

MCS LED Light

LP-400 series

Dustproof, IP67, PSE, RoHS



For those who are seeking fine and bright lighting of
processing machines and machine tools.



MICRO CONTROL SYSTEMS LTD.

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Selection guide for LP-400 series

MCS has prepared various LED lights for processing machines and machine tools. LP-400 series are suitable for LED lights of processing machines and machine tools. In order to help product selection by customers, the selection guide for LP-400 series products is shown in Fig.1.

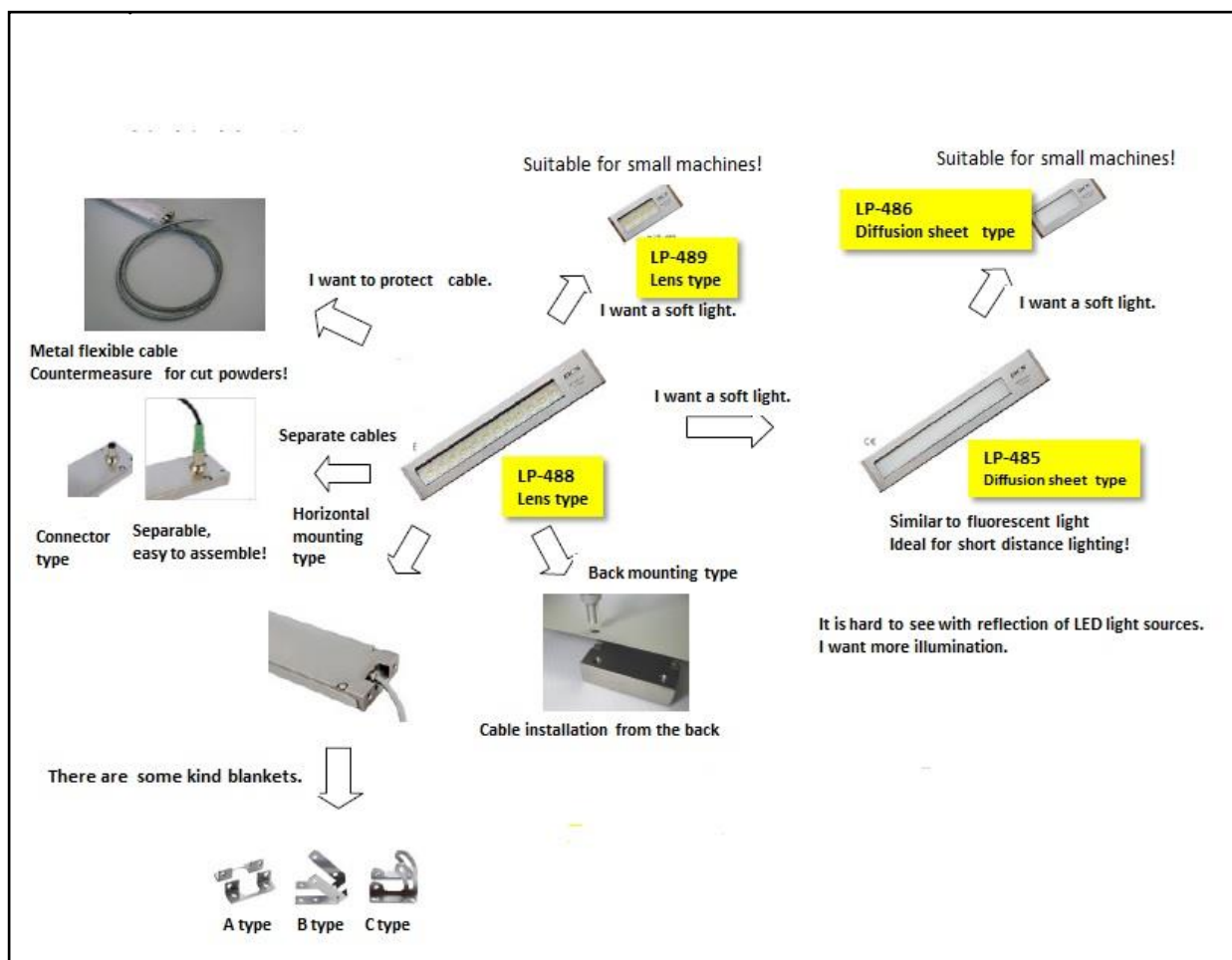


Fig.1 Selection guide for LP-400 series products.

LP-488 LED light and specification

Lens ・ Long type

■Characteristics

- By adopting a MCS original lens (two patents), the center illuminance of 1700 Lx is realized under 1m.
- Can choose the lens type to customize optimum lighting.
- Protection grade :IP67F, IP69K
- Tempered glass: 4 mm in thickness
- CE marking conformity.



Model reference table

L P - 4 8 8 □ - F □ - C □ - L □

① ② ③ ④

※①, ②, ③ and ④ correspond to blank squares.

① Specification of mounting hole position

No statement: Horizontal mounting type (3 types of brackets A, B, C are prepared)

M : Back mounting type

CN : Back mounting connector type (Connector: 1523450 [Phoenix contact])

② Metal flexible cable length

No description: None cable

(Ex.) F1.3 : 1.3m length

※The length designation is 0.1 m unit. Up to 5 m.

③ Electrical cable length

No description : 5m

※ For CN type, cable is not attached.

(Ex.) C1.5: 1.5m length

※The length designation is 0.1 m unit. Up to 5 m.

④ Lens specification

L1 : Narrow distribution Lens(Customized lens arrangement available)

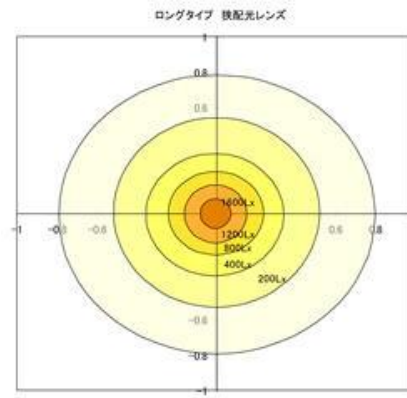
L2 : Middle distribution lens

L3 : Wide distribution lens

Specification

Rated input voltage	DC24V
Consumption current	Below 400mA
Operating voltage range	DC 21.6V~27.6V
Control method	Constant current method
Rated power	9W
Operating temperature range	-20℃~60℃ (No freezing)
Storage temperature range	-30℃~70℃ (No freezing)
Storage humidity range	35%RH~85%RH
Withstand voltage	AC1000V 1min. (Between housing and input)
Insulation resistance	DC500V Above 100MΩ (Between housing and input)
Protection grade	IP67F and IP69 compliance

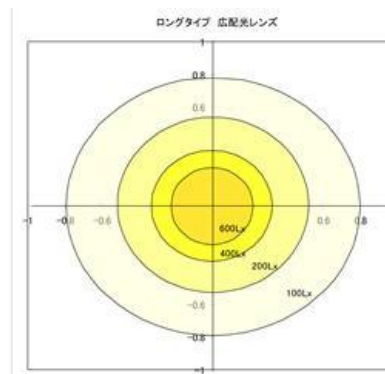
Weight	About 800g	
Material	Housing	Aluminum die-cast plated nickel
	Cover	Stainless
	Glass	Tempered glass (4mm in thickness)
	Cable	RO-FLEX1000T #22X2C [Nichigoh]
Compliant standard	CE marking	
Central illuminance ※ 1	L 1	1700 lx (under 1m)
	L 2	1200 lx (under 1m)
	L 3	850 lx (under 1m)
Life span		60,000 hours (Luminous flux maintenance factor 70%) ※LED manufacturer estimates.
※ 1 L1 : Narrow light distribution type, L2: Middle light distribution type, L3: Wide light distribution type Please choose the lens series for the large distance between object and light.		



L1: Narrow light distribution type

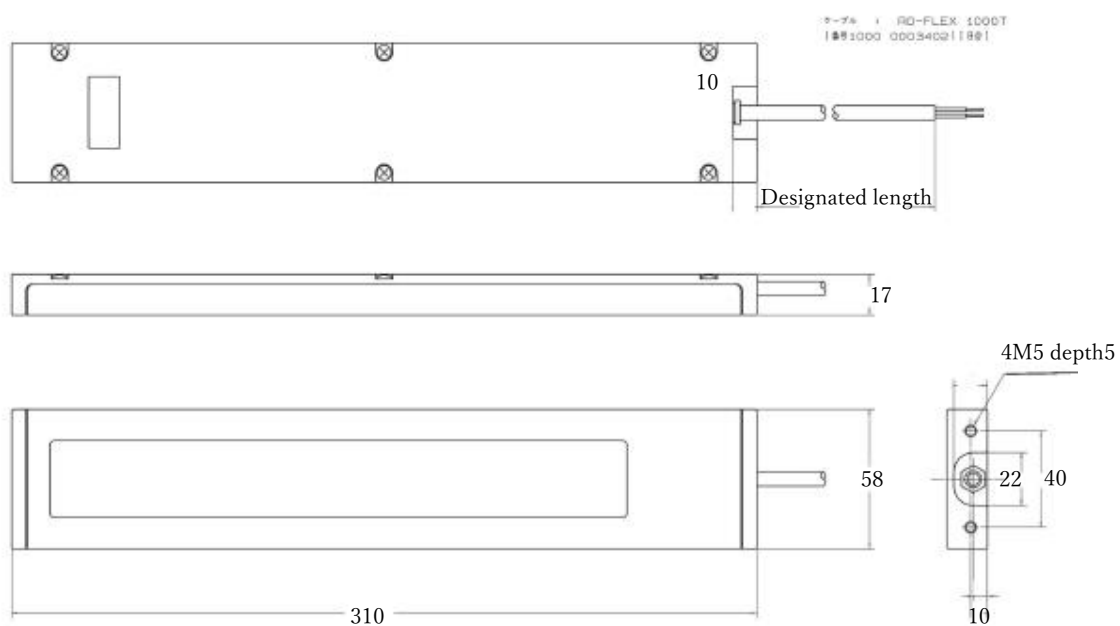


L2: Middle light distribution type

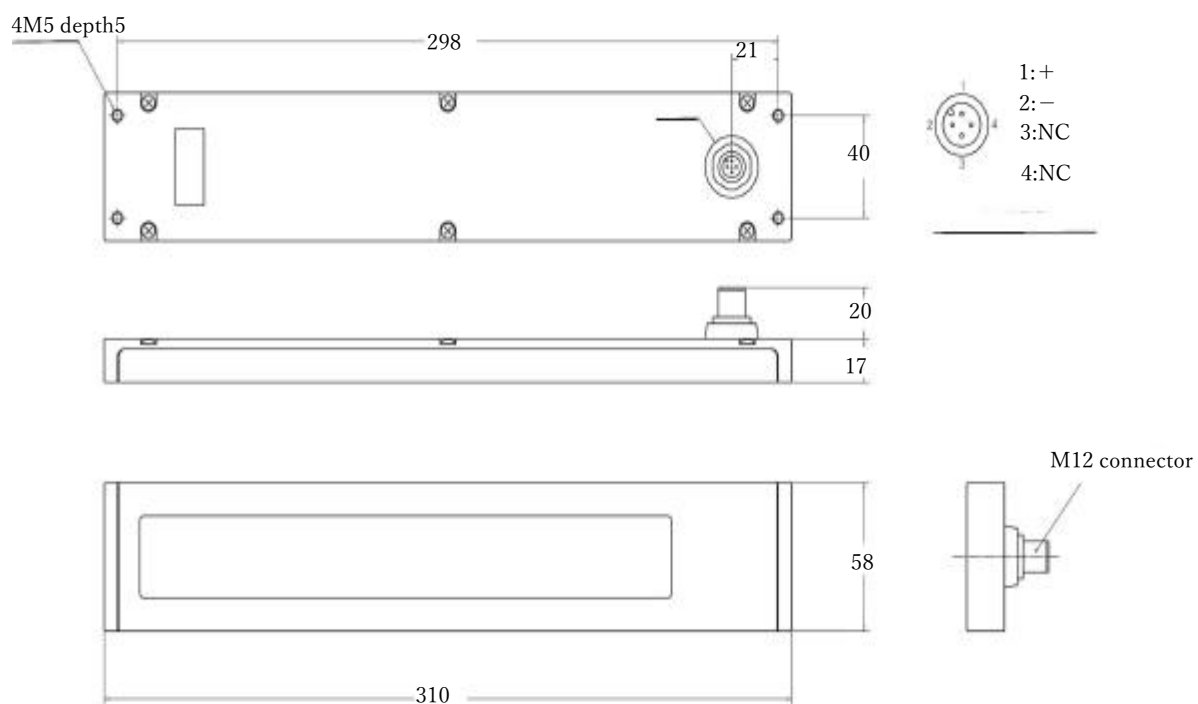


L3: Wide light distribution type

Size dimension of LP-488 (Long · Back Mount Type)



Size dimension of LP-488 (Long · Back Mounting Connector Type)



LP-489 LED light and specification

Lens ・ Mini type



Model reference table

L P - 4 8 9 □ - F □ - C □ - L □

① ② ③ ④

① Specification of mounting hole position

No statement: Horizontal mounting type (3 types of brackets A, B, C are prepared)

M : Back mounting type

② Metal flexible cable length

No description: None cable

(Ex.) 1.3 : 1.3m length

※The length designation is 0.1 m unit. Up to 5 m.

③ Electrical cable length

No description : None cable

(Ex.) 1.5: 1.5m length

※The length designation is 0.1 m unit. Up to 5 m.

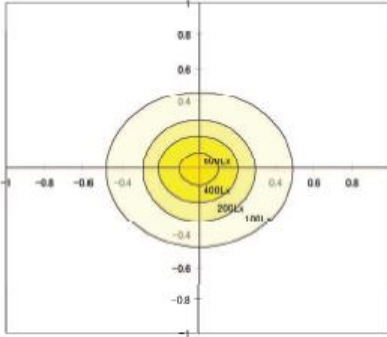
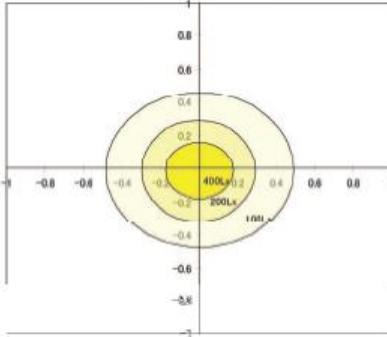
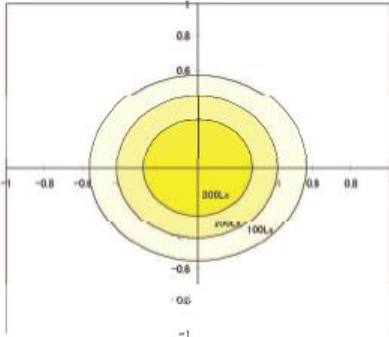
④ Lens specification

L 1 : Narrow distribution Lens

L 2 : Middle distribution lens

L 3 : Wide distribution lens

Specification		
Rated input voltage	DC24V	
Consumption current	Below 200mA	
Operating voltage range	DC21.6V~27.6V	
Control method	Constant current method	
Rated power	5W	
Operating temperature range	-20℃~60℃ (No freezing)	
Storage temperature range	-30℃~70℃ (No freezing)	
Storage humidity range	35%RH~85%RH	
Withstand voltage	AC1000V 1min. (Between housing and input)	
Insulation resistance	DC500V above 100MΩ (Between housing and input)	
Protection grade	IP67F, IP69K	
Weight	About 500g	
Material	Housing	Aluminum die-cast plated nickel
	Cover	Stainless
	Glass	Tempered glass (4mm in thickness)
	Cable	RO-FLEX1000T #22X2C [Nichigoh]
Compliant standard	C E marking	
	L 1	800 lx (below 1m)
	L 2	500 lx (below 1m)




Central illuminance ※ 1	L 3	350 lx (below 1m)
Lifespan	60,000hours (Luminous flux maintenance factor 70%) ※LED manufacturer estimate.	
<div>※ 1 ※ 1 L1 : Narrow light distribution type, L2: Middle light distribution type, L3: Wide light distribution type</div> <div>Please choose the lens series for the distance between object and light.</div> <div><div></div><div></div><div></div><div><div>Narrow light distribution type</div><div>Middle light distribution type</div><div>Wide light distribution type</div></div></div>		





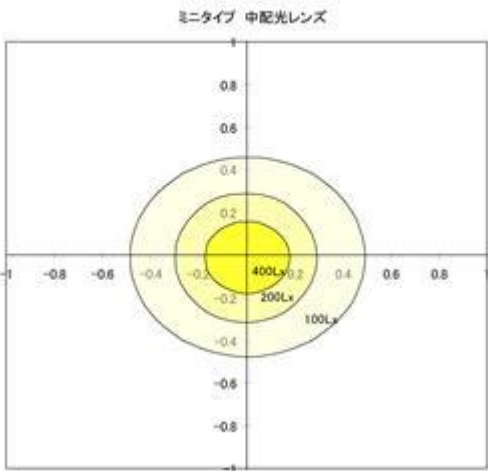
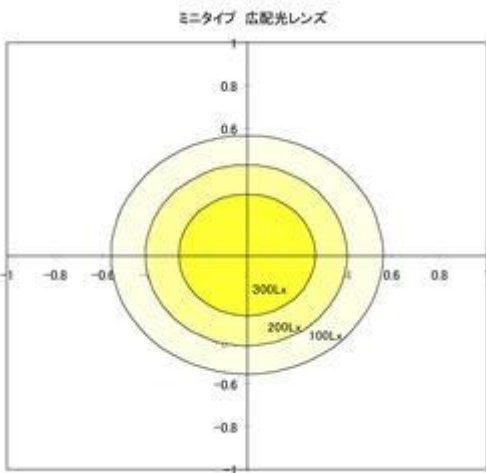
LP-488, LP-489 LED light mounting form

Classification	Lens type	
Model	LP-488	LP-489
Appearance		
Horizontal mounting	LP-488 ※Bracket mounting is possible.	LP-489 ※Bracket mounting is possible.
Back side mounting	LP-488M	LP-489M
Metal flexible cable	LP-488-F1.3-C1.5 ※Number is length [m].	LP-489-F1.3-C1.5 ※Number is length [m].

<p>Specification</p>	<p>LP-488CN</p> <p>M12 connector type</p> 	<p>LP-489F</p> <p>Flexible stand type</p> 
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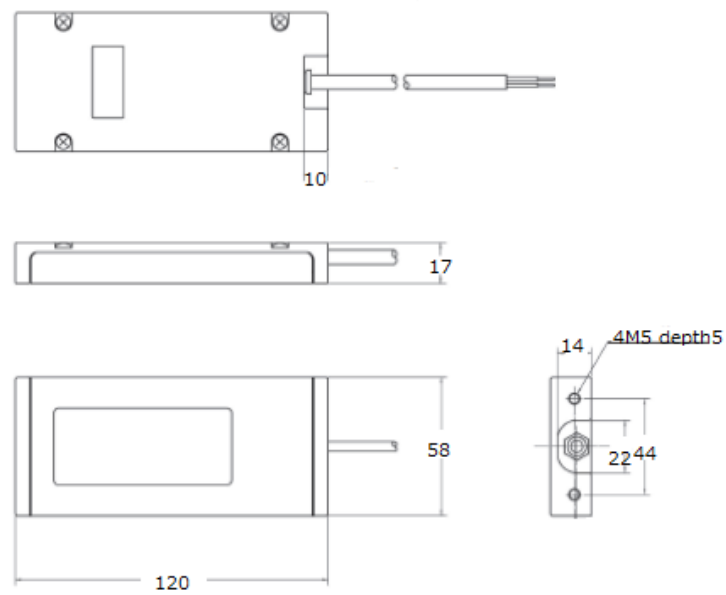
LP-485, LP-486 LED light (Diffusion light type)

Classification	Diffusion type	Diffusion type
Model	L P - 4 8 5	L P - 4 8 6
Appearance		
Characteristics	<ul style="list-style-type: none"> • Diffusion sheet suppresses glare specific to LED. Mild light is obtained. • Diffusion type is suitable for short distance lighting. 	<ul style="list-style-type: none"> • Mini version of diffusion type light. • It is suitable for small machine.
Luminous flux	1200 lm	600 lm
Central illuminance (below 1m)	220 lx	100 lx
Consumption power	9 W	6 W
Rated voltage	24 V	24 V
Appearance	L310 ×W58 ×H17	L130 × W58 × H17
Weight	About 800 g	About 500 g
Horizontal mounting 	<p>LP-485</p> <p>※Bracket mounting is possible.</p>	<p>LP-486</p> <p>※Bracket mounting is possible.</p>

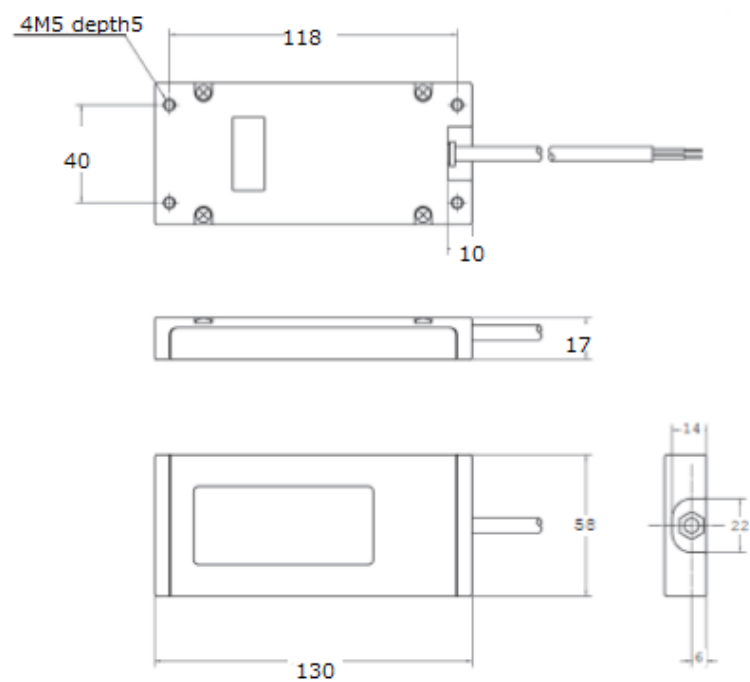
Back side mounting 	LP-485M	LP-486M
Metal flexible cable 	LP-485-F1.3-C1.5 ※Number is length [m].	LP-486-F1.3-C1.5 ※Number is length [m].
Specification	LP-485CN M12 connector type 	LP-486F Flexible stand type 
 Mini type: middle light distribution	 Mini type: wide light distribution	

Size dimension of LP-485 and LP-486

Mini type (Horizontal mounting)



Mini type (Back side mounting)





ISO9001 ISO14001

MCS has acquired certification of ISO 9001 (quality management system) and ISO 14001 (environmental management system), and we are actively working on quality control and environmental conservation.



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