
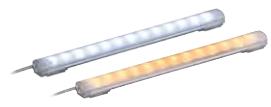




LED Work Lights

Page number	Page 172	Page 173	Page 175
Model Name	LED Work Light		LED Work Light
Model	CWF	CLA	CWA
Product image			
Rated Voltage	100-240V AC	24V DC	24V DC
Size	300/600/900	100/200/300/600/900/1200	300/600/900
IP	20	66/67/69K	65
Body	Aluminum	Polycarbonate	Polycarbonate
Cover	Polycarbonate	Polycarbonate	Polycarbonate
Color temperature	5700K(-CD)	6800K(-CD)	6500K(-CD)
Mounting			
CE	o	o	o
RoHS	o	o	o
UL	o	o	o

Page number	Page 177	Page 179	Page 181
Model Name	LED Work Light		LED Work Light
Model	CLK	CWK	CLN
Product image			
Rated Voltage	24V DC	24V DC	24V DC
Size	200/300/600	200/300/600	□85
IP	66G/67G/69K	66G/67G	66G/67G/69K
Body	Aluminum/Stainless steel	Aluminum	Aluminum
Cover	Tempered Glass	Tempered glass	Tempered glass
Color temperature	6500K(-CD), 5000K(-CN)	6500K(-CD)	6500K
Mounting			
CE	o	o	o
RoHS	o	o	o
UL	o*	o	o

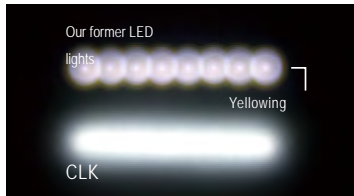
*AG (aluminum) specifications only

Shows Shadows and Light



Virtual midday sunlight color remarkably distinguishes shadows and edges. It's suitable for use with detailed lighting or lighting up displays.

Yellow Ring Reduction (CLK)



The new PATLITE "micro-array lens" is designed to even-out light refraction, reduce unevenness and "Yellow Ring", a bad influence on lighting.

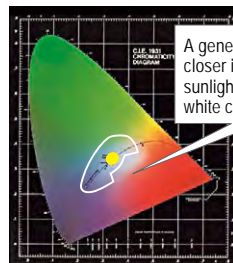
○Microarray lens



Daylight



The daylight color is the color temperature close to the sunlight at noon, and it is suitable for identifying shapes, precision work and inspection for research applications. (Approximately equivalent to a D65 light source)



□ White spectrum inside the white line
The natural white general spectrum

- IP6X= The product is placed in a dust chamber with a negative pressure state so that dust is made to float for 8 hours, and there is no invasion inside.
- IPX6= A water nozzle with a diameter of 12.0mm is placed at a range from 2.5 to 3.0 meters with a water velocity of 100 litres per minute injected towards the test piece in an omni-direction for three minutes or more without being affected by any harmful influences.
- IPXXG= The outline of the product is submerged at a distance of 1m from the bottom of a tank, and it is held submerged for 30 minutes. A non-water soluble N3 class No. 8 as specified in JIS K2241 (for coolants) is dropped on top of the upper part of a product at a rate of 0.5L/h for 48 hours.
- IPX9K= IPX9K is the German DIN 40050 PART9 standard. It is defined as a protection regulation for high temperature and high-pressurized water. Water is heated up to 80 and sprayed at a water pressure in the range from 80 to 100 BARs at 14 to 16 liters per minute at the test object. The test object is at a distance of 100 to 150 mm from the nozzle and sprayed in all directions at 0, 30, 60, and 90 degrees, then sprayed at a horizontal angle while it is being rotated, all done for a period of 30 seconds without being affected by water penetration.

Tough aluminum materials and stainless steel body

Aluminum specifications (CLK-AG)



Stainless steel specifications (CLK-SG)

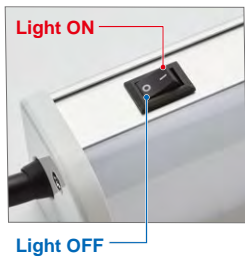


- Compliant with 3 different protection ratings; IP66 and 67G (JIS C0920:2003) and IP 69K (DIN 40050 part 9) in waterproof performance for the demand which needs 80 underpressure hot water washing in the field for meat / food processing, medicine manufacturing and beverage industries.
 - Product lineup of four types with three different sizes (200-600 mm), 2 colors (Daylight, Natural White), Main Unit selection of material, and the type of cable connection. It can adapt to various scenes.
 - The operating temperature limit of -40 to +60 allows the possibility for installation in a sub-freezing temperature environment, such as a cold storage warehouse.
 - Corresponds to Europe's RoHS Directive.
 - CE Marking Compliant
 - UL Listed (File No.E306141) for Cable and aluminium body
 - UL Recognized Component (File No.E306141) for M12 connector / M12 link and aluminium body
- *Water-proof and oil resistance varies according to the model.

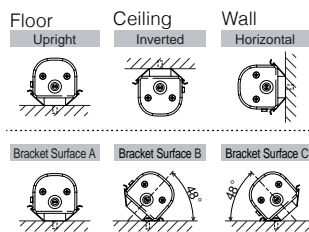


User-Friendly Operation

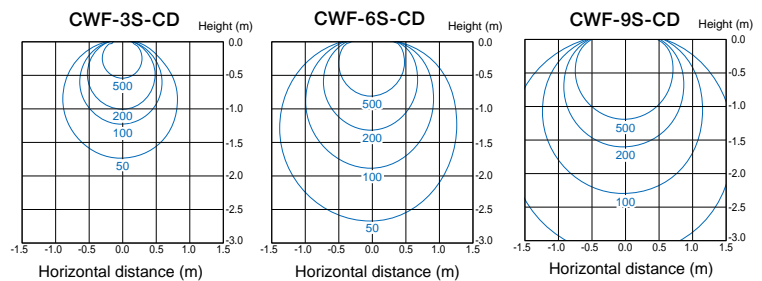
Rocker Switch



Simple Installation



Illuminance Distribution Chart (lx)



Specifications

Model	CWF3S-24	CWF6S-24	CWF3S-M2	CWF6S-M2	CWF9S-M2
Color Temperature (typ.)	5700K				
Illuminance (typ.) (Center) 1.0m	165 lx	320 lx	150 lx	320 lx	445 lx
Total Luminous Flux (typ.)	500 lm	1000 lm	500 lm	1000 lm	1500 lm
Rated Voltage	24V DC		100-240V AC (50/60Hz)		
Operating Voltage Range	21.6-26.4V DC		90-264V AC		
Rated Power Consumption	5W	10W	5W	10W	15W
Operating Ambient Temperature	-25°C ~ +60°C		-20°C ~ +50°C		
Operating Ambient Humidity	90% RH or less, no condensation				
Mounting Location	Indoor				
Mounting Direction	All Directions				
Protection Rating	IP20				
Mass (Tolerance ±10%)	0.42kg	0.57kg	M2U:0.53kg M2C:0.46kg	M2U:0.68kg M2C:0.6kg	M2U:0.84kg M2C:0.76kg

Model Code

CWF-□-□-CD

Full Length

3S	300mm
6S	600mm
9S	900mm

Luminous Color

CD	Daylight
----	----------

Rated Voltage / Standards

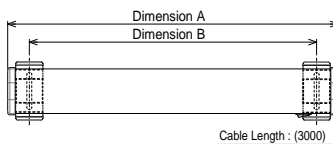
24	24V DC / UL LISTED, CE #1
M2U	100-240V AC / UL LISTED
M2C	100-240V AC / CE, KC

*1 CWF [3S][6S] type only

Dimensions (mm)

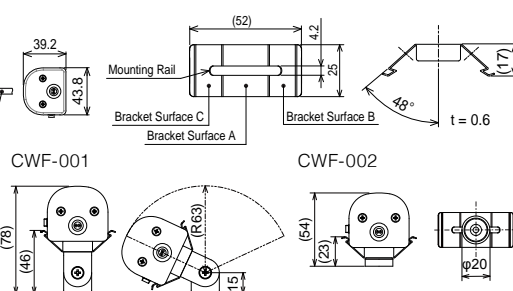
Unit : mm

LED Work Light



Model	Dimension A Body Length	Dimension B Bracket Pitch
CWF3S-□-CD	300	260
CWF6S-□-CD	600	560
CWF9S-□-CD	900	860

CWF Standard Mounting Bracket (2 pcs)



Optional Parts

Standard Mounting Bracket CWF-001

Option Swivel Bracket CWF-001

Option Magnetic Mounting Bracket CWF-002

Adjustment Angle 130°

* Mounting screws not included. Recommended Torque : 1.5Nm

* Accessory Bracket Screw 2pcs included

* Accessory Bracket Screw 2pcs included. Mounting screws not included.

Network
Signal Tower
Signal Light
Revolving Warning Light
Cube Tower
Audibles
Hybrid Signaling Devices
LED Illumination
Options

CLA

Network

Signal Tower

Signal Light

Revolving Warming Light

Cube Tower

Audibles

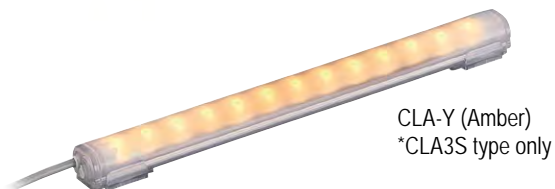
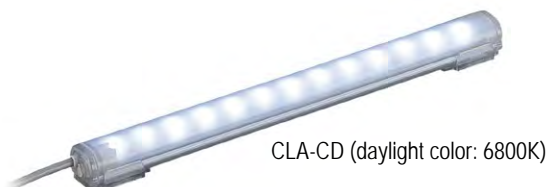
Hybrid Signaling Devices

LED Illumination

Options

The CLA Series is built for use in high-pressure, high-temperature cleaning and sub-zero environments. The rugged polycarbonate construction means there is no glass or other contamination to be concerned about. Its various lengths allow it to be used in small and large areas and the daylight color temperature enables objects to be seen clearly.

- First in industry (based on self investigation) IP66, IP67 and IP69K rated LED work light
- Ideal for use in wet or high-pressure, high-temperature applications in food processing, beverage, and pharmaceutical industries.
- 34% less heat generated compared to 20W fluorescent lights, thus keeping the work environment cooler.
- Ultra-bright, maintenance-free LEDs



- **IP6X=** The product is placed in a dust chamber with a negative pressure state so that dust is made to float for 8 hours, and there is no invasion inside.
- **IPX6=** A water nozzle with a diameter of 12.0mm is placed at a range from 2.5 to 3.0 meters with a water velocity of 100 litres per minute injected towards the test piece in an omni-direction for three minutes or more without being affected by any harmful influences.
- **IPX7=** The outline of the product is submerged at a distance of 1m from the bottom of a tank, and it is held submerged for 30 minutes.
- **IPX9K=** A non-water soluble N3 class No. 8 as specified in JIS K2241 (for coolants) is dropped on top of the upper part of a product at a rate of 0.5L/h for 48 hours. IPX9K is the German DIN 40050 PART9 standard. It is defined as a protection regulation for high temperature and high-pressurized water. Water is heated up to 80 °C and sprayed at a water pressure in the range from 80 to 100 BARs at 14 to 16 liters per minute at the test object. The test object is at a distance of 100 to 150 mm from the nozzle and sprayed in all directions at 0, 30, 60, and 90 degrees, then sprayed at a horizontal angle while it is being rotated, all done for a period of 30 seconds without being affected by water penetration.

Passed dust-proof and water resistance tests listed below:

Specifications

Model	Light source color	Rated Voltage	Operating Voltage Range	Rated Current Consumption	Central Illuminance (lx/50cm)	Body Materials	Operating Temperature Range	Mounting direction (Mounting specification)	Protection Rating	Vibration Resistance	Mass	Cable length
CLA1S-24-CD	Daylight color	24V DC (has polarity)	24V DC±10%	104mA	140	Cover: Polycarbonate	-40°C - +60°C (90%RH or less, no condensation)	All Directions (indoor use)	IP66/67/69K	19.6m/s	80 g	0.5m
CLA1S-24-CD-30	Daylight color											3.0m
CLA2S-24-CD	Daylight color			208mA	270						130 g	0.5m
CLA2S-24-CD-30	Daylight color											3.0m
CLA3S-24-CD	Daylight color			240mA	400						180 g	0.5m
CLA3S-24-CD-30	Daylight color											3.0m
CLA3S-24-Y	Amber			480mA	650						340 g	0.5m
CLA6S-24-CD	Daylight color											3.0m
CLA6S-24-CD-30	Daylight color			720mA	810						500 g	0.5m
CLA9S-24-CD	Daylight color											3.0m
CLA9S-24-CD-30	Daylight color			960mA	890						660 g	0.5m
CLA12S-24-CD	Daylight color											3.0m
CLA12S-24-CD-30	Daylight color											

Model Code

CLA1S-24-CD-30

Light-emitting component dimension

1	100mm
2	200mm
3	300mm
6	600mm
9	900mm
12	1200mm

Light source color

CD	Daylight color
Y	Amber

*-Y is a 300mm type only

Cable length

Blank	0.5m
30	3.0m

Optional Parts

For details, see pages 182 to 187.

Optional Parts	Model
Back mount (fastening screw)	SZ-310AR
Back mount (magnet specifications)	SZ-310ARM
Side mount (fastening screw)	SZ-310AS
Side mount 2 (fastening screw)	SZ-310ASB (dedicated compatibility with CLB-24N)

*Please exercise caution to prevent dropping magnet specifications (SZ-310ARM). Please use fastening screw specifications during normal installation.

[Recommended products]

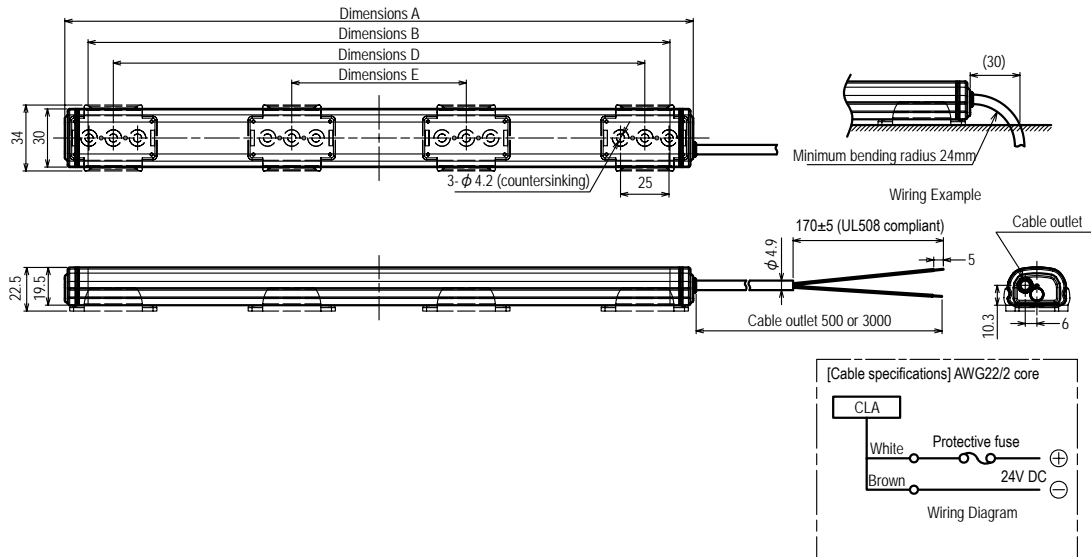
Recommended power supply for CLA series: Omron Corporation

■ Universal type...S8JX type (open type/type with cover) 24V
0.65A/1.5A/2.1A/4.5A/6.5A

■ UL Class 2 type...S8VS type 24V 0.65A/1.3A/2.5A/3.75A/5A/7.5A/10A/20A

<http://www.fa.omron.co.jp>

Dimensions (mm)



Model Name	Dimensions A	Dimensions B	Dimensions D	Dimensions E	Bracket (SZ-310AR) Number included
	Full-length part	Light-emitting component	Recommended mounting pitch		
CLA1S-	124	100	74	—	2
CLA2S-	224	200	174	—	2
CLA3S-	324	300	274	—	2
CLA6S-	624	600	574	—	2
CLA9S-	924	900	874	290	4
CLA12S-	1224	1200	1174	390	4

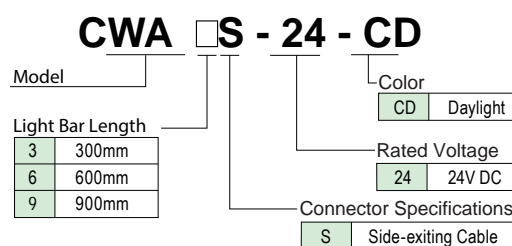
CWA



The CWA Series slim LED light bar is an affordable replacement for conventional fluorescent lamps. It outperforms them in several ways and has an IP65 rating which allows installation in most common environments. Bright, long-lasting LEDs (40,000 hrs. to 70% of original brightness) greatly reduce maintenance costs.

- 24V DC rated voltage
- -30°C to +60°C operating temperature range
- 6500K LED color temperature - Daylight white

Model Code



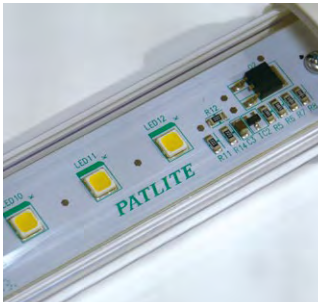
Specifications

Model	CWA3S-24-CD	CWA6S-24-CD	CWA9S-24-CD
Luminous Color	Daylight		
Color Temperature (typ.)	6500K		
Illuminance (at 24V DC) 1.0m	440 lx	800 lx	990 lx
Total Luminous Flux (typ.)	350 lm	700 lm	1050 lm
Operating Voltage Range	24V DC ±10%		
Current Consumption	180mA	360mA	540mA
Rated Power Consumption	6W	12W	18W
Operating Ambient Temperature	-30°C - +60°C		
Operating Ambient Humidity	90% RH or less, no condensation		
Main Unit Material	Body: Polycarbonate Resin; Packing: Silicon		
Cable Length	3 meters		
Mounting Location	Indoors		
Protection Rating	IP65 (Cable ends not included)		
Insulation Resistance	500V DC 5MΩ or more		
Withstand Voltage	500V AC for 1 minute (Between terminals and screw)		
Vibration Resistance	30Hz 19.6m/s ²		
Mass (Tolerance ±10%)	215g	385g	540g

Optional Parts



Highly reliable LED chips are used

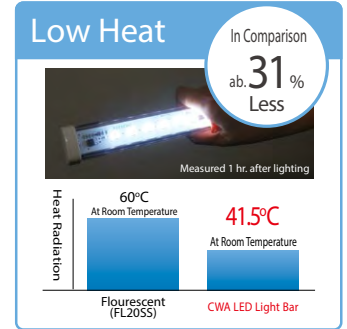
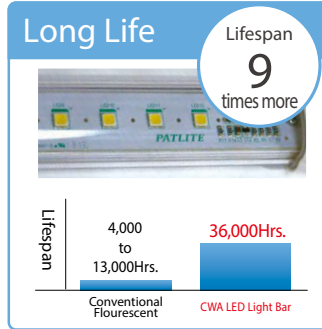
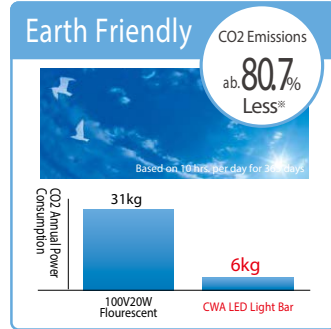
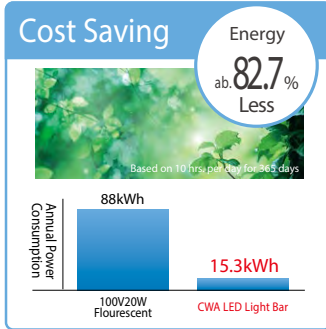
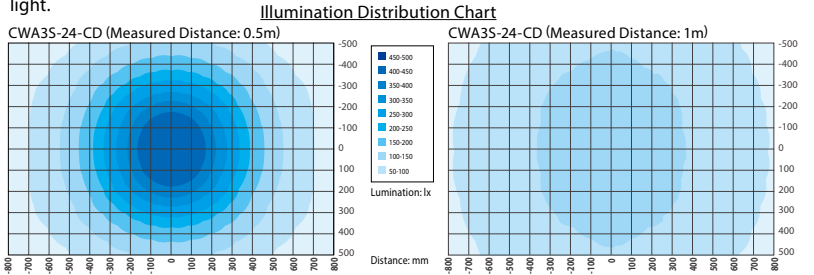


High-definition LED chip

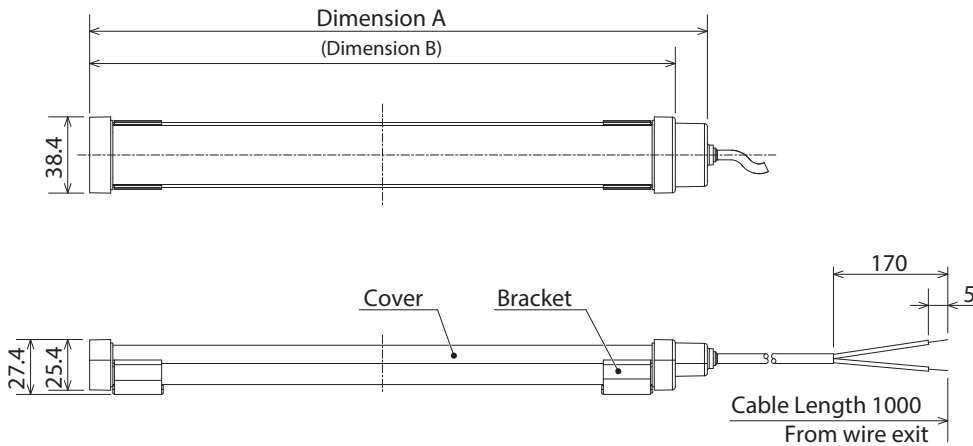
The highly reliable LED chip, which is the core of LED lighting, has nearly 10 times (about 40,000 hours) the lifespan (based on LED brightness of 70%) in comparison to the common fluorescent light, it also does not contain any mercury.

A uniform light that subdues glare

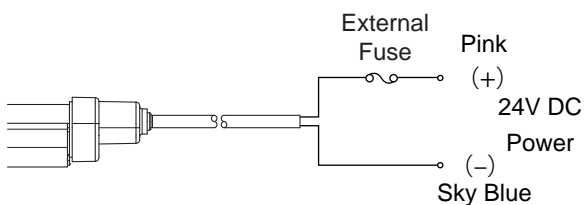
In comparison to an LED luminous source, we take advantage of the straight beam optical characteristic of the LED without dropping brightness or overdoing it, but reproducing a natural light.



Dimensions (mm)



Wiring Diagram



[Enforced]

There is no protection rating for the area surrounding the tip of the cable. To ensure insulation of water intrusion, the use of fillers (such as silicon, etc.) to plug up the tip part is recommended.

Network

Signal Tower

Signal Light

Revolving Warning Light

Cube Tower

Audibles

Hybrid Signaling Devices

LED Illumination

Options

CLK

Network



CLK6C-24AG-CD

Signal Tower



CLK3C-24SG-CD

Signal Light



CLK3C-24AG-CN

Revolving Warming Light



CLK2S-24AG-CD

Cube Tower



*UL standards are AG (aluminum) specifications only

Audibles

Hybrid Signaling Devices

Specifications

LED Illumination

Model	Cable length Connection method	Luminous Color	Rated Voltage	Operating Voltage Range	Power Consumption	Size of light-emitting component	Central illuminance (at 1m)	Total luminous flux	Body materials	Light-emitting component with transparent front surface	Operating Temperature Range	Protection Rating	Mass
CLK2S-24AG-CD	0.5m Cable takeout	Daylight color	24V DC	24V DC±10%	8.4W	200mm	820lx	865lm	Waterproof and oil-proof type/ Aluminum alloy	Tempered glass	-40°C ~+60°C (90%RH or less)	IP66G/ 67G/ 69K	450g
CLK3S-24AG-CD		Daylight color			12.5W	300mm	1,200lx	1,300lm					600g
CLK3S-24AG-CN		Neutral white			25W	600mm	2,100lx	2,600lm					1,070g
CLK6S-24AG-CD	Daylight color	8.4W			200mm	820lx	865lm	450g					
CLK2C-24AG-CD+FL005	M12 connector	Daylight color			12.5W	300mm	1,200lx	1,300lm	600g				
CLK3C-24AG-CD		Daylight color			25W	600mm	2,100lx	2,600lm	1,070g				
CLK3C-24AG-CN		Neutral white			12.5W	300mm	1,200lx	1,300lm	1,490g				
CLK6C-24AG-CD		Daylight color			Waterproof and highly anti-corrosive/ SUS316								
CLK3C-24SG-CD		Daylight color											
CLK3C-24SG-CN	Neutral white												

The CLK Series was designed especially for the machine tool industry where oil, oil mist, other cutting fluids and debris is constantly present (rated IP66G and IP67G). It has the lowest, space saving profile in the industry but puts out up to 2100 lx, illuminating large areas. The aluminum or stainless steel body and tempered glass protect the unit from hot flying debris. Various lengths are available along with the capability to daisy link them so that the CLK can be used in various equipment sizes.

A stainless steel with acrylic lens unit that is rated IP69K is also available for the food, beverage and pharmaceutical industries where high-pressure and high-temperature wash down is required.

- Cable or M12 connection methods
- 24V DC rated voltage
- -30o to +60oC operating temperature range

- IP6X= The product is placed in a dust chamber with a negative pressure state so that dust is made to float for 8 hours, and there is no invasion inside.
- IPX6= A water nozzle with a diameter of 12.0mm is placed at a range from 2.5 to 3.0 meters with a water velocity of 100 litres per minute injected towards the test piece in an omni-direction for three minutes or more without being affected by any harmful influences.
- IPXXG= The outline of the product is submerged at a distance of 1m from the bottom of a tank, and it is held submerged for 30 minutes. A non-water soluble N3 class No. 8 as specified in JIS K2241 (for coolants) is dropped on top of the upper part of a product at a rate of 0.5L/h for 48 hours. IPX9K is the German DIN 40050 PART9 standard. It is defined as a protection regulation for high temperature and high-pressurized water. Water is heated up to 80 and sprayed at a water pressure in the range from 80 to 100 BARs at 14 to 16 liters per minute at the test object. The test object is at a distance of 100 to 150 mm from the nozzle and sprayed in all directions at 0, 30, 60, and 90 degrees, then sprayed at a horizontal angle while it is being rotated, all done for a period of 30 seconds without being affected by water penetration.

Passed dust-proof, water resistance, and oil-proof tests listed below:.

Model Code

CLK2S-24AG-CD

Light-emitting component dimension

2	200mm
3	300mm
6	600mm

Wiring

S	Cable takeout
C	M12 connector connection

Body materials

AG	Body/aluminum
	Illumination Area: Tempered Glass
SG	Body/stainless steel
	Illumination Area: Tempered Glass

Luminous Color

CD	Daylight color
CN	Natural White

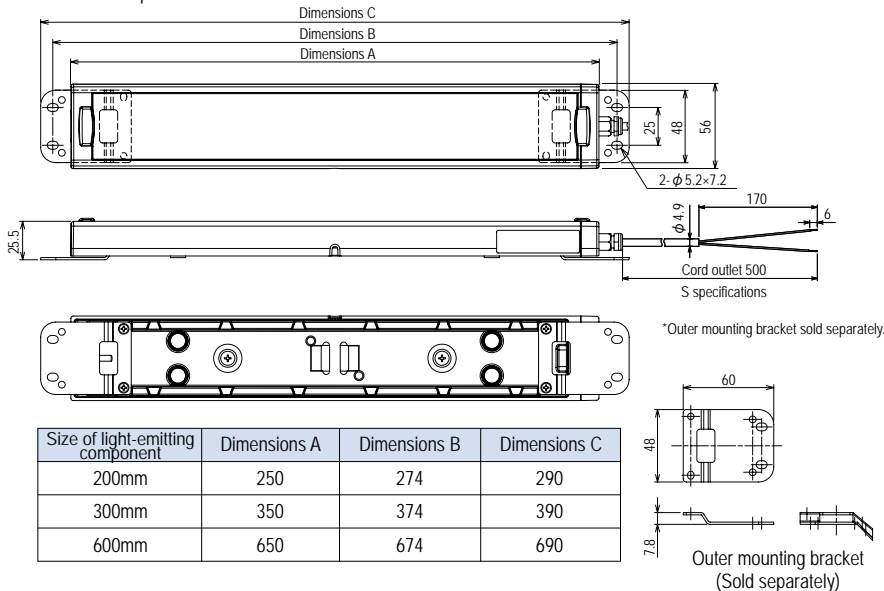
Optional Parts

For details, see pages 182 to 187.

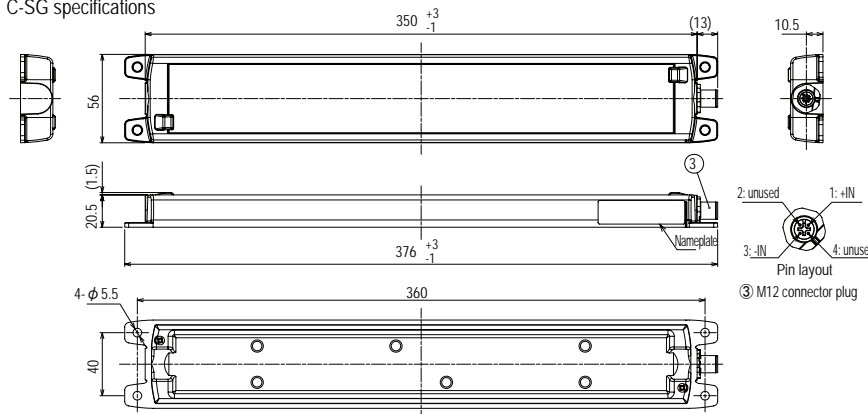
Optional Parts	Model
Outer mounting bracket	CLK-001
Angle adjustment bracket	SZ-320KS <symmetrical pair>

Dimensions (mm)

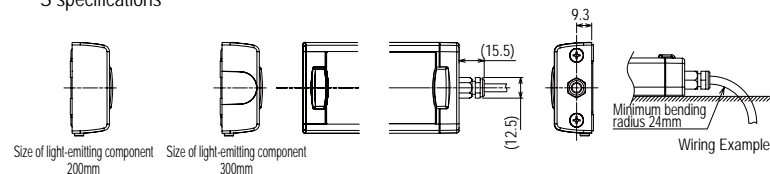
S-AG/C-AG specifications



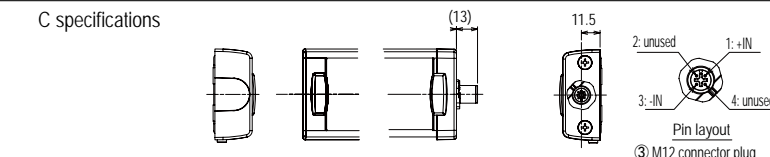
C-SG specifications



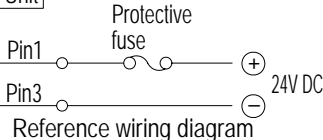
S specifications



C specifications



Main Unit



Caution

If the cable tip component comes into contact with water or is in a low temperature environment, please waterproof and oil-proof the cable tip component.

Oil proof test

The product has passed the oil-proof test in the following cutting oils!

Diluted 20 times in the following oils and soaked at 55°C for 240 hours (10 days).

Name of company
Hangsterfer's
Yushiro Chemical Industry Co., Ltd.
Castrol
Blaser Swisslube

Name of oil
Hangsterfer S500
Yushiroken Synthetic #663
Syntilo 9954
Blasocut BC35LFSW

Confirmation in result of swelling, contraction, dissolution, exfoliation, separation, cracks, and discoloration by the accelerated impregnation examination with the above-mentioned cutting fluid for diluted oil at 55 °C for 240 hours (for ten days) was made. Due to the additive agents in oil, the application of oils other than the ones above may influence physical properties, therefore, please investigate before purchasing. *The mentioned company names, product names, trademarks, etc. are the registered trademarks or trademarks.

CWK



These brackets are included.



Network

Signal Tower

Signal Light

Revolving Warning Light

Cube Tower

Audibles

Hybrid Signaling Devices

LED Illumination

Options

The CWK Series was designed especially for the machine tool industry where oil, oil mist, other cutting fluids and debris is constantly present (rated IP66G and IP67G). It has one of the lowest, space saving profiles in the industry but puts out up to 1500 lx, illuminating large areas. In addition to this, a specially designed lens disperses the light so a wider area is illuminated. The aluminum and tempered glass protect the unit from hot flying debris. Various lengths are available along so that the CWK can be used in various equipment sizes.



The body is protected by the tempered glass which disperses the flying debris.



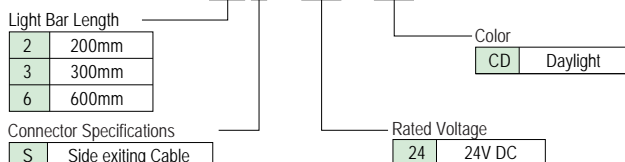
Passed oil resistant test with commonly used cutting oils. [Accelerated aging test with diluted oil at 55°C for 240 hours (10 days) sprayed onto the test object]

Specifications

Model	CWK2S-24	CWK3S-24	CWK6S-24
Luminous Color	Daylight		
Color Temperature (typ.)	6500K		
Illuminance (typ.) (at DC24V)	600 lx	850 lx	1500 lx
Total Luminous Flux (typ.)	800 lm	1200 lm	2400 lm
Operating Voltage Range	24V DC ±10%		
Rated Current Consumption	360mA ±10%	480mA ±10%	960mA ±10%
Rated Power Consumption	8.6W	11.5W	23.0W
Operating Ambient Temperature	-10 °C - +50 °C		
Operating Ambient Humidity	90% RH or less, no condensation		
Main Unit Material	Body: Aluminum Alloy; Lens: Tempered Glass		
Cable Length	3 meters		
Mounting Location	Indoors		
Protection Rating	IP66G/ IP67G (JIS C0920)		
Insulation Resistance	500V DC 5MΩ or more		
Withstand Voltage	500V AC for 1 minute (Between terminals and chassis)		
Vibration Resistance	30Hz 20m/s ²		
Mass (Tolerance ±10%)	600g	750g	1230g

Model Code

CWK S - 24 - CD



Dimensions (mm)

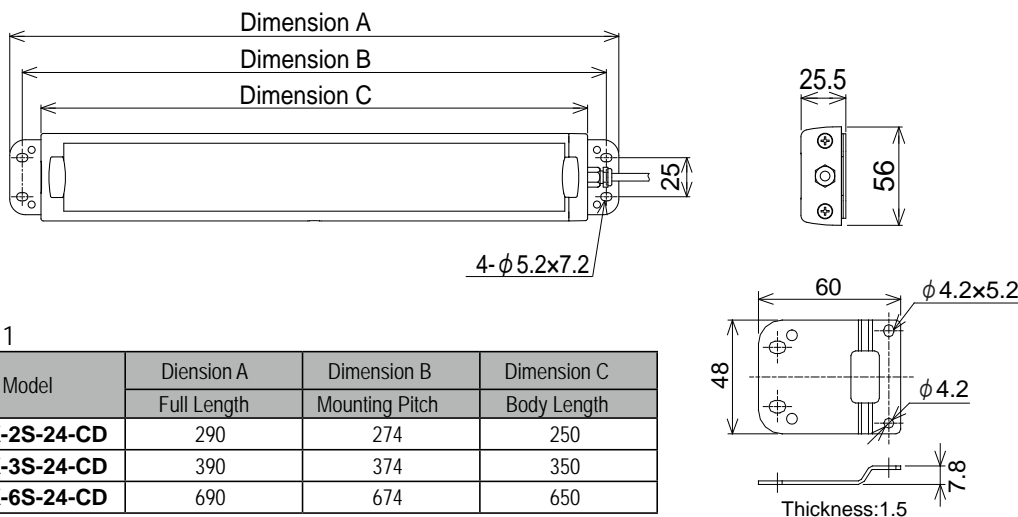
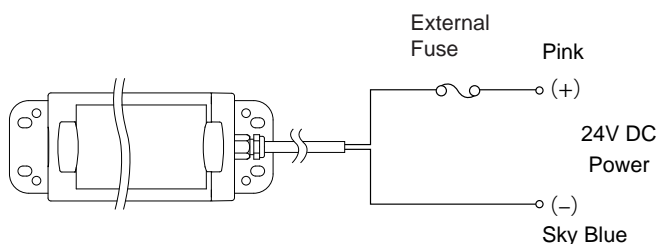


Table 1

Model	Dimension A	Dimension B	Dimension C
	Full Length	Mounting Pitch	Body Length
CWK-2S-24-CD	290	274	250
CWK-3S-24-CD	390	374	350
CWK-6S-24-CD	690	674	650

Wiring Diagram



[Enforced]

There is no protection rating for the area surrounding the tip of the cable. To ensure insulation of water intrusion, the use of fillers (such as silicon, etc.) to plug up the tip part is recommended.

Oil proof test

It has passed the oil resistant test from the following common cutting oils.

Company	Oil Type
Hangsterfer's	Hangsterfer's S-500
Yushiro Chemical Industry Co., Ltd.	Yushiroken Synthetic #663
Castrol	Syntilo 9954
BlaserSwisslube Inc.	Blasocut BC35LFSW

Confirmation in result of swelling, contraction, dissolution, exfoliation, separation, cracks, and discoloration by the accelerated impregnation examination with the oil types indicated in the table on the left for diluted oil at 55°C for 240 hours (ten days) was made.

Due to the additive agents in oil, the application of oils other than the ones mentioned may influence physical properties, therefore, please inquire in advance.

* The mentioned company names, product names, trademarks, etc. are the registered trademarks or trademarks in Japan for each company, and/or other countries.

Optional Parts

The following brackets can be used to fit various mounting applications.

Angle-adjustment Brackets



CLN

Tilt only (T type)



Daylight color

Pan & Tilt (PT type)



Daylight color

The CLN Series was designed especially for the machine tool industry where oil, oil mist, other cutting fluids and debris is constantly present (rated IP66G and IP67G). Its ability to pan and tilt allows operators to point the light where it's needed most. The aluminum body and tempered glass protect the unit from hot flying debris. The 6500K color temperature (daylight white) allow objects to be seen clearly.

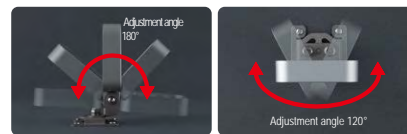
Flexible Angle Adjustment

■ Tilt only (T type)



Can tilt 180o and can be folded to 33mm for easier installation.

■ Pan & Tilt (PT type)



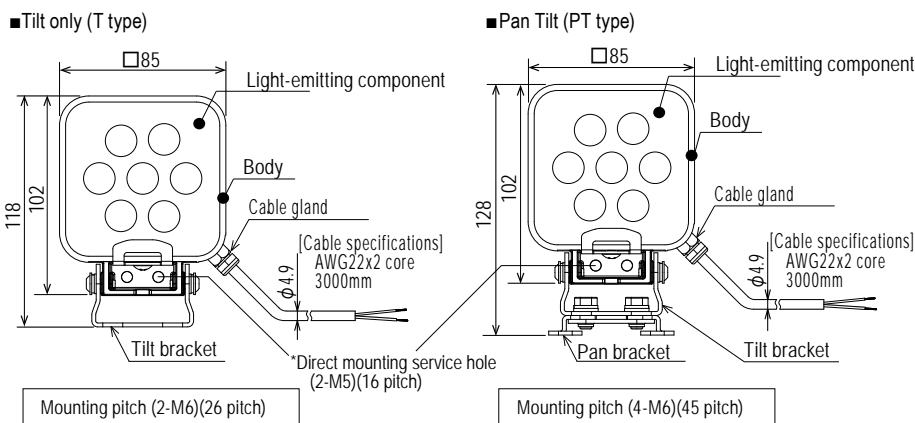
Can tilt 180o or rotated 120o to fit any application. Can be folded to 43mm for easier installation.



Specifications

Model	Light source color	Rated Voltage	Operating Voltage Range	Rated Current Consumption	Total luminous flux (typ.)	Central illuminance (lx/1.0m)	Body materials	Operating Temperature Range	Mounting location/mounting direction	Protection Rating	Vibration Resistance	Mass
CLN-24-CD-T	Daylight color	24V DC	Rated Voltage ±10%	174mA ±10%/4.2W	550lm	820	Body: aluminum alloy/ Light-emitting component: tempered glass	-40°C - +60°C (90%RH or less, no condensation)	Indoor/omnidirectional	IP66G/IP67G (JIS C0920) IP69K (DIN 40050 part 9) (Excludes cable tip component)	30Hz total amplitude 0.3mmp-p 2 hours each up-down, left-right, forward-back Total amplitude 0.3mmp-p (10-57Hz) Acceleration 19.6m/s ² (57-150Hz) (JIS C6068-2.4)	0.36kg
CLN-24-CD-PT	Daylight color				550lm	820						0.43kg

Dimensions (mm)



Model Code

CLN-24-CD-PT

Movable Type

T	Tilt
PT	Pan/Tilt

Oil-Proof Test

Passed Oil-proof Test

Product was immersed in the oils listed below in 1:20 dilution at 55oC for 240 hours (10 days).

Company Name	Oil Name
Hangsterfer's	Hangsterfer S500
Yushiro Chemical Industry Co., Ltd.	Yushiroken Synthetic #663
Castrol	Syntilo 9954
Blaser Swisslube	Blasocut BC35LFSW

At the conclusion of each test the product was examined and it was confirmed that there was no swelling, contraction, dissolution, exfoliation, separation, cracks, discoloration, and penetration.

It is recommended that careful investigation be made before purchase since additive agents in oil may differ from those tested and may influence the physical properties of the product.

*Company names, product names, trademarks, etc. of those listed in the table are each company's registered trademarks in Japan or other countries.