



Design: Thomas Coulbeaut



#### CHARACTERISTICS - LUMINAIRE

Optical compartment tightness level: IP 66  $^{(*)}$  Electronic compartment tightness level: IP 66  $^{(*)}$  Impact resistance (glass): IK 08  $^{(**)}$  Nominal voltage: 230V - 50Hz Electrical class: I or II  $^{(*)}$  Weight: 12.5kg

#### Materials

Body: Aluminium Protector: Glass

Colour: AKZO light grey 150 sanded

(\*) according to IEC - EN 60598 - (\*\*) according to IEC - EN 62262

#### KEY ADVANTAGES

- Elegant design for places where catenary lighting is the ideal solution
- Maximised savings in energy and maintenance costs
- Right lighting through LensoFlex®2 offering high performance photometry, comfort and safety
- Symmetrical light distribution
- Flexible: rope can be inclined up to + or -15°
- IP 66 tightness level for long lasting performance
- Automatic electrical disconnection upon opening (optional)
- FutureProof: photometric engine and electronic assembly are easy to replace
- Surge protection 10kV
- Designed to incorporate Owlet range of control solutions

# A MODERN IDENTITY FOR EFFICIENT CATENARY LED LIGHTING

The Dexo luminaire uses state-of-the-art LED technology to provide cost-effective lighting for urban catenary applications.

The combination of a pure and elegant design with the high performance LensoFlex®2 LED photometric engine increases safety and comfort while creating a distinctive identity in the city.

Made of robust and recyclable materials - die-cast aluminium and glass - the Dexo is available in three versions:

- 32 LEDs
- 48 LEDs
- 64 LEDs.

It offers efficient lighting with dramatic energy savings compared with luminaires equipped with traditional light sources.

The Dexo can be equipped with its suspension in transversal or axial orientation to suit most applications in urban lighting.

The flexible combinations of LED configurations, driving currents and dimming options make the Dexo a perfect tool for improving safety and comfort while reducing the ecological footprint.

#### OPTIONS

- Warm white (3000K)
- · Automatic electrical disconnector
- Delivery without suspension mounting piece
- Loop through version
- Other photometries available
- Intelligent drivers with CLO and dimming features
- Owlet control solutions
- Any other RAL or AKZO colour



### CREATING WELCOMING PLACES

The Dexo is a LED luminaire dedicated to suspended mounting. It is designed to provide maximised savings in energy and maintenance costs, with performing photometries for different typical site lay-outs such as tramway areas, narrow roads, pedestrian streets and other places where poles can not be installed. By freeing areas where space is very limited, the Dexo ensures that they are more welcoming and accessible. Its design provides a light, compact and secure lighting solution for these particular places.

#### ENERGY SAVINGS OF UP TO 75%

The Dexo luminaire integrates the latest cutting edge technologies. The combination of LEDs, a driver with a constant flux system and dimming makes it possible to achieve energy savings that can reach up to 75% compared with luminaires equipped with traditional light sources.

With this very favourable energy balance, the Dexo luminaire contributes to the effective management of finances and to the responsible use of energy.

#### LENSOFLEX®2

The Dexo luminaire is equipped with second generation LensoFlex®2 photometric engines that have been specifically developed for lighting spaces where the wellbeing and safety of people using the environments are essential.

This system is based upon the addition principle of photometric distribution. Each LED is associated with a specific lens that generates the complete photometric distribution of the luminaire. It is the number of LEDs in combination with the driving current that determines the intensity level of the light distribution.

## TOOL FREE ACCESS

The Dexo provides tool free access to the driver and optical compartment for easy maintenance on-site. Thanks to the snap-in mechanism, the gear-tray is automatically dislodged and disconnected from the LED modules and mains upon opening (only available for class II).

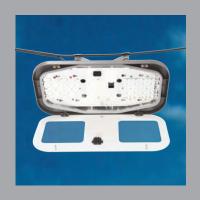
The Dexo is FutureProof. Both the LED unit and the electronic assembly can be replaced to take advantage of any future technological developments.

#### HIGH QUALITY MATERIALS

The body and mounting pieces are composed of corrosion-free high-pressure diecast aluminium protected by a powder-coating paint. The flat protector is made of tempered safety glass (IK o8).

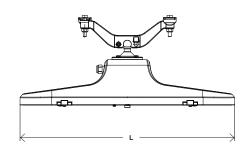


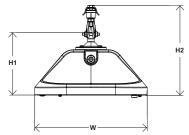






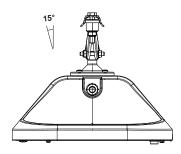






L	672mm			
W	352mm			
H1	196mm			
H <sub>2</sub>	282mm			

# MOUNTING



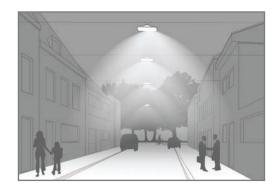
- Standard fixation up to rope-diameter 12mm
- Fixation with external electrical connection is available as an option
- Rope fixing: rotation 90° tilt 15°

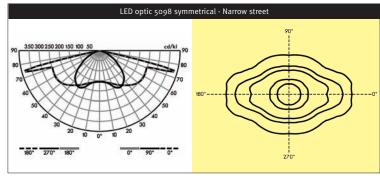
# **PHOTOMETRY**

LENSOFLEX®2					Lifetime residual flux @ t <sub>q</sub> 25°C (**)
Number of LEDs	Neutral white (4000K)	32 LEDs	48 LEDs	64 LEDs	@100.000h
Current: 350mA	Nominal flux (lm)*	4800	7200	9600	90%
	Power consumption (W)	36	55	72	
Current: 500mA	Nominal flux (lm)*	6300	9500	12600	
	Power consumption (W)	53	77	99	

<sup>(\*)</sup> The nominal flux is an indicative LED flux @ t<sub>1</sub> 25°C based on LED manufacturer's data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. Nominal flux depends on the type of LED in use and likely to change in accordance with the continuous and rapid developments in LED technology. To follow the progress of the luminous efficiency of the LEDs used, please visit our website.

# LIGHT DISTRIBUTION





 $<sup>^{(\</sup>star\star)}$  In accordance with IES LM-80 - TM-21.

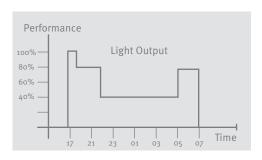
#### SMART LIGHTING

The Dexo luminaire can integrate the Owlet range of control solutions to operate either in stand-alone mode, in an autonomous network or an interoperable network. Our range of solutions encompasses small areas up to complete city networks in order to perfectly suit specific requests and targets in terms of savings.

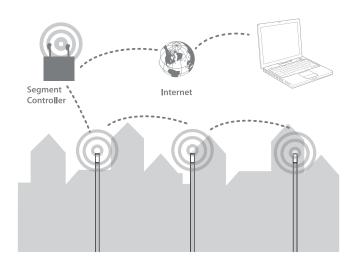


Thanks to dimming features, light-on-demand options and bi-directional communication, the Owlet solutions allow you to save energy, to provide light only when and where it is required and to optimise the operational management of your lighting scheme in terms of costs and services. The integrated Owlet solutions are key to monitor, to control, to meter and to manage a lighting network in the most efficient way.

#### CUSTOM DIMMING PROFILE (STAND-ALONE)

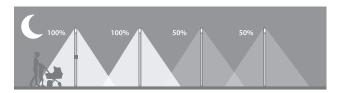


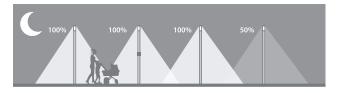
# REMOTE MANAGEMENT SYSTEM (INTEROPERABLE NETWORK)

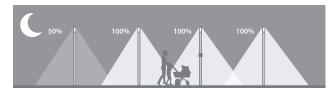


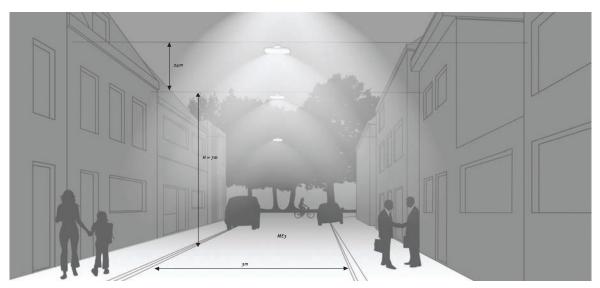
# MOTION DETECTION (AUTONOMOUS NETWORK)











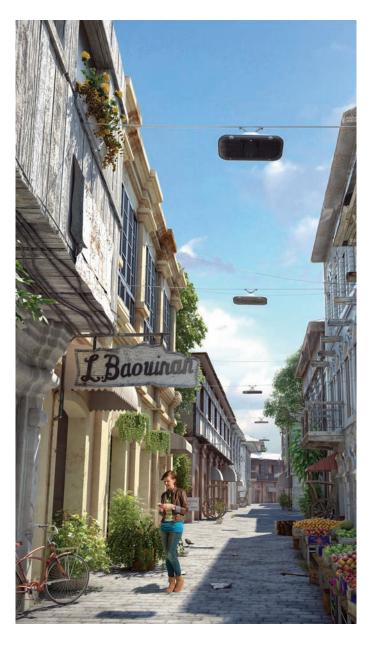
Dexo
LensoFlex®2 32 LEDs @350mA
4000K neutral white
36W
MF = 0.85
ME3 - classified street according to CIE 115
Installation height: 7m
Spacing between luminaires: 24m

By replacing the old catenary luminaires equipped with 2x36W fluorescent lamps, with the Dexo, the power consumption has been reduced by 50%.

Further energy savings can be achieved by adding dimming and other control features.

For 4,000 hours of use per year, for 1km of secondary street, this corresponds to a consumption of less than 17kWh/day and emissions lower than 7.6kg eq  $\rm CO_2$  according to the average European equivalent of 0.46kg eq  $\rm CO_2$ /kWh.



















SOLUTIONS

