VIZULO



BLACKBIRD MINI

Spot Bracket Mount

Bicycle lanes & Pedestrian paths

Small streets



Ventilation cable gland
Combines pressure equalization and cable gland in a single unit. It ensures high air flow rates as well as high water protection capacity

LED module
High quality LED's with optimal thermal resistance and energy consumption characteristic, for high lumen output and long expected life time.
Available color temperature: 2700 K, 3000 K, 4000 K
(1800 K, 2200 K, 3500 K, 5000 K, 5700 K, 6500 K available on customer request)

Protection
IP66 for the complete luminaire

Body
Die-cast aluminium

Sockets
Zhaga socket compatible [coming soon]

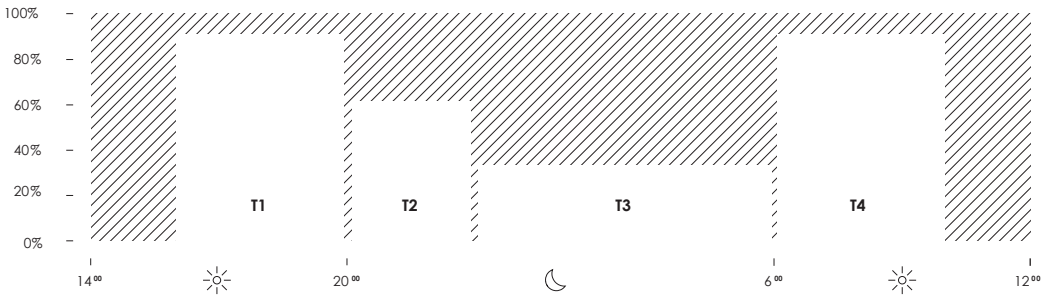
Light regulation
BLACKBIRD MINI drivers offer integrated midnight dimming and network-controlled 1-10 V and DALI protocols

Impact resistance
IK10 (Vandal protected) for the complete luminaire



Midnight dimming

Midnight dimming provides multi-stage night-time power reduction based on an internal timer referenced to the power on/off time. There is no need for an external control infrastructure. The unit automatically performs a dimming profile based on the predefined scheduled reference to the midpoint, which is calculated based on the power on/off times.



Blackbird mini

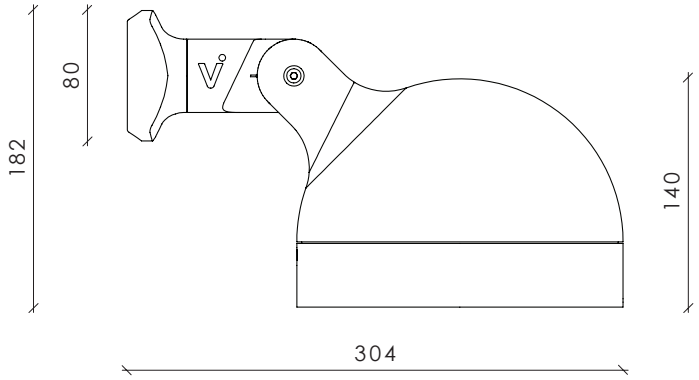
spot bracket mount

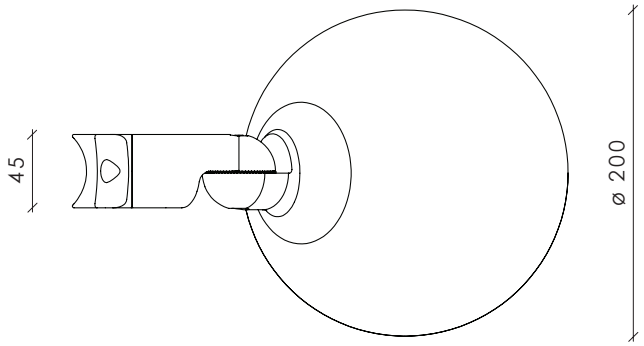


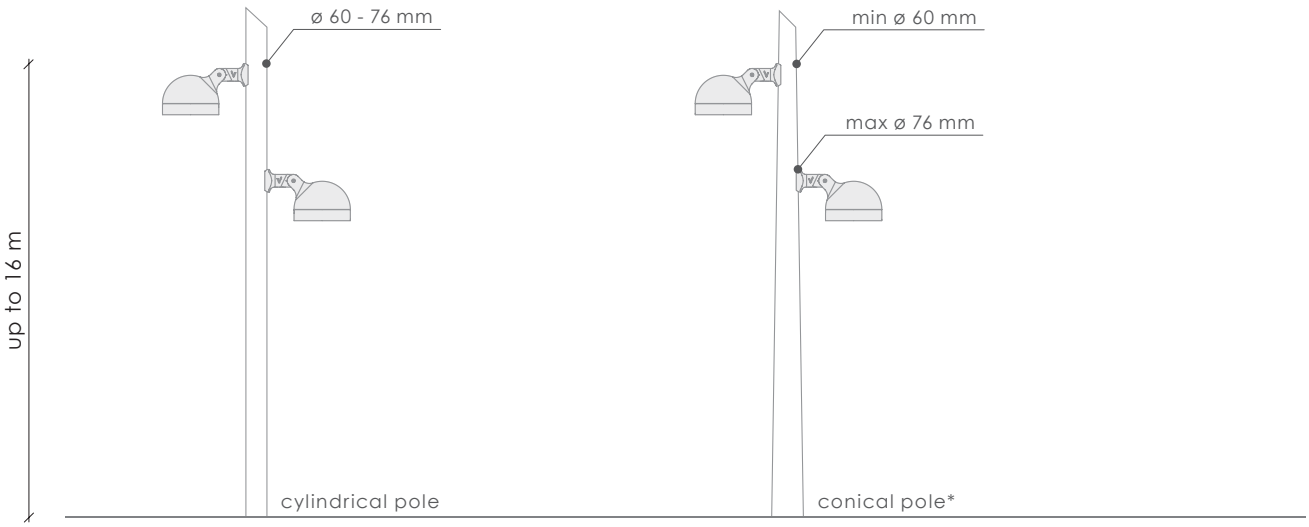


MICA 3602
MF/MA

Other colors
available on request







* pole conicity (taper) limitation:
15 mm per meter

Features

VARIOUS OPTICAL FEATURES

Choose from multiple visual styles and lighting effects to suit your application.

- Choose **white PCB** for brighter illumination, or the **black PCB** for a sleek, modern look that blends effortlessly into minimalist luminaire design.
- **Matt glass** will increase comfort for eyes by diffusing light and creating a uniform glow.

Note!

The standard configuration includes white PCB!
If black PCB is required, please specify this when placing your order.



ADVANCED GLARE CONTROL SOLUTIONS

Our lighting systems offer versatile glare reduction accessories tailored for demanding environments.

- The **Honeycomb** louvre minimizes glare by shielding the entire optical surface, directing light precisely where it's needed.
- **Honeycomb lens** provide targeted glare control without affecting overall light output.



↘ MODULAR POLE-MOUNTED LIGHTING

Designed for versatility, BLACKBIRD MINI can be mounted on poles with adjustable angles for precise illumination.

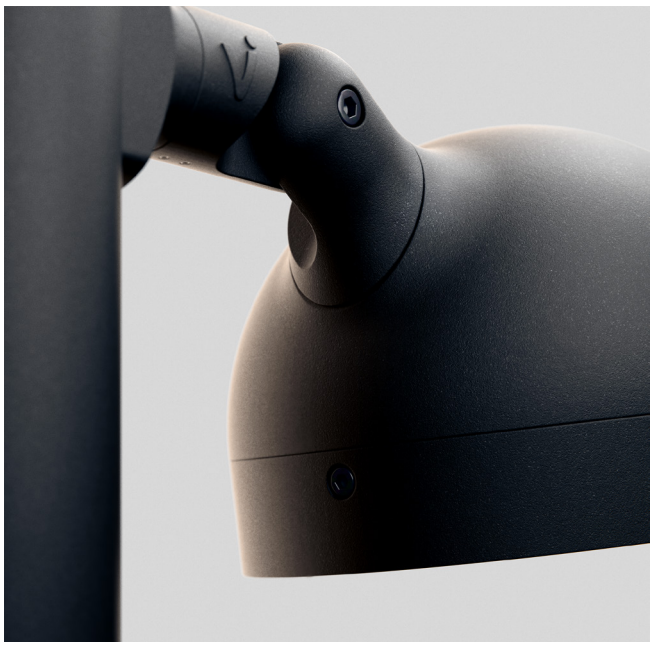
Its modular system allows for multiple configurations, making it ideal for urban, architectural, and pathway lighting.



↘ BLACKBIRD MINI REGULATION

Blackbird Mini offers full **360° horizontal rotation** and an adjustable **tilt range from 50° to 120°**, ensuring precise directional aiming and optimal illumination from any position and onto any surface.

Secure two piece body with hidden screws.



↘ EXTERNAL ZHAGA

COMING SOON

The **Zhaga Top Console** combines functionality with a refined appearance, ensuring a neat and secure installation.

Designed for **ø 60 mm** and **ø 76 mm** poles, it adapts easily to different project requirements.



Technical information



V	198 - 264
Hz	50 - 60
W	5 - 30
lm	Up to 3 900 [1
lm/W	Up to 130
K	2700 / 3000 / 4000 [2
°C	-40 to +40 | up to 30 W
	-40 to +50 | up to 20 W
CRI	>70 / >80 / >90 [2

Body:	Die-cast aluminium
Dimming:	DALI / 1-10 V / Midnight dimming / Step dimming / Mains dimming
Initial chromaticity:	MacAdam 5
Lifetime:	Up to 100 000 h (L98B10) at Ta = 25 °C*
Warranty:	5 years
Installation:	Pre-wired cable 30 cm [3
Mounting:	On ø 60 - 76 mm poles
Socket:	External Zhaga Top [coming soon]
Surge protection:	4 / 6 / 10 kV [4
Nature friendly:	PC Amber / Red / 1800 K
Corrosion protection:	Up to C5
Neto weight:	Up to 3.5 kg

[1] Lumen output indicated at CRI > 70

[2] 1800 / 2200 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

[3] Other lengths are on request

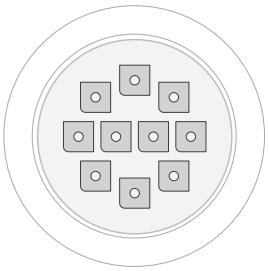
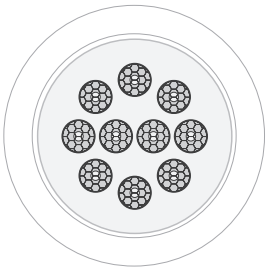
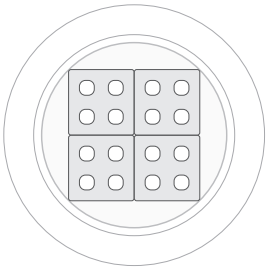
[4] 10 kV (L-N; L/N-PE) surge protection device available on request

[5] Coming soon

* This value is only informative and may change according to selected article. LED Lifetime is strongly depending from LEDs current and junction temperature – increase in LED current and luminaire power lead to increase of junction temperature and as consequence lifetime decrease. Thus, luminaire models with lower power, lower current (and lower junction temperature) will have higher lifetime than standard models. And high power and high current luminaire models may have negative lifetime deviation comparing to standard models. To receive precise value please contact VIZULO export representatives.

Technical parameters for final product can differ from typical data by 7% due to special conditions of LED manufacturing processes.

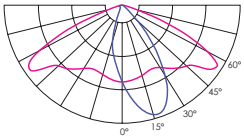
LED modules

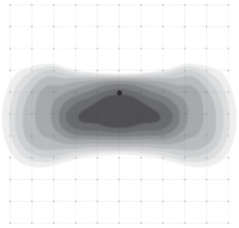
Type	Max module QTY	Min LED QTY per module	Max LED QTY per module	Max LED QTY per luminaire	LED step	LED type	Lens type	LED module
BR	1	10	10	10	-	Eco	type 1 Z01...ZZ9	
BR	1	10	10	10	-	Eco	type 1 honeycomb lens Q01...QZ9	
CH	1	8	16	16	-	Eco	type 2x2 L01...LZ9	

Photometry

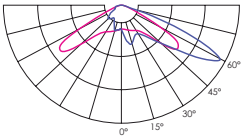
STREET LENS for BR LED module

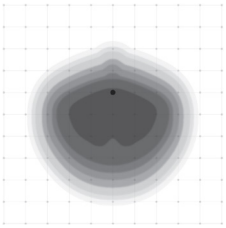
Z06
Type II - S



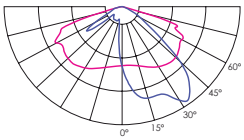


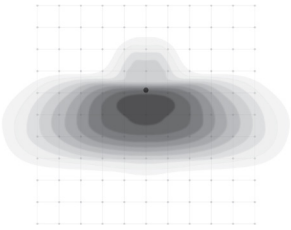
Z35
Type IV - M



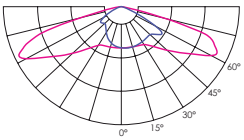


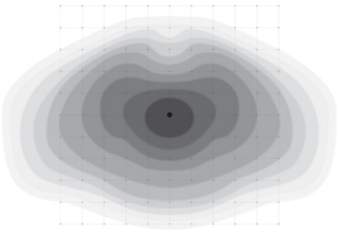
Z39
Type III - M



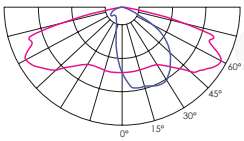


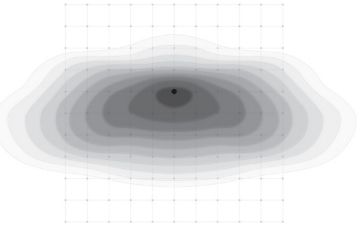
Z21
Type I - M



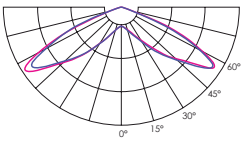


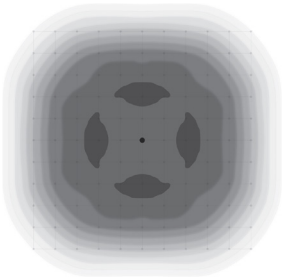
Z22
Type III - M





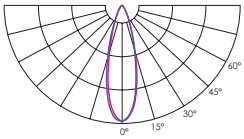
Z20
Type V - VS

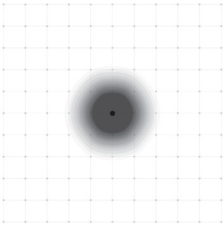




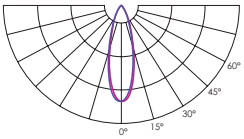
SPOT HONEYCOMB LENS for BR LED module

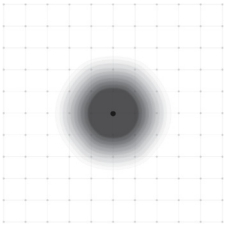
QE2
Type V - VS - 15°





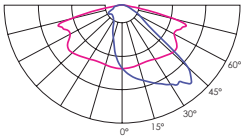
QE1
Type V - VS - 30°



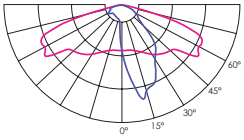


STREET LENS for CH LED module

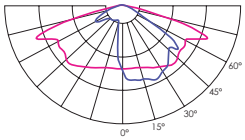
L01
Type III - M



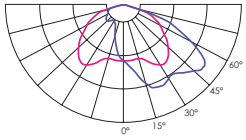
L04
Type II - M



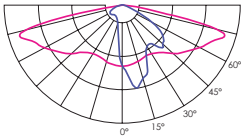
L05
Type III - M



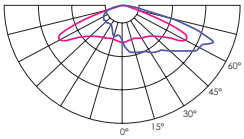
L07
Type IV - S



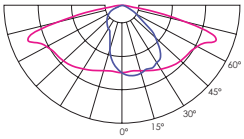
L22
Type III - M



L35
Type IV - M

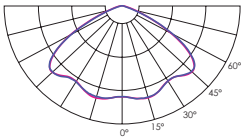


LC5
Type II - M

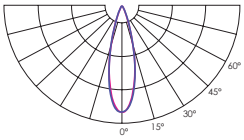


SPOT LENS for CH LED module

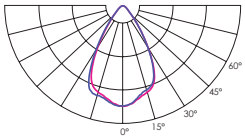
L10
Type VS - VS



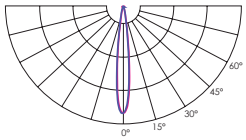
L13
Type VS - VS



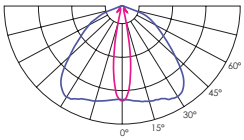
L14
Type VS - VS



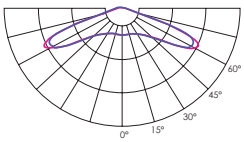
L15
Type VS - VS



L16
Type II - VS

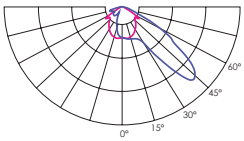


L20
Type VS - S

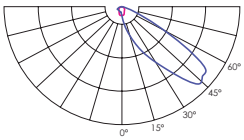


FLOODLIGHT LENS for CH LED module

L08
Type II - VS



LC7
Type II - VS



Model name principles



Power [W] 005 ... 030

Color rendering index
≥70 - 7
≥80 - 8

Color temperature [K] 1800 ... 6500
Standard values:
2700 K - 27
3000 K - 30
4000 K - 40
Nature Friendly Red - NR
Nature Friendly Amber - NA
Nature Friendly 1800 K - NK

Lens
type 2x2 - L01 ... LZ9
type 1 - Z01 ... ZZ9
type 1 honeycomb lens - Q01 ... QZ9

LED module type
10 LEDs, type 1 lens - BR
16 LEDs, type 2x2 lens - CH

LED quantity 008 ... 016

Diffuser
none - N
* honeycomb - H
* matt glass - M

* not compatible with *type 1 honeycomb lens*

Color
design black (mica 3602 MF/MA) - SF
other colors available on request

Through wiring no - N
[only for BBS Hanging version]

Dimming
non dimmable - N
DALI - D
1-10 V - A
midnight dimming - M
midnight dimming + DALI - R
step dimming - S
mains dimming - L
wireless - W

Surge protector
4 ... 6 kV integrated in driver - F
6 ... 10 kV integrated in driver - G

Insulation
class I - 1
class II - 2

EXAMPLE BBSDE 030 730 Z22 BR010 HSF NDF1

Note!

The standard configuration includes white PCB!
If black PCB is required, please specify this when placing your order.

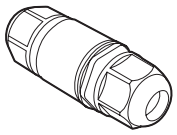
Cable core count

Socket	Dimming	Model number abbreviation	Input cable core count Class I	Input cable core count Class II
None	None	N	3	2
None	DALI	D	5	4
None	1-10 V	A	5	4
None	Midnight dimming	M	3	2
None	Midnight dimming + DALI	R	5	4
None	Step dimming	S	5 (1 core unused)	4 (1 core unused)
None	Mains dimming	L	3	2

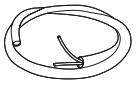
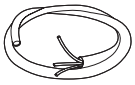
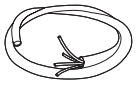
Accessories

IP68 rated wire cable connector

2 wire cable connector ..... *Art. 70000676*
3 wire cable connector ..... *Art. 70000677*
4 wire cable connector ..... *Art. 70000725*
5 wire cable connector ..... *Art. 70000678*



Cable order information


Cable length* [m]	2 x 1.5 mm²	3 x 1.5 mm²	4 x 1.5 mm²	5 x 1.5 mm²
0.5	*Art. 70100184*	*Art. 70100179*	*Art. 70100402*	*Art. 70100409*
1	*Art. 70100156*	*Art. 70100193*	*Art. 70000527*	*Art. 70100220*
1.5	*Art. 70100391*	*Art. 70100258*	*Art. 70100403*	*Art. 70100410*
2	*Art. 70100202*	*Art. 70100177*	*Art. 70000515*	*Art. 70100262*
2.5	*Art. 70100392*	*Art. 70100213*	*Art. 70100404*	*Art. 70100411*
3	*Art. 70100166*	*Art. 70100178*	*Art. 70000529*	*Art. 70100217*
4	*Art. 70100172*	*Art. 70100144*	*Art. 70000530*	*Art. 70100189*
5	*Art. 70100173*	*Art. 70100146*	*Art. 70000531*	*Art. 70100185*
6	*Art. 70100099*	*Art. 70000512*	*Art. 70000532*	*Art. 70000370*
7	*Art. 70100174*	*Art. 70100182*	*Art. 70000533*	*Art. 70100201*
8	*Art. 70100152*	*Art. 70000630*	*Art. 70000534*	*Art. 70100212*
9	*Art. 70100176*	*Art. 70000381*	*Art. 70000535*	*Art. 70100192*
10	*Art. 70100153*	*Art. 70000631*	*Art. 70000536*	*Art. 70000387*
11	*Art. 70100191*	*Art. 70100143*	*Art. 70000537*	*Art. 70000388*
12	*Art. 70100167*	*Art. 70100147*	*Art. 70000538*	*Art. 70100200*
13	*Art. 70100186*	*Art. 70100187*	*Art. 70000539*	*Art. 70100412*
14	*Art. 70100204*	*Art. 70100164*	*Art. 70000540*	*Art. 70100165*

* Custom cable lengths available on request

Certification

CE – conformity with European Union's health, safety and environmental protection standards

The CE mark is placed on products to state conformity with the relevant EU health, safety and environmental protection standards. In case of electronic products, the standards are, for example, the Restriction of Hazardous Substances in Electrical and Electronic Equipment (RoHS) directive, Waste Electrical and Electronic Equipment (WEEE) directive, the Electromagnetic Compatibility (EMC) directive etc. The mark ensures that the product can be sold anywhere in the European Economic Area (EEA).

UKCA - conformity with the relevant essential requirements of Great Britain

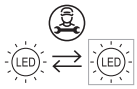
UKCA is a product mark intended to demonstrate compliance with the directives set by Great Britain (England, Scotland and Wales). It is analogous to the European Union's CE marking, meaning that depending on the type of product the applicable regulations are different. In case of LED lighting, the relevant requirements are compliance with the Electromagnetic Compatibility Regulations, the Electrical Equipment (Safety) Regulations, the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations and the Ecodesign for Energy-Related Products and Energy Information (Lighting Products) Regulations.

RoHS – compliance with European Union's RoHS directive

The RoHS (Restriction of Hazardous Substances in Electrical and Electronic Equipment) directive restricts (with exceptions) the use of ten hazardous materials in the manufacture of various types of electronic and electrical equipment. The aim of the directive is to prevent the risks posed to human health and the environment related to the management of electronic and electrical waste.

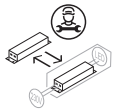
UL - compliance with UL standards for LED lighting **[coming soon]**

UL stands for Underwriter Laboratories, a third-party certification company that's been around for over a century. UL sets industry-wide standards for products and performs testing according to these standards to ensure that the products marked with the UL mark are safe and high quality.



LED module replaceable by a professional

This pictogram shows that the LED modules included in the luminaire are only replaceable by a professional. This labeling is a requirement folowing the introdution of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.



LED driver replaceable by a professional

This pictogram shows that the LED driver included in the luminaire is only replaceable by a professional. This labeling is a requirement folowing the introdution of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.



VIZULO

Bukultu street 11
Riga, LV – 1005, Latvia

Sales: + 371 67 383 023
Production: + 371 67 383 024

sales@vizulo.com
www.vizulo.com

VIZULO

VIZULO

VIZULOSOLUTIONS