BEKA Schréder

Experts in lightability™

KAZELLE

Designed around LEDs

EXEDRA

LOCALLY manufactured

KAZELLE

IP 66

IK 10

10kV

Efficient, discreet, flexible

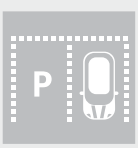
The KAZELLE luminaire's minimalistic and modern look is designed around the compactness of the LED engine, blending into your landscapes. At the same time, sustainable lighting solutions are provided that dramatically reduce energy consumption and improve visual comfort for motorists, cyclists and pedestrians.

Reliable, efficient, discreet and vandal resistant, the KAZELLE emits a pleasant, glare-free light. It has been designed for easy installation. With virtually no maintenance required and a full 5-year warranty, the KAZELLE guarantees long-lasting performance and massive savings. Simply turn it on and enjoy your new landscape!

URBAN & RESIDENTIAL STREET

BIKE & PEDESTRIAN PATH

SQUARES & PEDESTRIAN AREA



CAR PARK

RAILWAY STATION & METRO

SPORT AREA

Key advantages

- Designed and manufactured in South Africa
- Cost-effective and efficient lighting solution for a quick return on investment
- ThermiX®: resists high temperatures (Ta 40°C)
- Surge protection 10kV
- Optional control solutions: photocell or Schréder EXEDRA control systems for autonomous and interoperable networks
- No upward lighting
- Low glare
- Pleasant visual appearance
- Circular economy 3-star rating
- 5-year warranty (*)

(*) Terms and conditions apply

Characteristics

GENERAL INFORMATION	
Recommended installation height	3m to 6m
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 475, SANS 60598, SANS 62262

HOUSING AND FINISH	
Housing	Top cover - Acrylonitrile styrene acrylate (ASA)
	Spigot - Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
Protector	High-impact acrylic
	Polycarbonate (optional)
Housing finish	Black (RAL 9017), Textured finish
Tightness level	IP 66
Impact resistance	High-impact acrylic: IK 08
	Polycarbonate: IK 10

DIMENSIONS AND MOUNTING	
ØA (mm) B (mm) C (mm)	Ø562 84 179
Weight (kg)	4.9
Aerodynamic resistance (CxS) (m^2)	0.08
Standard mounting (mm)	Bottom-entry Ø76
Spigot length (mm)	≥ 80

ELECTRICAL INFORMATION	
Electrical class	EU class I or II
Nominal voltage	198-264V – 50Hz
Power factor	> 95% at full load
Surge protection	10kV / 10kA
Electromagnetic compatibility (EMC)	SANS 55015:2013/A1:2015, SANS 61000-3-2:2014, SANS 61000-3-3:2013, SANS 61547:2009, SANS 62493:2015

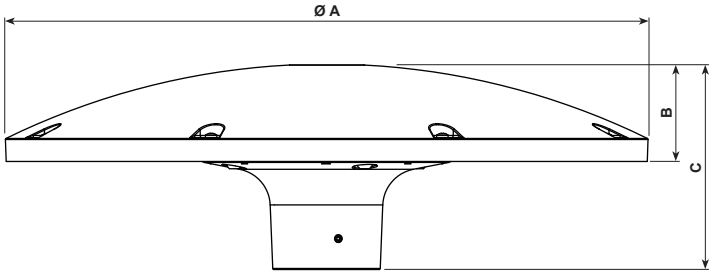
OPTICAL INFORMATION	
LED colour temperature	4000K (Neutral white 740)
	3000K (Warm white 730) (optional)
Colour rendering index (CRI)	≥ 70 (Neutral white 740)
	≥ 70 (Warm white 730) (optional)
Upward Light Output Ratio (ULOR)	≤ 1%

OPERATING CONDITIONS	
Operating temperature range (Ta)	-20°C up to +40°C

LIFETIME OF THE LEDS @ TQ 25°C	
For all versions	50,000h - L80B10

LIFETIME OF THE DRIVER @ TQ 25°C	
For all versions	100,000h ≤10% failure rate

For options and accessories, please turn to page 8.



Performance

Luminaire	Number of LEDs	Driver Current (mA)	Line Current (A)	Nominal flux (lm) (*) Typical	Power consumption (W) Typical	Nominal efficacy (lm/W) Typical	Luminaire output flux (lm) Typical	Luminaire efficacy (lm/W) Typical	Photometry (**)
KAZELLE	120	500	0.1	4607	24	195	3640	156	2900 4010
	120	750	0.16	6764	36	186	5344	147	
	160	500	0.21	9018	48	187	7124	147	2900 4010
	240	500	0.2	9214	46	199	7279	157	2900 4010
	240	750	0.31	13527	71	191	10686	151	

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

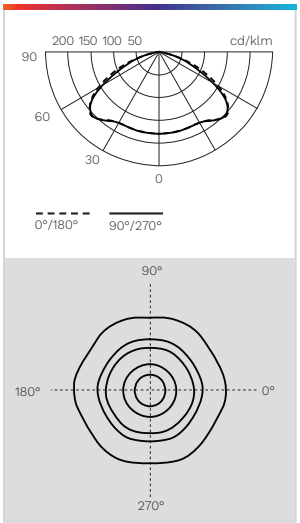
(*) The nominal flux is an indicative LED flux @ Ts 85°C based on LED manufacturer's data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. The type of LED used is subject to change due to the ongoing rapid progress taking place in LED technology.

(**) Custom combinations of lenses/optics to suit the project are available on request.

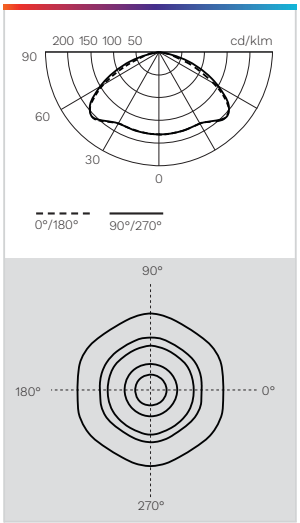
Light Distributions

Custom combinations of lenses/optics to suit the project are available on request.

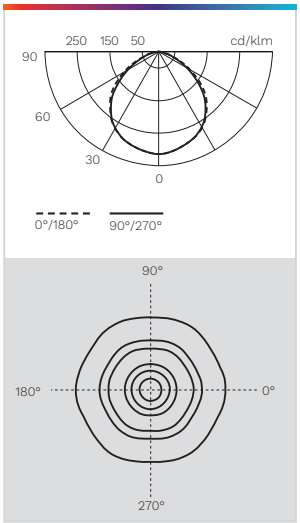
2900 optic - 120 LED



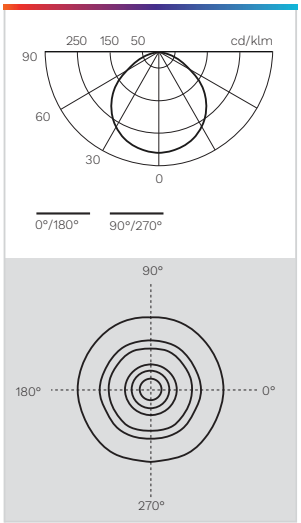
2900 optic - 240 LED



4010 optic - 120 LED



4010 optic - 240 LED



Key Features

No upward lighting

Clean lines allow for a pleasant visual appearance

240 LED version

120 LED version

Construction Details

The luminaire consists of a high-pressure powder-coated die-cast aluminium base and gear plate, a top cover made of ASA and a high-impact polycarbonate protector. The design can operate LEDs of up to 71W. The cable entry grommet can accommodate a connection of 3 x 1.5mm^2 cabtyre, with an overall diameter of 9mm.

The top cover is robustly constructed, weatherproof, hailproof, corrosion proof and vandal resistant. Manufactured from Acrylonitrile styrene acrylate and firmly secured with stainless steel screws to the high-impact acrylic protector. The colour is moulded into the ASA material to ensure colour consistency over the lifetime of the product. A silicon sponge gasket fixed into a groove to seal the top cover against the protector to IP 66.

The spigot base manufactured from high-pressure die-cast aluminium, powder coated for added protection in the colour specified. The luminaire secured to the pole by three M8 stainless steel grub screws.

All screws, bolts and metal parts are stainless steel or non-corrosive material. Mains connections by means of a suitable screw terminal block with a wire clamping contact.

Switching/dimming control

Schréder EXEDRA

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

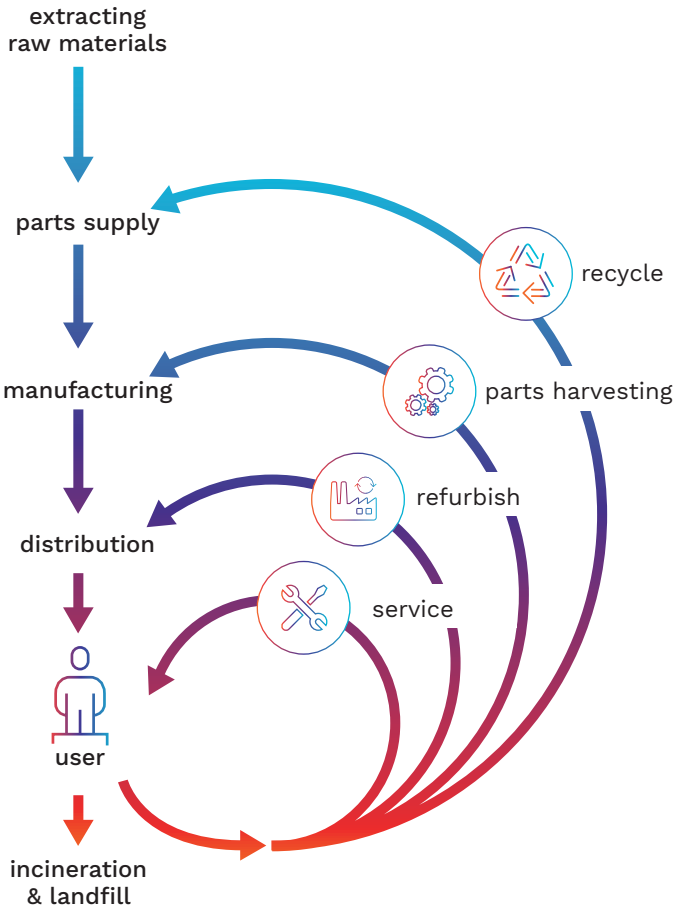
Data is gold. Schréder EXEDRA brings it with all the clarity managers need to drive decisions. The platform collects massive amounts of data from end devices and, aggregates, analyses and intuitively displays them to help end-users take the right actions.

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.

CIRCLELIGHT

Circularity concept



KAZELLE

Circularity focuses on reducing the environmental burden by valorising the flow of all materials.

It is mainly defined in opposition to the traditional linear economy: take, make and dispose. In a circular economy, products are part of a value network where they will be used for as long as possible.

Then, depending on their characteristics, they can be reused, refurbished, upgraded or recycled.

BEKA Schréder takes circular economy into account, right from the offset. Before we start to design our products, we incorporate it into their DNA.

After a careful analysis of the potential circularity of our luminaires, we decided to introduce a “circular lighting” product label. This label acts as a circular indicator for our customers.

It clearly designates products that are optimised for circular economy through 12 objective criteria.

Circular highlights:

- Equipped with a completely replaceable LED engine
- Materials with a high rate of recyclability

Star rating:

It was designed to be cost-efficient

It was built to last but not with circular economy requirements

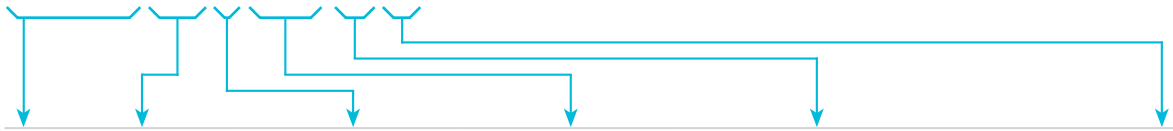
It was developed to meet most of circular economy requirements

It was developed to fully meet circular economy requirements

Ordering Information

Example:

KAZELLE 71W N 2900 BL 3D



ID	Watt	LED Colour	Optic[1]	Colour options	Switching/dimming control
KAZELLE	24 36 46 48 71	**N** Neutral White (4000K)	2900 4010	**BL** Black (RAL9017), Textured finish **BG** Telegrey 4 (RAL 7047), Textured finish **P/O** Painted Other (RAL / Finish [Brilliant/Matt])	**NR** NEMA complete with Royce Thomson DLS **NS** NEMA complete with Spectrum DLS **3D** NEMA 3-Pin complete with dummy link **7D** NEMA 7-Pin complete with dummy link **CM** Schréder EXEDRA CM

[1] Custom combinations of lenses/optics to suit the project are available on request.

Custom Options

Correlated colour temperature	3000K (Warm white 730)

BEKA Schréder

Experts in lightability™

SABS ISO 9001

www.beka-schreder.co.za

Designed and manufactured by BEKA Schréder (Pty) Ltd

LOCALLY manufactured

2024-01