

System magnets.

Solutions for automated precast concrete in concrete construction.

Concrete construction in precast concrete
The system magnets for any application.





Well-connected from the start.

Prefabrication in concrete construction.

Industrially prefabricated concrete slab elements are produced with dimensional accuracy, largely using an automated precast concrete manufacturing process. The high level of pre-planning, industrial prefabrication in a protected environment and automation during production with regard to the fixing and assembly of installation parts ensure short assembly times and minimised costs. The components for the electrical installation must also be fixed and integrated into the wall or ceiling with the same level of precision as is applied to the manufacture of the elements.

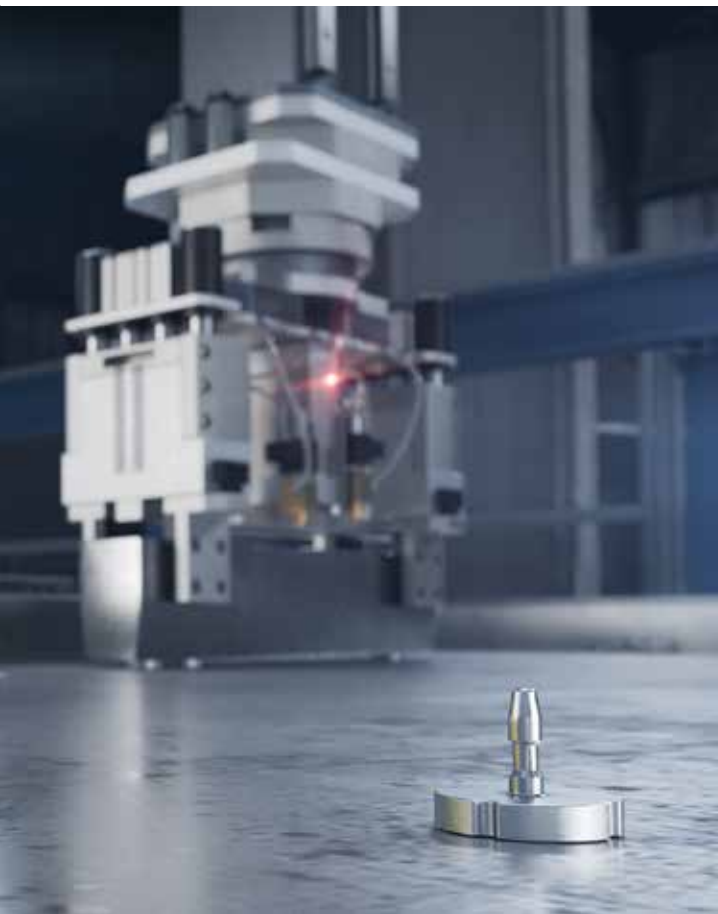
With the help of the **BIM planning method** and integrated building planning, shorter planning, production and commissioning times can be achieved, while at the same time the installation parts for the electrical installation can be precisely integrated.

Prefabricated sub-assemblies in precast concrete production ensure maximum efficiency, high quality and predictable processes. They are the key to forward-looking, industrial-scale installation technology that saves time, money and resources – whilst maintaining a consistently high level of precision. The wall and ceiling elements, including the installation parts required for the electrical installation, can be sent to the production control computer in the concrete plant via the CAD/CAM interface.

The automated and correct positioning of the system magnet for installation parts that are required for the integrated electrical installation ensures that these installation parts can be integrated precisely into the room-enclosing surfaces of the precast concrete according to the planning specifications, without the need for any on-site finishing work.

You will find all the relevant tender texts, BIM data and 3D geometry data for the system magnet and the installation parts required for the electrical installation at www.kaiser-elektro.de.





The system magnet and System magnet PLUS.

Both wall and ceiling elements (e.g. double walls, element ceilings) can be produced on modern pallet circulation systems. However, these elements have different electrical installation requirements. For example, one-gang boxes and one-gang junction boxes for switches and sockets, wall and ceiling transitions for continuous empty conduits and installation housings for luminaires and loudspeakers must be placed exactly, securely and in the correct position.

The system magnet and system magnet PLUS ensure that all these installation parts can be placed precisely and flush. Thanks to the outstanding adhesive force of 500 N, the system magnet and system magnet PLUS are suitable for precise and secure fitting.

A magnet for all installation parts ensures flawless production and maximum flexibility in the manufacture of industrially prefabricated slab elements.



Simple and efficient concrete construction.

System magnet and System magnet PLUS.

The system magnets are suitable for all installation parts required in wall and ceiling production to prepare the electrical installation in-factory. The system magnets can be used for correct positioning in both manual and automated production. In automated production, the magnets can be placed on the formwork table by machine and in the correct position using the multifunction gripper. The system magnet PLUS (1299-70) can also be automatically removed and stored in a magazine.

The high adhesive force of 500 N ensures that the magnets remain exactly where the installation parts have been placed in their correct position. Installation parts, such as one-gang boxes and one-gang junction boxes, are aligned via lateral notches on the system magnets and system magnet PLUS.

This ensures that the vertical and horizontal alignment is dimensionally accurate, even when multiple combinations are used. The exact-fitting connection between the system magnets/system magnet PLUS and the installation parts with peripheral sealing ensures that the ingress of concrete is prevented.

After removal of the formwork, the magnets remain on the formwork table and can then be returned to production.



The **system magnet** and **system magnet PLUS** are used to hold B² one-gang boxes and one-gang junction boxes, large slab ceiling boxes, wall and ceiling transitions, HaloX® luminaire and loudspeaker housings, the 48.5 mm extension element, the central transition casing and the system magnet adapter.

- The complete installation requires only one type of magnet
- For automated setting (system magnet 1299-69) or setting and removal (system magnet PLUS 1299-70)
- Four lateral notches ensure torsion-proof installation of the one-gang boxes
- Adhesive force of 500 N
- Reusable



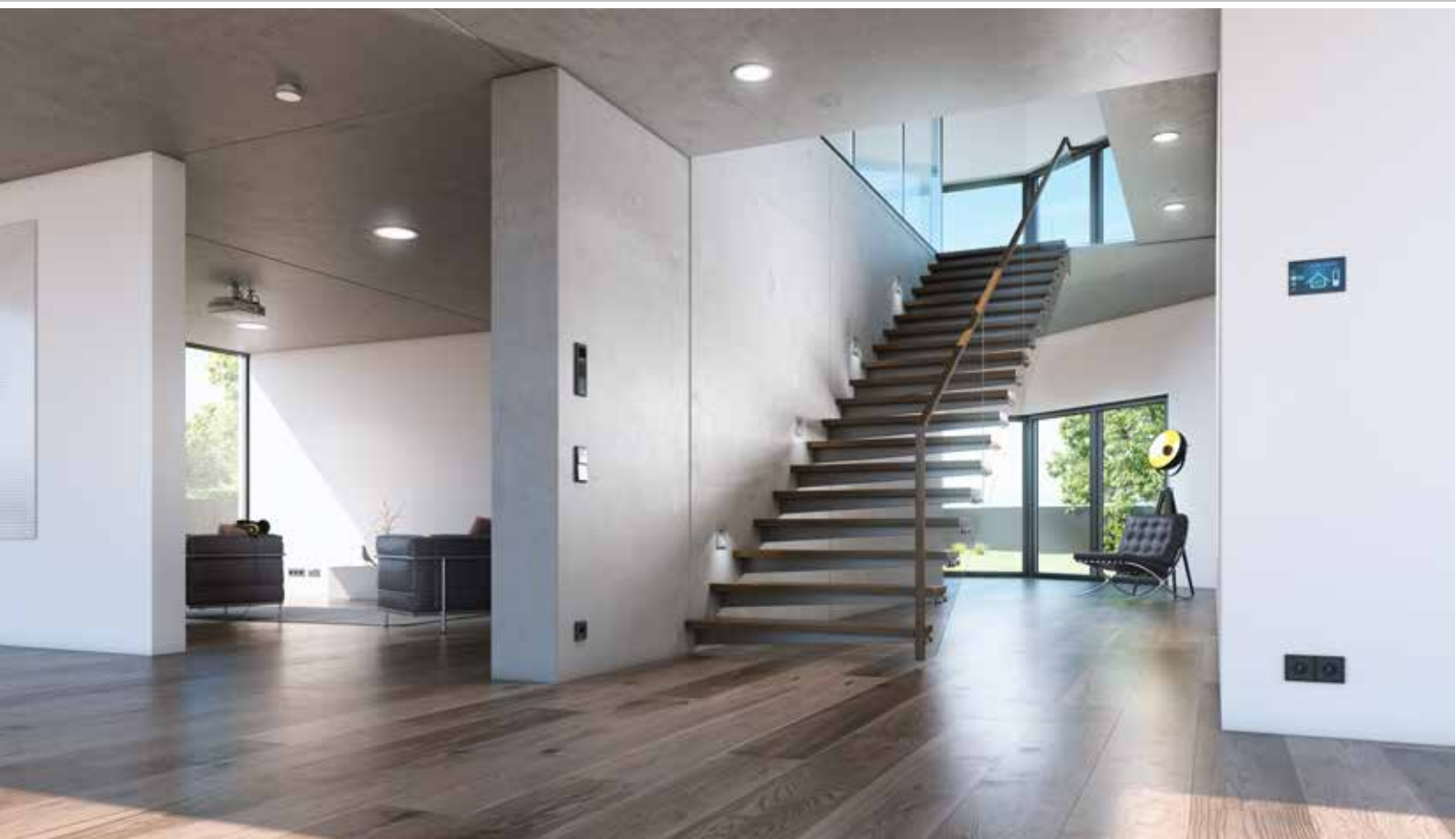
System magnet
Art. no. 1299-69



System magnet PLUS
Art. no. 1299-70



Product video
Trailer B²



Perfect connections for automated production.

The system magnet and system magnet PLUS provide the basis for good installation of all electrical installation solutions in precast concrete.

B² range

The new B² one-gang junction boxes, the B² electronics box and the B² two-gang junction box for precast concrete offer plenty of space for terminals and electric cables thanks to their large volume and ease of assembly. The version with a slot for the system magnet (1299-69) or system magnet PLUS (1299-70) is perfect for quick attachment to system magnets that have already been set automatically. Multiple combinations with a standardised distance of 71 mm can be created quickly and easily using the lateral connection options on the one-gang junction boxes. The separately available conduit connectors for toolless conduit connection prevent concrete from flowing in and at the same time dampen conduit vibrations during the compaction process.





Extension element 48.5 mm

The new 48.5 mm extension element enables automated positioning and fixing of overhead electrical installations in solid concrete walls as well as double concrete walls. The integrated slot for the system magnets (1299-69 or 1299-70) offers a safe, formwork-flush fit on the horizontal steel formwork. At the same time, the tried-and-tested B² push-button connection ensures a secure connection to all B² one-gang junction boxes and B² extension elements and thus enables overhead installation for wall thicknesses of 100 mm and more.



Wall and ceiling transitions

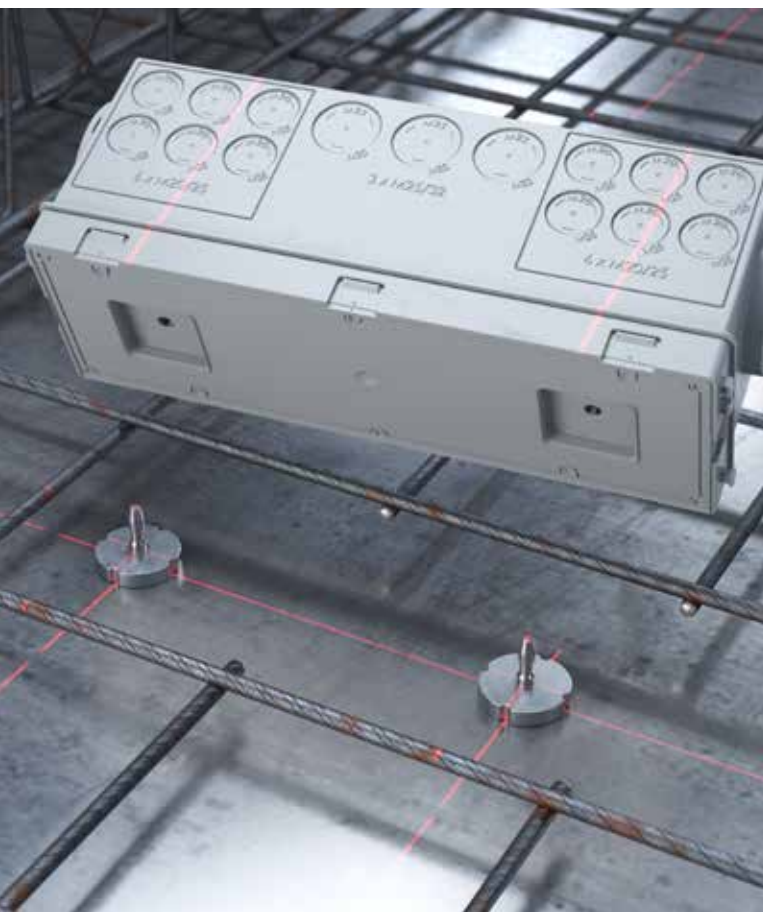
For the first time, the end and transition bushes, wall and ceiling elbows 30° as well as the new wall and ceiling transitions 90° allow the automated positioning and fastening of conduit connections in precast concrete elements. The integrated slot for system magnet (1299-69) and system magnet PLUS (1299-70) enables a safe, formwork-flush fit on the horizontal steel formwork for the circulation systems used in concrete plants. The new products also provide alternative options for fixing to formwork. In this way, they can be fixed using hot glue, steel nails and even Prefix® universal support seats (1261-00) for overhead installation in solid wall elements.



KRASO® Wall feed-through

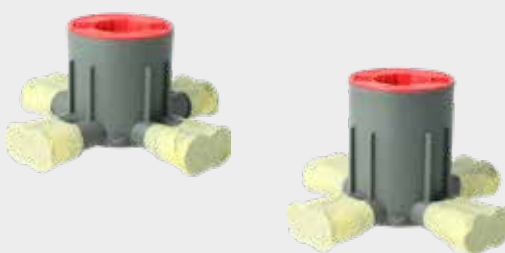
In WU concrete constructions in situations with pressurised water, conduit entries are particularly critical. Until now, cover plates have been fixed to the steel formwork table by hand. With the KRASO® DN110 wall feed-throughs and the KAISER system magnets, these can now be positioned quickly and accurately. This saves time, prevents adhesive residue and ensures clean feed-troughs.





Central ceiling box

The central ceiling box for the Dutch market has been specially developed for the installation of conventional systems in concrete ceilings. These junction boxes are fitted with combination inlets designed to accommodate both 16 mm and 19 mm conduits. Central ceiling boxes for concrete are used in solid floors and hollow-core or precast concrete slabs.



Large slab ceiling box 115

The large slab ceiling box is suitable for in-factory installation in prefabricated ceilings. The version with a slot for the system magnet (1299-69) or system magnet PLUS (1299-70) is perfect for quick attachment to system magnets that have already been set automatically. The large slab ceiling boxes are already part of the ceiling when they reach the construction site and enable the quick insertion of empty conduits. The resealable quick-release cover can be opened with a quarter turn and so enables the quick and exact creation of conduit entries using punch pliers (1286-33/-34).



Central transition casing

The new central transition casing for use in on-site mixed concrete ceilings or precast element ceilings is used for centralised joining of conduits of different diameters. As a central entry point, it enables a clean transition to electrical circuit distributors and cable routing systems, allowing, for example, all supply lines required for the electrical installation of a flat to be brought together at one transition point.





HaloX® luminaire and loudspeaker housings

For fitting in precast concrete, the HaloX® system is designed as a single element. The housings can easily be aligned on the formwork table by means of markings on the housing. The magnet attachment housings are available with pre-fitted front parts to accommodate the system magnet/system magnet PLUS (1299-69/1299-70 - available separately). The integrated slot for the system magnet enables a safe and formwork-flush fit on the horizontal steel formwork of the circulation systems used in the concrete factories.



System magnet adapter

In order to be able to automatically integrate not only the electrical installation components but also the mounting anchors for erecting the wall elements on the construction site in the in-factory production process in concrete wall production, there are new system magnet adapters. These are matched to the available inclined prop mounts on the market and thus enable the complete in-factory integration of all components required for a wall element.





System magnets.



System magnet
1299-69



System magnet PLUS
1299-70



Product video
Insertion work



Product video
Installation

For the automated setting (system magnet 1299-69) or setting and removal (system magnet PLUS 1299-70)

B² range.



B² one-gang junction box
1262-03



B² one-gang junction box
1263-03



B² one-gang junction box
1264-03



B² electronic box
1263-13



B² two-gang junction box
1263-23

Conduits: 10 x 25 mm / 6 x 25 mm, 2 x 40 mm
Cables: 10 x max. 16 mm / 8 x max. 16 mm

For system magnet (1299-69) and system magnet PLUS (1299-70).
The boxes are supplied closed.



Product video B²

Wall and ceiling transitions.



Ø 20 mm

End and transition bushes
1261-82



Ø 25 mm

End and transition bushes
1261-83



Ø 32 mm

End and transition bushes
1261-84



Ø 20 mm

Wall and ceiling transition
1261-92



Ø 25 mm

Wall and ceiling transition
1261-93



Ø 32 mm

Wall and ceiling transition
1261-94



Ø 20 mm

90° wall and ceiling transition
1261-95



Ø 25 mm

90° wall and ceiling transition
1261-96



Ø 32 mm

90° wall and ceiling transition
1261-97



Product video

Extension element.

Extension element 48.5 mm
1261-02

For system magnet (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70)



Product video

Central transition casing.

Central transition casing
9914.10

For system magnet (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70), adhesive or nail fixing.



Product video

Large slab ceiling box.

Large slab ceiling box 115
1227-16

Central ceiling box.

Central ceiling box
AT1032



Central ceiling box
AT1036

Wall feed-through.

KRASO® wall feed-through
www.kraso.de

For system magnet (1299-69) and system magnet PLUS (1299-70)

System magnet adapter.

For the manufacturer
NEVOGA
HWDPMMW16
1200-01

For push-pull prop attachment



For the manufacturer
NEVOGA **HWDPMMW16**
1200-01



For the manufacturer
SYSPRO **Type 1**
1200-02



For the manufacturer
SYSPRO **Type 2/ M12**
1200-03



For the manufacturer
SYSPRO **Type 2/ M16**
1200-04



For the manufacturer
PFEIFER **Mofi® 12**
1200-05



For the manufacturer
RÜDE
Z mounting anchor
www.ruede.de

HaloX® luminaire and loudspeaker housings.

HaloX® 180
1282-74



HaloX® 180 with tunnel 190
1282-75



HaloX® 180 with tunnel 325
1282-76



HaloX® 250
1283-74



HaloX® 250 with tunnel 325
1283-75



Product video

For system magnet (1299-69) and system magnet PLUS (1299-70).

WELL-INFORMED. KAISER SERVICE.

When you decide to use KAISER products, you always receive comprehensive service as well. This allows both you and your customers to take advantage of all the benefits we offer. Videos on products and applications, helpful tips and tricks for your everyday work. Here we clearly show all product and processing advantages, installation instructions, certificates and declarations of performance as well as conformity documents that make the product perfect. Intelligent product filters in the online catalogue help you with your product selection. Intelligent product filters in the online catalogue help you with your product selection. Our BIM data, tender texts and CAD data are important building blocks for your digital planning.

KAISER, PARTNER OF THE TRADE.

You can only get this variety from a strong brand.

Air-tight installation | Sealing sleeves, Airtight installations, fire protection, sound insulation, radiation protection, data and network technology, clean rooms, damp rooms, accessories and tools.

**The basis for good installation**

- Brand-name products for the perfect electrical installation
- Unique depth of range for all applications on the construction site
- Innovative boxes for fast, safe and reliable installation
- Media centre with tips and tricks for everyday installation work
- Professional system tools for daily use
- Comprehensive system accessories and helpers to make it perfect
- Always there for you – online, in print and, of course, in person

International products
of the KAISER GROUP for
electrical installation in timber
construction

www.agro.ch
www.attema.nl
www.helia-elektro.be

Systems and solutions for professional electrical installation work.

KAISER has been developing and producing systems and products as the basis for good installation work since 1904. Planners and fitters all over the world use our practice-oriented solutions for their daily work in all installation areas.



Energy efficiency.

Innovative KAISER products help you to ensure compliance with the requirements of EU Directives and national regulations, such as the German Energy Act for Buildings (GEG, formerly EnEV).



Radiation protection.

Use of the new radiation-protection one-gang boxes allows the radiation protection of the wall to be maintained without additional shielding measures.



Fire protection.

KAISER fire protection systems provide reliable solutions for electrical installations in fire protection walls and ceilings.



Construction.

KAISER has corresponding product system solutions for safe, durable and practical use in redevelopment, renovation and modernisation projects.



Sound insulation.

KAISER's innovative sound insulation boxes ensure compliance with the construction requirements for sound insulation walls, as well as for built-in installations.



Concrete construction.

Complete systems for on-site mixed and precast concrete. Fully optimised for professional electrical installation work.

Technical information and advice

All current further information on products, system solutions and communication media can be found on our website at www.kaiser-elektro.de

For additional questions or information, our team of technical consultants will be happy to assist you and look forward to talking to you: **+49(0)23 55 809 61** · technik@kaiser-elektro.de

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