

### 5635 Multisense R44

The 5635 Multisense R44 is a Helvar Freedom luminaire-based sensor which can be used with wireless control solutions; such as, the Helvar ActiveAhead®. 5635 Multisense combines a PIR sensor for movement detections and a light sensor for daylight harvesting. This sensor follows the Zhaga Book 20 mechanical dimensions for a rectangular sensor which suits to a 44 x 17 mm slot on a luminaire. The front side of the 5635 Multisense IP sensor is IP65 rated allowing it to be used in applications such as parking garages.

A Helvar Freedom connecting cable of a chosen length is required to connect this sensor to a Node. This sensor can be used on the wireless self-learning lighting control solution Helvar ActiveAhead.

If the sensor is connected to non-SELV control gear, the luminaire must be Class I.



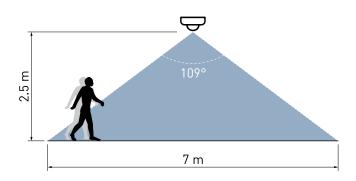
<sup>1.</sup> PIR sensor

## Key features

- Small Helvar Freedom luminaire based multisensor for wireless lighting solutions
- Fits to a standard Zhaga Book 20 based rectangular 44 x 17 mm luminaire slot
- IP65 rated front side
- Select a Helvar Freedom connecting cable length of choice

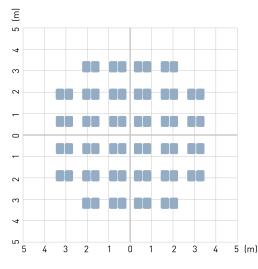
## Detection

#### **Detection Coverage**



Max. recommended mounting height: 4 m

#### **Detection Pattern**



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.

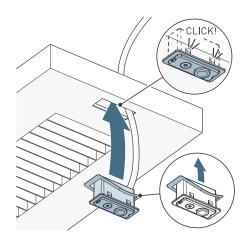
<sup>2.</sup> Light sensor



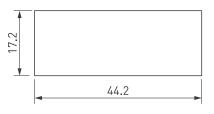
# Mounting

The Multisense R44 can be mounted to a luminaire in three ways:

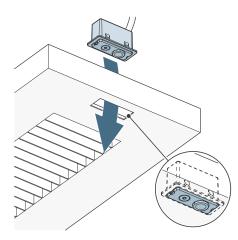
1) When mounting from outside in, carefully push the unit into the cutout until it 'clicks' into place and sits flush with the luminaire casing.



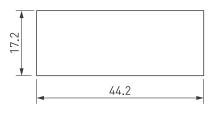
#### Cutout dimensions (mm)



2) When mounting from inside out, ensure the face of the unit sits level with the luminaire casing and secure the unit in place. The supported luminaire frame thickness in the range  $0.4 \le d \le 1.5$  mm.

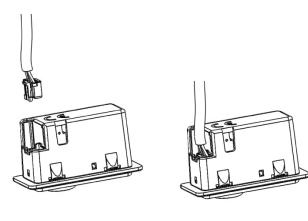


#### Cutout dimensions (mm)

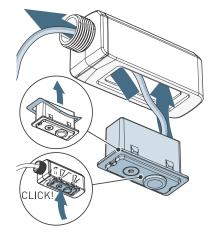


3) Using a 5695G - Holder Batten R44 accessory (sold separately).

1. Connect the Freedom connecting cable.

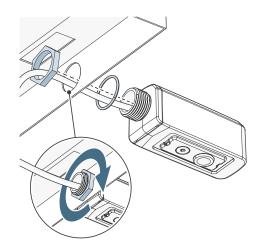


2. Remove the tape liner and feed the cable through the holder. Push the unit into the holder.

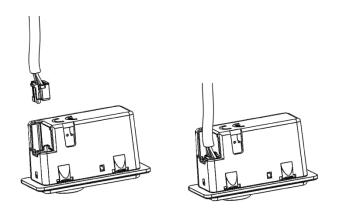


# Helvar

3. Feed the cable through the hole in the luminaire. Connect the cable to the Node. Fasten the holder to the luminaire using the O-ring and a M20 nut.

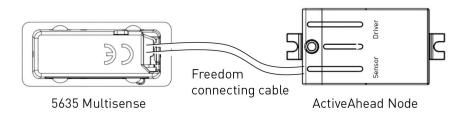


# Connections

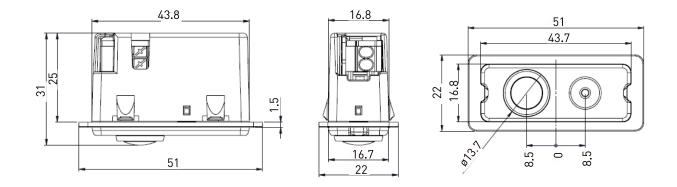


5635 Multisense has a connector for the Freedom connecting cable.

Picture below presents how a 5635 Multisense is connected to an ActiveAhead Node with a Freedom connecting cable.



# Dimensions (mm)





Operating and storage conditions

## **Technical Data**

#### Connections

Freedom:	Connector for the Freedom connecting cable. <b>Note:</b> If the sensor is connec- ted to non-SELV control gear, the luminaire must be Class I. Cable length must not exceed 150 cm.	Ambient temperature:	-20 °C to +50 °C Note: The temperature diffe- rence between the detection target and the background must be at least 4 °C. Note: Frost on lens may block the detection.
Electrical data		Relative humidity:	Max. 85 %, noncondensing
Input voltage: Max. power	3.3 V 36 mW	Storage temperature: Mechanical data	-20 °C to +70 °C
consumption:	30 111		
Movement detectio	n sensor	Dimensions: Material (casing):	51 x 22 x 31 mm Fire-retardant PC/ABS blend
Technology:	Passive infrared (PIR) detects moving temperature differences	Colour:	5635P: White (RAL 9003) 5635PG: Grey (RAL 7035)
Detection coverage area:	38 m² @ 2.5 m mounting height achieved with:	IP rating: Weight:	IP65 front, IP20 back 11 g
	8 C° temperature difference to target	Conformity and standards	
	1.0 m/s movement speed	Conformity:	
Max. recommended mounting height:	700 x 250 mm object size 4 m	EMC emission / immunity:	EN 55015 / EN 61547
		Safety:	EN 61347-2-11
Light sensor		Environment:	Complies with WEEE, RoHS and REACH directives.
Technology:	Closed loop reflected light	Order codes	
Illuminance:	5 lx to 5000 lx		
Max. recommended mounting height:	3 m	5635P	Multisense R44 IP White
mounting neight:		5635PG	Multisense R44 IP Grey
		Accessories (sold separately)	
		5695G	Holder Batten R44 Grey