E506617
LOW VOLTAGE LUMINAIRE

VEGA

ENGLISH

Installation Manual

CCEA

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1. Product Description

- LED Lighting fixtures suitable for all sizes CNC machine tools, anodized aluminum housing
- Recessed mount lights
- Hardened frosted glass front Cover
- High Power PCB LED, uniform lighting
- IP67 (connector) or IP67-IP69 (cable) degree of protection lamp with Viton seals
- Resistant to Vibration and metal chips impact
- Plug-in to 24VDC with M12 connector or power cord
- Three models available
- Use only with 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 in2 (30cm2) by the length of the product.

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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 through to packaging, following a detailed production schedule so as to guarantee that the product is safe and reliable
Material damages, 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 make sure that ALL instructions/information in this manual is carefully read through.
- Strict compliance with the instructions provided in this manual and on the lighting, equipment is required for its correct use.
- Installation and use of the product is recommended only provided it is in perfect conditions, 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 is fit for being 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 damages.

- All electrical connection procedures must be carried out by a licensed electrician.
- Switch off the power supply before any installation, mainteinance 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 meets the requirements shown on the product label.
- Maintenance and reparations must only be carried out by qualified electricians.

Risk of explosion

The Risk of the explosion might occur upon installing and using this product for applications with a high risk of explosion. 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 with care and avoid having it drop or being hit even it is still packed which might cause body injuries, as well as material damages.
- 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.

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, damages or accidents may as well occur.

- Avoid staring directly at the light source.
- The device must be adjusted so as to avoid having the light flow directed towards the eyes.

Danger caused by inappropriate spare parts.

Using inappropriate spare parts may cause bodily injuries and material damages.

- **Do not** use spare parts that have not been approved by the manufacturer.

Damage caused by the presence of laser beams

Use of VEGA **is not** allowed when a high power laser – see: a laser cutting system - is operating, since it may damage the LED source.

Danger due to high temperatures

Installing and using the equipment in all the environments where the existing temperature remarkably exceeds the foreseen operating temperature will considerably reduce LED lifetime while damaging as well the built-in electronic components.

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

Danger due to repairs

Having the product disassembled or repaired without any appropriate technical /electrical knowledge may cause damages to persons and objects.

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

2.3 Damage risk levels

DANGER

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

WARNING

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

ATTENTION

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

NOTICE

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.

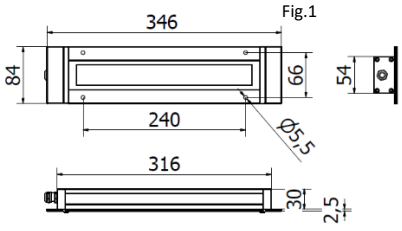
Note: Do not discard the product labeling which may be requested in case of complaint.

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)

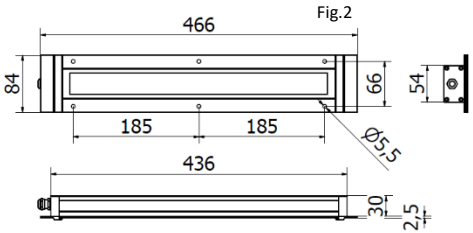
4. Guide to installation

4.1 Product size and accessories

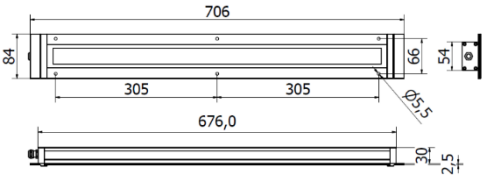
VE0221S01/VE0221S02



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

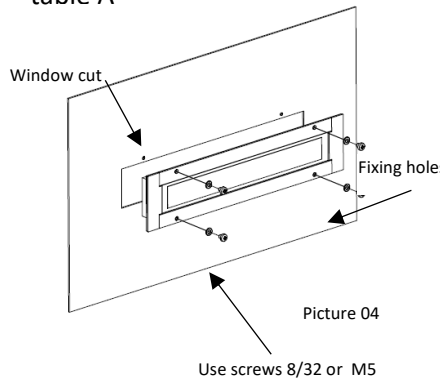
ATTENTION

The lamp fall-down may cause damage to persons and objects
When mounting the lamp ensure that the original fastenings are used, which you may purchase from the supplier

WARNING

Switch off 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 to inset heatsink for size windows See table A



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

- 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. If necessary, consider whether to place different sealing gaskets between the lamp and the mounting surface.

NOTICE

Damage or destruction of the device

- Periodically check the fixing of the lamp to the structure.
- Periodically check the tightening of the M3 cap screws: vibrations could loosen the screws to the detriment of the water-tightness of the lamp.

5. Plug-in

WARNING

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

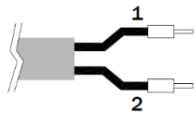
5.1 24VDC Low voltage plug-in

NOTICE

Wrong wiring may cause damages to the lamp

- All electrical connections have to be carried out by qualified electricians.
- Please respect the polarity of connectors.
- Always use the power cord supplied with the lamp.

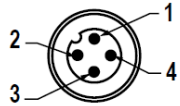
5.2 Versions with cable



PVC cord
2x0,75mmq

Wiring Diagram	
Conductor	*Connection*
Black 1	DC + (24 Vdc)
Black 2	DC – (0 Vdc)

5.3 Versions with M12 connector



M12 connector A
coding – 4P (M)

M12 Diagram	
Pin	*Connection*
1	DC + (24 Vdc)
2	Not connected
3	DC – (0 Vdc)
4	Not connected

NOTICE

Ensure that the supply voltage range to the lamp is closely respected in order to avoid damaging the Led drivers 22 ÷ 36VDC**.**

NOTICE

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 – M12 Cable Version

	CODE	DESCRIPTION
	**M12AFC5**	PVC Pre-assembled cord with M12 4P (F) CONNECTOR A Coding – conductor 4x0,75mmq - L 5m Connection: 1: brown – 24 VDC 2: white – not connected 3: blue – 0 VCD 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 on when plugged in and switch off when the power is off.

7. Problem solving

In case the lamp doesn't turn on:

- Check that the lamp is properly wired 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: +39 0444 572083
ccea@ccealights.com
www.ccealights.com

8. Replacing the LED lights source

The outstanding lifetime of the LED light source, over 60.000 hours, makes it unnecessary to replace the PCB LED if the lamp is properly installed 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 power the supply before any installation, maintenance or reparation procedures.

This product is maintenance-free.

- Lamp cleaning to be carried out only after it has been switched off and surfaces have cooled down.
- Carefully rinse the lamp surface with a mild cleanser and then wipe off using a soft cloth in order to avoid scoring it.

NOTICE

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.

10. Repairs

NOTICE

All material damages caused by poorly executed repairs may damage the lamp

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

11. Warranty

Terms of warranty

CCEA ensures that any control procedures or repairs – to be carried out exclusively at/by CCEA Technical service dept. or by any CCEA'S official dealer – are covered throughout the entire product's lifetime. In view of the above, take care to 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:

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

- Installation and/or operation carried out following different ways;
- Any unauthorized repairs or attempts to repair the product;
- Equipment operation under environmental conditions other than those specified in the user manual;
- Liquid leakages inside the lamp;
- 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 malfunctioning.

12. Product disposal (EU Regulation)

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

In view of the above this equipment, all its components, subsystems and the consumables which are an integral part of the product have to be conveyed to the local collection facilities for them to be disposed of in accordance with the current legislation.

Please apply to the council offices of your place of residence in order 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/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	CE Conformity marking
III	Protection class III device
IP67/IP67-IP69	Degree of protection IP67 (connector) Degree of protection IP67-IP69 (cable)
c UL us	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
	**WARNING:** **Cancer and Reproductive Harm** **www.P65Warnings.ca.gov**

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 in particular with the following regulations:

- **Directives**

CE

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

- **Certification:**

c UL us

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: _____
Week of production: _____
Product code: _____

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