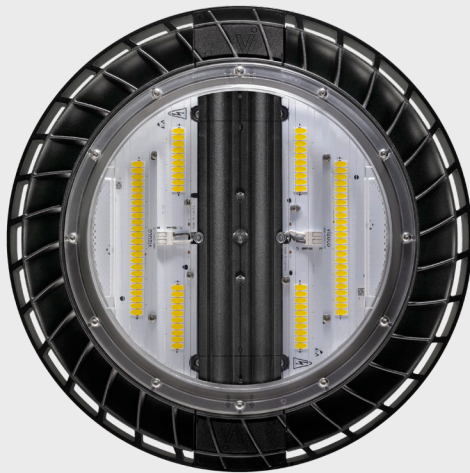


VIZULO

ACORN
GEN 2

Acorn



RAL9016

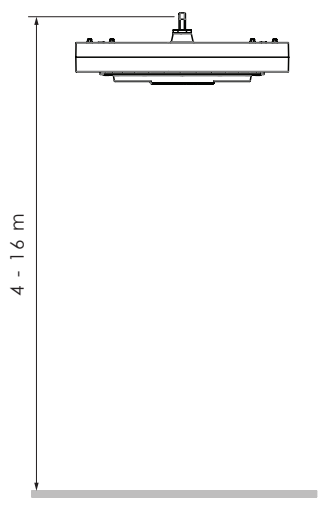
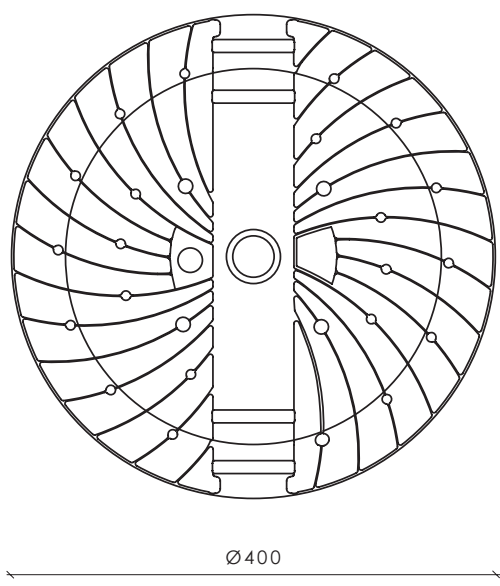
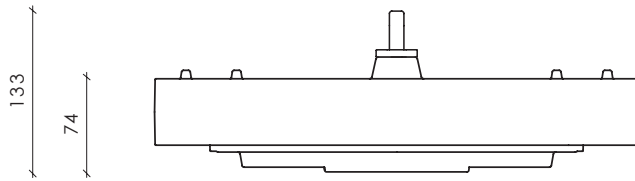


RAL9006



RAL9005

Other colors
available on request



Applications



↘ Sports hall



↘ Industrial
luminaires

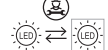
Technical information



RoHS



SundaHus
assessment
available



V	220 - 240	Body:	Die-cast aluminium
Hz	50 - 60	Dimming:	DALI / Bluetooth / Non dimmable
W	50 - 270 ⁽¹⁾ 30 - 200 ⁽²⁾ 30 - 150 ⁽³⁾	Sensor:	Microwave / PIR / PIR + Daylight
lm	4902 - 35037 ⁽⁴⁾	Initial chromaticity:	MacAdam 5
lm/W	Up to 160	Lifetime:	100 000 h (L80B10) at Ta = 25 °C*
K	3000 / 4000 / TW 2700 - 6500 K ⁽⁵⁾	Warranty:	5 years 2 years (emergency configuration)
°C	-40 to +50 50 - 200 W -40 to +40 201 - 270 W	Optics:	Symmetrical / Asymmetrical
CRI	>70 / >80 / >90 ⁽⁵⁾	Mounting:	Pendant / High-bay / Cable / Floodlight
		Human Centric Lighting:	Available
		Neto weight:	Up to 6.12 kg

¹⁾ With optics C01 / C02 / C03

²⁾ With optics D02 / D03

³⁾ Emergency configuration

⁴⁾ Lumen output indicated at 4000 K, CRI > 80

⁵⁾ 1800 / 2200 / 2700 / 3500 / 5000 / 5700 / 6500 K available on request along with other not listed CRI and CCT

⁶⁾ Emergency configuration IP40

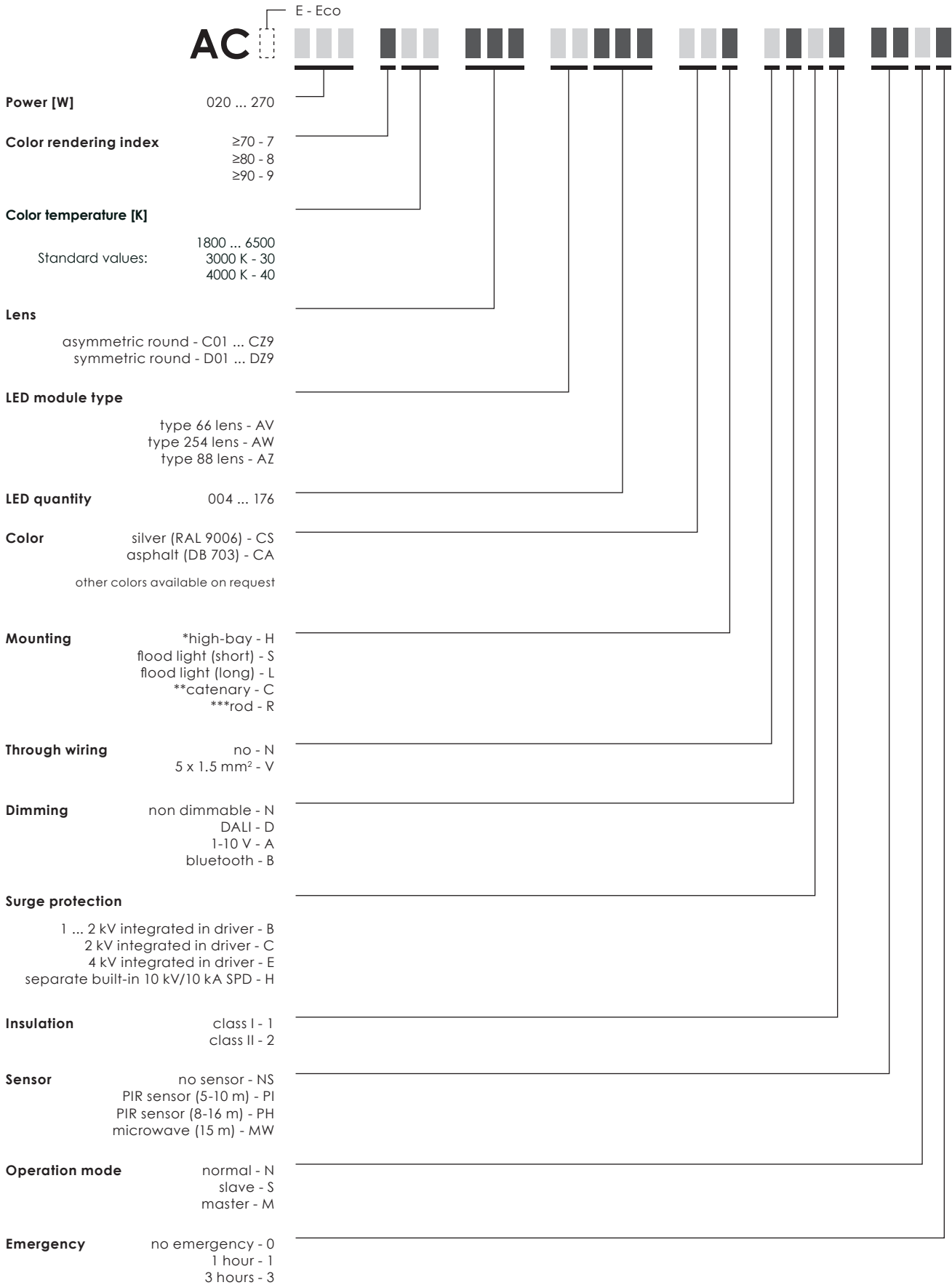
⁷⁾ Ball proof: tested according to DIN 57710-13

⁸⁾ Check SundaHus web page for product assessment results

*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.

Model name principles



Additional accessories:
 * use for chain suspension and wire rope suspension
 ** use for wire rope suspension
 *** use for rod suspension

Logistics

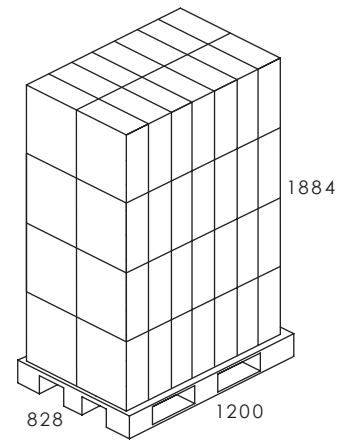
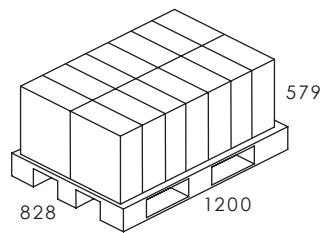
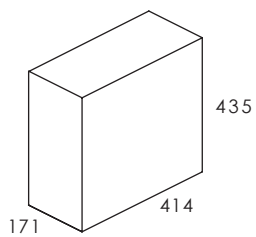
	Length (mm)	Width (mm)	Height (mm)	Net weights	Gross weights	Volume
Case (OD)	414	171	435	5,600	6,150 kg	30795 cm ³
Product	1197	828	1740	313,600	344,400 kg	1,72 m ³
Load	1200	828	1884	328,600	359,400 kg	1,87 m ³

Number of luminaires per row Number of rows QTY per pallet/pcs

14

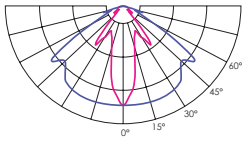
4

56

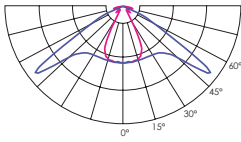


Optics

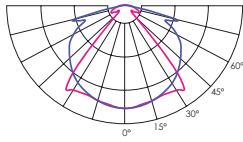
C01



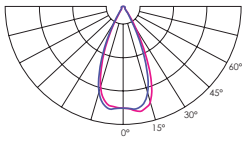
C02



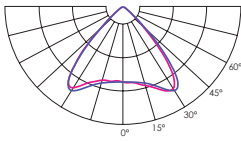
C03



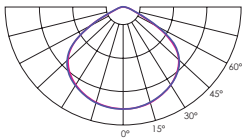
D02



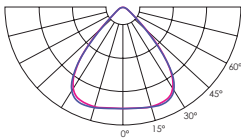
D03



DA7



DA8



Sensors

Microwave sensor (On-Off)



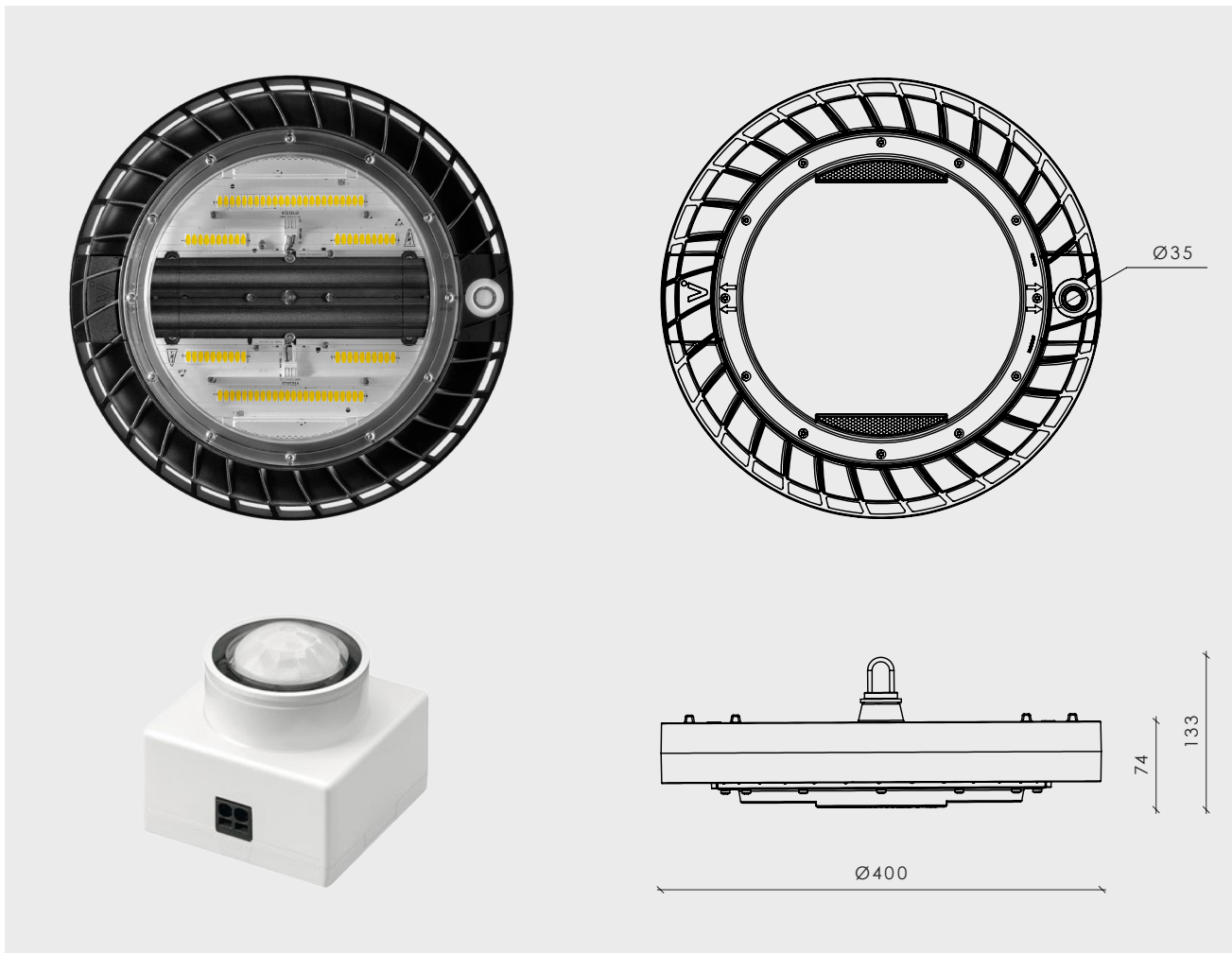
<i>Power Source:</i>	220 – 240 VAC
<i>Rated load:</i>	800 W
<i>HF System:</i>	5.8 GHz (+/- 75 MHz)
<i>Hold-time:</i>	2 s ~ 30 min (selectable)
<i>Sensitivity:</i>	10% / 50% / 75% / 100%
<i>Daylight sensor:</i>	2 ~ 500 lux, disable
<i>Detection range (max):</i>	20 m (Ø)/ 15 m (H), adjustable
<i>Detection angle:</i>	360°
<i>Working temperature:</i>	-20 °C ~ +50 °C
<i>IP rating:</i>	IP65
<i>Certificates:</i>	Semko, CB, CE, EMC, RED, RCM

Microwave sensor (DALI)



<i>Power Source:</i>	120 – 277 VAC
<i>Rated load:</i>	Max 20 DALI devices
<i>HF System:</i>	5.8 GHz (+/- 75 MHz)
<i>Hold-time:</i>	2 s ~ 30 min (selectable)
<i>Sensitivity:</i>	10% / 50% / 75% / 100%
<i>Daylight sensor:</i>	2 ~ 500 lux, disable
<i>Stand-by period (corridor function):</i>	0 s ~ 1 h, +∞ (selectable)
<i>Stand-by dimming level:</i>	10% / 20% / 30% / 50%
<i>Detection range (max):</i>	20 m (Ø)/ 15 m (H), adjustable
<i>Detection angle:</i>	360°
<i>Working temperature:</i>	-20 °C ~ +50 °C
<i>IP rating:</i>	IP65
<i>Certificates:</i>	Semko, CB, CE, EMC, RED, RCM

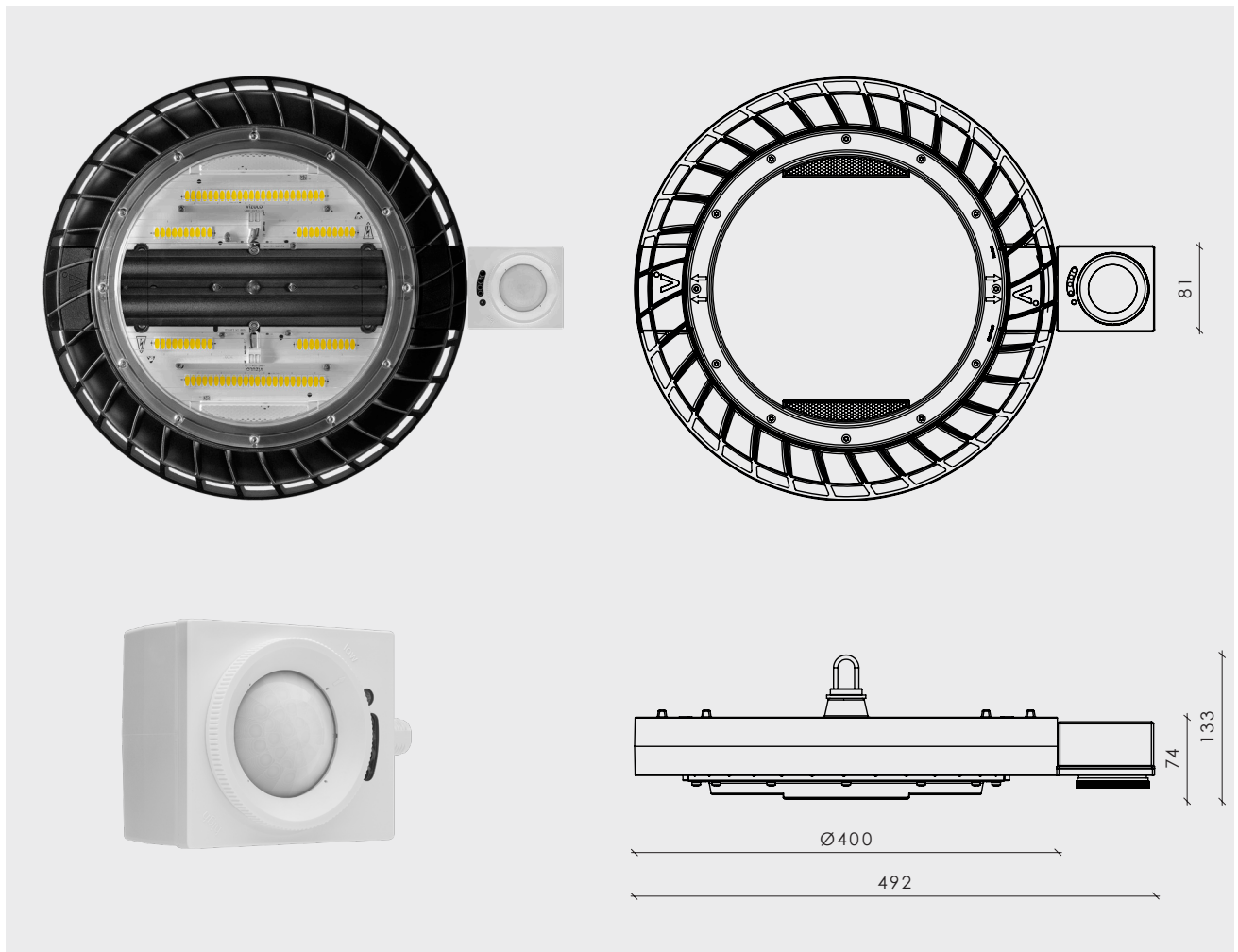
Mid-range DALI-2 multisensor (PIR sensor)



Power Source:	DALI
Mounting height (H):	5 - 10 m
Detection range for PIR (Max.):	8 m (@H = 10 m)
Detection angle for PIR:	72 ° / 44° (tangential / radial)
Detection angle for light measurement:	30 ° - 40 °
Light-control range:	0.5 - 2000 lux (adjustable)
Working temperature:	-20 °C to 50 °C*
Min. temperature difference between ambient temperature and detected object:	± 4 °C
Remote control (Optional):	Set and control with IR remote control**

* Minimal Luminaire temperature will be same or higher than for specific Sensors (if used)
 ** On demand

Long-range DALI-2 multisensor (PIR sensor)



<i>Power Source:</i>	DALI
<i>Mounting height (H):</i>	8 - 12 m (range position "low") 12 - 16 m (range position "high")
<i>Detection range for PIR (Max.):</i>	18 m (@H = 16 m)
<i>Detection angle for PIR detection angle "low":</i>	72 °
<i>Detection angle for PIR detection angle "high":</i>	60 °
<i>Detection angle for light measurement:</i>	13 °
<i>Light-control range:</i>	0.5 - 2000 lux (adjustable)
<i>Working temperature:</i>	-20 °C to 50 °C*
<i>Min. temperature difference between ambient temperature and detected object:</i>	± 4 °C
<i>Remote control (Optional):</i>	Set and control with IR remote control**

* Minimal Luminaire temperature will be same or higher than for specific Sensors (if used)
** On demand

Emergency lighting

Acorn has an option to have Emergency lighting (up to **150 W**)

Features

- Self contained emergency lighting
- 1 or 3 h rated duration
- Dimmable and non-dimmable versions available
- Constant power output
- Deepdischarge protection

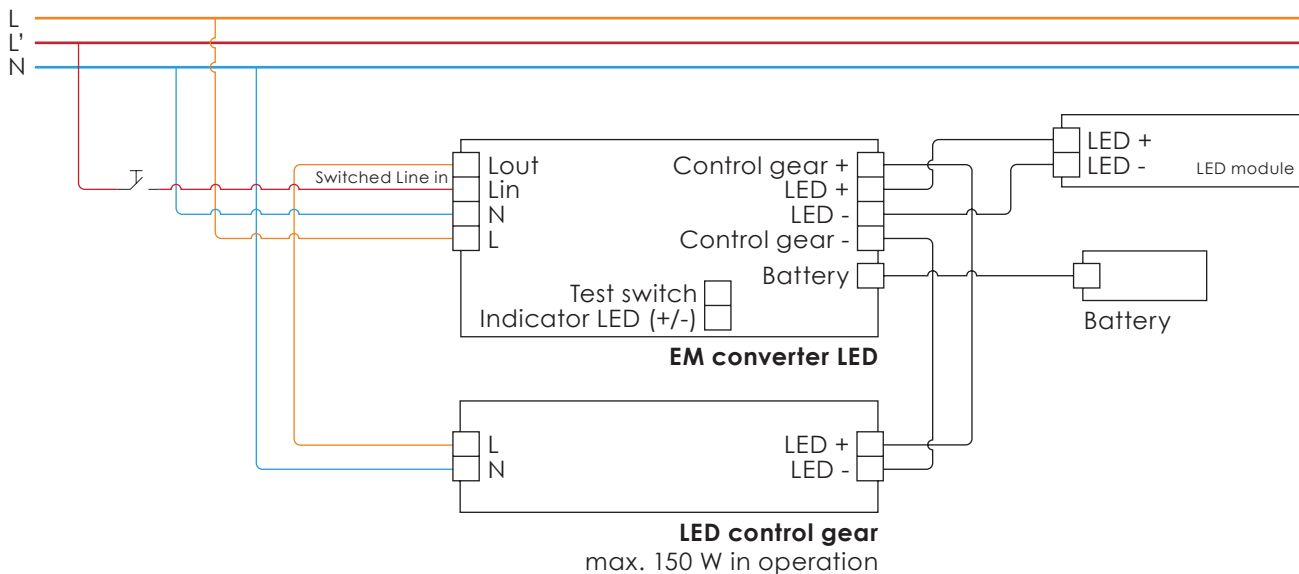
While Mains voltage is present Emergency controller is also charging the connected battery
 Rated emergency duration can be chosen (based on battery capacity) and can be 1 h or 3 h

Operation

Acorn luminaire which is equipped with Emergency lighting will work in 2 modes based on electrical conditions:

- 1) If Mains voltage is present, luminaire will work with its programmed power (just like in case without Emergency lighting)
- 2) If there is outage of Mains voltage, luminaire will work in Emergency mode with little power (about 2.5 W) while feeding from the battery

Simple wiring diagram



Additional Test switch

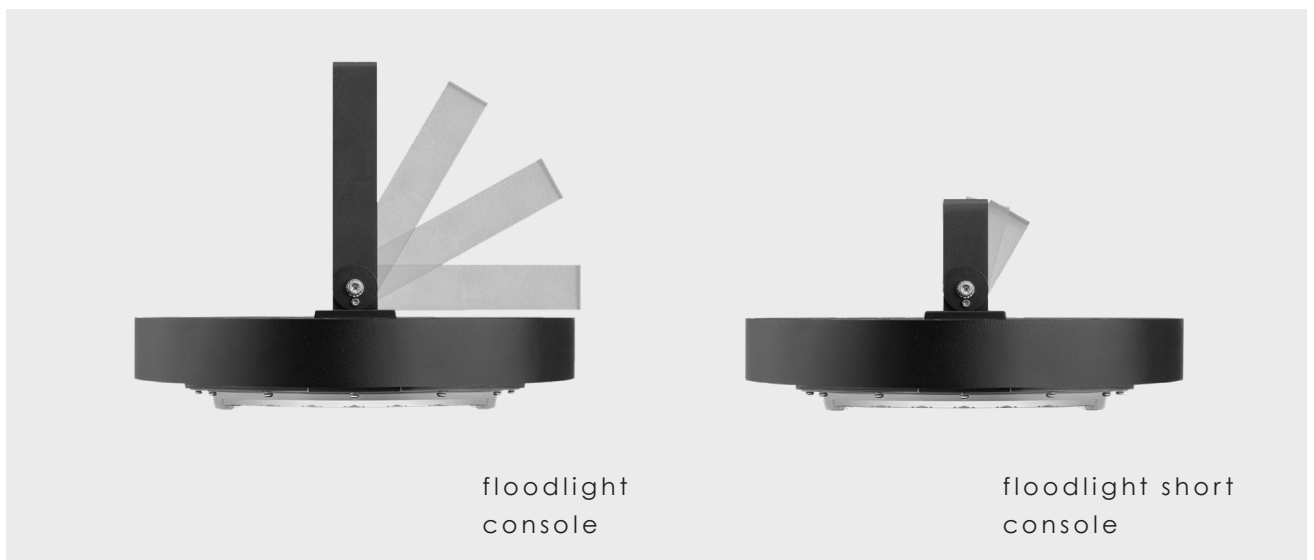
For connection to the emergency
 For checking the device function

Status indication LED

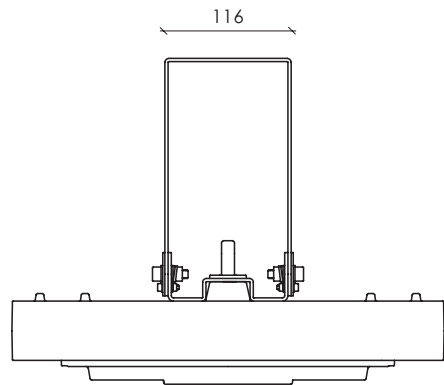
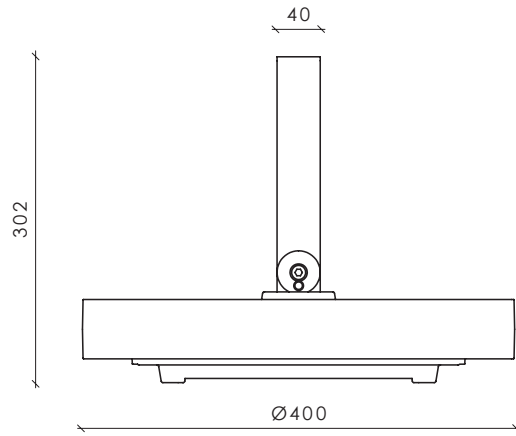
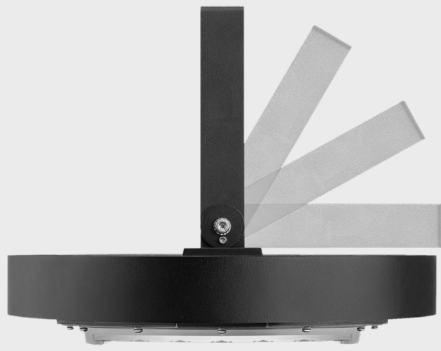
Two-colour status display LED (bi-color)
 Green: system OK, Red: fault



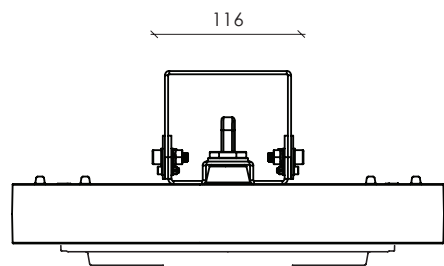
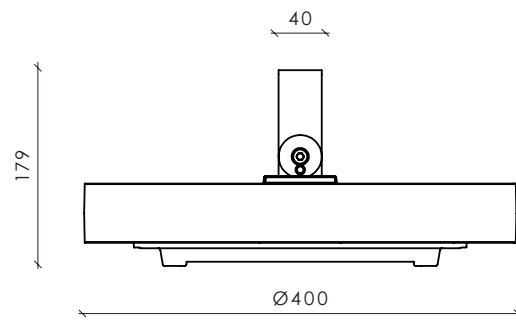
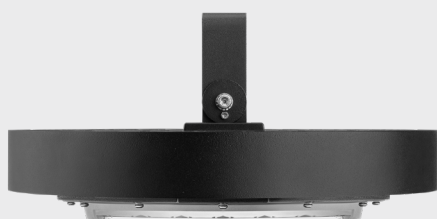
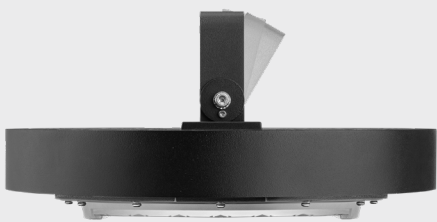
Acorn accessories



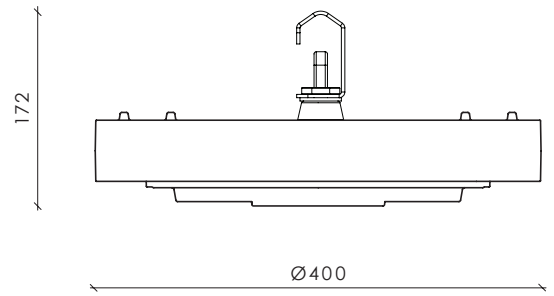
Floodlight console



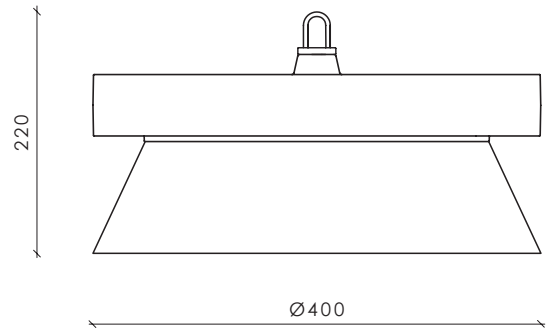
Floodlight short console



Console for wire mounting



Chain mounting & Reflector



Reflector applicable for any Acorn version



Accessories

Chain suspension set

Chain suspension set, 1 m	Art. 70058006
Chain suspension set, 3 m	Art. 70058018
Chain suspension set, 1,5 m	Art. 70058020

Wire mount console

Acorn Gen2 wire mounting console, RAL 9006	Art. 70058019
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Floodlight console

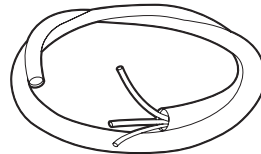
Acorn Gen2 floodlight console, DB 703	Art. 70058021
Acorn Gen2 floodlight console, DB 703, primer	Art. 70058022
Acorn Gen2 floodlight console, RAL 9005	Art. 70058023
Acorn Gen2 floodlight console, RAL 9005, primer	Art. 70058024
Acorn Gen2 floodlight console, RAL 9006	Art. 70058025
Acorn Gen2 floodlight console, RAL 9006, primer	Art. 70058026

Remote control *

REMOTECONTROL IR6	Art. 70000670
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Cables (3x1.5 mm²) **

H05RN-F 3x1.5 mm ² , 0.5 m, black, flexible rubber cable	Art. 70000319
H05RN-F 3x1.5 mm ² , 1 m, black, flexible rubber cable	Art. 70100091
H05RN-F 3x1.5 mm ² , 2 m, black, flexible rubber cable	Art. 70000365
H05RN-F 3x1.5 mm ² , 4 m, black, flexible rubber cable	Art. 70000422
H05RN-F 3x1.5 mm ² , 6 m, black, flexible rubber cable	Art. 70000321
H05RN-F 3x1.5 mm ² , 8 m, black, flexible rubber cable	Art. 70000322
H05RN-F 3x1.5 mm ² , 10 m, black, flexible rubber cable	Art. 70000323
H05RN-F 3x1.5 mm ² , 15 m, black, flexible rubber cable	Art. 70000514
H05RN-F 3x1.5 mm ² , 20 m, black, flexible rubber cable	Art. 70000424
H05RN-F 3x1.5 mm ² , 25 m, black, flexible rubber cable	Art. 70000426
H05RN-F 3x1.5 mm ² , 30 m, black, flexible rubber cable	Art. 70000327
H05RN-F 3x1.5 mm ² , 40 m, black, flexible rubber cable	Art. 70000328
H05RN-F 3x1.5 mm ² , 50 m, black, flexible rubber cable	Art. 70000329



Cables (5x1.5 mm²) **

H05RN-F 5x1.5 mm ² , 1.5 m, black, flexible rubber cable	Art. 70100032
H05RN-F 5x1.5 mm ² , 2 m, black, flexible rubber cable	Art. 70100033
H05RN-F 5x1.5 mm ² , 4 m, black, flexible rubber cable	Art. 70100037
H05RN-F 5x1.5 mm ² , 6 m, black, flexible rubber cable	Art. 70100041
H05RN-F 5x1.5 mm ² , 8 m, black, flexible rubber cable	Art. 70100045
H05RN-F 5x1.5 mm ² , 10 m, black, flexible rubber cable	Art. 70100051
H05RN-F 5x1.5 mm ² , 12 m, black, flexible rubber cable	Art. 70100053
H05RN-F 5x1.5 mm ² , 14 m, black, flexible rubber cable	Art. 70100014
H05RN-F 5x1.5 mm ² , 15 m, black, flexible rubber cable	Art. 70100058



* Available only in combination with a luminaire equipped with PIR function
** Other cables and lengths available on demand

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).

RoHS

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.



Byggsvarubedömningen – product chemical content and life cycle assessment

Byggsvarubedömningen is a non-profit organization owned by large constructors and property owners in Sweden. The organization conducts assessments of various construction products based on chemical content and sustainability criteria. The constituent substances and product life cycle are evaluated and the product is assigned one of three levels:



Recommended
(green)



Accepted
(yellow)



To be avoided
(red)

Note: the Recommended level assessment is unavailable for electronic products since it is assumed that all electronic products contain brominated flame retardants.

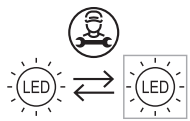


Ball-proof – compliance with the requirements of the DIN 57710-13 testing standard

The ball-proof test is described in the standard DIN 57710-13 (Luminaires with operating voltages below 1000 V; luminaires safety to ball throwing). The standard defines the requirements set for impact resistance of luminaires meant for use in indoor sports facilities. It states that a luminaire struck by a ball must withstand any damage that could cause parts of the luminaire to fall to the ground.

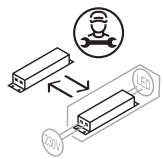
SundaHus i Linköping AB (publ) is a consulting company for the improvement of indoor environmental quality. The company conducts health and environmental assessments of building materials and assigns each product a letter evaluation:

- A** products that provide minimal health risks
- B** products that do not qualify for A, but do not match the criteria for C+, C- or D
- C+** products that risk exposure to substances of very high concern
- C-** products that risk exposure to toxic or volatile substances, as well as negatively impact the environment
- D** products that cannot be assessed due to insufficient data



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 following the introduction 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 following the introduction of European Union's Regulation on energy labelling for light sources (EU) 2019/2015.

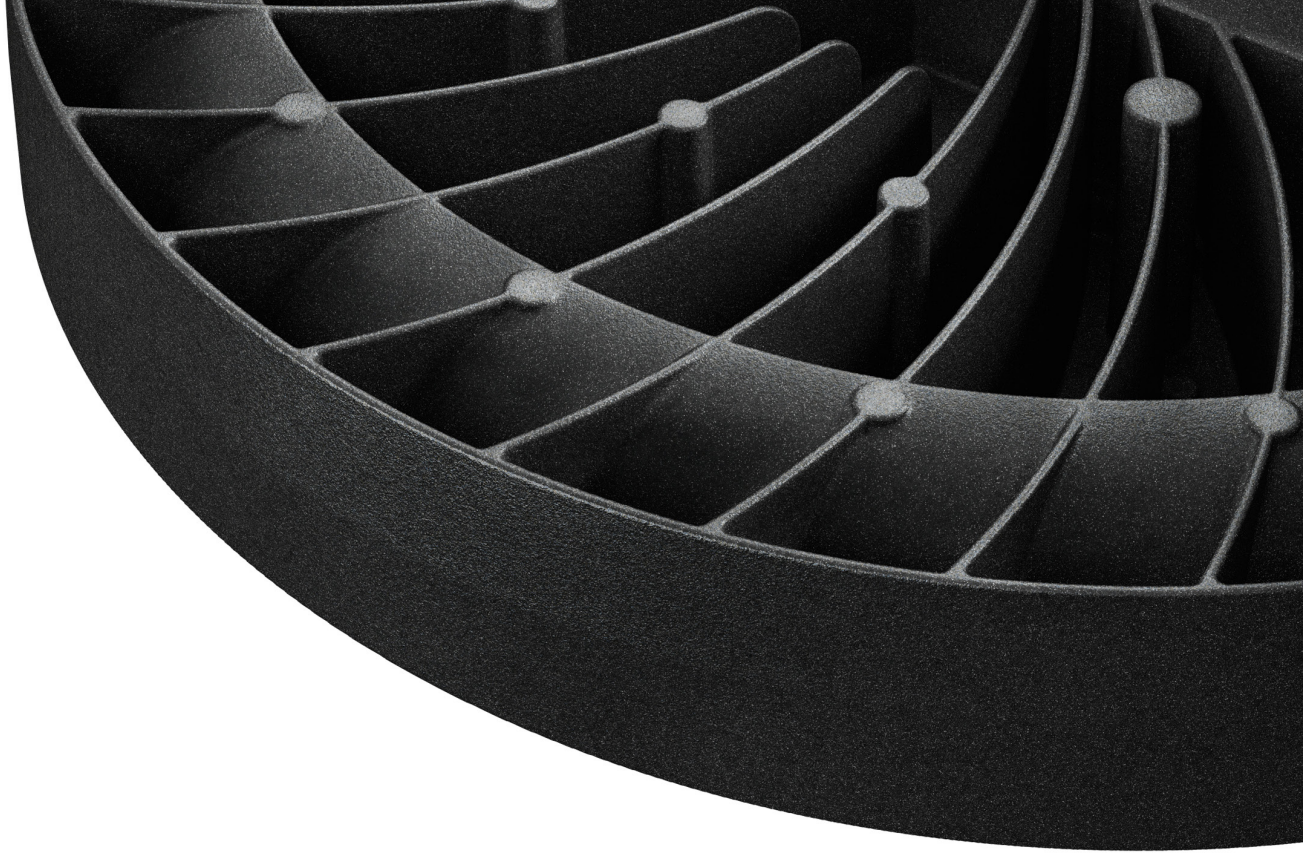
References



Hestheimar horse farm | Iceland



Komarom sports hall | Hungary



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 VIZULOSOLUTIONS