



E506617  
LOW VOLTAGE LUMINAIRE

# VEGA

# ENGLISH

## Installation Manual



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## 1. Product Description



- LED Lighting fixtures suitable for all sizes of CNC machine tools,
- Anodized aluminum housing
- Recessed mount lights
- Hardened frosted glass front Cover.
- High Power PCB LED, uniform lighting.
- Protection Rating: IP67 with M12 Connector or IP69 with Cable.
- Resistant to Vibration and metal chips.
- Plug-in to 24VDC with M12 connector or power cord
- Three models available
- Use only with a class 2 power supply.
- Suitable for wet areas
  
- CAUTION: To reduce the risk of fire, do not install in a compartment smaller than 11.8 in<sup>2</sup> (30cm<sup>2</sup>) by the length of the product.

## 2. Safety Instructions

Each Vega fixture was designed and manufactured based on state-of-the-art techniques.

It is made of well-selected, high-quality materials. It is carefully tested throughout the production process, from the raw material to packaging, following a detailed production schedule to guarantee that the product is safe and reliable.

Material damage, as well as bodily injuries, may nevertheless still occur while using it.



- This manual is part of the equipment and must always be kept with it.
- Please ensure that ALL instructions/information in this manual is read carefully.
- Strict compliance with the instructions provided in this manual and on the equipment is required for its correct use.

- Installation and use of the product are recommended only provided it is in perfect condition, and the user is well acquainted with all safety instructions.
- CCEA, the manufacturer, waives any responsibility in case of product tampering or improper.

### 2.1 Proper use of the product

This lighting equipment can be installed inside machine tools, even in a wet environment.

### 2.2 Product safety

#### Electrical Risks

The improper and incorrect use of the equipment may cause bodily injuries and material damage.

- A licensed electrician must carry out all electrical connection procedures.
- Switch off the power supply before installing, maintaining, or reparation procedures.
- Ensure to connect to a 24VDC power supply unit. Please respect the polarity of electric conductors.
- Please ensure that the power supply-rated tension and frequency meet the

requirements shown on the product label.

- Qualified electricians must only carry out maintenance and reparations.

The Risk of explosion might occur upon installing and using this product for applications with a high risk of explosion, and it might cause severe body injuries.

- **Do not** install and use this product in hazardous environments (high risk of explosion).

### Installation and safety

- Handle the lamp carefully and avoid having it drop or hit even if it is still packed, which might cause bodily injuries and material damage.
- Ensure the original mounting accessories are used, as available from the manufacturer.
- Set up the mounting accessories properly.
- The equipment must be correctly fastened using the proper screws according to the application, place, and surface where the product is being mounted.
- Ensure that the fastenings are regularly checked.

### The danger of dazzling glare due to a white light source

Avoid staring directly at the light source, as it may cause a temporary reduction of vision. Irritation, aches, damage, or accidents may as well occur.

- Avoid staring directly at the light source.
- The luminaire Direction must be adjusted to avoid the beam flowing directly into the eyes.

### Inappropriate spare parts cause danger.

Inappropriate spare parts may cause bodily injuries and material damage.

- **Do not** use spare parts that the manufacturer has not approved.

### Damage caused by the presence of laser beams.

The mounting of VEGA is **not** allowed when a high-power laser system operates since it may damage the LED source.

### Danger due to high temperatures

Installing and using the equipment in all the environments where the current temperature remarkably exceeds the foreseen operating

temperature will considerably reduce LED lifetime while damaging the built-in electronic components.

- **Do not** use this Fixture in environments where the device's operating temperature is exceeded.
- **Operating temperature - 4/+113°F (-20/+45°C)**
- Avoid direct solar radiation.

### Danger due to repairs

Disassembling or repairing the product without appropriate technical /electrical knowledge may cause damage to persons and objects.

- **Refrain from trying** to repair or disassemble the equipment. Please apply to qualified technicians for any issues.  
Any product tampering or modifications not approved by the manufacturer will null and void the warranty.

## 2.3 Damage risk levels

### NOTICE

Dangers where noncompliance may **immediately** cause severe injuries and eventually lead to death.



### DANGER

Dangers where failure to satisfy requirements **may** lead to severe injuries and even death.



### WARNING

Dangers where failure to satisfy requirements **may** lead to injuries.



### ATTENTION

Dangers where failure to satisfy requirements **may** cause damages to

### 3. Available versions

Please refer to the table hereunder listing all the lighting equipment, for you to identify the version you need and its main features, for you to have the lighting equipment correctly and efficiently installed and used.

**Note:** The product code is found on the brand name label stuck on the product's backside.

- Find out the product code printed on the brand name label and see if you find it on the table hereunder.
- Compare the codes and see if you can identify the same model on the table hereunder.
- The code printed on the brand name label shows the device's week and year of production.

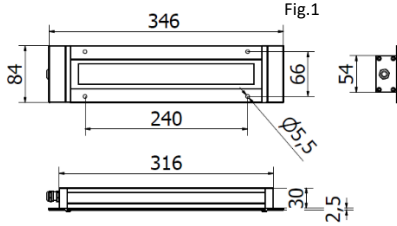
*Note: Do not discard the product labeling which may be requested in case of complaint.*

Versions with CABLE							
Model	Length	Optics		Power	Power Usage	E Connection	Weight
VE0221S01	346mm	Diffuser	120°	13W	24Vdc	CABLE 10 ft (3mt)	2.09 lb (0.95 kg)
VE0321S01	466mm	Diffuser	120°	19.5W	24Vdc	CABLE 10 ft (3mt)	2.54 lb (1.15 kg)
VE0521S01	706mm	Diffuser	120°	32.5W	24Vdc	CABLE 10 ft (3mt)	3.75 lb (1.70 kg)
Versions with M12 Connector A Coding							
Model	Length	Optics		Power	Power Usage	E Connection	Weight
VE0221S02	346mm	Diffuser	120°	13W	24Vdc	M12-A 4P M conn	1.98 lb (0.90 kg)
VE0321S02	466mm	Diffuser	120°	19.5W	24Vdc	M12-A 4P M conn	2.43 lb (1.10 kg)
VE0521S02	706mm	Diffuser	120°	32.5W	24Vdc	M12-A 4P M conn	3.64 lb (1.65 kg)

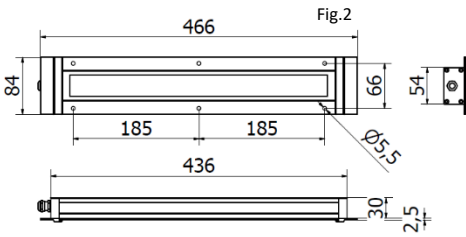
## 4. Guide to installation

### 4.1 Product size and accessories

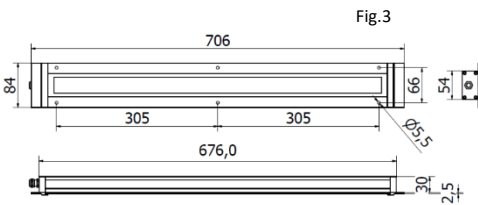
#### VE0221S01/VE0221S02



#### VE0321S01/VE0321S02



#### VE0521S01/VE0521S02



Dimensions of the window to insert lamp heatsink
VE0221201/02 ◊ 2.17x12.44 in / (55x316mm)
VE0321S01/02 ◊ 2.17x17.17 in / (55x436mm)
VE0521S01/02 ◊ 2.17x26.61 in / (55x676mm)

### 4.2 Installation



#### ATTENTION

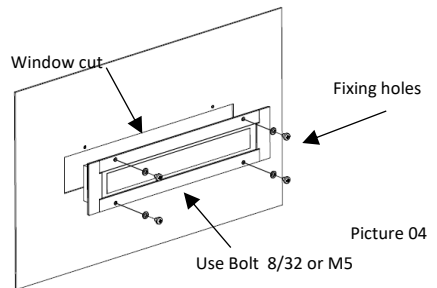
The fall of the luminaire may cause damage to persons and objects. When mounting the luminaire, ensure that the original brackets you may purchase from the supplier are used.



#### WARNING

Switch off the power supply before proceeding to installation.

- Mark out the positions of the fastening holes on the installation surface. See pictures 1-2-3 to drill center lines.
- Make the window inset heatsink for size windows. See table A



#### NOTICE

- Use proper 8/32 or M5 screws according to the application and material where the fixture is set up. Choose the bolt length relative to the thickness of the material (Pic. 4).



**NOTICE**

- Mounting screws are not included and must be chosen by the installer according to the characteristics of the place and the mounting surface.
- A layer of EPDM rubber is attached to the lamp frame. Consider placing different sealing gaskets between the luminaire and the mounting surface if necessary.

**NOTICE**

**Damage or destruction of the device**

- Periodically check the fixing of the lamp to the structure.
- Regularly check the tightening of the M3 cap screws: vibrations could loosen the screws to the detriment of the watertightness of the light.

**5. Plug-in**



**WARNING**

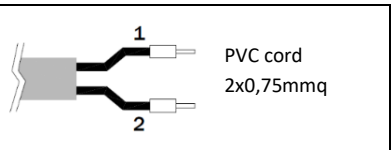
Always switch off the electricity before proceeding with the electrical wiring of the lamp.

**5.1 24VDC Low voltage plug-in**

Wrong wiring may cause damage to the luminaire.

- Qualified electricians must carry out all electrical connections.
- Please respect the polarity of connectors.
- Always use the power cord supplied with the light.

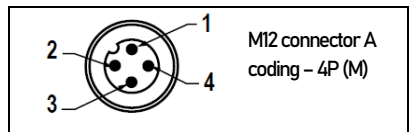
**5.2 Versions with cable**



**Wiring Diagram**

Conductor	Connection
Black 1	DC + (24 Vdc)
Black 2	DC - (0 Vdc)

**5.3 Versions with M12 connector**



**M12 Diagram**

Pin	Connection
1	DC + (24 Vdc)
2	Not connected
3	DC - (0 Vdc)
4	Not connected

**NOTICE**

Ensure the supply voltage range of 22 ÷ 36Vdc is respected to avoid damaging the LED drivers.

**Material damages caused by liquid leakage.**

- Use a connector securing the same degree of protection as the lamp, if not greater.
- Ensure that the power cord is correctly plugged into the female connector.

**5.4 Cable Accessories – Models with M12 connector**

Code	Description
M12AFC5	PVC pre-assembled cord with M12 4P (F) CONNECTOR, A-Coding – conductor 4x0,75mmq - L 5m



Pin	Wire Color	Load
1	Brown	24 Vdc (+)
2	White	Not connected
3	Blue	0 (-)
4	Black	Not connected

## 6. Switch on – Switch off

- The lamp is not equipped with an independent switch-on-switch-off system.
- The lamp will switch when plugged in and off when the power is off.

## 7. Troubleshooting

In case the lamp doesn't turn on:

- Check that the luminaire is wired correctly to the supply voltage.
- Check that polarity wiring has been carried out correctly.

Please contact CCEA'S Technical support service in case the lamp is defective.

**CCEA Technical Support Service**

**Phone:** 1-(623)-526-9599

[Techsupport@ccealights-usa.com](mailto:Techsupport@ccealights-usa.com)  
[www.ccealights-usa.com](http://www.ccealights-usa.com)

## 8. Replacing the LED

The outstanding lifetime of the LED light source, over 60.000 hours, makes it unnecessary to replace the PCB LED if the lamp is installed correctly and used following the instructions in this manual. Please contact CCEA's Technical Support service - or your Reseller – in case the replacement of the PCB LED is

needed for any defects not covered by the warranty.

## 9. Product maintenance and cleaning



### WARNING

**Switch off the power supply before any installation, maintenance, or reparation procedures.**

This product is maintenance-free.

### NOTICE

- Cleaning is only done after the switch is switched off and the surfaces have cooled down.

Carefully rinse the lamp surface with a mild cleanser and then wipe it off using a soft cloth to avoid scoring it.

## 10. Repairs

### NOTICE

**All material damages caused by poorly executed repairs may damage the luminaire.**

- All repairs must be carried out by the manufacturer or by qualified technicians.
- Only use spare parts having been approved by the manufacturer.

- Wrong installation or inappropriate use.
- Any unauthorized repairs or

**All material damages caused by liquid leakage may damage the lamp.**

- In case the lamp is working in environments where lubricants or coolers are present, all cleaning operations should be carried out at the end of the working cycle.

## 11. Warranty

### Terms of warranty

CCEA ensures that any control procedures or repairs are carried out exclusively at/by the CCEA Technical Service department or any CCEA'S official dealer and are covered throughout the entire product's lifetime. Given the above, preserve the product label and case to be submitted if any repair operations are needed.

All repair and spare parts costs will be notified after the defects have been examined.

The warranty does not cover the following:

- Any transport, packaging, or shipping costs.
- Any damages or deterioration caused by:

attempts to repair the product.

- Equipment operation under environmental conditions other than the user manual.
- Liquid leaks inside the luminaire.
- Failure to follow the safety precautions related to transport and shipping the product back for repair (please make sure to have it shipped back in its original case).

### Period of warranty

The warranty period covers 24 months, starting from the delivery date. CCEA guarantees that the products have no manufacturing defects or malfunctions.

## 12. Product Disposal (EU Regulation)

All the electrical and electronic equipment (WEEE) must be managed with selective waste sorting and cannot be disposed of as municipal waste, as provided in Directive 2012/19/UE.

Given the above, this Fixture, all its components, sub-systems, and consumables, which are an integral part of the product, must be conveyed to the local collection facilities for them to be disposed of by the current legislation.

Please apply to the council offices of your residence to know where the collection facilities are located.






### 13. Technical Data

**NOTE: Please refer to the data printed on the label or engraved on the lamp.**

Power Supply	22÷36VDC
Power Input	13/19.5/32.5W (see label)
IEC Class	III
Degree of Protection	IP67/IP69 Compatible with NEMA 6
LED Driver	I.D.S. (Integrated Driving System)
Light Color Temperature	5000K
CRI	80
Operating Temperature	-4°F/+131°F ( -20°C/+ 45 °C)
For any further information please refer to the table at page 7.	

### 14. Symbol Keys

	CE Conformity marking
	Protection class III Fixture
<b>IP67/IP69</b>	Degree of protection IP67/IP69
	<b>WARNING:</b> <b>Cancer and Reproductive Harm</b> <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

# 15. Declaration of Conformity

C.C.E.A. SRL, via Piave, 2 - 36077 Altavilla Vicentina (VI), Italy – VAT and Tax number 02374040240 hereby declares that the light equipment named VEGA – to which the present Declaration of Conformity is related - was manufactured by CCEA SRL in accordance with the following Directives: 2014/35/UE on Low Voltage Equipment Safety and the Directive of Electromagnetic Compatibility 89/336/CEE (EMC) 2014/30/UE. The unit complies with the following regulations:

• **Directives**



Machinery Directive 2006/42/EC  
Low Voltage Directive 2014/35/UE  
EMC Directive 2014/30/EU

• **Certifications**



**In Compliance with**  
**UL 2108 STANDARD FOR LOW VOLTAGE LIGHTING SYSTEM – Edition 2 – Revision Date 2017/05/30**  
**CSA C22.2 NO.9.0-96 LUMINAIRES – Edition 1 – Revision Date 1998/07/01. Reaff. 2016**

• **Harmonized Standards**

- CEI EN 60598-1 “Lighting equipment. Part 1: General instructions and tests”
- CEI EN 60598-2-4 “Lighting equipment part 2: particular requirements – part 4 Portable general-purpose luminaries”.
- CEI EN 62031 “LED modules for general lighting. Safety specifications”.
- CEI EN 62384 “DC or AC supplied electronic control gear for LED modules. Performance requirements”.

This is a standard product manufactured following a detailed production schedule ensuring that inspections and destructive tests were carried out, for a safe, functional and sustainable product to be delivered.

C.C.E.A. SRL disclaims any responsibility resulting from tampering and/or wrong use of the device.

**Date:** \_\_\_\_\_ **CCEA Technical Lighting Corp.**  
**Week of production:** \_\_\_\_\_ 2630 N Ogden Rd. Suite 108  
 Mesa, AZ, 85215  
**Product code:** \_\_\_\_\_ Tel1-623-526-9599  
 Fax: 1-480-985-9663  
 Email: Techsupport@ccealights-usa.com