



## BUSH 180 Flex Basic Sensor Instruction Manual

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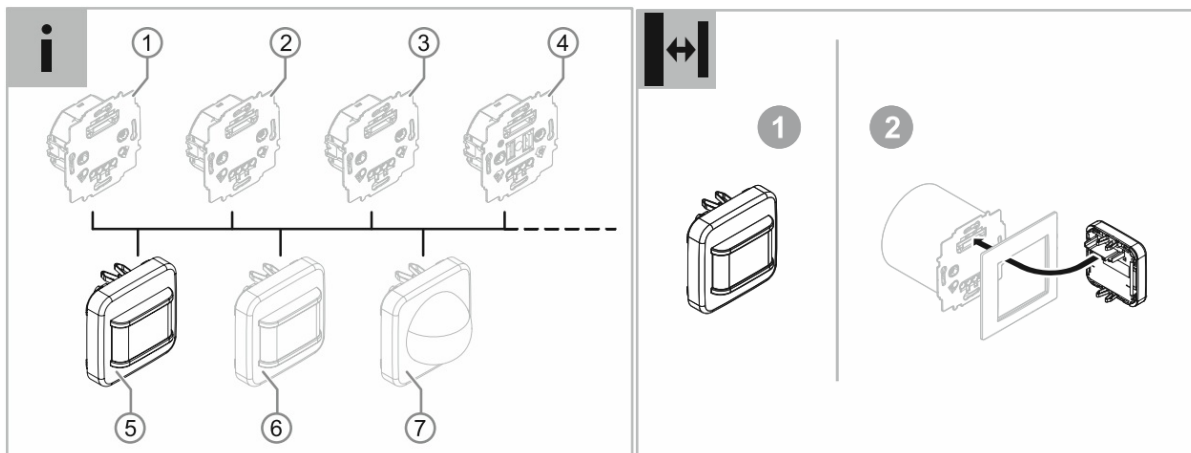
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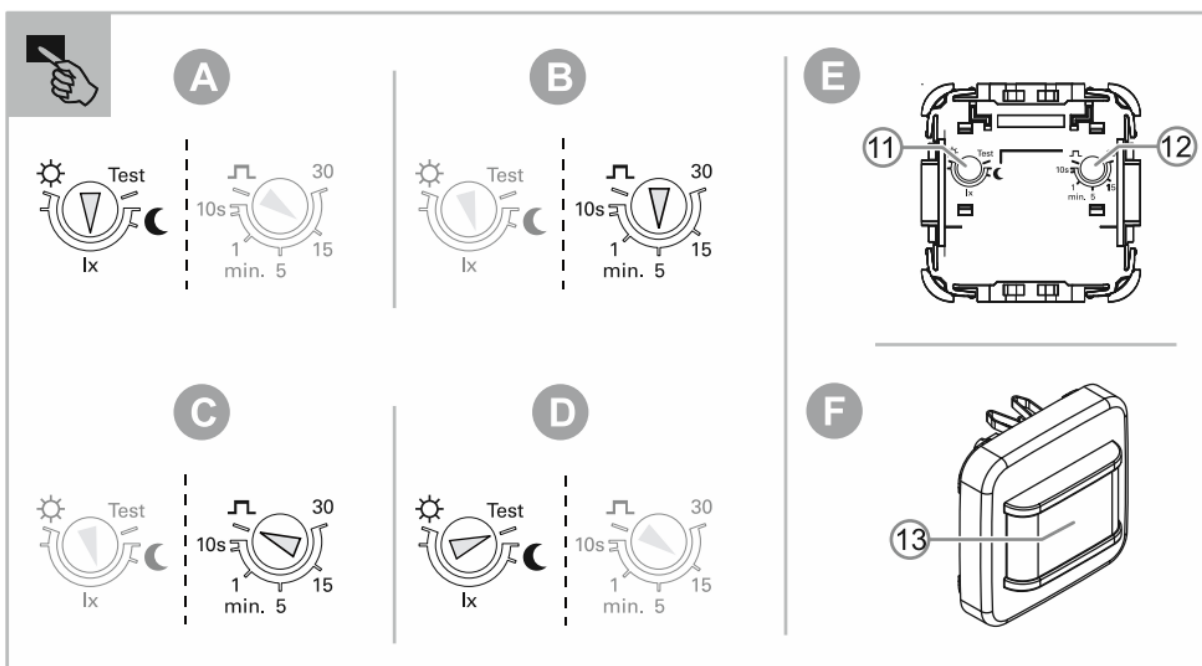
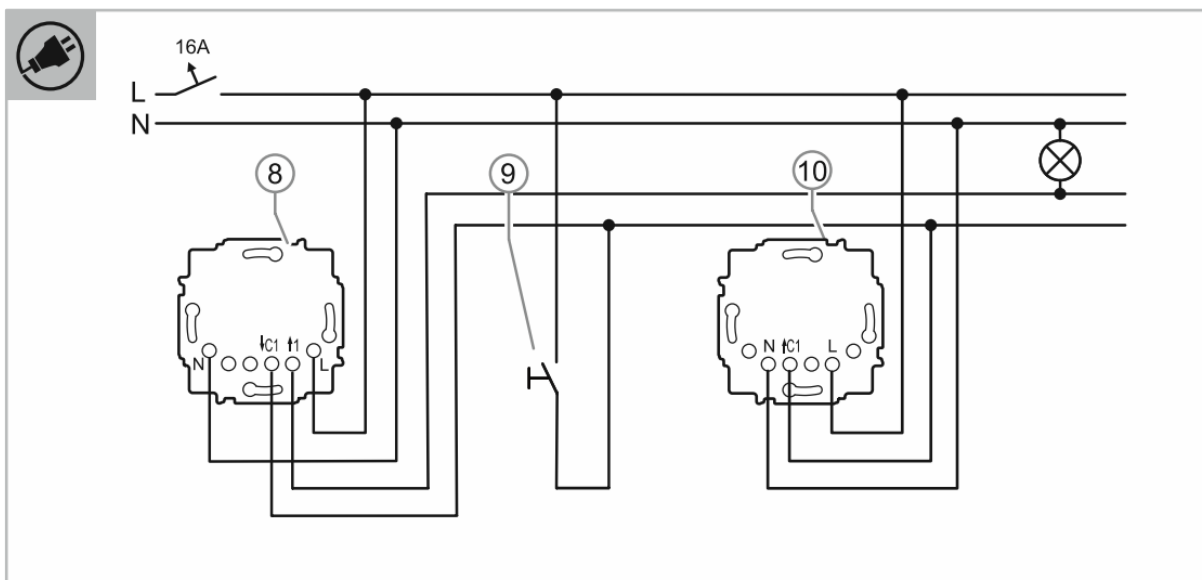
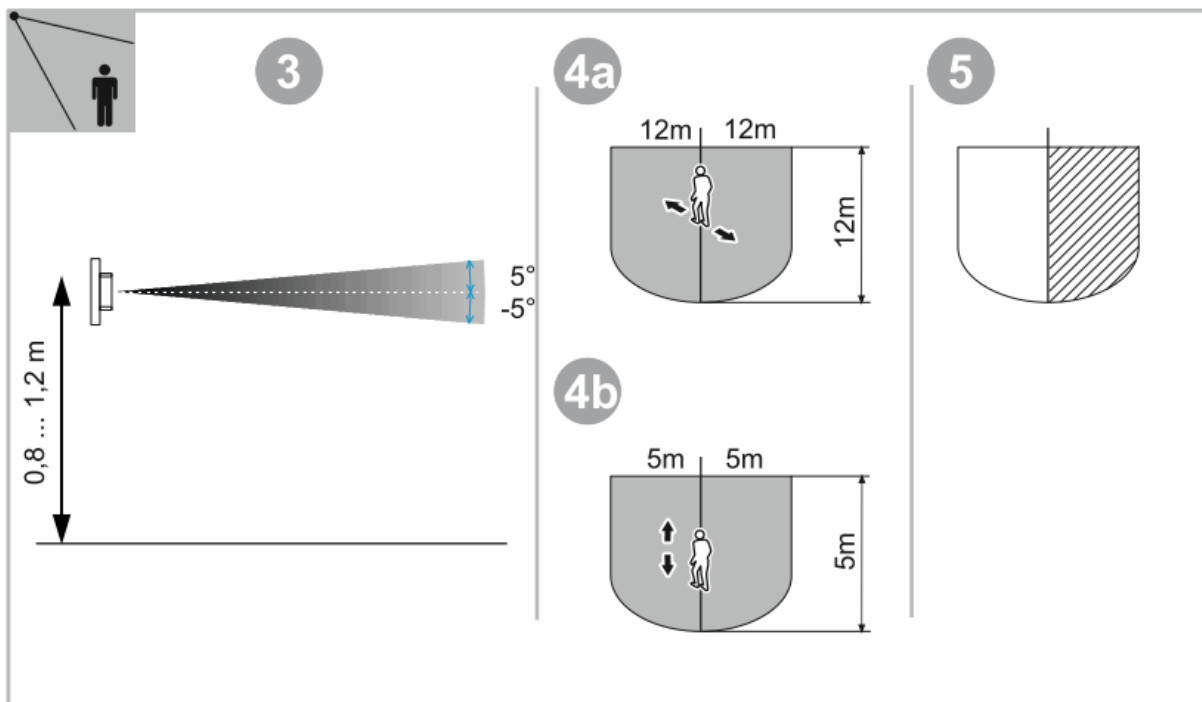
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### Busch-flex Tronics / ABB flexTronics







**2CKA000073B5099 / 30.03.2022**

**Busch-Watchdog**

64761-xxx	180 flex, Basic sensor with select lens
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#### **DANGER**



Dangerous currents flow through the body when coming into direct or indirect contact with live components. This can result in electric shock, burns or even death. Work improperly carried out on current-carrying parts can cause fires.



- Disconnect the mains voltage prior to mounting and dismantling!
- Permit work on the 110 – 240 V mains network to be carried out only by specialist staff.

- Please read the mounting instructions carefully and keep them for future use.
- Additional user information and information about planning is available at [www.BUSCH-JAEGER.com](http://www.BUSCH-JAEGER.com) or by scanning the QR code.

#### **Intended Use**

The movement detector serves for switching lighting systems in dependence of brightness and/or movement. It is designed only for interior areas of buildings and for mounting on ceilings. Mounting, among others, is practical on the following flex inserts:

- Relay inserts
- e-contact inserts
- LED dimmer inserts
- Extension unit inserts

The device is not suitable for use as an intrusion or attack alarm since it lacks the required security against sabotage in accordance with the German VdS (Authority on Safety and Security) regulations.

## ATTENTION

The device contains highly sensitive sensors and lens systems.

- Do not cover or mask lens segments since this will interfere with the function of the device.
- Do not clean the device and the lens system with abrasive or aggressive cleaning agents.

## Technical data

Opening angle:	180°
Brightness limit value:	5°- 500 lux, daytime operation
Switch-off delay:	<ul style="list-style-type: none"><li>• 10 seconds – 30 minutes</li><li>• Short-time pulse 1 second</li></ul>
Mounting height:	0.8 m – 1.2 m
Protection type:	IP20
Temperature range:	-5°C – +45°C
Storage temperature:	-25°C – +70°C



## Modular System

## Notice

The movement detector sensors [5-7] can be freely combined with the flex inserts [1 – 4]. Although not all combinations may be practical with regard to the desired functions.

## Function

The function depends on the flex insert used. Depending on the flex insert used, the movement detector [5] operates in one of the following modes:

- Relay insert, 1gang or e-contact insert:
  - At movement it switches in dependence of the ambient brightness.
  - With the e-contact, a soft switch-on or soft switch-off takes place within 1 second.
- Relay insert, 2gang:
  - At movement, channel 1 switches in dependence of the ambient brightness.
  - Channel 2 remains unaffected.
- LED dimmer insert:
  - At movement the light dims to the set value.
  - In dependence of the ambient brightness.
  - Within the soft switch-on time or soft switch-off time.
- Extension unit insert:
  - For the extension of the detection range.

## Notice

This device does not have a switch-off pre-warning according to DIN 18015-2 and is therefore suitable for use in public stairwells only to a limited extent.



## Connection

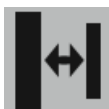
See the documentation of the respectively used flex insert.

An extended detection range is possible with the Sub-insert flex.

[8] "Relay insert flex, 1 gang" with "Busch-Watchdog 180 flex, Basic sensor with select lens"

[9] Option: Extension unit push-button, e.g.: 2020 US/xxx

[10] "Sub-insert flex" with "Busch-Watchdog 180 flex, Basic sensor with select lens"



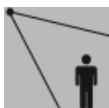
## Mounting

Attach the movement detector together with the cover frame on the flex insert [1] / [2].

Flex insert and cover frames are not included in the scope of delivery and must be purchased separately.

### Notice

To remove the cover, a suitable tool may have to be used.



## Detection range

The detection range is, among others, dependent on the ambient temperature. The specified values refer to an ambient temperature of 21°C. The detection range is reduced at higher ambient temperatures.

[3] Mounting heights / Detection levels

[4] Detection range

[5] Horizontal reduction of the detection range by masking

Detection range		
Mounting height (H)	Lengthways toward the detector	Crosswise toward the detector
1.1 m	5 m	12 m



## Setting and operation

### Notice

The function of the setting elements depends on the flex insert used.

[11] Trimmers

[12] Trimmers

[13] Test LED

### Brightness switching threshold

The brightness-value threshold and operation independent of the brightness are set via the trimmer [11] on the rear of the device [A].

- The brightness-value threshold determines the luminosity from which the light switches on at the detection of movement.
- If the surrounding light is brighter than the set brightness-value threshold, the light does not switch on at the detection of movement.

### Switch off delay

The switch-off takes place after the set switch-off delay. The switch-off delay is set via the trimmer [12] on the rear of the device [B].

- The switch-off delay starts again at each detection of movement.

### Short-time operation

In this operating mode short-time pulses are sent for the duration of detection (1 second ON / 9 seconds OFF). It is set via the trimmer [12] on the rear of the device [C].

- The short-time pulse serves for activating staircase light timer switches or door bells, for example.
- The subsequent behaviour depends on the activated device.

### Activation test

To activate the activation test, set the trimmer [11] on setting “Test” [D].

- Detected movements are signaled in the activation test via the LED [13] (behind the lens). Also the lamp connected on the flex insert is briefly switched on.
- Deactivate the activation test again after the test is completed. This is done by resetting the trimmer [11] to the desired brightness-value threshold.

### Extension unit operation via push-button

The light can be switched at any time via an extension unit push button.


- The switch-off takes place only after the detection range has been exited and the set switch-off delay has expired.
- Additional information on the operation of the extension unit is available in the product manual. (see the QR code in this manual).

### Service

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Tel.: +49 2351 956-1600;

[www.BUSCH-JAEGER.com](http://www.BUSCH-JAEGER.com)

### Documents / Resources

	<p><a href="#">BUSH 180 Flex Basic Sensor</a> [pdf] Instruction Manual 180 Flex Basic Sensor, Basic Sensor, 180 Flex Sensor, Sensor, 180 Flex</p>
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### References

-  [Busch-Jaeger - Elektro- und Installationstechnik](#)

