

Energy-efficient lighting Presence and motion detectors





Solutions for indoor use

Small rooms without daylight

Toilets	1	8
Storage rooms	1	8

Passage ways, corridors and staircases

Entrance halls	20
Corridors	22
Staircases	24

Offices, seminar rooms classrooms

Individual offices	2
Large offices	2
Classrooms	31

Sports halls, warehouses

Sports halls	3.
Warehouses	3.

Solutions for outdoor use

Private house building

Terraced house	7
Single-family house	7
Carport	7
Basement stairs	71

Commercial functional building

Underground garage	7 8
Hotel complex	3(
Parking area factory premises 8	32

Selection matrix Which detector for which application?



Indoors

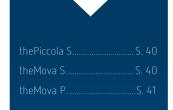
Walking motion Little daylight Ceiling installation Seated activities or little motion

Ceiling installation

Wall mounting

Switching operation

Dimming operation





PresenceLight 180S. 50



Outdoor use

With LED spotlight

Without LED spotlight

Wall mounting

Wall mounting

Wall and ceiling installation

Remote operation

theLuxa S150/S180.....S. 84

theLuxa S360 S. 84

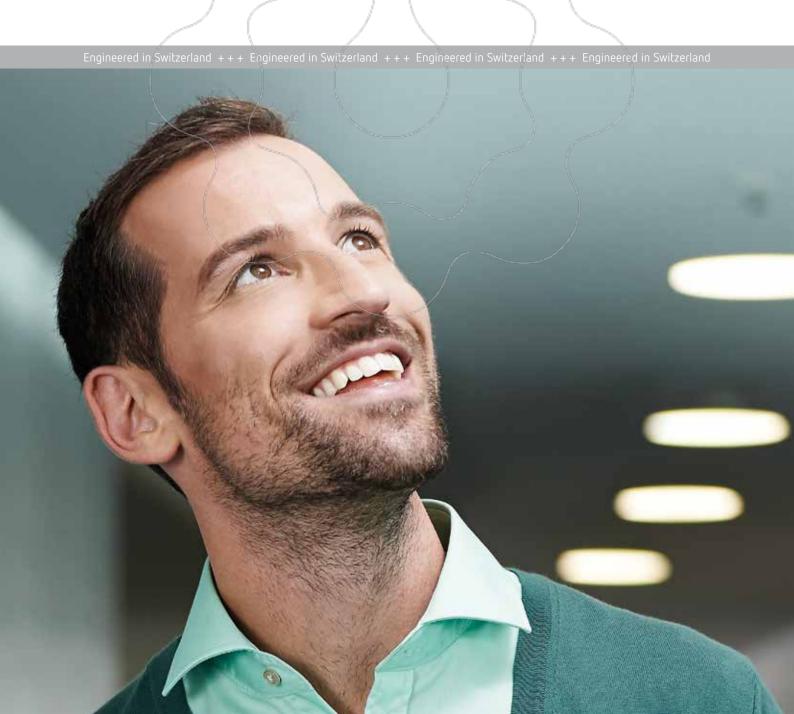


Lighting control indoor

Technology	8
Toilets	18
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Corridors	22
Staircases	24
Individual offices	26
Large offices	28
Classrooms	30
Sports halls	32
Warehouses	34

Presence detectors for energy-efficient lighting control

With the Theben presence detectors, you have every option for energy-efficient and intelligent lighting control. In addition to classic use for lighting control in offices, corridors and public buildings, you can also control heating and air-conditioning based on presence. This is how you save on energy costs and considerably reduce CO_2 emissions. Presence detectors react to the slightest of movements and measure room brightness at the same time. If no more movement is detected, or an individually set brightness value is exceeded, the presence detector automatically switches off the light.







¹ In accordance with guarantee conditions, see www.theben.de/en/guarantee









For its aesthetic design, the Prema has won several awards.

Technology: How does a presence detector work?

Presence detectors work according to the same principle as motion detectors: They detect thermal radiation in their surrounding, that is in their detection area. If thermal radiation is detected in the detection area, for example caused by a person approaching the presence detector, the presence detector converts the radiation into a measureable, electric signal, and the light is switched on.

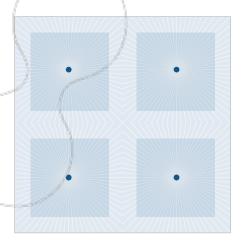
The difference between motion and presence detectors lies in the sensitivity of the sensors. Presence detectors have far more sensitive sensors than motion detectors and detect even the smallest of movements. The sensitive sensors divide the detection area of a presence detector evenly into up to 1000 zones. Like a chessboard, the zones run through the entire detection area. Even minimum changes in the thermal image, such as typing on the keyboard in an openplan office, will be detected. In contrast, a motion detector only responds to greater changes in the thermal image and is therefore mainly suited for applications with larger, walking movements or outdoor use.

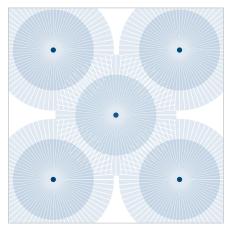
A further difference between motion and presence detectors lies in the light measurement. A motion detector measures brightness once, when the light is switched on because of a movement. If it continues to detect movements, e.g. in the morning in an office, the light remains switched on although daylight would be sufficient in the meantime the set brightness value has already been exceeded. The light unnecessarily remains switched on. In contrast, presence detectors permanently measure the brightness: If an individually set brightness value is exceeded, the presence detector switches the light off, even if it detects movement. That saves energy costs and a large amount of CO₂.



Square detection area of 360°

As most rooms are square or rectangular, a square detection area simplifies planning enormously. The detection areas of the individual presence detectors can be lined next to each other with no gaps. In addition to simplified planning, there is another practical benefit: There are no "blind spots" or overlappings in the room, and movements are guaranteed to be reliably detected everywhere.





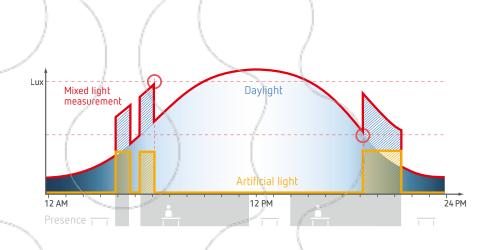
In contrast to presence detectors with a circular detection area, presence detectors with a square detection area ensure optimum coverage of rooms without unnecessary overlapping.

Light measurement in detail

Lighting control using presence detectors is based on detected movement on the one hand and on light measurement on the other. Presence detectors permanently measure the brightness inside the room. Through this permanent light measurement, the presence detector is able not only to switch on artificial light when there is not enough daylight, but also to switch it off again when there is sufficient daylight. It sounds very easy, but in fact the presence detector must be able to assess, whether there is enough daylight after switching off the artificial light.

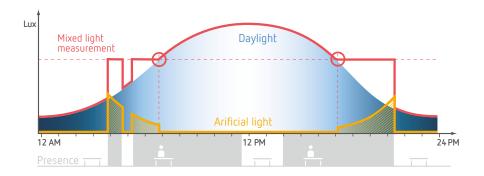
Switching operation

During switching operation, the presence detector measures the sum of artificial lighting and daylight. In order to be able to switch off the artificial light at the right moment when there is increasing daylight, the presence detector must know the proportion of artificial light. This value is automatically learned by the detector by constantly analysing the lighting switching processes in the room. This enables it to calculate the current daylight intensity at any time from the measured total brightness. The advantage of mixed light measurement is that it works with any light source whether LEDs, halogen or fluorescent lamps. Mixed light measurement is the base for constant light control.

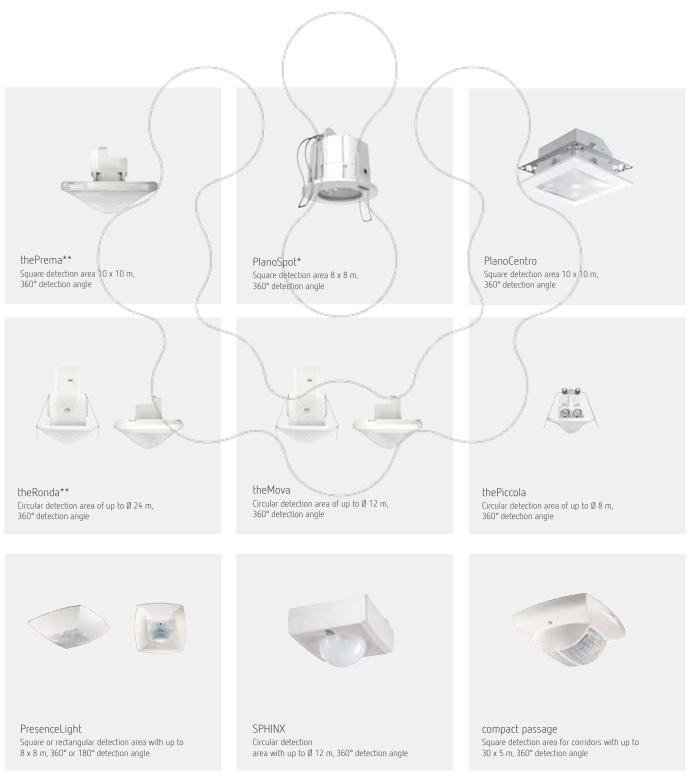


Constant light control

With constant light control, the presence detector permanently measures the sum of daylight and artificial light. It determines the desired brightness value from these two light sources. On a misty or rainy morning the available daylight is less. In this case, the presence detector increases the proportion of artificial light, in order to reach the desired brightness in the room. If the sun breaks through in the course of the morning and there is increased light through the windows, the presence detector reduces the proportion of artificial light. The brightness level in the room therefore remains constant, regardless of the incidence of daylight. Typical applications: Production buildings where a specific brightness level is required by law.



All products at a glance Presence- and motion detectors for inside



^{*} Only available as KNX LON and DALI-version

^{**} Also in DALI-version available



Planning and installation Correct installation of presence detectors

For optimum functioning of the presence detector and to avoid sources of interference, a few points have to be considered during installation: Everything inhibiting the sight of the presence detector must be avoided, such as suspended lamps, partitions, shelves or big plants. Sudden temperature changes in the surrounding of the presence detector — for instance caused by switching fan heaters or fans on or off —

simulate movement. Lamps which are switched on or off in the vicinity of the detection area (e.g. halogen lamps at a distance of < 1 m) simulate movement and can lead to incorrect switching. Moving objects, such as machines, robots etc. simulate motion signals or temperature differences. Slowly warming objects, such as heat radiators (lateral distance from lines and radiators > 0.5 m), IT equipment (computers,

screens), sunny surfaces, or room ventilation systems do not disturb the function of the presence detector, as long as the warm air is not directly pointed at the presence detector. Application examples for the optimum positioning of the presence detector in various rooms can be found from page 18 onwards.









Caution: Do not install presence detectors next to suspended lamps, partitions, shelves, and indoor plants or devices that simulate motion, such as fans or machines.



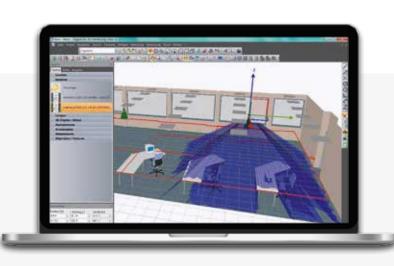
Free planning software for safe detector positioning

Those who want to position the light correctly right from the start will benefit from the Relux light simulation, which in general is free of charge. Relux offers professional planning software for development and

implementation of complex lighting control tasks. The software for planners, architects and light designers is based on lighting solutions from various manufacturers and is appreciated by its users around the globe.

Since spring 2014, Theben is Relux member in the sensors product group. More info at www.relux.com





Simple and efficient Practical advantages of presence detectors

Due to their very fine sensor technology, Theben presence detectors detect even the smallest movements and temperature differences. Due to this they can exactly adjust light and climate to the needs of inhabitants and users. Depending on the model, the various presence detectors are available in the colours black, white, grey, silver or in special colours upon request.



Square detection area

The square detection area is ideal for most rooms in which presence detectors are installed. In this way, the individual detectors can be perfectly arranged. Without any gap or unnecessary

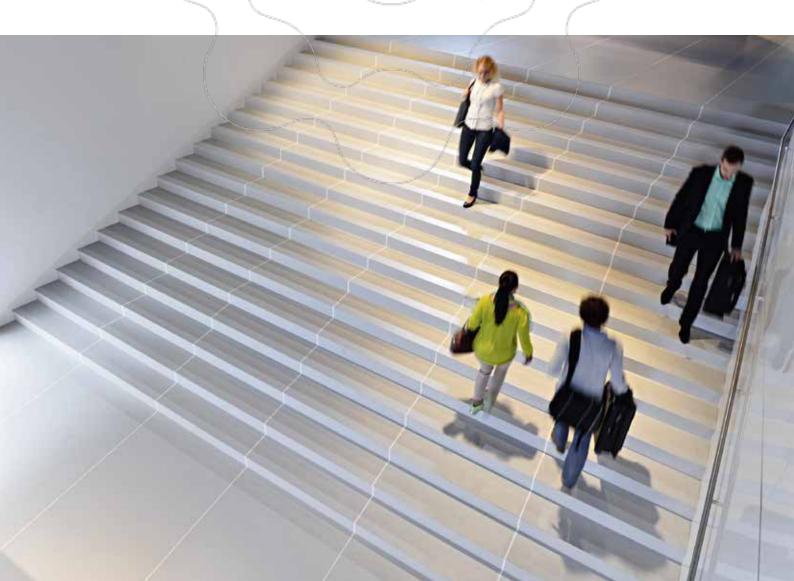
overlapping. Without blind spots. This makes planning easier, reduces the installation effort, saves energy and lowers costs — because, due to the square detection area, usually fewer detectors are needed.



Self-learning time delay

Depending on how people behave inside the room, the time delay changes automatically. If the presence detector detects more movement, the time delay is shortened to just two minu-

tes. If people hardly move or only rarely, the time delay is increased to up to 20 minutes. This saves energy, increases comfort and allows people to work in their most efficient way: active and lively or still and focused.





Sensitive room surveillance

A presence detector misses nothing. This is a particular advantage when the presence detector is integrated in the building system technology of large office or administration buildings. In this way the building management always know in which rooms people are still working.



Safe staircase light function

With presence detectors, nobody trips up. Not even on the stairs. The light can be turned on using the buttons, but it only goes off when there is no movement on the stairs anymore. This means that someone who is at the top of the stairs is not suddenly left in the dark because someone at the bottom has switched off the light.



Illuminating short stays

In the event of a short stay, the light is only on for two minutes. Since presence detectors "detect", whether and how long someone is in the room. This means that whoever enters the room for a short period of time does not automatically trigger the time delay that has been set and therefore does not have to go without light.



Individual light scenarios

Bright daylight or soft dimmed light — You can choose between two lighting scenarios you can define however the mood takes you. For example, in conference rooms where the light has to be dimmed for presentations. For exactly those lighting arrangements that are necessary for everyday situations. Settings can be made, saved and changed quickly and easily using the remote control.



Easy to use remote control

With a remote control, settings can be easily made and changed from the ground. This is faster, shortens installation times and lowers costs. And, moreover, it is safer.



Clever teachin function

Lighting conditions change quickly — it is good if you can simply save them when they are exactly how they should be. With the clever Teach-in function, the current lux value can be continuously saved. Without specialist knowledge. By the end user. It couldn't be easier.



Constant lighting control

Some versions have constant lighting control, which permanently compares artificial light and daylight. They determine the desired brightness value from these two light sources. No matter how changeable the weather: The lighting conditions inside the room remain pleasantly constant.



Sensitivity that can be set

It is up to you, how sensitive presence detectors respond to movements inside the room. The PIR sensors can be conveniently set using the remote control — according to the individual requirements of the users.



Suitable for damp rooms

Presence and motion detectors with protection class IP 54 can also be used in damp rooms such as showers, changing rooms or toilets.



Practical pulse function

The pulse function allows the presence detectors to be built into existing electrical installations with staircase light timer switches or KNX binary inputs without the need for expensive adjustments.



Most simple energy saving setting

"eco" stands for optimum switching behaviour. "eco plus" for maximum energy savings. You decide what is best for you at the push of a button. Just as you want. Exactly how you need it. There is no easier way to save energy.



Intelligent parallel switching

Presence detectors allow for more than just increasing the detection area via Master/ Slave switchings. Via Master/ Master/parallel switches the lighting conditions can be set in the detection area of individual devices independently, without depending on other devices and therefore individually. That is an advantage if, for instance, in open-plan offices, different lighting conditions are to be balanced between areas close to windows and the room's interior.



High switching capacity

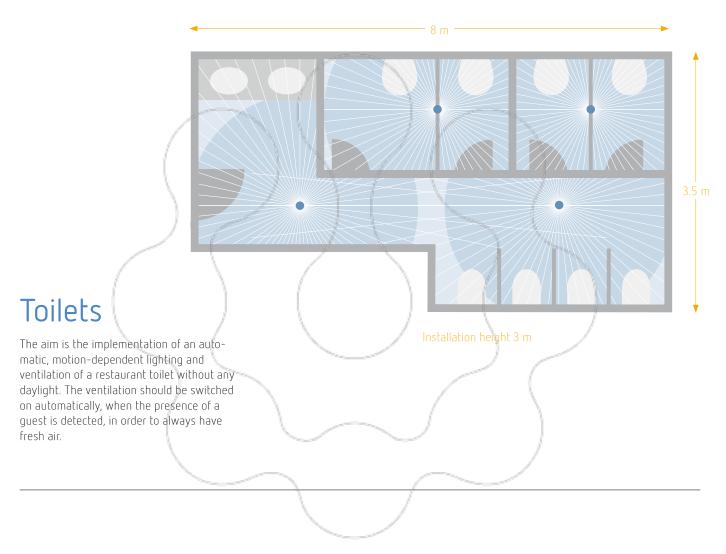
Theben presence and motion detectors have a high-performance relay with tungsten pre-contact or a zero-cross switching and can thus handle switch loads of up to 10 amperes. This allows several lamps to be connected at the same time and larger areas, such as loading ramps or hotel premises, to be lit. This improves planning security, lowers costs and reduces installation times.

All functions at a glance Motion and presence detectors

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Functions	thePiccola S360-100	theMova S360-100	theMova S360-101	theMova P360-100	thePiccola P360-100	theRonda \$360-100	theRonda S360-101	theRonda P360-100 M	theRonda P360-101 M		thePrema S360-100
Square detection area											•
Innovative light measurement			and the second second			1					
Self-learning time delay	and the second s				No. of Parties			No.	S. S	•	•
Illuminating short stays								•		•	•
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Safe staircase light-function			a de la companya del companya de la companya del companya de la co		and the second						•
Sensitivity that can be set		•	•			·	•	•	•	•	•
Sensitive room surveillance				1000						•	•
Constant lighting contro	I									•	
High switching capacity	•			•	•			•	•		•
Easy to use remote control		•	•	•	•	•	•	•	•	•	•
Individual lighting scenarios										•	•
Parallel connection	•				•			•	•	•	•
Suitable for damp rooms		•	•	•		•	•	•	•	•	

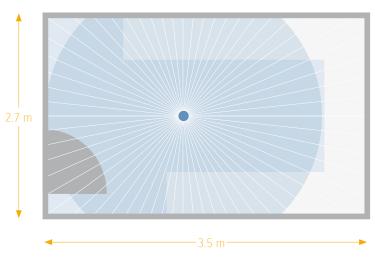
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thePrema S360-101	thePrema P360-101	thePrema S360 DALI	Plano Centro 101	Plano Centro 201	Plano Centro 300	Presence Light 360	Presence Light 180	compact passage	compact passimo	compact office DIM	SPHINX 104-360	SPHINX 104-360/2	SPHINX 104-360 DIMplus
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Automatic lighting control for sanitary and ancillary rooms



Storage rooms

In a small storage room without windows, the light should go on automatically, as soon as someone enters the room, and — in order to save energy — should also go off after a defined time delay.



nstallation height 3 m

We recommend:

Motion detector the Mova S360-101 AP

- **•** Thanks to its higher protection rating of IP 54, it can be used in damp rooms
- Ventilation can be controlled via the presence channel. This makes the detector also suitable for copying rooms or similar rooms, in which the air exchange is of high importance.
- ◆ Technical data theMova S AP: page 40

Alternative:

If daylight is available, we recommend a presence detector such as theRonda S360-101 AP:

- High protection rating of IP 54
- Control of ventilation via lighting channel
- Technical data theRonda S360-101 AP: page 42



High-performance KNX version



Since there is no window and thus no daylight comes in, a motion detector is absolutely sufficient. We recommend the Mova S360-100DE:

- **⊃** Large detection area of Ø 7 m at an installation height of 3 m
- Reliable detection of all movements, as soon as the door opens
- High protection rating of IP 54 (installed)
- Technical data theMova S: page 40

Alternative:

If people stay inside the room for a longer period, we recommend theRonda S360-100 DE

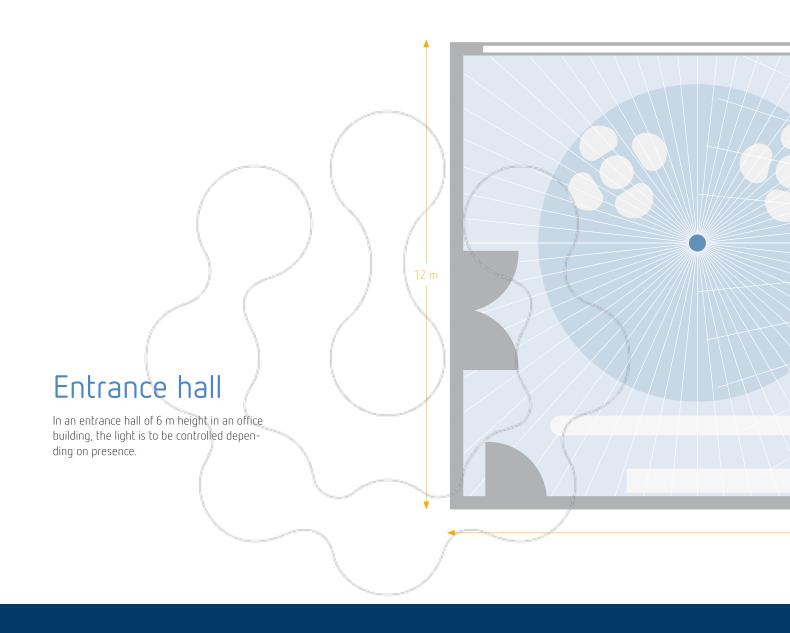


High-performance KNX version

theMova S360-100 DE



Presence-dependent lighting control for foyers, lobbies and entrance areas



In this case, we recommend the Ronda P:

- The detector has a large, circular detection area, which reliably detects the walking movements in the hall from a great height
- **3** The detection area can be individually restricted with practical cover clips.
- ⇒ Technical data theRonda P: page 43

Alternative:

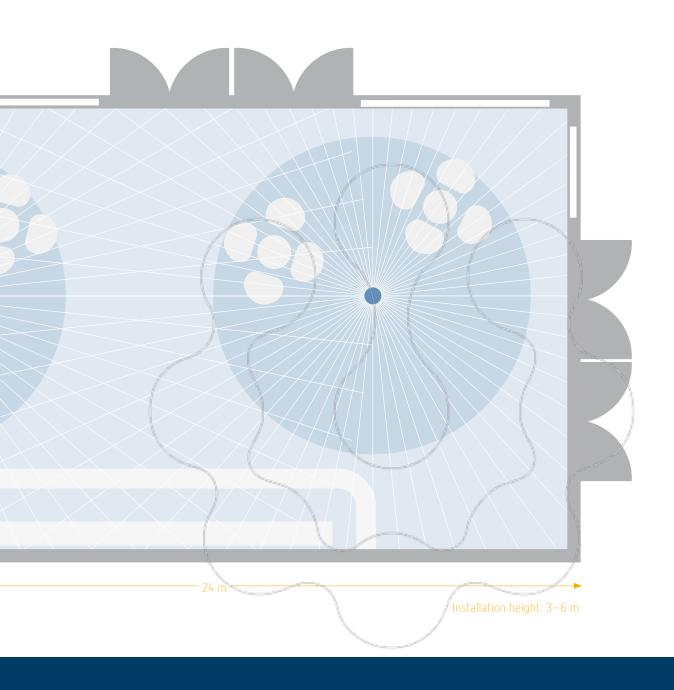
For applications in hotel lobbies or company canteens, in which seated activities predominate and slighter motions have to be detected, we recommend presence detectors, such as the Prema P or Plano Centro.

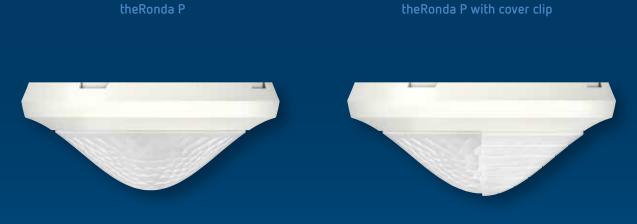


High-performance KNX version

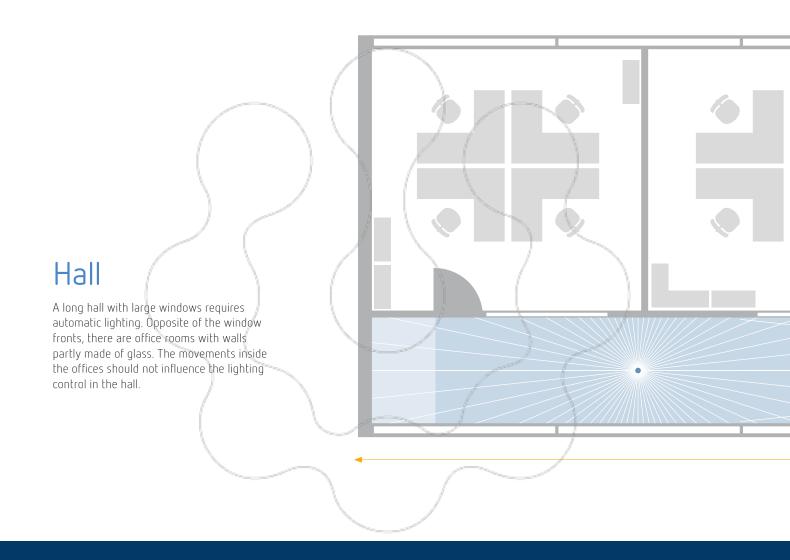


High-performance DALI version





Precise lighting control for corridors and escape routes



We recommend compact passage:

- ◆ Fewer detectors per area for coverage without gaps, thanks to a large, rectangular detection area of up to 30 m
- Optimum utilization of incident daylight and necessary artificial light, thanks to constant mixed light measurement. This reduces energy costs and CO₂ emissions
- The precise delimitation of the rectangular detection area to the adjacent office rooms prevents a detection of motion in there. In this way, the lighting in the

corridor is only switched on when someone is actually in the corridor

• Technical data compact passage: page 49



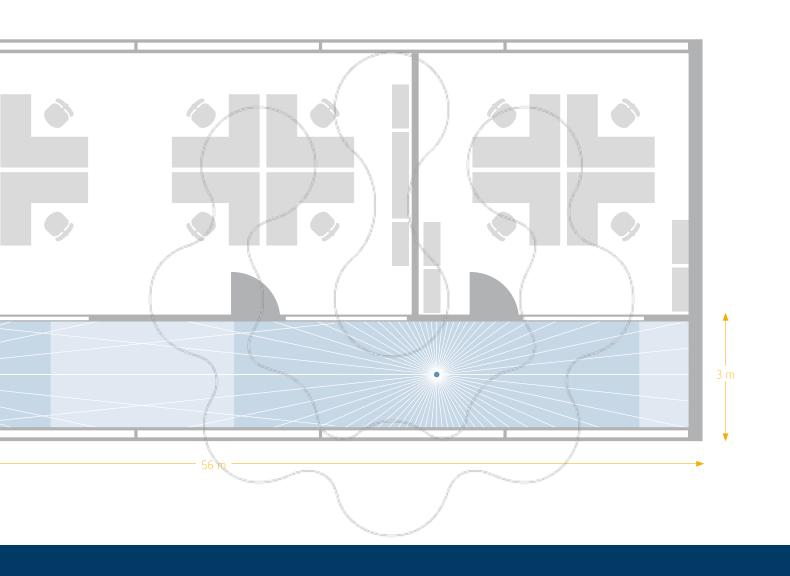
High-performance KNX version



High-performance 24 V version

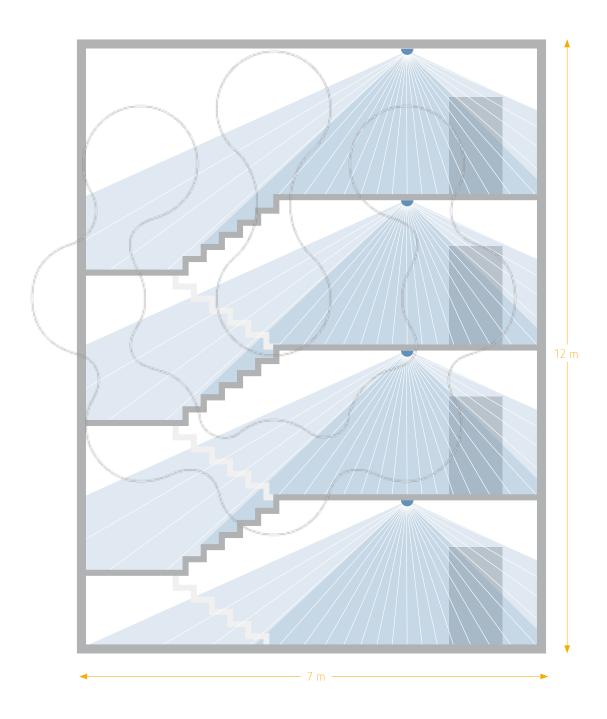
Alternative:

With its single-sided detection area, the compact passimo is ideal for the beginning and end of hallways and corridors.





Automatic lighting control for staircases without daylight



Staircase

Automatic lighting of a staircase without windows in a car park is required.

We recommend

theMova P for ceiling installation:

- ◆ Large detection area of up to 24 m and reliable detection also from great heights up to 10 m*
- High protection rating of IP 54 (when fitted)
- **⇒** Technical data theMova P: page 41



High-performance KNX version



Easy area restriction with cover clips



If wall mounting is desired and the staircase is subject to weather conditions, we recommend the Luxa P:

- ⇒ Large detection area of up to 16 m
- Optimum alignment, thanks to pivotable and rotatable sensor head of the detector
- ⇒ High protection rating of IP 55
- Technical data theLuxa P: page 85



High-performance KNX version



Easy area restriction with cover clips



theMova P





Relux

With the lighting planning software Relux Lighting simulation tool, which is free of charge, you can easily simulate detection areas, which allows for an optimum coverage of the area.

A complete coverage during planning ensures that all areas will be reliably detected.



^{*} Additional information can be found in the technical documentation at www.theben.de/en

Presence-dependent lighting control for office spaces and workplaces



We recommend the Prema S:

- Room coverage without gaps, thanks to square detection area
- Precise delimitation to the hall: Open office doors and movements in the corridor do not trigger the detector in the office
- Ventilation and climate control via presence channel
- Function "self learning time delay" shortens or extends the switch-on time of the lighting, depending on the number of detected movements
- Technical data thePrema S: page 44

5 years guarantee

thePrema stands out thanks to its top quality and reliability. We offer you a five year guarantee for it.

(in accordance with guarantee conditions: www.theben.de/en/guarantee)

thePrema S has won several awards for its aesthetic design.



High-performance



Square detection area

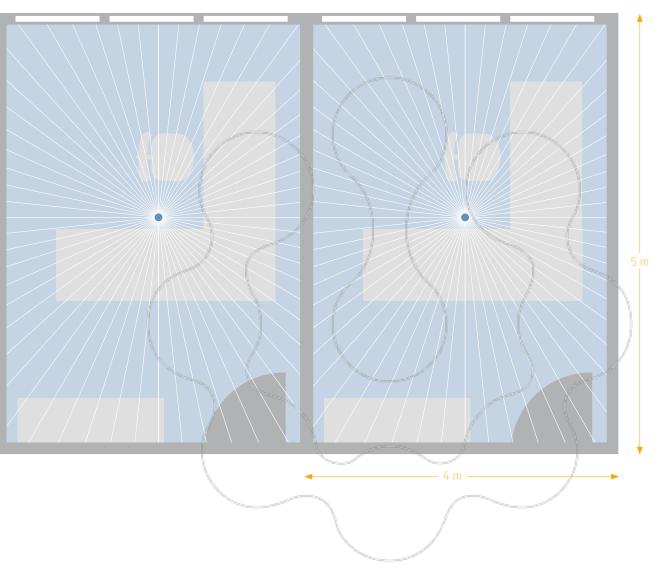
Alternative:

If the lighting is controlled via DALI-Bus, we recommend the Prema S360 DALI.

Technical data thePrema S360 DALI: page 45

theSenda P remote control

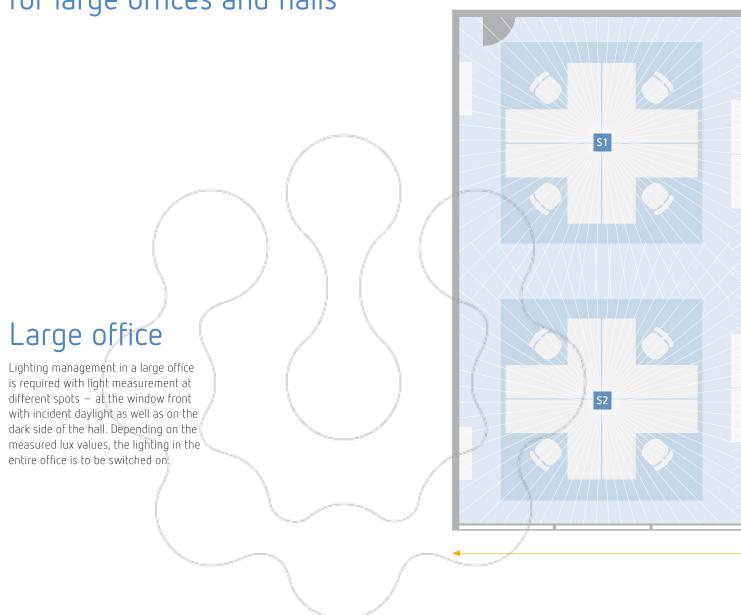
With theSenda P, installers can adjust virtually all functions of Theben presence and motion detectors with only one remote control. Fast, secure, from the ground up. Further information on page 37.



thePrema S

theSenda P

Complex lighting management for large offices and halls



We recommend the Prema P:

- Room coverage without gaps, thanks to square detection area
- Precise delimitation to the hall: Open office doors and movements in the corridor do not trigger the detector in the large office
- Ventilation and climate control via the presence channel
- Mixed light measurement takes incident daylight into account
- Combination of Master/Master and Master/Slave switchings reduce the cost for devices and ensure optimum utilization of daylight
- Technical data thePrema: page 44

5 years quarantee

thePrema stands out thanks to its top quality and reliability. We offer you a five year quarantee for it.

(in accordance with guarantee conditions:



High-performance DALI version

Design award

For its aesthetic design, the Prema has won several awards.

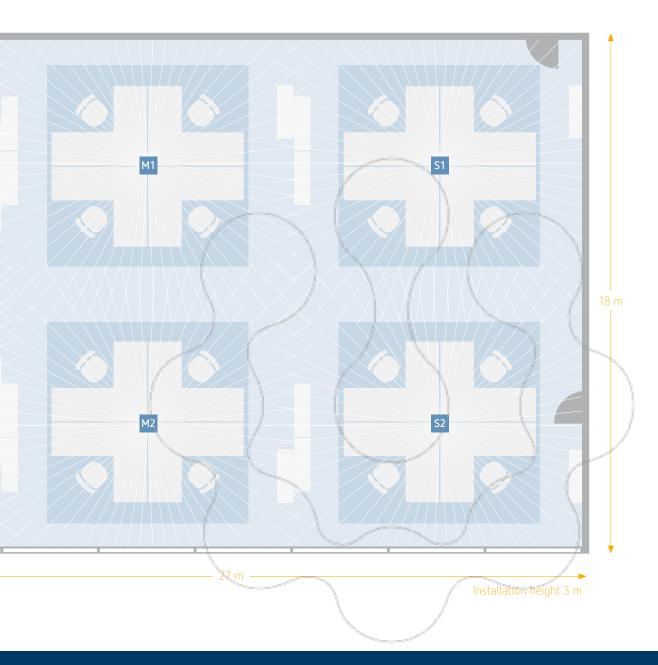
Alternative:

Room situations in offices are changing faster today than ever before. The new PlanoSpot from ThebenHTS is the first presence detector on the market with a mechanically moving detection area.

Note: PlanoSpot is only available as KNX, LON or DALI*-version.

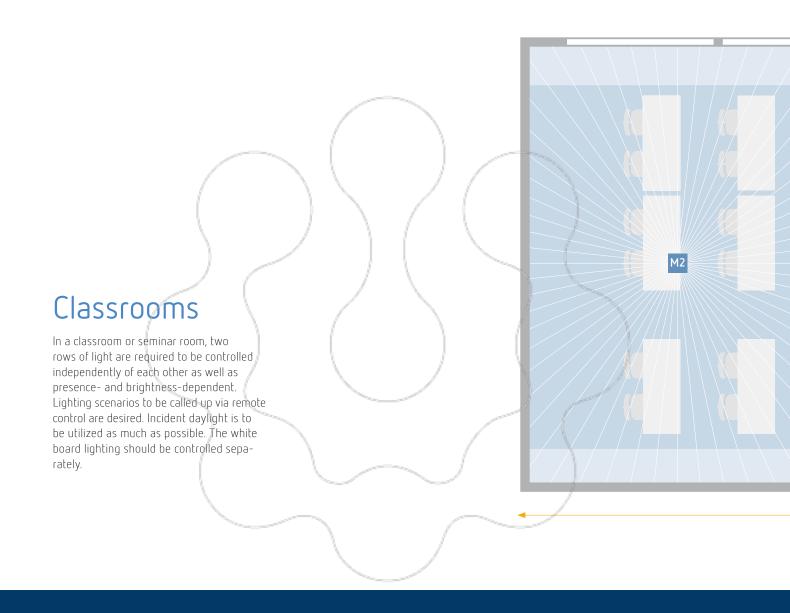
(* Please note the information on www.theben.de/en/planospot-dali)

For more informations on PlanoSpot 360 KNX DE see page 47.





Presence and brightness-dependent solutions for training, seminar and conference rooms



We recommend PlanoCentro 300:

- Two independent light measurements measure the brightness at different spots inside the room by taking the incident daylight into account
- ◆ Thanks to the separate control of the lighting rows, the light in the darker half of the room remains switched on, while the light on the brighter side of the windows will be switched off
- **•** The white board lighting is controlled separately via the 3rd light channel
- Technical data PlanoCentro 300: page 46

Alternative:

PlanoCentro 201 if no third switching channel for white board lighting is required.

Ventilation can be controlled presencedependent via a HKL channel — for pleasant indoor climate. Otherwise, the detector has the same advantages as PlanoCentro 300.



High-performance KNX version

Award-winning

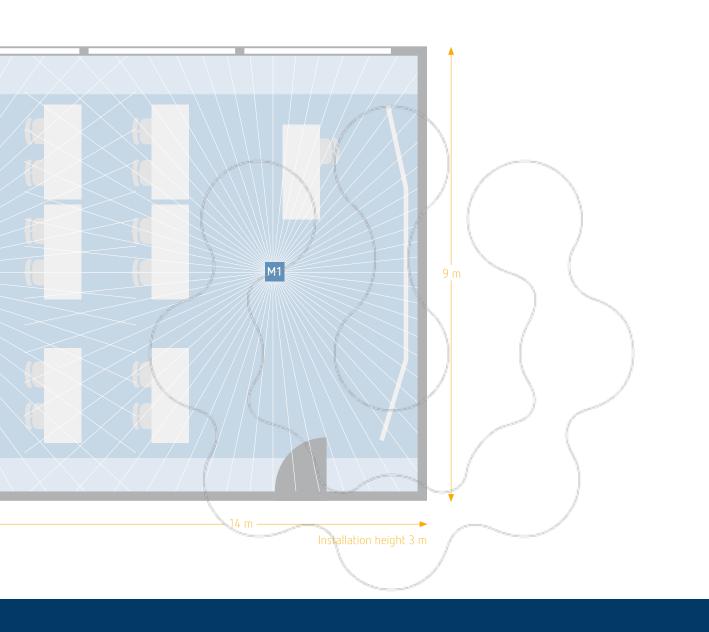


The cover of the PlanoCentro are available in white, silver and black. Special colours are also possible. In 2010, the PlanoCentro was awarded the iF award for its

elegant and slim design.

theSenda S remote control

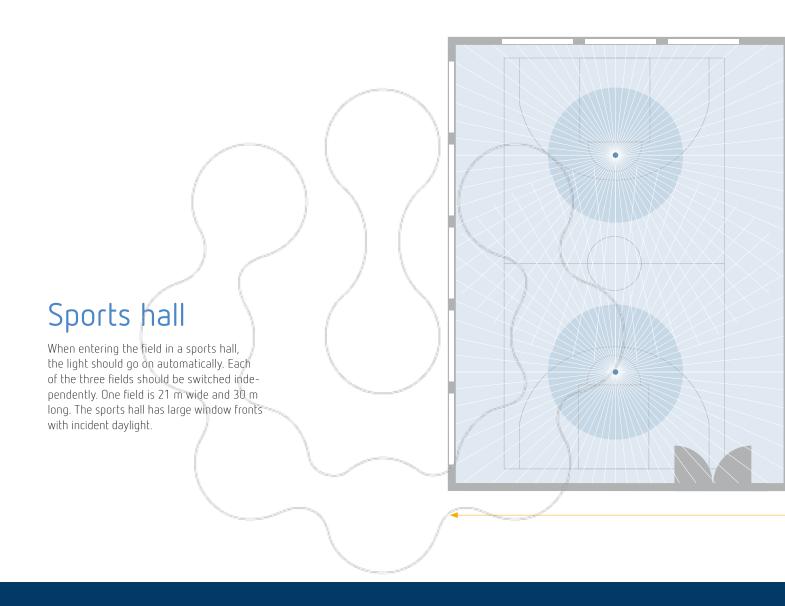
It can be used to call up scenarios for presentations or cinema shows. The SendoPro management remote control can be used to optimally set the detector and to adjust its operation.







Field-dependent lighting for gyms, tennis and sports halls



We recommend the Ronda P:

- Detects motion even from great heights of up to 10 m*
- High protection rating of IP 54 (when fitted)
- Only two detectors per field required, thanks to the large detection area of up to Ø 24 m
- With theRonda P KNX, constant lighting control with optimum utilization of daylight is also possible
- → Technical data theRonda P: page 43

Alternative:

thePrema P, if Master/Slave or Master/ Master switching is required.

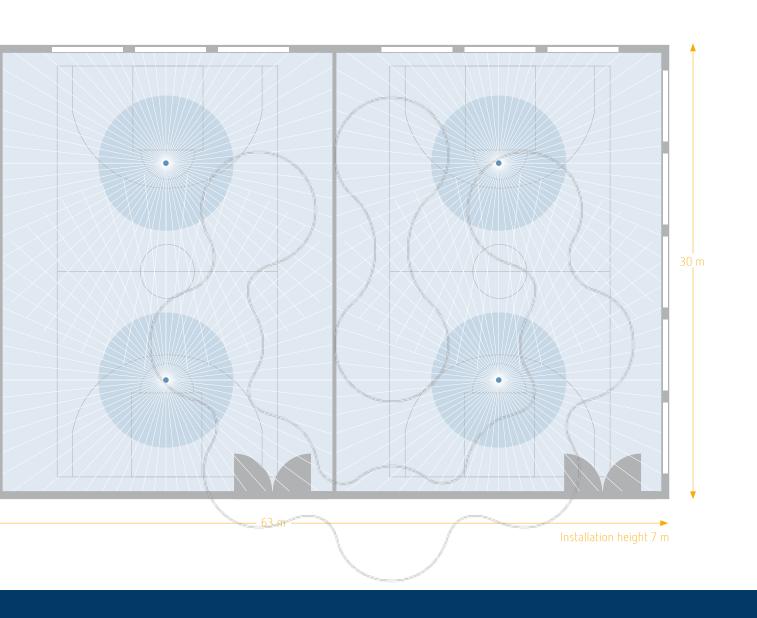


High-performance DALI version

Management remote control SendoPro It can be used to optimally and conveniently set the detector and adjust its operation. Especially in sports halls with installation heights of 7 m and more, a real advantage for adjustments.

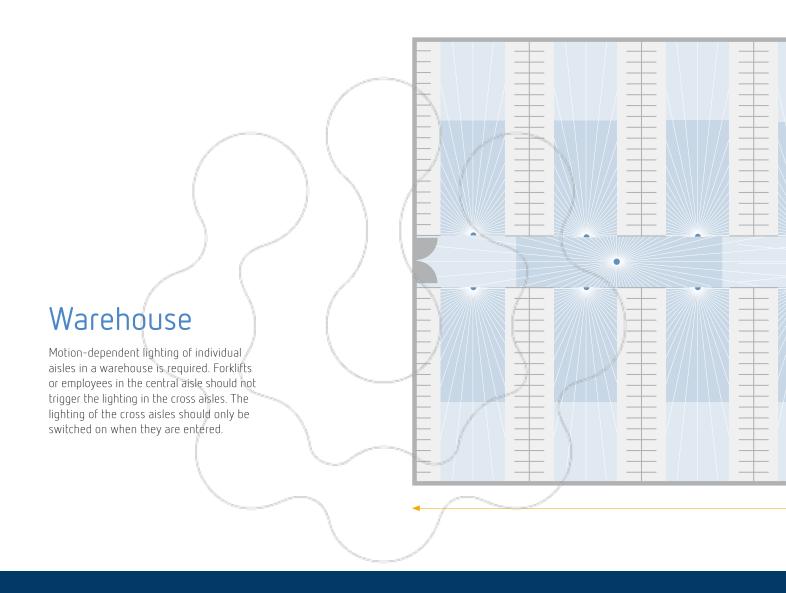


^{*} Further information can be found in the technical documentation at www.theben.de/e





Motion-dependent lighting for logistics centres, libraries and archives



We recommend compact passage and compact passimo:

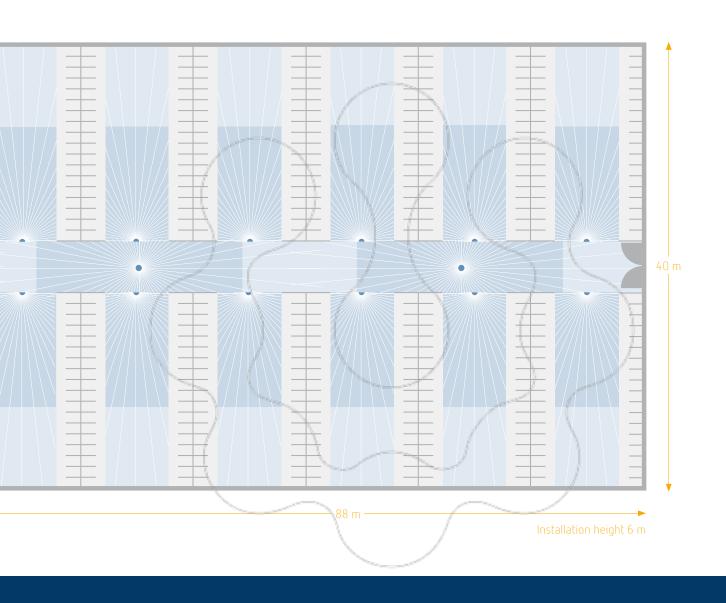
- No "moving light" thanks to precise delimitation of the detection areas of the warehouse aisles from the detection areas in the central aisle − the detectors of the cross aisles do not detect the movements in the central aisle. No other detector on the market offers this
- The compact passimo is ideal for installation directly above the entrances of the cross aisles, since it only detects
- single sided movements. Currently, no other detector offers this
- The compact passage has a rectangular detection area with up to 30 m and is therefore well suited for long aisles and corridors
- The detectors can even be installed at great heights of up to 6 m
- Technical data compact passage and compact passimo: page 49



High-performance KNX version



High-performance 24 V version





Clever accessory theSenda S remote control



Switching or dimming

The lighting can of course also be switched on and off via remote control. Smooth dimming can be done via the button in two channels.



Calling scenes

You want to give a presentation. You call up the programmed scene by pushing the icon: The blinds go down, the projector goes on and the light will be dimmed. After each presentation you call up scene 1 – and it will be light again.



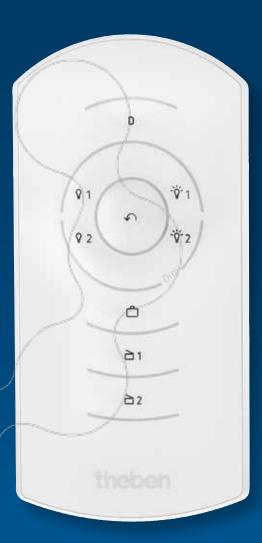
Presence simulation

During longer periods of absence, such as vacations or company holidays, you just switch to "Presence simulation". In this way, the switching cycles of the previous week will be called up. The advantage: The building looks alive and not abandoned. Burglars do not see that no one is at home.



Twilight switch

Via button D, the dimming function can be called up on the detector, and, from a defined lux value, the detector switches to permanent light.



One for all. All with one.

The remote controls the Senda S and P can be used to conveniently set a huge number of Theben motion and presence detectors.





thePiccola P



theMova S theRonda S



Perfect service theSenda P remote control



11 Pulse function

Simple installation into existing electrical installations with staircase light timer switches or KNX binary inputs.



Switching or dimming

Sensitivity

Adjustable sensitivity: Reduce or increase – depending on the application.

Can be set between 5 and 800 lux. Teach-in possible.

9

Time delay

Light or presence time delay can be set in different time values.

SendoPro universal remote control

It supports the setting of further parameters, such as:

- ⇒ Change over of Spot/Wide light measurement
- ⇒ Any lux value can be set
- Time delay can be set as desired
- Read out of light measurement values
- **⇒** Switch-on delay



theMova P theRonda P



thePrema



PlanoSpot



PlanoCentro



Impressive references for applied energy efficiency

Inventor of the presence detector

Those who select a ThebenHTS presence detector choose "the original". The ECO-IR was developed at Theben's High Technology Systems Laboratory in Switzerland at the beginning of the 1990s. Since then, Theben has worked to maximise areas such as product application, ease of use and efficiency. It is also worth noting that with the ECO-IR ThebenHTS invented the Presence Detector and Square Detector Area, a double first in the market.

Their innovative lenses and sensitive sensors provide an outstanding detection quality. Equally innovative are special solutions such as the compact passimo model for warehouse aisles. ThebenHTS detectors are not only functional but also clearly a leader in terms of design: The first flush-mounted PlanoCentro presence detector received the "iF product design award 2010" for high-quality design. This is definitely not the last chapter in the success story of the ThebenHTS presence detector, which celebrated its 20th anniversary in 2012.

Automated warehouse light at Coop, Switzerland

Over 1900 retail outlets in Switzerland want to be supplied with goods. The national distribution centre (NVZ) in Wangen near Olten is at the centre of this huge Coop logistics operation. As complex as the spacious high-rack warehouses are their lighting systems. Previously, the lighting was switched on permanently. In order to optimise energy consumption, the lighting only has to be switched on if someone is present in the warehouse aisles. Afterwards, it should go off automatically. In order to achieve this, Coop decided for lighting control via presence detectors.

The company opted for ThebenHTS compact passimo presence detectors. They have been specially developed for use in corridors and already proved to be impressive in the testing phase with the most accurate measurement at the aisle entry and a clear delimitation of the detection area from the neighbouring aisles. The presence detector also convincingly mastered the height of some warehouse aisles of up to six meters high. Following the tests, the whole warehouse in Wangen near Olten was converted from permanent to demand-actuated lighting. Meanwhile, Coop has completely refitted further warehouses. Currently, over 1300 ThebenHTS presence detectors are installed.



Innovative lighting design for DIAL, Lüdenscheid

In 2012, the DIAL (Deutsches Institut für Angewandte Lichttechnik GmbH) in Lüdenscheid erected an impressive new building, which sets standards by its integral building system design. For DIAL it was clear that planning for the building, building services engineering and lighting would be down to themselves. The institute especially emphasised the close interrelation of lighting planning, architecture, and lamp design. About 2000 m² floor space for office and conference rooms, laboratories as well as foyer, atrium, bistro, and catering zone were developed on three levels.

The company decided for Plano Centro KNX. The presence detector, fitting harmonically into any architecture, has been awarded the "iF Award" in 2010. In about 30 offices, the detectors control the lighting in accordance with the three different daylight sequences. A beautiful summer day is simulated. By means of its mixed light measurement, Plano Centro takes the incident daylight into account and accordingly reduces the portion of artificial light. This reduces lighting costs and CO_2 emissions. Thanks to its high detection quality, it reaches into the corners of the room, but also avoids faulty switchings. The PlanoCentro thus combines the ideal level of illumination for a room at the highest energy efficiency.



Sustainable lighting concept for DGNB e. V., Stuttgart

Direct experience sustainable building — this is the objective of the German Sustainable Building Council (DGNB e.V.). The new DGNB rooms in Stuttgart show what this means. With the support of about 30 member companies, the new DGNB office in the Caleido in Tübinger Straße became a Living Showroom of sustainable building. Here, staff members and visitors can literally grasp the advantages of sustainably planned and constructed rooms. A sensitive interior design in accordance with the DGNB principles, such as user comfort, environmental compatibility, and lifecycle considerations optimally supplements the sustainable building approach.

Light and lighting control constitute an essential aspect of it. An energy efficient use in the office of the DGNB is ensured by thePrema P KNX. Since 7 July 2014 the new rooms are available to the members of the association, sustainability experts, interested people, and the employees of the office. In the future, during a guided tour of the building, they can all learn what a sustainable building means in practice and what the benefits are for people and the environment, as well as the wallet.



HOCHTIEF Project development/countenance

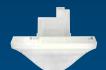
Further references can be found at www. theben.de/en/references

Motion detector the Piccola and the Mova Technical data

	66			
	thePiccola			
Features	S360-100 DE	theMova \$360-100 DE	theMova S360-100 AP	theMova S360-101 DE
Detection area*	circular, 8 m diameter	circular, 8 m diameter	circular, 8 m diameter	circular, 8 m diameter
Type of installation	Ceiling mounting	Ceiling mounting	Ceiling installation, surface mounted	Ceiling mounting
Installation height	2-4 m	2-4 m	2-4 m	2-4 m
Detection angle	360°	360°	360°	360°
Operating voltage	110-240 V AC, 50/60 Hz	230 V AC/50 Hz	230 V AC/50 Hz	230 V AC/50 Hz
Power consumption	~ 0.5 W	~ 0.5 W	~ 0.5 W	~ 0.5 W
Light channels	1 /	1	1/	1
Relay light	230 V/10 A, μ-contact	230 V/10 A, μ contact	230 V/10 A, μ contact	230 V / 10 A, μ contact
Switching capacity light (cos ϕ = 1, cos ϕ = 0.5)	2000 W	2300 W, 1150 VA	2300 W, 1150 VA	2300 W, 1150 VA
Max. switching capacity LED guidance value	< 2 W: 55 W/> 2 W: 180 W	< 2 W: 25 W/2-8 W: 70 W/> 8 W: 80 W	< 2 W: 25 W/2 – 8 W: 70 W/ > 8 W: 80 W	< 2 W: 25 W/2-8 W: 70 W/> 8 W: 80 W
Brightness setting range	5-1000 lx	30-3000 lx/ on	30-3000 lx/ on	30-3000 lx/on
Lighting time delay	30 s – 30 min	10 s – 60 min	10 s – 60 min	10 s – 60 min
Presence channels	- \		-	1
Switching capacity Presence	-	_	-)	50 W / 50 VA
Terminals	Plug-in terminals	Plug-in terminals	Plug-in terminals	Plug-in terminals
Protection rating (in fitted state)	IP 21 (Sensor), IP 20 (power unit)	IP 40	IP 54	IP 40
Permissible ambient temperature	−20 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C
Remote operation	no	yes	yes	yes
Teach-In	yes	yes	yes	yes
Adjustable sensitivity	no	yes	yes	yes
Test detection area	yes	yes	yes	yes
Article number				
Art. No. white (WH)	1060200	1030560	1030550	1030565
Art. No. grey (GR)**	_	1030561	1030551	1030566
Optional accessories				
theSenda S remote control	_	9070911	9070911	9070911
theSenda P remote control	_	9070910	9070910	9070910
SendoPro 868-A management remote control	_	9070675	9070675	9070675
Surface frame 110 A white (WH)	_	_	_	-
Surface frame 110 A grey (GR)	_	_	_	_
Ceiling installation box	_	_	_	_

Details at an installation height of 3 m
 Suitable for large installation heights of up to 10 m. Additional information can be found in the technical documentation.











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he	Mova	P360-	100 UP

Mova		

Lh ak	4	5360	PNIV	A D

the Move P360 KNX

circular, 8 m diameter	circular, 24 m diameter	circular, 8 m diameter	circular, 8 m diameter	circular, 24 m diameter
Ceiling installation, surface mounted	Ceiling mounting in flush-mounted box	Ceiling installation	Ceiling installation, surface mounted	Ceiling mounting in flush-mounted box
2-4 m	2-10 m**	2-4 m	2-4 m	2-10 m**
360°	360°	360°	360°	360°
230 V AC/50 Hz	110 V-230 V AC, 50/60 Hz	Via KNX bus	Via KNX bus	Via KNX bus
~ 0.5 W	~ 0.1 W	8 mA/9 mA with LED	8 mA/9 mA with LED	8 mA/9 mA with LED
1	1	1/	1	1
230 V/10 A, μ contact	230 V/10 A, μ contact	-	-	-
2300 W, 1150 VA	only with 230 V: 2300 W, 1150 VA	-\ /	-	-/
< 2 W: 25 W/2-8 W: 70 W/ > 8 W: 80 W	< 2 W: 60 W/> 2 W: 180 W	-	-) ~	**************************************
30-3000 lx/on	30-3000 lx/on	30-3000 lx/ on	30-3000 lx/on	30-3000 lx/on
10 s-60 min	10 s – 60 min	30 s-60 min	30 s – 60 min	30 s-60 min
1	- \	And the second	1	1
50 W / 50 VA	-\			_
Plug-in terminals	Screw terminals	WAGO 243	WAGO 243	WAGO 243
IP 54	IP 40	IP 40	IP 54	IP 40
−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	-15 °C to +50 °C
yes	yes	yes	yes	yes
yes	yes	yes	yes	yes
yes	yes	yes	yes	yes
yes	yes	yes	yes	yes
1030555	1030600	1039560	1039550	1039600
 1030556	1030601	1039561	1039551	1039601
9070911	9070911	9070911	9070911	9070911
9070910	9070910	9070910	9070910	9070910
9070675	9070675	9070675	9070675	9070675
-	9070912	-	-	9070912
-	9070913	-	-	9070913
-	9070917	-	-	9070917

Award-wining theMova S and thePiccola have received several awards:







Presence detectors the Piccola and the Ronda Technical data

				-
	a a	T		
Features	thePiccola P360-100 DE WH	theRonda S360-100	theRonda S360-101	theRonda P360 Slave UP
Detection area seated/walking*	round, Ø 2/8 m	round, Ø 4/8 m	round, Ø 4/8 m	round Ø 8/24 m
Installation height	2-4 m	2-4 m	2-4 m	2-10 m**
Detection angle	360°	360°	360°	360°
Operating voltage	110-240 V AC, 50/60 Hz	230 V AC/50 Hz	230 V AC/50 Hz	110-230 V AC, 50/60 Hz
Power consumption	~ 0.5 W	~ 0,5 W	~ 0,5 W	~ 0.5 W
Light measurement (mixed light)	1 x Mixed light	1 x Mixed light	1 x Mixed light	1 x Mixed light
Light channels	1	1	1/	\-
Switching capacity light ($\cos \phi = 1, \cos \phi = 0.5$)	2000 W	2300 W	2300 W	}
Max. switching capacity LED guidance value	< 2 W: 55 W/> 2 W: 180 W	< 2 W: 25 W/2-8 W: 70 W/> 8 W: 80 W	< 2 W: 25 W/2 - 8 W: 70 W/ > 8 W: 80 W	<i>J-</i>
Brightness setting range	5-1000 lx	30-3000 lx/on***	30-3000 lx/on***	-
Lighting time delay	30 s-30 min	10 s-60 min***	10 s – 60 min***	-
Standby brightness	- 1	- /	- \	-
Standby time	- \		-	-
Presence channels	_	-	1 /	-
Switching capacity Presence	_	_	50 W / 50 VA	-
Presence switch-on delay		-		-
Presence time delay	- \	- /	10 s-120 min***	-
Protection rating (in fitted state)	IP 21 (sensor), IP 20 (power unit)	IP 54	IP 54	IP 54
Permissible ambient temperature	-20 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	-15 °C to +50 °C
Remote operation	yes	yes	yes	yes
Article number				
Art. No. white (WH)	2090200	2080560 DE version 2080550 AP version	2080565 DE version 2080555 AP version	2080030
Art. No. grey (GR)	_	2080561 DE version 2080551 AP version	2080566 DE version 2080556 AP version	2080031
Optional accessories				
theSenda S remote control	9070911	9070911	9070911	9070911
theSenda P remote control	9070910	9070910	9070910	9070910
SendoPro 868-A management remote control	9070675	9070675	9070675	9070675
Surface frame white (WH)	_	_	_	9070912
Surface frame grey (GR)	_	_	_	9070913
Ceiling installation box	_	_	_	9070917

Details for an installation height of 3 m

^{**} Suitable for large installation heights of up to 10 m. Additional information can be found in the technical documentation.



theRonda P360-100 M UP	theRonda P360-101 M UP	theRonda S360-110 DALI UP	theRonda P360-110 DALI UP	theRonda P360-330 DALI UP	theRonda P360 KNX UP
round Ø 8/24 m	round Ø 8/24 m	round Ø 4/8 m	round Ø 8/24 m	round Ø 8/24 m	round Ø 8/24 m
2-10 m**	2-10 m**	2-4 m	2-10 m**	2-10 m**	2-10 m**
360°	360°	360°	360°	360°	360°
110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz	via KNX-Bus
~ 0.5 W	~ 0.5 W	~ 0,4 W	~ 0,4 W	~ 0,4 W	8 mA/9 mA with LED
1 x Mixed light	1 x Mixed light	1 x Mixed light	1 x Mixed light	3 x Mixed light	1 x Mixed light
1 /	1	1 (DALI broadcast)	1 (DALI broadcast)	3 (DALI addressable)	2
only with 230 V: 2300 W, 1150 VA	only with 230 V: 2300 W, 1150 VA	max. 50 DALI devices	max. 50 DALI devices	max. 50 DALI devices	-
< 2 W: 60 W/2-8 W: 180 W/> 8 W: 200 W	< 2 W: 60 W/2-8 W: 180 W/ > 8 W: 200 W	-	- /	-\	7
30-3000 lx/on	30-3000 lx/on	30-3000 lx/on	30-3000 lx/on	30-3000 lx/on	10-3000 lx/on
10 s – 60 min	10 s – 60 min	10 s-60 min	10 s – 60 min	10 s – 60 min	30 s – 60 min
_	- /	1-25%	1-25%	1-25%	1 - 25 %
-	- (0 s-60 min/on	0 s – 60 min/on	0 s - 60 min/on	30 s — 60 min/inactive/ permanent on
_	1	-	-	-)	2
_	50 W / 50 VA	_	-	-	_
_	0 s – 10 min		-		10 s – 30 min/inactive
_	10 s – 120 min	- \	- /	_	10 s – 120 min
IP 54	IP 54	IP 54	IP 54	IP 54	IP 54
−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C
yes	yes	yes	yes	yes	yes
2080020	2080025	2080580	2080040	2080045	2089000
2080021	2080026	2080581	2080041	2080046	2089001
9070911	9070911	9070911	9070911	9070911	9070911
9070910	9070910	9070910	9070910	9070910	9070910
9070675	9070675	9070675	9070675	9070675	9070675
9070912	9070912	9070912	9070912	9070912	9070912
9070913	9070913	9070913	9070913	9070913	9070913
9070917	9070917	9070917	9070917	9070917	9070917

Presence detectors the Prema Technical data









Features	thePrema S360-100 E UP	thePrema S360-101 E UP	thePrema S360 Slave E UP
Detection area seated/walking*	square 5 x 5 m/7 x 7 m	square 5 x 5 m/7 x 7 m	square 5 x 5 m/7 x 7 m
Installation height	2-3.5 m	2-3.5 m	2-3.5 m
Detection angle	360°	360°	360°
Operating voltage	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz
Power consumption	~ 0.1 W	~ 0.1 W	~ 0.1 W
Light measurement (mixed light)	1 x Mixed light	1 x Mixed light	- "
Light channels	1 /	1 /	- \
Switching capacity light (cos $\varphi = 1$, cos $\varphi = 0.5$)	2300 W, 1150 VA	2300 W, 1150 VA	-
Max. switching capacity LED guidance value	< 2 W: 60 W/2 – 8 W: 180 W/ > 8 W: 200 W	< 2 W: 60 W/2 – 8 W: 180 W/ > 8 W: 200 W	-)
Brightness setting range	5-3000 lx/on	5-3000 lx/on	- //
Lighting time delay	10 s – 60 min	10 s – 60 min	of the state of th
Standby brightness	Secretary Control of the Control of	-	-
Standby time	- \	- /	-
Presence channels	-	1	-
Switching capacity Presence	_	50 W / 50 VA	_
Presence switch-on delay		0 s – 10 min	-
Presence time delay		10 s – 120 min	-
Protection rating (in fitted state)	IP 40	IP 40	IP 40
Permissible ambient temperature	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
Remote operation	yes	yes	yes
Article number			
Art. No. white (WH)	2070600	2070605	2070630
Art. No. grey (GR)	2070601	2070606	2070631
Optional accessories			
theSenda S remote control	9070911	9070911	-
theSenda P remote control	9070910	9070910	9070910
SendoPro 868-A management remote control	9070675	9070675	9070675
Surface frame white (WH)	9070912	9070912	9070912
Surface frame grey (GR)	9070913	9070913	9070913
Ceiling installation box	9070917	9070917	9070917

Details for an installation height of 3 m Suitable for large installation heights of up to 10 m. Additional information can be found in the technical documentation. In accordance with guarantee conditions, see www.theben.de/en/guarantee











	thePrema S360 DALI UP	thePrema P360-101 E UP	thePrema P360 Slave E UP	thePrema S360 KNX UP	thePrema P360 KNX UP
	square 5 x 5 m/7 x 7 m	square 7 x 7 m/9 x 9 m	square 7 x 7 m/9 x 9 m	square 7 x 7 m/9 x 9 m	square 7 x 7 m/9 x 9 m
	2-3.5 m	2-10 m**	2-10 m**	2-3.5 m	2-10 m**
	360°	360°	360°	360°	360°
	230 V AC, 50 Hz	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz	via KNX-Bus	via KNX-Bus
	~ 0.5 W	~ 0.1 W	~ 0.1 W	9 mA/13 mA with LED	9 mA/13 mA with LED
	1 x Mixed light	Spot/Wide	- /	1 x Mixed light, Spot	3 x mixed light can be selected
	1	1	-/	2	3
	max. 25 DALI devices	2300 W, 1150 VA	7	- /	-
	-	< 2 W: 60 W/2 – 8 W: 180 W/ > 8 W: 200 W	-\	-	- /
	5-3000 lx	5-3000 lx/on	- \	5-3000 lx/on	5-3000 lx/on
	10 s – 60 min	10 s – 60 min	_	30 s – 60 min	30 s – 60 min
	1-25 %	-	_	1-25 %	1-25 %
	0 s-60 min/on	-/	-	30 s – 60 min/inactive/ permanent on	30 s – 60 min/inactive/ permanent on
	-	1	- /	2	2
	_	50 W / 50 VA	-	- /	_
	_	0 s – 10 min	_	10 s – 30 min/inactive	10 s – 30 min/inactive
	_	10 s – 120 min	7	10 s – 120 min	10 s-120 min
	IP 40	IP 40	IP 40	IP 40	IP 40
	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
	yes	yes	yes	yes	yes
	2070525	2070105	2070130	2079500	2079000
	2070526	2070106	2070131	2079501	2079001
	9070911	9070911	-	9070911	9070911
	9070910	9070910	9070910	9070910	9070910
	9070675	9070675	9070675	9070675	9070675
	9070912	9070912	9070912	9070918	9070918
	9070913	9070913	9070913	9070919	9070919
·	9070917	9070917	9070917	9070917	9070917





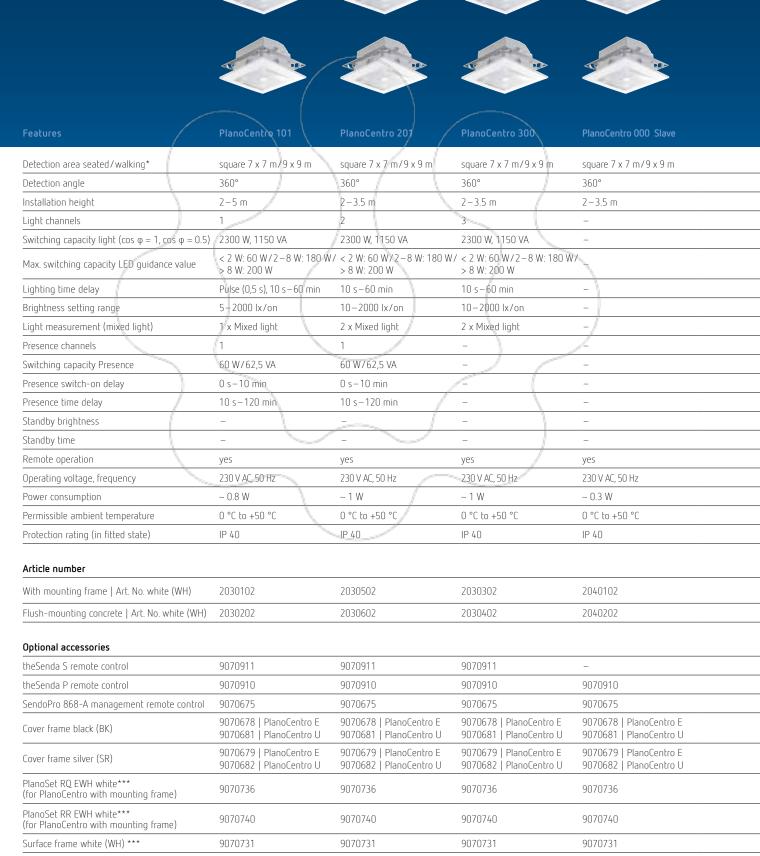






Award-winningFor its aesthetic design, thePrema has won several awards.

Presence detector PlanoCentro and PlanoSpot Technical data



^{*} Details for an installation height of 3 m

^{**} DALI sensor in application with a PLC. Please refer to the notes on www.theben.de/en/planospot-dali.

^{***} Also available in black and in silver.

















D.				IZKIV
М	ıanı	ocer	ıcro	KNX

Ч	anoSpot	S KNX
Р	anoSpot	KNX

PlanoCentro KNX
square 7 x 7 m/9 x 9 m
360°
2-3.5 m
2
-
_
30 s – 60 min
5-2000 lx/off
2 x Mixed light
1
-
10 s - 30 min/inactive
10 s – 120 min
5 %-10 %
30 s-60 min/on
yes
via KNX-Bus
~ 14 mA/18 mA with LE
0 °C to +50 °C
IP 40
2059102
2059202
9070911
0070010

	square 7 x 7 m/9 x 9 m
	360°
	2-3.5 m
	3
	-/ (
S. C.	-
	10 s – 100 min
	10-2000 lx

Ή.	74	
ŀ	square 4,5 x 4,5 m/	7 x
	360°	1
	2-3.5 m	
	3	Ţ
	- /	N
	-/	
	-/	
	10-3000 lx/off	
	. %	

	//	
m	square 4,5 x 4,5 m/7 x	7 m
	360°	
	2-3.5 m	-/
	- Waterway	
	-	
No. of the last of	-	
1	- /	
	10 – 3000 lx	

	square 4,5 x 4,5 m/7 x 7 m
1	360°
7	2-3.5 m
	_
No. of Concession,	-
	The state of the s

x/off	10-2000 lx
light	3 x Mixed light
No. of Concession, Name of Street, or other Persons, Name of Street, Name of S	3 (Occupancy)
	The same of the sa
min/inactive	10 s – 30 min/inactive
) min	10 s – 100 min
%	10-200 lx
min/on	30 s-60 min/on
	yes
US	LON FTT 24 V AC/DC
18 mA with LED	~ 30 mA
50 °C	0 °C to +50 °C

IP 40

2069102

2069202

9070731

10 s – 30 min/inactive
10 s – 120 min
1-25 %
30 s – 60 min/on
yes
via KNX-Bus
~ 8 mA/9 mA with LED
0 °C to +50 °C
IP 20

2 (Occupancy)	
-	100
10 s – 30 min/inactive	7
10 s – 100 min	- 60
1-25 %	
30 s-60 min/on	
yes	1

LON FTT | 24 V AC/DC

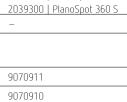
~ 30 mA 0 °C to +50 °C

IP 20

1	-
1	_
1	_
/	yes
	DALI
	~ 3 mA/5.5 mA with LED
	0 °C to +50 °C
	IP 20

2059102	
2059202	
9070911	
9070910	
9070675	
9070678 9070681	
9070679	

9070911
9070910
9070675
9070678 PlanoCentro E 9070681 PlanoCentro U
9070679 PlanoCentro E



2039100 | PlanoSpot 360

2039200	
_	

2020110
2030110
_

9070910	9070910
9070675	9070675
9070678 PlanoCentro E 9070681 PlanoCentro U	9070678 9070681
9070679 PlanoCentro E 9070682 PlanoCentro U	9070679 9070682
9070736	9070736
9070740	9070740



9070677
9070678
-

9070949

9070675

3070311
9070910
9070675
9070677

9070949







9070731

Presence detectors compact series Technical data

Features	compact office DIM	compact office 24V	compact office 24V Lux	compact passage
Detection area seated/walking*	square 4.5 x 4.5 m/7 x 7 m	square 4.5 x 4.5 m/7 x 7 m	square 4.5 x 4.5 m/7 x 7 m	rectangular 20 x 4.5 m/30 x 4.5 m
Detection angle	360°	360°	360°	360°
Installation height	2-3.5 m	2-3.5 m	2-3.5 m	2-6 m
Light channels	1	1	1	1
Switching capacity light ($\cos \varphi = 1$, $\cos \varphi = 0.5$)	1200 W, 600 VA	50 W (24 V AC/DC)/ 460 VA (230 V AC)	50 W (24 V AC/DC)/ 460 VA (230 V AC)	1200 W, 600 VA
Max. switching capacity LED guidance value	- (-	-(< 2 W: 25 W/2 – 8 W: 70 W/ > 8 W: 80 W
Lighting time delay	10 s – 20 min	Pulse (0.5 s), 10 s – 20 min	Pulse (0.5 s), 10 s–20 min	Pulse (0.5 s), 10 s – 20 min
Brightness setting range	10-1500 lx	10-1500 lx/on	10-1500 lx/on	10-1500 lx/on
Light measurement (mixed light)	1 x mixed light	1 x mixed light	1 x mixed light	1 x mixed light
Presence channels	Secretary,	1		1
Switching capacity Presence	- \	50 W (24 V AC/DC)/ 460 VA (230 V AC)	-	50 W / 50 VA
Presence switch-on delay	- \	0 s−10 min	-	0 s-10 min
Presence time delay	_	10 s – 120 min	/	10 s – 120 min
Standby brightness	~ 10 %	-	/	_
Standby time	0 s - 60 min/on	-	- Andrews	-
Remote operation	yes	yes	yes	yes
Operating voltage, frequency	230 V AC, 50 Hz	24 V AC/DC	24 V AC/DC	230 V AC, 50 Hz
Power consumption	~ 0.8 W	~ 0.4 W	~ 0.5 W	~ 0.7 W
Permissible ambient temperature	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
Protection rating (in fitted state)	IP 40	IP 40	IP 40	IP 40
Article number				
Art. No. white (WH)	2010001	2014000	2014001	2010090
Art. No. black (BK)	2010803	2014800	2014803	2010806
Art. No. silver (SR)	2010804	2014801	2014804	2010807
Optional accessories				
theSenda S remote control	_	_	_	_
theSenda P remote control	_	_	_	_
Clic user remote control	9070515	9070515	9070515	9070515
SendoPro 868-A management remote control	9070675	9070675	9070675	9070675
Ceiling installation box 73A	9070917	9070917	9070917	9070917
	<u> </u>			

 $^{^{\}star}\,$ Details at an installation height of 3 m











compact passage 24 V	compact passage KNX	compact passimo	compact passimo 24 V	compact passimo KNX
rectangular 20 x 4.5 m/30 x 4.5 m	rectangular 20 x 4.5 m/30 x 4.5 m	rectangular 10 x 4.5 m/15 x 4.5	mrectangular 10 x 4.5 m/15 x 4.5	mrectangular 10 x 4.5 m/15 x 4.5 m
360°	360°	360°	360°	360°
2-6 m	2-6 m	2-6 m	2-6 m	2-6 m
1	2	1 / \	1	2
50 W (24 V AC/DC)/ 460 VA (230 V AC)	-	1200 W, 600 VA	50 W (24 V AC/DC)/ 460 VA (230 V AC)	
- /	-	< 2 W: 25 W/2 – 8 W: 70 W/ > 8 W: 80 W	- /	- \
Pulse (0.5 s), 10 s – 20 min	30 s – 20 min	Pulse (0.5 s), 10 s –20 min	Pulse (0.5 s), 10 s – 20 min	30 s – 20 min
10-1500 lx/on	10-1500 lx	10-1500 lx/on	10-1500 lx/on	10 – 1500 lx
1 x mixed light	1 x mixed light	1 x mixed light	1 x mixed light	1 x mixed light
1	1	1	1	1
50 W (24 V AC/DC)/ 460 VA (230 V AC)	-/	50 W / 50 VA	50 W (24 V AC/DC)/ 460 VA (230 V AC)	_
0 s-10 min	0 s – 30 min	0 s – 10 min	0 s – 10 min	0 s – 30 min
10 s – 120 min	30 s – 120 min	10 s – 120 min	10 s – 120 min	30 s – 120 min
-	10 %	_	/	10 %
-	0 s-60 min/on	7		0 s-60 min/on
yes	yes	yes	yes	yes
24 V AC/DC	KNX bus voltage	230 V AC, 50 Hz	24 V AC/DC	KNX bus voltage
~ 0.4 W	~ 8 mA	~ 0.7 W	~ 0.4 W	~ 8 mA
0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
IP 40	IP 40	IP 40	IP 40	IP 40
2014090	2019290	2010080	2014810	2019280
2014806	2019803	2010809	2014811	2019809
2014807	2019804	2010810	2014812	2019810
-	-	-	-	_
-	-	-	-	_
9070515	9070515	9070515	9070515	9070515
9070675	9070675	9070675	9070675	9070675
9070917	9070917	9070917	9070917	9070917

Presence detectors PresenceLight Technical data

-20 °C to +50 °C

IP 54

2000050



~ 13 mA

IP 54

2009050

-10 °C to +50 °C

~ 30 mA

IP 54

2009150

-10 °C to +50 °C

Article		icle	numb	er
	Art.	No.	white	(WH)

Power consumption

Permissible ambient temperature

Protection rating (in fitted state)

Optional accessories			
theSenda S remote control	_	9070911	9070911
theSenda P remote control	_	9070910	9070910
Clic user remote control	9070515	-	-
SendoPro 868-A management remote control	9070675	9070675	9070675
Ceiling installation box 73A	9070917	9070917	9070917
Cover frame black (BK)	9070628	9070628	9070628
Cover frame silver (SR)	9070627	9070627	9070627
Surface frame white (WH)	9070513	9070513	9070513

Details at an installation height of 3 m

^{**} Details at an installation height of 2.2 m







PresenceLight 360		PresenceLight 360 KNX	PresenceLight 360 PLLON
square 4,5 x 4,5 m/7 x 7 m		square 4,5 x 4,5 m/7 x 7 m	square 4,5 x 4,5 m/7 x 7 m
360°		360°	360°
2-3,5 m	1	2-3,5 m	2-3,5 m
1		2	2
1200 W, 600 VA	1	- / \	-) (
< 2 W: 25 W/2-8 W: 70 W/> 8 V	W: 80 W	-	-/
Pulse (0,5 s) 10 s – 20 min	1	30 s – 60 min	10 s – 100 min
10-1500 lx/on	1	5-2000 lx	5-2000 lx
1 x mixed light		1 x mixed light	1 x mixed light
-		1	3 (Occupancy)
-		10 s – 30 min/inactive	10 s – 30 min/inactive
_	1	10 s – 120 min	10 s – 100 min
_)	5 % – 10 %	10-200 lx
_		30 s – 60 min/on	30 s – 60 min/on
yes		yes	yes
230 V AC, 50 Hz	\	via KNX-Bus	LON FTT 24 V AC/DC
~ 0,7 W/~ 0,9 W	The same of the sa	~ 13 mA	~ 30 mA
−20 °C to +50 °C	***************************************	–10 °C to +50 °C	-10 °C to +50 °C
IP 54		IP 54	IP 54
2000000		2009000	2009100
_		9070911	9070911
_		9070910	9070910
9070515		-	_
9070675		9070675	9070675
9070917		9070917	9070917
9070632		9070632	9070632
9070631		9070631	9070631
9070513		9070513	9070513

Presence detectors SPHINX Technical data

Features	SPHINX 104-360 AP	SPHINX 104-360
Detection area seated/walking*	circular 5 m/13 m diameter	circular 5 m/13 m diameter
Detection angle	360°	360°
Installation height	2-3.5 m	2-3.5 m
Light channels	1	4
Switching capacity light (cos $\varphi = 1$, cos $\varphi = 0.5$)	2000 W, 900 VA	1800 W, 900 VA
Max. switching capacity LED guidance value	< 2 W: 25 W/> 2 W: 90 W	< 2 W: 25 W/> 2 W: 90 W
Lighting time delay	1 s – 20 min	1 s – 20 min
Brightness setting range	10-2000 lx	10-2000 lx
Light measurement (mixed light)	1 x mixed light	1 x mixed light
Presence channels	- \	-\
Switching capacity Presence	-	-)
Presence switch-on delay	<u> </u>	
Presence time delay	-\	-
Remote operation	yes	yes
Operating voltage, frequency	230 V AC, 50 Hz	230 V AC, 50 Hz
Power consumption	1 W	1 W
Permissible ambient temperature	−10 °C to +55 °C	–10 °C to +55 °C
Protection rating (in fitted state)	IP 41	IP 41
Article number		
Art. No. white (WH)	1040360	1040370
Optional accessories		
SPHINX RC 104 remote control	9070538	9070538
SPHINX RC 104 Pro remote control	9070536	9070536

 $^{^{\}star}$ Details at an installation height of 3 m $\,$







SPHINX 104-360/2 AP	SPHINX 104-360/2	SPHINX 104-360/2 DIMplus
circular 5 m/13 m diameter	circular 15 m/13 m diameter	circular 6 m/24 m diameter
360°	360°	360°
2-3.5 m	2-3.5 m	2-3.5 m
1	1	1
2000 W, 900 VA	1800 W, 900 VA	1000 W, 900 VA
< 2 W: 25 W/> 2 W: 90 W	< 2 W: 25 W/> 2 W: 90 W	< 2 W: 25 W/> 2 W: 90 W
1 s – 20 min	1 s – 20 min	1 s – 20 min
10-2000 lx	10-2000 lx	5 – 2000 lx
1 x mixed light	1 x mixed light	1 x mixed light
1	1	1 \
150 W/1250 VA	90 W/750 VA	60 W/500 VA
0-60 min	0-60 min	
1 – 120 min	1 – 120 min	1 – 120 min
yes	yes	no
230 V AC, 50 Hz	230 V AC, 50 Hz	230 V AC, 50/60 Hz
1 W	1 W	1 W
−10 °C to +55 °C	–10 °C to +55 °C	−10 °C to +55 °C
IP 41	IP 41	IP 40
1040362	1040372	1040374
9070538	9070538	-
9070536	9070536	_

Pre-assembled presence and motion detectors Technical data

Features	theMova S360-100 GST	theMova S360-100 WINSTA	theMova P360-100 GST	theMova P360-100 WINSTA
Туре	Motion detector	Motion detector	Motion detector	Motion detector
Detection area seated/walking*	round, Ø 8 m (Walking)	round, Ø 8 m (Walking)	round, Ø 24 m (Walking)	round, Ø 24 m (Walking)
Installation height	2-4 m	2-4 m	2-10 m**	2-10 m**
Detection angle	360°	360°	360°	360°
Operating voltage	230 V AC/50 Hz	230 V AC/50 Hz	110-230 V AC, 50/60 Hz	110-230 V AC, 50/60 Hz
Power consumption	~ 0.5 W	~ 0.5 W	~ 0.1 W	~ 0.1 W
Light measurement (mixed light)	1 x Mixed light	1 x Mixed light	1 x Mixed light	1 x Mixed light
Light channels	1	1	1	1
Switching capacity light ($\cos \varphi = 1, \cos \varphi = 0.5$)	2300 W	2300 W	only with 230 V: 2300 W, 1150 VA	only with 230 V: 2300 W, 1150 VA
Max. switching capacity LED guidance value	< 2 W: 25 W/2 – 8 W: 70 W/ > 8 W: 80 W	< 2 W: 25 W/2-8 W: 70 W/ > 8 W: 80 W	< 2 W: 60 W/2-8 W: 180 W/> 8 W: 200 W	< 2 W: 60 W/2 – 8 W: 180 W/ > 8 W: 200 W
Brightness setting range	30-3000 lx/on***	30-3000 lx/on***	30-3000 lx/on	30-3000 lx/on
Lighting time delay	10 s – 60 min***	10 s – 60 min***	10 s – 60 min	10 s-60 min
Presence channels	-	-	-	-
Switching capacity Presence	-	_	- /	-
Presence switch-on delay	-	-	-	-
Presence time delay	-	- /	-	_
Protection rating (in fitted state)	IP 54	IP 54	IP 54	IP 54
Permissible ambient temperature	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C
Remote operation	yes	yes	yes	yes
Addistances				
Article number Art. No. white (WH)	1030570	1030575	1030610	1030615
Art. No. Write (Wn)	1030370	1030373	1030610	1030015
Optional accessories				
theSenda S remote control	9070911	9070911	9070911	9070911
theSenda P remote control	9070910	9070910	9070910	9070910
clic remote control	_	_	_	_
SendoPro 868-A management remote control	9070675	9070675	9070675	9070675

Details at an installation height of 3 m
 Suitable for large installation heights of up to 10 m. Additional information can be found in the technical documentation.
 The pre-configured values (300 lx and 10 min time delay) can only be changed by using the optional remote controls the Senda P and SendoPro









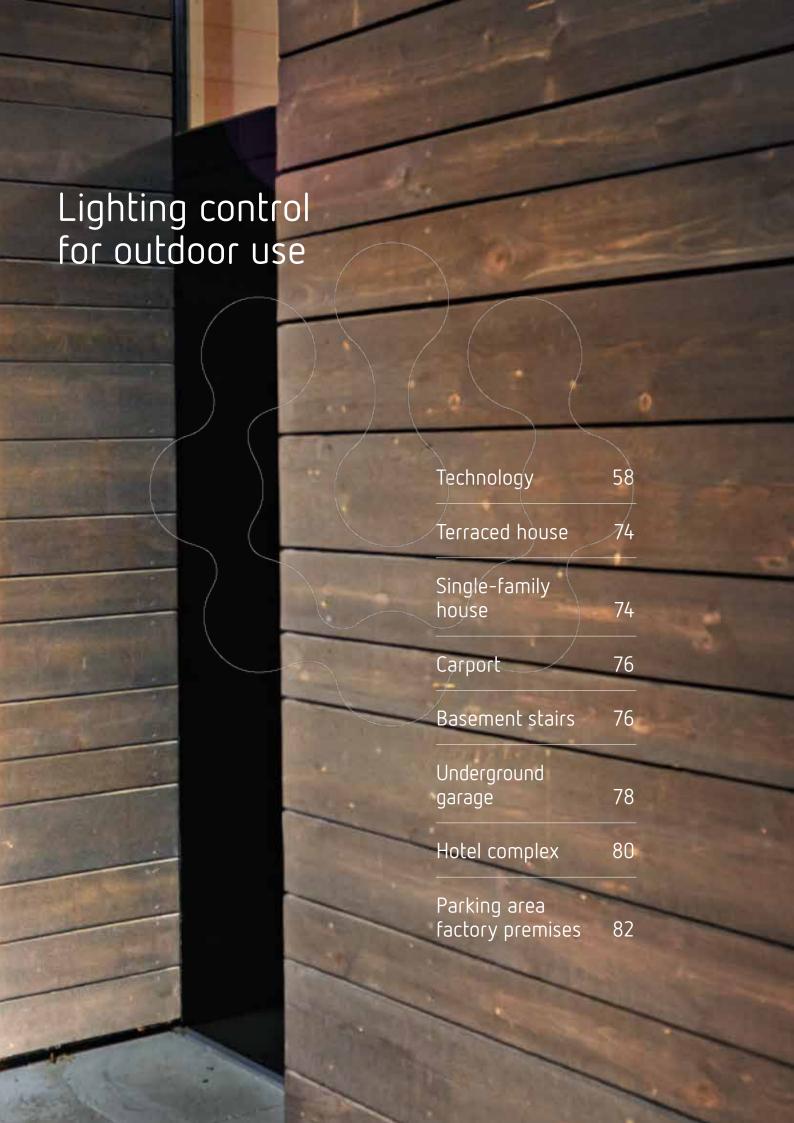




theRonda S360-100 GST	theRonda S360-100 WINSTA	P360-100 GST	P360-100 WINSTA	GST passage	compact passage WINSTA
Presence detector	Presence detector	Presence detector	Presence detector	Presence detector	Presence detector
round, Ø 4/8 m	round, Ø 4/8 m	round Ø 8/24 m	round Ø 8/24 m	rectangular 20x4,5m/30x4,5m	rectangular 20 x 4,5 m/ 30 x 4,5 m
2-4 m	2-4 m	2-10 m**	2-10 m**	2-6 m	2-6 m
360°	360°	360°	360°	360°	360°
230 V AC/50 Hz	230 V AC/50 Hz	110 – 230 V AC, 50/60 Hz	110 – 230 V AC, 50/60 Hz	230 V AC, 50 Hz	230 V AC, 50 Hz
~ 0.5 W	~ 0.5 W	~ 0.1 W	~ 0.1 W	~ 0.7 W	~ 0.7 W
1 x Mixed light	1 x Mixed light	1 x Mixed light	1 x Mixed light	1 x Mixed light	1 x Mixed light
1	1	1	1	1	1
2300 W	2300 W	only with 230 V: 2300 W, 1150 VA	only with 230 V: 2300 W, 1150 VA	1200 W, 600 VA	1200 W, 600 VA
< 2 W: 25 W/2-8 W: 70 W/> 8 W: 80 W	< 2 W: 25 W/2-8 W: 70 W/> 8 W: 80 W	< 2 W: 60 W/2-8 W: 180 W/> 8 W: 200 W	< 2 W: 60 W/2-8 W: 180 W/> 8 W: 200 W	< 2 W: 25 W/2-8 W: 70 W > 8 W: 80 W	/< 2 W: 25 W/2-8 W: 70 W/ > 8 W: 80 W
30-3000 lx/on***	30-3000 lx/ on***	30-3000 lx/on	30-3000 lx/on	10-1500 lx/on	10-1500 lx/on
10 s-60 min***	10 s – 60 min***	10 s – 60 min	10 s – 60 min	Impuls (0,5 s) 10 s – 20 min	Impuls (0,5 s) 10 s – 20 min
-	-	-	-	1	1
_	-	-	_	50 W / 50 VA	50 W / 50 VA
_	-		-	0 s – 10 min	0 s-10 min
_	-	-	- /	10 s – 120 min	10 s – 120 min
IP 54	IP 54	IP 54	IP 54	IP 40	IP 40
−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	−15 °C to +50 °C	0 °C to +50 °C	0 °C to +50 °C
yes	yes	yes	yes	yes	yes
2080570	2080575	2080010	2080015	2010100	2010105
9070911	9070911	9070911	9070911	-	-
9070910	9070910	9070910	9070910	-	-
-	-	-	-	9070515	9070515
9070675	9070675	9070675	9070675	9070675	9070675







Motion detectors for safe outdoor lighting

Light means security. A motion detector never leaves you in the dark and helps you cut energy costs at the same time, as lights do not stay on longer than absolutely necessary. The light comes on reliably when you do not have a free hand to operate the light switch. Outdoor motion detectors also have an effect on uninvited guests outside: Which burglar wants to be put under the spotlight? This page contains some useful tips and advice on the selection, installation and set-up of motion detectors.







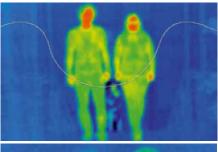
Awarded: theLeda P was awarded with the Plus X Award for its sleek design, outstanding functionality and low power consumption.

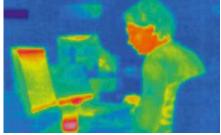


Technology: How does a motion detector work?

Motion detectors work by using passive infrared sensors (short "PIR") and react to thermal radiation in the immediate surrounding. Static heat differences are not detected. The infrared sensors of the motion detectors react to thermal radiation that changes quickly, such as people ascending stairs or cars approaching a house. If a motion detector detects this thermal radiation in its detection area, it converts it into a measurable electrical signal: The light is switched on.

Motion detectors are not exclusively, but mainly designed for outdoor use. While presence detectors, due to their sensitive sensors, detect slightest movements, motion detectors especially detect more significant changes, such as walking, running or gesticulation. A further difference is the light measurement. In contrast to presence detectors, which permanently measure the light, motion detectors only measure the brightness when being switched on. Therefore, they are not intended for indoor brightness control.





Motion detectors excellently detect significant spatial changes (upper thermal image). For slight motions, e. g. during seated activities (lower image), presence detectors are better suited.

HINT

Presence detectors for room monitoring are recommended in preference to motion detectors for lighting control in offices, class-rooms or meeting rooms. Presence detectors have significantly more sensitive sensors and register even minimal changes to the thermal image, such as typing on a keyboard.

More information on presence detectors from page 8



Motion detectors for indoor and outdoor use



theLuxa S150/S180 resp. theLuxa S360 detection angle 150°/180° resp.. 360° detection area 12 m bzw. 16 m



theLuxa P220/P300 (also as KNX) detection angle 220°/300° | detection area 16 m



For indoor use: theMova S and P (also as KNX) detection angle 360° | detection area 8 to max. 24 m

LED spotlight







theLeda E detection angle 180° | detection area 12 m



Which motion detector for which use?

There are motion detectors for outdoor and motion detectors for indoor use.



Motion detectors for outdoor use mostly have a higher protection rating, as they are exposed to rain and snow. However, also indoors the

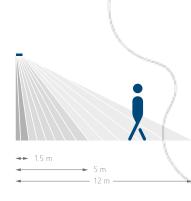
protection rating is of high importance: Since motion detectors which are to be used in wet rooms, such as bathrooms or showers, must have an appropriate protection rating. Whether you mount the motion detector on the ceiling or at the wall depends on the particular circumstances. There are motion detectors for both and models that can only be installed on ceilings or on walls.

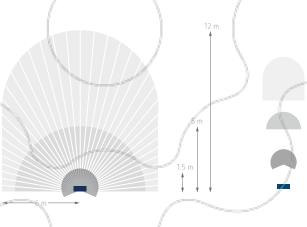
Apart from the selection of the installation location indoor or outdoor, the detection area plays an essential role. For monitoring a front door or a facade, a wall-mounted motion detector with a semi-circular detection area of 180° is usually sufficient. If you

want to monitor two sides of a building with one device, we recommend using a motion detector installed on the external corner of a building with a detection area of 300°. Creep under protection is important if you want to install the motion detector above the front door and detect movement directly under the device — that is when you step out of the front door.

Installation

Correct installation of motion detectors





Detection area, transversal movements

Detection area, directly approaching movements

Creep under protection

Motion detector

Movements running in a transverse direction of the motion detector can be easier detected than movements that approach the motion detector directly. In case of directly approaching movements, it is difficult for the device to identify temperature changes. The detection area is therefore smaller than with transversal movements. As an examp-

le, the detection area for transversal movements can therefore be up to 12 m and for direct approaching movements only 5 m. The higher the motion detector is mounted, the higher the detection area (maximum height: usually 5 m). As the passive and active zones in the detection area become bigger, sensitivity is reduced. Reflective

surfaces, such as mirrored facades or snow, can also influence the detection area and the reaction of the motion detector. In winter, open windows (escaping warm air) can lead to faulty responses.



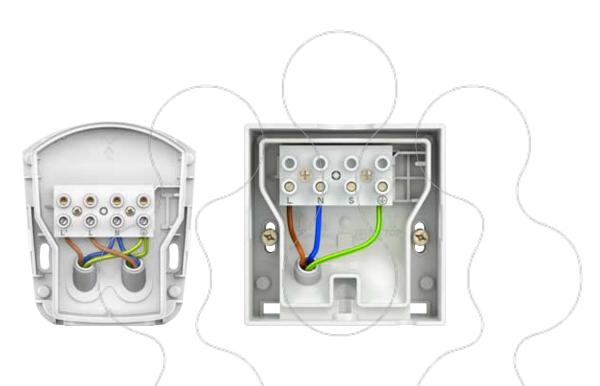






Caution: Do not install the motion detector in the detection area of permanent triggers, such as direct sunlight, street lamps, heat sources, such as heater outlets or air conditioners, or trees or window curtains swaying in the wind.

Start-up Correct setting of motion detectors



More space, easy handling, a clever concept – there are many reasons for Theben motion detectors to be installed and started up easier and faster. The best reasons you can find here.

Spacious socket

Particularly convenient — the spacious socket. It can be easily screwed to the wall an wired. The motion detector itself is just plugged on. Done. The socket comes for all motion detectors and LED-spotlights.

Highly visible terminal labelling

It is nice when you can always see what each connection is for. The terminal labelling is right above the connection. In this way it cannot be hidden by wires. That is not only more attractive, but also safer.

Secure fastening

Thanks to its blind terminal for earth conductors and the bracket for plug-in terminals, installation is quicker and safer. The earth conductor is neatly fixed, as it should be.

Once the motion detector is installed, the detection area can be set. The sensor heads of the motion detectors are rotatable. This ensures the optimum setting of the detection area. In order to avoid unnecessary activation — for example the light should not be switched on when pedestrians walk past on the pavement in front of your property — the detection area can be partially restricted. If you attach cover clips in front of the lens, the motion detector will not detect any movement in the covered segment. The light remains switched off.

Afterwards, you set the time delay and the lux value. Both is set via the potentiometers at the device. the Luxa P and the Mova can also conveniently be set from the ground via remote control.

The correct setting of the lux value varies greatly, since every person experiences "too dark" or "too bright" differently. Here is a short overview of different light scenarios and their corresponding lux values:

Bright sunny day	100000	lχ
Overcast summer day	20000	lχ
In the shade in summer	10000	lχ
Operating theatre	10000	lχ
Overcast winter day	3500	lχ
TV studio lighting	1000	lχ
Office/room lighting	500	lχ
Corridor lighting	100	lχ
Street lighting	15	lχ
Candle at a distance of approx. 1	metre 1	lχ
Full moon night	0.25	lχ
Clear night sky (new moon)	0.001	lχ

The clever teach-in and test functions allow you a simple setting of the current lux value, without any technical knowledge.



Switch on. View. Set. Mounting and installation videos.

Corner installation

This is how you install your motion detector on a corner of a house and cover two facades with only one device.



Time delay

How long should the light remain switched on if no motion is detected anymore? This is how you set the time delay.



Pulse function

This allows you to install motion detectors into existing electrical installations, in order to switch the staircase light, for instance.

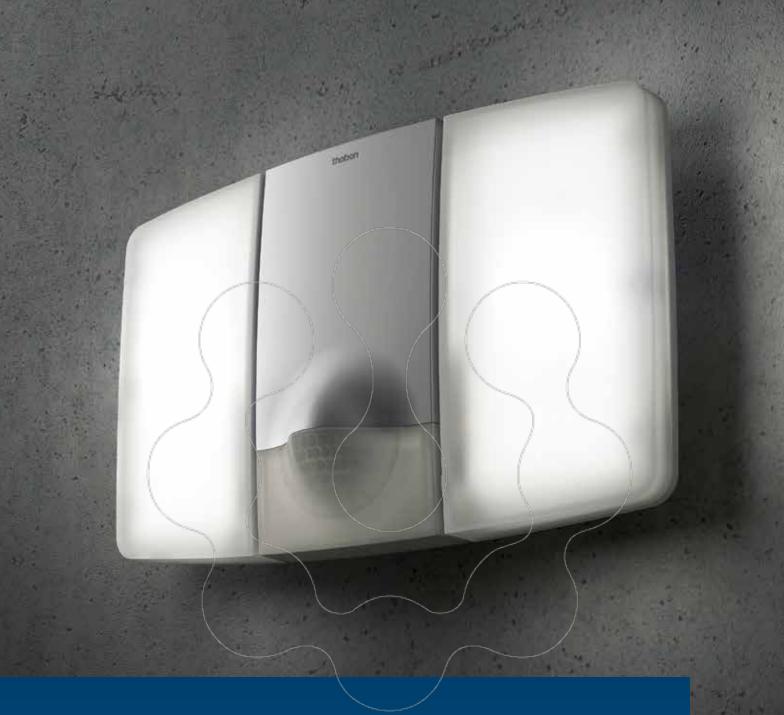


www.youtube.com/TheThebenAG

You can find all videos on our YouTube channel.







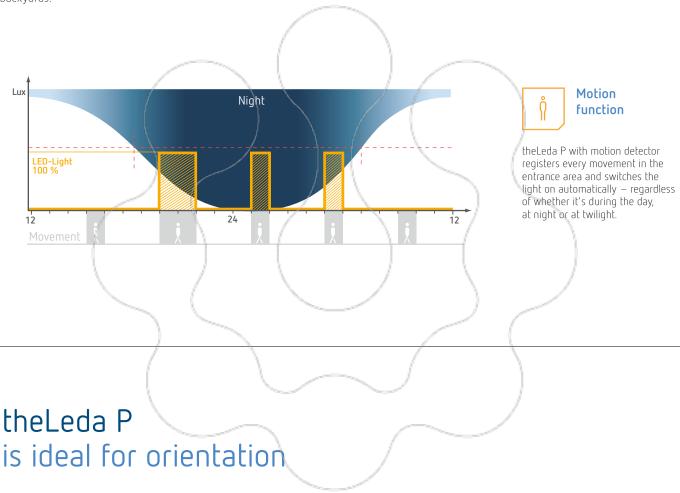
Intelligent lighting in its most beautiful form theLeda P LED spotlights

Beauty and brains: theLeda P. The new premium LED spotlight from Theben supports a range of functions that is unrivalled at the current time. This makes it a true all-rounder on every wall — and it has something about it in terms of looks.

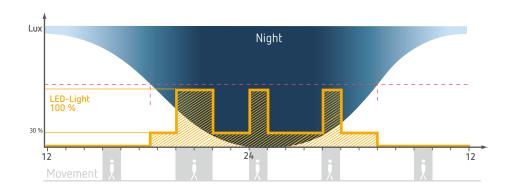
theLeda P is available with one or two light panels, in white and aluminium, with or without motion detector. But whichever version you choose, theLeda P will be sure to captivate you — with its pleasant, friendly light and, of course, its unique aura which provides an atmospheric backlit effect around the spotlight.

theLeda P registers movement

Provided that you opted for theLeda P with motion detector, of course. Then the light comes on exactly when it is needed and switches off again automatically after the selected time delay has expired. The motion detection functions both with and without the brightness measurement. In other words, theLeda P even lights up during the day in this case. This is useful in places with fundamentally difficult light conditions, such as basement entrances, multistorey car parks or backyards.



And therefore increases safety. Examples include in hotel garages and car parks, in residential homes and care homes for the elderly, or even in multistorey car parks. The orientation light in theLeda P delivers a defined basic brightness of between 10 % and 60 % of full power to provide dimmed lighting along pathways and access routes as well as through entrances once night starts to fall. When theLeda P registers movement, the LED spotlight will light up at full power (100 %) before returning to the dimmed brightness setting once the preset time delay has elapsed.





Orientation light

The defined brightness of theLeda P is purely a matter of a setting. Whether you set the light to 30 % for pleasant dimming, have the light on permanently or just switch it on at night is entirely up to you.

Looks good and saves energy too

It is the slight surges at the horizontal outer edges that lend the light panels of theLeda P their characteristic style and very special aura. This is bound to be a hit with anyone who sees light as more than just a function and wants to really make a mark with lighting design. As well as looking great, theLeda P is also pretty efficient, as is evident in its energy efficiency class A+.





Rotating and swivelling LED panels

You can rotate and swivel it as you wish — depending on the model and version, theLeda P simply provides more options for setting beautiful lighting effects, to emphasise architectural features or to light up two wall areas at the same time, for example.



Master/Master switching

Intelligent parallel switching of two or more units enables you to enlarge the detection area according to your wishes and requirements.



Spacious socket

Time is money. With theLeda P, you save both. The LED spotlight has a socket with a large terminal area. This makes assembly quick and easy. Simply screw the socket to the wall, connect the wires and insert the spotlight. And that's it done.



Bright, glare-free light

A luminous flux of 900 lumen and a colour temperature of 4000 kelvin ensure a high light output. Furthermore, 88 LEDs per panel and a high-tech diffuser stop this pleasantly consistent light field from blinding anyone. And all this at a luminance of 30,000 to 34,000 nits.



All weathers

theLeda P is rainproof in accordance with protection class IP 55. The LED spotlight can be installed anywhere outdoors, no matter how weatherproof the installation location is.



Manual switch on

theLeda P with motion detector can also be switched on manually. This is practical, for example, if you hear a noise that may have been made outside the detection area. And this gives you a reassuring feeling of security.



Sustainably energy-efficient

With regard to saving energy, theLeda P is ahead of the pack: with a maximum consumption of 0.4 W in standby, the LED spotlight is extremely energy efficient.



Clever teach-infunction

For the light of your choice, you don't need specialist knowledge, just a quick helping hand. With the teach-in function, the current lux value is saved quicker than the lighting conditions change.



Practical test function

The test function helps you to establish, set and optimise the detection area directly after installation. Even in daylight and sunshine.



Convenient creep-under protection

theLeda P features practical creep-under protection, which also captures the areas directly under and even slightly behind itself. This means that the light comes on when it is needed — and not when you have already stumbled about.

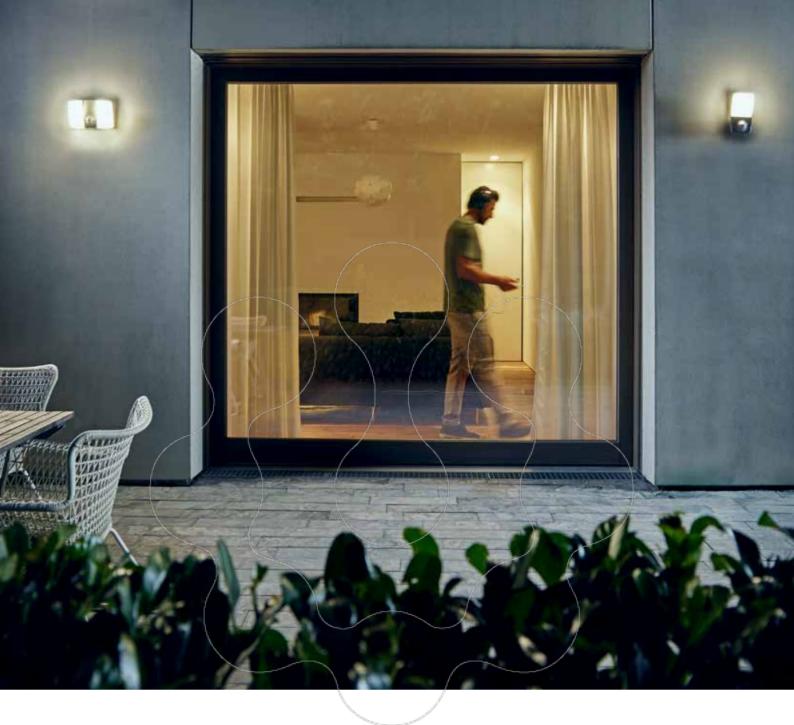


Easy-to-use remote control

With the Senda remote control, settings can be easily made and changed from the ground. This is faster, shortens the installation time and lowers costs. And, what's more, it's safer.



(left) theSenda P service remote control (right) theSenda S user remote control





Simple setting

Underneath the cover plate, well-protected from all weather conditions, you can find the potentiometer, which you can set directly on the detector using a screwdriver or via the Senda P.



Simple area restriction

The detection area can be individually restricted with practical cover clips. This means you can reduce unwanted activation of the detector due to movements next door or on the pavement.

SUMMARY

theLeda P always puts things in just the right light

theLeda P is probably the most intelligent LED spotlight on the market. What's crucial is that with theLeda P you can almost combine all of the functions it supports to meet your requirements. The motion detector can be combined with the orientation light and the night switch-off, for example, just as easily as the orientation light and the dimming function can be combined with the self-learning night switch-off. theLeda P will never leave you in the dark — unless you have programmed the LED spotlight to do so yourself.

Convenient and safe Advantages of theLuxa



theLuxa motion detectors essentially contribute to saving energy as well as increasing comfort and safety. The light is automatically switched on only when needed, and only then. theLuxa motion detectors integrate harmonically into the facade and are available in white and in black.





Simple setting

No interrupted coverage No long searches: The adjusters are highly visible, easily accessible and easy to set using a screwdriver on the bottom of the detector.



Suitable for flush-mounted boxes

If connections already exist, there is no need to drill new holes for theLuxa P. The detector can be fixed to a flush-mounted box (60 mm). Simply screw it on and it's ready.



Clever test function

With the clever test function, the detection area can be established, set and optimised immediately after installation. And this even in daylight and sunshine.



Simple and rainproof

theLuxa has protection rating IP 55 and can be installed anywhere outdoors, no matter how weatherproof the installation location.



Clever teach-in function

With the clever teach-in function, the current lux value can be permanently saved as a threshold. Without any specialist knowledge. By the end user. It couldn't be easier.



Zero-cross switching

With its zero-cross switching, theLuxa can handle switch loads of up to 10 amperes. This allows you to connect several lamps at the same time. For example when larger areas, such as loading ramps or hotel complexes, are to be illuminated. This gives you more security in your planning, lowers costs and reduces installation times, as you can save the additional modules that are otherwise needed. In the end, this is good for the environment, as the lifespan of the lamps is extended.



Manual switching/

The motion detector can also be switched on manually. This can be useful if you hear a sound outside and you want to switch on the outdoor lighting from inside.



Practical pulse function

The pulse function allows the motion detectors to be installed into existing electrical installations with staircase light timer switches or KNX binary inputs without expensive adjustments.



Convenient creep-under protection

theLuxa's creep under protection also covers the areas directly under and even a little behind the detector. This means that the light comes on when it is needed. Immediately, and not when you've already tripped over the first step.



Swivelling sensor head

With its horizontally and vertically swivelling sensor head, theLuxa only detects movement in those areas where it really should.



Simple area restriction

Further functions of theLuxa S360

The detection area can be individually restricted with practical cover clips. This means that unwanted activation of the detector due to movement next door or on the pavement can be avoided.



Elegant ceiling installation

With its swivelling sensor head, the theLuxa S360 can also be installed at the ceiling or at roof overhangs: This offers a greater scope for covering the optimal detection area.

Further functions of theLuxa P



High switching capacity theLuxa P

Its high-performance relay with tungsten pre-contact allows theLuxa P to handle switch loads of up to 10 amperes. This allows not only to connect several lamps and to light larger areas, such as loading ramps or hotel premises, but also using LEDs and energy saving lamps without any problem. This improves planning security, lowers costs and reduces installation times. Especially when using LEDs and energy saving lamps.



Floating contact

Thanks to this the theLuxa P can be directly and simply integrated into the building system technology. And it reduces installation costs, as no cut-off relays are required.



Highperformance KNX versions

theLuxa P KNX can be easily integrated via ETS into the building automation and is simple to configure. Brightness thresholds, duty cycle and sensitivity can also be configured via theserva KNX visualisation.



Easy to use remote control

With the theSenda P remote control, settings can be conveniently made and changed from the ground. This is faster, shortens installation times and lowers costs. And, moreover, it is safer.

Brighter and more energy saving Advantages of installation and use of LUXA-LED



They turn night into day and reliably illuminate gateways, terraces and paths at every turn: The LUXA LED spotlights with integrated Theben motion detectors. The spotlights are available in white and in black.



Clever test function

With the practical test function, the detection area can be established, set and optimised immediately after installation. Even in daylight and sunshine.



Swivelling sensor head

With its sensor head that can be swivelled by 90°, the motion detector exactly detects movements in those areas where it really should.



Simple area setting

The detection area can be individually restricted with practical cover clips. This means that unwanted activation of the detector due to movements next door or on the pavement can be avoided.



High light output

If this is not illuminating: The 8 W of the LEDs corresponds to around 100 W of a traditional halogen lamp. The colour temperature of 6000 K is daylight white.



Suitable for flush-mounted boxes

The successful spotlight series is also available with comfortable warm white LEDs. The colour temperature of about 3.000 Kelvin is warmer, which many people find more pleasant.



Manual switching

The LED spotlight with motion detector can also be switched on manually. This can be useful if you hear a sound outside and you want to switch on the outdoor lighting from inside.



Sustainably energy-efficient

With respect to energy-saving, LUXA LED spotlights are ahead of the pack: With a power consumption of only 0.3 W in standby or 0.5 W with LUXA 102-180 LED 32 W, the detectors work extremely efficiently.



Simple setting

No interrupted coverage, no long searches: The adjusters are highly visible and easily accessible on the bottom of the detector. Switch delay and brightness threshold can be set without any tool.



Convenient creep-under protection

The creep under protection of LUXA-LED spotlights also covers the areas directly under and even a little behind the detector. This means that the light comes on when it is needed. Immediately, and not when you've already tripped over the first step.



More spacious socket

LUXA-LED has a socket with a large terminal area. This simplifies and speeds up the installation, as the detector itself is not in the way during installation and can be easily attached at the end.



Flexible dimming function

The dimming function allows to switch on the spotlight permanently, when reaching the set lux value. This is especially useful on escape routes or in outside facilities of hospitals, senior residences or other care facilities



Suitable for flush-mounted boxes

If connections already exist, there is no need to drill new holes for LUXA-LED. The devices can be fixed to a flush-mounted box (60 mm). Simply screw it on and it's ready.

House number lighting >

Good when finding the right address also in the dark. With theLuxa, house number lighting is no problem. This pleases the paper boys — and the authorities: Since in many states, house number lighting is mandatory.



Simple and rainproof

LUXA LED 32 W has protection class IP 55 and can be installed anywhere outdoors, no matter how weatherproof the installation location.



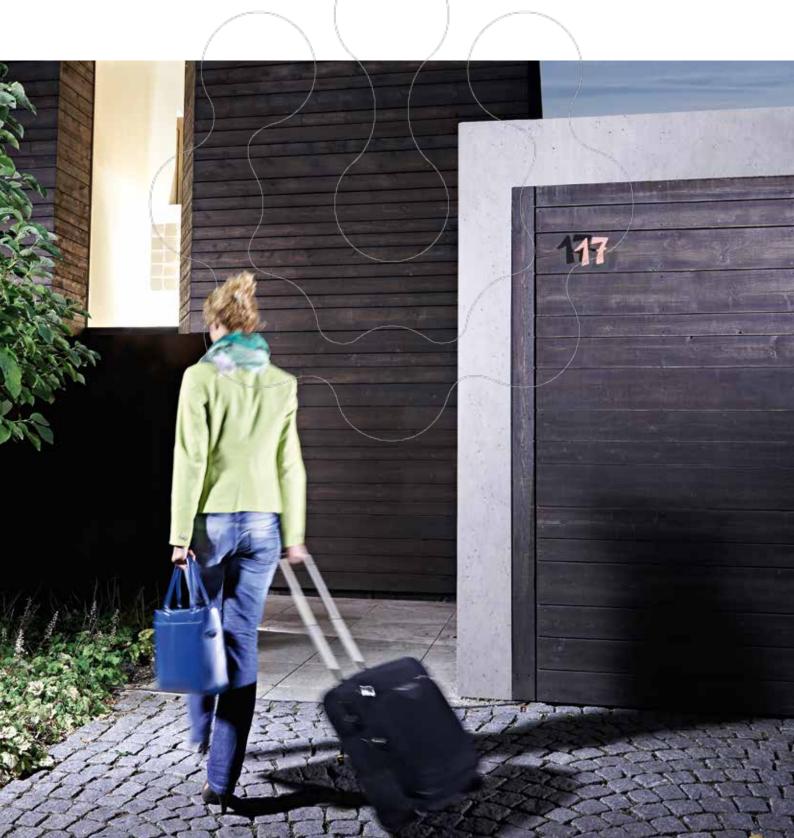
Extendable via 2nd switching output

Additional devices, such as further LED spotlights without detector, can be connected via the additional relay output of the 32 W spotlight with motion detector.



Master/Master switching

The area to be lit can be increased with the master/master switching of two devices.





Versatile lighting solutions for every outdoor use

Nothing can be brighter. With the powerful theLeda E LED spotlights, entrances, driveways and parking spaces become safely, reliably and quickly illuminated. Quickly, not only because installation is simple thanks to the large terminal area and test function, but also because the spotlights reach 100 % of their brightness of 2310 Im with theLeda E30 immediately after being switched on.





Large terminal area

Time is money. With theLuxa you save both. theLeda spotlights with motion detectors have a large terminal area. This makes assembly quick and easy.



Swivelling sensor head

With its horizontally and vertically swivelling sensor head, theLeda only detects movement in those areas where it really is supposed to.



Simple and rainproof

theLeda boasts protection class IP 55. That is not only safe, but also practical, as it allows the-Leda to be installed anywhere outdoors, regardless of how protected from the weather the installation location is.



Easily accessible potentiometers

Adjustment and operation is easy using the adjusters under the sensor head — no need for tools.



Practical test function

With theLeda, you can avoid detection errors from the outset: using the practical test function, the detection area can be established, set and optimised immediately after installation. Even in daylight and sunshine — when conventional motion detectors do not normally react...



A luminous family

The powerful theLeda E LED floodlights turn night into day. 10 W of the LEDs are equal to a 130 W of a traditional halogenlamp.



Simple area setting

theLeda comes with stickers for partially limiting the detection area. This means that unwanted activation of the detector due to movements next door or on the pavement can be avoided.



More energyefficient than ever

theLeda itself has a very low energy consumption, is extremely energy-efficient and is rated energy efficiency class A+ (theLeda E30 BK is rated energy efficiency class A). Good for the environment and good for your wallet.



Manual switching

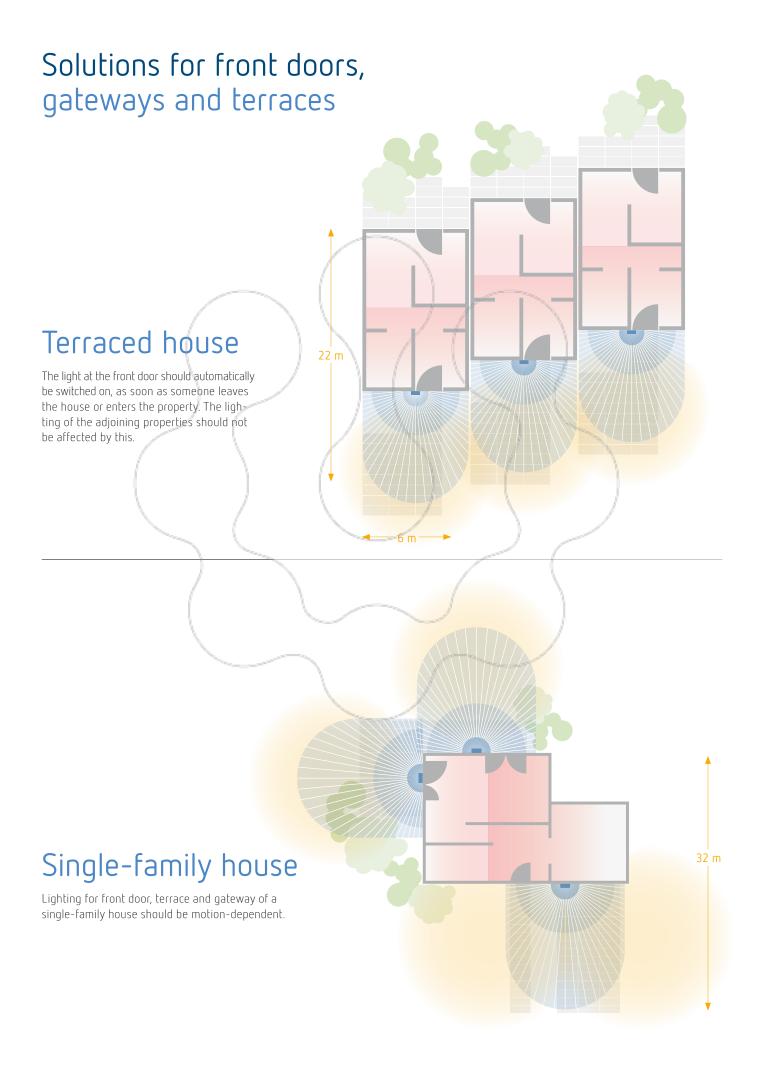
The LED spotlight with motion detector can also be switched on manually. This can be useful if you hear a sound outside and you want to switch on the outdoor lighting from inside.

theLeda E30



Extendable via switching output

Additional devices, such as further LED spotlights without detectors, can be connected via the additional relay output of the 30 W spotlight with motion detector.



If there is no exterior lamp, we recommend theLeda P12:

- Bright design LED spotlight with integrated motion detector
- **o** Orientation light
- **⇒** Linkable
- → Technical data theLeda: page 86

Alternative:

For motion-dependent control of an already installed exterior lamp, we recommend the Luxa S150/S180:

- Creep under protection
- ◆ Time delay and lux value easily adjustable
- ⇒ Technical data theLuxa: page 84





Apart from the above mentioned theLeda P12, we recommend theLeda R24 for motion-dependent control without an existing exterior lamp:

- **9** Bright design LED spotlight with integrated motion detector
- **o** Orientation light, linkable
- Corner installation possible
- **⇒** Technical data theLeda: page 87

Alternative:

If an exterior lamp is available, we recommend theLuxa S360, which can cover two facades at the same time, apart from the above mentioned theLuxa S150/S180:

- Corner and/or ceiling installation possible (only theLuxa S360)
- Creep under protection
- **3** Time delay and lux value can easily be set
- Technical data theLuxa: page 84



theLuxa S360







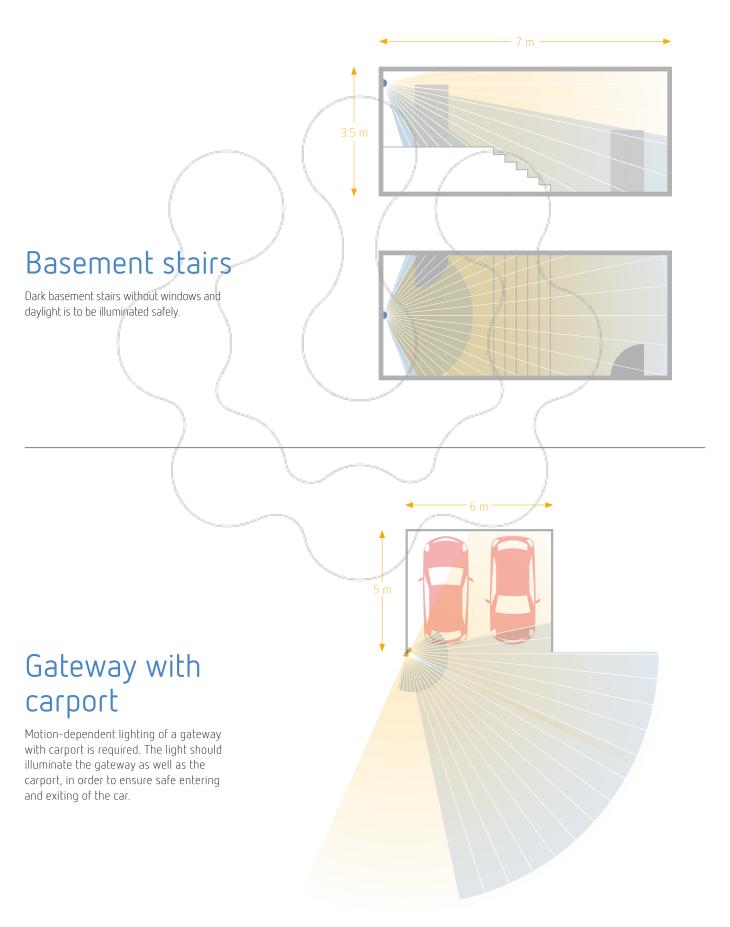






Practical cornerinstallation possible

Private home use basement stairs and carports



LUXA 102-140 LED 8W

We recommend LUXA 102-140 LED 8 W:

- High performance LED spotlight illuminates the basement stairs as bright as daylight
- Detection area with creep under protection reliably detects all movements
- Time delay and lux values easily adjustable at the device
- → Technical data LUXA-LED: page 80

Alternative:

If a lamp is already installed, which now has to be controlled motion-dependent, we recommend theLuxa S150/S180:

- Creep under protection
- Time delay and lux value easily adjustable
- ⇒ Technical data theLuxa: page 78



We recommend LUXA 102-140 LED 16 W:

- High performance double LED spotlight
- Corner installation angle (optional accessory) for optimum illumination of two facades
- **9** Both spotlights can be optimally aligned individually: one spotlight in the direction of the entrance or front door, the other one towards the carport
- **⇒** Technical data LUXA-LED: page 80



Alternative:



Practical corner



We recommend theLeda E10:

- Rotating and swivelling sensor head
- Adjustable lux value and switch-off delay
- Technical data LUXA-LED: page 82









theLeda E10



Garages and garage entrances Underground garage The lighting in a underground garage should be switched on motion-dependent, as soon as a person enters the underground garage through the staircase or when a car comes in.

We recommend theLuxa S360:

- Ceiling or wall mounting possible. Thanks to the flexibly adjustable sensor head even on the ceilings of the driveways
- Few detectors per area thanks to the large detection area of Ø 32 m
- High protection rating of IP 55 (humidity in a underground garage is therefore no problem)
- Technical data theLuxa: page 78

Alternative:

For smaller underground garages, motion detector the Mova P with optionally available surface frame is recommended:

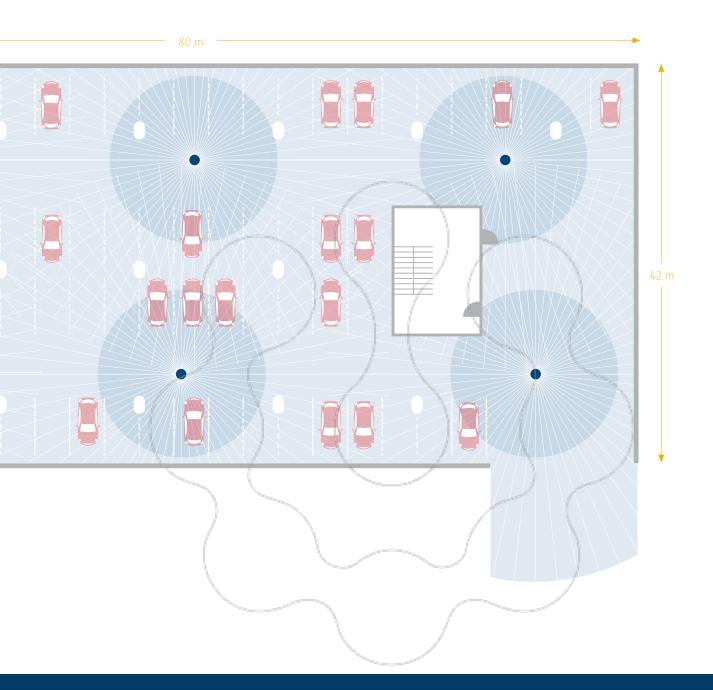
- Also high protection rating of IP 44 (humidity in a underground garage is therefore no problem)
- Detection area of Ø 24 m
- Technical data theMova P: page 41



theSenda P remote control

With the Senda P, installers can adjust virtually all functions of Theben presence and motion detectors with only one remote control. Fast, secure, from the ground up. Further information on page 36.







Solutions for hotels, hospitals and administration buildings



We recommend theLeda P12 and theLeda P24:

- **⇒**LED spotlight with integrated motion detector (IP 55)
- ◆The orientation light increases safety: A defined basic brightness gives orientation. Upon detection of movement the light ramps up to 100%
- **э** The dimming function (D-mode) ensures that the light goes on as soon as the brightness falls below a certain value − regardless of motion
- Pleasantly uniform light, which blinds no one Rotating and swivelling LED panels for optimum illumination of the areas

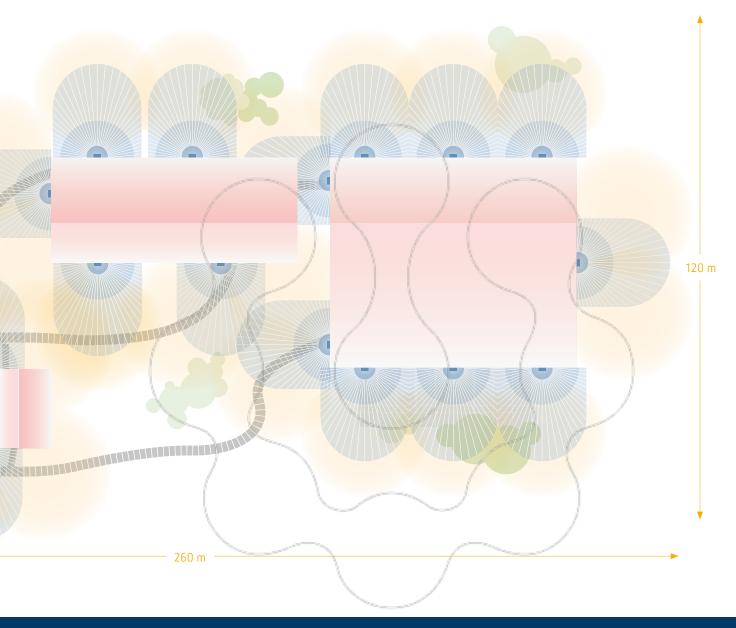
- **3** Energy efficient in standby operation, as well as when activating the spotlight
- Remote-controlled via the Senda
- ◆The area to be detected can be increased via Master/Master switching of two or more devices
- Technical data theLeda: page 86

Alternative:

- ◆ The motion detector theLuxa P300 provides reliable detection, even from high installation heights
- Small number of detectors per area thanks to the large detection area of Ø 32 m
- High protection rating of IP 55
- **⊃** Corner installation possible − for simultaneous detection over two facades
- Can easily be set via remote control
- ◆ Technical data theLuxa P300: page 85

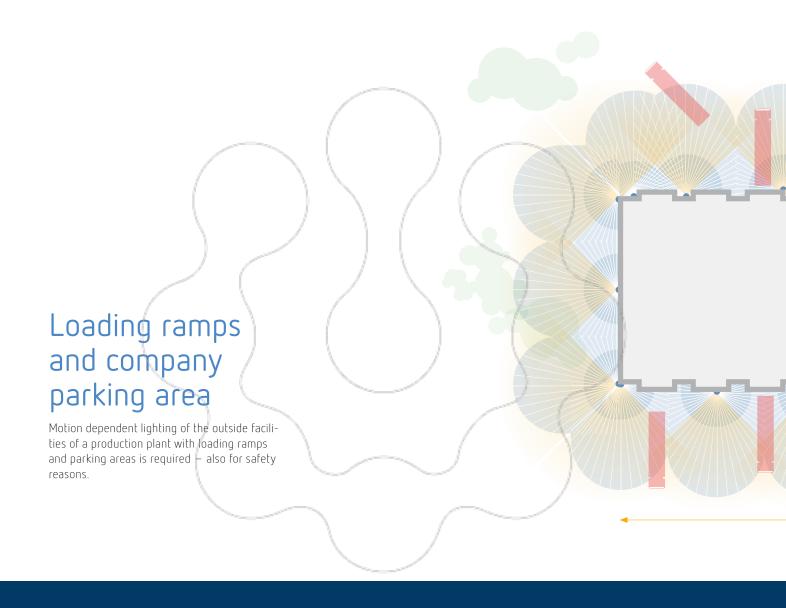


High-performance KNX version





Outside facilities of functional buildings factory halls and warehouses with parking area



LUXA 102-180 LED 32W

We recommend LUXA 102-180 LED 32 W:

- **⇒** Large detection area of up to 12 m
- The bright LEDs with an output of 2000 Im illuminate even large areas
- With additional relay output, to which further devices can be connected, e.g. further LED spotlights without detectors
- Technical data LUXA 102-180 LED 32 W: page 80

Alternative:

The powerful theLeda E spotlight is available with or without motion detector.

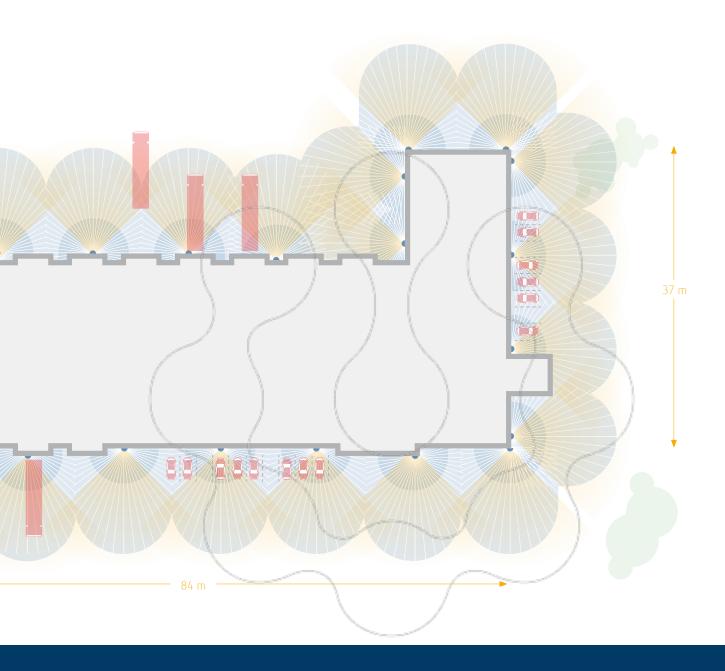
- Protection class IP 55 (so humidity in underground car park is no problem)
- Large detection area of up to 12 m
- Technical data theLeda: page 82





Master/ Master switching





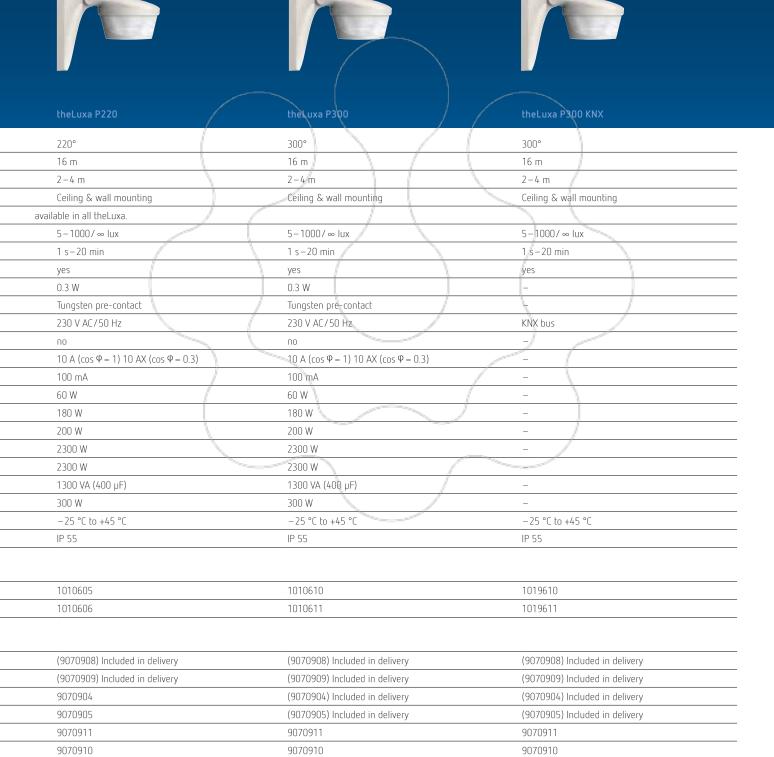


Motion detector theLuxa Technical data

		100	
Features	thet uxa S150	theLuxa/S180	theLuxa S360
- Testisies	G1020X0 3130	Incessor 150	LICEONG 3300
Detection angle	150°	180°	360°
Lateral detection area	12 m	12 m	16 m
Installation height	2-4 m	2-4 m	2-4 m
Type of installation	Wall mounting	Wall mounting	Ceiling & wall mounting
			der protection, pulse function, test function
Brightness setting range	5-1000/∞ lux	5-1000/ ∞ lux	5-1000/∞ lux
Duty cycle range	1 s – 20 min	1 s-20 min	1 s – 20 min
Remote operation	no	no	no
Standby consumption	< 1 W	< 1 W	0.5 W
Switch contact	μ contact 230 V AC	μ contact 230 V AC	μ contact 230 V AC
Operating voltage	230 V AC/50 Hz	230 V AC/50 Hz	230 V AC/50 Hz
Zero-cross switching	yes	yes	yes
Switching capacity	10 A ($\cos \Phi = 1$) 3 AX ($\cos \Phi = 0.3$)	10 A ($\cos \Phi = 1$) 3 AX ($\cos \Phi = 0.3$)	10 A ($\cos \Phi = 1$) 3 AX ($\cos \Phi = 0.3$)
Min. switching capacity	10 mA	10 mA	10 mA
LED lamps < 2 W	25 W	25 W	25 W
LED lamps 2 W - 8 W	90 W	90 W	90 W
LED lamps > 8 W	100 W	100 W	100 W
Incandescent and halogen lamp load	2300 W	2300 W	2300 W
Low-voltage halogen lamps	2300 W	2300 W	2300 W
Fluorescent lamps EVG	400 VA (42 μF)	400 VA (42 μF)	400 VA (42 μF)
Compact fluorescent lamps EVG	150 W	150 W	150 W
Ambient temperature	−25 °C to +45 °C	−25 °C to +45 °C	−25 °C to +45 °C
Protection rating (in accordance with EN 60529)	IP 55	IP 55	IP 55
Article number			
Art. No. white (WH)	1010500	1010505	1010510
Art. No. black (BK)	1010501	1010506	1010511
Optional accessories			
Spacer frame theLuxa WH	9070906	9070906	9070906
Spacer frame theLuxa BK	9070907	9070907	9070907
Corner angle theLuxa WH	9070902	9070902	(9070902) Included in delivery
Corner angle theLuxa BK	9070903	9070903	(9070903) Included in delivery
theSenda S remote control	-	-	-
theSenda P remote control	_	-	-







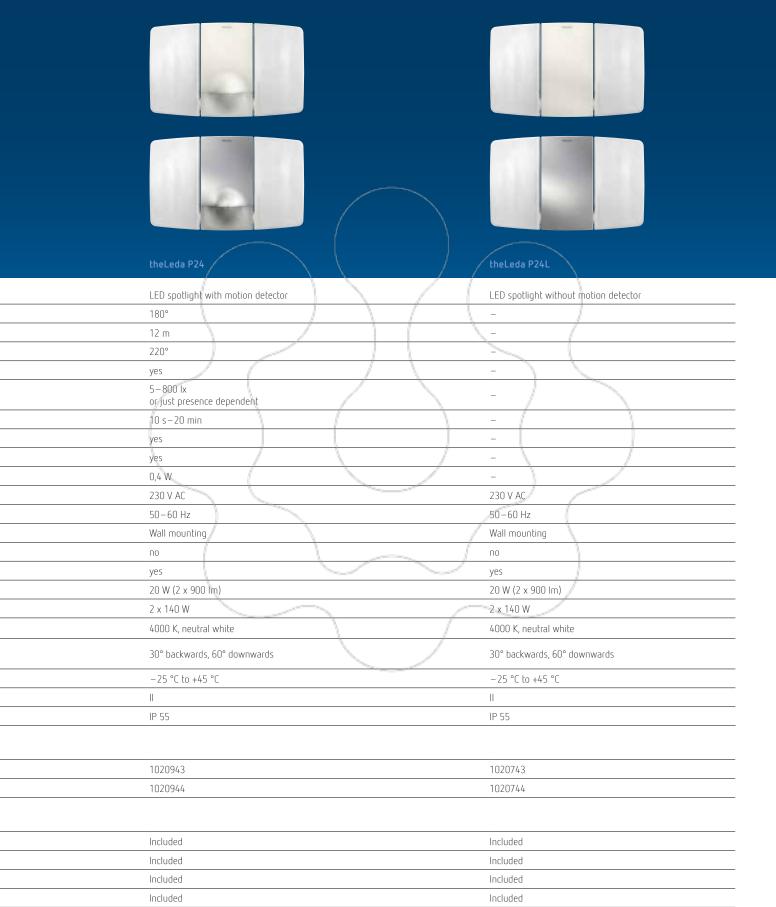






LED spotlight theLeda P Technical data

Features		theLeda P12	theLeda P12L
redelies	/		
Version		LED spotlight with motion detector	LED spotlight without motion detector
Detection angle	1	180°	/
Lateral detection area	1	12 m	/
Creep under protection	1	220°	-
Remote operation		yes	1-
Brightness setting range		5–800 lx or just presence dependent	/-
Lighting time delay		10 s – 20 min	-
Test function		yes	-
Light-sensitive switches		yes	
Standby output		0,4 W)-
Operating voltage	The State of the S	230 V AC	230 V AC
Frequency		50-60 Hz	50-60 Hz
Type of installation	1	Wall mounting	Wall mounting
Additional light switch output	1	no	no
Master/Master	\	yes	yes
LED output (lighting current)	No.	1 x 11 W (900 lm)	1 x 11 W (900 lm)
Comparable halogen output	The same of	140 W	140 W
Colour temperature		4000 K, neutral white	4000 K, neutral white
Adjustability of of spotlight		35° left/right, 60° upwards/downwards and 180° backwards	35° left/right, 60° upwards/downwards and 180° backwards
Ambient temperature		−25 °C to +45 °C	−25 °C to +45 °C
Protection class		II	II
Protection rating		IP 55	IP 55
Article number			
Art. No. white (WH)		1020941	1020741
Art. No. aluminium (AL)		1020942	1020742
Optional accessories			
theLeda P WH spacer frame WH whit	e	Included	Included
theLeda P WH spacer frame AL alum	inium	Included	Included
theLeda P WH corner bracket WH wh	ite	9070969	9070969
theLeda P WH corner bracket AL alur	minium	9070970	9070970
Remote control theSenda S		9070911	-
Remote control theSenda P		9070910	-







LED spotlight LUXA-LED Technical data

Features	LUXA 102-140 LED 8W	LUXA 102-140 LED 16W	LUXA 102-180 LED 32W
Version	LED spotlight with motion detector	LED spotlight with motion detector	LED spotlight with motion detector
Detection angle	90°	90°	180°
Lateral detection area	10 m	10 m	12 m
Creep under protection	140°	140°	220°
Adjustability of sensor	can be turned horizontally by ± 90°	can be turned horizontally by ± 90°	can be turned horizontally by ± 90°
Brightness setting range	5–200 lx or just presence dependent	5–200 lx or just presence dependent	5–200 lx or just presence dependent
Lighting time delay	5 s – 10 min	5 s – 10 min	5 s – 10 min
Test function	yes	yes	yes
Light-sensitive switches	yes	yes	yes
Standby output	0.3 W	0.3 W	0.5 W
Operating voltage	100-240 V AC	100-240 V AC	220-240 V AC
Frequency	50-60 Hz	50-60 Hz	50-60 Hz
Type of installation	Wall mounting	Wall mounting	Wall mounting
Additional light switch output	no	no	Relay 230V AC
Master/Master	no	-no	yes
LED output (lighting current)	1x 8 W (430 lm)	2x 8 W (860 lm)	32 W (2000 lm)
Comparable halogen output	100 W	2x 100 W	230 W
Emission angle	approx. 75° horizontal and 60° vertica	l approx. 75° horizontal and 60° vertic	al approx. 75° horizontal and 55° vertical
Colour temperature	6000 K, daylight white or 3000 K, warm white	6000 K, daylight white or 3000 K, warm white	6000 K, daylight white
Adjustability of of spotlight	can be turned horizontally by $\pm~40^\circ$ as swivelled down by 90°	nd can be turned horizontally by ± 40° and swivelled down by 90°	can be turned horizontally by ± 90° and swivelled down by 55°
Ambient temperature	-20 °C to +40 °C	-20 °C to +40 °C	-25 °C to +45 °C
Protection class	II		II
Protection rating	IP 44	IP 44	IP 55
Article number			
Art. No. white (WH, 6000 K, daylight white)	1020971	1020973	1020975
Art. No. white (WH, 3000 K, warm white)	1020951	1020953	-
Art. No. black (BK, 6000 K, daylight white)	1020972	1020974	1020976
Art. No. black (BK, 3000 K, warm white)	1020952	1020954	-
Optional accessories			
Corner angle LUXA white (WH)	9070756	9070756	-
Corner angle LUXA black (BK)	9070757	9070757	-







LUXA 102 FL LED 8W	LUXA 102 FL LED 16W	LUXA 102 FL LED 32W
LED spotlight without motion detector	LED spotlight without motion detector	LED spotlight without motion detector
-	-/ \ / \	-)
-	7 1 7 7	- /
-	4	_
- / /	- / \	3
-	- /	7
- /	- /	/- \
-	-	-
- \	- \	F /
-	-	-
100 – 240 V AC	100 – 240 V AC	220 – 240 V AC
50-60 Hz	50-60 Hz	50-60 Hz
Wall mounting	Wall mounting	Wall mounting
по	no	no
по	no	no
1x 8 W (430 lm)	2x 8 W (860 lm)	32 W (2000 lm)
100 W	2x 100 W	230 W
approx. 75° horizontal and 60° vertical	approx. 75° horizontal and 60° vertical	approx. 75° horizontal and 55° vertical
6000 K, daylight white or 3000 K, warm white	6000 K, daylight white or 3000 K, warm white	6000 K, daylight white or 3000 K, warm white
can be turned horizontally by $\pm40^{\circ}$ and swivelled down by 90°	can be turned horizontally by $\pm~40^{\circ}$ and swivelled down by 90°	can be turned horizontally by ± 90° and swivelled down by 55°
−20 °C to +40 °C	−20 °C to +40 °C	−25 °C to +45 °C
II	П	II
IP 44	IP 44	IP 55
1020771	1020773	1020775
1020751	1020753	
1020772	1020774	1020776
1020752	1020754	_
9070756	9070756	_
9070757	9070757	_

LED spotlight Technical data



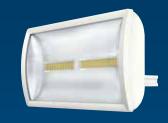




Version LED spotlight with motion detector LED spotlight with motion detector LED spotlight with motion detector Detection angle 180° 180° 180° Lateral detection area 1.2 m 1.2 m 1.2 m Adjustability of sensor can be turned horizontally, left and right by + 90° can be turned horizontally, left and right by + 90° can be turned horizontally, left and right by + 90° Brightness setting range 2 - 200 k 2 - 200 k 2 - 200 k Lightling time delay 5 s - 10 min 5 s - 10 min 5 s - 10 min East function yes yes yes Lightling brine delay 5 s - 10 min 5 s - 10 min 5 s - 10 min East function yes yes yes Lightling time delay 5 s - 10 min 5 s - 10 min 5 s - 10 min East function yes yes yes Lightling time delay 5 s - 10 min 5 s - 10 min 5 s - 10 min Lightling time delay 5 s - 10 min 5 s - 10 min 5 s - 10 min Lightling time delay 5 s - 10 min 4 s - 10 min	Merkmale	theLeda E10	theLeda E20	theLeda E30
Lateral detection area 12 m 12 m 12 m 12 m 12 m Adjustability of sensor Can be turned horizontally, left and right by ± 90° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swivelled up by €0° Can be turned down by 45° and swiv	Version	LED spotlight with motion detector	LED spotlight with motion detector	LED spotlight with motion detector
Adjustability of sensor can be turned horizontally, left and right by ± 90° right	Detection angle	180°	180°	180°
Adjustability of Selson right by ± 90° right by ± 90° right by ± 90° Brightness setting range 2 − 200 k 2 − 200 k 2 − 200 k Lighting time delay 5 s − 10 min 5 s − 10 min 5 s − 10 min Test function yes yes yes Light-sensitive switches yes yes Standby output 0,5 W 0,5 W 0,5 W Operating voltage 230 V AC 230 V AC 230 V AC Frequency 50 − 60 Hz 50 − 60 Hz 50 − 60 Hz Type of installation Wall mounting Wall mounting Wall mounting Additional light switch output no no no Master/ Master no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 110° horizontal and 100° vertical Colour temperature 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 5600	Lateral detection area	12 m	12 m	12 m
Lighting time delay 5 s - 10 min 5 s - 10 min 5 s - 10 min Test function yes yes yes Light-sensitive switches yes yes yes Standby output 0,5 W 0,5 W 0,5 W Operating voltage 230 V AC 230 V AC 230 V AC Frequency 50 - 60 Hz 50 - 60 Hz 50 - 60 Hz Type of installation Wall mounting Wall mounting Wall mounting Additional light switch output no no Relay 230 V AC Master/Master no no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110" horizontal and 100" vertical 110" horizontal and 100" vertical 110" horizontal and 100" vertical Colour temperature 5000 – 5600 K, daylight white Adjustability of of spotlight can be turned down by 45" and swivelled up by 6	Adjustability of sensor			
Test function yes yes yes Light-sensitive switches yes yes yes Standby output 0,5 W 0,5 W 0,5 W Operating voltage 230 V AC 230 V AC 230 V AC Frequency 50 –60 Hz 50 –60 Hz 50 –60 Hz Type of installation Wall mounting Wall mounting Wall mounting Additional light switch output no no Relay 230 V AC Master / Master no no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 100° horizontal and 100° vertical 100° horizontal and 100° vertical 10° horizontal and 100° vertical	Brightness setting range	2-200 lx	2-200 lx	2-200 lx
Light-sensitive switches yes yes yes yes	Lighting time delay	5 s – 10 min	5 s – 10 min	5 s – 10 min
Standby output 0,5 W 0,5	Test function	yes	yes	yes
Operating voltage 230 V AC Frequency 50 –60 Hz 50 –50 Hz 50 –50 Hz 50 –50 Hz	Light-sensitive switches	yes	yes	yes
Frequency 50–60 Hz 50–60 Hz Type of installation Wall mounting Wall mounting Wall mounting Additional light switch output no no Relay 230 V AC Master/Master no no no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 110° horizontal and 100° vertical 110° horizontal and 100° vertical 100° horizontal and 100° vertical 110° horizontal and 100° vertical 100° horizontal and 100° vertical 100° horizontal and 100° vertical 110° horizontal and 100° vert	Standby output	0,5 W	0,5 W	0,5 W
Type of installation Wall mounting Wall mounting Wall mounting Additional light switch output no no no Relay 230 V AC Master/Master no no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 110° horizontal and 100° vertical 110° horizontal and 100° vertical 100° vertical 110° horizontal and 100° vertical 100° vertical 110° horizontal and 100° vertical 100° vertical 100° vertical 100° vertical 110° horizontal and 1	Operating voltage	230 V AC	230 V AC	230 V AC
Additional light switch output no no no Relay 230 V AC Master / Master no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 250 Emission angle 110° horizontal and 100° vertical 110° horizontal and 100° vertical 110° horizontal and 100° vertical 2500—5600 K, daylight white 5000—5600 K, daylight w	Frequency	50-60 Hz	50-60 Hz	50-60 Hz
Master / Master no no no LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 110° horizontal and 100° vertical 110° horizontal and 100° vertical Colour temperature 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white Adjustability of of spotlight can be turned down by 45° and swivelled up by 60° can be turned down by 45° and swivelled up by 60° can be turned down by 45° and swivelled up by 60° Ambient temperature -20 °C to +40 °C -20 °C to +40 °C -25 °C to +45 °C Protection class I I I Protection rating IP 55 IP 55 IP 55 Article number Art. No. white (WH) 1020911 1020913 1020915	Type of installation	Wall mounting	Wall mounting	Wall mounting
LED output (lighting current) 1 x 10 W (700 lm) 1 x 20 W (1300 lm) 1 x 30 W (2200 lm) 250 Emission angle 110° horizontal and 100° vertical 100° borizontal and 100° vertical 100° borizontal and 100° vertical 100° horizontal and 100° vertical 10° horizontal and 100° vertical 110° horizonta	Additional light switch output	no	no	Relay 230 V AC
Comparable halogen output 130 185 250 Emission angle 110° horizontal and 100° vertical 1000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 500 K, day	Master/Master	no	no	no
Emission angle 110° horizontal and 100° vertical	LED output (lighting current)	1 x 10 W (700 lm)	1 x 20 W (1300 lm)	1 x 30 W (2200 lm)
Colour temperature 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 5000 – 5600 K, daylight white 4djustability of of spotlight can be turned down by 45° and swivelled up by 60° can be	Comparable halogen output	130	185	250
Adjustability of of spotlight can be turned down by 45° and swivelled up by 60° Ambient temperature -20 °C to +40 °C -20 °C to +40 °C -25 °C to +45 °C Protection class I I Protection rating IP 55 IP 55 IP 55 Article number Art. No. white (WH) 1020911 Can be turned down by 45° and swivelled up by 60° swivelled up by 60° -20 °C to +40 °C -25 °C to +45 °C -20 °C to +40 °	Emission angle	110° horizontal and 100° vertical	110° horizontal and 100° vertical	110° horizontal and 100° vertical
Adjustability of or spotlight swivelled up by 60° led up by 60° swivelled up by 60° led up by 60° led up by 6	Colour temperature	5000 – 5600 K, daylight white	5000 – 5600 K, daylight white	5000 – 5600 K, daylight white
Protection class I I I Protection rating IP 55 IP 55 IP 55 Article number Art. No. white (WH) 1020911 1020913 1020915	Adjustability of of spotlight			
Protection rating IP 55 IP 55 IP 55 Article number Art. No. white (WH) 1020911 1020913 1020915	Ambient temperature	−20 °C to +40 °C	-20 °C to +40 °C	−25 °C to +45 °C
Article number Art. No. white (WH) 1020911 1020913 1020915	Protection class	I		
Art. No. white (WH) 1020911 1020913 1020915	Protection rating	IP 55	IP 55	IP 55
	Article number			
Art. No. black (BK) 1020912 1020914 1020916	Art. No. white (WH)	1020911	1020913	1020915
	Art. No. black (BK)	1020912	1020914	1020916







theLeda E10L	the Leda E20L	theLeda E30L
LED spotlight without motion detector	LED spotlight without motion detector	LED spotlight without motion detector
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-)	- /	
- attached	- / \	-
- /	- /	-/
- /	\ - /	- /
-	-	-
-	7 - \	1
230 V AC	230 V AC	230 V AC
50-60 Hz	50-60 Hz	50-60 Hz
Wall mounting	Wall mounting	Wall mounting
no	no	no
no	no	no
1 x 10 W (700 lm)	1 x 20 W (1300 lm)	1 x 30 W (2200 lm)
130	185	250
110° horizontal and 100° vertical	110° horizontal and 100° vertical	110° horizontal and 100° vertical
5000 – 5600 K, daylight white	5000 – 5600 K, daylight white	5000 – 5600 K, daylight white
can be turned down by 45° and swivelled up by 60°	can be turned down by 45° and swivelled up by 60°	can be turned down by 45° and swivelled up by 60°
−20 °C to +40 °C	−20 °C to +40 °C	−25 °C to +45 °C
I	1	I
IP 55	IP 55	IP 55
1020711	1020713	1020715
1020712	1020714	1020716



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