

PX291

PxAqua

3 SF 12V

User manual



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*Manufacturer reserves the right to make modifications in order to improve device operation.*

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# 1 Description

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LED lamp PxAqua 3 SF 12V is intended for underwater and inrun lighting. It can also be used to illuminate the interior or exterior architectural details.

The lamp uses three high-performance Osram Oslon® LEDs. LEDs are available in white color, in different color temperatures: 2700K, 3000K, 4000K, 5000K, 5700K. The PX291 may be provided with optic beam angles of 10°, 22° (standard) or 40°. The casing is made of stainless steel (316L).

The lamp is powered by 12V DC. In order to run it, use a voltage driver or voltage power supply. In case of using a voltage driver, e.g. PX254, it is possible for dimming the lamp.

The device is supplied with a 2m cable.

## 2 Safety conditions

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**Before installing, connecting and using the lamp you have to absolutely read this document.**

The following symbols are used to underline important information on security conditions on the product and in this manual.



**Danger!**  
Risk of loss of life and health.



**Warning!**  
Fire hazard.



**Warning!**  
LED light emission.  
The risk of eye damage.



**Warning!**  
The risk of burns.



**Warning!**  
Read the instruction manual.

### **Caution!**

Do not look at the LEDs, LEDs can cause damage or eye irritation. Do not look at the light source with any optical devices that focus the light rays.



Light is harmful to unprotected eyes, can cause irritation, eye damage or even loss of eyesight.



While working outdoors in normal conditions, the housing unit can heat up to +65°C. Make sure that accidental contact with the device during use is impossible.



In case of improper usage of the product it may cause a risk of serious injury or death because of the threat of fire.

During its installation and use PX291 the following rules must be strictly observed:

1. Installation should be performed by a person holding the appropriate qualifications, according to the instruction manual.
2. Lamp may only be connected to stabilized voltage with current-carrying capacity compatible with technical data.
3. All the conductors should be protected against mechanical and thermal damage.
4. In the event of damaging any conductor, it should be replaced with a conductor of the same technical data.
5. All repairs and connections of outputs can only be made with cut off power supply.
6. Do not connect to the power supply to device with visible damage.
7. All sudden shocks, particularly dropping, should be avoided.
8. If you suspect that the housing is leaking, do not switch the device on.

### 3 Information on version

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The PX291 lamp is available in several versions that differ in the angle of the lenses used and the color of the LEDs.

Below there is a description of designation of the PX291 models and their explanation:

**PX291 – XX – YYY – ZZ**

**XX – lens angle:**

10 – 10°

22 – 22°

40 – 40°

**YYY – color LEDs:**

927 – CRI 90, 2700K

930 – CRI 90, 3000K

940 – CRI 90, 4000K

950 – CRI 90, 5000K

957 – CRI 90, 5700K

**ZZ – lamp housing version:**

SF – overrun with collar

Example of marking for a lamp with a lens angle of 25°, LEDs 3000K and overrun with collar:

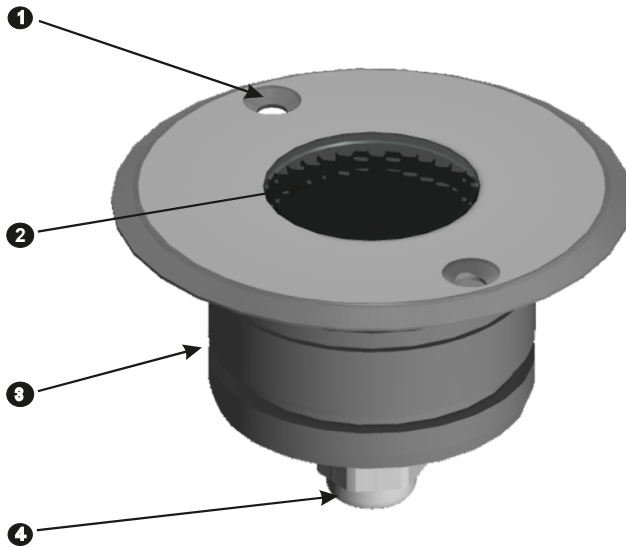
**PX291-22-930-SF**

Housing version:

Waterproof, in accordance with the IP68 standard, allows the device to be used in underwater installations, such as fountains, swimming pools, and places exposed to adverse weather conditions.

## 4 Model description

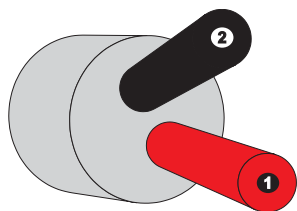
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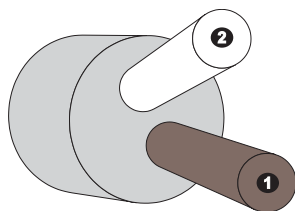
1. Mounting holes
2. Directional diffuser in the shape of a honeycomb (reducing the possibility of glare) with 3 LEDs
3. Stainless steel housing body
4. Cable gland

# 5 Connection scheme

Presented below are the possible colors of the wire used in the lamp. The cable should be connected as described. Lamps should only be connected parallel.



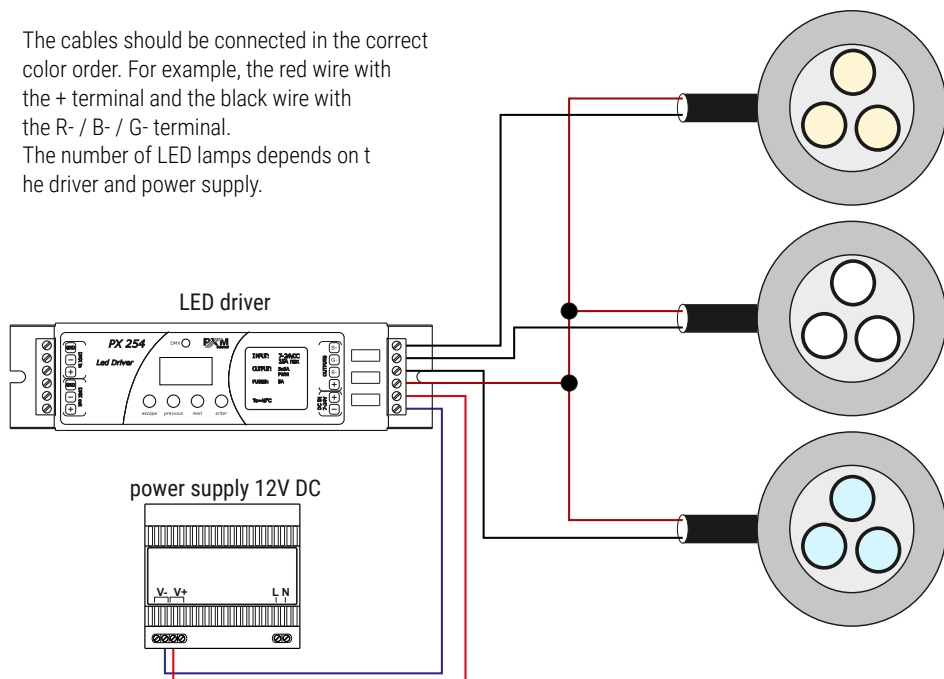
1. + (red)  
2. - (black)



1. + (brown)  
2. - (white)

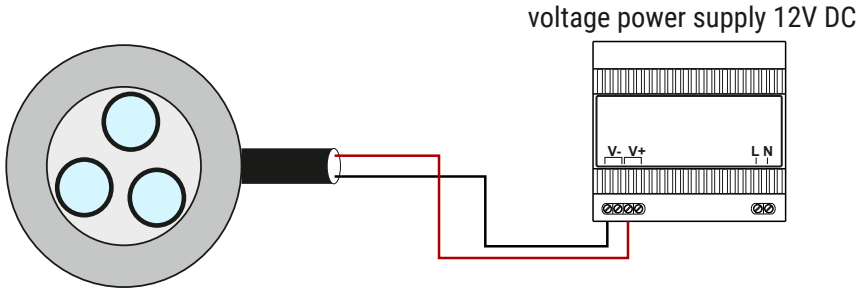
## a) sample connection of the PX291 to a PX254 driver

The cables should be connected in the correct color order. For example, the red wire with the + terminal and the black wire with the R- / B- / G- terminal. The number of LED lamps depends on the driver and power supply.

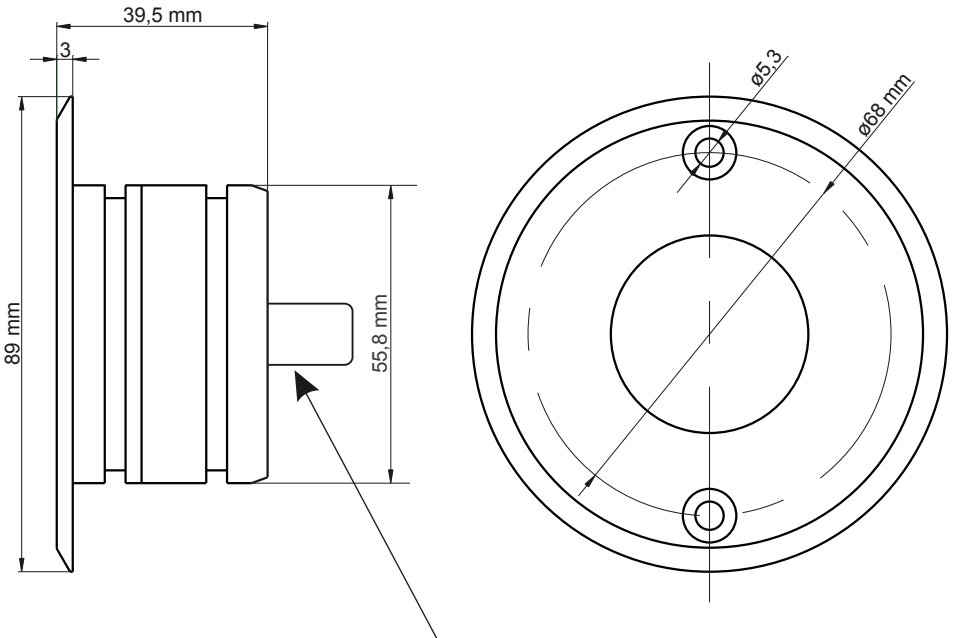




b) diagram of connecting the lamp with the voltage power supply



## 6 Dimensions



When mounting the lamp, you need to leave enough space for cable gland, from which goes out the power cord

## 7 Technical data

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type	PX291
power supply	12V DC
number of LEDs	3
current consumption	350mA
IP rate	IP68
housing	stainless steel (316L)
CRI	≥80
lighting angles	10°*, 22°, 40°*
available LED colors	2700K, 3000K, 4000K, 5000K, 5700K
brightness (22° / 1m)	~1120lx
weight	0.6kg
dimensions	diameter: 89mm height: 39.5mm

\* - available on request

## DECLARATION OF CONFORMITY

PXM Marek Żupnik spółka komandytowa  
Podłęże 654, 32-003 Podłęże

we declare that our product:

*Product name:* PxAqua 3 SF 12V

*Product code:* PX291

meets the requirements of the following standards, as well as harmonised standards:

PN-EN IEC 63000:2019-01

EN IEC 63000:2018

PN-EN 60598-1:2015

EN 60598-1:2015

PN-EN 62471:2010

EN 62471:2008

and meets the essential requirements of the following directives:

2011/65/UE DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment  
Text with EEA relevance.

  
Marek Żupnik spółka komandytowa  
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NIP 677-002-54-53



mgr inż. Marek Żupnik.