Experts in lightability™

DEXO GEN2









Designer : Thomas Coulbeaut



A modern identity for efficient catenary LED lighting

The DEXO GEN2 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® 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 GEN2 offers efficient lighting with dramatic energy savings compared with luminaires equipped with traditional light sources.





























Concept

DEXO GEN2 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.

DEXO GEN2 combines cutting-edge LED technology with versatile light distributions and dimming features to deliver safer, more comfortable public spaces – all while lowering energy costs and reducing your environmental impact.

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 GEN2 is FutureProof, as both the LED unit and the electronic assembly can be replaced to take advantage of any future technological developments.



DEXO GEN2 takes full advantage of the high efficiency offered by the latest LensoFlex® LED technology.



Easy access to the driver and optical

TYPES OF APPLICATION

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

KEY ADVANTAGES

- LensoFlex®4 versatile solutions for highend photometries maximising comfort and safety
- Elegant design for catenary lighting solutions
- Robust and recyclable materials
- Maximised savings in energy and maintenance costs
- FutureProof: easy replacement of the photometric engine and electronic assembly



Its dimming options help optimise energy use throughout the day, reducing costs while maintaining the right lighting levels at all times.



DEXO GEN2 offers a wide choice of light distributions to suit diverse urban lighting needs



LensoFlex®4

LensoFlex®4 maximises the heritage of the LensoFlex® concept with a very compact yet powerful photometric engine based upon the addition principle of photometric distribution. The number of LEDs in combination with the driving current determines the intensity level of the light distribution. With optimised light distributions and very high efficiency, this fourth generation enables the products to be downsized to meet application requirements with an optimised solution in terms of investment.

LensoFlex®4 optics can feature backlight control to prevent intrusive lighting, or a glare limiter for high visual comfort.

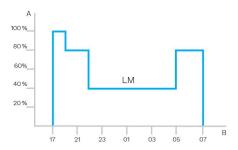




Custom dimming profile

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.



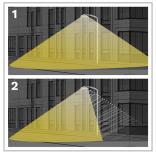
A. Dimming level | B. Time



With the PureNight concept, Schréder offers the ultimate solution for restoring the night sky without switching off cities, while maintaining safety and well-being for people and preserving wildlife. The PureNight concept guarantees that your Schréder lighting solution satisfies environmental laws and requirements. Welldesigned LED lighting has the potential to improve the environment in all respects.



Direct the light only where it is wanted and needed



- 1. Without backlight 2. With backlight
- Schréder is renowned for its expertise in photometry. Our optics direct light only where it is wanted and needed. However, light trespass behind the luminaire might be a key concern when it comes to protecting a sensitive wildlife habitat or avoiding intrusive lighting towards buildings. Our fully integrated backlight solutions easily address this potential risk.

Offer maximum visual comfort to



Because of the lower installation height compared to road lighting, visual comfort is an essential aspect of urban lighting. Schréder designs lenses and accessories to minimise any type of glare (distracting, discomforting, disabling glare and blinding glare). Our design offices harness a range of possibilities to find the best solutions for each project and ensure that we provide a gentle light that delivers the best night-time experience.

Protect wildlife



If not well designed, artificial lighting can badly affect wildlife. Blue light and excessive intensity can have a damaging effect on all types of life. Blue light radiation has the ability to suppress the production of melatonin, the hormone that contributes to the regulation of the circadian rhythm. It can also alter the behavioural patterns of animals including bats and moths, as it can change their movements towards or away from light sources. Schréder

favours warm white LEDs with minimal blue light, combined with advanced control systems including sensors. This enables permanent adaptation of the lighting to the real needs of the moment, minimising disturbance to the fauna

Get the starry sky back



The Upward Light Ratio (ULR) and Upward Light Output Ratio (ULOR), the latter taking the flux from the luminaire into account, provide information on the percentage of light emitted towards the sky. This Schréder range of luminaires minimises or eliminates (depending on the options) upward-directed light flux. It complies with strict international and local requirements.

DEXO GEN2 | CHARACTERISTICS

Schréder

FutureProof	Easy replacement of the photometric engine and electronic assembly					
CE mark	Yes					
ENEC certified	Yes					
ENEC+ certified	Yes					
UKCA marking	Yes					
HOUSING AND FINISH						
Housing	Aluminium					
Optic	PMMA					
Protector	Tempered glass					
Housing finish	Polyester powder coating					
Standard colour(s)	AKZO grey 900 sanded					
Tightness level	IP 66					
Impact resistance	IK 07					
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)					
Access for maintenance	By loosening screws on the bottom cover					
OPERATING CONDITIO	NS					
Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°F with wind effect					

 Depending of 	on the lu	minaire	configuration.	For more	details, p	lease
contact us.						

ELECTRICAL INFORMATION								
Electrical class	Class EU, Class EU							
Nominal voltage	220-240V - 50-60Hz							
Surge protection options (kV)	10							
Electromagnetic compatibility (EMC)	EN 55015 / EN 61000-3-2 / EN 61000-3-3 / EN 61547							
Control protocol(s)	1-10V, DALI							
Control options	AmpDim, Bi-power, Custom dimming profile							
OPTICAL INFORMATION								
LED colour temperature	2200K (Warm White WW 722) 2700K (Warm White WW 727) 3000K (Warm White WW 730) 3000K (Warm White WW 830) 4000K (Neutral White NW 740)							
Colour rendering index (CRI)	>70 (Warm White WW 722) >70 (Warm White WW 727) >70 (Warm White WW 730) >80 (Warm White WW 830) >70 (Neutral White NW 740)							
ULOR	0%							
ULR	0%							

 $[\]cdot$ ULOR may be different according to the configuration. Please consult us.

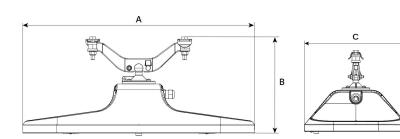
LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L95	
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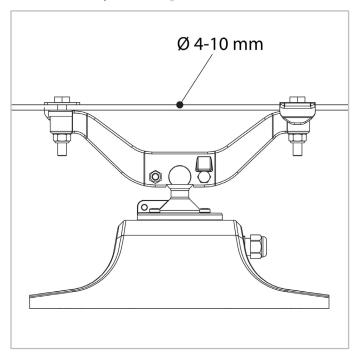
 $[\]cdot$ Lifetime may be different according to the size/configurations. Please consult us.

 $[\]cdot$ ULR may be different according to the configuration. Please consult us.

DIMENSIONS AND MOUNTING								
AxBxC (mm inch)	672x288x352 26.5x11.3x13.9							
Weight (kg lbs)	12.5 27.5							
Aerodynamic resistance (CxS)	0.13							
Mounting possibilities	Catenary							



DEXO GEN2 | Catenary fixation





	Luminaire output flux (lm)										Power		Luminaire efficacy
		White 722		White 727		White 730		White 830		l White 740	consumption (W)		(lm/W)
Number of LEDs	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to
20	700	4800	800	5300	900	5700	800	5300	900	6200	14	45	150
30	1100	7200	1200	8000	1300	8500	1200	8000	1400	9200	20	66	155
40	1500	9700	1700	10600	1800	11400	1700	10600	1900	12300	25	87	159
50	3800	12300	4200	13500	4500	14400	4200	13500	4800	15600	31	107	163

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



