

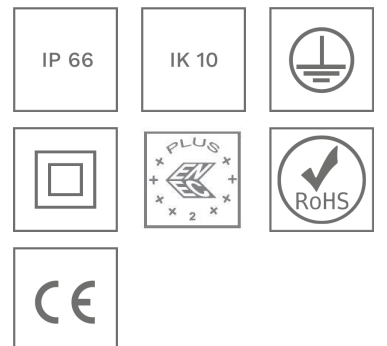
Zylindo



A classic design integrating the latest technology

With two timeless aesthetic designs, Zylindo blends into all kinds of urban environments. Zylindo has been designed to provide an efficient and sustainable lighting solution for various urban applications. With a high tightness level and a very high degree of impact resistance, this luminaire is built to withstand harsh environmental conditions and vandalism to perform over time. The elegant cylinder shape with a 360° clear protector hosts the latest evolution of the proven LensoFlex®2 photometric engine, providing symmetrical and asymmetrical light distributions.

Zylindo is available as a smooth cylinder or with a large canopy. Both versions are delivered pre-wired. They offer tool free access to the optical unit and gear compartment to facilitate maintenance operations.



Concept

Zylindo is a timeless decorative post-top luminaire designed for mounting at a height of between 3 and 6 metres. The luminaire is composed of three main parts made of high-pressure die cast aluminium; a lower section integrating the gear compartment and the fixation for a Ø60mm or Ø76mm spigot, an upper body part and a top cap.

The large canopy version incorporates a round shade made of aluminium with white paint on the lower half as a flux enhancer.

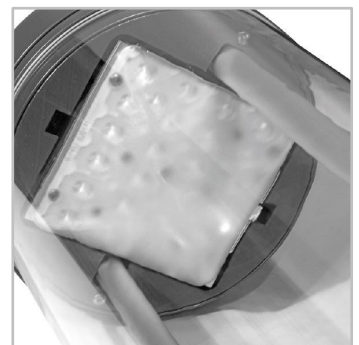
The 360° protector is made of UV-stabilised polycarbonate. It hosts the photometric engine and two oval rods in extruded aluminium connecting the bottom to the top of the luminaire. The power cable for the LEDs is hidden inside these hollow rods.

Zylindo offers tool free access for maintenance. The photometric engine fixed on an extruded aluminium heatsink can be accessed by pinching two stainless steel spring locks. A reusable extruded gasket ensures that the luminaire can be closed in a safe and easy manner after maintenance and guarantees the high tightness level. Multipole disconnectors enable the gear tray to be easily removed, without any tools, after opening the top cap and pulling out the photometric engine.

Zylindo combines the energy efficiency of LED technology with the photometric performance of the LensoFlex®2 concept developed by Schröder. To reduce the subjective perception of glare, an internal diffuser is available as an option.



Zylindo offers tool free access for maintenance.



As an option, an additional diffuser can be integrated for superior visual comfort.



Zylindo is delivered pre-wired for mounting on a Ø60mm (with an accessory) or Ø76mm spigot.



The electronics can be serviced without using any tools thanks to a removable gear tray.

Types of application

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

Key advantages

- Elegant and robust design with 2 aesthetic versions
- State-of-the-art LED technology for low energy consumption
- LensoFlex®2 providing asymmetrical and symmetrical light distributions
- Optional internal diffuser for high visual comfort
- Designed for mounting on both Ø60mm (with an accessory) and Ø76mm spigots
- Supplied pre-cabled to facilitate its installation
- IoT ready: optional 7-pin NEMA socket



LensoFlex®2

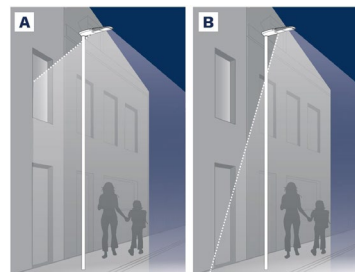
LensoFlex®2 is based upon the addition principle of photometric distribution. Each LED is associated with a specific PMMA lens that generates the complete photometric distribution of the luminaire. The number of LEDs in combination with the driving current determines the intensity level of the light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



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.



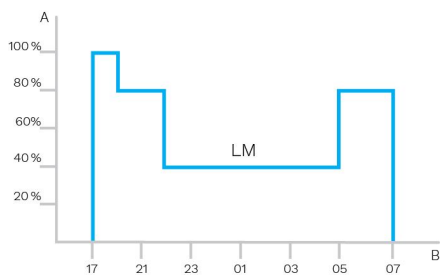
A. Without Back Light control | B. With Back Light control



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.

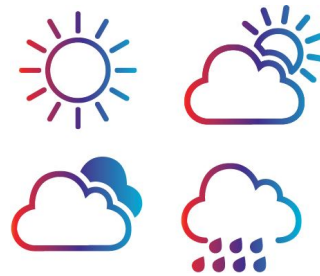


A. Performance | B. Time



Daylight sensor / photocell

Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.



PIR sensor: motion detection

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area.

Each luminaire level can be configured individually with several parameters such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.



Owlet IoT

Owlet IoT remotely controls luminaires in a lighting network, creating opportunities for improved efficiency, accurate real-time data and energy savings of up to 85%.



ALL-IN-ONE

The LUCO P7 CM controller includes the most advanced features for optimised asset management. It also provides an integrated photocell and operates with an astronomical clock for seasonal dimming profile adaptations.

EASY TO DEPLOY

Thanks to wireless communication, no cabling is needed. The network is not subject to physical constraints or limitations. From a single control unit to an unlimited network, you can expand your lighting scheme at any time. With real-time geolocation and automatic detection of luminaire features, commissioning is quick and easy.

USER-FRIENDLY

Once a controller is installed on a luminaire, the luminaire automatically appears with its GPS coordinates on a web-based map.

An easy-to-use dashboard enables each user to organise and customise screens, statistics and reports. Users can gain relevant, real-time insights.

The Owlet IoT web application can be accessed at all times from anywhere in the world with a device connected to the Internet. The application adapts to the device to offer an intuitive and user-friendly experience.

Real-time notifications can be pre-programmed to monitor the most important elements of the lighting scheme.



SECURE

The Owlet IoT system uses a local wireless mesh communication networks to control the on-site luminaires combined with a remote control system utilising the cloud to ensure smooth data transfers to and from the central management system.

The system uses encrypted IP V6 communication to protect data transmission in both directions. Using a secure APN, Owlet IoT ensures a high level of protection.

In the exceptional case of a communication failure, the built-in astronomical clock and photocell will take over to switch the luminaires on and off, thus avoiding a complete blackout at night.

EFFICIENT

Thanks to sensors and/or pre-programmed settings, lighting scenarios can be easily adapted to cope with live events, providing the right lighting levels at the right time and in the right place.

The integrated utility grade meter offers the highest accuracy available on the market today, enabling decisions based on real figures.

Accurate real-time feedback and clear reporting ensures that the network operates efficiently and maintenance is optimised.

When LED luminaires are switched on, the inrush current can create problems for the electricity grid. Owlet IoT incorporates an algorithm to preserve the grid at all times.

OPEN

The LUCO P7 CM controller can be plugged onto the standard 7 pin NEMA socket and operates through either a DALI or 1-10V interface to control the luminaire.

Owlet IoT is based on the IPv6 protocol. This method for addressing devices can generate an almost unlimited number of unique combinations to connect non-traditional components to the Internet or computer network.

Through open APIs, Owlet IoT can be integrated into existing or future global management systems.

The Schröder Bluetooth solution consists of 3 main components:

- A Bluetooth dongle plugged into the modular driver of the luminaire (BLE transceiver)
- A Bluetooth antenna fitted on the luminaire
- A smartphone application called Sirius BLE



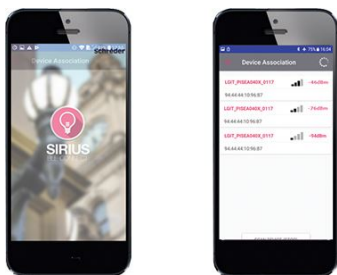
Easy to use

The Schröder Bluetooth solution is ideal for the on-site configuration of individual outdoor luminaires using Bluetooth. From the ground, the user is able to switch the luminaire on or off, adapt the dimming curve, read diagnostic data and much more. A user-friendly application called Sirius BLE provides an easy and secure access to the control and configuration functions.

Whether you are managing a lighting network in an urban or a residential area, this solution will make it easy to control your outdoor luminaires while simply standing by the pole.

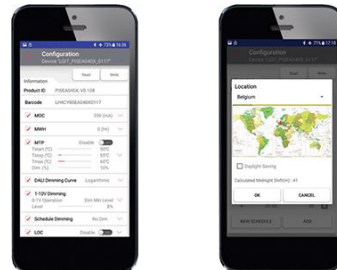
Quick and easy pairing

Get the Sirius App from Schröder. Go to the menu. Press the “SCAN DEVICE (START)” button, to search for the surrounding BLE modules. They will be displayed with a bar graphic (signal intensity) to indicate the closest and the most distant one you can reach. Click on the device you want to connect to and enter your personal access key to control the luminaire.



Defining the settings

Once you are connected to a luminaire, you can set various parameters such as the maximum output current, minimum dimming level and custom dimming profile.



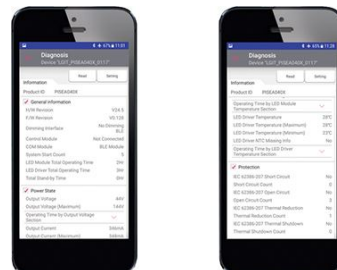
Manual dimming control

The App enables you to do a manual override to adapt the dimming levels instantly. Simply tap on the “Dimming” button in the main menu and adjust the dimming using the wheel and button. Predefined dimming levels can be applied immediately. The corresponding value is displayed on the wheel. This enables you to test the ON / OFF and dimming features of the luminaire paired to the smartphone.



On-site diagnostic

When a luminaire is paired, you can access various diagnostic information: total number of power up events, operation time of LED module and driver, total energy consumption of LED driver... etc. You can also track operating events (short circuits, thermal shutdowns...). The diagnostic values may be the current state or values accumulated to date.



GENERAL INFORMATION

Recommended installation height	3m to 6m 10' to 20'
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	Polycarbonate
Housing finish	Polyester powder coating
Standard colour(s)	DB 703 dark grey
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	Toolless access to gear compartment

OPERATING CONDITIONS

Operating temperature range (Ta)	-30 °C up to +55 °C / -22 ° F up to 131 °F
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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
Power factor (at full load)	0.9
Surge protection options (kV)	6 8 10
Electromagnetic compatibility (EMC)	EN 61547 / EN 61000-4-2, -3, -4, -5, -6, -8, -11
Control protocol(s)	Bluetooth, DALI
Control options	Bi-power, Custom dimming profile, Photocell, Remote management
Socket	Low voltage socket (optional) NEMA 7-pin (optional)
Associated control system(s)	Sirius BLE Owlet IoT
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2700K (Warm White 727) 3000K (Warm White 730) 4000K (Neutral White 740)
Colour rendering index (CRI)	>70 (Warm White 727) >70 (Warm White 730) >70 (Neutral White 740)
Upward Light Output Ratio (ULOR)	<3%

· ULOR may be different according to the configuration. Please consult us.

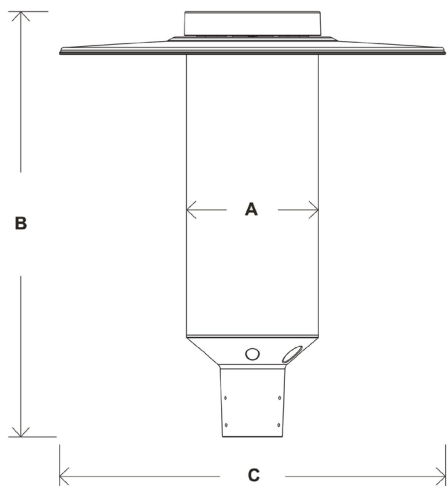
LIFETIME OF THE LEDS @ TQ 25°C

All configurations	100,000h - L90
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DIMENSIONS AND MOUNTING

AxBxC (mm inch)	220x708x644 8.7x27.9x25.4
Weight (kg lbs)	9.2 20.2
Aerodynamic resistance (CxS)	0.24
Mounting possibilities	Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm

· Zylindo smooth cylinder: different weight (7.8kg/15.4lbs) and CxS (0.027)





Luminaire	Number of LEDs	Current (mA)	Luminaire output flux (lm) Warm White 727		Luminaire output flux (lm) Warm White 730		Luminaire output flux (lm) Neutral White 740		Power consumption (W)		Luminaire efficacy (lm/W)	Photometry
			Min	Max	Min	Max	Min	Max	Min	Max	Up to	
ZYLINDO	8	350	700	1000	800	1100	800	1100	9.9	9.9	111	
	8	500	900	1300	1000	1500	1100	1500	13.7	13.7	109	
	8	700	1200	1700	1400	1900	1400	2000	19.4	19.4	103	
	16	350	1400	2000	1600	2200	1600	2300	18.3	18.3	126	
	16	500	1900	2700	2100	3000	2200	3100	25.8	25.8	120	
	16	700	2500	3500	2800	3900	2800	4100	36	36	114	
	24	350	2100	3000	2400	3400	2400	3500	27	27	130	
	24	500	2900	4100	3200	4600	3300	4700	37.5	37.5	125	
	24	700	3800	5400	4200	6000	4300	6200	53.5	53.5	116	

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

