

Busch-Watchdog presence

Overview and applications of presence detectors.

Power and productivity
for a better world™

Do without the unnecessary.
And save energy.

Presence detectors automatically detect the presence of someone inside the room to switch the light on and off. Their precision is far superior to that of conventional motion detectors. They register the smallest movements, which means that connected loads operate only when they are really needed. Empty rooms in which the lights are on and the air-conditioning runs at full power are now history. There is one presence detector for each.



Busch-Watchdog presence tech BasicLINE mini

- Low installation depth due to separate sensor/ actuator concept
- Sensitivity adjustable
- Detection range up to 6 m (at 3 m mounting height)
- Small rooms and toilet application
- False ceiling installation via integrated spring bracket



Busch-Watchdog presence tech BasicLINE

- Detection range 7 m (at 2.5 m mounting height)
- Universal application
- Automatic, semi-automatic
- Additional operation via pushbutton extension
- False ceiling installation via spring bracket, hollow-wall or flush-mounted box.



Busch-Watchdog presence tech BasicLINE Corridor

- Suitable for outdoor areas (in connection with surface-mounted housing)
- Detection range up to 24 m (at 2.5 m mounting height)
- Remote control possible via hand-held transmitter 6843
- Additional operation via pushbutton extension
- Ceiling installation via enclosed dust cover, with spring bracket, hollow-wall or flush-mounted box, surface-mounted housing (6888)

Seeing without being seen.

Ideal for small rooms – the new Busch-Watchdog presence tech BasicLINE mini. It is extremely flat, making it easy to install in the ceiling. The sensitivity is individually adjustable, depending on the application.

Press of a button or automatic.

The additional semi-automatic mode was specially designed for use in schools. The light is initially activated with the press of a button - it then remains active with constant of movement in the room.

For a specious area.

The Busch-Watchdog presence tech BasicLINE Corridor is perfect for corridors, underground car parks and large areas. The delay time adjusts itself to the situation in the room. If only a brief movement is registered, it switches itself off earlier to save energy. The use of a special housing makes the Watchdog suitable also for use in outdoor areas.





Busch-Watchdog presence tech
Busch-Watchdog presence tech DualLINE

- Detection range 8 m (at 2.5 m mounting height)
- For loads up to 2300 W/VA
- Automatic, semi-automatic
- For conference rooms and classrooms with two separately switchable light rows with 6402 U-500*
- For general office applications
- Additional operation via pushbutton extension and IR remote control 6010-25-500
- Constant light control in connection with 6550 U and 6593 U
- Ceiling installation via surface-mounted housing 6885-500, hollow-wall or flush-mounted box



Busch-Watchdog presence tech KNX
Busch-Watchdog presence tech DualLINE KNX

- movement detection with 2 channels and constant light switching (level of brightness is continuously monitored even during motion)
- Integrated bus coupler
- Additional two channels for constant brightness control via switching or dimming**
- integrated HVAC function makes it possible to control heating, ventilation and air-conditioning**
- usage of up to two external brightness values possible**
- up to 25 freely programmable IR channels (IC 5)**
- Logic function**

The office champion.

The Busch-Watchdog presence tech is ideal for all conceivable applications in the office. It was designed for higher loads, but is also suitable for the implementation of a constant light control and the control of the ventilation. Also the first choice for gymnasiums and sport facilities.

Always alert.

The Busch-Watchdog presence tech DualLINE is ideal for use in conference rooms or class rooms with two separately switchable light rows. It carefully and reliably monitors an area of 8 meters, which can also be enlarged by means of extension units. The presence tech DualLINE provides rooms with optimum lighting control a minimum energy consumption.

Utilization of daylight.

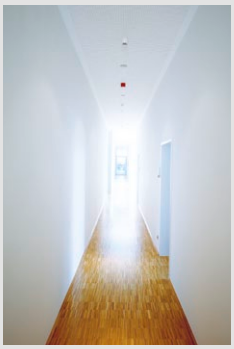
Even more energy can be saved when combining presence detectors with a constant light control. This regulates the electric light in dependence of incoming daylight. Lights are dimmed or completely switched off in dependence of brightness. For this purpose, a dimmer or control device for electronic loads is installed in addition to the presence detector. Experience has shown that constant light control can reduce the consumption of energy by 35 to 50%. Not only the cost of electricity is reduced, but lamps are conserved and the investment pays for itself within just a few years.

* Busch-Watchdog presence tech DualLINE

** Busch-Watchdog presence tech DualLINE KNX

Presence detector applications.
An orientation aid.



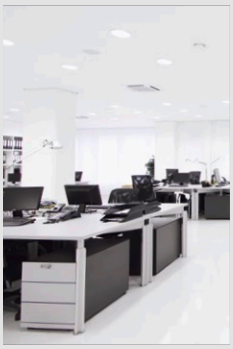




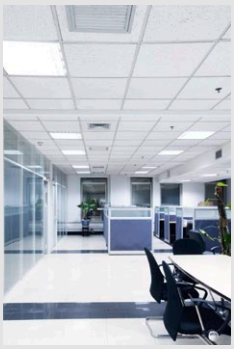
	Parking deck	Corridor	Toilet	Office Single
Presence tech (6813-101-500)				
Presence tech DualLINE (6813/11-xx-500)				
Presence tech BasicLINE mini (6811 EB-500)				
Presence tech BasicLINE (6814 U-500)				
Presence tech BasicLINE Corridor (6818 U-500)				
Presence tech KNX (6131/10-500)				
Presence tech DualLINE KNX (6131/11-500)				

Variety of applications.

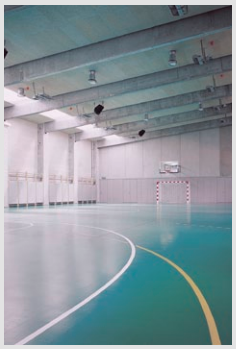
Lighting, heating, air-conditioning and ventilating systems can be controlled intelligently, according to need, with presence detectors. The choice of the right unit depends on the height of the ceiling, the size of the area to be monitored, the installation situation and the type of movement to be detected. Monitoring situations in corridors through which people move are totally different to offices in which sometimes only a finger moves across a keyboard. If a person works exclusively at a computer, only minimal movement is to be expected. Here detection by the Watchdog needs to be especially accurate and precise. In gymnasiums, on the other hand, where there is a lot of movement, the situation is different. Here the watchdog must accurately detect movement from a great height and at the same time be protected by a protective cage against damage. In classes and conference rooms a semi-automatic unit will suffice. Here, in case of presentations with a beamer, the lights can be switched off manually via a push button or a remote control. Presence detectors should be installed in locations where the most movement is to be expected. The Busch-Watchdog presence tech BasicLINE mini, BasicLINE Corridor and BasicLINE are especially easy to install in false ceilings with the enclosed spring bracket. Units in a surface-mounted housing and with a higher degree of protection are often used in multi-storey car parks. To make selection easier, we have assigned the ideal watchdogs to typical areas of application. This allows the most suitable model to be seen at a glance.











Office open plan	Office Constant light	Office Light + Ventilation	Class rooms Meeting room [2]	Gym
			1)	
			1)	

1) Switch off delay > 10 min. 2) push button at extension input is recommended for semi-automatic operation (e.g. projector presentation or movie)

Ideally suited

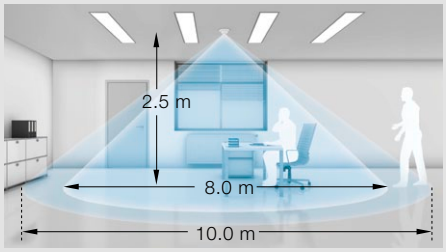
Limited suitability

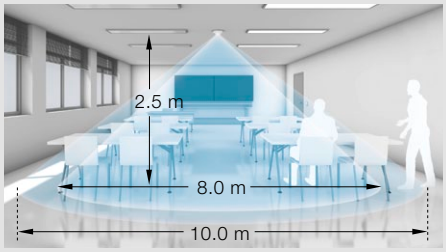
Unsuitable

Which one is best suited?

The grey levels help to identify the right presence detector at a glance: dark grey being the ideal choice for the respective application. Medium grey: while the choice of this watchdog may be possible, it should be checked with regard to the technical properties. In case of light grey, we advise against its use on the basis of our experience.

Technical Data.
An overview of all models.

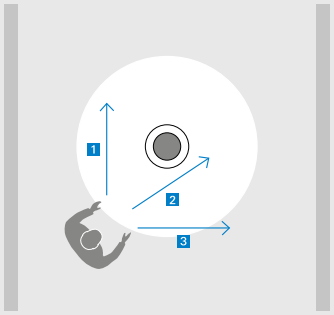




Products	Busch-Watchdog presence tech Busch-Watchdog presence tech DualLINE	Busch-Watchdog presence tech KNX Busch-Watchdog presence tech DualLINE KNX
Part no.	**6813-101-500 / 6813/11-xx-500**	**6131/10-500 / 6131/11-500**
Load incandescent lamp	max. 2300 W [7]	–
Load halogen & fluorescent lamp	max. 2300 W/VA [7]	–
Compact fluorescent lamp	7 W – 500 W / max. 20 pieces [7]	–
Remote-control [4]	6010-25-500	– / 6010-25-500*
Extension input (push button)	X [6]	–
Detection LED [1]	–	–
Operation mode [5]	M/A	M, A
Detection range [2]	8 m	8 m
Max. mounting height	8 m	8 m
Protection class	IP 20	IP 20
Sensitivity of innerdetection [8]	very high	very high
Sensitivity of outer detection [8]	high	high
Ceiling mountable without VDE box	–	–
Surface mounting box	IP 20 (6885-xxx)	IP 20 (6885-xxx)

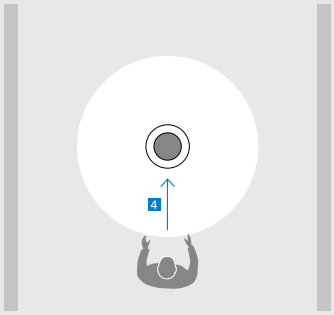
1) at test mode only **2)** diameter at ground (2.5 m mounting height) **3)** CFL 7-400 W **4)** please order IR remote control separately **5)** A = automatic mode, M = manual mode (semi automatic) **6)** with flush-mounted insert 6401 U-102-500 (2300 W/VA, 3 wire) / 6402 U-500 (2300 W/VA, 3 wire) / 6804 U-101 (60-420 W/VA, 2 wire) / 6593 U-500 (60-420 W/VA Uni Dimmer) and 6550 U-101-500 (700 W/VA, 1-10V DC, max. 50mA DC for ECG) **7)** depends on the insert 6401 U-102-500 (2300 W/VA, 3 wire) / 6402 U-500 (2300 W/VA, 3 wire) / 6812 U-101-500 (700 W/VA 3 wire) / 6804 U-101-500 (60-420 W/VA, 2 wire) / 6593 U-500 (60-420 W/VA Uni Dimmer) and 6550 U-101-500 (700 W/VA, 1-10V DC, max. 50mA DC for ECG) **8)** Sensitivity of detection: very high = hand movement, high = arm movement, medium = step movement **9)** use with surface-mounted housing 6888, ***** Busch-Watchdog Presence tech DualLINE

Optimum detection at lateral or diagonal approach.



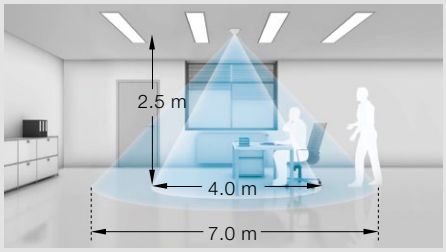
1 Lateral approach to the detector.
2 Diagonal approach to the detector.
3 Lateral approach to the detector.

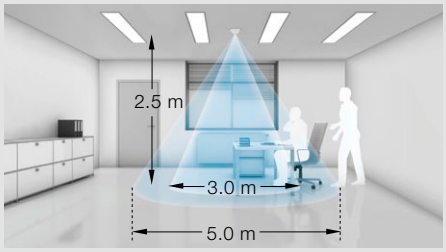
Reduced detection at frontal approach due to physical reasons.

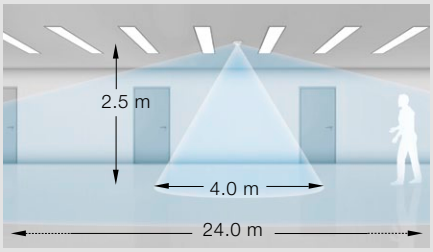


4 Frontal approach to the detector.

Technical details
A Busch-Watchdog presence tech consist of two parts lense and PIR sensor. The maximum detection range depends on the mounting site and ambient conditions.







Busch-Watchdog presence tech BasicLINE	Busch-Watchdog presence tech BasicLINE mini	Busch-Watchdog presence tech BasicLINE Corridor
6814 U-500	**6811 EB-500**	**6818 U-500**
2000 W	2000 W	2000 W
max. 1000 W/VA[3)]	max. 1000 W/VA[3)]	max. 1000 W/VA[3)]
7 W – 400 W	7 W – 400 W	7 W – 400 W
–	–	6843
X	–	X
X	X	X
M/A	A	M/A
7 m	5 m	24 m
4 m	5 m	3 m
IP 40	IP 20	IP 40 / 54 [9)]
high	high	high
medium	medium	medium
X	X	X
–	–	IP 54 (6888)

Mounting height	detection diameter					KNX	
	Busch-Watchdog presence tech	Busch-Watchdog presence tech DualLINE	Busch-Watchdog presence tech BasicLINE mini	Busch-Watchdog presence tech BasicLINE	Busch-Watchdog presence tech BasicLINE Corridor	Busch-Watchdog presence tech	Busch-Watchdog presence tech DualLINE
	6813-101-500	**6813/11-500**	**6811 EB-500**	**6814 U-500**	**6818 U-500**	**6131/10-500**	**6131/11-500**
2 m	6 m		4 m	6 m	20 m	6 m	
2.5 m	8 m		5 m	7 m	24 m	8 m	
3 m	10 m		6 m	8 m	20 m	10 m	
3.5 m	12 m		7 m	9 m		12 m	
4 m	14 m		8 m	10 m		14 m	
4.5 m	16 m		9 m			16 m	
7.5 m						20 m	

Contact us

A member
of the ABB Group

Busch-Jaeger Elektro GmbH
P.O. Box
58505 Lüdenscheid
Germany

Freisenbergstraße 2
58513 Lüdenscheid
Germany

www.BUSCH-JAEGER.com
info.bje@de.abb.com

Central sales service:

Phone +49 (0) 2351 956-1600
Fax +49 (0) 2351 956-1700

BJE 0001-0-1259/11.12/0502-D, dpi 406800

Power and productivity
for a better world™