

Dexo



Designer : Thomas Coulbeaut



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 performing 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 - Dexo offers efficient lighting with dramatic energy savings compared with luminaires equipped with traditional light sources.



IP 66	IK 08	
		CE



Concept

Dexo is a versatile LED catenary fixture. It can be equipped with its suspension in transversal or axial orientation to suit most applications in urban lighting.

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

Available in 3 different versions (32, 48 or 64 LEDs), this catenary luminaire provides easy access to the driver and optical compartment to facilitate maintenance on-site. Thanks to a snap-in mechanism, the gear-tray is automatically disconnected from the LED modules and mains upon opening (only available for class II as an option).

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



Dexo can be installed using a standard fixation on a rope.



Easy access to the driver and optical compartment to facilitate maintenance.



Replacing both LED modules can be easily done by loosening the screws on-site.



Dexo has symmetrical and asymmetrical light distributions.

Types of application

- URBAN & RESIDENTIAL STREETS
- BRIDGES
- BIKE & PEDESTRIAN PATHS
- RAILWAY STATIONS & METROS
- CAR PARKS
- LARGE AREAS
- SQUARES & PEDESTRIAN AREAS
- ROADS & MOTORWAYS

Key advantages

- Elegant design for catenary lighting solutions
- Maximised savings in energy and maintenance costs
- LensoFlex®2 offering high performance photometry, comfort and safety
- Symmetrical or asymmetrical light distributions
- FutureProof : smart upgradability
- Durable and recyclable materials



LensoFlex®2

LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light distribution.

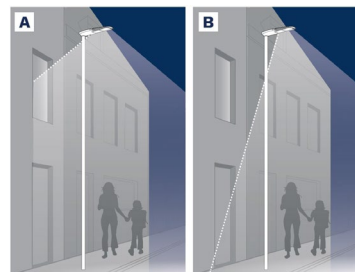
The proven LensoFlex®2 concept includes a glass protector to seal the LEDs and lenses into the luminaire body.



Back Light control

As an option, the LensoFlex®2 modules can be equipped with a Back Light control system.

This additional feature minimises light spill from the back of the luminaire to avoid intrusive light towards buildings.



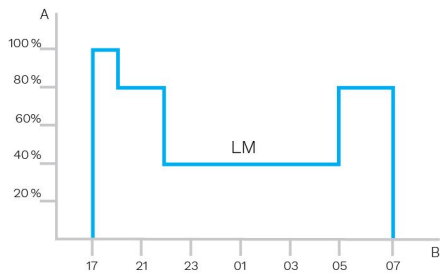
A. Without Back Light control | B. With Back Light control



Custom dimming profile

Intelligent luminaire drivers can be programmed with complex dimming profiles. Up to five combinations of time intervals and light levels are possible. This feature does not require any extra wiring.

The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



A. Performance | B. Time

GENERAL INFORMATION

Recommended installation height	4m to 10m 13' to 33'
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
CE Mark	Yes
ENEC certified	Yes
ROHS compliant	Yes
Testing standard	LM 79-08 (all measurements in ISO17025 accredited laboratory)

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	AKZO grey 150 sanded
Tightness level	IP 66
Impact resistance	IK 08
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)

· IK may be different according to the size/configurations. Please consult us.

OPERATING CONDITIONS

Operating temperature range (Ta)	-30 °C up to +50 °C / -22 °F up to 122 °F with wind effect
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· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	Class I EU, Class II EU
Nominal voltage	220-240V – 50-60Hz
Surge protection options (kV)	10
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-4-5
Control options	Bi-power, Custom dimming profile, Remote management
Associated control system(s)	Owlet Nightshift

OPTICAL INFORMATION

LED colour temperature	3000K (Warm White 730) 4000K (Neutral White 740)
Colour rendering index (CRI)	>70 (Warm White 730) >70 (Neutral White 740)
Upward Light Output Ratio (ULOR)	0%

LIFETIME OF THE LEDS @ TQ 25°C

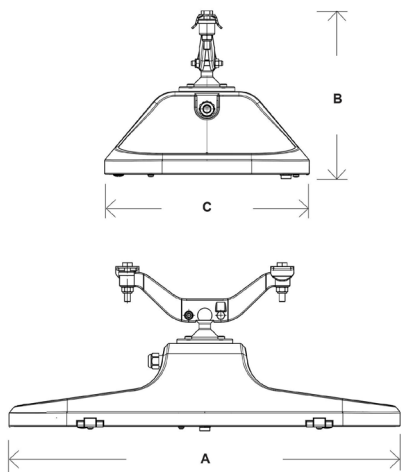
All configurations	100,000h - L90
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DIMENSIONS AND MOUNTING

AxBxC (mm | inch) 672x196x352 | 26.5x7.7x13.9

Weight (kg | lbs) 11.5 | 25.3

Mounting possibilities Catenary





Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Neutral White 740		Power consumption (W)		Luminaire efficacy (lm/W)	
			Min	Max	Min	Max	Min	Max	Up to	Photometry
DEXO	32	350	3800	4600	4000	4800	34.6	34.6	139	
	32	500	5100	6100	5200	6300	49.5	49.5	127	
	48	350	5800	7000	6000	7200	51.5	51.5	140	
	48	500	6900	8400	7200	8700	73	73	119	
	64	350	7700	9300	8000	9600	67.5	67.5	142	
	64	500	10200	12300	10500	12700	96	96	132	

Tolerance on LED flux is ± 7% and on total luminaire power ± 5 %

