BEKA Schréder

Experts in lightability™

LEDTEC

LED lowbay range
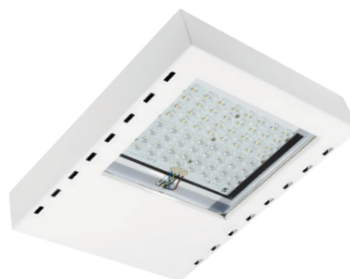

LOCALLY
manufactured

LEDTEC

LEDTEC
Surface mount with
Integrated Movement & Daylight Sensor

LEDTEC R
Recessed

LEDTEC S
Surface mount

IP 66

Up to
IK 10

10kV

Optimize your lowbay lighting

The LEDTEC is an LED lowbay range designed for energy-efficient lighting in industrial, commercial and petrochemical retail environments.

The LEDTEC range is optimized to deliver the best overall performance for lowbay applications. It outperforms all other LED lowbay luminaires thanks to the substantial energy savings it generates and the performance it delivers over time.

The LEDTEC can be used in hazardous environments where a Zone 2 or 21/22 rated luminaire is required. It is also available with a battery backup version, to be used in emergency situations.

The LEDTEC range is perfectly suited to multiple indoor and outdoor lighting applications with its typical lumen packages per product range and mounting options.

SERVICE STATION

RETAIL AREA

SPORT AREA

INDUSTRIAL HALL

WAREHOUSE

ASSEMBLY LINE

Key advantages

- Designed and manufactured in South Africa

- Designed to operate LED light sources of up to 144W in an ambient temperature (Ta) environment of up to 40°C

- The expected useful lifetime is 100 000 hours, at a lumen depreciation of not more than 30% (L70) at an ambient temperature (Tq) of 25°C

- Designed for easy, reliable and energy efficient canopy and ceiling installation to replace up to 400W HID light sources

- Easily accessible power supply/driver compartment

- Glare-reduced light distribution

- Flicker-free lighting

- Available in Emergency, Zone 2 and 21/22 versions (LEDTEC)

- Circular economy 3-star rating

- 5-year warranty (*)

(*) Terms and conditions apply

Characteristics

GENERAL INFORMATION

Recommended installation height	4m to 6m
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 60598
Weight (kg)	LEDTEC: 6
	LEDTEC Emergency Version: 7
	LEDTEC R: 13.7
	LEDTEC S: 11.2
Standard mounting	LEDTEC: Surface mount
	LEDTEC R: Recessed
	LEDTEC S: Surface mount

HOUSING AND FINISH

Housing	LEDTEC: Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
	LEDTEC R: Optical housing: Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300) Gear housing and fixation bracket: Marine grade e-coated and epoxy powder coated sheet metal
	LEDTEC S: Optical, gear housing and fixation bracket: Marine grade e-coated and epoxy powder coated sheet metal
Protector	Glass
	High-impact polycarbonate (optional)
Housing finish	White (RAL 9003), Brilliant finish
Tightness level	IP 66
Impact resistance	Glass: IK 08
	Polycarbonate: IK 10
Access for maintenance	Easy access to the gear compartment

ELECTRICAL INFORMATION

Electrical class	EU class I
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
Control options	DALI
	1-10V
	Integrated Movement & Daylight Sensor

OPTICAL INFORMATION

LED colour temperature	5700K (Cool white 757)
Colour rendering index (CRI)	≥ 70

OPERATING CONDITIONS

Operating temperature range (Ta)	-30°C up to +40°C

LIFETIME OF THE LEDS @ TQ 25°C

For all versions	100,000h - L70B10

LIFETIME OF THE DRIVER @ TQ 25°C

For all versions	100,000h ≤10% failure rate

Dimensions in mm

LEDTEC

LEDTEC R

Wieland connector for supply

M8 Dome nut

445

104

□ 520 (cutout □ 470)

LEDTEC S

300 Mounting Holes

ø8.5

380

469

359 Mounting Holes

394

85

133

Performance
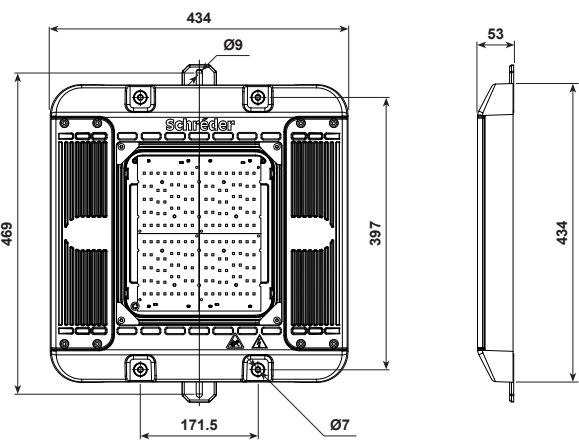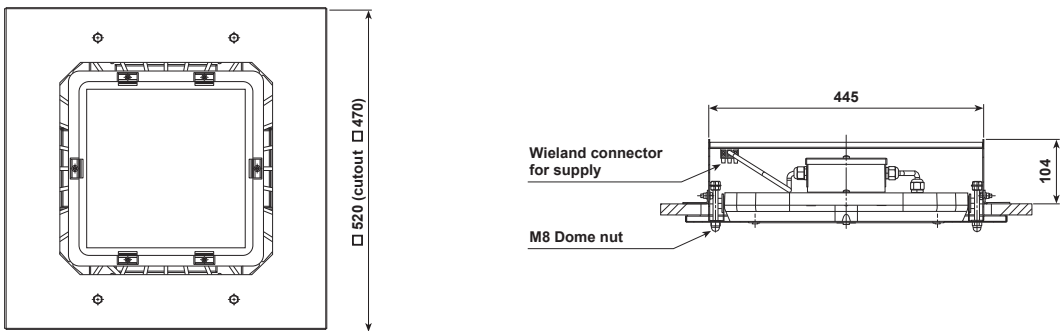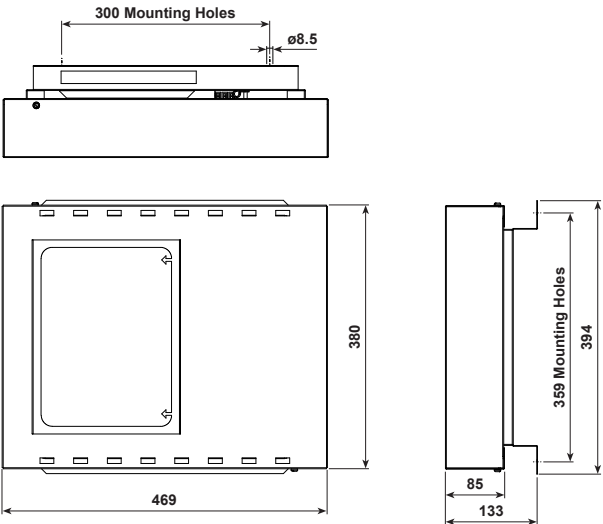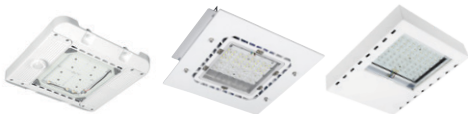
Luminaire	Number of LEDs	Driver Current (mA)	Line Current (A)	Nominal flux (lm) (*) Typical	Power consumption (W) Typical	Nominal efficacy (lm/W) Typical	Luminaire output flux (lm) Typical	Luminaire efficacy (lm/W) Typical	Photometry
LEDTEC	160	400	0.34	13223	78	169	12562	160	4010
LEDTEC	160	550	0.48	17777	110	162	16888	154	4010
LEDTEC	160	700	0.63	21967	144	153	20869	145	4010
LEDTEC R	160	900	0.51	18346	116	158	16878	145	4010
LEDTEC R	192	840	0.57	20774	132	158	19112	145	4010
LEDTEC S	160	500	0.45	15483	105	148	13408	128	4010
LEDTEC S	160	700	0.62	20754	142	146	17973	126	4010
LEDTEC (Emergency version)	160	400	0.34	13223 / 923 (EM)	78	169	12562	160	4010
LEDTEC (Emergency version)	160	550	0.48	17777 / 923 (EM)	110	162	16888	154	4010
LEDTEC (Emergency version)	160	700	0.63	21967 / 923 (EM)	144	153	20869	145	4010

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.

Light Distribution
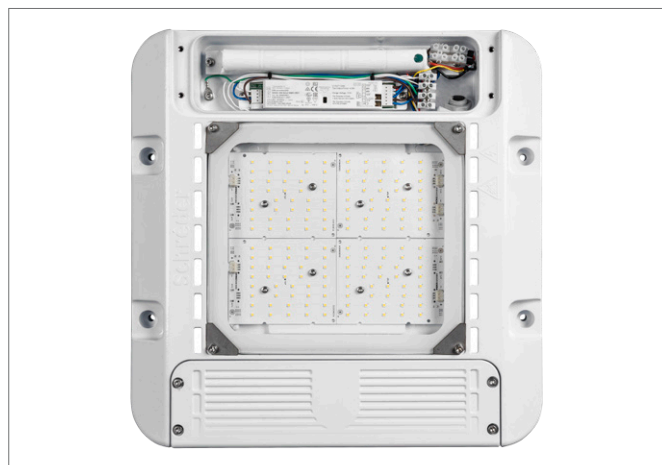
4010 optic
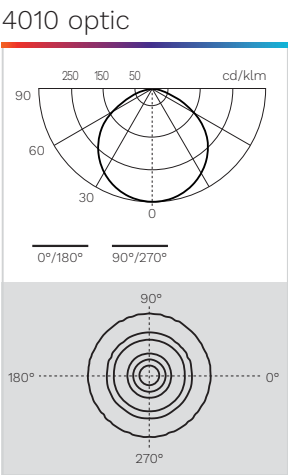
Key Features
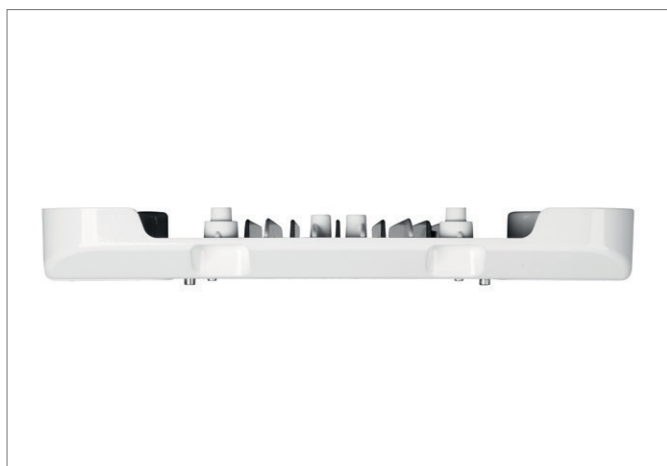
LEDTEC

Designed for ease of installation.
Various mounting options available (optional lugs for centre beam mounting or mounting holes to mount directly to canopy).
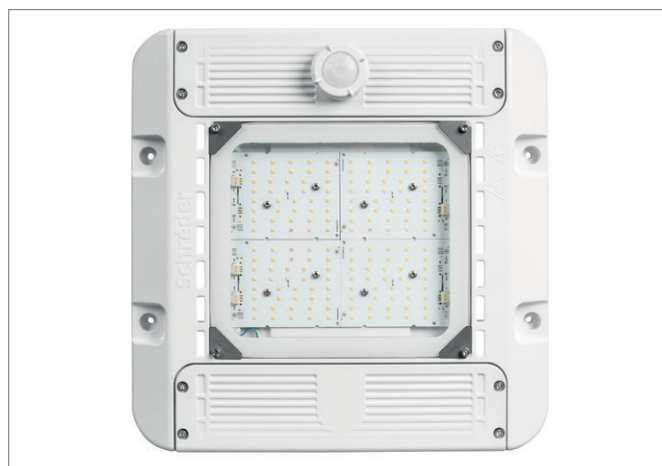

Vertical fin arrangement optimises thermal dissipation.

Optional integrated 1-hour battery back-up.

Low profile for improved aesthetics.

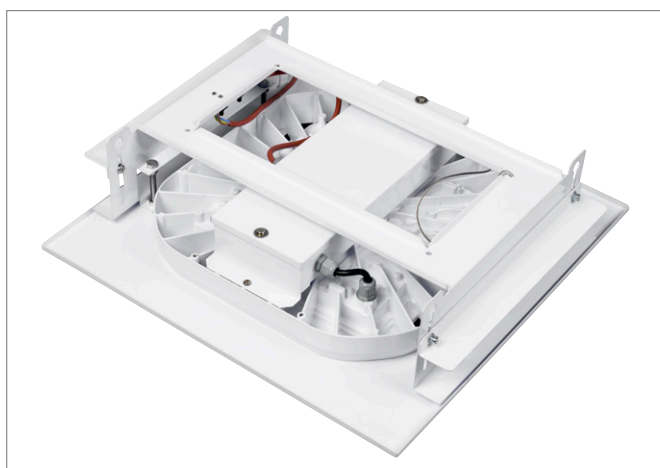Optional sensor for additional energy savings.

Control gear and optional emergency control gear easily accessible for ease of maintenance.
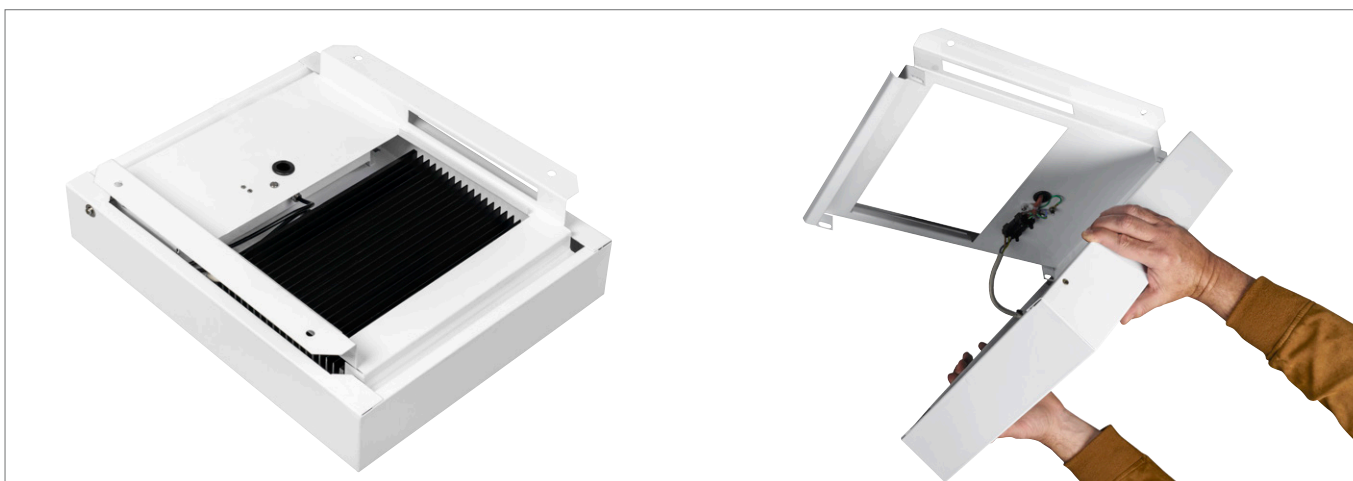
LEDTEC R

For recessed luminaire applications. Vertical fin arrangement optimises thermal dissipation.
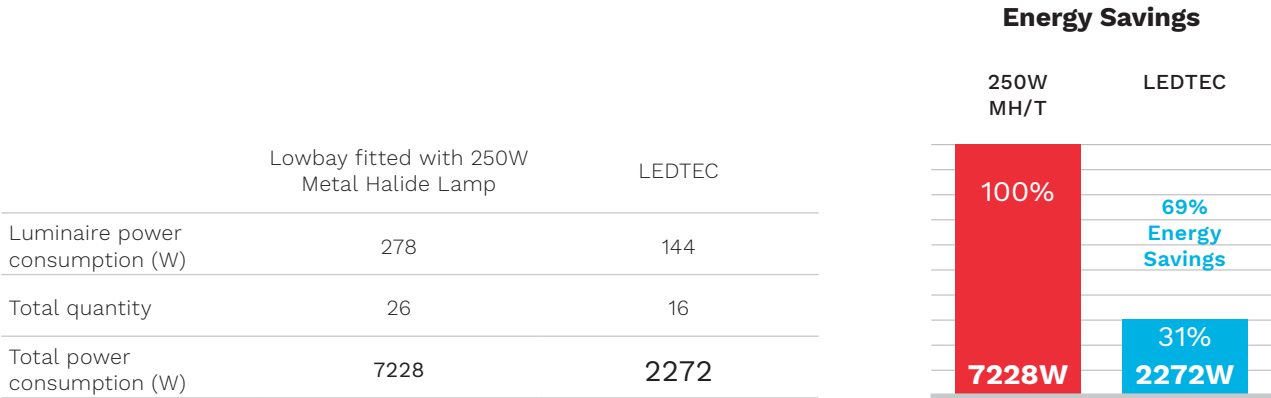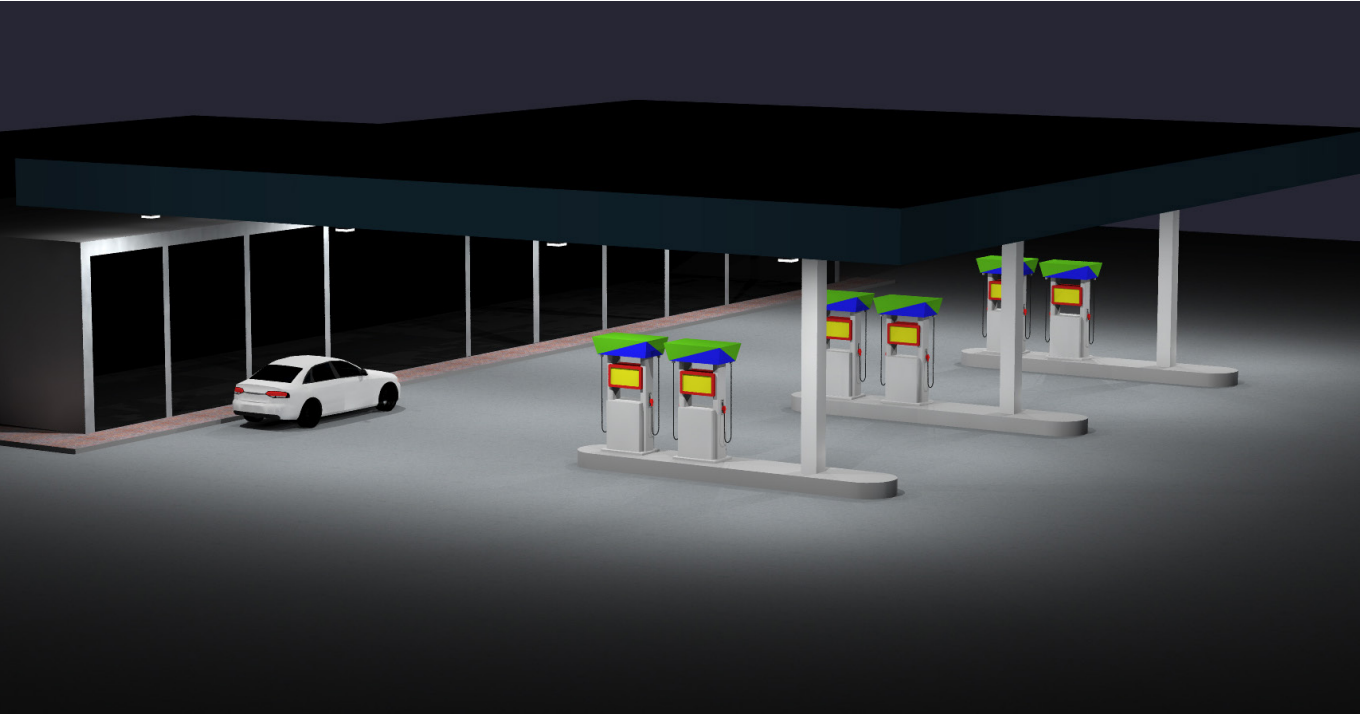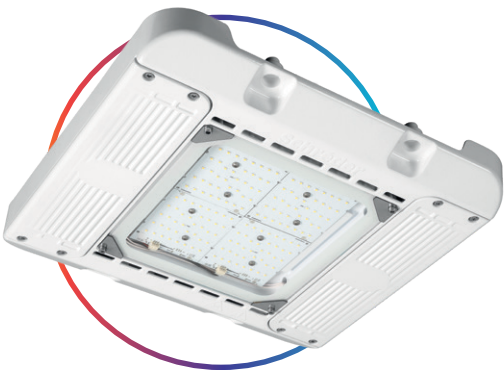

Compact and easy to install, ideal for low ceiling voids.

LEDTEC S

For surface mount luminaire applications. Low profile design ideal for undercanopy installations. Ease of installation is facilitated by external mounting lugs and a hingeable connector plate.

Case Study: Undercanopy Lighting of a Service Station

Energy Savings

	Lowbay fitted with 250W Metal Halide Lamp	LEDTEC
Luminaire power consumption (W)	278	144
Total quantity	26	16
Total power consumption (W)	7228	2272

250W MH/T	LEDTEC
100%	69% Energy Savings
7228W	31% 2272W

Please note: Above calculation is for demonstration purposes, please contact us for detailed energy saving and return of investment calculations.
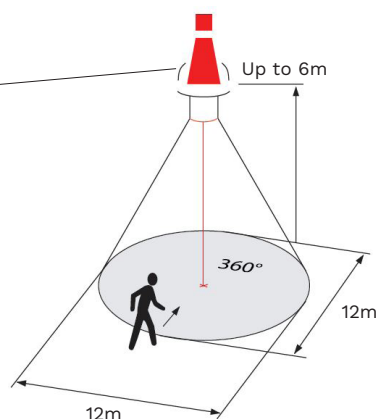
Integrated Movement & Daylight Sensor (optional)

The integrated motion sensor uses a specific lens to determine a detection zone. The standard lens is suitable for most applications. As an option, lenses can be provided for special needs.
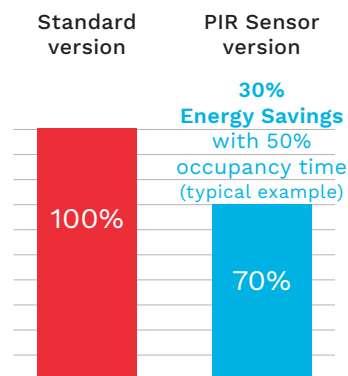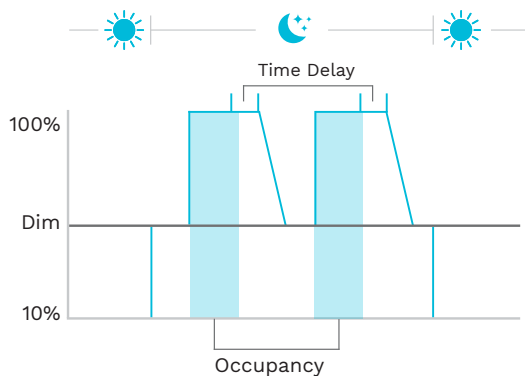
Not available for LEDTEC R.

Movement sensor

Energy Savings

Standard version | PIR Sensor version

30% Energy Savings with 50% occupancy time (typical example)

100%

70%

Up to 6m

360°

12m

12m

Mode A
Outdoor parking area with minimum light level at night
Features: Always ON during the night (ON at dusk; Low Dim maintains minimum level overnight; OFF at dawn)
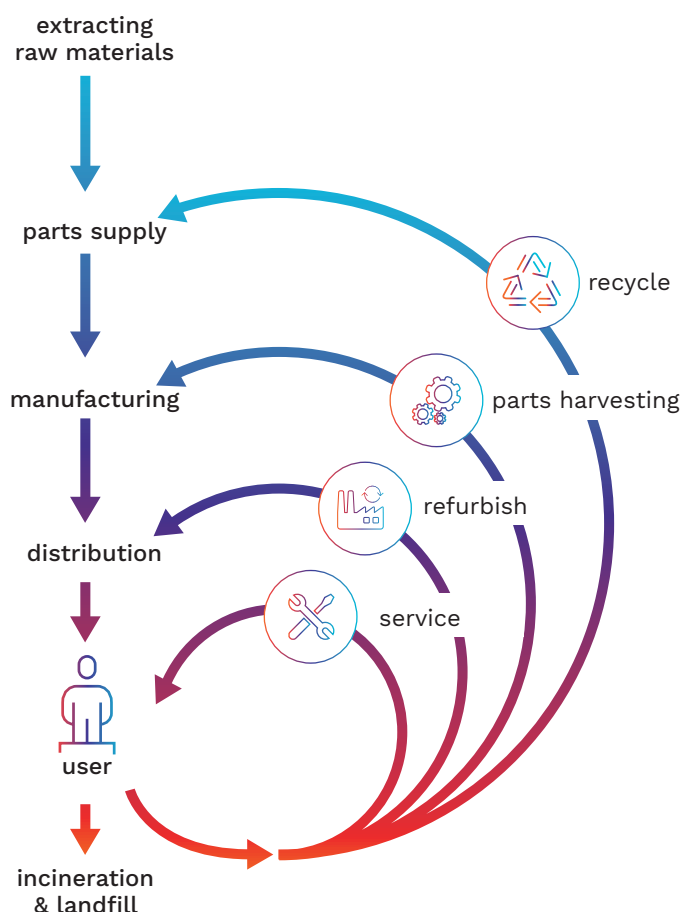
Time Delay

100%

Dim

10%

Occupancy

Mode B
Outdoor parking area with High/Low/Off levels at night
Features: At dusk, turns ON with occupancy; drops to Low Dim level after vacancy, then turns OFF after delay; OFF at dawn

Time Delay

100%

1/2 Time Delay

Dim

10%

Occupancy

CIRCLELIGHT

Circularity concept

- extracting raw materials
- parts supply
- manufacturing
- distribution
- user
- incineration & landfill

- recycle
- parts harvesting
- refurbish
- service
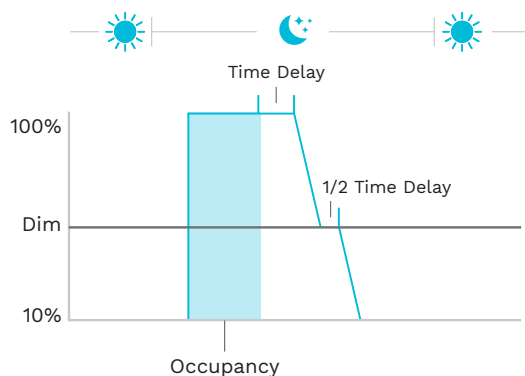
LEDTEC

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:

LEDTEC 160142W4010W1GmaM6A

ID	LED	Watt	LED Colour	Optic	Colour options	Surge Protection	Protector	Extras
LEDTEC	160 160	78 110 144	**N** Neutral White (4000K) **W** Warm white (3000K) **C** Cool white (5700K)	4010	**W** White (RAL 9003), Brilliant finish **O** Painted Other (RAL / Finish [Brilliant/Matt])	**0** No surge, emergency version only **1** 10kV	**G** Glass clear **P** Polycarbonate[1]	**ma** Mounting lugs, aluminium finish **mc** Mounting lugs, painted finish, same as housing **M6** Movement sensor up to 6m (Mode **A** or Mode **B**) **E1** Emergency version (1 hour) **Z2** Zone 2 **Z21/22** Zone 21/22
LEDTEC R	160 192	116 132	**N** Neutral White (4000K)	4010	**W** White (RAL 9003), Brilliant finish **O** Painted Other (RAL / Finish [Brilliant/Matt])	**1** 10kV	**G** Glass clear **P** Polycarbonate[1]	
LEDTEC S	160 160	105 142	**N** Neutral White (4000K)	4010	**W** White (RAL 9003), Brilliant finish **O** Painted Other (RAL / Finish [Brilliant/Matt])	**1** 10kV	**G** Glass clear	**M6** Movement sensor up to 6m (Mode A or Mode B)

[1] Suitable for Food & Beverage industry

Custom Options

Switching/dimming control	1-10V dimming
	DALI dimming

BEKA Schréder

Experts in lightability™

SABS
ISO 9001

www.beka-schreder.co.za

Designed and manufactured by BEKA Schréder (Pty) Ltd

LOCALLY manufactured