



Saves Your Energy

Lighting catalogue

2016-2017



www.ensto.com



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Lighting catalogue

2016-2017

Solutions for lighting professionals

You are holding the first ever Ensto Lighting product catalogue. First time ever we are presenting Ensto – and Alppilux products between the same covers. Our portfolio fulfills the needs of technical lighting in residential, public premises, industrial and outdoor projects. Ensto Lighting Oy is a part of Ensto Group. Ensto is a family business and international Cleantech company specializing in the development, manufacture and marketing of electrical systems and supplies for the distribution of electrical power as well as electrical applications.

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 where you can also find the mobile suitable product pages.

Best Regards
Jukka Tiitu
President
Ensto Lighting Oy



Residential

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

01



Public premises

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

02



Industrial

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

03



Outdoor

Enstos 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.

04

Homes and public areas



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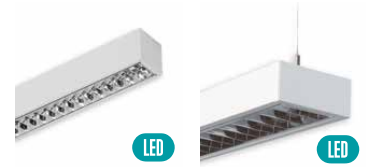


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Security and comfort with the base light

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.



Lighting with motion sensor with a reason

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.

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.

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



PIR

Slave luminaires

PIR with ignition and shut down function



On/off function controlled by Master-luminaire

PIR and base light

Master-luminaire type ...6D (PIR PXA53.2 + rele)



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

Master-luminaire type ...5D (PIR PXA53)



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

Radar

Slave luminaires

Radar with with ignition and shut down function



On/off function controlled by Master-luminaire

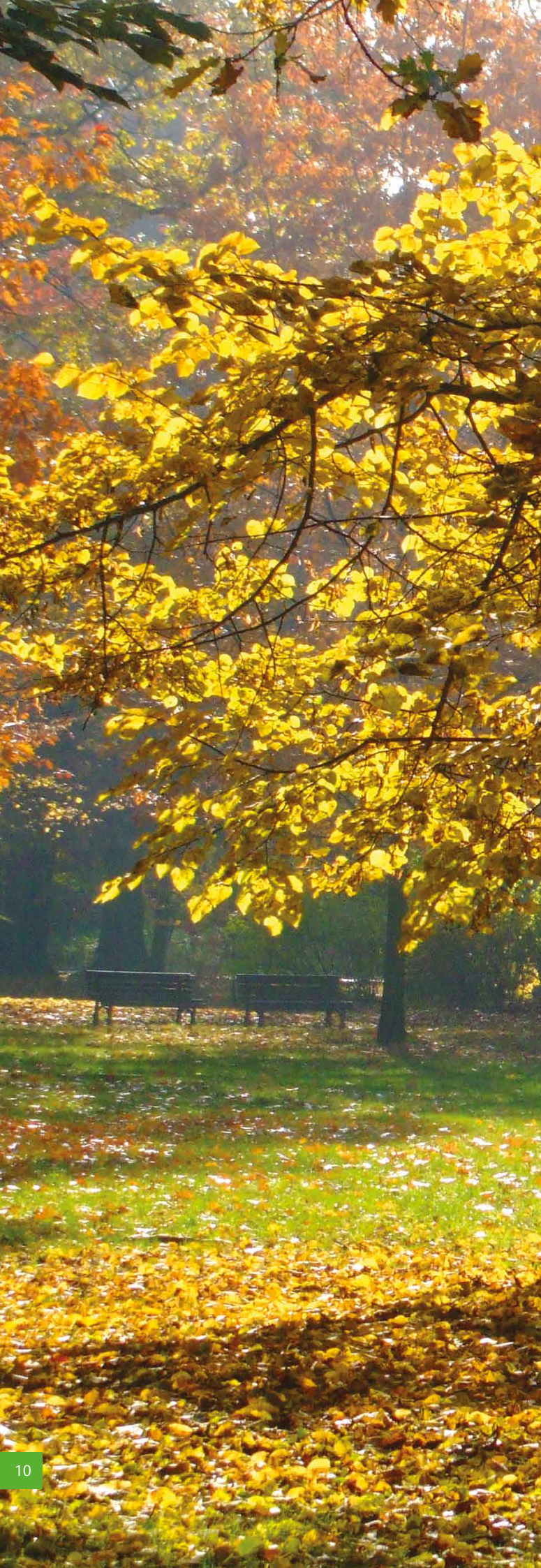
Radar and base light

Master-luminaire type ...9D (Radar PXA55+rele)



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)



Energy-efficient lighting safely

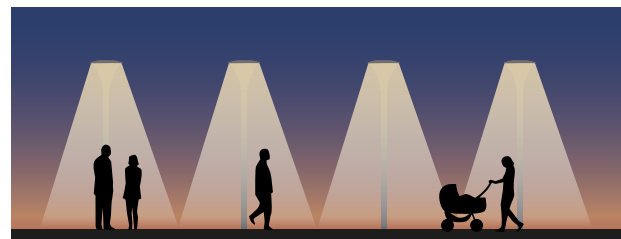
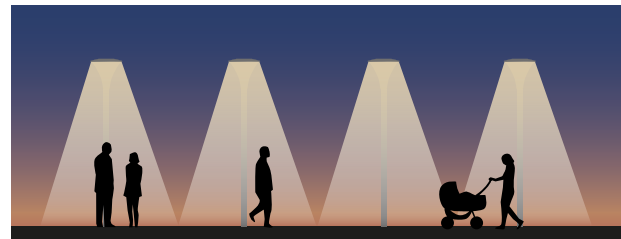
Our LED-outdoor luminaire selection offers energy-efficient, durable and overall economic solution for lighting parks and squares as well as yard and parking areas. Our selection includes traditional and new design, a suitable construction for demanding operating environment, an excellent instability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



Evening





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	08:00	05:00
Burning time	16 hours	6 hours
Dimming on *	21:00**	23:00/23:10***
Dimming off *	05:00**	05:00***

* 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.

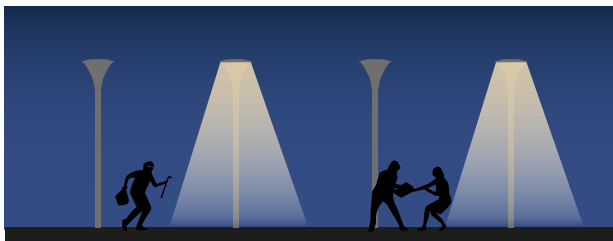
NightDIM-function is available for our garden luminaires and the function can be taken into the use when installing.

Estimated savings potential

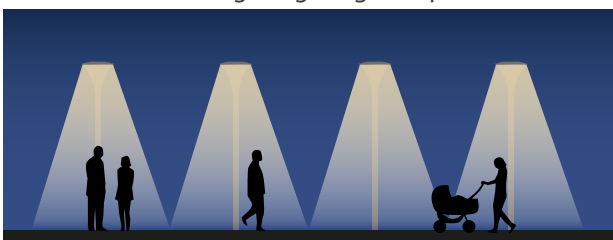
Night dimming	Power reduction	Energy savings
8 hours 50%	50%	36%

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

Night partial shut-down of lighting



dimming of lighting with power reduction



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 color rendering index nor the color temperature

High-quality lighting made energy efficiently

The primary task for lighting is to produce enough good quality to carry out tasks in a certain space.

Energy efficient lighting is a combination, where you look for the lowest possible energy consumption (W/m^2 and/or $W/m^2/100\text{ lx}$) in such a way that the quality requirements for lighting will be met.

It is important to take into account natural light in the planning of constructions as well as surfaces and furniture placement in the space.

Energy-efficient lighting solution is a result of a combination:

- luminaire is accomplished energy-efficiently and it fits to the application
- lighting is designed and executed carefully, the maintenance program is set up and it is being followed
- control solutions are being thought and are suitable for the application
- energy consumption is measured and followed



Learn more about our high-quality energy-efficient lighting in our training video.

Take into the consideration the following matters when planning an energy-efficient lighting solution:

Technology:



Light source efficacy (lm/W) - the higher the efficacy, the more energy-efficient the light source is.



Ballast classification (EEI) determinates the limits for ballasts losses. Energy-efficient ballasts have small losses. According to the EU-regulations starting from 13.4.2017; A1BAT, A2 BAT or A2 are permitted. The traditional ballasts will exit from the market. For LED drivers there are not yet defined Energy Efficient classes.



Light distribution determinates how the light is distributed to the area to be illuminated. Keep in mind that in LED luminaires the size and shape of the luminaire does not necessarily tell anything about the light distribution.



System efficacy (lm/W) = luminaire luminous flux (lm) / connected load (W)

Luminaire efficacy (lm/W) is taking into account the power source, heat and optics losses. Notice the glare! The luminaire with highest efficacy is not always the best option for the application.

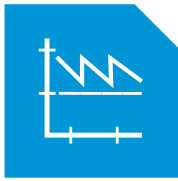
Control:



Movement / presence detection – lights on only when needed. The good features of LED's are highlighted in detection use. The lights turn on right away to full power and LED's can withstand a great number of switching on/off.



Daylight detection – taking advantage of the daylight when lighting the space, artificial lighting adapts with the natural light. It is often combined with the presence detection.



Constant illuminance – (constant light output) – CLO observes luminaire's / light sources loss of luminous flux during the maintenance period. A higher maintenance factor can be used in planning, because the luminous flux of the light source does not change during its lifespan. On the other hand this does not remove the need of cleaning and the energy consumption grows during the lifespan.



Task-scene setting – For many tasks maximum level of illuminance is not the most optimal. Dimming of luminaires according to the tasks increases comfort at work and saves as well energy.



Timed-off - automatic switch off when the space is not in use. This ensures that the lights turn off regardless of the user. This function is suitable for example in controlling the outdoor lighting. In outdoor lighting the use of luminaire specific independent power reduction (Bi-Power, NightDim etc.) is increasing, when the lights are desired to be turned on during the whole night, but be dimmed during night's quiet hours.

Application:



Task lighting – correct amount of light to task areas, background and other areas with less amount of light. Indoor lighting standard SFS1:2011-12464 (EN 12464-1:2011) is guiding lighting of public premises stronger to that direction.



Zoning of lighting – rational zoning of space according to its use. With practical placement of luminaires and with zoning the space for entities, energy consumption can be affected.



Maintenance schedule – maintenance of luminaires according to the space and its use. The light sources which are in the end of their lifespan should be changed and in dirty environment the luminaire has to be cleaned frequently enough.



Waste light - controlling light to the intended target. Outdoor lighting trend mostly, in some cities even regulations about this issue. Light should not be wasted to the sky, but in some applications high-lighting an object (for example a tree, plants or facade) can require an appropriate amount of scattered light.

Space and metering:



Reflectance - taking advantage of light which is reflected in space, selection of surface materials is important. Energy saving point of view light colors with high reflectance should be favored.



Metering of energy consumption and reporting to the user – awareness influence the behavior. Measured feedback about the energy consumption helps saving 5-15% in use of energy.

Energy-efficient lighting depends on many factors; do not stare only the efficacy.

Energy-efficient lighting is made of high-quality products, good design and execution together with proper maintenance and energy efficient use of the lighting over its life-time.

Remember the quality of lighting! The primary task of lighting is not to save energy.

High-quality lighting and energy efficiency can be combined.



Residential

01

AMI

LED | T5

IP21/44     



AL122L-series

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.



AL120L-series



AL122H-series



AL124-series

Structure

- Body - White or grey powder-coated aluminium
- End caps – uv resistant ABS plastic
- 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).
- AL120-series (IP44) without accessories. ALR120-models with radar to detect motion.
- LED-models:
Series AL120, AL122 and AL124 white and grey. ALR120 (radar) white.
See the connected load and luminaire luminous flux at the table.
3000K and 4000K, Ra > 80, power factor 0,92
Ambient temperature – 20 °C - + 30 °C
LED-module lifespan 30 000 h (L70), T_a = 25 °C

Mounting

- Under cupboard or on the wall. In 45° angle to the corner
- AL120 and ALR120 (radar) 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
- 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



E number	Type	Product name	Base	Kg	A	D	E	F	Luminous flux
With double socket outlet and switch, grey LED									
41 032 42	ALH122L450	ALH122L450 LED 7W/840 2-O PR H	LED	0,5	452	242	281	147	488 lm
41 032 44	ALH122L550	ALH122L550 LED 9W/840 2-O PR H	LED	0,6	552	292	352	160	770 lm
41 032 45	ALH122L750	ALH122L750 LED 11W/840 2 PR H	LED	0,8	752	362	540	170	1004 lm
With double socket outlets at both ends of the luminaire and one switch LED									
41 032 84	AL124L580	AL124L580 LED 7W/840 2+2-OS PR	LED	0,9	584	239	281	151	488 lm
41 032 86	AL124L680	AL124L680 LED 9W/840 2+2-OS PR	LED	1,0	684	303	354	164	770 lm
41 032 87	AL124L880	AL124L880 LED 11W/840 2+2OS PR	LED	1,3	884	441	540	171	1004 lm
41 033 34	AL124L1150	AL124L1150 14W/840 2+2OS PR	LED	1,4	1152	562	809	171	1522 lm
41 033 37	AL124L1460	AL124L1460 20W/840 2+2OS PR	LED	1,6	1462	717	1119	171	2306 lm
41 033 41	AL124L580/3K	AL124L580/3K LED 7W/830 2DSO	LED	0,9	582	239	281	151	503 lm
41 033 43	AL124L680/3K	AL124L680/3K LED 9W/830 2DSO	LED	1,0	682	303	354	164	795 lm
41 033 44	AL124L880/3K	AL124L880/3K LED 11W/830 2DSO	LED	1,3	882	441	540	171	1024 lm
41 033 35	AL124L1150/3K	AL124L1150/3K 14W/830 2DSO	LED	1,4	1152	562	809	171	1602 lm
41 033 38	AL124L1460/3K	AL124L1460/3K 20W/830 2DSO	LED	1,6	1462	717	1119	171	2391 lm
With double socket outlets at both ends of the luminaire and one switch, grey LED									
41 032 89	ALH124L580	ALH124L580 LED 7W/840 2+2 PR	LED	0,9	584	239	281	151	488 lm
41 032 90	ALH124L680	ALH124L680 LED 9W/840 2+2 PR	LED	1,0	684	303	354	164	770 lm
41 032 92	ALH124L880	ALH124L880 LED 11W/840 2+2 PR	LED	1,3	884	441	540	171	1004 lm
Without accessories									
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	
Without accessories, grey									
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	
With double socket outlet and switch									
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	
With double socket outlet and switch, grey									
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	
With double socket outlets at both ends of the luminaire and one switch									
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	
With double socket outlets at both ends of the luminaire and one switch, grey									
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	



ALI

T5 | T8 | TC

IP21     



ALH132-series

Streamlined and elegant universal 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.



AL132-series



AL134-series



Cover strip

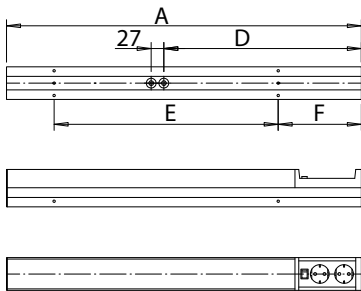
Structure

- 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 (50.000h) which manufacturer give 5 year warranty
- Models:
 - 11W (TC-S), 15W, 18W, 36W (T8)
 - 14W, 21W, 28W (T5)

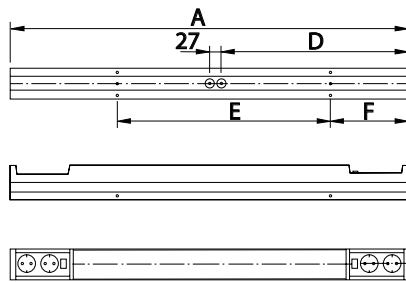
Mounting

- 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





AL132-series



AL134-series



E number	Type	Product name	Base	Kg	A	D	E	F
AL132 - with earthed double socket outlet and switch								
41 602 50	AL13211	AL13211 TC-S 11W DSO	G23	0,9	475	318	190	198
41 602 51	AL13215	AL13215 T8 15W DSO	G13	1,3	615	273	400	183
41 602 52	AL13218	AL13218 T8 18W DSO	G13	1,4	768	319	480	186
41 602 53	AL13236	AL13236 T8 36W DSO	G13	1,9	1377	520	770	303
41 602 75	AL13214	AL13214 T5 14W DSO	G5	1,1	725	336	510	176
41 602 76	AL13221	AL13221 T5 21W DSO	G5	1,2	1025	548	670	178
41 602 77	AL13228	AL13228 T5 28W DSO	G5	1,7	1325	776	970	178
AL132 - with earthed double socket outlet and switch, grey								
41 603 53	ALH13211	ALH13211 TC-S 11W DSO GR	G23	0,9	475	318	190	198
41 603 54	ALH13215	ALH13215 T8 15W DSO GR	G13	1,3	615	273	400	183
41 603 55	ALH13218	ALH13218 T8 18W DSO GR	G13	1,4	768	319	480	186
41 602 11	ALH13214	ALH13214 T5 14W DSO	G5	1,1	725	336	510	176
AL134 - with earthed double socket outlets at both ends and switch								
41 602 61	AL13415	AL13415 T8 15W 2XDSO	G13	1,5	754	316	400	183
41 602 62	AL13418	AL13418 T8 18W 2XDSO	G13	1,8	907	319	537	187
41 602 63	AL13436	AL13436 T8 36W 2XDSO	G13	2,2	1516	520	910	303
41 602 78	AL13414	AL13414 T5 14W 2XDSO	G5	1,3	865	340	476	208
41 602 06	AL13421	AL13421 T5 21W 2XDSO	G5	1,6	1165	340	602	208
41 031 28	AL13428	AL13428 T5 28W 2XDSO	G5	2,0	1465	719	1000	233

ALISA

T5 | T8 | TC



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.



AL142-series



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:
 - 11W (TC-S), 15W,18W, 36W (T8)
 - 14W, 21W, 28W (T5)
 - Alisa residual current braker- and modulemodels 2x9W (TC-S)

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





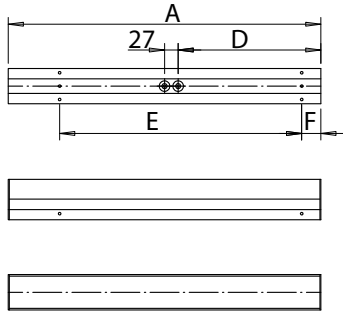
AL14229 with mirror cabinet fixing brackets



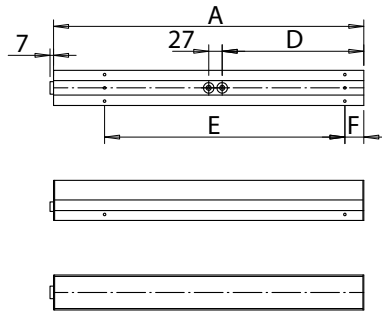
AL14229V



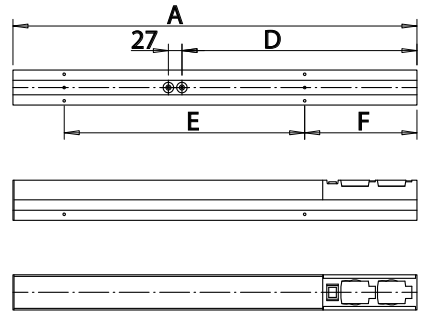
ALH142



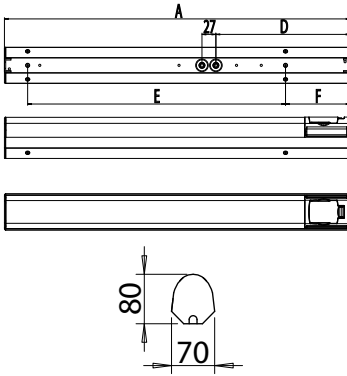
AL140-series



AL141-series



AL142-series



AL143-series

E number	Type	Product name	Base	Kg	A	D	E	F
AL140 - without accessories								
41 602 70	AL14011	AL14011 IP44 TC-S 11W	G23	0,7	335	178	190	58
41 602 71	AL14015	AL14015 IP44 T8 15W	G13	1,0	475	273	400	44
41 602 72	AL14018	AL14018 IP44 T8 18W	G13	1,1	628	196	503	63
41 602 73	AL14036	AL14036 IP44 T8 36W	G13	1,6	1237	520	630	303
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
AL141 - with rubber coated switch								
41 602 55	AL14111	AL14111 IP44 TC-S 11W SWITCH	G23	0,7	335	178	190	58
41 602 56	AL14115	AL14115 IP44 T8 15W SWITCH	G13	1,0	475	273	400	44
41 602 57	AL14118	AL14118 IP44 T8 18W SWITCH	G13	1,1	628	196	503	63
41 602 58	AL14136	AL14136 IP44 T8 36W SWITCH	G13	1,6	1237	520	630	303
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

E number	Type	Product name	Base	Kg	A	D	E	F
AL142 - with double socket outlet and rubber coated switch								
41 602 65	AL14211	AL14211 IP44 TC-S 11W DSO	G23	1,0	521	364	190	245
41 602 66	AL14215	AL14215 IP44 T8 15W DSO	G13	1,3	661	362	400	231
41 602 67	AL14218	AL14218 IP44 T8 18W DSO	G13	1,4	814	365	480	231
41 602 68	AL14236	AL14236 IP44 T8 36W DSO	G13	1,9	1423	520	818	303
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
AL142 - with double socket outlet and rubber coated switch, grey								
42 653 02	ALH14211	ALH14211 TC-S 11W DSO GR	G23	1,0	521	364	190	245
42 653 04	ALH14215	ALH14215 T8 15W DSO GR	G13	1,3	661	362	400	231
42 949 92	ALH14218	ALH14218 T8 18W DSO GR	G13	1,4	814	365	480	231
AL142 - with double socket outlet and rubber coated switch, module sizes (AL=white, ALH=grey)								
41 030 01	AL14229MOD	AL14229MOD IP44 TC-S2X9W DSO	G23	1,5	597	392	296	244
AL142 - with 1-socket outlet and rubber coated switch with residual current braker (AL=white, ALH=grey)								
42 653 01	AL14229V	AL14229V IP44 TC-S2X9W 1SO RCB	G23	1,7	597	392	296	244
AL143 - with 1-socket outlet								
41 031 48	AL14314	AL14314 IP44 T5 14W DSO	G5	1,1	670	260	500	125
Accessories								
41 030 02	SK13	SK13 MIRROR CABINET FIXTURES	Set consists of 2 fixing plate and 4 platescrews					



AVR66

LED | TC | T5 | T8

IP44   



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.



AVR66.110LP



AVR66.1104L LED PIR



AVR66.1159L LED RADAR

Structure

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

Control

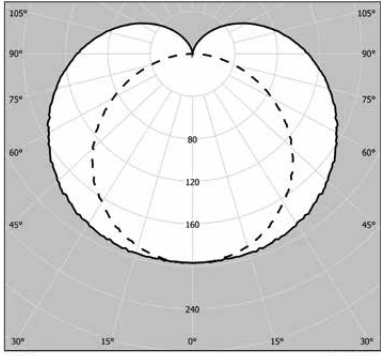
- AVR66 PIR-type of luminaires are sensor luminaires equipped with infra-red motion sensor (PIR) in which are settings for time (1-30 min.), sensitivity and twilight switch function
- AVR66 RADAR-type of luminaires are sensor luminaires equipped with high-frequency radar to detect motion (Radar) in which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

Mounting

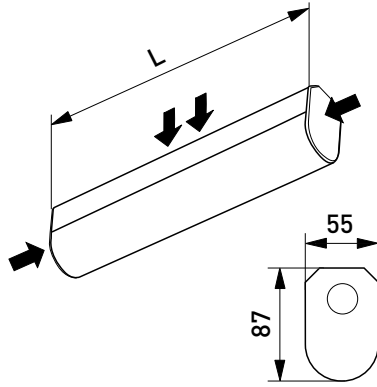
- To the ceiling and to the wall
- Snap-in terminal block 5x2,5 mm² with through wiring, PIR-/RADAR-models -o- 5x2,5 mm²
- Sensor luminaire models see more accurate information at WEB-site
PIR-models:
To the ceiling max. 4 meters height
To the wall max. 1,7-2,7 meters height
RADAR-models:
To the ceiling 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



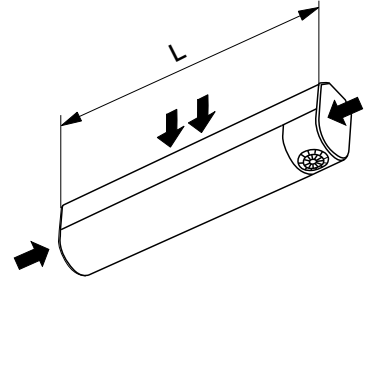
Jono LED



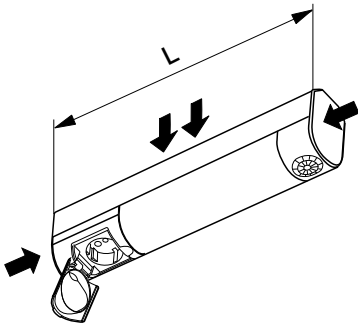
cd/klm — C0 - C180 — C90 - C270 **101%**



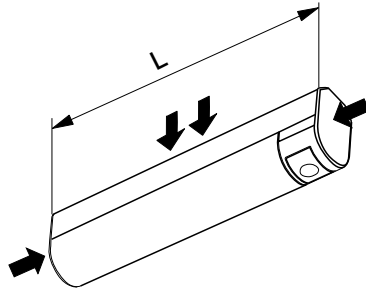
Jono and Jono Radar



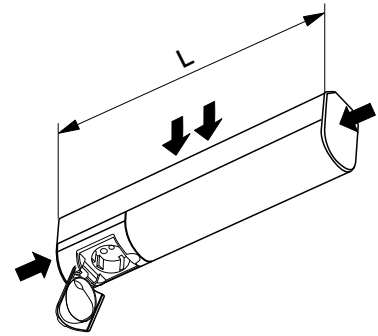
Jono PIR



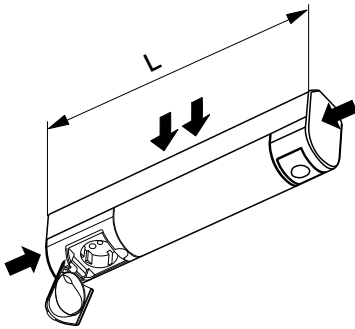
Jono PIR and socket outlet



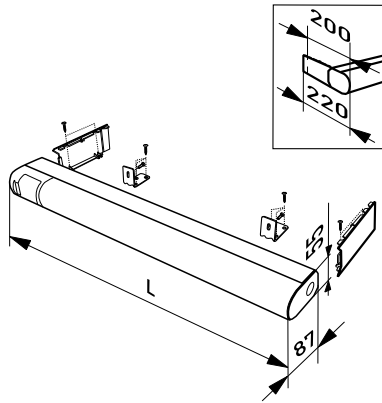
Jono with switch



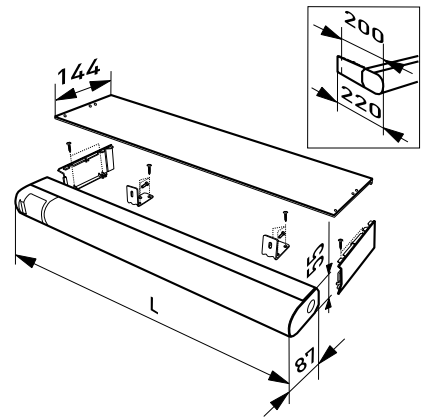
Jono with socket outlet and
Jono with socket outlet and circuitbreaker



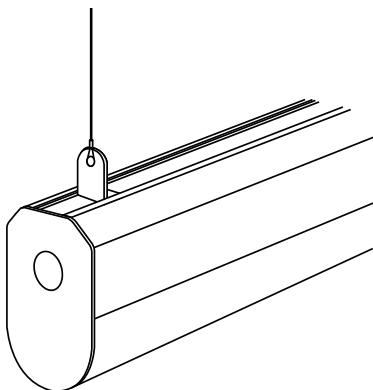
Jono with socket outlet and switch



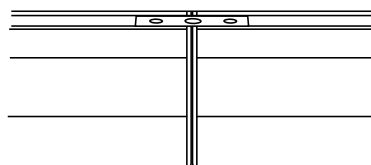
Module sized Jono with socket outlet



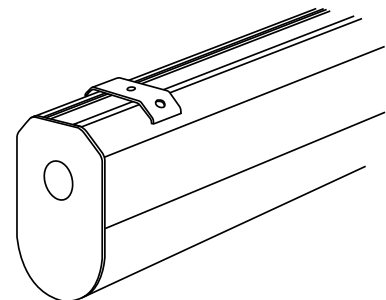
Module sized Jono with socket outlet and dust cover



AVL601

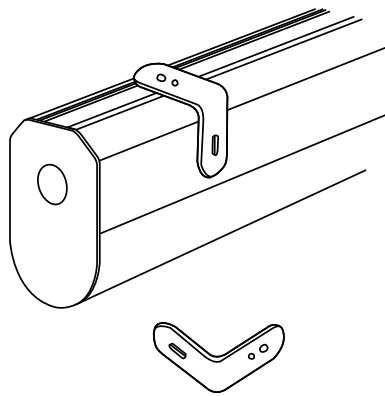


AVL605

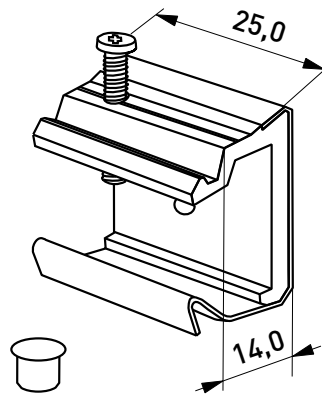


AVL607





AVL608



AVL609

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
LED Jono LED							
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	
LED Jono aluminium colour LED							
42 176 29	AVR66.110LAL/3K	AVR66 IP44 LED10W/830 EAL	LED	0,8	600	895 lm	
LED Jono with switch LED							
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	
LED Jono with switch, aluminium colour LED							
42 176 31	AVR66.1101LAL/3K	AVR66 IP44 LED10W/830 E1AL	LED	0,9	644	895 lm	
LED Jono with socket-outlet LED							
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	
LED Jono with socket-outlet, aluminium colour LED							
42 176 32	AVR66.110LPAL/3K	AVR66 IP44 LED10W/830 EPAL	LED	0,9	677	895 lm	
LED jono with socket-outlet and switch LED							
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	
LED jono with socket-outlet and switch, aluminium colour LED							
42 176 34	AVR66.1101LPAL/3K	AVR66 IP44 LED10W/830 E1PAL	LED	1,0	721	895 lm	
LED Jono 1-10V LED							
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	

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
LED Jono DALI LED							
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
LED Jono with sensor LED							
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	1033	1425 lm	
42 176 67	AVR66.1159L/3K	AVR66 IP44 LED15W/830 ERAD	LED	1,4	956	1342 lm	
LED Jono with sensor LED							
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	1200	1900 lm	
42 179 48	AVR66.1209L/3K	AVR66 IP44 LED20W/830 ERAD	LED	1,8	1200	1790 lm	
LED Jono with sensor, aluminium colour LED							
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	
LED Jono with PIR-sensor and socket-outlet LED							
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	
LED Jono with PIR-sensor and socket-outlet, aluminium colour LED							
42 176 37	AVR66.1104LPAL/3K	AVR66 IP44 LED10W/830 EPIRPAL	LED	1,1	733	895 lm	
LED Jono with sensor and constant light (5/20%, factory setting 5%) LED							
42 179 21	AVR66.1205DL	AVR66 IP44 LED20W/840 DPIR5	LED	2,0	1200	1900 lm	
42 179 49	AVR66.1205DL/3K	AVR66 IP44 LED20W/830 DPIR5	LED	2,0	1200	1790 lm	
LED Jono with sensor and constant light (5%) LED							
42 179 23	AVR66.1206DL	AVR66 IP44 LED20W/840 DPIR6	LED	2,0	1200	1900 lm	
42 179 58	AVR66.1206DL/3K	AVR66 IP44 LED20W/830 DPIR6	LED	2,0	1200	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	
LED Jono with 1 hour battery back-up LED							
42 179 43	AVR66.120L/1M	AVR66 IP44 LED20W/840 E1M	LED	1,9	1200	1900 lm	
LED Jono with sensor and constant light (5/20%) and 1 hour battery back-up LED							
42 179 44	AVR66.1205DL/1M	AVR66 IP44 LED20W/840 DPIR51M	LED	2,2	1200	1900 lm	
Jono TC 11W and T8 (ø 26 mm)							
42 176 02	AVR66.111	1x11W TC/G23 230V 50Hz, 335mm	G23	0,9	335		
42 170 63	AVR66.015	1x15W T8/G13 230V 50Hz, 479mm	G13	1,3	479		
42 170 66	AVR66.018	1x18W T8/G13 230V 50Hz, 631mm	G13	1,6	631		
42 170 69	AVR66.030	1x30W T8/G13 230V 50Hz, 936mm	G13	1,8	936		
42 170 72	AVR66.036	1x36W T8/G13 230V 50Hz, 1241mm	G13	2,2	1241		
42 170 75	AVR66.058	1x58W T8/G13 230V 50Hz, 1541mm	G13	3,1	1541		

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
Jono TC-E 11W and T8 (ø 26 mm) with electronic control gear							
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		
Jono T8 (ø 26 mm) with 1-10V electronic control gear							
42 170 64	AVR66.018D	1x18W T8/G13 220/240V 0-50/60Hz, 631mm	G13	1,1	631		
42 171 20	AVR66.036D	1x36W T8/G13 220/240V 0-50/60Hz, 1241mm	G13	1,9	1241		
42 171 23	AVR66.058D	1x58W T8/G13 220/240V 0-50/60Hz, 1541mm	G13	1,9	1541		
Jono T5 (ø 16 mm) with electronic control gear							
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		
Jono T5 (ø 16 mm) with 1-10V electronic control gear							
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		
Jono T5 (ø 16 mm) with DSI/DALI electronic control gear							
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		
PIR sensor Jono TC 11W ja T8 (ø 26 mm) with electronic quick starter							
42 172 03	AVR66.1114H	1x11W TC-E/2G7 230V 50Hz, 425mm	2G7	0,7	425		
42 172 88	AVR66.0154H	1x15W T8/G13 230V 50Hz, 536mm	G13	1,5	536		
42 172 91	AVR66.0184H	1x18W T8/G13 230V 50Hz, 688mm	G13	1,7	688		
42 172 97	AVR66.0364H	1x36W T8/G13 230V 50Hz, 1298mm	G13	2,1	1298		
42 173 00	AVR66.0584H	1x58W T8/G13 230V 50Hz, 1598mm	G13	3,2	1598		
PIR sensor Jono T8 (ø 26 mm) with electronic control gear							
41 171 70	AVR66.0184E	1x18W T8/G13 220-240V 0/50-60Hz, 688mm	G13	1,2	688		
41 171 72	AVR66.0364E	1x36W T8/G13 220-240V 0/50-60Hz, 1298mm	G13	1,5	1298		
41 171 74	AVR66.0584E	1x58W T8/G13 220-240V 0/50-60Hz, 1598mm	G13	2,1	1598		
PIR sensor Jono TC 11W ja T8 (ø 26 mm) with socket-outlet and electronic quick starter							
42 176 14	AVR66.1114HP	1x11W TC-E/2G7 230V 50Hz, 500mm	2G7	0,8	500		
42 173 06	AVR66.0154HP	1x15W T8/G13 230V 50Hz, 613mm	G13	1,5	613		
42 173 09	AVR66.0184HP	1x18W T8/G13 230V 50Hz, 764mm	G13	1,9	764		
PIR sensor Jono with 1-10V electronic control. Constant illumination level 5 % and PIR controlled illumination level 100%							
42 170 88	AVR66.0186D	1x18W T8/G13 220/240V 0-50/60Hz, 688mm	G13	1,3	688		
42 170 89	AVR66.0366D	1x36W T8/G13 220/240V 0-50/60Hz, 1298mm	G13	2,1	1298		
42 170 91	AVR66.0586D	1x58W T8/G13 220/240V 0-50/60Hz, 1598mm	G13	2,2	1598		
42 170 44	AVR66.0216D	1x21W T5/G5 220/240V 0-50/60Hz, 957mm	G5	1,6	957		
42 170 46	AVR66.0286D	1x28W T5/G5 220/240V 0-50/60Hz, 1257mm	G5	2,0	1257		
42 170 47	AVR66.0356D	1x35W T5/G5 220/240V 0-50/60Hz, 1557mm	G5	2,3	1557		

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
PIR sensor Jono T5 (ø 16 mm) with electronic control gear							
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		
PIR sensor Jono T5 (ø 16 mm) with socket-outlet and electronic control gear							
41 174 92	AVR66.0144EP	1x14W T5/G5 220-240V 0/50-60Hz, 734mm	G5	1,5	734		
Jono TC 11W and T8 (ø 26 mm) with switch							
42 176 04	AVR66.1111	1x11W TC/G23 230V 50Hz, 379mm	G23	1,0	379		
42 171 29	AVR66.0151	1x15W T8/G13 230V 50Hz, 523mm	G13	1,4	523		
42 171 32	AVR66.0181	1x18W T8/G13 230V 50Hz, 675mm	G13	1,7	675		
42 171 35	AVR66.0301	1x30W T8/G13 230V 50Hz, 980mm	G13	1,9	980		
42 171 38	AVR66.0361	1x36W T8/G13 230V 50Hz, 1285mm	G13	2,3	1285		
42 171 41	AVR66.0581	1x58W T8/G13 230V 50Hz, 1585mm	G13	3,0	1585		
Jono TC 11W, T5 (ø 16 mm) and T8 (ø 26 mm) with switch and electronic control gear							
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		
42 178 11	AVR66.0181E	1x18W T8/G13 220-240V 0/50-60Hz, 675mm	G13	1,6	675		
42 178 18	AVR66.0361E	1x36W T8/G13 220-240V 0/50-60Hz, 1285mm	G13	2,3	1285		
42 178 21	AVR66.0581E	1x58W T8/G13 220-240V 0/50-60Hz, 1585mm	G13	3,0	1585		
Jono TC 11W ja T8 (ø 26 mm) with socket-outlet							
42 172 02	AVR66.1111P	1x11W TC/G23 230V 50Hz, 412mm	G23	1,0	412		
42 171 65	AVR66.015P	1x15W T8/G13 230V 50Hz, 556mm	G13	1,5	556		
42 171 68	AVR66.018P	1x18W T8/G13 230V 50Hz, 708mm	G13	1,8	708		
42 171 71	AVR66.030P	1x30W T8/G13 230V 50Hz, 1013mm	G13	2,0	1013		
42 171 74	AVR66.036P	1x36W T8/G13 230V 50Hz, 1318mm	G13	2,4	1318		
42 171 77	AVR66.058P	1x58W T8/G13 230V 50Hz, 1618mm	G13	3,2	1618		
Jono T8 (ø 26 mm) with socket-outlet and electronic quick starter							
42 171 83	AVR66.015HP	1x15W T8/G13 230V 50Hz, 556mm	G13	1,5	556		
42 171 92	AVR66.036HP	1x36W T8/G13 230V 50Hz, 1318mm	G13	2,4	1318		
Jono T5 (ø 16 mm) ja T8 (ø 26 mm) with socket-outlet and electronic control gear							
42 172 27	AVR66.1111EP	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		
42 177 30	AVR66.028EP	1x28W T5/G5 220-240V 0/50-60Hz, 1277mm	G5	1,9	1277		
42 170 80	AVR66.018EP	1x18W T8/G13 220-240V 0/50-60Hz, 708mm	G13	1,1	708		
Jono TC 11W ja T8 (ø 26 mm) with socket-outlet and circuitbraker							
42 176 08	AVR66.1111WP	1x11W TC/G23 230V 50Hz, 495mm	G23	1,4	495		
42 172 01	AVR66.015WP	1x15W T8/G13 230V 50Hz, 646mm	G13	1,8	646		
42 172 04	AVR66.018WP	1x18W T8/G13 230V 50Hz, 798mm	G13	2,0	798		
Jono TC 11W ja T8 (ø 26 mm) with switch and socket-outlet							
42 172 22	AVR66.1111P	1x11W TC/G23 230V 50Hz, 456mm	G23	1,1	456		
42 172 25	AVR66.0151P	1x15W T8/G13 230V 50Hz, 599mm	G13	1,6	599		
42 172 28	AVR66.0181P	1x18W T8/G13 230V 50Hz, 751mm	G13	1,9	751		
42 172 31	AVR66.0301P	1x30W T8/G13 230V 50Hz, 1056mm	G13	2,1	1056		
Jono TC 11W, T5 (ø 16 mm) and T8 (ø 26 mm) with switch, socket-outlet and electronic control gear							
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		
42 177 32	AVR66.0281EP	1x28W T5/G5 220-240V 0/50-60Hz, 1321mm	G5	1,8	1321		
42 178 12	AVR66.0181EP	1x18W T8/G13 220-240V 0/50-60Hz, 751mm	G13	1,8	751		

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
Jono module-sized T8 (ø 26 mm) with socket-outlet							
41 171 92	AVR66.0600P	1x15W T8/G13 230V 50Hz, 600mm	G13	1,6	600		
41 171 95	AVR66.0800P	1x18W T8/G13 230V 50Hz, 800mm	G13	2,1	800		
41 171 98	AVR66.0900P	1x18W T8/G13 230V 50Hz, 900mm	G13	2,2	900		
41 172 01	AVR66.01200P	1x30W T8/G13 230V 50Hz, 1200mm	G13	2,4	1200		
Jono module-sized T8 (ø 26 mm) with socket-outlet, electronic quick starter and light source							
42 178 27	AVR66.1600HP	1x15W T8/G13 230V 50Hz, 600mm	G13	1,6	600		
42 178 29	AVR66.1800HP	1x18W T8/G13 230V 50Hz, 800mm	G13	2,2	800		
42 178 31	AVR66.1900HP	1x18W T8/G13 230V 50Hz, 900mm	G13	2,3	900		
42 178 25	AVR66.11200HP	1x30W T8/G13 230V 50Hz, 1200mm	G13	2,7	1200		
Jono module-sized T8 (ø 26 mm) with socket-outlet and circuitbraker							
41 172 07	AVR66.0800WP	1x18W T8/G13 230V 50Hz, 800mm	G13	2,0	800		
41 172 10	AVR66.0900WP	1x18W T8/G13 230V 50Hz, 900mm	G13	1,8	900		
41 172 13	AVR66.01200WP	1x30W T8/G13 230V 50Hz, 1200mm	G13	2,1	1200		
Jono module-sized TC 2x9W (ø 26 mm) with socket-outlet, circuitbraker and light source							
41 172 04	AVR66.2600WP	2x9W TC/G23 230V 50Hz, 600mm	G23	1,6	600		
42 178 32	AVR66.1900WP	1x18W T8/G13 230V 50Hz, 900mm	G13	1,8	900		
Jono module-sized T5 (ø 16 mm) and T8 (ø 26 mm) with socket-outlet, dust cover and light source							
42 176 58	AVR66.1600HPZ	1x15W T8/G13 230V 50Hz, 600mm	G13	2,5	600		
42 176 60	AVR66.1800HPZ	1x18W T8/G13 230V 50Hz, 800mm	G13	3,0	800		
42 176 62	AVR66.1900HPZ	1x18W T8/G13 230V 50Hz, 900mm	G13	3,2	900		
42 176 64	AVR66.11200HPZ	1x30W T8/G13 230V 50Hz, 1200mm	G13	4,0	1200		
41 179 43	AVR66.11200EPZ	1x21W T5/G5 220-240V 0/50-60Hz, 1200mm	G5	3,2	1200		
Jono module-sized T8 (ø 26 mm) with socket-outlet and light source							
42 178 28	AVR66.1600P	1x15W T8/G13 230V 50Hz, 600mm	G13	1,6	600		
Jono accessories							
42 175 56	AVL601	Wire suspension set for JONO AVR66					
42 175 59	AVL605	In-line connector set for JONO AVR66					
42 175 76	AVL607	45° angle connectorpair for JONO AVR66					
42 174 53	AVL608	90° angle connectorpair for JONO AVR66					
41 170 22	AVL609	Fixing kit for AVR66 Jono luminaire					

Other Jono accessories; see www.ensto.com



AVR254

LED | TC

IP54  /  CE  3x2,5mm²
4x2,5mm²

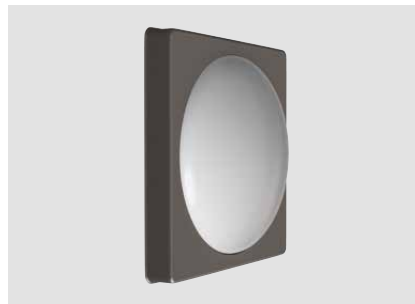


AVR254 universal luminaires are designed for both wet and dry premises. They can be used both in indoor and outdoor applications. Luminaires fit excellent for bathrooms and toilets, wardrobes, shelters, terraces and vestibules. Luminaires are available in LED-, PIR- and radar-models.

AVR254



AVR254 + AVL41.2



AVR254 + AVL43.3



AVR254 + AVL57

Structure

- Diffuser opal acrylate
- Body polycarbonate
- Light sources 9W/830 included
- LED-models:
connected load
8W (AVR254.18L) luminaire luminous flux 550 lm, 11W (AVR254.111L),
luminaire luminous flux 750 lm, comparable to 2x9W TC-S
4000 K, Ra > 80, power factor 0,77
Ambient temperature – 20 °C – + 25 °C
LED-module lifespan 60 000 h (L70), T_a = 25 °C

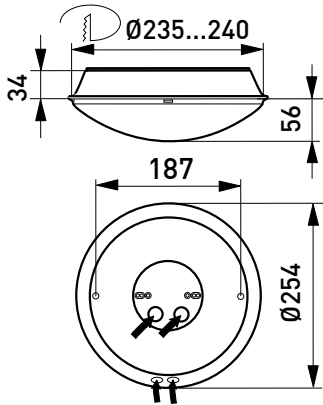
Control

- 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

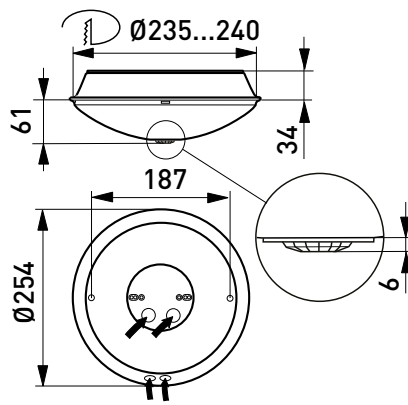
Mounting

- 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 mm² with through wiring, PIR-/RADAR-models -o- 4x2,5 mm²
- 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

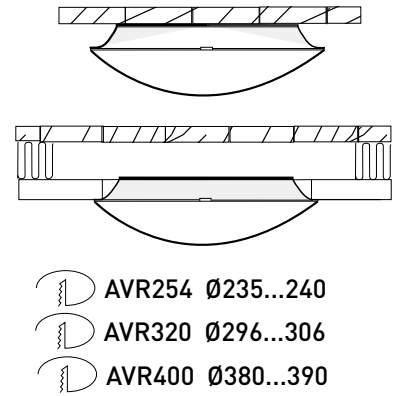







AVR254-luminaire

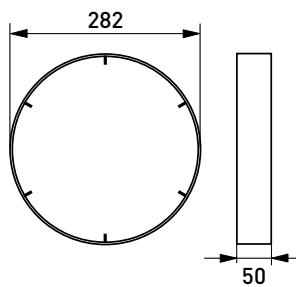


AVR254 PIR-sensor luminaire

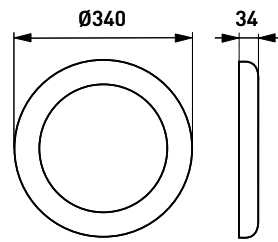


Installation picture

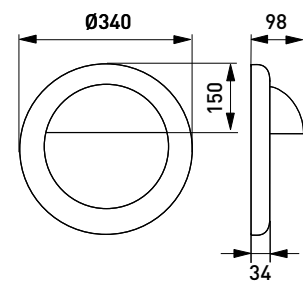
-  AVR254 Ø235...240
-  AVR320 Ø296...306
-  AVR400 Ø380...390



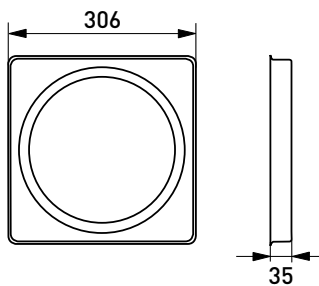
AVL57 decorative frame



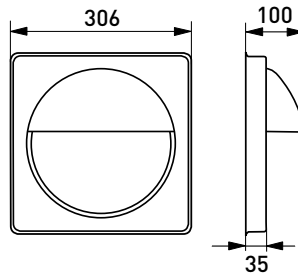
AVL40 decoration frame



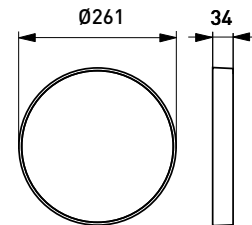
AVL41 anti-glare frame



AVL43 square frame



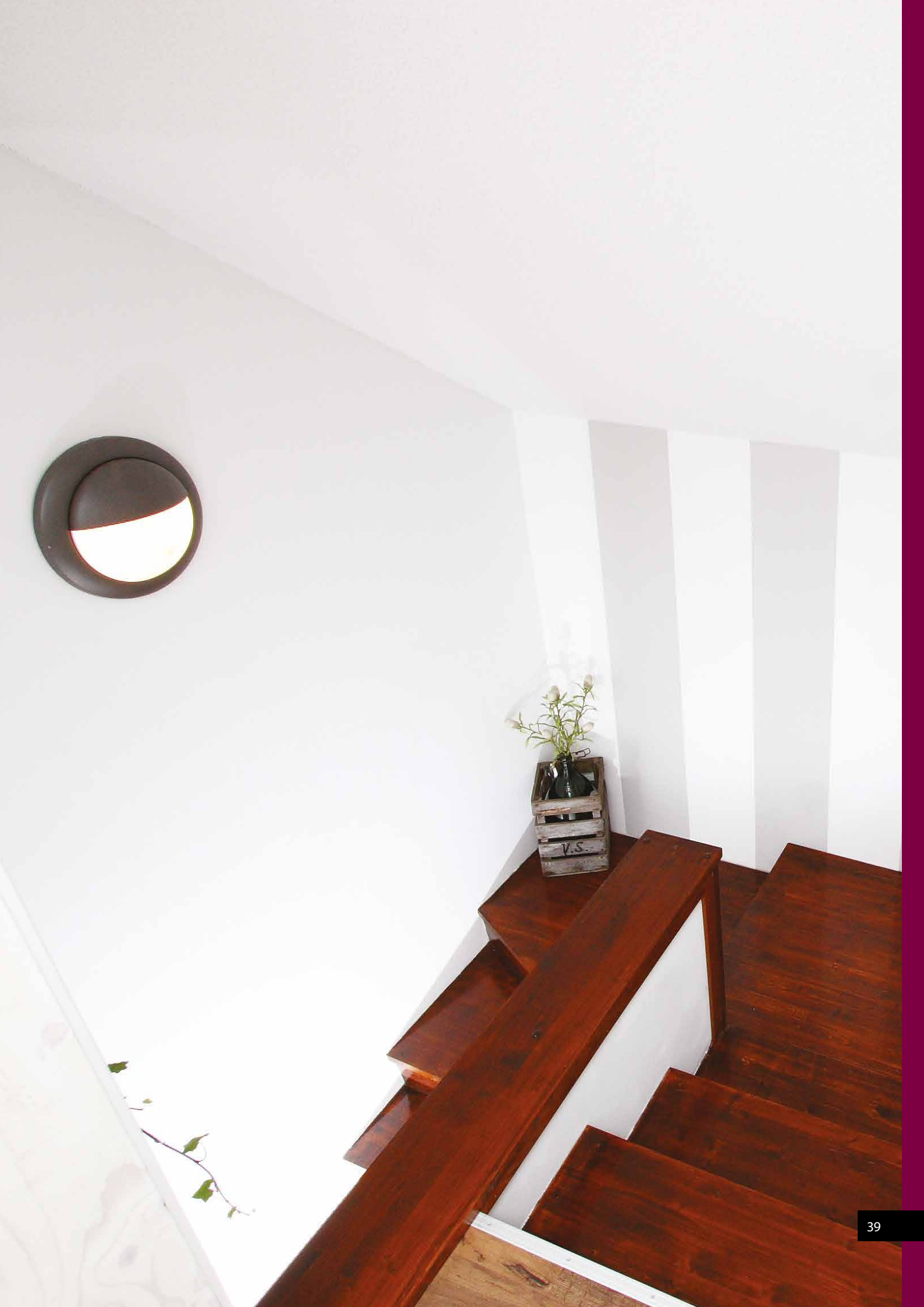
AVL44 anti-glare with visor



AVL42 cover frame

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR254 LED luminaires with electronic control gear LED						
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	
AVR254 LED PIR sensor luminaires LED						
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	
AVR254 LED radar sensor luminaires LED						
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	

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR254-luminaires with magnetic ballast						
41 175 70	AVR254.29	2x9W TC/G23 230V 50Hz	G23	0,8		
41 175 76	AVR254.29MP	6xAVR254 2x9W TC/G23 230V 50Hz	G23	5,6		
AVR254-luminaires with electronic sensor gear						
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		
AVR254 PIR sensor luminaires with magnetic ballast. Note! Class I luminaire						
41 175 68	AVR254.294	2x9W TC/G23 230V 50Hz	G23	0,8		
AVR254 PIR sensor luminaires with electronic sensor gear						
41 175 69	AVR254.294E	2x9W TC-E/2G7 220-240V 0/50-60Hz	2G7	0,6		
AVR254 radar sensor luminaires with electronic control gear						
42 170 05	AVR254.299E	AVR254 IP54 2xTC-E 9W E AC O RADAR	2G7	0,6		
AVR254 decorative frames, polycarbonate						
41 176 79	AVL57					white
41 176 80	AVL57/AL					aluminium
AVR254 decorative frames powder coated aluminium						
41 175 90	AVL40-9010					white
41 175 91	AVL40.1-9005					black
41 175 92	AVL40.2					antique-silver
41 175 93	AVL40.3					steel
AVR254 anti-glare frames galvanized, powder coated steel						
41 175 94	AVL41-9010					white
41 175 96	AVL41.2					antique-silver
41 175 97	AVL41.3					steel
AVR254 square frames galvanized, powder coated steel						
41 176 68	AVL43					white
41 176 69	AVL43.3					steel
AVR254 square anti-glare frames galvanized, powder coated steel						
41 176 70	AVL44					white
41 176 71	AVL44.3					steel
AVR254 cover frames polycarbonate						
41 175 99	AVL42					white
41 176 67	AVL42/AL					aluminium



ALUNETTE

LED | E27

IP54  /  CE  $\frac{5}{3 \times 2,5 \text{ mm}^2}$
 $\frac{3}{2 \times 2,5 \text{ mm}^2}$



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.



AL250LED + AL250KL-V



AL250LED + AL250KL-H



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 (4000K) and 530 lm (3000K), comparable to 2x9W TCS 4000K, Ra>80, power factor 0,92
Ambient temperature – 20 °C - + 30 °C
LED-module lifespan 30 000 h (L70), T₃ = 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 mm² (E27), 2x2,5 mm² (LED)
Sensor models: 5x2,5 mm² (E27), 3x2,5 mm² (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

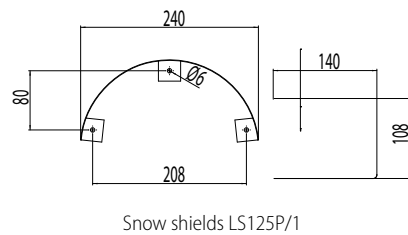
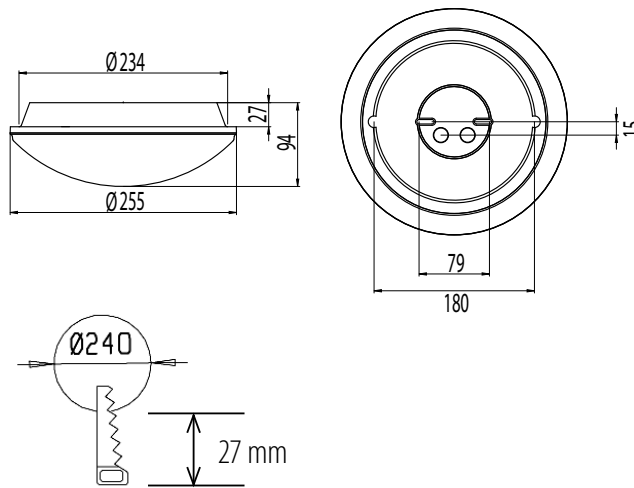
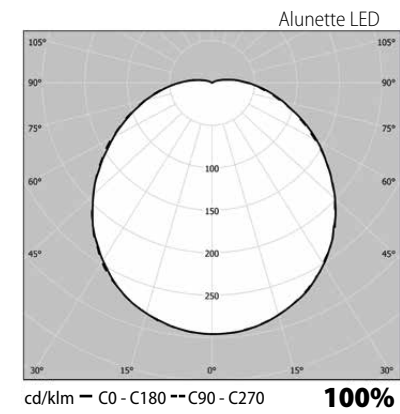
Decorative frame

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

Decorative frame with eye-lid

- 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
Alunette LED LED				
41 031 90	AL250LED	AL250LED IP54 LED 6W/840	LED	
41 033 01	AL250LED3K	AL250LED3K IP54 LED 6W/830	LED	
Alunette LED radar luminaires LED				
41 032 81	ALR250LED	ALR250LED IP54 LED 7W/840 RAD	LED	
41 033 05	ALR250LED3K	ALR250LED3K IP54 LED 7W/830 RA	LED	
Alunette E27 base (light source is not included in the delivery)				
41 033 80	AL250	AL250 IP54 E27 AC O	E27	
Decorative frame				
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
Decorative frame with eyelid				
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
Snow shield				
46 031 78	LS125P/1	LS125P/1 SNOW SHIELD WH		white

AVR320

LED | TC

IP44  /  CE 



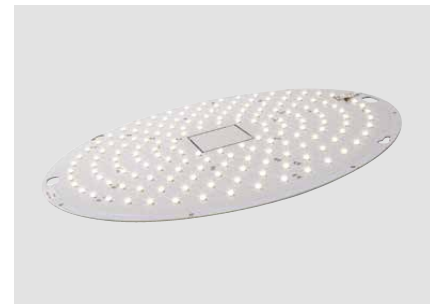
AVR320 luminaire range is equipped with new type of innovative technical features. Easy to install. New patented centering plate with bayonet-fixing eases installing both to the ceiling and to the wall.



AVR320 + AVL46



AVR320 + AVL58/AL



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-models:
connected load
10W, luminaire luminous flux 1047 lm (3000K), 1082 lm (4000K),
14W, luminaire luminous flux 1466 lm (3000K), 1514 lm (4000K),
3000/4000 K, Ra > 80, power factor 0,97
Ambient temperature – 20 °C - + 25 °C
LED-module lifespan 70 000 h (L70), T_a = 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
- 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
- 1-10V
- DALI
- Switch-control

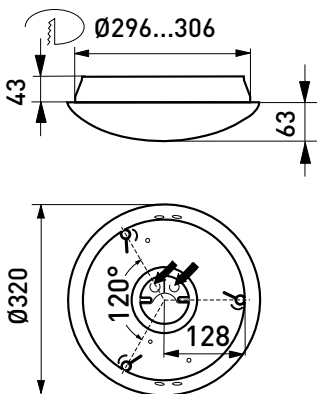
Mounting

- 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 mm² with through wiring, PIR-/RADAR-models -o- 4/5x2,5 mm²
- 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

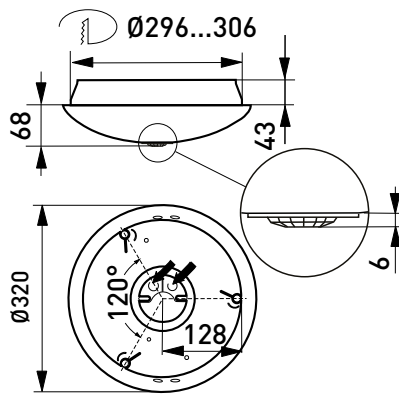
Mounting

- LED versions with PIR-sensor and radio control

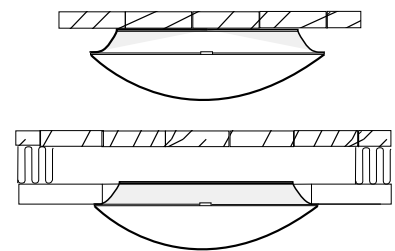




AVR320



AVR320 PIR sensor luminaire



AVR320 Ø296...306

Installation picture

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR320 LED luminaire with electronic control gear LED						
42 601 75	AVR320.110L	AVR320 IP44 LED 10W/840 E PC O	LED	1,3	1082 lm	
42 602 03	AVR320.110L/3K	AVR320 IP44 LED 10W/830 E PC O	LED	1,3	1047 lm	
42 602 52	AVR320.114L	AVR320 IP44 LED14W/840 E	LED	1,2	1514 lm	
42 289 07	AVR320.114L/3K	AVR320 IP44 LED14W/830 E	LED	1,2	1466 lm	
AVR320 LED with 1-10V dimmable electronic control gear LED						
42 601 90	AVR320.110DL	AVR320 IP44 LED 10W/840 D PC O	LED	1,3	1082 lm	1-10V
42 602 11	AVR320.110DL/3K	AVR320 IP44 LED 10W/830 D PC O	LED	1,3	1047 lm	1-10V
42 289 00	AVR320.114DL	AVR320 IP44 LED14W/840 D	LED	1,2	1514 lm	1-10V
42 289 10	AVR320.114DL/3K	AVR320 IP44 LED14W/830 D	LED	1,2	1466 lm	1-10V
AVR320 LED with 1-10V dimmable electronic control gear and a relay for controlling the 5%/100% light levels through a separate 230V power supply LED						
42 289 01	AVR320.114DLR	AVR320 IP44 LED14W/840 DRELAY	LED	1,3	1514 lm	base light
42 289 11	AVR320.114DLR/3K	AVR320 IP44 LED14W/830 DRELAY	LED	1,3	1466 lm	base light

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR320 LED PIR sensor luminaires with electronic control gear LED						
42 601 78	AVR320.1104L	AVR320 IP44 LED 10W/840 E PC O PIR	LED	1,4	1082 lm	
42 602 06	AVR320.1104L/3K	AVR320 IP44 LED 10W/830 E PC O PIR	LED	1,4	1047 lm	
42 602 53	AVR320.1144L	AVR320 IP44 LED14W/840 EPIR	LED	1,2	1514 lm	
42 289 08	AVR320.1144L/3K	AVR320 IP44 LED14W/830 EPIR	LED	1,2	1466 lm	
AVR320 LED radar sensor luminaires with electronic control gear LED						
42 601 81	AVR320.1109L	AVR320 IP44 LED 10W/840 E PC O RAD	LED	1,4	1082 lm	
42 602 09	AVR320.1109L/3K	AVR320 IP44 LED 10W/830 E PC O RAD	LED	1,4	1047 lm	
42 602 55	AVR320.1149L	AVR320 IP44 LED14W/840 ERAD	LED	1,5	1514 lm	
42 289 09	AVR320.1149L/3K	AVR320 IP44 LED14W/830 ERAD	LED	1,5	1466 lm	
AVR320 LED PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100% LED						
42 601 96	AVR320.1106DL	AVR320 IP44 LED 10W/840 D PC O PIR	LED	1,4	1082 lm	
42 602 41	AVR320.1106DL/3K	AVR320 IP44 LED 10W/830 D PC O PIR	LED	1,4	1047 lm	
42 289 03	AVR320.1146DL	AVR320 IP44 LED14W/840 DPIR6	LED	1,5	1514 lm	motion sensor/base light
42 289 13	AVR320.1146DL/3K	AVR320 IP44 LED14W/830 DPIR6	LED	1,5	1466 lm	motion sensor/base light
AVR320 LED PIR sensor luminaires with 1-10V dimmable electronic control gear. Basic light level 5% or 20% and PIR controlled light level 80% or 100% LED						
42 601 93	AVR320.1105DL	AVR320 IP44 LED 10W/840 D PC O PIR	LED	1,4	1082 lm	
42 602 34	AVR320.1105DL/3K	AVR320 IP44 LED 10W/830 D PC O PIR	LED	1,4	1047 lm	
42 289 02	AVR320.1145DL	AVR320 IP44 LED14W/840 DPIR5	LED	1,2	1514 lm	motion sensor/controlled base light + on/off
42 289 12	AVR320.1145DL/3K	AVR320 IP44 LED14W/830 DPIR5	LED	1,5	1466 lm	motion sensor/controlled base light + on/off
AVR320 LED radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100% LED						
42 601 99	AVR320.1109DL	AVR320 IP44 LED 10W/840 D PC O RAD	LED	1,4	1082 lm	
42 602 43	AVR320.1109DL/3K	AVR320 IP44 LED 10W/830 D PC O RAD	LED	1,4	1047 lm	
42 289 04	AVR320.1149DL	AVR320 IP44 LED14W/840 DRAD	LED	1,5	1514 lm	motion sensor/base light
42 289 14	AVR320.1149DL/3K	AVR320 IP44 LED14W/830 DRAD	LED	1,5	1466 lm	motion sensor/base light
AVR320 LED DALI luminaire with switch dim control gear LED						
42 602 02	AVR320.110DDL	AVR320 IP44 LED 10W/840 DALI PC O	LED	1,3	1082 lm	DALI, Switch dim
42 602 49	AVR320.110DDL/3K	AVR320 IP44 LED 10W/830 DALI PC O	LED	1,3	1047 lm	DALI, Switch dim
42 289 06	AVR320.114DDL	AVR320 IP44 LED14W/840 DA	LED	1,2	1514 lm	DALI, Switch dim
42 289 15	AVR320.114DDL/3K	AVR320 IP44 LED14W/830 DA	LED	1,2	1466 lm	DALI, Switch dim
AVR320 LED luminaire with 1 hour battery back-up LED						
42 601 87	AVR320.110L/1M	AVR320/1M IP44 LED 10W/840 E PC O	LED	1,6	1082 lm	
42 602 95	AVR320.114L/1M	AVR320 IP44 LED14W/840 E1M	LED	1,4	1047 lm	
42 602 00	AVR320.1105DL/1M	AVR320/1M IP44 LED 10W/840 D PC O P	LED	1,6	1514 lm	
42 289 05	AVR320.1145DL/1M	AVR320 IP44 LED14W/840 DPIR51M	LED	1,5	1466 lm	motion sensor/controlled base light + on/off
AVR320 luminaire for E27 compact fluorescent lamps. AVR320.1 include 15W/E27 compact fluorescent lamp						
41 178 22	AVR320.1	1x23W max /TC-DSE/E27 230V 50Hz, 3x2,5mm ²	E27	1,0		
AVR320 luminaires with electronic control gear						
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		
41 178 35	AVR320.218/9E	AVR320 IP44 TC-DE 18W+TC-E 9W E PC	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		
AVR320 emergency luminaire with electronic control gear						
42 179 30	AVR320.218E/3SM	AVR320/3SM IP44 2xTC-DE 18W E PC O	G24q-2	3,2		
AVR320 with 1-10V dimmable electronic control gear						
42 178 90	AVR320.213D	2x13W TC-DE/G24q-1 220-240V 0/50-60Hz	G24q-1	1,3		
41 178 29	AVR320.218D	2x18W TC-DE/G24q-2 220-240V 0/50-60Hz	G24q-2	1,3		

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR320 with 1-10V dimmable electronic ballast and a relay for controlling the 5%/100% light levels through a separate 230V power supply						
41 178 34	AVR320.218DR	2x18W TC-DE/G24q-2 230V 50Hz	G24q-2	1,4		
AVR320 PIR sensor luminaires with electronic control gear						
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		
41 178 15	AVR320.0224CE	1x22W T5C/2GX13 220-240V 50-60Hz	2GX13	1,1		
AVR320 radar sensor luminaires with electronic control gear						
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		
AVR320 PIR with electronic control gear and a relay for controlling the On/Off light levels also through a separate 230V power supply						
41 174 75	AVR320.2184ER	2x18W TC-DE/G24q-2 230V 50Hz	G24q-2	1,3		
AVR320 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100%.						
42 178 92	AVR320.2136D	2x13W TC-DE/G24q-1 220-240V 50-60Hz	G24q-1	1,3		
41 178 30	AVR320.2186D	2x18W TC-DE/G24q-2 220-240V 50-60Hz	G24q-2	1,4		
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%.						
42 178 91	AVR320.2135D	2x13W TC-DE/G24q-1 220-240V 50-60Hz	G24q-1	1,3		
42 178 93	AVR320.2185D	AVR320.2185D IP44 2xTC-DE18W D PC O	G24q-2	1,4		
AVR320 radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%						
42 170 07	AVR320.2139D	AVR320 IP44 2xTC-DE13W D PC O RADAR	G24q-2	1,3		
42 170 10	AVR320.2189D	AVR320 IP44 2xTC-DE18W D PC O RADAR	G24q-2	1,4		
AVR320 decorative frames polycarbonate						
41 176 81	AVL58					white
41 176 82	AVL58/AL					aluminium
AVR320 decorative frames power coated aluminium						
41 178 70	AVL45					white
41 178 72	AVL45.2					antique-silver
41 178 73	AVL45.3					steel
AVR320320 anti-glare frames galvanized powder coated steel						
41 176 72	AVL46					white
41 176 73	AVL46.2					antique-silver
41 176 74	AVL46.3					steel
AVR320 square frames galvanized powder coated steel						
41 176 75	AVL47					white
41 176 76	AVL47.3					steel
AVR320 square anti-glare frames galvanized powder coated steel						
41 176 77	AVL49					white
41 176 78	AVL49.3					steel

ALUNO

LED | TC | E27

IP54  /     5x2,5mm²
3x2,5mm²



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.



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 lightsource 18W/840
- Aluno LED-models (excluding ALRD..) CL2, others and ALRD-models CL1
- LED-models:
3000K and 4000K -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_a = 25 °

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 mm² with through wiring, sensor-models and 1-10V dimmable models -o- 5x2,5 mm²
- 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

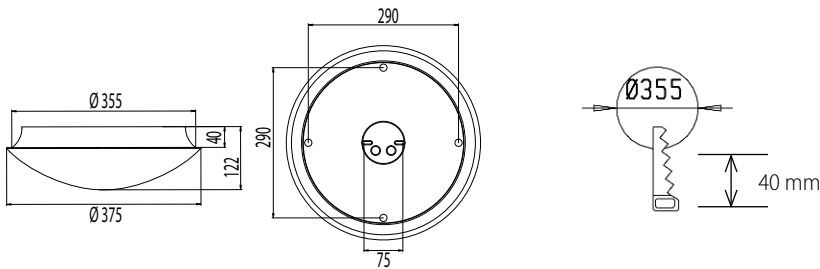
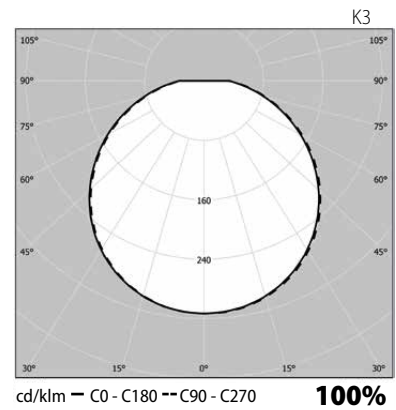
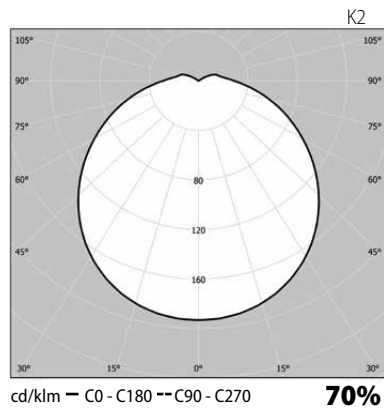
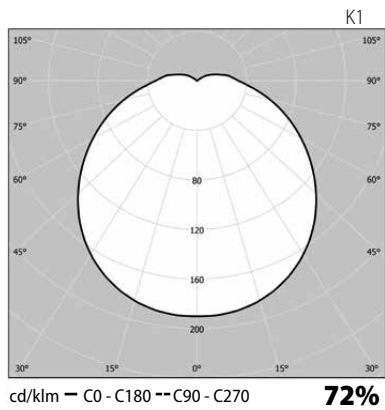
Made to order

- 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
Aluno LED LED						
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	
Aluno LED sensor luminaires LED						
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
Aluno						
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	AL375D28EL	AL375D28EL 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
Aluno sensor luminaires						
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
Decorative frames						
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

TITAN

LED | TC

IP44 /     5x2,5mm² / 3x2,5mm²



Titan LED

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.



Titan surface mounting



Titan recess mounting



ATR-models

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
4000K, Ra > 80, power factor 0,93
Ambient temperature – 20 °C - + 30 °C
LED-module lifespan 50 000 h (L70), T_a = 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

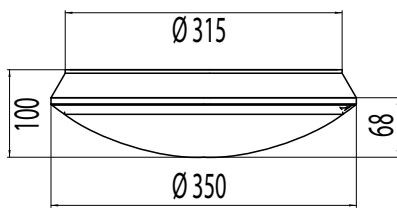
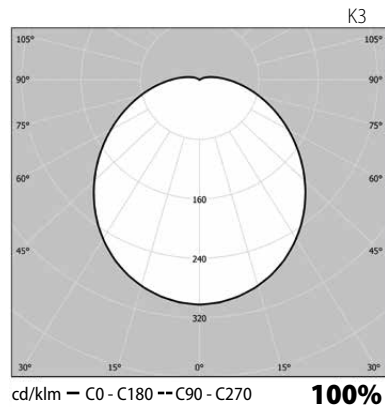
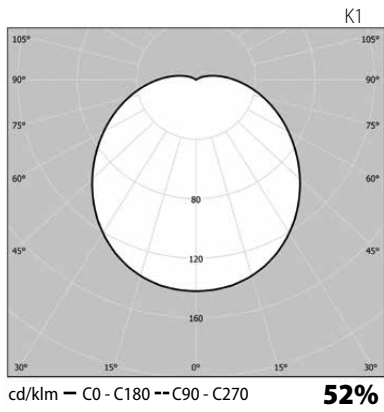
Mounting

- 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 mm² with through wiring, sensor-models and 1-10V dimmable models -ø- 5x2,5 mm²
- 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

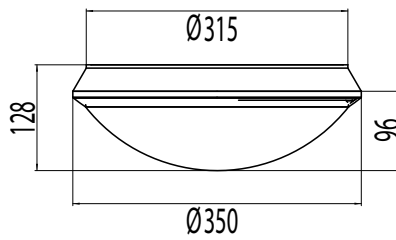
Made to order

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

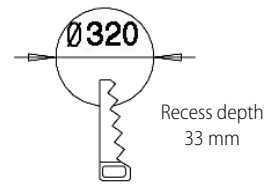




Titan 2x11W, 2D28



Titan 2x18W, LED



E number	Type	Product name	Base	Light distribution	Additional information
Titan LED luminaire LED					
41 031 33	AT100LED	AT100LED IP44 LED 13W/840	LED	K3	
41 032 27	AT100LED20	AT100LED20 IP44 LED 20W/840	LED	K3	
Titan LED sensor luminaire LED					
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 20W/840 RAD	LED	K3	
41 032 30	ATRD100LED20	ATRD100LED20 IP44 20W/840 D10%	LED	K3	with base light
Titan					
41 030 07	AT100211VEL	AT100211VEL IP44 TC-S 2X11W HF	2G7	K1	
41 030 08	AT100218VEL	AT100218VEL IP44 TC-S 2X18W HF	2G11	K1	
41 035 00	AT1002D28VEL	AT1002D28VEL TC-DD 28W GR10Q	GR10q		
Titan sensor luminaire					
41 030 13	ATR100211VEL	ATR100211VEL IP44 TC-S 2X11W R	2G7	K1	
41 030 14	ATR100218VEL	ATR100218VEL IP44 TC-S 2X18W R	2G11	K1	

AVR400

LED | TC | E27

IP44   



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.



AVR400 + AVL59



AVR400 + AVL59/AL

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 (3000K), 1790lm (4000K)
3000/4000 K, Ra > 80, power factor 0,93
Ambient temperature – 20 °C – + 25 °C
LED-module lifespan 70 000 h (L70), T_a = 25 °C

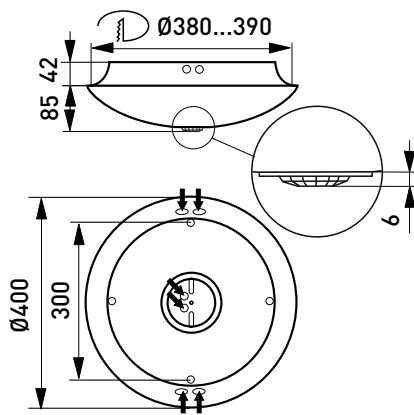
Control

- 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
- 1-10V
- DALI
- Switch-control

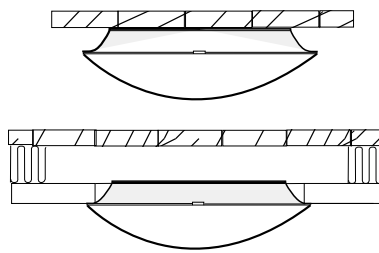
Mounting

- 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 mm² with through wiring, PIR-/RADAR-models -o- 4/5x2,5 mm², controlled models 5x2,5 mm²+2x2,5 mm²
- 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





AVR400 PIR sensor luminaire



AVR400 Ø380...390

Installation picture

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR400 LED universal luminaires LED						
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	
AVR400 LED universal luminaires with 1-10V dimmable control gear LED						
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	
AVR400 LED universal luminaires with DALI control gear LED						
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	
AVR400 LED PIR sensor luminaire LED						
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	
AVR400 LED RADAR sensor luminaire LED						
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	
AVD400 LED PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100% LED						
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	
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% LED						
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	
AVD400 LED radar sensor luminaire with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100% LED						
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	
AVR400 LED universal luminaires with 1 hour battery back-up LED						
42 173 79	AVR400.118L/1M	AVR400/1M IP44 LED 18W/840 E PC O	LED	2,3	1790 lm	
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%, 1 hour battery back-up LED						
42 173 86	AVR400.1185DL/1M	AVR400/1M IP44 LED 18W/840 D PC O P	LED	2,4	1790 lm	

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR400 luminaire for E27						
41 175 21	AVR400	1x100W A60/E27	E27	1,1		
AVR400 luminaires with electronic control gear						
41 175 22	AVR400.218E	2x18W TC-L/2G11 220-240V 0/50-60Hz	2G11	1,9		
41 175 38	AVR400.2188E	2x18W TC-L/2G11 220-240V 0/50-60Hz+E14 max 10W	2G11	1,8		
41 174 96	AVR400.226E	AVR400 IP44 2xTC-DE 26W E PC	G24q-3	1,9		
41 170 77	AVR400.128E	AVR400 IP44 TC-DD 28W E PC O	Gr10q	1,8		
41 175 24	AVR400.138E	1x38W TC-DD/GR10q 220-240V 0/50-60Hz	Gr10q	1,8		
41 175 27	AVR400.055CE	1x55W T5C/2GX13 220-240V 0/50-60Hz	2GX13	1,6		
AVR400 emergency luminaires with electronic control gear						
42 179 32	AVR400.218E/3SM	AVR400/3SM IP44 2xTC-L 18W E PC O	G24q-3	3,8		
AVR400 with 1-10V dimmable electronic control gear						
41 175 81	AVR400.218D	2x18W TC-L/2G11 220-240V 0/50-60Hz	2G11	1,9		
42 178 95	AVR400.226D	2x26W TC-DE/G24q-3 220-240V 0/50-60Hz	G24q-3	2,0		
AVR400 with 1-10V dimmable electronic ballast and a relay for controlling the 5%/100% light levels through a separate 230V power supply						
41 175 82	AVR400.218DR	2x18W TC-L/2G11 230V 50Hz	2G11	1,8		
AVR400 PIR sensor luminaires with electronic control gear						
41 174 83	AVR400.1184E	1x18W TC-L/2G11 220-240V 50-60Hz	2G11	1,8		
41 175 42	AVR400.2184E	2x18W TC-L/2G11 220-240V 50-60Hz	2G11	2,2		
41 174 84	AVR400.218/94E	9W TC-E/2G7+18W TC-L/2G11 220-240V 50-60Hz	2G11	2,0		
41 174 97	AVR400.2264E	AVR400 IP44 2xTC-DE 26W E PIR	G24q-3	2,2		
41 175 44	AVR400.0554CE	1x55W T5C/2GX13 220-240V 50-60Hz	2GX13	1,7		
AVR400 radar sensor luminaires with electronic control gear						
42 170 16	AVR400.2189E	AVR400 IP44 2xTC-L18W E PC O RADAR	2G11	2,2		
42 170 19	AVR400.2269E	AVR400 IP44 2xTC-DE26W E PC O RADAR	G24q-3	2,2		
AVR400 PIR with electronic control gear and a relay for controlling the On/Off light levels also through a separate 230V power supply						
41 174 87	AVR400.2184ER	2x18W TC-L/2G11 230V 50Hz	2G11	2,3		
AVR400 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and PIR controlled light level 100%						
41 174 86	AVR400.2186D	2x18W TC-L/2G11 220-240V 50-60Hz	2G11	2,0		
41 171 68	AVR400.218/186D	18W+18W TC-L/2G11 220-240V 50-60Hz	2G11	2,1		
42 178 97	AVR400.2266D	2x26W TC-DE/G24q-3 220-240V 50-60Hz	G24q-3	2,1		
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%						
42 178 94	AVR400.2185D	2x18W TC-L/2G11 220-240V 50-60Hz	2G11	1,9		
42 178 96	AVR400.2265D	AVR400 IP44 2xTC-DE 26W D PIR	G24q-3	2,0		
AVR400 radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%						
42 170 14	AVR400.2189D	AVR400 IP44 2xTC-L18W D PC O RADAR	2G11	2,0		
42 170 17	AVR400.2269D	AVR400 IP44 2xTC-DE26W D PC O RADAR	G24q-3	2,1		
AVR400 decorative frames polycarbonate						
41 179 52	AVL52					white
41 179 53	AVL52/AL					brushed aluminium
41 179 56	AVL54					steel
AVR400 decorative frames polycarbonate						
41 176 83	AVL59					white
41 176 84	AVL59/AL					aluminium
AVR400 decorative frames powder coated aluminium						
41 178 80	AVL50					white
41 178 82	AVL50.2					antique-silver
41 178 83	AVL50.3					steel



AVR1

TC

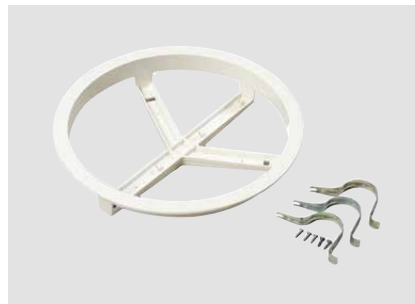
IP44   



AVR1 is an all-round luminaire made of impact resistant, non-corrosive, weather proof polycarbonate for both outdoor and indoor use. The various energy saving light sources and accessories together with PIR/radar sensor options enable many different installation solutions in both public and private premises.



AVR1 PIR sensor luminaire



AVL21 recess frame

Structure

- Diffuser and body polycarbonate
- Light sources colour temperature 830 included in the delivery

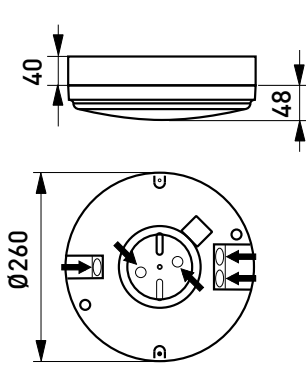
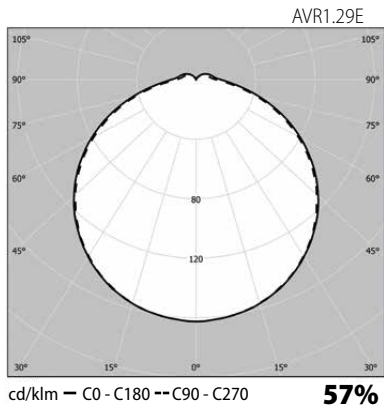
Control

- AVR1 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
- AVR1 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

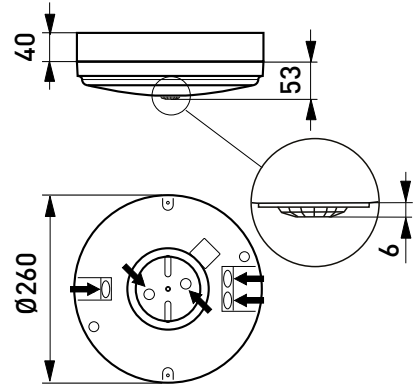
Mounting

- To the ceiling or to the wall or partly recessed
- Recess mounting bracket AVL21 to be ordered separately
- Recess depth 40 mm, recess hole \varnothing 270 mm, diffuser diameter \varnothing 295 mm
- Snap-in terminal block 3x2,5 mm² with through wiring, PIR-/RADAR-models -o- 3x2,5 mm²
- 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

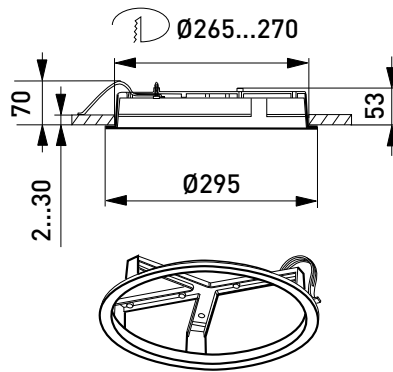




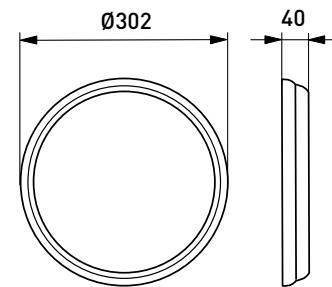
AVR1 luminaires



AVR1 PIR sensor luminaires



AVL21 recess frame



AVL28 decorative frame

E number	Type	Product name	Base	Kg	Additional information
AVR1 luminaires with electronic control gear					
41 174 07	AVR1.29E	2x9W TC-E/2G7 230/240V 0-50/60Hz	2G7	0,9	
41 172 14	AVR1.29/9E	9+9W TC-E/2G7 230/240V 0-50/60Hz	2G7	0,9	
41 170 01	AVR1.111E	AVR1 IP44 1xTC-E 11W E PC O	2G7	0,8	
41 174 09	AVR1.118E	1x18W TC-L/2G11 230/240V 0-50/60Hz	2G11	1,0	
41 170 74	AVR1.128E	AVR1 IP44 TC-DD 28W E PC O	GR10q	1,6	
AVR1 PIR sensor luminaires with electronic control gear					
41 174 69	AVR1.29/94E	9+9W TC-E/2G7 230/240V 50/60Hz	2G7	1,1	
41 172 15	AVR1.294E	2x9W TC-E/2G7 230/240V 50/60Hz	2G7	0,7	
AVR1 RADAR sensor luminaires with electronic control gear					
42 170 02	AVR1.299E	AVR1 IP44 2xTC-E 9W E PC O RADAR	2G7	1,0	
AVR1 recess frame polycarbonate					
41 173 69	AVL21				white
AVR1 decorative frames polycarbonate					
41 170 09	AVL28				white
41 175 32	AVL28/AL				brushed aluminium
41 170 15	AVL28/A				chrome

AVR4

TC | E27

IP44   



AVR4 universal splash proof luminaires are designed for both wet and dry premises. They can be used both in indoor and outdoor applications. Luminaires fit excellent to corridors, staircases, bathrooms and swimming pools. Due to its shock proof materials application areas can be also different public premises, hotels, staircases in block of houses. The luminaire itself can be modified with different kinds of accessories.



AVL28 decorative frame



AVL21 recess frame

Structure

- Diffuser and body polycarbonate
- Light sources colour temperature 830 included in the delivery, except incandescent lamp models AVR4 and AVR4MP

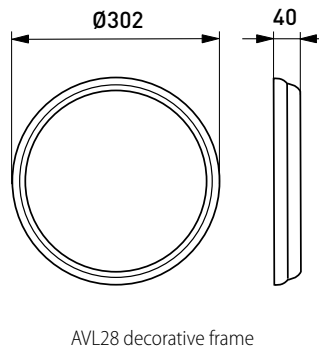
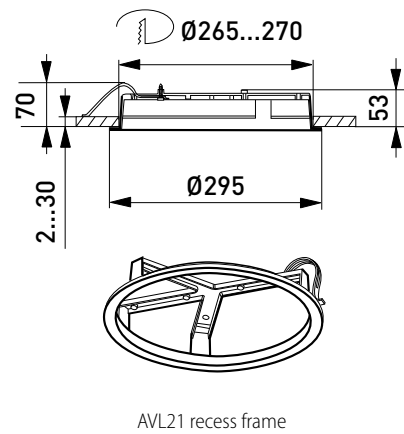
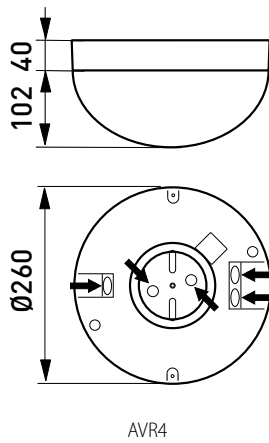
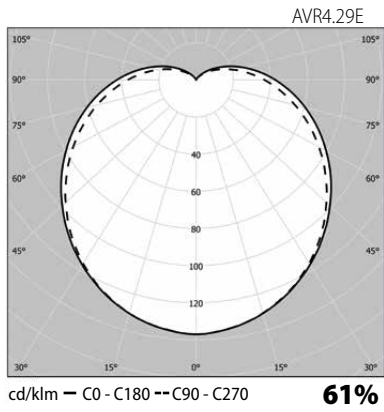
Control

- AVR4 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 or to the wall or partly recessed
- Recess mounting bracket AVL21 to be ordered separately
- Recess depth 40 mm, recess hole \varnothing 270 mm, diffuser diameter \varnothing 295 mm
- Snap-in terminal block 3x2,5 mm² with through wiring, RADAR models -o- 3x2,5 mm²
- Sensor luminaire models see more accurate information at WEB-site 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	Additional information
AVR4 luminaire for E27					
41 170 00	AVR4	1x60W A60/E27 230V	E27	0,8	
41 172 96	AVR4MP	6xAVR4 1x60W A60/E27	E27	4,4	
AVR4 luminaires with electronic control gear					
41 172 36	AVR4.29E	2x9W TC-E/2G7 230/240V 0-50/60Hz	2G7	0,8	
41 172 35	AVR4.29/9E	9+9W TC-E/2G7 230/240V 0-50/60Hz	2G7	0,9	
41 170 14	AVR4.111E	AVR4 IP44 1xTC-E 11W E PC O	2G7	0,8	
41 174 25	AVR4.118E	1x18W TC-L/2G11 230/240V 0-50/60Hz	2G11	0,8	
AVR4 radar sensor luminaires with electronic control gear					
42 170 13	AVR4.299E	AVR4 IP44 2xTC-E 9W E PC O RADAR	2G7	1,0	
42 170 32	AVR4.29/99E	AVR4 IP44 TC-E 9W+9W E PC O RADAR	2G7	1,0	
AVR4 recess frame polycarbonate					
41 173 69	AVL21				white
AVR4 decorative frames polycarbonate					
41 170 09	AVL28				white

AVR70-72

LED | TC | E27

IP44   



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.



AVR71



AVR72

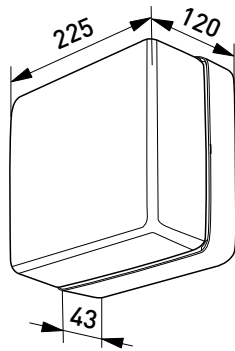
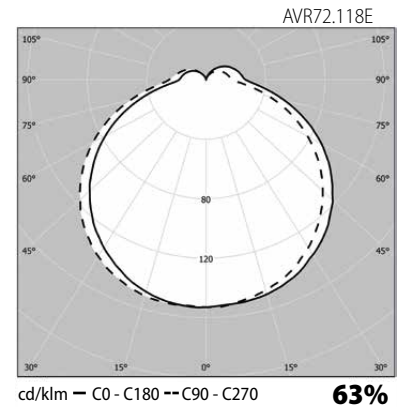
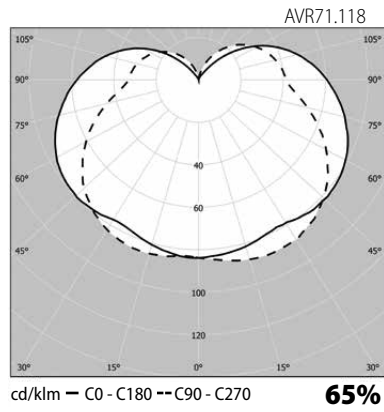
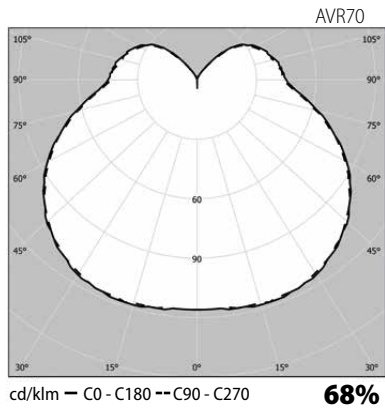
Structure

- Diffuser and body polycarbonate
- Light sources TC/830 included
- LED-model:
connected load 8W, luminaire luminous flux see table
4000K, Ra>80, power factor 0,87
Ambient temperature - 40 °C - + 25 °C
LED-module lifespan 60 000 h (L70), T_a = 25 °C

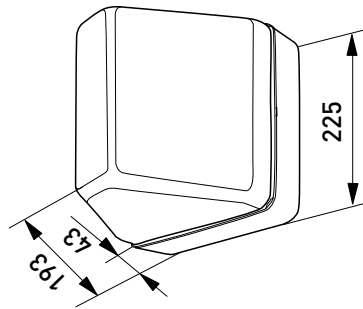
Mounting

- To the ceiling or to the wall
- Snow shields ordered separately
- Screw terminal block 4x2,5 mm² with through wiring

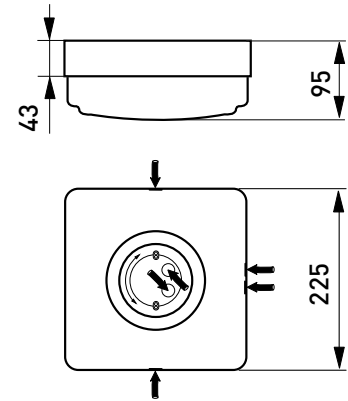




AVR70



AVR71



AVR72

E number	Type	Product name	Base	Kg	Luminous flux
AVR70 LED LED					
41 170 32	AVR70.19L	IP44 LED 8W/840 E PC O	LED	1,0	560 lm
AVR71 LED LED					
41 170 50	AVR71.19L	IP44 LED 8W/840 E PC O	LED	1,1	600 lm
AVR72 LED LED					
41 170 59	AVR72.19L	IP44 LED 8W/840 E PC O	LED	1,0	550 lm
AVR 70					
41 170 69	AVR70	AVR70 IP44 A60 60W PC O	2G11	1,7	
AVR71 luminaire with E27					
41 170 72	AVR71	AVR71 1x60W A60/E27 230V	E27	0,9	
AVR72 luminaires with electronic control gear					
41 174 42	AVR72.118E	1x18W TC-L/2G11 230/240V 0-50/60Hz	2G11	1,7	
AVR70 accessories and spare parts					
41 179 38	AVV70	Diffuser for AVR70 luminaires, opal polycarbonate			
41 171 05	AVL30	Snow shield for AVR70 luminaires, white			
AVR71 accessories and spare parts					
41 171 11	AVL68	Snow shield for AVR71 luminaires, white			
41 171 14	AVL68.1	Snow shield for AVR71 luminaires, black			
41 179 41	AVV71	Diffuser for AVR71 luminaires, opal polycarbonate			
AVR72 accessories and spare parts					
41 179 42	AVV72	Diffuser for AVR72 luminaires, opal polycarbonate			

VELOX-PANEL

LED

IP20/44    $2 \times 1,5 \text{ mm}^2$



ALSD168NP



ALSD168HNU

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.



ALSD168NU



ALSD180PP



ALSD240PU

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
4000K or 3000K, Ra > 80, power factor 0,92
Ambient temperature – 20 °C - + 30 °C
LED-luminaire lifespan 30 000 h (L70), T_a = 25 °C
- Triac-dimmable, check the recommended dimmers at the WEB-site www.ensto.com

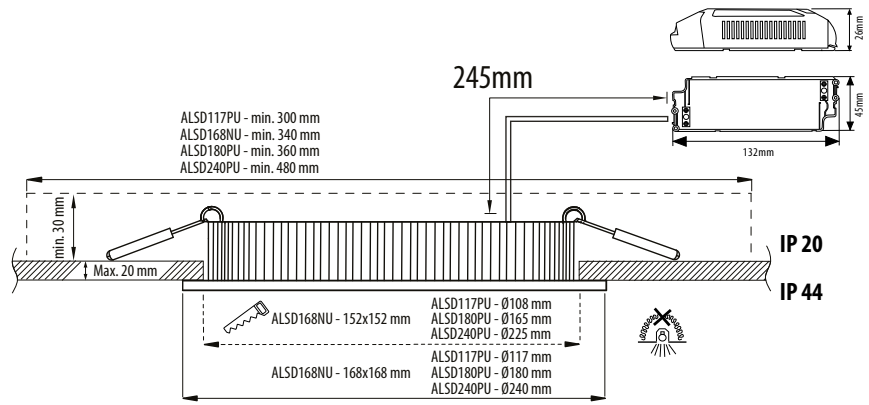
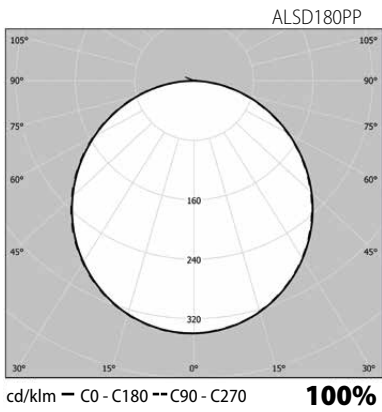
Mounting

- Models for surface and recess mounting
- -o 2x1,5 mm²
- -o- 2x1,5 mm², a separate junction box is included in the delivery

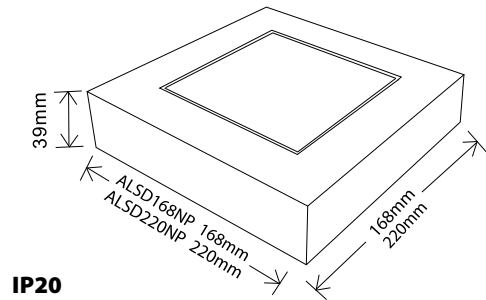
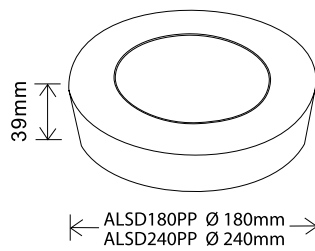
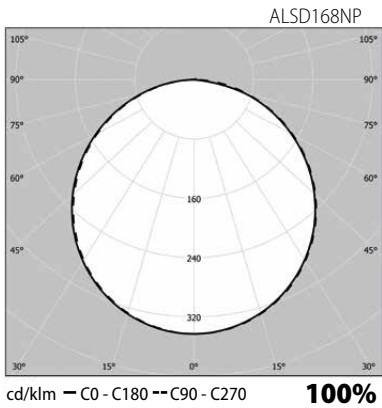
Made to order

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





Dimensions for Velox panels in recess mounting



E number	Type	Product name	Output	Base	Kg	Luminous flux
Recess mounting, round LED						
41 032 62	ALS117PU	ALS117PU IP44 8W/840 LED VA	8W	LED	0,3	550 lm
41 032 50	ALS180PU	ALS180PU IP44 11W/840 LED VA	11W	LED	0,5	850 lm
41 032 54	ALS240PU	ALS240PU IP44 14W/840 LED VA	14W	LED	0,7	1250 lm
41 032 65	ALS117WPU	ALS117WPU IP44 8W/830 LED VA	8W	LED	0,3	550 lm
41 032 74	ALS180WPU	ALS180WPU IP44 11W/830 LED V	11W	LED	0,5	820 lm
41 032 80	ALS240WPU	ALS240WPU IP44 14W/830 LED V	14W	LED	0,7	1180 lm
41 032 63	ALS117HPU	ALS117HPU IP44 8W/840 LED HA	8W	LED	0,3	550 lm
41 032 71	ALS180HPU	ALS180HPU IP44 11W/840 LED HA	11W	LED	0,5	850 lm
41 032 77	ALS240HPU	ALS240HPU IP44 14W/840 LED HA	14W	LED	0,7	1250 lm
Recess mounting, square LED						
41 032 47	ALS168NU	ALS168NU IP44 14W/840 LED VA	14W	LED	0,5	1080 lm
41 032 69	ALS168WNU	ALS168WNU IP44 14W/830 LED V	14W	LED	0,5	1030 lm
41 032 66	ALS168HNU	ALS168HNU IP44 14W/840 LED HA	14W	LED	0,5	1080 lm
Surface mounting, round LED						
41 032 48	ALS180PP	ALS180PP IP20 11W/840 LED VA	11W	LED	0,7	850 lm
41 032 53	ALS240PP	ALS240PP IP20 14W/840 LED VA	14W	LED	1,1	1250 lm
41 032 72	ALS180WPP	ALS180WPP IP20 11W/830 LED V	11W	LED	0,7	820 lm
41 032 78	ALS240WPP	ALS240WPP IP20 14W/830 LED V	14W	LED	1,1	1180 lm
Surface mounting, square LED						
41 032 56	ALS168NP	ALS168NP IP20 14W/840 LED VA	14W	LED	1,0	1080 lm
41 032 68	ALS168WNP	ALS168WNP IP20 14W/830 LED V	14W	LED	1,0	1080 lm

V or VA = white, HA = grey

We reserve the right to changes.

VELOX-DOWNLIGHT

LED

IP20/54   



ALS3X3D

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



ALS3X1



ALS3X3D

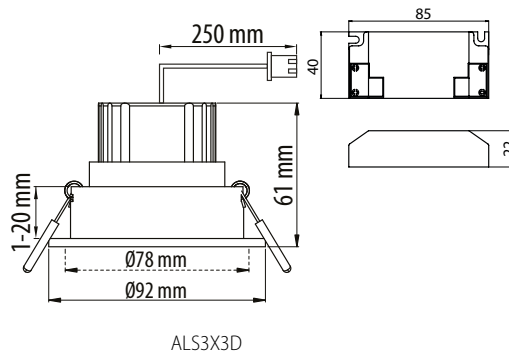
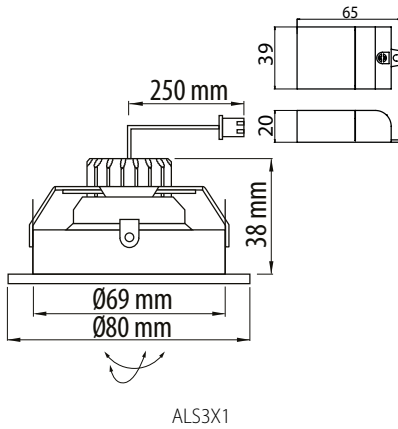
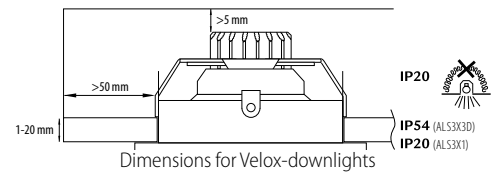
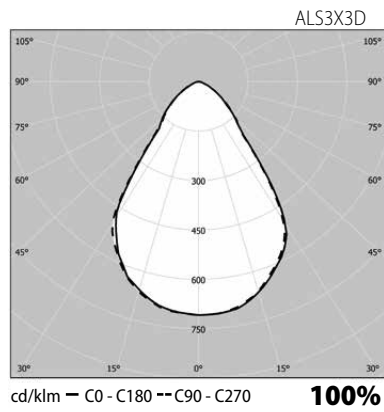
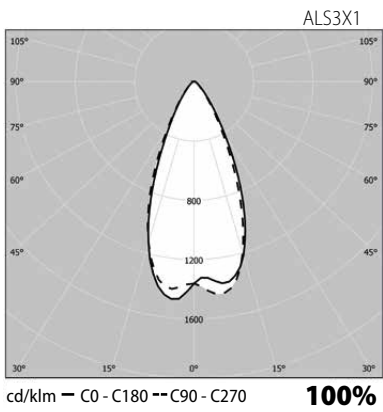
Structure

- Body and cooling element: aluminium
- Colour: white
- Separate driver included
- Models:
 - LED 3x1,2W, IP20, connected load 4W, luminaire luminous flux 210 lm, beam angle 20°, tiltable 30°
 - LED 3x3W, IP54, connected load 8,4W, luminaire luminous flux 350 lm, beam angle 60°, dimmable (see mounting)
 - 4000K, Ra > 80, power factor 0,94
 - Ambient temperature - 20 °C - + 30 °C
 - LED-luminaire lifespan 30 000 h (L70), T_a = 25 °C
- Triac-dimmable, check the recommended dimmers at the WEB-site www.ensto.com

Mounting

- -o 2x1,5 mm²
- Starting from 1.7.2014 -o- 2x1,5 mm², a separate junction box is included in the delivery
- Thickness of the ceiling plate 1–20 mm





E number	Type	Product name	Colour	Kg	Length	Width	Height
Velox-downlights LED							
41 032 02	ALS3X1	ALS3X1 IP20 3X1W LED 4K 20° WH	white	0,2	80	80	45
41 032 03	ALS3X3D	ALS3X3D IP54 3x3W LED 4K 60°WH	white	0,3	94	94	60

VELOX-LIST

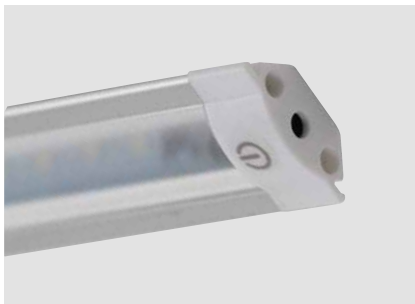
LED

IP20  



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.



Luminaire switch



ALS300TDV



ALS500EXTV

Structure

- Body: aluminium
- Colour: natural anodized aluminium
- Touch dim (5%/50%/100%/off)
- 12 V 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
3000K, Ra > 80
Ambient temperature – 20 °C - + 30 °C
LED-luminaire lifespan 20 000 h (L70), T_a = 25 °C

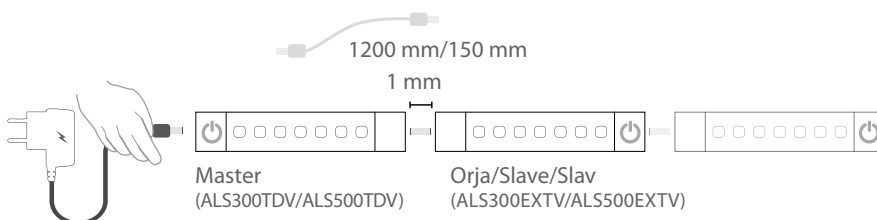
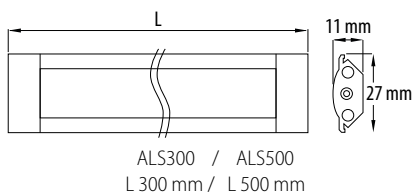
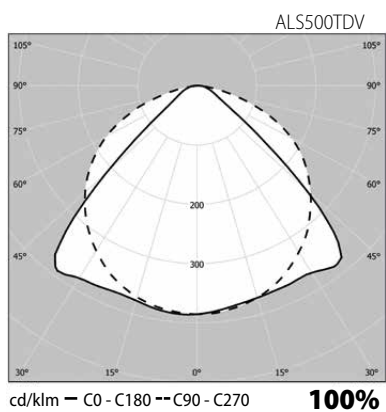
Mounting

- 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 workpoint 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
Velox LED-lists with power supply LED							
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
Velox LED-lists and slave luminaires without power supply LED							
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

IP54  



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.



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), 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 4000K, Ra>80
- Ambient temperature – 20 °C - + 30 °C
- LED-luminaire lifespan 30 000 h (L70), T_a = 25 °C
- Check the recommended dimmers at the WEB-site www.ensto.com

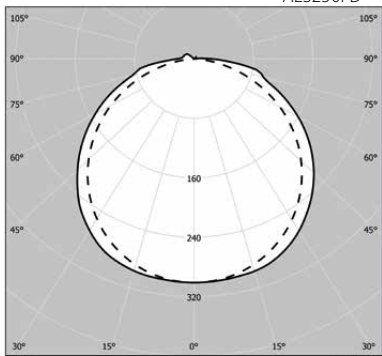
Mounting

- 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.



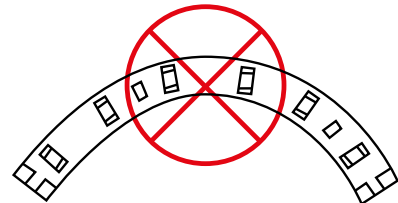
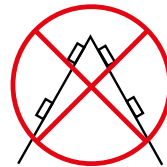
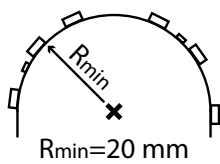
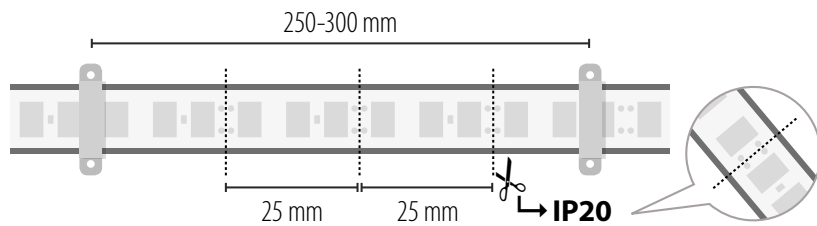


ALS250FD



cd/klm - C0 - C180 -- C90 - C270

100%



E number	Type	Product name	Colour	Kg	Length	Width	Height
Velox-strip LED							
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

DECOSSET

LED

IP44  



DecoSET luminaire

DecoSET is designed for special lighting as well as highlighting applications at home both in indoor and outdoor use. With the help of multi-purpose series of luminaires can be done an impressive light pattern to the wall or create a soft atmosphere in shower room, toilet facilities or on the terraces.



ALS6SET

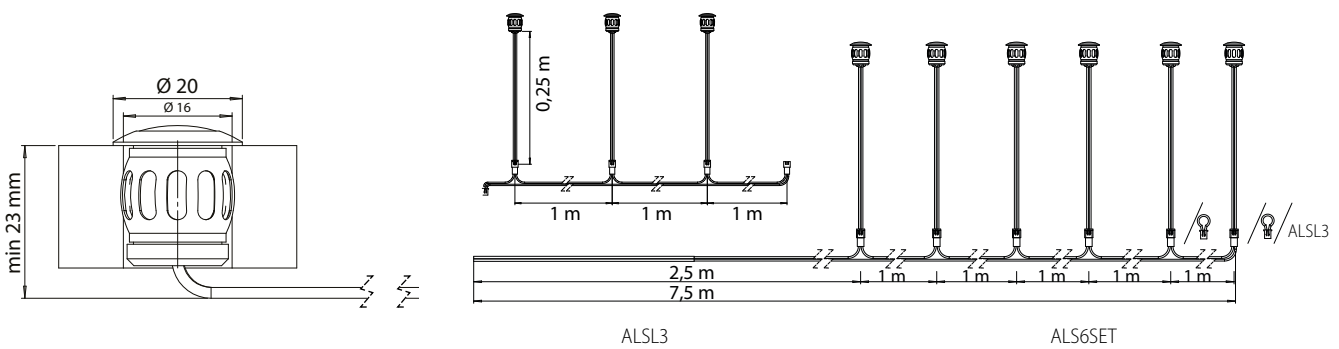
Construction

- Body aluminium. Lens plastic.
- Colour anodized aluminium
- **ALS6SET**
Set consist of 6 luminaires, wires, standard power source, mounting box, 4 pcs wire connectors and 3 pcs of shorting plugs 6x1W-sets, IP44
Connected load 5W, luminaire luminous flux 6x35 lm, opening angle 85 °C
3000K, Ra > 80
Ambient temperature – 20 °C - + 50 °C
The maximum operating temperature for the luminaire is +100 °C
LED-module lifespan 30 000 h (L70), T_a = 25 °C
- **ALS3**
Set consist of 3 luminaires, wires, extension set for shorting plugs 3x1W, IP44
Connected load 2W, luminaire luminous flux 3x35 lm, opening angle 85 °C
Power source is not included
3000K, Ra > 80
Ambient temperature – 20 °C - + 50 °C
The maximum operating temperature for the luminaire is +100 °C
LED-module lifespan 30 000 h (L70), T_a = 25 °C

Mounting

- Minimum 4 luminaires from the set has to be used. The excluded luminaires has to be replaced by shorting plugs. ALS6SET-series can be extended by ALS3-extension set, in which case the maximum amount of luminaires can be 9 pcs.
- The recess hole is 16 mm, recess depth min. 25 mm
- In the sauna max 100 cm height, minimum distance from the sauna stove 50 cm horizontally
- Maximum mounting height of the power source in sauna is 1 m from floor level. Power source should not be placed beside the hot sauna stove. Minimum mounting distance from the sauna stove is 0,5 m.
- The length of the wire from the power source up to the first luminaire is 2,5 m. The length of wire between the luminaires is 1 m. The length of the luminaire wire is 0,25 m.
- All luminaires and shorting plugs used have to be connected before swiching the power to the power source.
- Set of luminaires can be dimmed by separate power source LUMOTECH L05016Ci (1-10V)





E number	Type	Product name	Colour	Kg	Length	Width	Height
DecoSET LED							
41 032 93	ALS6SET	ALS6SET IP44 5W/830 LED	aluminium	0,5	20	20	21
41 032 95	ALSL3	ALSL3 IP44 2W/830 LED	aluminium	0,2	20	20	21

AVD5

LED

IP64/65   



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.



AVD5.13L/6



AVD5.13L



AVD5.23L

Structure

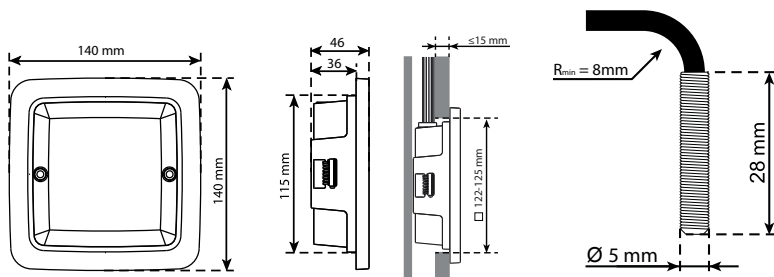
- Diffuser opal polycarbonate
- Body casted aluminium, powder coated, colour white
- Fibres glass, can be mounted to the ceiling
- LED-model:
Connected load
3W (AVD5.13L), luminaire luminous flux 120 lm
6W (AVD5.23L) luminaire luminous flux 125 lm+150 lm/LED
3000K, Ra>80
Ambient temperature – 20 °C – + 25 °C
LED-module lifespan 50 000 h (L70), T_a = 25 °C

Mounting

- To the wall, surface IP64, recessed IP65
- Structural recess depth 36mm, size of recess hole 123x123 mm
- Snap-in terminal block 2x2,5 mm² with through wiring

6-FIBRES						9-FIBRES						12-FIBRES			
AVD5.../6		AVD5.../6.1		AVD5.../6.2		AVD5.../9		AVD5.../9.1		AVD5.../9.2		AVD5.../12		AVD5.../12.1	
pc	length/m	pc	length/m	pc	length/m	pc	length/m	pc	length/m	pc	length/m	pc	length/m	pc	length/m
2	2,0	2	1,4	2	3,0	3	2,0	3	1,4	3	3,0	2	2,0	2	1,4
2	2,5	2	1,7	2	3,5	2	2,5	2	1,7	2	3,5	2	2,5	2	1,7
2	3,0	2	2,0	2	4,0	2	3,0	2	2,0	2	4,0	2	3,0	2	2,0
-	-	-	-	-	-	2	3,5	2	2,3	2	4,5	2	3,5	2	2,3
-	-	-	-	-	-	-	-	-	-	-	-	2	4,0	2	2,6
-	-	-	-	-	-	-	-	-	-	-	-	2	4,5	2	2,9
1 lens models /6 and /6.2						2 lenses models /9 and /9.2						2 lenses models /12			





E number	Type	Product name	Base	Kg	Luminous flux
AVD5 LED wall luminaire for recessed and surface mounting LED					
41 176 85	AVD5.13L	AVD5 IP64 LED 1x3W PCO VA	LED	0,8	120 lm
AVD5 LED optical fiber luminaire, 6-fibres LED					
41 176 86	AVD5.13L/6	AVD5 IP64 LED 1x3W 6xFIBER L VA	LED	1,0	120 lm
41 176 87	AVD5.13L/6.1	AVD5 IP64 LED 1x3W 6xFIBER S VA	LED	1,0	120 lm
AVD5 LED optical fiber luminaire, 9-fibres LED					
41 176 88	AVD5.13L/9	AVD5 IP64 LED 1x3W 9xFIBER L VA	LED	1,1	120 lm
41 176 89	AVD5.13L/9.1	AVD5 IP64 LED 1x3W 9xFIBER S VA	LED	1,0	120 lm
AVD5 LED optical fiber luminaire, 12-fibres LED					
41 176 90	AVD5.13L/12	AVD5 IP64 LED 1x3W 12xFIBER L VA	LED	1,3	120 lm
41 176 91	AVD5.13L/12.1	AVD5 IP64 LED 1x3W 12xFIBER S VA	LED	1,2	120 lm
AVD5 LED combined luminaire, 6-fibres LED					
41 176 92	AVD5.23L/6	AVD5 IP64 LED 2x3W 6xFIBER L PCO VA	LED	1,0	125 lm + 150 lm/LED
41 176 93	AVD5.23L/6.1	AVD5 IP64 LED 2x3W 6xFIBER S PCO VA	LED	0,9	125 lm + 150 lm/LED
AVD5 LED combined luminaire, 9-fibres LED					
41 176 94	AVD5.23L/9	AVD5 IP64 LED 2x3W 9xFIBER L PCO VA	LED	1,0	125 lm + 150 lm/LED
41 176 95	AVD5.23L/9.1	AVD5 IP64 LED 2x3W 9xFIBER S PCO VA	LED	0,9	125 lm + 150 lm/LED
AVD5 LED combined luminaire, 12-fibres LED					
41 176 96	AVD5.23L/12	AVD5 IP64 LED 2x3W 12xFIBER L PCO V	LED	1,1	125 lm + 150 lm/LED
41 176 97	AVD5.23L/12.1	AVD5 IP64 LED 2x3W 12xFIBER S PCO V	LED	1,0	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.

We reserve the right to changes.

AVH11

E27

IP44    2x1,5mm²



AVH11.2

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



AVH11



AVH11.1



AVH11.2

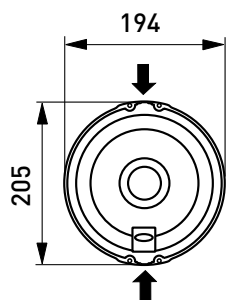
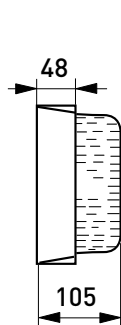
Structure

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

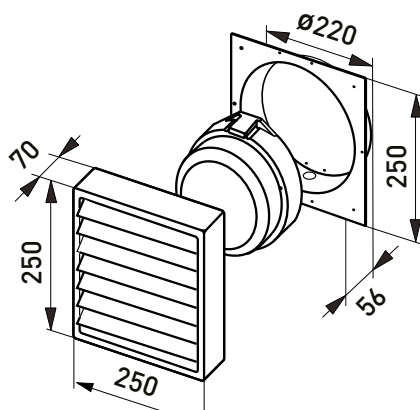
Mounting

- Wall installation, min. 100 mm from the ceiling
- Not to the ceiling!
- Screw terminal block 2x1,5 mm² -o

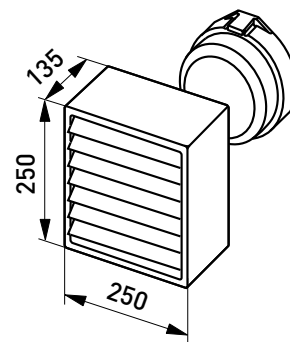




AVH11



AVH11.1



AVH11.2

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

AVH15

E14

IP44    2x1,5mm²



AVH15.1

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



AVH15.10



AVH15.2



AVH15.20

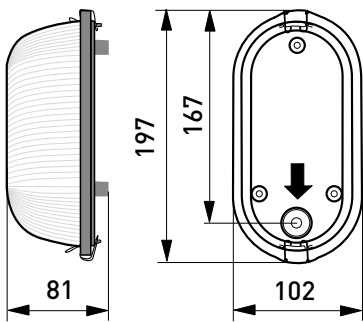
Structure

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

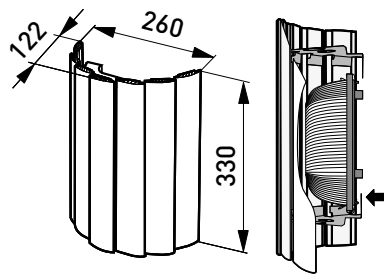
Mounting

- Wall installation, min. 100 mm from the ceiling
- Not to the ceiling!
- Screw terminal block 2x1,5 mm² -o

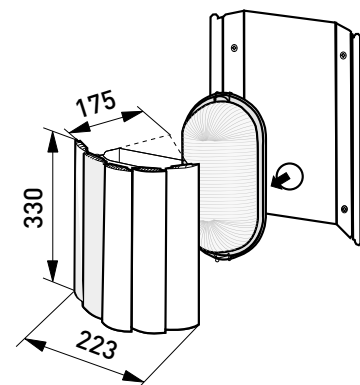




AVH15



AVH15.1



AVH15.2

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

AARIA

LED | E27

IP44   



AA01APLED

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.



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 4000K
Ra>80
Power factor 0,92
Temperature – 20 °C – + 50 °C
Lifespan 30 000 h (L70), T_a = 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.

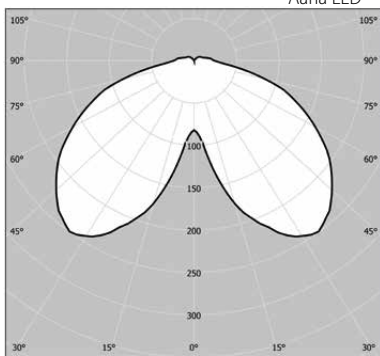
Mounting

- Can be mounted to a ø 50 mm pole, see poles at www.ensto.com - Aperia
- Wall models can be wired through a connection box, 4 punch holes for 78 mm screw spacing
- -o- 3x2,5 mm²



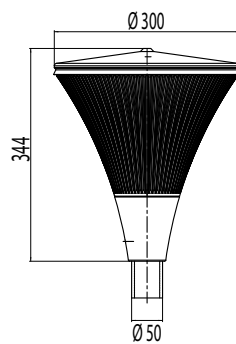


Aaria LED

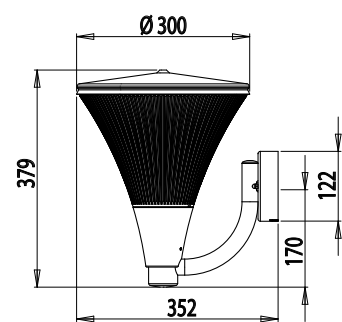


cd/klm — C0 - C180 -- C90 - C270

100%



Aaria pole model



Aaria wall model

E number	Type	Product name	Base	Model	Colour	Kg
LED-models LED						
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
LED wall models LED						
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
E27-models						
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
E27 wall models						
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

AVERIA

E27

IP44   



AVG02

Averia 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.



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.

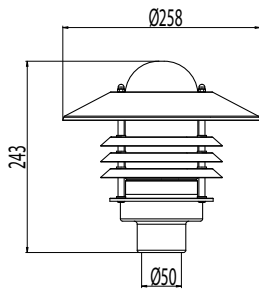
Mounting

- To the wall, ceiling, support leg \varnothing 50 mm or pole \varnothing 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 \varnothing 50 mm pole (1,5 m VP150050/colour or 2,0 m VP225050/colour). Ground support MT (\varnothing 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 mm² terminal block for through wiring in the luminaire body, knockouts for surface wiring Pole luminaires: 3x2,5 mm² terminal block for through wiring inside the luminaire

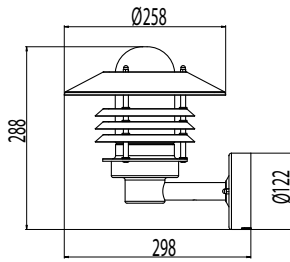
Made to order

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

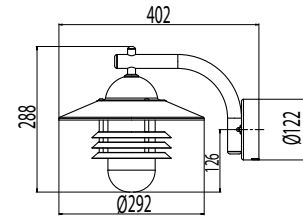




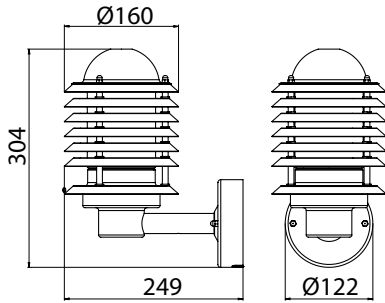
AVG01/AVG02



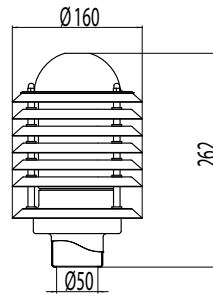
AVG03/AVG04



AVG07/AVG08



AVG03/AVG04

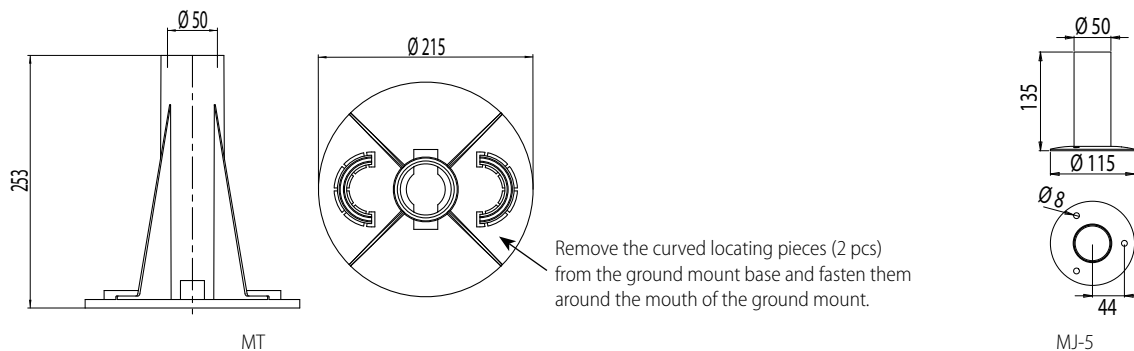


AVG05/AVG06

E number	Type	Product name	Base	Model	Colour	Kg
Pole mounting luminaire (pole ø 50 mm ordered separately)						
45 032 00	AVG01	AVG01 IP44 75W E27 G C WH	E27	pole	white	0,8
45 032 06	AVG01M	AVG01M IP44 75W E27 G O BK	E27	pole	black	0,8
41 031 21	AVG01GH	AVG01GH IP44 75W E27 G O GH	E27	pole	graphite grey	0,8
45 032 09	AVG02	AVG02 IP44 75W E27 G C CU	E27	pole	copper	1,1
Majakka pole luminaire(ø 50 mm pole ordered separately)						
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
Wall mounting luminaire, light up						
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
Wall mounting luminaire, light down						
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
Wall mounting luminaire, light up, Majakka						
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
Poles ø 50 mm fit to AVG01/02 and AVGP05/06 models			Height, m			
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
Support legs ø 50 mm fit to AVG01/02 models			Height, cm			
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
Ground supports for poles						
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





AVERIA BOLLARD

E27

IP44   



AVGP01GH

Averia Bollard models complement the Averia outdoor lighting range. Averia Bollards are well suited for dignified lighting application in garden passages, terrace and house entrances. The basic materials used are both genuine copper and durable aluminium.



AVGP01



AVGP01M



AVGP02CU

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
- Powder-coated aluminium pole delivered with the luminaire, height 950 mm, diameter \varnothing 120 mm
- 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
- LED- and energy-saving bulbs 8-20W are recommended with E27 base; Max measurements for light source: width 68 mm and length 251 mm

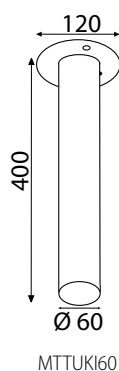
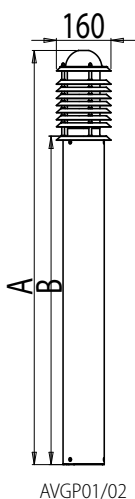
Mounting

- Averia Bollard luminaires can be installed on solid surfaces like rock, asphalt, concrete and timber. Bottom plate of the pole has three 11 mm fastening holes, and a 40x25 mm cable hole in the middle
- With MTTUKI60 ground tube (length 400 mm, diameter 60 mm) Averia Bollards can be mounted on \varnothing 60 mm ground support
- Bollard luminaire 3x2,5 mm² terminal block for through wiring

Made to order

- 35W HIE
- Pearl grey, antique silver and antique bronze models
- With 650 mm aluminium body, height of the luminaire 910 mm





E number	Type	Product name	Base	Colour	Kg	A	B
Averia bollard - model Majakka							
45 600 55	AVGP01	AVGP01 IP44 60W E27 C WH 1210	E27	white	7,5	1210	950
45 600 57	AVGP01M	AVGP01M IP44 60W E27 O BK 1210	E27	black	7,5	1210	950
41 030 73	AVGP01GH	AVGP01GH IP44 60WE27 O GH 1210	E27	graphite grey	7,5	1210	950
45 600 58	AVGP02CU	AVGP02CU IP44 60WE27 C CU 1210	E27	copper	8,3	1210	950
Ground tube for Bollard							
46 030 08	MTTUKI60	MTTUKI60 60MM GROUND TUBE	length 400 mm, ø 60 mm				

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

LUMIA

LED | E27

IP54   



AVN260GHLED

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 Averia outdoor graphite grey pole and bollard model luminaires.



AVN260LGH



AVN260L

Structure

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

Product range

- 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), 4000K
Ra>80, power factor 0,92
Ambient temperature - 20 °C - + 30 °C
LED-module lifespan 30 000 h (L70), T₃ = 30 °C

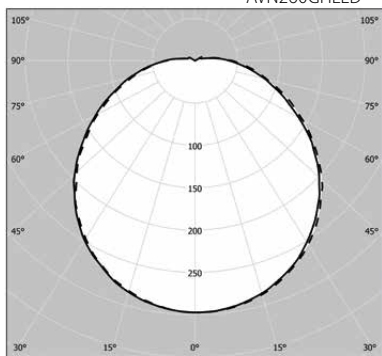
Mounting

- To the wall and ceiling, through-wiring 3x1,5 mm²



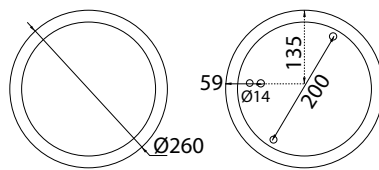


AVN260GHLED

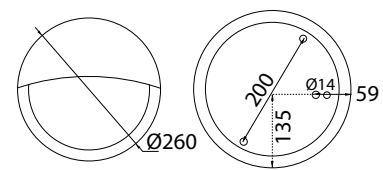


cd/klm — C0 - C180 — C90 - C270

100%



AVN260GH



AVN260LGH

E number	Type	Product name	Base	Model	Colour	Kg
LED-models LED						
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
Wall-/ ceiling luminaire						
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
Wall luminaire with eyelid						
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

IP44  /  CE 



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 Averia outdoor graphite grey pole and bollard model luminaires.



AVN03GH



AVN07GH



AVN08GH

Structure

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

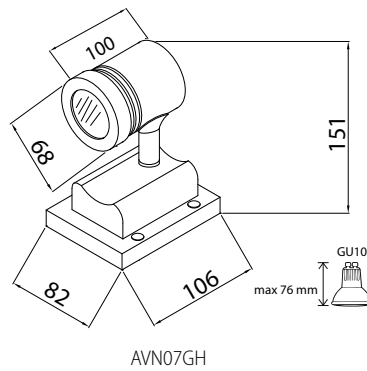
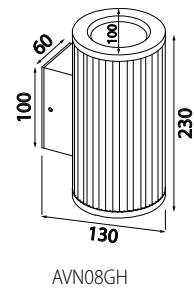
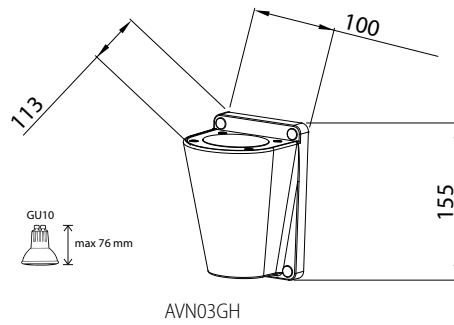
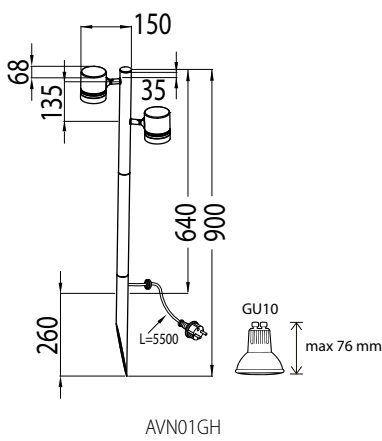
Selection

- 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 mm²
- AVN01GH-model equipped with ground spike and 5,5 m rubber cable (H05RN-F 2x1,0 mm²) and plug





E number	Type	Product name	Base	Model	Kg
Lumia Spike, 2xGU10, spike and 5,5 m rubber cable with Schuko plug, CL2					
41 031 49	AVN01GH	AVN01GH IP44 2X50W GU10 G C GH	GU10	pole	1,6
Lumia wallspot					
41 031 51	AVN03GH	AVN03GH IP44 50W GU10 G C GH	GU10	wall	0,7
Lumia wallspot, adjustable					
41 031 52	AVN07GH	AVN07GH IP44 50W GU10 G C GH	GU10	wall	0,6
Lumia wallspot up-down					
41 031 85	AVN08GH	AVN08GH IP44 2X35W GU10 G C GH	GU10	wall	1,1

KÄPY

E27

IP23   



AT101CU

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



AT101ALV



AT103ALM



AT103ALAP

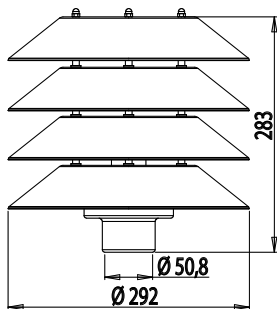
Structure

- 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

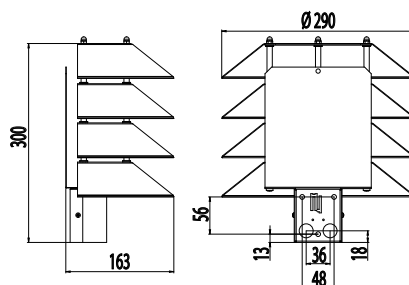
Mounting

- Pole models:
 - Can be mounted to a \varnothing 50 mm pole (1,5 m VP150050/colour or 2,0 m VP225050/colour). MT ground support (\varnothing 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
- Wall models directly to the wall
- 3x2,5 mm² terminal block for through wiring inside the luminaire.





AT101

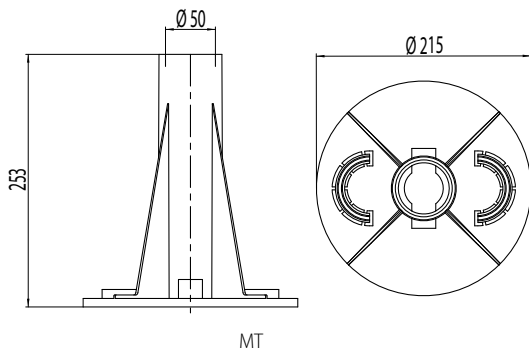


AT103 wall model

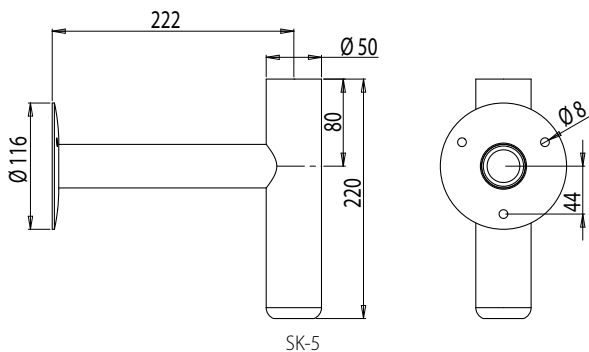
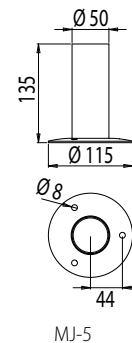
E number	Type	Product name	Base	Colour	Kg	
Käpy (4 anti-glare rings)						
45 033 06	AT101ALAP	AT101ALAP 100W E27 BR	E27	antique bronze	1,4	
45 033 09	AT101ALM	AT101ALM 100W E27 BK	E27	black	1,4	
45 033 12	AT101ALV	AT101ALV 100W W27 WH	E27	white	1,4	
45 033 15	AT101CU	AT101CU 100W E27 COPPER	E27	patinated copper	1,4	
Käpy, wall models						
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	
Poles ø 50 mm			Height	ø mm		
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	2,0	50,8	antique bronze	3,5
46 031 12	VP225050/M	VP225050/M 2M 50MM BK	2,0	50,8	black	3,5
46 031 09	VP225050/V	VP225050/V 2M 50MM WH	2,0	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	0,8
46 031 51	SK-5M	SK-5M WALL SUPPORT BK		50,8	black	0,8
46 031 48	SK-5V	SK-5V WALL SUPPORT WH		50,8	white	0,8
Support legs ø 50 mm			Height cm	ø mm		
46 601 40	MJ-5AP	MJ-5AP 50.8 BR	13,5	50,8	antique bronze	0,4
46 601 42	MJ-5M	MJ-5M 50.8 BK	13,5	50,8	black	0,4
46 601 44	MJ-5V	MJ-5V 50.8 WH	13,5	50,8	white	0,4
46 601 03	MJ-5AP/120	MJ-5AP/120 50.8 ANTPRONS1200MM	120	50,8	antique bronze	2,2
46 601 05	MJ-5M/120	MJ-5M/120 50.8 MU 1200MM	120	50,8	black	2,2
46 601 06	MJ-5V/120	MJ-5V/120 50.8 VA 1200MM	120	50,8	white	2,2

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



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





TELLUS

E27 | HS/HI

IP23   



AT4302SK

Tellus outdoor lighting series are designed for lighting gardens, market squares and pathways at parks. The diameter of the sphere is 300 or 400 mm.



AT4302KK



AT4302OPVK



AT4302OP

Structure

- Body and diffuser: uv resistant shockproof polycarbonate, lamella anti-glare rings: metallised polycarbonate
- Discharge lamp models (AT4405) ballast inside the luminaire, luminaire compensated
- Poles powder-coated aluzinked steel
- Sphere colours: clear, opal and smoke
- Clear and smoke diffuser models anti-glare rings colour is copper
- Base colour is black
- Delivered without light source
- Light sources:
 - AT4302 - LED and energy saving lamp max. 20W E27 recommended
 - AT4402 - LED and energy saving lamp max. 30W E27 recommended
 - AT4405 - 70/50W HS/HI (connected 70W)

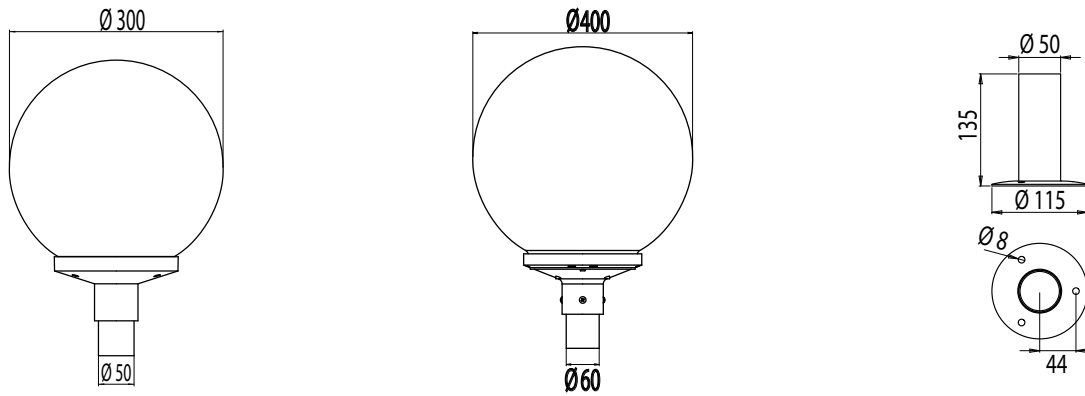
Mounting

- AT4302:
 - Can be mounted to a \varnothing 50 mm pole, black, (1,5 m VP150050/M or VP225050/M). Pole mounting with MT ground support (\varnothing 50 mm)
 - Can be mounted to a support leg MJ-5/M, black support legs available in 13,5 cm and 100 cm height
 - Can be mounted to a wall with wall supports SK-5
- AT4402 and AT4405 can be mounted to a pole \varnothing 60 mm, black (3,5 m VP350060/M2)
- Mounting accessories are not included in the delivery
- 3x 2,5 mm² terminal block for through wiring inside the luminaire

Made to order

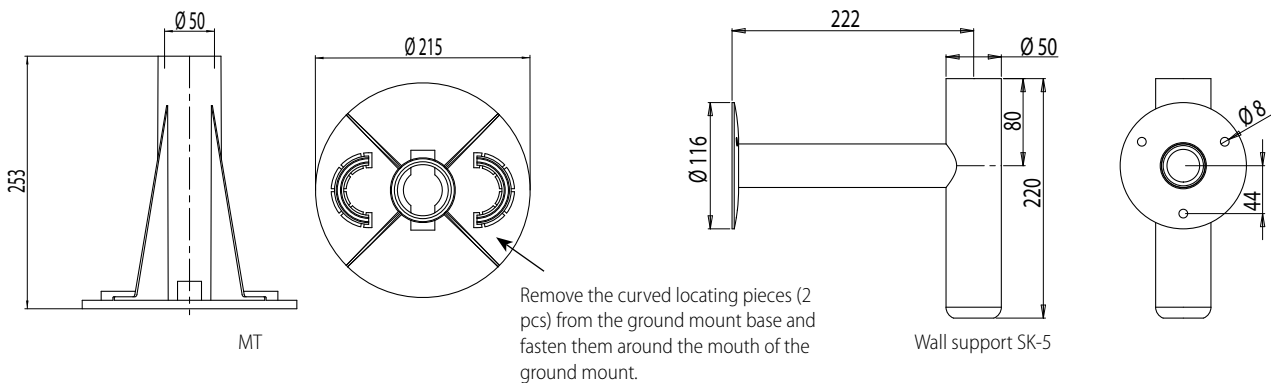
- AT4400: 125/80W HS/HI (connected 125W)

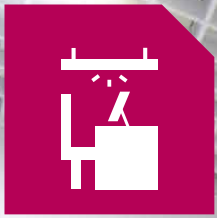




E number	Type	Product name	Base	Diffuser colour	Cone colour	Base colour	Kg
Tellus, sphere diameter 300 mm							
41 033 90	AT4302KK	AT4302KK 100W E27 CLEAR	E27	clear	copper	black	1,5
41 033 96	AT4302OP	AT4302OP 100W E27 OPAL	E27	opal	-	black	1,5
41 034 02	AT4302SK	AT4302SK 100W E27 SMOKE	E27	smoke	copper	black	1,5
Tellus, sphere diameter 400 mm							
41 033 99	AT4402KK	AT4402KK 150W E27 CLEAR	E27	clear	copper	black	4,2
41 034 06	AT4402OP	AT4402OP 150W E27 OPAL	E27	opal	-	black	4,2
41 034 04	AT4402SK	AT4402SK 150W E27 SMOKE	E27	smoke	copper	black	4,2
45 602 47	AT4405KK	AT4405KK HI/HS 70W E27 CLEAR	E27	clear	copper	black	4,2
45 602 48	AT4405OP	AT4405OP HI/HS 70W E27 OPAL	E27	opal	-	black	4,2
45 602 49	AT4405SK	AT4405SK HI/HS 70W E27 SMOKE	E27	smoke	copper	black	4,2
Poles ø 50 mm			Height, m	Colour			
46 031 24	VP150050/M	VP150050/M 1.5M 50MM BK	1,5	black			
46 031 12	VP225050/M	VP225050/M 2M 50MM BK	1,5	black			
Ground supports for poles ø 50 mm							
46 030 09	MT	MT GROUND SUPP. 50MM	Terrafix				0,45
Wall supports ø 50 mm							
46 031 51	SK-5M	SK-5M WALL SUPPORT BK	black				0,8
Support leg ø 50 mm							
46 601 42	MJ-5M	MJ-5M 50.8 BK	black				0,4
Poles ø 60 mm			Height, m				
46 031 03	VP350060/M2	VP350060/M2 3.5M 60MM BK	3,5	black			

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



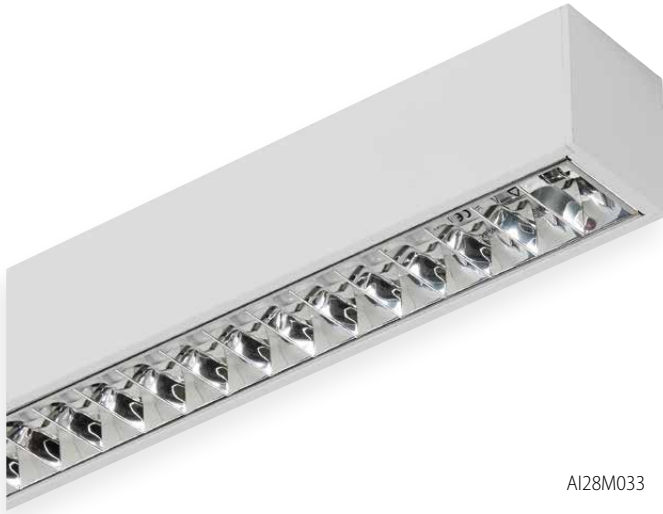
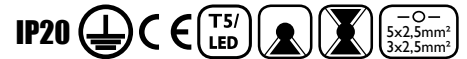


Public premises

02

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.



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
 - 4000K, Ra > 80, power factor 0,98 and 0,90 (DALI)
 - Ambient temperature – 20 °C - + 30 °C
 - LED-module lifespan 50 000 h (L70), T_a = 25 °C

Control

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

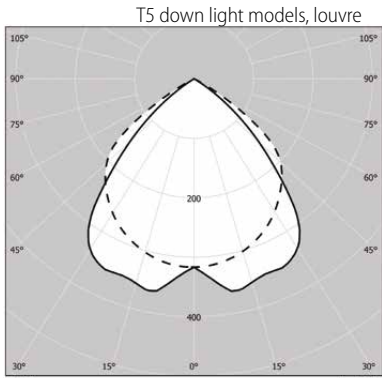
Mounting

- 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 mm² or 5x1,5 mm² (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

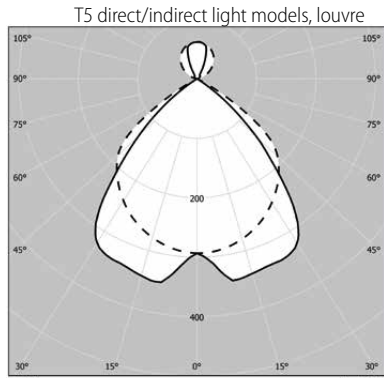
Made to order

- With pull cord switch, with connection lead, with light source
- Models equipped with integrated sensor
- Ramp models
- With grey colour (RAL 9006)
- Aino LED -versions to Helvar's Select the Weather solution
- With luminaire integrated sensors. Check sensor specific availability from the Ensto Lighting product management.

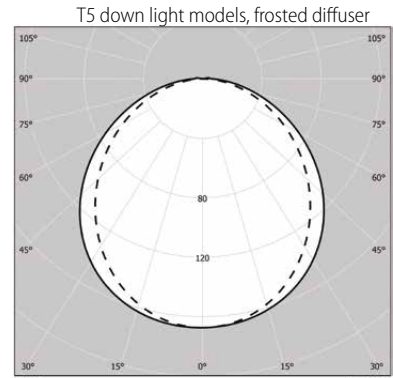




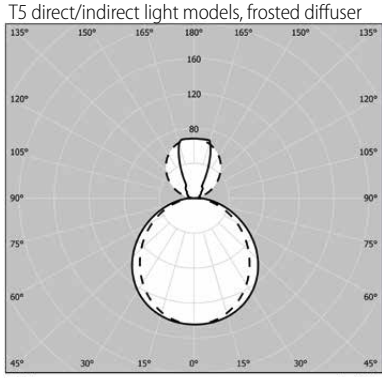
cd/klm — C0 - C180 -- C90 - C270 **70%**



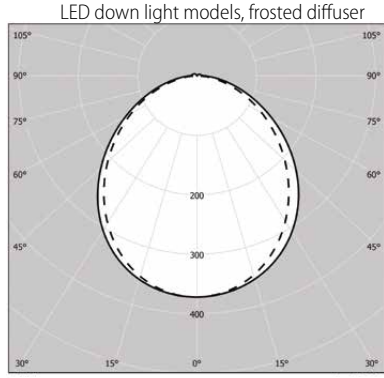
cd/klm — C0 - C180 -- C90 - C270 **75%**



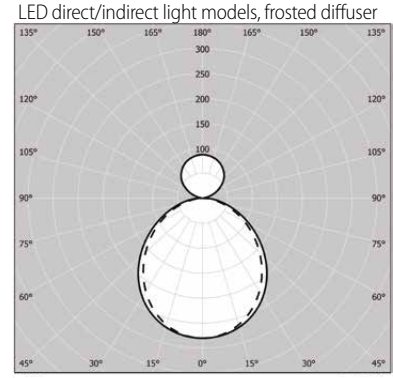
cd/klm — C0 - C180 -- C90 - C270 **48%**



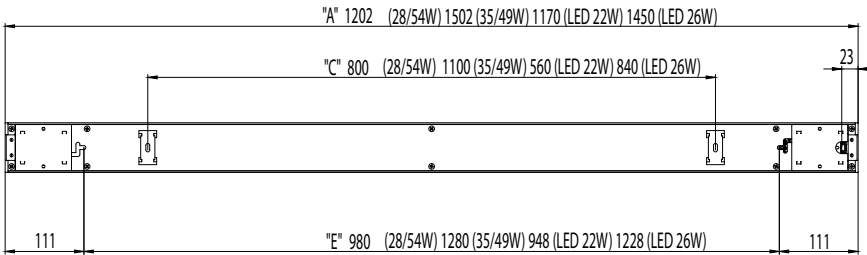
cd/klm — C0 - C180 -- C90 - C270 **54%**



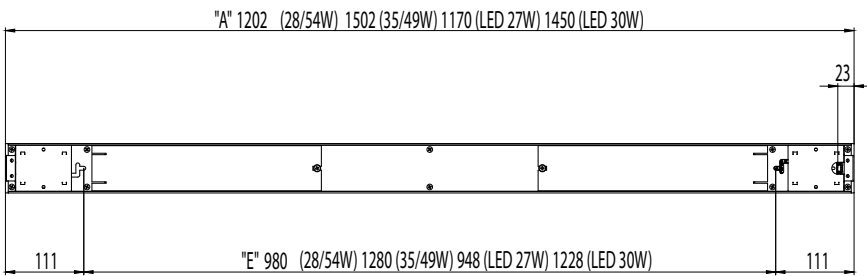
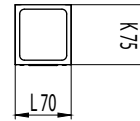
cd/klm — C0 - C180 -- C90 - C270 **100%**



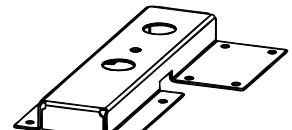
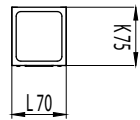
cd/klm — C0 - C180 -- C90 - C270 **100%**



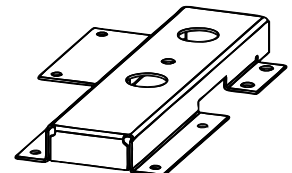
Aino with down light



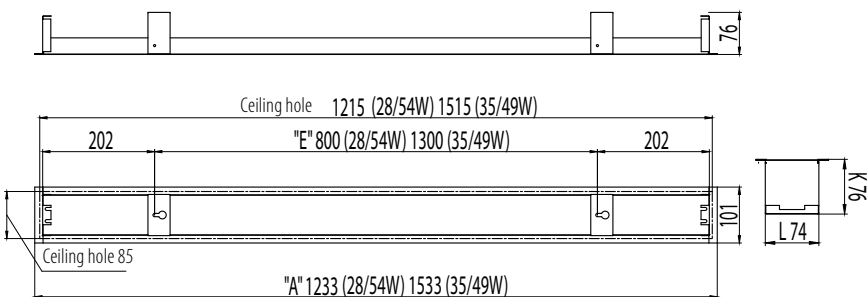
Aino with direct/indirect light



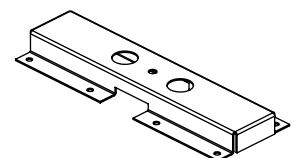
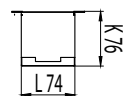
AIRKR90 right



AIRKL90 left



Aino recessed frame (T5-models)



AIRK direct

E number	Type	Product name	Output	Base	Kg	A	E	Luminous flux	Control
Aino LED down light models - with frosted diffuser (93) LED									
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
Aino LED direct/indirect light models (Y), uplight ca. 20 % - with frosted diffuser (93) LED									
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
Down light models - semi-glossed low luminance louvre (33)									
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
Direct/indirect light models, uplight ca. 10% - semi-glossed low luminance louvre (33)									
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
Down light models - with ribbed frosted diffuser (93)									
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
Direct/indirect light models, uplight ca 10% - with ribbed frosted diffuser (93)									
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
Aino mounting accessories									
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						



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 cases how to install a luminaire in the office environment.



Alpo matte-anodised louvre (31)



Alpo with luminaire 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 (2 x \varnothing 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), T₃ = 25 °C

Mounting

- Directly to the ceiling or on a lighting suspension rail. Stand alone or continuous lines with (RAMPP/ APV) ramp mounting kit
- T5-models to the lighting suspension rail with AMJK2/AMJK2V spring bracket (MEK)

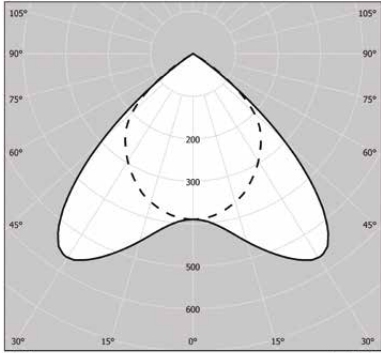
- Wire suspension
- Recess mounting with a separate recess frame
- Recess hole = luminaire dimensions + 10 mm
- -o- 5x2,5 mm² (Direct light and dimmable models)
- -o- 3x2,5 mm² (Ambient and Direct/indirect light models)
- Direct light models: connection point in the middle of the luminaire. Cable entry 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

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

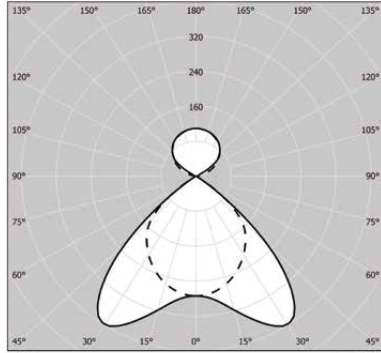


K14 (APL14433)



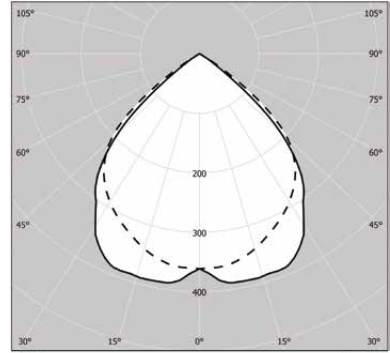
cd/klm - C0 - C180 -- C90 - C270 **100%**

K15 (APL14433Y)



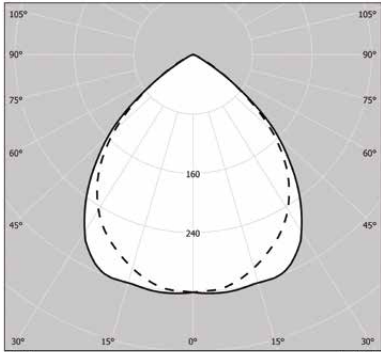
cd/klm - C0 - C180 -- C90 - C270 **100%**

K1



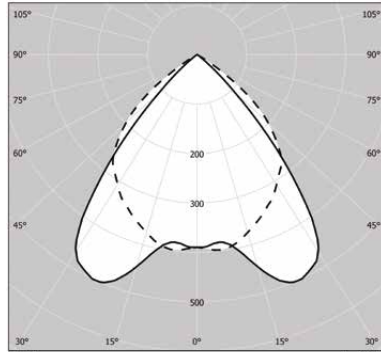
cd/klm - C0 - C180 -- C90 - C270 **74%**

K2



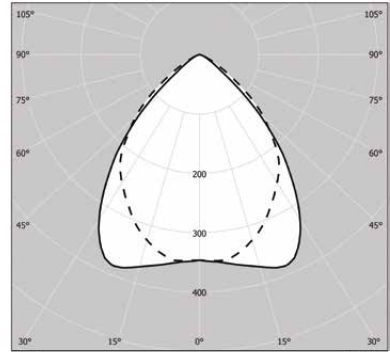
cd/klm - C0 - C180 -- C90 - C270 **62%**

K3



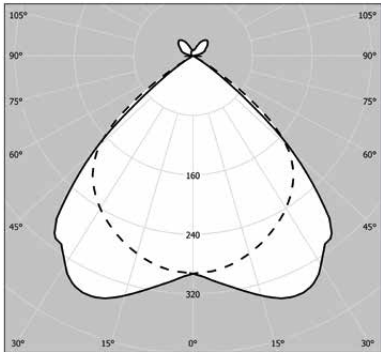
cd/klm - C0 - C180 -- C90 - C270 **82%**

K4



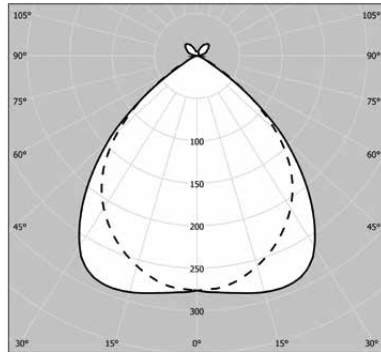
cd/klm - C0 - C180 -- C90 - C270 **67%**

K5



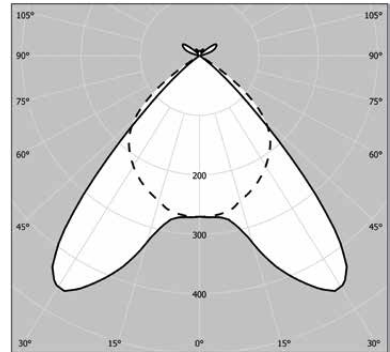
cd/klm - C0 - C180 -- C90 - C270 **76%**

K6



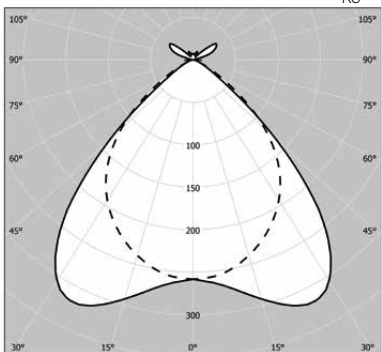
cd/klm - C0 - C180 -- C90 - C270 **61%**

K7



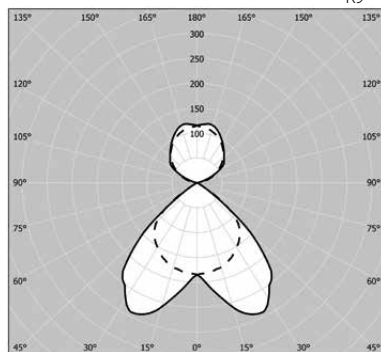
cd/klm - C0 - C180 -- C90 - C270 **76%**

K8



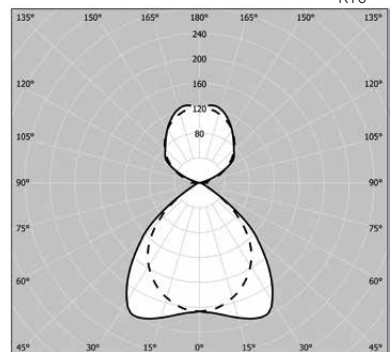
cd/klm - C0 - C180 -- C90 - C270 **63%**

K9

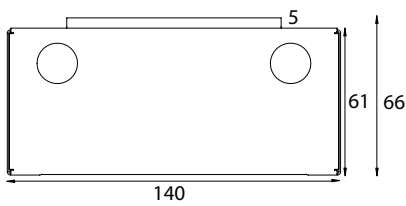
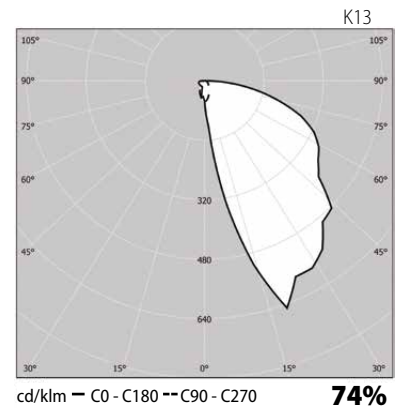
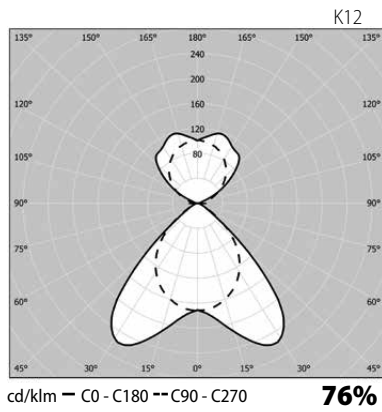
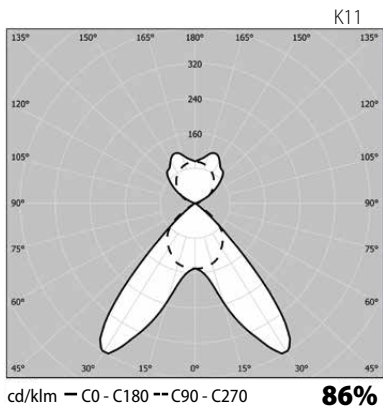


cd/klm - C0 - C180 -- C90 - C270 **86%**

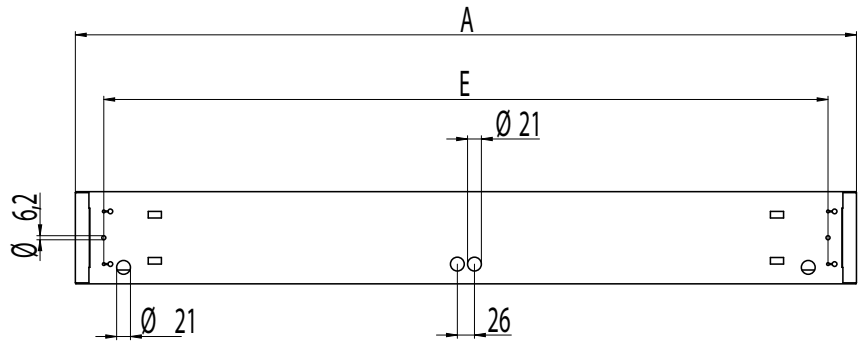
K10



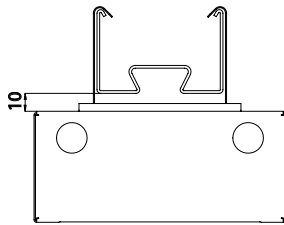
cd/klm - C0 - C180 -- C90 - C270 **80%**



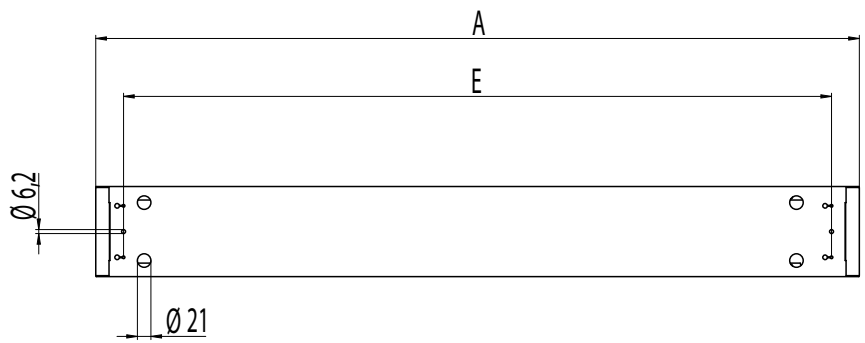
End (LED-models without cable entry holes)



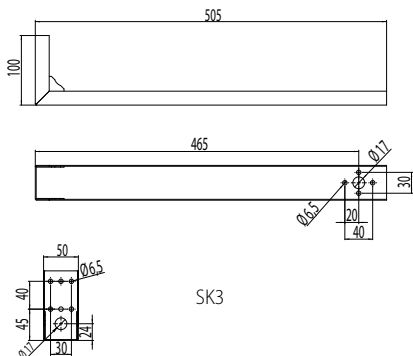
Alpo



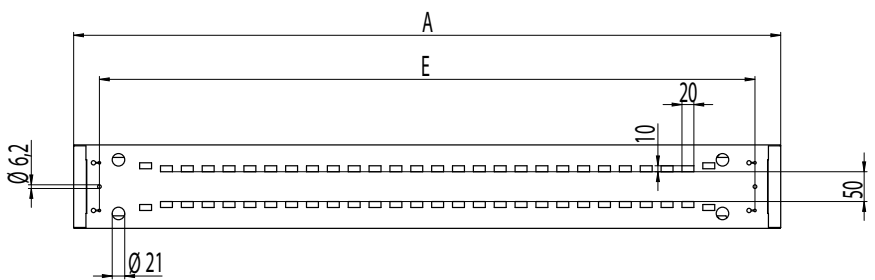
Alpo + AMJK2



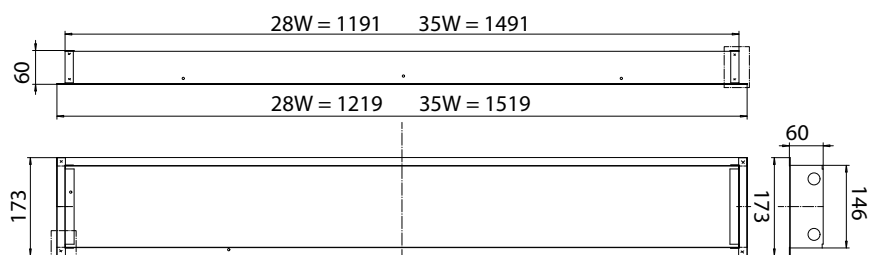
Alpo/A



SK3



Alpo/Y



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



RAMPP/AVP



RVLX02

E number	Type	Product name	Output	Base	Kg	Light distribution	A	E	Luminous flux	Control
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Alpo LED direct light models, with low-luminance louvre (semi-gloss anodised) LED										
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

Alpo LED ambient light models, uplight 30 % with low-luminance louvre (semi-gloss anodised) LED										
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

Direct light models - low-luminance louvre (semi-gloss anodised)										
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

Direct light models - low-luminance louvre (matte-anodised)										
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		

Direct light models - low-luminance louvre (matte-anodised) multi ballast - stock models										
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		

E number	Type	Product name	Output Base	Kg	Light distribution	A	E	Luminous flux	Control
Direct light models - low-luminance louvre (matte-anodised) 1-10V stock models									
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		
Ambient light models (no base reflector) - low-luminance louvre (semi-gloss anodised), uplight ca 10%									
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
Ambient light models (no base reflector) - low-luminance louvre (semi-gloss anodised), uplight ca 10%									
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
Ambient light models (no base reflector) - low-luminance louvre (matte-anodised), uplight ca 10%									
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		
Direct/indirect models (no base reflector) - low-luminance louvre (semi-gloss anodised), uplight ca 40%									
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

E number	Type	Product name	Output Base	Kg	Light distribution	A	E	Luminous flux	Control
Direct/indirect models (no base reflector) - low-luminance louvre (matte anodised), upright ca 40%									
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		
Board luminaires									
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
Mounting accessories									
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						
43 641 72	AMJK2	AMJK2 SPRING BRACKET PAIR	spring bracket pair for suspension rail mounting 70 mm wide (MEK70), steel						
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR	spring bracket pair for suspension rail mounting 70 mm wide (MEK70), white						
Ramp mounting accessories									
42 617 58	RAMPPI/APV	RAMPPI/APV RAMP MOUNT SET	ramp mounting kit (RAMPPI/APV), white						

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 acrylic diffuser gives finished looks in even most demanding places.



Diana Flat LED 600x600 mm



Diana Flat LED surface mounting frame



RVDL3X12 suspension kit

Structure

- Body white powder-coated aluminium
- Opal diffuser (O) or micro-prismatic optics (M)
- CL2, 1-10V-models CL1
- IP20
- 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 50 000 h (L70), $T_a = 25\text{ °C}$

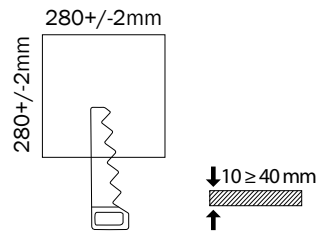
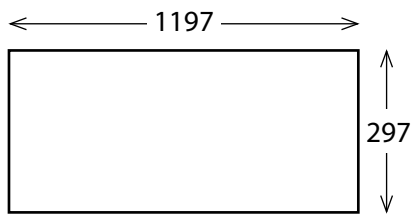
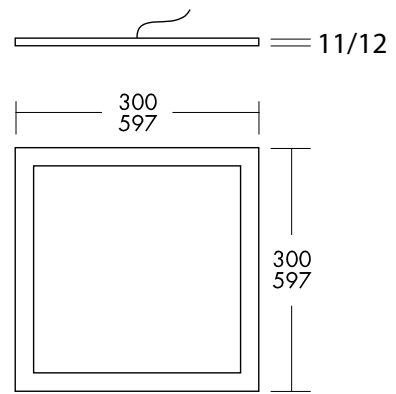
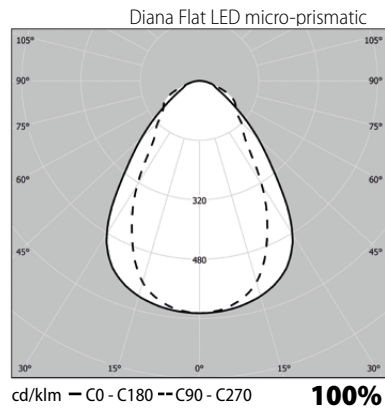
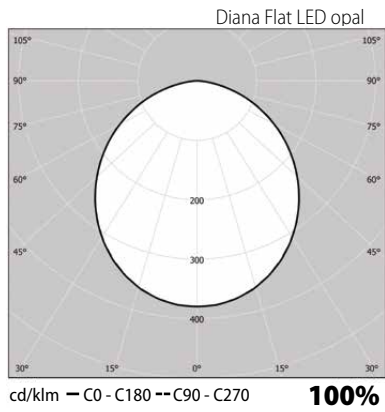
Mounting

- To the T-list ceiling (600x600 and 300x1200) and recess mounting hole (300x300 mm)
- Surface mounting (600x600 mm) with separate surface mounting frame
- To solid ceiling (600x600 mm) with separate frame
- Suspension mounting with separate suspension mounting kit 600x600 mm and 300x1200 mm, suspension measure max. 1500 mm
- -o- 3x2,5 mm² and 5x2,5 mm² (DALI)
-o 5x1,5 mm² (DL3X3ED)
- Power source can be placed on the top of the panel or beside it
- Models with tunable white control (TW) can be directly integrated to the Helvar Select the Weather system. Please see more at www.helvar.fi

Made to order

- Surface mounting frame DL3X12-K (300x1200 mm) and DL3X3-K (300x300 mm)
- DL3X12O and DL3X12M (300x1200 mm) 3000K-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





Recess hole (300 x 300mm)

E number	Type	Product name	Kg	Length	Height	Width	Luminous flux
Diana Flat LED 600x600, opal diffuser LED							
42 607 44	DL6X6O	DL6X6O 40W/840 LED O AC	3,6	597	11	597	4300 lm
42 607 59	DL6X6OED	DL6X6OED 40W/840 LED O AC DALI	3,6	597	11	597	4300 lm
42 607 64	DL6X6OELD	DL6X6OELD 40W/840 LED AC 1-10V	3,6	597	11	597	4300 lm
42 607 51	DL6X6O/3K	DL6X6O/3K 40W/830 LED O AC	3,6	597	11	597	4100 lm
42 607 62	DL6X6OED/3K	DL6X6OED/3K 40W/830 O AC DALI	3,6	597	11	597	4100 lm
42 607 65	DL6X6OELD/3K	DL6X6OELD/3K 40W/830 O AC 1-10	3,6	597	11	597	4100 lm
Diana Flat LED 600x600, micro-prismatic optics LED							
42 607 19	DL6X6M	DL6X6M 40W/840 LED MP AC	3,6	597	11	597	4000 lm
42 607 29	DL6X6MED	DL6X6MED 40W/840 LED MP AC DA	3,6	597	11	597	4000 lm
42 607 37	DL6X6MELD	DL6X6MELD 40W/840 LED AC 1-10V	3,6	597	11	597	4000 lm
42 607 20	DL6X6M/3K	DL6X6M/3K 40W/830 LED MP AC	3,6	597	11	597	3700 lm
42 607 34	DL6X6MED/3K	DL6X6MED/3K 40W/830 MP AC DALI	3,6	597	11	597	3700 lm
42 607 38	DL6X6MELD/3K	DL6X6MELD/3K 40W/830 MP 1-10V	3,6	597	11	597	3700 lm
Diana Flat LED 600x600, opal diffuser (O) or micro-prismatic optics (M), tunable white 3000K-6000K LED							
42 607 55	DL6X6O/TW	DL6X6O 40W/830-60 LED O AC	3,6	597	12	597	
42 607 23	DL6X6M/TW	DL6X6M 40W/830-60 LED MP AC	3,6	597	12	597	
Diana Flat LED 300x1200, opal diffuser LED							
42 607 09	DL3X12O	DL3X12O 34W/840 LED O AC	4,6	1197	12	297	3400 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 1-10	4,6	1197	12	297	3400 lm
Diana Flat LED 300x1200, micro-prismatic optics LED							
42 606 93	DL3X12M	DL3X12M 34W/840 LED MP AC	4,6	1197	12	297	3200 lm
42 607 06	DL3X12MED	DL3X12MED 34W/840 LED MP AC DALI	4,6	1197	12	297	3200 lm
42 607 08	DL3X12MELD	DL3X12MELD 34W/840 LED AC 1-10V	4,6	1197	12	297	3200 lm

E number	Type	Product name	Kg	Length	Height	Width	Luminous flux
Diana Flat LED 300x300, opal diffuser, spring brackets LED							
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
Diana Flat LED accessories							
42 606 18	DL6X6-K	DL6X6-K surface mounting frame, white	1,0	640	66	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			



AVD370

LED | TC | E27

IP21/44    5x2,5mm²



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.



AVD370 PIR sensor luminaire

Structure

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

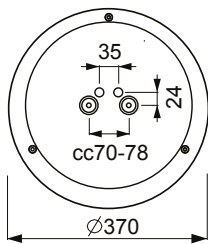
Control

- 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 mm² with through wiring, PIR-/RADAR-models -o- 5x2,5 mm² + 2x2,5 mm²
- 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





AVD370



E number	Type	Product name	Base	Kg	Luminous flux
AVD370 LED basic luminaires LED					
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
AVD370 LED basic luminaires with glass diffuser LED					
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
AVD370 LED basic luminaires with 1-10V controlled electronic control gear LED					
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
AVD370 LED basic luminaires with 1-10V controlled electronic control gear and glass diffuser LED					
41 172 50	AVD370.114DLG	AVD370 IP21/44 LED14W/840 DG	LED	1,7	1516 lm
41 172 66	AVD370.114DLG/3K	AVD370 IP21/44 LED14W/830 DG	LED	1,7	1468 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
AVD370 LED basic luminaires with DALI control gear LED					
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
AVD370 LED basic luminaires with DALI control gear and with glass diffuser LED					
41 172 57	AVD370.114DDLG	AVD370 IP21/44 LED14W/840DALIG	LED	1,7	1516 lm
41 172 89	AVD370.114DDLG/3K	AVD370 IP21/44 LED14W/830DALIG	LED	1,7	1468 lm
41 595 19	AVD370.118DDLG	AVD370 IP21/44 LED 18W/840 DALI GFR	LED	1,7	1705 lm
41 595 29	AVD370.118DDLG/3K	AVD370 IP21/44 LED 18W/830 DALI GFR	LED	1,7	1651 lm
AVD370 LED basic sensor luminaires LED					
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
AVD370 LED basic sensor luminaires with glass diffuser LED					
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	1651 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
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% LED					
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
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% LED					
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	1651 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
AVD 370 LED basic luminaire with 1 hour battery back-up LED					
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
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. LED					
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
AVD370 luminaires with plastic diffuser and E27					
41 170 79	AVD370	AVD370 IP44 2xTC-TSE 20W PC O	E27	0,9	
AVD370 luminaires with glass diffuser and E27					
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 luminaires with electronic control gear and glass diffuser					
41 171 76	AVD370.226EG	AVD370 IP21/44 2xTC-DE 26W E G FR	G24-q3	1,9	
AVD370 luminaires with 1-10V dimmable electronic control gear					
41 171 03	AVD370.226D	AVD370 IP44 2xTC-DE 26W D PC O	G24-q3	1,3	
AVD370 luminaires with 1-10V dimmable electronic control gear and glass diffuser					
41 171 73	AVD370.226DG	AVD370 IP21/44 2xTC-DE 26W D G FR	G24-q3		
AVD370 luminaires with DSI/DALI dimmable electronic control gear					
41 171 04	AVD370.226DB	AVD370 IP44 2xTC-DE 26W DB PC O	G24-q3	1,3	
AVD370 luminaires with DSI/DALI dimmable electronic control gear and glass diffuser					
41 171 75	AVD370.226DBG	AVD370 IP21/44 2xTC-DE 26W DB G FR	G24-q3	2,0	
AVD370 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%					
41 171 01	AVD370.2265D	AVD370 IP44 2xTC-DE 26W D PC O PIR	G24-q3	1,4	
AVD370 radar sensor luminaire with 1-10V dimmable electronic control gear and glass diffuser. Base light level 5% and radar controlled light level 100%					
41 171 69	AVD370.2269DG	AVD370 IP21/44 2xTC-DE 26W D G FR RADAR	G24-q3	2,1	
AVD370 emergency luminaires with electronic control gear					
42 172 38	AVD370.218E/3SM	AVD370 IP44 2xTC-DE 18W E PC O 3h SM	G24-q2	2,0	

AVD550

LED | TC

IP21   



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.



AVD550 PIR sensor luminaires

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_a = 25 °C

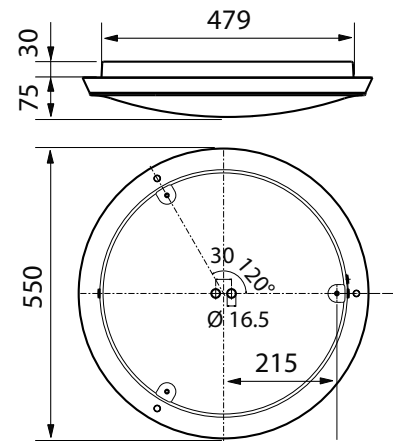
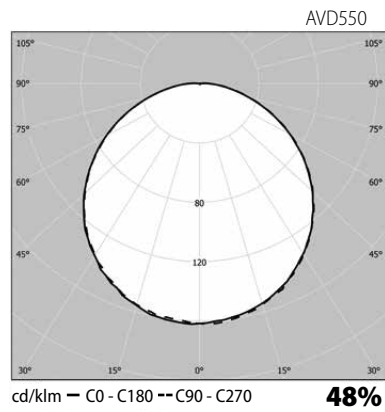
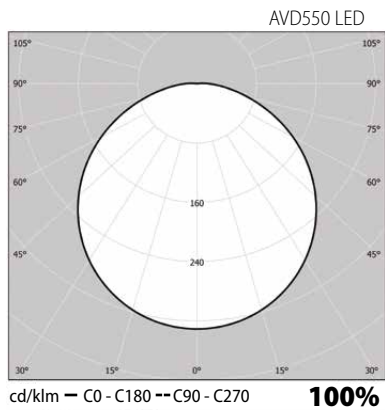
Control

- 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 mm² 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



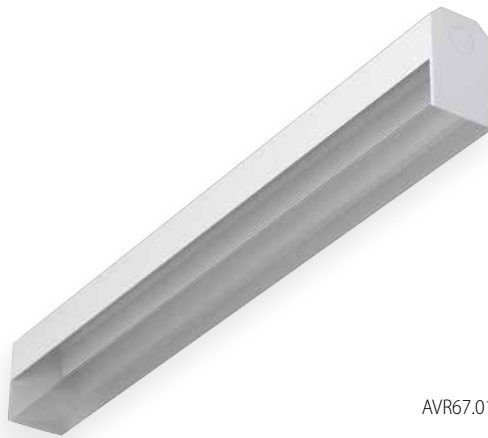


E number	Type	Product name	Output	Base	Kg	Additional information
AVD550 LED with polycarbonate diffuser LED						
42 903 16	AVD550.139L	AVD550 LED 39W/840 PC O	39W	LED	3,2	
42 903 17	AVD550.139L/3K	AVD550 LED 39W/830 PC O	39W	LED	3,2	
42 903 14	AVD550.139DDL	AVD550 LED 39W/840 PC O DALI	39W	LED	3,2	DALI
42 903 19	AVD550.139DDL/3K	AVD550 LED 39W/830 PC O DALI	39W	LED	3,2	DALI
AVD550 luminaires with electronic control gear						
42 171 22	AVD550.236E	AVD550 IP21 2xTC-L 36W E PC O		2G11	3,0	
AVD550 luminaires with electronic control gear and glass diffuser						
42 172 08	AVD550.236EG	AVD550 IP21 2xTC-L 36W E G FR		2G11	5,6	
AVD550 luminaires with 1-10V dimmable electronic control gear						
42 171 19	AVD550.236D	AVD550 IP21 2xTC-L 36W D PC O		2G11	3,9	
AVD550 luminaires with 1-10V dimmable electronic control gear and glass diffuser						
42 172 06	AVD550.236DG	AVD550 IP21 2xTC-L 36W D G FR		2G11	6,5	
AVD550 luminaires with DSI/DALI dimmable electronic control gear						
42 171 21	AVD550.236DB	AVD550 IP21 2xTC-L 36W DB PC O		2G11	3,9	
AVD550 luminaires with DSI/DALI dimmable electronic control gear and glass diffuser						
42 172 05	AVD550.236DBG	AVD550 IP21 2xTC-L 36W DB G FR		2G11	6,5	
AVD550 PIR sensor luminaires with electronic control gear						
42 171 10	AVD550.2364E	AVD550 IP21 2xTC-L 36W E PC O PIR		2G11	4,2	
AVD550 PIR sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% or 20% and PIR controlled light level 80% or 100%						
42 171 13	AVD550.2365D	AVD550 IP21 2xTC-L 36W D PC O PIR		2G11	4,3	
AVD550 radar sensor luminaires with electronic control gear						
42 171 18	AVD550.2369E	AVD550 IP21 2xTC-L 36W E PC O RADAR		2G11	3,9	
AVD550 radar sensor luminaires with electronic control gear and glass diffuser						
42 172 00	AVD550.2369EG	AVD550 IP21 2xTC-L 36W E G FR RADAR		2G11	6,5	
AVD550 radar sensor luminaires with 1-10V dimmable electronic control gear. Base light level 5% and radar controlled light level 100%						
42 171 16	AVD550.2369D	AVD550 IP21 2xTC-L 36W D PC O RADAR		2G11	4,1	
AVD550 radar sensor luminaires with 1-10V dimmable electronic control gear and glass diffuser. Base light level 5% and radar controlled light level 100%						
42 171 99	AVD550.2369DG	AVD550 IP21 2xTC-L 36W D G FR RADAR		2G11	6,7	
AVD550 emergency luminaires with electronic control gear						
42 171 24	AVD550.236E/3SM	AVD550 IP21 2xTC-L 36W E PC O 3h SM		2G11	5,0	

AVR67

LED | T5

IP44   

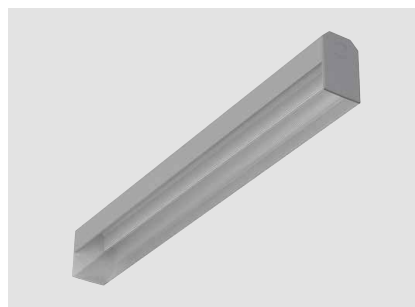


AVR67.014E

Jono with square diffuser is a stylish universal luminaire available in LED and T5 for indoor and outdoor use.



AVR67 LED



AVR67 aluminium

Structure

- Diffuser clear prismatic or opal polycarbonate, LED-models with opal diffuser
- Body aluminium
- LED models:
Connected load
10W, luminaire luminous flux 895 lm (3000K), 950 lm (4000K)
15W, luminaire luminous flux 1342 lm (3000K), 1425 lm (4000K)
20W, luminaire luminous flux 1790 lm (3000K), 1900 lm (4000K)
3000K and 4000K, Ra > 80, power factor 0,94
Ambient temperature – 20 °C - + 25 °C
LED-module lifespan 60 000 h (L70), T_a = 25 °C

Control

- AVR67 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

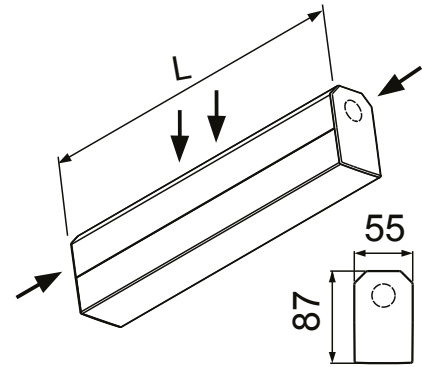
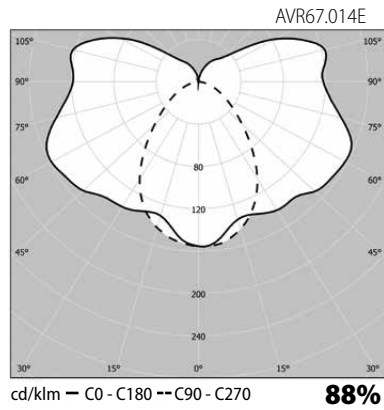
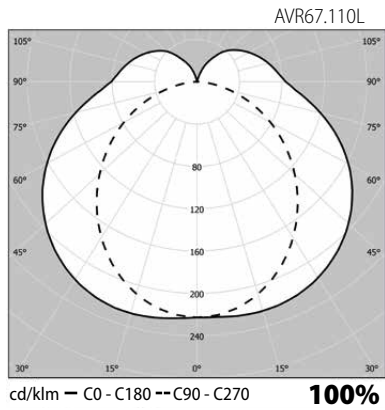
Mounting

- To the ceiling and to the wall
- Snap-in terminal block 5x2,5 mm² with through wiring, RADAR-models 5x2,5 mm² + 2x2,5 mm²
- Sensor luminaire models see more accurate information at WEB-site
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

Made to order

- AVR67 LED-models with RADAR sensor





E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
Jono LED with opal diffuser LED							
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	
Jono LED with opal diffuser, DALI LED							
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	
Jono T5 (ø 16 mm) with electronic control gear							
42 173 04	AVR67.014E	AVR67.014E IP44 T5 14W E PC C, 600mm	G5	1,1	600		
42 173 13	AVR67.021E	AVR67.021E IP44 T5 21W E PC C, 900mm	G5	1,4	900		
42 173 16	AVR67.024E	AVR67.024E IP44 T5 24W E PC C, 600mm	G5	1,0	600		
42 173 20	AVR67.028E	AVR67.028E IP44 T5 28W E PC C, 1200mm	G5	1,8	1200		
42 173 28	AVR67.035E	AVR67.035E IP44 T5 35W E PC C, 1500mm	G5	2,1	1500		
42 173 34	AVR67.039E	AVR67.039E IP44 T5 39W E PC C, 900mm	G5	1,4	900		
42 173 35	AVR67.049E	AVR67.049E IP44 T5 49W E PC C, 1500mm	G5	2,1	1500		
42 173 37	AVR67.054E	AVR67.054E IP44 T5 54W E PC C, 1200mm	G5	1,8	1200		
Jono T5 (ø 16 mm) with electronic control gear and opal diffuser							
42 173 40	AVR67.014EO	AVR67.014EO IP44 T5 14W E PC O, 600mm	G5	1,1	600		
42 173 41	AVR67.021EO	AVR67.021EO IP44 T5 21W E PC O, 900mm	G5	1,4	900		
42 173 42	AVR67.028EO	AVR67.028EO IP44 T5 28W E PC O, 1200mm	G5	1,8	1200		
42 173 43	AVR67.035EO	AVR67.035EO IP44 T5 35W E PC O, 1500mm	G5	2,1	1500		
Jono T5 (ø 16 mm) with 1-10V electronic control gear							
42 173 01	AVR67.014D	AVR67.014D IP44 T5 14W D PC C, 600mm	G5	1,1	600		1-10V
42 173 10	AVR67.021D	AVR67.021D IP44 T5 21W D PC C, 900mm	G5	1,4	900		1-10V
42 173 17	AVR67.028D	AVR67.028D IP44 T5 28W D PC C, 1200mm	G5	1,9	1200		1-10V
42 173 23	AVR67.035D	AVR67.035D IP44 T5 35W D PC C, 1500mm	G5	2,1	1500		1-10V
Jono T5 (ø 16 mm) with DSI/DALI electronic control gear							
42 173 02	AVR67.014DB	AVR67.014DB IP44 T5 14W DB PC C, 600mm	G5	1,1	600		DALI, Switch dim
42 173 11	AVR67.021DB	AVR67.021DB IP44 T5 21W DB PC C, 900mm	G5	1,4	900		DALI, Switch dim
42 173 19	AVR67.028DB	AVR67.028DB IP44 T5 28W DB PC C, 1200mm	G5	1,9	1200		DALI, Switch dim
42 173 25	AVR67.035DB	AVR67.035DB IP44 T5 35W DB PC C, 1500mm	G5	2,1	1500		DALI, Switch dim

E number	Type	Product name	Base	Kg	Length	Luminous flux	Additional information
Jono T5 (ø 16 mm) with electronic control gear, aluminium colour							
42 173 05	AVR67.014EAL	AVR67.014EAL IP44 T5 14W E PC C AL, 600mm	G5	1,1	600		
42 173 14	AVR67.021EAL	AVR67.021EAL IP44 T5 21W E PC C AL, 900mm	G5	1,4	900		
42 173 22	AVR67.028EAL	AVR67.028EAL IP44 T5 28W E PC C AL, 1200mm	G5	1,8	1200		
42 173 29	AVR67.035EAL	AVR67.035EAL IP44 T5 35W E PC C AL, 1500mm	G5	2,1	1500		
Jono T5 (ø 16 mm) with 1-10V electronic control gear, aluminium colour							
42 170 49	AVR67.014DAL	AVR67.014DAL IP44 T5 14W D PC C AL, 600mm	G5	1,1	600		1-10V
42 170 53	AVR67.021DAL	AVR67.021DAL IP44 T5 21W D PC C AL, 900mm	G5	1,4	900		1-10V
42 170 55	AVR67.028DAL	AVR67.028DAL IP44 T5 28W D PC C AL, 1200mm	G5	1,9	1200		1-10V
42 170 56	AVR67.035DAL	AVR67.035DAL IP44 T5 35W D PC C AL, 1500mm	G5	2,1	1500		1-10V
RADAR sensor Jono T5 (ø 16 mm) with electronic control gear							
42 170 20	AVR67.0149E	AVR67 IP44 T5 14W E PC C RADAR, 657mm	G5	1,0	657		
42 170 23	AVR67.0219E	AVR67 IP44 T5 21W E PC C RADAR, 957mm	G5	1,4	957		
42 170 26	AVR67.0289E	AVR67 IP44 T5 28W E PC C RADAR, 1257mm	G5	1,9	1257		
42 170 29	AVR67.0359E	AVR67 IP44 T5 35W E PC C RADAR, 1557mm	G5	2,2	1557		
RADAR sensor Jono T5 (ø 16 mm) with 1-10V electronic control gear							
42 170 38	AVR67.0219D	AVR67 IP44 T5 21W D PC C RADAR, 957mm	G5	1,6	957		1-10V
42 170 40	AVR67.0289D	AVR67 IP44 T5 28W D PC C RADAR, 1257mm	G5	2,0	1257		1-10V
42 170 41	AVR67.0359D	AVR67 IP44 T5 35W D PC C RADAR, 1557mm	G5	2,2	1557		1-10V
RADAR sensor Jono T5 (ø 16 mm) with 1-10V electronic control gear, aluminium colour							
42 170 22	AVR67.0149EAL	AVR67 IP44 T5 14W E PC C AL RADAR, 657mm	G5	1,0	657		
42 170 25	AVR67.0219EAL	AVR67 IP44 T5 21W E PC C AL RADAR, 957mm	G5	1,5	957		
42 170 28	AVR67.0289EAL	AVR67 IP44 T5 28W E PC C AL RADAR, 1257mm	G5	1,9	1257		
42 170 31	AVR67.0359EAL	AVR67 IP44 T5 35W E PC C AL RADAR, 1557mm	G5	2,2	1557		



SPORT

T5

IP20     



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.



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

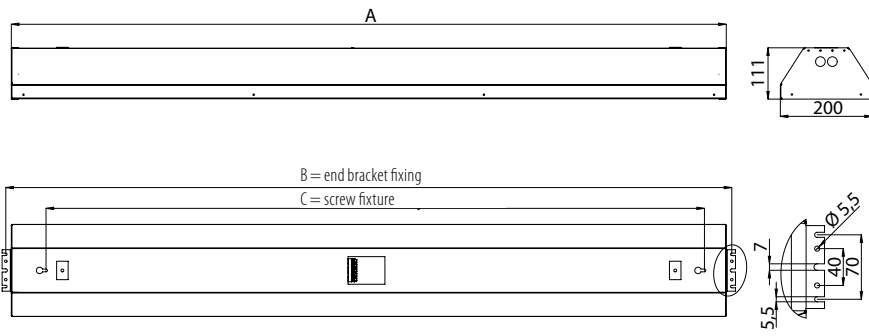
Mounting

- 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 mm²
- 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

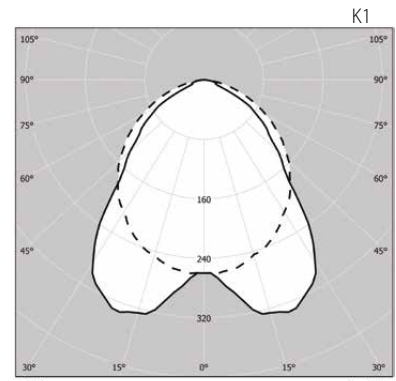
Made to order

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

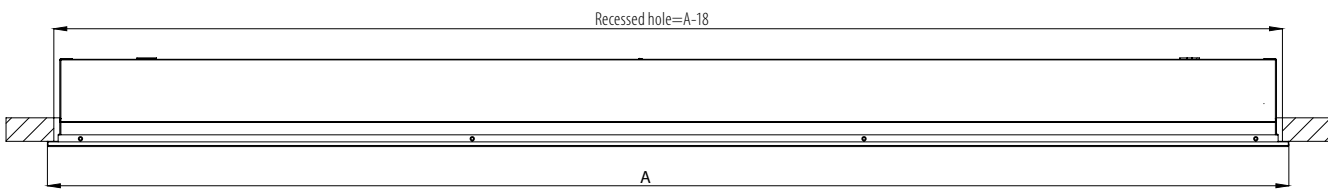




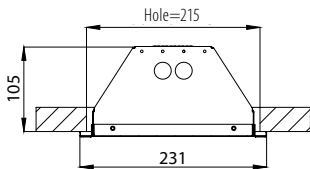
Sport surface mounting



cd/klm – C0 - C180 --C90 - C270 **75%**



Sport recessed mounting



E number	Type	Product name	Base	Colour	Kg	Light distribution	A	B	C
Sport									
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
Mounting accessories									
42 660 87	SP01	SP01 SUSP.RAIL BRACKET PAIR		white	0,1				
42 660 88	SP02	SP02 RECESSED FRAME		white	0,7		1585		



ferag... ferag...

Industrial

03

TINO G2 LED

LED

IP44    

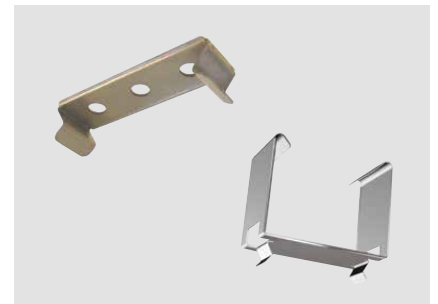


Tino G2 with clear diffuser

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



Tino G2 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
- LED models:
 - Connected load 44W, length 880 mm
 - Connected load 58W, length 1160 mm
 - Connected load 72W, length 1440 mm
 - See the luminaire luminous flux from the table below.
 - 4000K, power factor 0,98
 - Ra > 80
 - Ambient temperature – 20 °C - + 30 °C
 - LED-module lifespan 50 000 h (L70), T_a = 25 °C

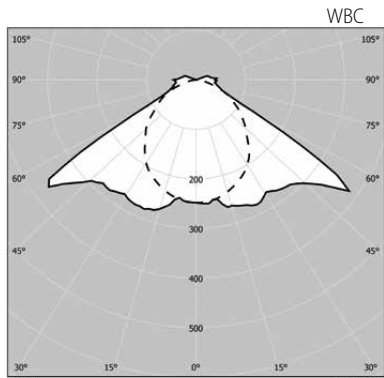
Mounting

- 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 mm², controlled models 1-phase for through-wiring

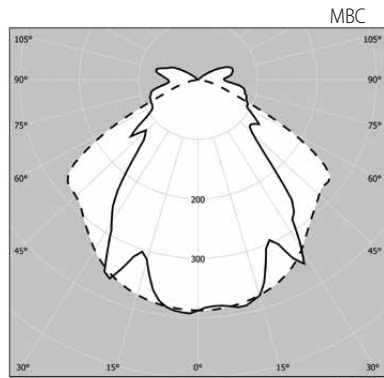
Made to order

- Switch-Control
- With connection lead
- With asymmetrical light distribution, light distribution curves when requested
- 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

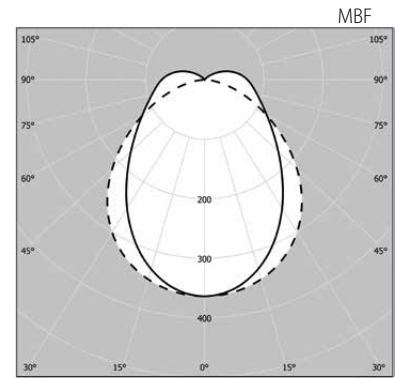




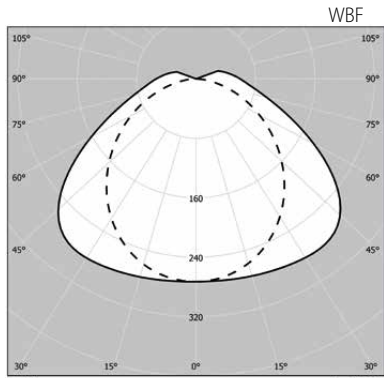
cd/klm – C0 - C180 --C90 - C270 **100%**



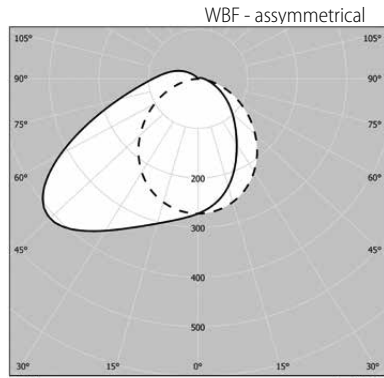
cd/klm – C0 - C180 --C90 - C270 **100%**



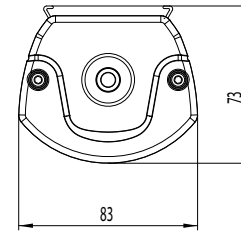
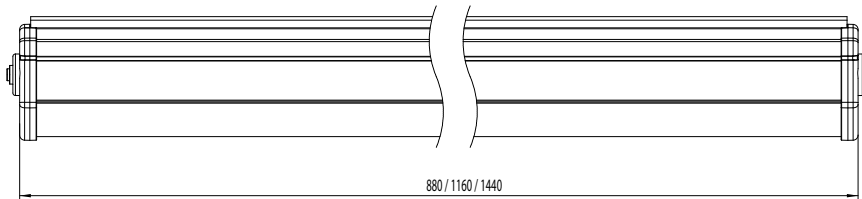
cd/klm – C0 - C180 --C90 - C270 **100%**



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



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



E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminous flux
With wide beam optics, clear diffuser LED								
43 603 92	TN2234WBC	TN2234WBC LED IP44 44W/840 ACC	44W	1,8	880	WBC		6003 lm
43 603 94	TN2234WBCED	TN2234WBCED 44W/840 AC C DALI	44W	1,8	880	WBC	DALI	6003 lm
43 604 07	TN2244WBC	TN2244WBC LED IP44 58W/840 ACC	58W	2,4	1160	WBC		7936 lm
43 604 09	TN2244WBCED	TN2244WBCED 58W/840 AC C DALI	58W	2,4	1160	WBC	DALI	7936 lm
43 604 22	TN2254WBC	TN2254WBC LED IP44 72W/840 ACC	72W	3,0	1440	WBC		10057 lm
43 604 25	TN2254WBCED	TN2254WBCED 72W/840 AC C DALI	72W	3,0	1440	WBC	DALI	10057 lm
With wide beam optics, frosted diffuser LED								
43 603 97	TN2234WBF	TN2234WBF LED IP44 44W/840 ACF	44W	1,8	880	WBF		5904 lm
43 603 98	TN2234WBFED	TN2234WBFED 44W/840 AC F DALI	44W	1,8	880	WBF	DALI	5904 lm
43 604 12	TN2244WBF	TN2244WBF LED IP44 58W/840 ACF	58W	2,4	1160	WBF		7880 lm
43 604 13	TN2244WBFED	TN2244WBFED 58W/840 AC F DALI	58W	2,4	1160	WBF	DALI	7880 lm
43 604 30	TN2254WBF	TN2254WBF LED IP44 72W/840 ACF	72W	3,0	1440	WBF		9885 lm
43 604 31	TN2254WBFED	TN2254WBFED 72W/840 AC F DALI	72W	3,0	1440	WBF	DALI	9885 lm
With medium beam optics, clear diffuser LED								
43 603 86	TN2234MBC	TN2234MBC LED IP44 44W/840 ACC	44W	1,8	880	MBC		5841 lm
43 603 88	TN2234MBCED	TN2234MBCED 44W/840 AC C DALI	44W	1,8	880	MBC	DALI	5841 lm
43 604 01	TN2244MBC	TN2244MBC LED IP44 58W/840 ACC	58W	0,0	1160	MBC		7812 lm
43 604 03	TN2244MBCED	TN2244MBCED 58W/840 ACC DALI	58W	2,4	1160	MBC	DALI	7812 lm
43 604 16	TN2254MBC	TN2254MBC LED IP44 72W/840 ACC	72W	3,0	1440	MBC		9826 lm
43 604 18	TN2254MBCED	TN2254MBCED 72W/840 AC C DALI	72W	3,0	1440	MBC	DALI	9826 lm

E number	Type	Product name	Output	Kg	Length	Light distribution	Control	Luminious flux
With medium beam optics, frosted diffuser LED								
43 603 89	TN2234MBF	TN2234MBF LED IP44 44W/840 ACF	44W	1,8	880	MBF		5845 lm
43 603 91	TN2234MBFED	TN2234MBFED 44W/840 AC F DALI	44W	1,8	880	MBF	DALI	5845 lm
43 604 04	TN2244MBF	TN2244MBF LED IP44 58W/840 ACF	58W	2,4	1160	MBF		7777 lm
43 604 06	TN2244MBFED	TN2244MBFED 58W/840 AC F DALI	58W	2,4	1160	MBF	DALI	7777 lm
43 604 19	TN2254MBF	TN2254MBF LED IP44 72W/840 ACF	72W	3,0	1440	MBF		9775 lm
43 604 21	TN2254MBFED	TN2254MBFED 72W/840 AC F DALI	72W	3,0	1440	MBF	DALI	9775 lm
Mounting accessories								
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 G2 RAMP

LED

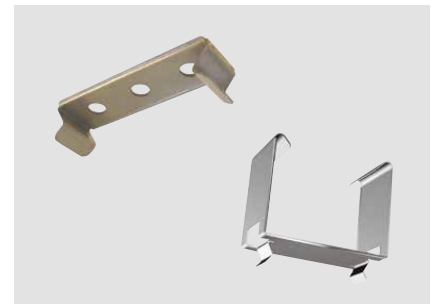
IP44    



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.



Tino G2 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
- LED models:
 - Connected load 116 W, length 2300 mm, see the luminaire luminous flux from the table
 - Connected load 144 W, length 2870 mm, see the luminaire luminous flux from the table
 - 4000K, power factor 0,98
 - Ra > 80
 - Ambient temperature – 20 °C - + 30 °C
 - LED-module lifespan 50 000 h (L70), T_a = 25 °C

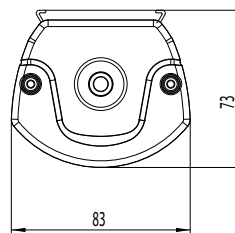
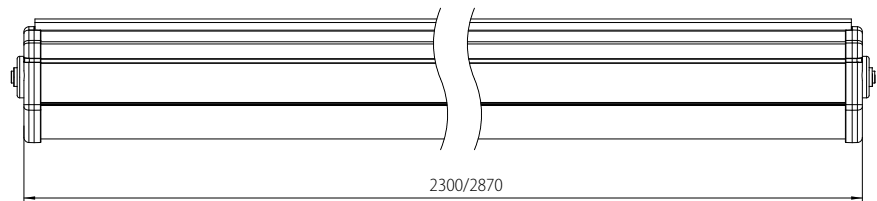
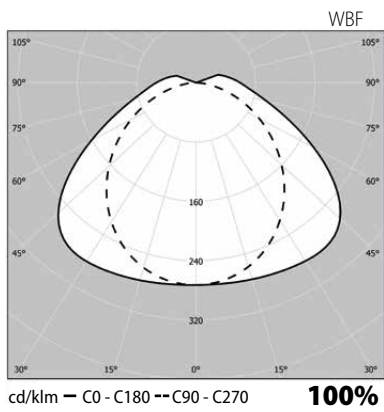
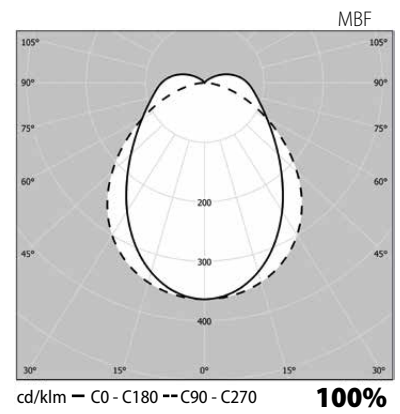
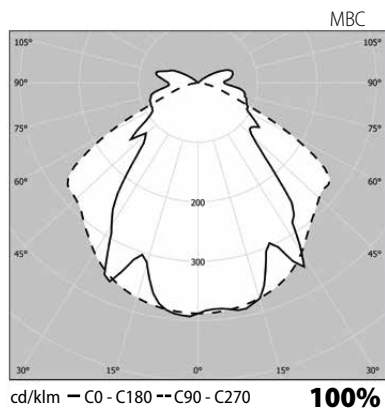
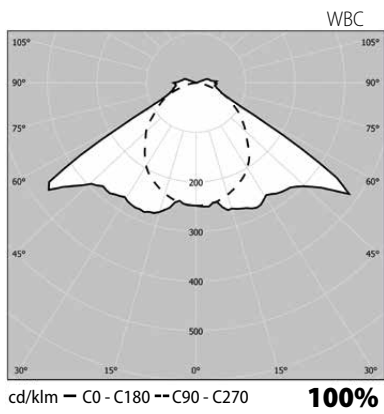
Mounting

- 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 - Monix Ramp
- Trough-wired -o-o- 5x2,5 mm², controlled models 1-phase for through-wiring

Made to order

- Switch-Control
- With connection lead
- With asymmetrical light distribution, light distribution curves when requested.
- 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	Luminious flux
With wide beam optics, clear diffuser LED								
43 604 43	TN2284WBC	TN2284WBC IP44 116W/840 AC C	116W	4,8	2300	WBC		15872 lm
43 604 45	TN2284WBCEd	TN2284WBCEd 116W/840 AC C DALI	116W	4,8	2300	WBC	DALI	15872 lm
43 603 80	TN22104WBC	TN22104WBC IP44 144W/840 AC C	144W	6,0	2870	WBC		20114 lm
43 603 82	TN22104WBCEd	TN22104WBCEd 144W/840 AC C DAL	144W	6,0	2870	WBC	DALI	20114 lm
With wide beam optics, frosted diffuser LED								
43 604 46	TN2284WBF	TN2284WBF IP44 116W/840 AC F	116W	4,8	2300	WBF		15760 lm
43 604 48	TN2284WBFEd	TN2284WBFEd 116W/840 AC F DALI	116W	4,8	2300	WBF	DALI	15760 lm
43 603 83	TN22104WBF	TN22104WBF IP44 144W/840 AC F	144W	6,0	2870	WBF		19770 lm
43 603 85	TN22104WBFEd	TN22104WBFEd 144W/840 AC F DAL	144W	6,0	2870	WBF	DALI	19770 lm
With medium beam optics, clear diffuser LED								
43 604 37	TN2284MBC	TN2284MBC IP44 116W/840 AC C	116W	4,8	2300	MBC		15624 lm
43 604 39	TN2284MBCEd	TN2284MBCEd 116W/840 AC C DALI	116W	4,8	2300	MBC	DALI	15624 lm
43 603 56	TN22104MBC	TN22104MBC IP44 144W/840 AC C	144W	6,0	2870	MBC		19652 lm
43 603 76	TN22104MBCEd	TN22104MBCEd 144W/840 AC C DAL	144W	6,0	2870	MBC	DALI	19652 lm
With medium beam optics, frosted diffuser LED								
43 604 40	TN2284MBF	TN2284MBF IP44 116W/840 AC F	116W	4,8	2300	MBF		15554 lm
43 604 42	TN2284MBFEd	TN2284MBFEd 116W/840 AC F DALI	116W	4,8	2300	MBF	DALI	15554 lm
43 603 77	TN22104MBF	TN22104MBF IP44 144W/840 AC F	144W	6,0	2870	MBF		19550 lm
43 603 79	TN22104MBFEd	TN22104MBFEd 144W/840 AC F DAL	144W	6,0	2870	MBF	DALI	19550 lm
Mounting accessories								
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

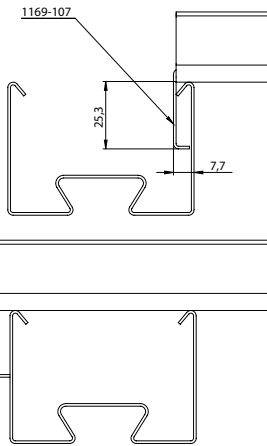


AMRPK end support adjustment / one end
 AMRPK 0-600 mm
 AMRPK500 0-315 mm
 AMRPK330 0-205 mm

TINO RAMP AND MONIX RAMP END SUPPORTS



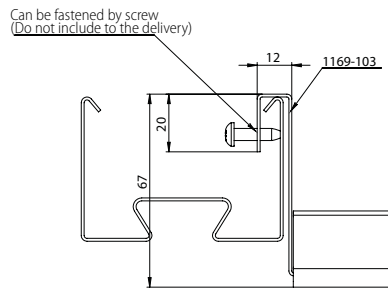
End support with standard bracket



AMRPK end support with standard bracket



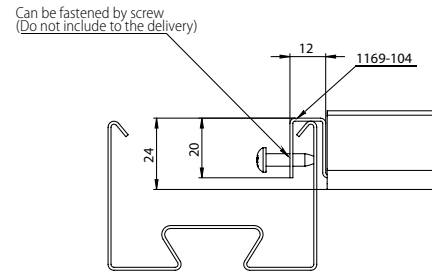
End support + bracket 2



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



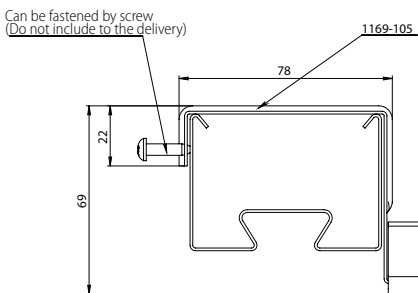
End support + bracket 3



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



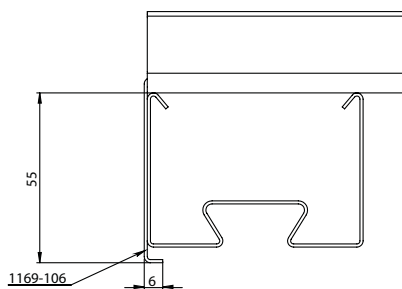
End support + bracket 4



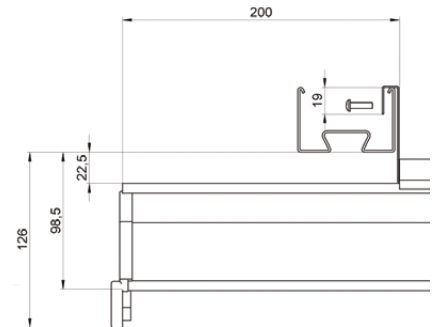
AMRPK end support and lower bracket which can be fastened by screw or by pressing together must be ordered separately. With the lower bracket the ramp luminaires installed between the lighting suspension rails can be positioned on the same level as luminaires installed to the lighting suspension rail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



End support + bracket 5



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



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

IP44     



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.



With clear diffuser



Made-to-order with spring brackets



Monix Slim with radar

Structure

- Body - white powder coated galvanized steel
- 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)
- AMSRD...-models include radar unit and Corridor Function; ca. 15 % constant light effect, radar controlled light effect 100 %. In ALRD-models the light goes up to 100 % level after having information from the sensor about the movement despite the LUX-level in the area.
- In sensor models radar unit is unit is located inside the luminaire and is not visible outside
- LED-models

Connected load 29W, length 598 mm, luminaire luminous flux 2822 lm
 Connected load 47W, length 898 mm, luminaire luminous flux 4663 lm
 Connected load 61W, length 1198 mm, luminaire luminous flux 6222 lm
 Connected load 76W, length 1498 mm, luminaire luminous flux 7669 lm
 In radar models the connected load is 1W higher than in the basic models

4000 K, power factor 0,98

Ra >80

Ambient temperature – 20 °C - + 30 °C

LED-module lifespan 50.000 h (L70) T_a=25 °C

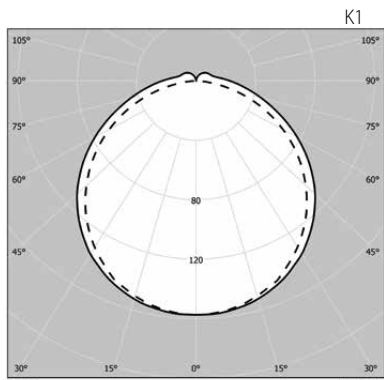
Mounting

- 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, master – slave or master-slave-master installation
 - Maximum load behind one master is 300W (bulb) 200W (fluorescent) including the master luminaire
- Slave luminaires from the Ensto basic luminaire range

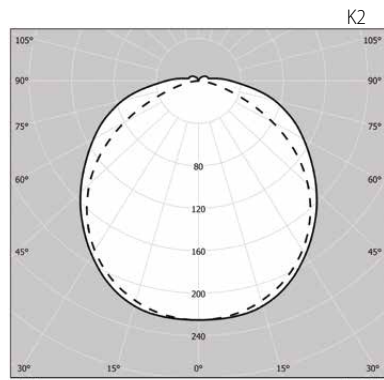
Made to order

- With spring brackets (AMJK2S/AMJK2SV) for MEK70 and (AMJK3S/AMJK3SV) for MEK110 lighting suspension rail mounting
- Controlled models (not T5 14W and LED 29W-models):
 - Switch-Control (ES) - T5 and LED
 - 1-10V (ELD) - T5
 - DALI (ED) - T5 and LED
- With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails
- Optimized luminous flux versions to projects

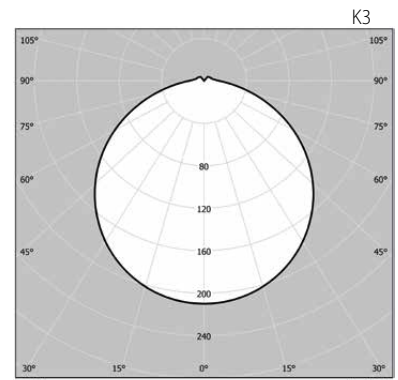




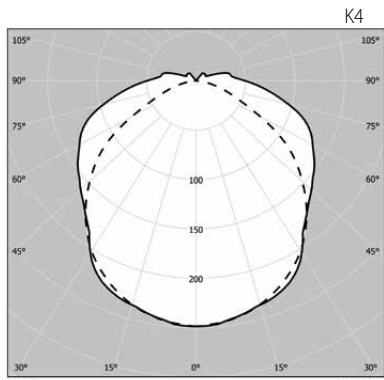
cd/klm – C0 - C180 --C90 - C270 **53%**



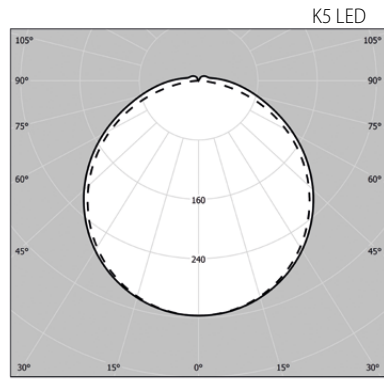
cd/klm – C0 - C180 --C90 - C270 **71%**



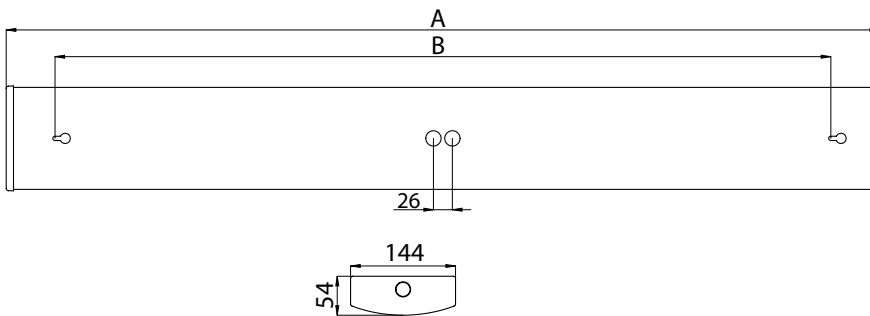
cd/klm – C0 - C180 --C90 - C270 **68%**



cd/klm – C0 - C180 --C90 - C270 **80%**



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



E number	Type	Product name	Base	Kg	Light distribution	A	B
Monix Slim LED LED							
43 603 28	AMSL60	AMSL60 IP44 LED 29W/840 AC O	LED	1,7	K5	598	520
43 603 32	AMSL90	AMSL90 IP44 LED 47W/840 AC O	LED	2,3	K5	898	765
43 603 22	AMSL120	AMSL120 IP44 LED 61W/840 AC O	LED	2,9	K5	1198	1065
43 603 26	AMSL150	AMSL150 IP44 LED 76W/840 AC O	LED	3,5	K5	1498	1365
Monix Slim LED with radar LED							
43 603 40	AMSLR90	AMSLR90 IP44 LED 48W/840 AC O RAD	LED	2,5	K5	898	765
43 603 34	AMSLR120	AMSLR120 IP44 LED 62W/840 AC O RAD	LED	3,1	K5	1198	1065
43 603 38	AMSLR150	AMSLR150 IP44 LED 77W/840 AC O RAD	LED	3,5	K5	1498	1365
Opal diffuser - 1-tube models							
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
Opal diffuser - 2-tube models							
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

E number	Type	Product name	Base	Kg	Light distribution	A	B
Clear diffuser - 1-tube models							
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
Clear diffuser - 2-tube models							
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
Monix Slim radar models - clear diffuser							
42 902 42	AMSR228K-N	AMSR228K-N T5 2X28W C RAD	G5	3,1	K2		
42 902 44	AMSRD228K-N	AMSRD228K-N T5 2X28W C D15%	G5	3,1	K2		Incl. Corridor Function
42 902 45	AMSR235K-N	AMSR235K-N T5 2X35W C RAD	G5	3,7	K2		
42 902 47	AMSRD235K-N	AMSRD235K-N T5 2X35W C D15%	G5	3,7	K2		Incl. Corridor Function
42 902 48	AMSR249K-N	AMSR249K-N T5 2X49W C RAD	G5	3,7	K2		
42 902 68	AMSRD249K-N	AMSRD249K-N T5 2X49W C D15%	G5	3,7	K2		Incl. Corridor Function
Monix Slim radar models - opal diffuser							
42 902 69	AMSR228O-N	AMSR228O-N T5 2X28W O RAD	G5	3,1	K1		
42 902 71	AMSRD228O-N	AMSRD228O-N T5 2X28W O D15%	G5	3,1	K1		Incl. Corridor Function
42 902 72	AMSR235O-N	AMSR235O-N T5 2X35W O RAD	G5	3,7	K1		
42 902 74	AMSRD235O-N	AMSRD235O-N T5 2X35W O D15%	G5	3,7	K1		Incl. Corridor Function
42 902 75	AMSR249O-N	AMSR249O-N T5 2X49W O RAD	G5	3,7	K1		
42 902 77	AMSRD249O-N	AMSRD249O-N T5 2X49W O D15%	G5	3,7	K1		Incl. Corridor Function
Mounting accessories							
43 641 85	AMJK2S	AMJK2S SPRING BRACKET PAIR					steel
43 600 38	AMJK2SV	AMJK2SV SPRING BRACKET PAIR WH					white



EUROPROOF 2

LED | T5 | T8

IP65      



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 cowsheds.



Europroof LED with acrylic diffuser



Europroof with radar

Structure

- Body-Glass fibre reinforced polyester
- Components are attached to removable gear tray, which function as a reflector
- In LED-models diffuser - shockproof sated 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)
- Thermo tube fits into the luminaire (32 mm)
- LED-models:
Connected load and luminaire luminous flux, see table
4000K, Ra > 80, power factor 0,96
Ambient temperature – 20 °C – + 30 °C
LED-module lifespan 50 000 h (L80), T_a = 25 °C

Control

- ERP2R...-models are sensor luminaires equipped with high-frequency (5,8 GHz) radar to detect motion (radar unit)
- Switch-Control (ES)
- 1-10V (ELD)
- DALI (ED)

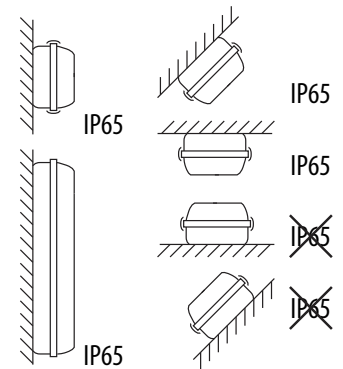
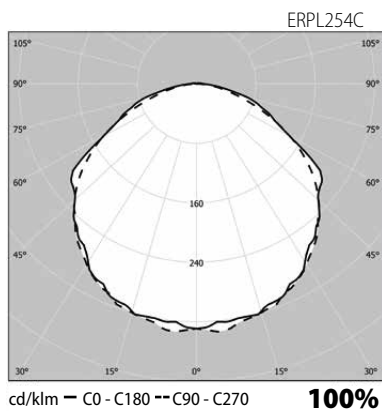
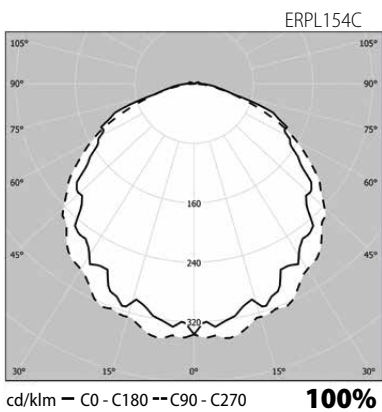
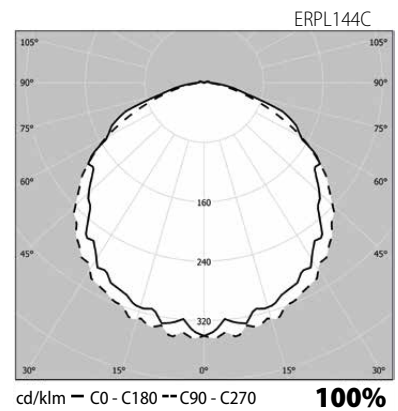
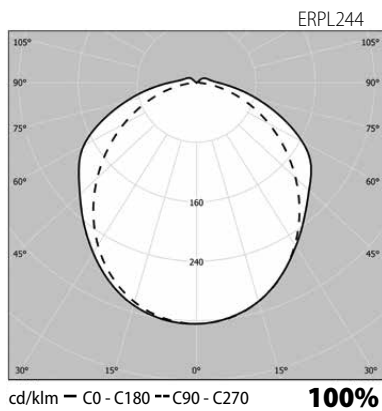
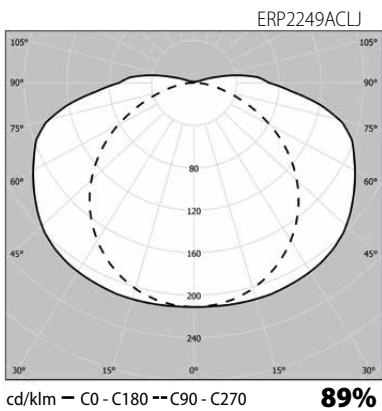
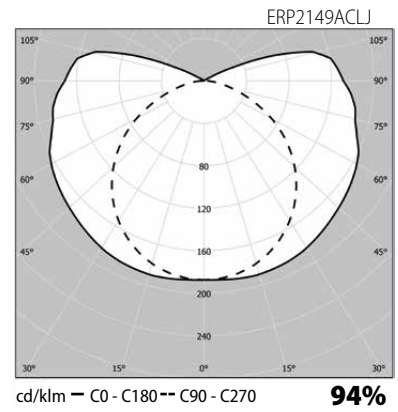
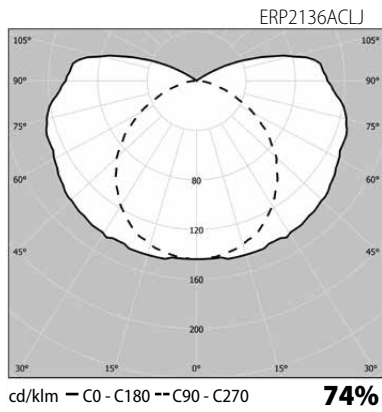
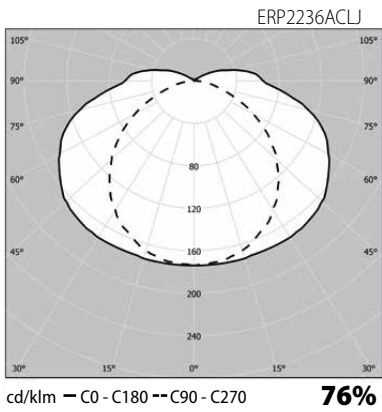
Mounting

- Models with polycarbonate diffuser can not be used in cowsheds
- To the ceiling or lighting suspension rail
- -o- 5x2,5 mm², through-wired
- Controlled models 1-phase and control for through-wiring
- Cable entries at the both ends of the luminaire
- 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) or 200W (fluorescent) including the master luminaire.
 - Slave luminaires from the Ensto basic luminaire range.

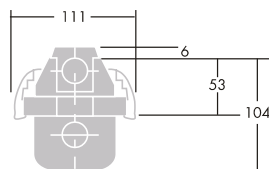
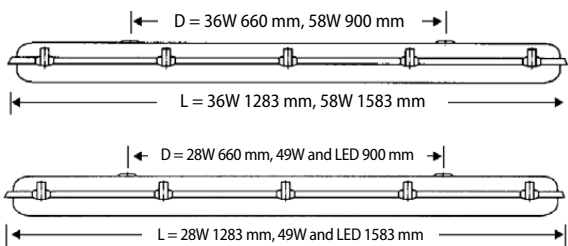
Made to order

- LED-models with DALI (ED) and Switch-Control (ES) control
- LED-models with wide body and with radar motion sensor
- 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

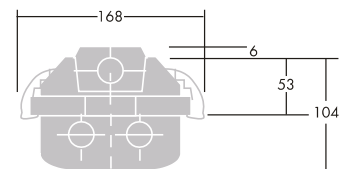




Installation picture



Europroof 1-tube and LED



Europroof 2-tube and LED

E number	Type	Product name	Base	Kg	Length	Width	Height	Luminous flux
Europroof 2 LED with satinated polycarbonate diffuser LED								
43 603 44	ERPL144	ERPL144 IP65 LED 24W/840 PC F	LED	2,1	1283	111	110	3320 lm
43 603 46	ERPL154	ERPL154 IP65 LED 31W/840 PC F	LED	2,5	1583	111	110	4250 lm
43 603 50	ERPL244	ERPL244 IP65 LED 46W/840 PC F	LED	2,9	1283	168	110	6350 lm
43 603 52	ERPL254	ERPL254 IP65 LED 58W/840 PC F	LED	3,4	1583	168	110	7950 lm

E number	Type	Product name	Base	Kg	Length	Width	Height	Luminous flux
Europroof 2 LED with acrylic diffuser LED								
43 604 57	ERPL144C	ERPL144C IP65 LED 24W/840 AC	LED	2,1	1283	111	110	3424 lm
43 604 58	ERPL154C	ERPL154C IP65 LED 31W/840 AC	LED	2,5	1583	111	110	4278 lm
43 604 60	ERPL244C	ERPL244C IP65 LED 46W/840 AC	LED	2,9	1283	168	110	6639 lm
43 604 61	ERPL254C	ERPL254C IP65 LED 58W/840 AC	LED	3,4	1583	168	110	8193 lm
Europroof 2 T8								
43 901 85	ERP2136ACLJ	EUROPROOF2 IP65 T8 1X36W AC	G13	2,4	1283	111	110	
43 901 88	ERP2158ACLJ	EUROPROOF2 IP65 T8 1X58W AC	G13	3,2	1583	111	110	
43 901 91	ERP2236ACLJ	EUROPROOF2 IP65 T8 2X36W AC	G13	3,7	1283	168	110	
43 901 94	ERP2258ACLJ	EUROPROOF2 IP65 T8 2X58W AC	G13	5,1	1583	168	110	
Europroof 2 T8 HF								
43 901 43	ERP2136HFACLJ	EUROPROOF2 IP65 T8 1X36HF AC	G13	2,1	1283	111	110	
43 901 46	ERP2158HFACLJ	EUROPROOF2 IP65 T8 1X58HF 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	
Europroof 2 T8 HFA 1-10V								
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	
Europroof 2 T5								
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	
Europroof 2 T5 with radar								
43 544 10	ERP2R228ACLJ	EUROPROOF IP65 T5 2X28W AC RAD	G5	3,1	1283	168	110	
43 600 79	ERP2R235ACLJ	EUROPROOF IP65 T5 2X35W AC RAD	G5	3,6	1583	168	110	
43 600 80	ERP2R249ACLJ	EUROPROOF IP65 T5 2X49W AC RAD	G5	3,6	1583	168	110	
43 600 82	ERP2R254ACLJ	EUROPROOF IP65 T5 2X54W AC RAD	G5	3,1	1283	168	110	
Diffusers and reflectors								
43 903 03	KUERP2136AC	AKRYYLKUPU 1X36W EUROPROOF 2		0,5	1283	111	50	
43 903 04	KUERP2158AC	AKRYYLKUPU 1X58W EUROPROOF 2		0,5	1583	111	50	
43 903 07	KUERP2236AC	AKRYYLKUPU 2X36W EUROPROOF 2		0,9	1283	168	50	
43 903 08	KUERP2258AC	AKRYYLKUPU 2X58W EUROPROOF 2		0,9	1583	168	50	
43 903 27	PEERP2236	HEIJASTIN 2X36W EUROPROOF 2		0,5	1150	130	20	
43 903 28	PEERP2258	HEIJASTIN 2X58W EUROPROOF 2		0,7	1440	130	20	



MONIX IP23

T5

IP23     



Surface mounting

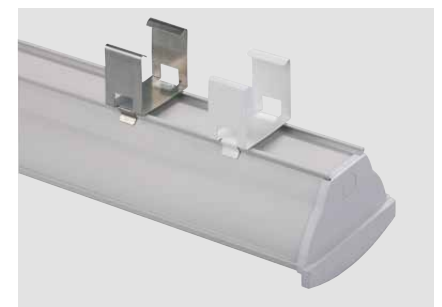
Monix IP23 is efficient and versatile luminaire serie for dry and humid premises. The multipurpose luminaire range fits excellent for general lighting supermarkets, warehouses and various industrial applications.



Monix lamella louvre



AV reflector



AMJK2 and AMJK2V

Structure

- Body - white painted aluminium profile
- End caps - uv- resistant ABS plastic
- Wide beam optics - gloss anodised aluminium = A (3-6 m)
- Medium beam optics - gloss anodised aluminium = AL (6-10 m)
- Wide and medium beam optics achieved with the same reflector by changing the lamp holder position
- Narrow beam optics for warehouses, gloss anodised aluminium = AV (over 10 m)
- -N in product code means individually packed

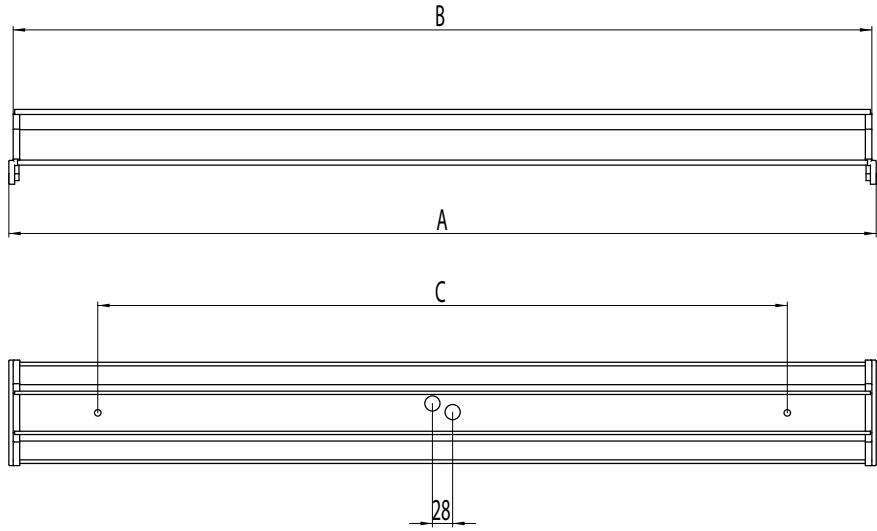
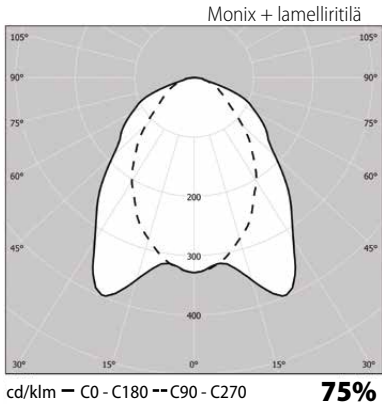
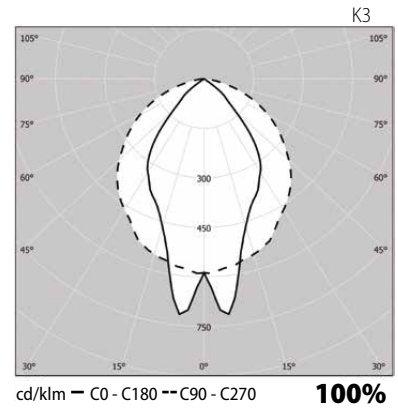
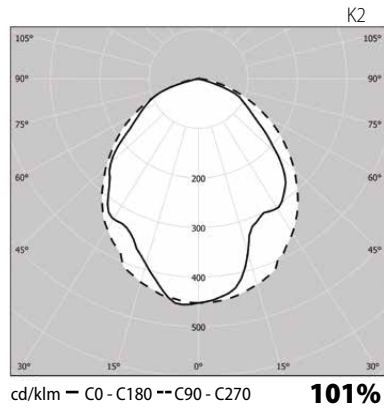
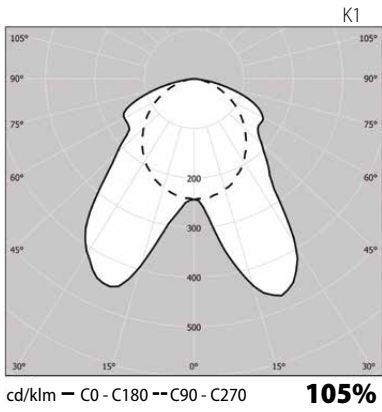
Mounting

- Surface mounting directly to the ceiling or with AMJK1 spring brackets
- Mounting to the lighting suspension rail 70 mm wide with (AMJK2/AMJK2V) and 110 mm wide with (AMJK3)
- Wire suspension with (AMJK1 + RVLX01 suspension wire kit)
- Recess mounting without additional parts, recess depth 70 mm
- Connection point in the middle of the luminaire
- Two 21 mm cable entry holes at the bottom of the luminaire
- Blind cable entries (21 mm) at the both ends
- 5x2,5 mm² for 3-phase through wiring

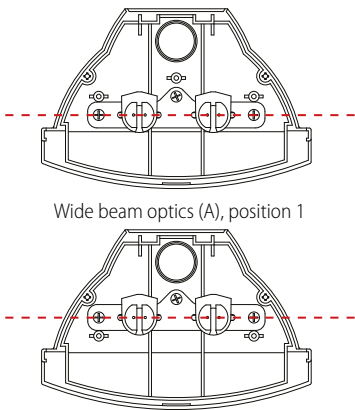
Made to order

- Dimmable models:
Switch-Control (ES)
1-10V (ELD)
DALI (ED)
- Adding diffuser raises IP rating to IP44, 80W versions available only in IP23
- Wide beam (A) and medium beam (AL) models with white lamella louvres
HSAM35-35/49/80W
HSAM28-28/54W
- AMPL end cover plate pair for covering tube holders
- With outside emergency light unit
- With fasteners for lighting track
- With fasteners for threaded rod
- AM214A T5 2x14W and AM114A T5 1x14W
- 1-tube models with medium (AL) and narrow beam (AV) light distribution
- With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails

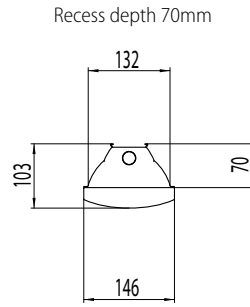




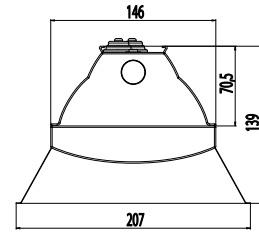
Monix tube holder positions



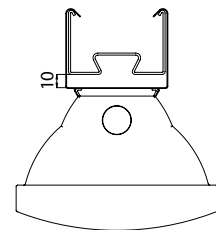
Medium (AL) and narrow (AV) beam optics, position 2



Monix A and AL



Monix AV



AMJK2 mounting



Spring fastener AMJK1



Spring fastener AMJK2



Pair of cover plates AMPL

E number	Type	Product name	Base	Colour	Kg	Light distribution	A	B	C
T5 Wide beam optics (A)									
43 641 00	AM128A	AM128A T5 1X28W	G5	white	1,8	K*	1200	1188	984
43 641 01	AM135A	AM135A T5 1X35W	G5	white	2,3	K*	1500	1488	1284
43 641 02	AM149A	AM149A T5 1X49W	G5	white	2,3	K*	1500	1488	1284
43 641 03	AM154A	AM154A T5 1X54W	G5	white	1,8	K*	1200	1188	984
43 641 04	AM180A	AM180A T5 1X80W	G5	white	2,3	K*	1500	1488	1284
43 641 83	AM228A	AM228A T5 2X28W	G5	white	1,8	K*	1200	1188	984
43 641 05	AM228A-N	AM228A-N T5 2X28W	G5	white	1,8	K*	1200	1188	984
43 641 06	AM235A	AM235A T5 2X35W	G5	white	2,3	K*	1500	1488	1284
43 641 84	AM249A	AM249A T5 2X49W	G5	white	2,3	K1	1500	1488	1284
43 641 07	AM249A-N	AM249A-N T5 2X49W	G5	white	2,3	K1	1500	1488	1284
43 641 08	AM254A	AM254A T5 2X54W	G5	white	1,8	K*	1200	1188	984
43 615 25	AM280A	AM280A T5 2X80W	G5	white	2,3	K*	1500	1488	1284
T5 Medium beam optics (AL)									
43 641 14	AM228AL	AM228AL T5 2X28W	G5	white	1,8	K*	1200	1188	984
43 641 15	AM235AL	AM235AL T5 2X35W	G5	white	2,3	K*	1500	1488	1284
43 641 16	AM249AL	AM249AL T5 2X49W	G5	white	2,3	K2	1500	1488	1284
43 641 17	AM254AL	AM254AL T5 2X54W	G5	white	1,8	K*	1200	1188	984
43 615 16	AM280AL	AM280AL T5 2X80W	G5	white	2,3	K*	1500	1488	1284
T5 Narrow beam optics (AV)									
43 641 23	AM228AV	AM228AV T5 2X28W	G5	white	1,9	K*	1200	1188	984
43 641 24	AM235AV	AM235AV T5 2X35W	G5	white	2,4	K*	1500	1488	1284
43 641 25	AM249AV	AM249AV T5 2X49W	G5	white	2,4	K3	1500	1488	1284
43 641 26	AM254AV	AM254AV T5 2X54W	G5	white	1,9	K*	1200	1188	984
43 641 27	AM280AV	AM280AV T5 2X80W	G5	white	2,4	K*	1500	1488	1284
Diffusers									
43 641 77	KUAM14K	KUAM14K 14W C		clear	diffuser, Monix 14W				
43 641 78	KUAM28K	KUAM28K 28/54W C		clear	diffuser, Monix 28/54W				
43 641 79	KUAM49K	KUAM49K 35/49/80W C		clear	diffuser, Monix 35/49W				
43 641 80	KUAM14O	KUAM14O 14W O		opal	diffuser, Monix 14W				
43 641 81	KUAM28O	KUAM28O 28/54W O		opal	diffuser, Monix 28/54W				
43 641 82	KUAM49O	KUAM49O 35/49/80W O		opal	diffuser, Monix 35/49W				
Mounting accessories									
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 70 mm wide (MEK70) steel					
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR WH		spring bracket pair for suspension rail mounting 70 mm wide (MEK70) white					
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR		spring bracket pair for suspension rail mounting 110 mm wide (MEK110) steel					
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR WH		spring bracket pair for suspension rail mounting 110 mm wide (MEK110) white					
43 641 73	AMPL	AMPL END COVER PLATE		end cover plate pair					
White lamella louvres									
43 600 46	HSAM1135	HSAM1135		lamella louvres Monix 35/49/80W					
43 600 32	HSAM1128	HSAM1128		lamella louvres Monix 28/54W					

K* Other light distribution curves upon request



MONIX IP44

T5

IP44     



Surface mounting, clear diffuser

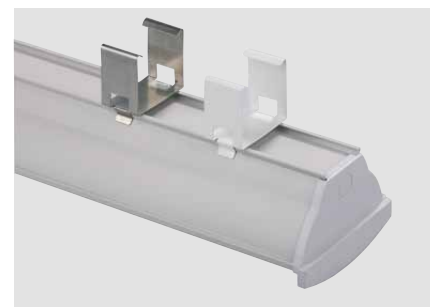
Monix IP44 is a luminaire for humid premises with plastic diffuser. The multi purpose luminaire range for general lighting of industrial premises and other wet premises.



Surface mounting, opal diffuser



Vibration fastener for diffuser and clear diffuser



Spring fastener AMJK2 and AMJK2V

Structure

- Body - white painted aluminium profile
- End caps - uv- resistant ABS plastic
- Diffuser - outside sleek, inside ribbed clear (K) or opal (O) uv resistant acrylic plastic
- Wide beam optics - gloss anodised aluminium = A (3-6 m)
- Medium beam optics - gloss anodised aluminium = AL (6-10 m)
- Wide and medium beam optics achieved with the same reflector by changing the lamp holder position

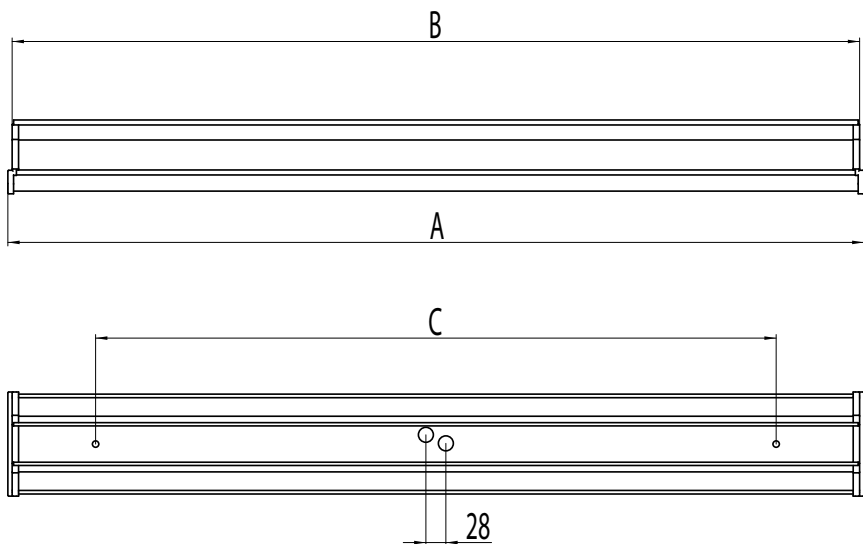
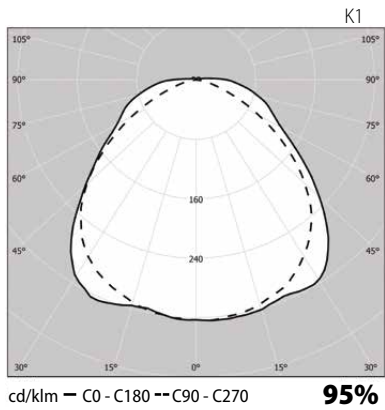
Mounting

- Surface mounting directly to the ceiling or with AMJK1 spring brackets
- Mounting to the lighting suspension rail 70 mm wide with (AMJK2/ AMJK2V) and 110mm wide with (AMJK3)
- Wire suspension with (AMJK1 + RVLX01 suspension wire kit)
- Recess mounting without additional parts, recess depth 70 mm
- Connection point in the middle of the luminaire
- Two 21 mm cable entry holes at the bottom of the luminaire
- Blind cable entries (21 mm) at the both ends
- 5x2,5 mm² for 3-phase through wiring

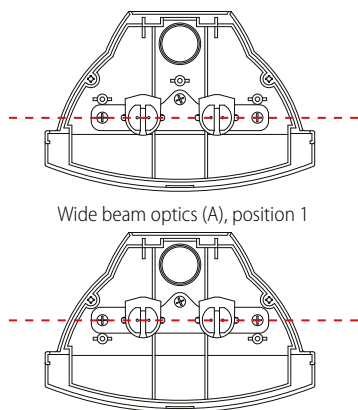
Made to order

- Dimmable models:
Switch-Control (ES)
1-10V (ELD)
DALI (ED)
- Vibration fastener pair for diffuser (1169-115)
- With outside emergency light unit
- With fasteners for lighting track
- With fasteners for threaded rod
- With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails



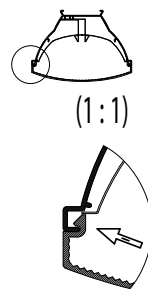
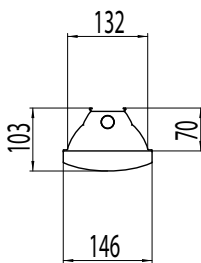


Monix tube holder positions

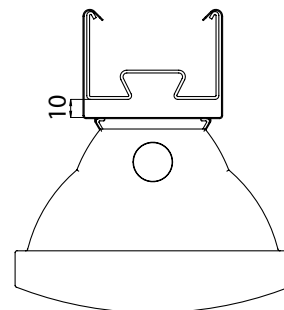


Medium (AL) beam optics, position 2

Recess depth 70mm



Reflector and diffuser mounting



AMJK2 mounting

E number	Type	Product name	Base	Colour	Kg	Light distribution	A	B	C
T5 With clear ribbed diffuser and wide beam optics (A)									
43 641 39	AM128AK	AM128AK IP44 T5 1X28W C	G5	white	2,3	K1	1200	1188	984
43 641 40	AM135AK	AM135AK IP44 T5 1X35W C	G5	white	2,9	K1	1500	1488	1284
43 641 41	AM149AK	AM149AK IP44 T5 1X49W C	G5	white	2,9	K1	1500	1488	1284
43 641 42	AM154AK	AM154AK IP44 T5 1X54W C	G5	white	2,3	K1	1200	1188	984
43 641 45	AM228AK	AM228AK IP44 T5 2X28W C	G5	white	2,3	K1	1200	1188	984
43 641 46	AM235AK	AM235AK IP44 T5 2X35W C	G5	white	2,9	K1	1500	1488	1284
43 641 47	AM249AK-N	AM249AK-N IP44 T5 2X49W C	G5	white	2,9	K1	1500	1488	1284
43 641 48	AM254AK	AM254AK IP44 T5 2X54W C	G5	white	2,3	K1	1200	1188	984
T5 With clear ribbed diffuser and medium beam optics (AL)									
43 641 50	AM114ALK	AM114ALK IP44 T5 1X14W C	G5	white	1,1	K*	600	588	384
43 641 51	AM128ALK	AM128ALK IP44 T5 1X28W C	G5	white	2,3	K*	1200	1188	984
43 641 52	AM135ALK	AM135ALK IP44 T5 1X35W C	G5	white	2,9	K*	1500	1488	1284
43 641 53	AM149ALK	AM149ALK IP44 T5 1X49W C	G5	white	2,9	K*	1500	1488	1284
43 641 54	AM154ALK	AM154ALK IP44 T5 1X54W C	G5	white	2,3	K*	1200	1188	984
43 641 56	AM214ALK	AM214ALK IP44 T5 2X14W C	G5	white	1,1	K*	600	588	384
43 641 57	AM228ALK	AM228ALK IP44 T5 2X28W C	G5	white	2,3	K*	1200	1188	984
43 641 58	AM235ALK	AM235ALK IP44 T5 2X35W C	G5	white	2,9	K*	1500	1488	1284
43 641 59	AM249ALK	AM249ALK IP44 T5 2X49W C	G5	white	2,9	K*	1500	1488	1284
43 641 60	AM254ALK	AM254ALK IP44 T5 2X54W C	G5	white	2,3	K*	1200	1188	984

E number	Type	Product name	Colour	Additional information
Diffusers				
43 641 77	KUAM14K	KUAM14K 14W C	clear	diffuser, Monix 14W
43 641 78	KUAM28K	KUAM28K 28/54W C	clear	diffuser, Monix 28/54W
43 641 79	KUAM49K	KUAM49K 35/49/80W C	clear	diffuser, Monix 35/49W
43 641 80	KUAM14O	KUAM14O 14W O	opal	diffuser, Monix 14W
43 641 81	KUAM28O	KUAM28O 28/54W O	opal	diffuser, Monix 28/54W
43 641 82	KUAM49O	KUAM49O 35/49/80W O	opal	diffuser, Monix 35/49W
Mounting accessories				
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 70 mm wide (MEK70) steel
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR WH		spring bracket pair for suspension rail mounting 70 mm wide (MEK70) white
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR		spring bracket pair for suspension rail mounting 110 mm wide (MEK110) steel
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR WH		spring bracket pair for suspension rail mounting 110 mm wide (MEK110) white
43 600 31	1169-115	FASTENER PAIR FOR DIFFUSER, STAINLESS STEEL		vibration fastener pair for Monix diffuser, stainless steel

K* Other light distribution curves upon request



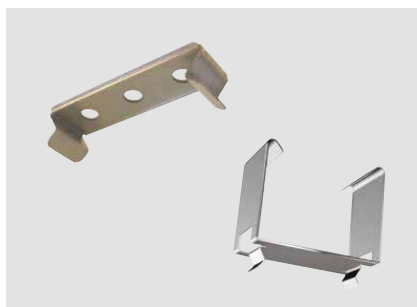
MONIX RAMP

T5

IP23     



Energy efficient T5 luminaire with self-supporting body specially designed for lighting in supermarkets and large open areas. Monix range offers wide selection of optics and installation accessories.



Spring brackets AMJK1 and AMJK2



End support AMRPK



Cover plate AMPL

Structure

- Body and end caps white powder coated aluminium profile
- End caps - uv-resistant ABS plastic
- Wide beam optics - gloss anodised aluminium = A (3-6 m)
- Medium beam optics - gloss anodised aluminium = AL (6-10 m)
- Wide and medium beam optics achieved with the same reflector by changing the lamp holder position
- Narrow beam optics for warehouses, gloss anodised aluminium = AV (over 10 m)
- 2x2x49W, length 2980 mm
- Other power options, for example:
 - AMR480..., 2x2x80W, length 2980 mm
 - AMR654..., 3x2x54W, length 3560 mm
 - AMR454..., 2x2x54W, length 2380 mm

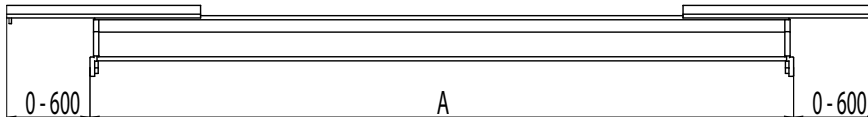
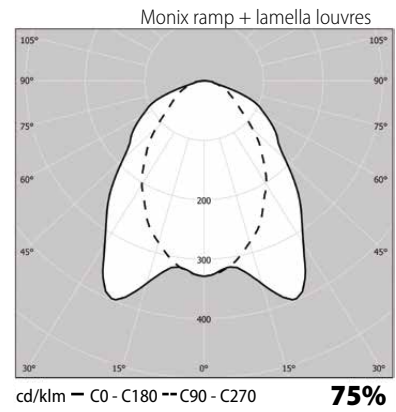
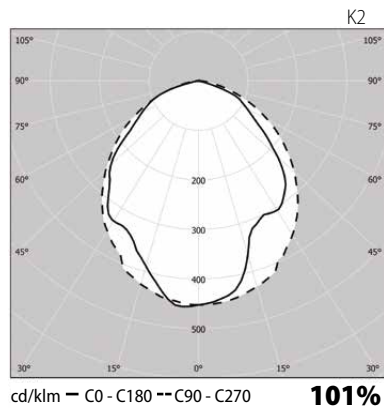
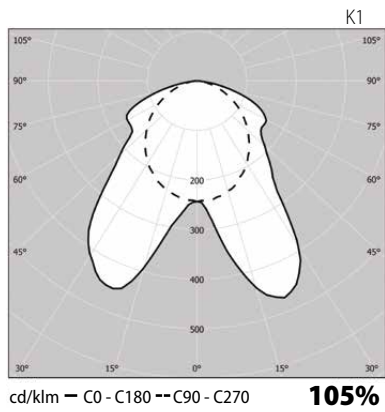
Mounting

- Mounting directly to the lighting suspension rail with steel spring brackets (AMJK1, AMJK2, AMJK2V and AMJK3) or between the lighting suspension rails with steplessly adjustable end supports (AMRPK, AMRPK500 and AMRPK330).

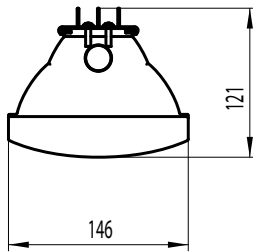
Made to order

- Dimmable models:
 - Switch-Control 1-10V (ELD)
 - DALI (ED)
- With connection lead
- Wide beam (A) and medium beam (AL) models with white lamella louvres
 - HSAM35-35/49/80W
 - HSAM28-28/54W
 - With clear inside ribbed diffusers
- With AMPL cover plate pair for covering tube holders (Wide and medium beam models)
- With outside emergency light unit
- With stand alone luminaires attached to long body, placed symmetrically in the middle of the luminaire body
- With spring brackets for XYRV, OBO and Elwia MP lighting suspension rails

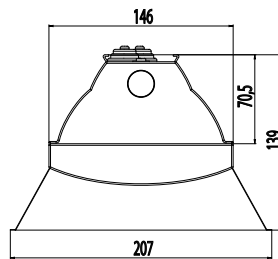




AMRPK end support adjustment / one end
AMRPK 0-600 mm
AMRPK500 0-315 mm
AMRPK330 0-205 mm

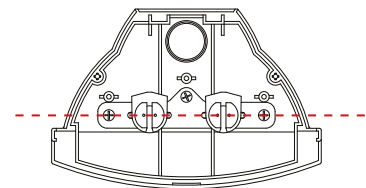


Monix Ramp A and AL

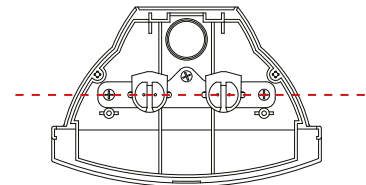


Monix Ramp AV

Monix tube holder positions



Wide beam optics (A), position 1



Medium (AL) and narrow (AV) beam optics, position 2

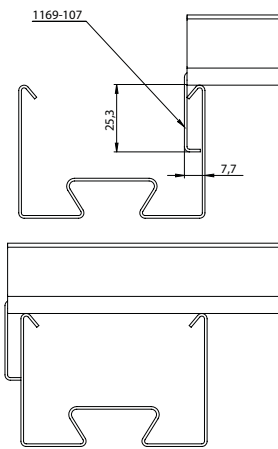
E number	Type	Product name	Base	Colour	Kg	Light distribution
Monix ramp						
43 641 74	AMR449A	AMR449A T5 2X2X49W RAMP	G5	white	4,6	K1
43 641 75	AMR449AL	AMR449AL T5 2X2X49W RAMP	G5	white	4,6	K2
Mounting accessories						
43 641 70	AMJK1	AMJK1 SPRING BRACKET PAIR		spring bracket pair		clear
43 641 72	AMJK2	AMJK2 SPRING BRACKET PAIR		Spring bracket pair for suspension rail mounting 70 mm wide (MEK70) steel		clear
42 653 82	AMJK2V	AMJK2V SPRING BRACKET PAIR WH		spring bracket pair for suspension rail mounting 70 mm wide (MEK70) white		white
42 653 05	AMJK3	AMJK3 SPRING BRACKET PAIR		spring bracket pair for suspension rail mounting 110 mm wide (MEK110) steel		clear
43 600 83	AMJK3V	AMJK3V SPRING BRACKET PAIR WH		spring bracket pair for suspension rail mounting 110 mm wide (MEK110) white		white
43 641 76	AMRPK	AMRPK RAMP MOUNT.PAIR 1M		pair of end supports 2980-4180 mm*	1,2	white
42 653 80	AMRPK500	AMRPK500 RAMP MOUNT.PAIR 0,5M		pair of end supports 2980-3610 mm*	0,6	white
42 653 79	AMRPK330	AMRPK330 RAMP MOUNT.PAIR 0,3M		pair of end supports 2980-3390 mm*	0,4	white

* = Total ramp lenght incl. end supports

TINO RAMP AND MONIX RAMP END SUPPORTS



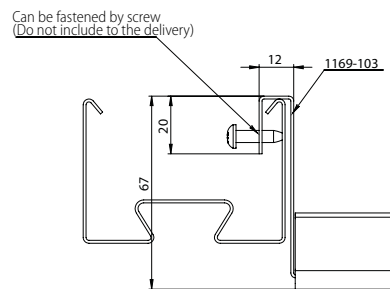
End support with standard bracket



AMRPK end support with standard bracket



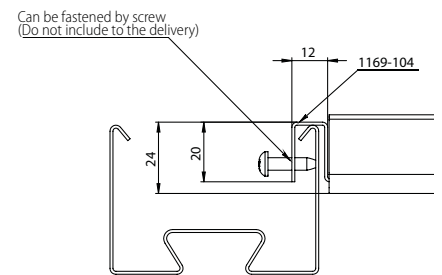
End support + bracket 2



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



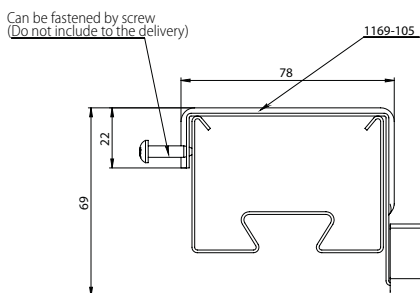
End support + bracket 3



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



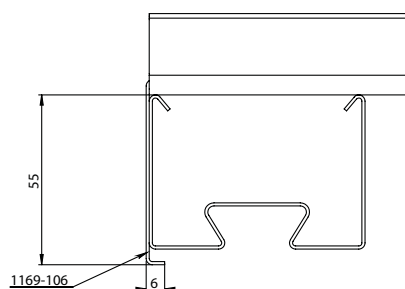
End support + bracket 4



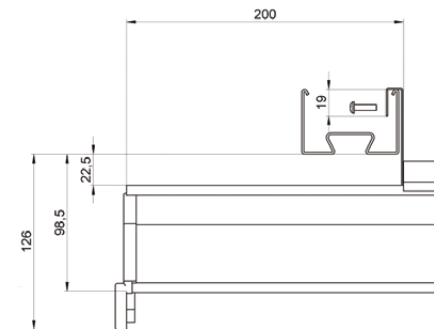
AMRPK end support and lower bracket which can be fastened by screw or by pressing together must be ordered separately. With the lower bracket the ramp luminaires installed between the lighting suspension rails can be positioned on the same level as luminaires installed to the lighting suspension rail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



End support + bracket 5



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



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.



Pg 5	Pg 6	Pg 7
Pg 12	Pg 13	Pg 14
Pg 19	Pg 20	
burde		

Naiset



Outdoor

04

TORI

LED | HSE/HIE

IP44   



TO50056AHA

Traditional post-top "China-hat" 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.



TO50056HH



TO500LEDAHA

Structure

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

Mounting

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

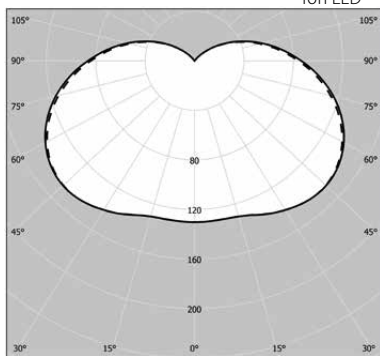
Made to order

- 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 mm²
- With light source
- Special colours
- Columns (3,5 m) to be ordered separately
- Helvar NightDim



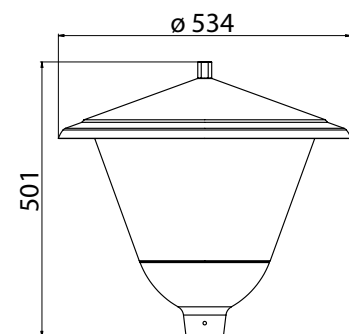
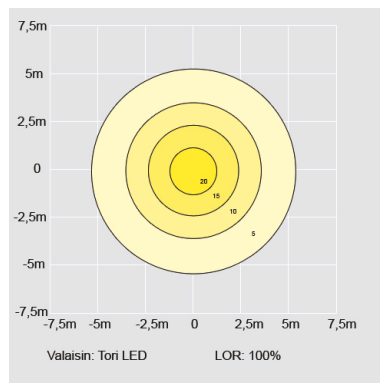


Tori LED



cd/klm — C0 - C180 — C90 - C270

100%



E number	Type	Product name	Base	Colour	Kg
Tori LED LED					
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
Tori					
45 600 93	TO50056AHA	TO50056AHA HSE/HIE-CE 70W E27	E27	anthrasite grey	7,5
45 030 49	TO50056HH	TO50056HH HSE/HIE-CE 70WE27 GR	E27	pearl grey	7,5
Columns					
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

CAMILLO

LED | HS/HI

IP44    IK10



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.



AC60056HA



AC60056V

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
- 70/50W HS/HI-CE 70/50W (connected 70W), delivered without light source
- Camillo LED:
Connected load 35W, luminaire luminous flux 3060 lm
4000K, Ra > 70, power factor 0,98
Ambient temperature - 25 °C - + 30 °C
LED-module lifespan 50 000 h (L70), T_a = 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 mm² included in the delivery

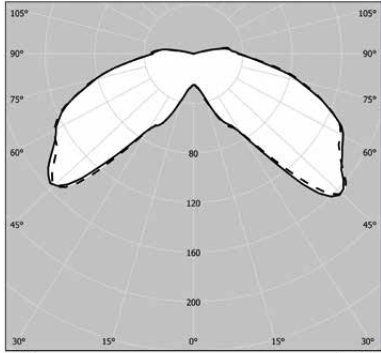
Made to order

- LED-models with DALI
- Special colours
- Columns from Tehomet selection:

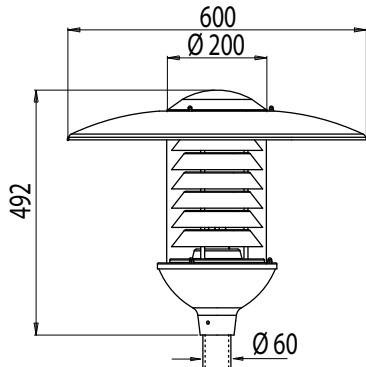
Stepped columns	Conical columns
OH3/108 + colour	KH3/108 + colour
OH4/108 + colour	KH4/108 + colour
OH5/108 + colour	KH5/121 + colour
OH6/108 + colour	KH6/136 + colour
- Colours: RAL 9006 (pearl grey) and RAL 9011 (black)
- O = stepped columns, K = conical columns
- H3 = height above the ground (f.ex. 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
- HS/HI models with connection lead 4,5 m VSKN 3x1,5 mm²
- HS/HI models with light source
- Helvar NightDim



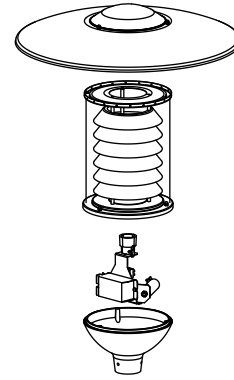
Camillo HS/HI



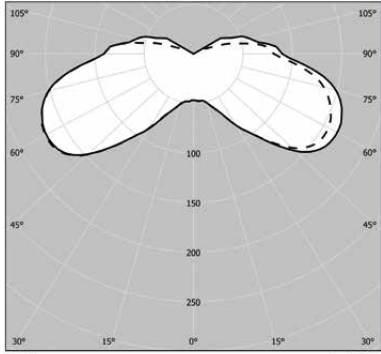
cd/klm — C0 - C180 -- C90 - C270 **66%**



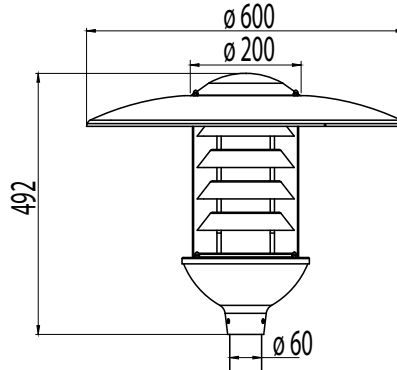
Camillo HS/HI



Camillo LED



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



Camillo LED

E Number	Type	Product name	Base	Colour	Kg
Camillo LED LED					
45 030 77	AC600LEDHH	AC600LEDHH 35W/840 F AC HH	LED	grey/white anti-glare rings	5,5
45 030 79	AC600LEDM	AC600LEDM 35W/840 F AC MU	LED	black/white anti-glare rings	5,5
Camillo LED with Bi-power power reduction LED					
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 F AC MU	LED	black/white anti-glare rings	5,5
HS/HI 70/50W (connected 70W)					
45 601 26	AC60056HA	AC60056HA HS/HI-CE 70W E27 GR	E27	grey/white anti-glare rings	5,5
45 601 27	AC60056M	AC60056M HS/HI-CE 70W E27 BK	E27	black/white anti-glare rings	5,5
45 601 28	AC60056V	AC60056V HS/HI-CE 70W E27 WH	E27	white/white anti-glare rings	5,5
Columns ø 60 mm			Height m		
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

OPERA

LED

IP44    IK09



Pearl grey

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.



Graphite grey

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,
 - 4000K, Ra > 70, power factor 0,98
 - Ambient temperature – 25°C - + 30 °C
 - Lifespan of LED-module 50 000 h (L70), T_a = 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 3x1,5mm² included
- Recommended mounting height 3-5 m

Made to order

- DALI-controlled models
- Special colours
- Columns from Tehomet selection:

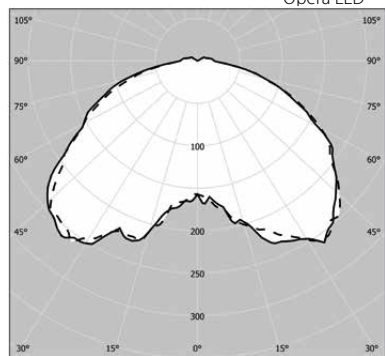
Stepped columns	Conical columns
OH3/108 + colour	KH3/108 + colour
OH4/108 + colour	KH4/108 + colour
OH5/108 + colour	KH5/121 + colour
OH6/108 + colour	KH6/136 + colour

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



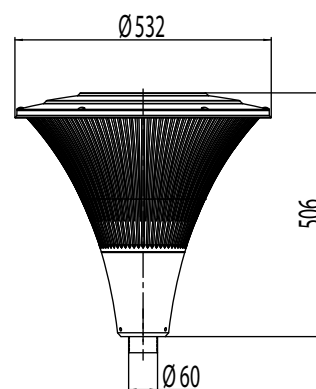
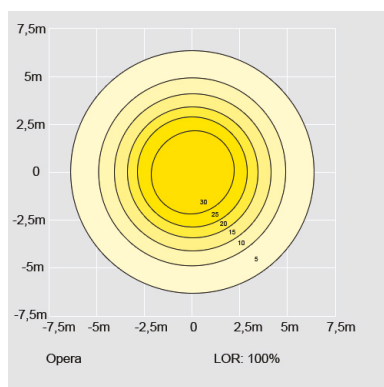


Opera LED



cd/klm — C0 - C180 — C90 - C270

100%



E Number	Type	Product name	Base	Colour	Kg
Opera LED LED					
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
Opera LED with Bi-power power reduction LED					
45 030 68	OP530LED20BPGH	OP530LED20BPGH 20W/840 BP GH	LED	graphite grey	8,0
45 030 70	OP530LED20BPHH	OP530LED20BPHH 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	OP530LEDBPHH	OP530LEDBPHH LED 38W/840 BP HH	LED	pearl grey	8,0

OPERA DECO

LED

IP44    IK09



Graphite grey

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.



Pearl grey

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,
 - 4000K, Ra > 70, power factor 0,98
 - Ambient temperature – 25°C - + 30 °C
 - Lifespan of LED-module 50 000 h (L70), T_a = 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 3x1,5mm² included
- Recommended mounting height 3-5 m

Made to order

- DALI-controlled models
- Special colours
- Columns from Tehomet selection:

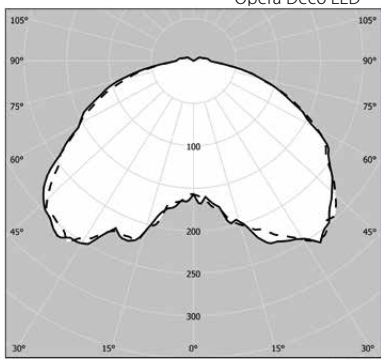
Stepped columns	Conical columns
OH3/108 + colour	KH3/108 + colour
OH4/108 + colour	KH4/108 + colour
OH5/108 + colour	KH5/121 + colour
OH6/108 + colour	KH6/136 + colour

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



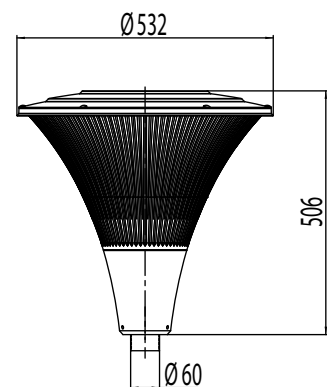
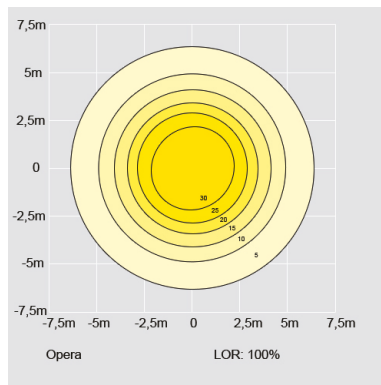


Opera Deco LED



cd/klm - C0 - C180 -- C90 - C270

100%



E Number	Type	Product name	Base	Colour	Kg
Opera Deco LED LED					
45 030 83	OPD530LED20GH	OPD530LED20GH LED 20W/840 AC GH	LED	graphite grey	8,0
45 030 87	OPD530LED20HH	OPD530LED20HH LED 20W/840 AC HH	LED	pearl grey	8,0
45 030 96	OPD530LEDGH	OPD530LEDGH LED 38W/840 AC GH	LED	graphite grey	8,0
45 030 97	OPD530LEDHH	OPD530LEDHH LED 38W/840 AC HH	LED	pearl grey	8,0
Opera Deco LED with Bi-power power reduction LED					
45 030 80	OPD530LED20BPGH	OPD530LED20BPGH 20W/840 BP GH	LED	graphite grey	8,0
45 030 82	OPD530LED20BPHH	OPD530LED20BPHH 20W/840 BP HH	LED	pearl grey	8,0
45 030 88	OPD530LEDBPGH	OPD530LEDBPGH LED 38W/840 BP GH	LED	graphite grey	8,0
45 030 89	OPD530LEDBPHH	OPD530LEDBPHH LED 38W/840 BP HH	LED	pearl grey	8,0

AVR8

LED | E27 | MT

IP44    IK10



AVR8.114LA

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



AVR8.114L



AVR8.114LAL



Structure

- Diffuser polycarbonat
- Body casted aluminium
- LED-model:
Connected load 14W, luminaire luminous flux 700 lm
3000K and 4000K, Ra>80, power factor 0,92
Ambient temperature - 40 °C - + 25 °C
LED-module lifespan 50 000 h (L70), T_a = 25 °C

Mounting

- To the surface
- Snap-in terminal block 5x2,5 mm² with through wiring
- To the pole with AVL81 and AVL822 bracket
- To the outer corner with AVL820 bracket





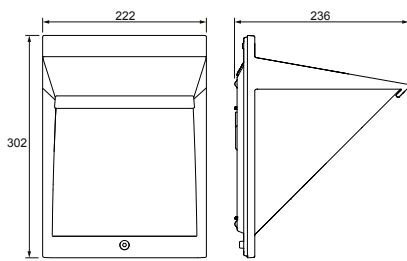
AVL8



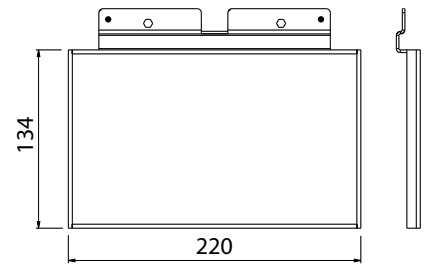
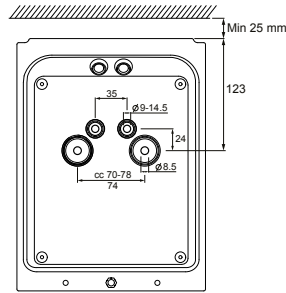
AVL820



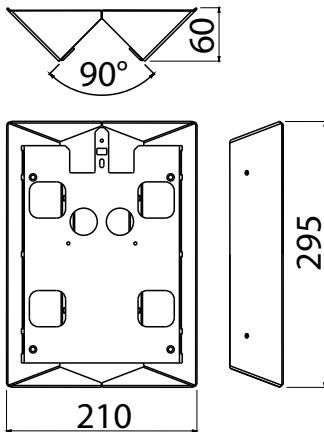
AVL822



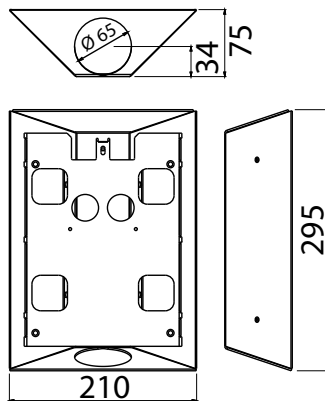
AVR8 luminaire



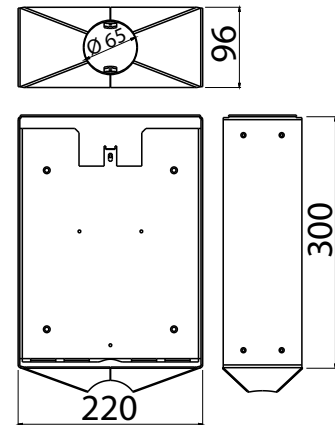
AVR8 number sign



AVL820 corner bracket



AVL821 pole bracket



AVL822 pole bracket

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR8 LED luminaire with electronic control gear LED						
45 170 07	AVR8.114L	AVR8 IP44 LED 14W/840 E PC O VA	LED	2,4	700 lm	white
45 170 08	AVR8.114LA	AVR8 IP44 LED 14W/840 E PC O A	LED	2,4	700 lm	graphite
45 170 10	AVR8.114LAL	AVR8 IP44 LED 14W/840 E PC O AL	LED	2,4	700 lm	aluminium
45 170 32	AVR8.114L/3K	AVR8 IP44 LED 14W/830 E PC O VA	LED	2,4	700 lm	white
45 170 34	AVR8.114LA/3K	AVR8 IP44 LED 14W/830 E PC O A	LED	2,4	700 lm	graphite
45 170 35	AVR8.114LAL/3K	AVR8 IP44 LED 14W/830 E PC O AL	LED	2,4	700 lm	aluminium
AVR8 luminaire with E27 base, light source included						
45 170 01	AVR8	AVR8 IP44 TC-TSE 23W/E27 PC O VA	E27	2,0		white
45 170 02	AVR8.A	AVR8 IP44 TC-TSE 23W/E27 PC O A	E27	2,0		graphite
45 170 04	AVR8.AL	AVR8 IP44 TC-TSE 23W/E27 PC O AL	E27	2,0		aluminium

E number	Type	Product name	Base	Kg	Luminous flux	Additional information
AVR8 luminaire G12 metal halide						
45 170 13	AVR8.035E	AVR8 IP44 MT 35W/G12 PC O VA	G12	2,2		white
45 170 14	AVR8.035EA	AVR8 IP44 MT 35W/G12 PC O A	G12	2,2		graphite
45 170 16	AVR8.035EAL	AVR8 IP44 MT 35W/G12 PC O AL	G12	2,2		aluminium
AVR8 accessories and spare parts						
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



FORTE

LED

IP55  CE   IK10



FO264LM

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



FO360LV



FO264GH



FO360M

Structure

- Body - aluminium
- Diffuser - UV-protected polycarbonate
- Colour: black (M), graphite grey (GH) and white (V)

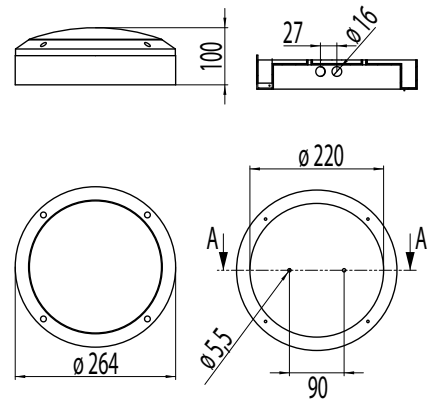
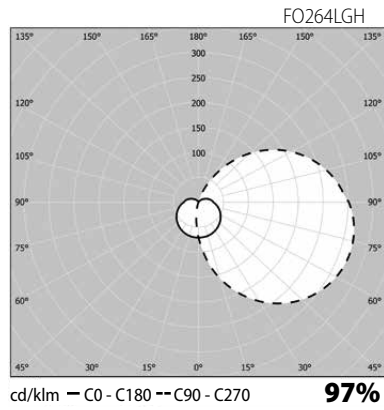
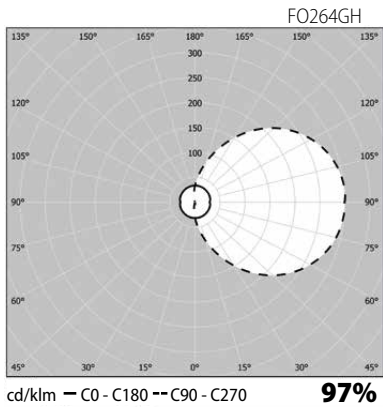
Selection

- LED-models:
Connected power 10W or 19W, see the luminaire luminous flux from the table
Colour temperature 3000K or 4000K
Ra > 80, power factor 0,9
Ambient temperature - 20 °C - + 25 °C
LED-module lifespan 50 000 h (L70), T_a = 25 °C

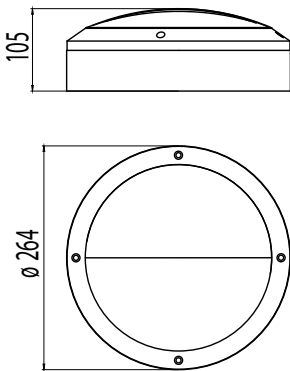
Mounting

- To the wall and to the ceiling, -o- 3x2,5 mm²

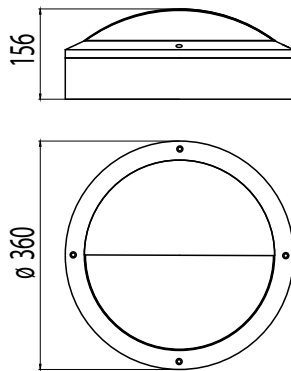




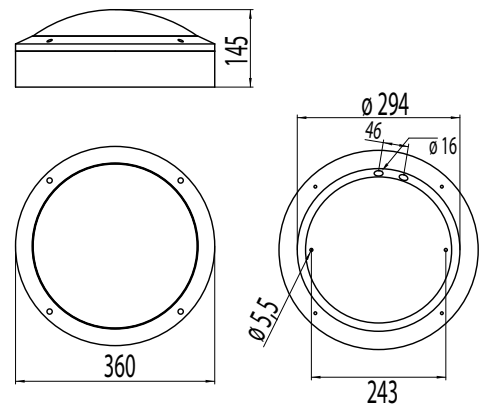
Forte S



Forte S with eyelid



Forte L with eyelid



Forte L

E number	Type	Product name	Output	Base	Kg	Colour	Luminous flux
Forte LED S LED							
45 031 19	FO264GH	FO264GH 10W/840 LED IP55 PC O	10W	LED	1,8	graphite grey	606 lm
45 031 21	FO264GH/3K	FO264GH/3K 10W/830 LED IP55 PC	10W	LED	1,8	graphite grey	562 lm
45 031 29	FO264M	FO264M 10W/840 LED IP55 PC O	10W	LED	1,8	black	606 lm
45 031 30	FO264M/3K	FO264M/3K 10W/830 LED IP55 PC O	10W	LED	1,8	black	562 lm
45 031 31	FO264V	FO264V 10W/840 LED IP55 PC O	10W	LED	1,8	white	606 lm
45 031 32	FO264V/3K	FO264V/3K 10W/830 LED IP55 PC O	10W	LED	1,8	white	562 lm
Forte S with eyelid LED							
45 031 23	FO264LGH	FO264LGH 10W/840 LED IP55 PC O	10W	LED	2,0	graphite grey	305 lm
45 031 24	FO264LGH/3K	FO264LGH/3K 10W/830 LED IP55 PC	10W	LED	2,0	graphite grey	284 lm
45 031 25	FO264LM	FO264LM 10W/840 LED IP55 PC O	10W	LED	2,0	black	305 lm
45 031 26	FO264LM/3K	FO264LM/3K 10W/830 LED IP55 PC	10W	LED	2,0	black	284 lm
45 031 27	FO264LV	FO264LV 10W/840 LED IP55 PC O	10W	LED	2,0	white	305 lm
45 031 28	FO264LV/3K	FO264LV/3K 10W/830 LED IP55 PC	10W	LED	2,0	white	284 lm
Forte LED L LED							
45 031 33	FO360GH	FO360GH 19W/840 LED IP55 PC O	19W	LED	3,7	graphite grey	1078 lm
45 031 34	FO360GH/3K	FO360GH/3K 19W/830 LED IP55 PC	19W	LED	3,7	graphite grey	1033 lm
45 031 41	FO360M	FO360M 19W/840 LED IP55 PC O	19W	LED	3,7	black	1078 lm
45 031 42	FO360M/3K	FO360M/3K 19W/830 LED IP55 PC	19W	LED	3,7	black	1033 lm
45 031 43	FO360V	FO360V 19W/840 LED IP55 PC O	19W	LED	3,7	white	1078 lm
45 031 44	FO360V/3K	FO360V/3K 19W/830 LED IP55 PC	19W	LED	3,7	white	1033 lm
Forte L with eyelid LED							
45 031 35	FO360LGH	FO360LGH 19W/840 LED IP55 PC O	19W	LED	4,4	graphite grey	557 lm
45 031 36	FO360LGH/3K	FO360LGH/3K 19W/830 IP55 PC O	19W	LED	4,4	graphite grey	518 lm
45 031 37	FO360LM	FO360LM 19W/840 LED IP55 PC O	19W	LED	4,4	black	557 lm
45 031 38	FO360LM/3K	FO360LM/3K 19W/830 LED IP55 PC	19W	LED	4,4	black	518 lm
45 031 39	FO360LV	FO360LV 19W/840 LED IP55 PC O	19W	LED	4,4	white	557 lm
45 031 40	FO360LV/3K	FO360LV/3K 19W/830 LED IP55 PC	19W	LED	4,4	white	518 lm

AVR51/52

LED

IP65   



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. This LED-luminaire can be recommended for house number lighting, room number lighting in hotels and as signal lights in shopping centres and public buildings.



AVR51.11LV



AVR52.11L



AVR52.11LV

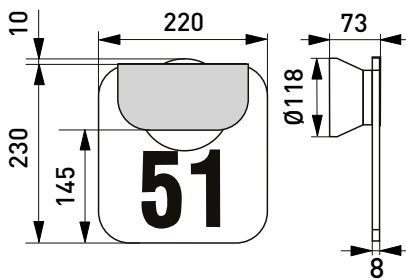
Structure

- Body casted aluminium
- Number blade acrylic
- LED-model:
Connected load 2W,
4000K
Ra>80
Ambient temperature - 30 °C - + 30 °C
LED-module lifespan 50 000 h (L70), T₃ = 30 °C

Mounting

- To the surface
- -o Snap-in terminal block 3x2,5 mm²





E number	Type	Product name	Base	Model	Colour	Kg
LED-signal luminaires LED						
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

ROV

B22D

IP54   



Ensto ROV light chains offer an excellent option for lighting different construction sites on temporarily bases. ROV light chains can also be used for lighting parties and festivals during the year, for example in Christmas time in different applications.



ROV-LSN



ROV-85



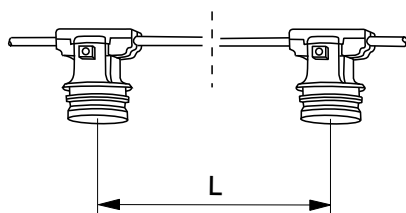
Structure

- ROV-light chains 2x1,5 mm² black rubber cable with black lamp holders B22d (max 75W)

Mounting

- With the help of wide range of ROV-accessories it is possible to produce lighting solutions suitable for different needs
- ROV-light chains are sold in full 100 m length (100 meters cardboard or 500 meters coil). Cutting to the needed length is done at your local electrical wholesaler.





Lamp holder distance

E number	Type	Product name	Base
ROV			
42 178 61	ROV0,33-1	100 m, lampholderdistance 0,33 m	B22
42 178 63	ROV0,50-1	100 m, lampholderdistance 0,50 m	B22
42 178 67	ROV0,75-1	100 m, lampholderdistance 0,75 m	B22
42 178 69	ROV1,0-1	100m, lampholderdistance 1 m	B22
42 178 71	ROV2,0-1	100 m, lampholderdistance 2 m	B22
42 178 73	ROV3,0-1	100 m, lampholderdistance 3 m	B22
42 178 77	ROV5,0-1	100 m, lampholderdistance 5 m	B22
42 178 75	ROV30/3,0	ROV30/3,0-light chain	B22
42 178 76	ROV30/5,0	ROV30/5,0-light chain	B22
42 178 79	ROV60/3,0	ROV60/3,0-light chain	B22
42 178 80	ROV60/5,0	ROV60/5,0-light chain	B22
Accessories			
	ROV-85	Steel protection grill, white	
	ROV-AH	End piece, black	
	ROV-DBI	Protection cap, red	
	ROV-LSN	White plastic reflector	
	ROV-P	Joint kit without lampholder, black	
	ROV-RS	Joint kit with lampholder, black	
	ROV-SET	Rubber plug without earthing + end piece, black	
	ROV-SP	Rubber plug without earthing	

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