# 320, 320B, 320P, 320PB PIR Sensor

The PIR Sensor is a compact sensor that provides energy saving functions in a DALI system. It can turn the lights on when its coverage area is occupied, and off when it is un-occupied. The sensor's settings are adjusted using Helvar's Designer or Toolbox software.

Due to its excellent detection performance, the PIR Sensor is especially suitable for applications where small or slow movements take place for extended periods of time, such as offices or classrooms. Since its detection sensitivity is less dependent on movement direction than that of most PIR sensors, fewer units are required to reliably cover a target area.

The unit can be mounted into a ceiling void or onto a solid surface using Helvar's SBB-C (white) or SBB-CB (black) mounting box (sold separately).
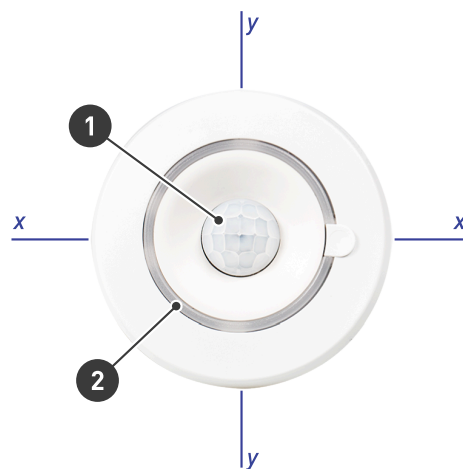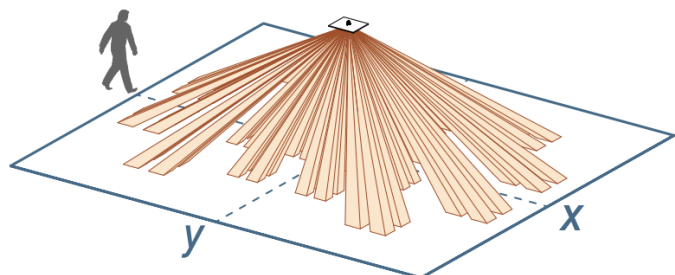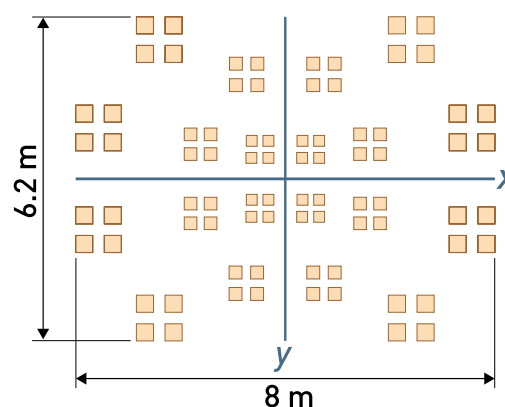

1. PIR sensor
2. Status LED

Key Features

- Excellent detection performance through high sensitivity and multidirectional coverage
- 10 mA DALI current consumption
- Compact and functional design
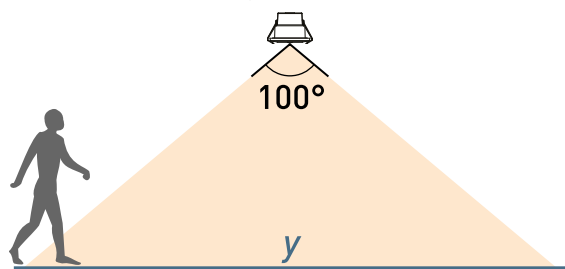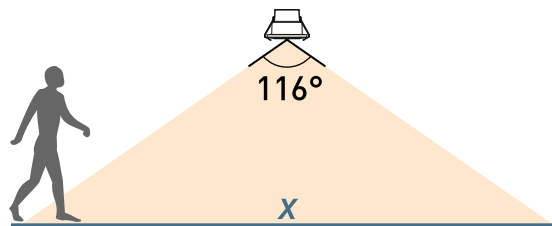- Programmable in Designer

Detection

Detection pattern

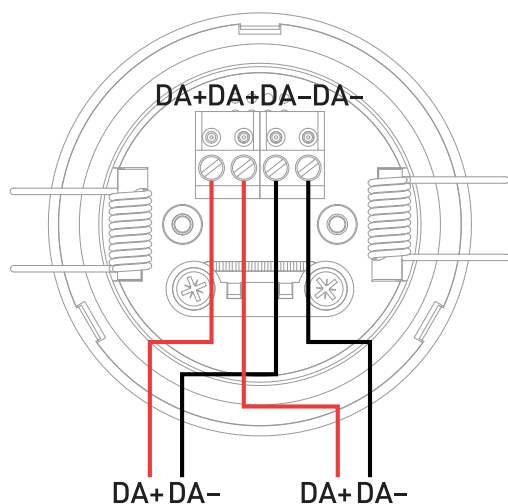Detection Pattern at floor level for 2.5 m mounting height

Y-axis coverage

100°

y

X-axis coverage

116°

x

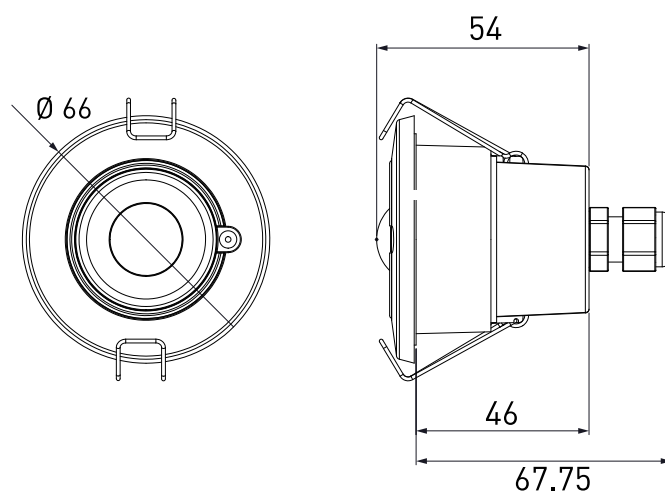## Connections

DA+ DA+ DA− DA−

DA+ DA−   DA+ DA−

Dimensions (mm)

320, 320B

Ø 66

62

54

320P, 320BP

Ø 66

54

46

67.75
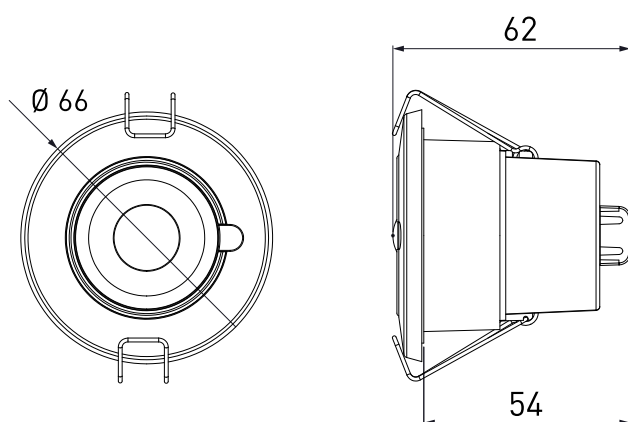
Technical Data

Connections

DALI:	Removable connector block
	Wire section: 0.5–1.5 mm², solid or stranded
Cable rating:	All cables must be mains rated.

Electrical Data

DALI supply input:	12–22.5 V
DALI consumption:	10 mA Max

Sensors

Presence detector:	Passive infrared (PIR)

Operation

Start-up time:	≤1 sec

Operating and storage conditions

Ambient temperature:	0 °C to +50 °C
Relative humidity:	Max. 90 %, noncondensing
Storage temperature:	-10 °C to +70 °C

Mechanical data

Recommended mounting height:	Max. 4 m
Presence detection coverage area:	46 m² @ 2.5 m mounting height
Mounting hole diameter:	51 mm +/- 1 mm

Note: If replacing an older sensor, 52–55 mm mounting hole is acceptable.

Ceiling thickness:	Maximum 25 mm
Bezel diameter:	66 mm
Recommended clearance depth:	10 cm (with cable cover, including 5 cm for cabling)
Dimensions:	320, 320B: 66 x 62 mm
	320P, 320PB: 66 x 67.75 mm
Material (casing):	Flame retardant PC/ABS
Finish/Colour:	320, 320P: Semi-matt / White RAL 9003
	320B, 320PB: Semi-matt / Anthracite grey RAL 7016
Weight:	66.3 g
IP rating:	320, 320B: IP30
	[IP20 cable cover]
	320P, 320PB: IP65

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.

Compatibility

Designer:	5.4 or later
Toolbox:	2.4.2 or later