Schréder
Experts in lightability™

ROAD

IZYLUM EVO

MID FLEX™ LENSO FLEX™ 4

IP 66 IK 10

The innovative powerful street lighting solution

IZYLUM EVO is a robust, powerful road luminaire designed around the concepts of simplicity, high performance and innovation.

This luminaire benefits from the latest photometric technologies, whether fitted with mid-power or high-power LEDs, thus covering many kinds of lighting application.

Its universal fixation system enables it to be switched from a post-top to a side-entry position at any time while eliminating any disconnection and effort constraints, making IZYLUM EVO the most adaptive road lighting solution. Like the luminaire itself, the fixation part is made of robust material, compliant with the most stringent vibrative and corrosive environment standards.

IZYLUM EVO is designed to operate with various control sockets and sensors, enabling significant energy and cost savings.

URBAN & RESIDENTIAL STREETS | BRIDGES | BIKE & PEDESTRIAN PATHS | CAR PARKS | LARGE AREAS | SQUARES & PEDESTRIAN AREAS | ROADS & MOTORWAYS

Concept

IZYLUM EVO is a robust yet compact luminaire, designed with a focus on ease of installation and maintenance. IZYLUM EVO is made of highly corrosion-resistant LM6 aluminium alloy, perfectly suited for harsh environments.

IZYLUM EVO takes advantage of the latest photometric innovations. It uses the LensoFlex®4 and MidFlex™ photometric engines, which have been developed around the concepts of high performance, compactness, versatility and standardisation.

IZYLUM EVO is available with the IZYFIX universal fixation system adapted to post-top and side-entry mounting on any spigot (Ø48mm, Ø60mm and Ø76mm). The IZYFIX system enables it to be switched from one position to another at any time, without removing the luminaire from the pole, offering complete versatility regarding pole and bracket configurations. This fixation system fully complies with the most demanding vibration requirements. To ease any maintenance activities, the luminaire offers tool-free access to the gear compartment.

The luminaire cabling can easily be carried-out via a separate connection compartment to prevent the risk of water ingress inside the luminaire or any cabling error. Connection with different main cables can be carried-out in the separate compartment, allowing usage of various existing types of cables found at the installation site.

IZYLUM EVO is a connected-ready luminaire available with various connectivity and sensor options. The NEMA socket is positioned under the luminaire to provide better protection against direct sunlight while also preventing easy access by birds and other animals.

IZYLUM EVO is made of robust LM6 aluminium alloy material.

The IZYFIX universal fixation system, with switching from a post-top to a side-entry position, facilitates luminaire ordering and installation.

TYPES OF APPLICATION

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

KEY ADVANTAGES

- Maximised savings in energy and maintenance costs
- Robust and recyclable materials
- Zhaga-D4i certified
- On-site adjustment from post-top to side-entry without disconnecting the luminaire from the pole thanks to IzyFix
- Tool-free access with a clear, perceptible click upon closing
- RCM-compliant
- Connected-ready for your future Smart city requirements
- Separate compartment to connect the luminaire
- LensoFlex® and MidFlex™ photometric engines offering high-efficiency lighting, comfort and safety

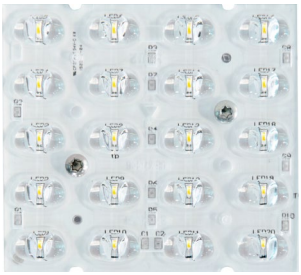
A separate connection compartment limits risk of water ingress due to incorrect installation and significantly speeds-up installation.

The NEMA socket is mounted on the bottom of the luminaire to protect the control devices from harsh environments and bird attacks.

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.



MidFlex™

The MidFlex™ photometric engine is based on the same principle as LensoFlex®2: each LED is associated with a specific lens that generates the complete photometric distribution of the luminaire. MidFlex™ takes advantage of the maturity of mid-power LEDs for professional applications. The MidFlex™ photometric engines are based on the combination of several modules of 48 mid-power LEDs tightly positioned to maximise the LED density. This concept provides high lumen packages with a limited product footprint. The MidFlex™ photometric engines offers excellent efficiency for a sustainable performance.

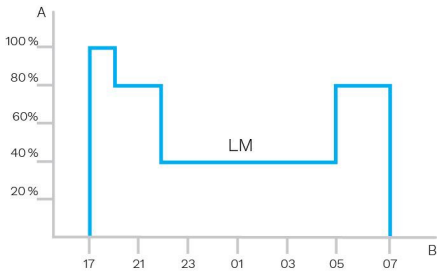
Embellishment plate

This accessory not only provides a more aesthetic solution as it covers the wires supplying the PCBA's with power, it also increases the lumen output thanks to its extra bright surface that reflects light out of the optical unit. Depending on the configuration, the embellishment plate can increase the lumen output by 2 to 3%.

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.

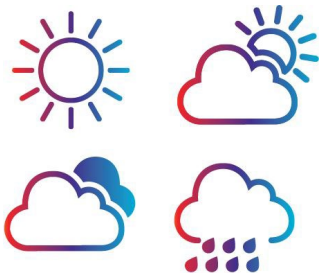
The period between switching on and switching off is used to activate the preset dimming profile. The customised dimming system generates maximum energy savings while respecting the required lighting levels and uniformity throughout the night.



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.



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 parametres 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.

IzyFix

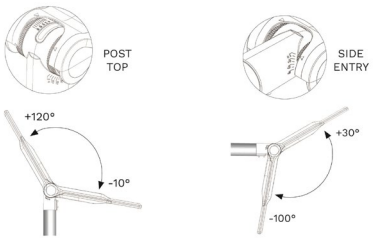
The Schréder IzyFix patented high-pressure die-casted aluminium universal fixation system is an integral part of the luminaire mounted in the factory. The IzyFix system aims to fit needs worldwide by meeting IEC and ANSI 3G testing requirements. It is intended to simplify life for customers and installers in the process of purchasing and installing luminaires for various applications.

From post-top to side-entry in one movement

The innovative design allows changing from a side-entry to a post-top position – even with luminaires ordered with factory pre-cabling – without any switching work on the fixation or disconnection from the pole. Therefore the type of mounting (horizontal or vertical) does not have to be considered when ordering. This unique feature also eases installation. After setting the correct position, an accessory is provided to cover the resulting space and ensure further protection of the luminaire.

Best-in-class tilting range

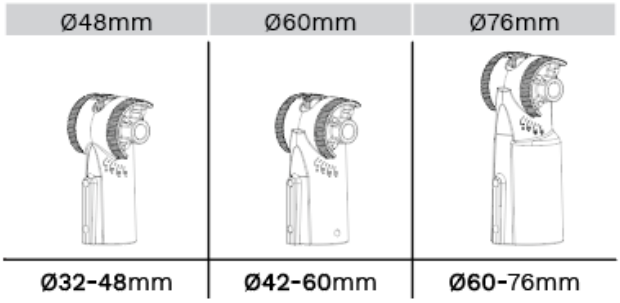
The IzyFix universal fixation system enables a best-in-class range of mounting angle of 130°, to ensure maximum lighting performance for all kinds of road scenarios and offer the possibility of installing the luminaire in extreme situations as well. With a setting mark on the body and angles on the spigot, adjusting is carried out in 5° increments by loosening two screws. The wide tilting range enables more comfortable access to the gear compartment during field maintenance.



Variation for all poles

Due to the many different applications used worldwide, Schréder has created a range of fixation systems and reducers to satisfy all needs that might come up on the market.

IzyFix - suitable for:
- Ø48mm spigot
- Ø60mm spigot
- Ø76mm spigot



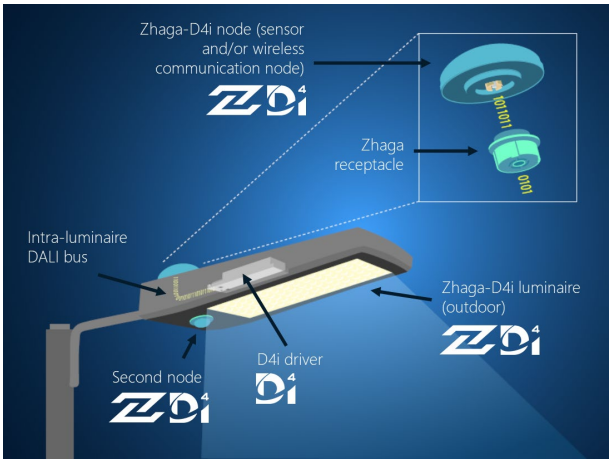
The Zhaga consortium joined forces with the DiiA and produced a single Zhaga-D4i certification that combines the Zhaga Book 18 version 2 outdoor connectivity specifications with the DiiA's D4i specifications for intra-luminaire DALI.

Standardisation for interoperable ecosystems

As a founding member of the Zhaga consortium, Schréder 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.

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.

Schréder 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

Schréder 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 Schréder EXEDRA system relies on shared and open technologies.

Schréder 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, Schréder 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. Schréder 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.

Tailored experience

Schréder 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. Schréder 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

Schréder 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.

GENERAL INFORMATION

Recommended installation height	4m to 15m | 13' to 49'
Circle Light label	Score ≥90 - The product fully meets circular economy requirements
CE mark	Yes
Zhaga-D4i certified	Yes
RCM mark	Yes

HOUSING AND FINISH

Housing	Aluminium
Optic	PMMA
Protector	Tempered glass
Housing finish	Polyester powder coating
Standard colour(s)	RAL 7040 window grey
Tightness level	IP 66
Impact resistance	IK 10
Vibration test	Compliant with AUS 3Hz vibration requirements Compliant with modified IEC 68-2-6 (0.5G)
Access for maintenance	Tool-less access to gear compartment

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +50°C / -22°F up to 122°F with wind effect

· Depending on the luminaire configuration. For more details, please contact us.

ELECTRICAL INFORMATION

Electrical class	I, II
Nominal voltage	220-240V – 50-60Hz
Power factor (at full load)	0.9
Surge protection options (kV)	10 20
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)	Schréder EXEDRA
Sensor	PIR (optional)

OPTICAL INFORMATION

LED colour temperature	2200K (Warm White 722) 2700K (Warm White 727) 3000K (Warm White 730) 4000K (Neutral White 740) 5700K (Cool White 757) 3000K (Warm White 830)
Colour rendering index (CRI)	>70 (Warm White 722) >70 (Warm White 727) >70 (Warm White 730) >70 (Neutral White 740) >70 (Cool White 757) >80 (Warm White 830)
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

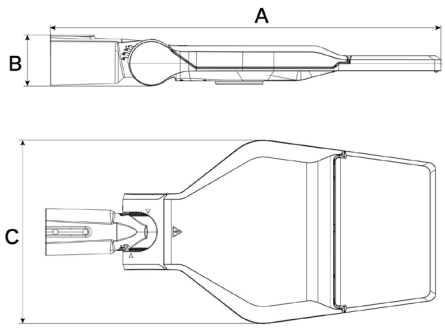
All configurations	100,000h - L95

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

DIMENSIONS AND MOUNTING

AxBxC (mm | inch)	IZYLUM EVO 3 : 737x97x372 | 29.0x3.8x14.6
Weight (kg | lbs)	IZYLUM EVO 3 : 7.6-8.4 | 16.7-18.5
Aerodynamic resistance (CxS)	IZYLUM EVO 3 : 0.03
Mounting possibilities	Side-entry slip-over – Ø32mm Side-entry slip-over – Ø48mm Side-entry slip-over – Ø60mm Side-entry slip-over – Ø76mm Post-top slip-over – Ø48mm Post-top slip-over – Ø60mm Post-top slip-over – Ø76mm

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



IZYLUM EVO | Slip-over mounting on Ø48mm, Ø60mm and Ø76mm spigots – 2xM8 screws or 2xM10 screws