PX229-H

PX229-P

PxAqua 3 SH

PxAqua 3 SP

User manual

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

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Rev.2-0
17.02.2022

1 Description

The PxAqua 3 SH / SP LED lamp is designed for underwater lighting. In addition, it can be used to illuminate interiors and architectural details.

The lamp uses three high-performance LEDs Osram Oslon®, which ensures its excellent lighting parameters. It can be equipped with optics with different beam angles (10 °, 25 ° or 45 °). Optionally, the lamp can be equipped with LEDs of other colors than typical RGB (e.g. white – WNC). The PX229 is based on a 350mA power supply, however, optionally in underwater applications, the lamp can work with a 700mA power supply, then the LEDs get the power of 3 x 3W.

It should be remembered that individual LED drivers can only control a certain number of lamps, depending on the power supply and other technical parameters.

PX229 is produced in a version with a handle (PX229-H) or in a drive-on version (PX229-P) for installation. It is intended both for installation under water, e.g. in fountains, as well as inside and, above all, outside buildings.

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 PX229 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 PX229 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 PX229 models and their explanation:

PX229 – XX – YYY – ZZ

XX – lens angle:	YYY – CRI and color LEDs:	ZZ – lamp housing version
10 – 10°	927 – 90 CRI, 2700K	SH – with handle
25 – 25°	930 – 90 CRI, 3000K	SP – with steel pipe
45 – 45°	940 – 90 CRI, 4000K	
	950 – 90 CRI, 5000K	
	965 – 90 CRI, 6500K	
	R – red	
	G – green	
	B – blue	

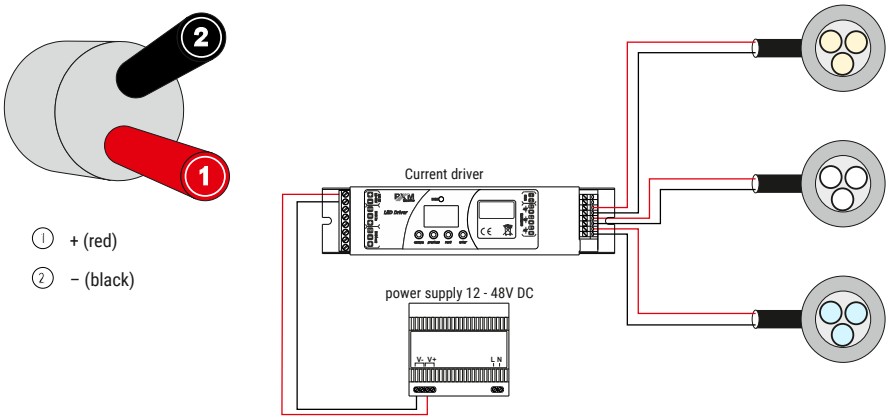
Example of marking for a lamp with a lens angle of 25°, LEDs 3000K with 90 CRI and housing with handle:

PX229-25-930-SH

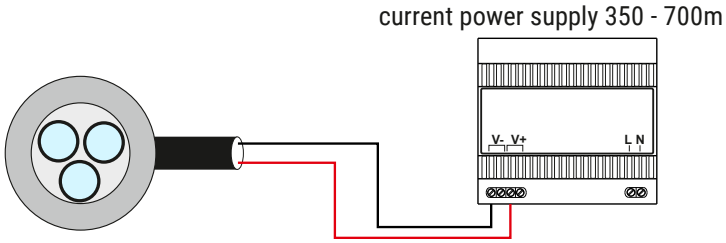
The housing, compliant with the IP68 standard, allows the device to be used in underwater applications, for example in fountains, swimming pools, as well as in places exposed to adverse weather conditions.

4 Connection scheme

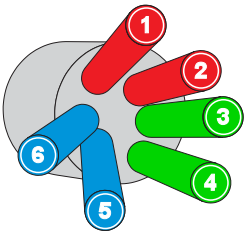
a) connecting monochrome lamps to the driver



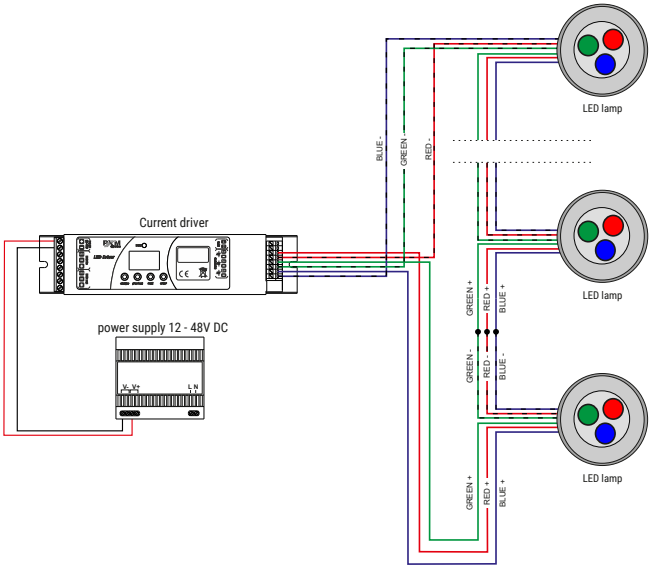
b) connecting a monochrome lamp to the power supply



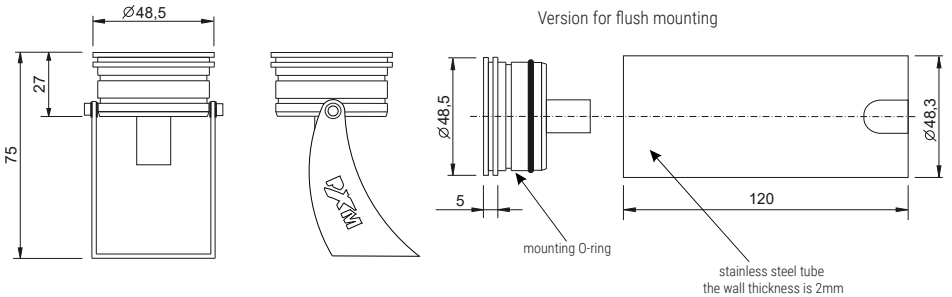
c) connecting RGB lamps in series to the driver



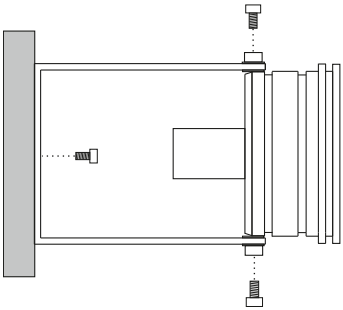
① R– (red/black)
② R+ (red)
③ G– (green/black)
④ G+ (green)
⑤ G– (blue/black)
⑥ G+ (blue)



5 Dimensions



6 Method of mounting



The lamp is attached to the holder with two M3 Allen screws and can be rotated vertically. The handle, on the other hand, is attached to the ground with an M5 screw, which in turn allows for rotation in the horizontal plane.

7 Technical data

type	PX229-H – version with a handle PX229-P – overrun version (for installation in a pipe)
power supply	for RGB version: 3 x 350mA or 3 x 700mA underwater version for monochrome version: 1 x 350mA or 1 x 700mA underwater version
IP rate	IP68
beam angles	25° (10° / 45° – on request)
available LED colors	2700K, 3000K, 4000K, 5000K, 6500K, RGB
brightness (25° distance 1m)	~1100 lux (white color of the LEDs)
LED colors	16 million (theoretical amount for RGB lamp)
weight	0.35kg
dimensions	height: 75mm diameter: 48,5mm

NOTE! The lamp can be powered from the driver only with current stabilization or from the power supply with current stabilization.

Podłęże, 31.03.2021

DECLARATION OF CONFORMITY

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

we declare that our product:

Product name:	PxAqua 3 SH PxAqua 3 SP
Product code:	PX229-H PX229-P

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.

PXM
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mgr inż. Marek Żupnik.