BEKA Schréder

Experts in lightability™

OMNISTAR

MIDI

High-power LED floodlighting solution

OMNISTAR MIDI

IP 66

Up to IK 10

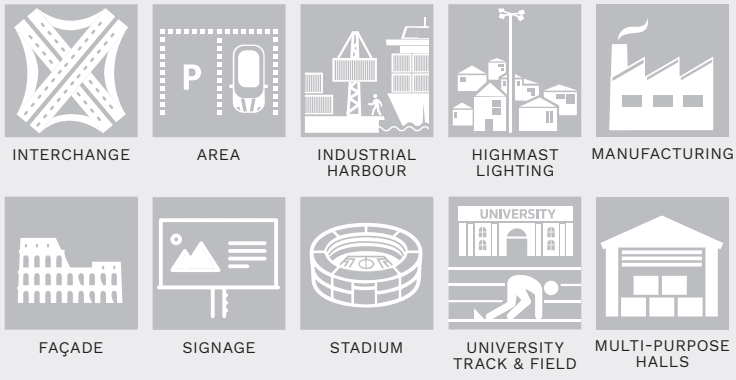
Up to 20kV

Versatile LED floodlighting solution

The OMNISTAR has been designed to provide an unrivalled combination of performance and flexibility for lighting areas where high lumen packages are needed while offering maximum savings in energy and maintenance costs with a short payback time. This luminaire can be installed in various applications to provide the lighting distribution and lumen package needed to meet the specifications of the area to be lit.

The OMNISTAR guarantees optimal lighting to ensure safety and comfort. It offers a real alternative to luminaires equipped with traditional sources, with the added advantages of an LED solution: low energy consumption, improved visibility with white light, limited maintenance, and longer life.

To withstand even the most corrosive environments, the luminaire housing can be especially e-coated (optional). The OMNISTAR is adaptable to all floodlighting applications to ensure maximum energy savings by adapting the light levels according to the needs.



Key advantages

- Designed and manufactured in South Africa
- Designed to operate LED light sources of up to 226W in an ambient temperature (Tq) environment of up to 25°C, without reducing the useful lifetime of 100 000 hours, at a lumen depreciation of not more than 10% (L90B10)
- Cost effective and efficient lighting solution to maximise energy and maintenance cost savings in high-power applications
- ThermiX® (resists extreme temperatures: Ta up to 55°C) and IP 66 tightness level for long-lasting performance
- Instant switch on/off
- Sports applications: ball impact resistant
- Maintenance free
- Surge protection 10kV/10kA
- Available in Emergency, Zone 2 and 21/22 versions
- Circular economy 3-star rating
- 5 year warranty (Terms and conditions apply)

Characteristics

GENERAL INFORMATION	
Recommended installation height	8m to 30m
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 60598, SANS 62262, SANS 475
Weight (kg)	Including gearbox: 10.8
Aerodynamic resistance (CxS) (m^2)	0.12

HOUSING AND FINISH	
Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
Optic	Acrylic PMMA
Protector	High-impact clear glass
	High-impact polycarbonate (optional)
Housing finish	Unpainted aluminium
Tightness level	IP 66
Impact resistance	Glass: IK 07
	Polycarbonate: IK 10

For options and accessories, please turn to page 10.

ELECTRICAL INFORMATION	
Electrical class	EU class I
Nominal voltage	198-264V – 50Hz
Power factor	> 95% at full load
Surge protection	10kV (standard)
Electromagnetic compatibility (EMC)	SANS 55015:2013/A1:2015, SANS 61000-3-2:2014, SANS 61000-3-3:2013, SANS 61547:2009, SANS 62493:2015
Control options	1-10V
	DALI
	Schréder ITERRA
	Schréder EXEDRA remote management
	Incorporated NEMA socket assembly – 3-pin
	Incorporated NEMA socket assembly – 7-pin

OPTICAL INFORMATION	
LED colour temperature	4000K (Neutral white 740)
	5700K (Cool white 757) (optional)
Colour rendering index (CRI)	≥ 70 (Neutral white 740)
	≥ 70 (Cool white 757) (optional)
Standard optic	5366

OPERATING CONDITIONS	
Operating temperature range (Ta)	-40°C up to +50°C (*)

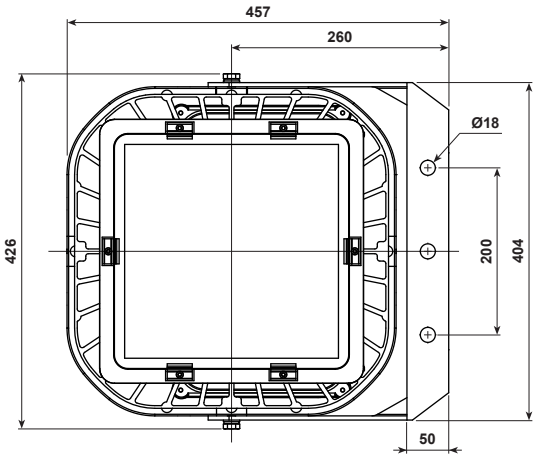
(*) Depending on the luminaire inclination and driving current. For more details, please contact us.

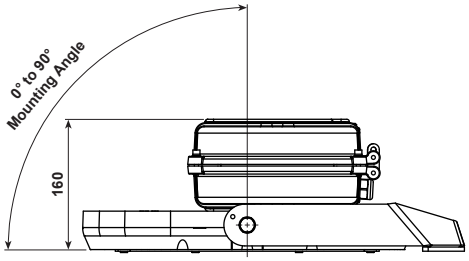
LIFETIME OF THE LEDS @ TQ 25°C	
For all versions	100,000h - L90B10

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

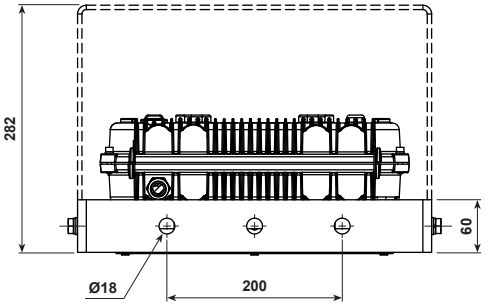
Dimensions in mm

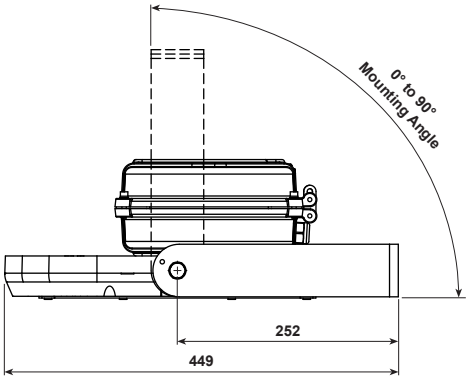
OMNISTAR-MIDI





OMNISTAR-MIDI U-bracket





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.

BlastFlex™4

Using collimators made of high-transmission PMMA, the BlastFlex™4 photometric engine offers the highest efficiency for directional beams dedicated to specific applications in architectural and sports lighting. The ability to control the light with the highest accuracy reduces light spill in the surroundings, improves uniformity on the area to be lit and contributes to optimal use of the energy consumed.

Performance

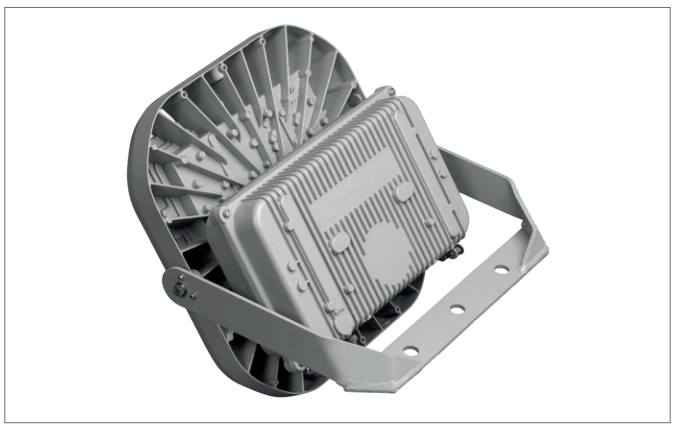
Luminaire	Number of LEDs	Driver Current (mA)	Line Current (A)	Nominal flux (lm) (*) Typical	Power consumption (W) Typical	Nominal efficacy (lm/W) Typical	Luminaire output flux (lm) Typical	Luminaire efficacy (lm/W) Typical	Photometry (**)
MIDI	60	700	0.59	20013	136	141	18412	129	LENSO FLEX® 4 / BLAST FLEX™ 4
	60	1000	0.83	25535	190	134	23492	124	
	80	850	0.92	30043	212	140	27363	129	
	80	900	0.98	32044	226	142	29434	130	
MIDI (Emergency version)	60	700	0.59	20013 / 915 (EM)	136	141	18412	129	

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.

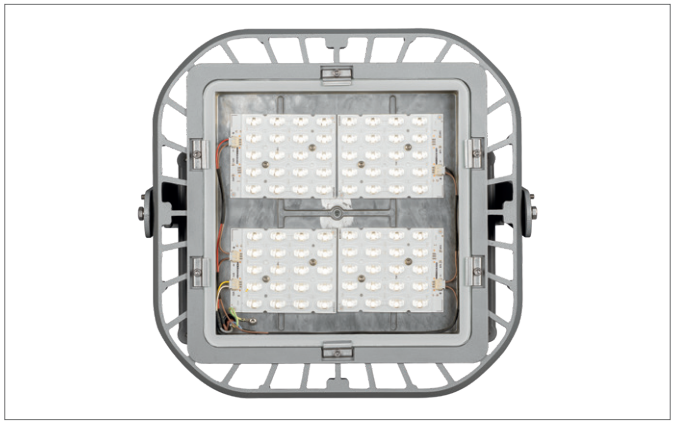
(**) Custom combinations of lenses/optics to suit the project are available on request.

Key Features



Optimal heat fin dissipation design and integrated gearbox

Rake angle adjustable on site



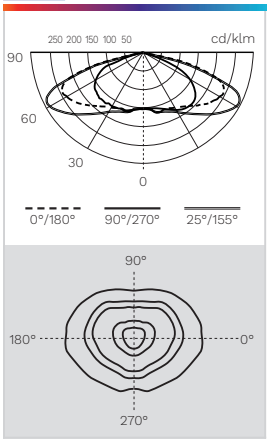
Highly efficient light distributions reduce the quantity of luminaires to be installed. Specific configurations available for Emergency and Zoned applications.

60 LED version - 20 LEDs in the top half, and 40 LEDs in the bottom half

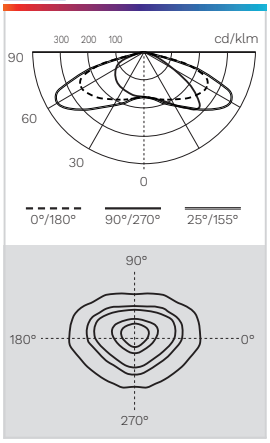
Light Distributions

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

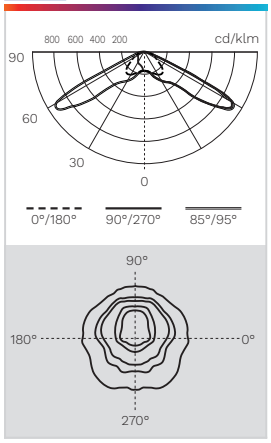
LENSO FLEX® 4 5304 optic



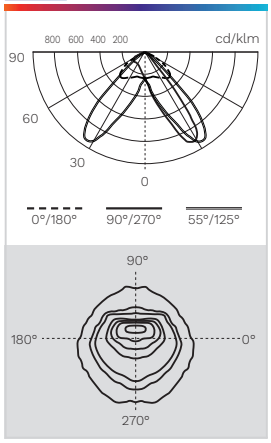
LENSO FLEX® 4 5304-W optic



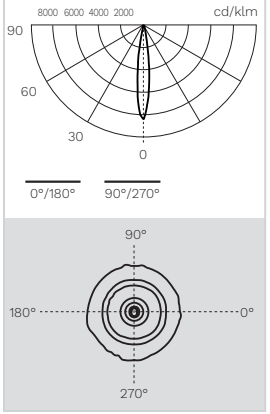
LENSO FLEX® 4 5355 optic



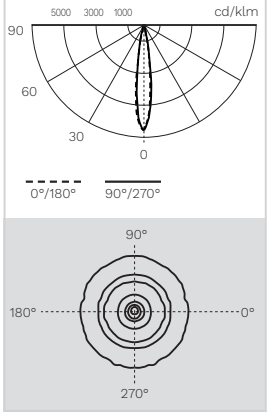
LENSO FLEX® 4 5356 optic



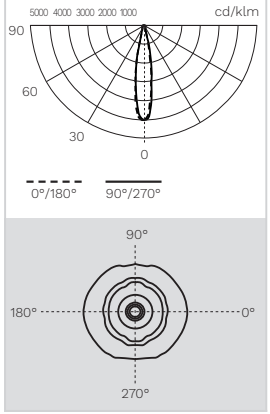
BLAST FLEX™ 4 5357 optic



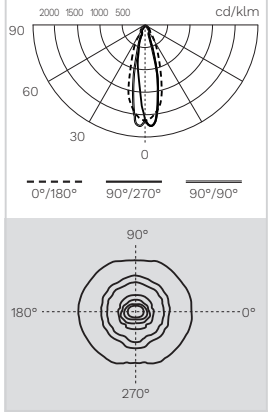
BLAST FLEX™ 4 5357-W optic



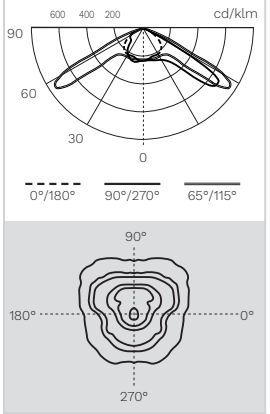
BLAST FLEX™ 4 5358 optic



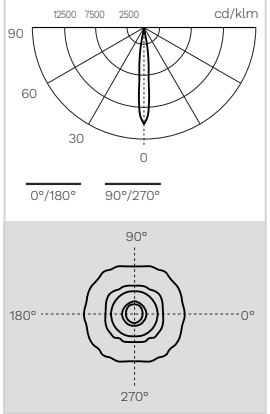
BLAST FLEX™ 4 5359 optic



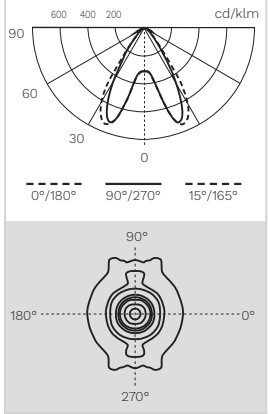
LENSO FLEX® 4 5366 optic



LENSO FLEX® 4 5405 optic

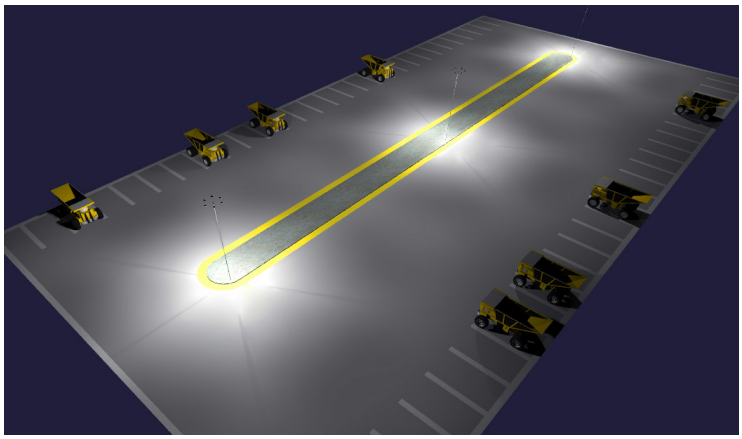


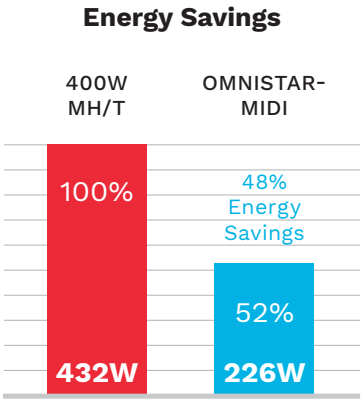
LENSO FLEX® 4 5407 optic



Case Studies

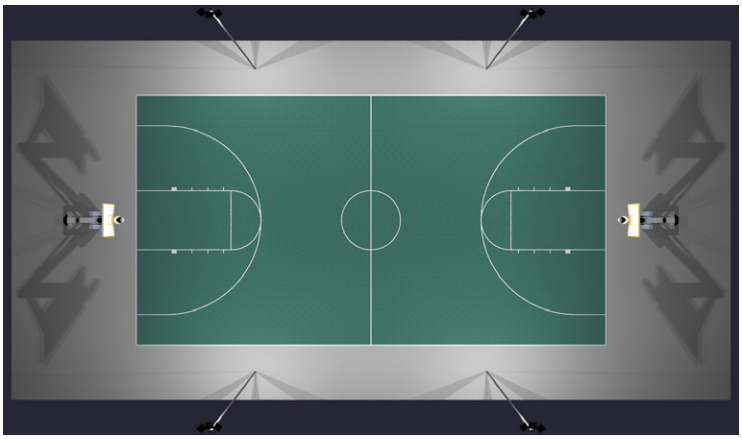
Industrial Parking Area

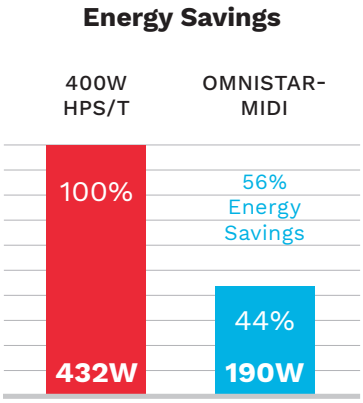




	Luminaire fitted with 400W Metal Halide lamp	OMNISTAR-MIDI 226W
Number of fittings	18	18
Energy used (W)	7 776	4 068
Energy saved (W)	3 708	

Recreational Sports - Basketball Major Club



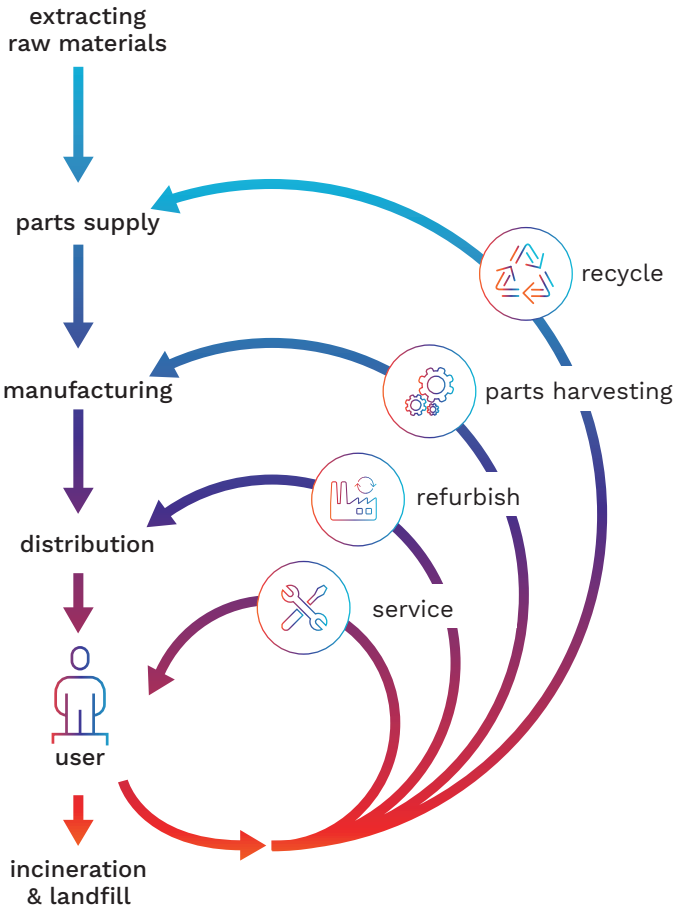


	Luminaire fitted with 400W Metal Halide lamp	OMNISTAR-MIDI 190W
Number of fittings	12	12
Energy used (W)	5 184	2 280
Energy saved (W)	2 904	

Please note: Above calculations are for demonstration purposes, please contact us for detailed energy saving and return of investment calculations.

CIRCLELIGHT

Circularity concept



OMNISTAR-MIDI

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

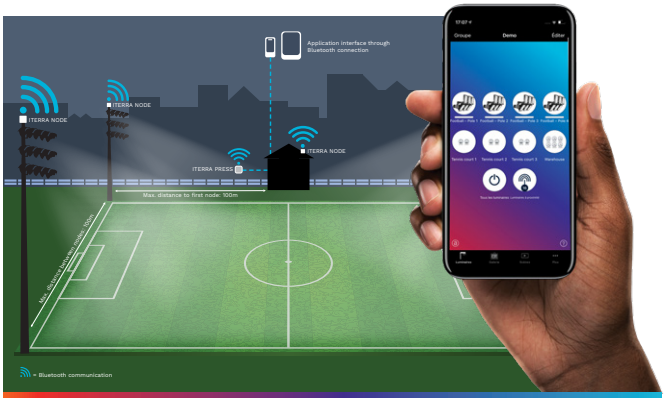
Switching/dimming control

Schréder ITERRA

Schréder ITERRA provides a complete user- and installer-friendly wireless control solution for sports lighting applications.

Schréder ITERRA offers site managers a robust, cost-effective and FutureProof platform to run their infrastructure with the utmost flexibility for adapting the lighting to any scenario or event while maximising energy savings and providing the best experience for players, fans and the neighbourhood.

A mobile App based system, Schréder ITERRA is very easy to operate. It comes with a visual interface that users can quickly personalise to the layout and settings of their lighting installation.



Download on the App Store

GET IT ON Google Play

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.

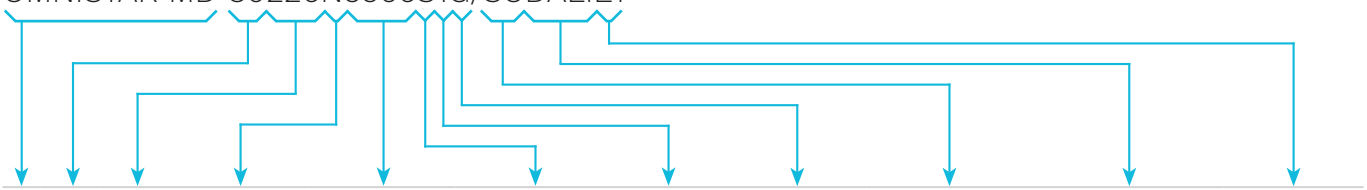
Protected on every side

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.

Ordering Information

Example:

OMNISTAR MD 80226N5366S1G/SUDALIE1



ID	LED	Watt	LED Colour	Optic[1]	Colour	Surge Protection	Protector	Mounting Option	Switching/ dimming control	Other options / accessories
OMNISTAR MD	60 60 80 80	136 190 212 226	**N** Neutral white (4000K) **W** Warm white (3000K) **C** Cool white (5700K)	5304 5304-W 5355 5356 5357 5357-W 5358 5359 5366 5405 5407	**A** Aluminium finish (unpainted) **S** Pearl Light Grey (RAL 9022), Textured finish **B** Black (RAL 9017), Textured finish **O** Painted Other (RAL / Finish [Brilliant/Matt])	**1** 10kV **2** 20kV	**G** Glass clear **P**[2] Polycarbonate	**SU** Stirrup - unpainted **SP** Stirrup - painted **UU** Wall bracket unpainted **UP** Wall bracket painted	**DALI** DALI Dim **1-10** 1-10V Dim **3D** NEMA 3-Pin complete with dummy link **7D** NEMA 7-Pin complete with dummy link **3I** NEMA 3-Pin complete with plug-in 20kV surge protection **7I** NEMA 7-Pin complete with plug-in 20kV surge protection **CM** Schréder EXEDRA CM	**E1** Emergency version 1 hour **Z2** Zone 2 **Z21/22** Zone 21/22

[1] Custom combinations of lenses/optics to suit the project are available on request.
[2] Suitable for Food & Beverage industry

Custom Options

Switching/Dimming Control	Integrated Schréder ITERRA
Emergency	3 hours
Extra treatment	e-Coating (for very harsh environments)

BEKA Schréder

Experts in lightability™

SABS ISO 9001

www.beka-schreder.co.za

Designed and manufactured by BEKA Schréder (Pty) Ltd

LOCALLY manufactured

2023-04