

PX278

PxAqua 3 SF

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

PxAqua 3 SF LED lamp is designed for underwater lighting. It can also be used to illuminate the interior or exterior architectural details.

The lamp uses three high-performance LEDs Osram Oslon[®], what ensures its excellent lighting performance. It can be equipped with the optics of different beam angles: 10°, 25° (standard) or 45°. The lamp may have diodes of a different color than RGB installed. It works with 350mA power supply, but in underwater applications the PxAqua 3 SF lamp can be powered with 700mA current and then the LEDs get 3 x 3W.

To control the lamp you need to use e.g. PX745 LED driver. Moreover, remember that different LED drivers can control only specified maximal number of LED lamps in according to power supply and other technical parameters.

The lamp is designed for installation under water, e.g. in fountains, as well as indoor and outdoor applications.

2 Safety conditions

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 PX278 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. Do not plug the device into the installation if you suspect that the casing is leaking.

3 Information on version

The PX278 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 PX278 models and their explanation:

PX278 – XX – YYY

XX – lens angle:

10 – 10°

25 – 25°

45 – 45°

YYY – CRI and color LEDs:

927 – 90 CRI, 2700K

930 – 90 CRI, 3000K

940 – 90 CRI, 4000K

950 – 90 CRI, 5000K

957 – 90 CRI, 5700K

R – red

G – green

B – blue

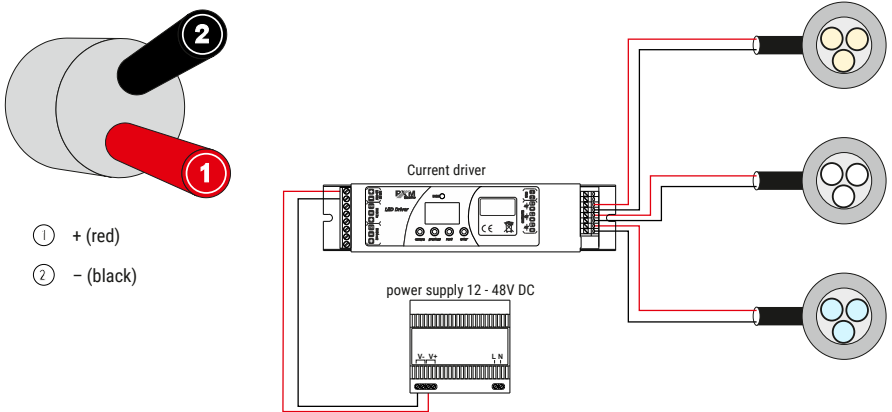
Example of marking for a lamp with a lens angle of 25° and LEDs 3000K with 90 CRI:

PX278-25-930

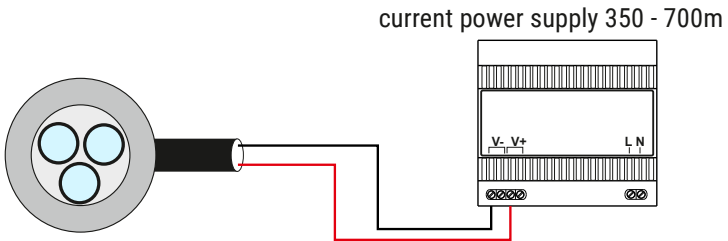
The housing, compliant with the IP68 standard, allows the device to be used in underwater applications, for example in fountains, swimming pools, as well as in places exposed to adverse weather conditions.

4 Connection scheme

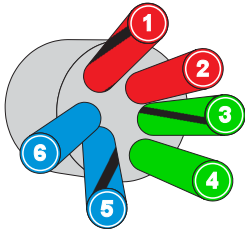
a) connecting monochrome lamps to the driver



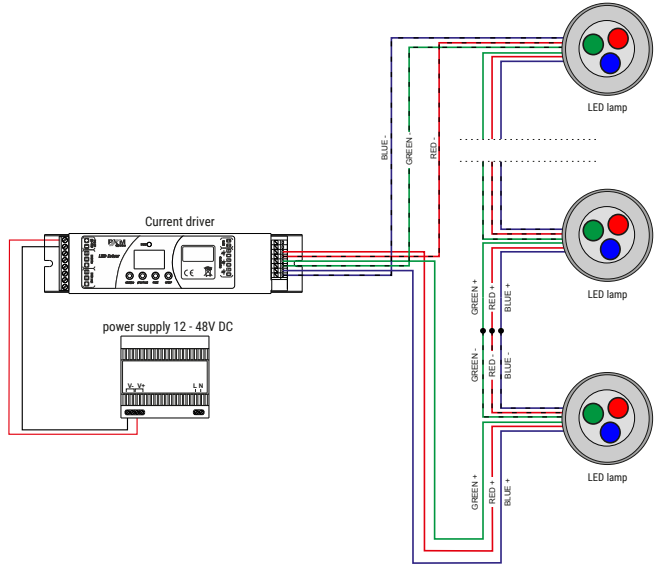
b) connecting a monochrome lamp to the power supply



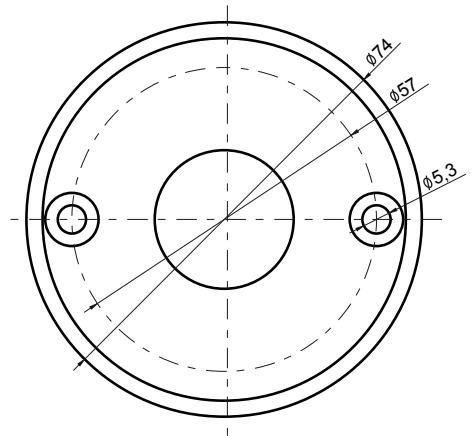
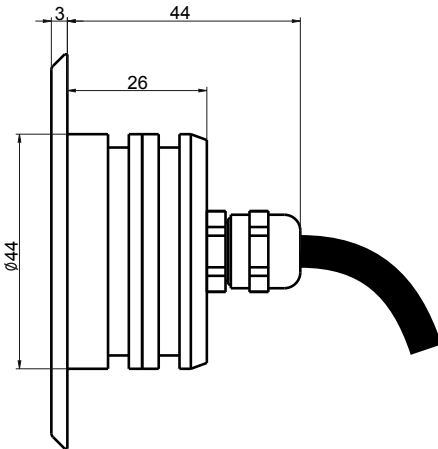
c) connecting RGB lamps in series to the driver



- ① R- (red/black)
- ② R+ (red)
- ③ G- (green/black)
- ④ G+ (green)
- ⑤ G- (blue/black)
- ⑥ G+ (blue)



5 Dimensions



NOTE! When installing the lamp, remember to leave enough space for the cable gland from which the power cable exits.

6 Technical data

type	PX278
power supply	RGB – 3 x 350mA (3 x 700mA in underwater mounting) Mono – 1 x 350mA (1 x 700mA w in underwater mounting)
IP rate	IP68
beam angles	10°*, 25°, 45°*
brightness (25° distance 1m)	~1000lx (white color)
LED colors	2700K, 3000K, 4000K, 5000K, 5700K, RGB
weight	0.4kg
dimensions	diameter: 74mm height: 29mm height with cable gland: 44mm

* - available on request

NOTE! The lamp can be powered only from a current driver or a current power supply.

DECLARATION OF CONFORMITY

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

we declare that our product:

Product name: PxAqua 3 SF

Product code: PX278

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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mgr inż. Marek Żupnik.