BEKA Schréder

Experts in lightability™

QVAL

Versatile, high-performance and reliable LED bulkhead

QVAL

IP 66

10kV

Comfort and efficiency for exterior lighting

The QVAL is a decorative, high-performance and reliable LED bulkhead which outperforms all conventional wall mounted bulkhead luminaires by providing a bright and long-lasting light for outdoor wall mounted applications.

The design ensures a discreet integration without compromising on performance. The QVAL delivers a strong white light with a high colour rendering index to ensure perfect visibility and comfort at all times. The luminaire emits a pleasant light due to the highly efficient white reflector.

The indirect reflector design has been specifically developed to not only provide glare-free lighting, but also a high-performing light distribution.

Thanks to the QVAL's high optical performance and strong mechanical design, it can achieve substantial energy and maintenance cost savings.

INDUSTRIAL HALL | WAREHOUSE | LOADING BAY

PUBLIC BUILDING | SHOPPING CENTRE | COMMERCIAL BUILDING

Key advantages

- Designed and manufactured in South Africa
- High-pressure die-cast aluminium housing
- Designed to operate LED light sources of up to 36W without reducing the useful lifetime of up to 80 000 hours, at a lumen depreciation of not more than 30% (L70)
- Ta of up to 45°C
- Easy installation with removable back plate to maintain the IP rating of the luminaire
- High energy savings compared to systems with traditional discharge lamps
- Robust yet discreet design to complement any environment
- High visual comfort
- White light with a high colour rendering index
- Optional: Supplied with helicoils to withstand harsh corrosive environments
- Surge protection 10kV/10kA
- Optional integrated movement or daylight sensor for further energy savings
- 5 year warranty (Terms and conditions apply)

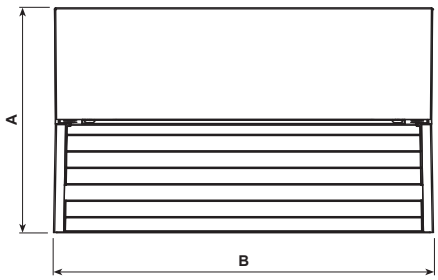
Characteristics

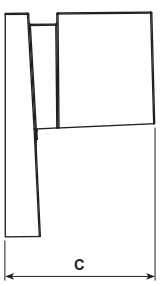
GENERAL INFORMATION	
Recommended installation height	Up to 7m
FutureProof	Easy replacement of the photometric engine and electronic assembly on-site
Driver included	Yes
ROHS compliant	Yes
Testing standard	SANS 60598, SANS 62262

HOUSING AND FINISH	
Housing	High-pressure die-cast aluminium
Optic	Acrylic PMMA
Protector	Glass
Housing finish	Black (RAL 9017), Textured finish
Tightness level	IP 66
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

DIMENSIONS AND MOUNTING	
AxBxC (mm)	200x340x134
Weight (kg)	Standard: 4.4
	With sensor: 4.6





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

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

LIFETIME OF THE LEDS @ TQ 25°C	
For all versions	80,000h - 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.

Construction Details

The QVAL's design is optimising the thermal operating environment around the LEDs and electronic gear, enabling the long useful lifetime (80 000hrs, L70) and low maintenance. The indirect reflector design has been specifically developed to not only provide glare-free lighting, but also a high-performing light distribution. The QVAL can be spaced twice as wide as the 70W HPS equivalent.

The luminaire housing is manufactured of corrosion-resistant high-pressure die-cast aluminium. All screws, clamps and fasteners are made of stainless steel. Helicoils can be supplied optionally.

Electronic temperature monitoring prevents overheating of LEDs and power supply within the LED compartment (ThermiX®). To maximize the reliability of the LEDs, the photometric engine and control gear compartment are completely sealed to IP 66. This ensures that the photometric performance is maintained over time.

The QVAL offers dimming control options to further maximise energy savings and reduce maintenance costs.

It is designed for LED light sources between 18W and 36W.

The luminaire is power factor corrected to ≥0,95.

Performance

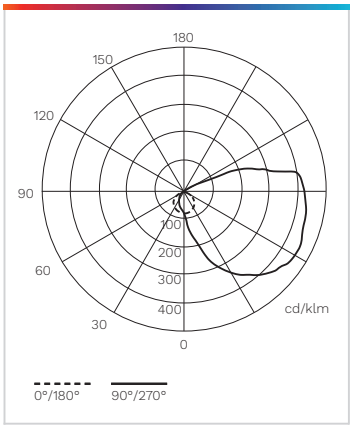
Luminaire	Number of LEDs	Current (mA)	Line Current (A)	Nominal flux (lm) (*)	Power consumption (W)	Nominal efficacy (lm/W)	Luminaire output flux (lm)	Luminaire efficacy (lm/W)	Photometry
				Typical	Typical	Typical	Typical	Typical	
QVAL	32	700	0.08	2870	18	159	2700	150	Optic 4410
	64	700	0.15	5740	36	159	5338	148	

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

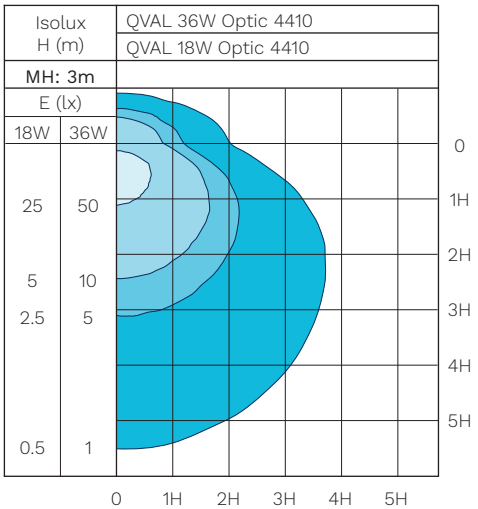
(*) The nominal flux is an indicative LED flux @ Tj 25°C based on LED manufacturer's data. The real flux output of the luminaire depends on environmental conditions (e.g. temperature and pollution) and the optical efficiency of luminaire. The type of LED used is subject to change due to the ongoing rapid progress taking place in LED technology.

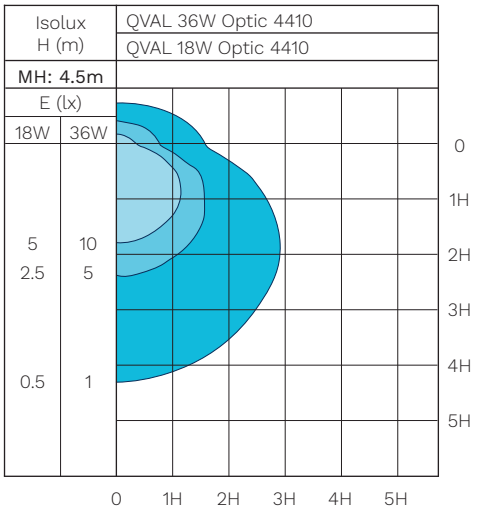
Light Distribution

4410 optic



Horizontal Illuminance





Key Features

The QVAL's design is optimising the thermal operating environment around the LEDs and electronic gear

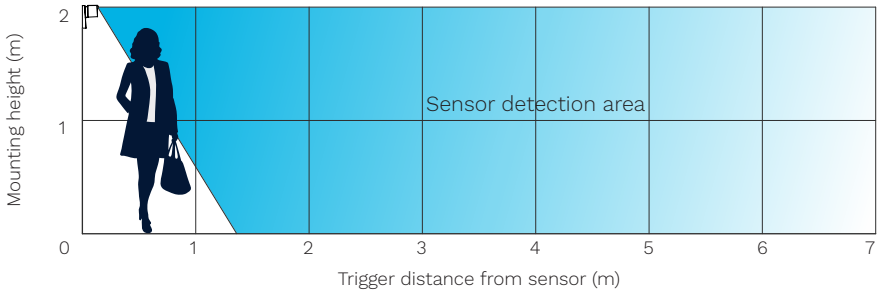
Optional PIR motion sensor and dimming

Optimised design for easy installation

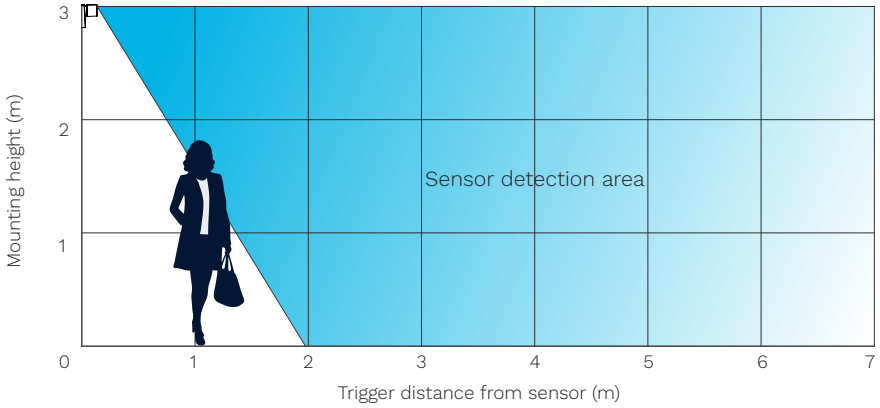
Passive Infrared (PIR) Motion Sensor (optional)

In places with little nocturnal activity, lighting can be dimmed to a minimum most of the time. By using passive infrared (PIR) sensors, the level of light can be raised as soon as a pedestrian or a slow vehicle is detected in the area. Each luminaire level can be configured individually with several parametres such as minimum and maximum light output, delay period and ON/OFF duration time. PIR sensors can be used in an autonomous or interoperable network.

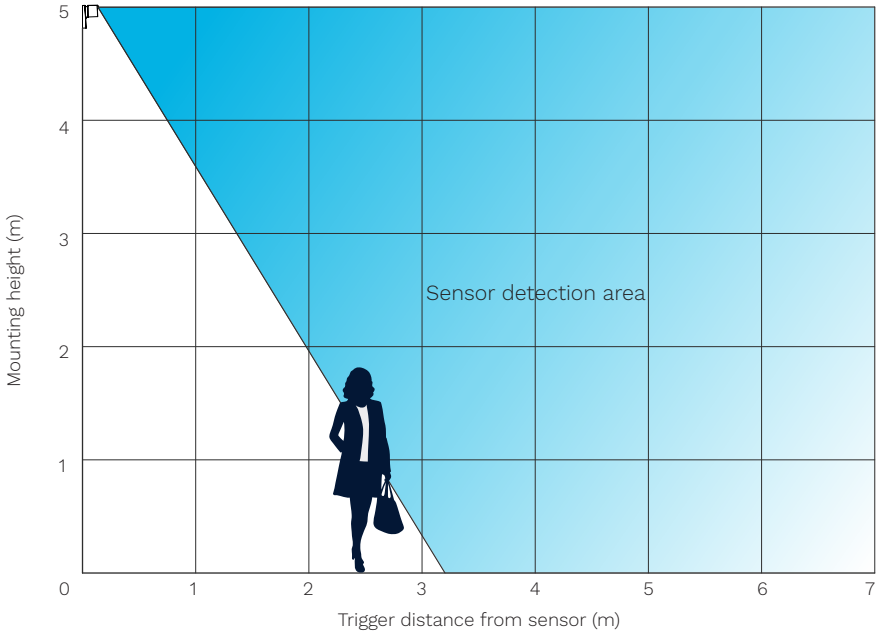
Installation height: 2m



Installation height: 3m



Installation height: 5m



Ordering Information

Example:

QVAL64/36N4410B1G M DALI HC

ID	LED	Watt	LED Colour	Optic	Colour options	Surge Protection	Protector	Switching control	Dimming control	Other options
QVAL	32 64	18 36	**N** Neutral White (4000K) **W** Warm white (3000K)	4410	**B** Black (RAL 9017), Textured finish **W** White (RAL 9003), Textured finish **S** Pearl Light Grey (RAL 9022), Textured finish **O** Painted Other (RAL / Finish [Brilliant/Matt])	**1** 10kV	**G** Glass clear	**M**[1] Movement sensor **DL** Daylight switch	**DALI**[2] DALI dimming	**HC** Helicoils

[1] Not available with DALI
[2] DALI only available for 36W version

BEKA Schréder

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SABS ISO 9001

www.beka-schreder.co.za

Designed and manufactured by BEKA Schréder (Pty) Ltd

LOCALLY manufactured

2020-07