

# BEKA VAPOURLINE

Industrial LED luminaire



**LOCALLY**  
manufactured

# BEKA VAPOURLINE



IP 65

IK 08



## Efficiency made affordable

The BEKA VAPOURLINE offers a robust and efficient LED alternative for replacing fixtures fitted with T5/T8 fluorescent tubes.

Designed to provide a long-term solution for harsh industrial environments, the BEKA VAPOURLINE has a strong mechanical design that makes it highly resistant to shock and vibration while its IP rating makes it ideal for dusty and wet locations.

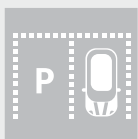
This high-performing luminaire provides an energy-efficient lighting solution. With a lifetime five times longer than a fluorescent tube, this modern linear LED luminaire lowers the total cost of ownership of a lighting installation and eliminates the need for maintenance.

For the 4ft version, the LED modules are clipped into the diffuser, creating a protected and enclosed optical compartment within the luminaire. This will prevent any premature damage to the LEDs during installation or during maintenance.

The BEKA VAPOURLINE creates safe and comfortable working conditions thanks to its low glare and high colour rendering index to optimise productivity.



INDUSTRIAL  
HALLS &  
WAREHOUSES



CAR PARKS



PUBLIC  
BUILDINGS



OFFICE  
BUILDINGS



SPORT  
AREAS

## Key advantages

- Designed and manufactured in South Africa
- LED alternative for fixtures equipped with fluorescent T5/T8 lamps
- Cuts energy costs by up to 50%
- Uniquely designed optical compartment to meet LED lifetime expectation
- Easy installation and maintenance free
- Suspension mounting
- High colour rendering index: CRI ≥80
- High luminaire efficacy (up to 159lm/W)
- Uniform luminance with low glare due to prismatic diffuser design
- Long service life: over 60,000 hours (L70B10)
- No ingress of dust and moisture into the LED and controller compartment - IP 65
- Vandal-resistant - IK 08
- Robust corrosion-resistant housing and diffuser
- Stainless steel latches
- Supplied with complete surface mounting kit
- Optional movement sensor for additional energy savings
- Optional 1-hour emergency back-up
- Available in Zone 2 and 21/22 versions
- Surge protection 10kV/10kA
- Circular economy 3-star rating
- 3-year warranty (Terms and conditions apply)

# Characteristics

## GENERAL INFORMATION

Recommended installation height	2m to 5m
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 60598

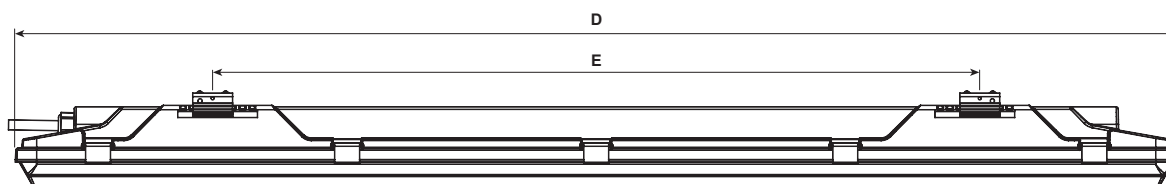
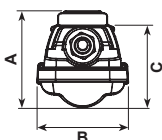
## HOUSING AND FINISH

Housing	High-impact polycarbonate
Protector	High-impact polycarbonate (*)
Tightness level	IP 65
Colour	Telegrey 1 (RAL 7045)
Impact resistance	IK 08

(\*) Suitable for Food & Beverage industry

## DIMENSIONS AND MOUNTING

A (mm)	4ft: 97	
	5ft: 101	
B (mm)	4ft: 92	
	5ft: 101	
C (mm)	4ft: 83	
	5ft: 96	
D (mm)	4ft: 1165	
	5ft: 1573	
E (mm)	4ft: 770	
	5ft: 1100	
Weight (kg)	Standard version:	4ft: 2.1
		5ft: 2.5
	Emergency version:	4ft: 2.6
		5ft: 3.0
Standard mounting	With two metal clips on the back of the body for surface/wall mounting. Pendant with an additional triangle accessory provided.	



## ELECTRICAL INFORMATION

Electrical class	EU class I
Nominal voltage	230V ±10% 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 option	DALI
	Movement sensor

## OPTICAL INFORMATION

LED colour temperature	4000K (Neutral white 840)
	5700K (Cool white 857) (optional)
Colour rendering index (CRI)	≥ 80 (Neutral white 840)
	≥ 80 (Cool white 857) (optional)

## OPERATING CONDITIONS

Operating temperature range (Ta)	Standard version:
	-35°C up to +40°C
	Emergency version:
	-35°C up to +35°C

## LIFETIME OF THE LEDS @ TQ 25°C


For all versions	60,000h - L70B10
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## LIFETIME OF THE DRIVER @ TQ 25°C

For all versions	50,000h ≤10% failure rate
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For options and accessories, please turn to page 8.

# Performance



				Nominal flux (lm) <sup>(*)</sup>	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)	T8 equivalent
Luminaire	Size	Driver Current (mA)	Line Current (A)	Typical	Typical	Typical	Typical	Typical	Typical
VLN LED Standard version	4ft	250	0.12	4577	27	170	4165	154	2*36W
	4ft	300	0.18	7122	41	174	6481	159	2*58W
	5ft	400	0.21	8170	49	166	7353	150	2*58W
VLN LED Emergency Version	4ft	250	0.12	4577 / 810 (EM)	27	170	4165	154	2*36W
	4ft	300	0.18	7122 / 810 (EM)	41	174	6481	159	2*58W
	5ft	400	0.21	8170 / 810 (EM)	49	166	7353	150	2*58W
VLN LED Explosion Proof Z2, Z21/22	4ft	250	0.12	4577 / 810 (EM)	27	170	4165	154	2*36W
	4ft	300	0.18	7122 / 810 (EM)	41	174	6481	159	2*58W

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

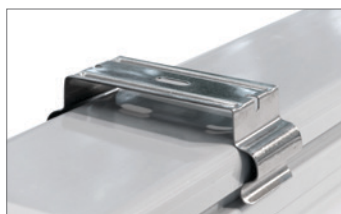
(\*) The nominal flux is an indicative LED flux @ Ts 85°C based on LED manufacturer’s data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. The type of LED used is subject to change due to the ongoing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



# Key Features



Sleek, slim design optimised for LED technology, versatile mounting and various wiring options



Standard mounting clips



Triangle for suspended mounting



Low glare design for comfortable working conditions



Uniquely designed optical compartment to meet LED lifetime expectation (applicable to 4ft version)



5ft version

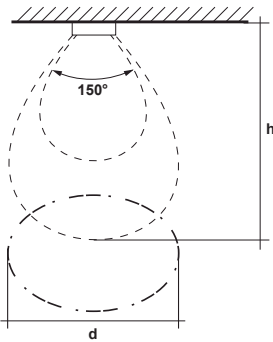


Integrated LED module on metal plate for optimal thermal dissipation

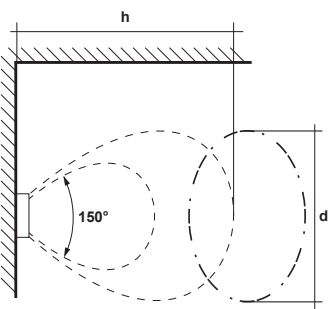
# Integrated Movement & Daylight Sensor (optional)

Diameter of the detection cone as a function of height at maximum detection area without taking objects in the room into consideration. Stationary objects (walls, tables, floor-standing luminaires, etc.) located in the direct view of the sensor change the characteristics of the detection area. The mentioned values are typical minimum values depending on the environment and application the detection area may increase.

Ceiling mounted

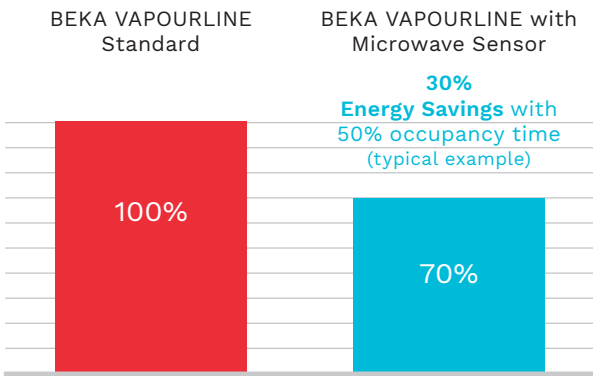


Wall mounted



Sensitivity		
h	100%	50%
	Detection diameter at 1 m/s moving speed (d)	
0.5m	5.0m	2.5m
1.0m	6.0m	3.0m
1.5m	7.0m	4.0m
2.0m	8.0m	5.0m
2.5m	8.0m	5.0m
3.0m	8.0m	5.0m
3.5m	7.5m	4.0m
4.0m	7.0m	3.0m
4.5m	6.5m	3.0m
5.0m	6.0m	2.5m
5.5m	5.0m	2.0m
6.0m	4.5m	2.0m
6.5m	4.0m	2.0m

Energy Savings



## Construction Details

The body is manufactured from injection-moulded, UV stable polycarbonate material. Mounting is facilitated through removable external stainless steel mounting brackets, which can accommodate either surface or suspension mounting. A silicon sponge gasket is fitted into a special groove in the housing. This, in conjunction with the tongue provided on the diffuser, ensures the optimal sealing of the total enclosure, thereby maintaining the IP 65 ingress protection rating.

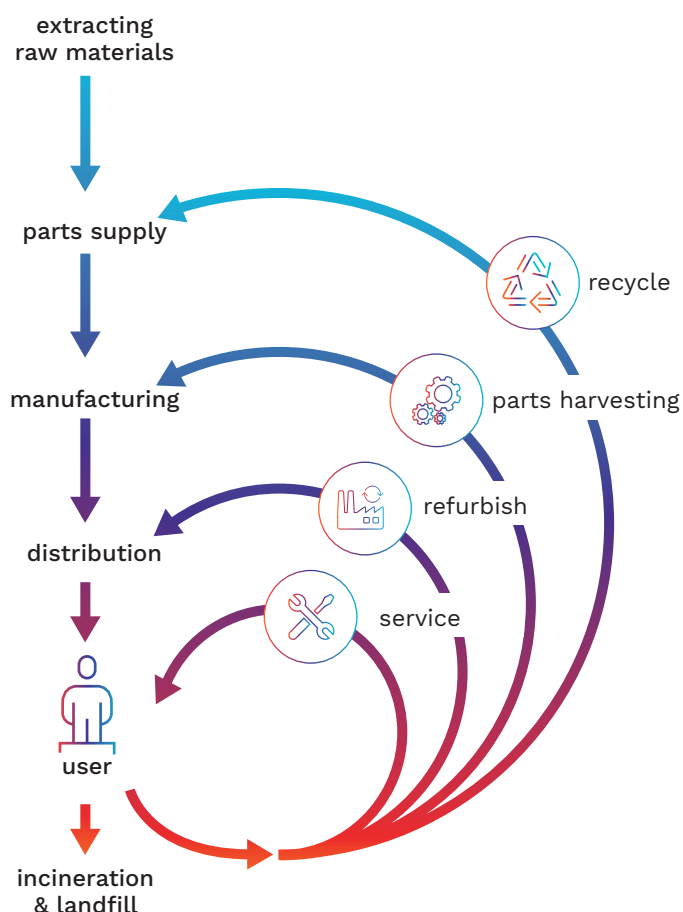
The diffuser is manufactured from injection-moulded, UV stable polycarbonate material. The highly effective internal prisms of the diffuser ensure an optimal distribution with a transmission value of  $\geq 91\%$ . The diffuser is secured in place through multiple sprung stainless steel clips which ensure the integrity of the IP rating.

For the 4ft version, the LED modules are clipped into the diffuser, creating a protected and enclosed optical compartment within the luminaire. This will prevent any premature damage to the LEDs during installation or during maintenance.

All control gear components are removable. Mains connections are by means of a suitable screw terminal block with a wire clamping contact.



## Circularity concept



## BEKA VAPOURLINE

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 Schröder 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:

-  • Tool-free opening of the gear compartment for easy maintenance
-  • Equipped with a completely replaceable LED engine
-  • Less than 8 steps to completely disassemble the luminaire
-  • 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

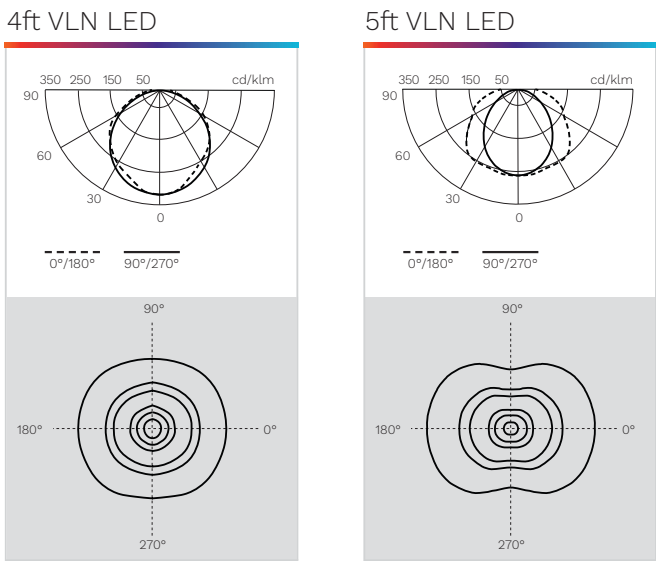


It was developed to meet most of circular economy requirements



It was developed to fully meet circular economy requirements

# Light Distributions



## Ordering Information

Example:

VLN LED41 N1 DALITWZ21/22

ID	Watt	LED Colour	Surge Protection	Switching/dimming control	Other options / accessories
VLN LED	27	<b>N</b>	<b>1</b> 10kV	<b>DALI</b> DALI Dim <b>MS</b> Movement sensor	<b>E1</b> Emergency version - 1 hour
	41	Neutral white (4000K)			<b>Z2</b> <sup>(1)</sup> Zone 2
	49	<b>C</b> <sup>(1)</sup> Cool white (5700K)			<b>Z21/22</b> <sup>(1)</sup> Zone 21/22 <b>TW</b> <sup>(1)</sup> Through-wire (2 x gland)

<sup>(1)</sup> Only available for the 27W & 41W versions



# BEKA Schröder

Experts in lightability™

**SABS**  
ISO 9001



[www.beka-schreder.co.za](http://www.beka-schreder.co.za)

Manufacturers of Luminaires and Glass Fibre Poles



2024-02

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