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 AC version 3
4.3 Electrical data DC version 3
5. Approvals **4**
6. Commissioning **5**
6.1 Safety information 5
6.2 Electrical connection PY X-M-05/ PY X-M-10 6
6.3 Electrical connection PY X-MA-05/ PY X-MA-10 6
6.4 Setting the flash frequency 7
6.5 Setting the tone types (PY X-MA-05 and PY X-MA-05) 7
7. Options **8**
7.1 – SSM (soft-start module, only 24V DC) 8
7.2 Activation input 8
8. Accessories **9**
9. Maintenance, service, repairs **9**
10. Decommissioning, dismantling and disposal **9**

Observe proprietary notice in accordance with DIN ISO 16016!

English translation

1. Intended use

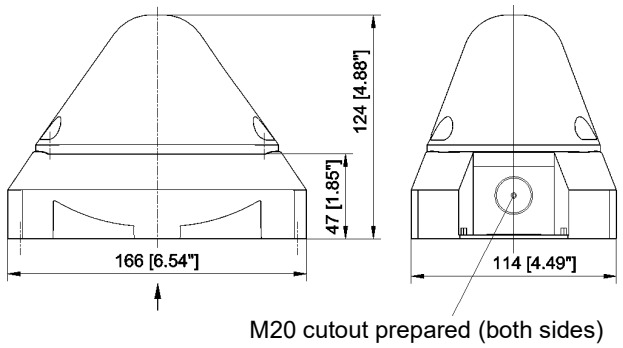
Flashing lights of the PYRA series are designed for the signaling of e.g. hazardous conditions in industry, trade and construction areas. The devices generate visual signals in four different adjustable flashing frequencies. There is also the possibility of acoustic signaling when the flashing lights are used in combination with a sounder (PY X-MA-05/ ..10).
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.

2. Scope of delivery

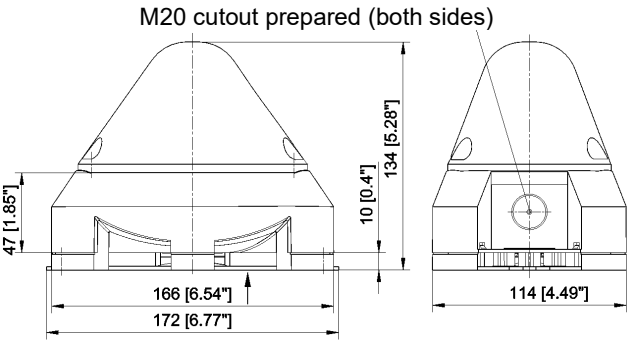
The scope of delivery consists of:
1x Signaling device
1x Diaphragm nipple M20
1x Quick guide
1x Resistor (only for –SSM versions)

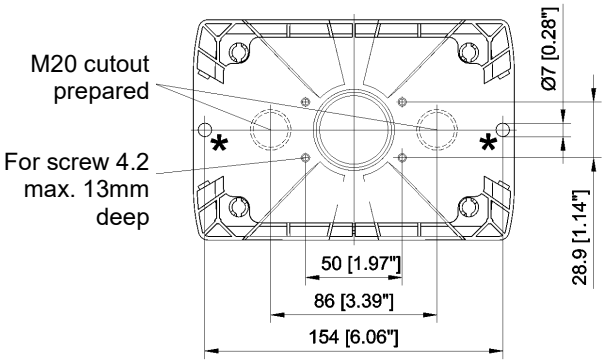
3. Dimensions

PY X-M-05/ PY X-M-10

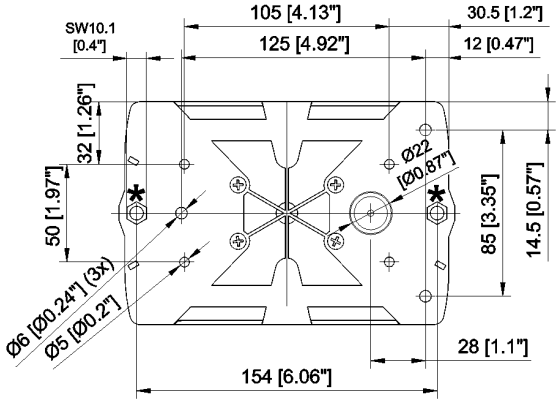


PY X-MA-05/ PY X-MA-10





Bore pattern; view from below



Bore pattern; view from below

* max. M6 screw, tightening torque 4 Nm

4. Technical data

4.1 General

	PY X-M-05	PY X-M-10	PY X-MA-05	PY X-MA-10
Flash energy	5 J	10 J	5 J	10 J
Flash frequency	0.1 / 0.5 / 0.75 / 1 Hz			
Max. sound level	-	-	101 dB (A) @1m	101 dB (A) @1m
Volume control	-	-	max. - 20 dB	max. - 20 dB
Tones	-	-	8	8
Duty cycle	100%			
Connecting terminals	0.14 - 2.5mm² fine stranded / AWG24 - AWG 14 (stranded)			
Ingress protection	IP 66 (EN 60529), Type 4 & 4x			
Impact strength	IK 08 (EN50102)			
Protection class	II ⧈ double insulated equipment			
Operating temperature	-40°C…+55°C (UL Certification see page 4)			
Storage temperature	-40°C…+70°C			
Max. rel. air humidity	90%			
Cable inlet	4x M20 pre-embossed		3x M20 pre-embossed	
Sealing area 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			

4.2 Electrical data AC version

	PY X-M-05			PY X-M-10		PY X-MA-05			PY X-MA-10	
Rated voltage (see approvals for limit values)	230 V	115 V	24 V	230 V	115 V	230 V	115 V	24 V	230 V	115 V
Rated frequency	50/60 Hz					50/60 Hz				
Voltage range	187 - 255 V	90 - 135 V	18 - 30 V	187 - 255 V	90 - 135 V	187 - 255 V	90 - 135 V	18 - 30 V	187 - 255 V	90 - 135 V
Flashing light current consumption (1 Hz) [mA]	95	140	600	170	320	95	140	600	170	320
Sounder current consumption max. [mA]	--					50/60 Hz: 10	10	60	10	10
Power consumption	24 VA	19 VA	14.4 VA	43 VA	43 VA	28 VA	23 VA	17.3 VA	47 VA	47 VA

4.3 Electrical data DC version

	PY X-M-05	PY X-M-10	PY X-MA-05	PY X-MA-10
Rated voltage (see approvals for limit values)	12 – 48 V SSM: 24 V DC		12 – 48 V SSM: 24 V DC	
Voltage range	10 – 57 V, SSM: 18 – 30 V		10 – 57 V, SSM: 18 – 30 V	
Flashing light current consumption (1 Hz)	450 mA 280 mA@24 V	950 mA 540 mA@24 V	450 mA 280 mA@24 V	950 mA 540 mA@24 V
Sounder current consumption (max)	-		25 mA	
Power consumption	6.7 W	13 W	8.6 W	14.9 W

5. Approvals

(Approvals are valid for marked devices)

<table>
<tr><td>Construction Products Directive (305/2011/EU)

CE 16
0786

UK CA 22
0843</td><td colspan="2">PY X-M-05-SSM + PY X-M-10-SSM: 01CPR2016-08-30<table>
<tr><td>Rated voltage</td><td>24 V DC</td></tr>
<tr><td>Voltage range in accordance with EN54-23</td><td>18 – 30 V DC (SSM)</td></tr>
<tr><td>Lens color</td><td>red and clear
Flash frequency: 0.5 Hz, 0.75 Hz, 1 Hz</td></tr>
<tr><td>Signaling range</td><td>EN 54-23 category O: see document 30360-005-1</td></tr>
<tr><td>Environmental class</td><td>Type B</td></tr>
<tr><td>Installation attitude</td><td>see document 30360-005-1</td></tr>
<tr><td colspan="2">The test was performed using the supplied diaphragm nipple and the outer mounting bores.</td></tr>
</table></td></tr>
<tr><td>VdS</td><td colspan="2">G216036: PY X-M-05-SSM + PY X-M-10-SSM, lens color: red and clear
See Construction Products Directive (305/2011/EU) for data</td></tr>
<tr><td></td><td colspan="2">G217037: PY X-M-05-SSM + PY X-M-10-SSM, lens color: white, yellow, amber, green, blue.
These lens colors are not certified in accordance with EN54-23 and must not be used as alarms in the event of fire. See Construction Products Directive (305/2011/EU) for data</td></tr>
<tr><td rowspan="4">UL, cUL</td><td colspan="2">E189090: PY X-M-05, PY X-M-10
S7256: PY X-MA-05, PY X-MA-10
Visual Signal Appliance - General Signaling Equipment (UEES, UEES7) (PY X-M-xx)
Audible and Visual Appliance for General Signaling (Non Fire Alarm) Use (UCST, UCST7 and UEES, UEES7) (PY X-MA-xx)</td></tr>
<tr><td>Rated Voltage</td><td>115V AC or
230V AC or
12.5V DC – 48V DC (PY X-M-05 and PY X-M-10) / 24V AC (PY X-M-05 only) or
12.5V DC – 48V DC (PY X-MA-05 and PY X-MA-10) / 24V AC (PY X-MA-05 only) or
24V DC (PY X-M-05-SSM and PY X-M-10-SSM) or
24V DC (PY X-MA-05-SSM and PY X-MA-10-SSM)</td></tr>
<tr><td>Ambient Temperature</td><td>-40°C .. +66°C</td></tr>
<tr><td>115V AC
230V AC</td><td>Suitable for indoor and outdoor use.
Warning: Not to be used as a Visual Public Mode Alarm Notification Appliance. (PY X-M-xx)
Warning: Not to be used as an Audible and Visual Public Mode Alarm Notification Appliance. (PY X-MA-xx)
According to CSA-C22.2 No. 205-12 clause 4.3.4 the connection is limited to max. six leads.
<u>Installation:</u>
The units shall be installed indoors or outdoors in accordance with the manufacturer’s installation instructions as well as the National Electrical Code (NFPA 70) in US. In Canada, they shall be installed in accordance with the Canadian Electrical Code, Part 1. The installations shall also be in a manner acceptable with the local authority having jurisdiction.</td></tr>
<tr><td>CNBOP</td><td colspan="2">4560/2022</td></tr>
</table>

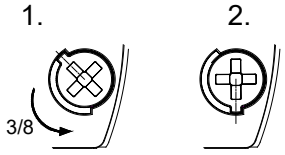
PYRA Xenon beacons PY X-M(A)-xx comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules.

6. Commissioning

6.1 Safety information

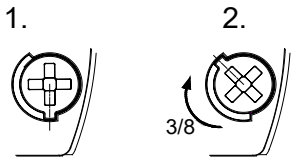
⚠	**DANGER - Danger to life due to electric shock** Voltage-carrying devices and exposed connection cables may cause electric shocks and serious accidents. ➢ Only trained and authorized electricians may work on electrical connections. ➢ Disconnect all supply lines from mains before installation and secure 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.
⚠	**WARNING - Danger due to unauthorized use of the devices** Improper use may lead to serious accidents. ➢ Ensure that the connection cable is protected against pulling and twisting during installation. The devices are only intended for fixed installation.
⚠	**DANGER - Danger due to damage to the devices** **Non-compliance with the information on the type plate can lead to serious accidents.** ➢ Always observe the information on the type plate when installing and maintaining the devices.
⚠	**CAUTION - Risk of injury due to sharp edges or heated components** ➢ Wear suitable personal protective equipment (PPE) for installation, assembly or service/maintenance work. ➢ Lay wires well away from sharp edges, corners and internal components; avoid collisions with parts.
⚠	**CAUTION - Impairment of vision** ➢ Avoid constant, direct glances into the activated lights to prevent impairment of vision. ➢ Unexpected triggering of the flash can lead to startled reactions. **CAUTION - High volume when using sounder/flashing light combination.** When using the flashing light/sounder combination: ➢ Wear sound insulation equipment during work/testing to prevent hearing impairment. ➢ Unexpected triggering of the sound can lead to startled reactions.

Opening the housing



The upper part can be detached by loosening the four cover screws

Closing the housing



Close the housing by turning the cover screws to the end position until they lock in place.

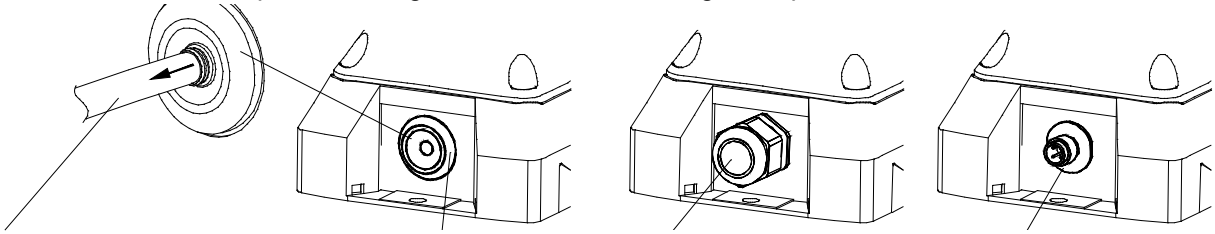
The device is delivered in an unsealed condition.
Sealing plugs for the housing screws are available as accessories.

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.



IP 66 only with the diaphragm funnel pointing outwards.
Remove the remains of the diaphragm after the cable has been fitted.

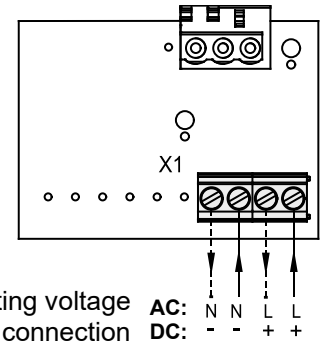
Diaphragm nipple
IP 66
(supplied)

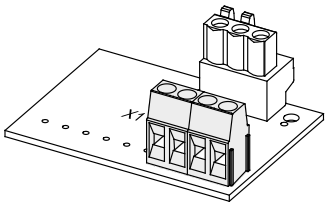
Cable gland
IP 66

M12 plug-in connector
IP 66
(for low-voltage devices)

6.2 Electrical connection PY X-M-05/ PY X-M-10

The electrical connection is established on the connection board in the lower part.

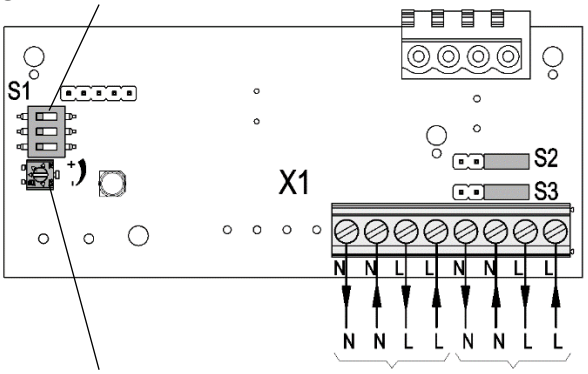




6.3 Electrical connection PY X-MA-05/ PY X-MA-10

AC version

S1 Tone selector switch



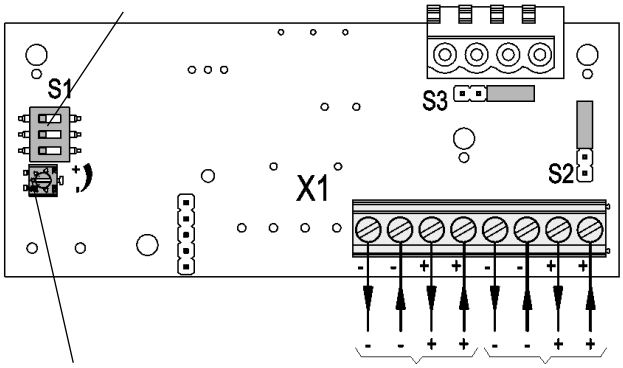
Volume control

Operating voltage connection Sounder

Operating voltage connection Flashing light

DC version

S1 Tone selector switch



Volume control

Operating voltage connection Sounder

Operating voltage connection Flashing light

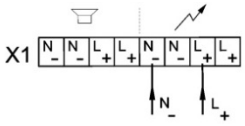
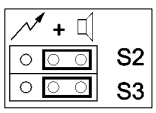
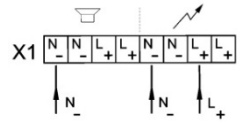
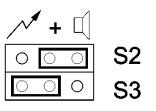
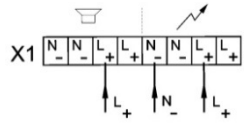
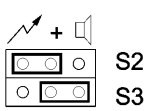
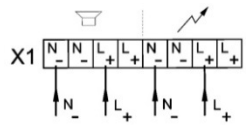
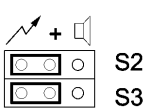
Note:

Devices with DC voltage are equipped with reverse polarity protection.

No function if the polarity of the connections is reversed.

The flashing light and sounder systems can be operated together or separately with combination devices PY X-MA-05 and PY X-MA-10.

S2 and S3 switch setting on the connection board should be as follows:

Simultaneous operation of flashing light and sounder **(Factory setting)**		
Operation with common "+" (DC) or L (AC) voltage		
Operation with common "-" (DC) or N (AC) voltage		
Separate operation of flashing light and sounder		

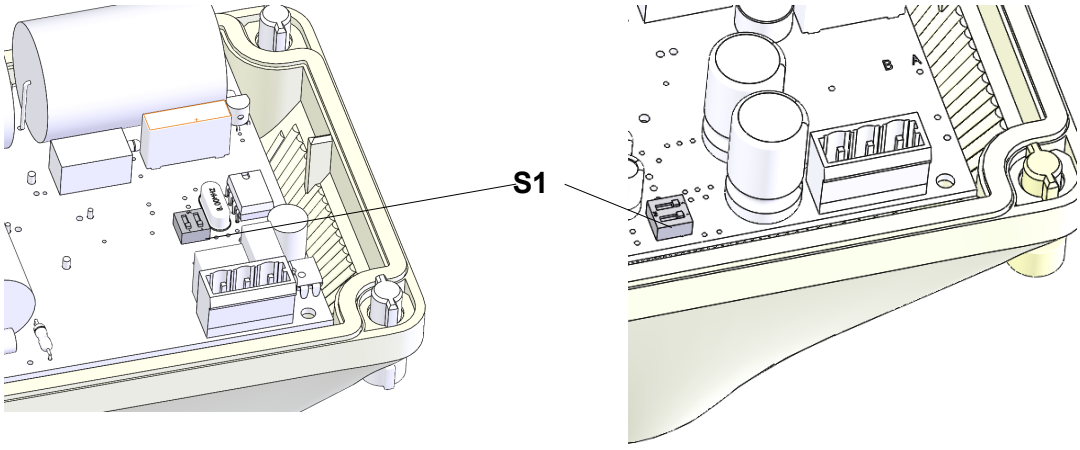
6.4 Setting the flash frequency

The flash frequency is set using the **S1** switch on the board in the lens, see table below.

Synchronicity:

The devices comply with the requirements of EN54-23 (synchronous operation).

Note: The devices must be operated with the same potential to ensure synchronous operation.



AC version **DC version**

	1 Hz	0.75 Hz	0.5 Hz	0.1 Hz
*	ON 1 2 OFF OFF OFF	ON 1 2 OFF ON OFF	ON 1 2 OFF OFF ON	ON 1 2 OFF ON ON

* Factory setting

6.5 Setting the tone types (PY X-MA-05 and PY X-MA-05)

S1 switch setting on the connection board should be as follows:

2	Sawtooth DIN 33404-3 (emergency signal) PFEER PTAP	1200Hz 1s 500Hz	ON 1 2 3 OFF OFF OFF OFF
	Slow whoop Fire alarm UK BS5839-1	970Hz 1s 800Hz	ON 1 2 3 OFF OFF ON OFF
131	Alternating tone UK BS5839-1, Level crossing fire alarm	1000Hz 0,25s 0,25s 800Hz	ON 1 2 3 OFF ON ON ON
160	Continuous tone (horn)	110 Hz	ON 1 2 3 OFF ON ON OFF

161	Continuous tone	300 Hz	ON 1 2 3 OFF ON OFF ON
162	Interrupted tone	300 Hz 0,5s 0,5s	* ON 1 2 3 OFF ON OFF OFF
163	Interrupted tone	300 Hz 25 ms 25 ms	ON 1 2 3 OFF OFF ON ON
164	Slow whoop	2850 Hz 143 ms 2400 Hz	ON 1 2 3 OFF OFF OFF ON

* Factory setting

7. Options

7.1 – SSM (soft-start module, only 24V DC)

The inrush current peak is limited to:

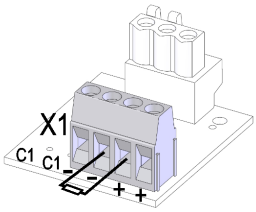
PY X-M(A)-05 -SSM:	: max. 2.1 A	: max. 2.1 A
PY X-M(A)-10 -SSM:	: max. 2.1 A	: max. 4.5 A

The operating voltage is only switched through to the operating equipment from >7 V.
Operating voltage range: 18 V – 30 V DC

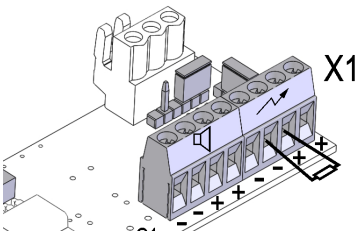
Positioning of the resistor (1kOhm) is as follows:

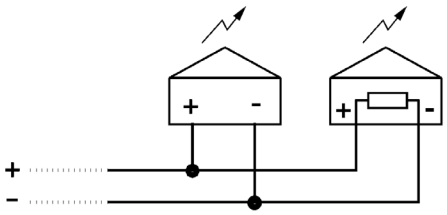
- Always mount the resistor for line monitoring in the last device.
- See below for the position of the second resistor if the sounder and flashing light are connected separately.
- Remove any resistors that are not required.

PY X-M-05 –SSM/ PY X-M-10 –SSM

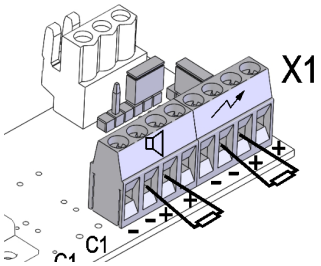


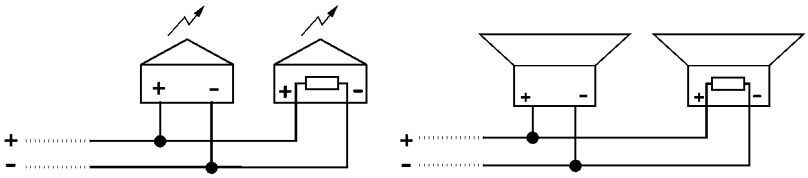
PY X-MA-05 –SSM/ PY X-MA-10 –SSM





Only with separate connection of flashing light and sounder:

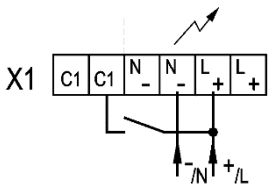




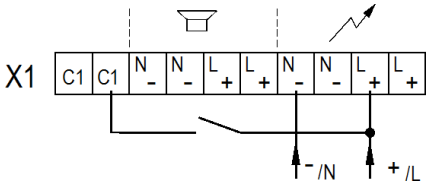
7.2 Control input (-AKT, -CI)

Devices with control input can be activated by means of control voltage.
The power consumption of the control input is max. 1W.

PY X-M-05 / PY X-M-10



PY X-MA-05 / PY X-MA-10



8. Accessories

Item No.	Designation
28300000002	Sealing plug, 4-pack
28912000000	Spare locking bolt, 4-pack
28111500000	Surface seal
28112000019	Control panel mounting kit PY X-M

9. Maintenance, service, repairs

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

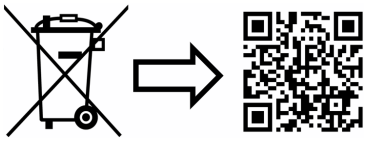
The device requires no special maintenance.

- Do not use abrasive, solvent-containing or chemically aggressive cleaners for cleaning the outside.
  Do not use sharp tools; especially avoid scratching the lens.
  Do not clean with high pressure.
- 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.

10. Decommissioning, dismantling and disposal

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



www.pfannenberg.com/disposal

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