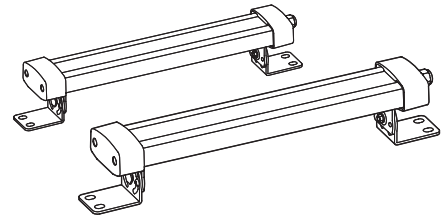


Explosion Proof LED Work Light

QMFL-300-Ex-24



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. This product requires grounding.

⚠ 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.)

⚠ 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.

Ordering Specifications

| | | | | | | |
|----------------|---|------------------|---|-------------------------------------|---|--------------|
| QMFL | - | 300 | - | Ex | - | 24 |
| [Model number] | | [Product length] | | [Ex-proof] | | [Voltage] |
| | | | | | | |
| • QMFL | | • 300 - 290mm | | • Ex - Non-sparking explosion proof | | • 24 - DC24V |



Please scan the QR code for more detailed product information.

www.qlight.com


Product Specifications

Explosion Proof Specifications

| | |
|-------------------------------|--|
| Model number | QMFL-300-Ex-24 |
| Range of operating voltage | DC 21.5V - 26.5V |
| Ex mark | KCs - Ex nR II T6 NEPSI - Ex nR IIC T6 Gc |
| Ambient operating temperature | -40°C ≤ Ta ≤ 60°C |
| Explosion proof Zone | Zone2 |
| Protection rating | IP67/ IP69K |

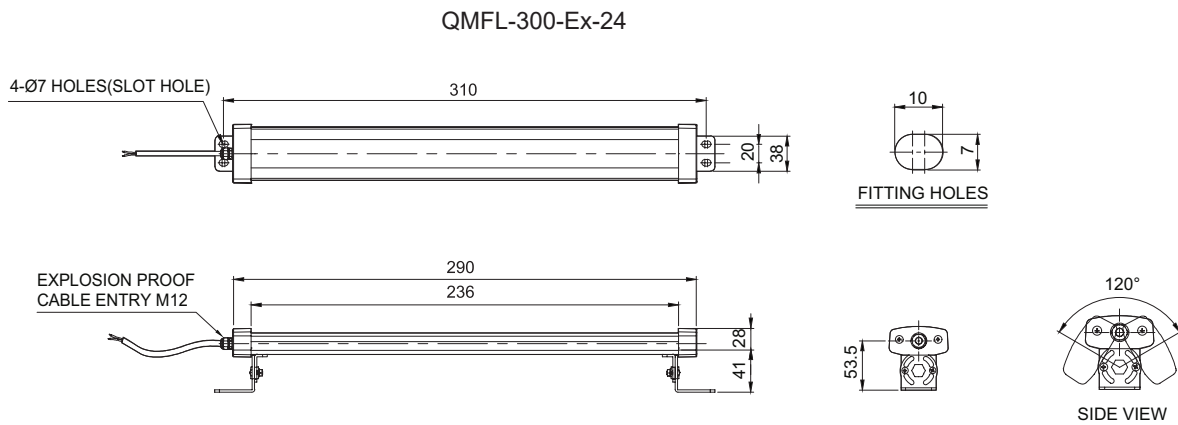
| | | | | |
|---|------------|---|----|-------|
| Zone definitions(Gas) | Zone 1 | High risk gas/vapour | | |
| | Zone 2 | Medium risk gas/vapour | | |
| Group definitions(Gas) | GROUP II A | Acetone, Petrol, Methanol, Propane, Toluene | | |
| | GROUP II B | Ethylene, City gas | | |
| | GROUP II C | Hydrogen, Acetylene, Carbon sulphide | | |
| Maximum surface temperature of electrical equipment | T1 | 450°C | T4 | 135°C |
| | T2 | 300°C | T5 | 100°C |
| | T3 | 200°C | T6 | 85°C |
| Zone definitions(Dust) | Zone 21 | High risk powder/dust | | |
| | Zone 22 | Medium risk powder/dust | | |
| Group definitions(Dust) | GROUP II A | Ignitable fibers/flyings(more than 0.5mm) | | |
| | GROUP II B | Non-conductive dusts | | |
| | GROUP II C | Conductive dusts | | |

Optics Specifications/ General Product Specifications

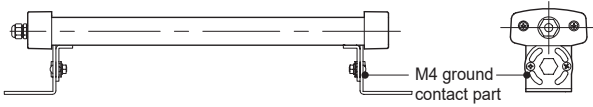
| | |
|--------------------------------|---|
| Optics Specifications | |
| Model number | QMFL-300-Ex-24 |
| Lens color | Translucent |
| Light color (Standard) | Cool daylight |
| Color temperature (Standard) | 6,000-7,000K |
| Luminous flux | 510lm |
| Illumination(at 1m) | 260Lux |
| General Product Specifications | |
| Model number | QMFL-300-Ex-24 |
| Rated voltage | DC24V |
| Range for operating voltage | DC21.5V-26.5V |
| Current | 0.410A |
| Power consumption | 10W |
| Insulation resistance | Min. 100MΩ(500V DC mega ohm meter) |
| Withstanding voltage | DC : 500V AC, 60Hz, 1 minute |
| Protection rating | IP67/ IP69K |
| Materials | Housing : Al, Side cover : Al, Lens : Tempered glass, Bracket : SPC-1 |
| Certificate |  |
| Weight(approx.) | 0.79kg |

Dimensions

(Units : mm)

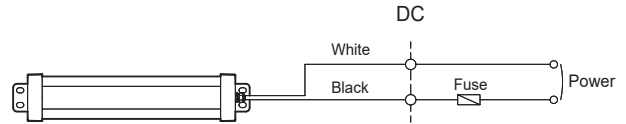


Grounding Instructions



- 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.
- Please use a ring terminal made of C5212 material as it has the same electrical properties of the conductor.
- Please use a grounding cable with a diameter greater than $\varnothing 4\text{mm}$.
- Please make sure to ground the common line(-) of the product.

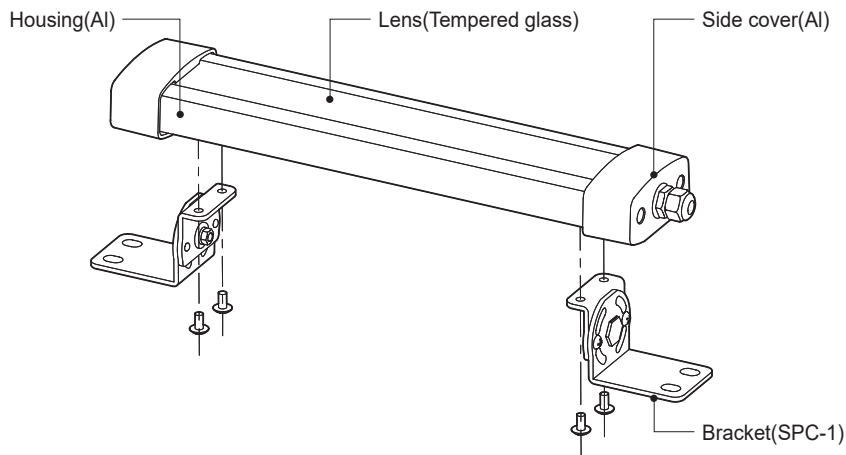
Wiring Instructions



- External power line - Dura&Flex-F VU(0.5sq) x 2C 450mm
- This product can be wired regardless of polarity.

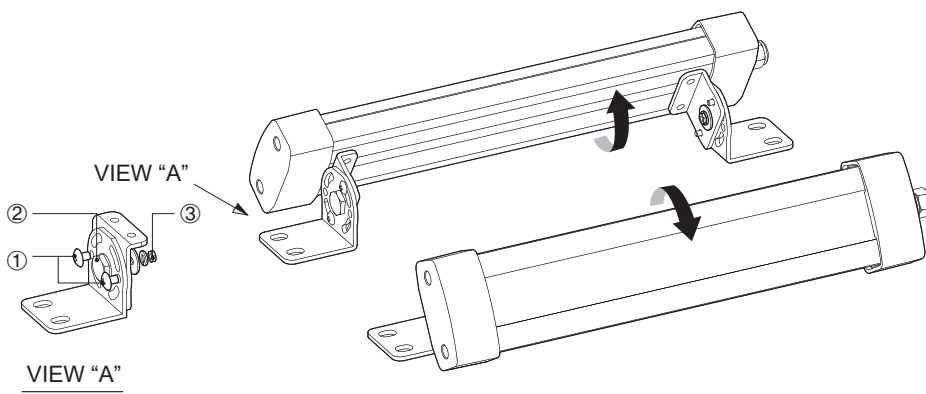
Parts Definition/ Bracket Adjustment

■ Parts Definition



■ Bracket Adjustment

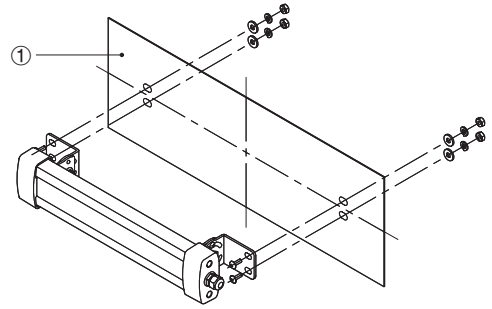
- In case angle adjustment is needed after installation, please loosen the fixing bolt of two brackets ① completely and remove them.
- Securing the bracket bushings ② using spanner, loosen the bracket fixing nuts ③ slightly and adjust the angle as desired.
- Once the angle is adjusted as desired, please secure the bracket fixing bolt ① aligning with guide rail and tighten the bracket fixing nut ③.



Installation/ Mounting Hole Specifications

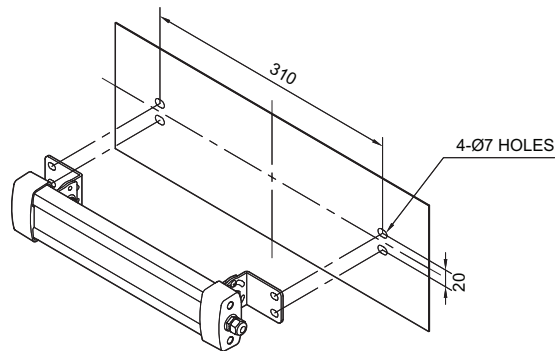
■ Installation

- First, machine taps or holes on the mounting surface ①.
- The mounting hole of this product is 7mm in diameter(long 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 for use with non-sparking explosion proof structure.
- Please make sure to use the product in a environment where satisfies regulated explosion proof grading.
- For further information, please visit our website (www.qlight.com).

Technical Certification

- Qlight products are designed to meet strict quality and technical standards. Thus, the Qlight brand is widely recognized for its high quality and technical innovations from leading institutions around the world.



ISO International Organization for Standardization

Qlight quality assurance systems have been certified by ISO by applying the ISO 9001:2008, KS Q ISO 9001:2009 regulation.



IECEX International Explosion Proof Certification (IECEX)

Certified that Qlight's products are being manufactured and manage according to international standards.



ATEX The European Regulatory Framework or Manufacture, Installation and Use of Equipment in Explosive Atmospheres

Qlight's explosion proof products comply with ATEX Directives 94/9/EC.



NEPSI National Supervision and Inspection Center for Explosion Protection and Safety of Instrumentation

Qlight's design and manufacturing system meets the People's Republic of China National explosion proof Standard. (Chinese Standard-GB3836/GB12476)



KCs Explosion Proof Device Safety Certification System

The safety performance of machines and equipment subject to safety certification and Technical capability and production system have been certified safety certification standards.



TIIS Japan Explosion-proof Certification

TIIS is a Japanese explosion proof test and certification system accordance with the Ministry of Health, Labour and Welfare Notice and the explosion proof guidelines for factory electrical equipment. Qlight's explosion proof products have been tested and certified by TIIS.



CCS China Classification Society

Qlight's design and quality assurance system has been certified by the China Classification Society.



RMRS Russian Maritime Register of Shipping

Qlight's design and quality assurance system has been certified from Russian Maritime Register of Shipping.



LR Lloyd's Register

Qlight's design and quality assurance system has been certified from Lloyd's Register.



KR Korean Register of Shipping

Qlight's design and quality assurance system has been certified by the Korean Register of Shipping.



KC Korea Safety Certification

Qlight's products are certified by KC for preventing accident caused by fire.



E-mark Commission Directive Regarding Vehicle Industry

Qlight has obtained EU mark for approved vehicles and vehicle components sold into the EU (EEA : European Economic Area)



ICAO International Civil Aviation Organization

Qlight guarantees our products satisfy the criteria regulated by the International Civil Aviation Organization (ICAO, FAA).



KCC Conformity Assessment of Broadcasting Communication Equipment

Qlight has been certified to protect the electromagnetic environment that causes unwanted electromagnetic waves from the device, communication failure due to other devices or external radio waves, and malfunction of the device.



UL Underwriters Laboratories

Qlight's design and quality assurance system has been certified from UL to ensure the stability of consumption goods and to protect consumers.



CCCF China Certification Center for Security & Protection

Qlight has passed the rigorous examination process of "Passing Fire Protection Products Centering" In order to sell fire-fighting products such as fire alarm equipment to Chinese market.



CCC China Compulsory Certificate

Qlight's has obtained CCC which guarantees safety, protection against fraud, environment, etc.



CE European Commission

Qlight has been certified by the European Commission.



RoHS2 Restriction of Hazardous Substances Directive

Qlight complies with the Restriction of Hazardous Substances Directive by limiting its use of hazardous materials.



For your safety

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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You can expect prompt service if you have exact information such as model name, symptom, telephone number and address.

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