SAURYA
Value Driven Safety

Instructions for Safe Use

(Certification N:o CML 22 ATEX 3188X & IECEx CML 22.0026X)

Thank you for choosing SLAM® Hornet Neos or SLAM FIXED® Novo –portable or fixed work light for your job site. Purpose of this manual is to provide you all the necessary safety and product information to conduct your job conveniently and without any risks for health and safety.

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1. Introduction to SLAM® Hornet Neos or SLAM FIXED® Novo

(Certification N:o CML 22 ATEX 3188X & IECEx CML 22.0026X)

This instruction manual guides you through the process of selecting and adopting SLAM® Hornet Neos or FIXED® Novo work light at your work site.

The manual regards the following SLAM® Hornet Neos or FIXED® Novo types:

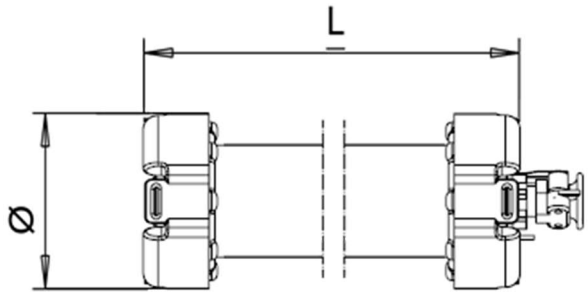
1.1 Technical data

SLAM® Hornet Neos 1LED
SLAM® Hornet Neos 2LED
SLAM® Hornet Neos Linear 2LED
SLAM Hornet Neos EM 1LED

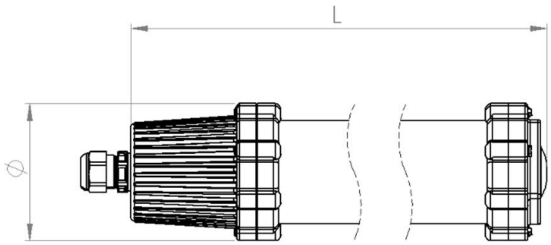
SLAM FIXED® Novo 1LED A
SLAM FIXED® Novo 2LED A
SLAM FIXED® Novo 1LED B (throughwired)
SLAM FIXED® Novo 2LED B (throughwired)

	Dimensions / mm	
Product model	**L**	**Ø**
SLAM® Hornet Neos 1LED A	595	125
SLAM® Hornet Neos 1LED C **SLAM® Hornet Neos EM 1LED**	725	125
SLAM® Hornet Neos 2LED **SLAM® Hornet Neos Linear 2LED**	1040	125

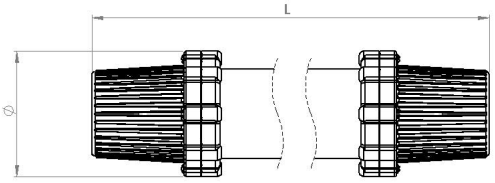
	Dimensions / mm	
Product model	**L**	**Ø**
SLAM FIXED® Novo 1LED A	614	112
SLAM FIXED® Novo 2LED A	1100	112
SLAM FIXED® Novo 1LED B	682	112
SLAM FIXED® Novo 2LED B	1168	112



SLAM Hornet Neos



SLAM FIXED Novo A



SLAM FIXED Novo B

ATEXOR

1.2 Certification of equipment

The SLAM® Hornet Neos or SLAM FIXED® Novo–series has been designed, tested and certified for portable or fixed use. There is "X" –mark in the certificate for special conditions of safe use of the equipment. Special conditions of safe use specifies:

- "ib"-marking is for internal protection of the switch in the emergency supply circuit. There is NO need for Exi assosiated apparatus in the supply of the luminaire

The equipment is to used properly and according to its ratings, documentation and local applicable laws.Local, national certificates of these units may exist outside the region of EU.

The aforementioned SLAM® Hornet Neos or SLAM FIXED® Novo types are certified as follows. You may find brief explanation of the certificates beneath:

CE_{2776} II 2 GD **Ex eb mb op is IIC T4 Gb**
Ex tb op is IIIC T 90 °C Db

or

CE_{2776} II 2 GD **Ex eb ib mb op is IIC T4 Gb**
Ex tb op is IIIC T 90 °C Db

CE_{2776} = Valid production quality system approved and notified by CML (Approved Body)

= Certified for explosion hazardous areas
II = Certified for use in areas excluding mines
2 = Equipment category (suitable for Zone 1&21 and Zone 2&22)
G = Certification taking account explosion hazardous GASES
D = Certification taking account explosion hazardous DUSTS

Explanation of marking for explosion hazardous area due to Gases (e.g Ex emb IIC T3 Gb) :

Ex = Certified for use in explosion hazardous areas
eb = Explosion protection method increased safety (of certain components)
ib = Explosion protection method intrinsic safety (of certain components
mb = Explosion protection method encapsulation (encapsulating ignition sources e.g. electronic ballast)
op is = Explosion protection method optically inherently safe (visible or infrared radiation that is incapable of producing sufficient energy under normal or specified fault conditions to ignite a

specific hazardous athmosphetic mixture). This definition is analogues to the term “intrinsically safe” applied to electrical circuits

IIC = Equipment group (including explosion hazardous areas of IIA, IIB and IIC gases)
T4 = Maximum inside temperature of the unit is 135 °C (within the ambient temperature range of -40°C - +55°C)
Gb = Explosion Protection Level (EPL) marking for “HIGH” level of protection. Equipment for explosive **GAS** atmospheres, which is not a source of ignition in normal operation or during expected malfunctions.

Explanation of marking for explosion hazardous area due to Dusts (e.g Ex t IIIC T 90 °C Db):

Ex = Certified for use in explosion-hazardous areas
tb = Explosion protection method “protection by enclosure”
op is = Explosion protection method optically inherently safe (visible or infrared radiation that is incapable of producing sufficient energy under normal or specified fault conditions to ignite a specific hazardous athmosphetic mixture). This definition is analogues to the term “intrinsically safe” applied to electrical circuits
IIIC = Equipment group for conductive dusts (including IIIA, IIIB and IIIC dusts)
T 90°C = Maximum OUTSIDE surface temperature of the unit is 90 °C (within the ambient temperature range of -40°C - +55°C)
Db = Explosion Protection Level (EPL) marking for “HIGH” level of protection. Equipment for explosive **DUST** atmospheres, which is not a source of ignition in normal operation or during expected malfunctions

1.3 Standard unit construction

The following list familiarizes you with some common unit features important to recognize.

End parts: SLAM® Hornet Neos or SLAM FIXED® Novo end parts consist of two separate assemblies. Inner end part assembly ensures ingress protection and optional outer flexible construction ensures shock-absorbing and harmless contact to sensitive and hard surface in case the luminary drops to the ground even from high position. Light construction affects the total weight of the unit itself.

Transparent PC –tube: Polycarbonate tube, being durable, flexible and lightweight plastic, brings advantage for use. Unique antistatic treatment allows the use of PC in explosion hazardous areas.

Aluminium frame: Nearly all SLAM® Hornet Neos or SLAM FIXED® Novo–units are based on use of solid but flexible aluminium frame. Components are tightened with screws on it, making

the unit tough and durable in severe conditions. Moreover, the frame derives excessive heat out from the luminary thereby extending lifetime of the unit.

Electronic control gear: The control gear in controlling the supply of energy to the light source of the luminaire.The contol gears are independent from each others. Under failure of one control gear, the other still continues operating. Low-voltage protection (smart-feature) brings reliability and convenience for use, especially when operating with transformers or with long cables.

Led module (LED): Light source combining Light Emitting Diodes with convenient and safe light distribution. Led module is explosion protected. Photobiological safety of Led module has been taken into account.

Cable: Standard cable of the SLAM® Hornet Neos or SLAM FIXED® Novo series is HFLEX C-PUR. This cable has polyurethane (PUR) outer sleeve and copper inner shielding. PUR withstands well chemicals as well mechanical wearing and copper shielding offers extra protection against mechanical stress. However, the user has an option to specify cable type in accordance with work site requirements of own.

Socket: Optional in-built sockets (receptacles) for linking the SLAM® Hornet Neos units in series

Battery: The Ex-approved rechargeable Li-Ion battery provides power during the supply power failure (Neos EM model). The external battery casing makes the battery more robust and suitable for harsh conditions. The battery temperature is monitored by the advanced control unit.

Other common accessories:

- Antistatic protective film for PC tube against chemical splashes and other substances
- SLAM®Click'n Fix 80 Magnetic Bracket
- SLAM®Click'n Fix 80 Scaffold Bracket
- SLAM®Click'n Fix 80 Unistrut Bracket
- SLAM®Click'n Fix 80 Single Bracket
- Adjustable hanging straps

To view options on accessories, please visit http://www.atexor.com for further study or call us directly +358 20 734 3250.

1.4 Quality guaranteed

1.4.1 General

The SLAM® Hornet Neos or SLAM FIXED® Novo series is designed, certified, manufactured and tested under ISO 9001:2008 quality system as well as additional requirements of the Directive 2014/34/EU (ATEX) or IECEx scheme. The SLAM® Hornet Neos or SLAM FIXED® Novo series is designed and tested according to the latest directives and standards. The referred directives and standards of the production date in case are stated on the Declaration of Conformity included in the delivery.

1.4.2 Individual testing reports

Each SLAM® unit has its own individual serial number and is provided with an original, individual testing report when leaving the factory. The year of manufacture is specified on the type label of the equipment. Following tests have been done for SLAM® Hornet Neos or SLAM FIXED® Novo–units according to standards relating to portable or fixed luminaries for explosion hazardous area. The Declaration of Conformity is specifying the relevant standards. The testing report which is included in the delivery specifies the results of the factory tests for that particular unit. The testing report typically specifies the following tests:

PE –resistance test
The purpose of this test is to measure persistence of earth conductor.
Vital test for electrical safety as well as explosion safety because of e.g static electricity control.
The test current is 10 A (current) and the overall resistance should not exceed 0,5 ohm.

High voltage test (electrical strength)
The purpose of this test is to measure leakage current trough insulation. Vital test for revealing broken components or similar failures which can not be identified visually.
Testing voltage applied is 2130VDC. Maximum leakage current is 5mA.

Test of expected use of equipment
The luminary is subjected to shaking and vibration – to see that all the internal wires are properly attached and components are not loose.

Operational test of luminaire and accessories
The unit is plugged-in and checked that it is working properly after all accomplished tests above.

Visual inspection
A final check to see everything is fine (screws attached properly, wires connected and required markings attached).

2. Prior to use

2.1 Selection of right equipment

You need to be sure that the equipment you intend to take into explosion-hazardous area matches up with the zone classification and other safety requirements related. The operator is solely responsible for the correct selection and use of the equipment at his site. At least the following points should be notified prior to use:

2.1.1 Intended purpose of equipment

Please keep in mind what the actual application of equipment is. For example in case the equipment is to be moved when connected to the supply it needs to be designed for that purpose. If the certification is mentioning “portable” it means that the equipment is suitable and tested for portable use. If the certification does not mention portable it means that the equipment shall not be moved when it is in operation (reliable fixing of equipment).

SLAM®-units are designed and tested for portable use or fixed use.

2.1.2 Application of use (Zone XX) in accordance with equipment category

Operator has the best knowledge of area classification at his site. To help the operators’ selection of equipment the certification is describing the equipment category. For explosion hazardous areas there are three equipment categories.

Category 1 product is suitable for use in Zones 0, 1 and 2 / (20, 21 and 22)

Category 2 product is suitable for use in Zones 1 and 2 / (21 and 22)

Category 3 product is suitable for use in Zones 2 / (22)

SLAM®-units mentioned in this instruction fall into Category 2 equipment

2.1.3 Explosion group (IIA, IIB or IIC) in accordance with Equipment group (IIA, IIB or IIC)

This information is vital because the substances require different amount of energy to be ignited. Safety requirements for equipment are not the same for different substances (e.g. static electricity requirements).Therefore making the selection easier the gases are divided to three different groups (IIA, IIB and IIC). Further information about the substances can be found from EN/IEC 60079-20-1 (Data for flammable gases and vapours, relating to the use of electrical apparatus).

SLAM®-units mentioned in this instruction are Equipment group IIC

2.1.4 Temperature class of the equipment

Please observe the Ignition Temperature (IT) of the substance creating the explosion hazard at your site. Select the equipment based on IT of the substance. The temperature of the equipment must be lower than IT. The highest temperature of the equipment is specified by using Temperature Classes T1 to T6.

Example:

Petroleum ignition temperature is approximately 250 Celsius → Maximum allowed temperature class of the equipment is T3 (< 200° C)

- SLAM®-units mentioned in this manual are Temperature Class T4 (GASES)
- SLAM®-units mentioned in this manual are having maximum surface temperature of 90ºC (DUSTS)

2.1.5 Environmental criteria

Please observe the ambient temperature of the application in use because certification is valid for temperatures between – 40°C --- + 55°C. Please see type label of the product for further data. If the equipment is used in other temperatures than mentioned the safety can not be guaranteed.

Selection and use of equipment is always under the responsibility of the operator. Please note that all of the aforementioned criteria are to be fulfilled when selecting the equipment.

<u>Please do not take any unnecessary risks!</u>

3. Operating instructions

3.1 Personnel

The use of the equipment is to be controlled and accepted by the operator. The personnel using the unit have to be authorized by the operator or his representative. In case of further training of using the equipment please contact the local supplier of this equipment.

3.2 Storage of the Neos EM

Neos EM units should be stored in normal operating temperatures -20°C…+40°C. To achieve the best lifetime for the battery it is recommended that the unit is stored in ambient temperature +5°C…+10°C and the battery is charged approximately every three months if not used.

3.3 Before first use of Neos EM

Before first use, connect the unit to mains/transformer for 24 hours to fully charge backup battery. This is necessary to get maximum battery life and capacity. Battery lasts ~600 cycles or 3 - 4 years in normal operation. See also section 4.5.

3.4 Visual Inspection of SLAM® Hornet Neos or SLAM FIXED® Novo

As for all equipment to be used inside explosion hazardous area it is recommended that before taking the unit into Ex –area, at least a visual re-inspection on the unit was taken and an analysis made that the unit is un-damaged (e.g. any part or wires are loose damaged or disconnected)

In case faults or defects on the unit are noticed, it is prohibited to use the unit or to take such a unit into Ex –area until corrective actions have been made.

3.5 Special Attention on 2-pole use (24 V or 42 V)

Certain SLAM® Hornet Neos -units are designed to be used together with step-down transformers. Using SLAM® Hornet Neos -unit with transformers of 2-pole socket outlets (without earthing / bonding) imposes certain extra requirements for the unit itself. All the external metal and aluminium parts of the SLAM® Hornet Neos are replaced by the manufacturer with

plastic parts or equipped with plastic covers in order to avoid electrostatic charging and a consequent risk of explosion. This process can only be done by manufacturer because the certification of the product.

Please inform us about your requirement for 2-pole use when placing the order. Products originally manufactured for 3-pole use can not be modified later for 2-pole use by the operator. Such modifications are only allowed to be carried out by the manufacturer or under supervision of the manufacturer.

Note! Lack of equipotential bonding may cause danger in Ex –area, therefore please pay special attention to all installations of yours involving metallic parts. Static charging is especially noted on standards referring to installations in explosion hazardous areas (e.g. EN/IEC 60079-14).

3.6 Connection to the supply

It is recommended that the unit is first connected to the mains / transformer before entering the explosion-hazardous area. Otherwise potential equalization of the equipment should be arranged by the operator prior entering explosion hazardous area.

SLAM® Hornet Neos -units with 2-pole supply (without bonding connection) can be taken to explosion hazardous area without connecting it to the supply first.

3.6.1 Requirements for supply (electricity)

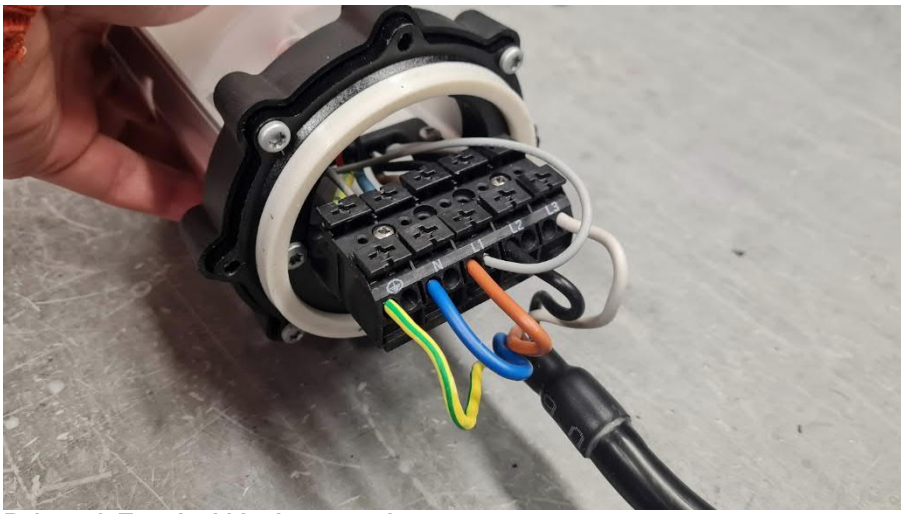
The following main requirements should be taken into account:

Supply voltage: Variation may be maximum +/- 6% from the value stated in the unit type label.
Current: Maximum current of the system is 16 A. Please see chapter 3.6.1 for special conditions.
Frequency: Standard 50 Hz if not otherwise stated in the type label.
Fuse protection: The supply has a fuse with a breaking capacity of at least 1500 A
Earth Leakage Circuit Breaker (ELCB): It is recommended to use a supply with 30 mA ELCB.

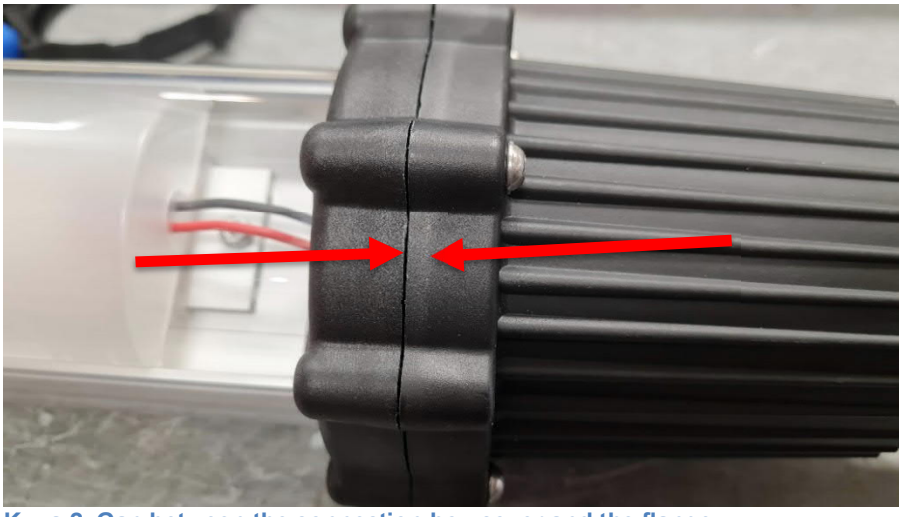
Please observe the type label for further data. Luminaires for 110 VAC or 230 V supply are to be connected to a supply incorporating protective earth conductor.

3.6.2 Electrical installation and connections for throughwired luminaries

1. Open connection box cover by unscrewing four torx T20 screws.
2. Install the cable throught the cable gland.
3. Select the desired phase (L1, L2 tai L3).
4. Strip connection wires for 12mm length. Connect the phase wire to the terminal block to the selected phase, which is going to be used for supplying the luminaire or luminaire chain.
5. Connect the ballast supply wire to the selected phase (Picture 1.) Luminaires that have two LED modules, the secondary ballast in the throughwired end is connected to phase 1 as default in the factory.
6. Close connection box cover by screwing the four torx T20. Do not overtighten, the threads may strip. Observe the gap between the cover and the flange. When screws are in correct tightness, the gap is between 0,3 – 0,7mm (Picture 2.)
7. Tighten the cable gland.



Pciture 1. Terminal block connections



Kuva 2. Gap between the connection box cover and the flange

3.7 Adding accessories to SLAM® Hornet Neos or SLAM FIXED® Novo

Atexor provides a number of different accessories but in case you afterwards want to add accessories of your own for the SLAM® Hornet Neos or SLAM FIXED® Novo –unit, please note the following points:

1. The user is fully responsible for the use of the equipment including service and maintenance

2. In case of adding accessories the following is mandatory

    a. The construction of the certified unit shall not change
    b. The IP –class of the unit shall not decrease

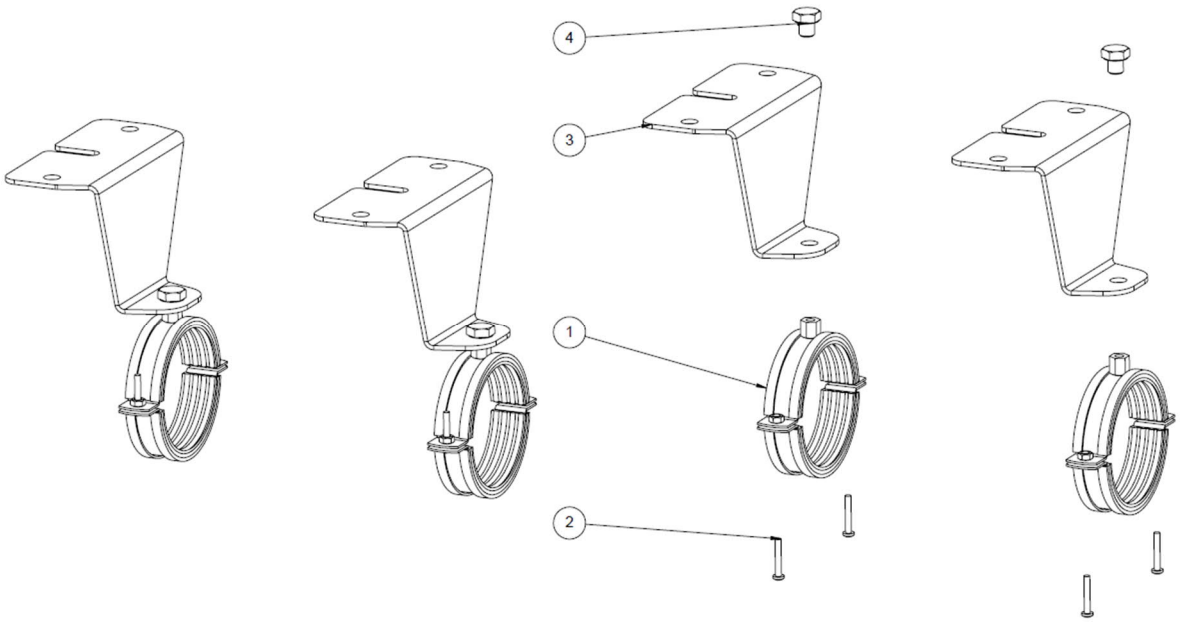
3. The static electricity is taken account (e.g. electrostatic bonding)

3.7.1 Accessories for SLAM FIXED® Novo

SLAM FIXED® Novo is available with two fixing options. The fixing system for ceiling installation and pole installation.

3.7.2 Ceiling installation for SLAM FIXED® Novo

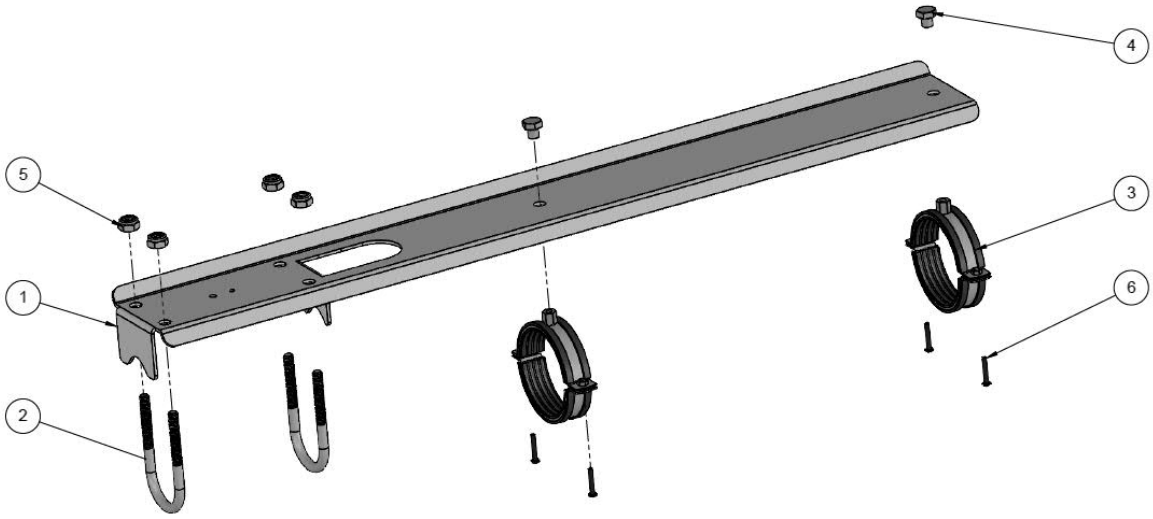
Install the luminary to the fixing bracket 1. and tighten with the screw 2.
Install both brackets to the luminary.
Fix the brackets to the ceiling from the holes on the metal plate 3 with approriate bolts or screws. Ensure proper bonding of the fixings.



Picture 3. Ceiling or wall installation brackets

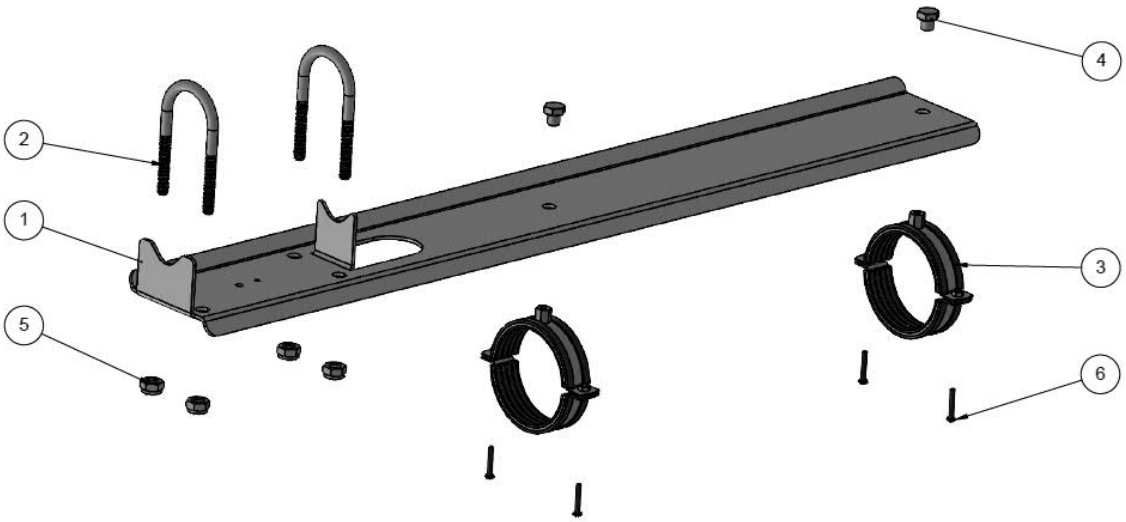
3.7.3 Pole installation for SLAM FIXED® Novo

In pole fixing, the bracket can be installed above (fixing 70908, pictures 4 and 5) or below (fixing 70908_1, pictures 6 and 7) the pole centerline.
Install the luminary to the fixing brackets 3. and tighten with the screw 6 on those brackets.
Install the fixing brackets 2. to the pole. Tighten with nuts 5 on those brackets.



Picture 4. Pole fixing bracket 70908

Picture 5. Pole fixing bracket 70908 installed above the pole centerline



Picture 6. Pole fixing bracket 70908_1

Picture 7. Pole fixing bracket 70908_1 installed below the pole centerline

In case you do not want to do your own risk assessment for the accessories please view the whole range of accessories at http://www.atexor.com

3.8 Linking in series

Certain SLAM®Hornet Neos units may be equipped with ATX or Ceag Ex –certified socket in the factory. Sockets are considered as one option so they are added to the unit upon customer's special request.

In-built sockets are recommended when the illuminated area is notably large, complex or not enough wiring points are available. Linking the units in series save time, amount of cable and provide an opportunity to build a chain of lights to provide enough illumination in the darkness.

When linking SLAM® Hornet Neos –lights together, please take the following steps:

1) If using transformer, ensure its condition and capability to supply correct amount of voltage, current and power (VA)
2) Connect the first unit outside the Ex –area
3) Then connect the other luminaries to each other one by one
4) The in-built socket is only for chaining SLAM®Hornet Neos units.
5) Fix them with accessories you have selected
6) Take the chain into Ex –area

Amount of lights which may be connected with each other depends on the supply voltage. **Competent person of the operator shall control and accept the temporary electrical installation at the site**.

3.9 Special conditions

Before connecting SLAM® Hornet Neos luminaries together, please ensure the following points.

1. The total length of the light chain does not exceed 66m. Please see additonal details below the chart.
2. The total current of the electrical installation does not exceed 16A.

Here in tables 1-4 you may see general and theoretical guide-lines for linking SLAM® Hornet Neos luminaires with 5m 3x1.5mm^2 (or 3x2.5mm^2) cable:

Table 1, SHN-1 LED general guide-lines for linking -40…+55°C (special conditions see Table 2)

Supply voltage (V)	Cable length (m)	Type of luminary	Number of luminaries in series
230	5	SHN-1LED (25VA)	13
110	5	SHN-1LED (21VA)	13
42	5	SHN-1LED (21VA)	10
24	5	SHN-1LED (21VA)	8

Table 2, Special conditions for CEAG sockets (apply only in +55°C and +54°C ambient for CEAG)

Ambient temperature (°C)	Supply voltage (V)	Cable length (m)	Type of luminary	Number of luminaries in series
55	230	5	SHN-1LED (25VA)	-
	110	5	SHN-1LED (21VA)	-
	42	5	SHN-1LED (21VA)	12
	24	5	SHN-1LED (21VA)	6
54	230	5	SHN-1LED (25VA)	13
	110	5	SHN-1LED (21VA)	8
	42	5	SHN-1LED (21VA)	12
	24	5	SHN-1LED (21VA)	6

Table 3, SHN-2 LED linear general guide-lines for linking -40…+55°C (special conditions see Table 4)

Supply voltage (V)	Cable length (m)	Type of luminary	Number of luminaries in series
230	5	SHNL-2LED (50VA)	13
110	5	SHNL-2LED (42VA)	13
42	5	SHNL-2LED (42VA)	10
24	5	SHNL-2LED (42VA)	5

Table 4, Special conditions for ATX & CEAG sockets

Ambient temperature (°C)	Supply voltage (V)	Cable length (m)	Type of luminary	Number of luminaries in series	
				CEAG Socket	ATX Socket
55 - 53	230	5	SHNL-2LED (50VA)	-	13
	110	5	SHNL-2LED (42VA)	-	13
	42	5	SHNL-2LED (42VA)	6	9
	24	5	SHNL-2LED (42VA)	3	5
52	230	5	SHNL-2LED (50VA)	-	
	110	5	SHNL-2LED (42VA)	-	
	42	5	SHNL-2LED (42VA)	8	
	24	5	SHNL-2LED (42VA)	4	
51	230	5	SHNL-2LED (50VA)	9	
	110	5	SHNL-2LED (42VA)	4	
51	42	5	SHNL-2LED (42VA)	9	
	24	5	SHNL-2LED (42VA)	5	
50	230	5	SHNL-2LED (50VA)	13	
	110	5	SHNL-2LED (42VA)	8	
	42	5	SHNL-2LED (42VA)	10	
	24	5	SHNL-2LED (42VA)	5	
49	230	5	SHNL-2LED (50VA)	13	
	110	5	SHNL-2LED (42VA)	11	
	42	5	SHNL-2LED (42VA)	10	
	24	5	SHNL-2LED (42VA)	5	

Please note that even if the voltage drop allows certain amount of luminaries to be linked together, too long chain of luminaries may affect the ability of the fuses in the electrical input to work properly in a fault situation. Therefore it is not recommended to chain luminaries to a longer chain than 66m measured from the protective fuse (when the electrical supply is protected with C-curve fuse). Please refer to local applicable laws and requirements for electrical installations.

The SLAM® Hornet Neos control gear protects itself against excessive voltage drops (numerous linking) by switching itself off. If too many units are connected to the chain, some units of the chain will switch off. You may start up by unplugging the last units on the line.

Voltage peaks are more harmful and may damage the control gear permanently when subjected to excessive peaks continuously.

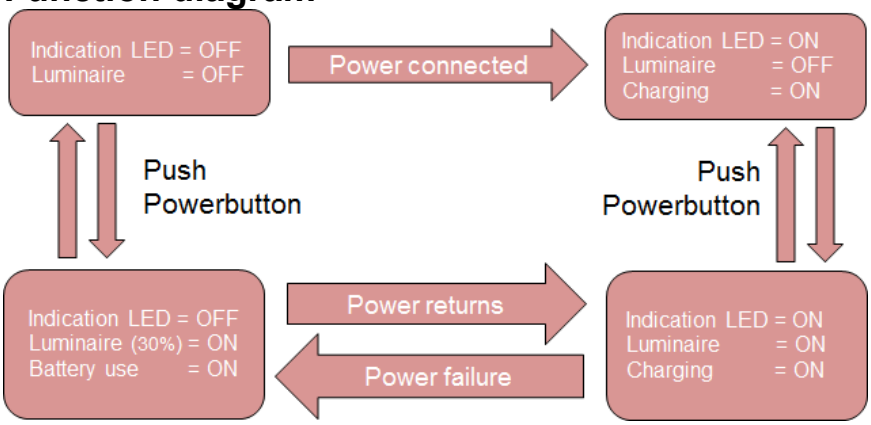
3.10 Special operating features of Neos EM

Connect luminaire to the mains/transformer. Push the power button on the end part to turn the luminaire on and off. Power button has an integrated standby/power LED to ease finding the button at dark enviroments and indicating that the luminaire is powered.

All EM -units are equipped with Li-Ion battery backup to allow the LED module to illuminate at up to 15% of the normal light output during power failures. When the backup is functioning the LED module blinks shortly every 15 seconds as an indication of the missing power supply. Battery backup function operates up to 3 hours depending on the condition and charge of the battery. By using the power button also the operation of battery backup can be controlled on and off.

Battery is charging whenever the luminaire is connected to the mains/transformer and the battery temperature is below +60°C. The temperature of the battery is monitored by the charging circuitry to prevent overtemperature charging. The battery charging in subzero temperatures is not prevented, but it is highly recommended that the charging is done only in ambient temperatures between +0°C…+55°C.

Function diagram



Indicator Status Chart

Button LED (power)	State
OFF	No power
BLINKING	Powered / Battery charging
LIT	Powered / Battery full

4.Inspection & Maintenance

4.1 After use

Take the following steps after the SLAM®Hornet Neos or SLAM FIXED® Novo –unit has been taken out from Ex –area:

1) Clean the unit with a damp cloth (do not use detergents or solvents)
2) Change the anti-static film if only little light comes through it or it is damaged
3) Have a visual check on the unit (condition of cable, PC –tube, tightness of parts)
4) Let the unit dry in open air

4.2 Maintenance

The following procedure should be taken in case the SLAM® Hornet Neos or SLAM FIXED® Novo unit needs to be repaired:

1) Maintenance may be carried out only outside Ex –area

2) Person responsible for maintenance should have been trained the basics of explosion-protection as well electricity. Please refer e.g. EN/IEC 60079-19 for further details.

3) Only original spare parts from the manufacturer should be used. Please note that there are no components in this unit which can be repaired by using glue, silicone or any other similar method.

4) The dissipation feature (antistatic) on transparent parts of SLAM® Hornet Neos or SLAM FIXED® Novo may be damaged because of external affects like solvents or chemicals or mechanical stress. In case the surface of the PC-tube is damaged in one area greater than 100 cm^2 the part has to be changed. The surface resistance of the transparent parts has to be between 0,5MΩ - 1 GΩ. Please contact Atexor Oy in case You need a simple measuring device, which is needed for measuring surface resistance of the PC-tube.

5) Maintenance instructions with exploded-view diagram and spare parts list are available at your local distributor and the manufacturer. Please, when requesting maintenance instructions with exploded-view diagrams, include the model and serial number of the product.

4.3 Testing

Tests are to be done according to EN/IEC 60079-19 until returning the repaired unit back to operation. Below mentioned tests shall be done in addition to the tests specified in EN/IEC 60079-19. For acceptance criteria please refer to the original test report of the equipment which is included in the delivery

- PE –resistance test (if applicable)
- High-voltage test (500 VDC between Phase& Neutral against P/E conductor)
- Operational test
- Test of expected use (vibrations, shaking)

Proper testing ensure safe operation of repaired equipment.

4.4 Repair report

The operator is responsible for keeping up to date record of the condition of his equipment (EN/IEC 60079-14). Ensuring the availability of this important information each repair procedure should be written down in repair report according to EN/IEC 60079-19.

This report should reveal at least:

- Person who conducted the maintenance
- Date of maintenance
- Procedure of maintenance
- Signature of person responsible accepting the maintenance

4.5 More information about the use of Electrical Apparatus for Explosive Gas Atmospheres

Please observe the requirements of the valid standards of the day. Please study at least the following standards:

EN/IEC 60079-14 (Electrical installations in hazardous areas)
EN/IEC 60079-10 (Classification of hazardous areas)
EN/IEC 60079-17 (Inspection and maintenance of electrical installations in hazardous areas)
EN/IEC 60079-19 (Repair and overhaul for apparatus used in potentially explosive atmospheres)

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Helpdesk

Under any doubt or question, please contact your local distributor or the manufacturer.

Contact details:

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