Explosion Proof LED Work Light
QMFL300-Ex-24

Ex | IP67 | IP69K | -40~+60℃ | RoHS2
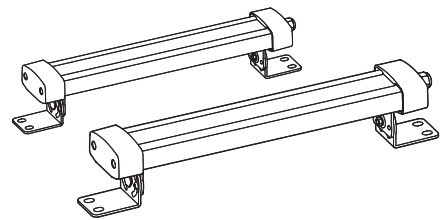
Thank you for purchasing Qlight's products. Please read this user manual carefully prior to installation and operation to ensure safe and correct use.

⚠ 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

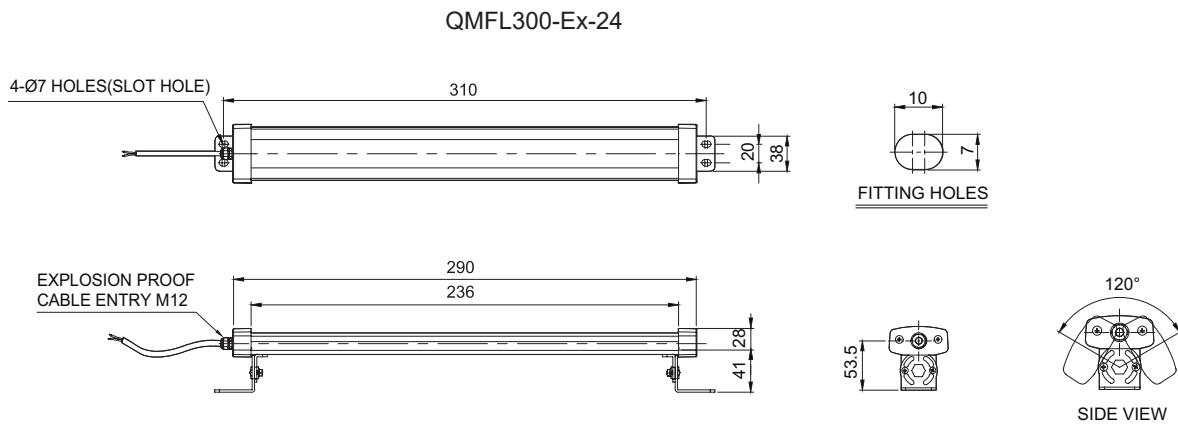| Model number	QMFL300-Ex-24
Range of operating voltage	DC 21.5V - 26.5V
Ex mark	KCs - Ex nR II T6 NEPSI - Ex nR IIC T6 Gc
Ambient operating temperature	–40°C ≤ Ta ≤ 60°C
Explosion proof Zone	Zone2
Protection rating	IP67/ IP69K

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	Ignitible 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	QMFL300-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	QMFL300-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)

QMFL300-Ex-24

4-Ø7 HOLES(SLOT HOLE)

310

20

38

10

7

FITTING HOLES

EXPLOSION PROOF CABLE ENTRY M12

290

236

28

41

53.5

120°

SIDE VIEW

Grounding Instructions

M4 ground contact part
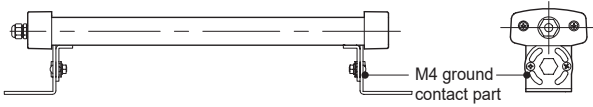
- Please use an M4 bolt at the location marked in the diagram above to ground the product.
- When connecting the grounding cable, please use a ring terminal.
- Please use a ring terminal made of C5212 material as it has the same electrical properties of the conductor.
- Please use a grounding cable with a diameter greater than Ø4mm.
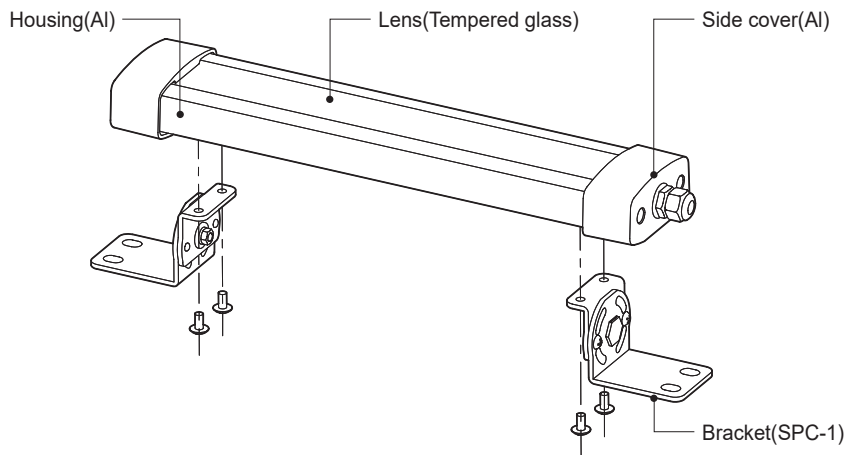- Please make sure to ground the common line(-) of the product.

Wiring Instructions

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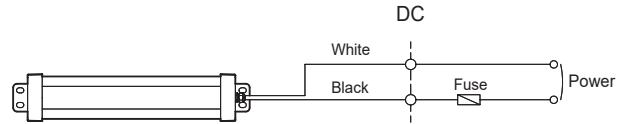
- External power line - Dura&Flex-F VU(0.5sq) x 2C 450mm
- This product can be wired regardless of polarity.

Parts Definition/ Bracket Adjustment

■ Parts Definition

Housing(Al)   Lens(Tempered glass)   Side cover(Al)

Bracket(SPC-1)

■ 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.

VIEW "A"

②
③
①

VIEW "A"
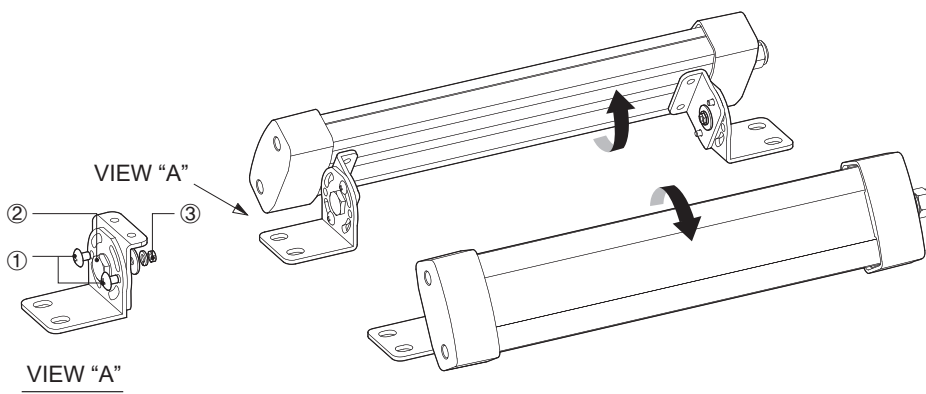
Installation/ Mounting Hole Specifications

■ 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.
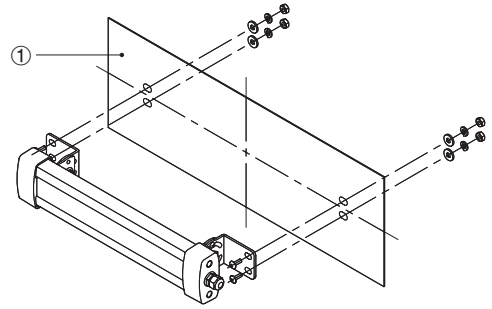
■ Mounting Hole Specifications

• Machine holes on the mounting surface referring to the diagram below.
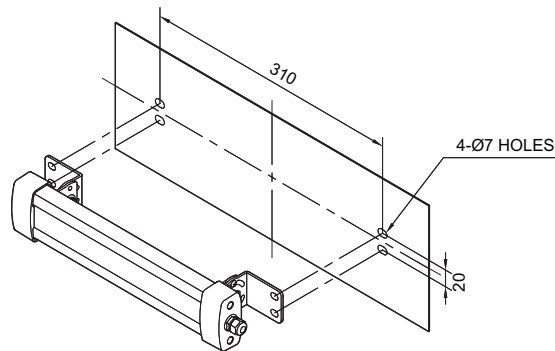
Installation Environment and Protection Rating

• This product is designed for use with non-sparking explosion proof structure.
• Please make sure to use the prduct in a environment where satisfies regulated explosion proof grading.
• 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.

Power cord inlet part shall not be facing the sky.
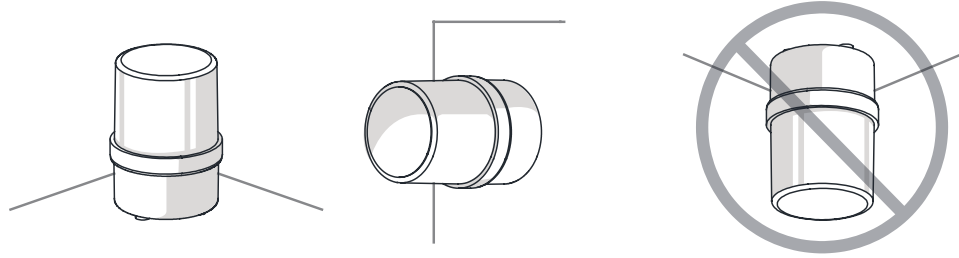
· ELECTRONIC SOUNDER/SIGNAL HORN

Sounder part shall not be facing the sky.
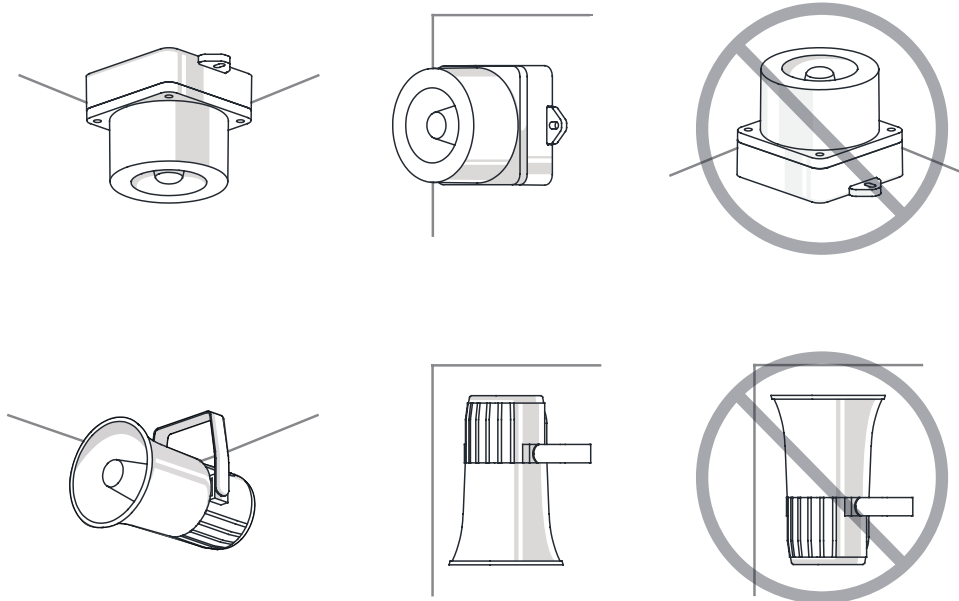
· HEAVY-DUTY & EXPLOSION PROOF SIGNALINGS

Sounder part shall not be facing the sky.
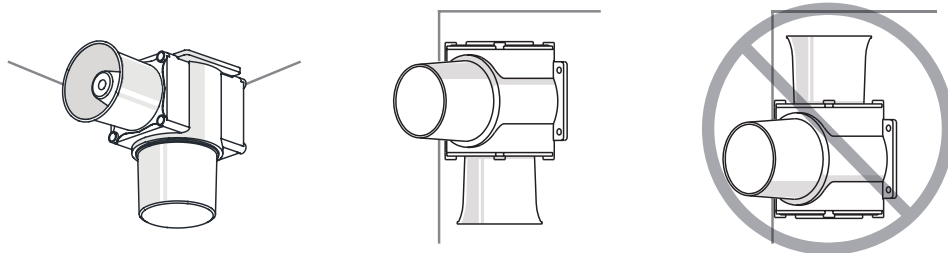
· SIGNAL TOWER LIGHTS　　　　　　　　　　※ For products with a protection rating of less than IPX4, please install it vertically.

Power cord inlet part shall not be facing the sky.

MEMO

MEMO
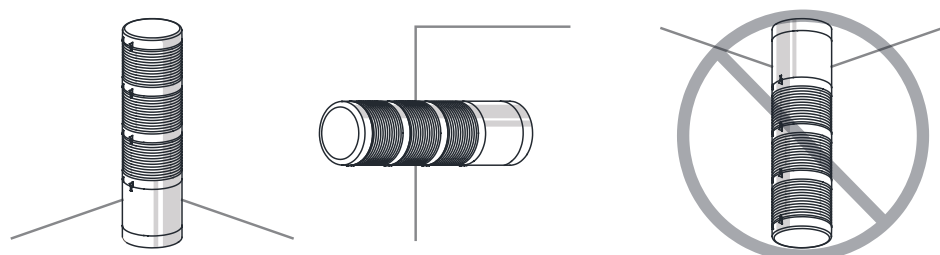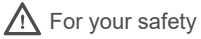
⚠ For your safety

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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