

329 DALI External Light Sensor

The 329 DALI External Light Sensor, when used in conjunction with a Helvar Lighting Router based controls system, can provide energy savings by adjusting light levels based on the available daylight.

Mount the 329 outdoors to monitor the level of daylight. For instance, bright sunlight will raise the overall light level in the rooms of a building. The sensor will detect this, and the system will reduce the energy levels supplied to the lamps. If the day then becomes overcast, the system will respond to the lower levels of ambient light by increasing the energy provided to the lamps. By profiling the building (measuring the daylight contribution per room), the system can be used to maintain an approximate constant light level, and thereby reduce energy use.

The 329 is for mounting outdoors. The unit head assembly is waterproof when correctly installed and mounted vertically, and can tolerate a wide range of operating temperatures and conditions.

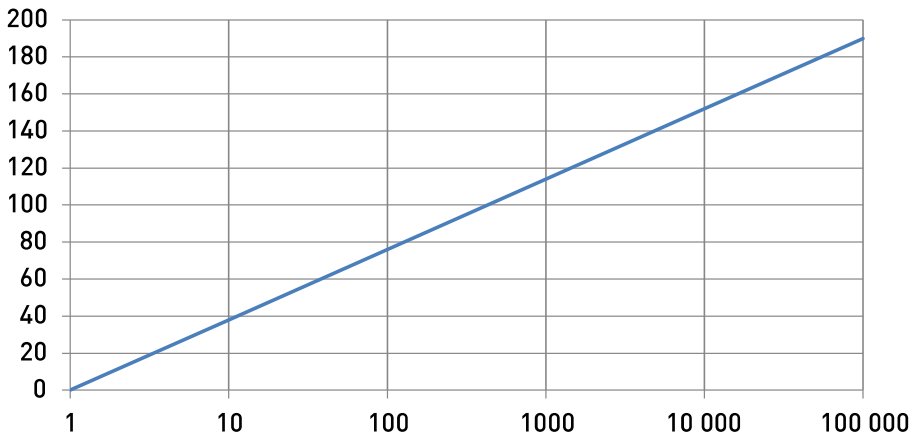


Key Features

- Open loop light control
- Light range of 1 – 100 000 lx
- Simple mounting
- Easy connection to Helvar router system

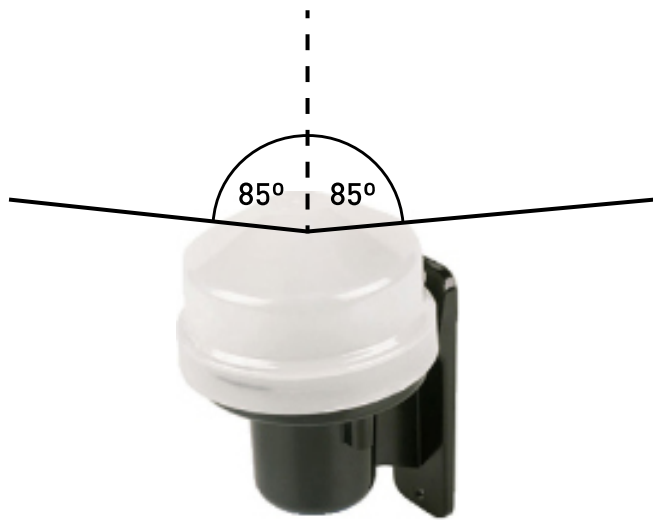
Light Level Output

The external light sensor is calibrated to provide a scaled light level output of 0 to 200 covering the full range of daylight. The sensitivity of the external light sensor is factory-set, and no adjustment is required.



Detection

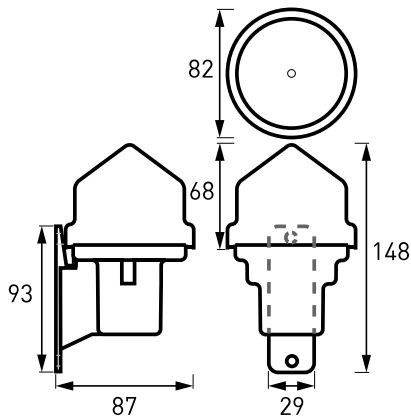
Light Sensing Angle



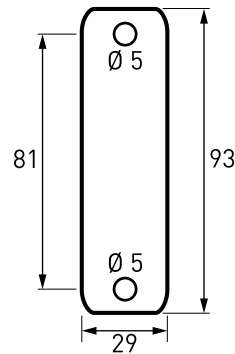
Vertical plane: Unrestricted viewing angle of 170°

Horizontal plane: 360° viewing angle

Dimensions (mm)



Fixing Centre Locations (mm)



Technical Data

Connections

DALI: 2-core solid, flexible or stranded
Wire section: 1.0–2.5 mm², Max. length: 300 m @ 2.5 mm² (part of DALI subnet)

Connector type: Screw terminals:
N: DALI+
L0: DALI-
L1: No connection

Cable rating: All cables must be mains rated.

Electrical Data

DALI supply input: 13–22 V
DALI consumption: 10 mA Max

Sensor

Light sensor: Photodiode matched to human eye response.

Illuminance: 1 lx to 100 000 lx

Operating and storage conditions

Ambient temperature: -35 °C to +70 °C
Relative humidity: Max. 90 %, noncondensing
Storage temperature: -20 °C to +70 °C

Mechanical data

Dimensions: 148 × 82 × 87 mm
Mounting angle: Vertical (clear sensor head at top)
Mounting points: 2 × M4 (No. 8 woodscrew) For fixing centres, see diagram.
Material: Base & mounting bracket: Black ABS
Socket and sensor accessory: Black glass-filled nylon
Sensor cover: Toughened acrylic (UV stable)
Weight: 250 g
IP code: IP65

Conformity and standards

Conformity: 
EMC emission: EN 55015
EMC immunity: EN 61547
Safety: EN 61347-2-11
Environment: Complies with WEEE and RoHS directives.