

LUMIMAX® VC-Box V02 / 115.0015.01

Product image



Picture may differ from the original product

Description

- VC-Box for manual switching ON and OFF as well as for stepless brightness regulation of LUMIMAX® LED lighting in continuous, switch or flash mode with a rotary switch

Technical data

Operation voltage	24 V DC
Electrical connection	Input: M8 3-pin plug Output: M8 3-pin socket
Protection class	IP40
Dimensions	l x w x h in mm 61 x 40 x 46
Weight	90 g
Material Casing	ABS
Tariff code	94054099
Country of Origin	Federal Republic of Germany

Functions

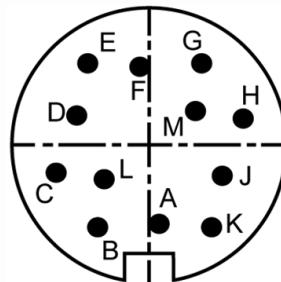


- M16 12-pin plug for connecting the supply line
- M16 12-pin socket for connecting the lighting
- Toggle switch for controlling the trigger signal
EXTERN – Switching ON via the external trigger signal of the supply line
HIGH – Switching ON via the rotary switch of the VC-Box (in flash operation single trigger pulse)
- Rotary switch for switching ON and switching OFF the lighting as well as for stepless brightness regulation (control voltage in the range of 0.9 to 10 V DC)
- Toggle switch for controlling the brightness regulation
EXTERN – Brightness regulation via external VC voltage of the supply line
VC BOX – Brightness regulation via rotary switch of the VC-Box

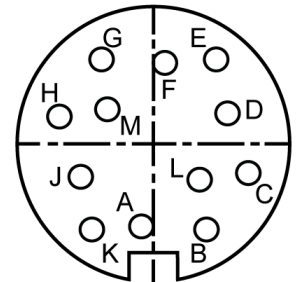
Pin assignment M16 plug, M16 socket

PIN	color	assignment	function
A+K	white	GND	GND Operation voltage
B+L	brown	U _B	Operation voltage
C	green	NC	NC
D	yellow	VC	Brightness regulation 1...10 V DC
E	grey	+ ON / OFF TTL	Switching input, TTL > 3 V DC
F	pink	+ ON / OFF SPS	Switching input, SPS > 15 V DC
G	blue	GND ON / OFF	GND switching circuit
H	Shield	Shield	Shield connection
J	NC	NC	NC
M	NC	NC	NC

M16 built-in plug (input side)

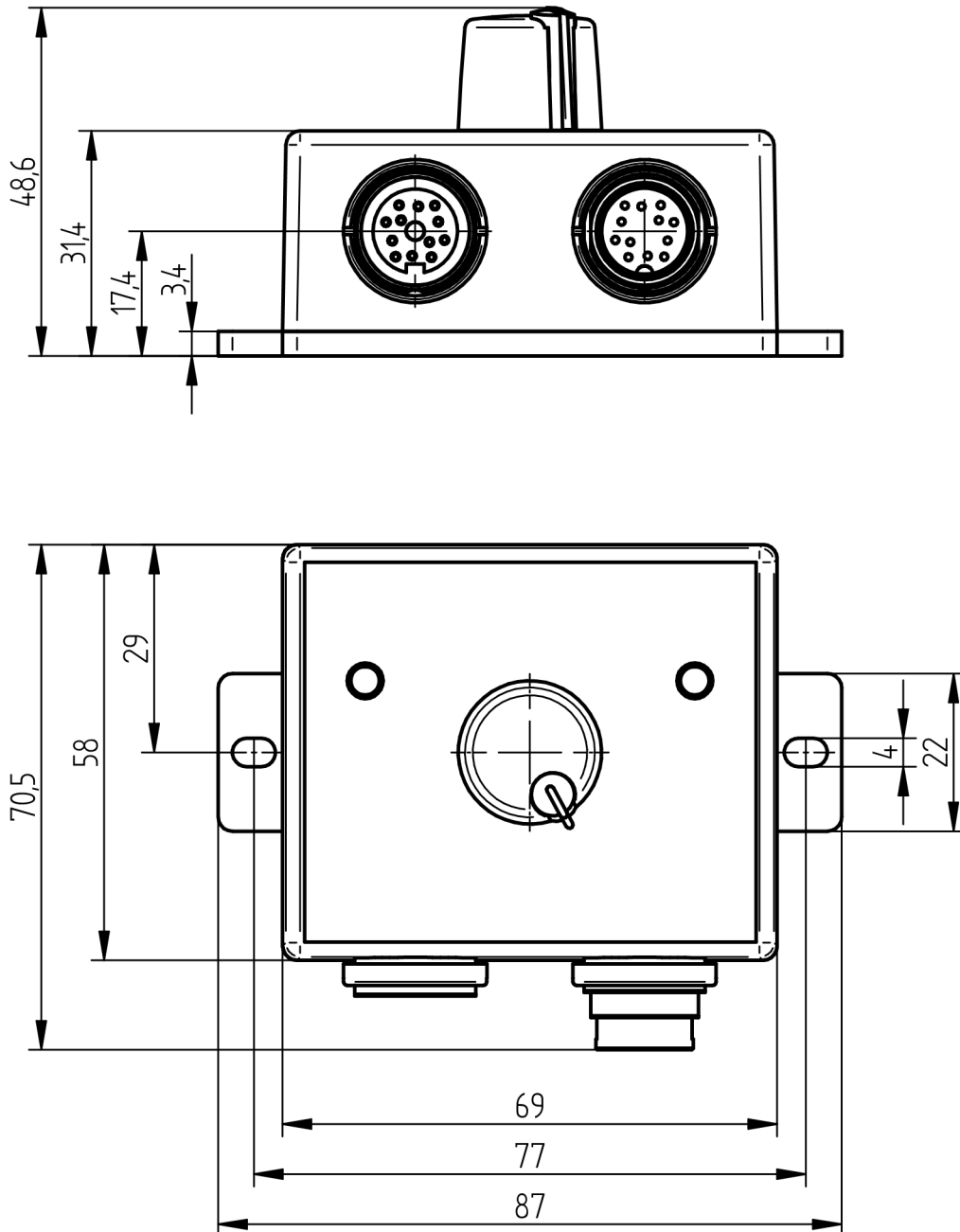


M16 built-in socket (output side)



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Technical Drawing



FAQ

Intended Use

LUMIMAX[®] LED lights are exclusively intended as components for Machine Vision systems, that are used for quality control as well as process control and optimisation in industrial installations.

- Use the lights in enclosed rooms only.

Notes on operation

Initial operation

- Have the light only put into operation by trained specialists and in compliance with the specified protective measures. Adhere to the permissible environmental conditions.
- For optimal heat dissipation, mount the largest possible surface of the light on thermally conductive machine elements.
- Keep cooling fins free to ensure sufficient convection.

Status LEDs

Most lights have 2 status LEDs on the (rear) side. The light only illuminates when both status LEDs light or blink.

- The green status LED signals the connection to the correct operating voltage.
- The red status LED blinks when a switching or trigger signal is connected to the light.

Protection class

LUMIMAX[®] LED lights with protection class IP64 and higher are protected against dust, contact and splash water on all sides in accordance with the applicable standards. Permanent protection against liquids containing solvents, such as e. g. cleaning agents, machine emulsions or other lubricants cannot be guaranteed.

Ageing-related brightness decrease of the LEDs

The brightness of LEDs decreases over time due to natural ageing. LUMIMAX[®] LED lights are designed and manufactured in such a way that at full load operation under the permissible ambient conditions at least the following expected operating hours are achieved or exceeded without the light's intensity falling by more than 30% compared to the delivery condition:

- 80,000+ h for LUMIMAX[®] LED lights in the visible and infrared wavelength range
- 55,000+ h for LUMIMAX[®] High Power LED lights in the ultraviolet wavelength range
- 21,000+ h for LUMIMAX[®] High Power LED Spot lights in the ultraviolet wavelength range

The ageing is significantly influenced by the mounting conditions in the machine, the ambient temperature, and the operating mode of the lighting. Switching or flashing can significantly reduce the decrease in brightness of the LEDs and thus of the light.

Troubleshooting

The device does not light up.

The green status LED does not light up.

- Check if the light is connected as described on the data sheet and that the correct operating voltage is set. If you are using a power supply with current limiting, increase the allowable current.

The green status LED does light up.

- Check whether the light has been dimmed. Carefully turn the brightness potentiometer clockwise. For variants with an active VC brightness regulation, check if the VC voltage input is correctly connected and a control voltage of at least 2 V DC is applied.
- For lights with switching input and for flash lights check that the necessary switching or trigger signals are present. The status LED should blink red when a trigger is released.

Care and Maintenance

The LED lights from iiM AG usually do not need maintenance. Should it still be necessary to clean the external glass and plastic surfaces or device components, then observe the following:

- Do not use acetone, methylated spirits or other solvents.
- For cleaning the plastic surfaces use a soft, lint-free cloth moistened with soapy water or a normal glass cleaning cloth.

Disposal

LUMIMAX[®] LED lights and cables are registered at Stiftung Elektro-Altgeräte Register[®] under WEEE Reg. No. DE 48985193.

- Ensure the separate collection of electrical and electronic equipment. On request, the iiM AG will handle the proper disposal of returned LED lights.