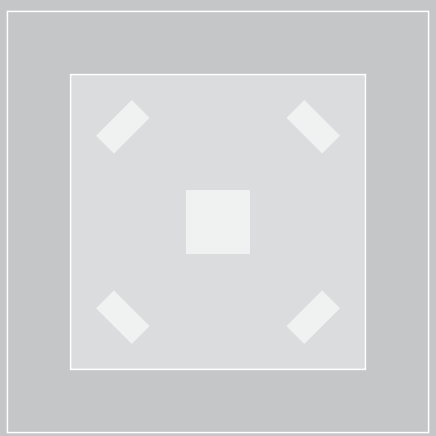
theben®

PlanoCentro

presence detector
Presence detector
détecteur de présence



product
design
award
2010

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Presence detector **PlanoCentro**

Subtle elegance, strong impact

You may very well miss it, but that is the advantage of the new PlanoCentro Presence Detector's design, attractive but discrete.

PlanoCentro, the new Presence Detector from Theben is installed to be almost flush with the ceiling and satisfies the requirement for discrete fitting sensor technology. The detection area is up to 100sq.m. and meets the requirements of most room layouts. This makes it the first Presence Detector on the market that combines a flush style design with such a large square detection area. With its sensitive detection, lux level detection and remote control capability the Plano-Centro guarantees individually tailored energy efficient lighting and climate control.

Comfort and energy efficiency
Intelligent and energy efficient building services require that rooms are correctly illuminated, ventilated and heated when they are actually being used. But when they unoccupied services are reduced, or switched off to save energy. This makes Presence detectors a vital element in sustainable building projects. PlanoCentro from ThebenHTS is unobtrusive and does not look out of place in any setting. It is both technically and visually impressive and its qualities convinced the jury of the International Forum Design in 2010 when the PlanoCentro earned the Product Design Award. PlanoCentro blends in with all types of decor and has the optional frame sizes and colours to meet most requirements. Installation is simple; the Presence detector is suitable for suspended ceilings using nominal strength materials as well as concrete ceilings with flush mounted ceiling sock-ets from Agro/Kaiser.

1 Installation in hollow ceilings with snap-lock mechanism and strain relief clamps for connections. The PlanoCentro presence detector has a simple push-in fitting for mounting in false ceilings.

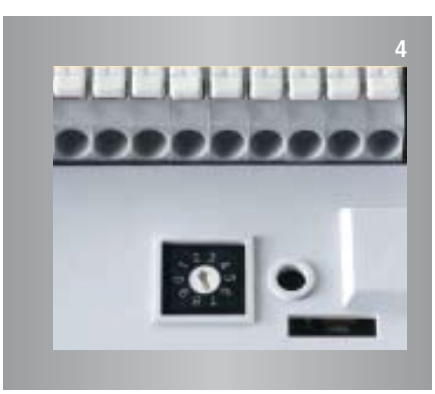
2 Installation in concrete using Agro/Kaiser flush-mounted socket for empty conduit connection. Robust metal frame for screw fastening to ceilings.

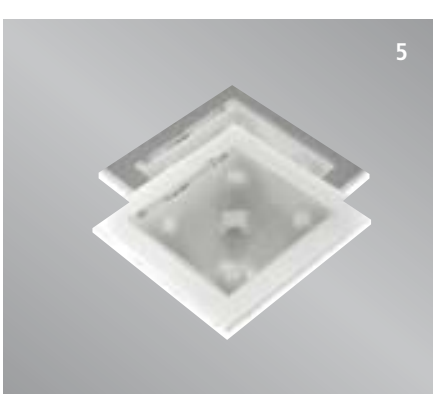
3 Time-saving installation through screwless but easily accessible terminals and large terminal area. Strain relief provided by cable straps. Terminal box cover plate provides protection against handling.

4 Quick start-up via six basic configurations on device. The following operating modes are available: Fully or semi-automatic with a choice of bright, medium or dark switching points.

5 Covers matching room decor in standard colours of white, black and silver. Special versions available to meet specific requirements for building projects.

6 Theben HTS presence detectors can be set using the SendoPro remote control. The PlanoCentro allows parameters to be selected, changed and managed. The presence detector can be set up quickly by sending individual parameters or parameter sets. They can be stored according to object in the internal memory or saved on an SD card.





PlanoCentro
Frames and materials

PlanoCentro
Frames are available in a wide range of colours…

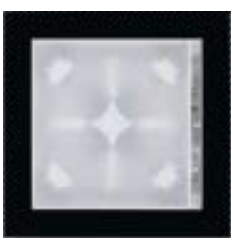
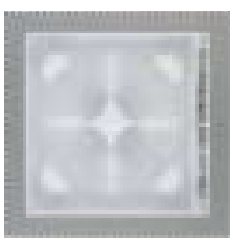
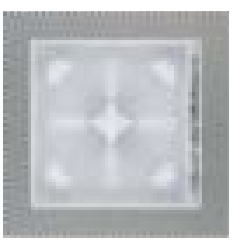


Photo: David Franck; Design: bottega + ehrhardt architekten, Stuttgart





PlanoCentro

… and available in varying frame widths. To satisfy particular architectural requirements.

Photo: Beat Bühler; Design: Bolthauser Architekten, Zürich

PlanoCentro
in the Material test

AIT Material Test

Material tests by the specialist magazine AIT have established a platform for the exchange of information and ideas between architects, product developers and decision makers. Materials, the building blocks of all architectural designs, should not only be visually pleasing but also a tactile experience. The M-test gives companies the opportunity to obtain informed feedback from leading architects and interior designers on products that are properly presented and installed on site. The events are held at selected sites that have an unusual architectural slant. The architects' opinions on the presented materials and solutions are gained from a series of questions and answers. Every Material test is then published in the form of a two page article in AIT.

On 25th June 2010, AIT invited ten renowned architects from Frankfurt and Switzerland to the picturesque Ankermühle vineyard in the Rheingau. Behind the sensitively restored half-timbered facade, Peter Wimmer, Head of Marketing at Theben AG, and Richard Raschle, Managing Director of Theben HTS AG, presented the new **PlanoCentro** presence detector. The architects were clearly impressed by the fact that the new Theben product fitted so snugly to the ceiling. Many of those present were happy to recognise that the **PlanoCentro** Presence Detectors offers a modern and practical solution that meets all design requirements.

Photos: Günter Pfannmüller

CRI Cronauer + Romani Innenarchitekten, Bensheim, Rolf Romani:
It's a new product for me and it's in a form that I was unaware of before. If you consider that sustainable energy conservation and comfort in residential properties will become ever more significant then the **PlanoCentro** presence detector fully deserves to be used.

Looc/M Architekten, Frankfurt, Jens Vorbröker:
Presence detectors are one of those building components that architects would ideally like to make invisible. The flush installation of the **PlanoCentro** shows that Theben HTS is incredibly close to achieving this target. This means that architects don't have to ignore a particular technology for design reasons when it makes practical sense.

Berghof & Haller Architekten, Frankfurt, Norbert Berghof:
The fact that Theben HTS involve architects in the decision making and design process is a clever and commendable decision. The project deserves special attention and great recognition.

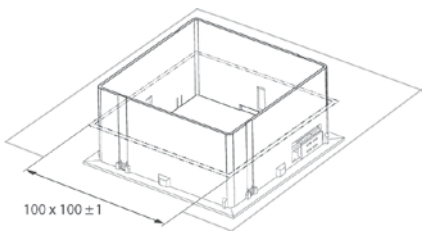
Camenzind Evolution, Zürich, Marco Noch:
As architects, **PlanoCentro** is a very attractive alternative to the standard products as it combines function and design in a special way.

Ramseier & Associates Ltd., Zürich, Andreas Ramseier:
Using the **PlanoCentro** presence detector makes absolute sense as it is hardly visible. The adaptability of the product to each project is a definite plus.

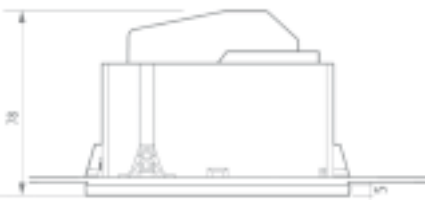
Löbig & Partner GmbH, Mainz, Wolfgang May:
I think the use of presence detectors makes sense and I find their versatility in range of different scenarios particularly convincing – from residential properties, through schools to large scale offices. The product appears to be perfectly thought out and I can't see any weak points.

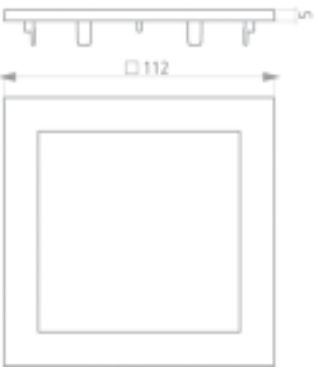
Presence detector **PlanoCentro**
For installation in hollow ceilings

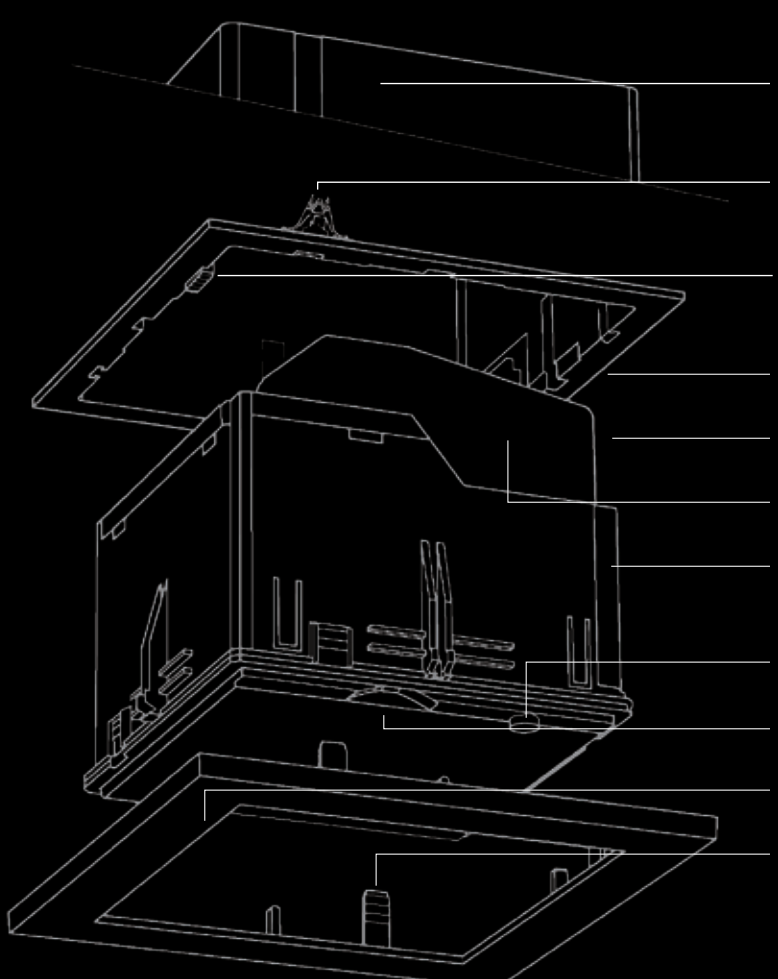
Dimensions in millimetres



Ceiling cut out



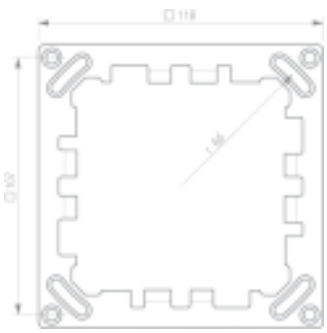


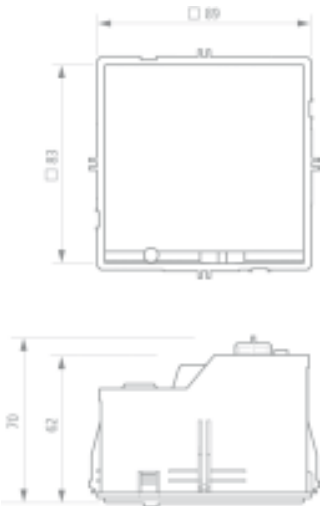


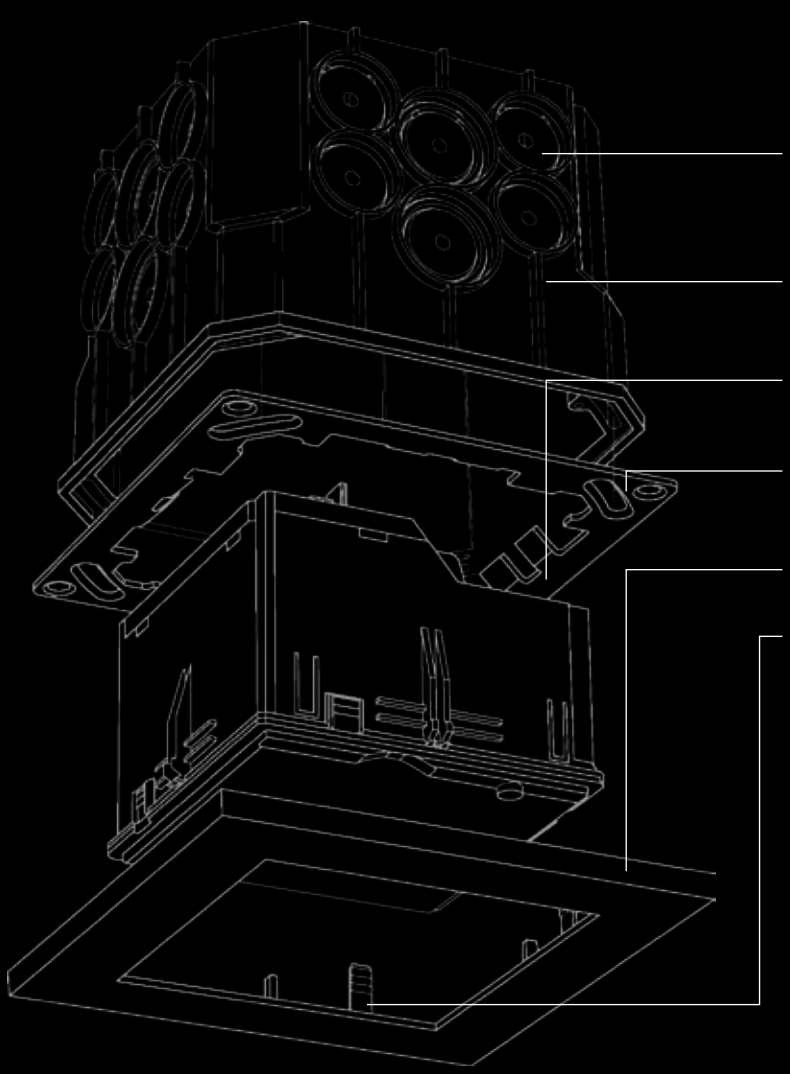
- Easy installation via installation frame for hollow ceilings
- Four detent hooks for fixing installation frame
- Locking slide for secure fixing of device in the installation frame
- Ceiling cut-out 100 x 100 mm
- Ceiling thickness up to 26 mm
- Terminal box cover plate
- Housing can also be subsequently turned by 90° in the installation frame
- Infra-red sensor for remote control
- Brightness sensor
- Elegant, flat installation
- Secure snap-in fastening for cover

Presence detector **PlanoCentro**
For installation in concrete ceilings

Dimensions in millimetres







- Standard Agro/Kaiser flush-mounted socket for empty conduit connection (not included in scope of supply)
- Concrete flush-mounted socket with installation depth of 90 mm
- Solid metal frame for screw fastening is locked on the sensor
- Can be screwed into flush-mounted sockets or ceilings
- Elegant, flat cover
- Secure snap-in fastening for cover

Presence detector **PlanoCentro**
Variable ceiling installation

PlanoCentro 101-EWH

PlanoCentro 101-UWH

PlanoCentro 101-EWH

› Passive infrared presence detector
› square detection range allows accurate and simple planning
› flat design
› exchangeable cover with choice of shapes, colours and materials
› Mixed light measurement
› presence and brightness-dependent control for lighting and HVAC systems
› Choice of fully or semi-automatic lighting control
› Connection option for push buttons or switches for manual switching with automatic recognition
› Adjustable sensitivity
› can be configured remotely
› six predefined basic settings
› Installation with mechanical locking-mechanism
› Lighting control with brightness switching value and intelligent time delay control
› Pulse function for staircase light timer
› Presence output with switch-on delay
› Room monitoring
› Management remote control SendoPro 868-A (optional)
› Parameters can be selected for subsequent changes
› SendoClic user remote control (optional)
› Installation set for ceiling installation (hollow ceiling) with installation frame and cover

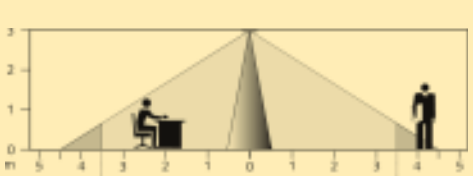
PlanoCentro 101-UWH

› all functions as with PlanoCentro 101-EWH, plus installation set for flush mounting (concrete ceiling)
› with metal installation frame for screw fastening in wooden ceilings or in flush-mounted sockets for concrete ceilings; flush-mounted socket not included in scope of supply.

Jointly used functions

› The switching response of the presence detector is controlled by presence and light
› The lighting switches on when it is dark or if presence is detected and off when there is sufficient light or the room is empty
› The intelligent time delay control adjusts to users' behaviour
› Fully or semi-automatic: In "Fully automatic" mode, the lighting switches on and off automatically according to presence and light. In "Semi-automatic" mode, switch-on must completed manually and switch-off happens automatically.
› Manual override: Lighting can be controlled manually at any time
› The presence detector has "Mixed light measurement" and is suitable for switching fluorescent lamps (FL/PL) halogen and incandescent lamps and LEDs
› Simple setting via rotary switch with six predefined parameter sets
› Presence output for HVAC control: Switching response is only controlled by presence
› Extended detection area (Slave)
› Master/master parallel switching: Up to ten presence detectors can be connected with each other to control several lighting groups. Each master controls its lighting group according to its own brightness measurements. Presence is detected by all the detectors
› Test operation mode checks the detection range and configuration

Detection range (installation height 3.0 m)



Detection range

Installation height	seated persons	
2.0 m	20 m²	4.5 x 4.5 m
2.5 m	36 m²	6.0 x 6.0 m
3.0 m	49 m²	7.0 x 7.0 m
3.5 m	64 m²	8.0 x 8.0 m

Installation height	moving persons	
2.0 m	36 m²	6.0 x 6.0 m ± 0.5 m
2.5 m	64 m²	8.0 x 8.0 m ± 0.5 m
3.0 m	81 m²	9.0 x 9.0 m ± 0.5 m
3.5 m	100 m²	10 x 10 m ± 0.5 m

Technical data	PlanoCentro (Master)	PlanoCentro (Slave)
Operating voltage	230 V~ ±10%	230 V~ ±10%
Frequency	50 Hz	50 Hz
Light measurement	Mixed light	–
Brightness setting range	5 – 2000 Lux	–
Power consumption	0.8 W	0.3 W
Channels	Light I Presence	–
Light type of contact	Relay	–
Switching capacity (cos = 1 resistive load)	2300 W	–
Switching capacity (cos = 0.5)	1150 VA	–
Switching current max.	10 AX	–
Zero cross switching	Yes	–
Incandescent lamp load	2300 W	–
Halogen lamp load (230 V)	2300 W	–
Compact fluorescent lamps (T5) – EB	20 x 54 W, 25 x 39 W, 10 x 2 W, 54 x 15 W, 2 x 39 W	–
Presence contact (HVAC)	Relay, floating	–
Switching capacity	60 W/220 V DC, 62.5 VA/250V AC minimum 0.5 mV/10 mA	–
Parallel switching	Yes	Yes
Detection range	360° square	360° square
moving (installation height 3.5 m)	100 m² (10 x 10 m ± 1 m)	100 m² (10 x 10 m ± 1 m)
seated (installation height 3.5 m)	64 m² (8 x 8 m ± xm)	64 m² (8 x 8 m ± xm)
recommended installation height	2.0 – 3.5 m	2.0 – 3.5 m
Lighting time delay	10 sec – 60 min	–
Presence channel switch-on delay (HVAC)	0 sec – 10 min	–
Presence time delay	10 sec – 120 min	–
Protection rating in accordance with EN 60529	IP 40	IP 40
Operating temperature range	0 °C to 50 °C	0 °C to 50 °C
PlanoCentro with hollow ceiling installation set:	**PlanoCentro 101-E… Order no.**	**PlanoCentro 000-E… only to be used with Master**
› with white PlanoCover	**› WH 2030102**	**› WH 2040102**
› with black PlanoCover	**› BK 2030103**	**› BK 2040103**
› with silver PlanoCover	**› SR 2030104**	**› SR 2040104**
PlanoCentro with flush-mounted set (concrete ceiling):	PlanoCentro 101-U… Order no.	PlanoCentro 000-U… only to be used with Master
› with white PlanoCover	› WH 2030202	› WH 2040202
› with black PlanoCover	› BK 2030203	› BK 2040203
› with silver PlanoCover	› SR 2030204	› SR 2040204

Accessories:		Order no.
Service remote control SendoPro 868-A		9070675
SendoClic user remote control		9070515

Accessories for ceiling installation	Order no.
PlanoCover EWH-112x112, white cover (as with RAL 9010), external dimensions: 112 x 112 mm	9070677
PlanoCover EBK-112x112, black cover (as with RAL 9010), external dimensions: 112 x 112 mm	9070678
PlanoCover ESR-112x112, silver cover (as with RAL 9006), external dimensions: 112 x 112 mm	9070679

Accessories for flush-mounted installation	Order no.
Flush-mounted socket, 115 x 115 x 100 mm, Agro/Kaiser flush-mounted junction box/connection box 9908.01/1298-07	9070689
PlanoCover UWH-123x123, white cover (as with RAL 9005), external dimensions: 123 x 123 mm	9070680
PlanoCover UBK-123x123, black cover (as with RAL 9005), external dimensions: 123 x 123 mm	9070681
PlanoCover USR-123x123, silver cover (as with RAL 9005), external dimensions: 123 x 123 mm	9070682

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