

# ENSTO

## Lighting catalogue

Export 2019



**Better life.**  
With electricity.



# Lighting catalogue

Export 2019

[www.ensto.com](http://www.ensto.com)



## Residential

Ensto's residential luminaire selection is extremely wide and designed to cover all professional needs in general lighting at home as well as in public premises.



## Public premises

Efficient and functional lighting enhances productivity and improves performance where ever we work. Ensto's public premises luminaires can be designed and installed to make the best possible lighting for each situation.



## Industrial

Ensto solves industrial lighting needs. Paper mill or parking hall; our efficient, wide and light technically superior portfolio suits almost everywhere.



## Outdoor

Ensto's outdoor luminaire selection is energy efficient, long lasting and economically sustainable. We know how to light parks, squares as well as yards and parking areas.





## Solutions for lighting professionals

The preliminary task of lighting is to create enough good quality light to perform tasks needed in the premises. Our portfolio fulfills the needs of technical lighting in residential, public premises, industrial and outdoor projects. Ensto luminaires are easy and fast to install and they are on a top level when measured by light and efficacy. Ensto provides also a variety of control and movement detection possibilities, which makes our luminaires the most interesting in the market.

Our portfolio develops and updates all the time and correct product information is our pride and joy. Therefore we would like to remind you that up-to-date product information is always available online in [www.ensto.com](http://www.ensto.com) where you can also find the mobile suitable product pages.



# Residential luminaires



# Industrial luminaires



# Public premises luminaires



# Outdoor luminaires





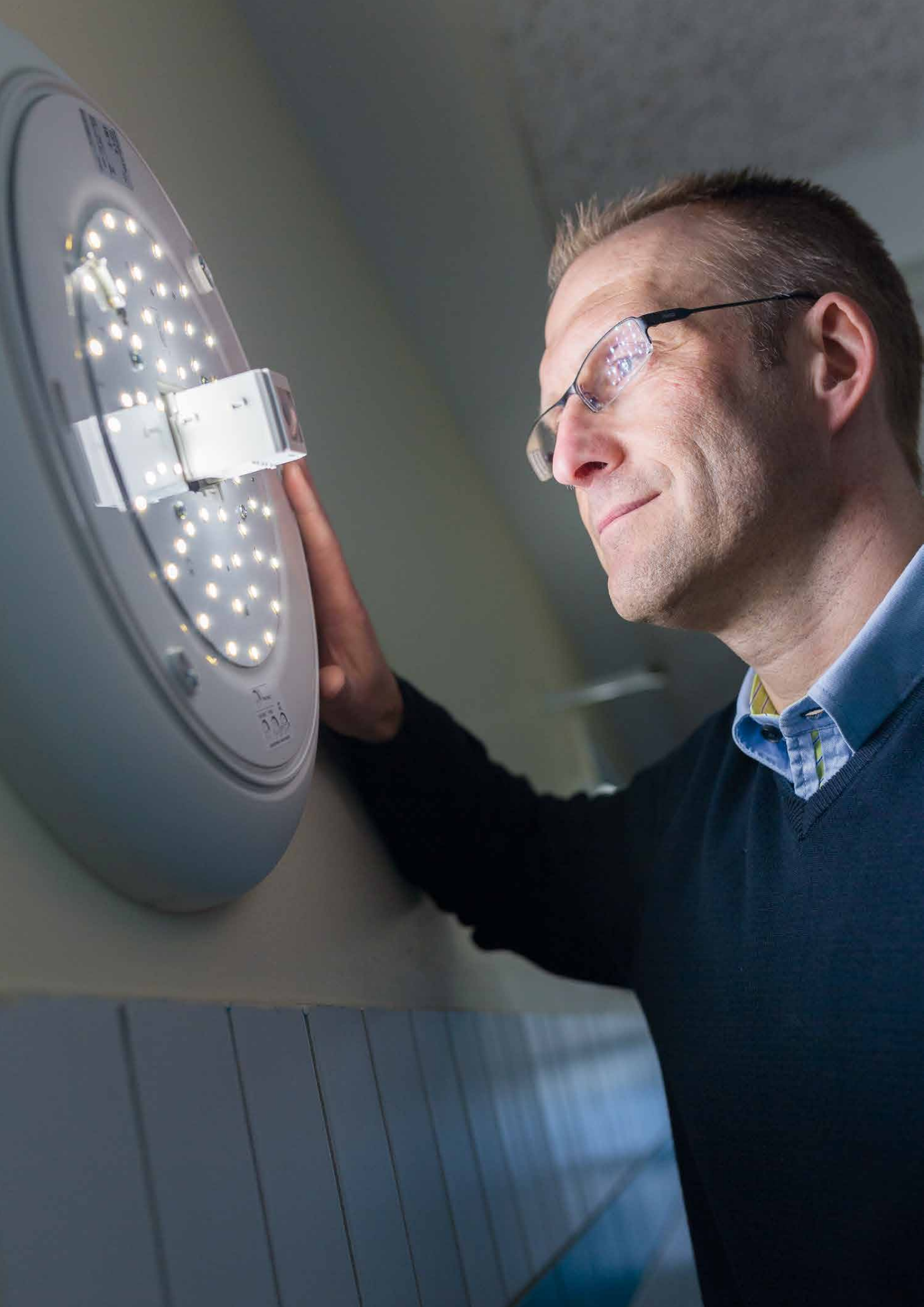


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# Ensto Smart Lighting solutions

Smart Lighting is created with a combination of quality luminaire with optics chosen for the purpose included with a control system doing the magic in the premises. Quality of a luminaire can be experienced in different ways, but Ensto quality means easy installation, long lifetime and variety of optics and control. Ensto provides exceptional amount of options when adding Smart into lighting. It all starts from project and premises needs and we are more than happy to help you along the way when making decisions to last for decades. Everything from optics and movement detection to artificial intelligent and learning can be added to the variety of our high running portfolio.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## DualWhite

Ensto luminaires with DualWhite -solution are equipped with integrated option for light colour temperature switching. You can easily switch between 3000 K and 4000 K which saves your SKUs and gives you possibility to change colour temperature according to project, with one luminaire.

## Tunable white

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move! -luminaires use PIR or Radar technique, depending on your projects and demand.

## RF

Radio Frequency (RF) enables luminaires to be wirelessly connected to each other. When RF luminaire is detecting movement it will light up the group ahead of it and one behind. RF makes lighting more secure and you'll never enter a dark place.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

## SmartDim

Ensto SmartDim is a programmable dimming solution which gives you optimized energy saving and light output when and where it's needed. You can choose maximum of 5-steps and levels during the dark hours.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

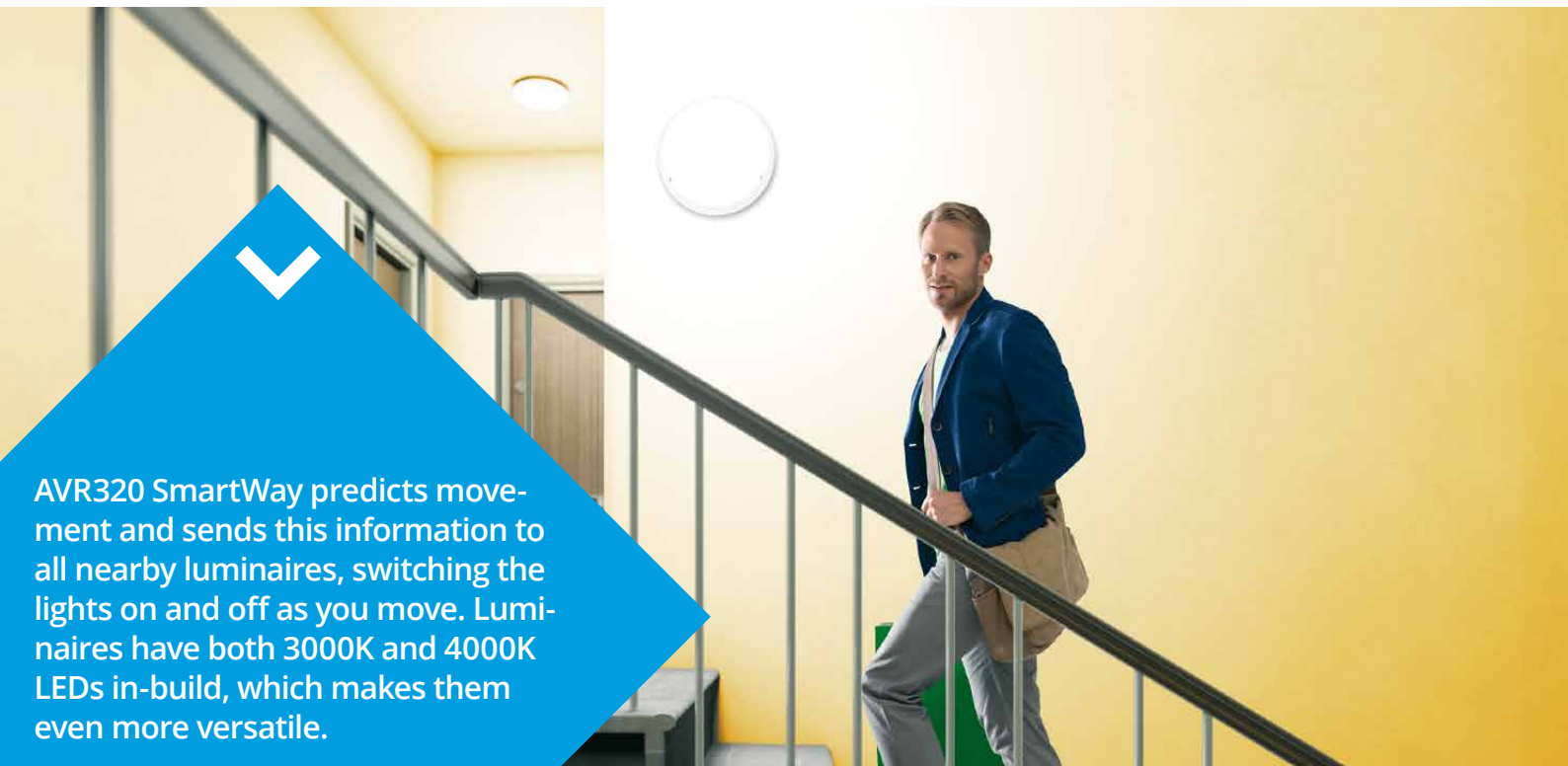
## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



# Ensto SmartWay + DualWhite

Self learning lighting



AVR320 SmartWay predicts movement and sends this information to all nearby luminaires, switching the lights on and off as you move. Luminaires have both 3000K and 4000K LEDs in-built, which makes them even more versatile.

AVR320 SmartWay luminaires communicate with each other wirelessly, with no need for control wires or radio control equipment, and they are ready for use without programming. The luminaires track the movements of the occupants of the building, communicate with each other and learn the habits of the occupants, creating the most user-friendly smart lighting system on the market.

The AVR320 SmartWay solution combines conventional motion detection technology with an innovative master/slave concept that allows for wireless communication without control wires or programming. The luminaires can communicate with each other irrespective of the phase they are connected to.

The luminaires are self-learning, and the smart features start working as soon as they have been installed. They learn continuously about the movements of the people using the building, adapting to any changes.

## Ensto SmartWay

Ensto SmartWay is a self-learning wireless system that tracks movement in hallways, corridors, offices and other locations, adapting its operation to the patterns it detects.

The plug-and-play luminaires are easy to install since they do not require control wires and no programming or configuration is needed.

## DualWhite

DualWhite feature with integrated 3000K and 4000K colour temperature provides installation flexibility and minimizes the stock.

GTIN	TYPE	PRODUCT NAME	LUMINOUS FLUX
6438389009316	AVR320.1107L/DW/AA	AVR320 IP44 10W/830/840 PIR AA	1082 lm
6438389009415	AVR320.1147L/DW/AA	AVR320 IP44 14W/830/840 PIR AA	1514 lm

## Default settings of the SmartWay system (suitable for e.g. staircases and basements)

- > Maximum light level > 100%
- > Power save light level > 10%
- > Minimum light level > 0%
- > Occupancy timeout > 1 min
- > Transition timeout > 2 min
- > Fade up time > 2 s
- > Fade down time > 8 s



Watch our SmartWay video on YouTube



### Self-learning lighting

Ensto's SmartWay is arguably the most human-centric lighting solution on the market. It continuously maps the movements of the occupants of the building, learning and adapting its operation based on the habits of the occupants. If one of the occupants takes their dog out for a walk at 7 am every morning or if the postman usually arrives at 9 am, the luminaires adapt effortlessly to these patterns.

The Ensto SmartWay solution has been in use at Ringvägen for a few months now, and its installer has made some interesting observations on the things the luminaires have learnt so far: "When using the stairs to reach the fifth floor, I noticed that the luminaires were unable to predict my movements from the second floor onwards. This shows that the people who live on the lower floors tend to use the stairs, while those living on the upper floors take the lift."

### Luminaires with the ability to learn

The Ensto SmartWay solution used for Ensto's AVR320 luminaires utilises ActiveAhead – a wireless Bluetooth Low Energy Mesh technology developed by Helvar. It is the first self-learning light control solution used in luminaires. The solution uses artificial intelligence, and it features the first smart PIR motion detection and light sensor on the market.

"This plastic 'UFO' houses state-of-the-art technology," explains Marketing Manager Paavo Ritala from Ensto. He says: "It has the ability to learn, and it keeps learning throughout its service life."

### At home in Stockholm

This block of flats in Stockholm is the first residential property in the world to benefit from a SmartWay staircase lighting system. 28 SmartWay luminaires have been installed in the staircases and short corridors of the six-storey block, owned and managed by Stockholmshem and located at Ringvägen in the Södermalm district of city.

"As a company, we want to be at the forefront of innovation and new technology," says Stockholmshem's Technical Expert Roger Modig. He manages the housing company's 26,000 rented properties located in 1,000 different buildings across Stockholm.

The SmartWay solution was installed as a replacement for fluorescent tubes that were reaching the end of their life, and Modig expects the new solution to be at least 60–70% less expensive to run than the old system. "These luminaires last for 70,000 hours, or around 20 years, and they are practically maintenance-free," he says.

### Smart installation

SmartWay luminaires are designed to be easy and quick to install. Anders Bergström from Svealands Fastighetsteknik AB (SVEFAB) installed all 28 luminaires in one day.

"Installation was really fast because no additional preparations were needed," he explains, continuing: "The luminaires communicate with each other without any additional cables or wiring. I could install them in the same two holes as the old light fittings, and earthing wasn't needed because the

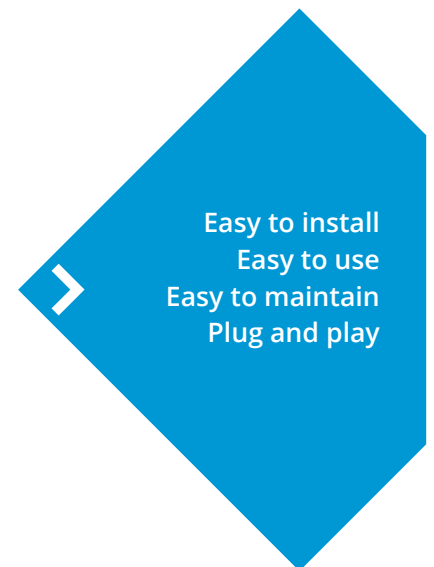
AVR320 luminaires are double-insulated and made of plastic. The SmartWay solution is pre-programmed in the luminaires, so it does not need to be switched on."

During the bidding process, contractors estimated in their budgets that installation would take 45–60 minutes per luminaire. Although he is more experienced than most installers, Bergström needed only 20 minutes per luminaire.

### Ensto listens and learns

Roger Modig from Stockholmshem says that Ensto won the contract not only because they were the only company who could offer an AI-assisted product, but also because they were known as a reliable partner. "I have been in this industry for 30 years, and my relationship with Ensto is almost as long," says Modig.

Modig concludes: "I like Ensto because they listen to their customers and learn from their feedback." Just like SmartWay.





# Security and comfort with the base light

## Move! to smarter light!



Dark corridors can be done comfort and secure with the help of sensor luminaires equipped with base light function. Modifiable base light is in standby mode with 5/20% power and it increases when sensor detects motion up to 80/100%. After the set delay time lighting returns to the base level and it can be separately set to be turned off completely after one hour from the movement.

### Two techniques:

#### PIR: heat and movement

Reacts to body temperature and senses well the sideways movement within 5-7 meters range.

#### Radar: motion control

Senses from a distance (6-8 meters) vertical motion and fits excellent for example to staircases.



### Tips

#### Staircase without windows

Because there is no day light, we recommend sensor luminaires with the base light function to increase both comfort and security. They illuminate with 5/20% power level regardless of the time of the day and they turn the lights on automatically, when there is a movement in the staircase.

#### Advantages:

- › In new construction there is no need to install wires to the switch
- › In renovation installations no need to new wiring
- › Secure and reliable; space is always illuminated when there are people
- › Handy: lighting switches on automatically
- › PIR- and radar luminaires can be combined with each other



#### Staircase with windows

Sensor luminaire equipped with switch on/off function combined with sensor's adjustable twilight level. In this case lighting turns on from the movement between nightfall and sunrise.



# PIR

## PIR with ignition and shut down function



On/off function controlled by Master-luminaire

## PIR and base light



On/off function controlled by Master-luminaire (non-controllable slave luminaires)

100% controlled by Master-luminaire, after a delay returns to the Master-luminaire's base light level (1-10V controllable slave-luminaires)

## Modifiable base light - PIR



100% controlled by Master-luminaire, after a delay returns Master-luminaire's base light level (1-10V controllable slave-luminaires)

# Radar

## Radar with with ignition and shut down function



On/off function controlled by Master-luminaire

## Radar and base light



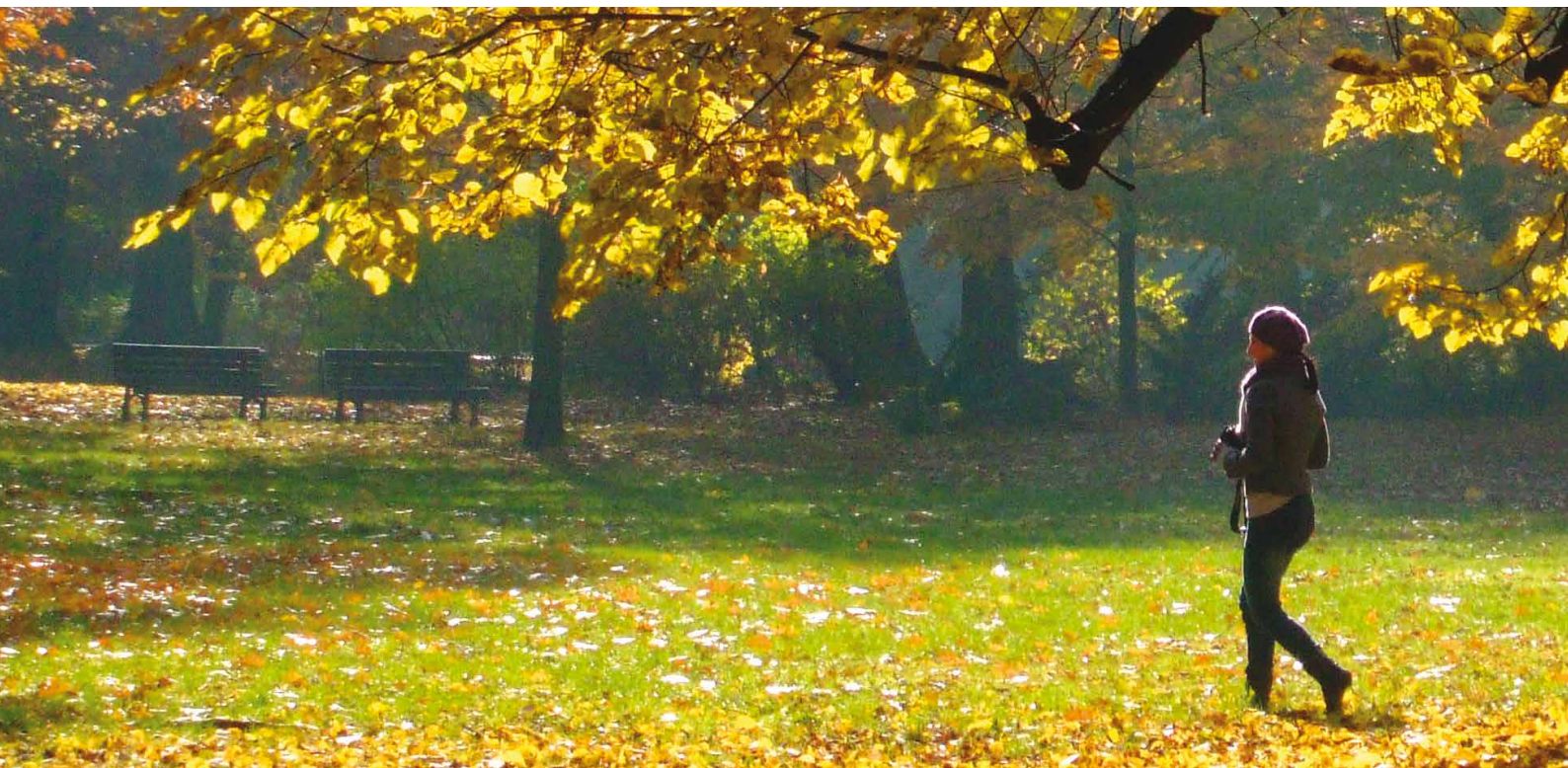
On/off function controlled by Master-luminaire (non-controllable slave luminaires)

100% controlled by Master-luminaire, after a delay returns to the Master-luminaire's base light level (1-10V controllable slave-luminaires)



# Night dimming

## Energy-efficient safety by lighting



Our LED-outdoor luminaire selection offers energy-efficient, durable and overall economic solution for lighting parks and squares as well as yard and parking areas. Our selection includes traditional and new design, a suitable construction for demanding operating environment, an excellent instability and sophisticated solutions supporting the optimization of energy consumption.

### How night dimming (Bi-power/ NightDIM) works?

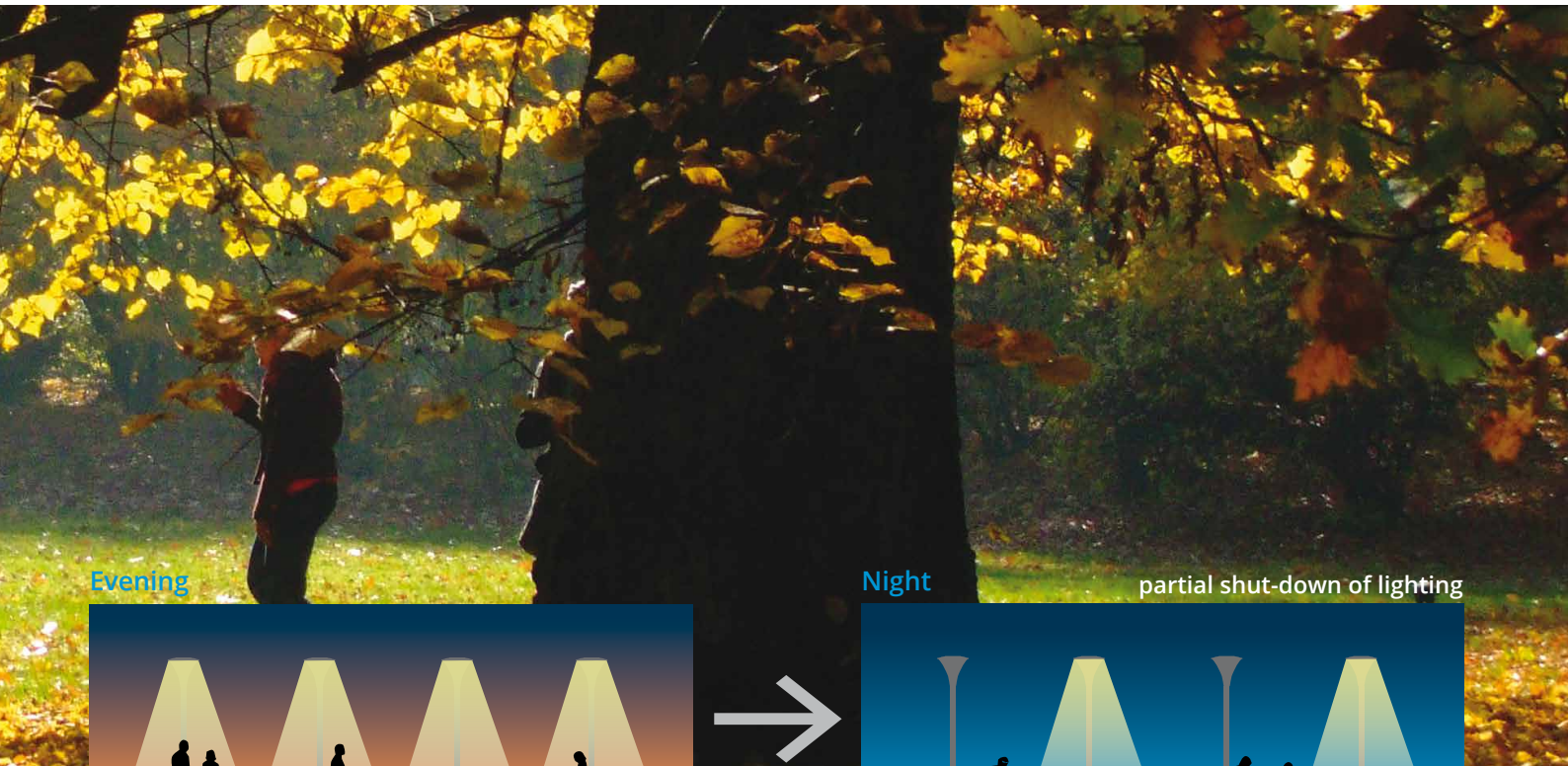
NightDIM-function is an independent power reduction, which is integrated to the LED-luminaire. NightDIM-function is used in dimming the lights during times, when lighting is not necessary work with full power. When using NightDIM-function lighting is controlled on/off with time- or twilight switch. Night dimming enables a cost-effective and easy way to save energy without loss of evenness of lighting.



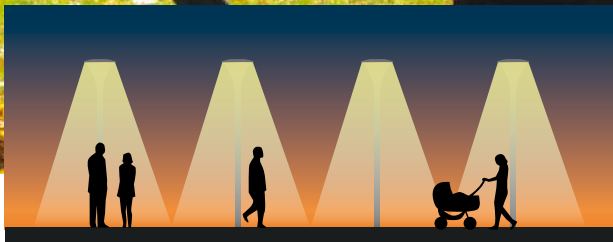
### Night dimming facts:

1. Energy savings without compromising safety
2. Remaining the evenness of lighting
3. Power reduction of lighting by 50%
4. Easy to implement and adjust according to the needs
5. Prolongs the life-span of luminaire/light source
6. Does not affect the colour rendering index nor the colour temperature



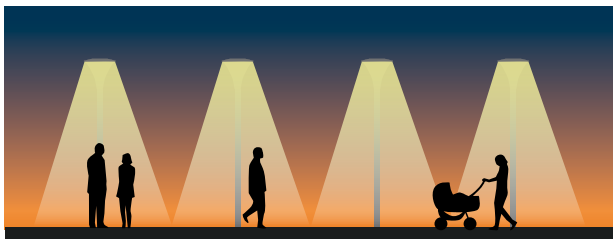
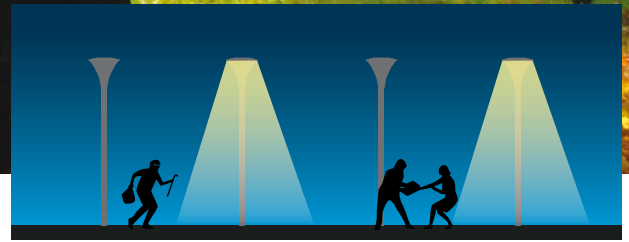


Evening

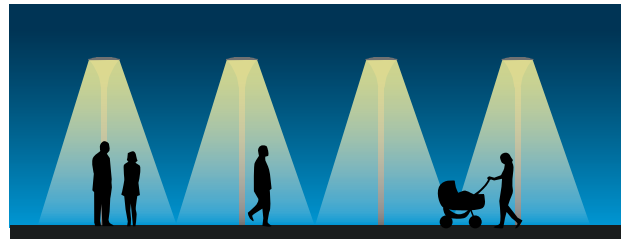


Night

partial shut-down of lighting



dimming of lighting with power reduction



### Dimming period's length

As a factory setting the dimming period's length is 8 hours and during that time lighting power is reduced by 50%. Dimming period time can be adjusted by lighting group.

NightDIM-function measures the total burning time of lighting and based on that defines the calculated midnight. As a default setting the reduced lighting level is taken into the use 3 hours before and taken off 5 hours later after the calculated midnight.

	WINTER TIME	SUMMER TIME
Lights turn on	16:00	23:00
Lights turn off	8:00	5:00
Burning time	16h	6h
Dimming on *	21:00**	23:00/23:10***
Dimming off *	5:00**	5:00***

\* dimming time 8 hours, 3 hours before and 5 hours after the calculated midnight  
 \*\* calculated midnight at 16+16 hours/2= at 24:00  
 \*\*\* calculated midnight at 23+6 hours/2= at 02:00  
 when the burning time is shorter than the dimming time, the LED-lights switches directly to reduced power level.

### Energy-efficient lighting safely

Thanks to nightDIM-function we can effectively respond to the needs of energy saving. NightDIM-function is available for our garden luminaires and the function can be taken into the use when installing.

### Estimated savings potential

Night dimming	Power reduction	Energy savings
8h 50%	50%	36%

The estimated savings potential is being calculated with ca. 4000 hours yearly burning time in Helsinki



# Ensto Plug-In for DIALux

Easy to design!



Load Ensto Plug-In for DIALux and benefit from leading Finnish manufacturer's product data.

You can download the free DIALux lighting calculator for your computer from the DIAL website [www.dialux.com](http://www.dialux.com).

## **Premium Partnership agreement**

Ensto has made a Premium Partnership agreement with German lighting software company DIAL. Ensto's lighting products can now be found from Plug-In version of DIALux program.

## **Files at your fingertips**

Ensto Plug-In for DIALux can now be downloaded from our website. Plug-In enables fast and efficient product search and light distribution curve download directly into your program. You will find Ensto also directly in the DIALux program where the downloading is easy and fast as well. You may search light distribution curves from product hierarchy or by technical features.









Residential

# Ami

LED | T5



AL122L

Slim, elegant and energy-efficient LED and T5 work point luminaire. The shape of the luminaire bottom allows it's installation in 45 degrees angle as well as directly on the surface. In Ami combines easy to install, slim design and versatility appreciated by professionals.

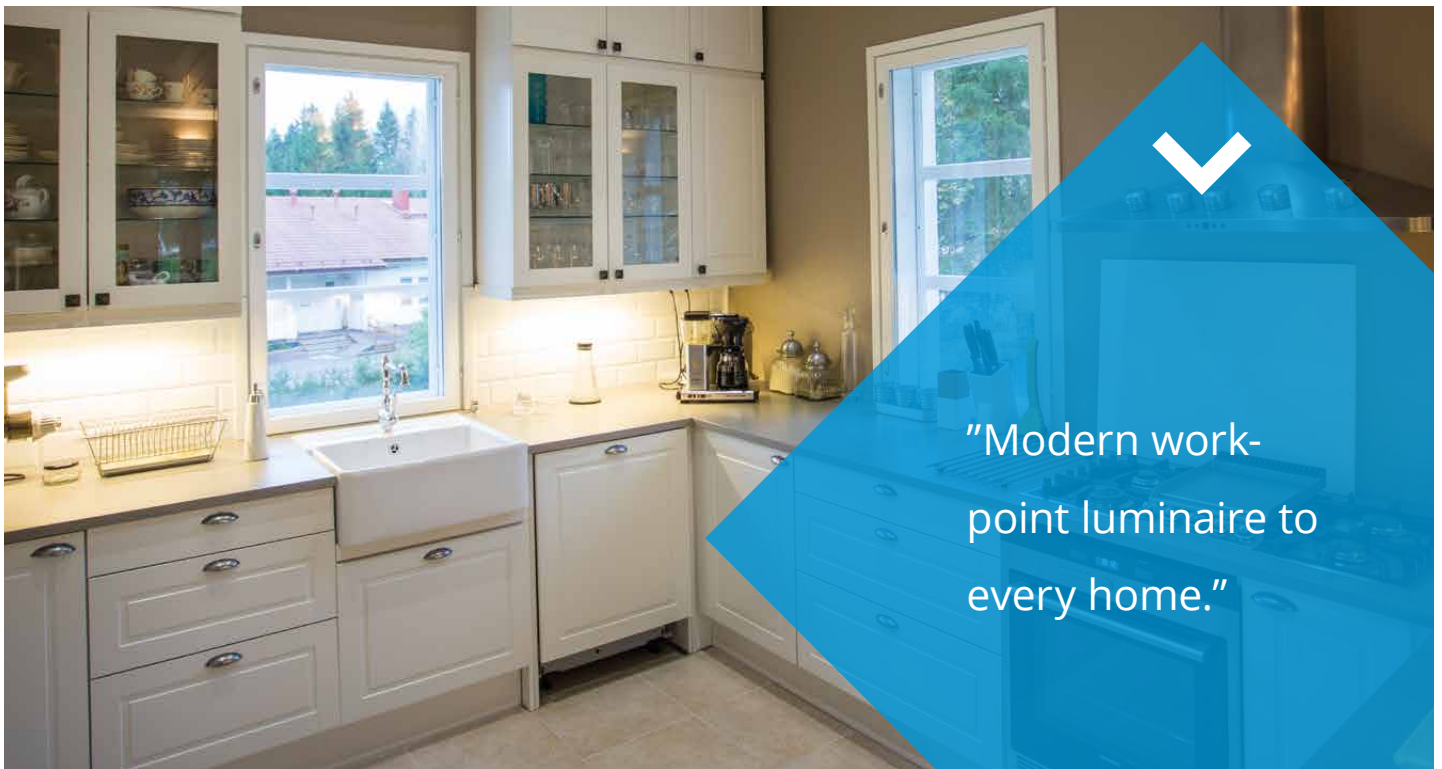
## DualWhite

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Dual  
White

1 Luminaire,  
2 Colour temperatures



“Modern work-point luminaire to every home.”



AL120L



AL122H



AL124

### Structure

- › Body - White or grey powder-coated aluminium
- › End caps – UV resistant polycarbonate
- › Diffuser – UV resistant frosted opal acrylic (LED-models) and satin acrylic (T5-models)
- › AL124-series (IP21) with earthed double socket outlets at both ends of the luminaire. Horizontal socket outlet holes. Switch at the one end of the luminaire. Side of the switch can be changed by turning the luminaire 180 degrees (without separate connection).
- › AL122-series (IP21) with earthed double socket outlet and switch. Horizontal socket outlet holes. Switch is next to socket outlet. Side of the switch can be changed by turning the luminaire 180 degrees (without separate connection).
- › AL121-series (IP44) with switch.
- › AL120-series (IP44) without accessories.
- › LED DualWhite -models:  
See the connected load and luminaire luminous flux at the table.  
3000 K/4000 K selected from circuit board switch under diffuser, Ra > 80, power factor 0,84 - 0,91  
Ambient temperature – 20 °C - + 30 °C  
LED-module lifespan 54 000 h (L70), T<sub>a</sub>=25 °C

### Mounting

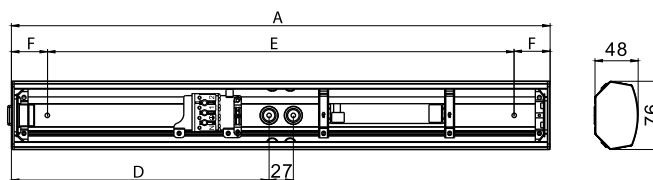
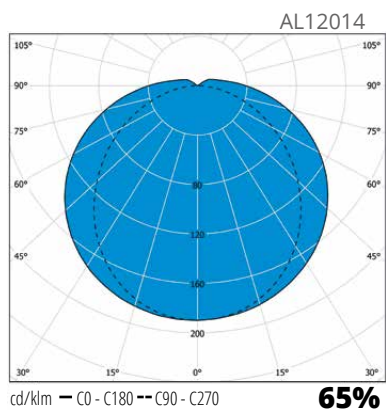
- › Under cupboard or on the wall. In 45° angle to the corner
- › AL120 without accessories also to the ceiling
- › Connection point next to the cable entry holes
- › 2 cable entry holes (ø 17 mm) at the bottom of the luminaire and at the end of the luminaire
- › Cable entry holes (ø 12 mm) at the both side of the luminaire

E number	Type	Product name	Base	Kg	A	D	E	F	Luminous flux
<b>AL120 LED DW - without accessories</b>									
41 035 36	AL120L420/DW	AL120L420 IP44 LED 9W/830/840	LED	0,5	420	170	340	40	850 lm
41 035 45	AL120L600/DW	AL120L600 IP44 LED 10W/830/840	LED	0,7	600	287	520	40	1000 lm
41 035 46	AL120L810/DW	AL120L810 IP44 LED 14W/830/840	LED	0,9	810	392	730	40	1500 lm
41 035 47	AL120L1200/DW	AL120L1200 IP44 LED 20W/830/840	LED	1,1	1200	585	1118	41	2300 lm
<b>AL121 LED DW - with rubber coated switch</b>									
41 035 48	AL121L420/DW	AL121L420 LED 9W/830/840 SW	LED	0,5	420	170	340	40	850 lm
41 035 49	AL121L600/DW	AL121L600 LED 10W/830/840 SW	LED	0,7	600	287	520	40	1000 lm
41 035 50	AL121L810/DW	AL121L810 LED 14W/830/840 SW	LED	0,9	810	392	730	40	1500 lm
41 035 51	AL121L1200/DW	AL121L1200 LED 20W/830/840 SW	LED	1,1	1200	585	1118	41	2300 lm
<b>AL122 LED DW - with double socket outlet and switch</b>									
41 035 35	AL122L450/DW	AL122L450 LED 6W/830/840 DSO	LED	0,5	452	242	281	147	500 lm
41 035 42	AL122L550/DW	AL122L550 LED 9W/830/840 DSO	LED	0,6	552	292	352	160	850 lm
41 035 43	AL122L750/DW	AL122L750 LED 10W/830/840 DSO	LED	0,8	752	362	540	172	1000 lm
41 035 44	AL122L1020/DW	AL122L1020 LED 14W/830/840 DSO	LED	1,0	1021	496	809	172	1500 lm
41 035 39	AL122L1330/DW	AL122L1330 LED 20W/830/840 DSO	LED	1,2	1332	651	1120	172	2300 lm
<b>AL122 LED DW - with double socket outlet and switch, grey</b>									
41 035 52	ALH122L450/DW	ALH122L450 LED 6W/830/840 DSO	LED	0,5	452	242	281	147	500 lm
41 035 53	ALH122L550/DW	ALH122L550 LED 9W/830/840 DSO	LED	0,6	552	292	352	160	850 lm
41 035 54	ALH122L750/DW	ALH122L750 LED 10W/830/840 DSO	LED	0,8	752	362	540	172	1000 lm
<b>AL124 LED DW - with double socket outlets at both ends of luminaire and one switch</b>									
41 035 40	AL124L580/DW	AL124L580 LED 6W/830/840 2DSO	LED	0,7	584	239	282	151	500 lm
41 035 41	AL124L680/DW	AL124L680 LED 9W/830/840 2DSO	LED	0,8	684	303	354	165	850 lm
41 035 34	AL124L880/DW	AL124L880 LED 10W/830/840 2DSO	LED	1,0	884	441	540	172	1000 lm
41 035 37	AL124L1150/DW	AL124L1150 14W/830/840 2DSO	LED	1,1	1153	562	809	172	1500 lm
41 035 38	AL124L1460/DW	AL124L1460 20W/830/840 2DSO	LED	1,5	1464	717	1120	172	2300 lm

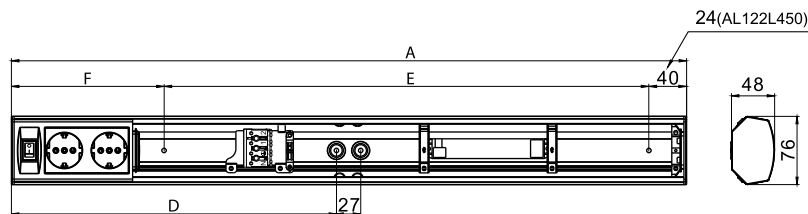
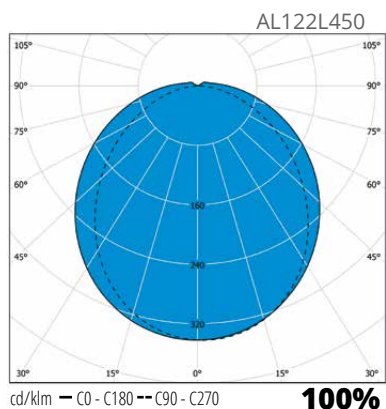




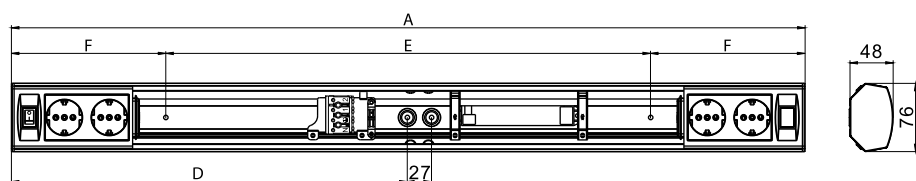
E number	Type	Product name	Base	Kg	A	D	E	F	Luminous flux
<b>AL120 - Without accessories</b>									
41 031 69	AL12014	AL12014 IP44 T5 14W	G5	0,5	589	281	510	40	
41 031 70	AL12021	AL12021 IP44 T5 21W	G5	0,8	889	431	810	40	
41 031 72	AL12028	AL12028 IP44 T5 28W	G5	1,1	1189	581	1110	40	
<b>ALH120 - Without accessories, grey</b>									
41 032 96	ALH12014	ALH12014 IP44 T5 14W HA	G5	0,5	589	281	510	40	
41 032 98	ALH12021	ALH12021 IP44 T5 21W HA	G5	0,8	889	431	810	40	
41 032 99	ALH12028	ALH12028 IP44 T5 28W HA	G5	1,1	1189	581	1110	40	
<b>AL122 - With double socket outlet and switch</b>									
41 031 73	AL12214	AL12214 T5 14W 2-OS PR	G5	0,7	721	347	510	172	
41 031 76	AL12221	AL12221 T5 21W 2-OS PR	G5	1,1	1021	497	810	172	
41 031 78	AL12228	AL12228 T5 28W 2-OS PR	G5	1,3	1321	647	1110	172	
<b>ALH122 - With double socket outlet and switch, grey</b>									
41 031 91	ALH12214	ALH12214 T5 14W 2-OS PR HA	G5	0,7	721	347	510	172	
41 031 93	ALH12221	ALH12221 T5 21W 2-OS PR HA	G5	1,1	1021	497	810	172	
41 031 94	ALH12228	ALH12228 T5 28W 2-OS PR HA	G5	1,3	1321	647	1110	172	
<b>AL124 - With double socket outlets at both ends of the luminaire and one switch</b>									
41 031 79	AL12414	AL12414 T5 14W 2x2-OS PR	G5	0,9	853	413	510	172	
41 031 81	AL12421	AL12421 T5 21W 2x2-OS PR	G5	1,3	1153	563	810	172	
41 031 82	AL12428	AL12428 T5 28W 2x2-OS PR	G5	1,5	1453	713	1110	172	
<b>ALH124 - With double socket outlets at both ends of the luminaire and one switch, grey</b>									
41 032 17	ALH12414	ALH12414 T5 14W 2x2-OS PR HA	G5	0,9	853	413	510	172	
41 032 18	ALH12421	ALH12421 T5 21W 2x2-OS PR HA	G5	1,3	1153	563	810	172	
41 032 20	ALH12428	ALH12428 T5 28W 2x2-OS PR HA	G5	1,5	1453	713	1110	172	



AL120/AL121



AL122



AL124





The Ami LED luminaires have been updated with DualWhite solution. It gives the opportunity to choose the colour temperature of the luminaire without adding any extra work during planning, procurement or installation.





AL132-series

## Ali

LED | T5

Streamlined and elegant universal LED and T5 work point luminaire for kitchens. All luminaires of these series are drip-proof. The shape of the luminaire bottom allows it's installation in 45 degrees angle as well as directly on the surface.

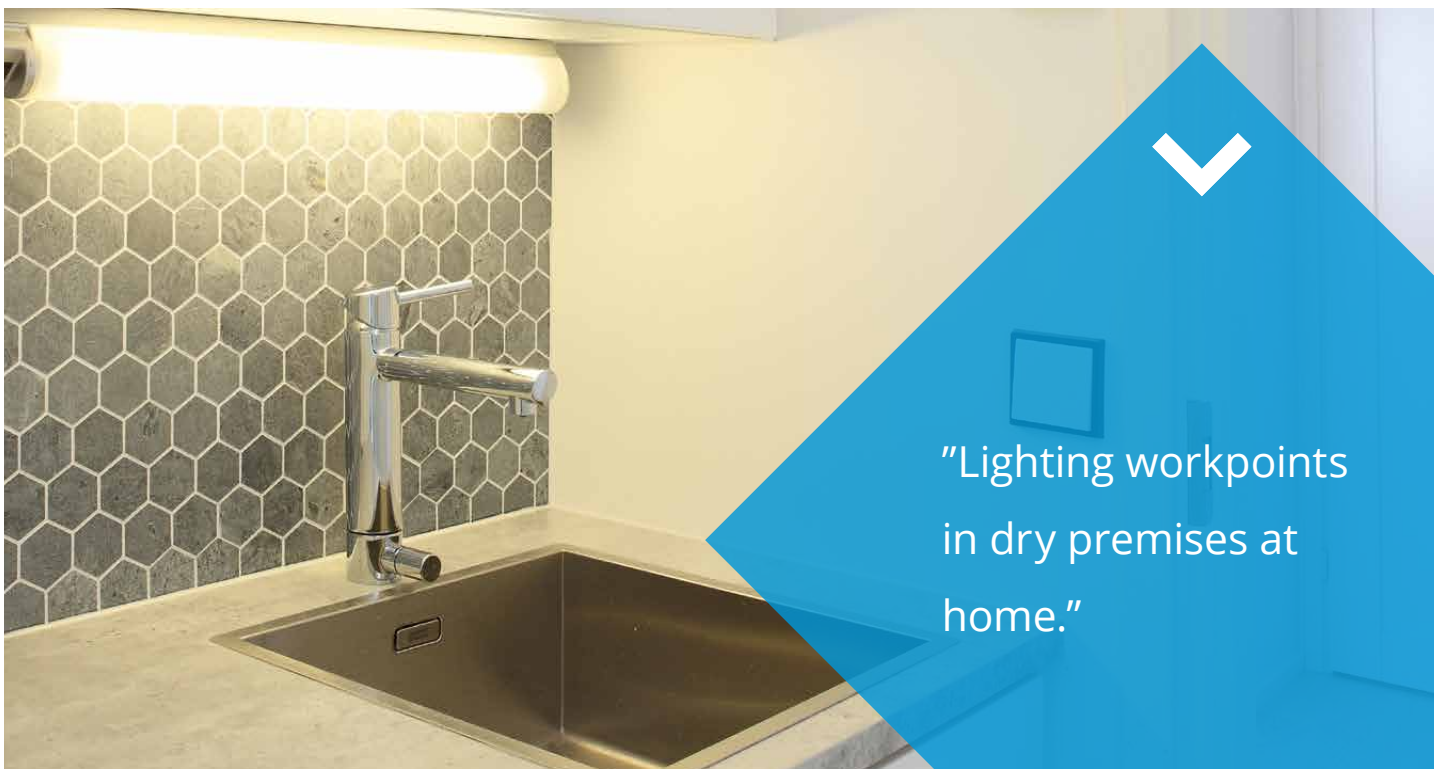
## DualWhite

Ensto luminaires with DualWhite -solution are equipped with integrated option for light colour temperature switching. You can easily switch between 3000K and 4000K which saves your SKUs and gives you possibility to change colour temperature according to project, with one luminaire.



Dual  
White

1 Luminaire,  
2 Colour temperatures



"Lighting workpoints  
in dry premises at  
home."



AL134-series



ALH132-series



Cover strip

### Structure

- › Body - White powder-coated aluminium or silver-coloured anodised aluminium
- › End caps – UV resistant polycarbonate
- › Diffuser – UV resistant opal acrylic plastic or satinated acrylic plastic (grey models)
- › Accessories:
  - AL132 with earthed double socket outlet and switch
  - AL134 with earthed double socket outlets at both ends of the luminaire and one switch
- › In AL132-series earthed safety double socket outlet. Horizontal outlet holes. Switch is next to socket outlet. Side of the switch can be changed by turning the luminaire 180 degrees (without separate connection)
- › T5 models with reliable and long life electronic ballast (50.000 h) which manufacturer give 5 year warranty
- › Models:
  - 14W, 21W, 28W (T5)
- › LED-models DualWhite:
  - 3000K or 4000K selected from circuit board switch under diffuser
  - 6W - 400/420 lm
  - 7W - 560/610 lm
  - 9W - 670/750 lm
  - 21W - 1640/1690 lm
  - Ra > 80, power factor 0,92
  - Ambient temperature – 20 °C - + 30 °C
  - LED-module lifespan 30 000 h (L70), T<sub>a</sub>=25 °C

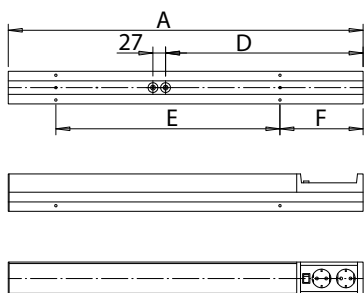
### Mounting

- › On the wall. In 45° angle to the corner
- › Connection point next to the cable entry
- › 2 cable entry holes at the bottom of the luminaire
- › Equipped with spacious cable mounting slot across the luminaire body
- › Blind cable entries in end caps
- › Constant voltage can be connected to luminaire's socket outlets

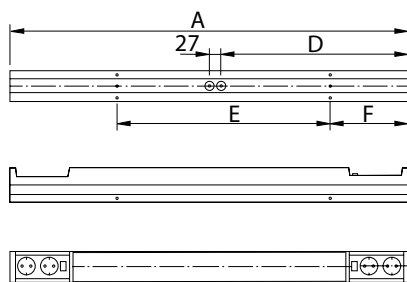
E number	Type	Product name	Base	Kg	A	D	E	F
<b>AL132 LED DW with earthed double socket outlet and switch</b>								
41 033 83	AL13211LED/DW	AL13211LED/DW LED 6W/8DW DSO	LED	0,9	475	318	190	198
41 033 85	AL13215LED/DW	AL13215LED/DW LED 8W/8DW DSO	LED	1,3	615	315	400	183
41 033 86	AL13218LED/DW	AL13218LED/DW LED 9W/8DW DSO	LED	1,4	768	319	480	186
41 033 88	AL13236LED/DW	AL13236LED/DW LED 21W/8DW DSO	LED	1,9	1377	520	772	303
<b>AL134 LED DW with earthed double socket outlets at the both ends and switch</b>								
41 033 89	AL13418LED/DW	AL13418LED/DW LED 9W/8DW 2DSO	LED	1,8	907	319	537	186
<b>AL132 with earthed double socket outlet and switch</b>								
41 602 75	AL13214	AL13214 T5 14W 2-OS PR	G5	1,1	725	336	510	176
41 602 76	AL13221	AL13221 T5 21W 2-OS PR	G5	1,2	1025	548	670	178
41 602 77	AL13228	AL13228 T5 28W 2-OS PR	G5	1,7	1325	776	970	178



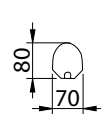
E number	Type	Product name	Base	Kg	A	D	E	F
<b>AL132 with earthed double socket outlet and switch, grey</b>								
41 602 11	ALH13214	ALH13214 T5 14W 2-0S PR HA	G5	1,1	725	336	510	176
<b>AL134 with earthed double socket outlets at both ends and switch</b>								
41 602 78	AL13414	AL13414 T5 14W 2X2-0S PR	G5	1,3	865	340	476	208
41 602 06	AL13421	AL13421 T5 21W 2X2-0S PR	G5	1,6	1165	340	602	208
41 031 28	AL13428	AL13428 T5 28W 2X2-0S PR	G5	2,0	1465	719	1000	233



AL132-series



AL134-series



DIP Switch



Workpoint luminaire with integrated socket outlets is a fast and easy to install. You'll get light and power distribution to kitchen and other areas in one package.





# Alisa

LED | T5



AL142-series

Alisa luminaire range fit for general and work point lighting and it is designed for wet premises. The shape of the luminaire bottom allows it's installation in 45 degrees angle as well as directly on the surface.

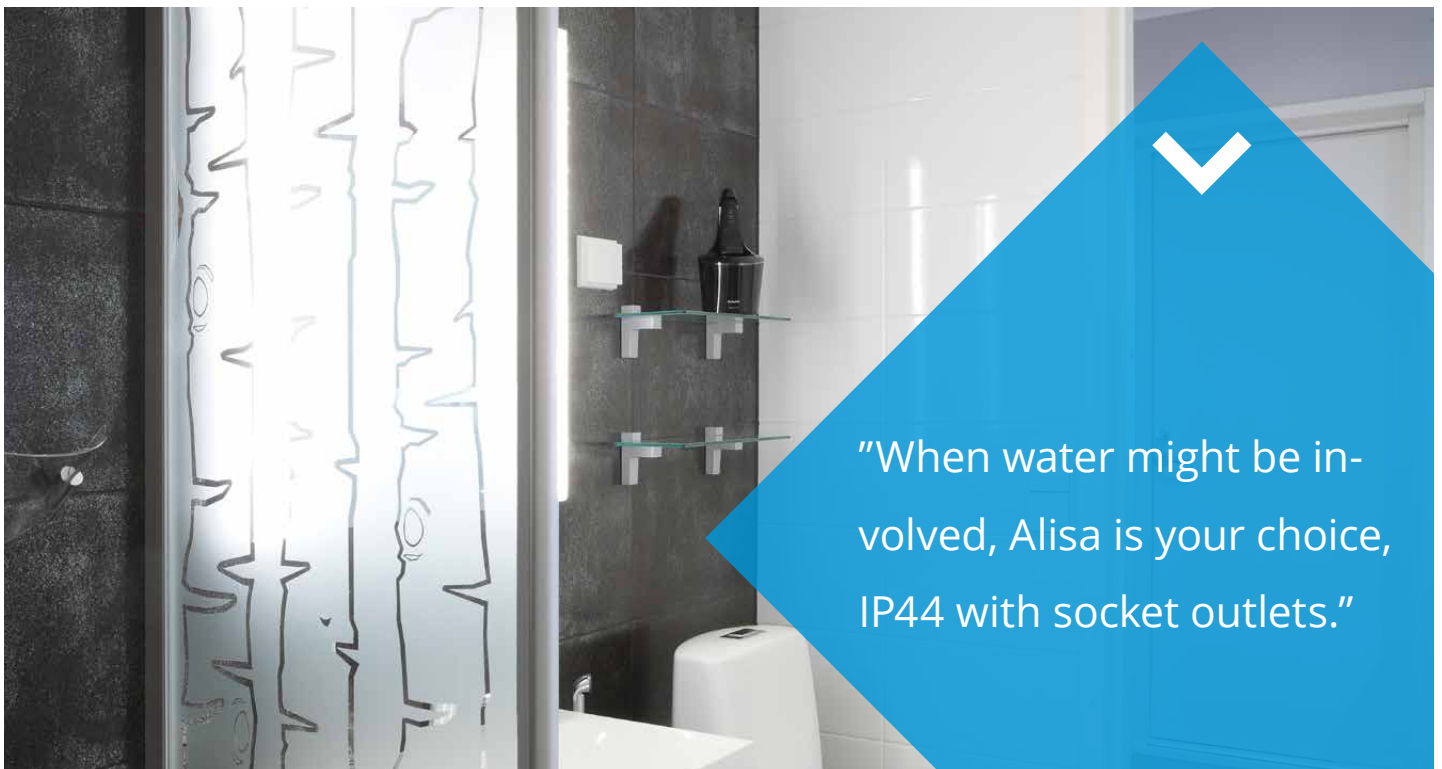
## DualWhite

Ensto luminaires with DualWhite -solution are equipped with integrated option for light colour temperature switching. You can easily switch between 3000K and 4000K which saves your SKUs and gives you possibility to change colour temperature according to project, with one luminaire.



Dual  
White

1 Luminaire,  
2 Colour temperatures



"When water might be involved, Alisa is your choice, IP44 with socket outlets."





AL140-series



AL141-series



AL14314

### Structure

- › Body - White or silver-grey powder-coated aluminium
- › End caps – UV resistant polycarbonate
- › Diffuser – UV resistant opal acrylic plastic
- › Switch side can be changed by turning the luminaire 180 degrees (without separate connection)
- › Accessories:
  - AL140 luminaire without accessories
  - AL141 luminaire and switch with protective rubber cover
  - AL142 luminaire, with double socket outlet and switch with protective rubber cover, horizontal outlet holes
  - Alisa models with residual current braker (RCB) with onesocket outlet and in place of an other socket outlet the residual current braker
- › AL142 series (except models with RCB) includes a separate cover for the switch
- › Models:
  - 14W, 21W, 28W (T5)
  - Alisa residual current braker- and modulemodels 2x9W (TC-S)
  - › LED-models DualWhite:
    - 3000K or 4000K selected from circuit board switch under diffuser
    - 7W - 560/610 lm
    - 9W - 670/750 lm
    - Ra > 80, power factor 0,92
    - Ambient temperature – 20 °C - + 30 °C
    - LED-module lifespan 30 000 h (L70), T<sub>a</sub>=25 °C

### Mounting

- › To the ceiling or in 45° angle to the corner.
- › Connection point next to the cable entry holes
- › 2 cable entry holes at the bottom of the luminaire
- › Equipped with cable mounting slot across the luminaire body
- › Blind cable entries in end caps
- › Constant voltage can be connected to luminaire's socket outlets
- › SK13 bracket for fixing the luminaire above the mirror cabinet

E number	Type	Product name	Base	Kg	A	D	E	F
<b>AL140 LED DW without accessories</b>								
41 033 94	AL14018LED/DW	AL14018LED/DW IP44 LED 9W/8DW	LED	1,1	628	423	480	103
<b>AL141 LED DW with rubber coated switch</b>								
41 033 95	AL14118LED/DW	AL14118LED/DW IP44 9W/8DW SW	LED	1,1	628	423	480	103
<b>AL142 LED DW with double socket outlet and rubber coated switch</b>								
41 033 97	AL14218LED/DW	AL14218LED/DW IP44 9W/8DW DSO	LED	1,4	814	365	480	231
<b>AL142 LED DW with 1-socket outlet and rubber coated switch with residual current braker</b>								
41 033 98	AL14229VLED/DW	AL14229VLED/DW IP44 7W/8DWSORC	LED	1,7	597	355	190	312
<b>AL143 LED DW with 1-socket outlet</b>								
41 034 00	AL143L600/DW	AL143L600/DW IP44 LED 7W/8DWSO	LED	1,5	600	280	400	148
<b>AL140 without accessories</b>								
41 602 83	AL14014	AL14014 IP44 T5 14W	G5	0,9	585	196	510	38
41 602 84	AL14021	AL14021 IP44 T5 21W	G5	1,0	885	352	625	122
41 602 85	AL14028	AL14028 IP44 T5 28W	G5	1,4	1185	441	827	179



E number	Type	Product name	Base	Kg	A	D	E	F
<b>AL141 with rubber coated switch</b>								
41 602 07	AL14114	AL14114 IP44 T5 14W SWITCH	G5	0,9	585	196	510	38
41 602 08	AL14121	AL14121 IP44 T5 21W SWITCH	G5	1,0	885	352	625	122
41 602 09	AL14128	AL14128 IP44 T5 28W SWITCH	G5	1,4	1185	441	827	179
<b>AL142 with double socket outlet and rubber coated switch</b>								
41 602 91	AL14214	AL14214 IP44 T5 14W DSO	G5	1,2	771	363	510	226
41 602 92	AL14221	AL14221 IP44 T5 21W DSO	G5	1,3	1071	441	625	223
41 602 93	AL14228	AL14228 IP44 T5 28W DSO	G5	1,7	1371	386	850	254
<b>AL143 with 1-socket outlet</b>								
41 031 48	AL14314	AL14314 IP44 T5 14W DSO	G5	1,1	670	260	500	125
<b>Accessories</b>								
41 030 02	SK13	SK13 MIRROR CABINET FIXTURES	Set consists of 2 fixing plate and 4 platescrews					



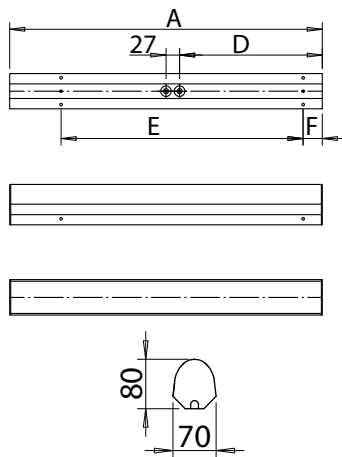
AL14229 with mirror cabinet fixing brackets



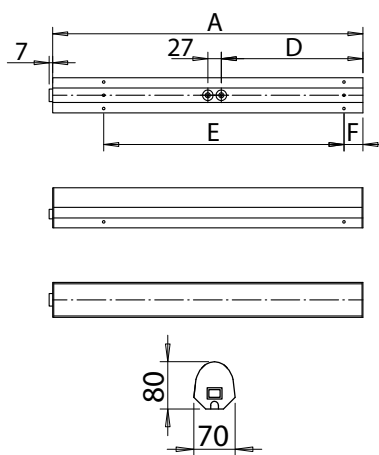
AL14229V



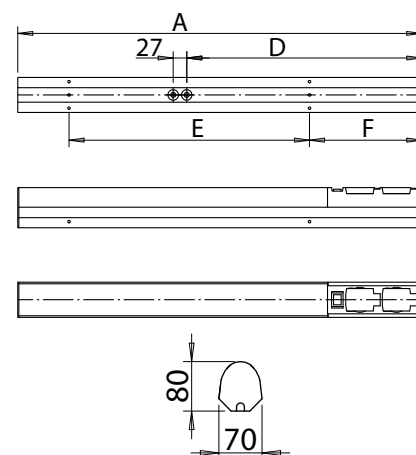
DIP Switch



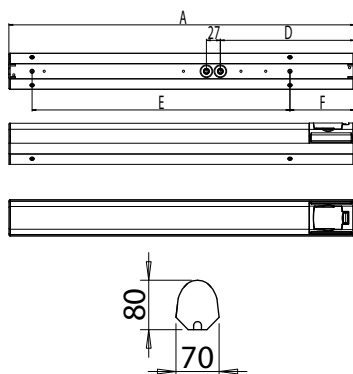
AL140-series



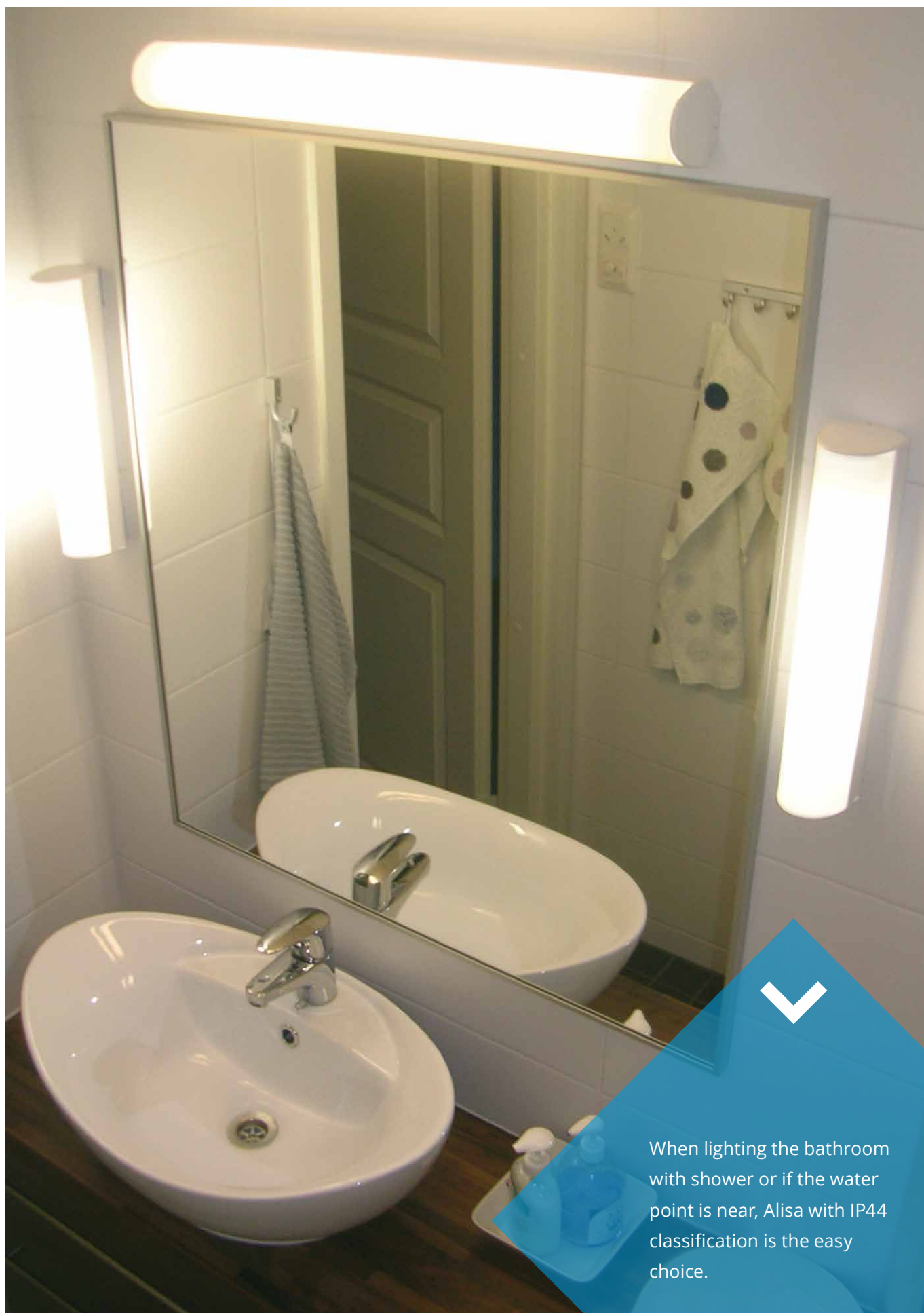
AL141-series



AL142-series



AL143-series



When lighting the bathroom with shower or if the water point is near, Alisa with IP44 classification is the easy choice.

# AVR66

LED | T5 | T8



AVR66.115L LED

Jono luminaires can be used widely in different lighting systems. Jono series includes a wide range of technical solutions for different needs of lighting. Jono can be used at home, in offices as well as in storages. It is an excellent luminaire in bathrooms and kitchen. It can be used as a ramp luminaire for corridors and staircases as well as in car shelters and garages.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move!-luminaires use PIR or Radar technique, depending on your projects and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



"Suits best everywhere,  
in- and outdoor."



AVR66.110LP



AVR66.1159L LED RADAR



AVR66.1104L LED PIR

### Structure

- ▶ Diffuser polycarbonate
- ▶ Body aluminium
- ▶ LED models:  
 Connected load  
 10W, luminaire luminous flux 895 lm (3000 K), 950 lm (4000 K)  
 15W, luminaire luminous flux 1342 lm (3000 K), 1425 lm (4000 K)  
 20W, luminaire luminous flux 1790 lm (3000 K), 1900 lm (4000 K)  
 3000 K and 4000 K, Ra > 80, power factor 0,94  
 Ambient temperature - 20 °C - + 25 °C  
 LED-module lifespan 60 000 h (L70), T<sub>a</sub> = 25 °C

### Control

- ▶ AVR66 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- ▶ AVR66 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- ▶ 1-10V
- ▶ DALI
- ▶ Switch-control

### Mounting

- ▶ To the ceiling and to the wall
- ▶ Snap-in terminal block 5x2,5 mm<sup>2</sup> with through wiring, PIR-/RADAR-models -o- 5x2,5 mm<sup>2</sup>
- ▶ Sensor luminaire models see more accurate information at WEB-site
- PIR-models:  
 To the ceiling max. 4 meters height  
 To the wall max. 1,7-2,7 meters height
- RADAR-models:  
 To the ceiling max. 3,5 meters height  
 To the wall 1,7- 2,7 meters height
- Suitable for stand-alone and master-slave installation  
 Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group  
 Slave luminaires from the Ensto basic luminaire range

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
<b>LED Jono</b>							
42 176 01	AVR66.110L	AVR66 IP44 LED10W/840 E	LED	0,8	600	950 lm	
42 176 17	AVR66.110L/3K	AVR66 IP44 LED10W/830 E	LED	0,8	600	895 lm	
42 176 40	AVR66.115L	AVR66 IP44 LED15W/840 E	LED	1,2	900	1425 lm	
42 176 57	AVR66.115L/3K	AVR66 IP44 LED15W/830 E	LED	1,2	900	1342 lm	
42 179 16	AVR66.120L	AVR66 IP44 LED20W/840 E	LED	1,6	1200	1900 lm	
42 179 45	AVR66.120L/3K	AVR66 IP44 LED20W/830 E	LED	1,6	1200	1790 lm	
<b>LED Jono aluminium colour</b>							
42 176 29	AVR66.110LAL/3K	AVR66 IP44 LED10W/830 EAL	LED	0,8	600	895 lm	
<b>LED Jono with switch</b>							
42 176 05	AVR66.1101L	AVR66 IP44 LED10W/840 E1	LED	0,9	644	950 lm	
42 176 20	AVR66.1101L/3K	AVR66 IP44 LED10W/830 E1	LED	0,9	644	895 lm	
42 176 41	AVR66.1151L	AVR66 IP44 LED15W/840 E1	LED	1,3	944	1425 lm	
42 176 59	AVR66.1151L/3K	AVR66 IP44 LED15W/830 E1	LED	1,3	944	1342 lm	
<b>LED Jono with switch, aluminium colour</b>							
42 176 31	AVR66.1101LAL/3K	AVR66 IP44 LED10W/830 E1AL	LED	0,9	644	895 lm	
<b>LED Jono with socket-outlet</b>							
42 176 07	AVR66.110LP	AVR66 IP44 LED10W/840 EP	LED	0,9	677	950 lm	
42 176 22	AVR66.110LP/3K	AVR66 IP44 LED10W/830 EP	LED	0,9	677	895 lm	
42 176 43	AVR66.115LP	AVR66 IP44 LED15W/840 EP	LED	1,3	977	1425 lm	
42 176 61	AVR66.115LP/3K	AVR66 IP44 LED15W/830 EP	LED	1,3	977	1342 lm	

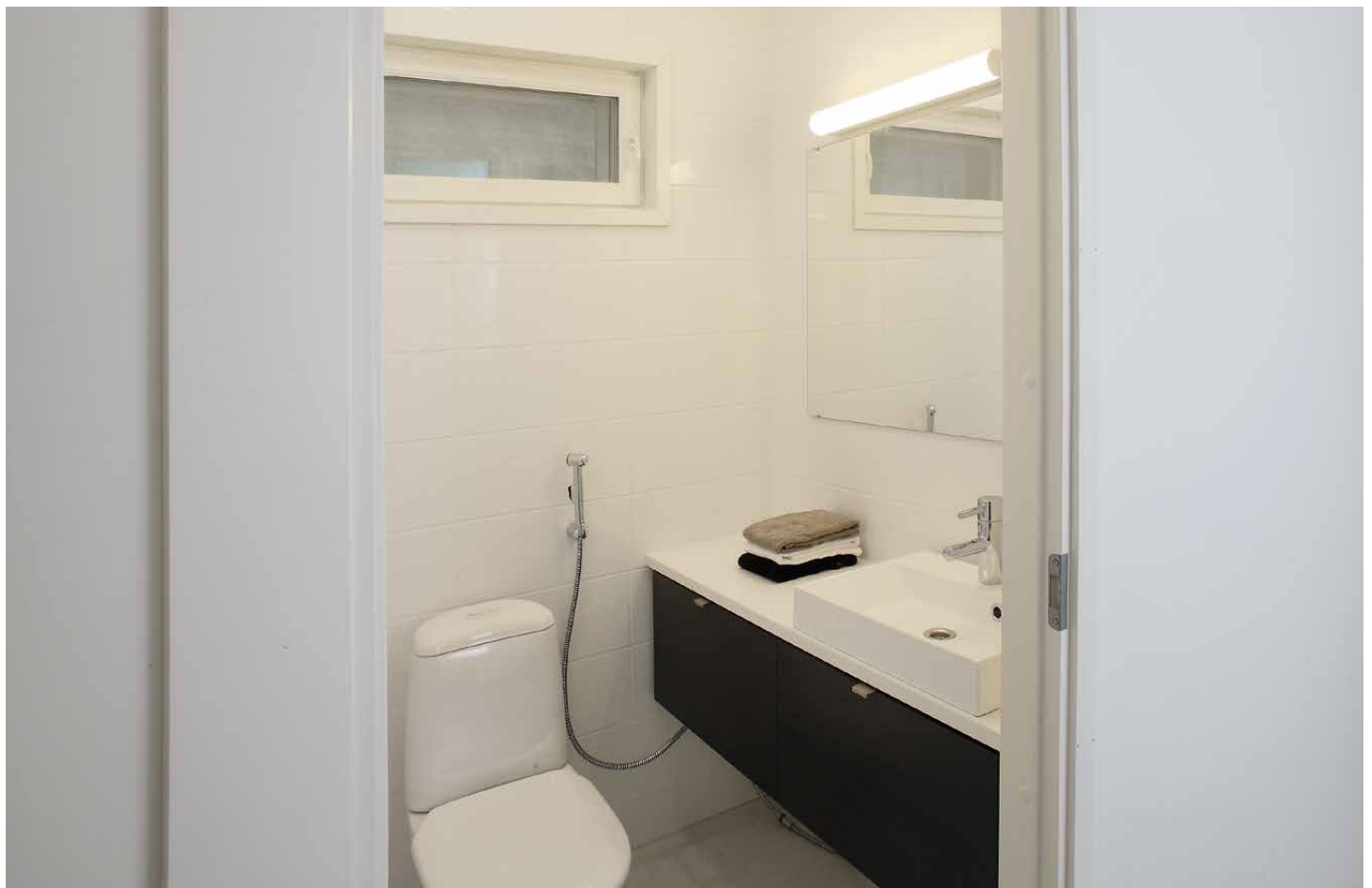
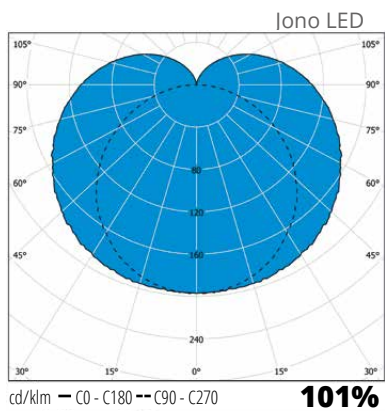


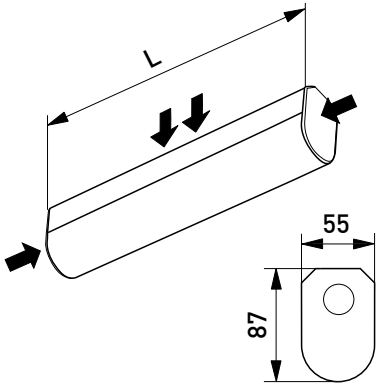


E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
<b>LED Jono with socket-outlet, aluminium colour</b>							
42 176 32	AVR66.110LPAL/3K	AVR66 IP44 LED10W/830 EPAL	LED	0,9	677	895 lm	
<b>LED jono with socket-outlet and switch</b>							
42 176 10	AVR66.1101LP	AVR66 IP44 LED10W/840 E1P	LED	1,0	721	950 lm	
42 176 23	AVR66.1101LP/3K	AVR66 IP44 LED10W/830 E1P	LED	1,0	721	895 lm	
42 176 44	AVR66.1151LP	AVR66 IP44 LED15W/840 E1P	LED	1,4	1021	1425 lm	
42 176 63	AVR66.1151LP/3K	AVR66 IP44 LED15W/830 E1P	LED	1,4	1021	1342 lm	
42 179 17	AVR66.1201LP	AVR66 IP44 LED20W/840 E1P	LED	1,9	1321	1900 lm	
42 179 46	AVR66.1201LP/3K	AVR66 IP44 LED20W/830 E1P	LED	1,9	1321	1790 lm	
<b>LED jono with socket-outlet and switch, aluminium colour</b>							
42 176 34	AVR66.1101LPAL/3K	AVR66 IP44 LED10W/830 E1PAL	LED	1,0	721	895 lm	
<b>LED Jono 1-10V</b>							
42 176 53	AVR66.115DL	AVR66 IP44 LED15W/840 D	LED	1,2	900	1425 lm	
42 176 68	AVR66.115DL/3K	AVR66 IP44 LED15W/830 D	LED	1,2	900	1342 lm	
42 179 27	AVR66.120DL	AVR66 IP44 LED20W/840 D	LED	1,8	1200	1900 lm	
42 179 71	AVR66.120DL/3K	AVR66 IP44 LED20W/830 D	LED	1,8	1200	1790 lm	
<b>LED Jono DALI</b>							
42 176 55	AVR66.115DDL	AVR66 IP44 LED15W/840 DALI	LED	1,2	900	1425 lm	DALI, Switch dim
42 176 69	AVR66.115DDL/3K	AVR66 IP44 LED15W/830 DALI	LED	1,2	900	1342 lm	DALI, Switch dim
42 179 29	AVR66.120DDL	AVR66 IP44 LED20W/840 DALI	LED	1,8	1200	1900 lm	DALI, Switch dim
42 179 98	AVR66.120DDL/3K	AVR66 IP44 LED20W/830 DALI	LED	1,8	1200	1790 lm	DALI, Switch dim
<b>LED Jono with sensor</b>							
42 176 11	AVR66.1104L	AVR66 IP44 LED10W/840 EPIR	LED	1,0	656	950 lm	
42 176 25	AVR66.1104L/3K	AVR66 IP44 LED10W/830 EPIR	LED	1,0	656	895 lm	
42 176 16	AVR66.1109L	AVR66 IP44 LED10W/840 ERAD	LED	1,0	656	950 lm	
42 176 28	AVR66.1109L/3K	AVR66 IP44 LED10W/830 ERAD	LED	1,0	656	895 lm	
42 176 46	AVR66.1154L	AVR66 IP44 LED15W/840 EPIR	LED	1,4	956	1425 lm	
42 176 65	AVR66.1154L/3K	AVR66 IP44 LED15W/830 EPIR	LED	1,4	956	1342 lm	
42 176 49	AVR66.1159L	AVR66 IP44 LED15W/840 ERAD	LED	1,4	956	1425 lm	
42 176 67	AVR66.1159L/3K	AVR66 IP44 LED15W/830 ERAD	LED	1,4	956	1342 lm	
42 179 18	AVR66.1204L	AVR66 IP44 LED20W/840 EPIR	LED	1,8	1256	1900 lm	
42 179 47	AVR66.1204L/3K	AVR66 IP44 LED20W/830 EPIR	LED	1,8	1256	1790 lm	
42 179 19	AVR66.1209L	AVR66 IP44 LED20W/840 ERAD	LED	1,8	1256	1900 lm	
42 179 48	AVR66.1209L/3K	AVR66 IP44 LED20W/830 ERAD	LED	1,8	1256	1790 lm	
<b>LED Jono with sensor, aluminium colour</b>							
42 176 35	AVR66.1104LAL/3K	AVR66 IP44 LED10W/830 EPIRAL	LED	1,0	656	895 lm	
42 176 38	AVR66.1109LAL/3K	AVR66 IP44 LED10W/830 ERADAL	LED	1,0	656	895 lm	
<b>LED Jono with PIR-sensor and socket-outlet</b>							
42 176 13	AVR66.1104LP	AVR66 IP44 LED10W/840 EPIRP	LED	1,1	733	950 lm	
42 176 26	AVR66.1104LP/3K	AVR66 IP44 LED10W/830 EPIRP	LED	1,1	733	895 lm	
42 176 47	AVR66.1154LP	AVR66 IP44 LED15W/840 EPIRP	LED	1,5	1033	1425 lm	
42 176 66	AVR66.1154LP/3K	AVR66 IP44 LED15W/830 EPIRP	LED	1,5	1033	1342 lm	
<b>LED Jono with PIR-sensor and socket-outlet, aluminium colour</b>							
42 176 37	AVR66.1104LPAL/3K	AVR66 IP44 LED10W/830 EPIRPAL	LED	1,1	733	895 lm	
<b>LED Jono with sensor and constant light (5/20%, factory setting 5%)</b>							
42 179 21	AVR66.1205DL	AVR66 IP44 LED20W/840 DPIR5	LED	2,0	1256	1900 lm	
42 179 49	AVR66.1205DL/3K	AVR66 IP44 LED20W/830 DPIR5	LED	2,0	1256	1790 lm	
<b>LED Jono with sensor and constant light (5%)</b>							
42 179 23	AVR66.1206DL	AVR66 IP44 LED20W/840 DPIR6	LED	2,0	1256	1900 lm	
42 179 58	AVR66.1206DL/3K	AVR66 IP44 LED20W/830 DPIR6	LED	2,0	1256	1790 lm	
42 179 25	AVR66.1209DL	AVR66 IP44 LED20W/840 DRAD	LED	2,0	1256	1900 lm	
42 179 59	AVR66.1209DL/3K	AVR66 IP44 LED20W/830 DRAD	LED	2,0	1256	1790 lm	

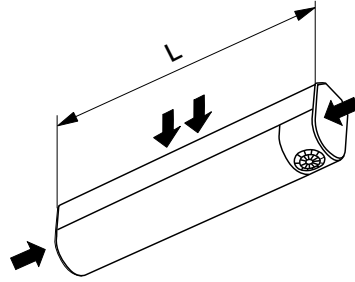
E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
<b>LED Jono with 1 hour battery back-up</b>							
42 179 43	AVR66.120L/1M	AVR66 IP44 LED20W/840 E1M	LED	1,9	1200	1900 lm	
<b>LED Jono with sensor and constant light (5/20%) and 1 hour battery back-up</b>							
42 179 44	AVR66.1205DL/1M	AVR66 IP44 LED20W/840 DPIR51M	LED	2,2	1256	1900 lm	
<b>LED Jono module-sized with socket-outlet</b>							
42 903 09	AVR66.1560LP	AVR66 IP44 LED7W/840 SO 560	LED	1,0	560	650 lm	
42 903 00	AVR66.1600LP	AVR66 IP44 LED7W/840 SO 600	LED	1,0	600	650 lm	
42 903 12	AVR66.1900LP	AVR66 IP44 LED10W/840 SO 900	LED	1,2	900	1050 lm	
<b>LED Jono module-sized with socket-outlet and dust cover</b>							
42 903 03	AVR66.1500LPZ	AVR66 IP44 LED7W/840 SODUC500	LED	1,5	500	650 lm	
42 903 06	AVR66.1550LPZ	AVR66 IP44 LED7W/840 SODUC550	LED	1,7	550	650 lm	
42 903 55	AVR66.1600LPZ	AVR66 IP44 LED 7W/840 SO DUC	LED	1,8	600	650 lm	
42 903 56	AVR66.1900LPZ	AVR66 IP44 LED 10W/840 SO DUC	LED	2,5	900	1050 lm	
<b>Jono TC-E 11W and T8 (ø 26 mm) with electronic control gear</b>							
42 172 26	AVR66.111E	AVR66 IP44 TC-E 11W E PC O, 335mm	2G7	0,7	335		
42 178 10	AVR66.015E	1x15W T8/G13 220-240V 0/50-60Hz, 479 mm	G13	0,9	479		
42 170 99	AVR66.018E	1x18W T8/G13 220-240V 0/50-60Hz, 631mm	G13	1,0	631		
42 177 53	AVR66.030E	1x30W T8/G13 220-240V 0/50-60Hz, 936mm	G13	1,4	936		
42 171 02	AVR66.036E	1x36W T8/G13 220-240V 0/50-60Hz, 1241mm	G13	1,8	1241		
42 171 05	AVR66.058E	1x58W T8/G13 220-240V 0/50-60Hz, 1541mm	G13	2,0	1541		
<b>Jono T5 (ø 16 mm) with electronic control gear</b>							
42 170 58	AVR66.014E	1x14W T5/G5 220-240V 0/50-60Hz, 600mm	G5	0,9	600		
42 170 59	AVR66.021E	1x21W T5/G5 220-240V 0/50-60Hz, 900mm	G5	1,4	900		
42 170 50	AVR66.024E	1x24W T5/G5 220-240V 0/50-60Hz, 600mm	G5	1,0	600		
42 170 61	AVR66.028E	1x28W T5/G5 220-240V 0/50-60Hz, 1200mm	G5	1,8	1200		
42 170 62	AVR66.035E	1x35W T5/G5 220-240V 0/50-60Hz, 1500mm	G5	2,1	1500		
42 170 52	AVR66.039E	1x39W T5/G5 220-240V 0/50-60Hz, 900mm	G5	1,4	900		
42 177 36	AVR66.049E	1x49W T5/G5 220-240V 0/50-60Hz, 1500mm	G5	2,1	1500		
42 170 54	AVR66.054E	1x54W T5/G5 220-240V 0/50-60Hz, 1200mm	G5	1,8	1200		
<b>Jono T5 (ø 16 mm) with 1-10V electronic control gear</b>							
42 179 22	AVR66.014D	1x14W T5/G5 220/240V 0-50/60Hz, 600mm	G5	1,1	600		
42 179 24	AVR66.021D	1x21W T5/G5 220/240V 0-50/60Hz, 900mm	G5	1,4	900		
42 179 26	AVR66.028D	1x28W T5/G5 220/240V 0-50/60Hz, 1200mm	G5	1,9	1200		
42 179 28	AVR66.035D	1x35W T5/G5 220/240V 0-50/60Hz, 1500mm	G5	2,1	1500		
<b>Jono T5 (ø 16 mm) with DSI/DALI electronic control gear</b>							
42 178 09	AVR66.014DB	1x14W T5/G5 220/240V 0-50/60Hz, 600mm	G5	1,1	600		
42 178 15	AVR66.021DB	1x21W T5/G5 220/240V 0-50/60Hz, 900mm	G5	1,4	900		
42 178 16	AVR66.028DB	1x28W T5/G5 220/240V 0-50/60Hz, 1200mm	G5	1,9	1200		
42 178 17	AVR66.035DB	1x35W T5/G5 220/240V 0-50/60Hz, 1500mm	G5	2,1	1500		
<b>PIR sensor Jono T5 (ø 16 mm) with electronic control gear</b>							
41 174 91	AVR66.0144E	1x14W T5/G5 220-240V 0/50-60Hz, 657mm	G5	1,0	657		
41 174 93	AVR66.0214E	1x21W T5/G5 220-240V 0/50-60Hz, 957mm	G5	1,4	957		
42 177 22	AVR66.0284E	1x28W T5/G5 220-240V 0/50-60Hz, 1257mm	G5	1,7	1257		
42 177 24	AVR66.0354E	1x35W T5/G5 220-240V 0/50-60Hz, 1557mm	G5	2,1	1557		
<b>PIR sensor Jono T5 (ø 16 mm) with socket-outlet and electronic control gear</b>							
41 174 92	AVR66.0144EP	1x14W T5/G5 220-240V 0/50-60Hz, 734mm	G5	1,5	734		
<b>Jono TC 11W, T5 (ø 16 mm) and T8 (ø 26 mm) with switch and electronic control gear</b>							
42 172 23	AVR66.1111E	AVR66 IP44 TC-E 11W E PC O 1, 379mm	2G7	0,7	379		
42 178 08	AVR66.0141E	1x14W T5/G5 220-240V 0/50-60Hz, 644mm	G5	1,0	644		
42 179 83	AVR66.0281E	1x28W T5/G5 220-240V 0/50-60Hz, 1244mm	G5	1,8	1244		

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
<b>Jono T5 (ø 16 mm) ja T8 (ø 26 mm) with socket-outlet and electronic control gear</b>							
42 172 27	AVR66.111EP	AVR66 IP44 TC-E 11W E PC O P, 412mm	2G7	0,8	412		
42 177 26	AVR66.014EP	1x14W T5/G5 220-240V 0/50-60Hz, 677mm	G5	1,0	677		
<b>Jono TC 11W, T5 (ø 16 mm) and T8 (ø 26 mm) with switch, socket-outlet and electronic control gear</b>							
42 172 24	AVR66.1111EP	AVR66 IP44 TC-E 11W E PC O 1 P, 456mm	2G7	0,9	456		
42 177 28	AVR66.0141EP	1x14W T5/G5 220-240V 0/50-60Hz, 721mm	G5	1,1	721		
<b>Jono accessories</b>							
42 175 56	AVL601	Wire suspension set for JONO AVR66					
42 175 59	AVL605	In-line connector set for JONO AVR66					
42 174 53	AVL608	90° angle connector pair for JONO AVR66					

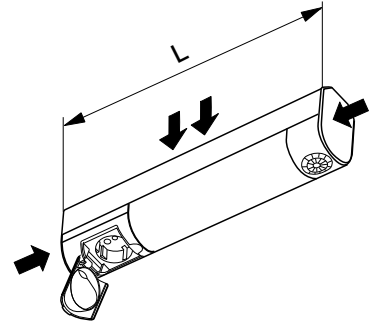




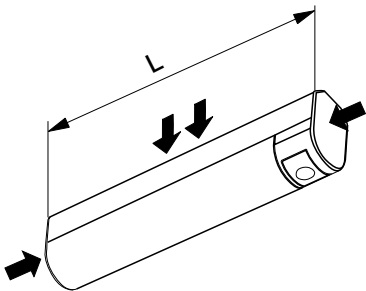
Jono and Jono Radar



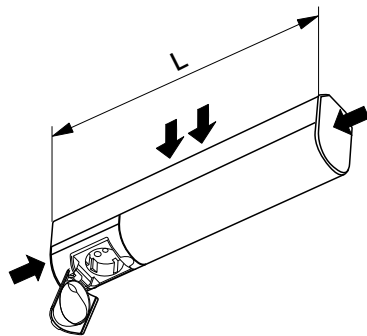
Jono PIR



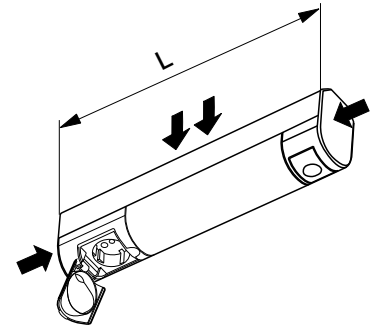
Jono PIR and socket outlet



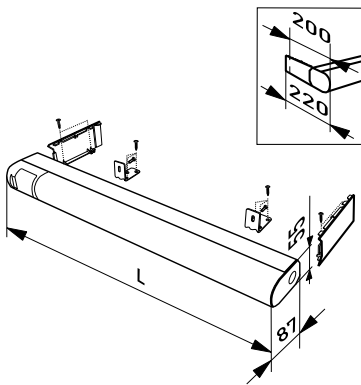
Jono with switch



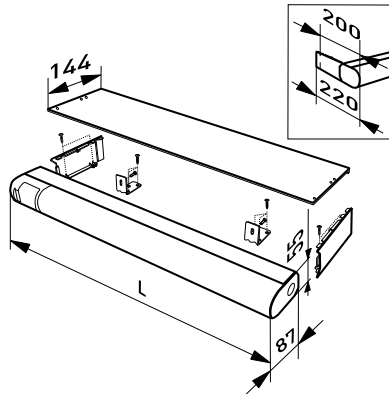
Jono with socket outlet and  
Jono with socket outlet and circuitbreaker



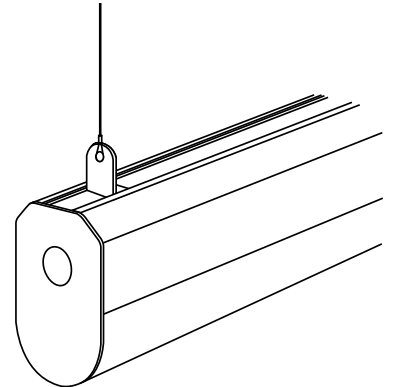
Jono with socket outlet and switch



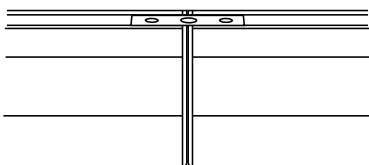
Module sized Jono with socket outlet



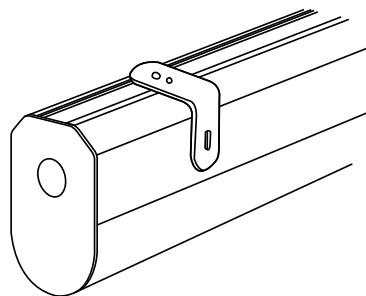
Module sized Jono with socket outlet  
and dust cover



AVL601



AVL605



AVL608



# AVR254

LED | TC



AVR254

AVR254 LED universal luminaires are designed for both wet and dry premises. They can be used both in indoor and outdoor applications. Luminaires fit excellent for bathrooms and toilets, wardrobes, shelters, terraces and vestibules. Luminaires are available in LED-, PIR- and radar-models.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move!-luminaires use PIR or Radar technique, depending on your projects and demand.





AVR254 + AVL40



AVR254 + AVL41



AVR254 + AVL57

### Structure

- › Diffuser opal acrylate
- › Body polycarbonate
- › LED-models:  
connected load  
8W (AVR254.18L) luminaire luminous flux 550 lm,  
11W (AVR254.111L), luminaire luminous flux  
750 lm  
4000 K, Ra > 80, power factor 0,77  
Ambient temperature - 20 °C - + 25 °C  
LED-module lifespan 60 000 h (L70), T<sub>a</sub>=25 °C

### Control

- › AVR254 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- › AVR254 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which are settings for time (1-30 min.), sensitivity and twilight switch function

### Mounting

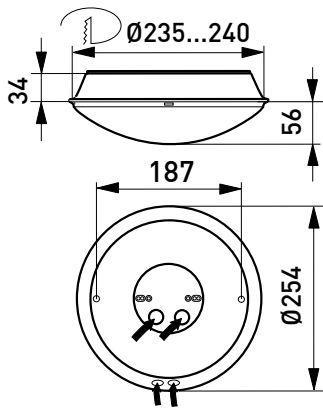
- › To the ceiling and to the wall or partly recessed
- › Recess mounting bracket AVL39 included in the packing
- › Recess depth 34 mm, recess hole ø 240 mm, diffuser diameter ø 254 mm
- › Snap-in terminal block 3x2,5 mm<sup>2</sup> with through wiring, PIR-/RADAR-models -o- 4x2,5 mm<sup>2</sup>
- › Sensor luminaire models see more accurate information at WEB-site
- PIR-models:  
To the ceiling max. 4 meters height  
To the wall max. 1,7-2,7 meters height
- RADAR-models:  
To the ceiling max. 3,5 meters height  
To the wall 1,7- 2,7 meters height
- Suitable for stand-alone and master-slave installation
- Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group
- Slave luminaires from the Ensto basic luminaire range

8W	550 lm	11W	750 lm
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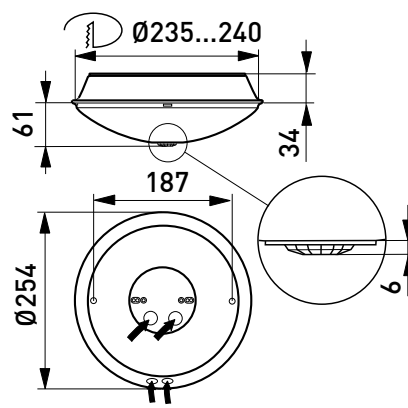
E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR254 LED luminaires with electronic control gear</b>						
42 173 70	AVR254.18L	AVR254 IP54 LED 8W/840 E AC O	LED	0,5	550 lm	
42 173 74	AVR254.18L/3K	AVR254 IP54 LED 8W/830 E AC O	LED	0,5	530 lm	
42 173 61	AVR254.111L	AVR254 IP54 LED 11W/840 E AC O	LED	0,5	750 lm	
42 173 62	AVR254.111L/3K	AVR254 IP54 LED 11W/830 E AC O	LED	0,5	725 lm	
<b>AVR254 LED PIR sensor luminaires</b>						
42 173 71	AVR254.184L	AVR254 IP54 LED 8W/840 E AC O PIR	LED	0,5	550 lm	
42 173 76	AVR254.184L/3K	AVR254 IP54 LED 8W/830 E AC O PIR	LED	0,5	530 lm	
42 173 64	AVR254.1114L	AVR254 IP54 LED 11W/840 E AC O PIR	LED	0,5	750 lm	
42 173 67	AVR254.1114L/3K	AVR254 IP54 LED 11W/830 E AC O PIR	LED	0,5	725 lm	
<b>AVR254 LED radar sensor luminaires</b>						
42 173 73	AVR254.189L	AVR254 IP54 LED 8W/840 E AC O RAD	LED	0,5	550 lm	
42 173 77	AVR254.189L/3K	AVR254 IP54 LED 8W/830 E AC O RAD	LED	0,5	530 lm	
42 173 65	AVR254.1119L	AVR254 IP54 LED 11W/840 E AC O RAD	LED	0,5	750 lm	
42 173 68	AVR254.1119L/3K	AVR254 IP54 LED 11W/830 E AC O RAD	LED	0,5	725 lm	
<b>AVR254-luminaires with electronic sensor gear</b>						
41 175 67	AVR254.29E	2x9W TC-E/2G7 220-240V 0/50-60Hz	2G7	0,5		
41 172 32	AVR254.29ECO	AVR254 IP54 2xTC-E 9W ECO AC O	2G7	0,5		
41 172 33	AVR254.29ECOMP	6 kpl val. AVR254.29ECO	2G7	4,1		
<b>AVR254 PIR sensor luminaires with electronic sensor gear</b>						
41 175 69	AVR254.294E	2x9W TC-E/2G7 220-240V 0/50-60Hz	2G7	0,6		



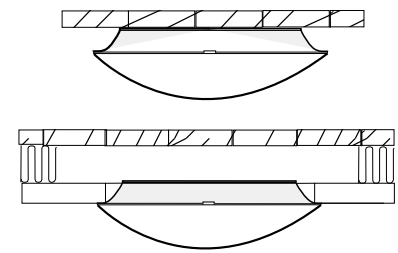
E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR254 decorative frames, polycarbonate</b>						
41 176 79	AVL57					white
<b>AVR254 decorative frames powder coated aluminium</b>						
41 175 90	AVL40					white
<b>AVR254 anti-glare frames galvanized, powder coated steel</b>						
41 175 94	AVL41					white
<b>AVR254 cover frames polycarbonate</b>						
41 175 99	AVL42					white






AVR254-luminaires

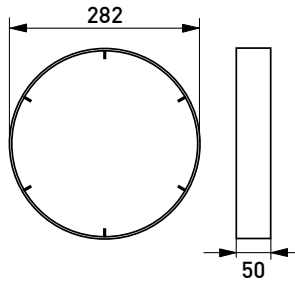


AVR254 PIR-sensor luminaires

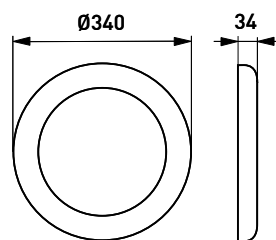


-  AVR254 Ø235...240
-  AVR320 Ø296...306
-  AVR400 Ø380...390

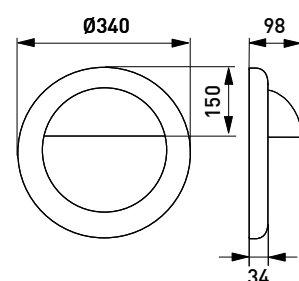
Installation picture



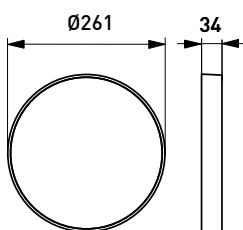
AVL57 decorative frame



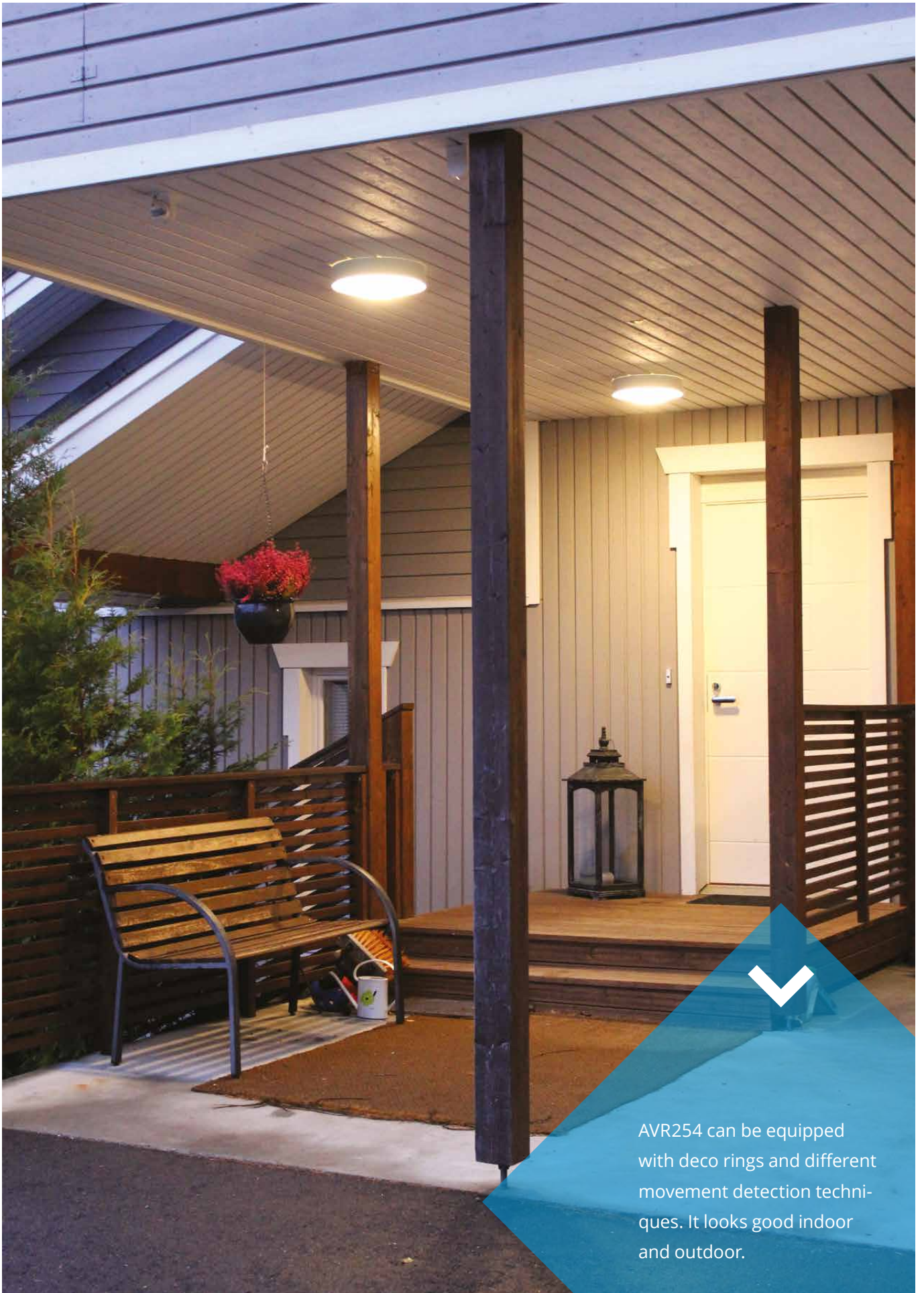
AVL40 decoration frame



AVL41 anti-glare frame



AVL42 cover frame



AVR254 can be equipped with deco rings and different movement detection techniques. It looks good indoor and outdoor.



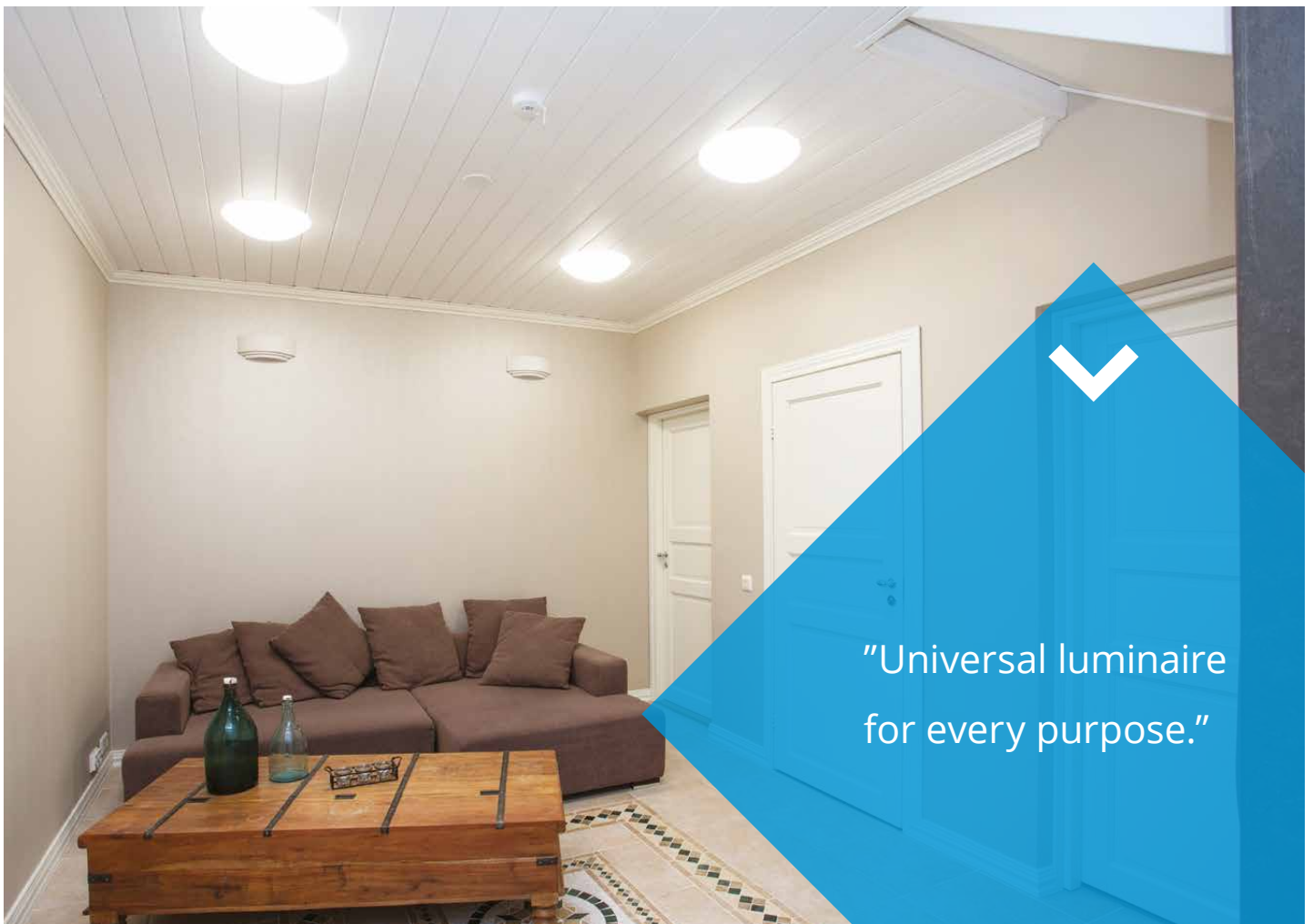
# Alunette

LED | E27



AL250LED

Alunette LED- and E27 universal luminaire for both indoor and outdoor use in public and private applications. Luminaires can be used among others in staircases, kitchens, bathrooms, storage rooms, toilets, corridors, shelters and terraces.



"Universal luminaire  
for every purpose."



AL250LED + AL250KL-V



AL250LED + AL250K-V

### Structure

- › Diffuser – UV and shock resistant acrylic
- › Body – UV resistant polycarbonate
- › LED-models CL2 and E27-base model CL1
- › LED-model:
  - Connected load 5W (AL250LED) and 6W (ALRD250LED), luminaire luminous flux 530 lm (4000 K) and 530 lm (3000 K), comparable to 2x9W TC-S
  - 4000 K, Ra>80, power factor 0,92
  - Ambient temperature – 20 °C - + 30 °C
  - LED-module lifespan 30 000 h (L70), T<sub>a</sub>=25 °C

### Control

- › ALR... -models are sensor luminaires equipped with high-frequency radar to detect motion (Radar unit)
- › Radar unit is located inside the luminaire and is not visible outside

### Mounting

- › To the ceiling and to the wall
  - › Suitable for surface or recess mounting
  - › Recess mounting bracket included in the packing
  - › Recess depth 27 mm, recess hole ø 240 mm, diffuser diameter ø 255 mm
  - › Snap-in terminal block with through wiring
    - Basic models: 3x2,5 mm<sup>2</sup> ( E27), 2x2,5 mm<sup>2</sup> (LED)
    - Sensor models: 5x2,5 mm<sup>2</sup> (E27), 3x2,5 mm<sup>2</sup> (LED)
  - › Sensor luminaire models see more accurate information at WEB-site
    - To the ceiling max. 4 meters height and to the wall max. 2,7 meters height
    - Suitable for stand-alone and master-slave installation
    - Maximum load behind one master is 300W (bulb) and 200W (fluorescent) or 100W (LED) including the master luminaire
- Slave luminaires from the Ensto basic luminaire range

### Decorative frame

- › Model: ring frame
- › Material: aluminium
- › Standard colours: white, black and grey (RAL 9006)
- › Diameter: 340 mm

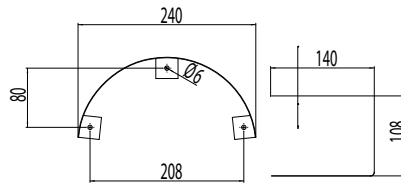
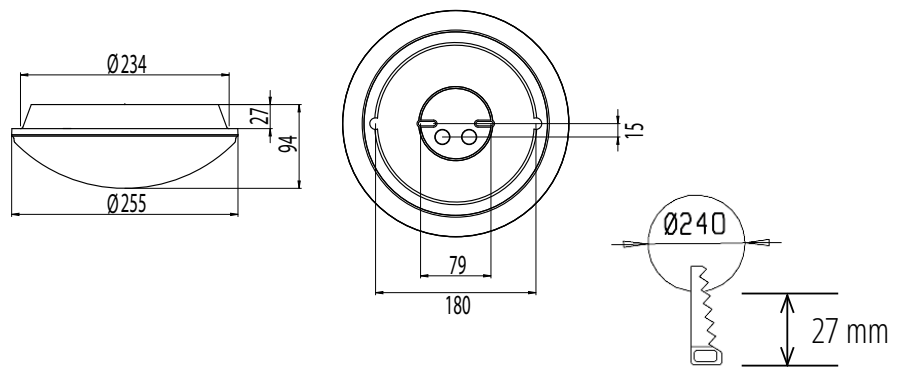
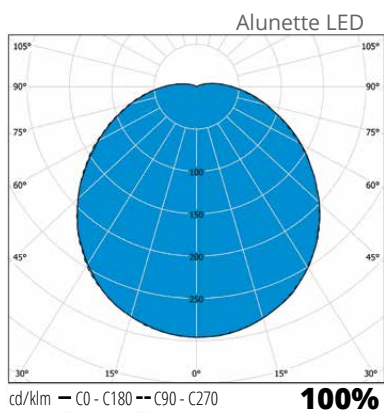
### Decorative frame with eyelid

- › Model: so called frame with eyelid
- › Material: aluminium
- › Standard colours: white, black and grey (RAL 9006)
- › Diameter: 340 mm

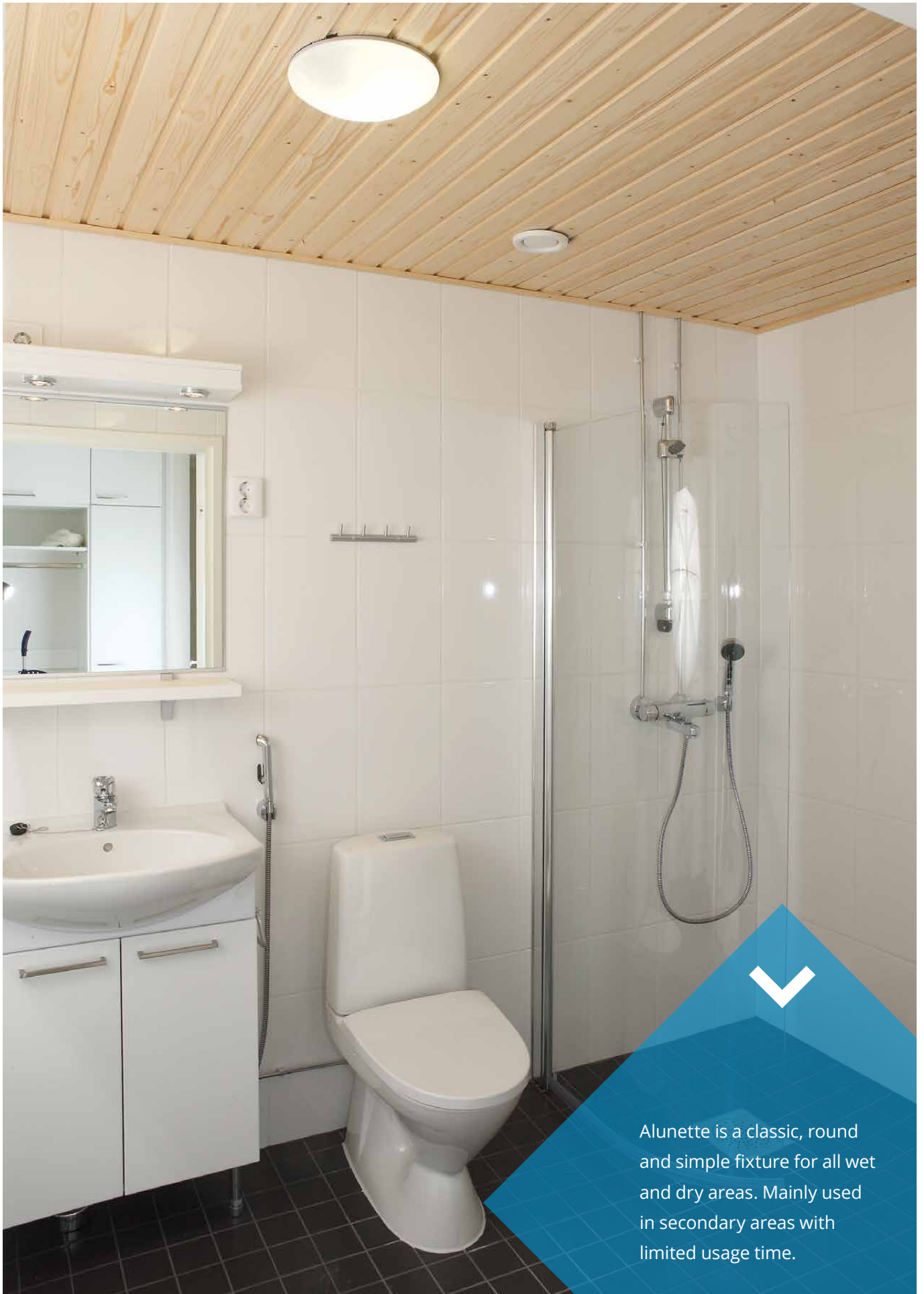
E number	Type	Product name	Base	Additional information
<b>Alunette LED</b>				
41 031 90	AL250LED	AL250LED IP54 LED 6W/840	LED	
41 033 01	AL250LED3K	AL250LED3K IP54 LED 6W/830	LED	
<b>Alunette LED radar luminaires</b>				
41 032 81	ALR250LED	ALR250LED IP54 LED 7W/840 RAD	LED	
41 033 05	ALR250LED3K	ALR250LED3K IP54 LED 7W/830 RA	LED	
<b>Alunette E27 base (light source is not included in the delivery)</b>				
41 033 80	AL250	AL250 IP54 E27 AC 0	E27	



E number	Type	Product name	Base	Additional information
<b>Decorative frame</b>				
41 607 00	AL250K-V	AL250K-V FRAME WH		white
41 607 01	AL250K-M	AL250K-M FRAME BK		black
41 607 02	AL250K-H	AL250K-H FRAME GR		grey
<b>Decorative frame with eyelid</b>				
41 607 03	AL250KL-V	AL250KL-V FRAME WH		white
41 607 04	AL250KL-M	AL250KL-M FRAME BK		black
41 607 05	AL250KL-H	AL250KL-H FRAME GR		grey
<b>Snow shield</b>				
46 031 78	LS125P/1	LS125P/1 SNOW SHIELD WH		white



Snow shields LS125P/1



Alunette is a classic, round and simple fixture for all wet and dry areas. Mainly used in secondary areas with limited usage time.



# AVR320

LED | TC



AVR320 luminaire range is equipped with new type of innovative technical features. Easy to install. Many different motion sensor versions, in some of which the sensor's control signal is transferable wirelessly between luminaires.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move! -luminaires use PIR or Radar technique, depending on your projects and demand.

## DualWhite

Ensto luminaires with DualWhite -solution are equipped with integrated option for light colour temperature switching. You can easily switch between 3000K and 4000K which saves your SKUs and gives you possibility to change colour temperature according to project, with one luminaire.



Dual White

1 Luminaire,  
2 Colour temperatures

## RF

Radio Frequency (RF) enables luminaires to be wirelessly connected to each other. When RF luminaire is detecting movement it will light up the group ahead of it and one behind. RF makes lighting more secure and you'll never enter a dark place.



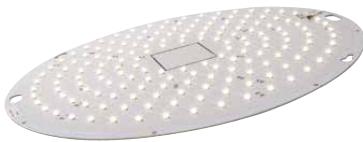
"World class technology and quality of light, wide range of possibilities."



AVR320 + AVL45



AVR320 + AVL46



### Structure

- ▶ Diffuser opal polycarbonate
- ▶ Body polycarbonate
- ▶ Circular TC/S lamps are not included in the delivery. Other models light sources, colour temperature 830 included. AVR320.1 luminaire 15W-E27/827 included.
- ▶ LED DualWhite models: connected load  
10W, luminaire luminous flux 1047 lm (3000 K), 1082 lm (4000 K),  
14W, luminaire luminous flux 1466 lm (3000 K), 1514 lm (4000 K),  
3000K or 4000K selected from circuit board switch under diffuse  
Ra > 80, power factor 0,97  
Ambient temperature - 20 °C - + 25 °C  
LED-module lifespan 70 000 h (L70), T<sub>a</sub>=25 °C

### Control

- ▶ AVR320 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function. Some versions of PIR sensor luminaires are available also with wireless radio frequency control signal between the luminaires.
- ▶ AVR320 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- ▶ AVR320 SmartWay luminaires with motion sensor (PIR) and self-learning wireless control. Factory settings 1 min time and 2 min base light.
- ▶ 1-10V
- ▶ DALI
- ▶ Switch-control

### Mounting

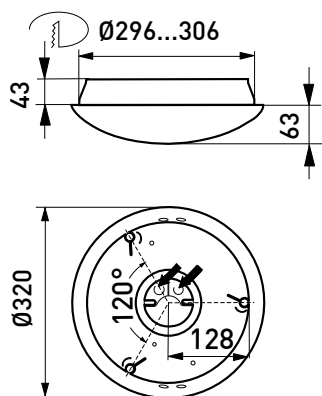
- ▶ To the ceiling and to the wall or partly recessed
  - ▶ Recess depth 43 mm, recess hole ø 306 mm, diffuser diameter ø 320 mm
  - ▶ Snap-in terminal block 3x2,5 mm<sup>2</sup> with through wiring, PIR-/RADAR-models -o- 4/5x2,5 mm<sup>2</sup>
  - ▶ Sensor luminaire models see more accurate information at WEB-site
- PIR-models:  
To the ceiling max. 4 meters height  
To the wall max. 2,7 meters height
- RADAR-models:  
To the ceiling max. 3,5 meters height  
To the wall 1,7- 2,7 meters height
- Suitable for stand-alone and master-slave installation  
Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group  
Slave luminaires from the Ensto basic luminaire range

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR320 LED DW luminaire with electronic control gear</b>						
41 035 16	AVR320.110L/DW	AVR320 IP44 LED10W/830/840	LED	1,2	1082 lm	
41 035 31	AVR320.114L/DW	AVR320 IP44 LED14W/830/840	LED	1,2	1514 lm	
<b>AVR320 LED DW with 1-10V dimmable electronic control gear</b>						
41 035 15	AVR320.110DL/DW	AVR320 IP44 LED10W/830/840 D	LED	1,2	1082 lm	1-10V
41 035 28	AVR320.114DL/DW	AVR320 IP44 LED14W/830/840 D	LED	1,2	1514 lm	1-10V
<b>AVR320 LED DW with 1-10V dimmable electronic control gear and a relay for controlling the 5%/100% light levels through a separate 230V power supply</b>						
41 035 29	AVR320.114DLR/DW	AVR320 IP44 LED14W/830/840 DRE	LED	1,3	1514 lm	base light
<b>AVR320 LED DW PIR sensor luminaires with electronic control gear</b>						
41 034 59	AVR320.1104L/DW	AVR320 IP44 LED10W/830/840 PIR	LED	1,2	1082 lm	
41 035 18	AVR320.1144L/DW	AVR320 IP44 LED14W/830/840 PIR	LED	1,2	1514 lm	

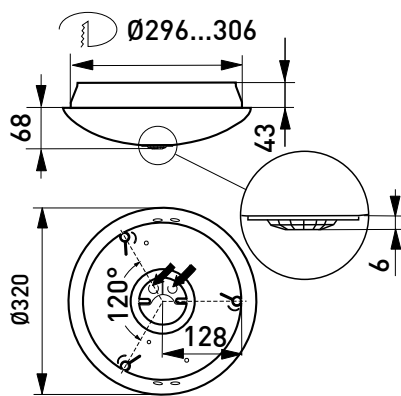


E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR320 LED DW radar sensor luminaires with electronic control gear</b>						
41 035 13	AVR320.1109L/DW	AVR320 IP44 LED10W/830/840 RAD	LED	1,2	1082 lm	
41 035 26	AVR320.1149L/DW	AVR320 IP44 LED14W/830/840 RAD	LED	1,2	1514 lm	
<b>AVR320 LED DW PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100%</b>						
41 034 77	AVR320.1106DL/DW	AVR320 IP44 LED10W/830/840 DP6	LED	1,3	1082 lm	motion sensor/base light
41 035 22	AVR320.1146DL/DW	AVR320 IP44 LED14W/830/840 DP6	LED	1,3	1514 lm	motion sensor/base light
<b>AVR320 LED DW PIR sensor luminaires with 1-10V dimmable electronic control gear. Basic light level 5% or 20% and PIR controlled light level 80% or 100%</b>						
41 034 63	AVR320.1105DL/DW	AVR320 IP44 LED10W/830/840 DP5	LED	1,2	1082 lm	motion sensor/controlled base light + on/off
41 035 20	AVR320.1145DL/DW	AVR320 IP44 LED14W/830/840 DP5	LED	1,3	1514 lm	motion sensor/controlled base light + on/off
<b>AVR320 LED DW radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%</b>						
41 034 79	AVR320.1109DL/DW	AVR320 IP44 LED10W/830/840 DR	LED	1,3	1082 lm	motion sensor/base light
41 035 25	AVR320.1149DL/DW	AVR320 IP44 LED14W/830/840 DR	LED	1,3	1514 lm	motion sensor/base light
<b>AVR320 LED DW PIR Smartway sensor luminaire</b>						
41 034 78	AVR320.1107L/DW/AA	AVR320 IP44 10W/830/840 PIR AA	LED	1,2	1082 lm	
41 035 24	AVR320.1147L/DW/AA	AVR320 IP44 14W/830/840 PIR AA	LED	1,2	1514 lm	
<b>AVR320 LED DW PIR sensor luminaires with RF sender</b>						
41 035 19	AVR320.1144L/DW/RF	AVR320 IP44 14W/830/840 PIR RF	LED	1,3	1514 lm	Master, on/off
<b>AVR320 LED DW luminaires with RF receiver (slave models)</b>						
41 035 33	AVR320.114L/DW/RF	AVR320 IP44 LED14W/830/840 RF	LED	1,2	1514 lm	Slave
<b>AVR320 LED DW PIR sensor luminaires with 1-10V dimmable control gear and RF sender. Basic light level 5% and PIR controlled light level 100%</b>						
41 035 23	AVR320.1146DL/DW/RF	AVR320 IP44 14W/830/840 DP6 RF	LED	1,3	1514 lm	Master, base light
<b>AVR320 LED DW with 1-10V dimmable control gear, RF receiver and relay for controlling the 5%/100% light levels</b>						
41 035 30	AVR320.114DLR/DW/RF	AVR320 IP44 14W/830/840 DRE RF	LED	1,3	1514 lm	Slave, base light
<b>AVR320 LED DW DALI luminaire with switch dim control gear</b>						
41 035 14	AVR320.110DDL/DW	AVR320 IP44 LED10W/830/840 DA	LED	1,2	1082 lm	DALI, Switch dim
41 035 27	AVR320.114DDL/DW	AVR320 IP44 LED14W/830/840 DA	LED	1,2	1514 lm	DALI, Switch dim
<b>AVR320 LED DW luminaire with 1 hour battery back-up</b>						
41 035 17	AVR320.110L/DW/1M	AVR320 IP44 LED10W/830/840 1M	LED	1,4	1082 lm	
41 035 32	AVR320.114L/DW/1M	AVR320 IP44 LED14W/830/840 1M	LED	1,4	1514 lm	
41 034 73	AVR320.1105DL/DW/1M	AVR320 IP44 10W/830/840 DP51M	LED	1,5	1082 lm	motion sensor/controlled base light + on/off
41 035 21	AVR320.1145DL/DW/1M	AVR320 IP44 14W/830/840 DP51M	LED	1,5	1514 lm	motion sensor/controlled base light + on/off
<b>AVR320 luminaire for E27 compact fluorescent lamps. AVR320.1 include 15W/E27 compact fluorescent lamp</b>						
41 178 22	AVR320.1	1x23W max /TC-DSE/E27 230V 50Hz, 3x2,5mm <sup>2</sup>	E27	1,0		
<b>AVR320 luminaires with electronic control gear</b>						
41 178 25	AVR320.126E	1x26W TC-DE/G24q-3 220-240V 0/50-60Hz	G24q-3	1,2		
41 178 33	AVR320.128E	1x28W TC-DD/GR10q 220-240V 0/50-60Hz	GR10q	1,1		
41 174 94	AVR320.213E	AVR320 IP44 2xTC-DE 13W E PC	G24q-1	1,1		
41 178 26	AVR320.218E	2x18W TC-DE/G24q-2 220-240V 0/50-60Hz	G24q-2	1,3		
42 178 05	AVR320.218/18E	18+18W TC-DE/G24q-2 220-240V 0/50-60Hz	G24q-2	1,3		
<b>AVR320 PIR sensor luminaires with electronic control gear</b>						
41 174 95	AVR320.2134E	AVR320 IP44 2xTC-DE 13W E PIR	G24q-1	1,3		
41 171 66	AVR320.218/94E	9W TC-E/2G7+18W TC-DE/G24q-2 220-240V 50-60Hz	G24q-2	1,3		
41 178 27	AVR320.2184E	2x18W TC-DE/G24q-2 220-240V 50-60Hz	G24q-2	1,3		
<b>AVR320 radar sensor luminaires with electronic control gear</b>						
42 170 08	AVR320.2139E	AVR320 IP44 2xTC-DE13W E PC O RADAR	G24q-2	1,3		
42 170 11	AVR320.2189E	AVR320 IP44 2xTC-DE18W E PC O RADAR	G24q-2	1,3		

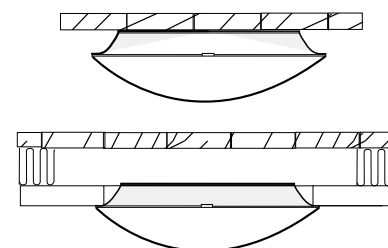
E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR320 PIR with electronic control gear and a relay for controlling the On/Off light levels also through a separate 230V power supply</b>						
41 174 75	AVR320.2184ER	2x18W TC-DE/G24q-2 230V 50Hz	G24q-2	1,3		
<b>AVR320 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100%.</b>						
41 178 30	AVR320.2186D	2x18W TC-DE/G24q-2 220-240V 50-60Hz	G24q-2	1,4		
<b>AVR320 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%.</b>						
42 178 93	AVR320.2185D	AVR320.2185D IP44 2xTC-DE18W D PC O	G24q-2	1,4		
<b>AVR320 radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%.</b>						
42 170 10	AVR320.2189D	AVR320 IP44 2xTC-DE18W D PC O RADAR	G24q-2	1,4		
<b>AVR320 decorative frames polycarbonate</b>						
41 176 81	AVL58					white
<b>AVR320 decorative frames power coated aluminium</b>						
41 178 70	AVL45					white
41 178 72	AVL45.2					antique-silver
41 178 73	AVL45.3					steel
<b>AVR320320 anti-glare frames galvanized powder coated steel</b>						
41 176 72	AVL46					white
<b>AVR320 square frames galvanized powder coated steel</b>						
41 176 75	AVL47					white



AVR320



AVR320 PIR sensor luminaire



AVR320 Ø296...306

Installation picture

# ECO320

LED



ECO320 is cost-effective IP44 luminaire range for general lighting for both public and residential premises. Two power options. Basic and PIR sensor motion models. Decorative rings as option from AVR320 range.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move! -luminaires use PIR or Radar technique, depending on your projects and demand.



"Affordable, easy and fast option when price is important."





ECO320 + AVL46



ECO320 + AVL58



## Structure

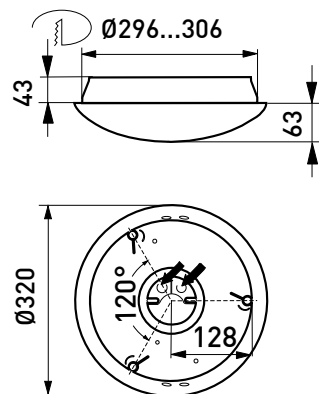
- Diffuser opal polycarbonate
- Body polycarbonate
- Models:
  - 10W, luminaire luminous flux 1047 lm (3000 K), 1082 lm (4000 K),
  - 14W, luminaire luminous flux 1466 lm (3000 K), 1514 lm (4000 K),
  - 3000/4000 K, Ra > 80, power factor 0,97
  - Ambient temperature - 20 °C - + 25 °C
  - LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C

## Control

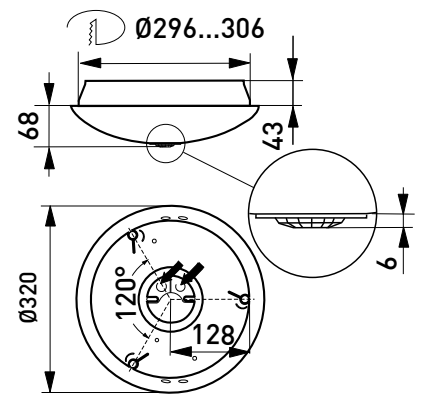
- ECO320 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function.

## Mounting

- To the ceiling and to the wall or partly recessed
- Recess depth 43 mm, recess hole ø 306 mm, diffuser diameter ø 320 mm
- Snap-in terminal block 3x2,5 mm<sup>2</sup> with through wiring, PIR-models -o- 4/5x2,5 mm<sup>2</sup>
- Sensor luminaire models see more accurate information at WEB-site
- PIR-models:
  - To the ceiling max. 4 meters height
  - To the wall max. 2,7 meters height
- Suitable for stand-alone and master-slave installation
- Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group
- Slave luminaires from the Ensto basic luminaire range.
- Special attention is paid to easy to install. Patented center plate with Bajonet fixing makes the installation work easy both in wall and ceiling installations.



ECO320



ECO320 PIR-sensor luminaire

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>ECO320 LED luminaire with electronic control gear</b>						
41 180 27	ECO320.110L	ECO320 IP44 LED 10W/840	LED	1,3	1082 lm	
41 180 28	Eco320.110L/3K	eco320 IP44 LED 10W/830	LED	1,3	1047 lm	
41 180 30	eco320.114L	eco320 IP44 LED14W/840 E	LED	1,2	1514 lm	
41 180 31	eco320.114L/3K	ECO320 IP44 LED14W/830 E	LED	1,2	1466 lm	
<b>ECO320 LED PIR-sensor luminaire with electronic control gear</b>						
41 180 26	ECO320.1104L	ECO320 IP44 LED 10W/840 PIR	LED	1,4	1082 lm	
41 180 32	ECO320.1104L/3K	ECO320 IP44 LED 10W/830 PIR	LED	1,4	1047 lm	
41 180 29	ECO320.1144L	ECO320 IP44 LED14W/840 PIR	LED	1,2	1514 lm	
41 180 33	ECO320.1144L/3K	ECO320 IP44 LED14W/830 PIR	LED	1,2	1466 lm	



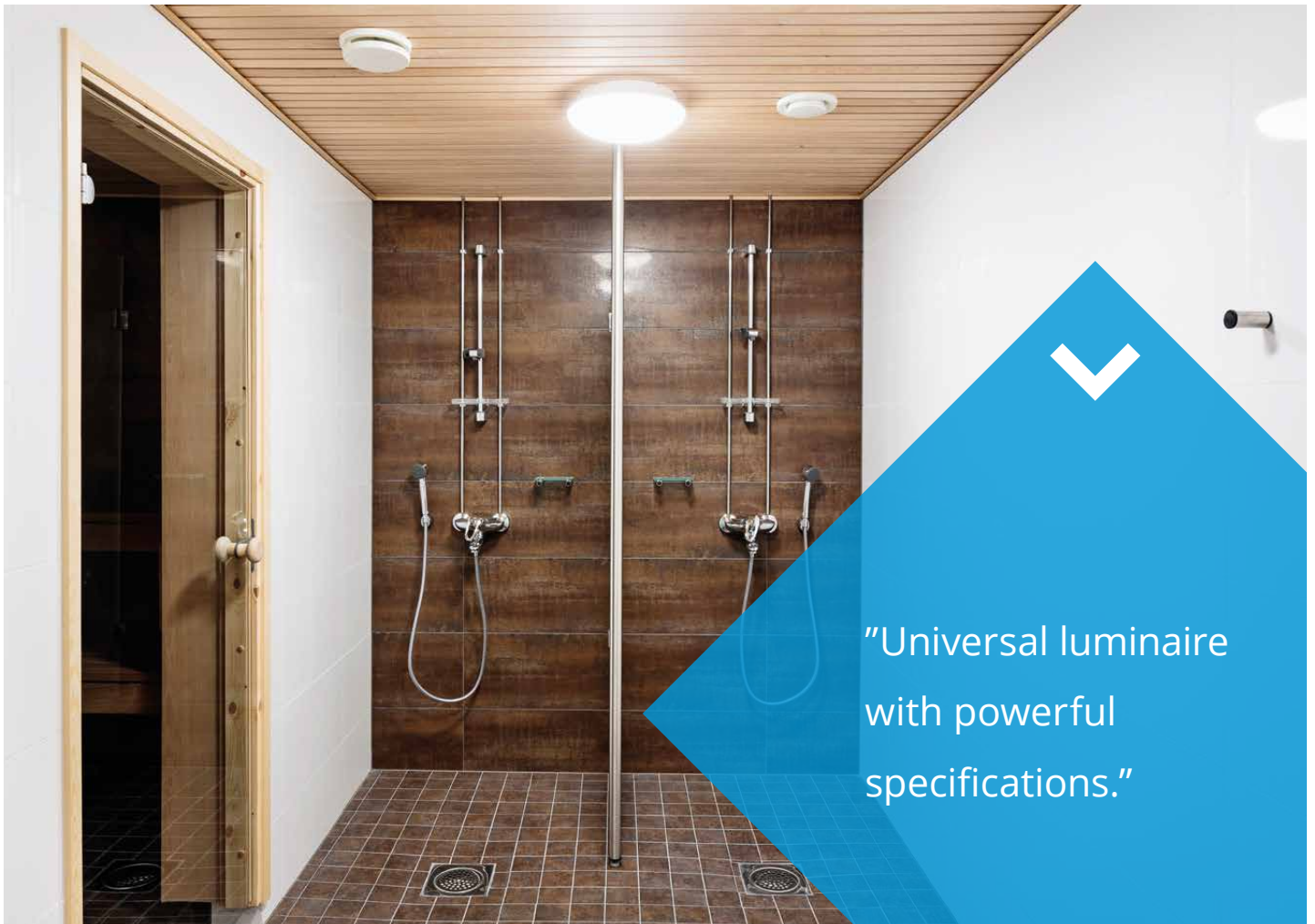
# Aluno

LED | TC | E27



AL375LED

Universal luminaire for wet and dry premises available in LED, TC and E27-models. Aluno can be used in indoor and outdoor applications both in public and private applications like corridors, staircases, kitchens, bath- and hobby rooms.



“Universal luminaire  
with powerful  
specifications.”



AL375LED + AL375K-V



ALR375LED

### Structure

- › Diffuser – UV and shock resistant opal acrylic
- › Body – transparent polycarbonate
- › Gear tray – galvanized steel
- › XFCY-models with Osram Dulux EI Facility light-source 18W/840
- › Aluno LED-models (excluding ALRD...) CL2, others and ALRD-models CL1
- › LED-models:  
3000 K and 4000 K -models, see the connected load and luminaire luminous flux from the table  
Ra > 80, power factor 0,93  
Ambient temperature – 20 °C - + 30 °C  
LED-module lifespan 35 000 h (L70), T<sub>a</sub>=25 °C

### Control

- › Sensor models:  
ALR... -models are sensor luminaires equipped with high-frequency radar to detect motion (Radar unit)  
ALRD-models with base light effect 10% (LED) or 15% (TC) and radar controlled light effect 100%  
In ALRD-models the lights turn on 100% level after the sensor detected motion, despite of the lux-level
- › Switch-Control (ES)
- › 1-10V (ELD), only TC-tube models
- › DALI (ED)
- ›

### Mounting

- › To the ceiling and to the wall, both for surface and recess mounting
- › Recess mounting bracket included in the packing
- › Recess depth 40 mm, recess hole ø 355 mm, diffuser diameter ø 375 mm
- › Snap-in terminal block 3x2,5 mm<sup>2</sup> with through wiring, sensor-models and 1-10V dimmable models -o- 5x2,5 mm<sup>2</sup>

- › Sensor luminaire models see more accurate information at WEB-site
  - To the ceiling max. 4 meters height and to the wall max. 2,7 meters height
  - Suitable for stand-alone and master-slave and master-slave-master installation
  - Maximum load behind one master is 300W (bulb) or 200W (fluorescent) including the master luminaire
- Slave luminaires from the Ensto basic luminaire range

### Made to order

- › Emergency models with 1 hour battery back-up
- › LED models with radar and radio control (868 MHz) in Master-Slave installations

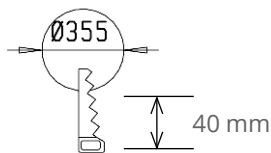
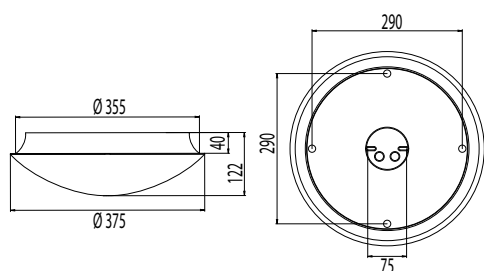
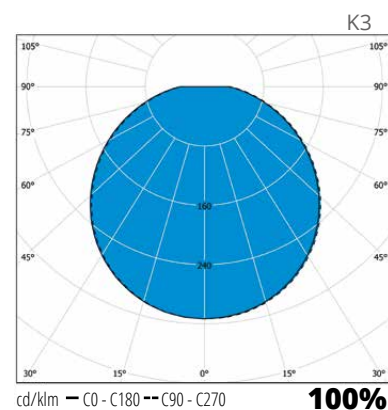
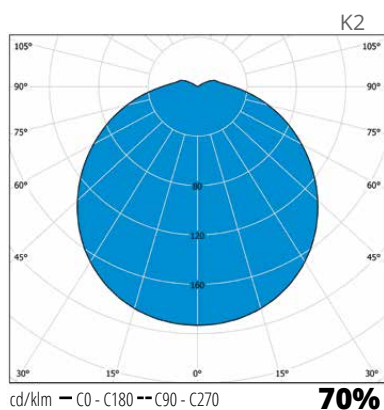
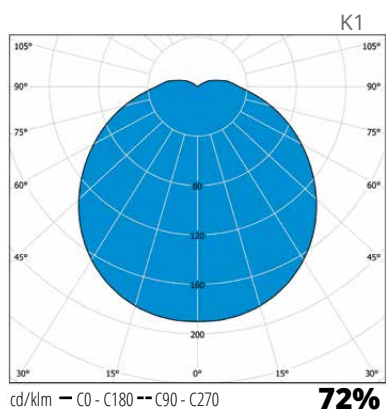
### Decorative frame

- › Powder coated aluminium, colours white, black and grey (RAL 9006)
- › Diameter: 450 mm

E number	Type	Product name	Base	Light distribution	Luminous flux	Additional information
<b>Aluno LED</b>						
41 031 30	AL375LED	AL375LED IP54 LED 12W/840	LED	K3	1050 lm	
41 033 04	AL375LED3K	AL375LED3K IP54 LED 12W/830	LED	K3	1090 lm	
41 032 23	AL375LED20	AL375LED20 IP54 LED 17W/840	LED	K3	1520 lm	
41 033 02	AL375LED203K	AL375LED203K IP54 LED 17W/830	LED	K3	1420 lm	
<b>Aluno LED sensor luminaires</b>						
41 031 31	ALR375LED	ALR375LED IP54 LED 13W/840 RAD	LED	K3	1050 lm	
41 033 08	ALR375LED3K	ALR375LED3K IP54 LED 13W/830 R	LED	K3	1090 lm	
41 032 41	ALRD375LED	ALRD375LED IP54 13W/840 D8%	LED	K3	1090 lm	with base light
41 032 24	ALR375LED20	ALR375LED20 IP54 LED 18W/840 R	LED	K3	1520 lm	
41 033 07	ALR375LED203K	ALR375LED203K IP54 18W/830 R	LED	K3	1420 lm	
41 032 26	ALRD375LED20	ALRD375LED20 LED 20W 4K R D10%	LED	K3	1640 lm	with base light



E number	Type	Product name	Base	Light distribution	Luminous flux	Additional information
<b>Aluno</b>						
41 607 34	AL375TCL118EL	AL375TCL118EL IP54 TC-L 1X18W	2G11			
41 607 36	AL375TCL218EL	AL375TCL218EL IP54 TC-L 2X18W	2G11	K1		
41 031 03	AL375TCL218ELD	AL375TCL218ELD IP54 TC-L 2X18W	2G11	K1		1-10V dimmable
41 607 58	AL3752D28EL	AL3752D28EL IP54 TC-DD 28W	GR10q			
41 607 70	AL375175	AL375175 IP54 75W E27	E27			
41 607 71	AL375175XFCY	AL375175XFCY FACI 18W/840	E27			incl. DULUX EL FCY 18W/840 light source
41 030 04	AL375275XFCY	AL375275XFCY FACI 2X18W/840	E27	K2		incl. DULUX EL FCY 2x18W/840 light sources
<b>Aluno sensor luminaires</b>						
41 604 50	ALR375TC118EL	ALR375TC118EL TC-L 1X18W RAD	2G11			
41 604 52	ALR375TC218EL	ALR375TC218EL TC-L 2X18W RAD	2G11	K1		
41 604 56	ALR375175XFCY	ALR375175XFCY FACI 18W/840 RAD	E27			incl. DULUX EL FCY 18W/840 light source
41 030 05	ALR375275XFCY	ALR375275XFCY FACI 2X18W/840 R	E27	K2		incl. DULUX EL FCY 2x18W/840 light sources
<b>Decorative frames</b>						
41 607 80	AL375K-V	AL375K-V FRAME WH				white
41 607 81	AL375K-M	AL375K-M FRAME BK				black
41 607 82	AL375K-H	AL375K-H FRAME GR				grey







Aluno is big enough to bring good light for open spaces, but small enough not draw too much attention to itself.



Titan LED

# Titan

LED | TC

Universal luminaire for wet and dry premises available in LED and TC-models. Titan can be used in indoor and outdoor applications both in public and private applications like corridors, staircases, kitchens, bath- and hobby rooms.



“For heavy duty  
public areas, IK10!”



Titan surface mounting



Titan recess mounting



ATR-models

13W	860 lm	20W	1215 lm
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### Structure

- › Body, frame and diffuser – shock resistant polycarbonate
- › Frame colour: white
- › Titan TC-models CL2, LED-models CL1
- › LED-models:  
connected load 13W, luminaire luminous flux 860 lm, comparable to 1x18W TC  
connected load 20W, luminaire luminous flux 1215 lm, comparable to 2x18W TC  
4000 K, Ra > 80, power factor 0,93  
Ambient temperature – 20 °C - + 30 °C  
LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C

### Control

- › ATR... -models are sensor luminaires equipped with high-frequency radar to detect motion (Radar unit), radar unit is located inside the luminaire and is not visible outside
- › ATRD-models with constant light effect 10% and radar controlled light effect 100%
- › Switch-Control (ES)
- › 1-10V (ELD)
- › DALI (ED), only TC-models

### Mounting

- › To the ceiling and to the wall, both for surface and recess mounting
- › Recess mounting bracket included in the packing
- › Recess depth 33 mm, recess hole ø 320 mm
- › Snap-in terminal block 3x2,5 mm<sup>2</sup> with through wiring, sensor-models and 1-10V dimmable models -o- 5x2,5 mm<sup>2</sup>

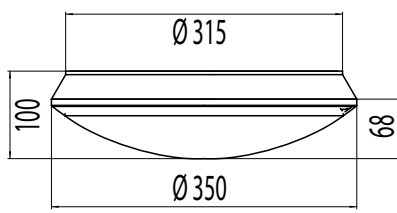
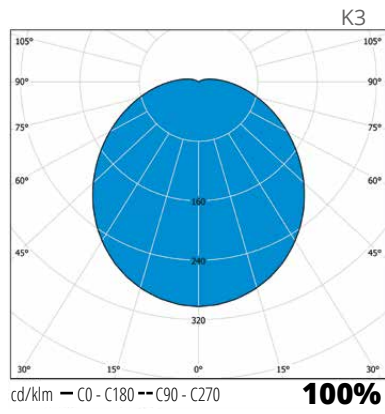
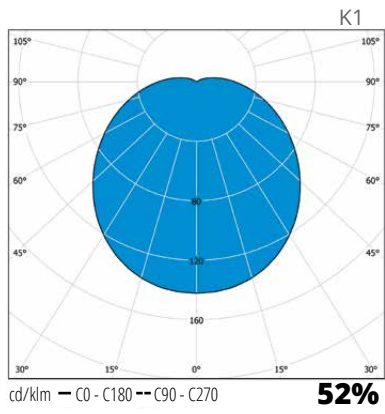
- › Sensor luminaire models see more accurate information at WEB-site
  - To the ceiling max. 4 meters height and to the wall max. 2,7 meters height
  - Suitable for stand-alone and master-slave and master-slave-master installation
  - Maximum load behind one master is 300W (bulb) or 200W (fluorescent or LED) including the master luminaire
- Slave luminaires from the Ensto basic luminaire range

### Made to order

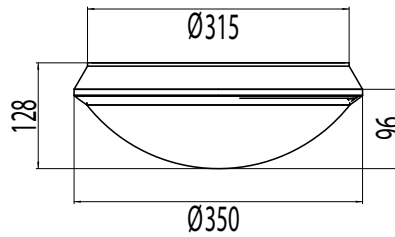
- › Emergency models with 1 hour battery back-up
- › LED models with radar and radio control (868 MHz) in Master-Slave installations

E number	Type	Product name	Base	Light distribution	Additional information
<b>Titan LED luminaires</b>					
41 031 33	AT100LED	AT100LED IP44 LED 13W/840	LED	K3	
41 032 27	AT100LED20	AT100LED20 IP44 LED 20W/840	LED	K3	
<b>Titan LED sensor luminaires</b>					
41 031 34	ATR100LED	ATR100LED IP44 LED 13W/840 RAD	LED	K3	
41 032 57	ATRD100LED	ATRD100LED IP44 13W/840 D8%	LED	K3	with base light
41 032 29	ATR100LED20	ATR100LED20 IP44 LED20W/840 R	LED	K3	
41 032 30	ATRD100LED20	ATRD100LED20 LED20W 4K R D10%	LED	K3	with base light
<b>Titan</b>					
41 030 07	AT100211VEL	AT100211VEL IP44 TC-S 2X11W HF	2G7	K1	
41 030 08	AT100218VEL	AT100218VEL IP44 TC-S 2X18W HF	2G11	K1	
<b>Titan sensor luminaires</b>					
41 030 14	ATR100218VEL	ATR100218VEL IP44 TC-S 2X18W R	2G11	K1	

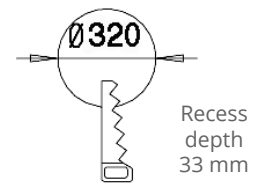




Titan 2x11W, 2D28



Titan 2x18W, LED





Titan is a good choice for public staircases, corridors and other areas where high impact protection might be needed. Quality light included, of course.





# AVR400

LED | TC | E27



AVR400 are stylish and effective luminaires for halls, corridors, offices and hotel rooms as well as in many applications at home. Luminaires are suitable both wet and dry premises.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move!-luminaires use PIR or Radar technique, depending on your projects and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



"Big and powerful,  
100% quality."



AVR400 + AVL59

### Structure

- ▶ Diffuser opal polycarbonate
- ▶ Body polycarbonate
- ▶ Circular TC/S and bulb lamps are not included in the delivery. Other models light sources included, colour temperature 830.
- ▶ LED-models:  
Connected load  
18W, luminaire luminous flux 1730 lm (3000 K), 1790 lm (4000 K)  
25W, luminaire luminous flux 2655 lm (3000 K), 2710 lm (4000 K)  
3000/4000 K, Ra > 80, power factor 0,93  
Ambient temperature - 20 °C - + 25 °C  
LED-module lifespan 70 000 h (L70), T<sub>a</sub>=25 °C

### Control

- ▶ AVR400 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (3-30 min.), sensitivity and twilight switch function
- ▶ AVR400 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- ▶ AVR400 SmartWay luminaires with motion sensor (PIR) and self-learning wireless control. Factory settings 1 min time and 2 min base light.
- ▶ 1-10V
- ▶ DALI
- ▶ Switch-control

### Mounting

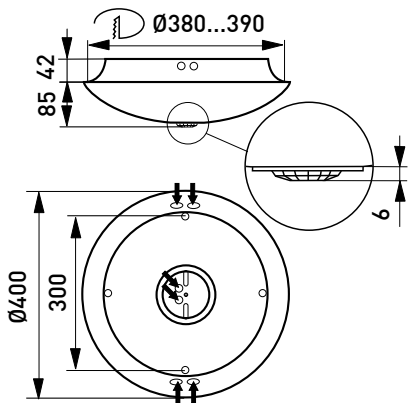
- ▶ To the ceiling and to the wall or partly recessed
- ▶ Fixing for recess mounting is included in the delivery
- ▶ Recess depth 42 mm, recess hole ø 390 mm, diffuser diameter ø 400 mm
- ▶ Snap-in terminal block 5x2,5 mm<sup>2</sup> with through wiring, PIR-/RADAR-models -o- 4/5x2,5 mm<sup>2</sup>, controlled models 5x2,5 mm<sup>2</sup>+2x2,5 mm<sup>2</sup>
- ▶ Sensor luminaire models see more accurate information at WEB-site  
PIR-models:  
To the ceiling max. 4 meters height  
To the wall max. 1,7 - 2,7 meters height  
RADAR-models:  
To the ceiling max. 3,5 meters height  
To the wall 1,7- 2,7 meters height  
Suitable for stand-alone and master-slave installation  
Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group  
Slave luminaires from the Ensto basic luminaire range

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR400 LED universal luminaires</b>						
42 173 56	AVR400.118L	AVR400 IP44 LED 18W/840 E PC O	LED	2,1	1790 lm	
42 173 89	AVR400.118L/3K	AVR400 IP44 LED 18W/830 E PC O	LED	2,1	1730 lm	
42 603 30	AVR400.125L	AVR400 IP44 LED 25W/840 E PC O	LED	2,1	2710 lm	
42 603 31	AVR400.125L/3K	AVR400 IP44 LED 25W/830 E PC O	LED	2,1	2655 lm	
<b>AVR400 LED universal luminaires with 1-10V dimmable control gear</b>						
42 173 80	AVR400.118DL	AVR400 IP44 LED 18W/840 D PC O	LED	2,1	1790 lm	
42 173 94	AVR400.118DL/3K	AVR400 IP44 LED 18W/830 D PC O	LED	2,1	1730 lm	
<b>AVR400 LED universal luminaires with DALI control gear</b>						
42 173 88	AVR400.118DDL	AVR400 IP44 LED 18W/840 DALI PC O	LED	2,1	1790 lm	
42 174 00	AVR400.118DDL/3K	AVR400 IP44 LED 18W/830 DALI PC O	LED	2,1	1730 lm	
42 903 31	AVR400.125DDL	AVR400 IP44 LED25W/840 DALI PC	LED	2,1	2710 lm	
42 903 32	AVR400.125DDL/3K	AVR400 IP44 LED25W/830 DALI PC	LED	2,1	2655 lm	

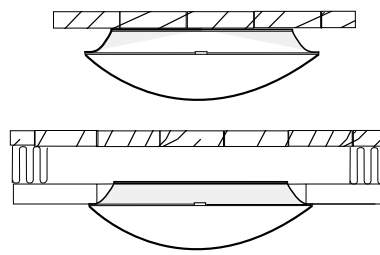


E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR400 LED PIR sensor luminaire</b>						
42 173 58	AVR400.1184L	AVR400 IP44 LED 18W/840 E PC O PIR	LED	2,2	1790 lm	
42 173 91	AVR400.1184L/3K	AVR400 IP44 LED 18W/830 E PC O PIR	LED	2,2	1730 lm	
42 603 25	AVR400.1254L	AVR400 IP44 LED 25W/840 E PC O PIR	LED	2,2	2710 lm	
42 603 26	AVR400.1254L/3K	AVR400 IP44 LED 25W/830 E PC O PIR	LED	2,2	2655 lm	
<b>AVR400 LED RADAR sensor luminaire</b>						
42 173 59	AVR400.1189L	AVR400 IP44 LED 18W/840 E PC O RAD	LED	2,2	1790 lm	
42 173 92	AVR400.1189L/3K	AVR400 IP44 LED 18W/830 E PC O RAD	LED	2,2	1730 lm	
42 603 27	AVR400.1259L	AVR400 IP44 LED 25W/840 E PC O RAD	LED	2,2	2710 lm	
42 603 28	AVR400.1259L/3K	AVR400 IP44 LED 25W/830 E PC O RAD	LED	2,2	2655 lm	
<b>AVD400 LED PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100%</b>						
42 173 85	AVR400.1186DL	AVR400 IP44 LED 18W/840 D PC O PIR	LED	2,2	1790 lm	
42 173 98	AVR400.1186DL/3K	AVR400 IP44 LED 18W/830 D PC O PIR	LED	2,2	1730 lm	
<b>AVD400 LED PIR sensor luminaire with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%</b>						
42 173 82	AVR400.1185DL	AVR400 IP44 LED 18W/840 D PC O PIR	LED	2,2	1790 lm	
42 173 95	AVR400.1185DL/3K	AVR400 IP44 LED 18W/830 D PC O PIR	LED	2,2	1730 lm	
<b>AVD400 LED radar sensor luminaire with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%</b>						
42 173 83	AVR400.1189DL	AVR400 IP44 LED 18W/840 D PC O RAD	LED	2,2	1790 lm	
42 173 97	AVR400.1189DL/3K	AVR400 IP44 LED 18W/830 D PC O RAD	LED	2,2	1730 lm	
<b>AVR400 LED PIR Smartway sensor luminaire</b>						
42 903 24	AVR400.1187L/AA	AVR400 IP44 LED 18W/840 PIR AA	LED	2,2	1790 lm	
42 903 21	AVR400.1187L/3K/AA	AVR400 IP44 LED 18W/830 PIR AA	LED	2,2	1730 lm	
42 903 30	AVR400.1257L/AA	AVR400 IP44 LED 25W/840 PIR AA	LED	2,2	2710 lm	
42 903 27	AVR400.1257L/3K/AA	AVR400 IP44 LED 25W/830 PIR AA	LED	2,2	2655 lm	
<b>AVR400 LED universal luminaires with 1 hour battery back-up</b>						
42 173 79	AVR400.118L/1M	AVR400/1M IP44 LED 18W/840 E PC O	LED	2,3	1790 lm	
42 173 86	AVR400.1185DL/1M	AVR400/1M IP44 LED 18W/840 D PC O P	LED	2,4	1730 lm	
<b>AVR400 luminaire for E27</b>						
41 175 21	AVR400	1x100W A60/E27	E27	1,1		
<b>AVR400 luminaires with electronic control gear</b>						
41 175 22	AVR400.218E	2x18W TC-L/2G11 220-240V 0/50-60Hz	2G11	1,9		
41 174 96	AVR400.226E	AVR400 IP44 2xTC-DE 26W E PC	G24q-3	1,9		
<b>AVR400 with 1-10V dimmable electronic ballast and a relay for controlling the 5%/100% light levels through a separate 230V power supply</b>						
41 175 82	AVR400.218DR	2x18W TC-L/2G11 230V 50Hz	2G11	1,8		
<b>AVR400 PIR sensor luminaires with electronic control gear</b>						
41 175 42	AVR400.2184E	2x18W TC-L/2G11 220-240V 50-60Hz	2G11	2,2		
<b>AVR400 radar sensor luminaires with electronic control gear</b>						
42 170 16	AVR400.2189E	AVR400 IP44 2xTC-L18W E PC O RADAR	2G11	2,2		
<b>AVR400 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100%</b>						
41 174 86	AVR400.2186D	2x18W TC-L/2G11 220-240V 50-60Hz	2G11	2,0		
<b>AVR400 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%</b>						
42 178 94	AVR400.2185D	2x18W TC-L/2G11 220-240V 50-60Hz	2G11	1,9		
<b>AVR400 radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%</b>						
42 170 14	AVR400.2189D	AVR400 IP44 2xTC-L18W D PC O RADAR	2G11	2,0		

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR400 decorative frames polycarbonate</b>						
41 179 52	AVL52					white
<b>AVR400 decorative frames polycarbonate</b>						
41 176 83	AVL59					white
<b>AVR400 decorative frames powder coated aluminium</b>						
41 178 80	AVL50					white



AVR400 PIR sensor luminaire



AVR400 Ø380...390

Installation picture



AVR400 suites well for office corridors, residential staircases, dry and wet areas and where ever you need high powered all around luminaire.

## AVR70-72

LED | TC | E27



AVR70

AVR70-72 series of basic all-round luminaires for both indoor and outdoor applications. The luminaires can be mounted to the ceiling and to the wall. Their material is shock-proof polycarbonate. These luminaires are often used for house numbering. In wall mounting they can be equipped with the snow-shield.



"Classic fixture for house numbering, which is not scared of cold."





AVR71



AVR72

### Structure

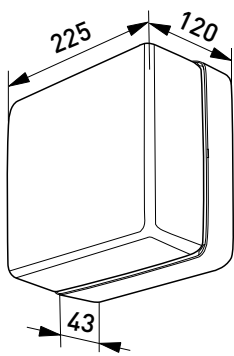
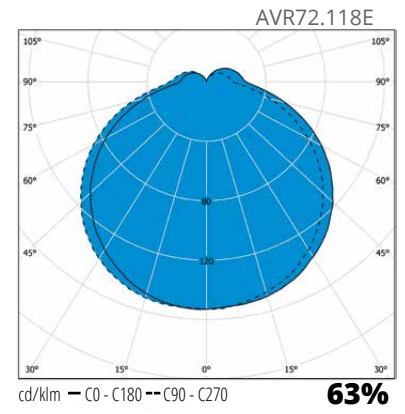
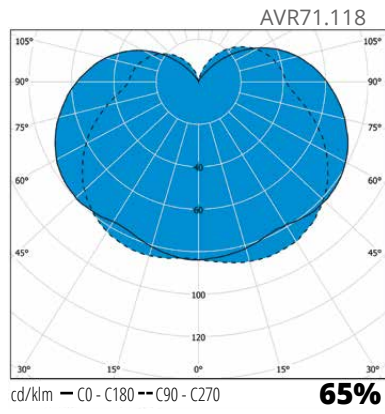
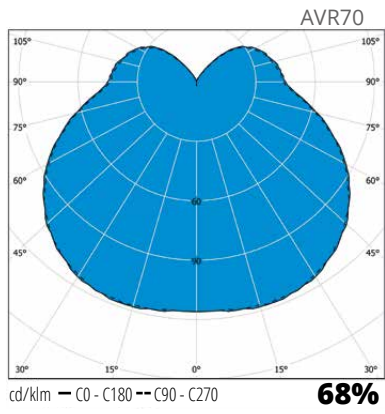
- › Diffuser and body polycarbonate
- › LED-model:  
connected load 8W, luminaire luminous flux see table  
4000 K, Ra>80, power factor 0,87  
Ambient temperature - 40 °C - + 25 °C  
LED-module lifespan 60 000 h (L70), T<sub>a</sub>=25 °C

### Mounting

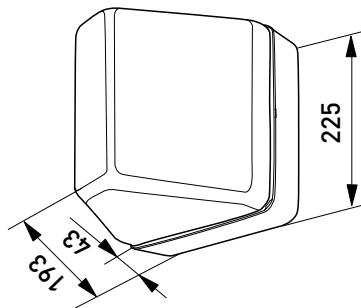
- › To the ceiling or to the wall
- › Snow shields ordered separately
- › Screw terminal block 4x2,5 mm<sup>2</sup> with through wiring

E number	Type	Product name	Base	Kg	Luminous flux
<b>AVR70 LED</b>					
41 170 32	AVR70.19L	IP44 LED 8W/840 E PC O	LED	1,0	560 lm
<b>AVR71 LED</b>					
41 170 50	AVR71.19L	IP44 LED 8W/840 E PC O	LED	1,1	600 lm
<b>AVR72 LED</b>					
41 170 59	AVR72.19L	IP44 LED 8W/840 E PC O	LED	1,0	550 lm
<b>AVR70</b>					
41 170 69	AVR70	AVR70 IP44 A60 60W PC O	2G11	1,7	
<b>AVR71 luminaire with E27</b>					
41 170 72	AVR71	AVR71 1x60W A60/E27 230V	E27	0,9	
<b>AVR70 accessories and spare parts</b>					
41 179 38	AVV70	Diffuser for AVR70 luminaires, opal polycarbonate			
41 171 05	AVL30	Snow shield for AVR70 luminaires, white			
<b>AVR71 accessories and spare parts</b>					
41 171 11	AVL68	Snow shield for AVR71 luminaires, white			
41 179 41	AVV71	Diffuser for AVR71 luminaires, opal polycarbonate			
<b>AVR72 accessories and spare parts</b>					
41 179 42	AVV72	Diffuser for AVR72 luminaires, opal polycarbonate			

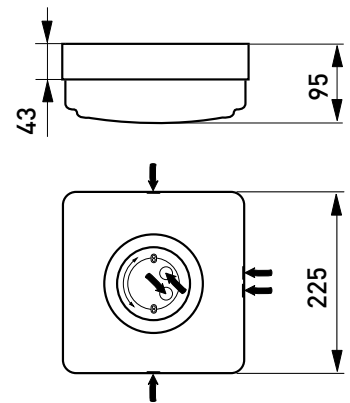




AVR70



AVR71



AVR72



AVR70-serie luminaires has been used on facades for decades and also decades to come. Hot or cold won't bother this classic.



# Velox-panel

LED



ALSD240PU/DW



ALSD168NP/DW

Velox product family is designed to cover basic needs of lighting at home by LED-solutions. Velox LED-panels fit excellent for universal lighting at home both in new construction and renovations.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

## DualWhite

Ensto luminaires with DualWhite -solution are equipped with integrated option for light colour temperature switching. You can easily switch between 3000K and 4000K which saves your SKUs and gives you possibility to change colour temperature according to project, with one luminaire.



Dual White

1 Luminaire,  
2 Colour temperatures



“New standard in general lighting, also for wet premises.”



ALSD168NU/DW



ALSD180PP/DW



ALSD168HNU/DW

### Structure

- › Body white or grey powder coated aluminium
- › Front plate made of light spreading opal sheet
- › Brackets for surface mounting made of steel
- › Dimmable (triac) LED-driver included
- › Models:
  - connected load 8W, 11W and 14W
  - See the luminaire luminous flux from the table below
  - 3000 K/4000 K, selected on the connector of the luminaire
  - Ra > 80, power factor 0,92
  - Ambient temperature - 20 °C - + 30 °C
  - LED-luminaire lifespan 50 000 h (L70), T<sub>a</sub>=25 °C
- › Triac-dimmable, check the recommended dimmers at the WEB-site [www.ensto.com](http://www.ensto.com)

### Mounting

- › Models for surface and recess mounting
- › -o- 2x1,5 mm<sup>2</sup>, a separate junction box is included in the delivery

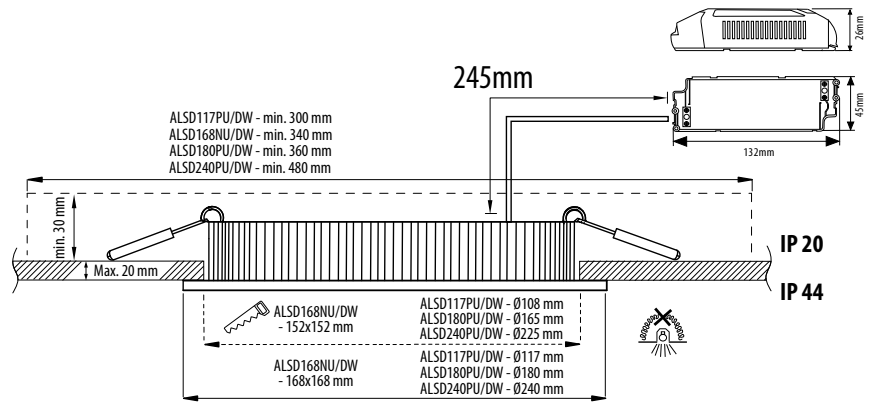
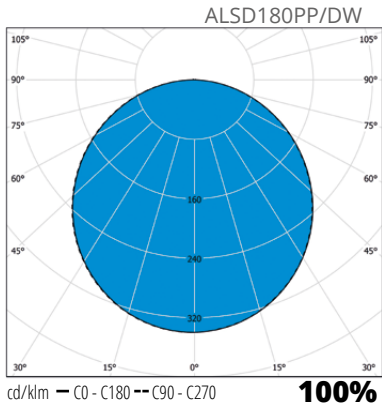
### Made to order

- › Models for recess mounting with DALI control for -o installation

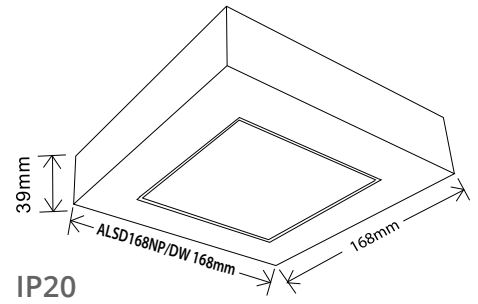
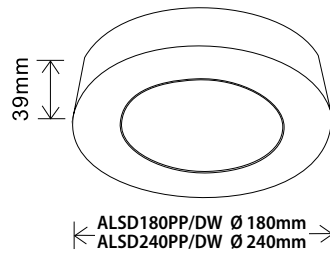
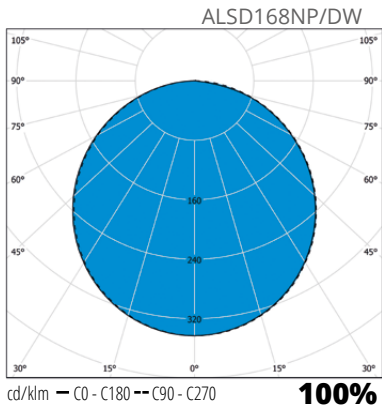
E number	Type	Product name	Output	Base	Kg	Luminous flux
<b>Recess mounting, round</b>						
41 034 22	ALSD117PU/DW	ALSD117PU IP44 8W 830/840 WH	8W	LED	0,3	500 lm
41 034 37	ALSD180PU/DW	ALSD180PU IP44 11W 830/840 WH	11W	LED	0,5	820 lm
41 034 43	ALSD240PU/DW	ALSD240PU IP44 14W 830/840 WH	14W	LED	0,7	1170 lm
41 034 21	ALSD117HPU/DW	ALSD117HPU IP44 8W 830/840 GR	8W	LED	0,3	500 lm
41 034 34	ALSD180HPU/DW	ALSD180HPU IP44 11W 830/840 GR	11W	LED	0,5	820 lm
41 034 40	ALSD240HPU/DW	ALSD240HPU IP44 14W 830/840 GR	14W	LED	0,7	1170 lm
<b>Recess mounting, square</b>						
41 034 28	ALSD168NU/DW	ALSD168NU IP44 14W 830/840 WH	14W	LED	0,5	1080 lm
41 034 25	ALSD168HNU/DW	ALSD168HNU IP44 14W 830/840 GR	14W	LED	0,5	1080 lm
<b>Surface mounting, round</b>						
41 034 36	ALSD180PP/DW	ALSD180PP IP20 11W 830/840 WH	11W	LED	0,7	820 lm
41 034 42	ALSD240PP/DW	ALSD240PP IP20 14W 830/840 WH	14W	LED	1,1	1170 lm
41 034 33	ALSD180HPP/DW	ALSD180HPP IP20 11W 830/840 GR	11W	LED	0,7	820 lm
41 034 39	ALSD240HPP/DW	ALSD240HPP IP20 14W 830/840 GR	14W	LED	1,1	1170 lm
<b>Surface mounting, square</b>						
41 034 27	ALSD168NP/DW	ALSD168NP IP20 14W 830/840 WH	14W	LED	1,0	1080 lm
41 034 24	ALSD168HNP/DW	ALSD168HNP IP20 14W 830/840 GR	14W	LED	1,0	1080 lm







Dimensions for Velox panels in recess mounting



Colour temperature selection



Velox panels are perfect for bathrooms and other living areas. IP44 classification and flat design gives you possibilities to decorate as you want.

# Velox Frameless

LED



ALFD155PU



ALFD125NU

Velox product family is designed to cover basic needs of lighting at home by LED-solutions. Frameless Velox LED-panels fit excellent for universal lighting at home both in new construction and renovations.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Unlimited lighting for all premises.”



ALFD215PU



ALFD125WNU

### Structure

- › Body aluminium
- › Front plate made of light spreading opal sheet
- › Dimmable (triac) LED-driver included
- › Models:  
Connected load 11W, 15W, 22W, 30W  
See the luminaire luminous flux from the table below  
4000 K or 3000 K, Ra > 80, power factor 0,92  
Ambient temperature - 20 °C - + 30 °C  
LED-luminaire lifespan 50 000 h (L70), T<sub>a</sub>=25 °C  
Triac-dimmable, check the recommended dimmers at the WEB-site [www.ensto.com](http://www.ensto.com)

### Mounting

- › Recess mounting
- › -o- 2x1,5 mm<sup>2</sup>, a separate junction box is included in the delivery

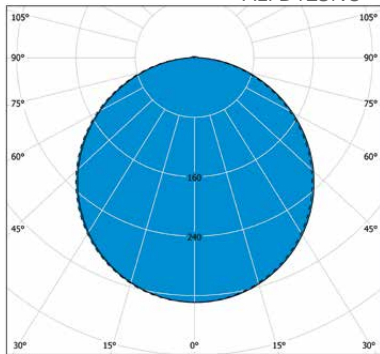
Made to order

› DALI-control for -o installation

E number	Type	Product name	Output	Base	Kg	Luminous flux
<b>Square</b>						
41 034 45	ALFD125NU	ALFD125NU IP44 11W/840 LED	11W	LED	0,3	820 lm
41 034 49	ALFD125WNU	ALFD125WNU IP44 11W/830 LED	11W	LED	0,3	800 lm
<b>Round</b>						
41 034 46	ALFD125PU	ALFD125PU IP44 11W/840 LED	11W	LED	0,3	760 lm
41 034 51	ALFD125WPU	ALFD125WPU IP44 11W/830 LED	11W	LED	0,3	740 lm
41 034 52	ALFD155PU	ALFD155PU IP44 15W/840 LED	15W	LED	0,4	1120 lm
41 034 54	ALFD155WPU	ALFD155WPU IP44 15W/830 LED	15W	LED	0,4	1100 lm
41 034 55	ALFD185PU	ALFD185PU IP44 22W/840 LED	22W	LED	0,5	1490 lm
41 034 56	ALFD185WPU	ALFD185WPU IP44 22W/830 LED	22W	LED	0,5	1470 lm
41 034 57	ALFD215PU	ALFD215PU IP44 30W/840 LED	30W	LED	0,7	2130 lm
41 034 58	ALFD215WPU	ALFD215WPU IP44 30W/830 LED	30W	LED	0,7	1950 lm

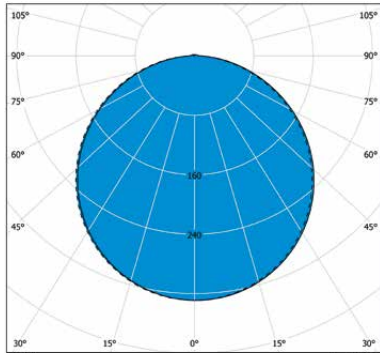


ALFD125NU

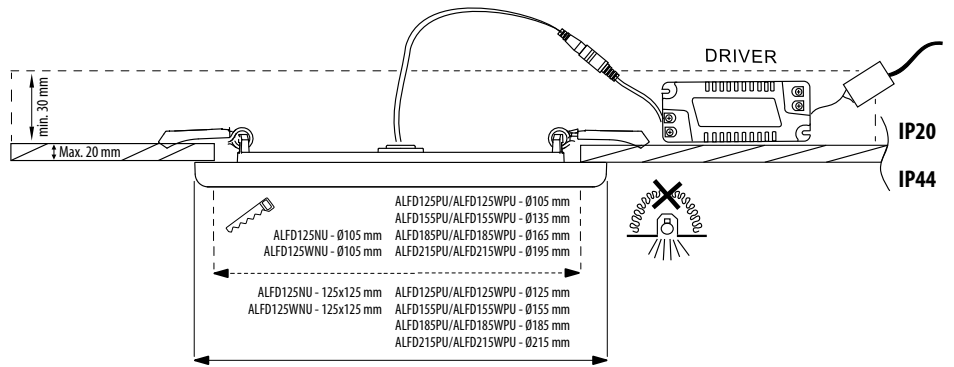


cd/klm — C0 - C180 -- C90 - C270 **100%**

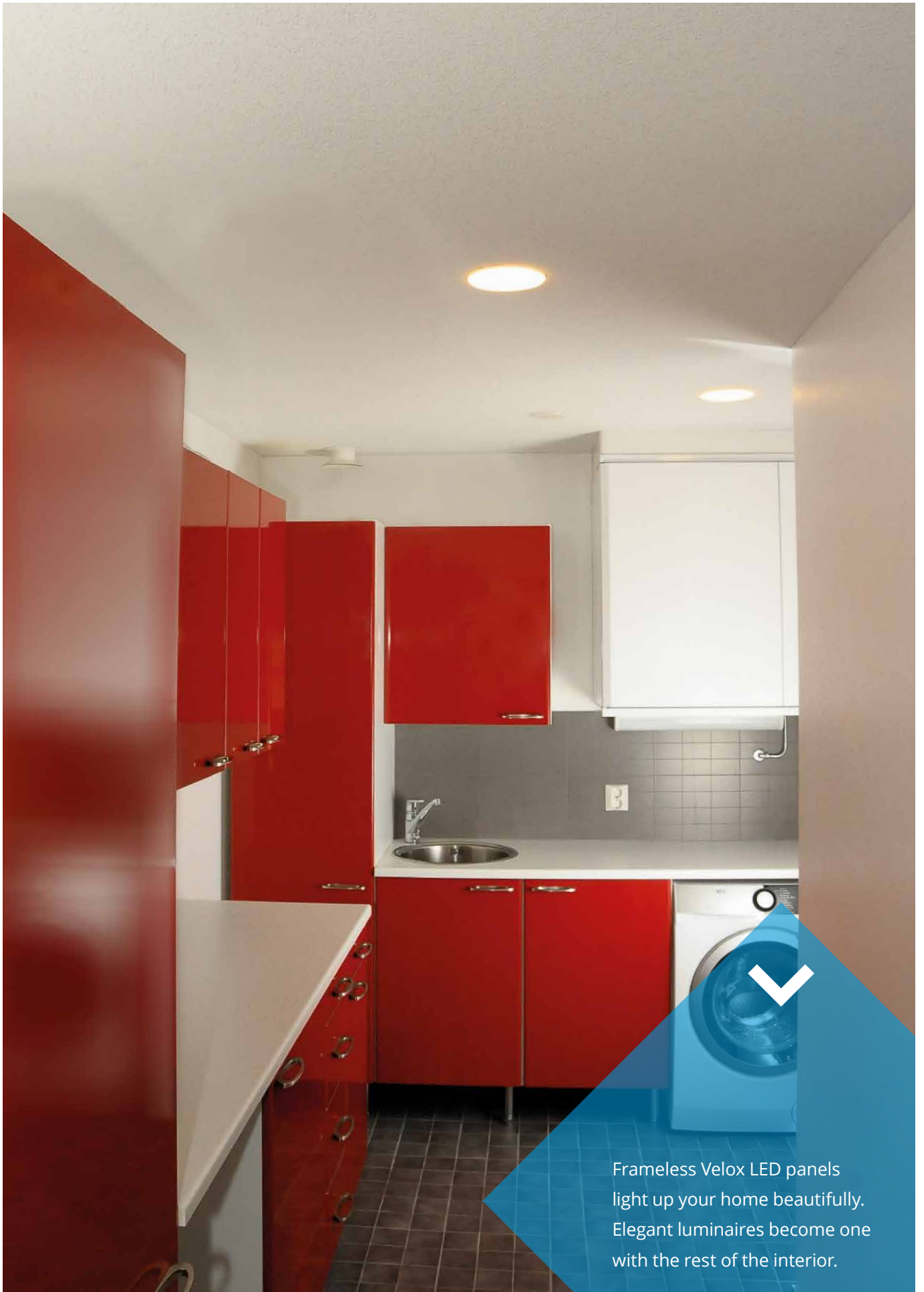
ALFD185PU



cd/klm — C0 - C180 -- C90 - C270 **100%**







Frameless Velox LED panels  
light up your home beautifully.  
Elegant luminaires become one  
with the rest of the interior.



# Velox-downlight

LED



ALS90WRD

Velox-downlights fit excellent for the different needs of universal and special lighting at new construction and replacing halogen lamps in renovation projects.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Small downlights  
for general use and  
highlighting.”



ALS85WSD



ALS90NR



ALS90NS

### Structure

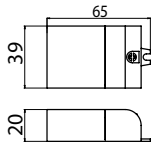
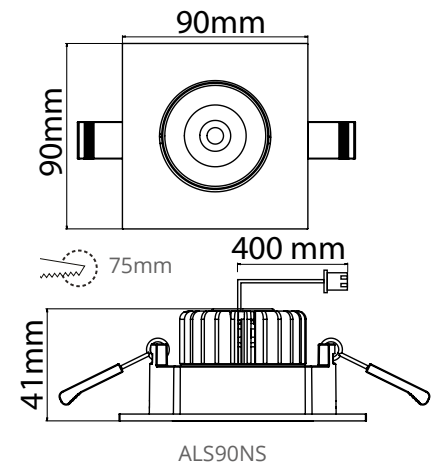
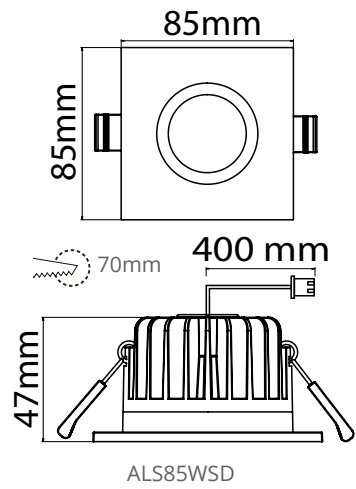
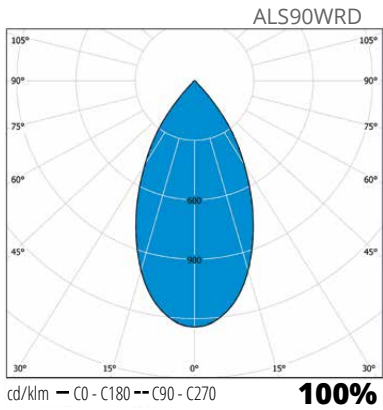
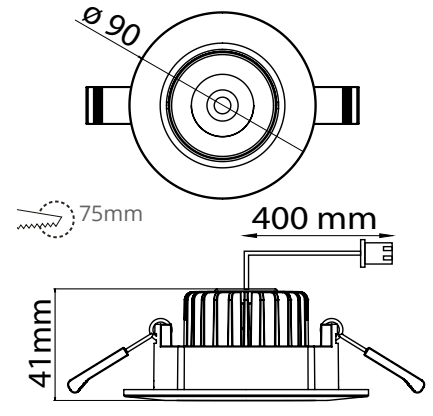
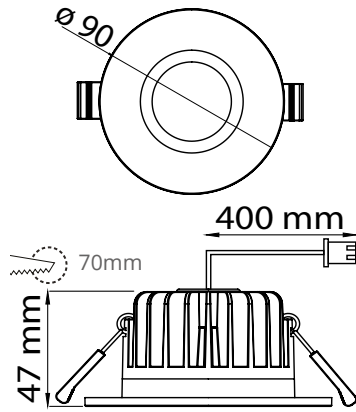
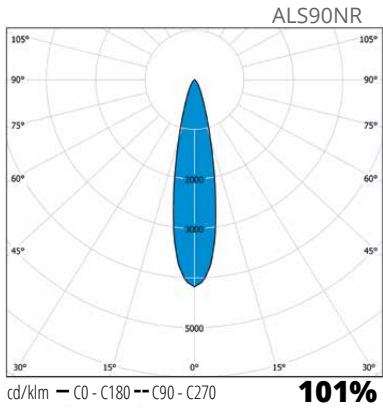
- ▶ Body and cooling element: aluminium
- ▶ Colour: white
- ▶ Separate driver included
- ▶ Models:
  - Adjustable models, connected load 4W, luminaire luminous flux, see table beam angle 20°, adjustable 30°
  - Non adjustable models, connected load 9W, luminaire luminous flux, see table beam angle 60°, dimmable (see mounting) 4000 K and 3000 K, Ra > 80, power factor 0,96 Ambient temperature - 20 °C - + 30 °C LED-luminaire lifespan 30 000 h (L70), T<sub>a</sub>=25 °C
- ▶ Non adjustable models (9W) Triac-dimmable, check suitable dimmers [www.ensto.com](http://www.ensto.com)

### Mounting

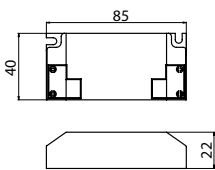
- ▶ -o- 2x1,5 mm<sup>2</sup>, a separate junction box is included in the delivery
- ▶ Thickness of the ceiling plate 1-20 mm

E number	Type	Product name	Kg	ø Recess hole	Luminous flux	Dimming
<b>Adjustable round</b>						
41 180 02	ALS90NR	ALS90NR 4W/840 LED WH	0,3	75 mm	340 lm	
41 180 03	ALS90NR/3K	ALS90NR/3K 4W/830 LED WH	0,3	75 mm	320 lm	
<b>Adjustable square</b>						
41 180 04	ALS90NS	ALS90NS 4W/840 LED WH	0,3	75 mm	340 lm	
41 180 05	ALS90NS/3K	ALS90NS/3K 4W/830 LED WH	0,3	75 mm	320 lm	
<b>Non adjustable round</b>						
41 180 06	ALS90WRD	ALS90WRD 9W/840 LED WH	0,5	70 mm	740 lm	Triac
41 180 07	ALS90WRD/3K	ALS90WRD/3K 9W/830 LED WH	0,5	70 mm	670 lm	Triac
<b>Non adjustable square</b>						
41 180 00	ALS85WSD	ALS85WSD 9W/840 LED WH	0,5	70 mm	740 lm	Triac
41 180 01	ALS85WSD/3K	ALS85WSD/3K 9W/830 LED WH	0,5	70 mm	670 lm	Triac

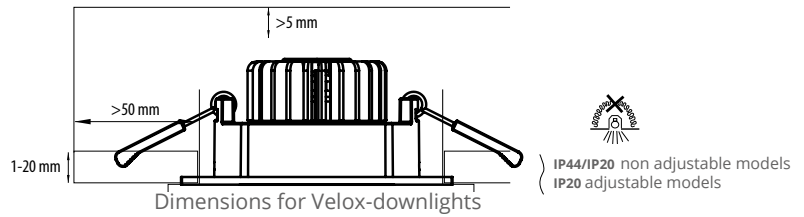




Power supply - adjustable models, 4W



Power supply - non adjustable models, 9W





For new buildings and renovations, Velox downlights are energy efficient, fast to install and easy to use. Dimmable Velox downlights are perfect for living-rooms and bedrooms.





# Velox-list

LED

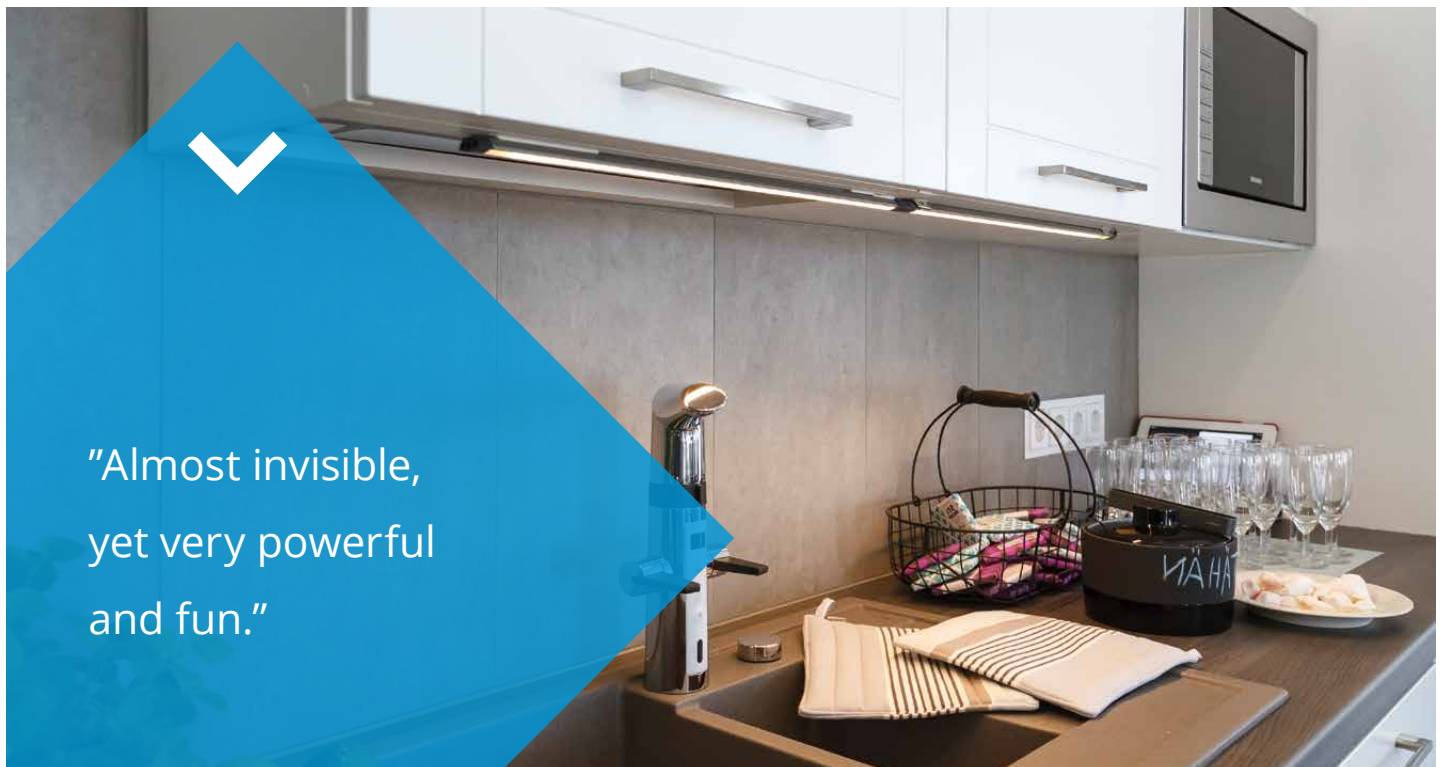


ALS300TDV

Velox product family is designed to cover basic needs of lighting at home by LED-solutions. Velox lists fit excellent for the different needs of workpoint lighting or highlighting and special lighting at home.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Almost invisible,  
yet very powerful  
and fun.”



ALS300TDV

ALS500EXTV



Luminaire switch

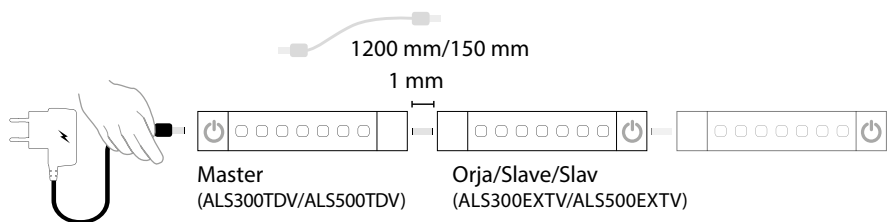
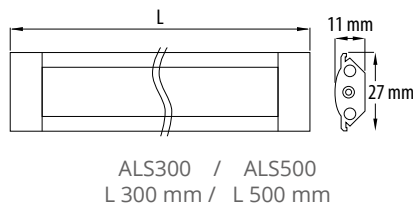
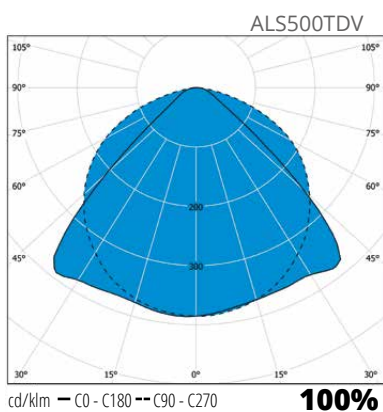
### Structure

- › Body: aluminium
- › Colour: natural anodized aluminium
- › Touch dim (5%/50%/100%/off)
- › 12V power supply with plug (incl. in the delivery of models ALS300TDV and ALS500TDV)
- › Connection wire (1200 mm and 150 mm) and fixed connector (incl. in the delivery of models ALS300EXTV and ALS500EXTV)
- › Steel fixing
- › Models:  
length 300 mm, IP20, connected load 3W, luminaire luminous flux 250 lm  
length 500 mm, IP20, connected load 5W, luminaire luminous flux 400 lm  
3000 K, Ra > 80  
Ambient temperature - 20 °C - + 30 °C  
LED-luminaire lifespan 20 000 h (L70), T<sub>a</sub>=25 °C

### Mounting

- › Velox-lists for surface or in 45 degrees angle mounting.  
In normal mounting (mounting height 50 cm, depth of the worktop 60 cm, lists are installed at the front of the above standing cupboard) to the worktop under the luminaire (ALS500TDV) comes on average:  
- with 100% setting ca. 550 lx (effective work-point lighting)  
- with 50% setting ca. 260 lx  
- with 5% setting ca. 30 lx
- › Velox lists can be installed step by step touch dimmable. In this method of installation the lights are switched on by touching the switch at the end of the luminaire. The step by step dimming is achieved by touching the switch at the end of the luminaire.
- › Velox-lists can be installed to permanent 100% light level. In this case the connection wire of the power supply is connected to the other end of the luminaire (without luminaire switch). In this method of installation the lights are always switched on 100% when connected to a socket outlet with voltage.
- › Slave luminaire is always connected to the end without luminaire switch. It is controlled on/off or dimmed via Master luminaire.
- › The maximum amount of Slave luminaires:

20W power supply		
Master	ALS300EXTV (3W)	ALS500EXTV (5W)
ALS300TDV (3W)	5	3
ALS500TDV (5W)	5	3



E number	Type	Product name	Colour	Kg	Length	Width	Height
<b>Velox LED-lists with power supply</b>							
41 033 11	ALS300TDV	ALS300TDV IP20 3W LED 3K VA	aluminium	0,2	300	28	11
41 033 14	ALS500TDV	ALS500TDV IP20 5W LED 3K VA	aluminium	0,2	500	28	11
<b>Velox LED-lists and slave luminaires without power supply</b>							
41 033 10	ALS300EXTV	ALS300EXTV IP20 3W LED 3K VA	aluminium	0,2	300	28	11
41 033 13	ALS500EXTV	ALS500EXTV IP20 5W LED 3K VA	aluminium	0,2	500	28	11



# Velox-strip

LED

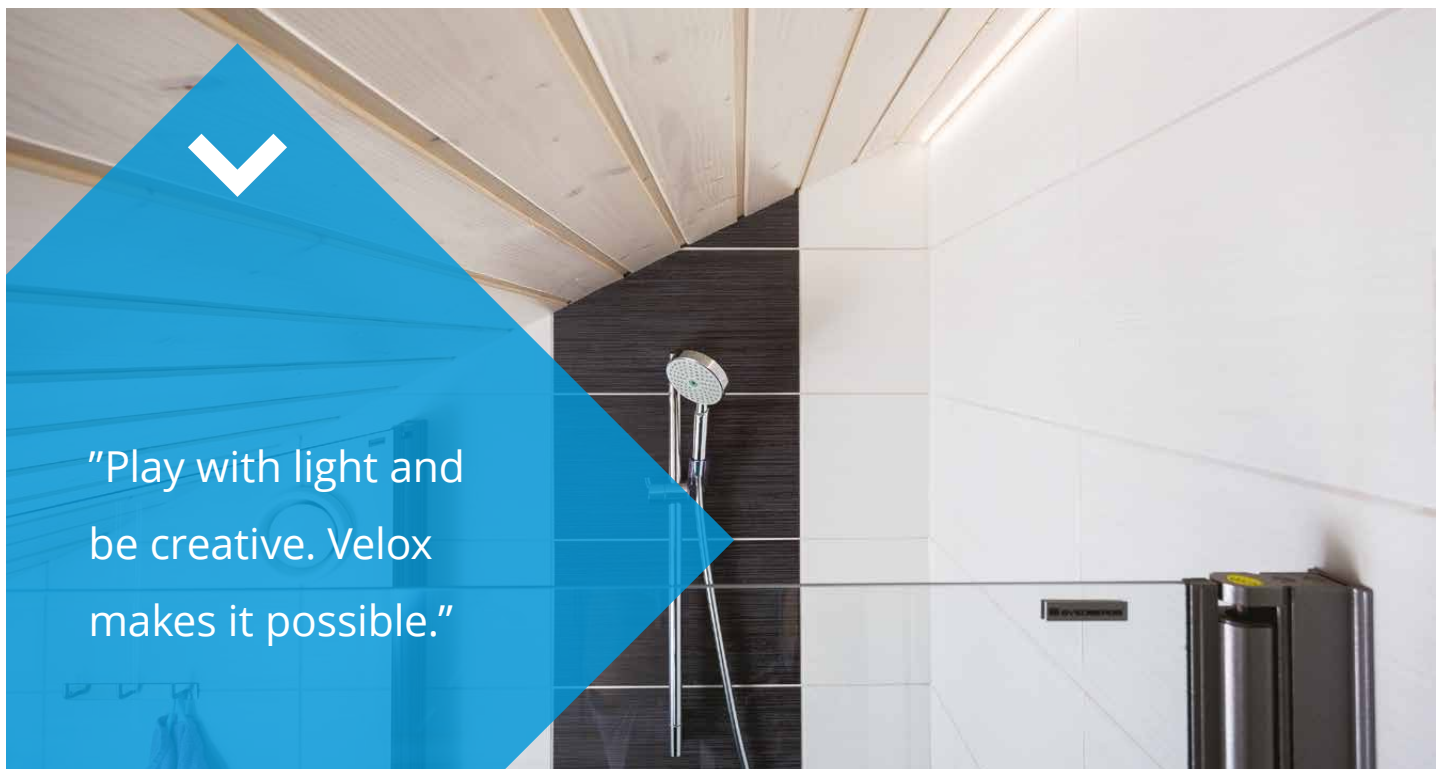


ALS250FD

Velox product family is designed to cover basic needs of lighting at home by LED-solutions. Velox-strips fit excellent for different work point and special lighting as well as high-lighting applications at home.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.





ALS250FD



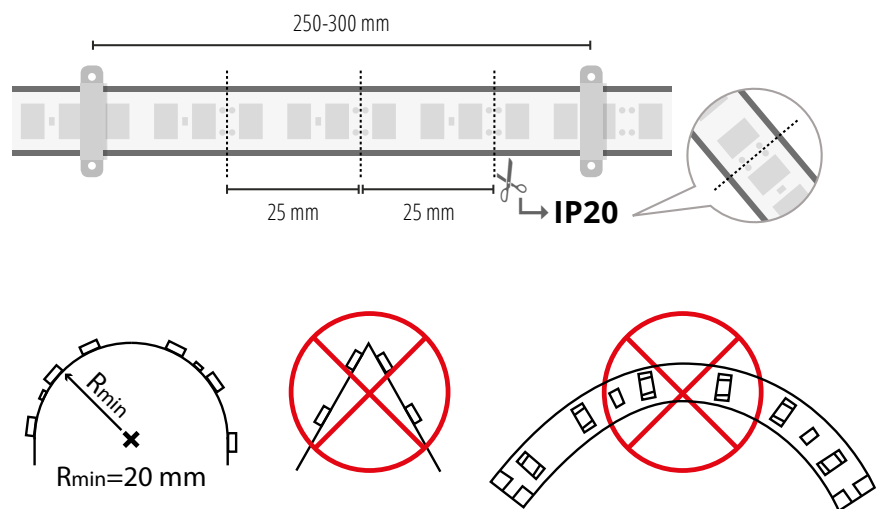
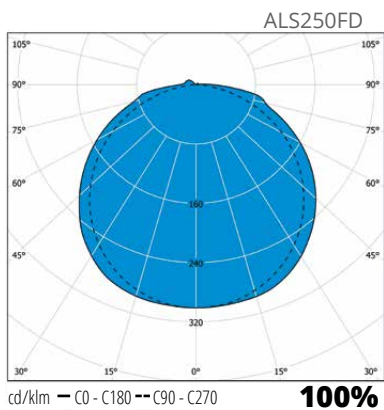
ALS500FLEXD

### Structure

- ▶ Flexible plastic strip
- ▶ Fastening sticker at the entire length of the strip
- ▶ **ALS250FD** Set consist of 2,5 m LED-strip, 36W 12V power supply with plug, dimmer on the secondary side, 120 cm connection lead f.ex. passing by the cooker hood and plastic fixings with screws
- ▶ **ALS500FLEXD** set consist of 5 m LED-strip, 2 m connection lead, Triac dimmable power source (see the recommended dimmers at [www.ensto.com](http://www.ensto.com)), 120 cm connection lead (f.eg. passing by the cooker hood) and plastic fixings with screws
- ▶ Models:
  - ALS250FD**, length 2500 mm, IP54, connected load 9,6W, luminaire luminous flux 490 lm/m, dimmable with its own dimmer
  - ALS500FLEXD**, length 5000 mm, IP54, connected load 9,6W/m, luminaire luminous flux 490 lm/m, Triac dimmable power source included 4000 K, Ra>80
- Ambient temperature - 20 °C - + 30 °C
- LED-luminaire lifespan 30 000 h (L70), T<sub>a</sub>=25 °C
- ▶ Check the recommended dimmers at the WEB-site [www.ensto.com](http://www.ensto.com)

### Mounting

- ▶ Velox-strips for surface mounting.
- In normal mounting (mounting height 50 cm, depth of the worktop 60 cm, strips are installed at the front of the above standing cupboard) to the worktop under the luminaire comes on average 450 lx, which corresponds efficient workpoint lighting.
- Strip can be cut to needed length at the marked spots for cutting (see measurement drawing). The IP-rating of cut strip is IP20. End piece (included in the packing) can be glued to the cut end by using suitable glue for PVC. Do not bend the LED strip against the instructions. Minimum bending radius is 20 mm in the vertical direction. No horizontal bending.



E number	Type	Product name	Colour	Kg	Length	Width	Height
Velox-strip							
41 033 82	ALS250FD	ALS250FD IP54 9,6W/m LED 4K	clear	0,5	2500	8	3
41 032 83	ALS500FLEXD	ALS500FLEXD IP54 9,6W/m LED 4K	clear	0,6	5000	8	3



## AVD5

LED



AVD5 is a multi-purpose combined luminaire, combining good features from both LED- and fiber luminaires. Due to its structure luminaire can be used both inside and outside premises as well as in special areas, where luminaire itself can not be placed where light is needed.



“LED and glass fiber,  
together or separately.  
Versatile top product.”





AVD5.13L/6.3



AVD5.13L



AVD5.23L

### Structure

- Diffuser opal polycarbonate
- Body casted aluminium, powder coated, colour white
- Fibres glass, can be mounted to the ceiling
- LED-model:
  - Connected load
  - 3W (AVD5.13L), luminaire luminous flux 120 lm
  - 6W (AVD5.23L) luminaire luminous flux 125 lm +150 lm/LED
  - 3000 K, Ra>80
  - Ambient temperature - 20 °C - + 25 °C
  - LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C
- Combined luminaire switches only fibres on. Fibres and direct light will both switch on if the luminaire is switched off and back on in less than 5 s. Functionality can be reversed with the jumper on the circuit board.

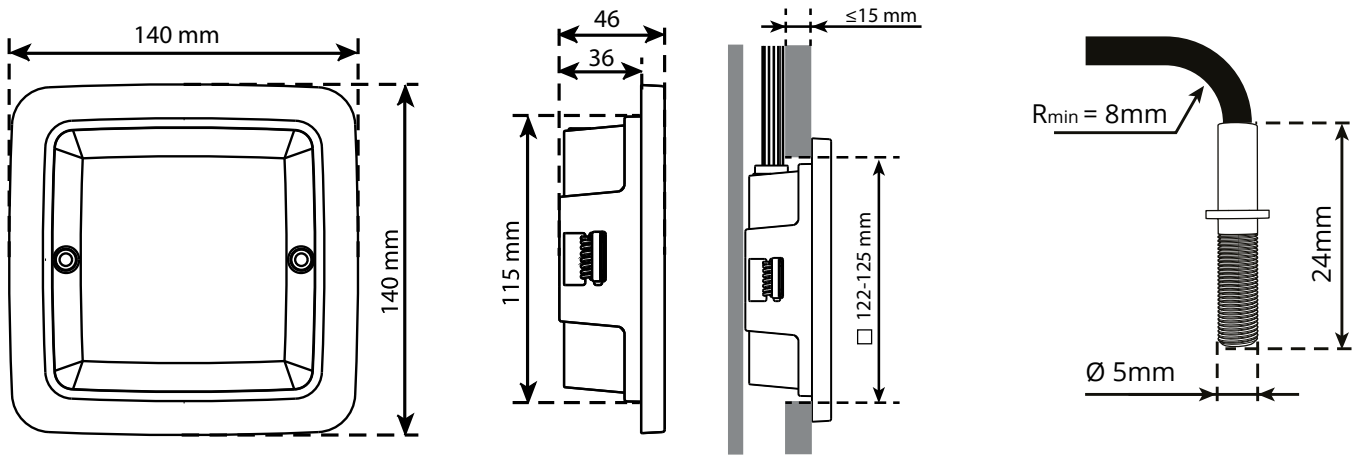
### Mounting

- To the wall, surface IP64, recessed IP65
- Structural recess depth 36 mm, size of recess hole 123x123 mm
- Snap-in terminal block 2x2,5 mm<sup>2</sup> with through wiring

E number	Type	Product name	Base	Kg	Luminous flux
<b>AVD5 LED wall luminaire for recessed and surface mounting</b>					
41 176 85	AVD5.13L	AVD5 IP64 LED 1x3W PCO VA	LED	0,8	120 lm
<b>AVD5 LED optical fiber luminaire, 6-fibres</b>					
41 035 61	AVD5.13L/6.3	AVD5 IP64 LED 1x3W 6xFIB XL	LED	1,0	120 lm
<b>AVD5 LED optical fiber luminaire, 9-fibres</b>					
41 035 62	AVD5.13L/9.3	AVD5 IP64 LED 1x3W 9xFIB XL	LED	1,1	120 lm
<b>AVD5 LED optical fiber luminaire, 12-fibres</b>					
41 035 63	AVD5.13L/12.3	AVD5 IP64 LED 1x3W 12xFIB XL	LED	1,3	120 lm
<b>AVD5 LED combined luminaire, 6-fibres</b>					
41 035 64	AVD5.23L/6.3	AVD5 IP64 LED 2x3W 6xFIB XL	LED	1,0	125 lm + 150 lm/LED
<b>AVD5 LED combined luminaire, 9-fibres</b>					
41 035 65	AVD5.23L/9.3	AVD5 IP64 LED 2x3W 9xFIB XL	LED	1,1	125 lm + 150 lm/LED
<b>AVD5 LED combined luminaire, 12-fibres</b>					
41 035 66	AVD5.23L/12.3	AVD5 IP64 LED 2x3W 12xFIB XL	LED	1,3	125 lm + 150 lm/LED

Combined luminaire include fibres LED-projector and LED-module with direct light. Fiber luminaire include optical fibres and LED-projector without direct light.





6-FIBRES		9-FIBRES		12-FIBRES	
AVD5..../6.3		AVD5..../9.3		AVD5..../12.3	
pcs	length/m	pcs	length/m	pcs	length/m
2	3	3	3	2	2
2	3,5	2	3,5	2	2,5
2	4	2	4	2	3
-	-	2	4,5	2	3,5
-	-	-	-	2	4
-	-	-	-	2	4,5



Only your imagination is a limit when thinking about the location for glass fiber optics. Behind the seat, in the ceiling. AVD5 is perfect also for terraces and other outdoor areas.



# AVH11

E27



AVH11.2

AVH11 luminaires are designed especially for private saunas. It can also be used in locations where a durable basic luminaire is required.



"The sauna luminaire of the world, original and genuine."



AVH11

**Structure**

- › Diffuser glass
- › Body thermo resistant polyester
- › Reflector aluminium
- › Vizor : pine grill

**Mounting**

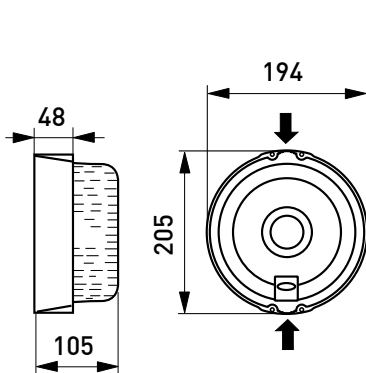
- › Wall installation, min. 100 mm from the ceiling
- › Not to the ceiling!
- › Screw terminal block 2x1,5 mm<sup>2</sup> -o



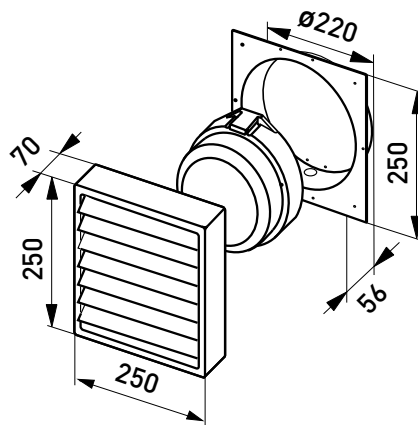
AVH11.1



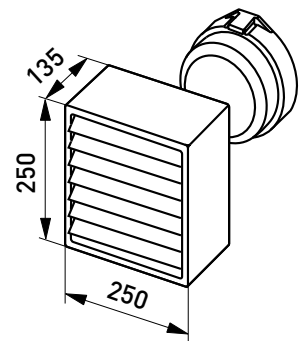
AVH11.2



AVH11



AVH11.1



AVH11.2

E number	Type	Product name	Base	Kg	Additional information
<b>Sauna luminaire</b>					
41 171 38	AVH11	1x60W A60/E27 IP44, ta125 °C	E27	1,2	
<b>Sauna luminaire with pine grill for recessed wall mounting</b>					
41 171 41	AVH11.1	1x60W A60/E27 IP44, ta125 °C	E27	2,2	
<b>Sauna luminaire with pine grill for wall mounting</b>					
41 171 44	AVH11.2	1x40/60W A60/E27 IP44, ta125 °C	E27	2,0	





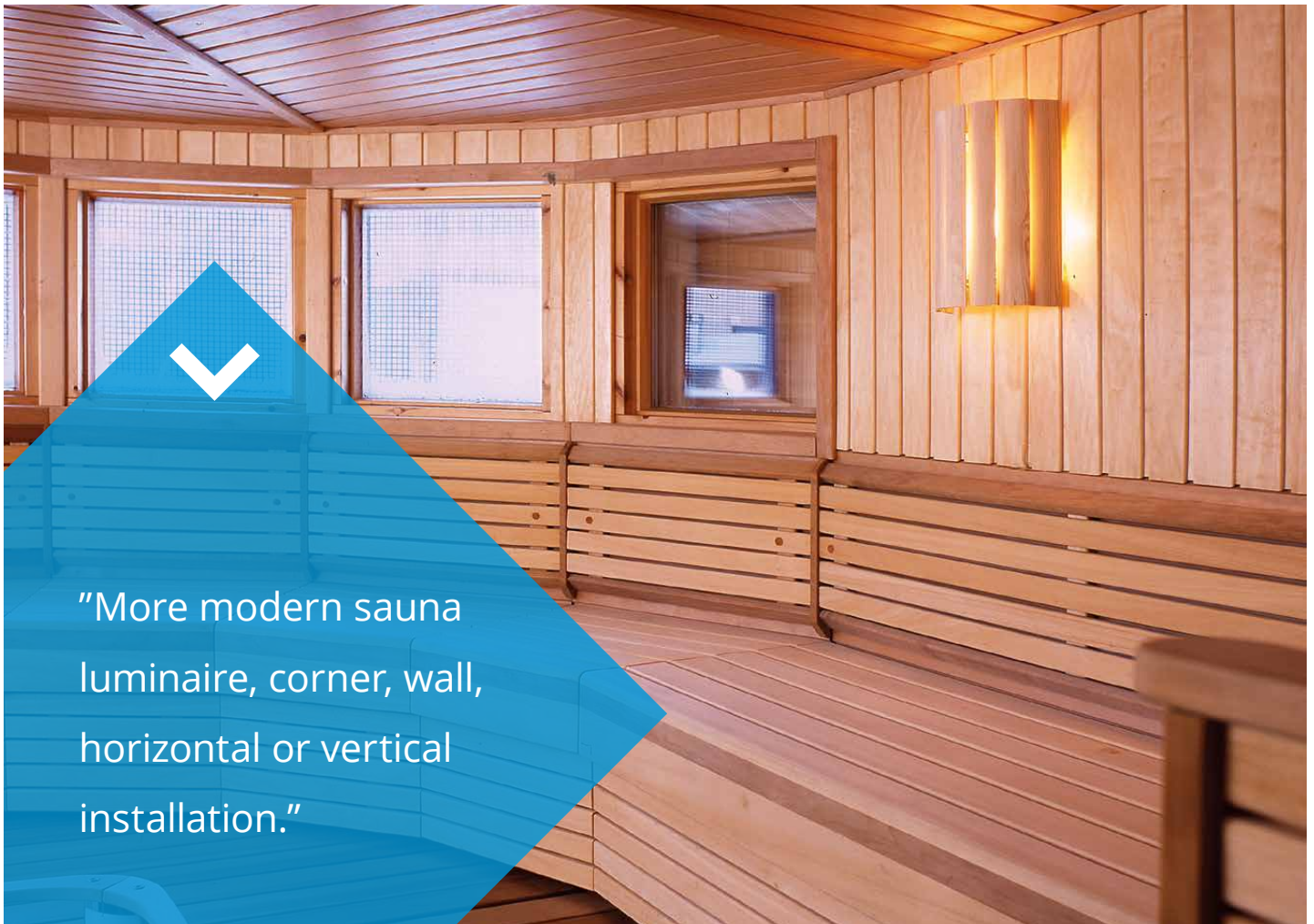
# AVH15

E14

AVH15 luminaires are designed especially for private saunas. It can also be used in locations where a durable basic luminaire is required.



AVH15.1



"More modern sauna luminaire, corner, wall, horizontal or vertical installation."



AVH15.10



AVH15.2



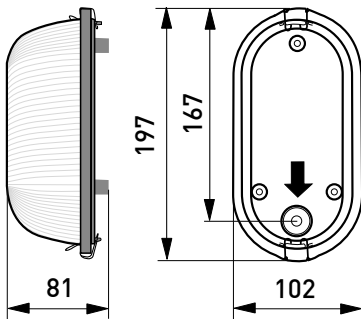
AVH15.20

**Structure**

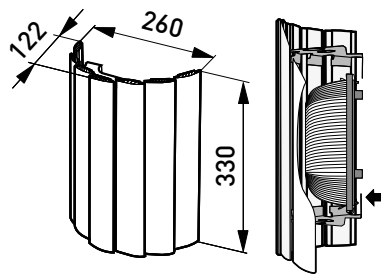
- › Diffuser glass
- › Body thermo resistant technical plastic
- › Vizor : pine or aspen grill

**Mounting**

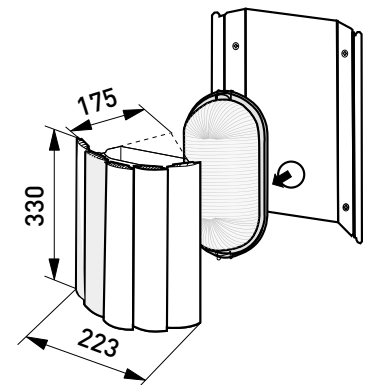
- › Wall installation, min. 100 mm from the ceiling
- › Not to the ceiling!
- › Screw terminal block 2x1,5 mm<sup>2</sup> -o



AVH15



AVH15.1



AVH15.2

E number	Type	Product name	Base	Kg	Additional information
<b>Sauna luminaire</b>					
41 171 42	AVH15	1x30/60W C35/E14 IP44, ta125 °C	E14	0,5	
<b>Sauna luminaire with pine grill for wall mounting</b>					
41 171 43	AVH15.1	1x30/60W C35/E14 IP44, ta125 °C	E14	1,2	
<b>Sauna luminaire with aspen grill for wall mounting</b>					
41 170 16	AVH15.10	1x30/60W C35/E14 IP44, ta125 °C	E14	1,2	
<b>Sauna luminaire with pine grill for corner mounting</b>					
41 171 45	AVH15.2	1x30/60W C35/E14 IP44, ta125 °C	E14	1,3	
<b>Sauna luminaire with aspen grill for corner mounting</b>					
41 170 17	AVH15.20	1x30/60W C35/E14 IP44, ta125 °C	E14	1,3	





# Aaria

LED | E27

Stylish garden luminaire designed for LED-light source. Aaria is suitable for large and small yards. Its anti-glare lighting is carefully directed to the illuminated area and the disturbing portion of scattered lighting has been minimized.



AA01APLED



“Lights up your garden with energy efficient light. Suits great with Opera in public places.”



AA01LED



AA03GH



AA03M

### Structure

- › Base and top powder coated aluminium
- › Wall brackets powder coated zinked aluminium
- › Diffuser is ribbed, light-scattering UV resistant acrylic
- › Colours: white, black, graphite grey and antique bronze
- › LED-models:  
connected load 10W, luminaire luminous flux 650 lm, neutral 4000 K  
Ra>80, Power factor 0,92  
Temperature - 20 °C - + 50 °C  
Lifespan 30 000 h (L70), T<sub>a</sub>=30 °C
- › E27-based models:  
Max. 60W, LED and energy saving light bulbs 8-20W are recommended. Max measurements for light source width 98 mm and length 173 mm

### Mounting

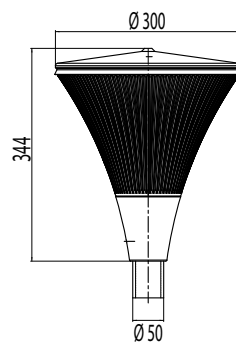
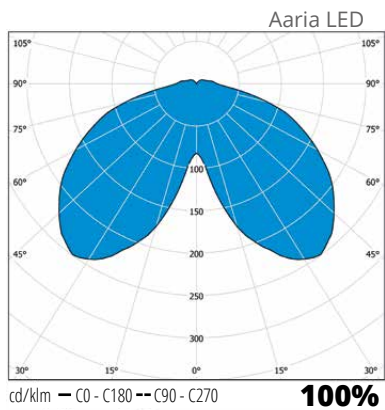
- › Can be mounted to a ø 50 mm pole, see poles at [www.ensto.com](http://www.ensto.com) - Gala
- › Wall models can be wired through a connection box, 4 punch holes for 78 mm screw spacing
- › -o- 3x2,5 mm<sup>2</sup>
- ›

10W | 650 lm

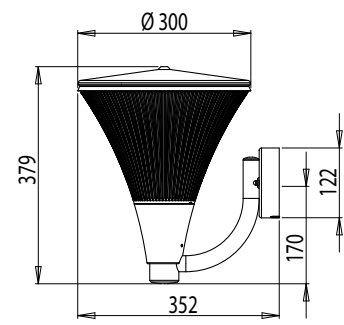
E number	Type	Product name	Base	Model	Colour	Kg
<b>LED-models</b>						
41 031 43	AA01LED	AA01LED IP44 10W/840 AC C WH	LED	pole	white	2,3
41 031 46	AA01MLED	AA01MLED IP44 10W/840 AC C BK	LED	pole	black	2,3
41 031 42	AA01GHLED	AA01GHLED IP44 10W/840 AC C GH	LED	pole	graphite grey	2,3
41 031 39	AA01APLED	AA01APLED IP44 10W/840 AC C BR	LED	pole	antique bronze	2,3
<b>LED wall models</b>						
41 031 64	AA03LED	AA03LED IP44 10W/840 AC C WH	LED	wall	white	2,7
41 031 67	AA03MLED	AA03MLED IP44 10W/840 AC C BK	LED	wall	black	2,7
41 031 63	AA03GHLED	AA03GHLED IP44 10W/840 AC C GH	LED	wall	graphite grey	2,7
41 031 60	AA03APLED	AA03APLED IP44 10W/840 AC C BR	LED	wall	antique bronze	2,7



Snro	Tyyppi	Tuotenimi	Kanta	Malli	Väri	Kg
<b>E27-models</b>						
41 031 36	AA01	AA01 IP44 60W E27 AC C WH	E27	pole	white	2,1
41 031 45	AA01M	AA01M IP44 60W E27 AC C BK	E27	pole	black	2,1
41 031 40	AA01GH	AA01GH IP44 60W E27 AC C GH	E27	pole	graphite grey	2,1
41 031 37	AA01AP	AA01AP IP44 60W E27 AC C BR	E27	pole	antique bronze	2,1
<b>E27 wall models</b>						
41 031 57	AA03	AA03 IP44 60W E27 AC C WH	E27	wall	white	2,5
41 031 66	AA03M	AA03M IP44 60W E27 AC C BK	E27	wall	black	2,5
41 031 61	AA03GH	AA03GH IP44 60W E27 AC C GH	E27	wall	graphite grey	2,5
41 031 58	AA03AP	AA03AP IP44 60W E27 AC C BR	E27	wall	antique bronze	2,5



Aaria pole model



Aaria wall model





Aaria fits to every yard and will light up your garden set up as you want. prismatic diffuser makes light distribution even and smooth.

# Gala

E27

Gala outdoor lighting series provide elegant luminaires for the entire garden area. The range consists of a coherent selection of wall, roof and pole luminaires. The basic materials used are both genuine copper and durable aluminium.



AVG02



“Wide variety of shapes and colours. Classic white for most, copper takes you to next level.”





AVG03



AVG07M



AVG01GHLED

### Structure

- ▶ Body and anti-glare rings powder coated aluminium, in copper luminaires body and upper anti-glare hat are patinated copper and the anti-glare rings are lacquered copper. Due to the patination process of copper anti-glare rings there occurs normal colour variation of patinated copper.
- ▶ Colours: white, black, graphite grey and copper
- ▶ Diffusers: transparent or matte glass, matte glass used with black and graphite grey luminaires and other models with clear glass diffuser.
- ▶ Wall brackets: powder-coated galvanised steel
- ▶ Poles and support legs (ordered separately); powder-coated aluzink steel, with copper luminaires is recommended to use antique bronze poles and support legs.
- ▶ LED- and energy-saving bulbs 8-20W are recommended with E27 base; Max measurements for light source: width 68 mm and length 188 mm.

### Mounting

- ▶ To the wall, ceiling, support leg ø 50 mm or pole ø 50 mm.
- ▶ Wall and ceiling models can be wired through a connection box, 4 punch holes for 78 mm screw spacing
- ▶ AVG01/02 pole models; Can be mounted to a ø 50 mm pole (1,5 m VP150050/colour or 2,0 m VP225050/colour). Ground support MT (ø 50 mm). Can be mounted to support leg; MJ-5/colour. Support legs available in 13,5 cm and 120 cm height. Mounting accessories are not included in the delivery.
- ▶ Connection: Wall and ceiling luminaires: 3x2,5 mm<sup>2</sup> terminal block for through wiring in the luminaire body, knockouts for surface wiring Pole luminaires: 3x2,5 mm<sup>2</sup> terminal block for through wiring inside the luminaire

### Made to order

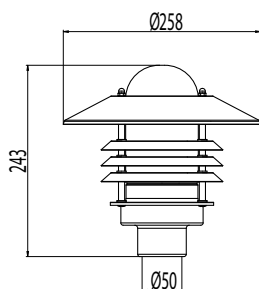
- ▶ Pearl grey, antique silver and antique bronze models
- ▶ AVGP05 / AVGP06 Majakka pole (white, black, graphite grey and copper).

E number	Type	Product name	Base	Model	Colour	Kg
<b>Pole mounting luminaire (pole ø 50 mm ordered separately)</b>						
45 032 00	AVG01	AVG01 IP44 75W E27 G C VA	E27	pole	white	0,8
45 032 06	AVG01M	AVG01M IP44 75W E27 G O MU	E27	pole	black	0,8
41 031 21	AVG01GH	AVG01GH IP44 75W E27 G C GH	E27	pole	graphite grey	0,8
45 032 09	AVG02	AVG02 IP44 75W E27 G C CU	E27	pole	copper	1,1
<b>Majakka pole luminaire (ø 50 mm pole ordered separately)</b>						
41 030 80	AVGP05	AVGP05 IP44 60W E27 G C WH	E27	pole	white	0,8
41 030 83	AVGP05M	AVGP05M IP44 60W E27 G O BK	E27	pole	black	0,8
41 030 82	AVGP05GH	AVGP05GH IP44 60W E27 G O GH	E27	pole	graphite grey	0,8
41 030 85	AVGP06	AVGP06 IP44 60W E27 G C CU	E27	pole	copper	1,0
<b>Wall mounting luminaire, light up</b>						
41 030 36	AVG03	AVG03 IP44 75W E27 G C WH	E27	wall	white	1,2
45 032 15	AVG03M	AVG03M IP44 75W E27 G O BK	E27	wall	black	1,2
41 031 25	AVG03GH	AVG03GH IP44 75W E27 G O GH	E27	wall	graphite grey	1,2
41 030 39	AVG04	AVG04 IP44 75W E27 G C CU	E27	wall	copper	1,6
<b>Wall mounting luminaire, light down</b>						
41 030 48	AVG07	AVG07 IP44 75W E27 G C WH	E27	wall	white	1,4
45 602 70	AVG07M	AVG07M IP44 75W E27 G O BK	E27	wall	black	1,4
41 030 67	AVG07GH	AVG07GH IP44 75W E27 G O GH	E27	wall	graphite grey	1,4
41 030 51	AVG08	AVG08 IP44 75W E27 G C CU	E27	wall	copper	1,7
<b>Wall mounting luminaire, light up, Majakka</b>						
45 602 50	AVGP03	AVGP03 IP44 75W E27 G C WH	E27	wall	white	1,3
45 602 52	AVGP03M	AVGP03M IP44 75W E27 G O BK	E27	wall	black	1,3
41 030 76	AVGP03GH	AVGP03GH IP44 75W E27 G O GH	E27	wall	graphite grey	1,3
45 602 53	AVGP04	AVGP04 IP44 75W E27 G C CU	E27	wall	copper	1,6

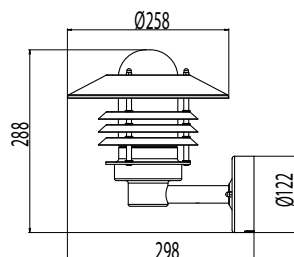


E number	Type	Product name	Base	Model	Colour	Kg
<b>Poles ø 50 mm fit to AVG01/02 and AVGP05/06 models</b>				<b>Height, m</b>		
46 031 21	VP150050/V	VP150050/V 1.5M 50MM WH		1,5	white	2,5
46 031 24	VP150050/M	VP150050/M 1.5M 50MM BK		1,5	black	2,5
46 030 04	VP150050/GH	VP150050/GH 1.5M 50MM GH		1,5	graphite grey	2,5
46 031 27	VP150050/AP	VP150050/AP 1.5M 50MM BR		1,5	antique bronze	2,5
46 031 09	VP225050/V	VP225050/V 2M 50MM WH		2,0	white	3,5
46 031 12	VP225050/M	VP225050/M 2M 50MM BK		2,0	black	3,5
46 030 05	VP225050/GH	VP225050/GH 2M 50MM GH		2,0	graphite grey	3,5
46 031 15	VP225050/AP	VP225050/AP 2M 50MM BR		2,0	antique bronze	3,5
<b>Support legs ø 50 mm fit to AVG01/02 models</b>				<b>Height, cm</b>		
46 601 44	MJ-5V	MJ-5V 50.8 WH		13,5	white	0,4
46 601 42	MJ-5M	MJ-5M 50.8 BK		13,5	black	0,4
46 030 01	MJ-5GH	MJ-5GH 50.8 GH		13,5	graphite grey	0,4
46 601 40	MJ-5AP	MJ-5AP 50.8 BR		13,5	antique bronze	0,4
46 601 06	MJ-5V/120	MJ-5V/120 50.8 VA 1200MM		120	white	2,2
46 601 05	MJ-5M/120	MJ-5M/120 50.8 MU 1200MM		120	black	2,2
46 030 02	MJ-5GH/120	MJ-5GH/120 50.8 GH 1200MM		120	graphite grey	2,2
46 601 03	MJ-5AP/120	MJ-5AP/120 50.8 ANTPRONS1200MM		120	antique bronze	2,2
<b>Ground supports for poles</b>						
46 030 09	MT	MT GROUND SUPP. 50MM		Terrafix ø 50 mm		0,45

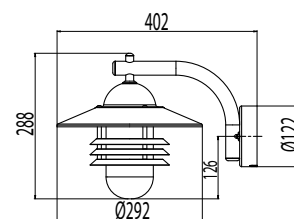
G=clear glass diffuser, C=clear, O=opal/matte. Power indicated as max. incandescent lamp effect, use of energy saving or LED lamps recommended



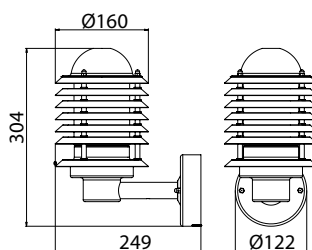
AVG01/AVG02



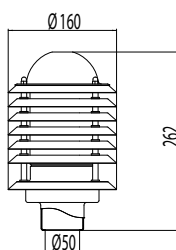
AVG03/AVG04



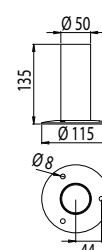
AVG07/AVG08



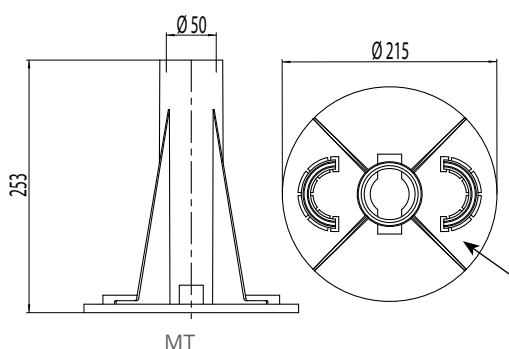
AVGP03/AVGP04



AVGP05/AVGP06



MJ-5



MT

Remove the curved locating pieces (2 pcs) from the ground mount base and fasten them around the mouth of the ground mount.



✓

Gala is designed to fit and last almost everywhere. Post tops, bollards, wall and colour variety will give you a product family to choose from.







AVN260GHLED

## Lumia

LED | E27

Stylish, graphite grey colour and modern design make the Lumia-series luminaires an obvious choice for modern gardens and houses. The series provides models for general lighting and spotlights. Series of Lumia luminaires can be combined with Gala outdoor graphite grey pole and bollard model luminaires.



“Durable and stylish aluminium fixture for wall and ceiling.”



AVN260LGH



AVN260L

### Structure

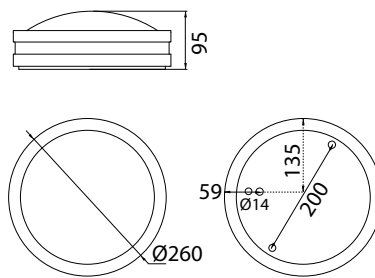
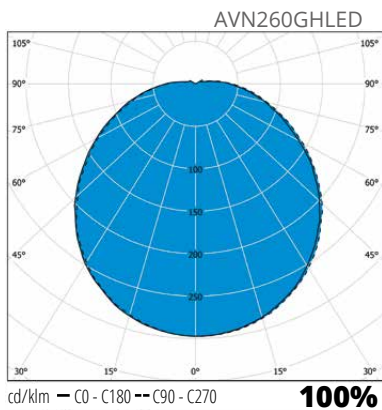
- › Body powder-coated aluminium
- › Diffuser UV resistant polycarbonate
- › Colour graphite grey=GH or white=VA
- › IK08

### Valikoima

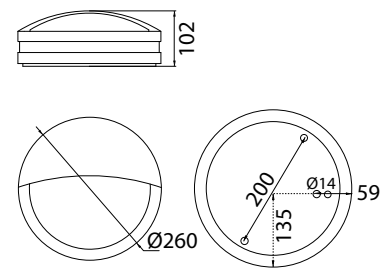
- › E27-based models for general- and house number lighting max. 60W, 11-18W energy saving bulbs are recommended. Light source width max. 45 mm and length max. 145 mm
- › LED-models:  
 AVN260...- Connected load 8W, luminaire luminous flux 450 lm (with frame) / 290 lm (with eye-lid), 4000 K  
 Ra>80, power factor 0,92  
 Ambient temperature - 20 °C - + 30 °C  
 LED-module lifespan 30 000 h (L70), T<sub>a</sub>=30 °C

### Mounting

- › To the wall and ceiling, through-wiring 3x1,5 mm<sup>2</sup>



AVN260GH



AVN260LGH

E number	Type	Product name	Base	Model	Colour	Kg
<b>LED-models</b>						
41 032 08	AVN260GHLED	AVN260GHLED IP54 9W/840 PC GH	LED	wall/ceiling	graphite grey	1,2
41 032 11	AVN260LGHLED	AVN260LGHLED IP54 9W/840 PC GH	LED	wall	graphite grey	1,2
<b>Wall-/ ceiling luminaire</b>						
41 032 06	AVN260	AVN260 IP54 60W E27 PC O WH	E27		white	1,2
41 031 54	AVN260GH	AVN260GH IP54 60W E27 PC O GH	E27		graphite grey	1,2
<b>Wall luminaire with eyelid</b>						
41 032 09	AVN260L	AVN260L IP54 60W E27 PC O WH	E27		white	1,2
41 031 55	AVN260LGH	AVN260LGH IP54 60W E27 PC O GH	E27		graphite grey	1,2



# Lumia Spot

GU10



AVN01GH

Stylish, graphite grey colour and modern design make the Lumia-series luminaires an obvious choice for modern gardens and houses. The series provides models for general lighting and spotlights. Series of Lumia luminaires can be combined with Gala outdoor graphite grey pole and bollard model luminaires.



"Spotlight for home wall or summer cottage. Durable and affordable."



AVN03GH



AVN07GH



AVN08GH

### Structure

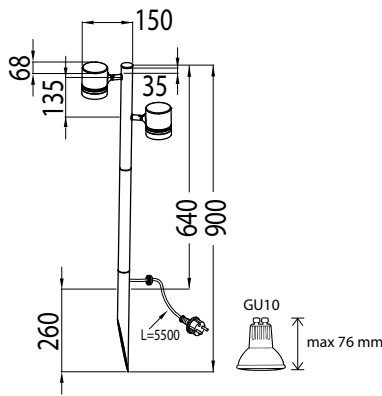
- › Body is aluminium
- › Protective glass (AVN01GH, AVN03GH, AVN07GH and AVN08GH)
- › Colour graphite grey=GH

### Valikoima

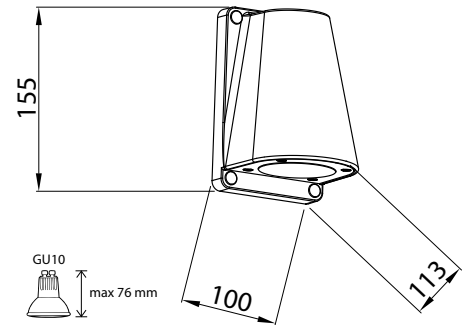
- › GU10-based models for spot lighting, light source alternatives:  
 GU10 CFL 9W  
 GU10 LED max. 7W  
 GU10 halogen max. 35W  
 Light source max. height 76 mm

### Mounting

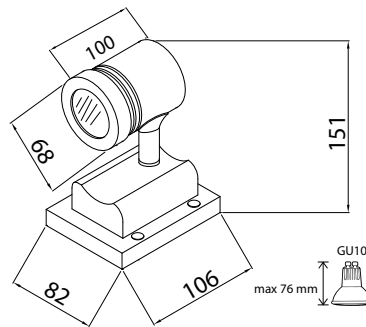
- › To wall, -o 3x1,5 mm<sup>2</sup>
- › AVN01GH-model equipped with ground spike and 5,5 m rubber cable (H05RN-F 2x1,0 mm<sup>2</sup>) and plug



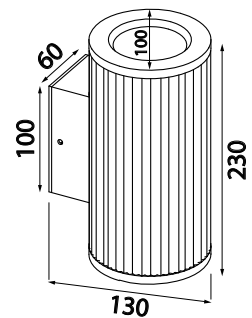
AVN01GH



AVN03GH



AVN07GH



AVN08GH

E number	Type	Product name	Base	Model	Kg
<b>Lumia Spike, 2xGU10, spike and 5,5 m rubber cable with Schuko plug, CL2</b>					
41 031 49	AVN01GH	AVN01GH IP44 2X35W GU10 G C GH	GU10	pole	1,6
<b>Lumia wallspot</b>					
41 031 51	AVN03GH	AVN03GH IP44 50W GU10 G C GH	GU10	wall	0,7
<b>Lumia wallspot, adjustable</b>					
41 031 52	AVN07GH	AVN07GH IP44 35W GU10 G C GH	GU10	wall	0,6
<b>Lumia wallspot up-down</b>					
41 031 85	AVN08GH	AVN08GH IP44 2X35W GU10 G C GH	GU10	wall	1,1





# Käpy

E27

Traditional garden lighting pole luminaire, which creates atmosphere. Käpy cone shape luminaires are an ideal choice for lighting pathways and planting areas.



AT101CU



"Lighting gardens for decades, Käpy has never looked better and still does."





AT101ALV



AT103ALM



AT103ALAP

### Structure

- › Body and anti-glare rings powder coated aluminium or patinated copper. Due to the patination process of copper anti-glare rings there occurs normal colour variation of patinated copper.
- › Poles: powder-coated aluzink steel
- › Colours: antique bronze, black, white and patinated copper
- › Luminaires are delivered without light source. LED- and energy-saving bulbs designed for outdoor use 8-20W are recommended with E27 base

### Mounting

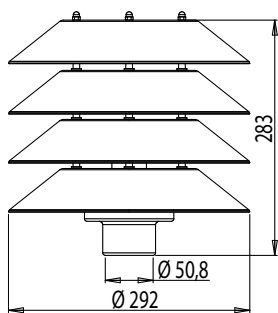
- › Pole models:
  - Can be mounted to a ø 50 mm pole (1,5 m VP150050/colour or 2,0 m VP225050/colour).
  - MT ground support (ø 50 mm).
  - Can be mounted to a support legs; MJ-5/colour available in 13,5 cm and 120 cm height
  - Can be mounted to the wall with wall supports; SK-5/colour
  - Mounting accessories to be ordered separately
- › Wall models directly to the wall
- › 3x2,5 mm<sup>2</sup> terminal block for through wiring inside the luminaire.

E number	Type	Product name	Base	Colour	Kg	
<b>Käpy (4 anti-glare rings)</b>						
45 033 06	AT101ALAP	AT101ALAP 100W E27 BR	E27	antique bronze	1,4	
45 033 09	AT101ALM	AT101ALM 100W E27 BK	E27	black	1,4	
45 033 12	AT101ALV	AT101ALV 100W W27 WH	E27	white	1,4	
45 033 15	AT101CU	AT101CU 100W E27 COPPER	E27	patinated copper	1,4	
<b>Käpy, wall models</b>						
45 033 24	AT103ALAP	AT103ALAP 100W E27 BR	E27	antique bronze	0,7	
45 033 27	AT103ALM	AT103ALM 100W E27 BK	E27	black	0,7	
45 033 30	AT103ALV	AT103ALV 100W E27 WH	E27	white	0,7	
45 033 33	AT103CU	AT103CU 100W E27 COPPER	E27	patinated copper	0,7	
<b>Poles ø 50 mm</b>			<b>Height</b>	<b>ø mm</b>		
46 031 27	VP150050/AP	VP150050/AP 1.5M 50MM BR	1,5	50,8	antique bronze	2,5
46 031 24	VP150050/M	VP150050/M 1.5M 50MM BK	1,5	50,8	black	2,5
46 031 21	VP150050/V	VP150050/V 1.5M 50MM WH	1,5	50,8	white	2,5
46 031 15	VP225050/AP	VP225050/AP 2M 50MM BR	2	50,8	antique bronze	3,5
46 031 12	VP225050/M	VP225050/M 2M 50MM BK	2	50,8	black	3,5
46 031 09	VP225050/V	VP225050/V 2M 50MM WH	2	50,8	white	3,5

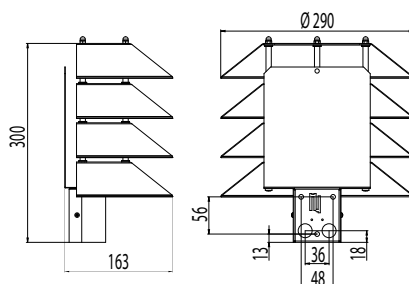


E number	Type	Product name	Base	Colour	Kg
Ground supports for poles			ø mm		
46 030 09	MT	MT GROUND SUPP. 50MM	Terrafix	50	0,5
Wall supports ø 50 mm			ø mm		
46 031 54	SK-5AP	SK-5AP WALL SUPPORT BR		50,8	antique bronze
46 031 51	SK-5M	SK-5M WALL SUPPORT BK		50,8	black
46 031 48	SK-5V	SK-5V WALL SUPPORT WH		50,8	white
Support legs ø 50 mm			Height	ø mm	
46 601 40	MJ-5AP	MJ-5AP 50.8 BR	13,5	50,8	antique bronze
46 601 42	MJ-5M	MJ-5M 50.8 BK	13,5	50,8	black
46 601 44	MJ-5V	MJ-5V 50.8 WH	13,5	50,8	white
46 601 03	MJ-5AP/120	MJ-5AP/120 50.8 ANTPRONS1200MM	120	50,8	antique bronze
46 601 05	MJ-5M/120	MJ-5M/120 50.8 MU 1200MM	120	50,8	black
46 601 06	MJ-5V/120	MJ-5V/120 50.8 VA 1200MM	120	50,8	white

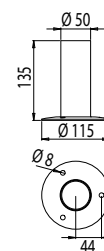
Power indicated as max. incandescent lamp effect, use of energy saving or LED lamps recommended 8-20W



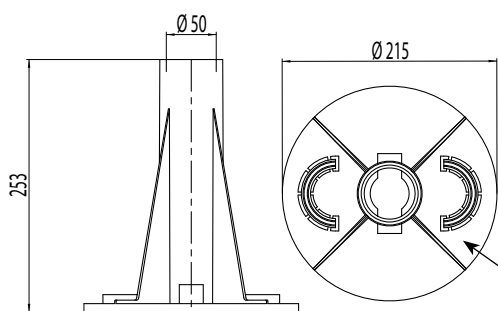
AT101



AT103 wall model

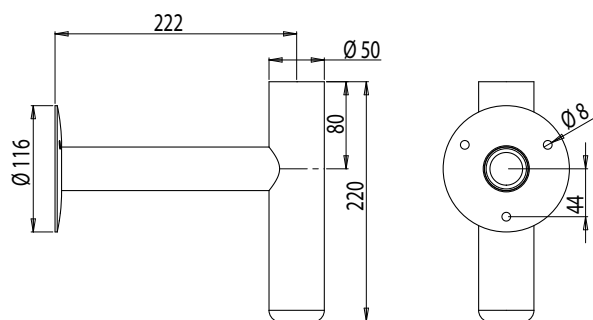


MJ-5



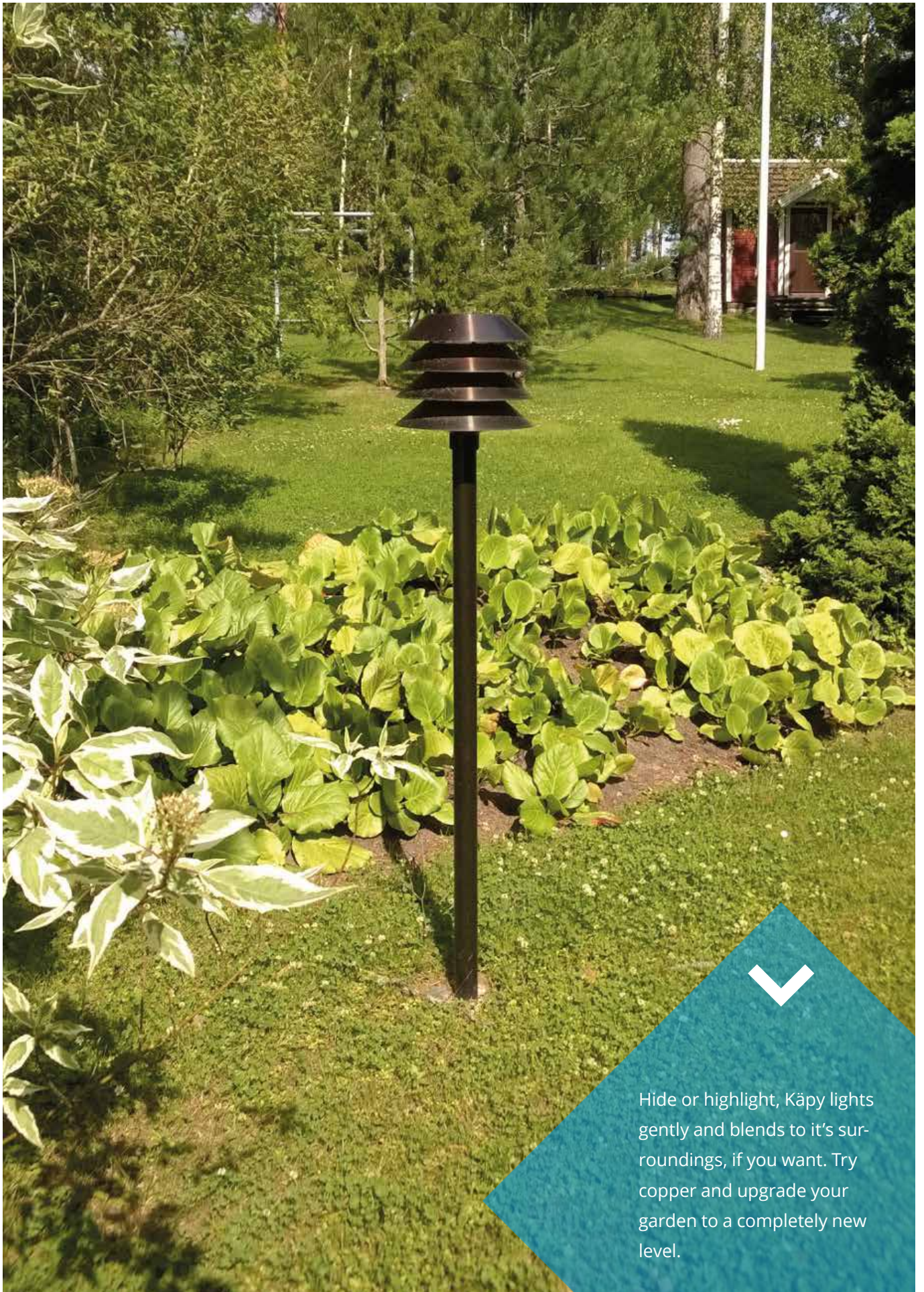
MT

Remove the curved locating pieces (2 pcs) from the ground mount base and fasten them around the mouth of the ground mount.



SK-5





Hide or highlight, Käpy lights gently and blends to its surroundings, if you want. Try copper and upgrade your garden to a completely new level.







# Public premises





# Anna

LED

Anna is a state of the art luminaire for public premises with high interior design demands. With its high-end design, control and optical features it fits perfectly for offices, public buildings and schools.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

## DALI

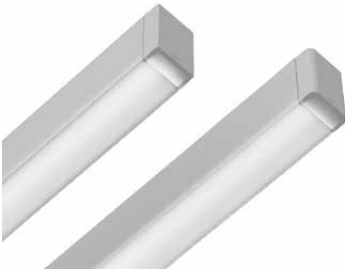
DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

"Anna combines high-end design and smart lighting."





Anna microprismatic optics



End cap square and round design



Mounting options

### Structure

- › Body white powder coated (RAL 9016) structure painted aluminium profile
- › End caps structure painted white aluminium
- › Low luminance aluminium louvre
- › Microprismatic optics polycarbonate
- › UGR<19
- › Models:
  - Direct light models for surface and wire suspension mounting
  - Uplight models (U), uplight 40%
  - Flush mount models (F)
  - Square (S) or rounded (R) end caps
- › IP20
- › Connected load and luminous flux, see table
- › LED-module lifespan 100 000h (L70), T<sub>a</sub> = 25 °C

### Mounting

- › Wire suspension. Freely adjustable suspension points.
- › Surface mounting
- › Recessed mounting
- › Mounting accessories to be ordered separately

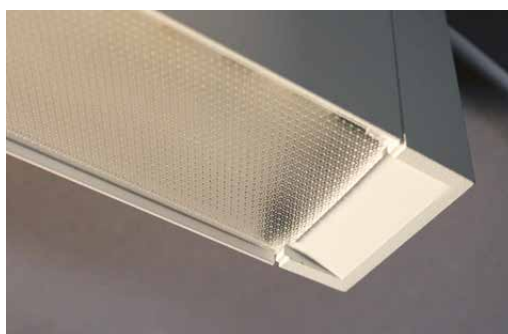
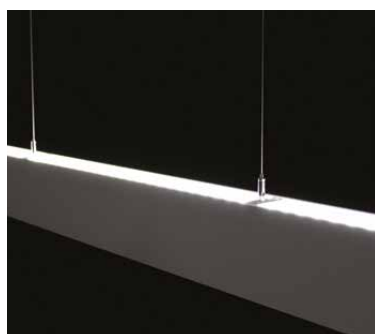
### Made to order

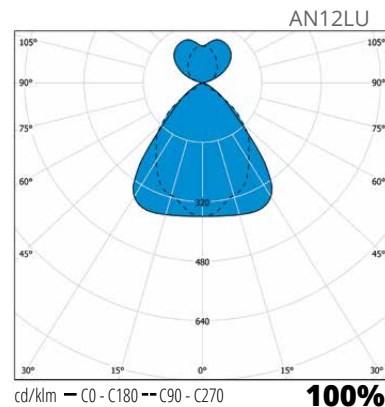
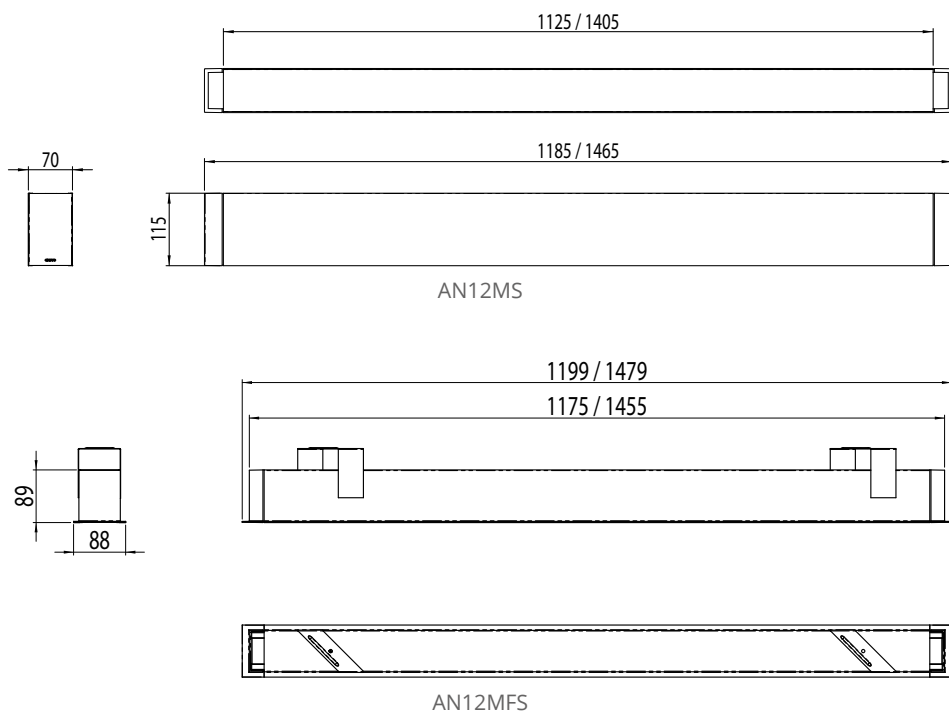
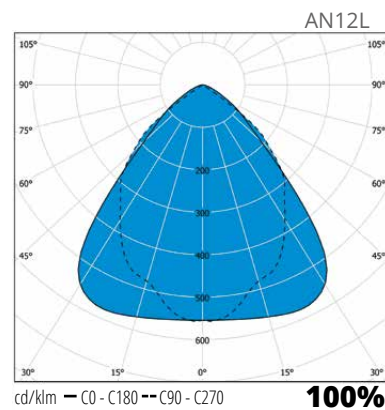
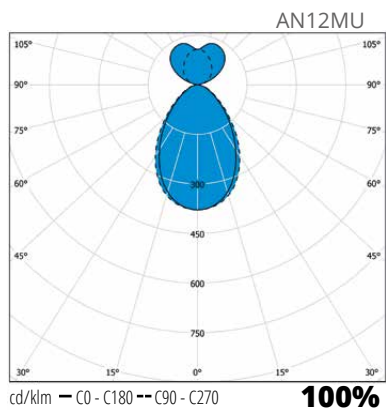
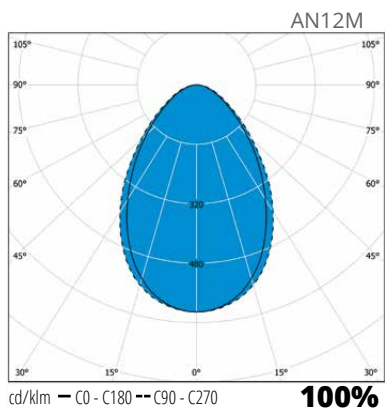
- › Pull cord, connection lead
- › 3000K models /3K
- › Tunable white models /TW
- › SmartWay self learning sensor /AA
- › 50/50 light distribution
- › Project specific luminous flux packages 1500-4000 lm (direct light/uplight)

E number	Type	Product name	Luminous flux	Optics	Control
<b>Anna, suspended/surface mount, square end caps</b>					
42 603 38	AN12LS	AN12LS LED 21W/840 L	2400 lm	louvre	
42 604 02	AN12LSED	AN12LSED LED 21W/840 L DA	2400 lm	louvre	DALI
42 603 53	AN15LS	AN15LS LED 26W/840 L	3000 lm	louvre	
42 604 24	AN15LSED	AN15LSED LED 26W/840 L DA	3000 lm	louvre	DALI
42 603 45	AN12MS	AN12MS LED 15W/840 M	1550 lm	microprism	
42 604 12	AN12MSED	AN12MSED LED 15W/840 M DA	1550 lm	microprism	DALI
42 603 59	AN15MS	AN15MS LED 19W/840 M	1950 lm	microprism	
42 604 42	AN15MSED	AN15MSED LED 19W/840 M DA	1950 lm	microprism	DALI
<b>Anna with uplight, square end caps</b>					
42 603 41	AN12LUS	AN12LUS LED 30W/840 L	3800 lm	louvre	
42 604 04	AN12LUSED	AN12LUSED LED 30W/840 L DA	3800 lm	louvre	DALI
42 603 55	AN15LUS	AN15LUS LED 38W/840 L	4700 lm	louvre	
42 604 30	AN15LUSED	AN15LUSED LED 38W/840 L DA	4700 lm	louvre	DALI
42 603 49	AN12MUS	AN12MUS LED 22W/840 M	2500 lm	microprism	
42 604 14	AN12MUSED	AN12MUSED LED 22W/840 M DA	2500 lm	microprism	DALI
42 603 61	AN15MUS	AN15MUS LED 27W/840 M	3100 lm	microprism	
42 604 48	AN15MUSED	AN15MUSED LED 27W/840 M DA	3100 lm	microprism	DALI



E number	Type	Product name	Luminous flux	Optics	Control
<b>Anna flush mount, square end caps</b>					
42 603 36	AN12LFS	AN12LFS LED 21W/840 L	2400 lm	louvre	
42 604 00	AN12LFSED	AN12LFSED LED 21W/840 L DA	2400 lm	louvre	DALI
42 603 51	AN15LFS	AN15LFS LED 26W/840 L	3000 lm	louvre	
42 604 18	AN15LFSED	AN15LFSED LED 26W/840 L DA	3000 lm	louvre	DALI
42 603 43	AN12MFS	AN12MFS LED 15W/840 M	1550 lm	microprism	
42 604 10	AN12MFSED	AN12MFSED LED 15W/840 M DA	1550 lm	microprism	DALI
42 603 57	AN15MFS	AN15MFS LED 19W/840 M	1950 lm	microprism	
42 604 36	AN15MFSED	AN15MFSED LED 19W/840 M DA	1950 lm	microprism	DALI
<b>Anna, suspended/surface mount, round end caps</b>					
42 603 37	AN12LR	AN12LR LED 21W/840 L	2400 lm	louvre	
42 604 01	AN12LRED	AN12LRED LED 21W/840 L DA	2400 lm	louvre	DALI
42 603 52	AN15LR	AN15LR LED 26W/840 L	3000 lm	louvre	
42 604 21	AN15LRED	AN15LRED LED 26W/840 L DA	3000 lm	louvre	DALI
42 603 44	AN12MR	AN12MR LED 15W/840 M	1550 lm	microprism	
42 604 11	AN12MRED	AN12MRED LED 15W/840 M DA	1550 lm	microprism	DALI
42 603 58	AN15MR	AN15MR LED 19W/840 M	1950 lm	microprism	
42 604 39	AN15MRED	AN15MRED LED 19W/840 M DA	1950 lm	microprism	DALI
<b>Anna with uplight, round end caps</b>					
42 603 40	AN12LUR	AN12LUR LED 30W/840 L	3800 lm	louvre	
42 604 03	AN12LURED	AN12LURED LED 30W/840 L DA	3800 lm	louvre	DALI
42 603 54	AN15LUR	AN15LUR LED 38W/840 L	4700 lm	louvre	
42 604 27	AN15LURED	AN15LURED LED 38W/840 L DA	4700 lm	louvre	DALI
42 603 47	AN12MUR	AN12MUR LED 22W/840 M	2500 lm	microprism	
42 604 13	AN12MURED	AN12MURED LED 22W/840 M DA	2500 lm	microprism	DALI
42 603 60	AN15MUR	AN15MUR LED 27W/840 M	3100 lm	microprism	
42 604 45	AN15MURED	AN15MURED LED 27W/840 M DA	3100 lm	microprism	DALI
<b>Anna flush mount, round end caps</b>					
42 603 35	AN12LFR	AN12LFR LED 21W/840 L	2400 lm	louvre	
42 603 97	AN12LFRED	AN12LFRED LED 21W/840 L DA	2400 lm	louvre	DALI
42 603 50	AN15LFR	AN15LFR LED 26W/840 L	3000 lm	louvre	
42 604 15	AN15LFRED	AN15LFRED LED 26W/840 L DA	3000 lm	louvre	DALI
42 603 42	AN12MFR	AN12MFR LED 15W/840 M	1550 lm	microprism	
42 604 08	AN12MFRED	AN12MFRED LED 15W/840 M DA	1550 lm	microprism	DALI
42 603 56	AN15MFR	AN15MFR LED 19W/840 M	1950 lm	microprism	
42 604 33	AN15MFRED	AN15MFRED LED 19W/840 M DA	1950 lm	microprism	DALI
<b>Anna accessories</b>					
4266060	RVLX01	RVLX01 WIRE SUSP.SET 1.5M	susp. wire set 1,5 m with friction locks		
4266061	RVLX02	RVLX02 WIRE SUSP.SET 1.5M Ø31	susp. wire set 1,5 m with friction locks, small ceiling cup ø 31 mm		
4266062	RVLX03	RVLX03 WIRE SUSP.SET 1.5M Ø67	susp. wire set 1,5 m with friction locks, large ceiling cup ø 67 mm		
4266108	RVLXT25	RVLXT25 WIRE SUSP.SET T-FRAME	susp. wire set with friction locks for T-frame		









# Anna System

LED

Anna System is greater than the sum of its parts. High-end design, control and optical features enable creating high quality lighting in demanding public spaces.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

## DALI

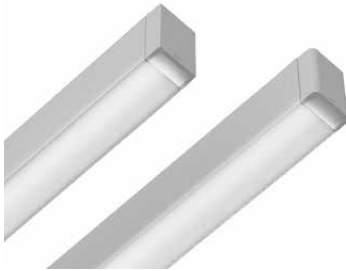
DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

"Anna System is greater than the sum of its parts."

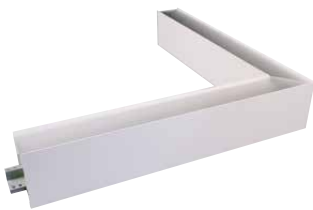




Mounting options



End cap square and round design



Anna microprism corner luminaire

### Structure

- › Body white powder coated (RAL 9016) structure painted aluminium profile
- › End caps and corner modules structure painted aluminium
- › Low luminance aluminium louvre
- › Microprismatic optics polycarbonate
- › UGR<19
- › Models:
  - Direct light models for surface and wire suspension mounting
  - Uplight models (U), uplight 40%
  - Flush mount models (F)
- › 90° corner luminaires with microprismatic optics (ANL60M)
- › Square (S) or rounded (R) end caps
- › IP20
- › Connected load and luminous flux, see table
- › LED-module lifespan 100 000h (L70), T<sub>a</sub> = 25 °C

### Mounting

- › Wire suspension. Freely adjustable suspension points.
- › Surface mounting
- › Recessed mounting
- › Continuous light-line by connecting several luminaires
- › 90° corner module for connecting louvre versions
- › End caps to be ordered separately
- › Mounting accessories to be ordered separately

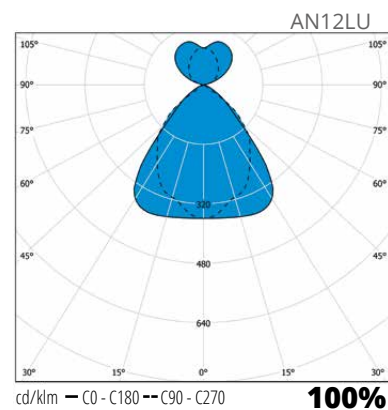
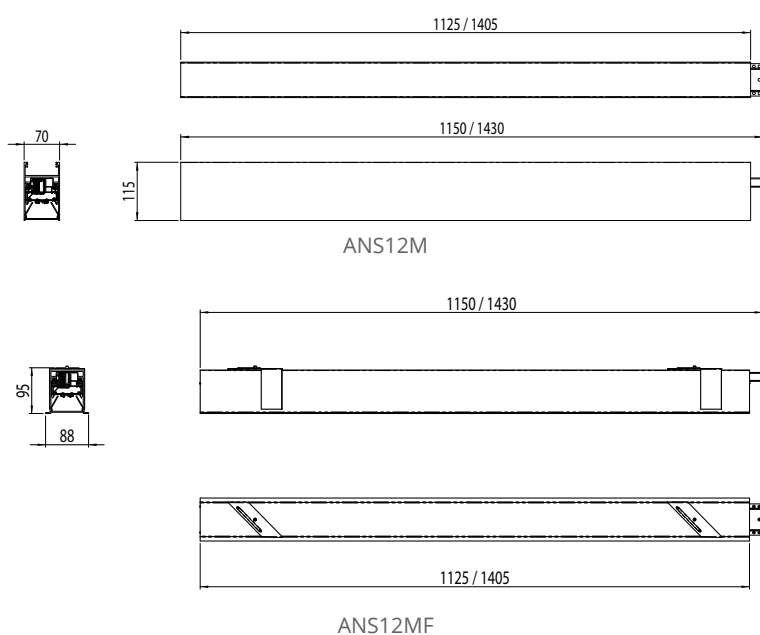
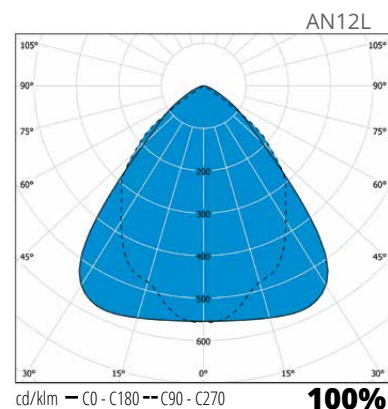
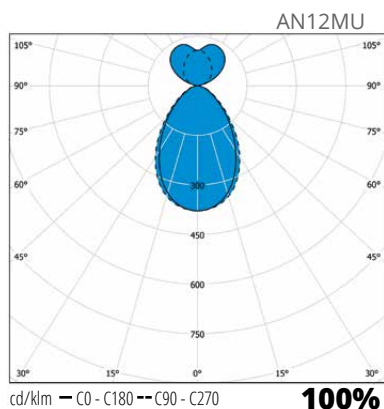
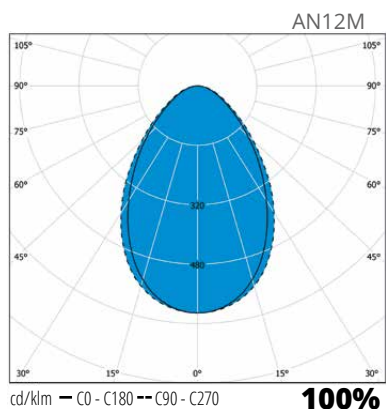
### Made to order

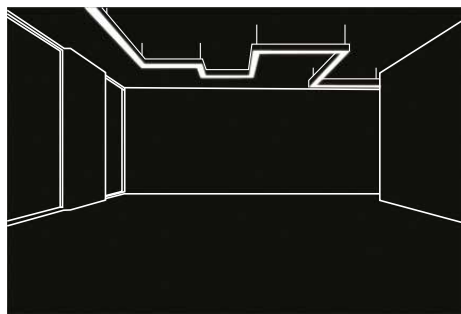
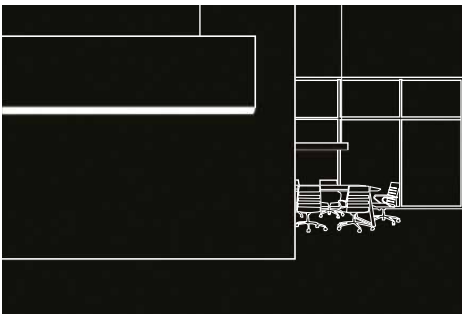
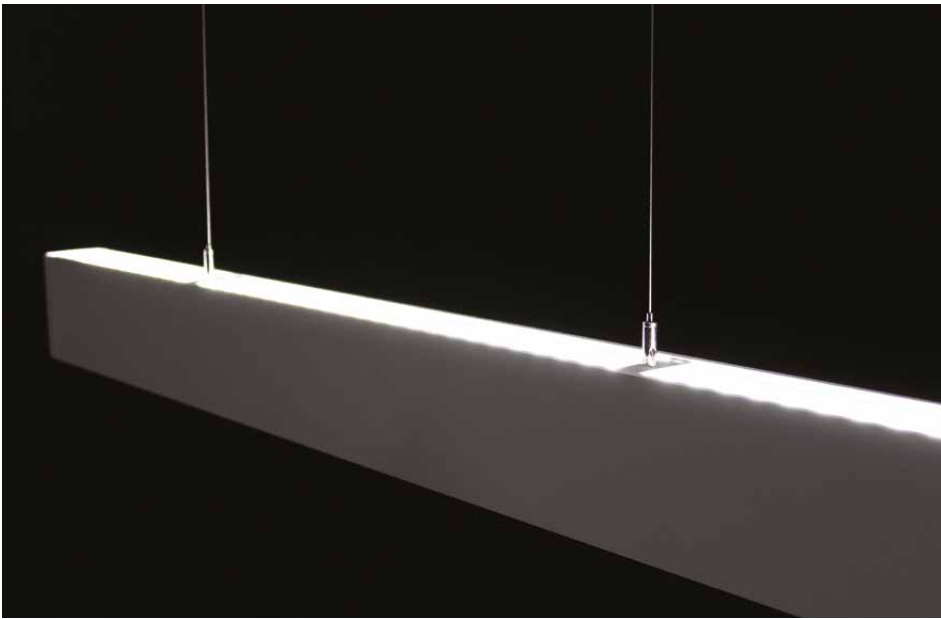
- › 3000K models/3K
- › Tunable white models /TW
- › SmartWay self learning sensor /AA. Availability per model to be checked from Ensto Lighting product management
- › 50/50 light distribution
- › Project specific luminous flux packages 1500-4000 lm (direct light/uplight)

E number	Type	Product name	Luminous flux	Optics	Control
<b>Anna System linear luminaires, suspended / surface mount</b>					
42 603 75	ANS12L	ANS12L LED 21W/840 L	2400 lm	louvre	
42 604 60	ANS12LED	ANS12LED LED 21W/840 L DA	2400 lm	louvre	DALI
42 603 85	ANS15L	ANS15L LED 26W/840 L	3000 lm	louvre	
42 604 71	ANS15LED	ANS15LED LED 26W/840 L DA	3000 lm	louvre	DALI
42 603 81	ANS12M	ANS12M LED 15W/840 M	1550 lm	microprism	
42 604 66	ANS12MED	ANS12MED LED 15W/840 M DA	1550 lm	microprism	DALI
42 603 90	ANS15M	ANS15M LED 19W/840 M	1950 lm	microprism	
42 604 75	ANS15MED	ANS15MED LED 19W/840 M DA	1950 lm	microprism	DALI
42 603 68	ANL60M	ANL60M LED 15W/840 M	1550 lm	microprism, corner luminaire	
42 604 51	ANL60MED	ANL60MED LED 15W/840 M DA	1550 lm	microprism, corner luminaire	DALI
<b>Anna System linear luminaires with uplight</b>					
42 603 80	ANS12LU	ANS12LU LED 30W/840 L	3800 lm	louvre	
42 604 65	ANS12LUED	ANS12LUED LED 30W/840 L DA	3800 lm	louvre	DALI
42 603 87	ANS15LU	ANS15LU LED 38W/840 L	4700 lm	louvre	
42 604 73	ANS15LUED	ANS15LUED LED 38W/840 L DA	4700 lm	louvre	DALI
42 603 83	ANS12MU	ANS12MU LED 22W/840 M	2500 lm	microprism	
42 604 69	ANS12MUED	ANS12MUED LED 22W/840 M DA	2500 lm	microprism	DALI
42 603 92	ANS15MU	ANS15MU LED 27W/840 M	3100 lm	microprism	
42 604 78	ANS15MUED	ANS15MUED LED 27W/840 M DA	3100 lm	microprism	DALI
42 603 70	ANL60MU	ANL60MU LED 22W/840 M	2500 lm	microprism, corner luminaire	
42 604 57	ANL60MUED	ANL60MUED LED 22W/840 M DA	2500 lm	microprism, corner luminaire	DALI



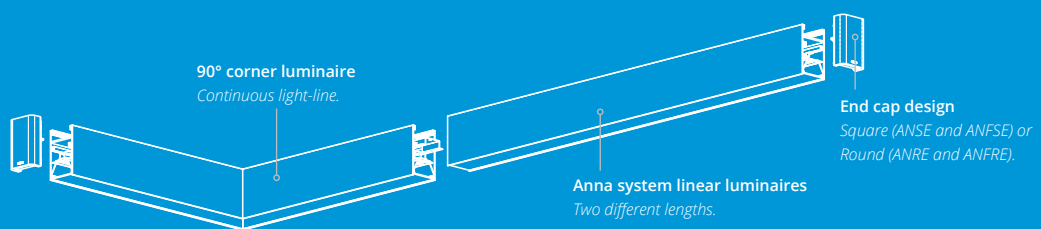
E number	Type	Product name	Luminous flux	Optics	Control
<b>Anna System linear luminaires, flush mount</b>					
42 603 76	ANS12LF	ANS12LF LED 21W/840 L	2400 lm	louvre	
42 604 63	ANS12LFED	ANS12LFED LED 21W/840 L DA	2400 lm	louvre	DALI
42 603 86	ANS15LF	ANS15LF LED 26W/840 L	3000 lm	louvre	
42 604 72	ANS15LFED	ANS15LFED LED 26W/840 L DA	3000 lm	louvre	DALI
42 603 82	ANS12MF	ANS12MF LED 15W/840 M	1550 lm	microprism	
42 604 67	ANS12MFED	ANS12MFED LED 15W/840 M DA	1550 lm	microprism	DALI
42 603 91	ANS15MF	ANS15MF LED 19W/840 M	1950 lm	microprism	
42 604 77	ANS15MFED	ANS15MFED LED 19W/840 M DA	1950 lm	microprism	DALI
42 603 69	ANL60MF	ANL60MF LED 15W/840 M	1550 lm	microprism, corner luminaire	
42 604 54	ANL60MFED	ANL60MFED LED 15W/840 M DA	1550 lm	microprism, corner luminaire	DALI
<b>Anna System accessories</b>					
42 603 94	ANSE	ANSE end cap pair, square			
42 603 73	ANRE	ANRE end cap pair, round			
42 603 66	ANFSE	ANFSE end cap pair square, flush mount			
42 603 63	ANFRE	ANFRE end cap pair round, flush mount			
42 603 72	ANLR	ANLR 90° corner module for louvre			
42 603 71	ANLFR	ANLFR 90° corner module for louvre, flush mount			
42 660 60	RVLX01	RVLX01 WIRE SUSP.SET 1.5M	susp. wire set 1,5 m with friction locks		
42 660 61	RVLX02	RVLX02 WIRE SUSP.SET 1.5M Ø31	susp. wire set 1,5 m with friction locks, small ceiling cup ø 31 mm		
42 660 62	RVLX03	RVLX03 WIRE SUSP.SET 1.5M Ø67	susp. wire set 1,5 m with friction locks, large ceiling cup ø 67 mm		
42 661 08	RVLXT25	RVLXT25 WIRE SUSP.SET T-FRAME	susp. wire set with friction locks for T-frame		



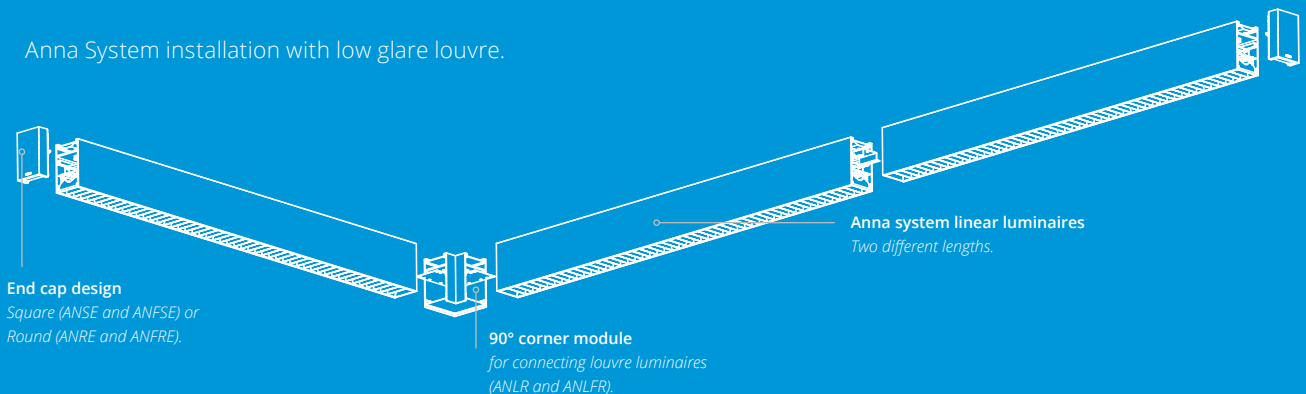


## Create your own space.

System light-line installation with microprismatic optics.



Anna System installation with low glare louvre.





# Aava

LED

Aava is a reliable and efficient office luminaire. Aava doubles the light and is at its best in class rooms, offices and workpoints.



## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

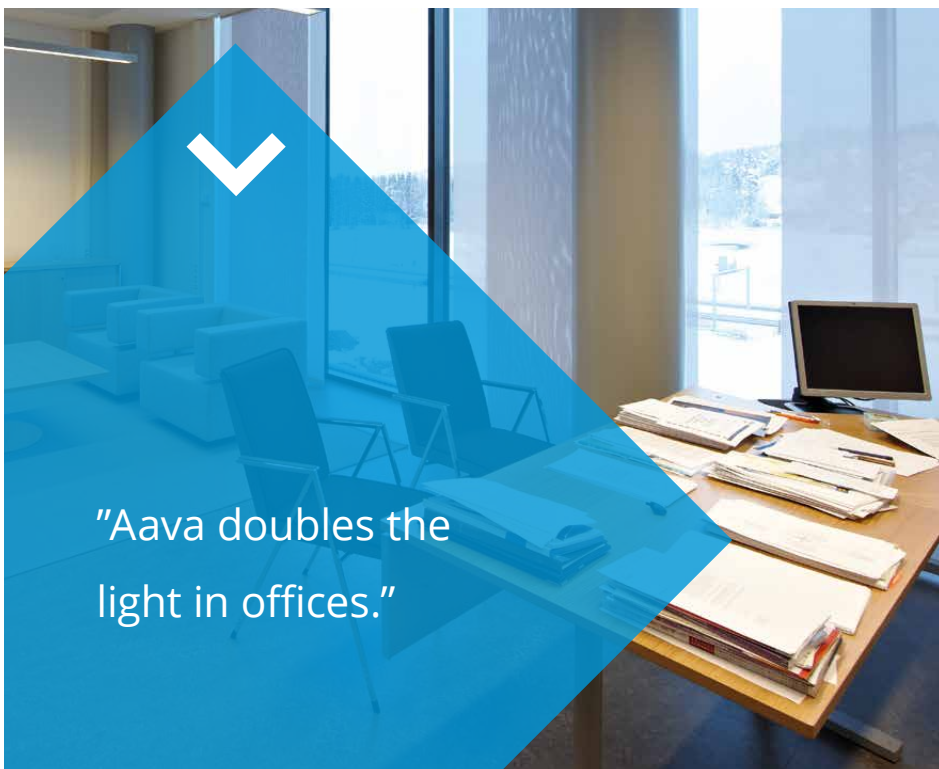
Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Aava doubles the light in offices.”



Aava with square end caps



Aava with round end caps

### Structure

- › Body and end caps white powder coated (RAL 9016) structure painted aluminium
- › Low luminance aluminium louvre, UGR < 19.
- › Models:  
Direct light models for surface and wire suspension mounting  
Uplight models (U), uplight 35%  
Square (S) or rounded (R) end caps
- › IP20
- › Connected load and luminous flux, see table
- › LED-module lifespan 100 000h (L70), T<sub>a</sub>=25 °C

### Mounting

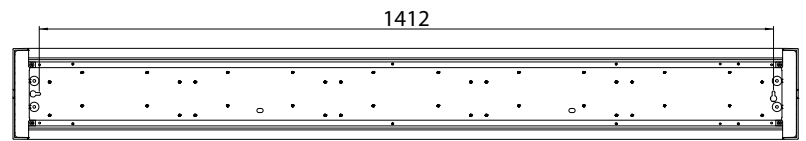
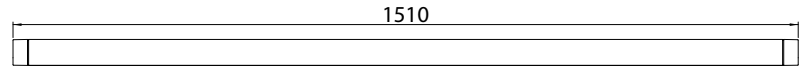
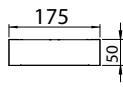
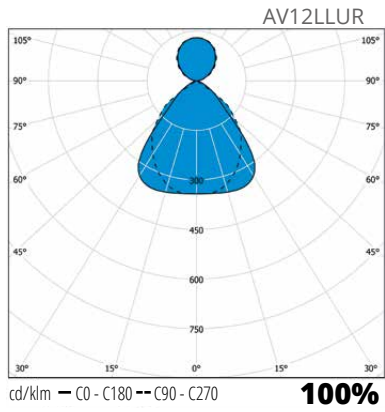
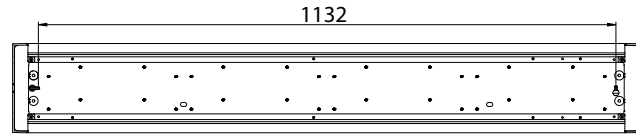
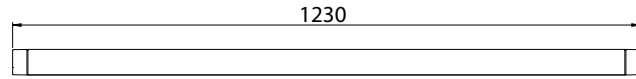
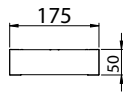
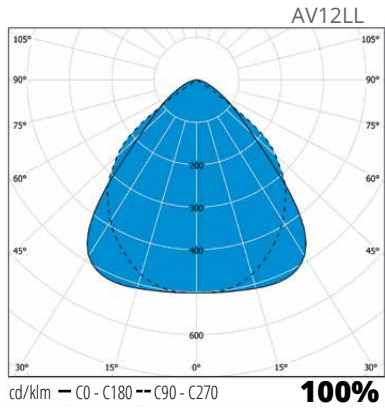
- › Wire suspension. Freely adjustable suspension points.
- › Surface mounting
- › Mounting accessories to be ordered separately

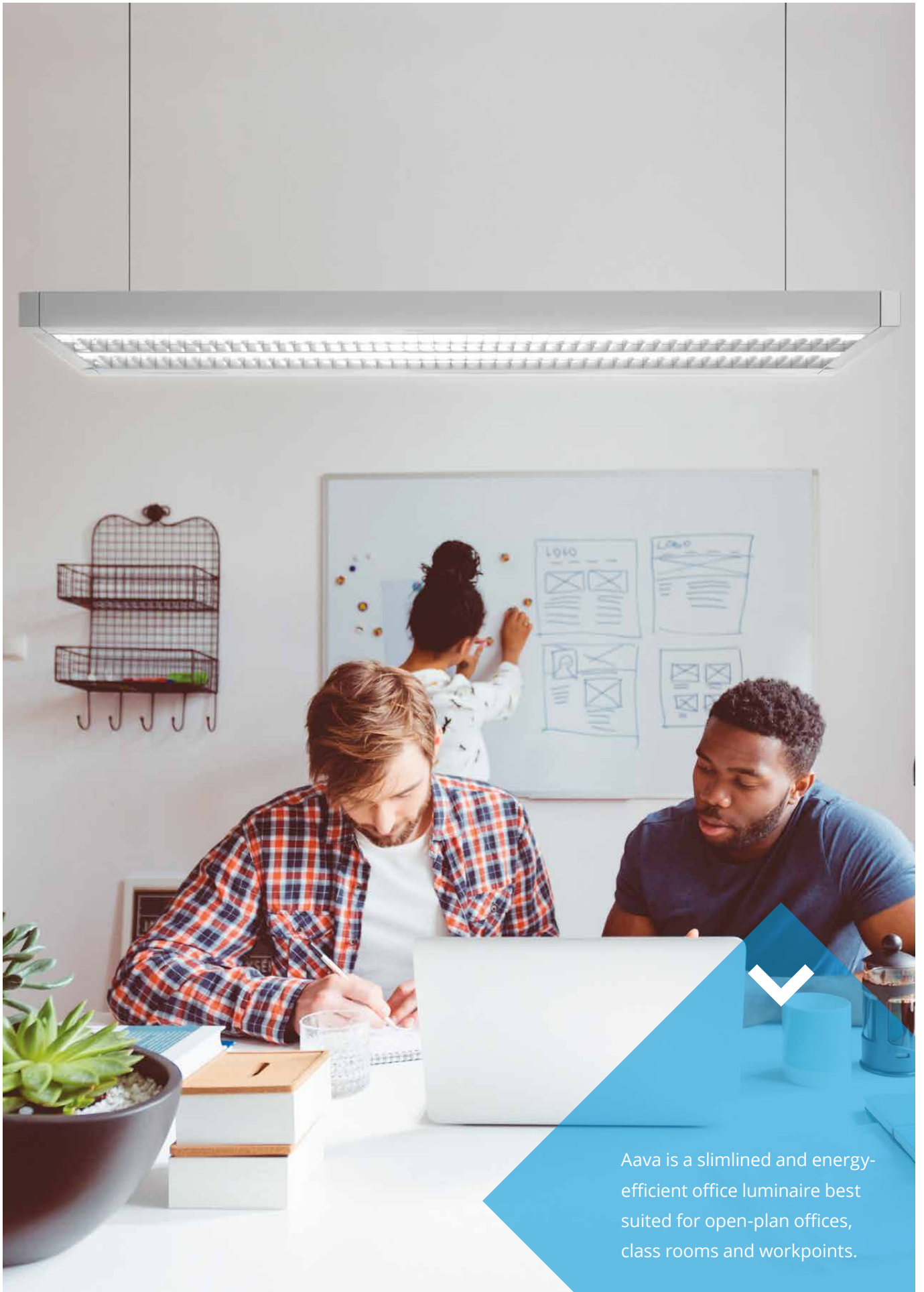
### Made to order

- › Pull cord, connection lead
- › 3000K models /3K
- › Tunable white models /TW
- › Project specific luminous flux packages

E number	Type	Product name	Luminous flux	Optics	Control
<b>Aava suspended/surface mount, square end caps</b>					
42 606 02	AV12LLS	AV12LLS LED 34W/840 L	4500 lm	louvre	
42 607 03	AV12LLSED	AV12LLSED LED 34W/840 L DA	4500 lm	louvre	DALI
42 606 68	AV15LLS	AV15LLS LED 42W/840 L	5400 lm	louvre	
42 607 30	AV15LLSED	AV15LLSED LED 42W/840 L DA	5400 lm	louvre	DALI
<b>Aava with uplight, square end caps</b>					
42 606 05	AV12LLUS	AV12LLUS LED 51W/840 L	6850 lm	louvre	
42 607 05	AV12LLUSED	AV12LLUSED LED 51W/840 L DA	6850 lm	louvre	DALI
42 606 74	AV15LLUS	AV15LLUS LED 65W/840 L	8220 lm	louvre	
42 607 32	AV15LLUSED	AV15LLUSED LED 65W/840 L DA	8220 lm	louvre	DALI
<b>Aava suspended/surface mount, round end caps</b>					
42 606 04	AV12LLR	AV12LLR LED 34W/840 L	4500 lm	louvre	
42 607 04	AV12LLRED	AV12LLRED LED 34W/840 L DA	4500 lm	louvre	DALI
42 606 71	AV15LLR	AV15LLR LED 42W/840 L	5400 lm	louvre	
42 607 31	AV15LLRED	AV15LLRED LED 42W/840 L DA	5400 lm	louvre	DALI
<b>Aava with uplight, round end caps</b>					
42 606 06	AV12LLUR	AV12LLUR LED 51W/840 L	6850 lm	louvre	
42 607 07	AV12LLURED	AV12LLURED LED 51W/840 L DA	6850 lm	louvre	DALI
42 606 77	AV15LLUR	AV15LLUR LED 65W/840 L	8220 lm	louvre	
42 607 33	AV15LLURED	AV15LLURED LED 65W/840 L DA	8220 lm	louvre	DALI
<b>Aava accessories</b>					
42 605 96	RVLX05	RVLX05 WIRE SUS.SET 1,5M		susp. Wire set 1,5 m with friction locks	







Aava is a slimlined and energy-efficient office luminaire best suited for open-plan offices, class rooms and workpoints.





# Avara

LED

Avara is an aesthetic and graceful pendant luminaire best suited for offices and meeting rooms.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

"Avara brightens up your meetings."





Avara with square end caps



Avara with round end caps

### Structure

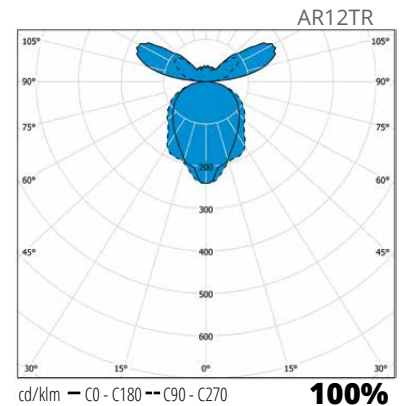
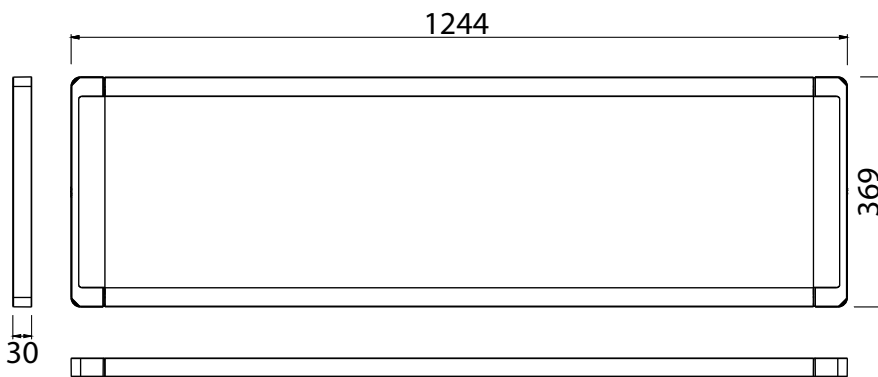
- › Body and end caps white powder coated (RAL 9016) structure painted aluminium
- › Transparent acrylic light guide, UGR < 19
- › Models:  
Square (S) or rounded (R) end caps  
Uplight 40%
- › CRI > 80. Tunable White -models CRI > 90
- › IP20
- › Connected load and luminous flux, see table
- › LED-module lifespan 100 000h (L80), T<sub>a</sub>=25 °C

### Mounting

- › Wire suspension with included suspension set
- › On/off- and sensor models delivered with textile covered cable and Schuko plug
- › DALI- and Tunable White -models with 5-pole textile covered cable
- › Cable length 2,5 m

### Made to order

- › Project specific luminous flux packages



E number	Type	Product name	Luminous flux	Control
<b>Avara suspension luminaire, square end caps</b>				
42 607 47	AR12TS	AR12TS LED 43W/840	5800 lm	
42 607 57	AR12TS/3K	AR12TS/3K LED 43W/830	5500 lm	
42 607 49	AR12TSED	AR12TSED LED 43W/840 DA	5800 lm	DALI
42 607 60	AR12TSED/3K	AR12TSED/3K LED 43W/830 DA	5500 lm	DALI
42 607 54	AR12TSAA	AR12TSAA LED 43W/840 AA	5800 lm	SmartWay
42 607 63	AR12TSAA/3K	AR12TSAA/3K LED 43W/830 AA	5500 lm	SmartWay
42 607 52	AR12TS/TW	AR12TS/TW LED 52W/927-965	5800 lm	Tunable White
<b>Avara suspension luminaire, round end caps</b>				
42 607 48	AR12TR	AR12TR LED 43W/840	5800 lm	
42 607 58	AR12TR/3K	AR12TR/3K LED 43W/830	5500 lm	
42 607 50	AR12TRED	AR12TRED LED 43W/840 DA	5800 lm	DALI
42 607 61	AR12TRED/3K	AR12TRED/3K LED 43W/830 DA	5500 lm	DALI
42 607 56	AR12TRAA	AR12TRAA LED 43W/840 AA	5800 lm	SmartWay
42 607 66	AR12TRAA/3K	AR12TRAA/3K LED 43W/830 AA	5500 lm	SmartWay
42 607 53	AR12TR/TW	AR12TR/TW LED 52W/927-965	5800 lm	Tunable White



# Aamu

LED



Aamu is an optically advanced module luminaire with easy installation features. Aamu is suitable for offices, schools and commercial areas or almost anywhere, when high-quality, energy-efficient, extremely controlled glare free light is needed.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

"Four letters to optical supremacy, modular luminaire of tomorrow."





Special model with 625 mm front panel



Special model with 3 light sources



Special model with 4 light sources

### Structure

- › Body white (RAL 9016) powder-coated steel sheet
- › Low luminance reflector anodized aluminium, UGR < 19
- › Contact protection polycarbonate
- › IP20
- › Connected load and luminaire luminous flux, see table
- › DPML6X6/TW-models Tunable white with DALI controlled control gear
- › SmartOne-models equipped with Helvar Actice+ concept sensor and control gear
- › SmartWay-models equipped with Helvar ActiveAhead concept sensor and control gear

### Mounting

- › To the T-list ceiling (600x600)
- › Surface mounting with separate frame
- › To hidden T-bar ceiling with DPML-HTB mounting kit
- › To plasterboard ceiling with DPML-CSB mounting kit
- › Basic-, SmartOne- and SmartWay-models -o- 3x2,5 mm<sup>2</sup> DALI-, and Tunable White-models -o- 5x2,5 mm<sup>2</sup>
- › Linect-connection as a standard, check the suitable connector type from the Ensto Lighting product management

### Made to order

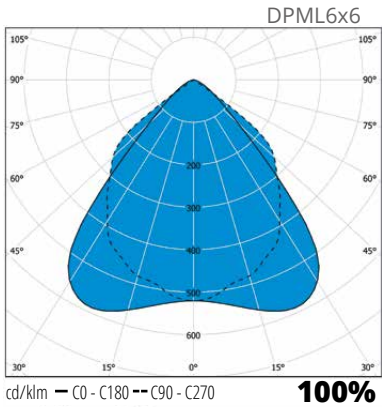
- › With 600x600 or 625x625-front panel
- › With luminaire integrated sensors. Check sensor specific availability from the Ensto Lighting product management.
- › With EnstoNET connector
- › -o- 5x2,5 mm<sup>2</sup> connection to basic, SmartOne and SmartWay models

E number	Type	Product name	Kg	Connected load	Luminous flux
<b>Aamu 600x600</b>					
42 903 95	DPML6X6	DPML6X6 LED 34W/840	4,5	34	4000 lm
42 903 97	DPML6X6/3K	DPML6X6/3K LED 34W/830	4,5	34	4000 lm
<b>Aamu 600x600 DALI</b>					
42 915 08	DPML6X6ED	DPML6X6ED LED 34W/840 DALI	4,5	34	4000 lm
42 915 10	DPML6X6ED/3K	DPML6X6ED/3K LED 34W/830 DALI	4,5	34	4000 lm
<b>Aamu 600x600 with SmartWay - sensor and control gear</b>					
42 915 32	DPML6X6AA	DPML6X6AA LED 34W/840 AA	4,5	34	4000 lm
42 915 34	DPML6X6AA/3K	DPML6X6AA/3K LED 34W/830 AA	4,5	34	4000 lm
<b>Aamu 600x600 Tunable White</b>					
42 903 98	DPML6X6/TW	DPML6X6/TW LED 40W/827-865	4,5	40	4000 lm





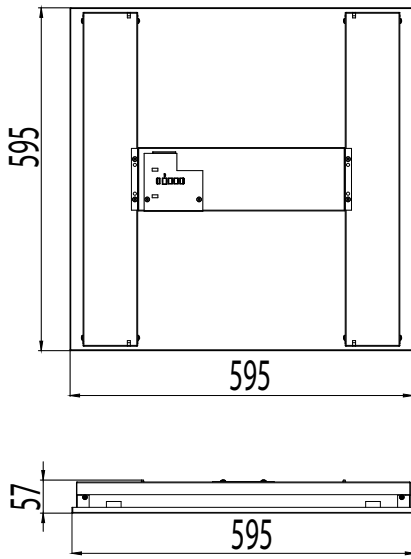
E number	Type	Product name	Kg	Connected load	Luminous flux
<b>Aamu 600x600 - 2 light sources closely spaced</b>					
-	DPML6X6N	DPML6X6N LED 34W/840	4,5	34	4000 lm
-	DPML6X6N/3K	DPML6X6N/3K LED 34W/830	4,5	34	4000 lm
<b>Aamu 600x600 DALI - 2 light sources closely spaced</b>					
-	DPML6X6NED	DPML6X6NED LED 34W/840 DALI	4,5	34	4000 lm
-	DPML6X6NED/3K	DPML6X6NED/3K LED 34W/830 DALI	4,5	34	4000 lm
<b>Aamu 600x600 with SmartOne - 2 light sources closely spaced</b>					
-	DPML6X6NAP	DPML6X6NAP LED 34W/840 AP	4,5	34	4000 lm
-	DPML6X6NAP/3K	DPML6X6NAP/3K LED 34W/830 AP	4,5	34	4000 lm
<b>Aamu 600x600 with SmartWay - sensor and control gear - 2 light sources closely spaced</b>					
-	DPML6X6NAA	DPML6X6NAA LED 34W/840 AA	4,5	34	4000 lm
-	DPML6X6NAA/3K	DPML6X6NAA/3K LED 34W/830 AA	4,5	34	4000 lm
<b>Aamu 600x600 Tunable White - 2 light sources closely spaced</b>					
-	DPML6X6N/TW	DPML6X6N/TW LED 40W/827-865	4,5	40	4000 lm
<b>Aamu 600x600 - 3 light sources</b>					
-	DPML6X6T	DPML6X6T LED 51W/840	5,3	51	6000 lm
-	DPML6X6T/3K	DPML6X6T/3K LED 51W/830	5,3	51	6000 lm
<b>Aamu 600x600 DALI - 3 light sources</b>					
-	DPML6X6TED	DPML6X6TED LED 51W/840 DALI	5,3	51	6000 lm
-	DPML6X6TED/3K	DPML6X6TED/3K LED 51W/830 DALI	5,3	51	6000 lm
<b>Aamu 600x600 with SmartOne - sensor and control gear - 3 light sources</b>					
-	DPML6X6TAP	DPML6X6TAP LED 51W/840 AP	5,3	51	6000 lm
-	DPML6X6TAP/3K	DPML6X6TAP/3K LED 51W/830 AP	5,3	51	6000 lm
<b>Aamu 600x600 with SmartWay - sensor and control gear - 3 light sources</b>					
-	DPML6X6TAA	DPML6X6TAA LED 51W/840 AA	5,3	51	6000 lm
-	DPML6X6TAA/3K	DPML6X6TAA/3K LED 51W/830 AA	5,3	51	6000 lm
<b>Aamu 600x600 Tunable White - 3 light sources</b>					
-	DPML6X6T/TW	DPML6X6T/TW LED 60W/827-865	5,3	60	6000 lm
<b>Aamu 600x600 - 4 light sources</b>					
-	DPML6X6Q	DPML6X6Q LED 68W/840	6,0	68	8000 lm
-	DPML6X6Q/3K	DPML6X6Q/3K LED 68W/830	6,0	68	8000 lm
<b>Aamu 600x600 DALI - 4 light sources</b>					
-	DPML6X6QED	DPML6X6QED LED 68W/840 DALI	6,0	68	8000 lm
-	DPML6X6QED/3K	DPML6X6QED/3K LED 68W/830 DALI	6,0	68	8000 lm
<b>Aamu 600x600 with SmartOne - sensor and control gear - 4 light sources</b>					
-	DPML6X6QAP	DPML6X6QAP LED 68W/840 AP	6,0	68	8000 lm
-	DPML6X6QAP/3K	DPML6X6QAP/3K LED 68W/830 AP	6,0	68	8000 lm
<b>Aamu 600x600 with SmartWay - sensor and control gear - 4 light sources</b>					
-	DPML6X6QAA	DPML6X6QAA LED 68W/840 AA	6,0	68	8000 lm
-	DPML6X6QAA/3K	DPML6X6QAA/3K LED 68W/830 AA	6,0	68	8000 lm
<b>Aamu accessories</b>					
42 606 18	DL6X6-K	DL6X6-K surface mounting frame, white	1,0	640	66 650
42 903 15	DPML-CSB	DPML mounting kit for plasterboard ceiling			
42 903 18	DPML-HTB	DPML mounting kit for concealed grid ceiling			



Linect connection as a standard (DALI)



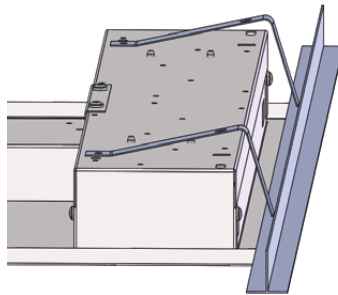
Special model with EnstoNET-connector



Mounting to the terminal block (DALI)



Linect EnstoNET-adaptor (DALI)



Mounting kit for concealed grid ceiling

Aamu can be installed as standard to T-list ceiling. Surface mount, plaster-board ceiling and concealed grid installation with accessories.



Surface mounting frame

# Aino

LED | T5



AI28M033

Aino is an elegant and stylish radiant LED or T5 luminaire for public premises. Luminaire can be surface- or suspension mounted. It can be used in various applications like offices, corridors and entrances.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## Dimming

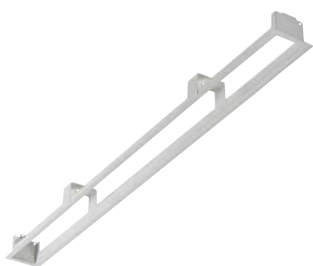
Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Light and beautiful office fixture to support general lighting.”



AIL14493



Recessed frame for T5 models



AI281093Y

### Structure

- › Body - white (RAL 9016) coated aluminium profile, grey AIH-models (RAL 9006) to be ordered separately
- › Reflector - gloss anodised aluminium (33) or ribbed frosted acrylate (93)
- › Models:  
Direct down light models  
Direct/indirect light models (Y), uplight ca. 10% (T5) and ca. 20% (LED), dust cover for the uplight openings - clear acrylate plate
- › LED down light models with frosted acrylate diffuser:  
Connected load and luminaire luminous flux, see table  
4000 K, Ra > 80, power factor 0,98 and 0,90 (DALI)  
Ambient temperature - 20 °C - + 30 °C  
LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C

### Control

- › Switch-Control (ES)
- › 1-10V (ELD)
- › DALI (ED), only T5 models

### Mounting

- › Wire suspension
- › Directly to the ceiling or on a lighting suspension rail with spring brackets included to the delivery. Please note! The connections inside the luminaire has to be done before installing the luminaire to the ceiling or to the lighting suspension rail.
- › Recess mounting with a separate recessed frame (T5-models)  
Recess hole dimensions = luminaire dimensions + 10 mm
- › -o- 3x1,5 mm<sup>2</sup> or 5x1,5 mm<sup>2</sup> (DALI), connection point at the end of the luminaire
- › AIRK-ramp mountind sets for direct or 90° ramp installation. Sets include an extension piece and fixing screws.
- › Mounting accessories to be ordered separately

### Made to order

- › With pull cord switch, with connection lead, with light source
- › Models equipped with integrated sensor
- › Ramp models
- › With grey colour (RAL 9006)
- › With luminaire integrated sensors. Check sensor specific availability from the Ensto Lighting product management.

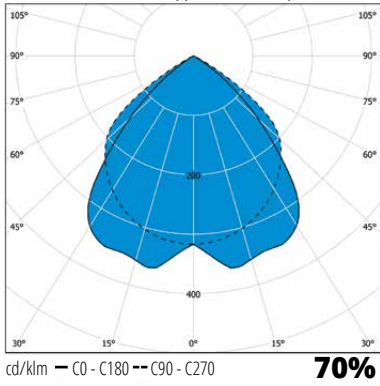
E number	Type	Product name	Output	Base	Kg	A	E	Luminous flux	Control
<b>Aino LED down light models - with frosted diffuser (93)</b>									
42 606 66	AIL14493	AIL14493 LED 22W/840 AC F	22W	LED	3,3	1170	948	2512 lm	
42 606 67	AIL14493ED	AIL14493ED LED 22W/840 AC F DA	22W	LED	3,3	1170	948	2512 lm	DALI
42 606 72	AIL15493	AIL15493 LED 26W/840 AC F	26W	LED	4,1	1450	1228	3007 lm	
42 606 73	AIL15493ED	AIL15493ED LED 26W/840 AC F DA	26W	LED	4,1	1450	1228	3007 lm	DALI
<b>Aino LED direct/indirect light models (Y), uplight ca. 20 % - with frosted diffuser (93)</b>									
42 606 69	AIL14493Y	AIL14493Y LED 27W/840 AC F	27W	LED	3,3	1170	948	3140 lm	
42 606 70	AIL14493YED	AIL14493YED LED 27W/840 AC DA	27W	LED	3,3	1170	948	3140 lm	DALI
42 606 75	AIL15493Y	AIL15493Y LED 30W/840 AC F	30W	LED	4,1	1450	1228	3643 lm	
42 606 76	AIL15493YED	AIL15493YED LED 30W/840 AC DA	30W	LED	4,1	1450	1228	3643 lm	DALI



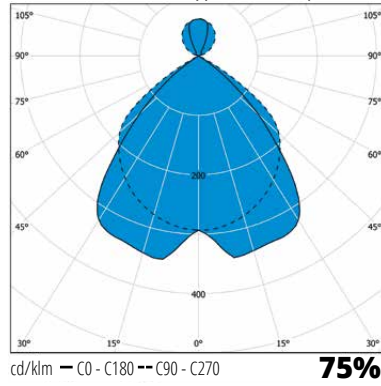
E number	Type	Product name	Output	Base	Kg	A	E	Luminous flux	Control
<b>Down light models - semi-glossed low luminance louvre (33)</b>									
42 076 67	AI281033	AI281033 T5 28W	28W	G5	3,5	1202	980		
42 076 68	AI281033ED	AI281033ED T5 28W DALI	28W	G5	3,5	1202	980		DALI
42 076 77	AI351033	AI351033 T5 35W	35W	G5	4,4	1502	1280		
42 076 78	AI351033ED	AI351033ED T5 35W DALI	35W	G5	4,4	1502	1280		DALI
42 076 87	AI491033	AI491033 T5 49W	49W	G5	4,4	1502	1280		
42 076 88	AI491033ED	AI491033ED T5 49W DALI	49W	G5	4,4	1502	1280		DALI
42 076 95	AI541033	AI541033 T5 54W	54W	G5	3,5	1202	980		
42 076 96	AI541033ED	AI541033ED T5 54W DALI	54W	G5	3,5	1202	980		DALI
<b>Direct/indirect light models, uplight ca. 10% - semi-glossed low luminance louvre (33)</b>									
42 076 61	AI281033Y	AI281033Y T5 28W	28W	G5	3,3	1202	980		
42 076 63	AI281033YED	AI281033YED T5 28W DALI	28W	G5	3,3	1202	980		DALI
42 076 73	AI351033Y	AI351033Y T5 35W	35W	G5	4,2	1502	1280		
42 076 74	AI351033YED	AI351033YED T5 35W DALI	35W	G5	4,2	1502	1280		DALI
42 076 83	AI491033Y	AI491033Y T5 49W	49W	G5	4,2	1502	1280		
42 076 84	AI491033YED	AI491033YED T5 49W DALI	49W	G5	4,2	1502	1280		DALI
42 076 91	AI541033Y	AI541033Y T5 54W	54W	G5	3,3	1202	980		
42 076 92	AI541033YED	AI541033YED T5 54W DALI	54W	G5	3,3	1202	980		DALI
<b>Down light models - with ribbed frosted diffuser (93)</b>									
42 604 09	AI281093	AI281093 T5 28W AC C	28W	G5	3,5	1202	980		
42 604 19	AI281093ED	AI281093ED T5 28W AC C DALI	28W	G5	3,5	1202	980		DALI
42 604 28	AI351093	AI351093 T5 35W AC C	35W	G5	4,4	1502	1280		
42 604 29	AI351093ED	AI351093ED T5 35W AC C DALI	35W	G5	4,4	1502	1280		DALI
42 604 41	AI491093	AI491093 T5 49W AC C	49W	G5	4,4	1502	1280		
42 604 43	AI491093ED	AI491093ED T5 49W AC C DALI	49W	G5	4,4	1502	1280		DALI
42 604 53	AI541093	AI541093 T5 54W AC C	54W	G5	3,5	1202	980		
42 604 55	AI541093ED	AI541093ED T5 54W AC C DALI	54W	G5	3,5	1202	980		DALI
<b>Direct/indirect light models, uplight ca 10% - with ribbed frosted diffuser (93)</b>									
42 604 23	AI281093Y	AI281093Y T5 28W AC C	28W	G5	3,3	1202	980		
42 604 25	AI281093YED	AI281093YED T5 28W AC C DALI	28W	G5	3,3	1202	980		DALI
42 604 35	AI351093Y	AI351093Y T5 35W AC C	35W	G5	4,2	1502	1280		
42 604 37	AI351093YED	AI351093YED T5 35W AC C DALI	35W	G5	4,2	1502	1280		DALI
42 604 47	AI491093Y	AI491093Y T5 49W AC C	49W	G5	4,2	1502	1280		
42 604 49	AI491093YED	AI491093YED T5 49W AC C DALI	49W	G5	4,2	1502	1280		DALI
42 604 59	AI541093Y	AI541093Y T5 54W AC C	54W	G5	3,3	1202	980		
42 604 61	AI541093YED	AI541093YED T5 54W AC C DALI	54W	G5	3,3	1202	980		DALI
<b>Aino mounting accessories</b>									
42 603 78	RVLX04	RVLX04 WIRE SUSP.SET 1.5M Ø31	susp. wire set 1,5 m with friction locks, diameter of the ceiling cup ø 31 mm						
42 603 84	UKAI28V-N	UKAI28V-N RECESSED FRAME 28/54W	recessed frame 28/54W white						
42 603 88	UKAI35V-N	UKAI35V-N RECESSED FRAME 35/49W	recessed frame 35/49W white						
42 605 54	AIRK	AIRK RAMP MOUNT. SET DIRECT	extension piece direct						
42 605 65	AIRKL90	AIRKL90 RAMP MOUNT. SET 90 DEGREES LEFT	angle extension piece left						
42 605 79	AIRKR90	AIRKR90 RAMP MOUNT. SET 90 DEGREES RIGHT	angle extension piece right						



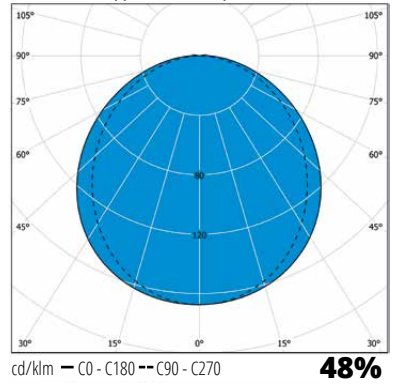
T5 down light models, louvre



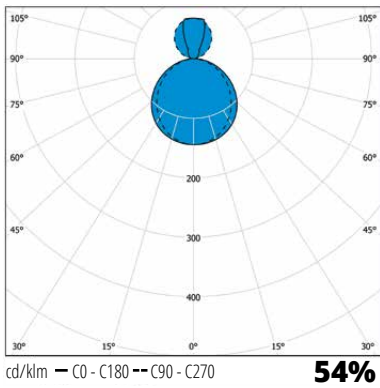
T5 direct/indirect light models, louvre



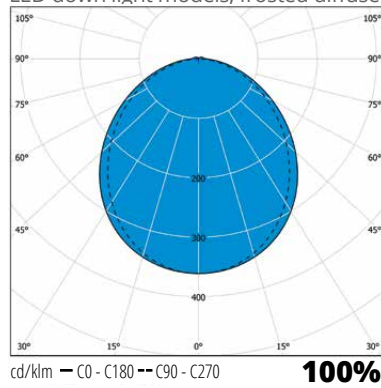
T5 down light models, frosted diffuser



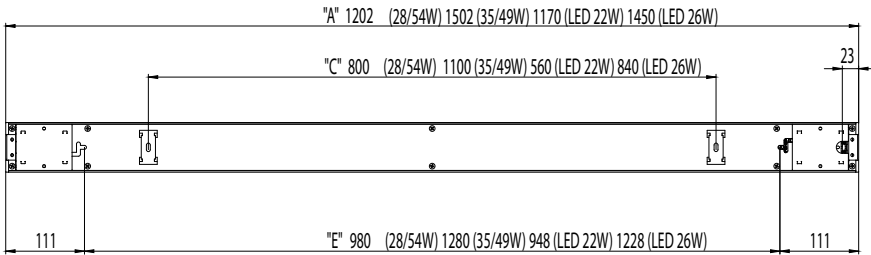
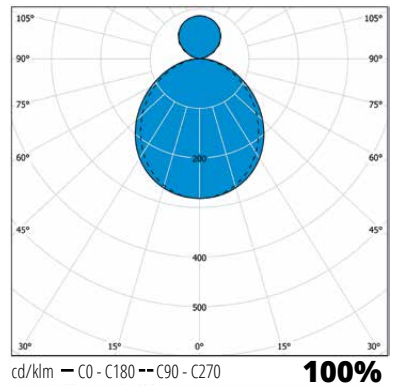
T5 direct/indirect light models, frosted diffuser



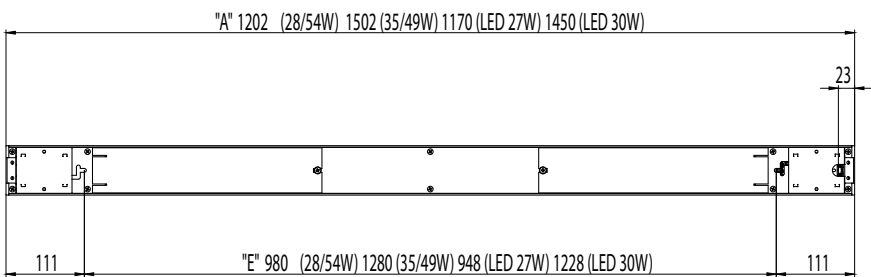
LED down light models, frosted diffuser



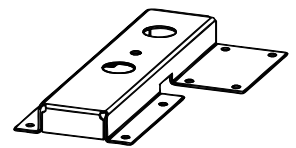
LED direct/indirect light models, frosted diffuser



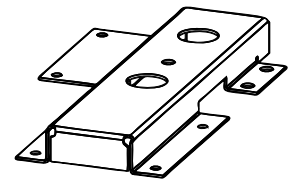
Aino with down light



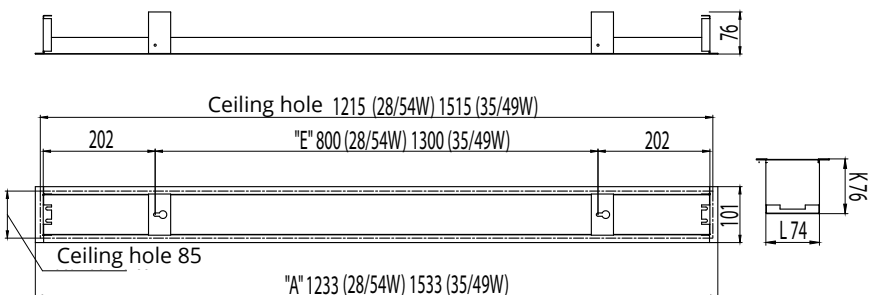
Aino with direct/indirect light



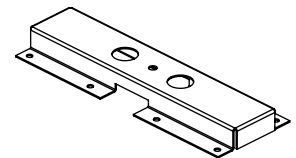
AIRKR90 right



AIRKL90 left



Aino recessed frame (T5-models)



AIRK direct

# Alpo

LED | T5



Alpo LED

Alpo is LED and T5 universal and working zone luminaire for offices and other public premises. The luminaire is suitable for direct and direct/ indirect lighting combination. In the product range can be found solutions for majority of office environments.

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Multi-purpose Alpo suites well for many locations.”



Alpo matte-anodised louvre (31)



Alpo with integrated sensor

## Structure

- › Body - white (RAL 9016) powder coated steel
- › Reflector - gloss anodised aluminium
- › Louvre anodised aluminium: low-luminance louvre matte-anodised (31) or low-luminance semigloss anodised (33)
- › Louvre is hinged and locked to the body
- › Models:
  - Direct light
  - Ambient light (Y=small uplight holes), uplight ca. 10% (T5) and 30% (LED)
  - Direct/indirect light (A= big uplight holes), uplight ca. 40% (T5)
  - Board luminaires (T5) - asymmetric reflector without louvre
- › Cable entry holes (2xø 21 mm) at both ends of the luminaire, made-to-order without cable entry holes at the luminaire ends, LED-models without cable entry holes
- › Multi-ballast models are equipped with control gear which identify the lamp power, powers 35/49W and 28/54W
- › LED-models with low-luminance louvre (semigloss anodised)
  - Connected load and luminaire luminous flux, see table
  - 4000 K, Ra > 80, power factor 0,98
  - Ambient temperature - 20 °C - + 25 °C
  - LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C

## Mounting

- › Directly to the ceiling or on a lighting suspension rail. Stand alone or continuous lines with ramp mounting kit RAMPPI/APLV (LED) or RAMPPI/APV (T5).
- › Wire suspension
- › Recess mounting with a separate recess frame
- › Recess hole = luminaire dimensions + 10 mm
- › -o- 5x2,5 mm<sup>2</sup> (Direct light and dimmable models)
- › -o- 3x2,5 mm<sup>2</sup> (Ambient and Direct/indirect light models)
- › Direct light models: connection point in the middle of the luminaire. Cable entry holes in the middle of the luminaire and next to the suspension point
- › Ambient and Direct/indirect light models: connection point at the end of the luminaire, next to the suspension point. Cable entry holes next to the suspension point.
- › Mounting accessories to be ordered separately

## Made to order

- › LED-models with 3000K colour temperature
- › Control:
  - Switch-Control (ES)
  - 1-10V (ELD), only T5 models
- › LED-models with tunable white (2700-6500 K)
- › With pull cord switch, connection lead, light source
- › With integrated sensor
- › With grey colour (RAL 9006)
- › With lighting track brackets
- › Alpo LED -versions to Helvar's Select the Weather solution
- › With luminaire integrated sensors. Check sensor specific availability from the Ensto Lighting product management.

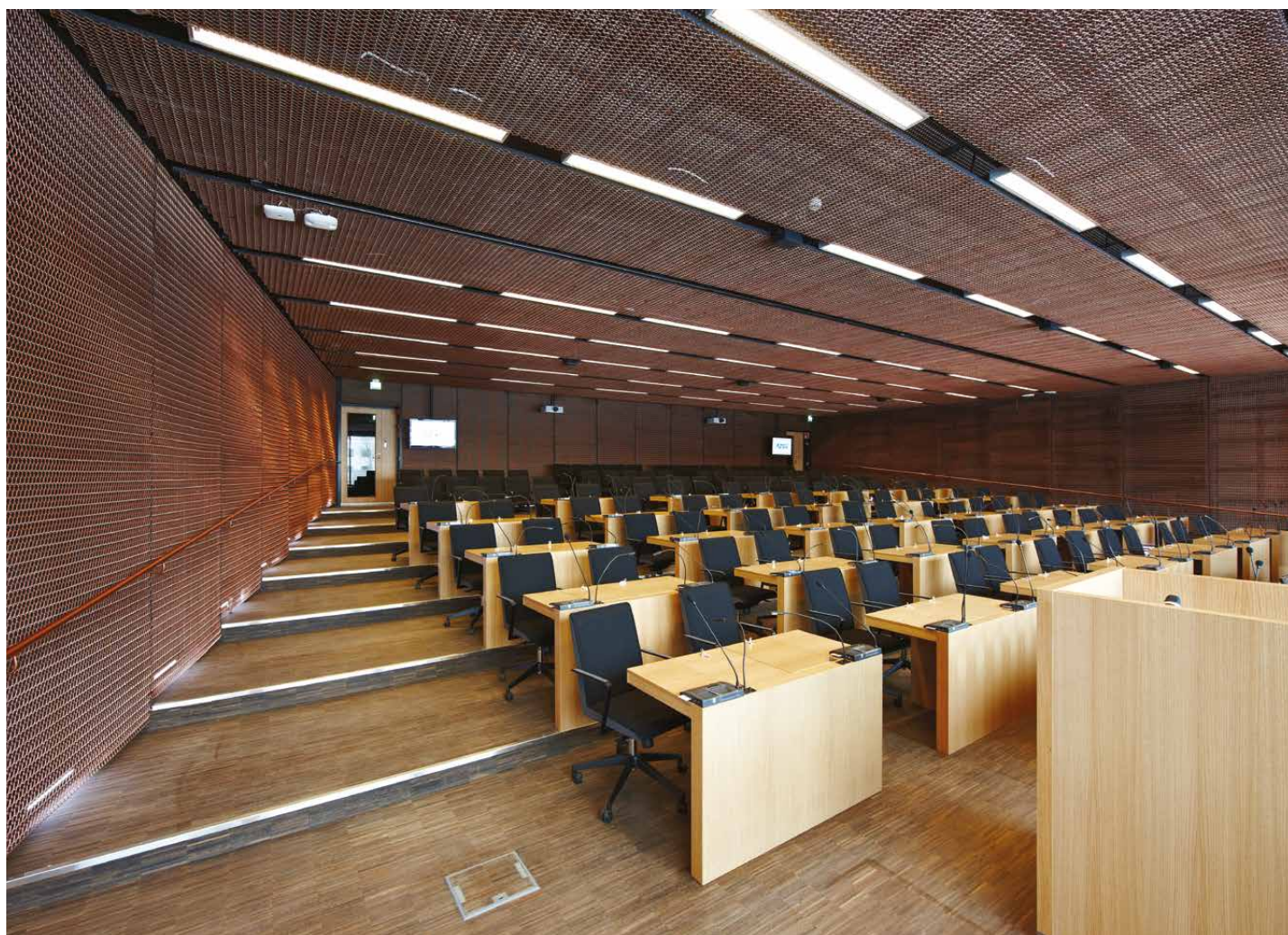


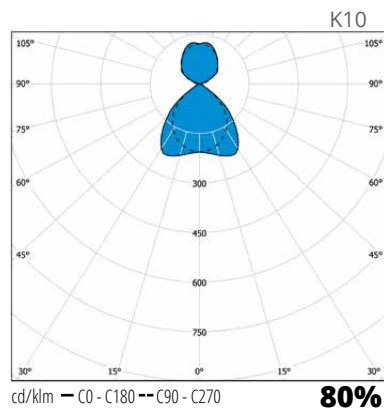
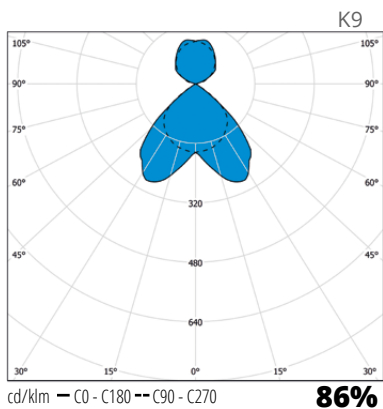
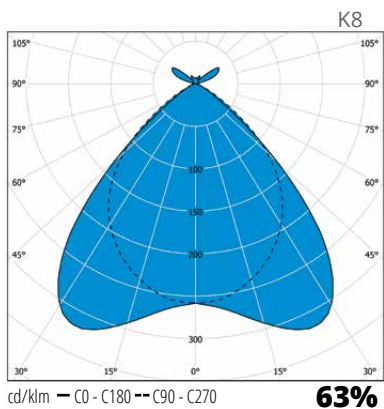
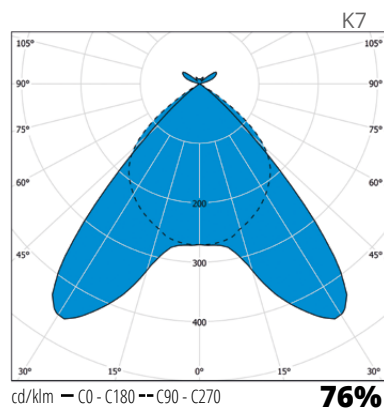
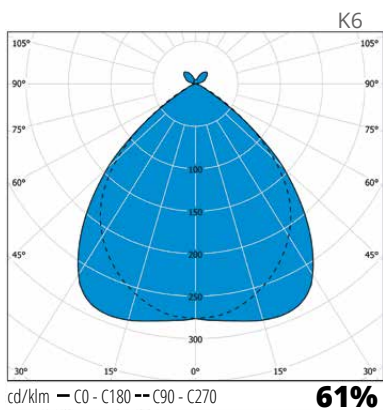
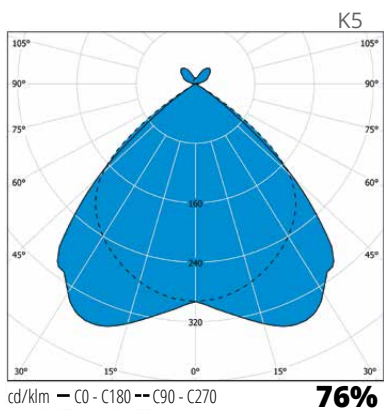
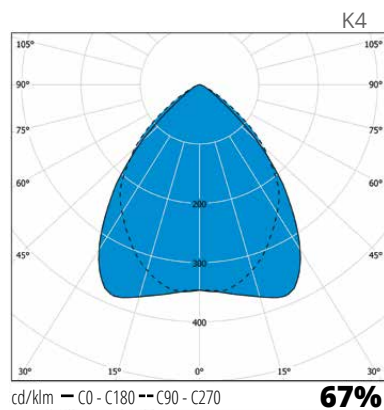
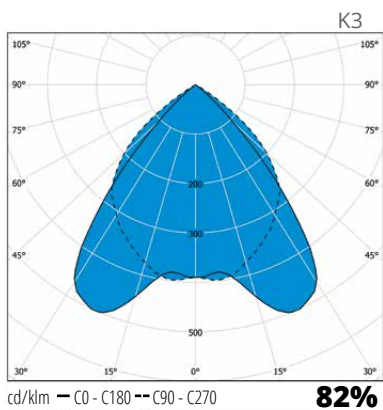
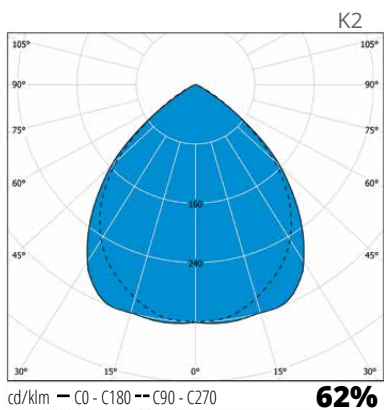
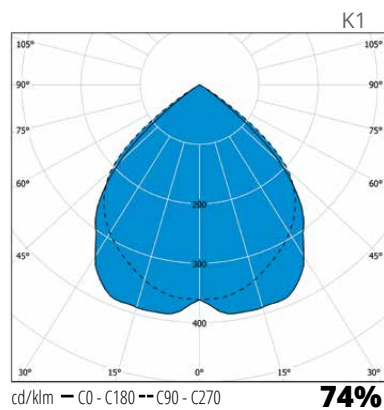
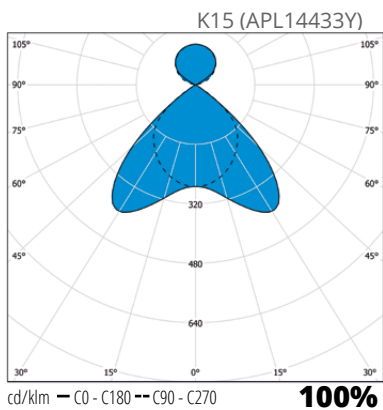
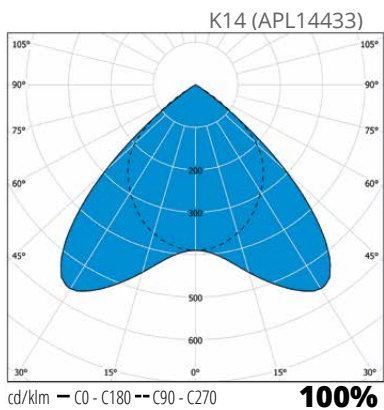
E number	Type	Product name	Output	Base	Kg	Light distribution	A	E	Luminous flux	Control
<b>Alpo LED direct light models, with low-luminance louvre (semi-gloss anodised)</b>										
42 606 78	APL14433	APL14433 LED 36W/840 WH	36W	LED	3,2	K14	1187	1100	3938 lm	
42 606 79	APL14433ED	APL14433ED LED 36W/840 WH DALI	36W	LED	3,2	K14	1187	1100	3938 lm	DALI
42 606 84	APL15433	APL15433 LED 44W/840 WH	44W	LED	3,9	K14	1487	1400	4919 lm	
42 606 85	APL15433ED	APL15433 LED 44W/840 WH DALI	44W	LED	3,9	K14	1487	1400	4919 lm	DALI
<b>Alpo LED ambient light models, uplight 30 % with low-luminance louvre (semi-gloss anodised)</b>										
42 606 81	APL14433Y	APL14433Y LED 48W/840 WH	48W	LED	3,2	K15	1187	1100	5586 lm	
42 606 82	APL14433YED	APL14433YED LED 48W/840 DALI	48W	LED	3,2	K15	1187	1100	5586 lm	DALI
42 606 87	APL15433Y	APL15433Y LED 61W/840 WH	61W	LED	3,9	K15	1487	1400	7110 lm	
42 606 88	APL15433YED	APL15433YED LED 61W/840 WH	61W	LED	3,9	K15	1487	1400	7110 lm	DALI
<b>Alpo LED SmartWay sensor luminaire</b>										
42 915 22	APL14433AA	APL14433AA LED 36W/840 WH AA	36W	LED	3,2	K14	1187	1100	3938 lm	SmartWay
42 915 26	APL14433YAA	APL14433YAA LED 48W/840 AA	48W	LED	3,2	K15	1187	1100	5586 lm	SmartWay
42 915 28	APL15433AA	APL15433AA LED 44W/840 WH AA	44W	LED	3,9	K14	1487	1400	4919 lm	SmartWay
42 915 29	APL15433YAA	APL15433YAA LED 60W/840 WH AA	60W	LED	3,9	K15	1487	1400	7110 lm	SmartWay
<b>Direct light models - low-luminance louvre (semi-gloss anodised)</b>										
42 617 19	AP281433	AP281433 T5 1X28W		G5	3,2	K3	1187	1100		
42 621 40	AP541433	AP541433 T5 1X54W		G5	3,2	K3	1187	1100		
42 617 20	AP351433	AP351433 T5 1X35W		G5	3,9	K3	1487	1400		
42 621 41	AP491433	AP491433 T5 1X49W		G5	3,9	K3	1487	1400		
42 617 21	AP282433	AP282433 T5 2X28W		G5	3,2	K1	1187	1100		
42 621 42	AP542433	AP542433 T5 2X54W		G5	3,2	K1	1187	1100		
42 617 22	AP352433	AP352433 T5 2X35W		G5	3,9	K1	1487	1400		
42 621 43	AP492433	AP492433 T5 2X49W		G5	3,9	K1	1487	1400		
42 603 01	AP281433ED	AP281433ED T5 1X28W DALI		G5	3,2	K3	1187	1100		DALI
42 603 19	AP541433ED	AP541433ED T5 1X54W DALI		G5	3,2	K3	1187	1100		DALI
42 604 98	AP351433ED	AP351433ED T5 1X35W DALI		G5	3,9	K3	1487	1400		DALI
42 603 13	AP491433ED	AP491433ED T5 1X49W DALI		G5	3,9	K3	1487	1400		DALI
42 076 29	AP282433ED	AP282433ED T5 2X28W DALI		G5	3,2	K1	1187	1100		DALI
42 603 33	AP542433ED	AP542433ED T5 2X54W DALI		G5	3,2	K1	1187	1100		DALI
42 603 07	AP352433ED	AP352433ED T5 2X35W DALI		G5	3,9	K1	1487	1400		DALI
42 076 35	AP492433ED	AP492433ED T5 2X49W DALI		G5	3,9	K1	1487	1400		DALI
<b>Direct light models - low-luminance louvre (matte-anodised)</b>										
42 617 15	AP281431	AP281431 T5 1X28W		G5	3,2	K4	1187	1100		
42 621 28	AP541431	AP541431 T5 1X54W		G5	3,2	K4	1187	1100		
42 617 16	AP351431	AP351431 T5 1X35W		G5	3,9	K4	1487	1400		
42 621 29	AP491431	AP491431 T5 1X49W		G5	3,9	K4	1487	1400		
42 617 17	AP282431	AP282431 T5 2X28W		G5	3,2	K2	1187	1100		
42 621 30	AP542431	AP542431 T5 2X54W		G5	3,2	K2	1187	1100		
42 617 18	AP352431	AP352431 T5 2X35W		G5	3,9	K2	1487	1400		
42 621 31	AP492431	AP492431 T5 2X49W		G5	3,9	K2	1487	1400		
<b>Direct light models - low-luminance louvre (matte-anodised) multi ballast - stock models</b>										
42 076 54	AP28M1431	AP28M1431 T5 1X28/54W T5		G5	3,2	K4	1187	1100		
42 076 55	AP28M2431	AP28M2431 T5 2X28/54W T5		G5	3,2	K2	1187	1100		
42 076 56	AP35M1431	AP35M1431 T5 1X35/49W T5		G5	3,9	K4	1487	1400		
42 076 57	AP35M2431	AP35M2431 T5 2X35/49W T5		G5	3,9	K2	1487	1400		
<b>Direct light models - low-luminance louvre (matte-anodised) 1-10V stock models</b>										
42 076 47	AP282431ELD	AP282431ELD T5 2X28W 1-10V		G5	3,2	K2	1187	1100		
42 076 51	AP542431ELD	AP542431ELD T5 2X54W 1-10V		G5	3,2	K2	1187	1100		
42 076 48	AP352431ELD	AP352431ELD T5 2X35W 1-10V		G5	3,4	K2	1487	1400		
42 076 50	AP492431ELD	AP492431ELD T5 2X49W 1-10V		G5	3,4	K2	1487	1400		

E number	Type	Product name	Output	Base	Kg	Light distribution	A	E	Luminous flux	Control
<b>Ambient light models (no base reflector) - low-luminance louvre (semi-gloss anodised), uplight ca 10%</b>										
42 617 61	AP281433Y	AP281433Y T5 1X28W		G5	3,2	K7	1187	1100		
42 621 44	AP541433Y	AP541433Y T5 1X54W		G5	3,2	K7	1187	1100		
42 617 62	AP351433Y	AP351433Y T5 1X35W		G5	3,9	K7	1487	1400		
42 621 45	AP491433Y	AP491433Y T5 1X49W		G5	3,9	K7	1487	1400		
42 617 63	AP282433Y	AP282433Y T5 2X28W		G5	3,2	K5	1187	1100		
42 621 46	AP542433Y	AP542433Y T5 2X54W		G5	3,2	K5	1187	1100		
42 617 64	AP352433Y	AP352433Y T5 2X35W		G5	3,9	K5	1487	1400		
42 621 47	AP492433Y	AP492433Y T5 2X49W		G5	3,9	K5	1487	1400		
42 604 92	AP281433YED	AP281433YED T5 1X28W DALI		G5	3,2	K7	1187	1100		DALI
42 605 24	AP541433YED	AP541433YED T5 1X54W DALI		G5	3,2	K7	1187	1100		DALI
<b>Ambient light models (no base reflector) - low-luminance louvre (semi-gloss anodised), uplight ca 10%</b>										
42 605 00	AP351433YED	AP351433YED T5 1X35W DALI		G5	3,9	K7	1487	1400		DALI
42 605 09	AP491433YED	AP491433YED T5 1X49W DALI		G5	3,9	K7	1487	1400		DALI
42 604 94	AP282433YED	AP282433YED T5 2X28W DALI		G5	3,2	K5	1187	1100		DALI
42 605 28	AP542433YED	AP542433YED T5 2X54W DALI		G5	3,2	K5	1187	1100		DALI
42 605 06	AP352433YED	AP352433YED T5 2X35W DALI		G5	3,9	K5	1487	1400		DALI
42 605 22	AP492433YED	AP492433YED T5 2X49W DALI		G5	3,9	K5	1487	1400		DALI
<b>Ambient light models (no base reflector) - low-luminance louvre (matte-anodised), uplight ca 10%</b>										
42 617 65	AP281431Y	AP281431Y T5 1X28W		G5	3,2	K8	1187	1100		
42 621 32	AP541431Y	AP541431Y T5 1X54W		G5	3,2	K8	1187	1100		
42 617 66	AP351431Y	AP351431Y T5 1X35W		G5	3,9	K8	1487	1400		
42 621 33	AP491431Y	AP491431Y T5 1X49W		G5	3,9	K8	1487	1400		
42 617 67	AP282431Y	AP282431Y T5 2X28W		G5	3,2	K6	1187	1100		
42 621 34	AP542431Y	AP542431Y T5 2X54W		G5	3,2	K6	1187	1100		
42 617 68	AP352431Y	AP352431Y T5 2X35W		G5	3,9	K6	1487	1400		
42 621 35	AP492431Y	AP492431Y T5 2X49W		G5	3,9	K6	1487	1400		
<b>Direct/indirect models (no base reflector) - low-luminance louvre (semi-gloss anodised), uplight ca 40%</b>										
42 617 27	AP281033A	AP281033A T5 1X28W		G5	3,1	K11	1187	1100		
42 621 48	AP541033A	AP541033A T5 1X54W		G5	3,1	K11	1187	1100		
42 617 28	AP351033A	AP351033A T5 1X35W		G5	3,8	K11	1487	1400		
42 621 49	AP491033A	AP491033A T5 1X49W		G5	3,8	K11	1487	1400		
42 617 29	AP282033A	AP282033A T5 2X28W		G5	3,1	K9	1187	1100		
42 621 50	AP542033A	AP542033A T5 2X54W		G5	3,1	K9	1187	1100		
42 617 30	AP352033A	AP352033A T5 2X35W		G5	3,8	K9	1487	1400		
42 621 51	AP492033A	AP492033A T5 2X49W		G5	3,8	K9	1487	1400		
42 076 99	AP281033AED	AP281033AED T5 1X28W DALI		G5	3,1	K11	1187	1100		DALI
42 603 15	AP541033AED	AP541033AED T5 1X54W DALI		G5	3,1	K11	1187	1100		DALI
42 603 04	AP351033AED	AP351033AED T5 1X35W DALI		G5	3,8	K11	1487	1400		DALI
42 603 09	AP491033AED	AP491033AED T5 1X49W DALI		G5	3,8	K11	1487	1400		DALI
42 076 22	AP282033AED	AP282033AED T5 2X28W DALI		G5	3,1	K9	1187	1100		DALI
42 603 29	AP542033AED	AP542033AED T5 2X54W DALI		G5	3,1	K9	1187	1100		DALI
42 603 06	AP352033AED	AP352033AED T5 2X35W DALI		G5	3,8	K9	1487	1400		DALI
42 076 32	AP492033AED	AP492033AED T5 2X49W DALI		G5	3,8	K9	1487	1400		DALI
<b>Direct/indirect models (no base reflector) - low-luminance louvre (matte anodised), uplight ca 40%</b>										
42 617 23	AP281031A	AP281031A T5 1X28W		G5	3,1	K12	1187	1100		
42 621 36	AP541031A	AP541031A T5 1X54W		G5	3,1	K12	1187	1100		
42 617 24	AP351031A	AP351031A T5 1X35W		G5	3,8	K12	1487	1400		
42 621 37	AP491031A	AP491031A T5 1X49W		G5	3,8	K12	1487	1400		
42 617 25	AP282031A	AP282031A T5 2X28W		G5	3,1	K10	1187	1100		
42 621 38	AP542031A	AP542031A T5 2X54W		G5	3,1	K10	1187	1100		
42 617 26	AP352031A	AP352031A T5 2X35W		G5	3,8	K10	1487	1400		
42 621 39	AP492031A	AP492031A T5 2X49W		G5	3,8	K10	1487	1400		

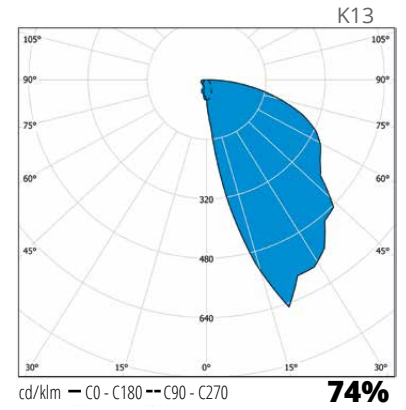
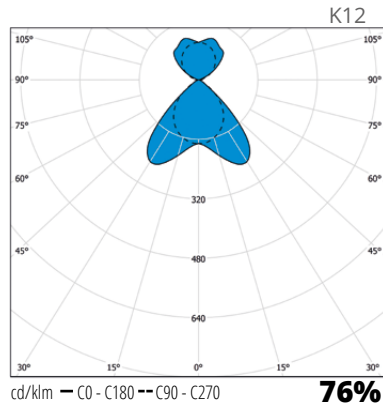
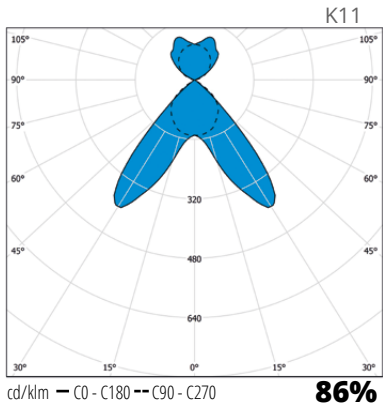


E number	Type	Product name	Output	Base	Kg	Light distribution	A	E	Luminous flux	Control
<b>Board luminaires</b>										
42 638 55	AP281700	AP281700 T5 1X28W VA		G5	3,2	K13	1187	1100		
42 638 56	AP351700	AP351700 T5 1X35W VA		G5	3,9	K13	1487	1400		
42 638 57	AP491700	AP491700 T5 1X49W VA		G5	3,9	K13	1487	1400		
42 076 46	AP281700ED	AP281700ED T5 1X28W DALI		G5	3,2	K13	1187	1100		DALI
42 605 04	AP351700ED	AP351700ED T5 1X35W DALI		G5	3,9	K13	1487	1400		DALI
42 076 49	AP491700ED	AP491700ED T5 1X49W DALI		G5	3,9	K13	1487	1400		DALI
<b>Mounting accessories</b>										
42 660 60	RVLX01	RVLX01 WIRE SUSP.SET 1.5M	susp. wire set 1,5 m with friction locks							
42 660 61	RVLX02	RVLX02 WIRE SUSP.SET 1.5M Ø31	susp. wire set 1,5 m with friction locks, small ceiling cup ø 31 mm							
42 660 62	RVLX03	RVLX03 WIRE SUSP.SET 1.5M Ø67	susp. wire set 1,5 m with friction locks, large ceiling cup ø 67 mm							
42 661 08	RVLXT25	RVLXT25 WIRE SUSP.SET T-FRAME	susp. wire set with friction locks for T-frame							
42 653 63	SK3	SK3 WALL MOUNT PAIR	wall bracket pair for board luminaire, white							
42 617 53	UKAP28V-N	UKAP28V RECESSED FRAME 28/54W	recessed frame 28/54W, white							
42 617 54	UKAP35V-N	UKAP35V RECESSED FRAME 35/49W	recessed frame 35/49W, white							
42 617 55	UKAP28H	UKAP36V-N RECESSED FRAME 36W	recessed frame 36W, white							
42 617 56	UKAP35H	UKAP58V-N RECESSED FRAME 58W	recessed frame 58W, white							
<b>Ramp mounting accessories</b>										
42 617 58	RAMPPI/APV	RAMPPI/APV RAMP MOUNTING KIT	ramp mounting kit, white							
42 603 34	RAMPPI/APLV	RAMPPI/APLV RAMP MOUNTING KIT LED	ramp mounting kit, white							







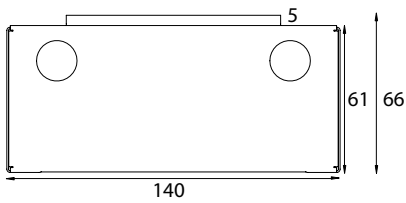


RAMPP/APV

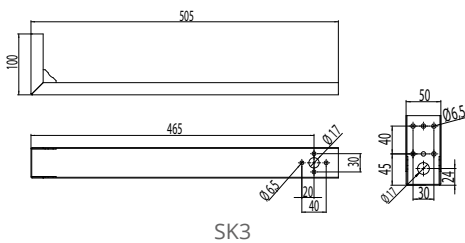
RAMPP/APLV



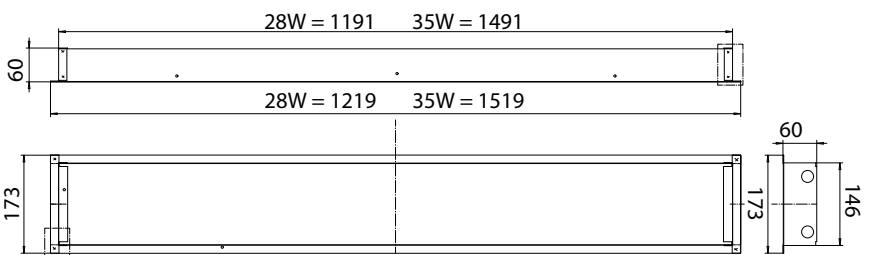
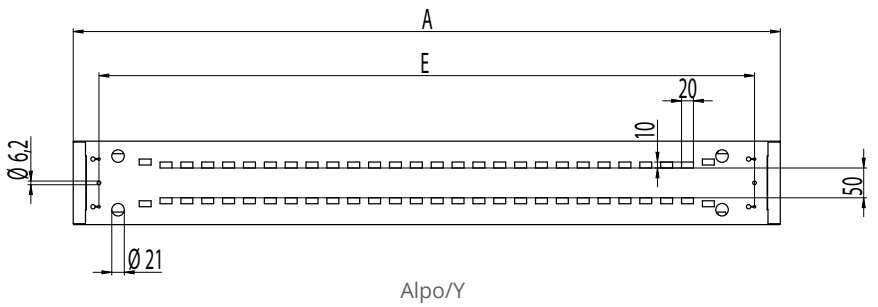
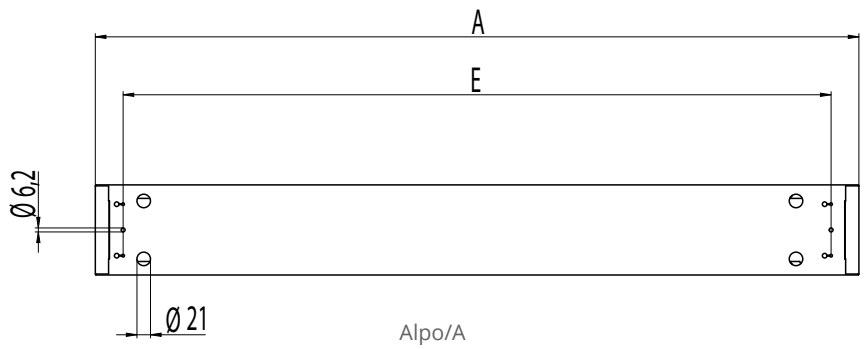
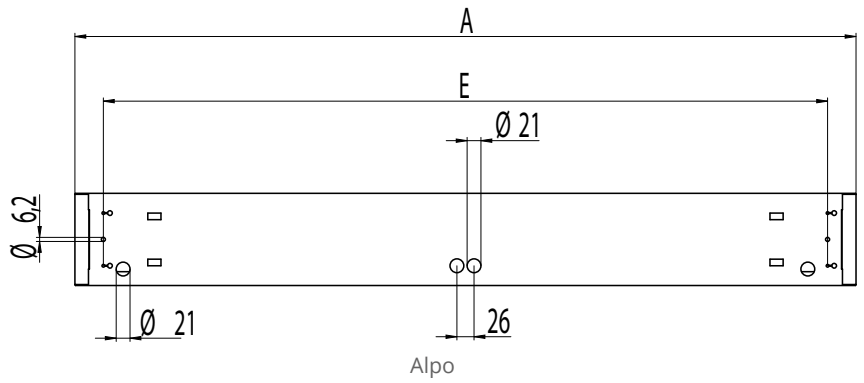
RVLX02



End (LED-models without cable entry holes)



SK3



Recess frame needs to be mounted to the luminaire before luminaire installation.



# Diana Flat LED

## LED



Diana Flat LED

Diana Flat LED is slim modular luminaire series for general lighting in offices and commercial premises. Edge-lit technology combined with opal diffuser gives finished looks in even most demanding places.

## Optics

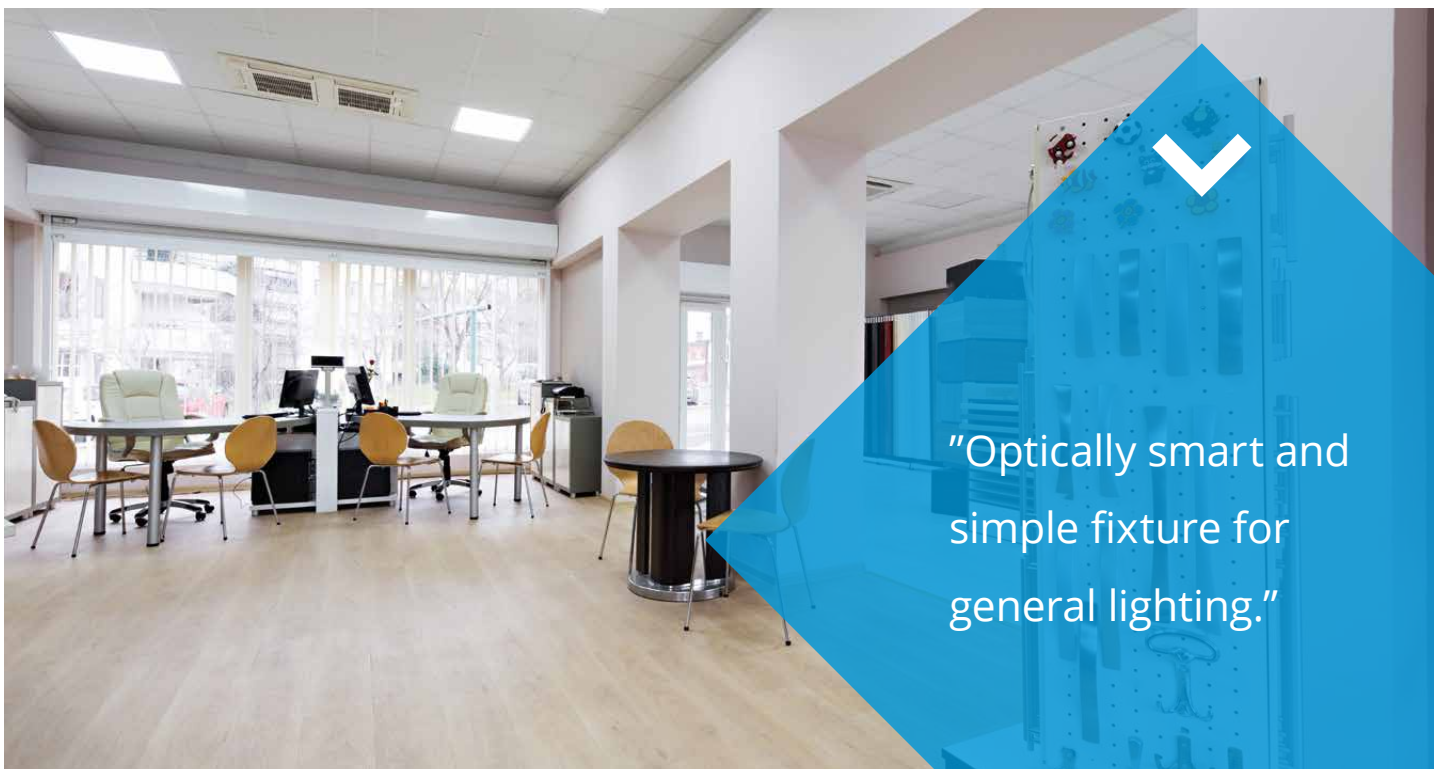
Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



“Optically smart and simple fixture for general lighting.”





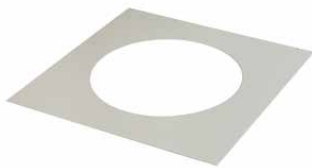
Diana Flat LED 600x600 mm



Diana Flat LED surface mounting frame



RVDL3X12 suspension kit



DL6X6-R400

### Structure

- ▶ Body white powder-coated aluminium
- ▶ Opal diffuser (O) or micro-prismatic optics (M)
- ▶ CL2, 1-10V-models CL1
- ▶ Luminaire IP44 from bottom side, IP20 from top side
- ▶ UGR < 19 with micro-prismatic models
- ▶ 300x300 mm recessed frame and fastening spring brackets
- ▶ Range:
  - 600x600 mm and 300x1200 mm with opal diffuser or with micro-prismatic optics
  - 300x300 mm with opal diffuser
- Ambient temperature + 25 °C
- LED-module lifespan:
  - 600x600- and 300x1200-models: 55 000 h L80B50, 85 000 h L70B50, T<sub>a</sub>=25 °C
  - 300x300-models: 50 000 h L70B50, T<sub>a</sub>=25 °C

### Mounting

- ▶ To the T-list ceiling (600x600 mm and 300x1200 mm) and recess mounting hole (300x300 mm)
- ▶ Surface mounting (600x600 mm and 300x1200 mm) with separate surface mounting frame
- ▶ To solid ceiling (600x600 mm and 300x1200 mm) with separate frame
- ▶ Suspension mounting with separate suspension mounting kit 600x600 mm and 300x1200 mm, suspension measure max. 1500 mm
- ▶ -o- 3x2,5 mm<sup>2</sup> and 5x2,5 mm<sup>2</sup> (DALI)
- ▶ -o 5x1,5 mm<sup>2</sup> (DL3X3ED)
- ▶ Power source can be placed on the top of the panel or beside it

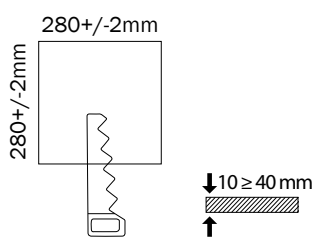
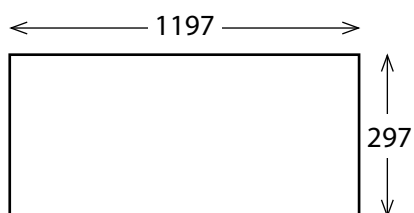
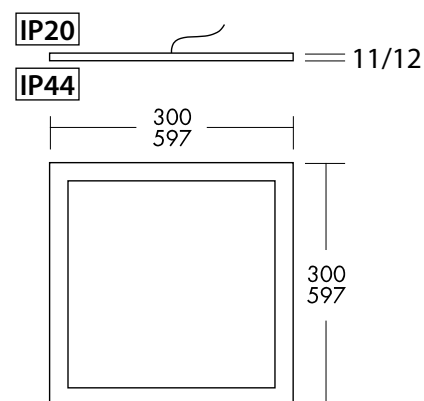
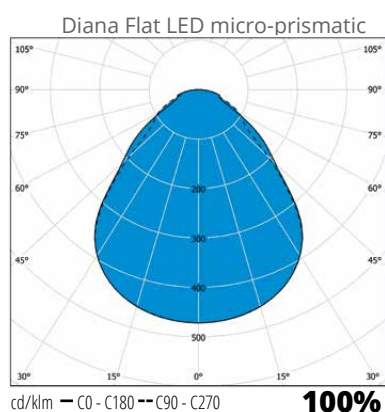
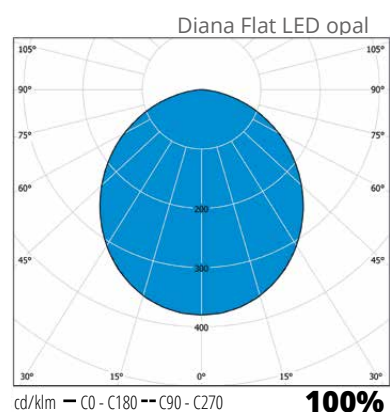
### Made to order

- ▶ Mounting kit for concealed grid ceiling
- ▶ Surface mounting frame DL3X12-K (300x1200 mm) and DL3X3-K (300x300 mm)
- ▶ DL3X12O and DL3X12M (300x1200 mm) 3000 K-models
- ▶ Diana Flat LED -versions to Helvar's Select the Weather solution
- ▶ With luminaire integrated sensors. Check sensor specific availability from the Ensto Lighting product management.
- ▶ Optimized luminous flux versions to projects
- ▶ DL6X6O and DL6X6M (600x600 mm) 4000 K, CRI > 90

E number	Type	Product name	Kg	Length	Height	Width	Luminous flux
<b>Diana Flat LED 600x600, opal diffuser</b>							
42 607 44	DL6X6O	DL6X6O 40W/840 LED O AC	3,6	597	11	597	4600 lm
42 603 22	DL6X6O22	DL6X6O22 21W/840 LED O AC	3,6	597	11	597	2300 lm
42 603 23	DL6X6O30	DL6X6O30 28W/840 LED O AC	3,6	597	11	597	3000 lm
42 607 59	DL6X6OED	DL6X6OED 40W/840 LED O AC DALI	3,6	597	11	597	4600 lm
42 607 64	DL6X6OELD	DL6X6OELD 40W/840 LED AC 1-10V	3,6	597	11	597	4600 lm
42 607 51	DL6X6O/3K	DL6X6O/3K 40W/830 LED O AC	3,6	597	11	597	4200 lm
42 607 62	DL6X6OED/3K	DL6X6OED/3K 40W/830 O AC DALI	3,6	597	11	597	4200 lm
42 607 65	DL6X6OELD/3K	DL6X6OELD/3K 40W/830 O AC 1-10	3,6	597	11	597	4200 lm
<b>Diana Flat LED 600x600, micro-prismatic optics</b>							
42 607 19	DL6X6M	DL6X6M 40W/840 LED MP AC	3,6	597	11	597	4500 lm
42 603 20	DL6X6M22	DL6X6M22 22W/840 LED MP AC	3,6	597	11	597	2300 lm
42 603 21	DL6X6M30	DL6X6M30 28W/840 LED MP AC	3,6	597	11	597	3000 lm
42 607 29	DL6X6MED	DL6X6MED 40W/840 LED MP AC DA	3,6	597	11	597	4500 lm
42 607 37	DL6X6MELD	DL6X6MELD 40W/840 LED AC 1-10V	3,6	597	11	597	4500 lm
42 607 20	DL6X6M/3K	DL6X6M/3K 40W/830 LED MP AC	3,6	597	11	597	4000 lm
42 607 34	DL6X6MED/3K	DL6X6MED/3K 40W/830 MP AC DALI	3,6	597	11	597	4000 lm
42 607 38	DL6X6MELD/3K	DL6X6MELD/3K 40W/830 MP 1-10V	3,6	597	11	597	4000 lm



E number	Type	Product name	Kg	Length	Height	Width	Luminous flux
<b>Diana Flat LED 600x600, opal diffuser (O) or micro-prismatic optics (M), tunable white 3000-6000 K</b>							
42 607 55	DL6X6O/TW	DL6X6O 40W/830-60 LED O AC	3,6	597	12	597	3500 lm
42 607 23	DL6X6M/TW	DL6X6M 40W/830-60 LED MP AC	3,6	597	12	597	3500 lm
<b>Diana Flat LED 300x1200, opal diffuser</b>							
42 607 09	DL3X12O	DL3X12O 34W/840 LED O AC	4,6	1197	12	297	3400 lm
42 603 18	DL3X12O28	DL3X12O28 26W/840 LED O AC	4,6	1197	12	297	2800 lm
42 607 16	DL3X12OED	DL3X12OED 34W/840 LED O AC DA	4,6	1197	12	297	3400 lm
42 607 17	DL3X12OELD	DL3X12OELD 34W/840 LED AC 1-10V	4,6	1197	12	297	3400 lm
<b>Diana Flat LED 300x1200, micro-prismatic optics</b>							
42 606 93	DL3X12M	DL3X12M 40W/840 LED MP AC	4,6	1197	12	297	4300 lm
42 603 17	DL3X12M28	DL3X12M28 25W/840 LED O AC	4,6	1197	12	297	2800 lm
42 607 06	DL3X12MED	DL3X12MED 40W/840 LED MP AC DALI	4,6	1197	12	297	4300 lm
42 607 08	DL3X12MELD	DL3X12MELD 40W/840 LED AC 1-10V	4,6	1197	12	297	4300 lm
<b>Diana Flat LED 300x300, opal diffuser, spring brackets</b>							
42 606 48	DL3X3	DL3X3 14W/840 LED O AC	1,5	300	12	300	1100 lm
42 606 51	DL3X3ED	DL3X3ED 14W/840 LED O AC DALI	1,5	300	12	300	1100 lm
42 606 54	DL3X3ELD	DL3X3ELD 14W/840 O AC 1-10V	1,5	300	12	300	1100 lm
42 606 49	DL3X3/3K	DL3X3/3K 14W/830 LED O AC	1,5	300	12	300	1000 lm
42 606 52	DL3X3ED/3K	DL3X3ED/3K 14W/830 O AC DALI	1,5	300	12	300	1000 lm
42 606 55	DL3X3ELD/3K	DL3X3ELD/3K 14W/830 O AC 1-10V	1,5	300	12	300	1000 lm
<b>Diana Flat LED accessories</b>							
42 603 32	DL6X6-KM	DL6X6-KM surface mounting frame, white	2,4	605	51	650	
42 606 61	DL6X6-LK	DL6X6-LK mounting frame for solid ceilings	0,2	637	66	650	
42 606 64	RVDL6X6	RVDL6X6 suspension kit	0,2	140			
42 606 63	RVDL3X12	RVDL3X12 suspension kit	0,3	140			



Recess hole (300 x 300mm)



Diana suites well for many different premises. Optical solutions like microprism and Tunable White will give more options when thinking about special variations in your project.





# Tivoli

LED



TIV100

Tivoli is a cost-effective downlight series for public premises. Three different body sizes with faceted reflectors offer a classy result in every project.



"Tivoli with three size options to fit your project."





TIV150



TIV200

### Structure

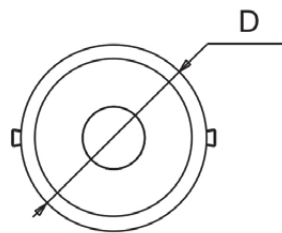
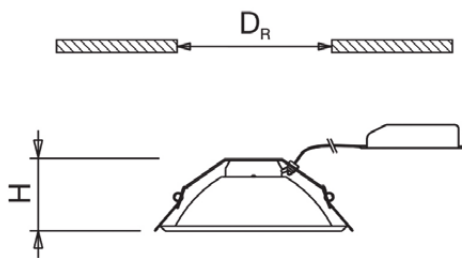
- › Body satin finished aluminium
- › Decor ring made of white aluminium
- › IP20/IP44
- › Connected load and luminaire luminous flux, see table
- › LED-luminaire lifetime 50 000 h (L80B50)

### Mounting

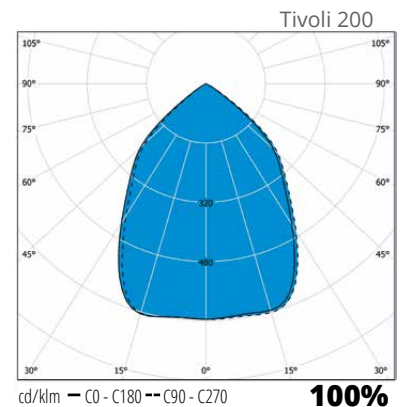
- › Recess mounting with integrated spring brackets
- › Dimensions of luminaire and ceiling cut-out, see table
- › TIV100 basic models -o 3x2,5 mm<sup>2</sup>
- › TIV100 DALI-models -o 3x2,5 mm<sup>2</sup>
- › Other basic models -o- 3x2,5 mm<sup>2</sup>
- › Other DALI-models -o- 5x2,5 mm<sup>2</sup>
- › Ceiling thickness 1-25 mm

### Made to order

- › Optimized luminous flux versions to projects



	H	D	D <sub>R</sub>
TIV100	64	133	114
TIV150	75	183	155
TIV200	89	233	205



E number	Type	Product name	Connected load	Kg	Diameter	Luminous flux	Control
<b>Tivoli LED</b>							
42 076 07	TIV100	TIV100 IP44 11W/840	11W	0,3	100	1000 lm	
42 076 08	TIV100/3K	TIV100/3K IP44 11W/830	11W	0,3	100	900 lm	
42 076 09	TIV150	TIV150 IP44 15W/840	15W	0,4	150	1500 lm	
42 076 10	TIV150/3K	TIV150/3K IP44 15W/830	15W	0,4	150	1400 lm	
42 076 11	TIV200	TIV200 IP44 21W/840	21W	0,5	200	2200 lm	
42 076 12	TIV200/3K	TIV200/3K IP44 21W/830	21W	0,5	200	2000 lm	
<b>Tivoli LED DALI</b>							
42 076 13	TIV100ED	TIV100ED IP44 11W/840 DA	11W	0,3	100	1000 lm	DALI
42 076 14	TIV100ED/3K	TIV100ED/3K IP44 11W/830 DA	11W	0,3	100	900 lm	DALI
42 076 15	TIV150ED	TIV150ED IP44 15W/840 DA	15W	0,4	150	1500 lm	DALI
42 076 17	TIV150ED/3K	TIV150ED/3K IP44 15W/830 DA	15W	0,4	150	1400 lm	DALI
42 076 18	TIV200ED	TIV200ED IP44 21W/840 DA	21W	0,5	200	2200 lm	DALI
42 076 19	TIV200ED/3K	TIV200ED/3K IP44 21W/830 DA	21W	0,5	200	2000 lm	DALI



# Optima

LED



Optima is a powerful downlight series with long lifetime for public premises. The wide range guarantees optimal illumination for every project. The deep satin finished reflector offers many possibilities to create low glare general lighting.





### Structure

- › Body satin finished aluminium
- › Decor ring made of white steel
- › Heat sink made of aluminium profile
- › IP20
- › Connected load and luminaire luminous flux, see table
- › LED-luminaire lifetime 50 000 h (L80B10)

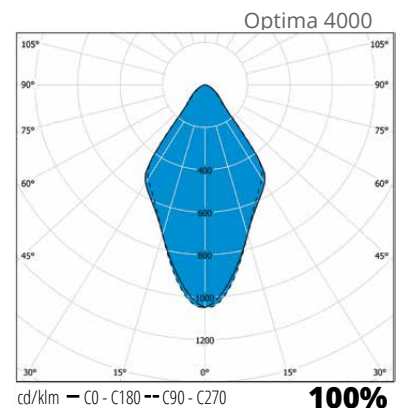
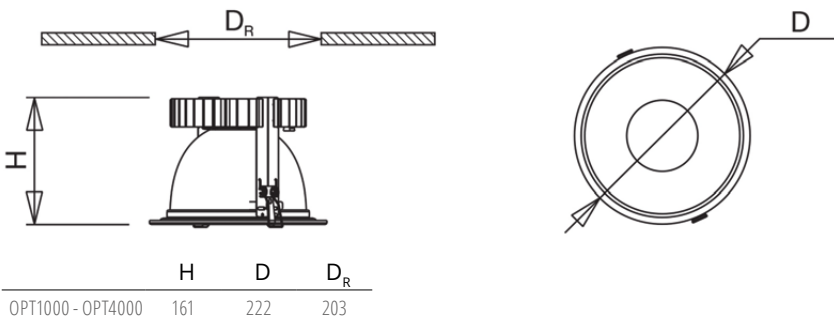
### Made to order

- › Optimized luminous flux versions to projects
- › Clear or frosted decor glass (IP44)



### Mounting

- › Recess mounting with integrated spring brackets
- › Dimensions of ceiling cut-out 203 mm
- › Basic models -o- 3x2,5 mm<sup>2</sup>
- › DALI models -o- 5x2,5 mm<sup>2</sup>
- › Minimum clearance above luminaire 150 mm
- › Ceiling thickness 1-27 mm



E number	Type	Product name	Connected load	Kg	Luminous flux	Additional information
<b>Optima LED</b>						
42 076 25	OPT2000	OPT2000 21W/840 LED	21W	1,2	2100 lm	
42 076 26	OPT2000/3K	OPT2000/3K 21W/830 LED	21W	1,2	1900 lm	
42 076 62	OPT3000	OPT3000 29W/840 LED	29W	1,2	2900 lm	
42 076 65	OPT3000/3K	OPT3000/3K 29W/830 LED	29W	1,2	2700 lm	
42 603 00	OPT4000	OPT4000 41W/840 LED	41W	1,2	4000 lm	
42 603 02	OPT4000/3K	OPT4000/3K 41W/830 LED	41W	1,2	3900 lm	
<b>Optima LED DALI</b>						
42 603 08	OPT2000ED	OPT2000ED 21W/840 LED DA	21W	1,2	2100 lm	DALI
42 603 10	OPT2000ED/3K	OPT2000ED/3K 21W/830 LED DA	21W	1,2	1900 lm	DALI
42 603 11	OPT3000ED	OPT3000ED 29W/840 LED DA	29W	1,2	2900 lm	DALI
42 603 12	OPT3000ED/3K	OPT3000ED/3K 29W/830 LED DA	29W	1,2	2700 lm	DALI
42 603 14	OPT4000ED	OPT4000ED 41W/840 LED DA	41W	1,2	4000 lm	DALI
42 603 16	OPT4000ED/3K	OPT4000ED/3K 41W/830 LED DA	41W	1,2	3900 lm	DALI



# AVD370

LED | TC | E27



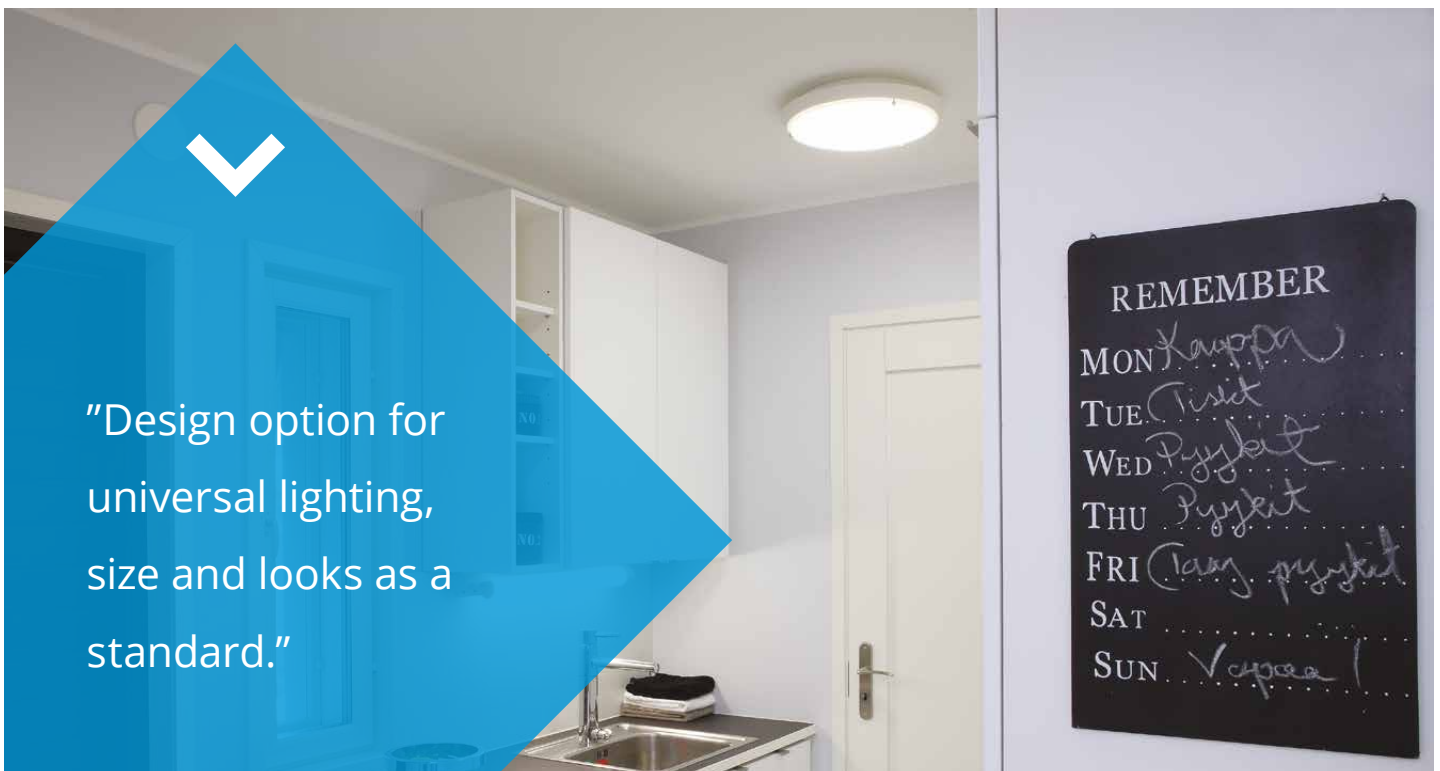
AVD370 is beautiful plafond luminaire for general lighting both at home and in public premises. It can be used as universal luminaire at home as well as sensor luminaire in office buildings at corridors and staircases.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move!-luminaires use PIR or Radar technique, depending on your projects and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



"Design option for universal lighting, size and looks as a standard."





AVD370 PIR sensor luminaire

### Structure

- › Diffuser opal polycarbonate or glass
- › Body aluminium
- › Colour temperature 3000 K/4000 K
- › LED-models:  
connected load  
14W, luminaire luminous flux 1468 lm (3000 K),  
1516 lm (4000 K),  
18W, luminaire luminous flux 1842 lm (3000 K),  
1902 lm (4000 K),  
3000/4000 K, Ra > 80, power factor 0,9  
Ambient temperature - 20 °C - + 25 °C  
LED-module lifespan 70 000 h (L70), T<sub>a</sub>=25 °C

### Control

- › AVD370 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- › AVD370 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- › 1-10V
- › DALI
- › Switch-control

### Mounting

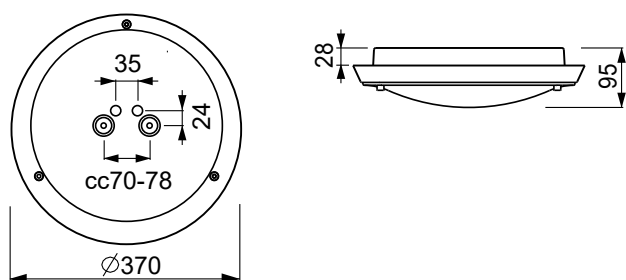
- › To the ceiling and to the wall or partly recessed
- › Recess depth 28 mm, recess hole ø 315 mm, diffuser diameter ø 370 mm
- › Snap-in terminal block 5x2,5 mm<sup>2</sup> with through wiring, PIR-/RADAR-models -o- 5x2,5 mm<sup>2</sup> + 2x2,5 mm<sup>2</sup>
- › Sensor luminaire models see more accurate information at WEB-site
- PIR-models:  
To the ceiling max. 4 meters height  
To the wall max. 1,7-2,7 meters height
- RADAR-models:  
To the ceiling max. 3,5 meters height  
To the wall 1,7- 2,7 meters height
- Suitable for stand-alone and master-slave installation
- Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group
- Slave luminaires from the Ensto basic luminaire range

E number	Type	Product name	Base	Kg	Luminous flux
<b>AVD370 LED basic luminaires</b>					
41 172 41	AVD370.114L	AVD370 IP44 LED14W/840 E	LED	1,2	1516 lm
41 172 59	AVD370.114L/3K	AVD370 IP44 LED14W/830 E	LED	1,2	1468 lm
41 595 08	AVD370.118L	AVD370 IP44 LED 18W/840 E PC O	LED	1,2	1902 lm
41 595 20	AVD370.118L/3K	AVD370 IP44 LED 18W/830 E PC O	LED	1,2	1842 lm
<b>AVD370 LED basic luminaires with glass diffuser</b>					
41 172 42	AVD370.114LG	AVD370 IP21/44 LED14W/840 EG	LED	1,7	1366 lm
41 172 60	AVD370.114LG/3K	AVD370 IP21/44 LED14W/840 EG	LED	1,7	1322 lm
41 595 09	AVD370.118LG	AVD370 IP21/44 LED 18W/840 E G FR	LED	1,7	1705 lm
41 595 21	AVD370.118LG/3K	AVD370 IP21/44 LED 18W/830 E G FR	LED	1,7	1651 lm
<b>AVD370 LED basic luminaires with 1-10V controlled electronic control gear</b>					
41 172 48	AVD370.114DL	AVD370 IP44 LED14W/840 D	LED	1,2	1516 lm
41 172 65	AVD370.114DL/3K	AVD370 IP44 LED14W/830 D	LED	1,2	1468 lm
41 595 13	AVD370.118DL	AVD370 IP44 LED 18W/840 D PC O	LED	1,2	1902 lm
41 595 24	AVD370.118DL/3K	AVD370 IP44 LED 18W/830 D PC O	LED	1,2	1842 lm

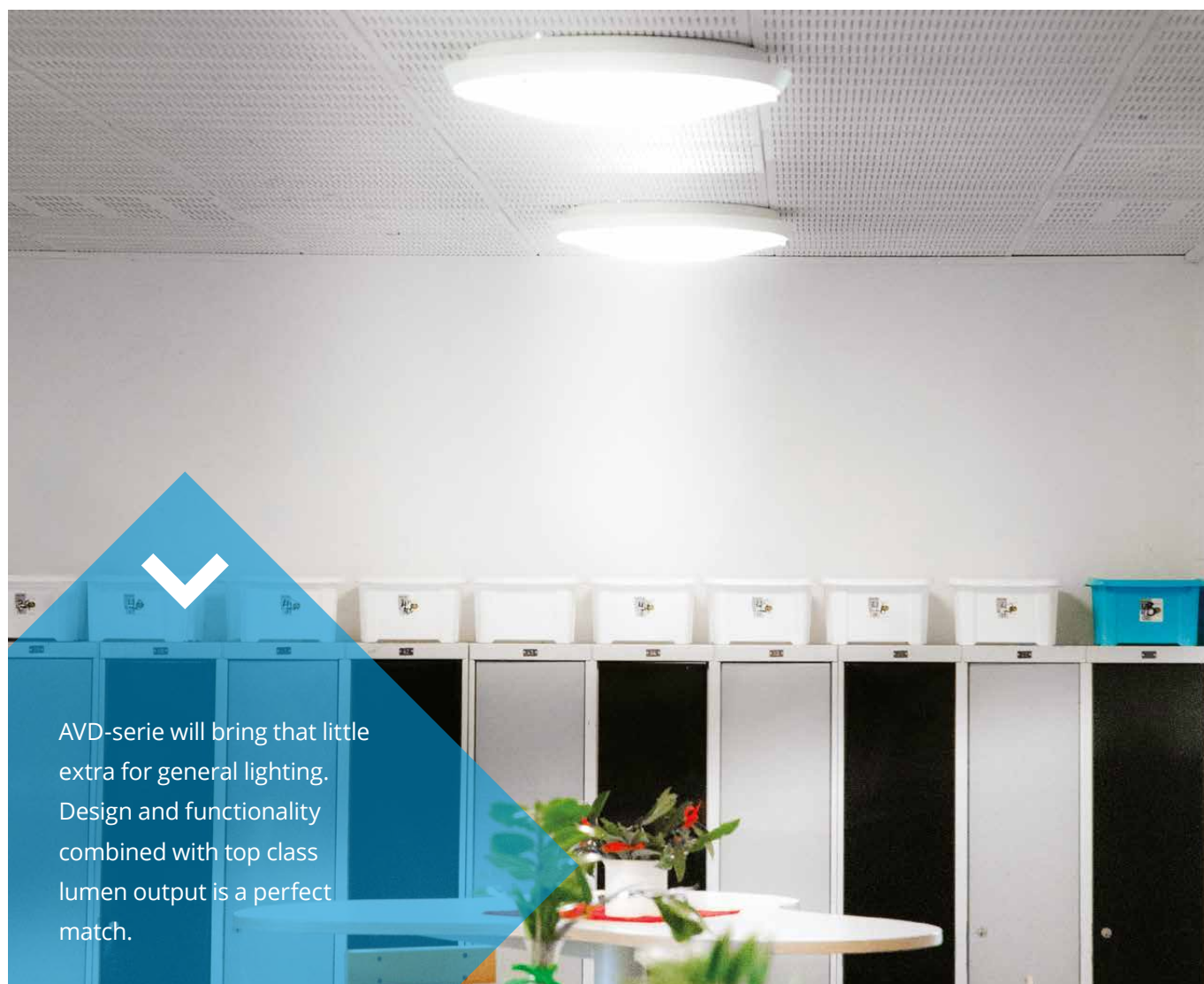


E number	Type	Product name	Base	Kg	Luminous flux
<b>AVD370 LED basic luminaires with 1-10V controlled electronic control gear and glass diffuser</b>					
41 172 50	AVD370.114DLG	AVD370 IP21/44 LED14W/840 DG	LED	1,7	1366 lm
41 172 66	AVD370.114DLG/3K	AVD370 IP21/44 LED14W/830 DG	LED	1,7	1322 lm
41 595 14	AVD370.118DLG	AVD370 IP21/44 LED 18W/840 D G FR	LED	1,7	1705 lm
41 595 25	AVD370.118DLG/3K	AVD370 IP21/44 LED 18W/830 D G FR	LED	1,7	1651 lm
<b>AVD370 LED basic luminaires with DALI control gear</b>					
41 172 56	AVD370.114DDL	AVD370 IP44 LED14W/840 DALI	LED	1,2	1516 lm
41 172 75	AVD370.114DDL/3K	AVD370 IP44 LED14W/830 DALI	LED	1,2	1468 lm
41 595 18	AVD370.118DDL	AVD370 IP44 LED 18W/840 DALI PC O	LED	1,2	1902 lm
41 595 28	AVD370.118DDL/3K	AVD370 IP44 LED 18W/830 DALI PC O	LED	1,2	1842 lm
<b>AVD370 LED basic luminaires with DALI control gear and with glass diffuser</b>					
41 172 57	AVD370.114DDL	AVD370 IP21/44 LED14W/840DALIG	LED	1,7	1366 lm
41 172 89	AVD370.114DDL/3K	AVD370 IP21/44 LED14W/830DALIG	LED	1,7	1322 lm
41 595 19	AVD370.118DDL	AVD370 IP21/44 LED 18W/840 DALI GFR	LED	1,7	1705 lm
41 595 29	AVD370.118DDL/3K	AVD370 IP21/44 LED 18W/830 DALI GFR	LED	1,7	1651 lm
<b>AVD370 LED basic sensor luminaires</b>					
41 172 44	AVD370.1144L	AVD370 IP44 LED14W/840 EPIR	LED	1,2	1516 lm
41 172 62	AVD370.1144L/3K	AVD370 IP44 LED14W/830 EPIR	LED	1,2	1468 lm
41 595 10	AVD370.1184L	AVD370 IP44 LED 18W/840 E PC O PIR	LED	1,2	1902 lm
41 595 22	AVD370.1184L/3K	AVD370 IP44 LED 18W/830 E PC O PIR	LED	1,2	1842 lm
<b>AVD370 LED basic sensor luminaires with glass diffuser</b>					
41 172 45	AVD370.1149LG	AVD370 IP21/44 LED14W/840EGRAD	LED	1,9	1366 lm
41 172 63	AVD370.1149LG/3K	AVD370 IP21/44 LED14W/830EGRAD	LED	1,9	1322 lm
41 595 11	AVD370.1189LG	AVD370 IP21/44 LED 18W/840 EGFR RAD	LED	1,9	1705 lm
41 595 23	AVD370.1189LG/3K	AVD370 IP21/44 LED 18W/830 EGFR RAD	LED	1,9	1651 lm
<b>AVD370 LED PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%</b>					
41 172 51	AVD370.1145DL	AVD370 IP44 LED14W/840 DPIR5	LED	1,2	1516 lm
41 172 68	AVD370.1145DL/3K	AVD370 IP44 LED14W/830 DPIR5	LED	1,2	1468 lm
41 595 15	AVD370.1185DL	AVD370 IP44 LED 18W/840 D PC O PIR	LED	1,2	1902 lm
41 595 26	AVD370.1185DL/3K	AVD370 IP44 LED 18W/830 D PC O PIR	LED	1,2	1842 lm
<b>AVD370 LED radar sensor luminaire with 1-10V dimmable electronic control gear and with glass diffuser. Base light level 5% and radar controlled light level 100%</b>					
41 172 53	AVD370.1149DLG	AVD370 IP21/44 LED14W/840DGRAD	LED	1,9	1366 lm
41 172 69	AVD370.1149DLG/3K	AVD370 IP21/44 LED14W/830DGRAD	LED	1,9	1322 lm
41 595 16	AVD370.1189DLG	AVD370 IP21/44 LED 18W/840 DGFR RAD	LED	1,9	1705 lm
41 595 27	AVD370.1189DLG/3K	AVD370 IP21/44 LED 18W/830 EGFR RAD	LED	1,9	1651 lm
<b>AVD 370 LED basic luminaire with 1 hour battery back-up</b>					
41 172 47	AVD370.114L/1M	AVD370 IP44 LED14W/840 E1M	LED	1,6	1516 lm
41 595 12	AVD370.118L/1M	AVD370/1M IP44 LED 18W/840 E PC O	LED	1,6	1902 lm
<b>AVD370 LED PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%, 1 hour battery back-up.</b>					
41 172 54	AVD370.1145DL/1M	AVD370 IP44 LED14W/840 DPIR51M	LED	1,6	1516 lm
41 595 17	AVD370.1185DL/1M	AVD370/1M IP44 LED 18W/840 D PC O P	LED	1,6	1902 lm
<b>AVD370 luminaires with plastic diffuser and E27</b>					
41 170 79	AVD370	AVD370 IP44 2xTC-TSE 20W PC O	E27	0,9	
<b>AVD370 luminaires with glass diffuser and E27</b>					
41 172 09	AVD370.01PE27G	AVD370 IP21/44 1xTC-TSE 20W G FR	E27	1,6	
41 172 12	AVD370.02PE27G	AVD370 IP21/44 2xTC-TSE 20W G FR	E27	1,7	

E number	Type	Product name	Base	Kg	Luminous flux
AVD370 luminaires with electronic control gear					
41 171 00	AVD370.218E	AVD370 IP44 2xTC-DE 18W E PC O	G24-q2	1,2	
41 171 06	AVD370.226E	AVD370 IP44 2xTC-DE 26W E PC O	G24-q3	1,2	
AVD370 accessories					
41 171 12	AVL370	AVD370 recessed mounting fastening			
41 171 13	AVL372	Flush mounting frame for AVR320/AVD370 luminaires, 600 mm x 600 mm			



AVD370



AVD-serie will bring that little extra for general lighting. Design and functionality combined with top class lumen output is a perfect match.



## AVD550

LED | TC

AVD550 is a prestige design luminaire with energy efficient light sources for lighting public premises. Several efficient light source options, also with motion sensors and with emergency versions.



“Design option for universal lighting, size and looks as a standard.”





AVD550 PIR sensor luminaires



AVD550 + AVL551 wire suspension set

### Structure

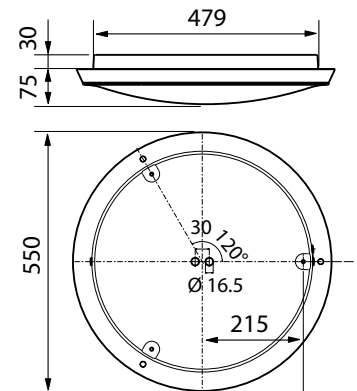
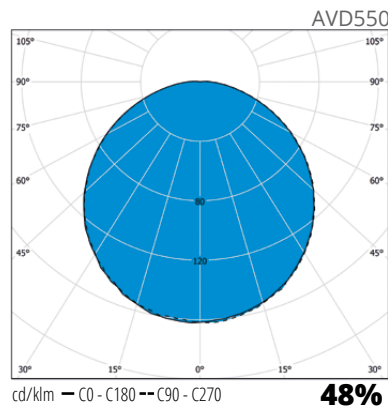
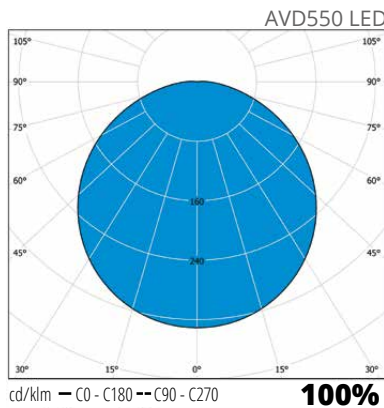
- ▶ Diffuser opal polycarbonate or glass, LED-models with polycarbonate diffuser
- ▶ Body aluminium
- ▶ Light sources included in the delivery
- ▶ LED-models:  
Connected load 39W, luminaire luminous flux 3890 lm (3K) and 4030 lm (4K)  
Ra > 80, power factor 0,94, DALI 0,98  
Ambient temperature - 20 °C - + 25 °C  
LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C

### Control

- ▶ AVD550 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- ▶ AVD550 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- ▶ 1-10V
- ▶ Switch-dim / DALI

### Mounting

- ▶ To the ceiling and to the wall or partly recessed
- ▶ Recess depth 30 mm, recess hole ø 485 mm, diffuser diameter ø 550 mm
- ▶ AVL551 wire suspension kit for suspension mounting
- ▶ Snap-in terminal block 5x2,5 mm<sup>2</sup> with through wiring
- ▶ Sensor luminaire models see more accurate information at WEB-site
- PIR-models:  
To the ceiling max. 4 meters height  
To the wall 1,7- 2,7 meters height
- RADAR-models:  
To the ceiling max. 3,5 meters height  
To the wall 1,7- 2,7 meters height
- Suitable for stand-alone and master-slave installation  
Maximum load behind one master is 400VA, however max. 5 luminaires in the same control group  
Slave luminaires from the Ensto basic luminaire range



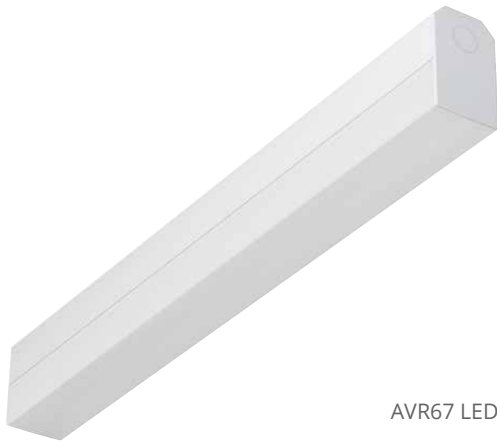
E number	Type	Product name	Output	Base	Kg	Additional information
<b>AVD550 LED with polycarbonate diffuser</b>						
42 903 16	AVD550.139L	AVD550 LED 39W/840 PC O	39W	LED	3,2	
42 903 17	AVD550.139L/3K	AVD550 LED 39W/830 PC O	39W	LED	3,2	
42 903 14	AVD550.139DDL	AVD550 LED 39W/840 PC O DALI	39W	LED	3,2	DALI
42 903 19	AVD550.139DDL/3K	AVD550 LED 39W/830 PC O DALI	39W	LED	3,2	DALI
<b>AVD550 luminaires with electronic control gear</b>						
42 171 22	AVD550.236E	AVD550 IP21 2xTC-L 36W E PC O		2G11	3,0	
<b>AVD550 luminaires with DSI/DALI dimmable electronic control gear</b>						
42 171 21	AVD550.236DB	AVD550 IP21 2xTC-L 36W DB PC O		2G11	3,9	
<b>AVD550 accessories</b>						
42 171 37	AVL550	AVD550 recessed mounting fastening				
42 171 39	AVL551	Wire suspension set for AVD550 luminaires				
42 171 42	AVL552	Flush mounting frame for AVD550 luminaires, 600 mm x 600 mm				



# AVR67

LED

Jono with square diffuser is a stylish universal luminaire available in LED for indoor and outdoor use.



AVR67 LED

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Classic linear luminaire with square shaped diffuser. Sharp alternative for all areas.”



AVR67 + wire suspension set

### Structure

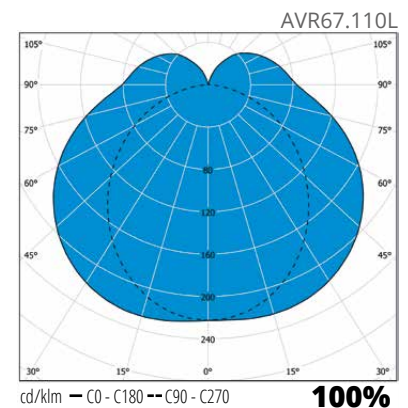
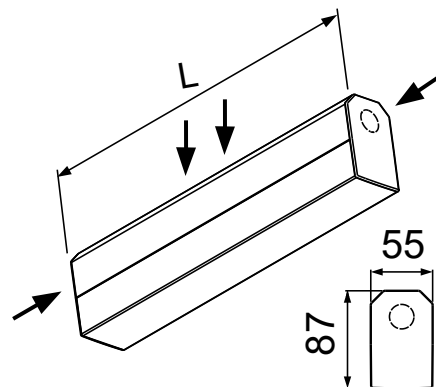
- › Diffuser polycarbonate
- › Body aluminium
- › Connected load
  - 10W, luminaire luminous flux 895 lm (3000 K), 950 lm (4000 K)
  - 15W, luminaire luminous flux 1342 lm (3000 K), 1425 lm (4000 K)
  - 20W, luminaire luminous flux 1790 lm (3000 K), 1900 lm (4000 K)
- 3000 K and 4000 K, Ra > 80, power factor 0,94
- Ambient temperature - 20 °C - + 25 °C
- LED-module lifespan 60 000 h (L70), T<sub>a</sub> = 25 °C

### Control

- › DALI
- › Switch-control

### Mounting

- › To the ceiling and to the wall
- › Snap-in terminal block 5x2,5 mm<sup>2</sup> with through wiring



E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
<b>Jono LED with opal diffuser</b>							
42 903 20	AVR67.110L	AVR67 IP44 LED10W/840 E	LED	0,8	600	950 lm	
42 903 22	AVR67.110L/3K	AVR67 IP44 LED10W/830 E	LED	0,8	600	895 lm	
42 903 25	AVR67.115L	AVR67 IP44 LED15W/840 E	LED	1,2	900	1425 lm	
42 903 26	AVR67.115L/3K	AVR67 IP44 LED15W/830 E	LED	1,2	900	1342 lm	
42 903 29	AVR67.120L	AVR67 IP44 LED20W/840 E	LED	1,6	1200	1900 lm	
42 903 35	AVR67.120L/3K	AVR67 IP44 LED20W/830 E	LED	1,6	1200	1790 lm	
<b>Jono LED with opal diffuser, DALI</b>							
42 903 23	AVR67.115DDL	AVR67 IP44 LED15W/840 DALI	LED	1,2	900	1425 lm	
42 903 28	AVR67.115DDL/3K	AVR67 IP44 LED15W/830 DALI	LED	1,2	900	1342 lm	
42 903 43	AVR67.120DDL	AVR67 IP44 LED20W/840 DALI	LED	1,6	1200	1900 lm	
42 903 49	AVR67.120DDL/3K	AVR67 IP44 LED20W/830 DALI	LED	1,6	1200	1790 lm	
<b>Jono accessories</b>							
42 175 56	AVL601	Wire suspension set for JONO AVR66					
42 175 59	AVL605	In-line connector set for JONO AVR66					
42 174 53	AVL608	90° angle connector pair for JONO AVR66					



# Sport

T5



SP2498

Robust and impact resistant luminaire for school gyms, sports halls and various multipurpose premises. Sport combines innovative lighting technology with sturdy structure and functional design.



“Sport will light sweat and tears, winners and challengers.”





SP2498 + SP01

### Structure

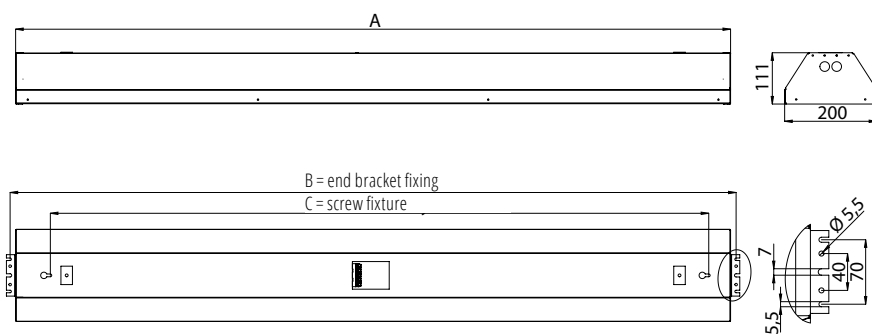
- › Body - white powder coated steel
- › Reflector - gloss anodised aluminium
- › White protective steel wire-guard, grid 30x30 mm
- › Wire-guard is hinged and fastened to the luminaire body which makes it easy to maintain

### Mounting

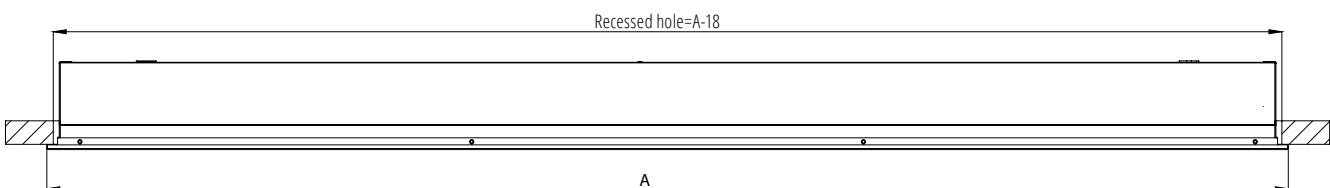
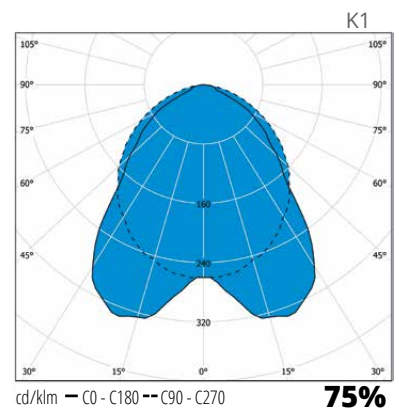
- › Directly to the ceiling, to the lighting suspension rail or recess, recess mounting with SP02 frame
- › Mounting accessories to be ordered separately (see table)
- › -o- 5x2,5 mm<sup>2</sup>
- › Connection point and cable entry holes are in the centre of luminaire bottom
- › Additional cable entry holes at both ends of the luminaire
- › Blind cable entries at both ends

### Made to order

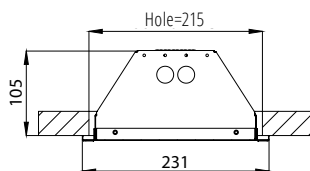
- › Dimmable models:  
Switch-Control (ES)  
1-10V (ELD)  
DALI (ED)



Sport surface mounting



Sport recessed mounting



E number	Type	Product name	Base	Colour	Kg	Light distribution	A	B	C
<b>Sport</b>									
42 660 89	SP2358	SP2358 T5 2X35W	G5	white	7,1	K1	1553	1577	1430
42 660 90	SP2498	SP2498 T5 2X49W	G5	white	7,1	K1	1553	1577	1430
42 660 91	SP2808	SP2808 T5 2X80W	G5	white	7,1	K1	1553	1577	1430
<b>Mounting accessories</b>									
42 660 87	SP01	SP01 SUSP.RAIL BRACKET PAIR		white	0,1				
42 660 88	SP02	SP02 RECESSED FRAME		white	0,7		1585		





# Lampett

LED

Decorative wall luminaire for public premises and homes.



“Quality and design  
for public premises  
and homes.”

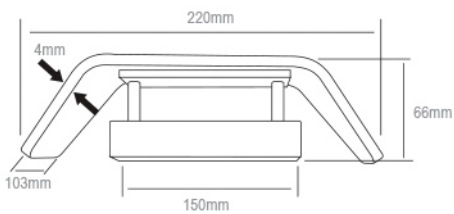
**Structure**

- › Body and shade white aluminium
- › Connected load 9W, luminaire luminous flux 600 lm
- › 3000 K, Ra > 90
- › LED-luminaire lifespan 30 000 h
- › Triac-dimmable

**Mounting**

- › Surface wall mounting
- › -o 3x2,5 mm<sup>2</sup>

9W	600 lm
----	--------



E number	Type	Product name	Kg	Luminous flux
<b>Lampett</b>				
42 076 02	LM9220D/3K	LM9220D/3K LED 9W/830 WH	1,6	600 lm



# Luxova

LED

Decorative wall luminaire for public premises and homes.



"Comfortable indirect light  
and modern design."

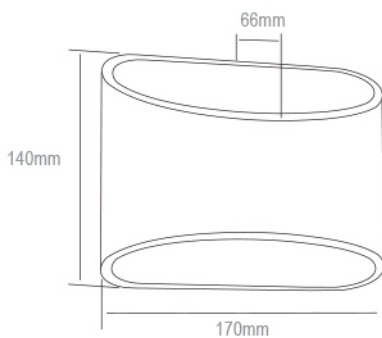
**Structure**

- › Body white aluminium
- › Connected load 9W, luminaire luminous flux 600 lm
- › 3000 K, Ra > 90
- › LED-luminaire lifespan 30 000 h
- › Triac-dimmable

**Mounting**

- › Surface wall mounting
- › -o 3x2,5 mm<sup>2</sup>

9W	600 lm
----	--------



E number	Type	Product name	Kg	Luminous flux
Luxova				
42 076 06	LX8170D/3K	LX8170D/3K LED 8W/830 WH	1,6	600 lm





# Stage

LED

Stage is energy efficient and versatile spotlight for many applications.



"Stylish and powerful  
spotlight."



**Structure**

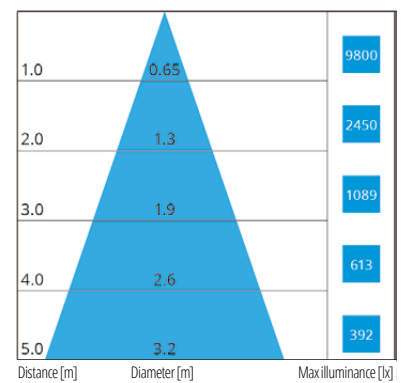
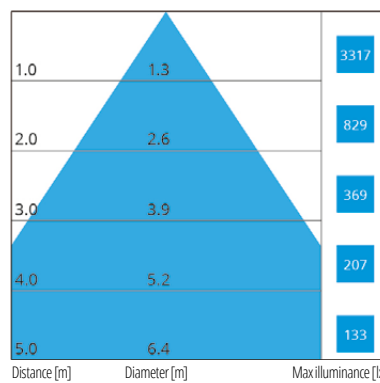
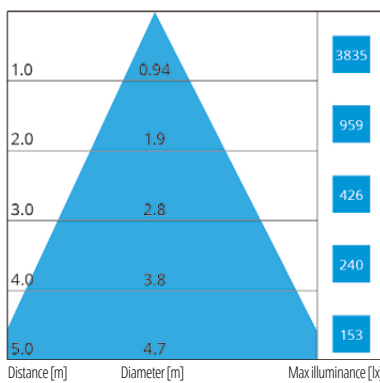
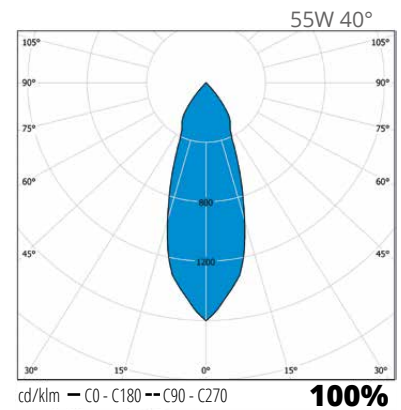
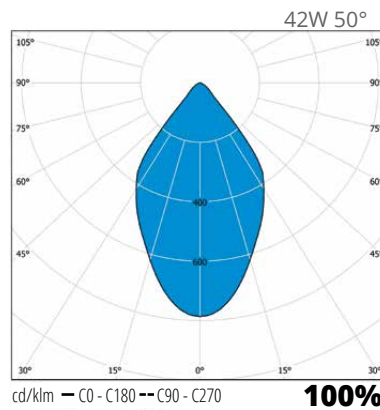
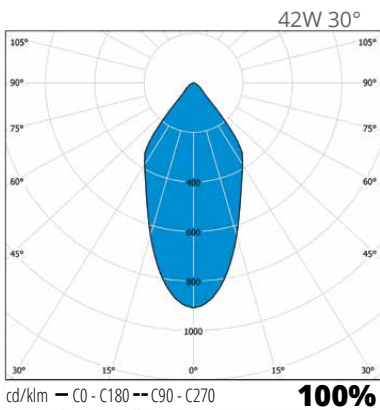
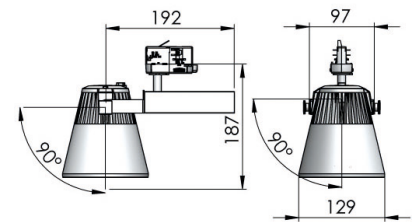
- › Housing: powder coated aluminium
- › Housing colours: White and black
- › Connected power: 42W and 55W
- › Beam angles:
  - 30°
  - 40°
  - 50°
- › Lumen output: please see the table below
- › 3000 K, Ra>90
- › MacAdams 2-SDCM
- › LED module lifetime: 50 000h L80B10

**Mounting**

- › 3 phase track
- › GA69 multi adapter

**Made to order**

- › Housing in silver colour
- › DALI versions
- › Other beam angles
- › Other colour temperature and colour rendering choices and lumen packages
- › Special light colours for meat, fish and bakery products and fruits and vegetables



E number	Type	Product name	Base	Colour	Kg	Beam angle	Connected load	Luminous flux
<b>Stage</b>								
42 604 79	ST33FL930WH	ST33FL930WH 3300LM FL WH	LED	White	1,12	30°	42W	3300 lm
42 604 81	ST33FL930BL	ST33FL930BL 3300LM FL BL	LED	Black	1,12	30°	42W	3300 lm
42 604 83	ST34WF930WH	ST34WF930WH 3375LM WFL WH	LED	White	1,12	50°	42W	3375 lm
42 604 84	ST34WF930BL	ST34WF930BL 3375LM WFL BL	LED	Black	1,12	50°	42W	3375 lm
42 604 87	ST50FL930BL	ST50FL930BL 5000LM FL BL	LED	Black	1,22	40°	55W	5000 lm
42 604 89	ST50FL930WH	ST50FL930WH 5000LM FL WH	LED	White	1,22	40°	55W	5000 lm

Products marked in orange are stock items with shorter delivery time.



# Arena

LED

Arena is powerful and practically designed spotlight.



"Powerful choice  
for spotlighting."



### Structure

- › Housing: powder coated aluminium
- › Housing colours: white and black
- › Connected power: 42W and 55W
- › Beam angles:
  - 30° and 50° (42W)
  - 40° and 60° (55W)
- › Lumen output: please see the table below
- › 3000 K, Ra>80 and Ra>90
- › MacAdams 2-SDCM
- › LED module lifetime: 50 000h L80B10

### Mounting

- › 3 phase track
- › GA69 multi adapter

### Made to order

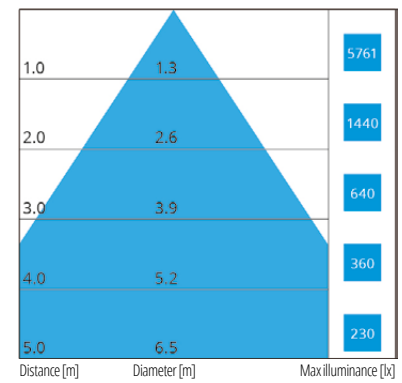
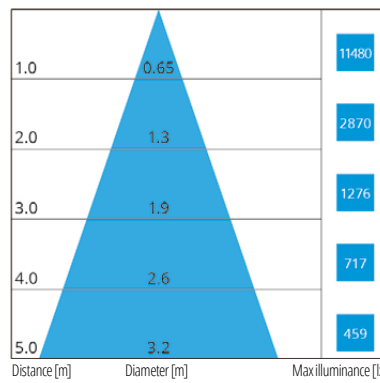
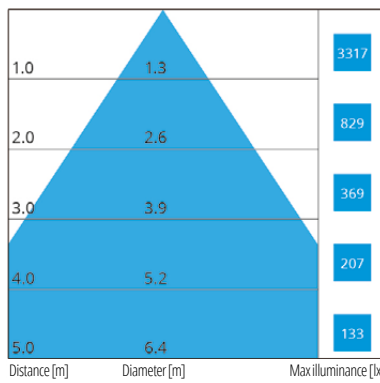
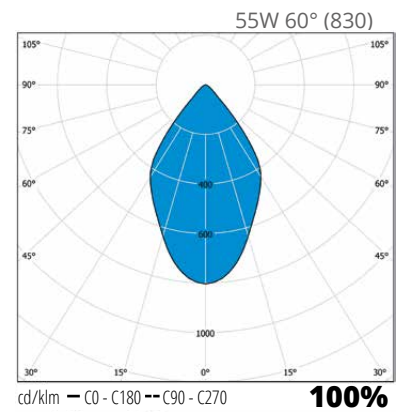
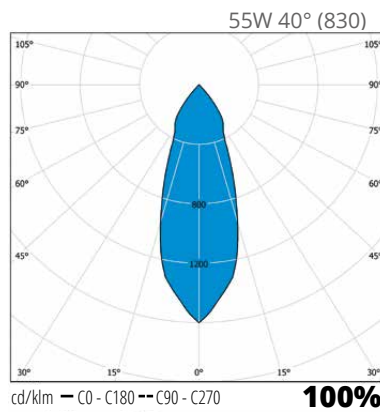
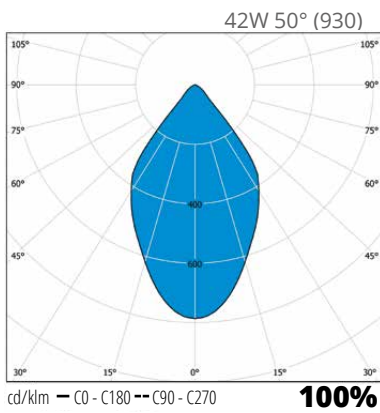
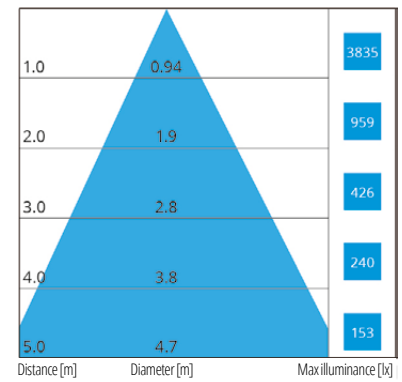
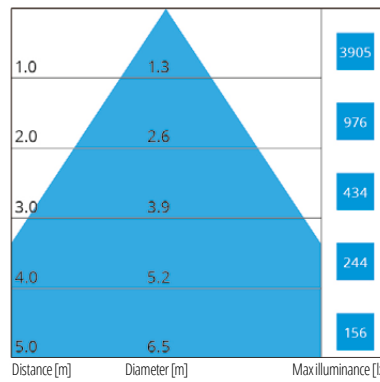
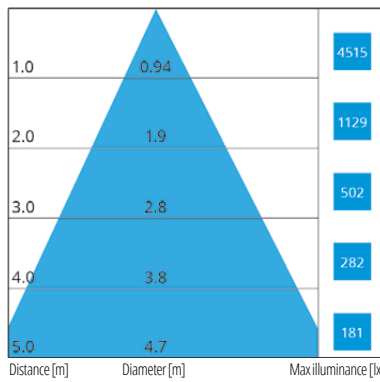
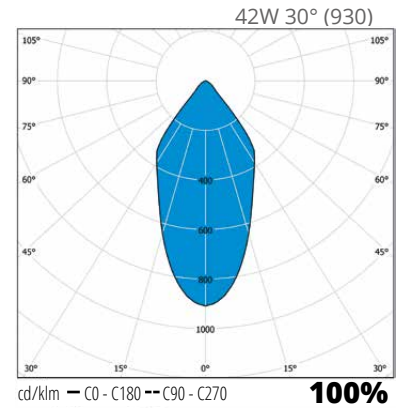
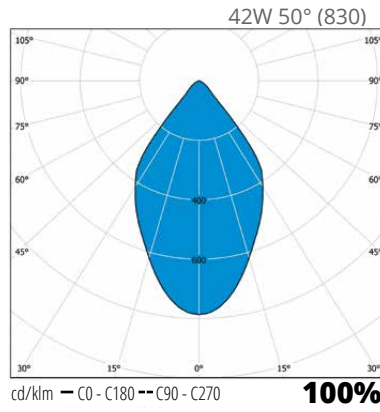
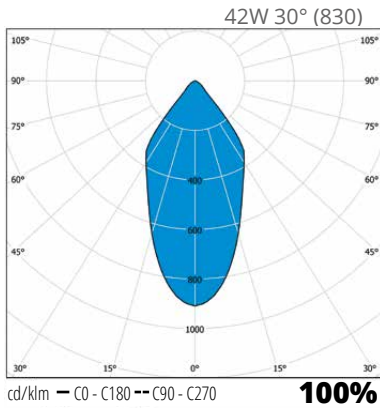
- › Housing in silver colour
- › DALI versions
- › Other beam angles
- › Other colour temperature and colour rendering choices and lumen packages
- › Special light colours for meat, fish and bakery products and fruits and vegetables

E number	Type	Product name	Base	Colour	Kg	Beam angle	Connected load	Luminous flux
<b>Arena</b>								
42 604 90	AR39FL830WH	AR39FL830WH 3900LM FL WH	LED	White	1,35	30°	42W	3900 lm
42 604 91	AR39FL830BL	AR39FL830BL 3900LM FL BL	LED	Black	1,35	30°	42W	3900 lm
42 604 93	AR40WF830WH	AR40WF830WH 3975LM WFL WH	LED	White	1,35	50°	42W	3975 lm
› 42 607 46	AR40WF840WH	AR40WF840WH 4100LM WFL WH	LED	White	1,35	50°	42W	4100 lm
42 604 95	AR40WF830BL	AR40WF830BL 3975LM WFL BL	LED	Black	1,35	50°	42W	3975 lm
42 604 96	AR33FL930WH	AR33FL930WH 3300LM FL WH	LED	White	1,35	30°	42W	3300 lm
42 604 97	AR33FL930BL	AR33FL930BL 3300LM FL BL	LED	Black	1,35	30°	42W	3300 lm
42 604 99	AR34WF930WH	AR34WF930WH 3375LM WFL WH	LED	White	1,35	50°	42W	3375 lm
42 605 01	AR34WF930BL	AR34WF930BL 3375LM WFL BL	LED	Black	1,35	50°	42W	3375 lm
42 605 02	AR59FL830WH	AR59FL830WH 5850LM FL WH	LED	White	1,45	40°	55W	5850 lm
42 605 03	AR59FL830BL	AR59FL830BL 5850LM FL BL	LED	Black	1,45	40°	55W	5850 lm
42 605 05	AR59WF830WH	AR59WF830WH 5875LM WFL WH	LED	White	1,45	60°	55W	5875 lm
42 605 07	AR59WF830BL	AR59WF830BL 5875LM WFL BL	LED	Black	1,45	60°	55W	5875 lm
42 605 08	AR50FL930WH	AR50FL930WH 5000LM FL WH	LED	White	1,45	40°	55W	5000 lm
42 605 10	AR50FL930BL	AR50FL930BL 5000LM FL BL	LED	Black	1,45	40°	55W	5000 lm
42 605 11	AR50WF930WH	AR50WF930WH 5025LM WFL WH	LED	White	1,45	60°	55W	5025 lm
42 605 12	AR50WF930BL	AR50WF930BL 5025LM WFL BL	LED	Black	1,45	60°	55W	5025 lm

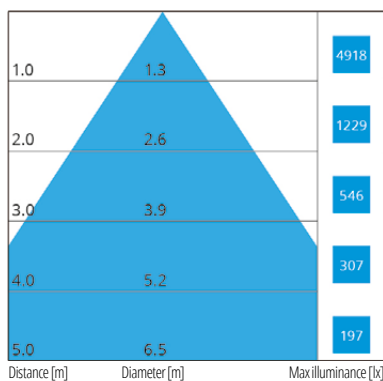
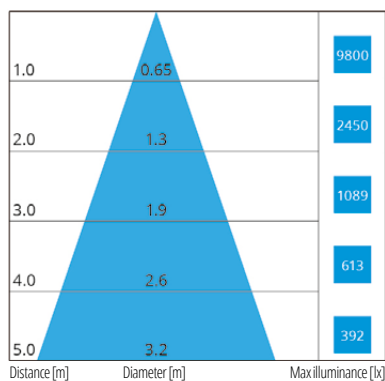
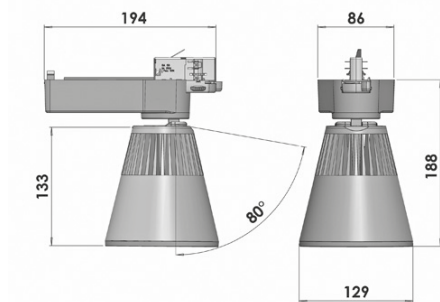
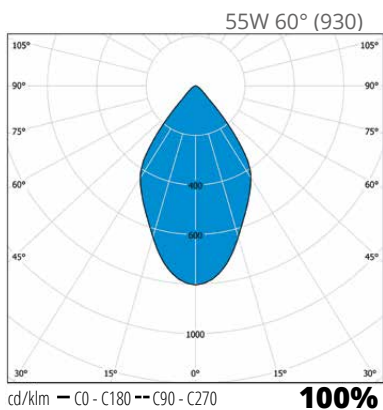
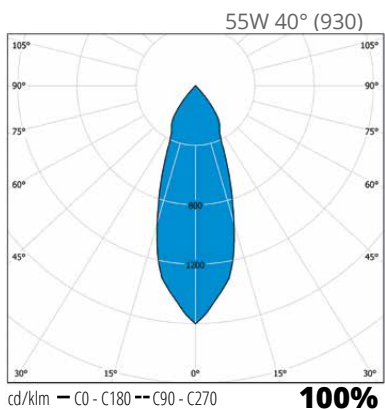
Products marked in orange are stock items with shorter delivery time.











# Diva

LED

Ultra slim adapter makes Diva a beautiful choice for spotlighting.



"Small in size, big  
in lumen output."



**Structure**

- › Housing: powder coated aluminium
- › Housing colours: white and black
- › Connected power: 34W
- › Beam angles:  
30°  
50°
- › Lumen output: please see the table below
- › 3000 K and 4000 K, Ra>80 and Ra>90
- › MacAdams 2-SDCM
- › LED module lifetime: 50 000h L80B10

**Mounting**

- › 3 phase track

**Made to order**

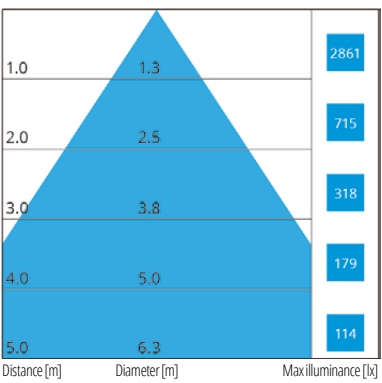
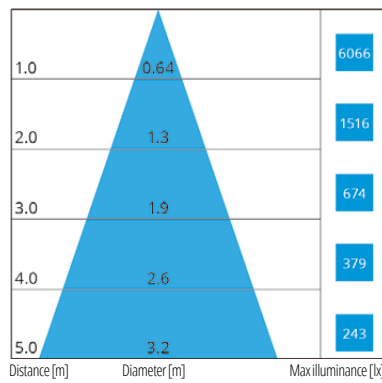
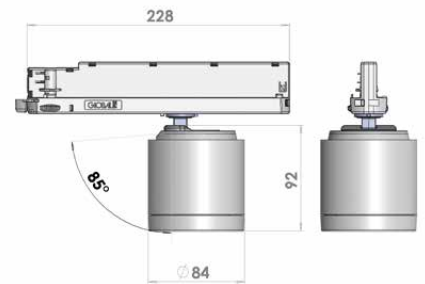
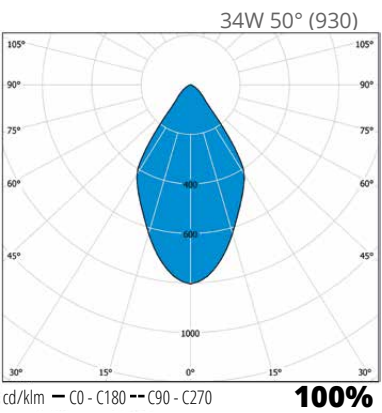
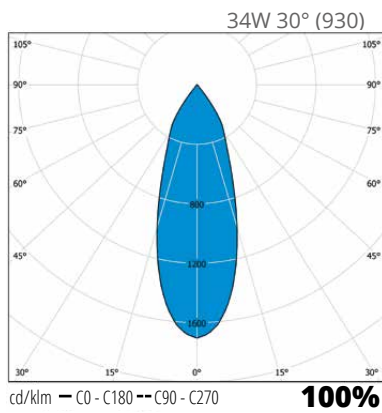
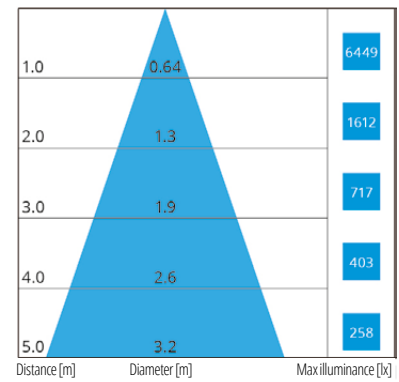
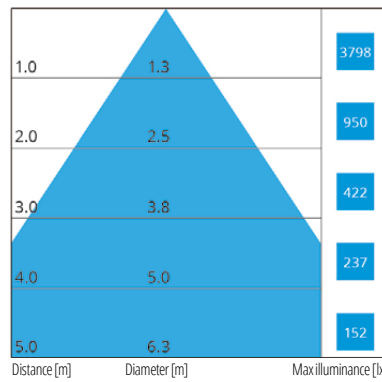
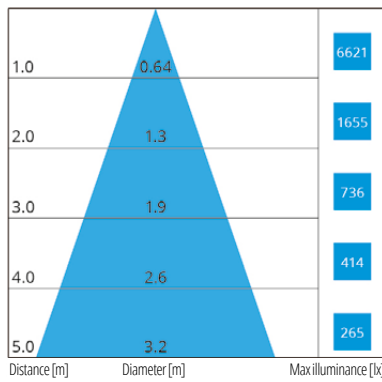
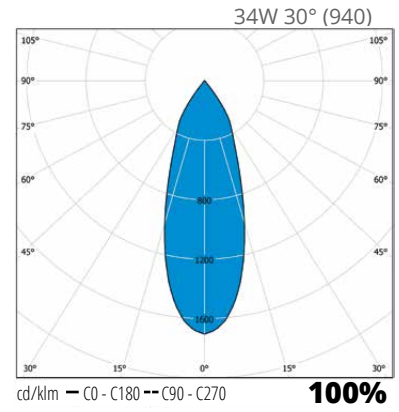
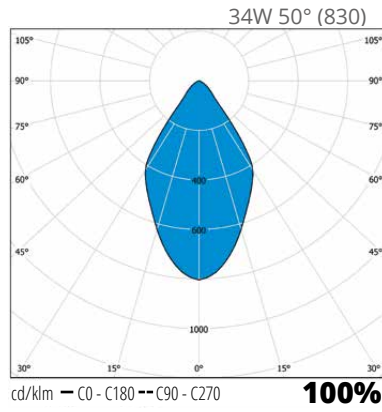
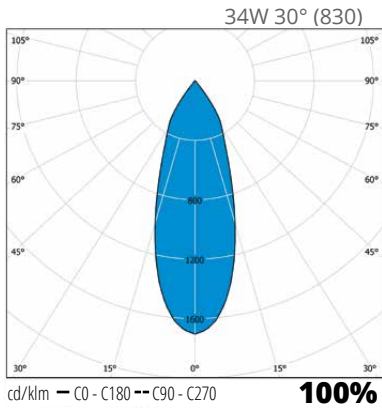
- › Housing in silver colour
- › DALI versions
- › Other beam angles
- › Other colour temperature and colour rendering choices and lumen packages
- › Special light colours for meat, fish and bakery products and fruits and vegetables

E number	Type	Product name	Base	Colour	Kg	Beam angle	Connected load	Luminous flux
<b>Diva</b>								
42 605 13	DI32FL830WH	DI32FL830WH 3175LM FL WH	LED	White	0,57	30°	34W	3175 lm
42 605 14	DI32FL830BL	DI32FL830BL 3175LM FL BL	LED	Black	0,57	30°	34W	3175 lm
42 605 15	DI31WF830WH	DI31WF830WH 3050LM WFL WH	LED	White	0,57	50°	34W	3050 lm
42 605 16	DI31WF830BL	DI31WF830BL 3050LM WFL BL	LED	Black	0,57	50°	34W	3050 lm
› 42 605 17	DI29FL930WH	DI29FL930WH 2925LM FL WH	LED	White	0,57	30°	34W	2925 lm
› 42 605 92	DI31FL940WH	DI31FL940WH 3110LM FL WH	LED	White	0,57	30°	34W	3110 lm
› 42 605 18	DI29FL930BL	DI29FL930BL 2925LM FL BL	LED	Black	0,57	30°	34W	2925 lm
› 42 605 19	DI28WF930WH	DI28WF930WH 2785LM WFL WH	LED	White	0,57	50°	34W	2785 lm
› 42 605 20	DI28WF930BL	DI28WF930BL 2785LM WFL BL	LED	Black	0,57	50°	34W	2785 lm

Products marked in orange are stock items with shorter delivery time.











# Club

LED

Compact spotlight for all accent lighting applications in shops and offices.



"Power and style  
in one package."



### Structure

- › Housing: powder coated aluminium
- › Housing colours: White and black
- › Connected power: 42W
- › Beam angles:
  - 30°
  - 50°
- › Lumen output: please see the table below
- › 3000 K, Ra>80 and Ra>90
- › MacAdams 2-SDCM
- › LED module lifetime: 50 000h L80B10

### Mounting

- › 3 phase track
- › GA69 multi adapter

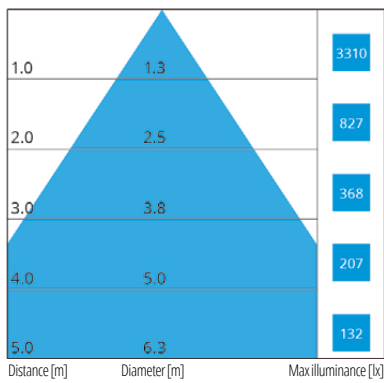
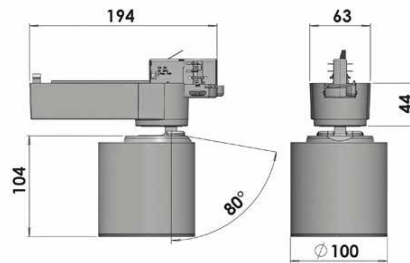
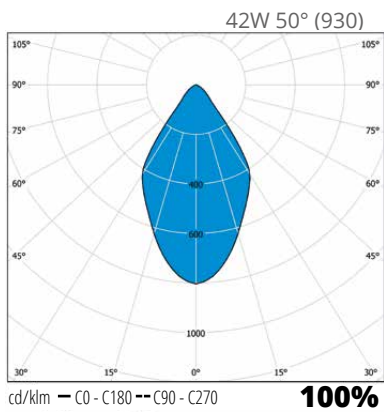
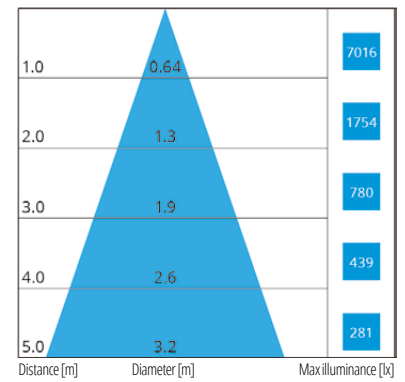
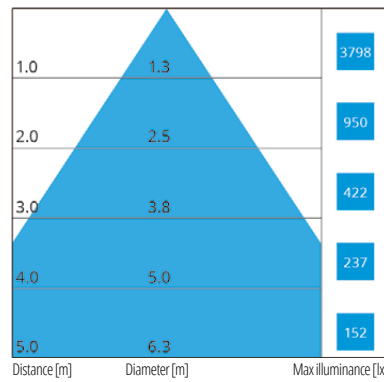
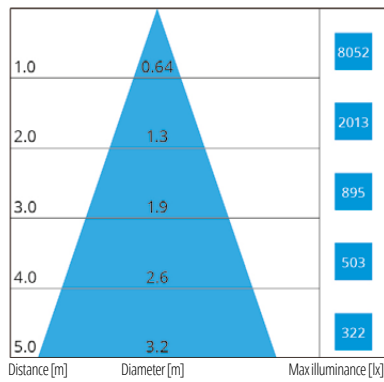
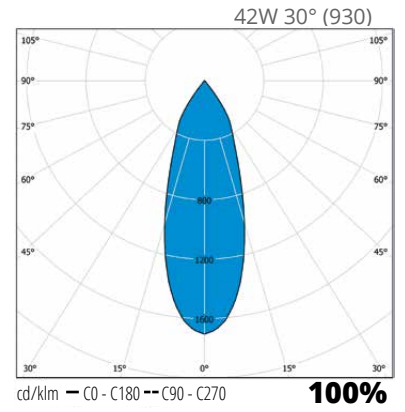
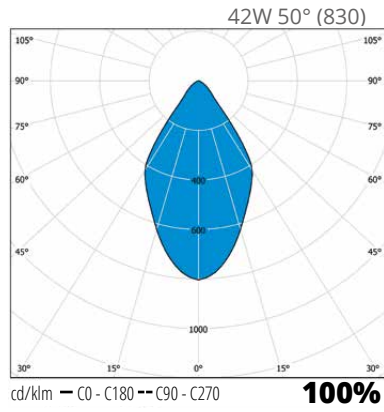
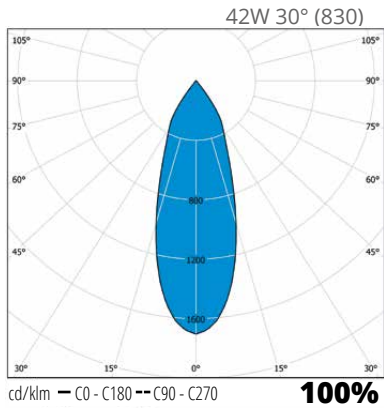
### Made to order

- › Housing in silver colour
- › DALI versions
- › Other beam angles
- › Other colour temperature and colour rendering choices and lumen packages
- › Special light colours for meat, fish and bakery products and fruits and vegetables

E number	Type	Product name	Base	Colour	Kg	Beam angle	Connected load	Luminous flux
<b>Club</b>								
42 605 21	CL39FL830WH	CL39FL830WH 3875LM FL WH	LED	White	1,06	30°	42W	3875 lm
42 605 23	CL39FL830BL	CL39FL830BL 3875LM FL BL	LED	Black	1,06	30°	42W	3875 lm
42 605 25	CL37WF830WH	CL37WF830WH 3700LM WFL WH	LED	White	1,06	50°	42W	3700 lm
42 605 26	CL37WF830BL	CL37WF830BL 3700LM WFL BL	LED	Black	1,06	50°	42W	3700 lm
› 42 605 27	CL34FL930WH	CL34FL930WH 3375LM FL WH	LED	White	1,06	30°	42W	3375 lm
› 42 605 29	CL34FL930BL	CL34FL930BL 3375LM FL BL	LED	Black	1,06	30°	42W	3375 lm
› 42 605 30	CL32WF930WH	CL32WF930WH 3225LM WFL WH	LED	White	1,06	50°	42W	3225 lm
› 42 605 32	CL32WF930BL	CL32WF930BL 3225LM WFL BL	LED	Black	1,06	50°	42W	3225 lm

Products marked in orange are stock items with shorter delivery time.











# Play

LED



Versatile and energy efficient downlight for general lighting in shops and offices. Tilts 90 degrees.



"All-round downlight."



### Structure

- › Housing: powder coated aluminium
- › Housing colour: white
- › Connected power: 42W and 55W
- › Beam angles:  
30° and 50° (42W)  
40° and 60° (55W)
- › Lumen output: please see the table below
- › 3000 K, Ra>80 and Ra>90
- › MacAdams 2-SDCM
- › LED module lifetime: 50 000h L80B10

### Mounting

- › Recessed mounting
- › External driver, 1 m cable MSK 3x0,75 mm<sup>2</sup>

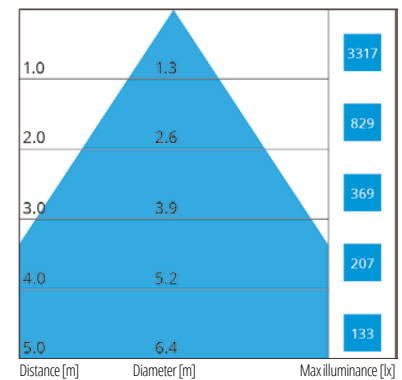
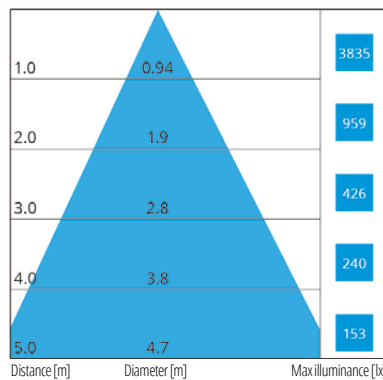
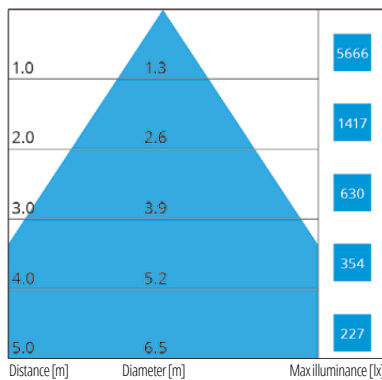
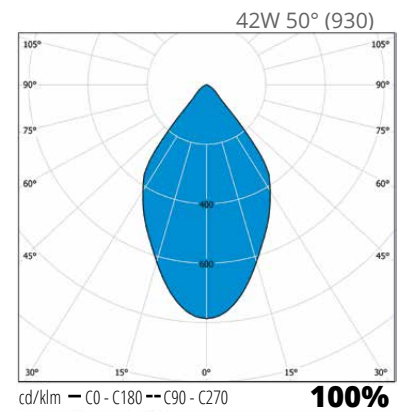
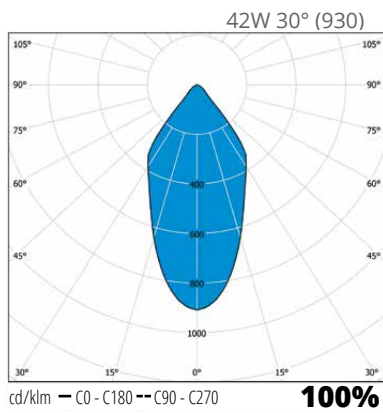
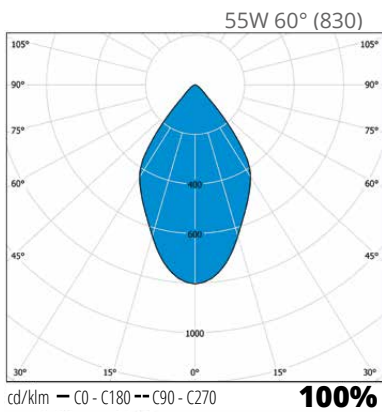
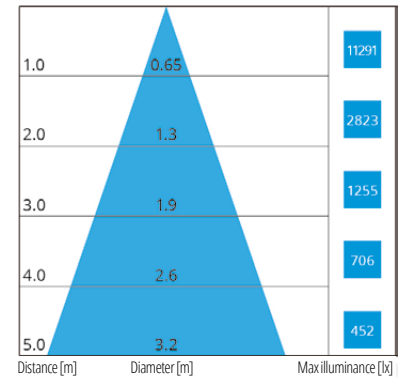
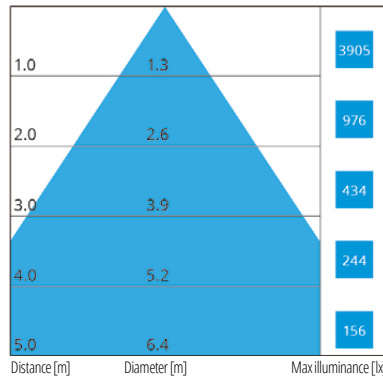
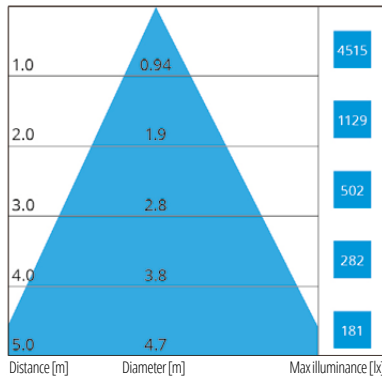
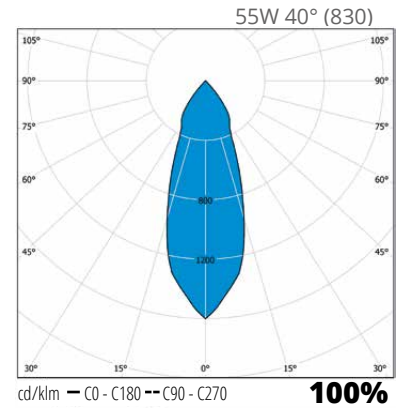
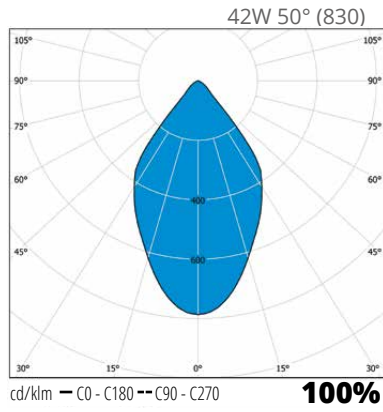
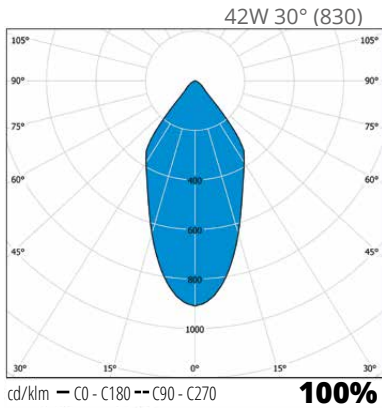
### Made to order

- › Housing in silver or black colour
- › DALI versions
- › Other beam angles
- › Other colour temperature and colour rendering choices and lumen packages
- › Special light colours for meat, fish and bakery products and fruits and vegetables
- › 2,5 m cable with schuko plug

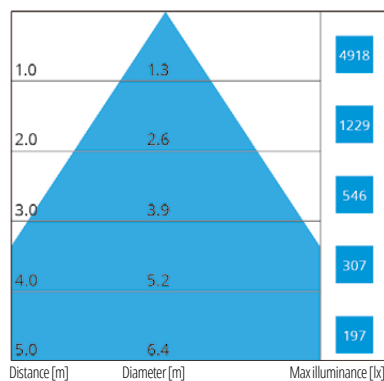
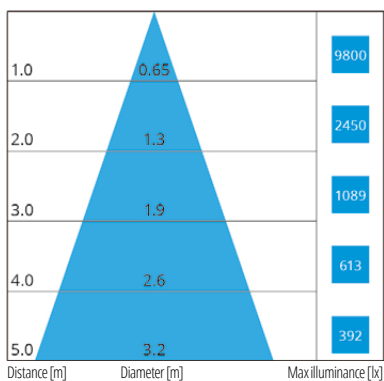
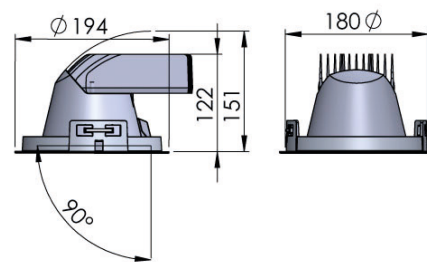
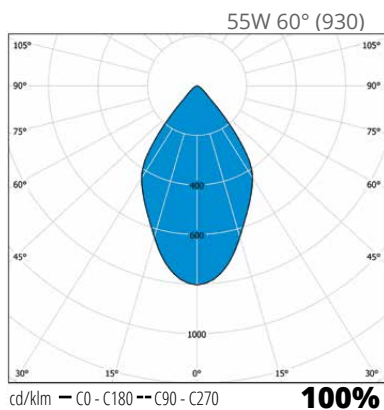
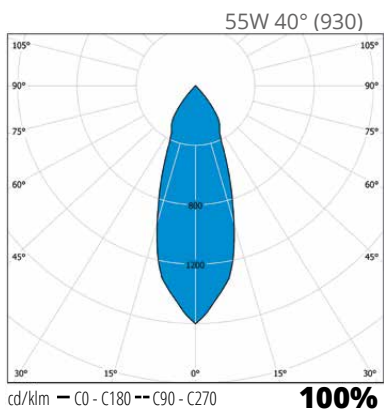
E number	Type	Product name	Base	Colour	Kg	Beam angle	Connected load	Luminous flux
<b>Play</b>								
42 605 33	PL39FL830WH	PL39FL830WH 3900LM FL WH 1M	LED	White	1,55	30°	42W	3900 lm
42 605 36	PL39FL830BL	PL39FL830BL 3900LM FL BL 1M	LED	Black	1,55	30°	42W	3900 lm
42 605 39	PL40WF830WH	PL40WF830WH 3975LM WFL WH 1M	LED	White	1,55	50°	42W	3975 lm
42 605 40	PL40WF830BL	PL40WF830BL 3975LM WFL BL 1M	LED	Black	1,55	50°	42W	3975 lm
› 42 605 42	PL33FL930WH	PL33FL930WH 3300LM FL WH 1M	LED	White	1,55	30°	42W	3300 lm
42 605 43	PL33FL930BL	PL33FL930BL 3300LM FL BL 1M	LED	Black	1,55	30°	42W	3300 lm
› 42 605 55	PL34WF930WH	PL34WF930WH 3375LM WFL WH 1M	LED	White	1,55	50°	42W	3375 lm
42 605 64	PL34WF930BL	PL34WF930BL 3375LM WFL BL 1M	LED	Black	1,55	50°	42W	3375 lm
42 605 74	PL59FL830WH	PL59FL830WH 5850LM FL WH 1M	LED	White	1,65	40°	55W	5850 lm
42 605 75	PL59FL830BL	PL59FL830BL 5850LM FL BL 1M	LED	Black	1,65	40°	55W	5850 lm
42 605 76	PL59WF830WH	PL59WF830WH 5875LM WFL WH 1M	LED	White	1,65	60°	55W	5875 lm
42 605 77	PL59WF830BL	PL59WF830BL 5875LM WFL BL 1M	LED	Black	1,65	60°	55W	5875 lm
› 42 605 78	PL50FL930WH	PL50FL930WH 5000LM FL WH 1M	LED	White	1,65	40°	55W	5000 lm
42 605 80	PL50FL930BL	PL50FL930BL 5000LM FL BL 1M	LED	Black	1,65	40°	55W	5000 lm
› 42 605 81	PL50WF930WH	PL50WF930WH 5025LM WFL WH 1M	LED	White	1,65	60°	55W	5025 lm
42 605 82	PL50WF930BL	PL50WF930BL 5025LM WFL WH 1M	LED	Black	1,65	60°	55W	5025 lm

Products marked in orange are stock items with shorter delivery time.











# Mini Play

LED

Compact downlight for general lighting in shops and offices.  
Tilts 90 degrees.



### Structure

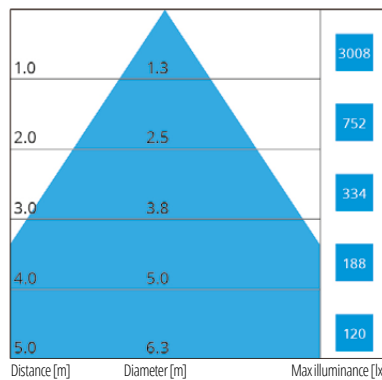
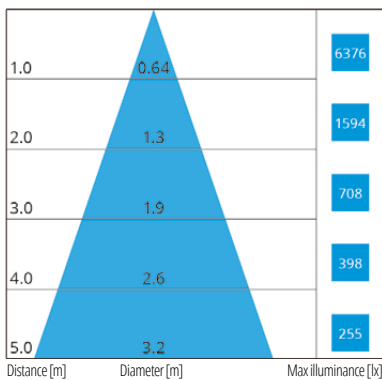
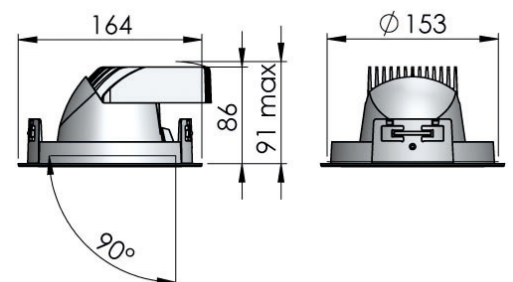
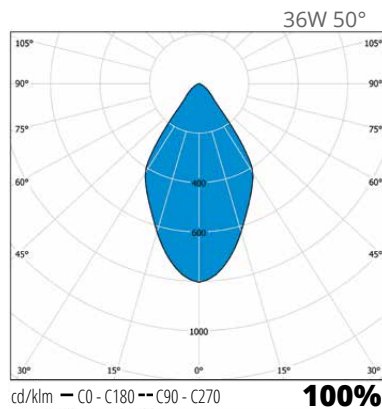
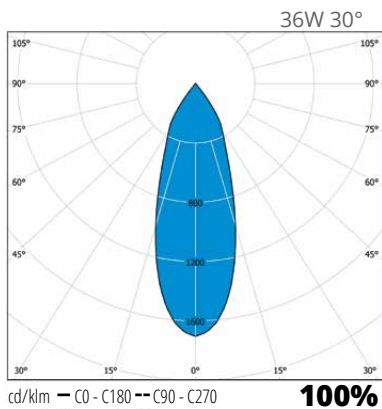
- › Housing: powder coated aluminium
- › Housing colour: white
- › Connected power: 36W
- › Beam angles: 30° and 50°
- › Lumen output: please see the table below
- › 3000 K, Ra>90
- › MacAdams 2-SDCM
- › LED module lifetime: 50 000h L80B10

### Mounting

- › Recessed mounting
- › External driver, 1 m cable MSK 3x0,75 mm<sup>2</sup>

### Made to order

- › Housing in silver or black colour
- › DALI versions
- › Other beam angles
- › Other colour temperature and colour rendering choices and lumen packages
- › Special light colours for meat, fish and bakery products and fruits and vegetables
- › 2,5 m cable with schuko plug



E number	Type	Product name	Base	Colour	Kg	Beam angle	Connected load	Luminous flux
<b>Mini Play</b>								
42 605 83	MPL31FL930WH	MPL31FL930WH 3075LM FL WH 1M	LED	White	1,08	30°	36W	3075 lm
42 605 90	MPL29WF930WH	MPL29WF930WH 2925LM WFL WH 1M	LED	White	1,08	50°	36W	2925 lm









Industrial



# Marlo

LED



Marlo was specifically designed as a lighting solution for retail premises. It is ideal for supermarkets and other store and warehouse premises that require optimal lighting system properties with regard to general lighting, highlighting, and glare. Marlo offers the perfect solution for various types of lighting projects.



"Versatile, high-quality optics."



EnstoNET connectors



Marlo 3R



Marlo with microprismatic optic

### Structure

- › Body, white powder coated aluminium
- › End caps - shockproof, heat and UV resistant white polycarbonate
- › Lens optics PC or acrylic (3R)
- › Optics:
  - Wide beam angle (WB/90°)
  - Medium beam angle (MB/60°)
  - Rack beam optics (O)
  - Shelf optics (DAS)
- › DALI and basic models
- › Microprismatic optics (MP):
  - MA12MP: 4000 lm 32W
  - MA15MP: 5000 lm 40W
- › Lumen output and length: See the table below
- › 4000 K, power factor 0,98, Ra>80
- › Ambient temperature range -20 °C to 30 °C
- › LED-luminaire lifespan 100000 h (L70B50), T<sub>a</sub> = 25 °C

### Mounting

- › Ceiling mounting with AMJK1 spring brackets included
- › Suspension rail (MEK) with AMJK2 spring brackets
- › Made to order: Through wiring sets for different lengths

### Made to order

- › With connection lead
- › More optics options
- › EnstoNET connectors (note: IP20)
- › 3000 K models
- › Project-specific luminous flux packages
- › Models with micro-prismatic optics:
  - With connection lead or EnstoNET connectors
- › Sensor solutions
- › Through wiring set
- › Customized spring brackets for lighting suspension rails

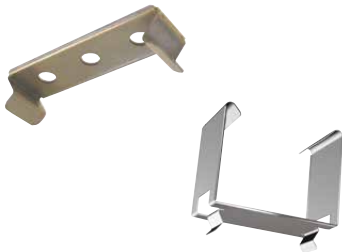
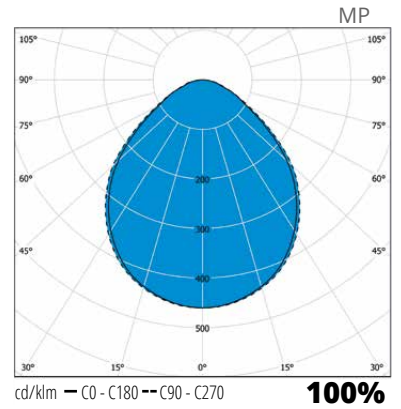
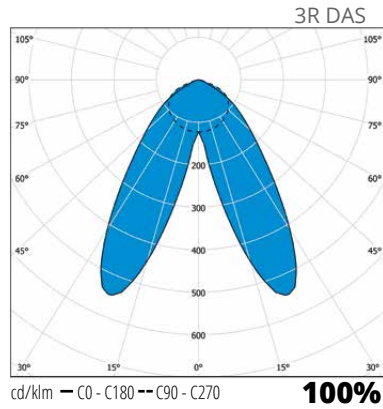
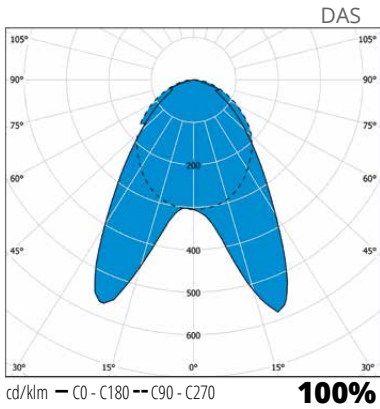
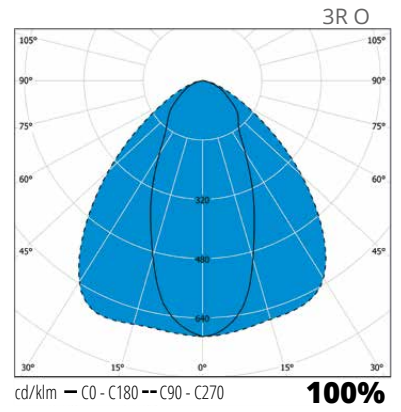
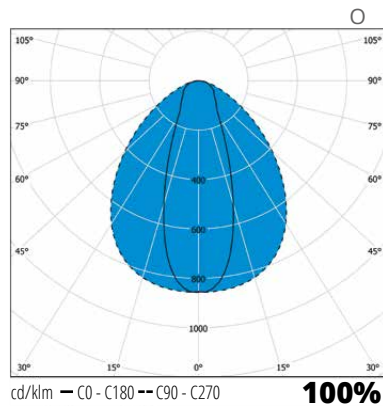
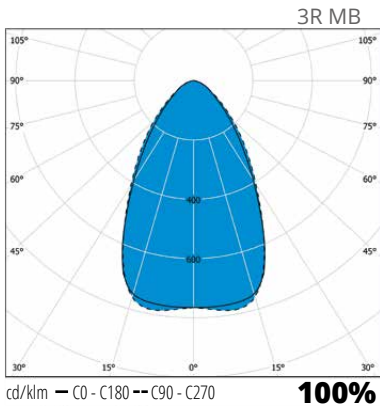
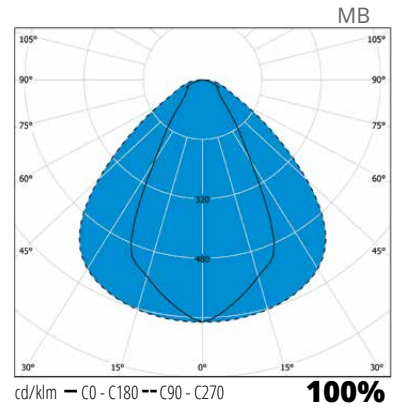
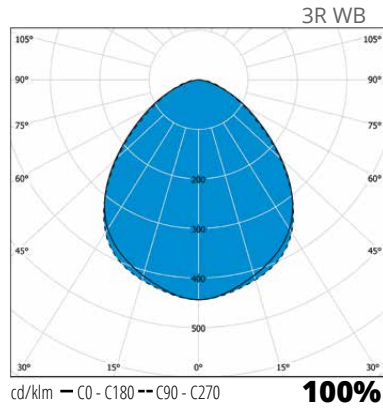
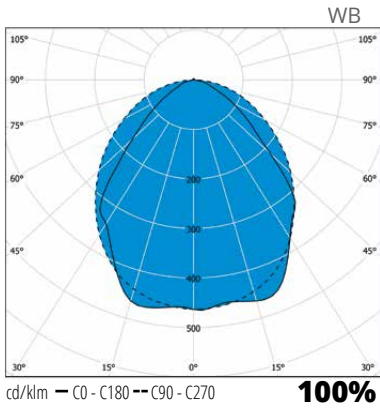
E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
<b>Marlo - Wide beam angle (WB)</b>								
43 605 30	MA12WB	MA12WB LED IP23 42W/840	42W	3,1	1190	WB		5500 lm
43 605 32	MA12WBED	MA12WBED LED IP23 42W/840 DA	42W	3,1	1190	WB	DALI	5500 lm
43 605 42	MA15WB	MA15WB LED IP23 52W/840	52W	3,7	1470	WB		7370 lm
43 605 45	MA15WBED	MA15WBED LED IP23 52W/840 DA	52W	3,7	1470	WB	DALI	7370 lm
43 606 26	MA123RWB	MA123RWB LED IP23 39W/840	39W	3,4	1190	3R WB		5840 lm
43 606 28	MA123RWBED	MA123RWBED LED IP23 39W/840 DA	39W	3,4	1190	3R WB	DALI	5840 lm
43 606 38	MA153RWB	MA153RWB LED IP23 49W/840	49W	4,1	1470	3R WB		7300 lm
43 606 40	MA153RWBED	MA153RWBED LED IP23 49W/840 DA	49W	4,1	1470	3R WB	DALI	7300 lm
<b>Marlo - Medium beam angle (MB)</b>								
43 605 21	MA12MB	MA12MB LED IP23 42W/840	42W	3,1	1190	MB		5940 lm
43 605 23	MA12MBED	MA12MBED LED IP23 42W/840 DA	42W	3,1	1190	MB	DALI	5940 lm
43 605 36	MA15MB	MA15MB LED IP23 52W/840	52W	3,7	1470	MB		7430 lm
43 605 38	MA15MBED	MA15MBED LED IP23 52W/840 DA	52W	3,7	1470	MB	DALI	7430 lm
43 606 20	MA123RMB	MA123RMB LED IP23 39W/840	39W	3,4	1190	3R MB		5840 lm
43 606 22	MA123RMBED	MA123RMBED LED IP23 39W/840 DA	39W	3,4	1190	3R MB	DALI	5840 lm
43 606 32	MA153RMB	MA153RMB LED IP23 49W/840	49W	4,1	1470	3R MB		7380 lm
43 606 34	MA153RMBED	MA153RMBED LED IP23 49W/840 DA	49W	4,1	1470	3R MB	DALI	7380 lm



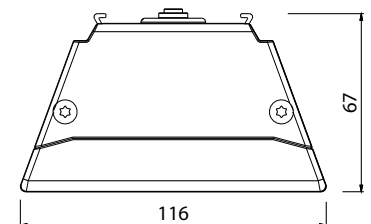
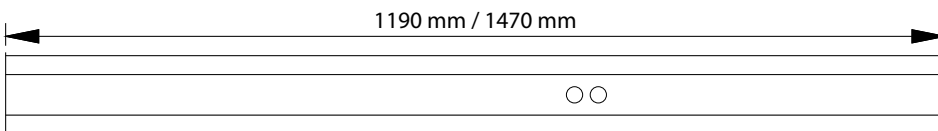
E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
<b>Marlo - Rack beam optics (O)</b>								
43 605 26	MA120	MA120 LED IP23 42W/840	42W	3,1	1190	0		5780 lm
43 605 29	MA120ED	MA120ED LED IP23 42W/840 DA	42W	3,1	1190	0	DALI	5780 lm
43 605 39	MA150	MA150 LED IP23 52W/840	52W	3,7	1470	0		7230 lm
43 605 41	MA150ED	MA150ED LED IP23 52W/840 DA	52W	3,7	1470	0	DALI	7230 lm
43 606 23	MA123RO	MA123RO LED IP23 39W/840	39W	3,4	1190	3R 0		5800 lm
43 606 25	MA123ROED	MA123ROED LED IP23 39W/840 DA	39W	3,4	1190	3R 0	DALI	5800 lm
43 606 35	MA153RO	MA153RO LED IP23 49W/840	49W	4,1	1470	3R 0		7490 lm
43 606 37	MA153ROED	MA153ROED LED IP23 49W/840 DA	49W	4,1	1470	3R 0	DALI	7490 lm
<b>Marlo - Shelf optics (DAS)</b>								
43 605 75	MA12DAS	MA12DAS LED IP23 42W/840	42W	3,1	1190	DAS		5860 lm
43 605 77	MA12DASED	MA12DASED LED IP23 42W/840 DA	42W	3,1	1190	DAS	DALI	5860 lm
43 605 78	MA15DAS	MA15DAS LED IP23 52W/840	52W	3,7	1470	DAS		7330 lm
43 605 80	MA15DASED	MA15DASED LED IP23 52W/840 DA	52W	3,7	1470	DAS	DALI	7330 lm
43 606 17	MA123RDAS	MA123RDAS LED IP23 39W/840	39W	3,4	1190	3R DAS		5880 lm
43 606 19	MA123RDASED	MA123RDASED IP23 39W/840 DA	39W	3,4	1190	3R DAS	DALI	5880 lm
43 606 29	MA153RDAS	MA153RDAS LED IP23 49W/840	49W	4,1	1470	3R DAS		7600 lm
43 606 31	MA153RDASED	MA153RDASED IP23 49W/840 DA	49W	4,1	1470	3R DAS	DALI	7600 lm
<b>Mounting accessories</b>								
43 641 70	AMJK1	AMJK1 SPRING BRACKET PAIR	Spring bracket pair					
43 641 72	AMJK2	AMJK2 SPRING BRACKET PAIR	Spring bracket pair for suspension rail mounting, rail width 70 mm					
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR, WHITE	Spring bracket pair for suspension rail mounting, rail width 70 mm					
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR	Spring bracket pair for suspension rail mounting, rail width 110 mm					
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR, WHITE	Spring bracket pair for suspension rail mounting, rail width 110 mm					







Spring brackets AMJK1 and AMJK2





# Marlo Ramp

LED

Marlo ramp was specifically designed as a lighting solution for retail premises. It is ideal for supermarkets and other store and warehouse premises that require optimal lighting system properties with regard to general lighting, highlighting, and glare. Marlo ramp offers the perfect solution for various types of lighting projects.



"Versatile, high-quality optics."



EnstoNET connectors



Marlo

### Structure

- › Body, white powder coated aluminium
- › End caps - shockproof, heat and UV resistant white polycarbonate
- › Lens optics PC or acrylic (3R)
- › Optics:
  - Wide beam angle (WB/90°)
  - Medium beam angle (MB/60°)
  - Rack beam optics (O)
  - Shelf optics (DAS)
- › DALI and basic models
- › Lumen output and length: See the table below
- › 4000 K, power factor 0,98, Ra>80
- › Ambient temperature range -20 °C to 30 °C
- › LED-luminaire lifespan 100000 h (L70B50), T<sub>a</sub> = 25 °C

### Mounting

- › Ceiling mounting with AMJK1 spring brackets
- › Suspension rail (MEK) with AMJK2 spring brackets
- › End supports with a stepless adjustment system (AMRPK, AMRPK500 or AMRPK330)
  - End supports with a stepless adjustment system which are designed for Marlo ramp(MAR-RP-K05M2, MAR-RPK05M4, MAR-RPK05M6, MAR-RPK1M2, MAR-RPK1M4, MAR-RPK1M6)
- › Made to order: Through wiring sets for different lengths

### Made to order

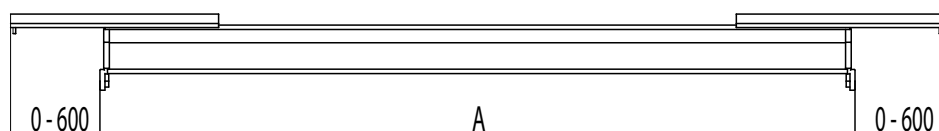
- › With connection lead
- › More optics options
- › EnstoNET connectors (note: IP20)
- › 3000 K models
- › Project-specific luminous flux packages
- › Sensor solutions
- › Through wiring set
- › Customized spring brackets for lighting suspension rails

E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
<b>Marlo ramp - Wide beam angle (WB)</b>								
43 605 53	MAR24WB	MAR24WB LED IP23 82W/840	82W	5,6	2336	WB		11000 lm
43 605 56	MAR24WBED	MAR24WBED LED IP23 82W/840	82W	5,6	2336	WB	DALI	11000 lm
43 605 63	MAR30WB	MAR30WB LED IP23 102W/840	102W	6,7	2910	WB		14700 lm
43 605 65	MAR30WBED	MAR30WBED LED IP23 102W/840	102W	6,7	2910	WB	DALI	14700 lm
43 606 53	MAR243RWB	MAR243RWB LED IP23 77W/840	77W	5,9	2336	3R WB		11680 lm
43 606 55	MAR243RWBED	MAR243RWBED IP23 77W/840 DA	77W	5,9	2336	3R WB	DALI	11680 lm
43 600 57	MAR243RWBHO	MAR243RWBHO LED IP23 95W/840	95W	5,9	2336	3R WB		13900 lm
43 600 54	MAR243RWBEDHO	MAR243RWBEDHO LED IP23 95W/840 DA	95W	5,9	2336	3R WB	DALI	13900 lm
43 606 67	MAR303RWB	MAR303RWB LED IP23 95W/840	95W	7,0	2910	3R WB		14600 lm
43 606 68	MAR303RWBED	MAR303RWBED IP23 95W/840 DA	95W	7,0	2910	3R WB	DALI	14600 lm
43 600 36	MAR303RWBHO	MAR303RWBHO LED IP23 118W/840	118W	7,0	2910	3R WB		17300 lm
43 600 96	MAR303RWBEDHO	MAR303RWBEDHO LED IP23 118W/840 DA	118W	7,0	2910	3R WB	DALI	17300 lm
<b>Marlo ramp - Medium beam angle (MB)</b>								
43 605 47	MAR24MB	MAR24MB LED IP23 82W/840	82W	5,6	2336	MB		11880 lm
43 605 48	MAR24MBED	MAR24MBED LED IP23 82W/840	82W	5,6	2336	MB	DALI	11880 lm
43 605 57	MAR30MB	MAR30MB LED IP23 102W/840	102W	6,7	2910	MB		14860 lm
43 605 59	MAR30MBED	MAR30MBED LED IP23 102W/840	102W	6,7	2910	MB	DALI	14860 lm
43 606 44	MAR243RMB	MAR243RMB LED IP23 77W/840	77W	5,9	2336	3R MB		11680 lm
43 606 46	MAR243RMBED	MAR243RMBED IP23 77W/840 DA	77W	5,9	2336	3R MB	DALI	11680 lm
43 600 42	MAR243RMBHO	MAR243RMBHO LED IP23 95W/840	95W	5,9	2336	3R MB		14100 lm
43 601 59	MAR243RMBEDHO	MAR243RMBEDHO LED IP23 95W/840 DA	95W	5,9	2336	3R MB	DALI	14100 lm
43 606 59	MAR303RMB	MAR303RMB LED IP23 95W/840	95W	7,0	2910	3R MB		14760 lm
43 606 61	MAR303RMBED	MAR303RMBED IP23 95W/840 DA	95W	7,0	2910	3R MB	DALI	14760 lm
43 600 87	MAR303RMBHO	MAR303RMBHO LED IP23 118W/840	118W	7,0	2910	3R MB		17600 lm
43 600 84	MAR303RMBEDHO	MAR303RMBEDHO LED IP23 118W/840 DA	118W	7,0	2910	3R MB	DALI	17600 lm



E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
<b>Marlo ramp - Rack beam optics (O)</b>								
43 605 50	MAR240	MAR240 LED IP23 82W/840	82W	5,6	2336	0		11560 lm
43 605 51	MAR240ED	MAR240ED LED IP23 82W/840	82W	5,6	2336	0	DALI	11560 lm
43 605 60	MAR300	MAR300 LED IP23 102W/840	102W	6,7	2910	0		14460 lm
43 605 62	MAR300ED	MAR300ED LED IP23 102W/840	102W	6,7	2910	0	DALI	14460 lm
43 606 50	MAR243RO	MAR243RO LED IP23 77W/840	77W	5,9	2336	3R O		11600 lm
43 606 52	MAR243ROED	MAR243ROED LED IP23 77W/840 DA	77W	5,9	2336	3R O	DALI	11600 lm
43 600 51	MAR243ROHO	MAR243ROHO LED IP23 95W/840	95W	5,9	2336	3R O		14300 lm
43 600 48	MAR243ROEDHO	MAR243ROEDHO LED IP23 95W/840 DA	95W	5,9	2336	3R O	DALI	14300 lm
43 606 64	MAR303RO	MAR303RO LED IP23 95W/840	95W	7,0	2910	3R O		14980 lm
43 606 65	MAR303ROED	MAR303ROED LED IP23 95W/840 DA	95W	7,0	2910	3R O	DALI	14980 lm
43 600 93	MAR303ROHO	MAR303ROHO LED IP23 118W/840	118W	7,0	2910	3R O		17800 lm
43 600 90	MAR303ROEDHO	MAR303ROEDHO LED IP23 118W/840 DA	118W	7,0	2910	3R O	DALI	17800 lm
<b>Marlo ramp - Shelf optics (DAS)</b>								
43 605 81	MAR24DAS	MAR24DAS LED IP23 82W/840	82W	5,6	2336	DAS		11720 lm
43 605 83	MAR24DASED	MAR24DASED LED IP23 82W/840	82W	5,6	2336	DAS	DALI	11720 lm
43 605 84	MAR30DAS	MAR30DAS LED IP23 102W/840	102W	6,7	2910	DAS		14660 lm
43 605 86	MAR30DASED	MAR30DASED LED IP23 102W/840	102W	6,7	2910	DAS	DALI	14660 lm
43 606 41	MAR243RDAS	MAR243RDAS LED IP23 77W/840	77W	5,9	2336	3R DAS		11760 lm
43 606 43	MAR243RDASED	MAR243RDASED IP23 77W/840 DA	77W	5,9	2336	3R DAS	DALI	11760 lm
43 601 56	MAR243RDASHO	MAR243RDASHO LED IP23 95W/840	95W	5,9	2336	3R DAS		14500 lm
43 600 99	MAR243RDASEDHO	MAR243RDASEDHO LED IP23 95W/840 DA	95W	5,9	2336	3R DAS	DALI	14500 lm
43 606 56	MAR303RDAS	MAR303RDAS LED IP23 95W/840	95W	7,0	2910	3R DAS		15200 lm
43 606 58	MAR303RDASED	MAR303RDASED IP23 95W/840 DA	95W	7,0	2910	3R DAS	DALI	15200 lm
43 600 81	MAR303RDASHO	MAR303RDASHO LED IP23 118W/840	118W	7,0	2910	3R DAS		18200 lm
43 600 78	MAR303RDASEDHO	MAR303RDASEDHO LED IP23 118W/840 DA	118W	7,0	2910	3R DAS	DALI	18200 lm
<b>Mounting accessories</b>								
43 641 70	AMJK1	AMJK1 SPRING BRACKET PAIR				Spring bracket pair		
43 641 72	AMJK2	AMJK2 SPRING BRACKET PAIR				Spring bracket pair for suspension rail mounting, rail width 70 mm		
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR, WHITE				Spring bracket pair for suspension rail mounting, rail width 70 mm		
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR				Spring bracket pair for suspension rail mounting, rail width 110 mm		
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR, WHITE				Spring bracket pair for suspension rail mounting, rail width 110 mm		
43 641 76	AMRPK	AMRPK RAMP MOUNT.PAIR 1M		1,2		Steplessly adjustable - max 1200mm* white		
42 653 80	AMRPK500	AMRPK500 RAMP MOUNT.PAIR 0,5M		0,5		Steplessly adjustable - max 630 mm* white		
42 653 79	AMRPK330	AMRPK330 RAMP MOUNT.PAIR 0,3M		0,3		Steplessly adjustable - max 410 mm* white		
43 601 62	MAR-RPK05M2	MAR-RPK05M2 RAMP MOUNT.PAIR 0.5M		1,0		Steplessly adjustable - max. 700 mm*, white		
43 601 65	MAR-RPK05M4	MAR-RPK05M4 RAMP MOUNT.PAIR 0.5M		1,0		Steplessly adjustable - max. 700 mm*, white		
43 601 68	MAR-RPK05M6	MAR-RPK05M6 RAMP MOUNT.PAIR 0.5M		1,0		Steplessly adjustable - max. 700 mm*, white		
43 601 71	MAR-RPK1M2	MAR-RPK1M2 RAMP MOUNT.PAIR 1M		1,8		Steplessly adjustable - max. 1400 mm*, white		
43 601 74	MAR-RPK1M4	MAR-RPK1M4 RAMP MOUNT.PAIR 1M		1,8		Steplessly adjustable - max. 1400 mm*, white		
43 601 77	MAR-RPK1M6	MAR-RPK1M6 RAMP MOUNT.PAIR 1M		1,8		Steplessly adjustable - max. 1400 mm*, white		

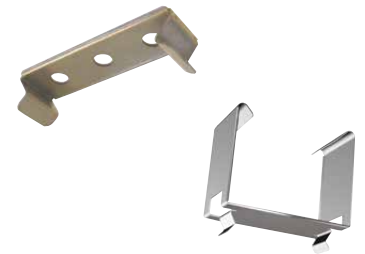
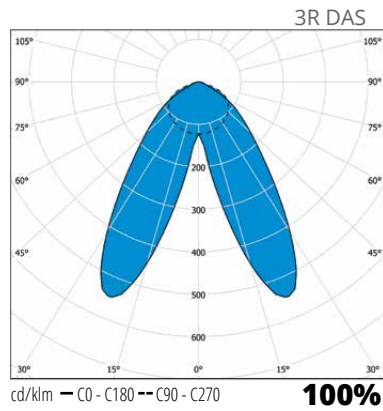
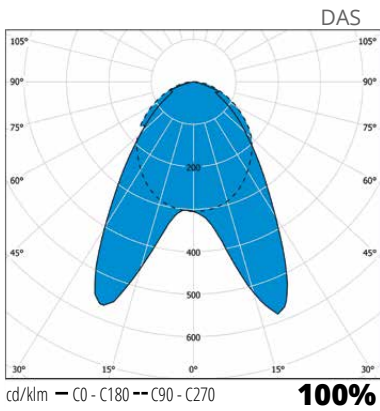
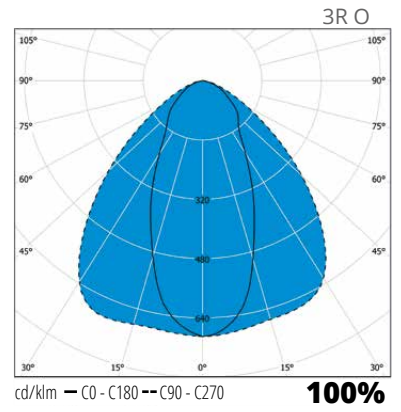
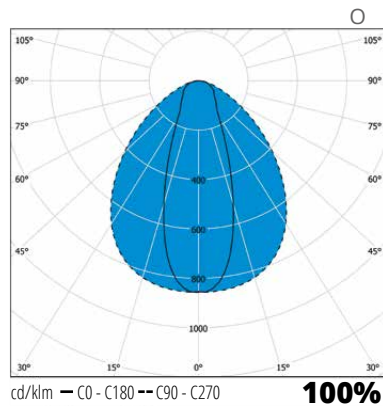
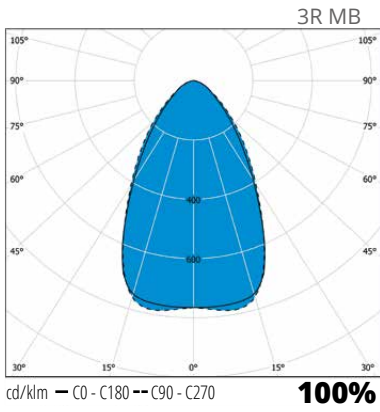
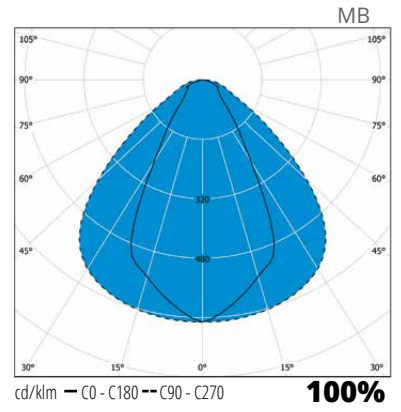
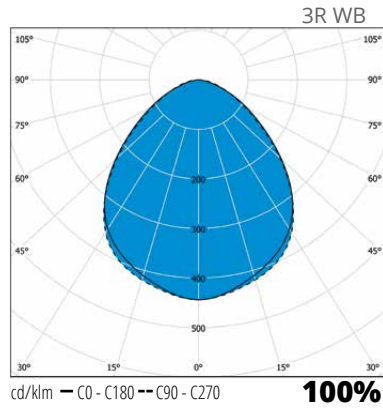
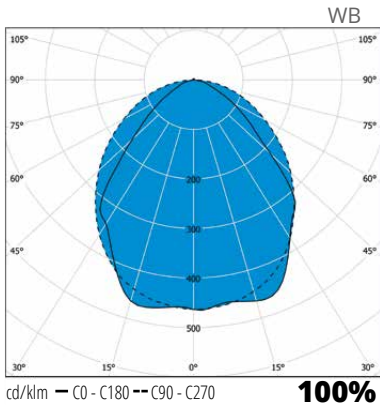
\* Max. end support suspension length = the length of the luminaire + max. adjustment F.ex MAR30WB+AMRPK (pair); 2910 mm + 1200 mm = 4110 mm



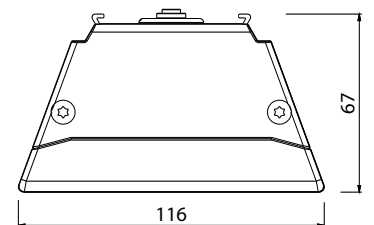
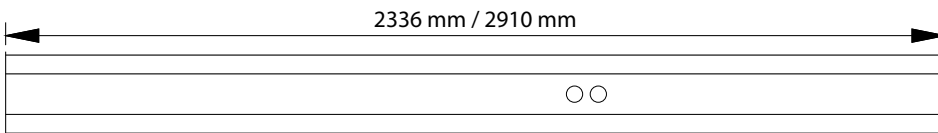
A = The length of the luminaire

AMRPK end support adjustment / one end  
 AMRPK 0-600 mm  
 AMRPK500 0-315 mm  
 AMRPK330 0-205 mm

MAR-RPK end support adjustment / one end  
 MAR-RPK1M 0-700 mm  
 MAR-RPK05M 0-350 mm



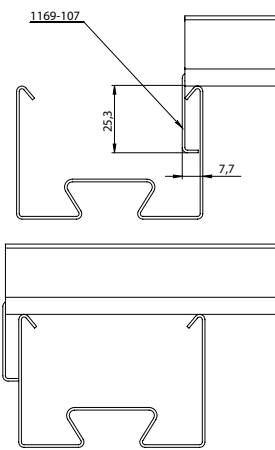
Spring brackets AMJK1 and AMJK2





MARLO RAMP END SUPPORTS

End support with standard bracket

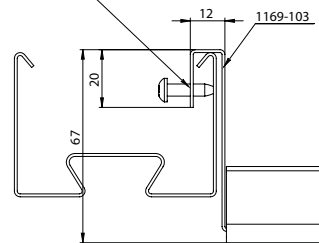


AMRPK end support with standard bracket

End support + bracket 2



Can be fastened by screw  
(Do not include to the delivery)

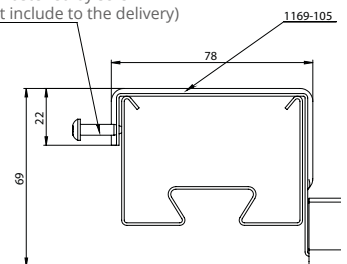


AMRPK end support with lower bracket.  
Can be fastened with screw or by pressing together (to be ordered separately).

End support + bracket 4

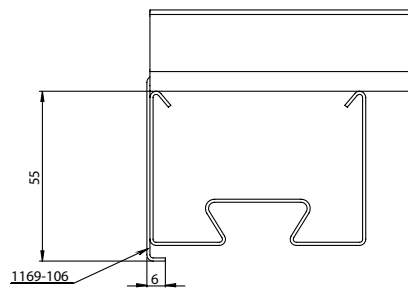


Can be fastened by screw  
(Do not include to the delivery)

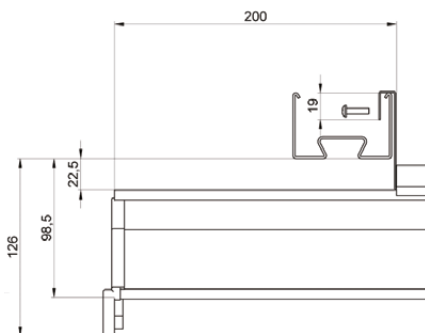


AMRPK end support with high bracket  
(to be ordered separately)

End support + bracket 5

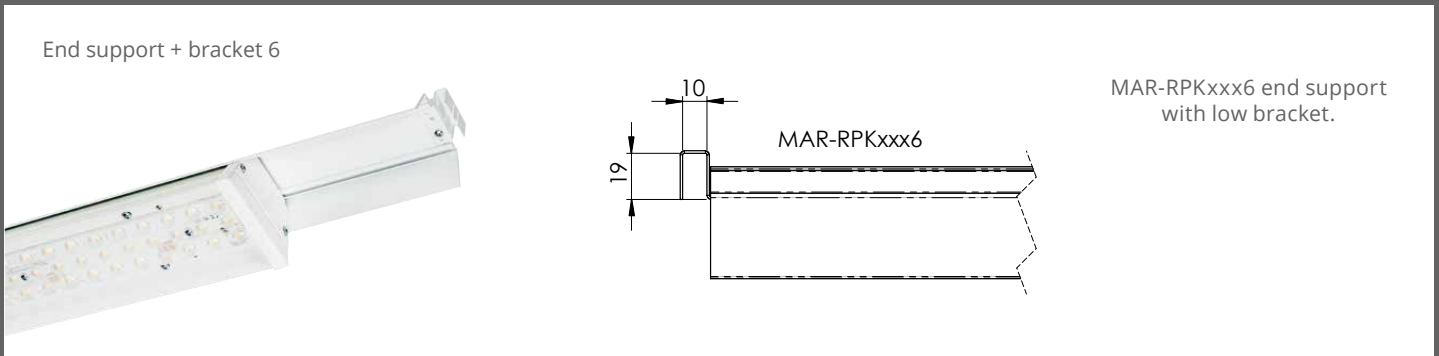
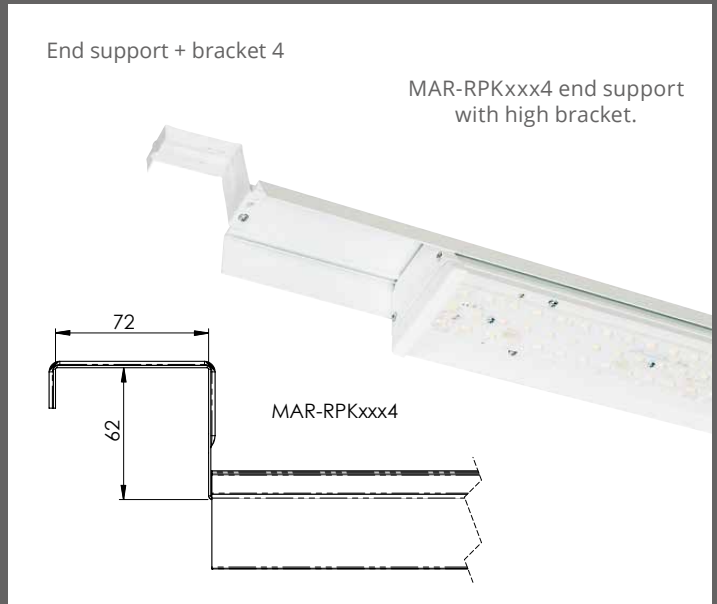
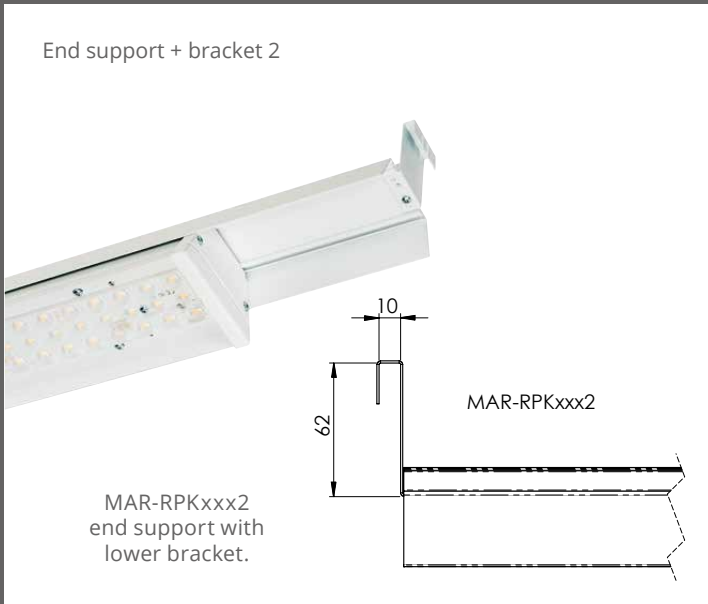


AMRPK end support and lower bracket which can be fastened by screw or by pressing together must be ordered separately. With the lower bracket the ramp luminaires installed between the lighting suspension rails can be positioned on the same level as luminaires installed to the lighting suspension rail with AMJK2 spring brackets.



When the distance between the lighting suspension rails is shorter than the length of the luminaire (e.g. renovation project), the mounting of ramp can be done with lower bracket.

MARLO RAMP END SUPPORTS



# Tino

LED

Energy-efficient, low maintenance, industrial IP44 LED allround luminaire. Wide selection of optics and power options enables use of Tino in various applications from supermarkets to logistic centers and parking halls.



Tino with clear diffuser

## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Optics

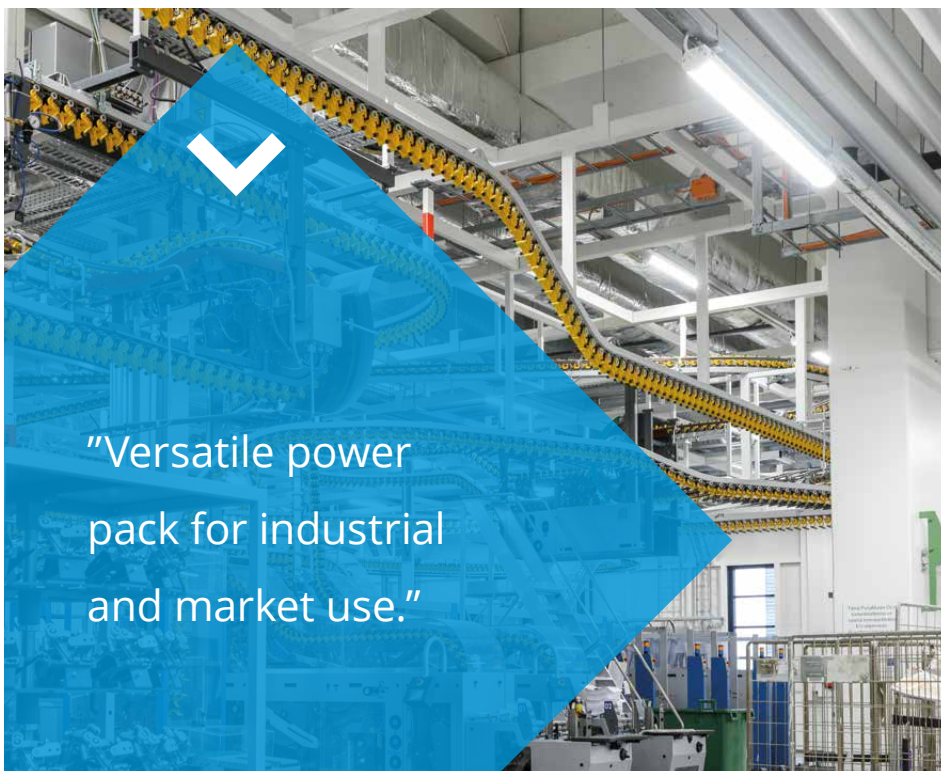
Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## DALI

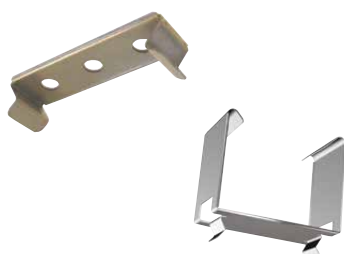
DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



"Versatile power pack for industrial and market use."



Tino with frosted acrylic diffuser



Spring brackets AMJK1 and AMJK2

### Structure

- › Body aluminium profile, end caps aluminium, colour white
- › Diffuser clear (C) or frosted (F) acrylic
- › Optics:
  - Wide beam (WB)
  - Medium beam (MB)
- › DALI and basic models
- › TN2xxx models:
  - Connected load 41W, length 880 mm
  - Connected load 54W, length 1160 mm
  - Connected load 66W, length 1440 mm
  - See the luminaire luminous flux from the table below
- › TN3xxx models:
  - 1-row model
  - Frosted (F) acrylic models
  - Connected load 41W, length 880 mm
  - Connected load 53W, length 1160 mm
  - Connected load 65W, length 1440 mm
  - See the luminaire luminous flux from the table below
  - 4000 K, power factor 0,98, Ra> 80
  - Ambient temperature – 20 °C - + 30 °C
  - LED-luminaire lifespan 100 000h L<sub>70</sub>B<sub>50</sub>F<sub>10</sub>
  - T<sub>a</sub>=25 °C

### Mounting

- › Directly to the ceiling with AMJK1 spring brackets (included in the delivery)
- › To the lighting suspension rail (MEK) with AMJK2 spring brackets
- › Through-wired -o-o- 5 x 2,5 mm<sup>2</sup>, controlled models 1-phase for through-wiring

41W	53W	54W	65W	66W
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### Made to order

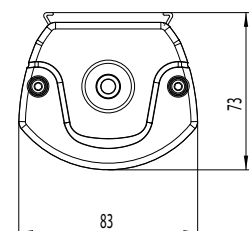
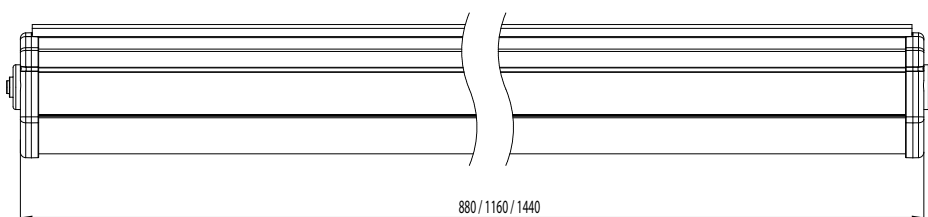
- › Switch-Control
- › With connection lead
- › With asymmetrical light distribution, light distribution curves when re-quested (excl. TN3-models)
- › Product codes as Tino G2-basic models, but however the 4. character is 1 (e.g. TN2134WBF)
- › RA > 90-models made to order, luminous flux is ca. 15% lower than in Ra >80-models
- › 3000 K -models
- › With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails
- › Tino LED -versions to Helvar's Select the Weather solution
- › Optimized luminous flux versions to projects

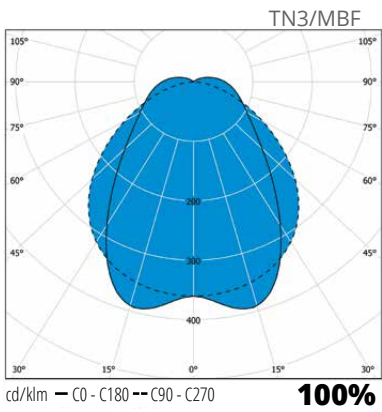
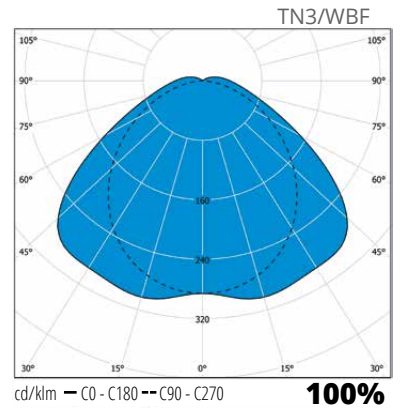
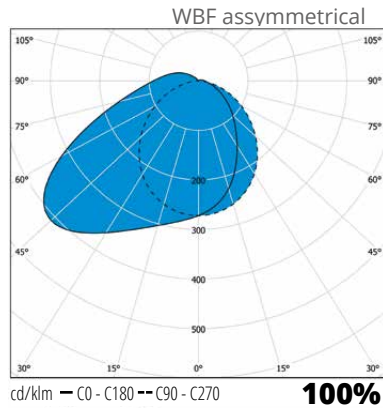
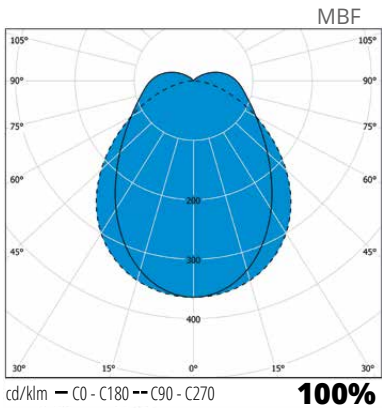
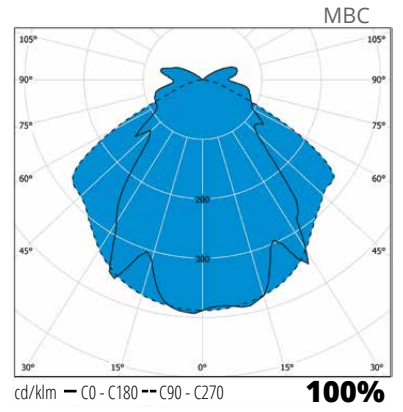
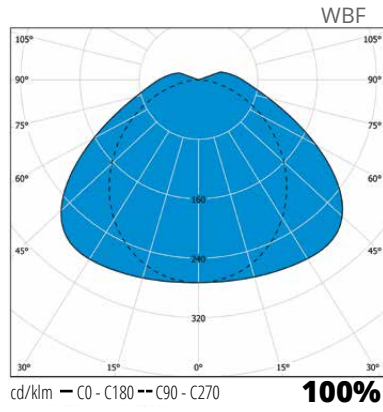
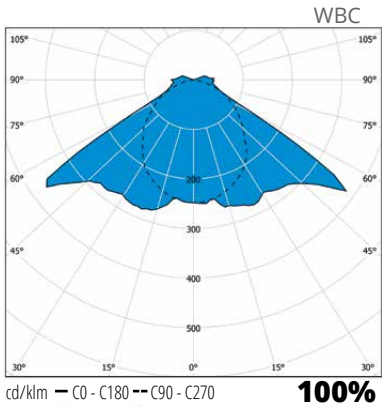
E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
With wide beam optics, clear diffuser								
43 603 92	TN2234WBC	TN2234WBC LED IP44 41W/840 ACC	41W	1,8	880	WBC		6003 lm
43 603 94	TN2234WBCED	TN2234WBCED 41W/840 AC C DALI	41W	1,8	880	WBC	DALI	6003 lm
43 604 07	TN2244WBC	TN2244WBC LED IP44 54W/840 ACC	54W	2,4	1160	WBC		7936 lm
43 604 09	TN2244WBCED	TN2244WBCED 54W/840 AC C DALI	54W	2,4	1160	WBC	DALI	7936 lm
43 604 22	TN2254WBC	TN2254WBC LED IP44 66W/840 ACC	66W	3,0	1440	WBC		10057 lm
43 604 25	TN2254WBCED	TN2254WBCED 66W/840 AC C DALI	66W	3,0	1440	WBC	DALI	10057 lm





E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
<b>With wide beam optics, frosted diffuser</b>								
43 605 96	TN3134WBF	TN3134WBF LED IP44 41W/840 ACF	41W	1,8	880	WBF		5240 lm
43 605 98	TN3134WBFED	TN3134WBFED LED IP44 41W/840 ACF DALI	41W	1,8	880	WBF	DALI	5240 lm
43 603 97	TN2234WBF	TN2234WBF LED IP44 41W/840 ACF	41W	1,8	880	WBF		5904 lm
43 603 98	TN2234WBFED	TN2234WBFED 41W/840 AC F DALI	41W	1,8	880	WBF	DALI	5904 lm
43 606 02	TN3144WBF	TN3144WBF LED IP44 53W/840 ACF	53W	2,4	1160	WBF		7500 lm
43 606 04	TN3144WBFED	TN3144WBFED LED IP44 53W/840 ACF DALI	53W	2,4	1160	WBF	DALI	7500 lm
43 604 12	TN2244WBF	TN2244WBF LED IP44 54W/840 ACF	54W	2,4	1160	WBF		7880 lm
43 604 13	TN2244WBFED	TN2244WBFED 54W/840 AC F DALI	54W	2,4	1160	WBF	DALI	7880 lm
43 606 08	TN3154WBF	TN3154WBF LED IP44 65W/840 ACF	65W	3,0	1440	WBF		9260 lm
43 606 10	TN3154WBFED	TN3154WBFED LED IP44 65W/840 ACF DALI	65W	3,0	1440	WBF	DALI	9260 lm
43 604 30	TN2254WBF	TN2254WBF LED IP44 66W/840 ACF	66W	3,0	1440	WBF		9885 lm
43 604 31	TN2254WBFED	TN2254WBFED 66W/840 AC F DALI	66W	3,0	1440	WBF	DALI	9885 lm
<b>With medium beam optics, clear diffuser</b>								
43 603 86	TN2234MBC	TN2234MBC LED IP44 41W/840 ACC	41W	1,8	880	MBC		5841 lm
43 603 88	TN2234MBCED	TN2234MBCED 41W/840 AC C DALI	41W	1,8	880	MBC	DALI	5841 lm
43 604 01	TN2244MBC	TN2244MBC LED IP44 54W/840 ACC	54W	2,4	1160	MBC		7812 lm
43 604 03	TN2244MBCED	TN2244MBCED 54W/840 ACC DALI	54W	2,4	1160	MBC	DALI	7812 lm
43 604 16	TN2254MBC	TN2254MBC LED IP44 66W/840 ACC	66W	3,0	1440	MBC		9826 lm
43 604 18	TN2254MBCED	TN2254MBCED 66W/840 AC C DALI	66W	3,0	1440	MBC	DALI	9826 lm
<b>With medium beam optics, frosted diffuser</b>								
43 605 93	TN3134MBF	TN3134MBF LED IP44 41W/840 ACF	41W	1,8	880	MBF		5220 lm
43 605 95	TN3134MBFED	TN3134MBFED LED IP44 41W/840 ACF DALI	41W	1,8	880	MBF	DALI	5220 lm
43 603 89	TN2234MBF	TN2234MBF LED IP44 41W/840 ACF	41W	1,8	880	MBF		5845 lm
43 603 91	TN2234MBFED	TN2234MBFED 41W/840 AC F DALI	41W	1,8	880	MBF	DALI	5845 lm
43 605 99	TN3144MBF	TN3144MBF LED IP44 53W/840 ACF	53W	2,4	1160	MBF		7480 lm
43 606 01	TN3144MBFED	TN3144MBFED LED IP44 53W/840 ACF DALI	53W	2,4	1160	MBF	DALI	7480 lm
43 604 04	TN2244MBF	TN2244MBF LED IP44 54W/840 ACF	54W	2,4	1160	MBF		7777 lm
43 604 06	TN2244MBFED	TN2244MBFED 54W/840 AC F DALI	54W	2,4	1160	MBF	DALI	7777 lm
43 606 05	TN3154MBF	TN3154MBF LED IP44 65W/840 ACF	65W	3,0	1440	MBF		9210 lm
43 606 07	TN3154MBFED	TN3154MBFED LED IP44 65W/840 ACF DALI	65W	3,0	1440	MBF	DALI	9210 lm
43 604 19	TN2254MBF	TN2254MBF LED IP44 66W/840 ACF	66W	3,0	1440	MBF		9775 lm
43 604 21	TN2254MBFED	TN2254MBFED 66W/840 AC F DALI	66W	3,0	1440	MBF	DALI	9775 lm
<b>Mounting accessories</b>								
43 641 70	AMJK1	AMJK1 SPRING BRACKET PAIR	Spring bracket pair					
43 641 72	AMJK2	AMJK2 SPRING BRACKET PAIR	Spring bracket pair for suspension rail mounting, rail width 70 mm					
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR, WHITE	Spring bracket pair for suspension rail mounting, rail width 70 mm					
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR	Spring bracket pair for suspension rail mounting, rail width 110 mm					
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR, WHITE	Spring bracket pair for suspension rail mounting, rail width 110 mm					





# Tino Ramp

LED

Energy-efficient, low maintenance, industrial IP44 LED allround luminaire with self-supporting body. Wide selection of optics and power options enables use of Tino in various applications from super markets to logistic centers.



## SmartWay

Ensto SmartWay is a self-learning, wirelessly networked and future proof control system. SmartWay luminaires listen and learn by themselves and from each other to make sure that there is always light on your way. Plug'n play, no programming or commissioning needed.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## Tunable White

Ensto luminaires with Tunable White -solution are a base for Human Centric lighting. You can integrate Ensto TW -luminaires into numerous control systems which operate steplessly between 2700 K and 6500 K. Tunable White -solution is perfect for modern office use.

## DALI

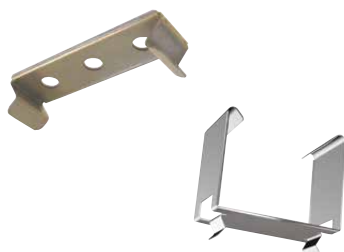
DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



"The real package for lighting with multiple optics."



Tino with frosted acrylic diffuser



Spring brackets AMJK1 and AMJK2

### Structure

- › Body aluminium profile, end caps aluminium, colour white
- › Diffuser clear (C) or frosted (F) acrylic
- › Optics:
  - Wide beam (WB)
  - Medium beam (MB)
- › DALI- and basic models
- › TN2xxx models:
  - Connected load 107W, length 2300 mm, see the luminaire luminous flux from the table
  - Connected load 132W, length 2870 mm, see the luminaire luminous flux from the table
- › TN3xxx models:
  - 1-row model
  - Frosted (F) acrylic models
  - Connected load 106W, length 2300 mm, see the luminaire luminous flux from the table
  - Connected load 130W, length 2870 mm, see the luminaire luminous flux from the table
  - 4000 K, power factor 0,98, Ra> 80
  - Ambient temperature - 20 °C - + 30 °C
  - LED-luminaire lifespan 100 000h  $L_{70}B_{50}F_{10}$
  - $T_a=25\text{ °C}$

### Mounting

- › Directly to the ceiling with AMJK1 spring brackets
- › To the lighting suspension rail (MEK) with AMJK2 spring brackets between the lighting suspension rails with steplessly adjustable end supports (AMRPK, AMRPK500 or AMRPK330).
- › In case of installation between the suspension rails the bending of the luminaire is ca. 5 mm in the center of the luminaire. The bending can be avoided by installing an extra suspension support (AMJK1 + suspension wire or threaded rod). See end support options at Monix Ramp product card at WEB-site [www.ensto.com](http://www.ensto.com) - Monix Ramp
- › Trough-wired -o-o- 5x2,5 mm<sup>2</sup>, controlled models 1-phase for through-wiring
- › DALI-luminaires with one DALI-address

106W 107W 130W 132W

### Made to order

- › Switch-Control
- › With connection lead
- › With asymmetrical light distribution, light distribution curves when requested (excl. TN3-models)
- › RA > 90-models made to order, luminous flux is ca. 15% lower than in Ra >80-models
- › 3000 K -models
- › With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails

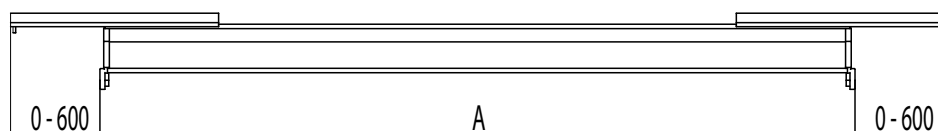
E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
With wide beam optics, clear diffuser								
43 604 43	TN2284WBC	TN2284WBC IP44 107W/840 AC C	107W	4,8	2300	WBC		15872 lm
43 604 45	TN2284WBCED	TN2284WBCED 107W/840 AC C DALI	107W	4,8	2300	WBC	DALI	15872 lm
43 603 80	TN22104WBC	TN22104WBC IP44 132W/840 AC C	132W	6,0	2870	WBC		20114 lm
43 603 82	TN22104WBCED	TN22104WBCED 132W/840 AC C DAL	132W	6,0	2870	WBC	DALI	20114 lm





E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
<b>With wide beam optics, frosted diffuser</b>								
43 606 14	TN3184WBF	TN3184WBF LED IP44 106W/840 ACF	106W	4,8	2300	WBF		15010 lm
43 606 16	TN3184WBFED	TN3184WBFED LED IP44 106W/840 ACF DALI	106W	4,8	2300	WBF	DALI	15010 lm
43 604 46	TN2284WBF	TN2284WBF IP44 107W/840 AC F	107W	4,8	2300	WBF		15760 lm
43 604 48	TN2284WBFED	TN2284WBFED 107W/840 AC F DALI	107W	4,8	2300	WBF	DALI	15760 lm
43 605 90	TN31104WBF	TN31104WBF LED IP44 130W/840 ACF	130W	6,0	2870	WBF		18520 lm
43 605 92	TN31104WBFED	TN31104WBFED LED IP44 130W/840 ACF DALI	130W	6,0	2870	WBF	DALI	18520 lm
43 603 83	TN22104WBF	TN22104WBF IP44 132W/840 AC F	132W	6,0	2870	WBF		19770 lm
43 603 85	TN22104WBFED	TN22104WBFED 132W/840 AC F DAL	132W	6,0	2870	WBF	DALI	19770 lm
<b>With medium beam optics, clear diffuser</b>								
43 604 37	TN2284MBC	TN2284MBC IP44 107W/840 AC C	107W	4,8	2300	MBC		15624 lm
43 604 39	TN2284MBCED	TN2284MBCED 107W/840 AC C DALI	107W	4,8	2300	MBC	DALI	15624 lm
43 603 56	TN22104MBC	TN22104MBC IP44 132W/840 AC C	132W	6,0	2870	MBC		19652 lm
43 603 76	TN22104MBCED	TN22104MBCED 132W/840 AC C DAL	132W	6,0	2870	MBC	DALI	19652 lm
<b>With medium beam optics, frosted diffuser</b>								
43 606 11	TN3184MBF	TN3184MBF LED IP44 106W/840 ACF	106W	4,8	2300	MBF		14970 lm
43 606 13	TN3184MBFED	TN3184MBFED LED IP44 106W/840 ACF DALI	106W	4,8	2300	MBF	DALI	14970 lm
43 604 40	TN2284MBF	TN2284MBF IP44 107W/840 AC F	107W	4,8	2300	MBF		15554 lm
43 604 42	TN2284MBFED	TN2284MBFED 107W/840 AC F DALI	107W	4,8	2300	MBF	DALI	15554 lm
43 605 87	TN31104MBF	TN31104MBF LED IP44 130W/840 ACF	130W	6,0	2870	MBF		18420 lm
43 605 89	TN31104MBFED	TN31104MBFED LED IP44 130W/840 ACF DALI	130W	6,0	2870	MBF	DALI	18420 lm
43 603 77	TN22104MBF	TN22104MBF IP44 132W/840 AC F	132W	6,0	2870	MBF		19550 lm
43 603 79	TN22104MBFED	TN22104MBFED 132W/840 AC F DAL	132W	6,0	2870	MBF	DALI	19550 lm
<b>Mounting accessories</b>								
43 641 70	AMJK1	AMJK1 SPRING BRACKET PAIR						Spring bracket pair
43 641 72	AMJK2	AMJK2 SPRING BRACKET PAIR						Spring bracket pair for suspension rail mounting, rail width 70 mm
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR, WHITE						Spring bracket pair for suspension rail mounting, rail width 70 mm
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR						Spring bracket pair for suspension rail mounting, rail width 110 mm
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR, WHITE						Spring bracket pair for suspension rail mounting, rail width 110 mm
43 641 76	AMRPK	AMRPK RAMP MOUNT.PAIR 1M		1,2				Steplessly adjustable - max 1200mm* white
42 653 80	AMRPK500	AMRPK500 RAMP MOUNT.PAIR 0,5M		0,5				Steplessly adjustable - max 630 mm* white
42 653 79	AMRPK330	AMRPK330 RAMP MOUNT.PAIR 0,3M		0,3				Steplessly adjustable - max 410 mm* white

\* Max. end support suspension length = the length of the luminaire + max. adjustment F.ex TN2104WBC+AMRPK (pair); 2870 mm + 1200mm = 4070 mm



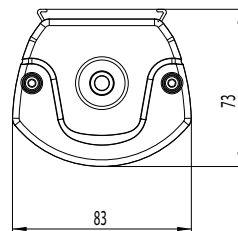
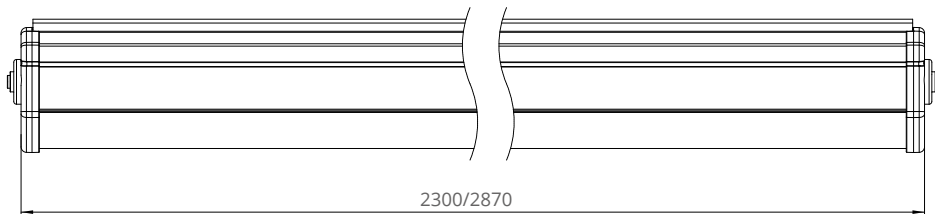
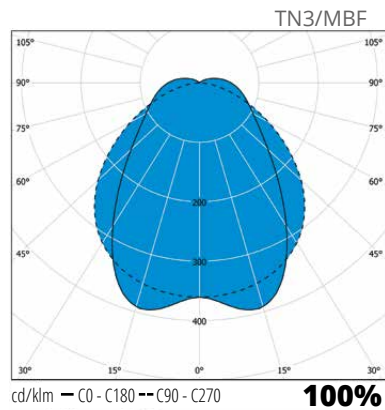
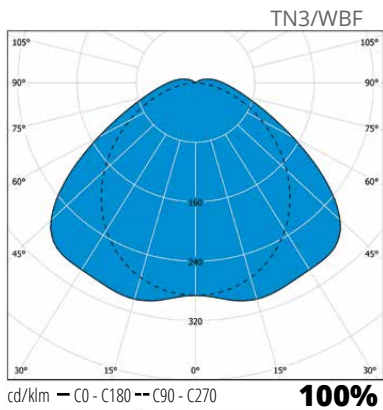
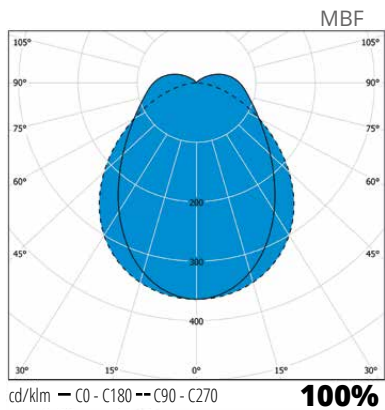
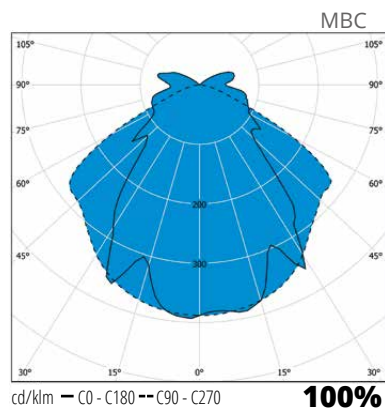
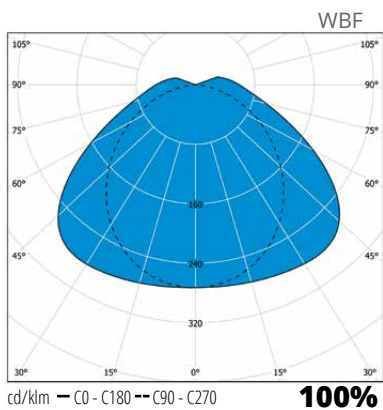
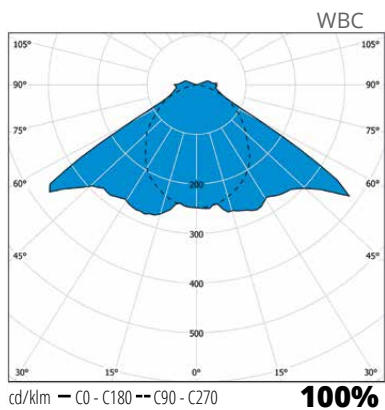
A = The length of the luminaire

AMRPK end support adjustment / one end

AMRPK 0-600 mm

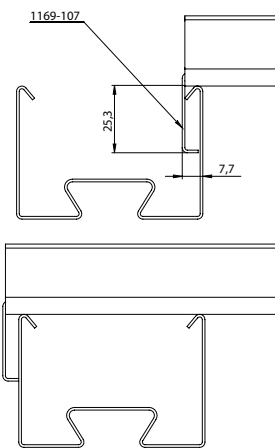
AMRPK500 0-315 mm

AMRPK330 0-205 mm



TINO RAMP END SUPPORTS

End support with standard bracket

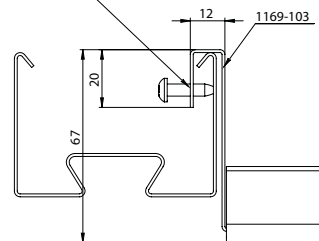


AMRPK end support with standard bracket

End support + bracket 2



Can be fastened by screw  
(Do not include to the delivery)

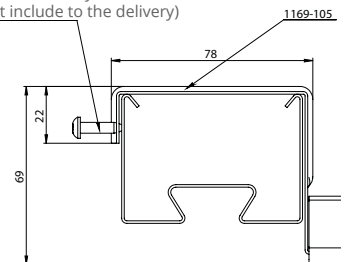


AMRPK end support with lower bracket.  
Can be fastened with screw or by pressing together (to be ordered separately).

End support + bracket 4

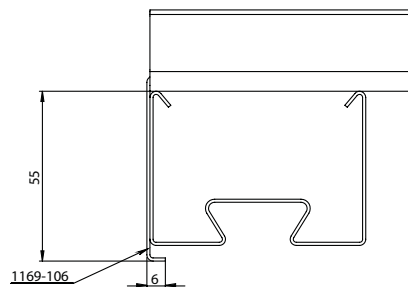


Can be fastened by screw  
(Do not include to the delivery)

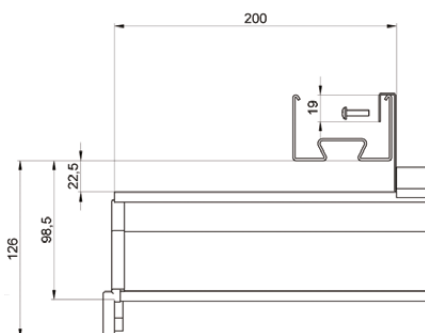


AMRPK end support with high bracket  
(to be ordered separately)

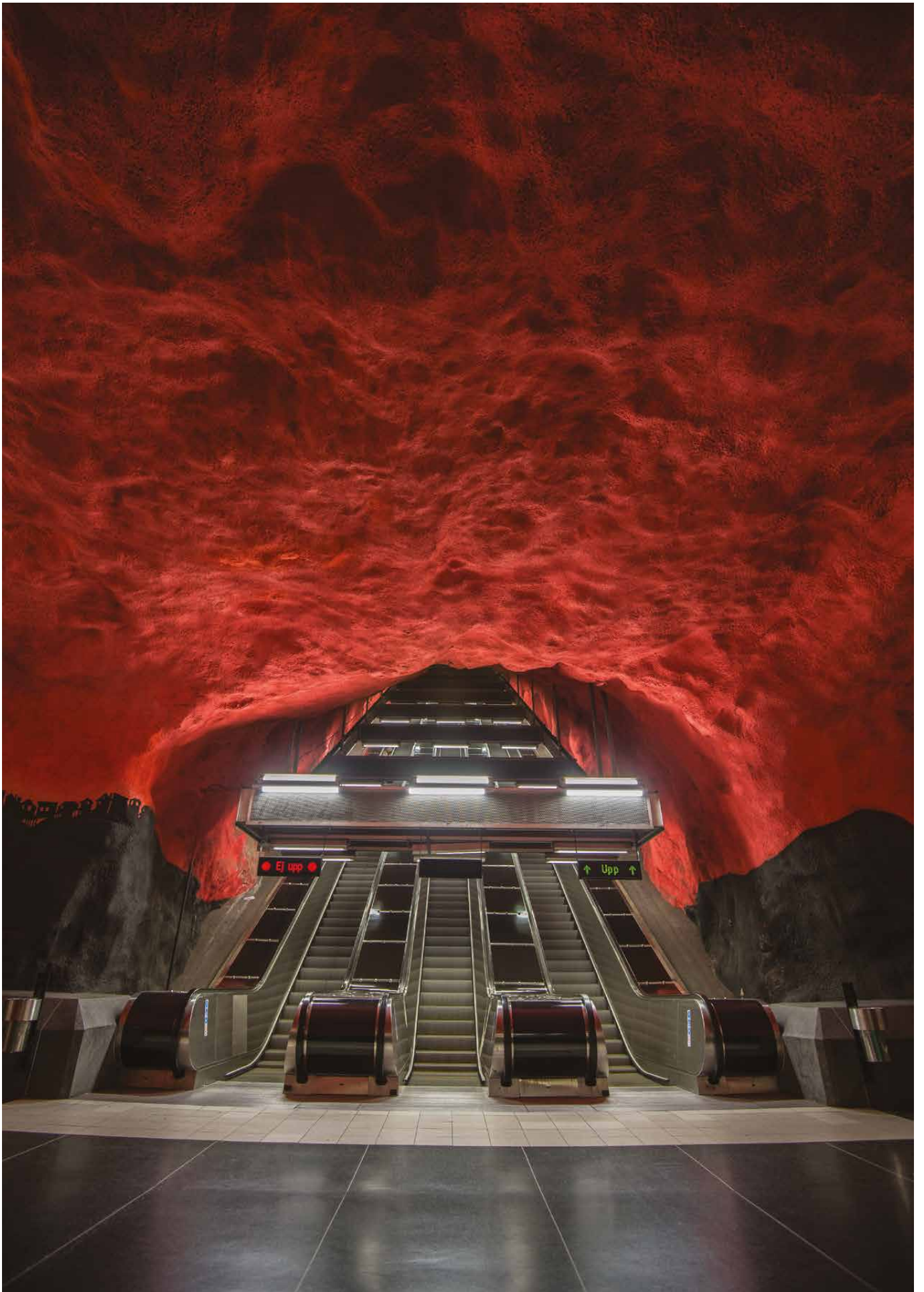
End support + bracket 5



AMRPK end support and lower bracket which can be fastened by screw or by pressing together must be ordered separately. With the lower bracket the ramp luminaires installed between the lighting suspension rails can be positioned on the same level as luminaires installed to the lighting suspension rail with AMJK2 spring brackets.



When the distance between the lighting suspension rails is shorter than the length of the luminaire (e.g. renovation project), the mounting of ramp can be done with lower bracket.





# Monix Slim

LED | T5



Monix Slim LED with opal diffuser

Monix Slim is a LED and T5 IP44 luminaire for wet premises with plastic diffuser. Thin multi-purpose luminaire has broad application area; from industry to warehouses, parking halls and general areas both in residential and non-residential buildings.

## Move!

Ensto Luminaires and movement detection is a base for many Smart Solutions but operate perfectly as a standalone versions as well. Ensto Move!-luminaires use PIR or Radar technique, depending on your projects and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.



“Stylish and small universal luminaire to all premises, even and effective light.”



With clear diffuser



Made-to-order with spring brackets



Monix Slim with radar

### Structure

- › Body - white powder coated electro-galvanised steel sheet
- › Ends caps - shockproof, heat and UV resistant white ABS plastic
- › Diffuser - outside sleek, inside ribbed clear (K) UV resistant acrylic plastic or opal plastic (O)
- › White gear tray
- › In 1-tube models the light source is placed symmetrically in the middle of the luminaire
- › AMSR and AMSLR... type models are sensor luminaires equipped with high-frequency (5,8 GHz) radar to detect motion (radar unit)
- › In sensor models radar unit is located inside the luminaire and is not visible outside
- › LED-models:  
Connected load 29W and 21W, length 598 mm, see the luminaire luminous flux from the table  
Connected load 42W and 29W, length 898 mm, see the luminaire luminous flux from the table  
Connected load 54W and 38W, length 1198 mm, see the luminaire luminous flux from the table  
Connected load 65W and 47W, length 1498 mm, see the luminaire luminous flux from the table  
4000 K, power factor 0,98, Ra >80  
Ambient temperature - 20 °C - + 35 °C  
LED-module lifespan 50.000 h (L70) T<sub>a</sub> = 25 °C

### Mounting

- › Directly to the ceiling, on a lighting suspension rail or on the wall. Key holes.
- › Connection point in the middle of the luminaire
- › Two 21 mm cable entry holes at the bottom of the luminaire
- › Blind cable entries at both ends, 21 mm, end wiring is suitable only for 2-tube models
- › 5-pole terminal block
- › Sensor luminaire models see more accurate information at WEB-site
  - To the ceiling max. 4 meters height
  - To the wall max. 2,7 meters height
  - Suitable for stand-alone or master-slave installation
  - Maximum load behind one master is 200W (fluorescent) including the master luminaire
  - Slave luminaires from the Ensto basic luminaire range

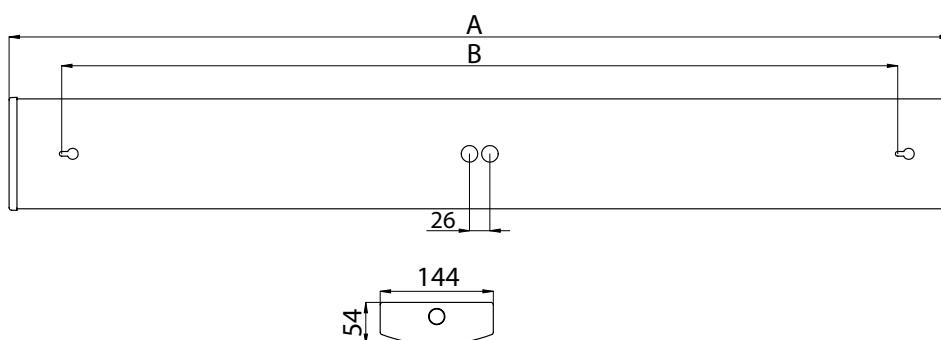
### Made to order

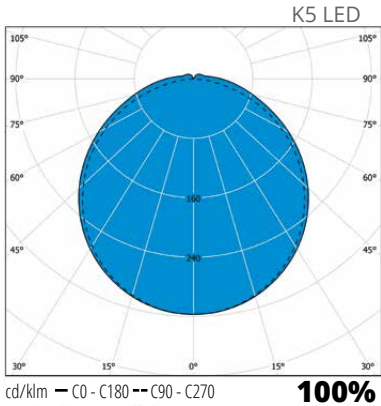
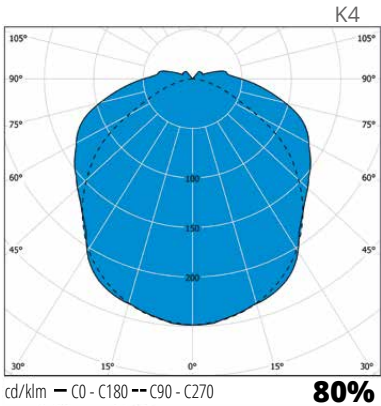
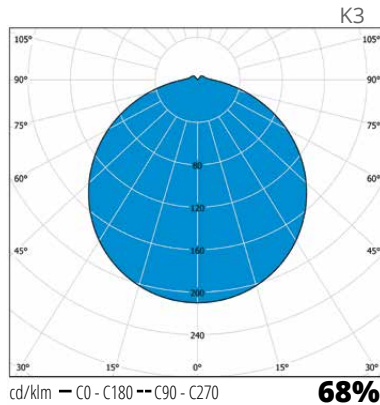
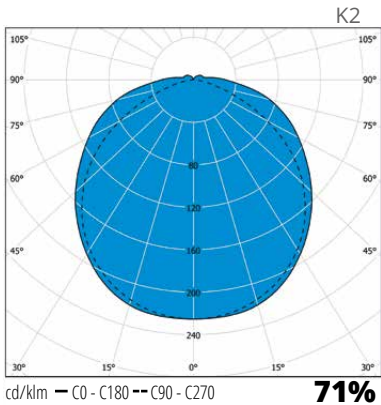
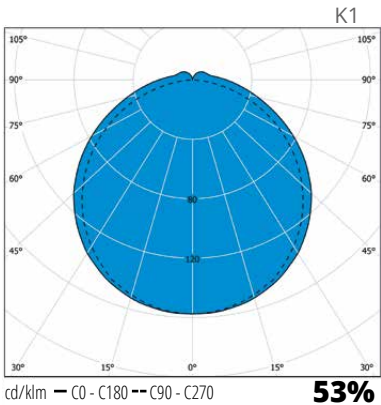
- › With spring brackets (AMJK2S/AMJK2SV) for MEK70 and (AMJK3S/AMJK3SV) for MEK110 lighting suspension rail mounting
- › Controlled models (not T5 14W):  
Switch-Control (ES) - T5 and LED  
1-10V (ELD) - T5 and LED  
DALI (ED) - T5 and LED
- › With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails
- › Optimized luminous flux versions to projects
- › 3000 K models
- › Driver supporting corridor function for AMSL120 and AMSL150 models

E number	Type	Product name	Base	Kg	Light distribution	A	B	Luminous flux
<b>Monix Slim LED</b>								
43 603 28	AMSL60	AMSL60 IP44 LED 29W/840 AC O	LED	1,7	K5	598	520	3050 lm
43 605 08	AMSL6020	AMSL6020 IP44 LED 21W/840 AC O	LED	1,7	K5	598	520	2170 lm
43 603 32	AMSL90	AMSL90 IP44 LED 42W/840 AC O	LED	2,3	K5	898	765	4480 lm
43 605 09	AMSL9030	AMSL9030 IP44 LED 29W/840 AC O	LED	2,3	K5	898	765	3050 lm
43 603 22	AMSL120	AMSL120 IP44 LED 54W/840 AC O	LED	2,9	K5	1198	1065	6200 lm
43 604 87	AMSL12045	AMSL12045 IP44 LED 38W/840 AC O	LED	2,9	K5	1198	1065	4470 lm
43 603 26	AMSL150	AMSL150 IP44 LED 65W/840 AC O	LED	3,5	K5	1498	1365	7600 lm
43 604 88	AMSL15055	AMSL15055 IP44 LED 47W/840 AC O	LED	3,5	K5	1498	1365	5510 lm



E number	Type	Product name	Base	Kg	Light distribution	A	B	Luminous flux
<b>Monix Slim LED with radar</b>								
43 605 14	AMSLR60	AMSLR60 IP44 LED 30W/840 AC O RAD	LED	1,7	K5	598	520	3050 lm
43 605 15	AMSLR6020	AMSLR6020 IP44 LED 22W/840 AC O RAD	LED	1,7	K5	598	520	2170 lm
43 603 40	AMSLR90	AMSLR90 IP44 LED 43W/840 AC O RAD	LED	2,3	K5	898	765	4480 lm
43 605 20	AMSLR9030	AMSLR9030 IP44 LED 30W/840 AC O RAD	LED	2,3	K5	898	765	3050 lm
43 603 34	AMSLR120	AMSLR120 IP44 LED 55W/840 AC O RAD	LED	2,9	K5	1198	1065	6200 lm
43 605 11	AMSLR12045	AMSLR12045 IP44 LED 39W/840 AC O RAD	LED	2,9	K5	1198	1065	4470 lm
43 603 38	AMSLR150	AMSLR150 IP44 LED 66W/840 AC O RAD	LED	3,5	K5	1498	1365	7600 lm
43 605 12	AMSLR15055	AMSLR15055 IP44 LED 48W/840 AC O RAD	LED	3,5	K5	1498	1365	5510 lm
<b>Opal diffuser - 1-tube models</b>								
43 600 23	AMS1280-N	AMS1280-N T5 1X28W O	G5	2,9	K3	1198	1065	
43 600 26	AMS1350-N	AMS1350-N T5 1X35W O	G5	3,5	K3	1498	1365	
43 600 29	AMS1490-N	AMS1490-N T5 1X49W O	G5	3,5	K3	1498	1365	
<b>Opal diffuser - 2-tube models</b>								
42 653 10	AMS2140-N	AMS2140-N T5 2X14W O	G5	1,7	K1	598	520	
42 653 13	AMS2280-N	AMS2280-N T5 2X28W O	G5	2,9	K1	1198	1065	
42 653 16	AMS2350-N	AMS2350-N T5 2X35W O	G5	3,5	K1	1498	1365	
42 653 22	AMS2490-N	AMS2490-N T5 2X49W O	G5	3,5	K1	1498	1365	
<b>Clear diffuser - 1-tube models</b>								
43 600 22	AMS128K-N	AMS128K-N T5 1X28W C	G5	2,9	K4	1198	1065	
43 600 25	AMS135K-N	AMS135K-N T5 1X35W C	G5	3,5	K4	1498	1365	
43 600 28	AMS149K-N	AMS149K-N T5 1X49W C	G5	3,5	K4	1498	1365	
<b>Clear diffuser - 2-tube models</b>								
42 653 08	AMS214K-N	AMS214K-N T5 2X14W C	G5	1,7	K2	598	520	
42 653 11	AMS228K-N	AMS228K-N T5 2X28W C	G5	2,9	K2	1198	1065	
42 653 14	AMS235K-N	AMS235K-N T5 2X35W C	G5	3,5	K2	1498	1365	
42 653 17	AMS249K-N	AMS249K-N T5 2X49W C	G5	3,5	K2	1498	1365	
<b>Monix Slim radar models - clear diffuser</b>								
42 902 42	AMSR228K-N	AMSR228K-N T5 2X28W C RAD	G5	3,1	K2			
42 902 45	AMSR235K-N	AMSR235K-N T5 2X35W C RAD	G5	3,7	K2			
42 902 48	AMSR249K-N	AMSR249K-N T5 2X49W C RAD	G5	3,7	K2			
<b>Monix Slim radar models - opal diffuser</b>								
42 902 69	AMSR2280-N	AMSR2280-N T5 2X28W O RAD	G5	3,1	K1			
42 902 72	AMSR2350-N	AMSR2350-N T5 2X35W O RAD	G5	3,7	K1			
42 902 75	AMSR2490-N	AMSR2490-N T5 2X49W O RAD	G5	3,7	K1			
<b>Mounting accessories</b>								
43 641 85	AMJK2S	AMJK2S SPRING BRACKET PAIR				steel		
43 600 38	AMJK2SV	AMJK2SV SPRING BRACKET PAIR WH				white		





Flat and simple design makes Monix Slim an ideal fixture for low and narrow spaces. IP44 classification and good light fulfills the needs around the premises.





# Europroof 2

LED | T5 | T8



Europroof LED with polycarbonate diffuser

Europroof 2 is a reliable and durable universal luminaire for wet and corrosion sensitive premises available in LED, T5 and T8 models. This versatile luminaire has a wide range of application areas from carparks to agricultural and livestock buildings.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



“Powerful and durable IP65 classified general luminaire.”



Europroof LED with acrylic diffuser

### Structure

- › Body-Glass fibre reinforced polyester
- › Components are attached to removable gear tray, which function as a reflector
- › In LED-models diffuser - shockproof satinated polycarbonate or shockproof textured clear acrylic. T5 and T8 models - shockproof textured clear acrylic diffuser
- › Toggles – stainless steel
- › Europroof 2 will be delivered installation ready (lampholders and toggles assembled)
- › LED-models:  
Connected load and luminaire luminous flux, see table  
4000 K, Ra > 80, power factor 0,96  
Ambient temperature – 20 °C - + 30 °C  
LED-module lifespan 50 000 h (L80), T<sub>a</sub>=25 °C  
Use of LED models in the livestock building to be checked case by case

### Control

- › Switch-Control (ES)
- › 1-10V (ELD)
- › DALI (ED)

### Mounting

- › Models with polycarbonate diffuser can not be used in cowsheds
- › To the ceiling or lighting suspension rail
- › -o- 5x2,5 mm<sup>2</sup>, through-wired
- › Controlled models 1-phase and control for through-wiring
- › Cable entries at the both ends of the luminaire

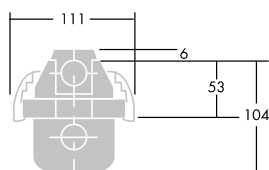
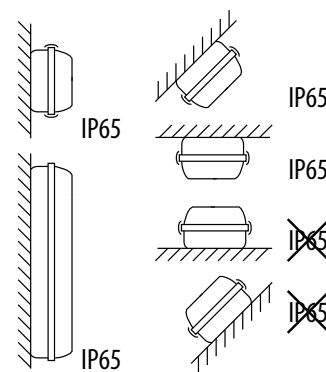
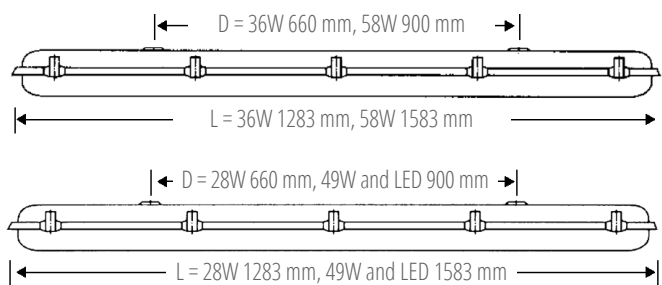
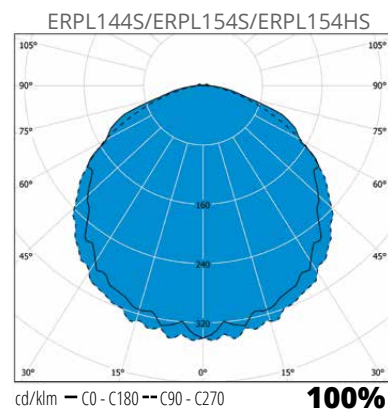
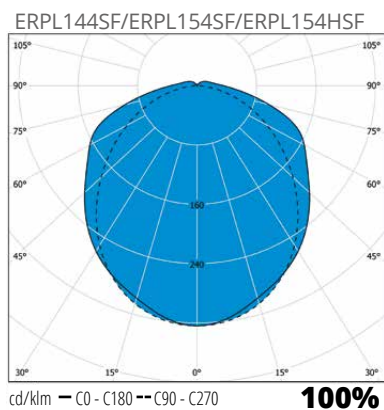
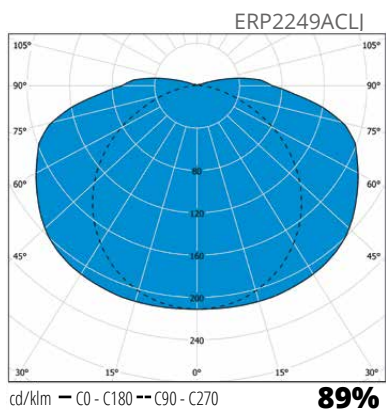
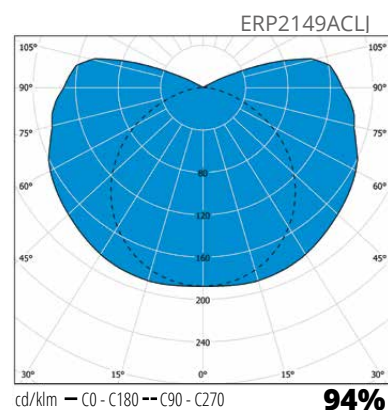
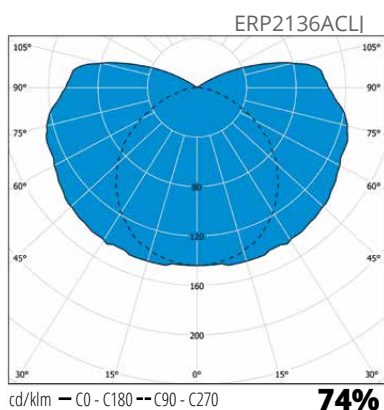
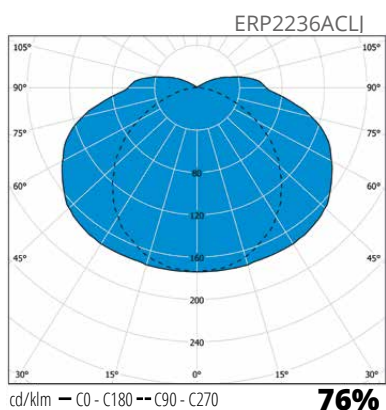
### Made to order

- › LED-models with DALI (ED) and Switch-Control (ES) control
- › 1-tube T5-radar models installed into the 2-tube luminaire body (width 168 mm), tube located symmetrically in the middle of the luminaire
- › T8 HF with extreme industrial ballast, lifespan 100 000 hours
- › With gloss anodized aluminium reflector for 2x36W/28W and 2x58W/49W models
- › Optimized luminous flux versions to projects

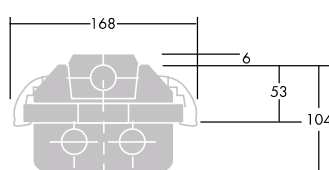
E number	Type	Product name	Base	Kg	Length	Width	Height	Luminous flux
<b>Europroof 2 LED with satinated polycarbonate diffuser</b>								
43 604 70	ERPL144SF	ERPL144SF IP65 LED 33W/840 F	LED	2,1	1283	111	110	4320 lm
43 604 73	ERPL154SF	ERPL154SF IP65 LED 47W/840 F	LED	2,5	1583	111	110	6010 lm
43 604 79	ERPL154HSF	ERPL154HSF IP65 LED 56W/840 F	LED	2,5	1583	111	110	6780 lm
<b>Europroof 2 LED with acrylic diffuser</b>								
43 604 67	ERPL144S	ERPL144S IP65 LED 33W/840 AC	LED	2,1	1283	111	110	4540 lm
43 604 72	ERPL154S	ERPL154S IP65 LED 47W/840 AC	LED	2,5	1583	111	110	6320 lm
43 604 76	ERPL154HS	ERPL154HS IP65 LED 56W/840 AC	LED	2,5	1583	111	110	7125 lm
<b>Europroof 2 T8 HF</b>								
43 901 43	ERP2136HFACLJ	EUROPROOF2 IP65 T8 1X36HF AC	G13	2,1	1283	111	110	
43 901 46	ERP2158HFACLJ	EUROPROOF2 IP65 T8 1X5 8HF AC	G13	2,5	1583	111	110	
43 901 49	ERP2236HFACLJ	EUROPROOF2 IP65 T8 2X36HF AC	G13	2,9	1283	168	110	
43 901 52	ERP2258HFACLJ	EUROPROOF2 IP65 T8 2X58HF AC	G13	3,4	1583	168	110	
<b>Europroof 2 T8 HFA 1-10V</b>								
43 544 00	ERP2136ACLJHFA	EUROPROOF2 IP65 T8 1X36HFA AC	G13	2,1	1283	111	110	
43 544 02	ERP2158ACLJHFA	EUROPROOF2 IP65 T8 1X58HFA AC	G13	2,5	1583	111	110	
43 544 04	ERP2236ACLJHFA	EUROPROOF2 IP65 T8 2X36HFA AC	G13	2,9	1283	168	110	
43 544 06	ERP2258ACLJHFA	EUROPROOF2 IP65 T8 2X58HFA AC	G13	3,4	1583	168	110	
<b>Europroof 2 T5</b>								
43 544 07	ERP2128ACLJ	EUROPROOF2 IP65 T5 1X28W AC	G5	2,1	1283	111	110	
43 544 09	ERP2135ACLJ	EUROPROOF2 IP65 T5 1X35W AC	G5	2,5	1583	111	110	
43 544 01	ERP2149ACLJ	EUROPROOF2 IP65 T5 1X49W AC	G5	2,5	1583	111	110	
43 544 03	ERP2228ACLJ	EUROPROOF2 IP65 T5 2X28W AC	G5	2,9	1283	168	110	
43 544 08	ERP2235ACLJ	EUROPROOF2 IP65 T5 2X35W AC	G5	3,4	1583	168	110	
43 544 05	ERP2249ACLJ	EUROPROOF2 IP65 T5 2X49W AC	G5	3,4	1583	168	110	



E number	Type	Product name	Base	Kg	Length	Width	Height	Luminous flux
<b>Diffusers and reflectors</b>								
43 903 03	KUERP2136AC	ACRYLIC DIFF 1X36W EUROPROOF 2		0,5	1283	111	50	
43 903 04	KUERP2158AC	ACRYLIC DIFF 1X58W EUROPROOF 2		0,5	1583	111	50	
43 903 07	KUERP2236AC	ACRYLIC DIFF 2X36W EUROPROOF 2		0,9	1283	168	50	
43 903 08	KUERP2258AC	ACRYLIC DIFF 2X58W EUROPROOF 2		0,9	1583	168	50	
43 903 27	PEERP2236	REFLECTOR 2X36W EUROPROOF 2		0,5	1150	130	20	
43 903 28	PEERP2258	REFLECTOR 2X58W EUROPROOF 2		0,7	1440	130	20	



Europroof 1-tube and LED



Europroof 2-tube





Strong body, energy efficient light and multiple installation options make Europroof a standard of IP65 fixtures. Garages, cowsheds and warehouses are normal playground for Europroof.





# HB360

LED



HB360 is suitable for high warehouse and production facilities, where efficient and high quality light is needed. Versatile installation possibilities, optical solutions and efficient lumen packages make HB360 an excellent choice for industrial lighting.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.



"An excellent choice for new industry premises or replacing old metal halide luminaires."



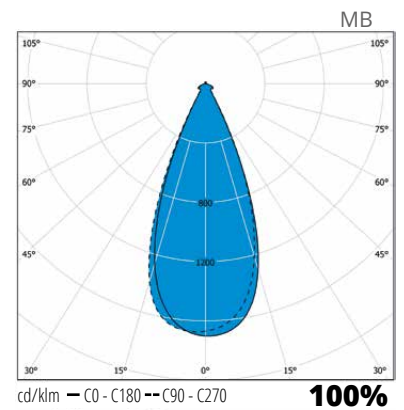
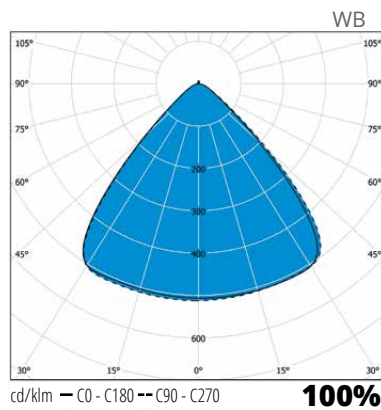
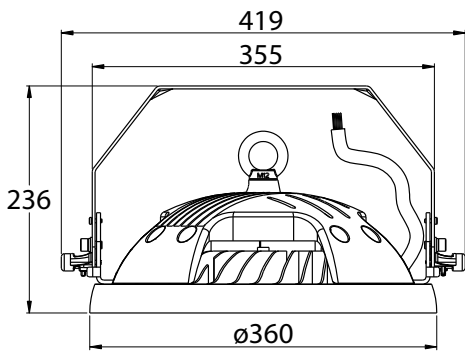
HB360 bracket (included)



HB360 wire or chain ring (included)



Bracket adjustment in 15° steps



### Structure

- › Body powder coated die-cast aluminium
- › Lens optics polycarbonate
- › Optics:
  - Wide beam angle (WB) 90°
  - Middle beam angle (MB) 50°
- › Power: 103W, 140W or 198W
- › DALI
- › 4000 K, power factor 0,95, Ra>80
- › Ambient temperature range -30 °C to +55 °C
- › LED-luminaire lifespan:
  - 100 000h L70B50 T<sub>a</sub>=25°C
  - 50 000h L70B50 T<sub>a</sub>=35°C

### Mounting

- › Bracket mounting on ceiling or wall (bracket included)
- › Ring for wire or chain installation include
- › 1,5 m 5x1,5 mm<sup>2</sup> connection lead H07RN-F included
- › Bracket angle adjustable in 15° steps
- › Mounting height up to 20 meters depending on the premises.

E number	Type	Product name	Output	Kg	Diameter	Height	Light distribution	Luminous flux
<b>Wide beam angle optics 90°</b>								
43 605 68	HB360.100WBED	HB360.100WBED LED IP65 103W/840	103W	6,7	360	189	WB	13500 lm
43 605 71	HB360.150WBED	HB360.150WBED LED IP65 140W/840	140W	6,7	360	189	WB	19200 lm
43 605 74	HB360.200WBED	HB360.200WBED LED IP65 198W/840	198W	6,9	360	189	WB	25000 lm
<b>Medium beam angle optics 50°</b>								
43 605 66	HB360.100MBED	HB360.100MBED LED IP65 103W/840	103W	6,7	360	189	MB	13500 lm
43 605 69	HB360.150MBED	HB360.150MBED LED IP65 140W/840	140W	6,7	360	189	MB	19200 lm
43 605 72	HB360.200MBED	HB360.200MBED LED IP65 198W/840	198W	6,9	360	189	MB	25000 lm









Outdoor



# Saga

LED



Graphite grey

Ensto Saga is an outdoor luminaire, in which high quality light technical solution and design meet. Symmetric and asymmetric light distribution enables energy efficient lighting solution according to the specific needs of the project. Due to the innovative reflector solution, modern control technology and luminous efficacy Saga is an excellent choice for various surroundings.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## SmartDim

Ensto SmartDim is a programmable dimming solution which gives you optimized energy saving and light output when and where it's needed. You can choose maximum of 5-steps and levels during the dark hours.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

"Finnish design  
with top of the line  
optical solution."





Black

28W	3000 lm	42W	4500 lm
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### Structure

- › Hat: powder-coated aluminium
- › Base: powder-coated aluminium
- › Colours: pearl grey, graphite grey (Akzo900) and black (RAL 9005)
- › Diffuser: UV-stabilized clear PC
- › Saga selection:
  - connected load 28W, luminaire luminous flux 3000 lm
  - connected load 42W, luminaire luminous flux 4500 lm
  - round symmetric and streetlight optics
  - 4000 K, Ra > 80, power factor 0,95
  - Ambient temperature -40 °C - + 35 °C
  - Lifetime of LED-module 100 000h (L80B50), T<sub>a</sub>=25°C
- › MacAdam 3
- › Overvoltage protection 6/8kV
- › Lifetime of control gear 100 000h (10% fr)

### Mounting

- › On ø 60 mm column or on stepped column ø 60 mm
- › Saga poles space for coupling
- › Connection lead 4,5 m VSKN 3x1,5 mm<sup>2</sup> included
- › Recommended mounting height 3-5 m

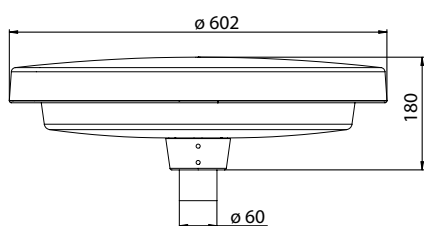
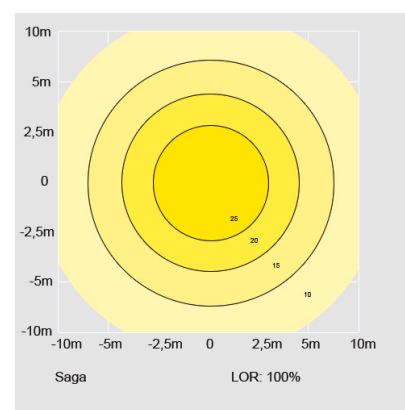
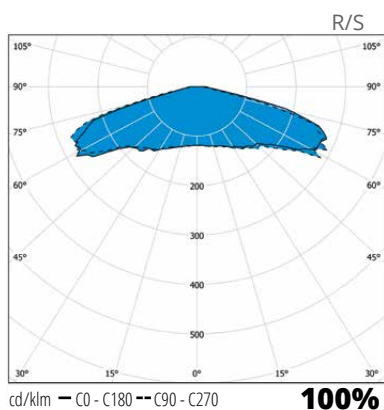
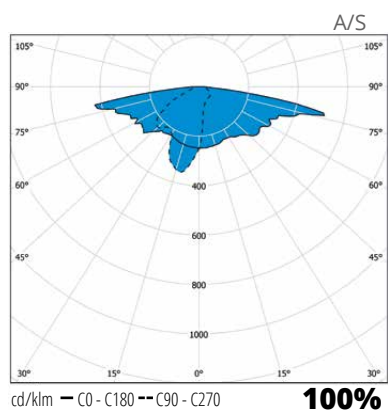
### Made to order

- › 1-10V
- › DALI
- › BaseDim (BD) - nighttime dimming, onestep
- › SmartDim - nighttime dimming, multistep
- › AmpDim
- › Lineswitch
- › 3000 K

E Number	Type	Product name	Base	Colour	Kg
<b>Saga - round symmetric optics 3000 lm</b>					
45 031 57	SA30HHR	SA30HHR 28W/840 PC HH R/S	LED	pearl grey	10,0
45 031 46	SA30GHR	SA30GHR 28W/840 PC GH R/S	LED	graphite grey	10,0
45 031 61	SA30MR	SA30MR 28W/840 PC M R/S	LED	black	10,0
45 031 86	SA30HHRED	SA30HHRED 28W/840 PC HH R/S DA	LED	pearl grey	10,0
45 031 84	SA30GHRED	SA30GHRED 28W/840 PC GH R/S DA	LED	graphite grey	10,0
45 031 88	SA30MRED	SA30MRED 28W/840 PC M R/S DA	LED	black	10,0
<b>Saga - streetlight optics 3000 lm</b>					
45 031 47	SA30HHA	SA30HHA 28W/840 PC HH A/S	LED	pearl grey	10,0
45 031 45	SA30GHA	SA30GHA 28W/840 PC GH A/S	LED	graphite grey	10,0
45 031 59	SA30MA	SA30MA 28W/840 PC M A/S	LED	black	10,0
45 031 85	SA30HHAED	SA30HHAED 28W/840 PC HH A/S DA	LED	pearl grey	10,0
45 031 83	SA30GHAED	SA30GHAED 28W/840 PC GH A/S DA	LED	graphite grey	10,0
45 031 87	SA30MAED	SA30MAED 28W/840 PC M A/S DA	LED	black	10,0



E Number	Type	Product name	Base	Colour	Kg
<b>Saga - round symmetric optics 4500 lm</b>					
45 031 80	SA45HHR	SA45HHR 42W/840 PC HH R/S	LED	pearl grey	10,0
45 031 65	SA45GHR	SA45GHR 42W/840 PC GH R/S	LED	graphite grey	10,0
45 031 82	SA45MR	SA45MR 42W/840 PC M R/S	LED	black	10,0
45 031 92	SA45HHRED	SA45HHRED 42W/840 PC HH R/S DA	LED	pearl grey	10,0
45 031 90	SA45GHRED	SA45GHRED 42W/840 PC GH R/S DA	LED	graphite grey	10,0
45 031 94	SA45MRED	SA45MRED 42W/840 PC M R/S DA	LED	black	10,0
<b>Saga - streetlight optics 4500 lm</b>					
45 031 79	SA45HHA	SA45HHA 42W/840 PC HH A/S	LED	pearl grey	10,0
45 031 63	SA45GHA	SA45GHA 42W/840 PC GH A/S	LED	graphite grey	10,0
45 031 81	SA45MA	SA45MA 42W/840 PC M A/S	LED	black	10,0
45 031 91	SA45HHAED	SA45HHAED 42W/840 PC HH A/S DA	LED	pearl grey	10,0
45 031 89	SA45GHAED	SA45GHAED 42W/840 PC GH A/S DA	LED	graphite grey	10,0
45 031 93	SA45MAED	SA45MAED 42W/840 PC M A/S DA	LED	black	10,0



Luminaires per miniature circuit breaker	B10	B16	C10	C16
SA30	15	25	26	42
SA30ED, DALI	16	26	27	44
SA45	6	11	11	18
SA45ED, DALI	6	11	11	18



Ensto Saga writes a new story to outdoor lighting. Symmetric and asymmetric light distribution options and truly magnificent design greets people and premises on many locations.





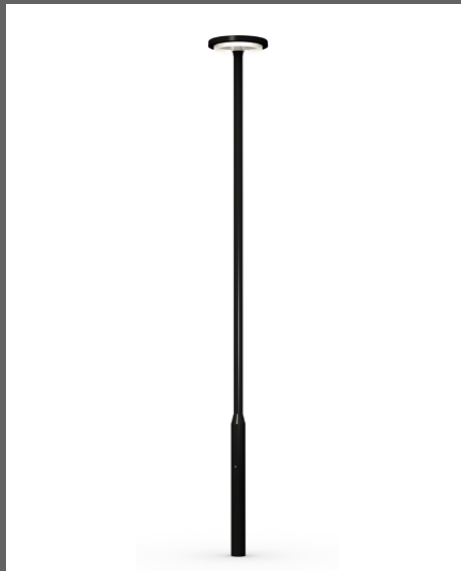
## SAGA STEPPED AND WOODEN POLES

E Number	Type	Product name	Total height	Base height	Base ø	Spigot ø	Kg
<b>Saga stepped poles</b>							
46 030 07	SAGA4SA9G	SAGA 4S AKZO 900 GREY	4500 mm	500 mm	139 mm	60 mm	44,0
46 030 10	SAGA5SA9G	SAGA 5S AKZO 900 GREY	5500 mm	500 mm	139 mm	60 mm	51,0
46 030 11	SAGA6SA9G	SAGA 6S AKZO 900 GREY	6500 mm	500 mm	139 mm	60 mm	58,0
46 030 13	SAGA4S9005	SAGA 4S RAL 9005	4500 mm	500 mm	139 mm	60 mm	44,0
46 030 14	SAGA5S9005	SAGA 5S RAL 9005	5500 mm	500 mm	139 mm	60 mm	51,0
46 030 15	SAGA6S9005	SAGA 6S RAL 9005	6500 mm	500 mm	139 mm	60 mm	58,0
46 030 16	SAGA4S9006	SAGA 4S RAL 9006	4500 mm	500 mm	139 mm	60 mm	44,0
46 030 17	SAGA5S9006	SAGA 5S RAL 9006	5500 mm	500 mm	139 mm	60 mm	51,0
46 030 18	SAGA6S9006	SAGA 6S RAL 9006	6500 mm	500 mm	139 mm	60 mm	58,0
<b>Saga wooden poles</b>							
46 030 19	SAGA4WA9GCIN	SAGA 4W AKZO 900 GREY/CINNAMON	4500 mm	500 mm	139 mm	60 mm	43,0
46 030 20	SAGA5WA9GCIN	SAGA 5W AKZO 900 GREY/CINNAMON	5500 mm	500 mm	139 mm	60 mm	49,0
46 030 21	SAGA6WA9GCIN	SAGA 6W AKZO 900 GREY/CINNAMON	6500 mm	500 mm	139 mm	60 mm	54,0
46 030 22	SAGA4W9005CIN	SAGA 4W RAL 9005/CINNAMON	4500 mm	500 mm	139 mm	60 mm	43,0
46 030 23	SAGA5W9005CIN	SAGA 5W RAL 9005/CINNAMON	5500 mm	500 mm	139 mm	60 mm	49,0
46 030 24	SAGA6W9005CIN	SAGA 6W RAL 9005/CINNAMON	6500 mm	500 mm	139 mm	60 mm	54,0
46 030 25	SAGA4W9006CIN	SAGA 4W RAL 9006/CINNAMON	4500 mm	500 mm	139 mm	60 mm	43,0
46 030 26	SAGA5W9006CIN	SAGA 5W RAL 9006/CINNAMON	5500 mm	500 mm	139 mm	60 mm	49,0
46 030 27	SAGA6W9006CIN	SAGA 6W RAL 9006/CINNAMON	6500 mm	500 mm	139 mm	60 mm	54,0
46 030 28	SAGA4WA9GSAF	SAGA 4W AKZO 900 GREY/SAFFRON	4500 mm	500 mm	139 mm	60 mm	43,0
46 030 29	SAGA5WA9GSAF	SAGA 5W AKZO 900 GREY/SAFFRON	5500 mm	500 mm	139 mm	60 mm	49,0
46 030 30	SAGA6WA9GSAF	SAGA 6W AKZO 900 GREY/SAFFRON	6500 mm	500 mm	139 mm	60 mm	54,0
46 030 31	SAGA4W9005SAF	SAGA 4W RAL 9005/SAFFRON	4500 mm	500 mm	139 mm	60 mm	43,0
46 030 32	SAGA5W9005SAF	SAGA 5W RAL 9005/SAFFRON	5500 mm	500 mm	139 mm	60 mm	49,0
46 030 33	SAGA6W9005SAF	SAGA 6W RAL 9005/SAFFRON	6500 mm	500 mm	139 mm	60 mm	54,0
46 030 34	SAGA4W9006SAF	SAGA 4W RAL 9006/SAFFRON	4500 mm	500 mm	139 mm	60 mm	43,0
46 030 35	SAGA5W9006SAF	SAGA 5W RAL 9006/SAFFRON	5500 mm	500 mm	139 mm	60 mm	49,0
46 030 36	SAGA6W9006SAF	SAGA 6W RAL 9006/SAFFRON	6500 mm	500 mm	139 mm	60 mm	54,0





SAGA 5S AKZO 900 GREY



SAGA 5S RAL 9005



SAGA 5S RAL 9006



SAGA 5W AKZO 900 GREY/CINNAMON



SAGA 5W RAL 9005/CINNAMON



SAGA 5W RAL 9006/CINNAMON



SAGA 5W AKZO 900 GREY/SAFFRON



SAGA 5W RAL 9005/SAFFRON



SAGA 5W RAL 9006/SAFFRON





Pearl grey

# Opera

LED

Efficient LED luminaire for gardens and yards. Its anti-glare lighting is carefully directed to the illuminated area and the disturbing portion of scattered lighting has been minimized. Opera can be used in various outdoor applications like large gardens and market squares, pedestrian areas, parks, car parks and playgrounds.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

## SmartDim

Ensto SmartDim is a programmable dimming solution which gives you optimized energy saving and light output when and where it's needed. You can choose maximum of 5-steps and levels during the dark hours.



"Stylish and efficient  
Opera is beautiful  
around the clock."



Graphite grey

20W	1950 lm	38W	3810 lm
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### Structure

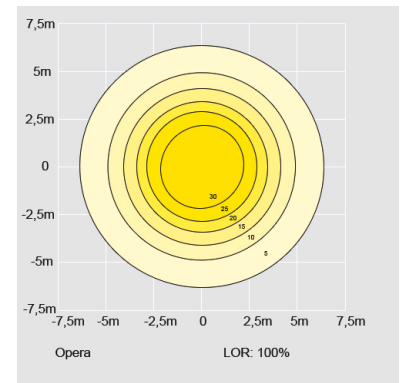
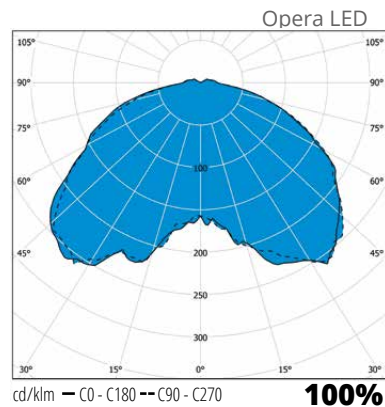
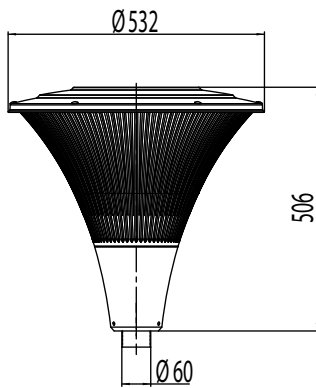
- › Hat: powder-coated aluminium
- › Base: powder-coated aluminium
- › Colours: Graphite grey (Akzo900) and pearl grey (RAL 9006)
- › Diffuser: ribbed, light-scattering uv resistant acrylic
- › Opera LED:
  - connected load 20W, luminaire luminous flux 1950 lm
  - connected load 38W, luminaire luminous flux 3810 lm,
  - 4000 K, Ra > 70, power factor 0,98
  - Ambient temperature - 25°C - + 30 °C
  - Lifespan of LED-module 50 000 h (L70), T<sub>a</sub>=25 °C
- › Opera LED with Bi-power function. The luminaire switches automatically (factory setting) to lower power level 50% for 8 hours (3 hours before and 5 hours after the calculated midnight)

### Mounting

- › On Ø 60 mm column or on stepped column Ø 60 mm
- › Connection lead 4,5 m VSKN 3x1,5mm<sup>2</sup> included
- › Recommended mounting height 3-5 m

### Made to order

- › DALI-controlled models
- › Special colours
- › Columns from Tehomet selection:
  - Stepped columns      Conical columns
  - OH3/108 + colour      KH3/108 + colour
  - OH4/108 + colour      KH4/108 + colour
  - OH5/108 + colour      KH5/121 + colour
  - OH6/108 + colour      KH6/136 + colour
- Colours: RAL 9006 (pearl grey) and Akzo900 (graphite grey)
- O= stepped columns, K= conical columns
- H3 = height above the ground (f.ex. 3 m) /108 = diameter of the base
- Top of the column is always Ø 60 mm
- Besides the height above the ground to the overall height of column an additional + 500 mm is calculated, which goes to base. All columns have a coupling space. Surface-treatment hot dip galvanized and power coated.
- › Helvar NightDim



E Number	Type	Product name	Base	Colour	Kg
<b>Opera LED</b>					
45 030 71	OP530LED20GH	OP530LED20GH LED 20W/840 AC GH	LED	graphite grey	8,0
45 030 73	OP530LED20HH	OP530LED20HH LED 20W/840 AC HH	LED	pearl grey	8,0
45 030 62	OP530LEDGH	OP530LEDGH LED 38W/840 AC GH	LED	graphite grey	8,0
45 030 64	OP530LEDHH	OP530LEDHH LED 38W/840 AC HH	LED	pearl grey	8,0
<b>Opera LED with Bi-power power reduction</b>					
45 030 68	OP530LED20BPGH	OP530LED20BPGH 20W/840 BP GH	LED	graphite grey	8,0
45 030 70	OP530LED20BP HH	OP530LED20BP HH 20W/840 BP HH	LED	pearl grey	8,0
45 030 65	OP530LEDBPGH	OP530LEDBPGH LED 38W/840 BP GH	LED	graphite grey	8,0
45 030 67	OP530LEDBP HH	OP530LEDBP HH LED 38W/840 BP HH	LED	pearl grey	8,0







Graphite grey

# Opera Deco

LED

Efficient LED luminaire for gardens and yards. Its anti-glare lighting is carefully directed to the illuminated area and the disturbing portion of scattered lighting has been minimized. Opera Deco can be used in various outdoor applications like large gardens and market squares, pedestrian areas, parks, car parks and playgrounds.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

## SmartDim

Ensto SmartDim is a programmable dimming solution which gives you optimized energy saving and light output when and where it's needed. You can choose maximum of 5-steps and levels during the dark hours.



"Stylish and efficient  
Opera Deco is beautiful  
around the clock."



Pearl grey

20W	1950 lm	38W	3810 lm
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### Structure

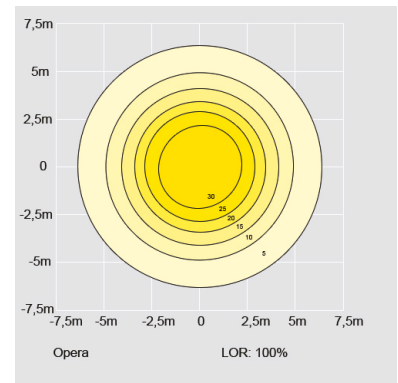
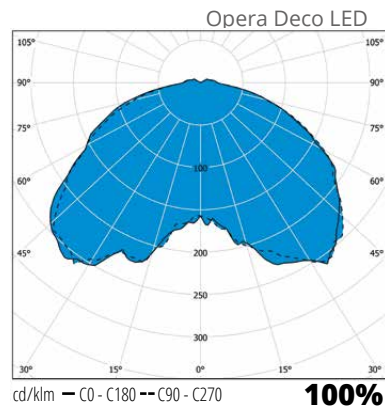
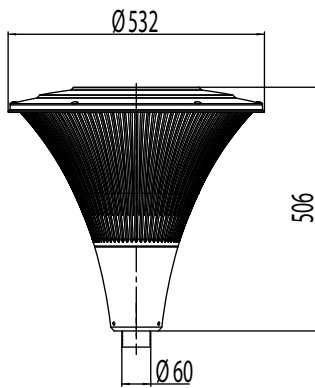
- › Hat: powder-coated aluminium
- › Opera Deco decorative frames are powder-coated aluminium
- › Base: powder-coated aluminium
- › Colours: Graphite grey (Akzo900) and pearl grey (RAL 9006)
- › Diffuser: ribbed, light-scattering UV resistant acrylic
- › Opera Deco LED:
  - connected load 20W, luminaire luminous flux 1950 lm
  - connected load 38W, luminaire luminous flux 3810 lm,
  - 4000 K, Ra > 70, power factor 0,98
  - Ambient temperature - 25 °C - + 30 °C
  - Lifespan of LED-module 50 000 h (L70), T<sub>a</sub>=25 °C
- › Opera Deco LED with Bi-power function. The luminaire switches automatically (factory setting) to lower power level 50% for 8 hours (3 hours before and 5 hours after the calculated midnight)

### Mounting

- › On ø 60 mm column or on stepped column ø 60 mm
- › Connection lead 4,5 m VSKN 3x1,5 mm<sup>2</sup> included
- › Recommended mounting height 3-5 m

### Made to order

- › DALI-controlled models
- › Special colours
- › Columns from Tehomet selection:
  - Stepped columns      Conical columns
  - OH3/108 + colour      KH3/108 + colour
  - OH4/108 + colour      KH4/108 + colour
  - OH5/108 + colour      KH5/121 + colour
  - OH6/108 + colour      KH6/136 + colour
 Colours: RAL 9006 (pearl grey) and Akzo900 ( graphite grey)
  - O= stepped columns, K= conical columns
  - H3 = height above the ground (f.ex. 3 m)
  - /108 = diameter of the base
  - Top of the column is always ø 60 mm
  - Besides the height above the ground to the overall height of column an additional + 500 mm is calculated, which goes to base. All columns have a coupling space. Surface-treatment hot dip galvanized and power coated.
- › Helvar NightDim



E Number	Type	Product name	Base	Colour	Kg
<b>Opera Deco LED</b>					
45 030 83	OPD530L20GH	OPD530L20GH LED 20W/840 AC GH	LED	graphite grey	8,0
45 030 87	OPD530L20HH	OPD530L20HH LED 20W/840 AC HH	LED	pearl grey	8,0
45 030 96	OPD530LGH	OPD530LGH LED 38W/840 AC GH	LED	graphite grey	8,0
45 030 97	OPD530LHH	OPD530LHH LED 38W/840 AC HH	LED	pearl grey	8,0
<b>Opera Deco LED with Bi-power power reduction</b>					
45 030 80	OPD530L20BPGH	OPD530L20BPGH 20W/840 BP GH	LED	graphite grey	8,0
45 030 82	OPD530L20BPHH	OPD530L20BPHH 20W/840 BP HH	LED	pearl grey	8,0
45 030 88	OPD530LBP GH	OPD530LBP GH LED 38W/840 BP GH	LED	graphite grey	8,0
45 030 89	OPD530LBP HH	OPD530LBP HH LED 38W/840 BP HH	LED	pearl grey	8,0



# Maestro

LED



Graphite grey

Maestro is a park luminaire with Scandinavian simplicity and precise details. Maestro is perfect for parks and walkways where high quality and efficient but perfectly controlled light is needed.

## Optics

Ensto luminaires include variable possibilities for optical solutions to choose from. Symmetric, wide and many others, our product families have several options for light distribution and -output to fit your project and demand.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

## SmartDim

Ensto SmartDim is a programmable dimming solution which gives you optimized energy saving and light output when and where it's needed. You can choose maximum of 5-steps and levels during the dark hours.

## Dimming

Ensto can provide many dimming possibilities for luminaires. 1-10V, Switch Dim, DALI and base light are just few examples of possibilities to change the light output to fit your premises.

"Reduced design  
but modern."





Black



Pearl grey

### Structure

- Hat: powder-coated aluminium
- Base: powder-coated aluminium
- Colours: pearl grey, graphite grey (Akzo900 grey) and black (RAL 9005)
- Diffuser: UV-stabilized clear polycarbonate
- Inner diffuser and decorative rings are acrylic
- Maestro selection:
  - Power<sub>start</sub> 25W, Power<sub>end</sub> 27W, luminaire luminous flux 3100 lm
  - Power<sub>start</sub> 36W, Power<sub>end</sub> 40W, luminaire luminous flux 4350 lm
- Optics: Round symmetric
- 4000 K, Ra>80, power factor 0,95
- Ambient temperature -40 - +30 °C
- LED-modules lifetime 100 000h (L<sub>100</sub>B<sub>50</sub>), T<sub>a</sub> = 25 °C
- Macadam 3
- Lifetime of control gear 100 000h (10 % fr)
- Projected wind area 0,092 m<sup>2</sup>
- Overvoltage protection 6kV
- CLO-function as a standard

### Installation

- On ø 60 mm column or on stepped column ø 60 mm
- Connection lead 4,5 m VSKN(H07RN-F) 2x1,5 mm<sup>2</sup> included. DALI-versions 4,5 m 4x1,5 mm<sup>2</sup>
- Recommended mounting height 3-5 meters

### Made to order

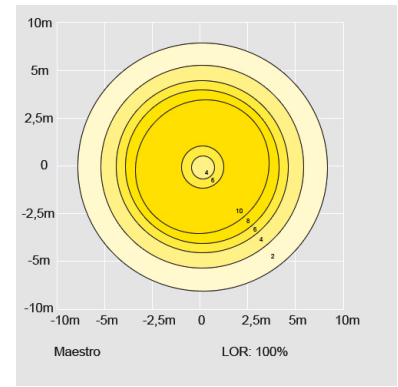
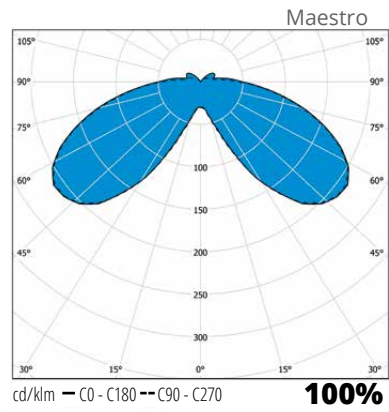
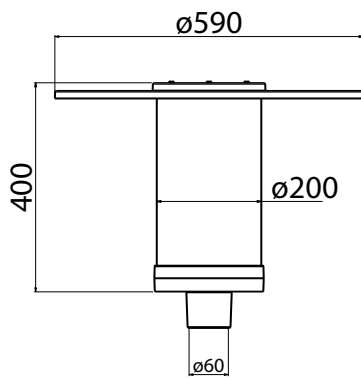
- 1-10V
- DALI
- BaseDim (BD) - nighttime dimming, onestep
- SmartDim - nighttime dimming, multistep
- AmpDim
- Lineswitch
- 3000 K

25W	3100 lm	36W	4350 lm
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E number	Type	Product name	Base	Colour	Kg	Additional information
<b>Maestro - 3100 lm</b>						
45 032 20	MAE30LGH	MAE30LGH IP65 25W/840 PC GH	LED	graphite grey	5,6	
45 032 22	MAE30LGHED	MAE30LGHED IP65 25W/840 PC GH	LED	graphite grey	5,6	DALI (ED)
45 032 23	MAE30LHH	MAE30LHH IP65 25W/840 PC HH	LED	pearl grey	5,6	
45 032 25	MAE30LHHED	MAE30LHHED IP65 25W/840 PC HH	LED	pearl grey	5,6	DALI (ED)
45 032 26	MAE30LM	MAE30LM IP65 25W/840 PC M	LED	black	5,6	
45 032 28	MAE30LMED	MAE30LMED IP65 25W/840 PC M	LED	black	5,6	DALI (ED)
<b>Maestro - 4350 lm</b>						
45 032 29	MAE40LGH	MAE40LGH IP65 36W/840 PC GH	LED	graphite grey	5,6	
45 032 31	MAE40LGHED	MAE40LGHED IP65 36W/840 PC GH	LED	graphite grey	5,6	DALI (ED)
45 032 32	MAE40LHH	MAE40LHH IP65 36W/840 PC HH	LED	pearl grey	5,6	
45 032 33	MAE40LHHED	MAE40LHHED IP65 36W/840 PC HH	LED	pearl grey	5,6	DALI (ED)
45 032 34	MAE40LM	MAE40LM IP65 36W/840 PC M	LED	black	5,6	
45 032 35	MAE40LMED	MAE40LMED IP65 36W/840 PC M	LED	black	5,6	DALI (ED)

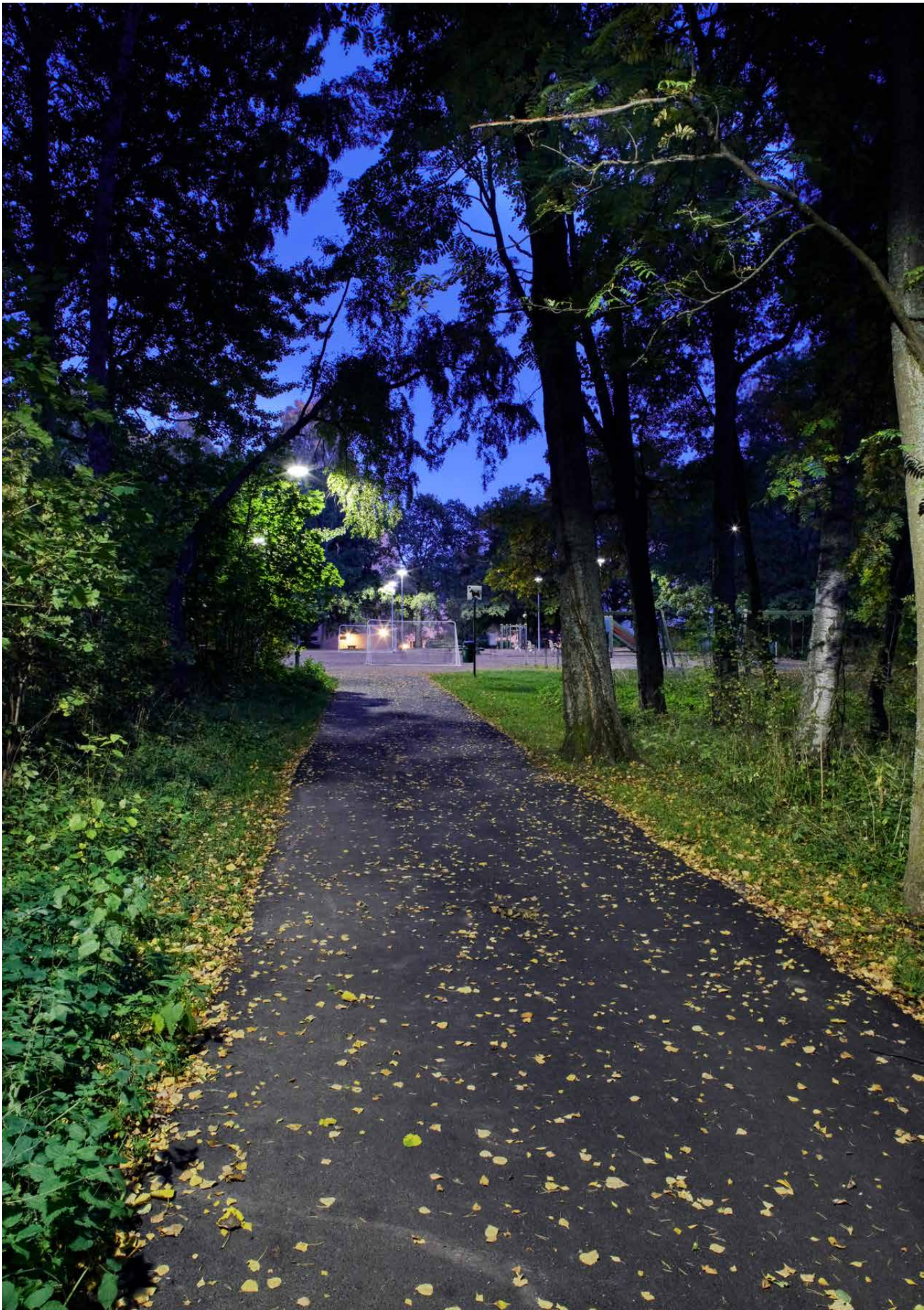






Luminaires per miniature circuit breaker	B10	B16	C10	C16
MAE30xxx	15	24	24	40
MAE30xxxED, DALI	13	21	21	35
MAE40xxx	15	24	24	40
MAE40xxxED, DALI	13	21	21	35







# Camillo

LED



AC600LEDHH

Camillo is a traditional post-top luminaire for garden, available in LED and discharge lamp models. Camillo can be used in various outdoor applications like large gardens and market squares, pedestrian areas, parks, parking areas and playgrounds.

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.



"Traditional beauty  
available also in LED."



AC600LEDM

35W 3060 lm

### Structure

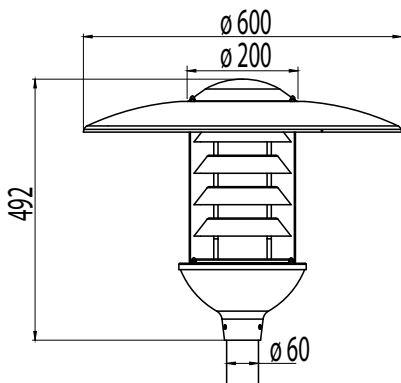
- White anti-glare rings powder-coated aluminium
- In LED-models acrylic frosted diffuser inside the anti-glare rings
- Diffuser shock and uv resistant polycarbonate
- Hat used as reflector and base of the luminaire power coated aluminium
- Integrated gear tray inside the luminaire body
- Camillo LED:  
Connected load 35W, luminaire luminous flux 3060 lm  
4000 K, Ra > 70, power factor 0,98  
Ambient temperature - 25 °C - + 30 °C  
LED-module lifespan 50 000 h (L70), T<sub>a</sub>=25 °C  
With Bi-power function. The luminaire switches automatically (factory setting) to lower power level 50% for 8 hours. (3 hours before and 5 hours after the calculated midnight)

### Mounting

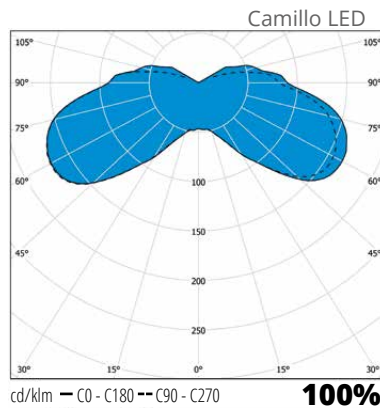
- On ø 60 mm column or stepped column ø 60 mm
- Recommended mounting height 3-5 m
- LED-models with connection lead 4,5 m VSKN 3x1,5 mm<sup>2</sup> included in the delivery

### Made to order

- LED-models with DALI
- Special colours
- Columns from Tehomet selection:  
Stepped columns    Conical columns  
OH3/108 + colour    KH3/108 + colour  
OH4/108 + colour    KH4/108 + colour  
OH5/108 + colour    KH5/121 + colour  
OH6/108 + colour    KH6/136 + colour  
Colours: RAL 9006 (pearl grey) and RAL 9011 ( black)  
O = stepped columns, K = conical columns  
H3 = height above the ground (f.ex. 3 m) /108 = diameter of the base  
Top of the column is always ø 60 mm.  
Besides the height above the ground to the overall height of column an additional + 500 mm is calculated, which goes to base. All columns have a coupling space. Surface-treatment hot dip galvanized and power coated.
- SK-6 wall arms available for wall installations
- Helvar NightDim



Camillo LED



E Number	Type	Product name	Base	Colour	Kg
<b>Camillo LED</b>					
45 030 77	AC600LEDHH	AC600LEDHH 35W/840 FAC HH	LED	grey/white anti-glare rings	5,5
45 030 79	AC600LEDM	AC600LEDM 35W/840 FAC MU	LED	black/white anti-glare rings	5,5
<b>Camillo LED with Bi-power power reduction</b>					
45 030 98	AC600LEDBPHH	AC600LEDBPHH 31W/840 BP AC HH	LED	grey/white anti-glare rings	5,5
45 030 99	AC600LEBPDM	AC600LEDBPM 31W/840 BP FAC MU	LED	black/white anti-glare rings	5,5
<b>Columns ø 60 mm</b>			<b>Height m</b>		
46 031 00	VP350060/M5	VP350060/M5 3.5M 60MM GR	3,5	grey	10,2
46 031 03	VP350060/M2	VP350060/M2 3.5M 60MM BK	3,5	black	10,2
46 031 06	VP350060/M1	VP350060/M1 3.5M 60MM WH	3,5	white	10,2





# Tori

LED

Traditional post-top lantern for gardens and yards. Tori can be used in various outdoor applications like large gardens and market squares, pedestrian areas, parks, car parks and playgrounds.



TO500LEDAHA

## DALI

DALI drivers enable luminaires to be connected to DALI based control systems and Smart Buildings. Compared to a fixed output installation, the dimming and individual control capability provided by DALI enables considerable energy savings and control, depending on luminaire specifications.

## BaseDim

Ensto BaseDim -solution makes energy saving easy without compromising safety or area lighting. BaseDim drops light output 50% during 8 hours in dark time. It's automatic and simple, but gives you benefits in energy saving.

"Classic and affordable park luminaire."



TO500LEDHH



TO500LEDAHA

38W 3100 lm

### Structure

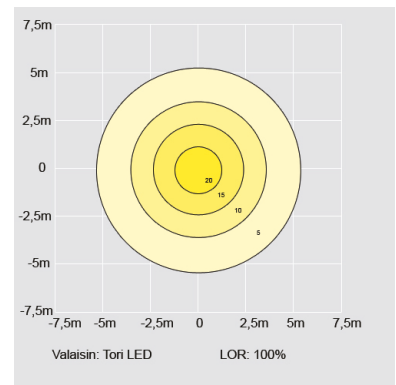
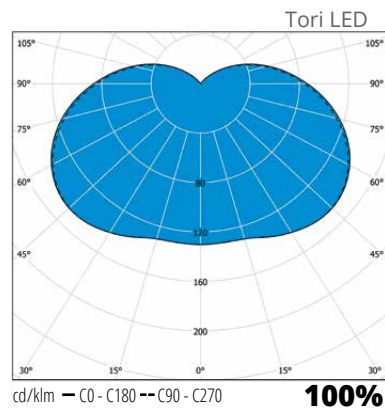
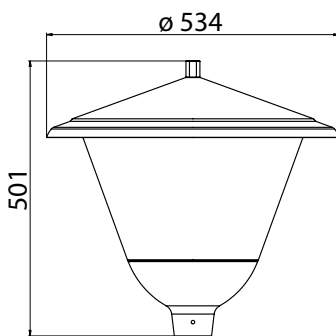
- › Hat: powder-coated aluminium
- › Base: powder-coated aluminium
- › Colours: anthrasite (RAL 7024) and pearl grey (RAL 9006)
- › Diffuser: UV resistant opal acrylate
- › Tori LED:  
Connected load 38W, luminaire luminous flux 3100 lm  
4000 K, Ra > 70, power factor 0,98  
Ambient temperature - 25 °C - + 30 °C  
LED-module lifespan 50 000 h (L70), T<sub>a</sub> = 25 °C

### Mounting

- › On ø 60 mm column or stepped column ø 60 mm
- › Recommended mounting height 3-5 m

### Made to order

- › Tori LED with Bi-power function.  
The luminaire switches automatically (factory setting) to lower power level 50% for 8 hours (3 hours before and 5 hours after the calculated midnight)
- › DALI controlled models
- › With connection lead 4,5 m VSKN 3x1,5 mm<sup>2</sup>
- › Special colours
- › Columns (3,5 m) to be ordered separately
- › Helvar NightDim



E number	Type	Product name	Base	Colour	Kg
<b>Tori LED</b>					
45 030 59	TO500LEDAHA	TO500LEDAHA LED 38W/840 AC AHA	LED	anthrasite grey	7,5
45 030 61	TO500LEDHH	TO500LEDHH LED 38W/840 AC HH	LED	pearl grey	7,5
<b>Columns</b>					
46 031 03	VP350060/M2	VP350060/M2 3.5M 60MM BK		black	10,2
46 031 00	VP350060/M5	VP350060/M5 3.5M 60MM GR		grey	10,2



# AVR8

LED | E27 | MT



AVR8.114LA

AVR8 is a modern, clear lined, durable and energy-efficient luminaire for outdoor lighting. Wall-mounted luminaires fit excellent for lighting entrances of multi-store buildings and areas nearby of industrial premises.



“Wonderful fixture for facades and for house number use.”



AVR8.114L



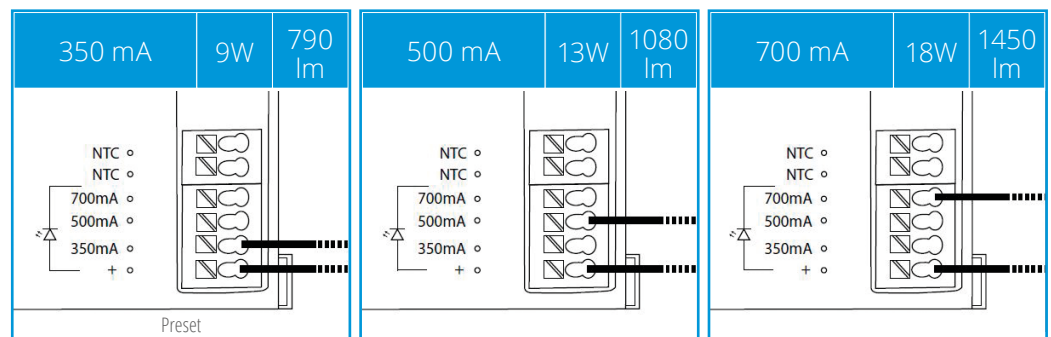
AVR8.114LAL

### Structure

- › Diffuser polycarbonat
- › Body casted aluminium
- › LED-model:  
The power can be selected by changing the connection at the installation site  
Connected load: 9W/13W/18W  
Luminaire luminous flux (4K):  
790 lm/1080 lm/1450 lm  
Preset: 9W/790 lm  
3000 K and 4000 K, Ra>80, power factor 0,92  
Ambient temperature - 40 °C - + 25 °C  
LED-module lifespan 100 000 h (L70B50),  
T<sub>a</sub>=25 °C

### Mounting

- › To the surface
- › Snap-in terminal block 3x2,5 mm<sup>2</sup> with through wiring
- › To the pole with AVL81 and AVL822 bracket
- › To the outer corner with AVL820 bracket



Ability to change luminous flux and power in the same luminaire.

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
<b>AVR8 LED</b>						
45 170 07	AVR8.114L	AVR8 IP44 LED 9W/840 PCO WH	LED	2,4	790 lm/1080 lm/1450 lm	white
45 170 08	AVR8.114LA	AVR8 IP44 LED 9W/840 PCO BG	LED	2,4	790 lm/1080 lm/1450 lm	blackgrey (RAL7021)
45 170 10	AVR8.114LAL	AVR8 IP44 LED 9W/840 PCO AL	LED	2,4	790 lm/1080 lm/1450 lm	aluminium
45 170 32	AVR8.114L/3K	AVR8 IP44 LED 9W/830 PCO WH	LED	2,4	770 lm/1050 lm/1410 lm	white
45 170 34	AVR8.114LA/3K	AVR8 IP44 LED 9W/830 PCO BG	LED	2,4	770 lm/1050 lm/1410 lm	blackgrey (RAL7021)
45 170 35	AVR8.114LAL/3K	AVR8 IP44 LED 9W/830 PCO AL	LED	2,4	770 lm/1050 lm/1410 lm	aluminium
<b>AVR8 luminaire with E27 base</b>						
45 170 01	AVR8	AVR8 IP44 TC-TSE/E27 PCO WH	E27	2,0		white
45 170 02	AVR8.A	AVR8 IP44 TC-TSE/E27 PCO BG	E27	2,0		blackgrey (RAL7021)
45 170 04	AVR8.AL	AVR8 IP44 TC-TSE/E27 PCO AL	E27	2,0		aluminium
<b>AVR8 luminaire G12 metal halide</b>						
45 170 13	AVR8.035E	AVR8 IP44 MT 35W/G12 PCO WH	G12	2,2		white
45 170 14	AVR8.035EA	AVR8 IP44 MT 35W/G12 PCO BG	G12	2,2		blackgrey (RAL7021)
45 170 16	AVR8.035EAL	AVR8 IP44 MT 35W/G12 PCO AL	G12	2,2		aluminium
<b>AVR8 accessories and spare parts</b>						
45 170 17	AVL8	Number sign for AVR8 luminaire		0,2		white
45 170 31	AVL8.A	Number sign for AVR8 luminaire, graphite		0,2		graphite
45 170 38	AVL8.AL	Number sign for AVR8, aluminium		0,2		aluminium
45 170 40	AVL820	Corner bracket AVR8, white		1,4		white
45 170 26	AVL820.A	Corner bracket AVR8, graphite		1,4		graphite
45 170 28	AVL821.A	Pole bracket AVR8, graphite		1,4		graphite
45 170 29	AVL822.A	Pole bracket 2xAVR8, graphite		2,9		graphite
45 170 19	AVV8	Diffuser for AVR8 luminaire		0,2		white







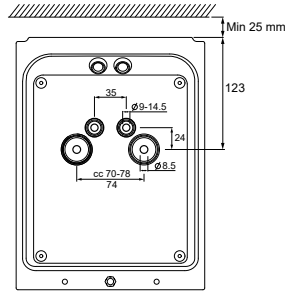
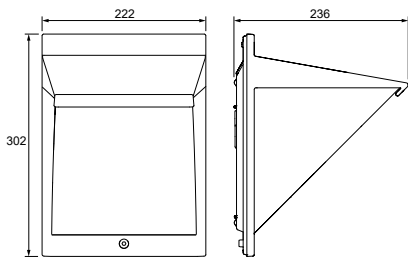
AVL8



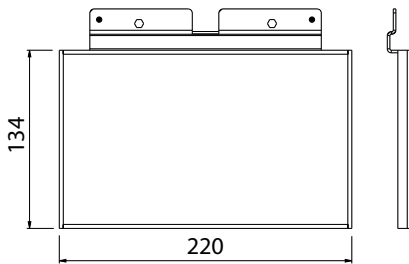
AVL820



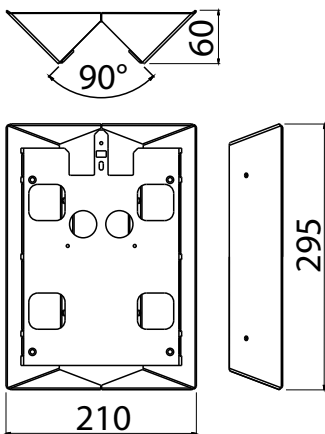
AVL822



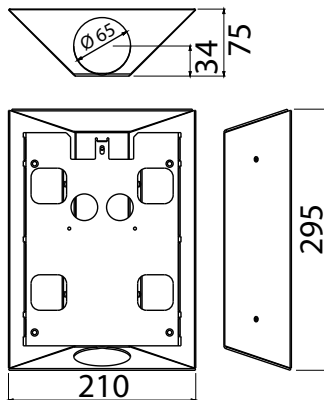
AVR8 luminaire



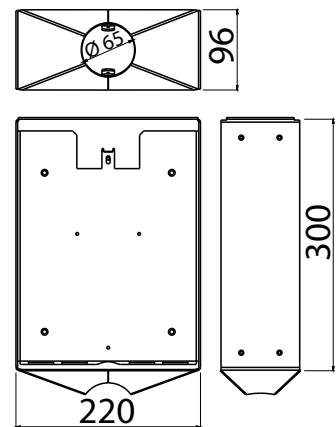
AVL8 number sign



AVL820 corner bracket



AVL821 pole bracket



AVL822 pole bracket



When you are after a stylish and modern fixture, take a look at AVR8. Durable aluminium body complemented with energy efficient light is a beautiful option for facades around the town.





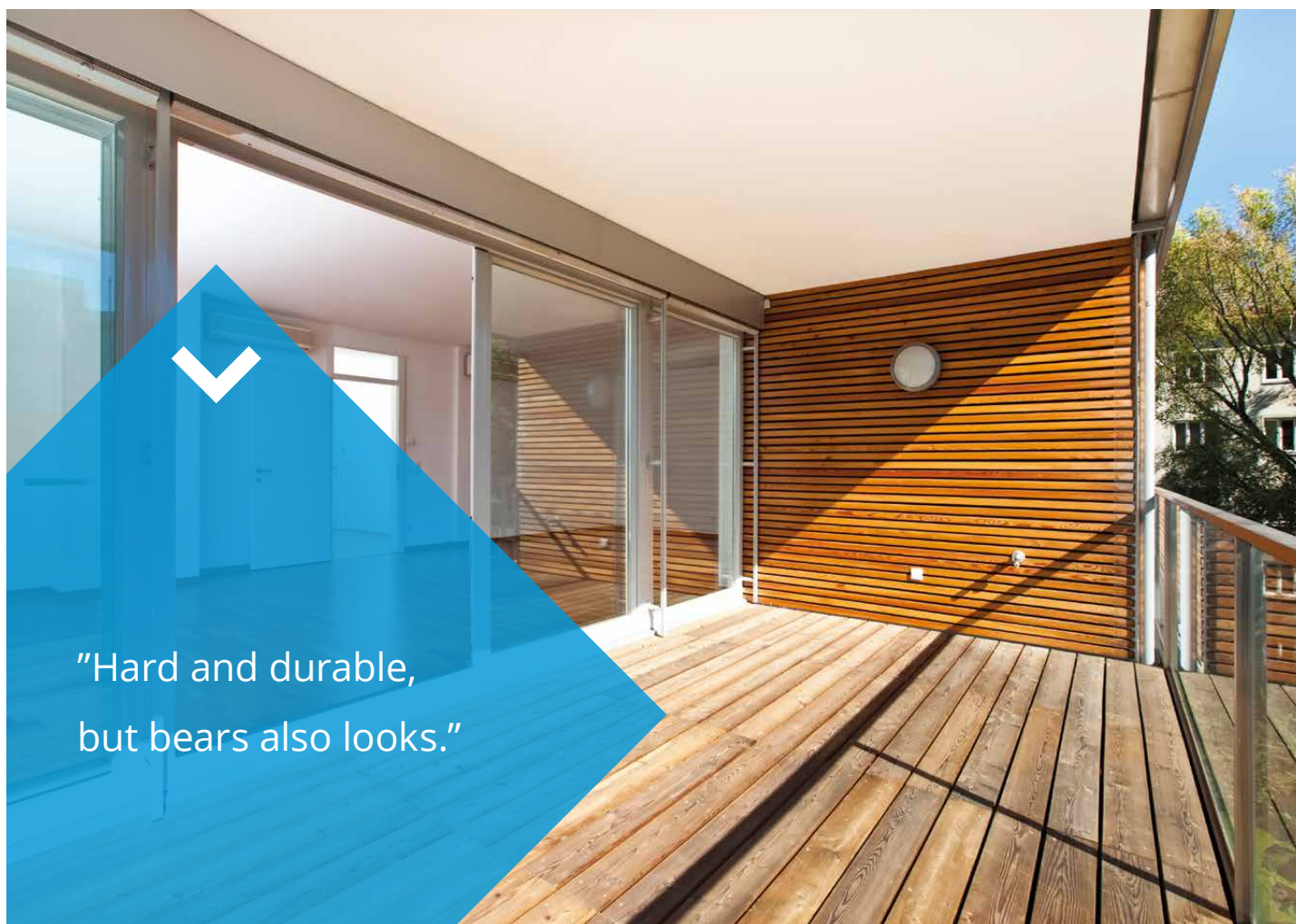
# Forte

LED

Strong and stylish outdoor LED luminaire for residential and public premises.



FO265.14LGH



"Hard and durable,  
but bears also looks."



FO265.14LV



FO265.14GH

### Structure

- ▶ Body die-cast aluminium
- ▶ Diffuser UV-protected polycarbonate
- ▶ Colours: Graphite grey (GH) and white (V)
- ▶ LED-models:  
 Connected power 14W and 19W, see the luminaire luminous flux from the table  
 Colour temperature 3000K and 4000K  
 Ra>80, power factor 0,9  
 Ambient temperature -20 °C - +30 °C  
 LED-module lifetime 50 000h (L70), T<sub>a</sub>=25 °C

### Mounting

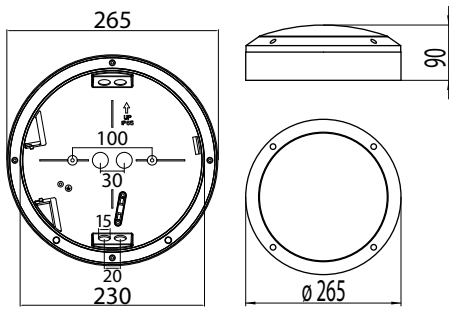
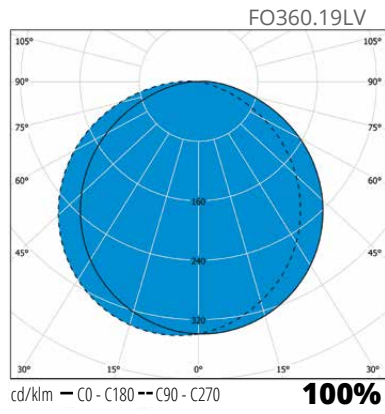
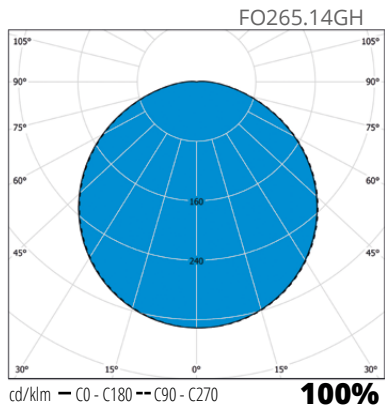
- ▶ To the wall and to the ceiling, -o- 3x2,5 mm<sup>2</sup>
- ▶ Breakthroughs on luminaires side
- ▶ Cable holes at the bottom of the luminaire and sides also



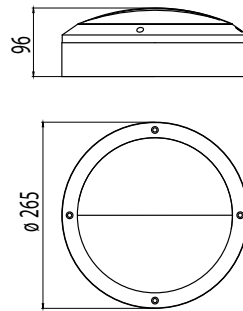
E number	Type	Product name	Output	Base	Kg	Colour	Luminous flux
<b>Forte LED S</b>							
45 031 95	FO265.14GH	FO265.14GH 14W/840 LED IP65 PC	14W	LED	1,30	Graphite grey	1100 lm
45 031 96	FO265.14GH/3K	FO265.14GH/3K 14W/830 LED IP65	14W	LED	1,30	Graphite grey	1000 lm
45 032 02	FO265.14V	FO265.14V 14W/840 LED IP65 PC	14W	LED	1,30	White	1100 lm
45 032 04	FO265.14V/3K	FO265.14V/3K 14W/830 LED IP65	14W	LED	1,30	White	1000 lm
<b>Forte LED S with eye-lid</b>							
45 031 97	FO265.14LGH	FO265.14LGH 14W/840 LED IP65	14W	LED	1,40	Graphite grey	750 lm
45 031 98	FO265.14LGH/3K	FO265.14LGH/3K 14W/83 LED IP65	14W	LED	1,40	Graphite grey	650 lm
45 031 99	FO265.14LV	FO265.14LV 14W/840 LED IP65 PC	14W	LED	1,40	White	750 lm
45 032 01	FO265.14LV/3K	FO265.14LV/3K 14W/830 LED IP65	14W	LED	1,40	White	650 lm
<b>Forte LED L</b>							
45 032 05	FO360.19GH	FO360.19GH 19W/840 LED IP65 PC	19W	LED	2,60	Graphite grey	1500 lm
45 032 07	FO360.19GH/3K	FO360.19GH/3K 19W/830 LED IP65	19W	LED	2,60	Graphite grey	1400 lm
45 032 17	FO360.19V	FO360.19V 19W/840 LED IP65 PC	19W	LED	2,60	White	1500 lm
45 032 19	FO360.19V/3K	FO360.19V/3K 19W/830 LED IP65	19W	LED	2,60	White	1400 lm
<b>Forte LED L with eye-lid</b>							
45 032 08	FO360.19LGH	FO360.19LGH 19W/840 LED IP65	19W	LED	2,80	Graphite grey	1000 lm
45 032 10	FO360.19LGH/3K	FO360.19LGH/3K 19W/83 LED IP65	19W	LED	2,80	Graphite grey	900 lm
45 032 11	FO360.19LV	FO360.19LV 19W/840 LED IP65 PC	19W	LED	2,80	White	1000 lm
45 032 13	FO360.19LV/3K	FO360.19LV/3K 19W/830 LED IP65	19W	LED	2,80	White	900 lm



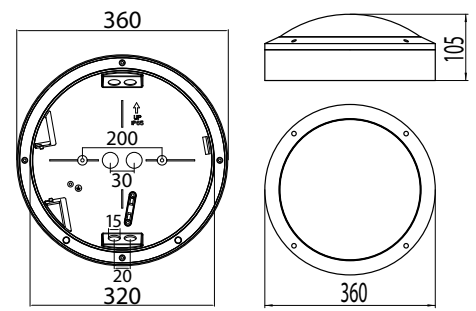




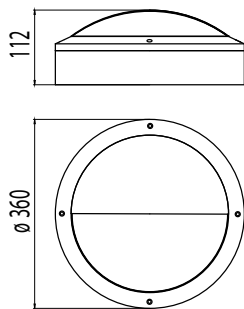
Forte S



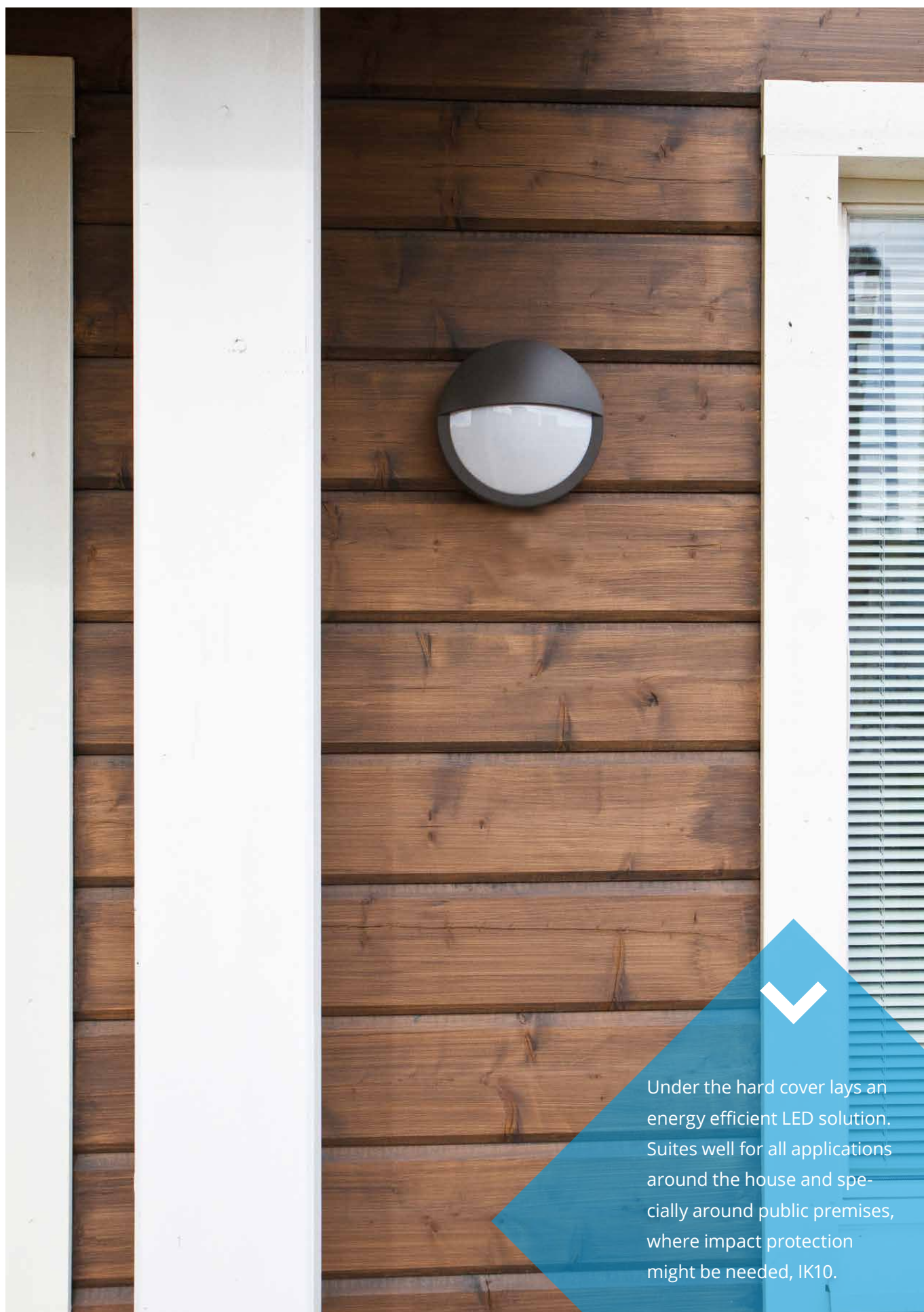
Forte S with eye-lid



Forte L



Forte L with eye-lid



Under the hard cover lays an energy efficient LED solution. Suits well for all applications around the house and specially around public premises, where impact protection might be needed, IK10.



## AVR51/52

LED



AVR51.11L

Energy efficient LED-signal luminaires are compact, durable and suitable for versatile use, including both indoor and outdoor applications, when there is a need for a sign to be light up. An excellent light source to light up the blade, where the information can be displayed with stickers or by engraving directly to the blade.



“Use for house numbering or as a info plate.”



AVR51.11LV



AVR52.11L



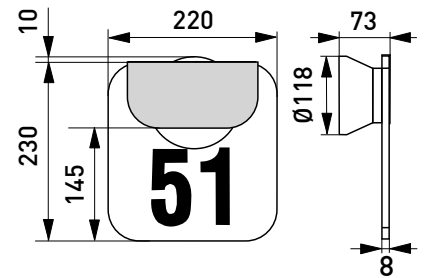
AVR52.11LV

**Structure**

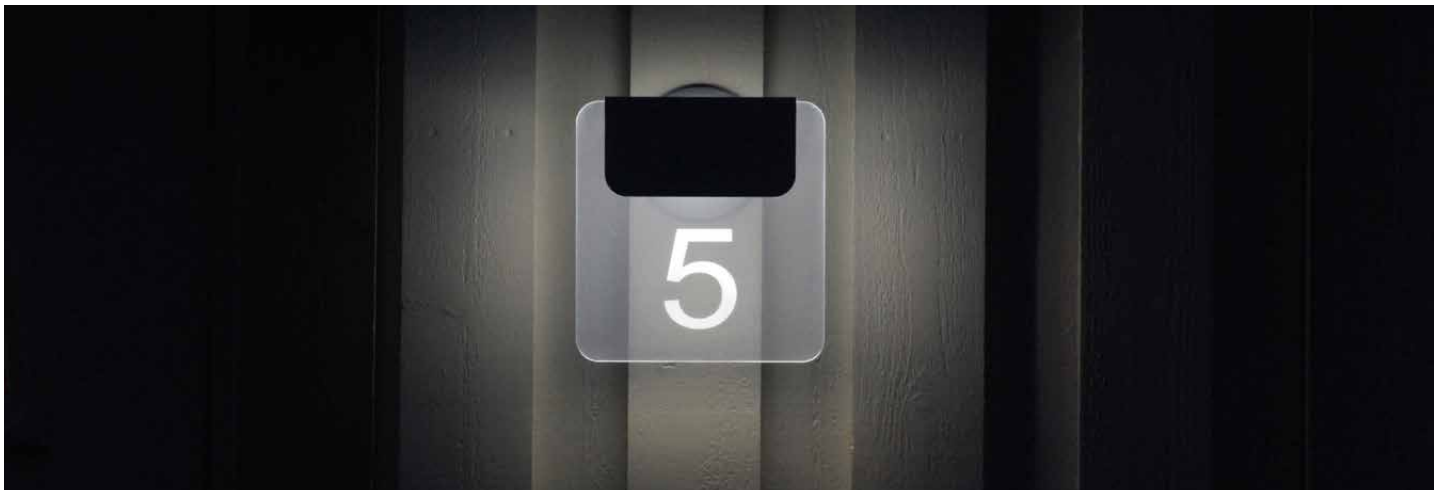
- ▶ Body casted aluminium
- ▶ Number blade acrylic
- ▶ LED-model:
  - Connected load 2W,
  - 4000 K
  - Ra>80
  - Ambient temperature - 30 °C - + 30 °C
  - LED-module lifespan 50 000 h (L70), T<sub>a</sub>=30 °C

**Mounting**

- ▶ To the surface
- ▶ -o Snap-in terminal block 3x2,5 mm<sup>2</sup>



E number	Type	Product name	Base	Model	Colour	Kg
<b>LED-signal luminaires</b>						
41 170 55	AVR51.11L	LED luminaire 1W square black	LED	square	black	1,2
41 170 56	AVR51.11LV	LED luminaire 1W square white	LED	square	white	1,2
41 170 57	AVR52.11L	LED luminaire 1W rectangular black	LED	rectangular	black	1,3
41 170 58	AVR52.11LV	LED luminaire 1W rectangular white	LED	rectangular	white	1,3





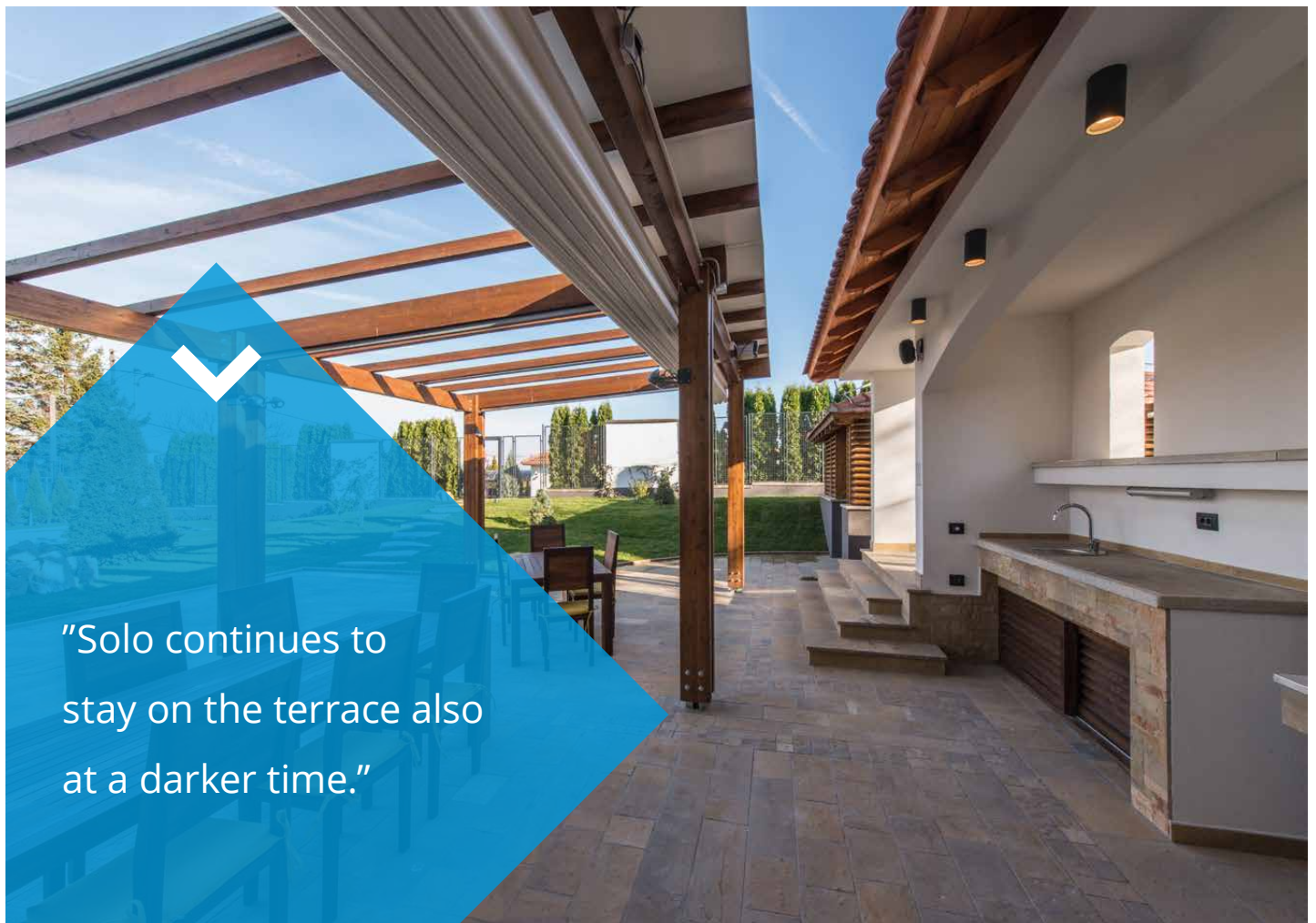
# Solo

LED



White

Solo illuminates the terraces and entrances in outdoor spaces and canopies. Surface-mounted Solo is a compact, durable and stylish downlight which is suitable for its appearance both home and public spaces.



"Solo continues to stay on the terrace also at a darker time."



Black

### Structure

- › Body aluminium
- › Diffuser tempered matt glass
- › Colours: Black and white
- › Selection:
  - Power 20W, luminous flux 1800 lm
  - Power 28W, luminous flux 2400 lm
  - Power 40W, luminous flux 3300 lm
- › Colour temperature 4000 K, Ra>80
- › Power factor 0,95
- › Ambient temperature -20 °C - +30 °C
- › LED-module lifetime 68 000h(L90B10) T<sub>a</sub>=25 °C

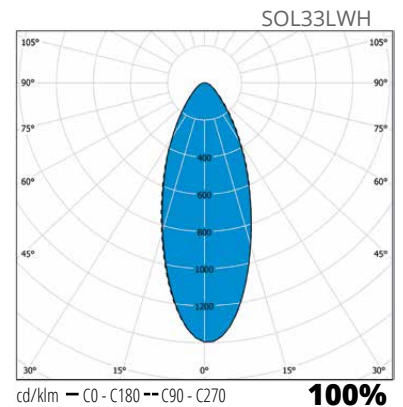
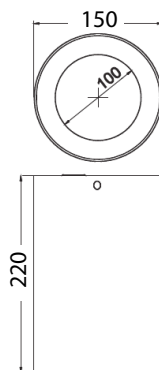
### Mounting

- › Installation on the ceiling surface, ended 3x1,5 mm<sup>2</sup>
- › Breakthrough in the installation plate and the connection box
- › Fixing screws are not included

### Made to order

- › DALI-versions
- › 3000 K-versions

20W	1800 lm	28W	2400 lm	40W	3300 lm
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E number	Type	Product name	Power	Base	Kg	Colour	Luminous flux
<b>Solo</b>							
45 032 40	SOL18LWH	SOL18LWH IP65 1800LM 840 GL WH	20W	LED	1,00	White	1800 lm
45 032 38	SOL18LBL	SOL18LBL IP65 1800LM 840 GL BL	20W	LED	1,00	Black	1800 lm
45 032 43	SOL24LWH	SOL24LWH IP65 2400LM 840 GL WH	28W	LED	1,00	White	2400 lm
45 032 41	SOL24LBL	SOL24LBL IP65 2400LM 840 GL BL	28W	LED	1,00	Black	2400 lm
45 032 45	SOL33LWH	SOL33LWH IP65 3300LM 840 GL WH	40W	LED	1,00	White	3300 lm
45 032 44	SOL33LBL	SOL33LBL IP65 3300LM 840 GL BL	40W	LED	1,00	Black	3300 lm





White

# Opus

LED

Opus is recessed outdoor downlight which is suitable for illuminate public buildings entrances and canopies. Opus luminaire is IP65 so it can be installed in several places in outdoor premises.



“Opus illuminates and invites to step in.”



Black



Opus with connection box

### Structure

- › Body aluminium
- › Diffuser tempered bright glass
- › Colours: Black and white
- › Luminaires IP-class is IP65. Connection box IP21
- › Selection:
  - Power 28W, luminous flux 3000 lm
  - Power 41W, luminous flux 4500 lm
- › Colour temperature 4000 K, Ra>80
- › Power factor 0,95
- › Ambient temperature -20 °C - +30 °C
- › LED-module lifetime 68 000h (L90B10) T<sub>a</sub>=25 °C

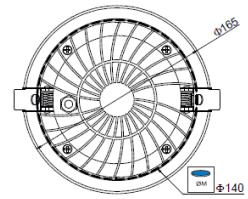
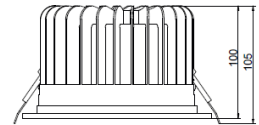
### Mounting

- › Recessed installation, through wiring 3x1,5 mm<sup>2</sup>
- › Cut-out diameters
  - OPU30: ø 140 mm
  - OPU45: ø 165 mm
- › Separate connection box (IP21) with two break throughs

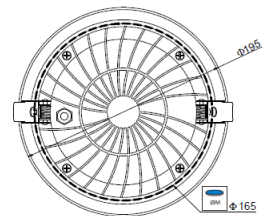
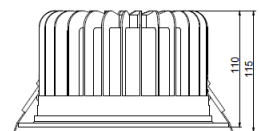
### Made to order

- › DALI-versions
- › 3000 K-versions

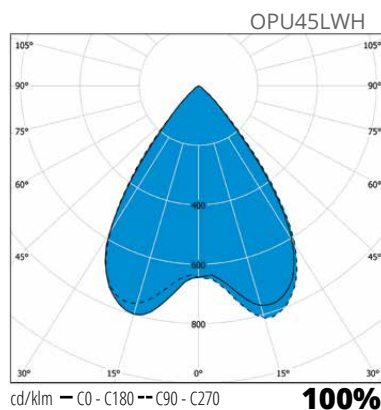
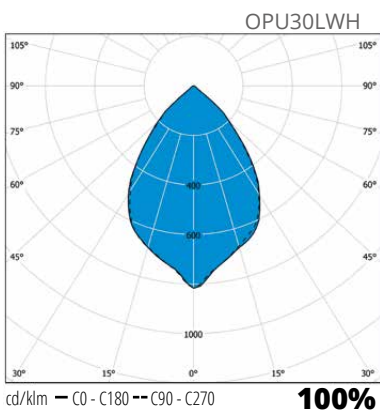
28W	3000 lm	41W	4500 lm
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OPU30L



OPU45L



E number	Type	Product name	Power	Base	Kg	Colour	Luminous flux
<b>Opus</b>							
45 032 36	OPU30LWH	OPU30LWH IP65 3000LM 840 GL WH	28W	LED	1,50	White	3000 lm
45 032 46	OPU30LBL	OPU30LBL IP65 3000LM 840 GL BL	28W	LED	1,50	Black	3000 lm
45 032 37	OPU45LWH	OPU45LWH IP65 4500LM 840 GL WH	41W	LED	1,70	White	4500 lm
45 032 47	OPU45LBL	OPU45LBL IP65 4500LM 840 GL BL	41W	LED	1,70	Black	4500 lm







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