installations. KAISER's air-tight cavity wall systems comply fully with the legal 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.