

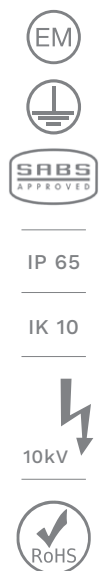
# ROUGHGUARD LED

Vandal-resistant linear LED luminaire



**LOCALLY**  
manufactured

# ROUGHGUARD LED



1ft version - opaque diffuser



2ft version - clear diffuser

## Vandal-proof LED luminaire

The ROUGHGUARD LED has been designed to be used in industrial corrosive and harsh environments.

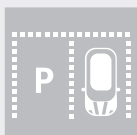
With applications like police stations and prison cells, railway stations, underground parking areas, mining workshops and others, where vandalism and corrosive elements are prevalent, the ROUGHGUARD LED will be able to not only withstand these environments, but to also efficiently provide light exactly where it is needed.



SECURITY LIGHTING



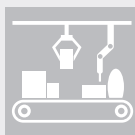
RAILWAY STATIONS & METROS



AREA



PUBLIC BUILDINGS



ASSEMBLY LINE



WAREHOUSE



MANUFACTURING



LOADING BAY



HAULAGE LIGHTING



CONVEYOR BELT

## Key advantages

- Designed and manufactured in South Africa
- Vandal proof
- Available in two sizes for applications flexibility
- Designed to operate LED light sources of up to 56W in an ambient temperature (T<sub>a</sub>) environment of up to 35°C, without reducing the useful lifetime of up to 50 000 hours, at a lumen depreciation of not more than 30% (L70)
- Corrosion-resistant high-pressure die-cast aluminium body
- One-piece injection-moulded clear polycarbonate diffuser
- Removable gear tray for ease of maintenance
- 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, SANS 62262

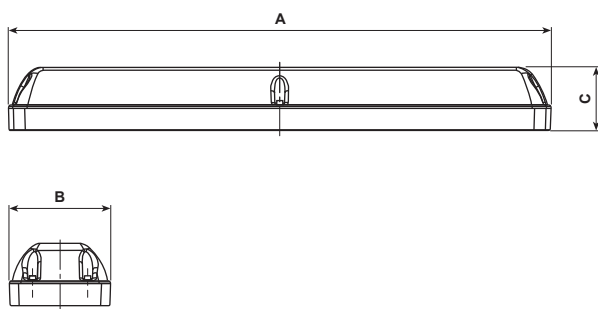
## HOUSING AND FINISH

Housing	Marine grade high-pressure die-cast aluminium (EN 1706 AC-44300)
Optic	Acrylic PMMA
Protector	Polycarbonate <sup>(*)</sup>
Housing finish	Pearl Light Grey (RAL 9022), Textured finish
Tightness level	IP 65
Impact resistance	IK 10

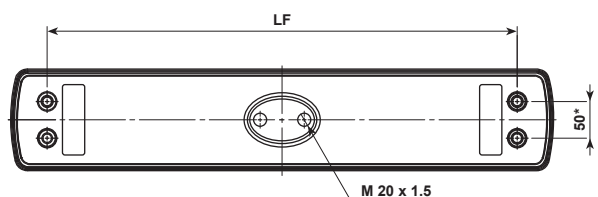
(\*) Suitable for Food & Beverage industry

## DIMENSIONS AND MOUNTING

AxBxC (mm)	1ft: 356x138x95 2ft: 742x138x85
LF (mm)	1ft: 241.5 2ft: 640
LB (mm)	1ft: 241.5 2ft: 568
Weight (kg)	1ft: 2.4 2ft: 3.8
Standard mounting	Knock-outs or bracket mounting



### Surface mounting through knock-out



\* Only applicable to 2ft version

## ELECTRICAL INFORMATION

Electrical class	EU class I
Nominal voltage	198-277V – 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	DALI (optional) Movement sensor (optional)

## OPTICAL INFORMATION

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

## OPERATING CONDITIONS

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

## LIFETIME OF THE LEDS @ TQ 25°C

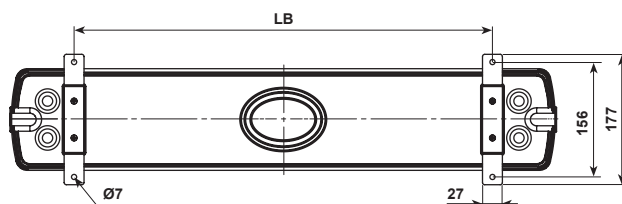
For all versions	50,000h - L70B10
------------------	------------------

## LIFETIME OF THE DRIVER @ TQ 25°C

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

For options and accessories, please turn to page 7.

### Surface mount bracket



# Performance



				Nominal flux (lm) <sup>(*)</sup>	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)
Luminaire	Size	Current (mA)	Line Current (A)	Typical	Typical	Typical	Typical	Typical
ROUGHGUARD LED	1ft	350	0.03	1060	7 <sup>(**)</sup>	151	763	109
	1ft	500	0.06	2050	15 <sup>(**)</sup>	136	1635	109
	2ft	250	0.11	4240	26 <sup>(***)</sup>	163	3858	148
	2ft	500	0.24	8200	56 <sup>(***)</sup>	146	7462	133
ROUGHGUARD LED Emergency Version (1 hour)	1ft	350	0.03	1060 / 455 (EM)	7 <sup>(**)</sup>	151	763	109
	1ft	500	0.06	2050 / 455 (EM)	15 <sup>(**)</sup>	136	1635	109
	2ft	250	0.11	4240 / 815 (EM)	26 <sup>(***)</sup>	163	3858	148
	2ft	500	0.24	8200 / 815 (EM)	56 <sup>(***)</sup>	146	7462	133

Tolerance on LED flux is  $\pm 7\%$  and on total luminaire power  $\pm 5\%$

(\*) 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.

(\*\*) Opaque diffuser

(\*\*\*) Clear diffuser

## Construction Details

The luminaire consists of a high-pressure die-cast marine grade aluminium body with a robust clear polycarbonate diffuser and is designed to operate LEDs of up to 56W.

The luminaire bears the SANS 60598-2-1 safety mark.

It is specifically designed for surface mounted applications.

The body and diffuser are designed in such a way to prevent collection of dust on the accessible surface of the body, thus also preventing any grip of the luminaire. The luminaire is designed to allow entry of surface conduits via 20mm conduit threaded entries at both ends, as well as a 25mm hole in the centre of the back of the body. A silicone sponge gasket ensures reliable IP 65 rating.

The one-piece, injection-moulded polycarbonate diffuser is vandal resistant. It is secured to the body by six stainless steel Allen head screws. Tamper-proof screws with centre-pin are available upon request.

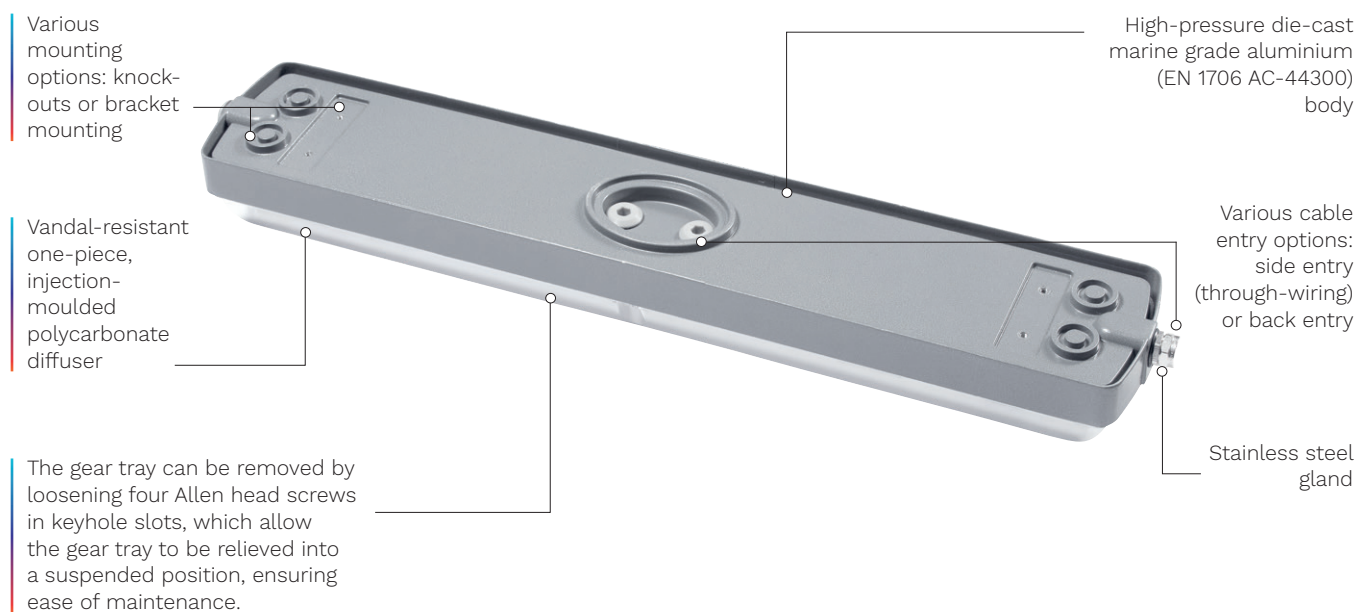
The removable gear tray is manufactured from mild steel, powder coated white to optimise luminaire efficiency. All control gear components are mounted on the gear tray. The gear tray can be removed by loosening four Allen head screws in keyhole slots, which allow the gear tray to be relieved into a suspended position, ensuring ease of maintenance.

All control gear components are removable and bear the relevant SABS mark. All screws, bolts and metal parts are stainless steel or non-corrosive material. Mains connections are by means of a suitable screw terminal block with a wire clamping contact.

Electronic temperature monitoring prevents overheating of LEDs and power supply.



# Key Features



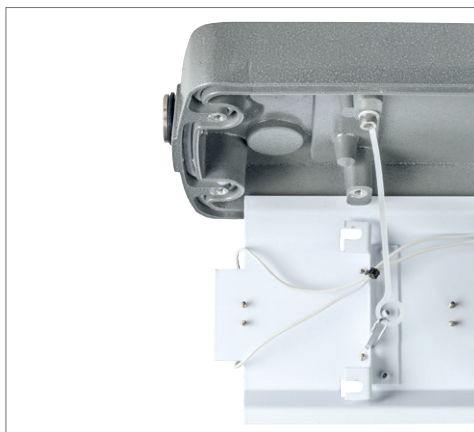
1ft version available with opaque diffuser only



2ft version with clear diffuser, opaque diffuser optional



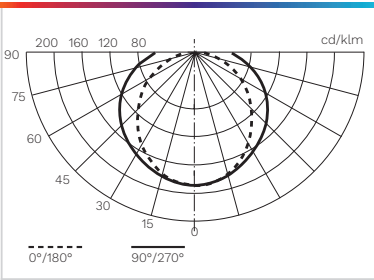
Optional integrated movement and daylight sensor for further energy savings



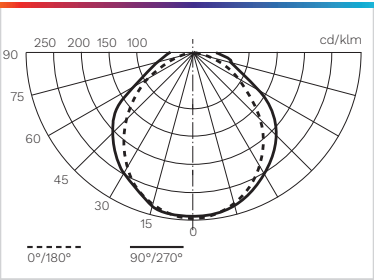
Removable gear tray with suspension hanger

# Light Distributions

1ft optic - opaque diffuser



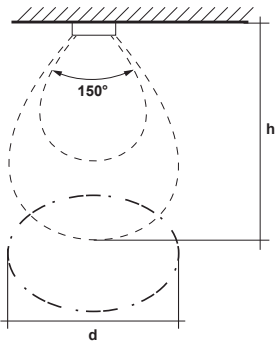
2ft optic - clear diffuser



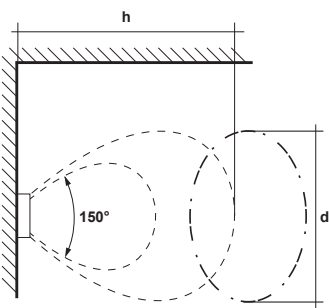
## Integrated Movement & Daylight Sensor (optional)

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

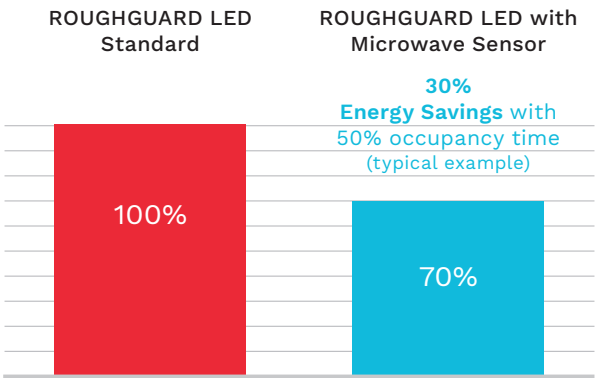


Wall mounted



Sensitivity					
h	100%	75%	50%	30%	10%
	d				
0.5m	5.0m	3.0m	1.5m	1.0m	0.50m
1.0m	6.0m	4.0m	3.0m	2.0m	1.00m
1.5m	6.5m	4.0m	3.0m	2.0m	1.00m
2.0m	7.0m	4.5m	3.5m	2.5m	1.00m
2.5m	7.0m	4.5m	3.5m	2.0m	1.50m
3.0m	7.5m	5.5m	4.0m	1.5m	0.50m
3.5m	5.5m	3.5m	2.0m	0.5m	0.25m
4.0m	5.5m	3.0m	1.5m	0.5m	0.25m
4.5m	3.5m	2.0m	1.0m	0.5m	0.25m
5.0m	3.0m	1.5m	1.0m	0.5m	0.25m

Energy Savings



# Ordering Information

Example:

ROUGHGUARD LED 56WNS1PmS V MS

ID	Watt	LED Colour	Colour options	Surge Protection	Protector	Mounting	Wire entry	Other options
ROUGHGUARD LED	7 <sup>(1)</sup> 15 <sup>(1)</sup> 26 <sup>(2)</sup> 56 <sup>(2)</sup>	<b>N</b> Neutral White (4000K)	<b>S</b> Pearl Light Grey (RAL 9022), Textured finish <b>P</b> Painted Other (RAL / Finish [Brilliant/Matt])	<b>1</b> 10kV	<b>P</b> Clear (2ft version only) <b>O</b> Opaque	<b>m</b> Mounting bracket	<b>S</b> Side <b>B</b> Back	<b>T</b> Through-wiring  <b>V</b> Vandal-proof screws  <b>NL</b> Night light  <b>E</b> Emergency version  <b>DALI</b> DALI Dim  <b>MS</b> Motion sensor

<sup>(1)</sup> 1ft version

<sup>(2)</sup> 2ft version

## Custom Options

Correlated colour temperature	3000K (Warm white 730) 5700K (Cool white 757)
Extra treatment	e-Coating (for very harsh environments)

# 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



**LOCALLY**  
manufactured

2021-05

Copyright © BEKA Schröder (Pty) Ltd – 13 West View Road – Olifantsfontein (South Africa) • The information, descriptions and illustrations herein are of only an indicative nature. Due to advanced developments, we may be required to alter the characteristics of our products without notice. As these may present different characteristics according to the requirements of individual countries, we invite you to consult us.