QML/QMHL

Water, Vibration and Oil Resistant LED Work Lights with IP67/ IP69K Protection

IP67 IP69K -30~+60°C

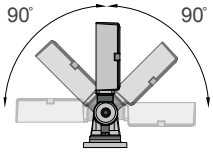
Water, vibration and oil resistant LED work light, suitable for machine tools applications and high temperature water cleaning environments

Common Specifications(QML/ QMHL)

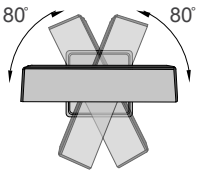
- Excellent oil resistance with a special sealing structure with IP67 protection rating, suitable for machine tool applications with cutting fluids
- Suitable for high pressure and high temperature water cleaning environments(IP69K)
- Tempered glass prevents damage from machine tool chips
- Foreign substances do not accumulate on the shielding glass surface of the working light due to its flush structure to the housing structure of the product
- Can select between QML model (Anti-glare type) and QMHL model (High luminance type) depending on your work conditions
- An external power supply is not needed for the AC type product; AC voltage can be applied directly to the product
- Can select from a variety of bracket options from direct mount, tilt mount, and pan/ tilt mount type to fit your work environment or lighting condition needs
- Standard entry cable included. Can customize the product with the M12 connector if requested
- Customized oil resistant cable attached type available
- Certificates : CE, UL, KC Compliant

Tilt/ Pan Type MF Bracket, Water and Oil Resistant

SIDE VIEW



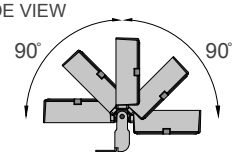
TOP VIEW



- Water and oil resistant MF type brackets protect output cable from cutting fluid and chips
- Has a tilt adjustment angle of 180° and a pan angle of 160°

Tilt Type K Bracket

SIDE VIEW



Has tilt adjustment with wide angle of 180°

M12 Connector Attached Type

Customized cable entry M12 connector attached type available, an additional connector cable will be also provided with this model.

Test Conditions/ Regulations

Vibration Resistance Test	• Acceleration : 20m/s^2 • Duration : 1 octave/min • Range of frequency : 10-150Hz • Amplitude : 10 times maximum 7.5mm, direction : test 10times in 3 directions(X, Y, Z)
Shock Resistance Test	• Acceleration : 20g • Directions : ±X, ±Y, ±Z • Numbers : 3 times each directions • Time period : 11ms for each direction • Waveform : Half sine
Oil Resistance Test	• General test : Tested in water soluble and non-water soluble flooded environments for 500 hours. • High temperature oil resistance test : Place the object in a constant temperature water bath at 80°C for two hours and then submerge the object in the room temperature oil diluent for 24hours.
Solid Particle Protection Test(IP6X)	• After reducing the pressure inside the test object, spray talcum powder with a nominal diameter of 50um for 2 hours at 40-60meters/hour inside the dust chamber. • IEC60529
Liquid Ingress Protection Test(IPX7)	• Test ingress by putting the object under 1000mm water with 2bar of pressure for 30 mins
High-pressure, High-temperature Wash-down Test (IP69K)	• Spray nozzle provides 80°C water with pressure of 80–100 bar and a flow rate of 14–16 L/min to the object • Distance between spray nozzle and the test object : 10-15cm • Water spray angle : 0°, 30°, 60°, 90° • The nozzle is held at 4 of each angle for 30 seconds • DIN 40050 PART9

QML/QMHL

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IP67 IP69K -30~+60°C

QML-150/QML-250

- Equipped anti-glare filter
- Suitable for environments that require stable intensity illumination for improved visibility

QML-150-D

QML-250-D

QML-150-K

QML-250-K

QML-150-MF

QML-250-MF

QMHL-150/QMHL-250

- High intensity illumination and condensor lens combination
- High intensity illumination allows for the environment both long distance and straightness are required

QMHL-150-D

QMHL-250-D

QMHL-150-K

QMHL-250-K

QMHL-150-MF

QMHL-250-MF

Optics Specifications				
Model	QML-150-D QML-150-K QML-150-MF	QML-250-D QML-250-K QML-250-MF	QMHL-150-D QMHL-150-K QMHL-150-MF	QMHL-250-D QMHL-250-K QMHL-250-MF
Lens color	Translucent	Translucent	Transparent	Transparent
Light color	Cooldaylight			
Color temperature	6,000-7,000K			
Luminous flux	875lm	2,014lm	884lm	1,892lm
Illumination(at 1m)	620Lux	890Lux	1,000Lux	1,900Lux

Specifications				
Model	QML-150-D QML-150-K QML-150-MF	QML-250-D QML-250-K QML-250-MF	QMHL-150-D QMHL-150-K QMHL-150-MF	QMHL-250-D QMHL-250-K QMHL-250-MF
Rated voltage	DC24V	DC24V	DC24V	DC24V
	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V
Range for operation voltage	DC21.5V-26.5V / AC98V-121V / AC198V-245V			
Current	0.530A	1.180A	0.510A	1.020A
	0.110A / 0.054A	0.215A / 0.104A	0.105A / 0.051A	0.208A / 0.102A
Power consumption	13W	29W	12W	25W
	12W / 11W	24W / 23W	11.5W / 11W	23W / 23W
Insulation resistance	Min. 100MΩ(500V DC mega ohm meter)			
Withstanding voltage	DC : 500V AC, 60Hz, 1 minute / AC : 1,500V AC, 60Hz, 1 minute			
Operating temperature	-30°C to +60°C			
Waterproof	IP67/ IP69K			
Materials	Housing: Al, Lens : Tempered glass, Cover : Al, Bracket : K type-STS430/MF type-Al			
Certification	CE UL DC only KC			
Weight(approx.)	QML-150-D : 0.75kg QML-150-K : 0.93kg QML-150-MF : 0.98kg	QML-250-D : 1.30kg QML-250-K : 1.46kg QML-250-MF : 1.52kg	QMHL-150-D : 0.95kg QMHL-150-K : 1.05kg QMHL-150-MF : 1.45kg	QMHL-250-D : 1.20kg QMHL-250-K : 1.30kg QMHL-250-MF : 1.70kg

QML/QMHL

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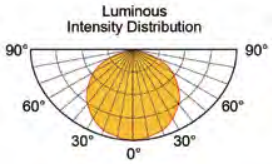
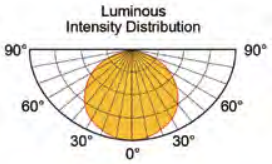
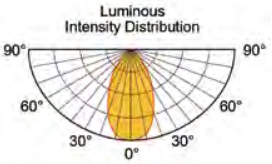
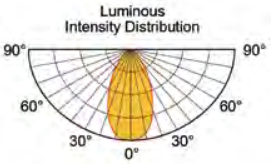
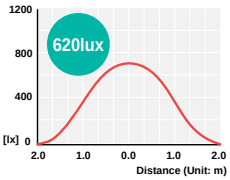
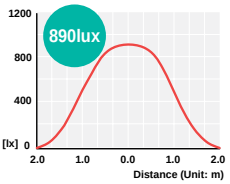
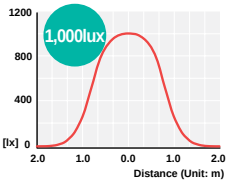
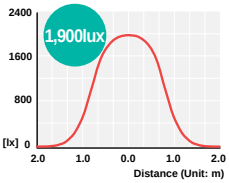
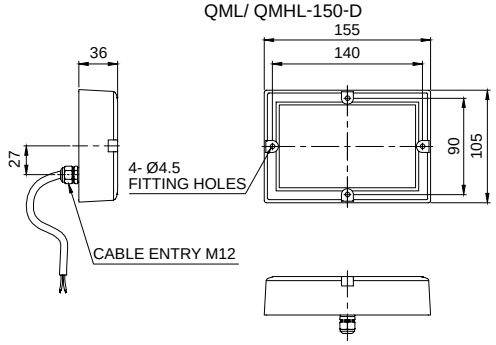
Light Distribution and Illumination

Model	QML-150-D QML-150-K QML-150-MF	QML-250-D QML-250-K QML-250-MF	QMHL-150-D QMHL-150-K QMHL-150-MF	QMHL-250-D QMHL-250-K QMHL-250-MF
Light Distribution Curve				
Illumination Feature				

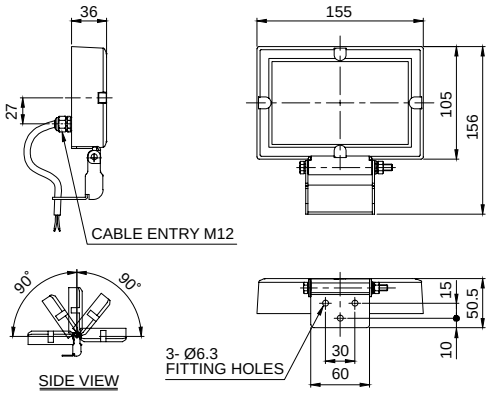
Technical Diagram

(Units : mm)

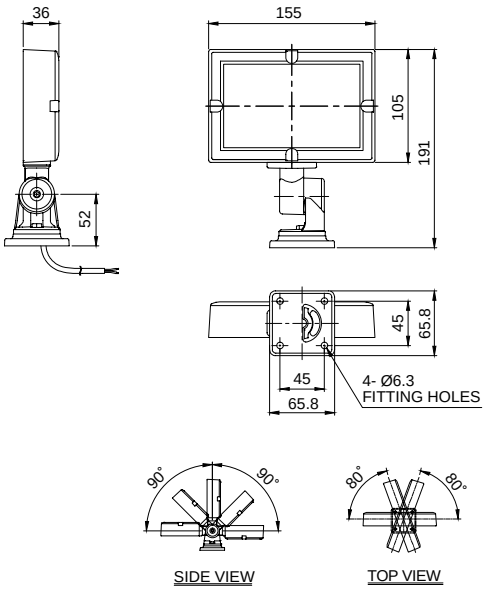
QML/ QMHL-150-D



QML/ QMHL-150-K



QML/ QMHL-150-MF



※ Power line standard : Dura & Flex-F VU(0.5sq×2C) 450mm

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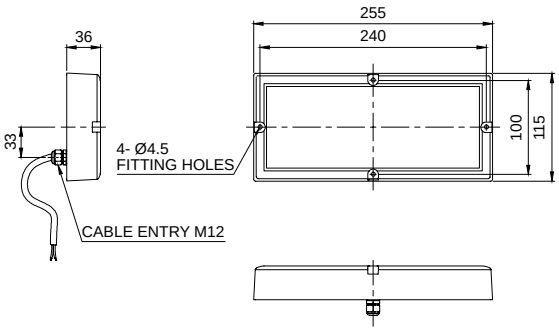
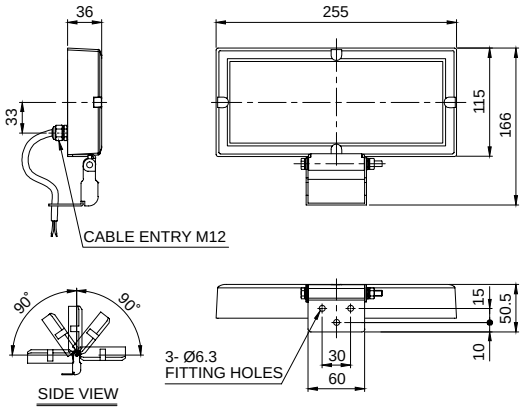
Technical Diagram

(Units : mm)

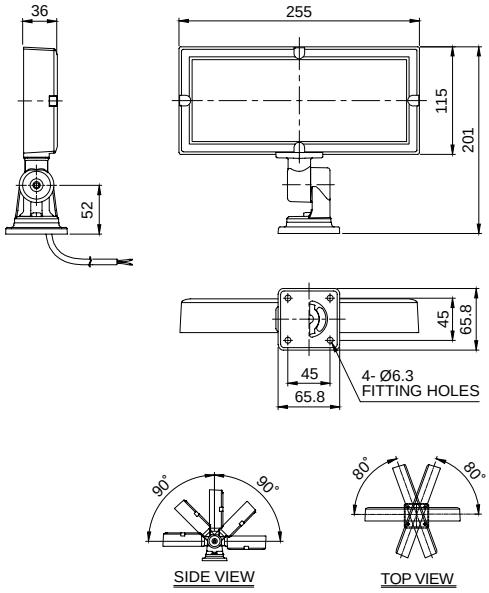
QML/ QMHL-250-D



QML/ QMHL-250-K



QML/ QMHL-250-MF



※ Power line standard : Dura & Flex–F VU(0.5sq×2C) 450mm

Ordering Specification

QML	-	150	-	D	-	24
[Model number]		[Length]		[Mount bracket]		[Voltage]
• QML : Anti-Glare • QMHL : High illumination		• 150 : 155mm • 250 : 255mm		• D : Self stand • K : Vertical angle adjustment • MF : Vertical, horizontality angle adjustment		• 24-DC24V • 110-AC110V • 220-AC220V

Please check the safety manual before use, accidents such as fire or electric shock can occur if the safety manual is not followed.

This product can be changed without any notification. Latest information is on the website.