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



#### **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
- Can customize the product with the M12 connector if requested
- High-intensity type available upon request (Model number : QMFHLN)
- Certificates : CE Compliant, UL Listed



## **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

Aluminum Heat-Radiant Housing

sealed environment

Adopted special heat-radiant structure to

provide stable luminance in high temperature

#### Special Micro Lens -

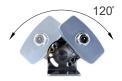
Provides high luminance with superior light focusing capability, suitable for work environments that need long distance direct visibility

### Test Conditions/ Regulations



**Olight** 

#### **Tilt Type K Bracket**



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

### Cable entry M12 connector attached type



Customized Cable entry M12 connector attached type available.

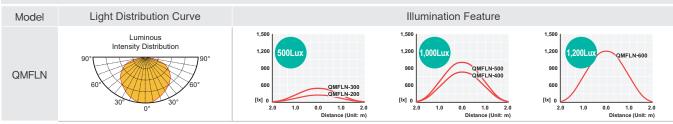
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Vibration Resistance Test	<ul> <li>Acceleration : 20m/s<sup>2</sup></li> <li>Duration : 1 octave/min</li> <li>Range of frequency : 10-150Hz</li> <li>Amplitude : Maximum 7.5mm, Direction : tested 10times each 3 directions(X, Y, Z)</li> </ul>
Shock Resistance Test	<ul> <li>Acceleration : 20g</li> <li>Directions : ±X, ±Y, ±Z</li> <li>Numbers : 3 times each directions</li> <li>Time period : 11ms for each direction</li> <li>Waveform : Half sine</li> </ul>
Oil Resistance Test	<ul> <li>General test : Tested in water soluble and non-water soluble flooded environments for 500 hours.</li> <li>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.</li> </ul>
Solid Particle Protection Test(IP6X)	<ul> <li>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.</li> <li>IEC60529</li> </ul>
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)	<ul> <li>Spray nozzle provides 80°C water with pressure of 80–100 bar and a flow rate of 14–16 L/min to the object</li> <li>Distance between spray nozzle and the test object : 10-15cm</li> <li>Water spray angle : 0°, 30°, 60°, 90°</li> <li>The nozzle is held at 4 of each angle for 30 seconds</li> <li>DIN 40050 PART9</li> </ul>

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## Light Distribution and Illuminance

QMFLN

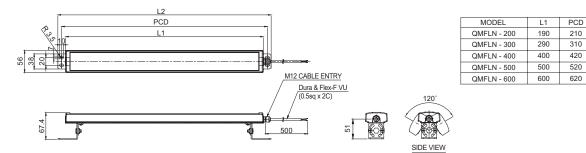


## **Optics Specifications**

Model		QMFLN-200	QMFLN-300	QMFLN-400	QMFLN-500	QMFLN-600		
(E	Blank)	Transparent	Transparent	Transparent	Transparent	Transparent		
Lens color TI	TLC	Translucent	Translucent	Translucent	Translucent	Translucent		
Light color		Cooldaylight						
Color temperature				6,000-7,000K				
Luminous flux DC	(Blank)	359lm	851lm	1,284lm	1,553lm	1,719lm		
Luminous flux DC	TLC	306lm	730lm	1,109lm	1,394lm	1,532lm		
Efficacy (Im/W) DC	(Blank)	240Lux	560Lux	850Lux	1,000Lux	1,300Lux		
Efficacy (Im/W) DC	TLC	160Lux	370Lux	580Lux	750Lux	1,050Lux		
Specifications								
Model		QMFLN-200	QMFLN-300	QMFLN-400	QMFLN-500	QMFLN-600		
Voltage		DC24V	DC24V	DC24V	DC24V	DC24V		
Range for operation voltage	DC	DC22V-30V						
Power consumption	DC	5.6W	12.5W	20W	20W	25W		
Insulation resistance		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		CE UDC24V Only						
Weight (Approx.)		0.57kg	0.80kg	1.03kg	1.26kg	1.49kg		

## Technical Diagram

QMFLN-200/ 300/ 400/ 500/ 600



\* External power line - Dura & Flex-F VU(0.5sq) x 2C 450mm

Ordering Specification						
QMFLN	- 200 -	24	- TLC			
[Model number]	[Product length]	[Voltage]	[Lens type]			
I	I	I	I			
• QMFLN	<ul> <li>200 : 190mm</li> <li>300 : 290mm</li> <li>400 : 400mm</li> <li>500 : 500mm</li> <li>600 : 600mm</li> </ul>	• 24-DC24V	• (Blank) - Transparent le • TLC - Translucent lens			

(Units : mm)

L2

230

330

440

540

640