# Explosion Proof LED Work Light

## **QLEX-SLM** series



Thank you for purchasing Qlight's products. Please read this user manual carefully prior to installation and operation to ensure safe and correct use.

## Safety Precautions for Explosion Proof Products

Please follow the instruction below to ensure safe and correct use of explosion proof products.

- 1. Explosion proof products should be managed according to explosion-proof regulations. Do not disassemble, assemble, alter or repair the product arbitrarily.
- 2. The temperature rating of the product is the temperature the product will experience at the applied rated voltage and ambient temperature indicated.
- 3. Use cable glands that satisfy the product's explosion proof grade and temperature grade.
- 4. Unused cable entries must be filled with material that meets the explosion proof grade and temperature rating.
- 5. Before installing the product, please make sure all cautions indicated on the labels, packaging, and operation manual of the product are fully understood.
- 6. Installation, maintenance and repair of the product must be performed by experts in the explosion proof field, or persons who have received relevant training.
- 7. For safety, the product should be installed and operated in environments that avoid high temperature and high pressure.
- 8. Please follow general safety precautions and avoid installing the product in locations that may generate excessive heat.
- 9. When installing the product in places where chemicals are located, please make sure that the environment does not have two or more incompatible chemicals mixed. For safety, please read the instruction manual carefully and be mindful of the chemical compositions where the product is used.
- 10. Static electricity may be generated by physical contact due to the surface characteristics of this product so please use a wet towel or anti-static cleaner to remove the foreign substances on the product.
- 11. Please be careful of static electricity during product installation. Please eliminate static electricity by using static eliminator or handle the product with anti-static globes.
- Be cautious of generating static electricity when installing the product. To avoid static electricity , use static-protective accessories or Where anti-static gloves when handling the product.
- 13. Please note that special conditions shall be applied if the sign "X" is placed after the certificate number.
- 14. For safe use, regular overpressure test must be carried out in accordance with EN 60079-1, clause 15.2.3.
- 15. For safe use, tempered glass must be protected from strong impact

## A Precaution for Safety

Failure to follow the instructions below may cause a loss of life or serious physical injury.

- 1. During wiring or maintenance, please completely turn off the power of the product. (Failure to follow this may lead to an electric shock.) 2. Do not install the product in locations that subjects it to excessive dust or water other than the conditions designated by the IP protection
- ratings indicated for each product. (Failure to follow these instructions may cause a fire to the product, electric shock, physical injury, malfunction or damage to the product.)
- 3. Do not alter or repair this product. If maintenance or repair service is required, please contact your local Qlight contact point. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
- 4. Please apply the correct voltage to the product. (Failure to follow these instructions may lead to fire, electric shock, or product damage.)
- 5. When the product is applied to a condition that may impact lives or property, please make sure to have a double safety device. (Failure to follow this may cause damage to property, fire, electric shock and loss of life.)

## A Precautions for Correct Use

Failure to follow the proper instructions may cause damage to property, the product, or malfunction of the product that would void the warranty.

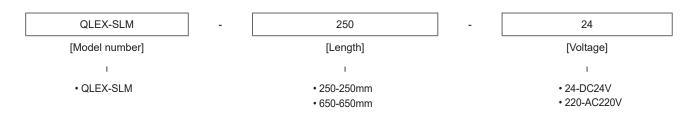
- 1. Please remove any objects that can interrupt ventilation around the product.
- 2. Please turn off the power of the product immediately if it fails to operate properly.
- 3. Carefully wire the product according to each product's specification.
- 4. Please be careful in preventing chemicals such as thinner, benzene, etc. in contact with the surface of the product.
- 5. Do not apply excessive force/impact to the product.
- 6. Failure to follow any of the instructions above may cause malfunction or damage to the product, fire, and electric shock.



Please scan the QR code for more detailed product information.

www.qlight.com

## **Ordering Specifications**



## **Product Specifications**

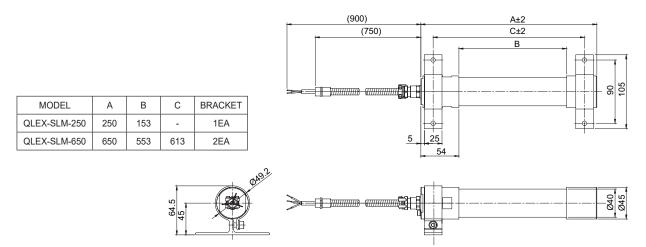
#### Explosion Proof Specifications

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Model number	QLEX-SLM-250	Zone	Zone 1	High risk gas/vapour	
	QLEX-SLM-650	definitions(Gas)	Zone 2	Medium risk gas/vapour	
Range for operating voltage	DC24V		GROUP II A	Acetone, Petrol, Methanol, Propane, Toluene	
	AC220V	Group	GROUP II B	Ethylene, City gas	
Ex mark	ATEX - DI 2G Ex db IIC T6 Gb IECEx - Ex db IIC T6 Gb KCs - Ex d IIC T6(QLEX-SLM-250) Ex d IIC T5/T6(QLEX-SLM-650) NEPSI - Ex db IIC T6 Gb	definitions(Gas)	GROUP II C	Hydrogen, Acetylene, Carbon sulphide	
			T1	450°C	
		Maximum surface	T2	300°C	
		temperature of electrical equipment	Т3	200°C	
Ambient operating temperature	(QLEX-SLM-250) QLEX-SLM-650 IECEx/ATEX : -40°C≤Tamb≤60°C(DC) QLEX-SLM-650 IECEx/ATEX : -40°C≤Tamb≤55°C(AC) QLEX-SLM-650 KCs : -40°C≤Tamb≤60°C(T5) QLEX-SLM-650 KCs : -40°C≤Tamb≤55°C(T6) QLEX-SLM-250 : -40°C ≤ Tamb ≤+ 60°C		T4	135°C	
			T5	100°C	
			T6	85°C	
		Zone definitions(Dust)	Zone 21	High risk powder/dust	
			Zone 22	Medium risk powder/dust	
			GROUP III A	Ignitible fibers/flyings(more than 0.5mm)	
		Group definitions(Dust)	GROUP III B	Non-conductive dusts	
			GROUP III C	Conductive dusts	
Explosion proof Group / Zone	Zone1, Zone2				
Protection rating	IP66/ IP67				

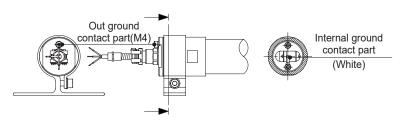
#### Optics Specifications/ General Product Specification

Optics Specifications							
Model number		QLEX-SLM-250		QLEX-SLM-650			
Lens color		Translucent					
Light color(Standard)		Cooldaylight					
Color temperature(Standard)		6,000-7,000K					
Luminous flux	DC	650lm		1,800lm			
	AC	350lm		1,580lm			
Illumination(at 1m)	DC	310Lux		650Lux			
	AC	240Lux		530Lux			
General Product Speci	fication						
Model number		QLEX-SLM-250		QLEX-SLM-650			
Rated voltage		DC24V	AC220V	DC24V	AC220V		
Range for operation voltage		DC21.6V-26.4V	AC198V-242V	DC21.6V-26.4V	AC198V-242V		
Power consumption		8.6W	9.0W	20.0W	23.0W		
Insulation resistance		Min. 100MΩ(500V DC mega ohm meter)					
Withstanding voltage		DC : 500VAC, 60Hz, 1minute / AC : 1,500VAC, 60Hz, 1minute					
Protection rating		IP66/ 67					
Materials		Side cover : AI, Lens : PC, Bracket : AI					
Certificate		C E 🕼 🖾 🕲 🏧 🔛		Cs Iter			
Weight(approx.)		0.50Kg		0.93Kg			

#### QLEX-SLM-250/ QLEX-SLM-650

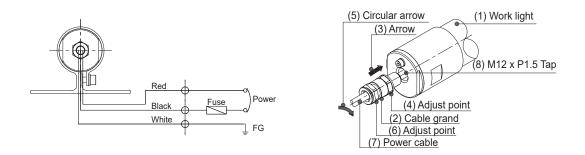


## **Grounding Instructions**



- Outer ground is Please use an M4 bolt at the location marked in the diagram above to ground the product.
- When connecting the grounding cable, please use a ring terminal(Ø4.2mm).
- Please use a grounding cable with a diameter greater than 4mm.
- Internal ground is Just using the White line in Power Cable.

## Wiring Instructions



• A Cable gland(2) shall path through power cable(7) in accordance with direction of the arrow(3). The cable gland shall be connected to M12xP1.5 Tab and it shall be fixed at the adjust point(4) with the direction of circular arrow(5) by a tool.

• Please fasten the power cable(7) in accordance with the circular arrow(5) once the adjust point(6) is fixed by the tool.

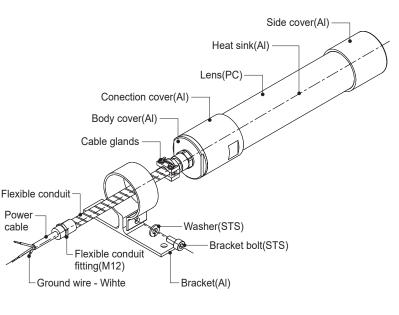
## Parts Definition/ Bracket Adjustment

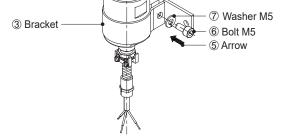
#### Parts Definition



④ Circular arrow

2 Arrow





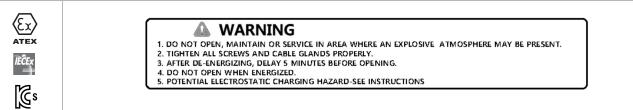
1 Work light

- Please place the product on desired surface area and secure it with brackets (either horizontal or vertical direction is possible).
- Insert the lens tube (1) into the bracket (3) in the direction indicated in the diagram (2). Adjust the lighting direction (4) to the desired position.
- Washer M5 (7) and bolt M5 (6) to the bracket in the direction indicated in the diagram (5).

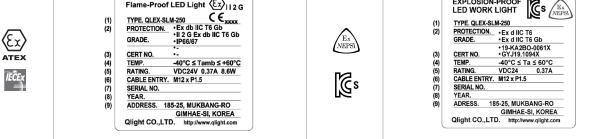
## Explosion proof product label

• All equipment that are used in explosive environment must have a label showing on following details in accordance with International Electrotechnical Commission(IEC) Regulation 60079-0.

#### ATEX, IECEx explosion proof certification - Warning Label



ATEX, IECEx explosion proof certification – Name Plate (1) Flame-Proof LED Light (2)|12 G (1) TYPE OLEX.SLM.250 C (2) PROTECTION. - Ex db IIC T6 Gb



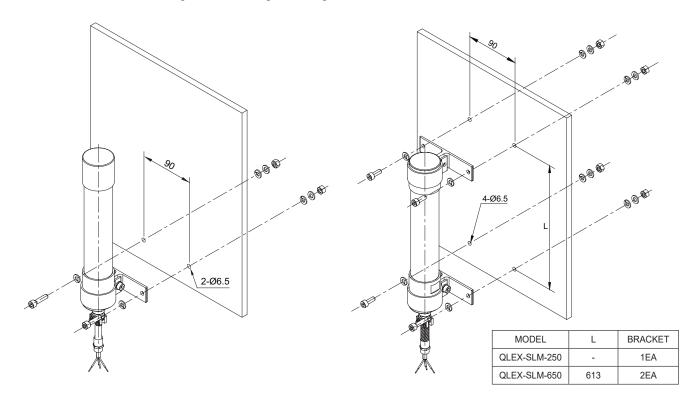
- (1) Type : QLEX-SLM-250
- (2) Protection Type. ( 1) Ex 2 d 3 IIC 4 T6 )
- ① : Explosion protection
- O : Type of protection Flame proof enclosure "d"
- ③:Explosion Group
- ④: Classification of Maximum surface temperature. T6 is 85°C
- (3) Cer't No.
- (4) Temp : Ambient Temperature
- (5) Electricity Specification
- (6) Cable grand Specification
- (7) Serial number
- (8) Producing Date
- (9) Address

#### Installation

- First, machine taps or holes on the mounting surface.
- The mounting hole of this product is 6.5mm in diameter(hole).
- When machining taps, fasten the bolt through the mounting hole of the product.
- When machining holes, insert the bolt through the hole of the product, and tighten the nut from the opposite side of the mounting surface.

#### Mounting Hole Specifications

• Machine holes on the mounting surface referring to the diagram below.



## Installation Environment and Protection Rating

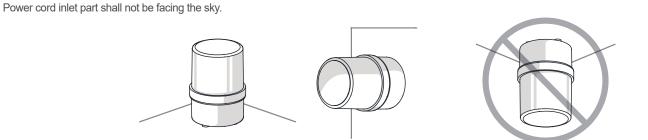
- This product is designed to be explosion proof.
- · Please make sure to use the product in an environment that meets the specified explosion proof rating and regulations.
- For further information, please visit our website (www.qlight.com).

## Product installation direction

#### Install the product in accordance with the manual. Otherwise rainwater or moisture may penetrate into the product.

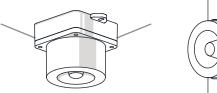
· BEACON/SIGNALING LIGHT

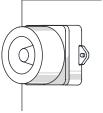
\* For products with a protection rating of less than IPX4, please install it vertically.



· ELECTRONIC SOUNDER/SIGNAL HORN

Sounder part shall not be facing the sky.









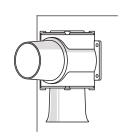




#### · HEAVY-DUTY & EXPLOSION PROOF SIGNALINGS

Sounder part shall not be facing the sky.



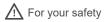




· SIGNAL TOWER LIGHTS

Power cord inlet part shall not be facing the sky.

\* For products with a protection rating of less than IPX4, please install it vertically.



Specification and dimensions listed in this catalogue subject to change without notice for product quality improvement. The newest product information is available on our website.(www.qlight.com) Please read the instruction manual attached to the product carefully before installation and use.

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Sightec Solution such as model name, symptom, telephone number and address. \*ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY FUNCTION OR DESIGN OR OTHERWISE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE. Head office : Suite #1510, STX-V Tower, 128 Gasan digital 1-ro, Geumcheon-gu, Seoul, Korea (Postal Code : 08507) Factory : 185-25, Mukbang-Ro, Sangdong-Myeon, Gimhae-Si, Gyeongsangnam-Do, Korea (Postal Code : 50805)

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