RMN NEWSLETTER

LIGHTING SPECIAL

AUTUMN 2022

This RMN Newsletter is a special version with only news items about lighting, because of the new EU-directives and many questions about LED lighting. Due to the high energy prices we pay attention again to our high-quality NTE-SOLAR Lighting Systems. We are also pleased to announce that we became the Distributor for Vyrtych LED Lighting which makes our scope of LED lighting even more complete. Also in this RMN Newsletter product news from other partner manufacturers and explanations about LED and where to pay attention to when investing in new lighting fixtures.

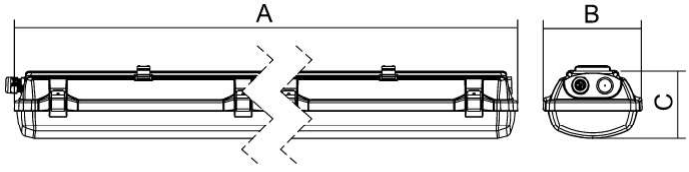
VYRTYCH

LED LIGHTING SOLUTIONS FOR INDUSTRIAL AND EX ATEX APPLICATIONS

The Vyrtych Company is founded in 1924 as a manufacturer in electronics. Since 1990 they are fully present on the market with product development, production and sales of lighting fixtures. The company is located in the Czech Republic and offer a very high-quality development department where the latest techniques are used to develop lighting fixtures that meets the highest requirements. In house there are several divisions.The Plastic dvision produce components using injection technology. A metal production department is equipped with ultra modern machines for the production of all kind of metal parts for the light fixtures and a fylly automatic powder coating line takes care for top quality surface treatment of metal parts. The last step that takes place is the assembly and testing of the lighting fixtures.
Especially with the plastic (PC) LED fixtures from Vyrtych, both Industrial and Ex (ATEX) has RMN an extra range to offer to the customers. Even cleanroom LED fixtures and HACCP fixtures are available with this manufacturer.

The **VYRTYCH EXTRA-Ex-LED** is a dustproof IP66 ATEX Zone 1, 21 LED luminaire with resistance against splashing water and is determinated for lighting areas with danger of explosion. The luminaire is certified by FTZÚ Ostrava-Radvanice (certificate FTZÚ 16 ATEX 0167X). Equipped with an electronic ballast 110-254Vac, 50/60Hz, 220-250Vdc 0Hz. The standard light color is 4000K (CRI+80), but also available is 3000K and 6000K. Body of polycarbonate (PC) color RAL 7035 (grey) and an opal polycarbonate cover for pleasant light without glare. Various suspension options and equipped with stainless steel cover clamps. The installation is easy due to the screwless 3-pole terminals with a wire capacity of max. 4.0mm².
The calculated lifetime of the LED modules are L80B50 ta50 and 60.000 hours.
The Ex parameters are: Ex II 2G Ex eb mb op is IIC T4 Gb and Ex II 2D Ex tb op is IIIC T67°C Db.
Also available with emergency lighting module for 1.5 or 3 hours.

Available in length 670 and 128mm, height only 105mm and a width of 155mm.



Contact our product specialists for all features of this polycarbonate LED luminaire and all other Vyrtych LED lighting solutions.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

NEW THE DOUBLEPOWER SEA EX D E 1-21

DE SEA EX ZONE 1-21 DEVELOPMENT OF DOUBLEPOWER!! AND RMN

We are proud to present the latest doublepower!! product development, the SEA-Ex d-e for ATEX Zone 1, 21. With this luminaire the product range of the SEA luminaires is complete. This successful LED luminaire was already available in the Industrial version and a Zone 2, 22 version and now also for Zone 1, 21. The application is mainly offshore, power plants, petrochemicals, chemicals, tankers etc.
The Ex parameters are: II 2G Ex db eb IIC T6 Gb and II 2D Ex tb IIIC T85 °C Db.
The real calculated lifespan of the luminaire is >80.000 hours L80B10) in Ta +25°C and comes with 6 years full manufacturer warranty. The luminaire is available with a polycarbonate or borosilicate glass tubular 90mm body, with high quality special aluminium end caps. There is a choice in two different lengths resp. 850mm and 1408mm. All weather exposed materials are seawater resistant as the entire SEA range. This luminaire is also IP68 protected and IK08-09 for glass and IK10 for the polycarbonate execution. For ambient temperatures of -40°C to +50°C. **Extreme efficient up to 177 lumen/watt.**
Rated voltage 220-240Vac (198-264Vac) (176-280Vdc) 0/50/60 Hz. Power factor λ 0.95 (at 230V 50Hz full power).
Can be used at heights of 2-10 meter. Standard light color 4000K (optional 2700K and 6000K). Due to No stroboscopic effect is the luminaire safe to use in areas where machines are running. Diffused pleasant light without glare. The entire luminaire is developed and produced in the Czech Republic Europe using EU components.
Optional also available with emergency light module with internal 1 hour or 3 hours battery.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

NEW EU DIRECTIVES (LED) LIGHTING

With the arrival of Autumn and shorter daylight hours it is obvious that we need more electric lighting. There are some important changes coming up which we must attend before we replace standard light sources for new LED fixtures. The fact is that the European Regulations for light sources are changed meaning that again certain types of light sources are prohibited due to environment RoHS (hazardous substance in light source), energy consumption associated to CO^2 emission and labeling.

* What are light sources.
* What is being phased out soon (regulation 09/2021 and supplement to annex III of the EU-directives 2022).
* What are the different dates when these light sources are banned.
* Where are exemptions applied on for the time being.
* Where exeptions apply.

What are light sources:
A light source is an electrically controlled product that emits visible white light. This can be a lamp, but it can also be a module or a luminaire with fully integrated components.

What is being phased out soon:
Due to the Phase-out EU / SLR regulation, there is a **ban** on the following light sources.

* Halogen lamps R7S >2.700lm from September 01, 2021
* Halogen lamps G9, G4, GY6.35 from September 01, 2023
* Compact Fluo (energy saver)lamps with integrated ballast from September 01, 2012
* Compact Fluo (energy saver)lamps CFLNI without integrated ballast with pin-connection from February 25, 2023
* Fluorescent lamps (TL) T2, T12 from September 01, 2021
* TL 2ft, 4ft, 5ft , T5 and T8 from Augustus 25, 2023

What are the different dates:
As writen above, the prohibitions apply to various dates depending on the type of lamp. Early 2022 changes have been made again to the EU Directive in Annex III, whereby even more light sources are phased out in a shorter period of time. This is mainly prompted by RoHS, which reduces hazardous and environmentally harmful substance in the light sources. It is clear that it is going very quickly. Be prepared.

What exemptions still apply:
In de RoHS Annex III of the EU-Directive there is a provisional exemption for the following light sources:

* HPD-lamps
* Lamps for special purposes (UV-C).

This is for a 3-5 year period of time.

Where do exceptions apply to:
Emergency lighting
Battery powered light sources
Original artworks
Lighting for transportation and military equipment and vehicles.
Screes and displays
Medical devices
Ship equipment
Special products
Fixtures with interchangeable light sources

Standards from 09/2021: SVM ≤ 0,9* /PstLM ≤ 1
Standards from 09/2024: SVM ≤ 0,4* /PstLM ≤ 1
* excl. outdoor-, industial and other light sources.
Application that have a color rendering with CRI ≤ 80.

SVM (stroboscopic) effect visibility measures:
This can occur when non-compliant light sources illuminate a moving object. This can lead to dangerous situations, because they reduce the perceptibility of moving parts. For example rotating machine parts can be experienced as not running.

PstLM (perception of momentary light modulation):
This refers to visible flickering, for example on screens. The flicker may cause discomfort, causing fatique and can cause headaches. This is easy to observe by placing the camera of the Smartphone in video position and hold it in front of the light source. If the image flickers, the light source doesn't comply to the PstLM standards and it can cause complaints as described.

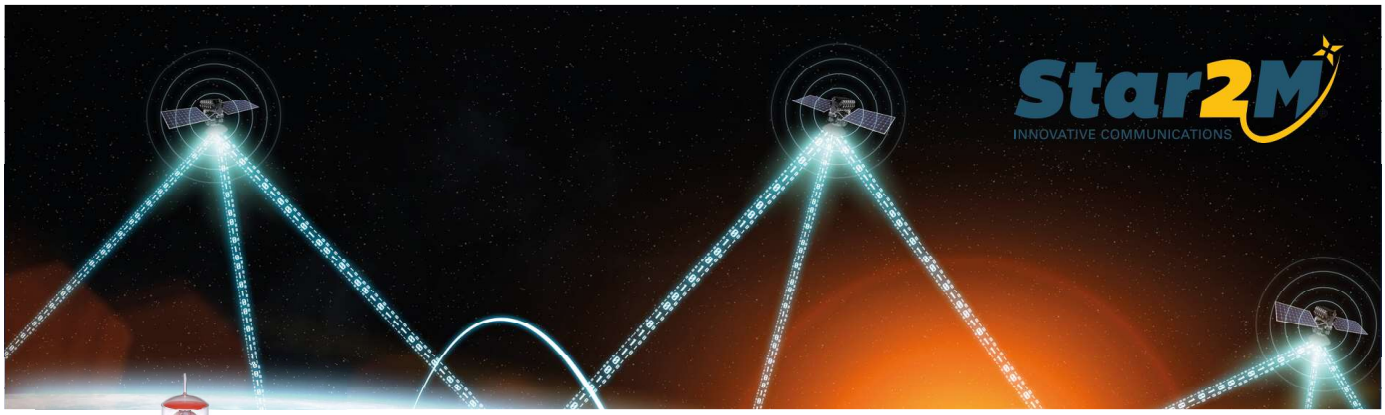
Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

SEALITE SOLAR NAVIGATION LIGHTING

With the shorter daylight around this time of year, it is very important for shipping that lighting on the waterways is working properly. Sealite the global market leader offers a complete range of AtoN (Aids to Navigation) for increased Maritime Safety. An extensive range of marine lanterns, high precision sector lights, guiding lights, power supply systems and monitoring and control systems, as well buoys are offered to provide customers worldwide safe working environment at sea. RMN as Sealite distributor is happy to assist you makig the right choice in navigation lighting. We are able to calculate for our customers which Solar lantern they need in combination with the Solar panel and battery capacity. This calculation is important to know if you are also safe in the winter mounths with the right flash code.

The Solar Marine Lanterns from the series SL-75 and higher can optionally be adjusted and monitored via the **Iridium Satelliet Star2M** system. There are also various options for **Bluetooth®, GSM configuration** and maintenance via an App on the Smartphone or Tablet. Optionally **GPS synchronisation** is possible to create 2 or more lanterns with the same flash character to make them flash simultaneously, improving visual recogition of boundries or channels.



The **Solar Marine Lantern SL-C310** is available in 2 different battery capacities of 12Ah and 24Ah. There are 3 different versions, a Compact housing with 20W Solar Panels and a 12Ah battery, a Standard housing with 28W Solar Panels and a 24Ah battery and an Extended housing with 33.6W Solar Panels and a 24Ah battery.
All Sealit Solar Navigations Marine Lanterns have up to 256 flash charcters according to IALA regulations. These are easy to set up with the supplied key and table in the manual. This changing is also possible using the Sealite IR-Remote Control or via the above described communication examples. The lantarn has standard GPS Synchronisation, where 2 or more lantarns with the same flash character can blink simultaneously, improving visual recognition of boundries or channels. The expected life time of the LED head is >100.000 hours. Consult our product specialists to assist you making the right choice.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

SEALITE BARGE LIGHTING

HOW TO ILLUMINATE BARGES

Barges are in fact ships with mostly a flat bottom without own propulsion. The are used a lot on inland waters as rivers and canals. Propulsion takes place by tugboat or a pushing vessel. Working barges are also in the same category without own propulsion and are often used for various activities on these waterways. The large barges is a category which comes also at sea. It is essential that they are lit well by navigation light lanterns. Sealite has three different options for making these barges visible for other waterway traffic in dark hours. RMN supplies also for this type of vessels special solar powered working lights which can be used as work light or to illuminate a barge against unwanted persons.

SEALITE 2NM BargeSafe Solar Barge Light SL-BLS-2
This is a powerful compact Solar powered LED lamp that meets to UL1104 and COLREG-72 standards.
The LED Barge lighting sets a new standard and includes a number of innovative features designed to make the unit extremely user-friendly. The lamp has a visible range from 2NM.
The world-class LED lens is designed and manufactured by Sealite and achives precise intensity and sectoral requirements from a single LED light source. It is made of strong, durable polycarbonate and uses the latest LED.
As a result, the BargeSafe Solar 2NM lamp has an unbelievable low energy consumption.
The lamp can be installed in minutes and requires no intervention from an operator and has a permanent ON/OFF switch for easy storage.
The BargeSafe 2NM Solar is available in the colors Red, Green and White and can be used on barges from 12 meter length but less than 50 meter length.

SEALITE 3NM BargeSafe Solar Barge Light
This is a high quality Solar powered LED lamp certified according to UL1104 and COLREG-72 standards. Is fully autonomous with high-quality Solar Panels and battery.
The lamp has a visible range of 3NM. This LED Barge light is one of the most advanced in its class and includes a wide range of innovative features, designed to make the unit extremely user-friendly. The world-class LED lens is designed and manufactured by Sealite and achieves precise intensity and sectoral requirements from a single LED light source. This design helps to achieve lower operating current compared to alternative LED Barge lighting, making it ultra-efficient.
The BargeSafe Solar 3NM is available in the colors Red, Green, White, Yellow and Yellow with a connection for a Blue PEEP-light.
Optionally with a 360° lens. The lantern has an autonomy of >24 days.

SEALITE 3NM BargeSafe Barge Light
This is a high quality battery powered LED lamp certified to UL1140 and COLREG-72 standards. The lamp has a visible range of >3NM.

The LED Barge lighting is one of the most advanced in its class and includes a lot of innovative features designed to make the unit extremely easy to use. Designed and manufactured by SEALITE, the world-class lens achieves precise intensity and sectoral requirements from a single 1 Watt LED light source. This design helps to achieve lower operating current compared to alternative LED Barge lighting, making it ultra-efficient and providing battery life up to 45 nights.
A magnetic base provides strong attachment on the deck.
The BargeSafe 3NM is avaialble in Red, Green, White, Yellow and Yellow with a connection for a Blue PEEP light.
Optionally avaialble with 360° lens.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

SOLAR OUTDOOR LIGHTING

NTE SOLAR KITS THE NEW STANDARD

NTE LEADING THE WAY
The Spanich manufacturer NTE Sistemas has a long experience in the development and production of professional Solar Lighting Solutions. With a compact Solar Kit it is possible to illuminate places without a fixed power connection or where is chosen to illuminate without using standard electrical power from the network. This is mainly done for energy saving or when costs for new fixed cable connection to the network is too expensive in compare to this autonomous system. This NTE Solar System were already very effective cost wise but now with the extremely high energy cost it is even more attractive to invest in such a systems. The return on investment is very short. With the choice in NTE Solar Kits lighting can be used from 4.000 up to 12.000 lumen LED light fixtures. **NTE SOLAR KITS 100% GREEN ENERGY**

NEW is the Tubular Solar Kit that slides over themast. These panels have no negative effect on the aesthetics of the lamppost and its surroundings and are therefore very stylish. NTE LED Fixtures from 6.000 lumens and 12.000 lumens can be used on this Solar Kit. The Solar Kit can be mounted on poles with a diameter of 70-160mm.

Customer Example
DC Dredging has installed a NTE Solar Kit at their office with a NTE LED Street Light fixture Type PULSAR, with a power consumption of 24/27W and a light output of 4.084 lumen.

Even so close at the building as here, it was very profitalbe not to add a new cable in the ground but was chosen for the NTE Solar Solution.

The return on investment time is extremely short and the additional advantage is that the lantern has no effect on the energy bill of the company. **100% Green Energy.** The system is equipped with smart software developed by NTE. When movement is detected the lamp lights up to 100% light output and slowly dims back to 10% when there is no movement anymore. With this system it never gets complete dark during night time. This smart system has been tested in the Netherlands for several years and also functions properly during the short daylight periods in the winter months.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

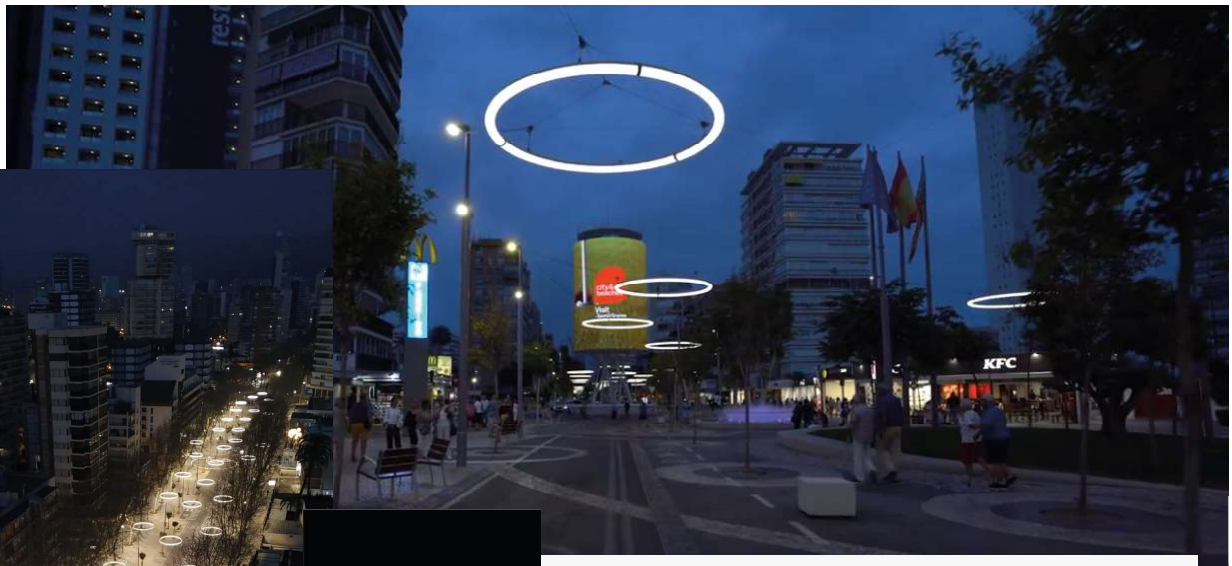
RMN NEWSLETTER

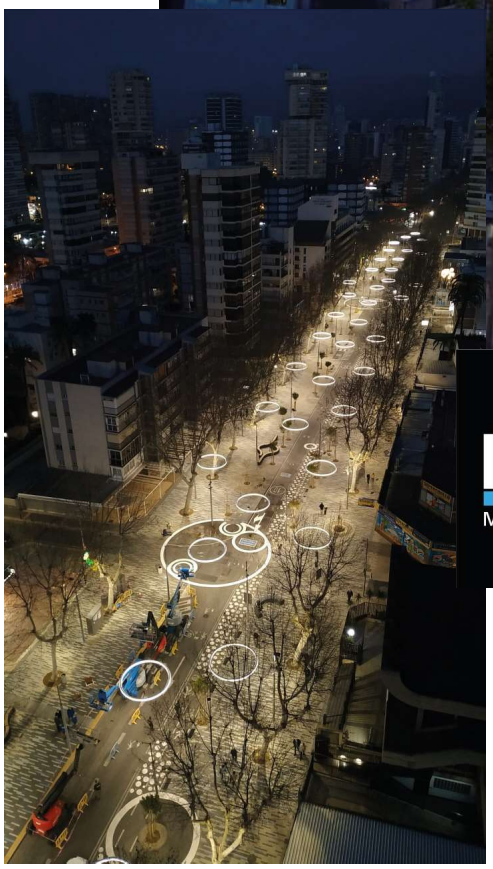
NTE CYCLE LED

PROJECT BENIDORM

NTE CYCLE
The NTE Sistemas Cyclo is an ultra efficient (>170lm/W real data) LED fixture with a very eye-catching design. The fixture has been specially developed for urban areas with high-traffic such as promenades and shopping areas.
It stands out with its minimalist ring-shaped design. The fixture is extremly energy efficient and reduces energy consumption up to 40% in compare to traditional LED. The fixture is manufactured with an extruded aluminium housing and a 3mm frosted polycarbonate microprismatic cover with an advanced UV-filter and a low UGR (Glare factor) level. The fixture is IK10 impact resistant and has standard 20KV over voltage protection, an IP68 driver with integrated 1-10V dimming or DALI. The LED source is L90B10, estimated life is >100.000 hours with a CRI>80. Special anchoring for catenary systems. For coastal areas the fixture can optional be equipped with a certified Anti-Saline coating that protects the aluminium against the salt air and has no negative effect on the thermal management of the fixture and its electronics.
As option it is possible to order the NTE Remote Monitoring System.
The Cylcle LED is available in 3 different versions, 5K - 12.240 lumen, 11K 18,810 lumen and 28K 27.873 lumen.

NTE CYCLE project BENIDORM
After BARCELONA, BENIDORM has now also chosen to equip the central promenade with the NTE CYCLE LED fixtures. This is part of Europes largest LED Lighting project with "El Tecnohito" a 22 meter metal structure encased in LED-screens on the roundabout of Avenida Mediterráneo and the Esperanto Street. The entire Avenida del Mediterráneo is illuminated with the NTE CYCLE.
With these types of projects, NTE Sistemas shows that they are able to devise and implement the right lighting solutions for all kinds of environments, using the latest techniques.





nte
MORE THAN LIGHT

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

WHAT YOU NEED TO KNOW ABOUT LED

Worth knowing facts about LED

A lot is said about LED lighting, truths and untruths are sometimes very close to each other. What is actually a LED Chip, how long does a LED Chip actually last. What is the effect of heat to LED Chips, What is the function of the LED driver and what is the effect on your power network. How long is the lifespan of a LED Driver and why is one driver better than another.
How goes warrantee, is it only on the LED or also on the driver or even on the complete fixture.
What does the **LB standard** mean such as L90B10 or L80B10 what you can see often on the datasheets. What is the effect of high temperatures on the LED and electronics lifespan. What is the effect of it on the degradation of the LED.
Does frequently switching On/Off effect the expected lifespan of the LED. How is it with over- and under voltage and over- and under frequency and is the fixture resistant to it. What happens when the electronics and fixture become too warm. Why do manufacturers mainly use aluminium as material for housings. What is the function of all the ribs on the floodlights at the back of the housing. Are spare parts available or do you have to replace the entire fixture in case of a failure or accident. What is the function of a breather valve that some manufacturer use. Are there also LED fixtures for high ambient temperature environments. What is the Glare factor and how dangerous is Glare from LED for the human eye. What is stroboscopic effect and why is this a potential hazard in industrial machine environments. Why can invisible flickering for office LED illumination can be the cause of fatique and headaches. Why is it not possible to compare conventional lighting lumen output one to one with LED lumen output. Can you dim every LED light fixture or connect it to a control system.

Does it already dizzle al this questions. In this newsletter we will answer a part of it. Contact our product specialists for all the answers. We will guide you through all of this to assist you by making the right choice, so you will be satisfied with your future LED lighting. We have already assisted many customers in this wood of questions. ARE YOU THE NEXT ONE

LB Standard and lifespan of LED's

(LED) Light sources provide less light the older they become. This is also the case with fixtures using LED's. There are sometimes major differences between light sources from one brand to another. In order to clearly understand the quality we use the LB standard. The LB-value tells a lot bout the quality for the LED's themselves.

L-Value

The L-value is based on the light outpt that is left at the end of the service life. The higher this number (expressed in percent), the better the quality of the light source. If a luminaire has a lifespan of 50.000 running hours and a L-Value of 80, then there is 80% of the total light output left over.

B-Value

The B-value indicates how many LED's have less light output than the remaining L-value at the end of lifespan. B-value assumes the worst but can be lower. The lower the B-value number, the better the quality of the LED's. **For example:** Light source of brand "X" has a lumen output of 3.000 lumen, a lifespan of 50.000 running hours and a LB standard of L70B50. The Value L indicates that after 50.000 running hours, 70% of the light output remains, or the lumenoutput is still 2.100 after 50.000 hours. The B-value indicates that with 50% of the light sources the lumen output is less than 2.1000 lumen (and therefore 70%) after 50.000 burning hours.

Warranty and estimated life:

There are 2 major differences in warranty and estimated life. The estimated lifespan is often longer than the manufacturer's warrnaty. The factory warranty is often between 3 and 8 years depending on the manufacturer. The estimated lifespan is indicated in hours, such as 50.000 hours. This is determinated after aging tests of the luminaire and light sources. It is important to know whether the warranty is given on the LED's or on the entire fixture (including the electronics). Giving warranty on only the LED what is popular is the most easy. It is important to choose for a manufacturer which gives a full warranty because the electronics are the most vulnerable due to heat build-up during use. Also pay attention to the maximum ambient temperature specified by the manufacturer. This indicates for many applications if you can use a LED fixture or not.

Heat management and lifespan:

Electronics such as LED Drivers are very sensitive to high temperatures. LED light sources are also sensitive to this, but less than drivers. This is why aluminium is the material used for LED fixture housings. The fixtures therefore have so-called cooling fins or ribs, because the larger the total surface of the housing, the better heat can be discharged. Contary to what people think LED light sources are not cold when they burn but shine out heat at the back and not as with conventional light sources do at the front. This heat must be easily and quickly dissipated in order not to overload the LED and driver by this and cause aging of this parts. LED floodlight does have for this reason often the driver separate from the LED PCB module housing mounted. There are also special TaMax LED drivers available, that can be used in areas with an ambient temperature above the critical 40°C (what is for electronics the reason of rapid degradation). The TaMax Drivers can be used in areas up to 65-70°C. RMN has the right fixtures available for these type of applications. Again pay attention on the max. ambient temperature of the fixture, especially when installed just under a roof in an industrial area where temperature can easily become >40°C during summer days.

Stroboscopic effect SVM and PstLM:

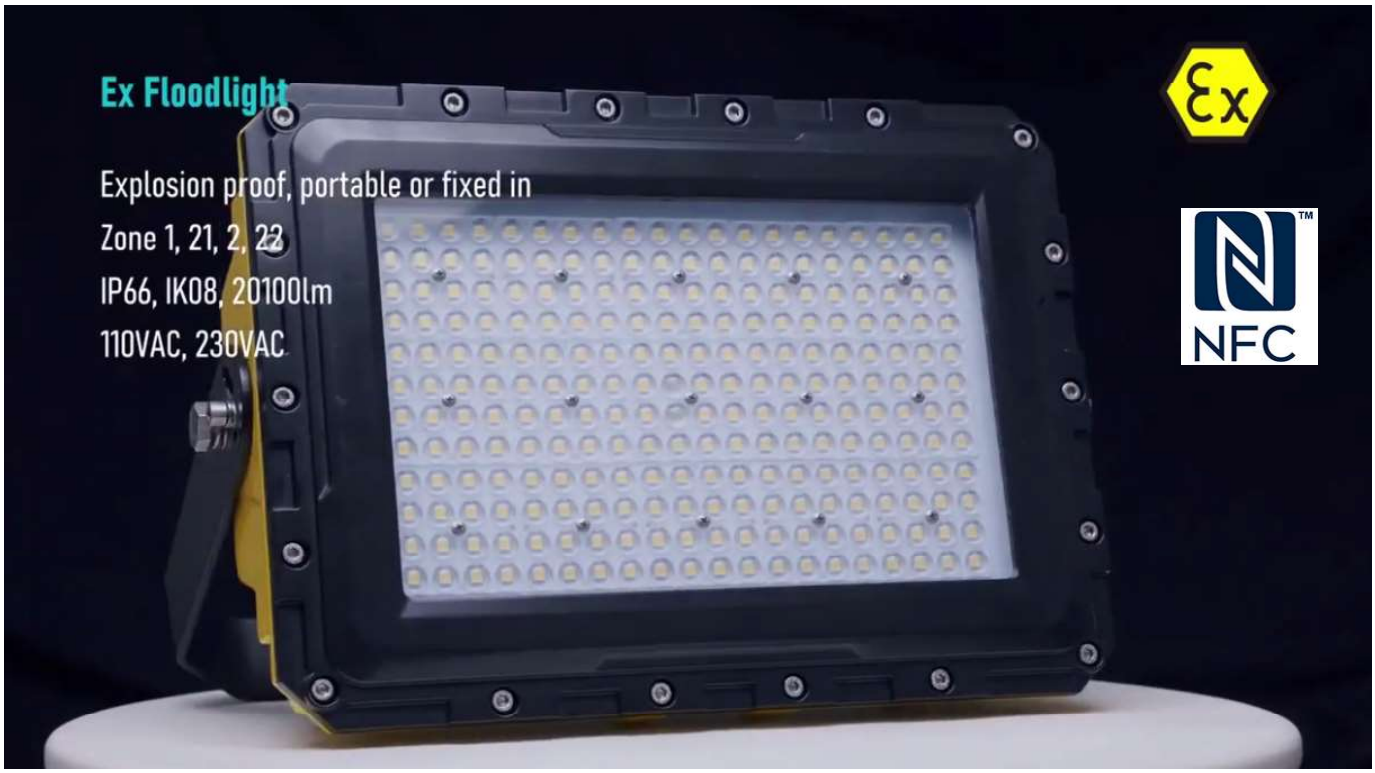
Stroboscopic effect or fllickering of the LED is not or almost not imperceptible to the human eye and is mainly caused by a lower quality LED driver used in the fixture. It is easy to check by adding your Smartphone camera on video and point it to the LED light source. It is immedately visible on the screen whether the fixture is flickering (like a stroboscoop) or not. Luckely the EU has increasingly strict standards for this since 2021 (see page 3 of this newsletter). Good quality LED fixtures do NOT cause a Stroboscopic effect and meet at least the SVM and PstLM EU standards. Especially in the industry is SVM a No Go due to the described dangerous situation. Both effects are also visible on lower quality office LED fixtures and can cause headaches and fatique especially when working with PC Screens. It is easy to choose for the cheapest ceiling light panels for an office but alsways check this thoroughly before taking the decision to order you LED light fixtures.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWLETTER

NEW EX LED FLOODLIGHTS

DataLink RFID Explosion Proof LED Floodlights for Zone 1, 21, 2, 22
A new LED floodlight which can be used in potentially explosive atmospheres of explosive gases, vapours and dusts.
The fixture is **equipped with NFC**, which is a TAG inside the housing with a technology easy to read the data of the fixture such as serial number etc. by using a Smartphone. This is an ideal addition for maintenance and inspection. High lumen output to provide maximum light what was a major important focus during the development of the fixture. It is a state-of-the-art product with many excellent features.
The fixture is available in a 230Vac version and in two low safety voltage versions as 42Vac/Vdc and and meet the highest safety standards (CENELEC standard HD63751). The 140W version has a luminous flux of >20.000 lumens. The housing is extremely robust and reliable and has also the function as heat sink for the highly efficient LED PCB.



DataLink RFID Explosion Proof LED Floodlights Versions
Avalable as 100W (14.000lm) and 140W (20.100lm), where the 140W has a dimmable option.
Each wattage is available in the following different light angles 25°, 60°, 90° and 120°.
Power factor is >0.95 and the CCT (light color is ~5000K, CRI >80, RA 80-85.
Lifespan at 25°C is 60.000 hours. For ambient temperatures from -40°C to +50°C.

Optional available with a special anti-saline treatment for use in salt air environments.
Optional available are Anti-static Peel-Off foils for protection of the frontglass in dirty environments.

Explosion protection
II 2G Ex db op is IIC* T6 Gb; II 2D Ex tb op is IIIC T85°C Db
Gas Group IIA-IIB-IIC and Dust Group IIIA-IIIB-IIIC
Type protection Ex db - Ex tb. Zone level 1 Gb- 2 Gb and 21 Db - 22 Db
* also as IIB version avaialbe.
Protection is IP66 and IK08, OVP (over voltage protection) and OTP (over temperature protection).

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl

RMN NEWSLETTER

CORDLESS LED WORK LIGHTS

Conveniece during various types of work with rechargeable LED Floodlights

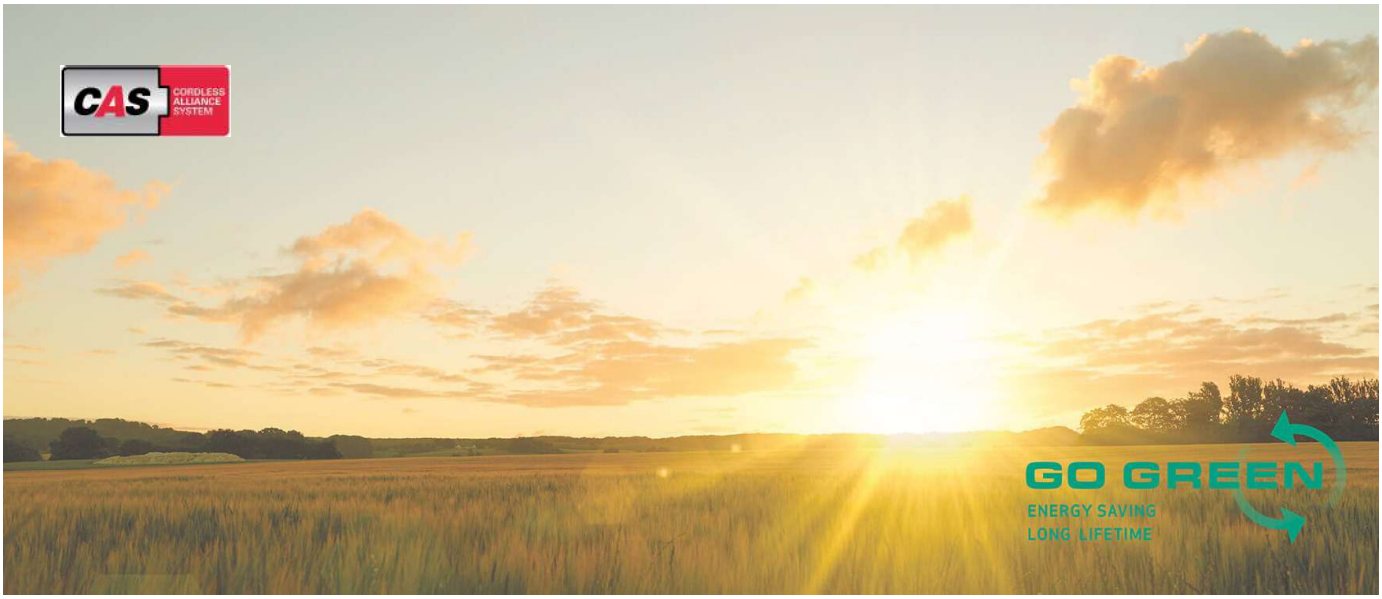
The Danish Scangrip develops and produces a wide range of LED work lighting, whereby the battery is a built-in type or a slide-on exchangeable type. Cordless work light is a big advantage for service engineers when working on location and not have to rely on a power cable and fixed power connection. The LED work floodlights are equipped with a dimmable function, often in 5 steps of 20%. Battery charge status can be read out on the back side of the fixture and for some types via the Scangrip SmartApp via a Smartphone. Via the App it is easy to operate the dimming function what is a benefit when the fixture is mounted high on a tripot.

METABO/CAS BATTERY SYSTEM:

New is the CAS battery system, with this all 18V batteries of the CAS System of Metabo can be used in this fixtures. The CAS System is developed by Metabo Tools.

JUST CONNECT:

Scangrip developed a new system of battery adapters, making it possible to use the standard 18V battery from many well-known manufacturers of electric cordless tools. This adapter slides easily at the back of the fixture in the battery slot. With this adapter the 18V tool battery can be inserted in the adapter in order to use it as power source. With this adapter users always have a charged battery at hand. At this moment the adapters are developed for 16 brands of cordless power tools and more will follow.



Example of the JUST CONNECT Smart Connector for a 18V Makita Battery.

Repair Management Nederland B.V. – Jade 300 – 3316 LJ Dordrecht – Netherlands
Phone +31 (0)85 27 32 216 – email info@rmn.eu - www.repairmanagement.nl