

# AXIA 3 EVO SE



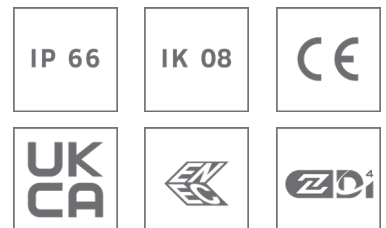
## The ultimate lightweight yet performant lighting solution for city streets

Discover AXIA 3 EVO SE, the newest addition to the AXIA 3 EVO family. This street luminaire follows the philosophy of the range by offering a lightweight, cost-effective outdoor lighting solution for cities' functional lighting needs.

Without compromising on performance, AXIA 3 EVO SE features a user-friendly, compact design with an effortless lateral fixation system that makes it easy to use yet highly efficient.

Fitted with the latest photometric technologies, this luminaire provides safe lighting and creates a sense of comfort and wellbeing across your city streets, while significantly reducing energy consumption.

AXIA 3 EVO SE stands out as the perfect choice for anyone seeking a compact yet energy-efficient street lighting solution.



## Concept

The AXIA 3 EVO SE is a lightweight luminaire designed to improve lighting levels in a compact, user-friendly solution. The luminaire body housing the LEDs and electrical components is composed of high-pressure die-cast aluminium, while the cover is made of UV resistant polypropylene.

Thanks to its reduced weight and user-friendly side-entry fixing, this road luminaire is easy to handle during installation. Its high tightness and impact resistance levels make it the ideal partner for your city life.

AXIA 3 EVO SE is equipped with ProFlex photometric engines, providing the highest efficiency thanks to their ability to maximise lumen output and provide large light distribution.

AXIA 3 EVO SE is connected-ready and can operate with various sensors and control systems.

AXIA 3 EVO SE features side-entry mounting on Ø42-60mm spigots.

The inclination angle can be adjusted on site from -15° to +5° in 5-degree increments to optimise the light distribution.

It can be opened by releasing 4 screws on the body frame, making it easy to maintain and service. A safety cable prevents the cover from any risk of falling during maintenance.

Looking to enhance your city street lighting while making significant savings? Discover AXIA 3 EVO SE, the perfect user-friendly solution for improving street lighting while reducing energy costs.



AXIA 3 EVO SE is the ideal solution for those seeking convenience without sacrificing quality.



Fitted with the ProFlex™ LED engine, AXIA 3 EVO SE offers high efficiency with various light distributions to meet the specific requirements of your town and city streets.

## TYPES OF APPLICATION

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

## KEY ADVANTAGES

- Maximised savings in energy and maintenance costs
- ProFlex photometric engines offering high efficiency lighting, comfort and safety
- Adjustable inclination for optimised photometry and uniformity
- Compact, lightweight and easy to install
- Connected-ready



AXIA 3 EVO SE features easy side-entry mounting on Ø42-60mm spigots.



AXIA 3 EVO SE is a connected-ready lighting solution that can be optionally equipped with a NEMA or a Zhaga socket.



The ProFlex photometric engine integrates the lenses into a polycarbonate protector. This integration increases the output and reduces the reflection inside the optical unit. The polycarbonate used for the ProFlex photometric engine offers essential characteristics such as high optical clarity for a superior light transmission, better impact resistance compared to glass and a long life span with UV-stabilisation treatment. The ProFlex concept enables a compact design with a thin optical compartment. It provides extensive light distributions so that the spacing between the luminaires can be increased.

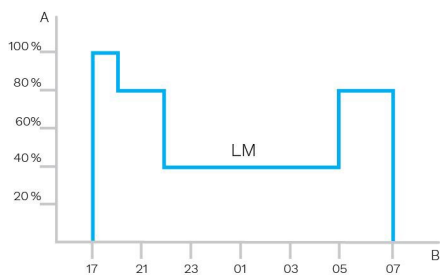




## Custom dimming profile

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.

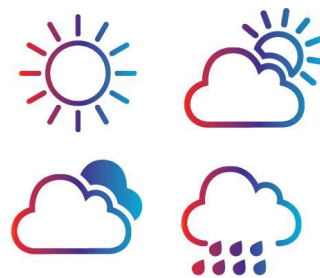


A. Dimming level | B. Time



## Daylight sensor / photocell

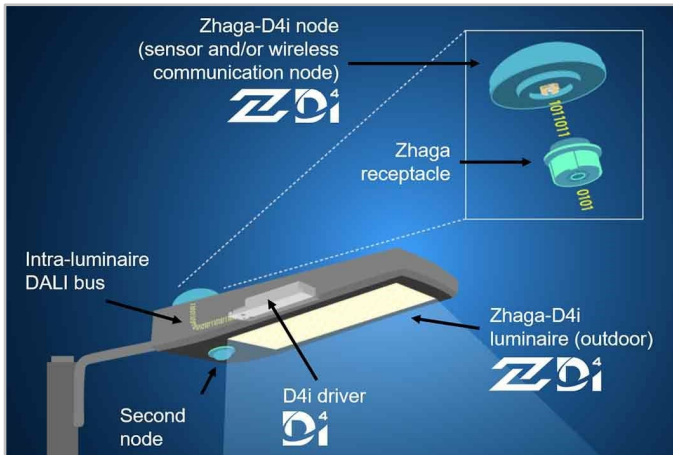
Photocell or daylight sensors switch the luminaire on as soon natural light falls to a certain level. It can be programmed to switch on during a storm, on a cloudy day (in critical areas) or only at nightfall so as to provide safety and comfort in public spaces.



The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

## 2 sockets: top and bottom

The Zhaga socket is small and suited to applications where aesthetics is essential. The architecture of Zhaga-D4i also foresees the possibility of putting two sockets on one luminaire, allowing for instance, the combination of a detection sensor and a control node. This also has the added value of standardising certain detection sensor communications with the D4i protocol.



## Standardisation for interoperable ecosystems



As a founding member of the Zhaga consortium, Schröder has participated in the creation of, and therefore supports, the Zhaga-D4i certification program and the initiative of this group to standardise an interoperable ecosystem. The D4i specifications take the best of the standard DALI2 protocol and adapt it to an intra-luminaire environment but it has certain limitations. Only luminaire mounted control devices can be combined with a Zhaga-D4i luminaire.

According to the specification, control devices are limited respectively to 2W and 1W average power consumption.

## Certification program

The Zhaga-D4i certification covers all the critical features including mechanical fit, digital communication, data reporting and power requirements within a single luminaire, ensuring plug-and-play interoperability of luminaires (drivers) and peripherals such as connectivity nodes.

## Cost-effective solution

A Zhaga-D4i certified luminaire includes drivers offering features that had previously been in the control node, like energy metering, which has in turn simplified the control device therefore reducing the price of the control system.

Schröder EXEDRA is the most advanced lighting management system on the market for controlling, monitoring and analysing streetlights in a user-friendly way.



## Standardisation for interoperable ecosystems

Schröder plays a key role in driving standardisation with alliances and partners such as uCIFI, TALQ or Zhaga. Our joint commitment is to provide solutions designed for vertical and horizontal IoT integration. From the body (hardware) to the language (data model) and the intelligence (algorithms), the complete Schröder EXEDRA system relies on shared and open technologies. Schröder EXEDRA also relies on Microsoft Azure for cloud services, provided with the highest levels of trust, transparency, standards conformance and regulatory compliance.

## Breaking the silos

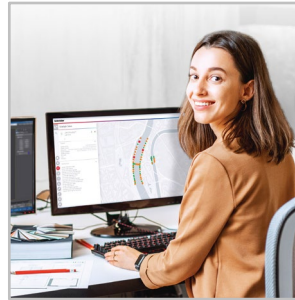
With EXEDRA, Schröder has taken a technology-agnostic approach: we rely on open standards and protocols to design an architecture able to interact seamlessly with third-party software and hardware solutions. Schröder EXEDRA is designed to unlock complete interoperability, as it offers the ability to:

- control devices (luminaires) from other brands
- manage controllers and to integrate sensors from other brands
- connect with third-party devices and platforms

## A plug-and-play solution

As a gateway-less system using the cellular network, an intelligent automated commissioning process recognises, verifies and retrieves luminaire data into the user interface. The self-healing mesh between luminaire controllers enables real-time adaptive lighting to be configured directly via the user interface. OWLET IV luminaire controllers, optimised for Schröder EXEDRA, operate Schröder's luminaires and luminaires from third parties. They use both cellular and mesh radio networks, optimising geographical coverage and redundancy for continuous operation.

## Tailored experience



Schröder EXEDRA includes all advanced features needed for smart device management, real-time and scheduled control, dynamic and automated lighting scenarios, maintenance and field operation planning, energy consumption management and third-party connected hardware integration. It is fully configurable and includes tools for user management and multi-tenant policy that enables contractors, utilities or big cities to segregate projects.

## A powerful tool for efficiency, rationalisation and decision making

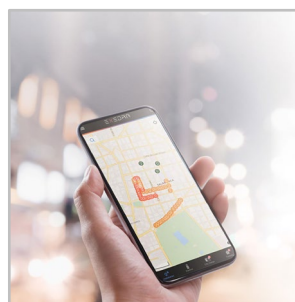
Data is gold. Schröder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

## Protected on every side



Schröder EXEDRA provides state-of-the-art data security with encryption, hashing, tokenisation, and key management practices that protect data across the whole system and its associated services. The whole platform is ISO 27001 certified. It demonstrates that Schröder EXEDRA meets the requirements for establishing, implementing, maintaining and continually improving security management.

## Mobile App: any time, any place, connect to your street lighting



The Schröder EXEDRA mobile application offers the essential functionalities of the desktop platform, to accompany all types of operator on site in their daily effort to maximise the potential of connected lighting. It enables real-time control and settings, and contributes to effective maintenance.

## GENERAL INFORMATION

Recommended installation height	4m to 12m   13' to 39'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
Driver included	Yes
CE mark	Yes
ENEC certified	Yes
Zhaga-D4i certified	Yes
UKCA marking	Yes
Testing standard	EN 60598-1 EN 60598-2-1

## HOUSING AND FINISH

Housing	Aluminium Polypropylene
Optic	Polycarbonate
Protector	Polycarbonate (with integrated lenses)
Housing finish	Polyester powder coating
Standard colour(s)	RAL 7040 window grey
Tightness level	IP 66
Impact resistance	IK 08
Vibration test	Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	By loosening screws on the optical block

## OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +55°C / -22°F up to 131°F with wind effect
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· Depending on the luminaire configuration. For more details, please contact us.

## ELECTRICAL INFORMATION

Electrical class	I, II
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
Socket	Zhaga (optional) NEMA 7-pin (optional)
Associated control system(s)	Schröder EXEDRA
Sensor	PIR (optional)

## OPTICAL INFORMATION

LED colour temperature	2700K (Warm White WW 727) 3000K (Warm White WW 730) 4000K (Neutral White NW 740)
Colour rendering index (CRI)	>70 (Warm White WW 727) >70 (Warm White WW 730) >70 (Neutral White NW 740)
ULOR	0%
ULR	0%

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

## LIFETIME OF THE LEDS @ TQ 25°C

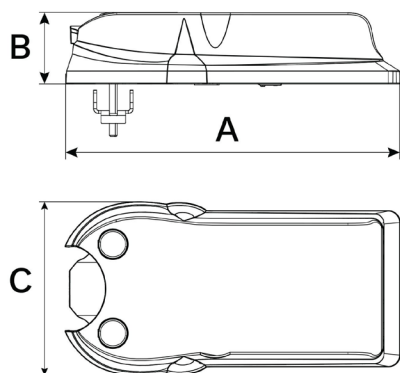
All configurations	100,000h - L95 (high-power LEDs)
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· Lifetime may be different according to the size/configurations. Please consult us.

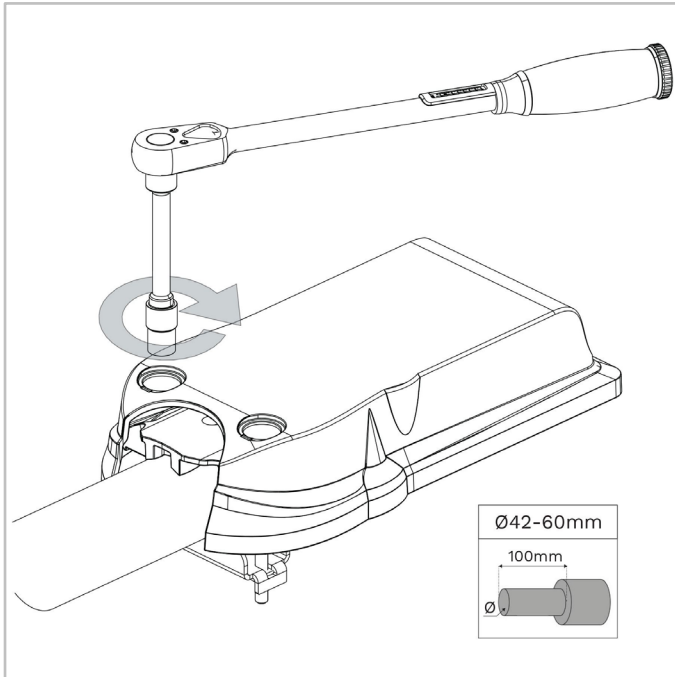
## DIMENSIONS AND MOUNTING

AxBxC (mm   inch)	339x72x176   13.3x2.8x6.9
Weight (kg   lbs)	2.2-3.2   4.8-7.0
Aerodynamic resistance (CxS)	0.03
Mounting possibilities	Side-entry slip-over – Ø42mm Side-entry slip-over – Ø48mm Side-entry slip-over – Ø60mm

· For more information about mounting possibilities, please consult the installation sheet.



## AXIA 3 EVO SE | Side-entry mounting for Ø42-60mm spigots





Number of LEDs	Luminaire output flux (lm)						Power consumption (W)		Luminaire efficacy (lm/W)
	Warm White WW 727		Warm White WW 730		Neutral White NW 740		Min	Max	Up to
	Min	Max	Min	Max	Min	Max			
8	600	2800	600	2800	700	3300	6	27	151
14	3500	5900	3600	6100	4200	7000	31	46	196
16	1300	5600	1300	5700	1500	6600	11	52	155

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

