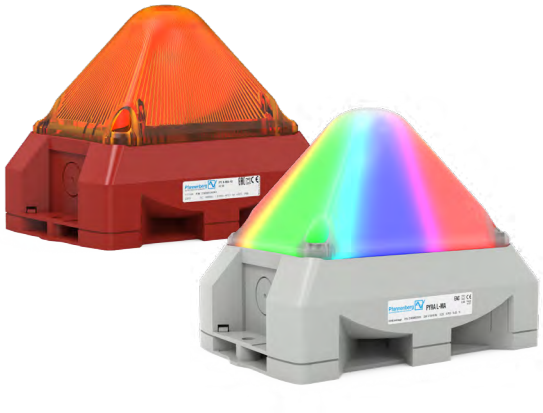
# PYRA® LED/SOUNDER COMBINATION MAX. 101 dB(A) / 23 cd
# PY L-MA / PY L-MA RGB



RGB multi colour or single colour LED/Sounder combination. Maximal perceptible but discreet.

- Selectable signaling modes – Continuous steady on, blinking light or flashing light.
- External colour & mode control (RGB version only) – With PYRA® LED RGB you can state several situations with only one light. Change colour and mode easily by remote control!
- Selectable blink & flash frequencies – Adaptable to all your applications - select the frequency your gadget requires and boost the perceptibility.
- Selectable colour (RGB version only) – Choose the colour you require and stay flexible.
- Possibility to control visual and audible signaling separately – High flexibility in controlling different warning levels.
- Quick and easy to install – Several advantageous characteristics ease the installation process significantly.

RGB multi colour LED (option) · IP 66 protection system · NEMA 4/4X protection system · IK08 impact-proof housing · +55 °C / –40 °C operating temperature · brightness adjustable · 10 Years warranty · EAC EurAsian Conformity · UL UL aprproval (pending) · M12 connector (option)

| 3D-COVERAGE PERFORMANCE DATA | | PY L-MA | | | |
|---|---|---|---|---|---|
| | VISUAL Indicate | 38.7 x 43.2 x 44.1 m | AUDIBLE 75 dB (A) | 10.6 x 10.6 x 7.8 m |
| | VISUAL Warn | 17.2 x 19.2 x 19.6 m | AUDIBLE 80 dB (A) | 5.8 x 5.9 x 4.4 m |
| | VISUAL Alarm | 8.6 x 9.6 x 9.8 m | AUDIBLE 85 dB (A) | 3.2 x 3.3 x 2.2 m |

To determine the exact signaling area for your needs, please use the online available Pfannenberg Sizing Software PSS.

| PRODUCT | | PY L-MA | | | |
|---|---|---|---|---|---|
| DATA | | | | | |
| Rated voltage | | 115 / 230 V AC | 120 V DC | 24 V AC | 12-48 V DC |
| | | 50 / 60 Hz | – | 50 / 60 Hz | – |
| Operating range | | 95 – 265 V | 108 – 132 V | 21.6 – 26.4 V | 10 – 60 V |
| Current consumption light (max) | | 36mA @ 230 V AC | 25 mA @ 120 V DC | 167 mA @ 24 V AC | 120 mA @ 24 V DC |
| Current consumption sound (max) | | 10 mA @ 230 V AC | 40 mA @ 120 V DC | 60 mA @ 24 V AC | 15 mA @ 24 V DC |
| Sound pressure level | | max. 101 dB (A) | | | |
| Sound level reduction | | max. -20 dB | | | |
| Alarm tones | | 8 | | | |
| Light alternation frequency | | blinking light 1 Hz / 2 Hz I flashing light 0.1 Hz / 0.5 Hz / 0.75 Hz / 1 Hz / 2 Hz | | | |
| Light source | | single colour: two high output LED / RGB: one high output LED | | | |
| Light intensity (DIN 5037) [1] | | 23 cd (reducible) | | | |
| Colour of RGB LED | | ; additionaly though external control | | | |
| Max. viewing distance | | 111 m | | | |
| Operating temperature | | –40 °C ... +55 °C | | | |
| Storage temperature | | –40 °C ... +70 °C | | | |
| Installation position | | any | | | |
| Degree of protection | | IP 66 (EN 60529), NEMA TYPE 4/4X, IK 08 (EN 50102) | | | |
| Service life of the light source | | ≥50,000 hrs | | | |
| Material | lens | ( - RGB) polycarbonate (PC) | | | |
| | housing | PC / ABS blend | | | |
| Cable entry | | 3 x M20 pre-embossed | | | |
| Connecting terminal | | 0.14 - 2.5 mm² fine stranded | | | |
| Weight | | 620 g | | | |

[1] with a clear lens

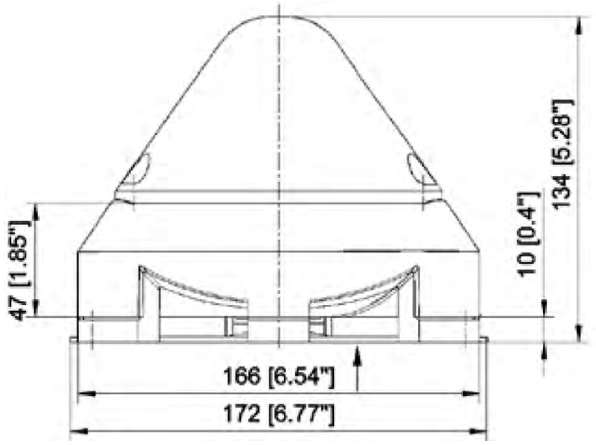
## TONE TABLE

| NO. | DESCRIPTION | |
|---|---|---|
| 2 | Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP | 1200 Hz / 500 Hz, 1 s |
| 9 | Slow whoop, fire alarm, UK BS5839-1 | 970 Hz / 800 Hz, 1 s |
| 131 | Alternating tone, UK BS5839-1 (fire alarm, railway crossing) | 1000 Hz / 800 Hz, 0,25 s / 0,25 s |

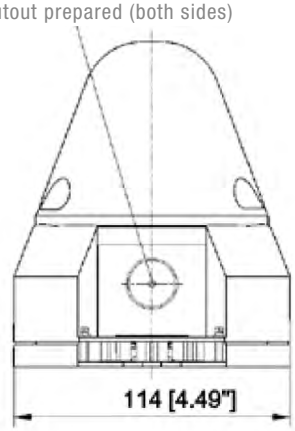
[1] factory setting

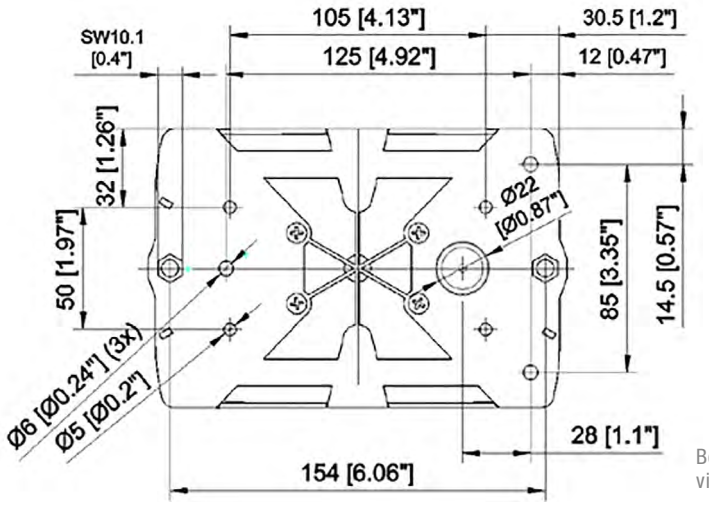
| NO. | DESCRIPTION | |
|---|---|---|
| 160 | Continuous tone (horn) | 110 Hz |
| 161 | Continuous tone | 3000 Hz |
| 162 [1] | Interrupted tone | 3000 Hz, 0,5 s / 0,5 s |
| 163 | Interrupted tone | 3000 Hz, 25 ms / 25 ms |
| 164 | Slow whoop | 2850 Hz / 2400 Hz, 143 ms |

## DIMENSIONS




M20
cutout prepared (both sides)




Bore pattern;
view from below

| ARTICLE NO. | | PY L-MA / PY L-MA RGB | |
|---|---|---|---|
| HOUSING COLOUR | LIGHT / LENS COLOUR | 115 / 230 V AC; 120 V DC | 12-48 V DC |
| | / | 21556648055 | 21556818055 |
| | | 21556643055 | 21556813055 |
| | | 21556644055 | 21556814055 |
| | | 21556645055 | 21556815055 |
| | | 21556646055 | 21556816055 |

Article numbers for other colours and voltages on request.

| OPTIONS / ACCESORIES | |
|---|---|
| **Sealing plug, 4-pack** | 28300000002 |
| **Spare locking bolt, 4-pack** | 28912000000 |
| **Surface seal** | 28111500000 |

Version with M12 connection on request

## CONFORMITY TO STANDARDS

The acoustic parameters conform to the European standard DIN EN ISO 7731:
**“Ergonomic – alarms for public areas and workplaces – acoustic alarms“**.

The requirement for an acoustic alarm signal can be found in the harmonised standards:
EN 60204-1 Electrical equipment of machines
EN 60825-1 Radiation safety of laser devices, identical to IEC 825 and DIN-VDE 0837

The visual characteristics of LED lights conform to the European standard DIN EN 842; **“Machine safety – visual alarm signals”.**
Requirements contained in the DIN EN 981 standard; **“Machine safety – system of acoustic and visual alarm and information signals”,** can be fulfilled.

The colours “red” for the emergency signal and “yellow” for the warning signal conform to the requirements of IEC 73 / DIN EN 60073 / VDE 0199; **“Coding of display devices and control elements using colours and supplementary means”.**
References to visual alarm devices can be found in the following standards:
EN 60825-1 Radiation safety of laser devices, identical to IEC 825 and DIN-VDE 0837
DIN EN 54 Fire alarm systems
DIN 54113-2 Radiation protection regulations for the technical operation of X-ray equipment up to 500 kV