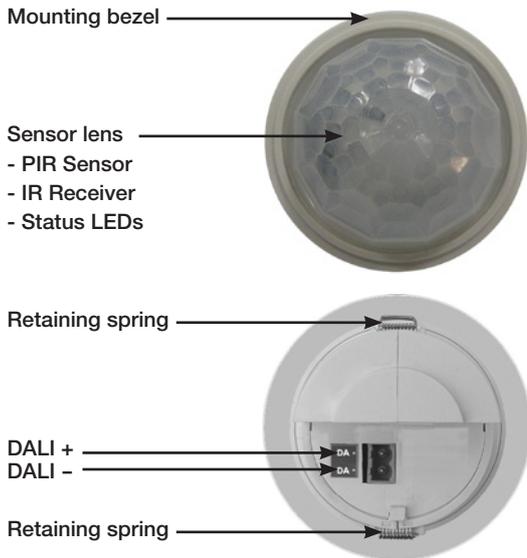


High-Bay PIR Presence / Absence Detector (317)

The 317 High-Bay PIR Presence / Absence Detector, in conjunction with a Helvar lighting control system, provides automatic control of lighting loads in buildings and interior spaces with high ceilings. The 317 is typically installed in warehouses and factories, and is used in other applications where mounting heights are too high for standard sensors.

As with all the other Helvar "system" sensors, the 317 is fully compatible with Helvar's lighting systems and configuration software, Designer™ and Digidim Toolbox™: once connected to a Helvar DALI network and lighting control system, the software automatically detects the unit which can then be programmed with the required functions.

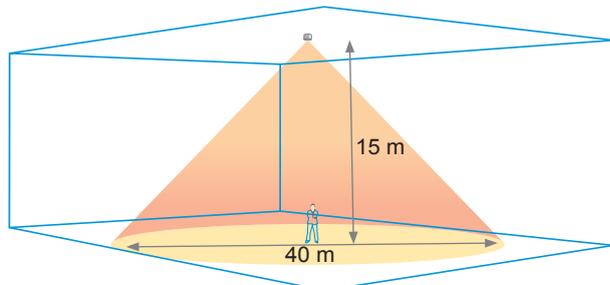
Features and Connections



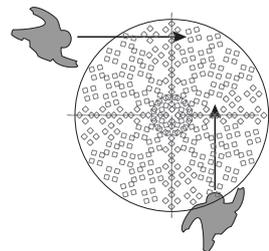
DALI connection

The DALI connection is made via DA+ and DA- terminals. The device is not polarity-sensitive.

Detection area

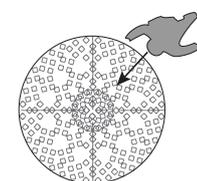


Walk across



Height	Range diameter
15 m	40 m
10 m	26 m
6 m	16 m
3 m	9 m

Walk towards



Height	Range diameter
15 m	30 m
10 m	20 m
6 m	12 m
3 m	8 m

PIR sensor

Detects movement within the detection range allowing load control in response to changes in room occupancy.

IR Receiver

Receives control and programming commands from a 307 IR (infrared) handset (available separately).

Status LED

The red LED flashes to indicate the following:

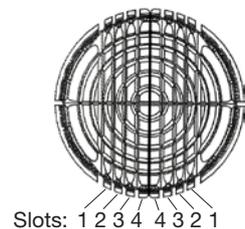
Walk Test LED active	when movement is detected
Valid setting received	
Identify Active	

= Red LED

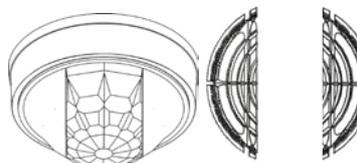
Detection area masking

Two adaptable clip-on shielding masks are supplied with the 317. Each can cover half of the sensor lens.

Lateral or radial strips can be cut out of the masks to customise the detection area.

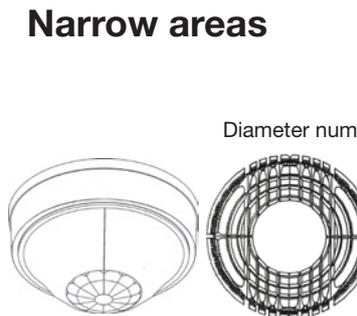


Aisles / corridors



Slot number	Masking shield approx. % coverage
1	45%
2	30%
3	20%
4	10%

Narrow areas



Diameter number: 1 2 3 4 5 5 4 3 2 1

Diameter number	Masking shield approx. % coverage
1	90%
2	65%
3	45%
4	35%
5	20%

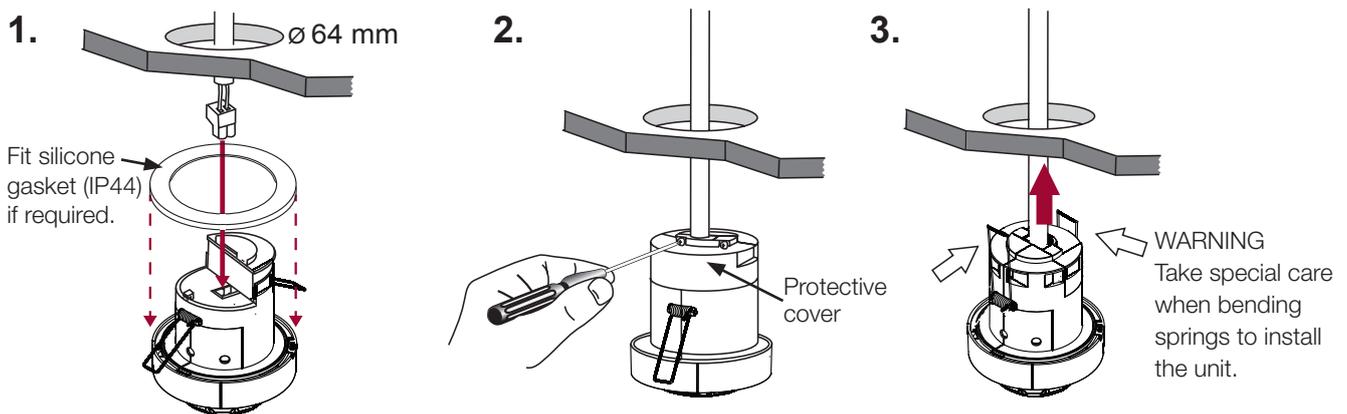
Installation

1. Install the unit: refer to the Connection and Fixing diagram below.
2. Connect the DALI connectors to the socket at the rear of the sensor.
3. Power the unit up.
4. If the load comes on, by default it will take 20 minutes (of no movement detected) for the load to switch off.

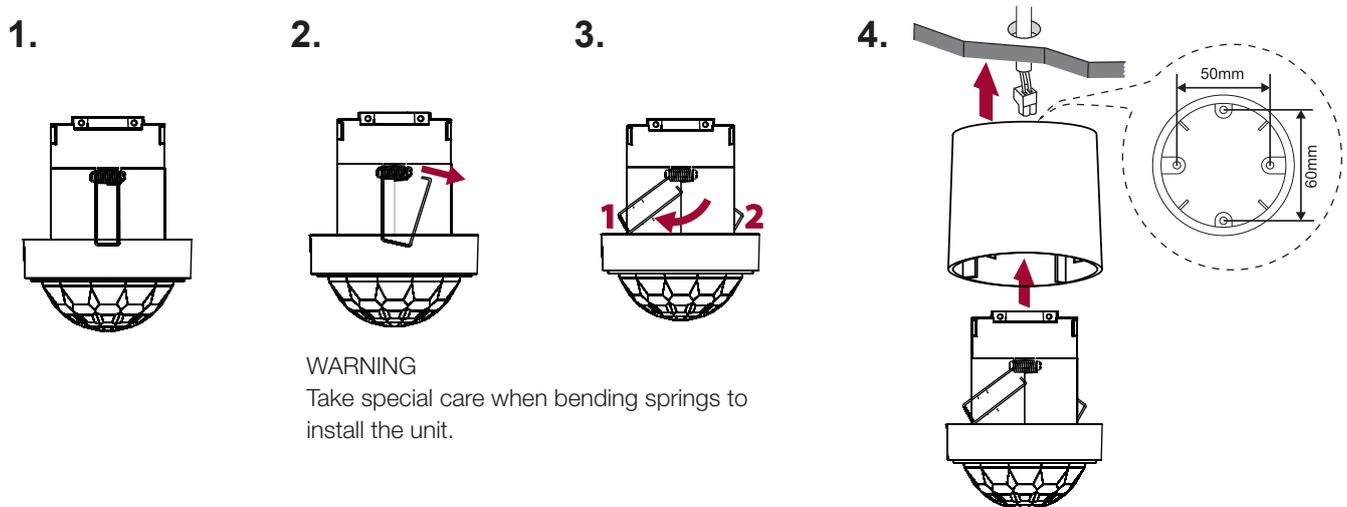
Installation notes

Position the sensor so that the occupants of the room are normally inside the detection zone.
 Do not install the sensor within 1 m of any lighting, forced air heating, or ventilation equipment.
 Do not fix the sensor to an unstable or vibrating surface.
 Install the unit as far away as possible from the surface of metal objects.
 The detection pattern illustrated is based on a mounting height of 2.8 m.
 A lower mounting height will decrease the overall size of the detection zone.

Connection and Fixing: Flush fixing



Connection and Fixing: Surface mounting



Remote Control

You can use the Helvar 303 IR Remote Control to send signals to the 317 detector to:

- recall lighting scenes 1 - 4
- adjust light levels
- store current level
- install preset levels for scenes 1 - 4



Helvar 303 IR Remote Control

See the 303 Remote User Manual (Helvar Document D004744) for full details.

Other Functions

Sensitivity

Adjust the sensitivity using *Designer*, or *DIGIDIM Toolbox* (Helvar's lighting system design and control software).

Note: On maximum sensitivity, the detector unit is **extremely sensitive** to movement and may detect through glass, thin walls or partitions. If this causes a problem reduce its sensitivity.

Adjusting On, Exit and Transition timeouts

The default timeouts for On, Exit and Transition can be altered using *Designer*, or *DIGIDIM Toolbox* (Helvar's lighting system design and control software).

Check connection to DALI network

To check the sensor is correctly connected to the DALI network use the *Identify* function in Helvar's lighting system design and control software, *Designer*, or *DIGIDIM Toolbox*.

Using Designer and Toolbox software

When using *Designer* software, connect the PC to the lighting network via a Helvar Router.

When using *Toolbox* software, connect the PC to the lighting network via a Helvar serial or USB interface.

For further information on using *Designer* and *Toolbox*, see the *System Software* section of www.helvar.com.

Technical Data

Connections

DALI: Removable connector block
Wire size: 0.5 mm² - 1.5 mm²
Solid or stranded

Cable rating: All cables must be mains rated

Power

DALI Supply Input: 13 V to 22.5 V
DALI Consumption: 20 mA

Sensors

Presence detector: PIR: Passive infra-red presence detector

Infra-red receiver: For remote control commands

Remote Control Functions

Infrared remote control: Sensitivity adjustment;
Reset default sensitivity settings

Mechanical Data

Mounting hole diameter: 64 mm

Bezel diameter: 88 mm

Recommended clearance depth: 80 mm (without protective cover);
100 mm (with protective cover)
(incl. 50 mm for cabling)

Material (casing): Flame retardant ABS and PC/ABS

Finish / Colour: Matt / White

IP rating: IP 40 without gasket
IP 44 with gasket

Weight: 120 g

Gasket: Silicone ingress protection gasket
(not compatible with surface mount box SBB-A)

Masks: 2 adaptable masks included, each covering half of the sensor lens.

Operating Conditions

Ambient Temperature: 10°C to 35°C

Relative Humidity: Max 90%, non-condensing

Storage Temperature: -10°C to 70°C

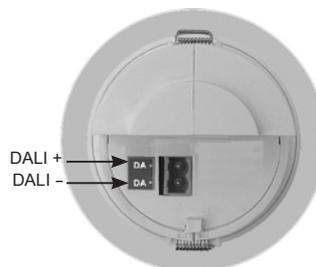
Conformity and Standards

EMC: Immunity: EN 61000-6-1
Emissions: EN 61000-6-3

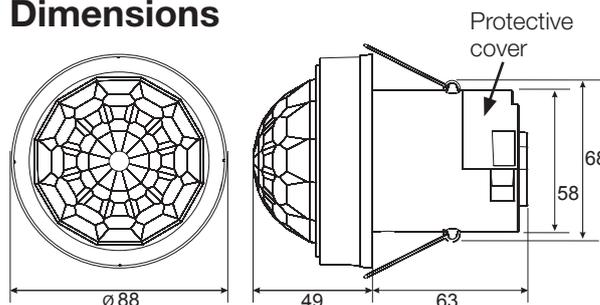
Safety: EN 60730-1

Environment: Complies with WEEE and RoHS directives

Connections



Dimensions



Installation: Surface back box SBB-A

Note: order the SBB-A surface mount box separately.

