BEKA Schréder

Experts in lightability™

OMNISTAR

MICRO / MINI

LED floodlighting solution

TERRA | LENSO FLEX® 4 | BLAST FLEX™ 4 | DoC Food & Beverage

LOCALLY manufactured

OMNISTAR MICRO / MINI

IP 66

Up to IK 10

10kV

OMNISTAR-MICRO

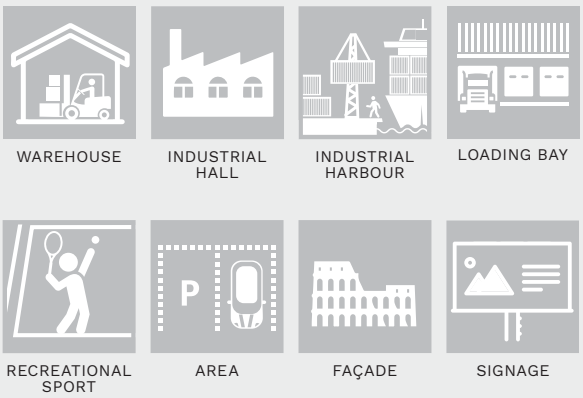
OMNISTAR-MINI

Where LED floodlight flexibility meets function

The OMNISTAR family is complete with the addition of the MICRO and MINI.

This LED floodlight range is available in the standard stirrup mount version and an optional pole mount version. This versatility makes it suitable for use in various environments, which include outdoor general area and perimeter floodlighting, mining areas, food and beverage, manufacturing and processing plants.

The OMNISTAR range has not only been developed for performance and reliability, but also with quality of light output in mind. Furthermore, the added advantages of an LED solution are provided: low energy consumption, improved visibility with white light, limited maintenance, and longer life.



Key advantages

- Designed and manufactured in South Africa
- Highly efficient and energy saving
- White light with a high colour rendering index
- Designed to operate LED light sources of up to 116W without reducing the useful lifetime of up to 100 000 hours, at a lumen depreciation of not more than 5% (L95B10)
- Ta of up to 45°C
- Slim, aesthetical design optimised for LED characteristics
- Designed to replace conventional HID and CFL floodlight luminaires
- Easy to install
- Surge protection 10kV/10kA
- Circular economy 3-star rating
- 5-year warranty (Terms and conditions apply)

Characteristics

GENERAL INFORMATION	
Recommended installation height	Up to 10m
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 475, SANS 60598, SANS 62262

HOUSING AND FINISH	
Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
Optic	Acrylic PMMA
Protector	Glass
	High-impact polycarbonate (optional)
Housing finish	Unpainted aluminium
Tightness level	IP 66
Impact resistance	Glass: IK 07
	High-impact polycarbonate: IK 10
Access for maintenance	Easy access to the gear compartment

DIMENSIONS AND MOUNTING	
AxBxC (mm)	MICRO: 419x275x82
	MINI: 461x310x82
Weight (kg)	MICRO: 4.3
	MINI: 5.3
Aerodynamic resistance (CxS) (m^2)	MICRO: 0.09
	MINI: 0.113

For options and accessories, please turn to page 10.

ELECTRICAL INFORMATION	
Electrical class	EU class I or II
Nominal voltage	198-264V – 50Hz
Power factor	> 95% at full load
Surge protection	10kV / 10kA
	20kV / 20kA (optional for MINI only)
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
	Daylight switch (MINI only)
	Integrated movement sensor up to 12m (MINI only)

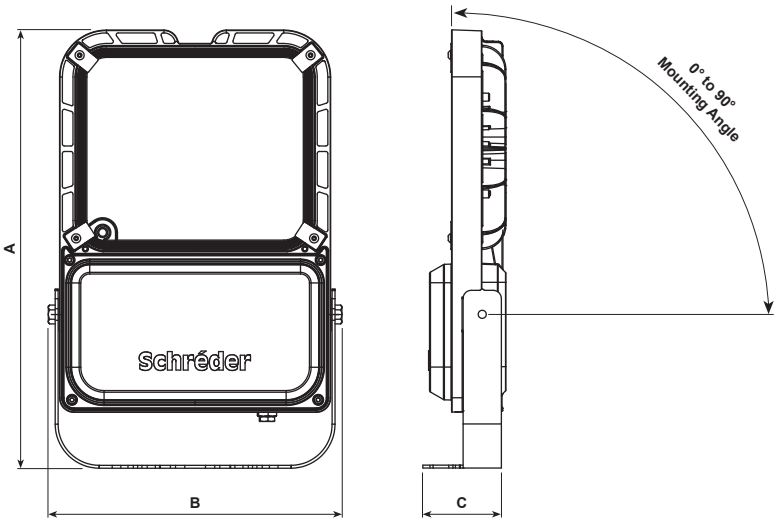
OPTICAL INFORMATION	
LED colour temperature	4000K (Neutral white 740)
	5700K (Cool white 757) (optional)
Colour rendering index (CRI)	≥ 70 (Neutral white 740)
	≥ 70 (Cool white 757) (optional)
Standard optic	5366

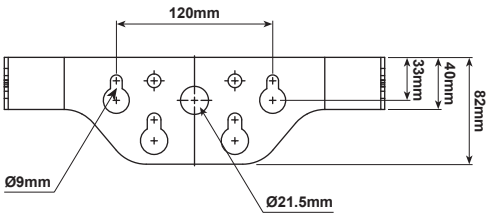
OPERATING CONDITIONS	
Operating temperature range (Ta)	-35°C up to +45°C (*)

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

LIFETIME OF THE LEDS @ TQ 25°C	
For all versions	100,000h - L95B10

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





Performance


Luminaire	Number of LEDs	Current (mA)	Line Current (A)	Nominal flux (lm) (*)	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)	Photometry (**)
				Typical	Typical	Typical	Typical	Typical	
MICRO	20	600	0.17	5720	38	151	4748	125	
	20	900	0.26	8083	59	137	6708	113	
	20	1200	0.35	9948	81	123	8257	102	LENSO FLEX® 4
MINI	40	600	0.32	11399	74	153	9461	127	BLAST FLEX™ 4
	40	700	0.38	13052	88	149	10833	124	
	40	900	0.5	15997	116	138	13277	115	

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.

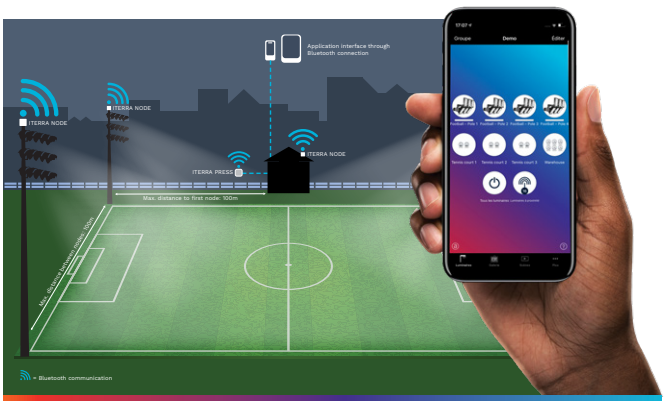
Switching/dimming control

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.



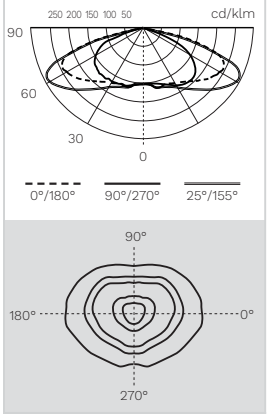
Download on the App Store

GET IT ON Google Play

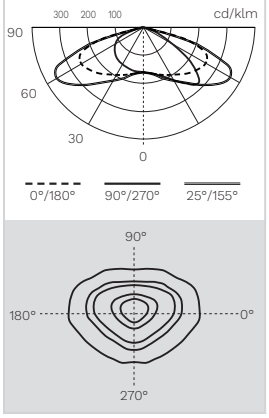
Light Distributions

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

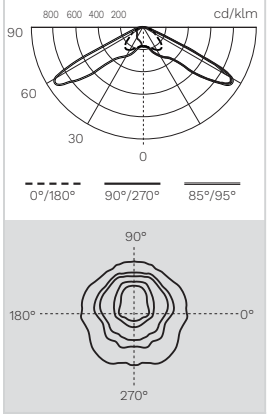
LENSO FLEX®4 5304 optic



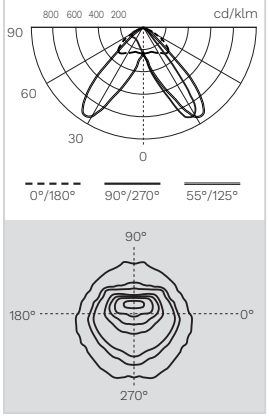
LENSO FLEX®4 5304-W optic*



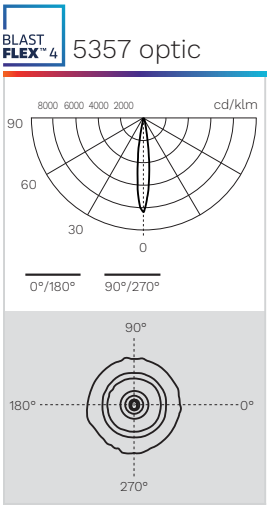
LENSO FLEX®4 5355 optic



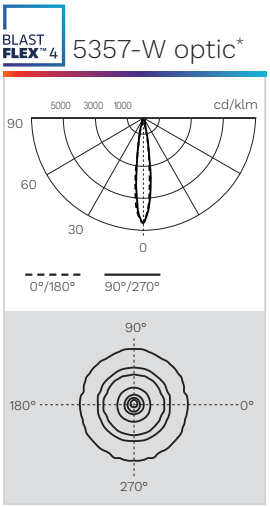
LENSO FLEX®4 5356 optic



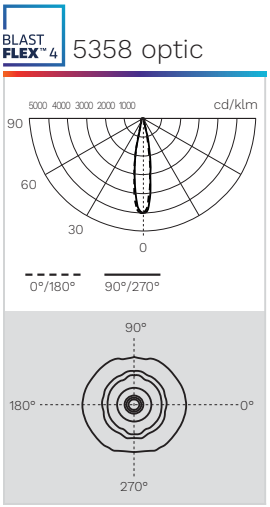
BLAST FLEX™4 5357 optic



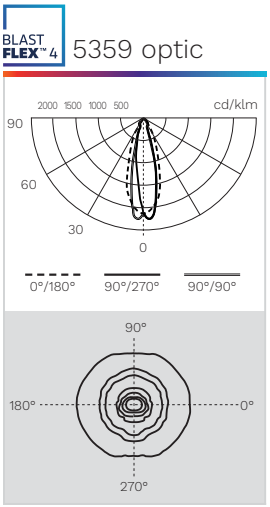
BLAST FLEX™4 5357-W optic*



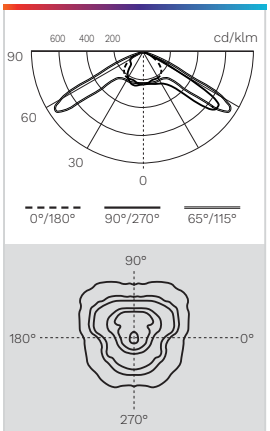
BLAST FLEX™4 5358 optic



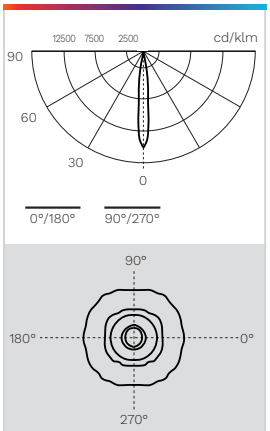
BLAST FLEX™4 5359 optic



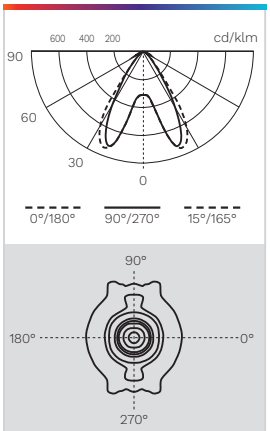
LENSO FLEX®4 5366 optic



LENSO FLEX®4 5405 optic



LENSO FLEX®4 5407 optic



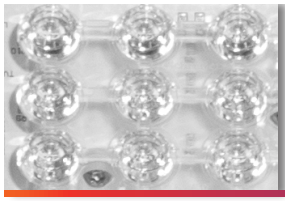
(*) Only available for OMNISTAR-MINI

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.

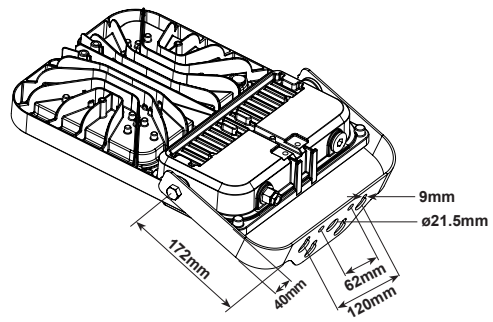
BlastFlex™4



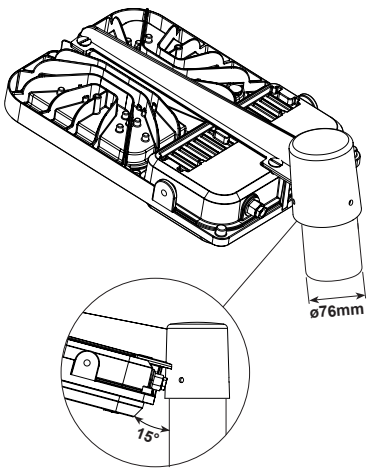
Using collimators made of high-transmission PMMA, the BlastFlex™4 photometric engine offers the highest efficiency for directional beams dedicated to specific applications in architectural and sports lighting. The ability to control the light with the highest accuracy reduces light spill in the surroundings,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

Mounting Options

Stirrup mounting (standard)



Pole mounting (optional)

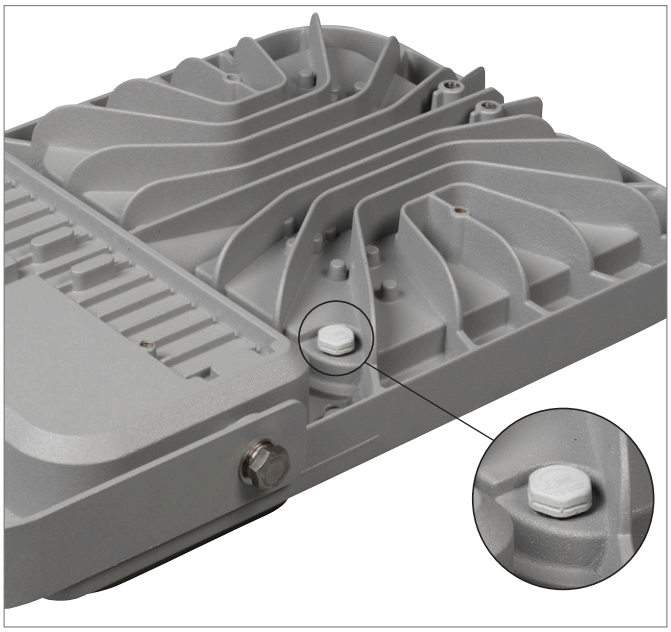


Key Features

High-efficient LED light sources with various optical distributions available

Optimal heat fin dissipation design

Rake angle adjustable on site



Integrated vent (breather) on optical and gear compartment for rapid pressure equalisation and reduction of condensation (MICRO)

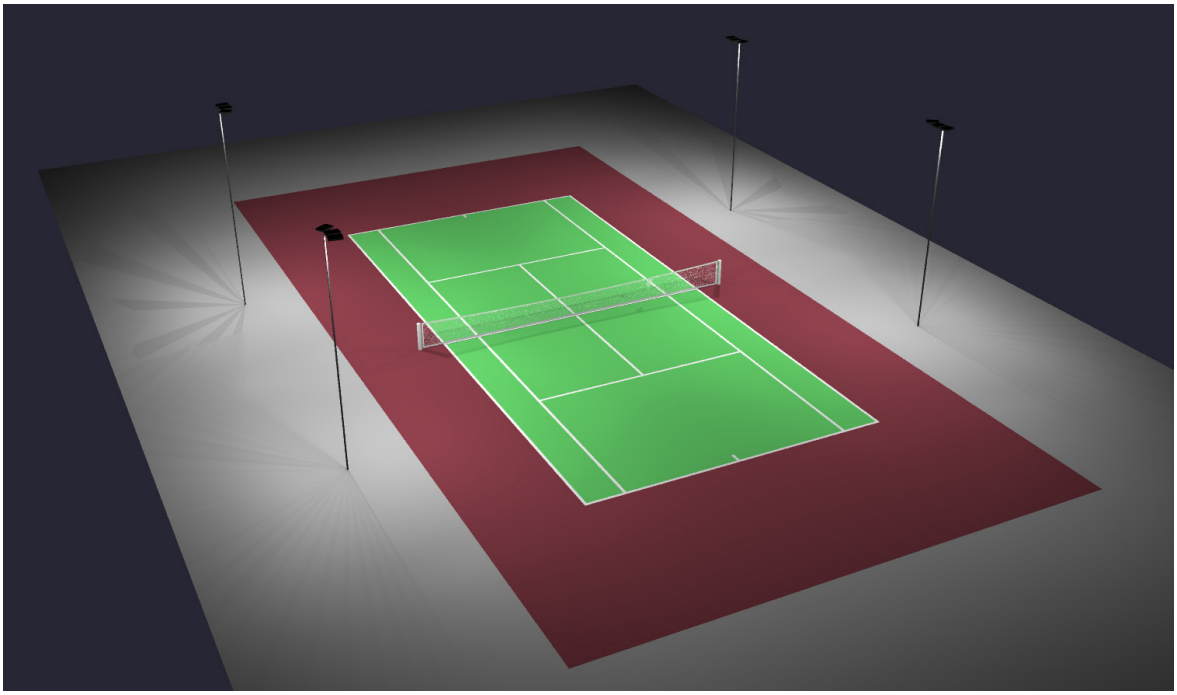
Case Study: 150W MH Comparison

Specifications

No. of poles: 4
Tennis court playing area:
24m x 11m
Height: 8m

Comparing a 150W MH to an OMNISTAR-MINI recreational tennis court installation

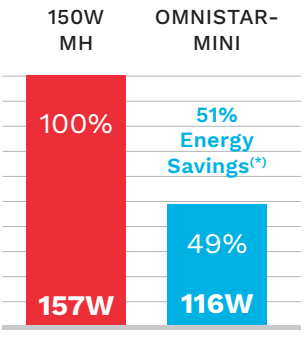
The OMNISTAR-MINI provides a 51% energy saving compared to a 150W metal halide luminaire, while fully meeting the required light level requirements.



	Luminaire fitted with 150W Metal Halide Lamp (3 per 8m pole)	OMNISTAR-MINI 116W (2 per 8m pole)
Luminaire power consumption (W)	157	116
Average illuminance (lx)	91.33	135.98
Min/Avg uniformity	0.76	0.63
Power consumption per installation (W)	1,884	928

Detail on lighting design comparison available on request.

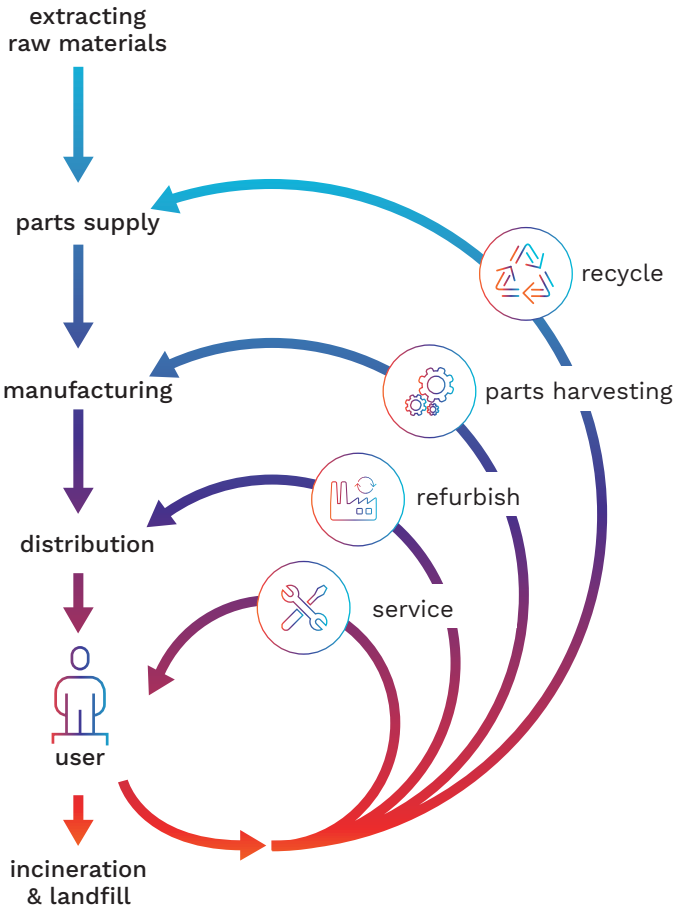
Energy Savings



(*)Optic 1440, optimised design based on specifications

CIRCLELIGHT

Circularity concept



OMNISTAR MICRO/MINI

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:

OMNISTAR MC2081N5304A1Gs

ID	LED	Watt	LED Colour	Optic[1]	Colour options	Surface Protection	Protector	Mounting
OMNISTAR MC	20	38 59 81	**N** Neutral White (4000K) **C** Cool white (5700K)	5304 5355 5356 5357 5358 5359 5366 5405 5407	**A** Aluminium finish (unpainted) **L** Pearl Light Grey (RAL 9022), Textured finish **O** Painted Other (RAL / Finish [Brilliant/Matt])	**1** 10kV	**G** Glass (IK07) **P**[2] Polycarbonate (IK10)	**s** Stirrup mounted **p** Pole mounted
OMNISTAR MI	40	74 88 116		5304 5304-W 5355 5356 5357 5357-W 5358 5359 5366 5405 5407				

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

Custom Options

OMNISTAR-MICRO & OMNISTAR-MINI	
Switching/dimming control	DALI
	1-10V
	Integrated Schréder ITERRA
Extra treatment	Anti-corrosion treatment (for very harsh environments)
OMNISTAR-MINI only	
Switching/dimming control	Daylight switch
	Integrated movement sensor up to 12m
Surge protection	20kV

BEKA Schréder

Experts in lightability™

SABS ISO 9001

www.beka-schreder.co.za

Designed and manufactured by BEKA Schréder (Pty) Ltd

LOCALLY manufactured

2023-10