

Content

1. Intended use	1
2. Scope of delivery	1
3. Dimensions	2
4. Technical data	2
4.1 General	2
4.2 Electrical data	3
5. Approvals	3
6. Commissioning	4
6.1 Safety information	4
6.2 Electrical connection	5
7.1 Setting the operating modes - versions with single-color LED (without external control)	5
7.2 Setting the operating modes - versions with multicolor LED	6
7.2.1 without external control	6
7.2.2 with external control	6
8. Option	7
9. Accessories	7
10. Maintenance, service, repairs	7
11. Decommissioning, dismantling and disposal	7

1. Intended use

LED lights of the PYRA series are designed for the optical signaling of e.g. hazardous conditions in industry, trade and construction areas.

The LED in the light section can be operated in different modes, all of which can be activated by an internal switch.

The multicolor (RGBW) versions also allow different colors to be assigned to the individual operating modes. These versions also feature the option of selecting alternative operating modes and colors via external control

The devices must only be operated when undamaged and within the specified parameters. The function of the device can only be guaranteed if the upper and lower parts are correctly joined together.

The devices are designed for indoor and outdoor use and are only intended for fixed installation.

2. Scope of delivery

The scope of delivery consists of:

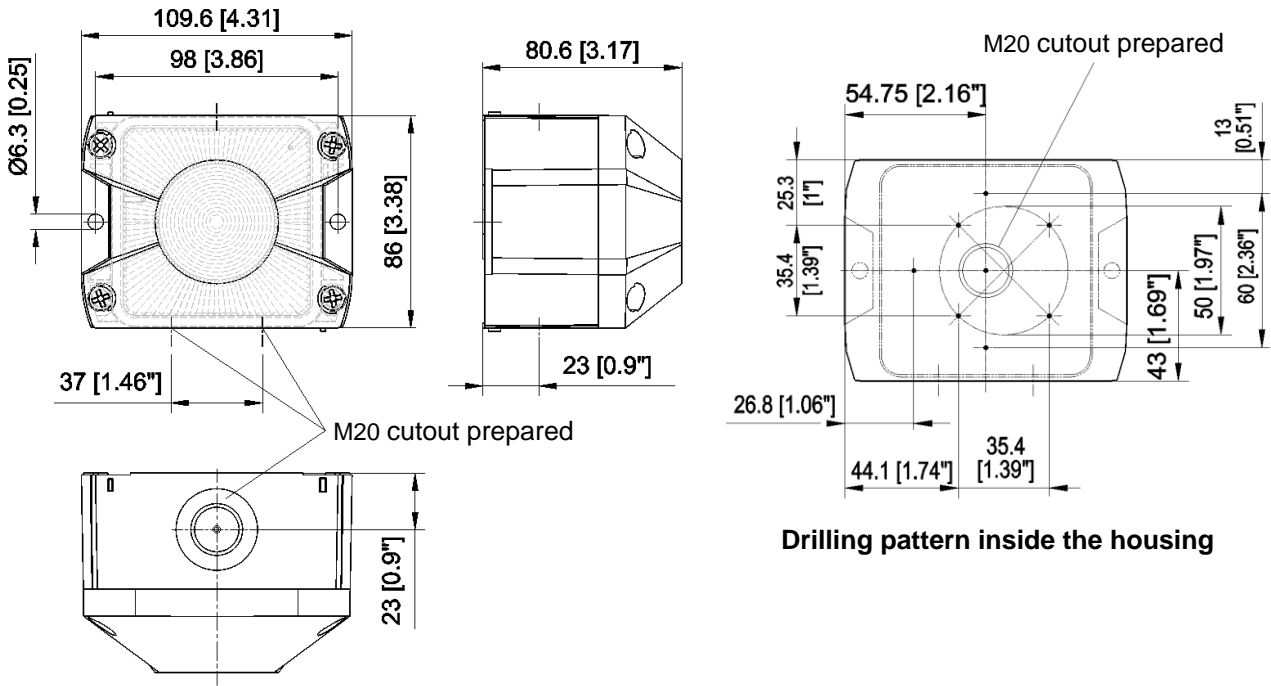
1x Signaling device

1x Diaphragm nipple M20

(Option: Cable gland/ M12 plug-in connector)

1x Quick guide

3. Dimensions



4. Technical data

4.1 General

	PY L-S
Light intensity	70 cd (clear)
Illuminant	1x high-performance LED
Colors of RGBW-LED	blue, red, green, yellow via external control: White
Duty cycle	100%
Connecting terminals	0.14 - 2.5mm ² fine stranded / AWG24 - AWG 14
Ingress protection	IP 66 (EN 60529), Type 4 & 4x
Impact strength	IK08 (EN 50102)
Protection class	II □ double insulated equipment
Operating temperature	-40 °C...+55 °C
Storage temperature	-40 °C...+70 °C
Max. rel. air humidity	90%
Cable inlet	4x M20 pre-embossed
Sealing range of the feed-through grommet	7 – 13 mm A cable gland with a sufficient degree of protection must be provided when cable diameters of < 7 mm are used.
Housing material	PC/ ABS Blend
Lens material	PC
Installation position	any
Lens colors	transparent, white, yellow, amber, red, green, blue RGBW version: white

4.2 Electrical data

Rated voltage (See approvals for limit values)	12 – 48V DC			24 V AC 50/ 60 Hz	115 - 230 V AC 50/ 60 Hz 120V DC		
Operation voltage range	10 – 60 V DC			21.6 – 26.4 V AC	90 – 265 V AC <i>108 -132V DC</i>		
Rated current (max)	12 V DC	24 V DC	48 V DC	167 mA	120V DC	115V AC	230V AC
	275 mA	120 mA	65 mA		74.4 mA	51 mA	36 mA
Power consumption (max)	3.3 W	2.9 W	3.1 W	4 VA	2.93 mA	5.9 V	8.3 VA






5. Approvals

(Approvals are valid for marked devices)

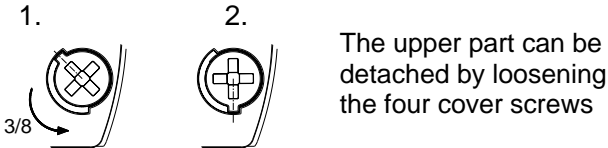
UL, cUL In preparation	E189090 UCST, UCST7, ULSZ, ULSZ7, UEES, UEES7
---------------------------	---

6. Commissioning

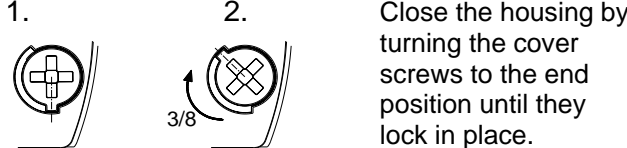
6.1 Safety information

	<p>DANGER - Danger to life due to electric shock Voltage-carrying devices and exposed connection cables may cause electric shocks and serious accidents.</p> <ul style="list-style-type: none"> ➤ Only trained and authorized electricians may work on electrical connections. ➤ Disconnect all supply lines from mains before installation and secure them against reconnection. Always ensure absence of voltage. ➤ Wait for the discharge phase of 5 minutes for the electrical components. The device should only be opened afterwards. ➤ The operating voltage must only be applied when the housing is firmly closed.
	<p>WARNING - Danger due to unauthorized use of the devices Improper use may lead to serious accidents.</p> <ul style="list-style-type: none"> ➤ Ensure that the connection cable is protected against pulling and twisting during installation. The devices are only intended for fixed installation.
	<p>DANGER - Danger due to damage to the devices Non-compliance with the information on the type plate can lead to serious accidents.</p> <ul style="list-style-type: none"> ➤ Always observe the information on the type plate when installing and maintaining the devices.
	<p>CAUTION - Risk of injury due to sharp edges or heated components</p> <ul style="list-style-type: none"> ➤ Wear gloves during any installation, assembly or service/maintenance work. ➤ Perform wiring tasks at a distance from sharp edges, corners and internal components.
	<p>CAUTION - Impairment of vision</p> <ul style="list-style-type: none"> ➤ Avoid constant, direct glances into the activated lights to prevent impairment of vision.

Opening the housing



Closing the housing



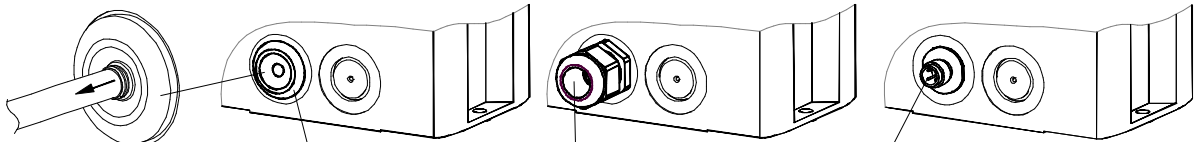
The device is delivered in an unsealed condition. Sealing plugs for the housing screws are available as accessories.

Cable feed-throughs

The supplied diaphragm nipple can be replaced by a cable gland or by an M12 plug-in connector with a flange dimension of M20.

- Only cable glands with a degree of protection of at least IP66 should be fitted to the corresponding openings.

Cable diameters of <7 mm require a cable gland with a sufficient degree of protection.

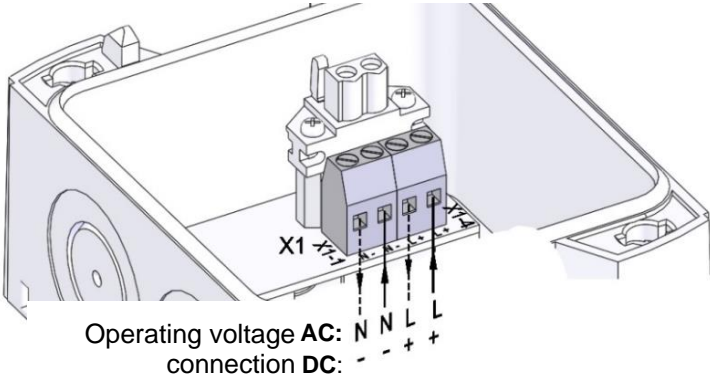


Remove the remains of the diaphragm after the cable has been fitted.

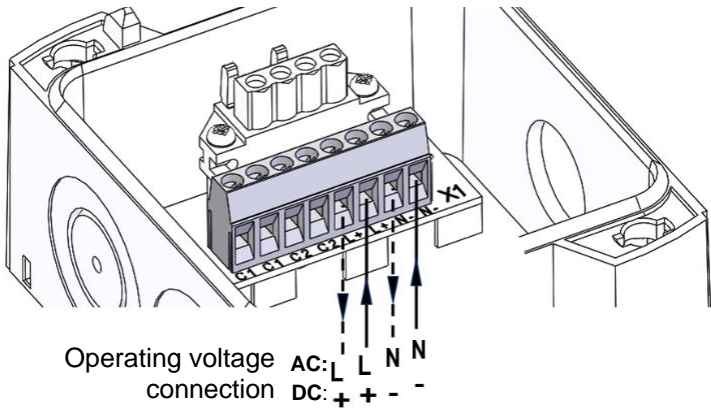
6.2 Electrical connection

➤ Observe the [Safety information!](#)

Circuit board in lower part:



PY L-S with single color LED

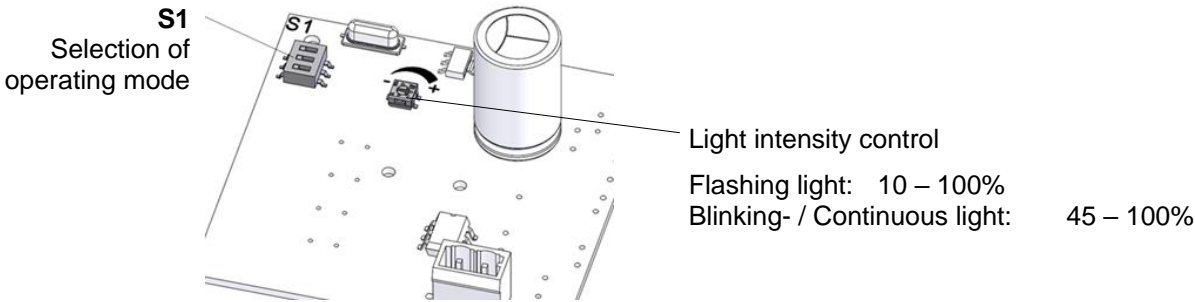


PY L-S with multicolor LED (RGBW)

Note: Devices with DC voltage are equipped with reverse polarity protection. No function if the polarity of the connections is reversed.

7.1 Setting the operating modes - versions with single-color LED (without external control)

Circuit board in the lens:

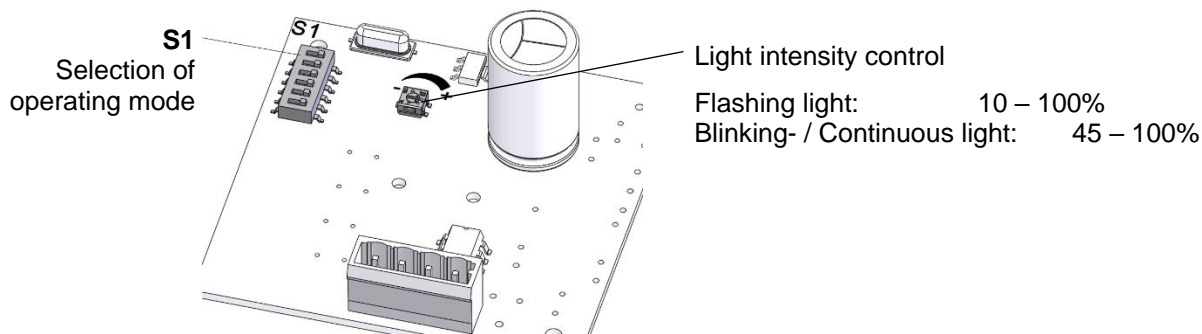


S1			Operating mode
1	2	3	
OFF	OFF	OFF	Flashing light 1 Hz *
OFF	OFF	ON	Flashing light 0.75 Hz
OFF	ON	OFF	Continuous light
OFF	ON	ON	Blinking light 1 Hz
ON	OFF	OFF	Flashing light 2 Hz
ON	OFF	ON	Blinking light 2 Hz
ON	ON	OFF	Flashing light 0.1 Hz
ON	ON	ON	Flashing light 0.5 Hz
OFF	OFF	ON	Double Flash mode (DFM) see Option

* Factory setting

7.2 Setting the operating modes - versions with multicolor LED

Circuit board in the lens:



7.2.1 without external control

S1			Operating mode
1	2	3	
OFF	OFF	OFF	Flashing light 1 Hz *
OFF	OFF	ON	Flashing light 0.75 Hz
OFF	ON	OFF	Continuous light
OFF	ON	ON	Blinking light 1 Hz
ON	OFF	OFF	Flashing light 2 Hz
ON	OFF	ON	Blinking light 2 Hz
ON	ON	OFF	Flashing light 0.1 Hz
ON	ON	ON	Flashing light 0.5 Hz
OFF	OFF	ON	Double Flash mode (DFM) see Option

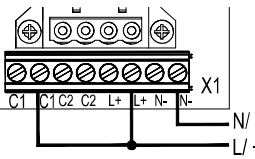
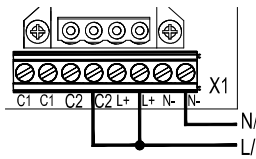
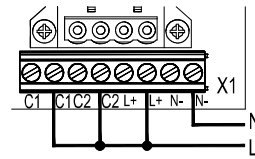
S1			Color assignment
4	5	6	
OFF	OFF	OFF	Red *
	OFF	ON	Blue
	ON	OFF	Green
	ON	ON	Yellow

* Factory setting

7.2.2 with external control

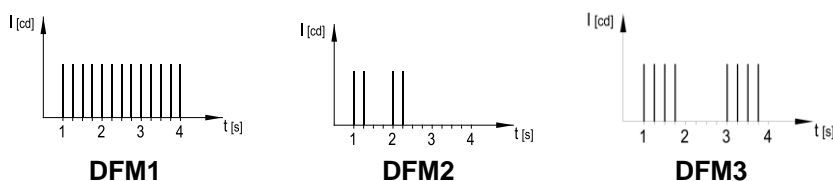
Setting on the circuit board in lower part:

S1				Operating mode			
1	2	3	4	C1/ C2 not activated			
OFF	OFF	OFF	ON	Standby	Blinking light 1 Hz	Continuous light	Continuous light
OFF	OFF	ON		Standby	Continuous light	Continuous light	Continuous light
OFF	ON	OFF		Standby	Blinking light 1 Hz	Continuous light	Blinking light 1 Hz
OFF	ON	ON		Standby	Flashing light 1 Hz	Continuous light	Continuous light
ON	OFF	OFF		Standby	Flashing light 1 Hz	Continuous light	Blinking light 1 Hz
ON	OFF	ON		Standby	Flashing light 1 Hz	Continuous light	Flashing light 1 Hz
ON	ON	OFF		Standby	Blinking light 1 Hz	Blinking light 1 Hz	Blinking light 1 Hz
ON	ON	ON		Standby	Flashing light 1 Hz	Flashing light 1 Hz	Flashing light 1 Hz
<i>Option DFM</i>				Standby	<i>DFM1</i>	<i>DFM2</i>	<i>DFM3</i>
OFF	OFF	ON					

S1			Color assignment			
			C1/ C2 not activated			
4	5	6				
ON	OFF	OFF	Standby	Red	Green	Blue
	OFF	ON	Standby	Red	Green	Yellow
	ON	OFF	Standby	Red	Green	White
	ON	ON	Standby	Red	Green	Red

8. Option

Double Flash mode



PY L-S with single color LED:

Instead of the "Flash 0.75 Hz" mode, the double flash DFM3 is available.

PY L- with multicolor-LED:

It is possible to choose between DFM1, DFM2 and DFM3 (Double Flash Mode) via the external control, see 7.2.2 with external control.

9. Accessories

Item No.	Designation
28300000002	Sealing plug, 4-pack
28912000000	Spare locking bolt, 4-pack
28300000004	Surface seal
28112000042	Control panel installation kit PY L-S
28112000043	Control panel installation kit PY L-S RGB

10. Maintenance, service, repairs

- Observe the Safety information during all work on the device.

The device requires no special maintenance.

- Carry out external cleaning using a weak soap solution without using any solvents.
- Only replace components using original spare parts.
- Only have repairs carried out at the manufacturer's premises.

Conversions, modifications, improper and impermissible use as well as failure to observe the notes in these operating instructions shall void any warranty.

11. Decommissioning, dismantling and disposal

- Observe the Safety information during all work on the device.
- Only properly qualified personnel should dispose of old devices in accordance with applicable environmental regulations.
Old devices are also professionally disposed of by Pfannenberg. Delivery to one of our manufacturing facilities shall be free of charge.