

# QMFLN

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



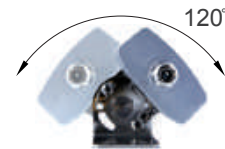
### Suitable for machine tool equipment that needs excellent water and oil proof features

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



#### Tilt Type K Bracket



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



#### 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

#### Cable entry M12 connector attached type



Customized Cable entry M12 connector attached type available.

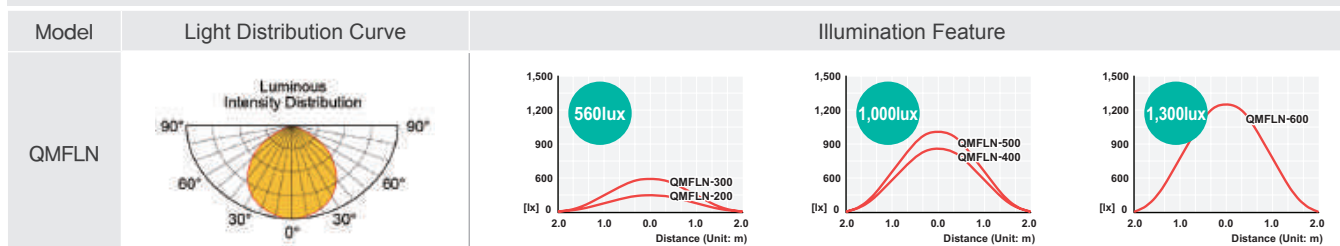
#### Test Conditions/ Regulations

Vibration Resistance Test	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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 style="list-style-type: none"> <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)	<ul style="list-style-type: none"> <li>• Test ingress by putting the object under 1000mm water with 2bar of pressure for 30 mins</li> </ul>
High-pressure, High-temperature Wash-down Test (IP69K)	<ul style="list-style-type: none"> <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>

# QMFLN

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### Light Distribution and Illuminance



### Optics Specifications

Model		QMFLN-200	QMFLN-300	QMFLN-400	QMFLN-500	QMFLN-600
Lens color	(Blank)	Transparent	Transparent	Transparent	Transparent	Transparent
	TLC	Translucent	Translucent	Translucent	Translucent	Translucent
Light color		Cooldaylight				
Color temperature		6,000-7,000K				
Luminous flux	(Blank)	359lm	851lm	1,284lm	1,553lm	1,719lm
	TLC	306lm	730lm	1,109lm	1,394lm	1,532lm
Efficacy (lm/W)	(Blank)	240lux	560lux	850lux	1,000lux	1,300lux
	TLC	160lux	370lux	580lux	750lux	1,050lux

### Specifications

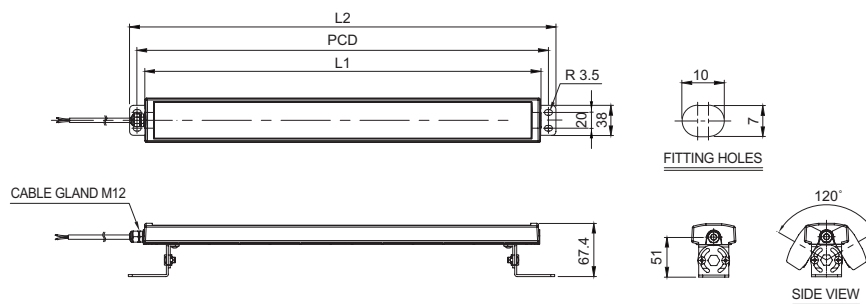
Model	QMFLN-200	QMFLN-300	QMFLN-400	QMFLN-500	QMFLN-600
Voltage	DC24V				
Range for operation voltage	DC22V-30V				
Power consumption	5.6W	12.5W	20W	20W	25W
Power consumption	Min. 100MΩ(500V DC mega ohm meter)				
Withstanding voltage	500V AC, 60Hz, 1 minute				
Operation temperature	-30°C to +60°C	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



### Technical Diagram

(Units : mm)

QMFLN-200/ 300/ 400/ 500/ 600



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

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



### Ordering Specification

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

### ООО "РусАвтоматизация"

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