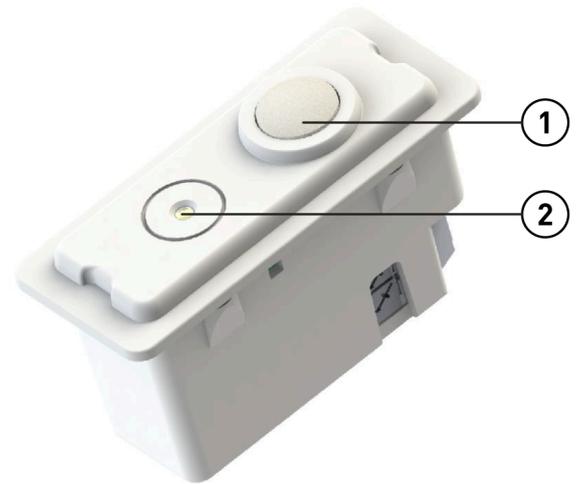# 324D2 Multisensor DALI-2 R44

The 324D2 Multisensor is a luminaire-based DALI-2 sensor that combines a PIR sensor for movement detections and a light sensor for constant light output. This sensor complies to the DALI-2 parts 303 and 304 and follows the Zhaga Book 20 mechanical dimensions for a rectangular sensor which suits to a 44.2 mm x 17.2 mm slot on a luminaire

This sensor can be used with a Helvar DALI-2 multi-master lighting control solution, such as the Helvar 950 Router.
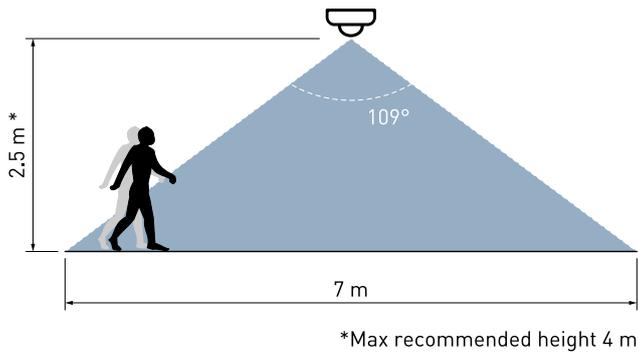
Key Features

- Small luminaire based DALI-2 multisensor
- Fits to a standard Zhaga Book 20 based rectangular 44.2 x17.2 mm (+/- 0.1 mm tolerance) luminaire slot
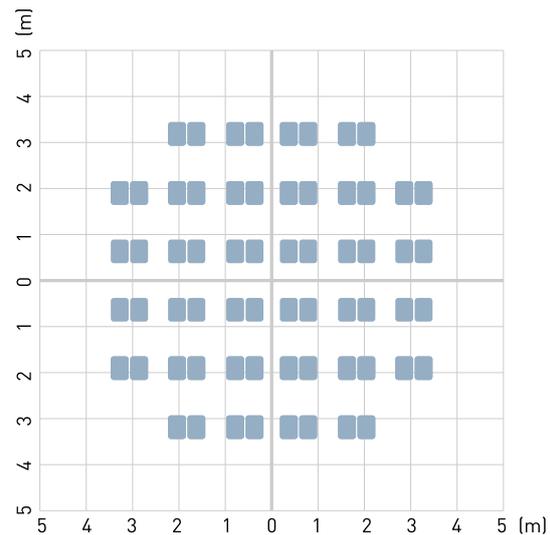- 10 mA DALI current consumption
- DALI-2 certified input device

1. PIR sensor
2. Light sensor

Sensor Detection Coverage

Presence detection - Passive infrared (PIR)

109°

2.5 m *
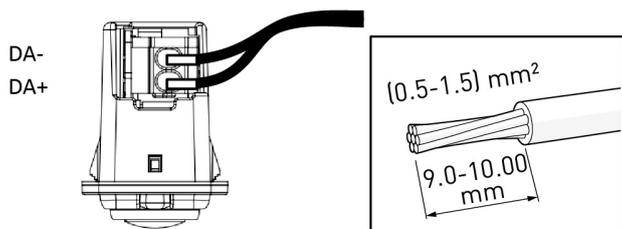
7 m

*Max recommended height 4 m

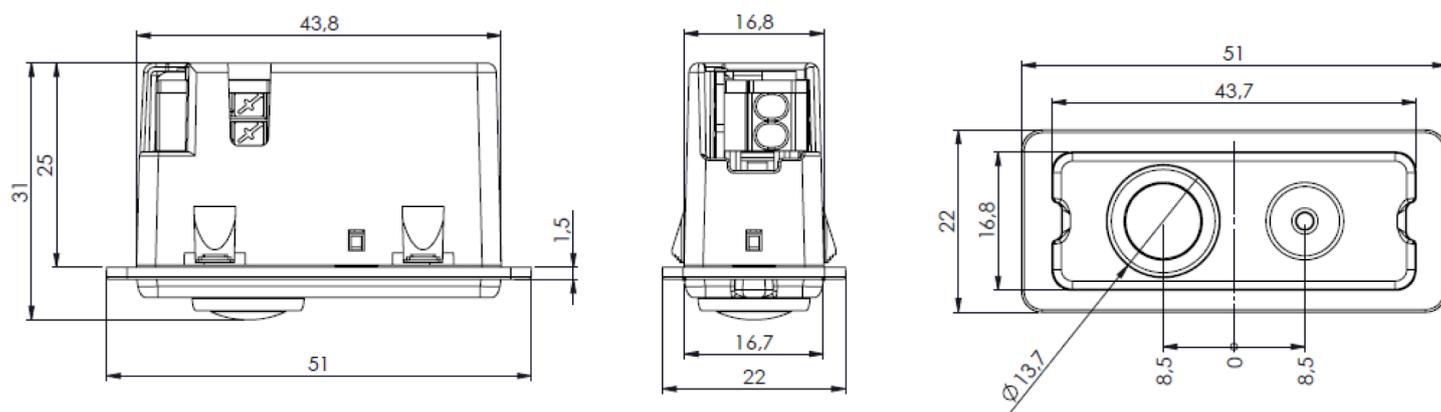### Detection pattern at floor level for 2.5 m mounting height

Detection range and sensitivity depends on the speed and size of the moving object as well as its temperature difference to the surroundings. Moving directionally towards the sensor will give worse detection than crossing the detection area on an angle.
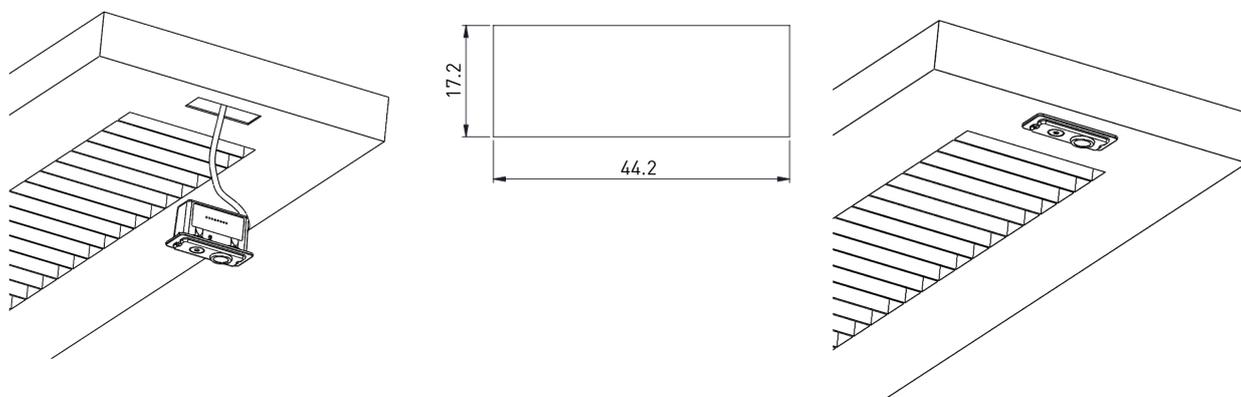
Connections

DA-
DA+

(0.5-1.5) mm²

9.0-10.00 mm

Dimensions (mm)

43,8

31 25

1,5

51

16,8

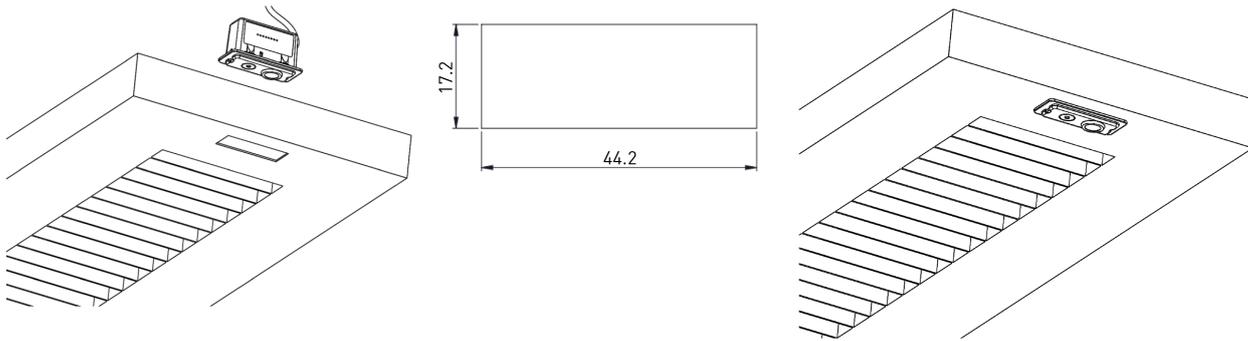16,7

22

51

43,7

22 16,8

⌀13,7

8,5 0 8,5

Mounting

324 Multisensor can be mounted to a luminaire following the Zhaga Book 20 rectangular 44.2 mm x17.2 mm (+/- 0.1 mm) sized luminaire slot or using the batten mountable holder accessory in the following ways.

1. Rectangular hole for mounting from outside the luminaire inwards (recommended)

17.2

44.2

Carefully push the unit into the cutout until it 'clicks' into place and sits flush with the luminaire casing. Supported luminaire frame thickness in the range $0.4 \leq d \leq 1.5$ mm.

324D2 Multisensor DALI-2 R44: Datasheet
Data is subject to change without notice.

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2. Rectangular hole for mounting from inside the luminaire outwards
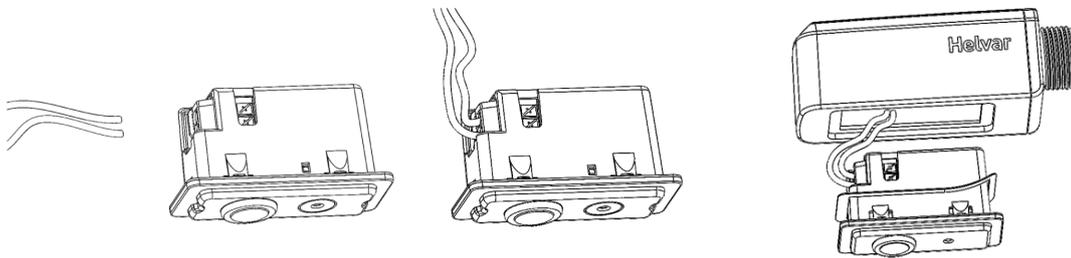

17.2

44.2

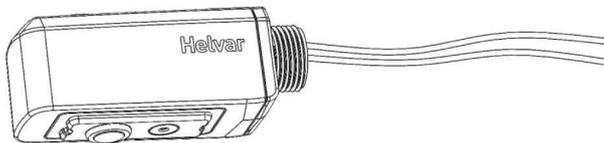Ensure the face of the unit sits level with the luminaire casing and secure the unit in place.

⚠ Note: For IP65 units. Ensure the rating is met when the sensor is mounted from inside the luminaire. The sensor has no seal on the outside surface.

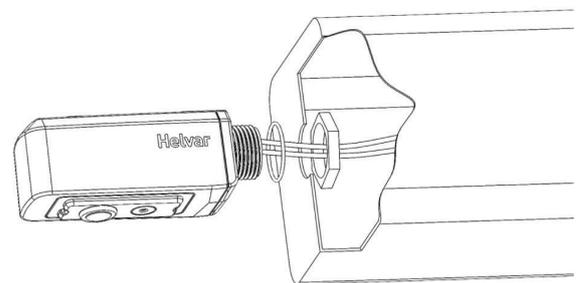## 3. 5695G - R44 Sensor Holder Batten Mount accessory (sold separately)

a) Connect DALI wires.

b) Remove the tape liner and feed the wires through the holder.

c) Push the unit into the holder.

d) Feed the wires through the hole in the luminaire, connect them and fasten the holder to the luminaire using the O-ring and a M20 nut.

Technical Data

Connections

DALI:	Push-fit terminals for the DALI wires.
Wire section:	0.5 mm² – 1.5 mm² solid or stranded
Cable rating:	All cables must be mains rated.

Electrical data

DALI supply input:	12.0 V – 22.5 V
DALI consumption:	10 mA Max

Movement detection sensor

Technology:	Passive infrared (PIR) detects moving temperature differences
Detection coverage area:	38 m² @ 2.5 m mounting height achieved with: - 8 C° temperature difference to target - 1.0 m/s movement speed - 700 x 250 mm object size
Max. recommended mounting height:	4 m

Light sensor

Technology:	Closed loop reflected light
Illuminance:	5 lx to 5000 lx
Max. recommended mounting height:	3 m

Operating and storage conditions

Operating temperature:	0 °C to +50 °C Note: The temperature difference between the detection target and the background must be at least 4 °C.
Relative humidity:	Max. 85 %, noncondensing
Storage temperature:	-20 °C to +70 °C

Mechanical data

Dimensions:	51 mm x 22 mm x 31 mm
Material (casing):	Fire-retardant PC/ABS blend
Colour:	White RAL (9003) Black (RAL 9005) Grey (RAL 7035)
IP rating:	324D2: IP30 324BD2: IP30 324PGD2: IP65 front, IP20 back
Weight:	14 g

Conformity and standards

Conformity:	CE UKCA
EMC emission:	EN 55015
EMC immunity:	EN 61547
Safety:	EN 61347-2-11
Environment:	Complies with WEEE and RoHS directives.
DALI:	IEC 62386, Parts 101, 103, 303 and 304

Order codes

324D2	Multisensor DALI-2 R44 White
324BD2	Multisensor DALI-2 R44 Black
324PGD2	Multisensor DALI-2 R44 IP Grey
5695G	R44 Sensor Holder Batten Mount

324D2 Multisensor DALI-2 R44: Datasheet
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