Qlight LED Industrieleuchten

Katalog 2018

QMFLN

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

IP67 IP69K -30~+60°C

Suitable for machine tool equipment that needs excellent water and oil proof features

Common Specifications

- Special sealing structure provides excellent oil resistance, suitable for environments with high temperature cutting oil
- Suitable for high pressure and high temperature water cleaning environments(IP69K)
- Tempered glass prevents damage from machine tool chips
- Bracket included has tilt adjustment with angle of 120°
- Can select from variety of body length of 200/300/400/500/600mm to fit your application needs
- Can choose anti-glare lens type depending on work environment needs

Micro lens structure provides superior light focusing capability

Structural Features

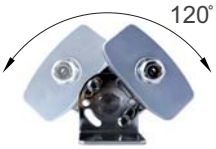
Special sealing structure features superior oil resistance
Prevents components from moving in the sealed body due to warpage from high temperature over a period of time

Chemically Tempered Glass
Prevents shock damage from machine tool chips

Special Micro Lens
Provides high luminance with superior light focusing capability, suitable for work environments that need long distance direct visibility

Aluminum Heat-Radiant Housing
Adopted special heat-radiant structure to provide stable luminance in high temperature sealed environment

Tilt Type Bracket



The standard bracket included enables tilt adjustment with angle of 120°

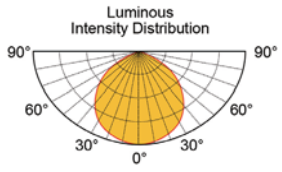
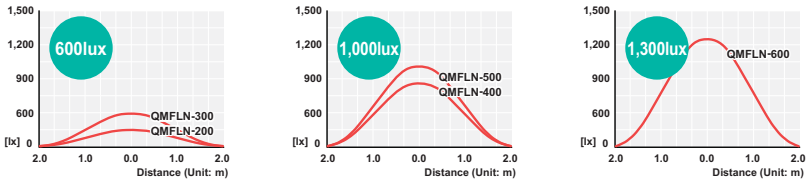
Test Conditions/ Regulations

Vibration Resistance Test	• Acceleration : 20m/s^2 • Duration : 1 octave/min • Range of frequency : 10-150Hz • Amplitude : Maximum 7.5mm, Direction : tested 10times each 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

QMFLN

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

Light Distribution and Illuminance

Model	Light Distribution Curve	Illumination Feature
QMFLN		

Optics Specifications

Model		QMFLN-200	QMFLN-300	QMFLN-400	QMFLN-500	QMFLN-600
Lens color		Translucent	Translucent	Translucent	Translucent	Translucent
Light color		Cooldaylight				
Color temperature		6,000-7,000K				
Luminous flux	DC	732lm	1,626lm	2,411lm	2,710lm	3,523lm
Efficacy (lm/W)	DC	270Lux	600Lux	890Lux	1,000Lux	1,300Lux

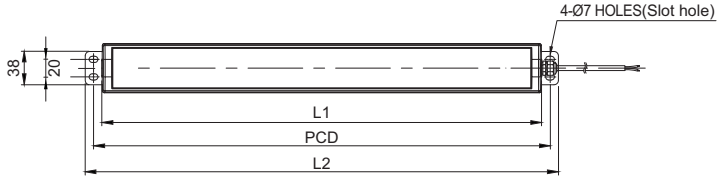
Specifications

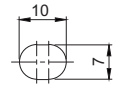
Model	QMFLN-200	QMFLN-300	QMFLN-400	QMFLN-500	QMFLN-600
Voltage	DC24V				
Range for operation voltage	DC22V-30V				
Current	0.235A	0.520A	0.816A	0.816A	1.050A
Power consumption	5.6W	12.5W	20W	20W	25W
Power consumption	Min. 100MΩ(500V DC mega ohm meter)				
Withstanding voltage	500V AC, 60Hz, 1 minute				
Operation temperature	-30°C to +60°C				
Protection rating	IP67/ IP69K				
Materials	Housing: Al, Lens : Tempered glass, Bracket : Spc-1				
Certificates	-				
Weight (Approx.)	0.57kg	0.80kg	1.03kg	1.26kg	1.49kg

Technical Diagram

(Units : mm)

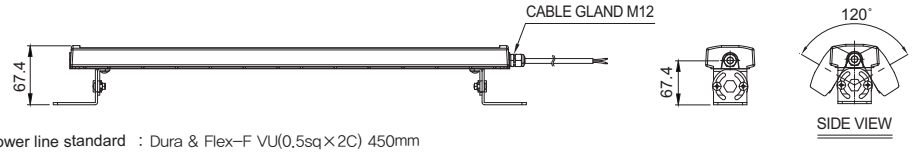
QMFLN-200/ 300/ 400/ 500/ 600





FITTING HOLES

MODEL	L1	PCD	L2
QPFLN - 200	190	210	230
QPFLN - 300	290	310	330
QPFLN - 400	400	420	440
QPFLN - 500	500	520	540
QPFLN - 600	600	620	640



SIDE VIEW

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

Ordering Specification

QMFLN	-	600	-	24
[Model number]		[Product length]		[Voltage]
• QMFLN		• 200 : 190mm • 300 : 290mm • 400 : 400mm • 500 : 500mm • 600 : 600mm		• 24-DC24V

QFL/ QFLC

Water and Vibration Resistant LED Light Bars with IP67 Protection

IP67 -30~+50°C

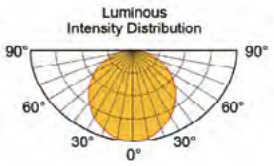
Common Specifications(QFL/ QFLC)

- Excellent front and side light distribution with the use of a special light distributing structure on the surface of the oval lens
- An external power supply is not needed for the AC type product; AC voltage can be applied directly to the product
- Excellent heat dissipation by using a heat dissipative material connected to the outer cover
- Water and vibration proof model (IP67), suitable for outdoors and places with dust and moisture
- Can select between QFL model (Anti-glare type) and QFLC model (High luminance type) depending on your work conditions
- Tilt bracket provides wide luminance angle adjustment of 130˚
- Superior durability with lens made of polycarbonate
- Standard entry cable included. Can customize the product with the M12 connector if requested
- Certificates: CE, UL, KC Compliant

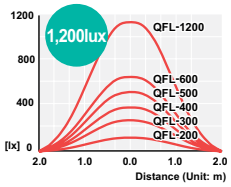
QFL Translucent Lens Type

Light Distribution and Luminance

Light Distribution Curve



Luminance Feature



Specifications on Luminance

Model		QFL-200	QFL-300	QFL-400	QFL-500	QFL-600	QFL-1200
Lens color		Translucent	Translucent	Translucent	Translucent	Translucent	Translucent
Light color		Cooldaylight					
Color temperature		6,000-7,000K					
Luminous flux	DC	395lm	828lm	1,087lm	1,474lm	1,815lm	3,338lm
	AC	481lm	940lm	1,172lm	1,602lm	1,862lm	3,545lm
Luminance (at 1m)	DC	120lux	250lux	375lux	500lux	625lux	1,150lux
	AC	150lux	280lux	400lux	545lux	640lux	1,200lux

General Specifications

Model	QFL-200	QFL-300	QFL-400	QFL-500	QFL-600	QFL-1200
Rated voltage	DC24V	DC24V	DC24V	DC24V	DC24V	DC24V
	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V
Range for operation voltage	DC21.5V-26.5V / AC98V-121V / AC198V-245V					
Current	0.180A	0.380A	0.520A	0.690A	0.820A	1.650A
	0.097A / 0.047A	0.220A / 0.107A	0.330A / 0.160A	0.410A / 0.200A	0.450A / 0.220A	0.910A / 0.450A
Power consumption	4.5W	9.5W	12.5W	17W	20W	40W
	5.5W / 5.5W	13W / 13W	20W / 19W	24W / 24W	27W / 26W	53W / 53W
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 +50°C					
Protection rating	IP67					
Materials	Lens : PC, Cover : Al, Heat sink : Al					
Certifications	CE UL DC only KC					
Weight(approx.)	0.40kg	0.49kg	0.58kg	0.73kg	0.82kg	1.28kg
	0.43kg	0.52kg	0.61kg	0.76kg	0.85kg	1.31kg

QFL/ QFLC

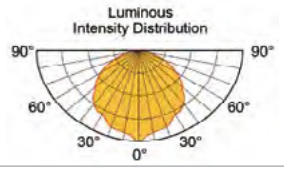
Water and Vibration Resistant LED Light Bars with IP67 Protection

IP67 -30~+50°C

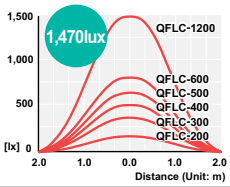
QFLC Transparent Lens

Light Distribution and Luminance

Light Distribution Curve



Luminance Feature



Specifications on Luminance

Model		QFLC-200	QFLC-300	QFLC-400	QFLC-500	QFLC-600	QFLC-1200
Lens color		Transparent	Transparent	Transparent	Transparent	Transparent	Transparent
Light color		Cooldaylight					
Color temperature		6,000-7,000K					
Luminous flux	DC	462lm	975lm	1,282lm	1,739lm	2,084lm	3,970lm
	AC	565lm	1,109lm	1,384lm	1,893lm	2,198lm	4,221lm
Luminance (at 1m)	DC	150Lux	310Lux	460Lux	620Lux	775Lux	1,470Lux
	AC	190Lux	350Lux	500Lux	670Lux	815Lux	1,500Lux

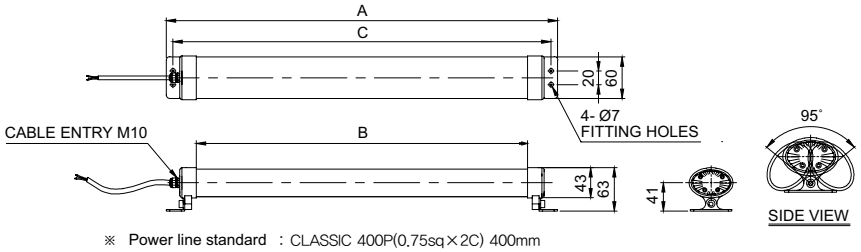
General Specifications

Model	QFLC-200	QFLC-300	QFLC-400	QFLC-500	QFLC-600	QFLC-1200
Rated voltage	DC24V	DC24V	DC24V	DC24V	DC24V	DC24V
	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V	AC110V / 220V
Range for operation voltage	DC21.5V-26.5V / AC98V-121V / AC198V-245V					
Current	0.180A	0.380A	0.520A	0.690A	0.820A	1.650A
	0.097A / 0.047A	0.220A / 0.107A	0.330A / 0.160A	0.410A / 0.200A	0.450A / 0.220A	0.910A / 0.450A
Power consumption	4.5W	9.5W	12.5W	17W	20W	40W
	5.5W / 5.5W	13W / 13W	20W / 19W	24W / 24W	27W / 26W	53W / 53W
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 +50°C					
Protection rating	IP67					
Materials	Lens : PC, Side cover : Al, Heat sink : Al					
Certifications	CE UL DC only KC					
Weight(approx.)	0.47kg	0.57kg	0.67kg	0.77kg	0.86kg	1.32kg
	0.50kg	0.61kg	0.71kg	0.81kg	0.90kg	1.40kg

Technical Diagram

(Units : mm)

QFL/ QFLC-200/ 300/ 400/ 500/ 600/ 1200



※ Power line standard : CLASSIC 400P(0.75sq×2C) 400mm

MODEL	A	B	C
QFL/ QFLC-200	240	152	220
QFL/ QFLC-300	340	252	320
QFL/ QFLC-400	440	352	420
QFL/ QFLC-500	540	452	520
QFL/ QFLC-600	640	552	620
QFL/ QFLC-1200	1190	1102	1170

Ordering Specification

QFL	-	600	-	110
[Model number]		[Product length]		[Voltage]
• QFL : Translucent lens • QFLC : Transparent lens		• 200 : 240mm • 300 : 340mm • 400 : 440mm • 500 : 540mm • 600 : 640mm • 1200 : 1,190mm		• 24-DC24V • 110-AC110V • 220-AC220V

QCML/ QCMLC

Waterproof LED Light Bars for Multi-use with Protection of IP67/ IP69K

IP67 IP69K -30~+50℃

High seal and high waterproof light bars that can be used in high temperature wash down applications
Can select from a variety of light colors from cooldaylight, incandescent, amber and red color lights to fit your application needs

Common Specifications(QCML/ QCMLC)

- Side cover and lens is integrated together with a multi silicon rubber sealing structure for superior protection from water
- Aesthetically pleasing with slim and compact housing
- Polycarbonate material provides superior heat and shock resistance
- Features great seal and durability in food processing, pharmaceutical, and beverage processing machine that needs high temperature wash down
- Can select from light colors of cool white, warm white, amber and red color lights depending on your application needs such as semiconductor manufacturing equipment, machine tools and test equipment
- Can select between transparent lens type and translucent lens type depending on your application needs
- Detachable mounting bracket structure enables to adjust mounting hole space freely
- Protection rating : IP67, IP69K
- Certificates : CE Compliant, UL Listed

QCML Series Specifications

Lens Type	Length	Cooldaylight	Incandilight	Red	Amber
Translucent Lens	200mm	QCML-200-W	QCML-200-PY	QCML-200-R	QCML-200-A
	300mm	QCML-300-W	QCML-300-PY	QCML-300-R	QCML-300-A
	400mm	QCML-400-W	QCML-400-PY	QCML-400-R	QCML-400-A
	500mm	QCML-500-W	QCML-500-PY	QCML-500-R	QCML-500-A
	600mm	QCML-600-W	QCML-600-PY	QCML-600-R	QCML-600-A
	900mm	QCML-900-W	QCML-900-PY	QCML-900-R	QCML-900-A
	1,200mm	QCML-1200-W	QCML-1200-PY	QCML-1200-R	QCML-1200-A
	1,500mm	QCML-1500-W	QCML-1500-PY	QCML-1500-R	QCML-1500-A
Transparent Lens	200mm	QCMLC-200-W	QCMLC-200-PY	QCMLC-200-R	QCMLC-200-A
	300mm	QCMLC-300-W	QCMLC-300-PY	QCMLC-300-R	QCMLC-300-A
	400mm	QCMLC-400-W	QCMLC-400-PY	QCMLC-400-R	QCMLC-400-A
	500mm	QCMLC-500-W	QCMLC-500-PY	QCMLC-500-R	QCMLC-500-A
	600mm	QCMLC-600-W	QCMLC-600-PY	QCMLC-600-R	QCMLC-600-A
	900mm	QCMLC-900-W	QCMLC-900-PY	QCMLC-900-R	QCMLC-900-A
	1,200mm	QCMLC-1200-W	QCMLC-1200-PY	QCMLC-1200-R	QCMLC-1200-A
	1,500mm	QCMLC-1500-W	QCMLC-1500-PY	QCMLC-1500-R	QCMLC-1500-A
Features		• Bright and transparent color temperature that is most commonly used • Color temperature : 6,000-7,000K	• Less eye fatigue with color temperature similar to incan-descent lamp • Color temperature : 2,500-3,500K	• Red color light for special use • Wavelength : 618nm-632nm	• Amber color light for special use • Wavelength : 585nm-595nm
Applications		• Machine tools • Factory facilities • Image test • Panel boards	• Food processing facilities • Cosmetics manufacturing facility • Pharmaceutical equipment and facilities • Chemical facilities	• Semiconductor manufacturing equipment (in clean room) • Print and light exposure manufacturing facilities • Growing plants with artificial lights	• Semiconductor manufacturing equipment • Testing equipment

QCML/ QCMLC

Waterproof LED Light Bars for Multi-use with Protection of IP67/ IP69K

IP67 IP69K -30~+50°C

QCML Translucent Lens Type

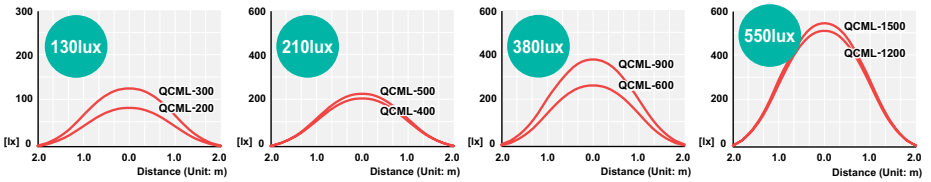
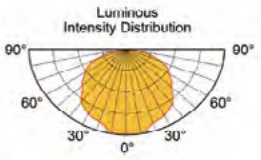
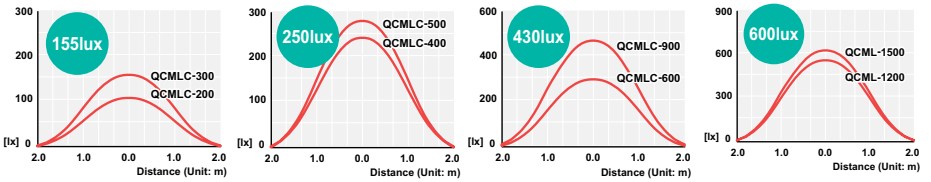
QCMLC Transparent Lens Type

Optics Specifications									
Model		QCML-200/ QCMLC-200	QCML-300/ QCMLC-300	QCML-400/ QCMLC-400	QCML-500/ QCMLC-500	QCML-600/ QCMLC-600	QCML-900/ QCMLC-900	QCML-1200/ QCMLC-1200	QCML-1500/ QCMLC-1500
Lens color		Translucent/ Transparent	Translucent/ Transparent	Translucent/ Transparent	Translucent/ Transparent	Translucent/ Transparent	Translucent/ Transparent	Translucent/ Transparent	Translucent/ Transparent
Light color/ Color temperature	Cooldaylight	6,000-7,000K							
	Incandescent	2,500-3,500K							
	Red	618-632nm							
	Amber	585-632nm							
Luminous flux (Cooldaylight)		276lm/ 322lm	381lm/ 436lm	729lm/ 833lm	742lm/ 849lm	754lm/ 863lm	1,126lm/ 1,291lm	1,492lm/ 1,691lm	1,855lm/ 2,105lm
Illumination(at 1m) (Cooldaylight)		85Lux/ 100Lux	130Lux/ 155Lux	200Lux/ 245Lux	210Lux/ 250Lux	250Lux/ 295Lux	380Lux/ 430Lux	500Lux/ 560Lux	550Lux/ 600Lux
Specifications									
Model		QCML-200/ QCMLC-200	QCML-300/ QCMLC-300	QCML-400/ QCMLC-400	QCML-500/ QCMLC-500	QCML-600/ QCMLC-600	QCML-900/ QCMLC-900	QCML-1200/ QCMLC-1200	QCML-1500/ QCMLC-1500
Rated voltage		DC24V							
Range for operation voltage		DC21.5V-26.5V							
Current		0.230A	0.235A	0.460A	0.465A	0.465A	0.700A	0.925A	1.160A
Power consumption		5.5W	6W	11W	11.5W	11.5W	17W	22W	28W
Insulation resistance		Min. 100MΩ(500V DC mega ohm meter)							
Withstanding voltage		DC : 500V AC, 60Hz, 1 minute							
Operating temperature		-30°C to +50°C							
Waterproof		IP67/ IP69K							
Materials		Lens : PC, Side cover : PC, Heat sink : Al, Bracket : PC							
Certificate		CE UL DC only							
Weight(approx.)		0.16kg	0.20kg	0.26kg	0.33kg	0.40kg	0.56kg	0.76kg	0.94kg

QCML/ QCMLC

Waterproof LED Light Bars for Multi-use with Protection of IP67/ IP69K

Light Distribution and Luminance

Model	Light Distribution Curve	Illumination Feature
QCML		
QCMLC		

Mounting Bracket

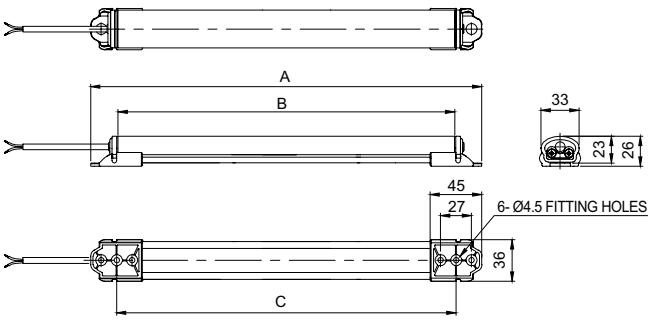
※ Adopts removable mounting bracket and sliding structure, adjustable mounting distance.(patent)

※ mounting bracket is arranged on edge or middle of body, in case of edge of body, mounting bracket space is kept.

Technical Diagram

(Units : mm)

QCML/ QCMLC-200/ 300/ 400/ 500/ 600/ 900/ 1200/ 1500



MODEL	A	B	C	D
QCML/ QCMLC-200	257	226	45~212	2
QCML/ QCMLC-300	357	326	45~312	2
QCML/ QCMLC-400	457	426	45~412	2
QCML/ QCMLC-500	557	526	45~512	2
QCML/ QCMLC-600	657	626	45~612	2
QCML/ QCMLC-900	957	926	45~912	3
QCML/ QCMLC-1200	1257	1226	45~1212	4
QCML/ QCMLC-1500	1557	1526	45~1512	4

※D : Recommended quantity of mounting brackets

※ Power line standard : UL2464–AWG22(0.3sq×2C) 400mm

Ordering Specification

QCML	-	300	-	PY	-	24
[Model number]		[Product length]		[Light color]		[Voltage]
• QCML : Translucent lens • QCMLC : Transparent lens		• 200 : 257mm • 300 : 357mm • 400 : 457mm • 500 : 557mm • 600 : 657mm • 900 : 957mm • 1200 : 1,257mm • 1500 : 1,557mm		• W-Cooldaylight • PY-Incandilight • R-Red • A-Amber		• 24-DC24V

QPL/ QPLC/ QPHL/ QPHLC

Basic Waterproof LED Light Bars

IP65 -30~+50°C

Waterproof LED light bars, suitable for dusty and moisture environments

Common Specifications(QPL/QPLC/QPHL/QPHLC)

- Fully enclosed structure with protection rating of IP65, suitable for environments which have lingering dust or moisture
- Maintains bright intensity illumination from dust resistant lens
- Beautiful appearance with dome type lens
- Slim thickness 24mm adopted AC direct LED control system
- 4 kinds of products length 200/300/400/500mm
- Selectable lens between translucent and transparent based on condition
- Certificates : CE, UL, KC Compliant

QPL Translucent Lens

QPLC Transparent Lens

Optics Specifications									
Model		QPL200	QPLC200	QPL300	QPLC300	QPL400	QPLC400	QPL500	QPLC500
Lens color		Translucent	Transparent	Translucent	Transparent	Translucent	Transparent	Translucent	Transparent
Light color(Standard)		Cooldaylight							
Color temperature(Standard)		6,000-7,000K							
Luminous flux	DC	168lm	187lm	248lm	309lm	387lm	436lm	515lm	587lm
	AC	-	-	381lm	433lm	527lm	600lm	696lm	792lm
Illumination (at 1m)	DC	50Lux	65Lux	80Lux	100Lux	120Lux	145Lux	160Lux	195Lux
	AC	-	-	120Lux	135Lux	160Lux	200Lux	215Lux	265Lux

Specifications					
Model		QPL200/ QPLC200	QPL300/ QPLC300	QPL400/ QPLC400	QPL500/ QPLC500
Rated voltage		DC24V	DC24V	DC24V	DC24V
			AC110V / 220V	AC110V / 220V	AC110V / 220V
Range for operation voltage		DC21.5V-26.5V	DC21.5V-26.5V / AC98V-121V / AC198V-245V		
Current		0.155A	0.155A	0.230A	0.308A
			0.052A / 0.025A	0.070A / 0.034A	0.093A / 0.045A
Power consumption		4W	4W	5.5W	7.5W
			6W / 5.5W	8W / 7.5W	11W / 10W
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 +50°C			
Waterproof		IP65			
Materials		Lens : PC, Side cover : ABS, Heat sink : Al			
Certificates		CE UL DC only KC			
Weight(approx.)		0.13kg	0.15kg	0.21kg	0.24kg
			0.15kg	0.21kg	0.24kg

QPL/ QPLC/ QPHL/ QPHLC

Basic Waterproof LED Light Bars

IP65 -30~+50℃

QPHL Translucent Lens

QPHLC Transparent Lens

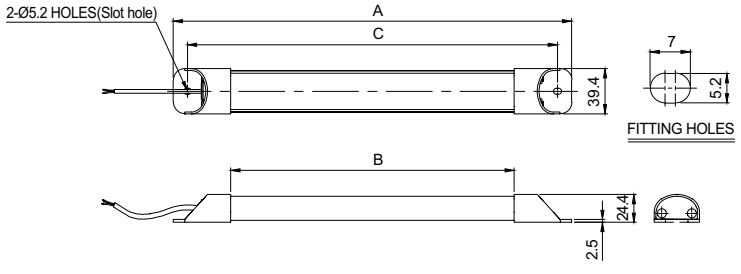
Optics Specifications									
Model		QPHL200	QPHLC200	QPHL300	QPHLC300	QPHL400	QPHLC400	QPHL500	QPHLC500
Lens color		Translucent	Transparent	Translucent	Transparent	Translucent	Transparent	Translucent	Transparent
Light color(Standard)		Cool white							
Color temperature(Standard)		6,000-7,000K							
Luminous flux	DC	289lm	344lm	460lm	529lm	668lm	768lm	803lm	907lm
	AC	-	-	505lm	582lm	714lm	814lm	927lm	1,094lm
Illumination (at 1m)	DC	80Lux	100Lux	120Lux	150Lux	190Lux	230Lux	250Lux	310Lux
	AC	-	-	135Lux	170Lux	200Lux	250Lux	290Lux	375Lux

Specifications					
Model		QPHL200/ QPHLC200	QPHL300/ QPHLC300	QPHL400/ QPHLC400	QPHL500/ QPHLC500
Rated voltage		DC24V	DC24V	DC24V	DC24V
			AC110V / 220V	AC110V / 220V	AC110V / 220V
Range for operation voltage		DC21.5V-26.5V	DC21.5V-26.5V / AC98V-121V / AC198V-245V		
Current		0.200A	0.210A	0.310A	0.400A
			0.062A / 0.030A	0.076A / 0.037A	0.095A / 0.046A
Power consumption		4.8W	5W	7.5W	9.5W
			7W / 6.5W	8.5W / 8W	11W / 10W
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 +50°C			
Waterproof		IP65			
Materials		Lens : PC, Side cover : ABS, Heat sink : Al			
Certificates		CE UL DC only KC			
Weight(approx.)		0.13kg	0.22kg	0.31kg	0.41kg
			0.23kg	0.32kg	0.42kg

Technical Diagram

(Units : mm)

QPL/ QPHL 200/ 300/ 400/ 500
QPLC/ QPHLC 200/ 300/ 400/ 500



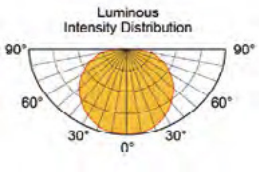
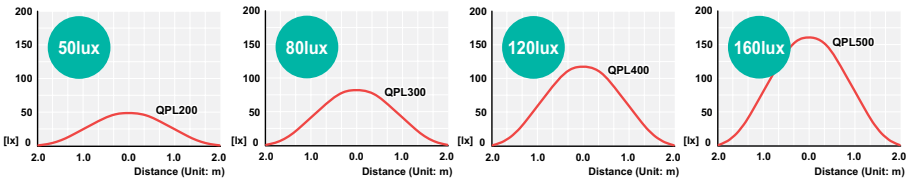
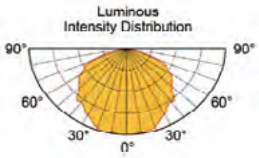
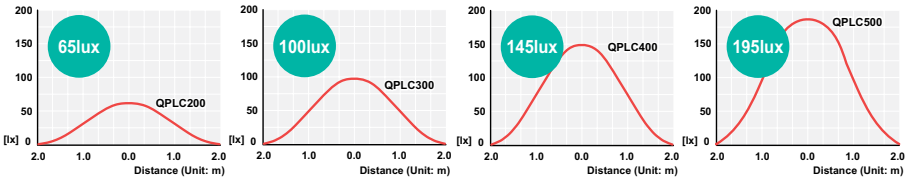
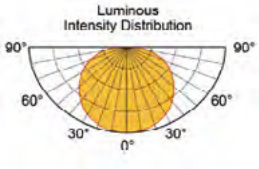
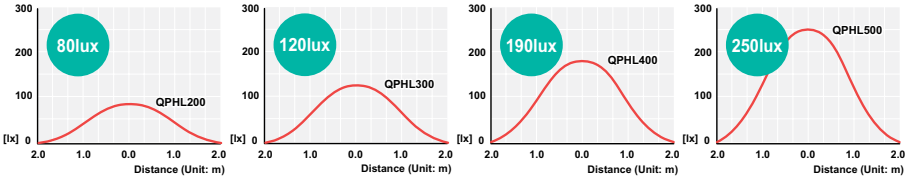
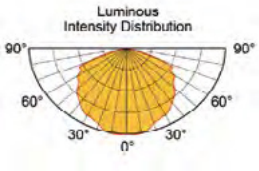
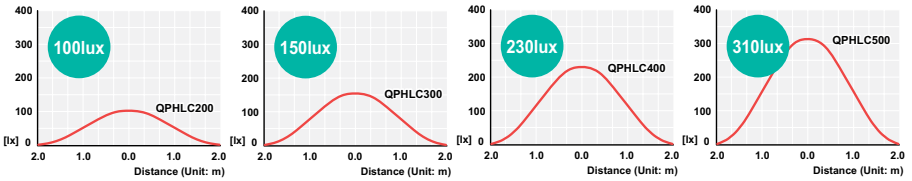
MODEL	A	B	C
QPL/ QPHL/ QPLC/ QPHLC 200	200	100	175
QPL/ QPHL/ QPLC/ QPHLC 300	300	200	275
QPL/ QPHL/ QPLC/ QPHLC 400	400	300	375
QPL/ QPHL/ QPLC/ QPHLC 500	500	400	475

※ Power line standard : DC TYPE – UL2464 AWG22(0.3sq×2C) 400mm
AC TYPE – VCTFK(0.75sq×2C) 400mm

QPL/ QPLC/ QPHL/ QPHLC

Basic Waterproof LED Light Bars

Light Distribution and Luminance

Model	Light Distribution Curve	Illumination Feature
QPL		
QPLC		
QPHL		
QPHLC		

Ordering Specification

QPHL	500	-	24
[Model number]	[Product length]		[Voltage]
• QPL : Translucent lens • QPLC : Transparent lens • QPHL : High illumination translucent lens • QPHLC : High illumination transparent lens	• 200 : 200mm • 300 : 300mm • 400 : 400mm • 500 : 500mm		• 24-DC24V • 110-AC110V • 220-AC220V

QML/ QMHL

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

IP67 IP69K -30~+60°C

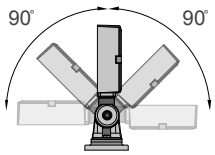
Water, vibration and oil resistant LED work light, suitable for machine tools applications and high temperature water cleaning environments

Common Specifications(QML/ QMHL)

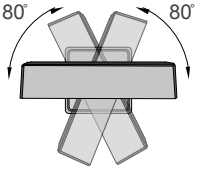
- Excellent oil resistance with a special sealing structure with IP67 protection rating, suitable for machine tool applications with cutting fluids
- Suitable for high pressure and high temperature water cleaning environments(IP69K)
- Tempered glass prevents damage from machine tool chips
- Foreign substances 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



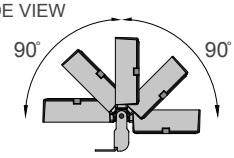
TOP VIEW



- 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

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

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

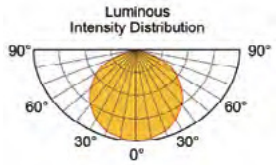
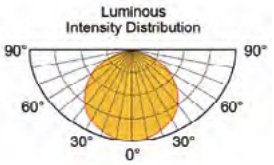
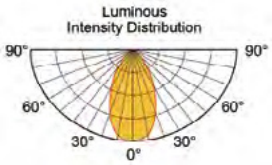
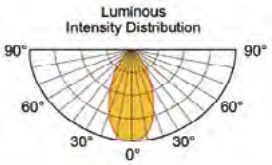
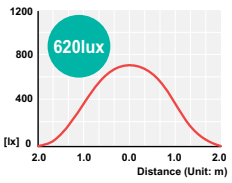
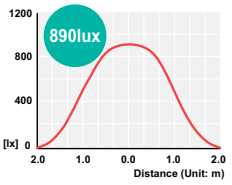
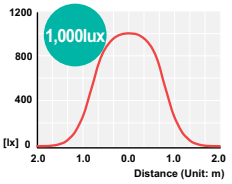
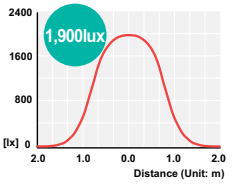
Optics Specifications				
Model	QML-150-D QML-150-K QML-150-MF	QML-250-D QML-250-K QML-250-MF	QMHL-150-D QMHL-150-K QMHL-150-MF	QMHL-250-D QMHL-250-K QMHL-250-MF
Lens color	Translucent	Translucent	Transparent	Transparent
Light color	Cooldaylight			
Color temperature	6,000-7,000K			
Luminous flux	875lm	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

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

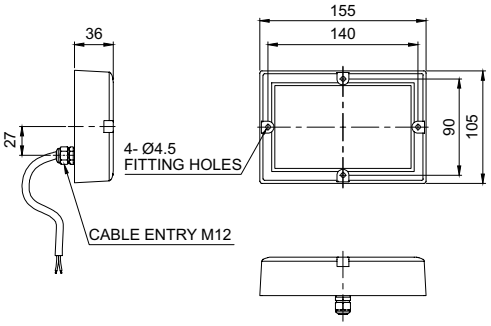
Light Distribution and Illumination

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				

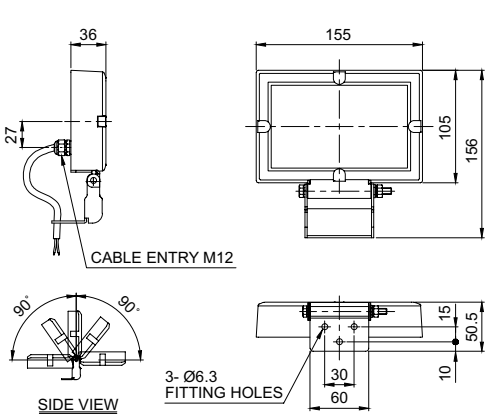
Technical Diagram

(Units : mm)

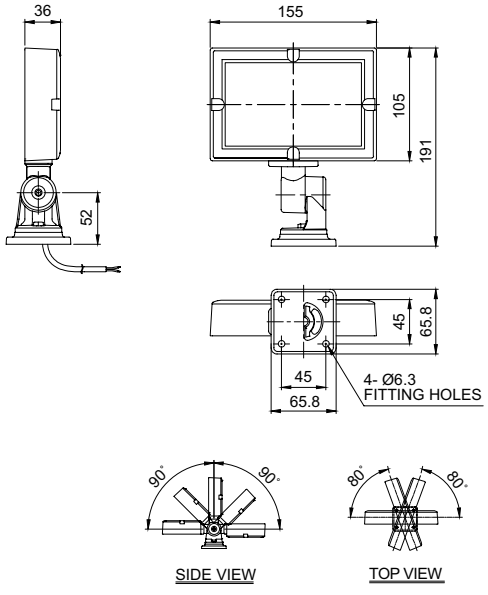
QML/ QMHL-150-D



QML/ QMHL-150-K



QML/ QMHL-150-MF



※ Power line standard : Dura & Flex–F VU(0,5sq×2C) 450mm

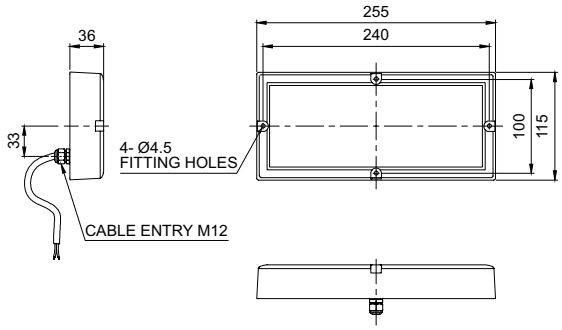
QML/ QMHL

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

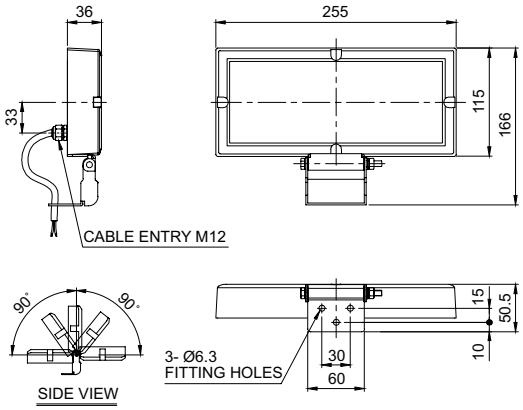
Technical Diagram

(Units : mm)

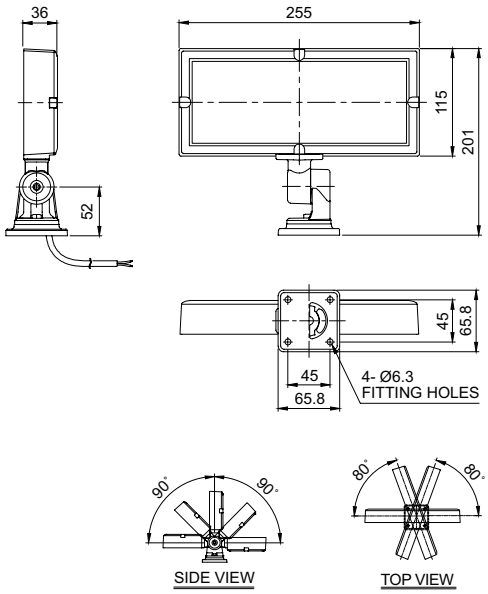
QML/ QMHL-250-D



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.

Sollten die LED Leuchten in der Standardausführung nicht optimal für Ihre Anwendung passen, so können wir diese in Bezug auf Anschluss und Montage kundenspezifisch für Sie konfektionieren. Falls Sie nicht sicher sind, welche Leuchte für Ihre Anwendung die beste ist, zögern Sie nicht und kontaktieren Sie uns. Wir beraten Sie gerne und finden gemeinsam mit Ihnen das für Sie am besten geeignete Produkt.

Neben den LED Industrieleuchten, bieten wir ein breites Spektrum an Produkten aus den folgenden Bereichen:

- Elektrische Antriebstechnik
- Mechanische Antriebstechnik
- Automatisierungstechnik
- Warn- & Meldesysteme

Alle Informationen dazu finden Sie unter **www.ghv.de**.

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