

SIGNALING TECHNOLOGY:

Signaling devices for all industrial areas and applications.



“Digital Twin” - supporting data and software

Pfannenberg now provides MultiCAD-data for our signaling technologies for all common CAD formats, enabling the creation of a complete, detailed, three-dimensional, virtual representation or “digital twin” of the product. In addition, we also offer the electronic equivalent in the form of EPLAN data.

Minimize the risk of dangerous and costly planning errors by creating virtual 3D building models with the Pfannenberg BIM Revit library. This allows you to easily integrate and visualize signaling systems and their coverage in your planning.

The free and intelligent Pfannenberg Sizing Software supports you to capture customized solutions for your projects and makes them even more economical, more accurate, safer and avoid costly oversizing or dangerous undersizing.



Warranty extension for signaling devices worldwide

Customer and service friendliness are our top priorities: That's why we offer a 10-year warranty on our visual, audible and combined devices from our Patrol, Pyra, DS and Quadro series. And with the introduction of the “Easy Replacement Process”, we enable our customers to replace defective devices even more easily and quickly.

PFANNENBERG 3D-COVERAGE:

A visual representation of device performance in any space.



What is 3D-Coverage?

Any planning based on insufficient performance data leads to great risks, not only financially but also in terms of danger to life!

3D-Coverage is a smart and easy method to identify and document the optimal and safe signaling solution for customers and users. In a nutshell, based on the product parameters of the signaling device and the environmental conditions, a 3-dimensional space is determined in which the signaling device exactly meets the project requirement of the customer application. This 3-dimensional space represents the “digital twin” of the functional area required by the user.



The Pfannenberg 3D Coverage offer:

- Detailed technical documentation with all performance parameters (3D coverage) of all signaling devices
- Supporting technical and commercial planning methods such as PSS, 3D Coverage Calculation Tool, planning methods, Revit BIM files
- Webinars and e-learning platforms for on-demand use
- Know-How pages and white papers on various topics
- Consulting based on international standards in relation to the respective application
- Documentation to prove the design complies with the regulations
- Active planning / project support
- On-site consultation by experts and stocktaking and full planning

PYRA® FLASHING LIGHTS

5 J

- The small flashing light is adaptable to many applications and is also impressive due to its safe and simple mounting.
- Suitable for panel mounting.



WEBCODE #8059

| PRODUCT | PY X-S-05 | |
|-----------------------|---|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 184–253 V | 18–30 V |
| Max. viewing distance | 164 m | |
| Light source | xenon flash tube | |
| Light intensity | 5 J, 50 cd (DIN 5037) | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Lens colour | / ● ● ● ● ● ● ● ● | |
| Housing colour | ● RAL 3000 ● RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Operating temperature | –40 °C ... +55 °C | |
| Dimension (WxHxD) | 109.5 x 85.8 x 80.6 mm | |

| | |
|-----------|--|
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA option: DNV CNBOP EN 54-23 (24 V) VdS (24 V) |

| ARTICLE NO. | ● housing | ● housing |
|-------------|-------------|-------------|
| 230 V | 21510101000 | 21510101055 |
| 230 V | 21510103000 | 21510103055 |
| 230 V | 21510104000 | 21510104055 |
| 230 V | 21510105000 | 21510105055 |
| 24 V | 21510801000 | 21510801055 |
| 24 V | 21510803000 | 21510803055 |
| 24 V | 21510804000 | 21510804055 |
| 24 V | 21510805000 | 21510805055 |

Please find further variants at www.pfannenberg.com

10 J

- Providing full synchronisation on multi-flashing light systems.
- 5 Joule version available.



WEBCODE #8061

| PRODUCT | PY X-M-10 | |
|-----------------------|---|---------|
| Rated voltage | 230 V AC | 24 V DC |
| Operating range | 187–255 V | 10–57 V |
| Max. viewing distance | 283 m | |
| Light source | xenon flash tube | |
| Light intensity | 10 J, 149 cd (DIN 5037) | |
| Flash rate | 0.1 0.5 0.75 1 Hz (DIP switch) | |
| Lens colour | / ● ● ● ● ● ● ● ● | |
| Housing colour | ● RAL 3000 ● RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Operating temperature | –40 °C ... +55 °C | |
| Dimension (WxHxD) | 166 x 124 x 114 mm | |

| | |
|-----------|--|
| Warranty | 10 years |
| Approvals | EN 54-23 (SSM version, 24 V) VdS (SSM version, 24 V) UL EAC CE UKCA |

| ARTICLE NO. | ● housing | ● housing |
|-------------|-------------|-------------|
| 230 V | 21551103000 | 21551103055 |
| 230 V | 21551104000 | 21551104055 |
| 230 V | 21551105000 | 21551105055 |
| SSM 24 V | 21551801005 | – |
| 24 V | 21551813000 | 21551813055 |
| 24 V | 21551814000 | 21551814055 |
| 24 V | 21551815000 | 21551815055 |
| SSM 24 V | 21551805005 | – |

Please find further variants at www.pfannenberg.com

15 J

- Inrush current regulator (DC version) provides electrical protection for control devices such as switching components and relays.
- Redundant electrical contacts provides ease of wiring and daisy-chain connection.



WEBCODE #8103

| PRODUCT | PY X-L-15 | PY X-L-15-CPR | |
|-----------------------|---|---------------|-------------|
| Rated voltage | 230 V AC | 24 V DC | 24 V DC |
| Operating range | 187–255 V | 19.2–28.8 V | 19.2–28.8 V |
| Max. viewing distance | 320 m | | |
| Light source | xenon flash tube | | |
| Light intensity | 15 J, 190 cd (DIN 5037) | | |
| Flash rate | 0.1 0.5 0.75 1 Hz (DIP switch) | | |
| Lens colour | / ● ● ● ● ● ● ● ● | | |
| Housing colour | ● RAL 3000 ● RAL 7035 | | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | | |
| Service life | light emission still 70 % after 8,000,000 flashes | | |
| Operating temperature | –40 °C ... +55 °C | | |
| Dimension (WxHxD) | 212 x 157 x 144 mm | | |

| | |
|-----------|---|
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA CPR version: EAC EN 54-23 VdS |

| ARTICLE NO. | ● housing | ● housing |
|-------------|-------------|-------------|
| 230 V | 21561103000 | 21561103055 |
| 230 V | 21561104000 | 21561104055 |
| 230 V | 21561105000 | 21561105055 |
| CPR 24 V | 21561801020 | on request |
| CPR 24 V | 21561805020 | on request |
| 24 V | 21561803000 | 21561803055 |
| 24 V | 21561804000 | 21561804055 |
| 24 V | 21561805000 | 21561805055 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

FLASHING LIGHTS

7 J

- Powerful 360° omnidirectional signaling for large distances (indoor and outdoor).



WEBCODE #8064

| PRODUCT | PMF 2015 | |
|-----------------------|--------------------------------------|------------------|
| | direct mounting | bracket mounting |
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 18–30 V |
| Operating mode | quad, double flash | |
| Max. viewing distance | 366 m | |
| Light source | xenon flash tube | |
| Light intensity | 7 J, 250 cd (DIN 5037) | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Lens colour | | |
| Degrees of protection | IP 55 (EN 60529) (vertical mounting) | |
| Operating temperature | –40 °C ... +55 °C | |

| | | |
|-----------------|---|------------------|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxH) | direct | Ø 177 x 185 mm |
| | bracket | Ø 130 x 170.5 mm |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | direct mounting | bracket mounting |
|-------------|-----------------|------------------|
| 230 V | 21007104000 | 21007104010 |
| 230 V | 21007105000 | 21007105010 |
| 24 V | 21007804000 | 21007804010 |
| 24 V | 21007805000 | 21007805010 |

Please find further variants at www.pfannenberg.com

30 J

- Very good perceptibility over great distances; low power consumption.



WEBCODE #8065

| PRODUCT | PMF 2030 | |
|-----------------------|---|------------------|
| | direct mounting | bracket mounting |
| Rated voltage | 230 V AC 50 60 Hz | |
| Operating range | 195–253 V | |
| Max. viewing distance | 898 m | |
| Light source | xenon flash tube | |
| Light intensity | max. 30 J switchable to 20 J, 1,500 cd (DIN 5037) | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Lens colour | | |
| Degrees of protection | IP 55 (EN 60529) (vertical mounting) | |

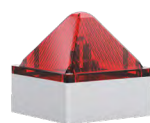
| | | |
|-----------------------|---|------------------|
| Operating temperature | –40 °C ... +55 °C | |
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxH) | Ø 177 x 185 mm | Ø 130 x 170.5 mm |
| | Approvals | |
| EAC CE UKCA | | |

| ARTICLE NO. | direct mounting | bracket mounting |
|-------------|-----------------|------------------|
| | 21010104000 | 21010104010 |
| | 21010105000 | 21010105010 |

Please find further variants at www.pfannenberg.com

13 J

- Redundant electrical contacts provides ease of wiring and daisychain connection for multi-unit installations.



WEBCODE #8066

| PRODUCT | Quadro F12 | |
|-----------------------|---|------------------|
| | direct mounting | bracket mounting |
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 18–30 V |
| Max. viewing distance | 374 m | |
| Light source | xenon flash tube | |
| Light intensity | 13 J, 260 cd (DIN 5037) | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Lens colour | | |
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Operating temperature | –40 °C ... +55 °C | |

| | | |
|-------------------|--|--|
| Service life | light emission still 70 % after 12,000,000 flashes | |
| Dimension (WxHxD) | 130 x 130 x 130 mm | |
| Warranty | 10 years | |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 21041103000 | 21041803000 |
| | 21041104000 | 21041804000 |
| | 21041105000 | 21041805000 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

LED TRAFFIC LIGHTS

125 cd



- Simple to combine for horizontal or vertical configuration.



WEBCODE #8067

| PRODUCT | P 450 TLA | |
|-----------------------|-----------------------|-----------------|
| Rated voltage | 115 / 230 V AC/DC | 12 / 24 V DC |
| Operating range | 48–260 V | 10–14 16–33 V |
| Max. viewing distance | 259 m | |
| Light source | high output LED array | |
| Light intensity | 125 cd (DIN 5037) | |
| Lens colour | / | |
| Degrees of protection | IP 65 (EN 60529) | |
| Operating temperature | –40 °C ... +70 °C | |

| | |
|-------------------|-----------------|
| Service life | >50,000 hrs |
| Dimension (WxHxD) | 177 x Ø 140 mm |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | 115 / 230 V AC | 12 / 24 V DC |
|---|----------------|--------------|
|  | 21355645000 | 21355635000 |
|  | 21355646000 | 21355636000 |


Please find further variants at www.pfannenberg.com

75 cd


- Face-on LEDs provide far-reaching signals for traffic control and machinery feedback applications.



WEBCODE #8068

| PRODUCT | Quadro LED-TL | |
|-----------------------------|---|---------|
| Rated voltage | 115 / 230 V AC | 24 V DC |
| Operating range | 90–253 V | 11–60 V |
| Operating mode (adjustable) | continuous light blinking light flashing light | |
| Max. viewing distance | 201 m | |
| Light source | 4 high performance LEDs each | |
| Light intensity | >75 cd, reducible | |
| Lens colour |  | |

| | |
|-----------------------|-------------------------------------|
| Degrees of protection | IP 65 (EN 60529) IK08 (EN 50102) |
| Operating temperature | –40 °C ... +55 °C |
| Service life | >50,000 hrs |
| Dimension (WxHxD) | 396 x 130 x 130 mm |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | 115 / 230 V AC | 24 V DC |
|--|----------------|-------------|
|  | 21106640008 | 21106630008 |


Please find further variants at www.pfannenberg.com

76 cd



- Feel free to compose your traffic light as you wish! The prewired base can be complemented with several stages of LEDs plus a sounder.



WEBCODE #8188

| PRODUCT | PY L-S-TL / A | |
|----------------------------|---|-----------|
| Rated voltage | 115 / 230 V | 12-48V DC |
| Operating range | 90-253 V | 10-60V |
| Max. viewing distance | 202 m | |
| Light source | one high output LED per single unit | |
| Light intensity (DIN 5037) | 76 cd (reducible) per single unit | |
| Lens colour | /  | |
| Degrees of protection | IP 66 (EN 60529), NEMA TYPE 4/4x, IK 08 (EN 50102) | |

| | |
|-----------------------|-----------------------|
| Operating temperature | –40 °C ... +55 °C |
| Service life | ≥50,000 hrs |
| Dimension (WxHxD) | 345 x 109.5 x 80.6 mm |
| Warranty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | 115 / 230 V AC | 12-48V DC |
|--|----------------|-------------|
|  | 21120615000 | 21120605000 |
|  | 21514643055 | 21514813055 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

LED LIGHTS

23 cd

- RGB multi colour or single colour LED light with wide signaling area and maximum visibility.



WEBCODE #8189

| PRODUCT | PY L-M / PY L-M RGB | | |
|----------------------------|---|-----------|-----------|
| Rated voltage | 115 / 230 V | 120 V DC | 12-48V DC |
| Operating range | 95-265 V | 108-132 V | 10-60V |
| Max. viewing distance | 111 m | | |
| Light source | single colour: two high output LED / RGB: one high output LED | | |
| Light intensity (DIN 5037) | 23 cd (reducible) | | |
| Lens colour | - RGB Polycarbonate (PC) | | |
| Degrees of protection | IP 66 (EN 60529), NEMA TYPE 4/4X, IK 08 (EN 50102) | | |
| Operating temperature | -40 °C ... +55 °C | | |

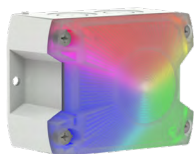
| | |
|-----------------|--------------------|
| Service life | >50,000 hrs |
| Dimension (WxH) | 166 x 114 x 124 mm |
| Warranty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | 115 / 230 V AC; 120 V DC | 12-48 V DC |
|-------------|--------------------------|-------------|
| | 21513648055 | 21513818055 |
| | 21513643055 | 21513813055 |
| | 21513644055 | 21513814055 |
| | 21553645055 | 21553815055 |

Please find further variants at www.pfannenberg.com

76 cd

- Most flexible, ultra bright RGB multi colour or single colour LED technology



WEBCODE #8190

| PRODUCT | PY L-S / PY L-S RGB | | |
|----------------------------|--|-----------|-----------|
| Rated voltage | 115 / 230 V | 120 V DC | 12-48V DC |
| Operating range | 95-265 V | 108-132 V | 10-60V |
| Max. viewing distance | 202 m | | |
| Light source | one high output LED | | |
| Light intensity (DIN 5037) | 76 cd (reducible) | | |
| Lens colour | - RGB Polycarbonate (PC) | | |
| Degrees of protection | IP 66 (EN 60529), NEMA TYPE 4/4X, IK 08 (EN 50102) | | |
| Operating temperature | -40 °C ... +55 °C | | |

| | |
|-----------------|---------------------|
| Service life | ≥50,000 hrs |
| Dimension (WxH) | 109.6 x 86 x 80.6mm |
| Warranty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | 115/230 V AC/DC | 24 V DC |
|-------------|-----------------|-------------|
| | 21553648055 | 21553818055 |
| | 21553643055 | 21553813055 |
| | 21553643055 | 21553814055 |
| | 21513645055 | 21513815055 |

Please find further variants at www.pfannenberg.com

27 cd

- LED technology – multi-function capability.



WEBCODE #8133

| PRODUCT | PMF-LED Flex | |
|-----------------------|---|------------------|
| | direct mounting | bracket mounting |
| Operating range | AC 50 60 Hz | DC |
| | 95-253 V | 100-350 V |
| Max. viewing distance | 120 m | |
| Light source | 8x 2 LED (3 chip version) | |
| Light intensity | 27 cd (DIN 5037) | |
| Operating mode | continuous light blinking light (1.5 Hz) flashing light (1 Hz) rotating allround light (2.5 Hz) | |
| Lens colour | | |
| Degrees of protection | IP 55 (EN 60529) (vertical mounting) | |

| | | |
|-----------------------|-------------------|------------------|
| Operating temperature | -30 °C ... +55 °C | |
| Service life | >50,000 hrs | |
| Dimension (WxH) | Ø 177 x 185 mm | Ø 130 x 170.5 mm |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | direct mounting | bracket mounting |
|-------------|-----------------|------------------|
| | 21151644006 | 21151644007 |
| | 21151645006 | 21151645007 |

Please find further variants at www.pfannenberg.com

75 cd

- Operating mode internally and externally selectable (DC).



WEBCODE #8119

| PRODUCT | ABL LED-HI | ABS LED-HI |
|-----------------------|--|------------|
| Rated voltage | 115/230 V AC/DC | 24 V DC |
| Operating range | 90-253 V | 11-60 V DC |
| Max. viewing distance | 201 m | |
| Light source | LED | |
| Operating mode | continuous light blinking light (1 Hz 2 Hz) flashing light (0.1 Hz 0.5 Hz 0.75 Hz 1 Hz 2 Hz) | |
| Light intensity | 75 cd, reduzierbar (DIN 5037) | |
| Lens colour | | |
| Degrees of protection | IP 54 (EN 60529) (vertical mounting) | |

| | | |
|-----------------------|-------------------|--|
| Operating temperature | -40 °C ... +55 °C | |
| Service life | ≥50,000 hrs | |
| Dimension (WxH) | Ø 80 x 242 mm | |
| Warranty | 10 years | |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | 115/230 V AC/DC | 24 V DC |
|-------------|-----------------|-------------|
| | 21118643000 | 21118633000 |
| | 21118644000 | 21118634000 |
| | 21118645000 | 21118635000 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

LED LIGHTS

75 cd

- For recognition over long distances.
- 3 selectable operating modes (internally and externally selectable).



WEBCODE #8070

| PRODUCT | Quadro-LED-HI | |
|-----------------------|--|---------|
| Rated voltage | 230 V AC/DC | 24 V DC |
| Operating range | 90–253 V | 11–60 V |
| Max. viewing distance | 201 m | |
| Light source | 4 high performance LEDs | |
| Operating mode | continuous light blinking light (1 Hz 2 Hz) flashing light (0.1 Hz 0.5 Hz 1 Hz 2 Hz) | |
| Light intensity | 75 cd, reducible (DIN 5037) | |
| Lens colour | | |
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |

| | |
|-----------------------|--------------------|
| Operating temperature | –40 °C ... +55 °C |
| Service life | ≥50,000 hrs |
| Dimension (WxHxD) | 130 x 130 x 130 mm |
| Warranty | 10 years |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 21108643000 | 21108633000 |
| | 21108644000 | 21108634000 |
| | 21108645000 | 21108635000 |

Please find further variants at www.pfannenberg.com

315 cd

- Automatic brightness adjustment to ambient light can be activated.



WEBCODE #8134

| PRODUCT | PMF LED-HI | |
|-----------------------|--|------------------|
| | direct mounting | bracket mounting |
| Operating range | 10–30 V DC | |
| Max. viewing distance | 411 m | |
| Light source | 8x 2 high performance LEDs | |
| Light intensity | 315 cd, automatically reducible (day/night operation) (DIN 5037) | |
| Operating mode | blinking light (1.5 Hz) flashing light (1 Hz) rotating allround light (2.5 Hz) | |
| Lens colour | | |
| Degrees of protection | IP 55 (vertical mounting) | |

| | |
|-----------------------|-----------------------------------|
| Operating temperature | –40 °C ... +55 °C |
| Service life | >50,000 hrs |
| Dimension (WxH) | ∅ 177 x 185 mm ∅ 130 x 170.5 mm |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | direct mounting | bracket mounting |
|-------------|-----------------|------------------|
| | 21155634006 | 21155634007 |
| | 21155635006 | 21155635007 |

Please find further variants at www.pfannenberg.com

FUNCTION-MONITORED LIGHTS

23 cd

- Control and function monitoring directly via AS-I field bus.
- Low current consumption.



WEBCODE #8184

| PRODUCT | PY L-M-M | | |
|-----------------------|---|-----------|-----------|
| Rated voltage | 115 / 230 V | 120 V DC | 12-48V DC |
| Operating range | 95-265 V | 108-132 V | 10-60 V |
| Max. viewing distance | 111 m | | |
| Light source | two high output LED | | |
| Light intensity | 23 cd (reducible) | | |
| Lens colour | | | |
| Degree of protection | IP 66 (EN 60529), NEMA TYPE 4/4X, IK 08 (EN 50102) | | |
| Operating temperature | –40 °C ... +55 °C | | |
| Service life | ≥50,000 hrs | | |

| | |
|-------------------|-------------------|
| Dimension (WxHxD) | 166 x 114 x 124mm |
| Warranty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | 115 / 230 V AC; 120 V DC | 12-48 V DC |
|-------------|-----------------------------|-------------|
| | 21553643004 | 21553813004 |
| | 21553644004 | 21553814004 |
| | 21553645004 | 21553815004 |
| | 21553646004 | 21553816004 |

Please find further variants at www.pfannenberg.com

5 J

- Integrated flash monitoring and fault message contact.



WEBCODE #8071

| PRODUCT | WBL-M |
|-----------------------|--------------------------------------|
| Rated voltage | 230 V AC |
| Operating range | 185–242 V |
| Max. viewing distance | 181 m |
| Light source | xenon flash tube |
| Light intensity | 5 J, 61 cd (DIN 5037) |
| Flash rate | 1 Hz = 60 flashes/min |
| Lens colour | |
| Degrees of protection | IP 54 (EN 60529) (vertical mounting) |

| | |
|-----------------------|--|
| Operating temperature | –20 °C ... +55 °C |
| Service life | light emission still 70 % after 8,000,000 flashes |
| Dimension (WxH) | ∅ 80 x 242 mm |
| Approvals | EAC CE UKCA option: DNV |

| ARTICLE NO. | 230 V AC |
|-------------|-------------|
| | 21003103156 |
| | 21003105156 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

FUNCTION-MONITORED LIGHTS

7 J

- Internally monitored via an optical sensor and evaluation circuitry.



WEBCODE #8072

| PRODUCT | PMF 2015-M |
|-----------------------|------------------------|
| Rated voltage | 24 V DC |
| Operating range | 18–30 V |
| Operating mode | double flash |
| Max. viewing distance | 366 m |
| Light source | xenon flash tube |
| Light intensity | 7 J, 250 cd (DIN 5037) |
| Flash rate | 1 Hz = 60 flashes/min |
| Lens colour | |

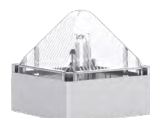
| | |
|-----------------------|---|
| Degrees of protection | IP 55 (EN 60529) |
| Operating temperature | –30 °C ... +55 °C |
| Service life | light emission still 70 % after 8,000,000 flashes |
| Dimension (WxH) | Ø 130 x 170.5 mm |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | bracket mounting |
|-------------|------------------|
| 24 V | 21007804012 |
| 24 V | 21007805012 |

Please find further variants at www.pfannenberg.com

13 J

- Synchronised flashing of up to 10 beacons in series with no additional controller.
- Integrated function monitoring with fault message contact.



WEBCODE #8073

| PRODUCT | Quadro S-M-Flex |
|-----------------------|---|
| Rated voltage | 230 V AC 50 60 Hz |
| Operating range | 195–253 V |
| Max. viewing distance | 374 m |
| Light source | xenon flash tube |
| Light intensity | 13 J, 260 cd (DIN 5037) |
| Flash rate | adjustable (1 Hz = 60 flashes/min factory setting) |
| Lens colour | |
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) |

| | |
|-----------------------|--|
| Operating temperature | –25 °C ... +55 °C |
| Service life | light emission still 70 % after 12,000,000 flashes |
| Dimension (WxHxD) | 130 x 130 x 130 mm |
| Warranty | 10 years |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | 230 V AC |
|-------------|-------------|
| | 21042101179 |
| | 21042104179 |
| | 21042105179 |

Please find further variants at www.pfannenberg.com

OBSTACLE LIGHTS

- LED obstacle lights, AVV-approved, compliant to ICAO, Annex 14, Volume 1, Chapter 6.
- Omnidirectional LED array. Light radiation of 360° offers superb marking of aviation obstructions for night time and twilight safety.
- Integrated functional fault monitoring with dry contact relay permits automatic switchover to backup lighting.
- POL 10-M-RA: Automatic switching over to standby light in case of error or by means of external control system.

LED – 32 cd

- ICAO.
- Low Intensity, type B.



WEBCODE #8075

| PRODUCT | POL 32-M | |
|-----------------|--|--------------|
| Rated voltage | 115 / 230 V AC | 12 / 24 V DC |
| Operating range | 85–265 V | 9.6–28.8 V |
| Operating mode | continuous light | |
| Version | monitored | |
| Beam angle | vertical approx. ±35° horizontal 360° | |
| Light source | LED array (red) | |
| Light intensity | 32 cd (DIN 5037) | |
| Lens colour | | |

| | | |
|-----------------------|------------------------|--|
| Light colour | aviation red | |
| Degrees of protection | IP 68 (EN 60529) | |
| Operating temperature | –40 °C ... +55 °C | |
| Service life | >50,000 hrs | |
| Dimension (HxW) | 240 x Ø 118 mm | |
| Approvals | ICAO EAC CE UKCA | |

| ARTICLE NO. | 115 / 230 V AC | 12 / 24 V DC |
|-------------|----------------|--------------|
| | 21105681005 | 21105671005 |

Please find further variants at www.pfannenberg.com

LED – 18 cd

- AVV | ICAO.
- Low Intensity, type A.



WEBCODE #8076

| PRODUCT | POL 10-M-RA | |
|-----------------|--|--------------|
| Rated voltage | 115 / 230 V AC | 12 / 24 V DC |
| Operating range | 85–265 V | 9.6–28.8 V |
| Operating mode | continuous light | |
| Version | monitored redundant | |
| Beam angle | vertical approx. ±35° horizontal 360° | |
| Light source | LED array (red) | |
| Light intensity | 18 cd (DIN 5037) | |
| Lens colour | | |

| | | |
|-----------------------|------------------------------|--|
| Light colour | aviation red | |
| Degrees of protection | IP 68 (EN 60529) | |
| Operating temperature | –40 °C ... +55 °C | |
| Service life | >50,000 hrs | |
| Dimension (HxW) | 240 x Ø 118 mm | |
| Approvals | AVU ICAP EAC CE UKCA | |

| ARTICLE NO. | 115 / 230 V AC | 12 / 24 V DC |
|-------------|----------------|--------------|
| | 21105641010 | 21105631010 |

Please find further variants at www.pfannenberg.com

SAFETY-RELATED LIGHTS

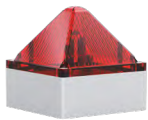


Since 1st June 2015, the European Directive, Seveso III, has been implemented as national law. In Germany, this occurs with the Amendment to the Hazardous Incident Ordinance (12 BlmSchV). Official, government inspections and monitoring will have even more influence in the new Hazardous Incident Ordinance. Basic obligations are to take precautions to prevent hazardous incidents and the possible consequences thereof. This includes equipping the operating area with sufficient warning, alerting and safety facilities.

- Devices be implemented in Safety Instrumented Systems (SIS) up to SIL 2/PLd.

10 J

- To signal dangerous situations in safety-relevant application such as process and plant safety.



WEBCODE #8091

| PRODUCT | Quadro F12-SIL | |
|-----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 18–30 V |
| Max. viewing distance | 348 m | |
| Light source | xenon flash tube | |
| Light intensity | 10 J, 225 cd (DIN 5037) | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Lens colour | / ● ● ● ● ● ● ● ● | |
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Operating temperature | –30 °C ... +55 °C | |

| | | |
|-------------------|---|--|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxHxD) | 130 x 130 x 130 mm | |
| Warranty | 10 years | |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| ● | 21041103601 | 21041803601 |
| ● | 21041104601 | 21041804601 |
| ● | 21041105601 | 21041805601 |

Please find further variants at www.pfannenberg.com

10 J

- Extremely bright flashing light by light bundling with fensel lens, low power consumption.



WEBCODE #8090

| PRODUCT | PMF 2015-SIL | |
|-----------------------|--------------------------------------|------------------|
| | direct mounting | bracket mounting |
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 18–30 V |
| Max. viewing distance | 348 m | |
| Light source | xenon flash tube | |
| Light intensity | 10 J, 225 cd (DIN 5037) | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Lens colour | / ● ● ● ● ● ● ● ● | |
| Degrees of protection | IP 55 (EN 60529) (vertical mounting) | |
| Operating temperature | –30 °C ... +55 °C | |

| | | |
|-----------------|---|----------------|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxH) | Ø 177 x 185 mm | Ø 150 x 185 mm |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | direct mounting | bracket mounting |
|-------------|-----------------|------------------|
| ● 230 V | 21007104601 | 21007104611 |
| ● 230 V | 21007105601 | 21007105611 |
| ● 24 V | 21007804601 | 21007804611 |
| ● 24 V | 21007805601 | 21007805611 |

Please find further variants at www.pfannenberg.com

315 cd

- Automatic brightness adjustment to ambient light can be activated.



WEBCODE #8135

| PRODUCT | PMF LED-HI-SIL | |
|-----------------------|--|------------------|
| | direct mounting | bracket mounting |
| Operating range | 10–30 V DC | |
| Max. viewing distance | 411 m | |
| Light source | 8x 2 high performance LEDs | |
| Light intensity | 315 cd, automatically reducible (day/night operation) (DIN 5037) | |
| Operating mode | blinking light (1.5 Hz) flashing light (1 Hz) rotating allround light (2.5 Hz) | |
| Lens colour | / ● ● ● ● ● ● ● ● | |
| Degrees of protection | IP 55 (EN 60529) (vertical mounting) | |

| | | |
|-----------------------|-------------------|------------------|
| Operating temperature | –40 °C ... +55 °C | |
| Service life | >50,000 hrs | |
| Dimension (WxH) | Ø 177 x 185 mm | Ø 130 x 170.5 mm |
| Approvals | EAC CE UKCA | |

| ARTICLE NO. | direct mounting | bracket mounting |
|-------------|-----------------|------------------|
| ● | 21154634006 | 21154634007 |
| ● | 21154635006 | 21154635007 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

SAFETY-RELATED SOUNDERS



- Integrated safety tough demands under industrial conditions.
- 32 different sounds selectable.
- Can be implemented in Safety Instrumented Systems (SIS) up to SIL 2/PLd.

108 dB(A)



WEBCODE #8092

| PRODUCT | DS 5-SIL | |
|-----------------------|---|---------|
| Rated voltage | 115–230 V AC 50/60 Hz | 24 V DC |
| Operating range | 95–253 V | 19–29 V |
| Sound pressure level | 107 dB(A) @ DIN tone | |
| Alarm tones | 32 4 tones are externally selectable (option) | |
| Colour | ● RAL 3000 | |
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) IP 66 IP 67 (EN 60529) | |
| Cable entry | 2x M20 | |

| | |
|-----------------------|--------------------------|
| Connecting terminals | max. 2.5 mm ² |
| Operating temperature | –25 °C ... +55 °C |
| Dimension (WxHxD) | 133.5 x 133.5 x 143 mm |
| Warranty | 10 years |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | 115–230 V AC | 24 V DC |
|-------------|--------------|-------------|
| | 23106100601 | 23106800601 |

Please find further variants at www.pfannenberg.com

114 dB(A)



WEBCODE #8093

| PRODUCT | DS 10-SIL | |
|-----------------------|--|---------|
| Rated voltage | 115–230 V AC 50/60 Hz | 24 V DC |
| Operating range | 95–253 V | 19–29 V |
| Sound pressure level | 112 dB(A) @ DIN tone | |
| Alarm tones | 32 4 tones are externally selectable (option) | |
| Colour | ● RAL 3000 | |
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Cable entry | 2x M20 | |

| | |
|-----------------------|--------------------------|
| Connecting terminals | max. 2.5 mm ² |
| Operating temperature | –25 °C ... +55 °C |
| Dimension (WxHxD) | 133.5 x 133.5 x 143 mm |
| Warranty | 10 years |
| Approvals | EAC CE UKCA |

| ARTICLE NO. | 115–230 V AC | 24 V DC |
|-------------|--------------|-------------|
| | 23111100601 | 23111800601 |

Please find further variants at www.pfannenberg.com

PATROL SOUNDERS

- Safe; an incorrect installation is virtually impossible.
- Easy; significantly shorter assembly and installation times.
- Economical; extremely high efficiency and good penetration of acoustical obstacles significantly reduce the required number of sounders.

105 dB(A)



WEBCODE #8077

| PRODUCT | PA 1 | |
|-----------------------|---|------------|
| Rated voltage | 230 V AC 50 60 Hz | 12–48 V DC |
| Operating range | 195–253 V | 10–57 V |
| Sound pressure level | 104 dB(A) @ DIN tone | |
| Sound level reduction | max. –12 dB via potentiometer | |
| Alarm tones | 80 thereof 4 tones are externally selectable | |
| Colour | ● RAL 3000 ● RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |
| Operating temperature | –40 °C ... +55 °C | |

| | |
|-------------------|---|
| Dimension (WxHxD) | 109.5 x 86 x 80.6 mm |
| Warranty | 10 years |
| Approvals | UL EAC EN 54-3 (24 V) VdS (24 V) CNBOP CE UKCA option: DNV MED |

| ARTICLE NO. | 230 V AC | 12–48 V DC |
|-------------|-------------|-------------|
| ● | 23310100055 | 23310630055 |
| ● | 23310100000 | 23310630000 |

Please find further variants at www.pfannenberg.com

107 dB(A)



WEBCODE #8078

| PRODUCT | PA 5 | |
|-----------------------|---|------------|
| Rated voltage | 230 V AC 50 60 Hz | 12–48 V DC |
| Operating range | 195–253 V | 10–57 V |
| Sound pressure level | 105 dB(A) @ DIN tone | |
| Sound level reduction | max. –12 dB via potentiometer | |
| Alarm tones | 80 thereof 4 tones are externally selectable | |
| Colour | ● RAL 3000 ● RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |
| Operating temperature | –40 °C ... +55 °C | |

| | |
|-------------------|---|
| Dimension (WxHxD) | 163.4 x 135 x 132 mm |
| Warranty | 10 years |
| Approvals | UL EAC EN 54-3 (24 V) VdS (24 V) CNBOP CE UKCA option: DNV MED |

| ARTICLE NO. | 230 V AC | 12–48 V DC |
|-------------|-------------|-------------|
| ● | 23350100055 | 23350630055 |
| ● | 23350100000 | 23350630000 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

PATROL SOUNDERS

117 dB(A)



WEBCODE #8079

| PRODUCT | PA 10 | |
|-----------------------|---|------------|
| Rated voltage | 115–230 V AC 50/60 Hz | 12–48 V DC |
| Operating range | 95–265 V | 10–60 V |
| Sound pressure level | 115 dB(A) @ DIN tone | |
| Sound level reduction | max. –10 dB via potentiometer | |
| Alarm tones | 80 thereof 4 tones are externally selectable | |
| Colour | ● RAL 3000 ● RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |
| Operating temperature | –40 °C ... +55 °C | |

| | | |
|-------------------|---|--|
| Dimension (WxHxD) | 214 x 170 x 156 mm | |
| Warranty | 10 years | |
| Approvals | UL EAC EN 54-3 (24 V) VdS (24 V) CNBOP CE UKCA option: DNV MED | |

| ARTICLE NO. | 115–230 V AC | 12–48 V DC |
|-------------|--------------|-------------|
| ● | 23360640055 | 23360630055 |
| ● | 23360640000 | 23360630000 |

Please find further variants at www.pfannenberg.com

122 dB(A)



WEBCODE #8080

| PRODUCT | PA 20 | |
|-----------------------|---|----------------------|
| Rated voltage | 115–230 V AC 50/60 Hz | 12–48 V DC |
| Operating range | 95–265 V | 10–60 V |
| Sound pressure level | 118 dB(A) @ DIN tone | 120 dB(A) @ DIN tone |
| Sound level reduction | max. –9 dB via potentiometer | |
| Alarm tones | 80 thereof 4 tones are externally selectable | |
| Colour | ● RAL 3000 ● RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |
| Operating temperature | –40 °C ... +55 °C | |

| | | |
|-------------------|---|--|
| Dimension (WxHxD) | 214 x 170 x 181 mm | |
| Warranty | 10 years | |
| Approvals | UL EAC EN 54-3 (24 V) VdS (24 V) CNBOP CE UKCA option: DNV MED | |

| ARTICLE NO. | 115–230 V AC | 12–48 V DC |
|-------------|--------------|-------------|
| ● | 23370640055 | 23370300055 |
| ● | 23370640000 | 23370300000 |

Please find further variants at www.pfannenberg.com

DS SOUNDERS

- Die-cast aluminium housing resistant to UV light, seawater, and many chemicals. Sturdy construction resists vandalism to ensure a high degree of functional safety.
- Choice of 32 unique alarm tones with three stages of tone control for distinctive signaling of specific events.

108 dB(A)



WEBCODE #8081

| PRODUCT | DS 5 | |
|-----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 19–29 V |
| Sound pressure level | 107 dB(A) @ DIN tone | |
| Sound level reduction | by –20 dB via potentiometer (option) | |
| Alarm tones | 32 4 tones are externally selectable (option) | |
| Colour | ● RAL 3000 | |
| Operating temperature | –40 °C ... +55 °C | |

| | | |
|-----------------------|---|--|
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Dimension (WxHxD) | 133.5 x 133.5 x 143 mm | |
| Warranty | 10 years | |
| Approvals | EN 54-3 VdS EAC CE UKCA option: DNV UL | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 23106100000 | 23106800000 |

Please find further variants at www.pfannenberg.com

114 dB(A)



WEBCODE #8082

| PRODUCT | DS 10 | |
|-----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 19–29 V |
| Sound pressure level | 112 dB(A) @ DIN tone | |
| Alarm tones | 32 4 tones are externally selectable (option) | |
| Colour | ● RAL 3000 | |
| Operating temperature | –40 °C ... +55 °C | |

| | | |
|-----------------------|---|--|
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Dimension (WxHxD) | 133.5 x 133.5 x 143 mm | |
| Warranty | 10 years | |
| Approvals | EN 54-3 VdS EAC CE UKCA option: DNV UL | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 23111100000 | 23111800000 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

PATROL LED SOUNDERS

76cd / 105 dB(A)



| PRODUCT | PA L 1 | | |
|----------------------------|--|----------|------------|
| Rated voltage | 230 V AC | 115 V AC | 12-48 V DC |
| Operating range | 195-253 V | 95-127 V | 10-57 V |
| Max. viewing distance | 202 m | | |
| Light source | one high output LED per single unit | | |
| Light intensity (DIN 5037) | 76 cd (reducible) per single unit | | |
| Max sound level | 105 dB (A) @ 1m | | |
| Sound level reduction | max. -12 dB | | |
| Alarm tones | 80 | | |
| Lens colour | Polycarbonate (PC) | | |
| Housing colour | RAL 3000 RAL 7035 | | |
| Degrees of protection | IP 66 (EN 60529), NEMA TYPE 4/4x, IK 08 (EN 50102) | | |

WEBCODE #8081

| | |
|-----------------------|------------------------|
| Operating temperature | -40 °C ... +55 °C |
| Service life | ≥50,000 hrs |
| Dimension (WxHxD) | 172.4 x 109.5 x 80.6mm |
| Warranty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | | PA L 1 | |
|----------------|---------------------|-------------|-------------|
| HOUSING COLOUR | LIGHT / LENS COLOUR | 230 V | 12-48 V DC |
| | | 23313108055 | 23313638055 |
| | | 23313105000 | 23313635000 |
| | | 23313103055 | 23313633055 |
| | | 23313104055 | 23313634055 |
| | | 23313105055 | 23313635055 |

Please find further variants at www.pfannenberg.com

23cd / 107 db(A)



| PRODUCT | PA L 5 | | |
|----------------------------|---|----------|------------|
| Rated voltage | 230 V AC | 115 V AC | 12-48 V DC |
| Operating range | 195-253 V | 95-127 V | 10-57 V |
| Max. viewing distance | 111m | | |
| Light source | single colour: two high output LED / RGB: one high output LED | | |
| Light intensity (DIN 5037) | 23 cd (reducible) | | |
| Sound pressure level | max. 107 dB (A) | | |
| Sound level reduction | max. -12 dB | | |
| Alarm tones | 80 | | |
| Lens colour | Polycarbonate (PC) | | |
| Housing colour | RAL 3000 RAL 7035 | | |
| Degrees of protection | IP 66 (EN 60529), NEMA TYPE 4/4x, IK 08 (EN 50102) | | |

WEBCODE #8185

| | |
|-----------------------|---------------------|
| Operating temperature | -40 °C ... +55 °C |
| Service life | ≥50,000 hrs |
| Dimension (WxHxD) | 163.4 x 215 x 132mm |
| Warranty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | | PA L 5 | |
|----------------|---------------------|-------------|-------------|
| HOUSING COLOUR | LIGHT / LENS COLOUR | 230 V | 12-48 V DC |
| | | 23353108055 | 23353638055 |
| | | 23353103055 | 23353633055 |
| | | 23353104055 | 23353634055 |
| | | 23353105055 | 23353635055 |
| | | 23353106055 | 23353636055 |

Please find further variants at www.pfannenberg.com

PATROL FLASHING SOUNDERS

5 J / 105 dB(A)



| PRODUCT | PA X 1-05 | |
|-----------------------|---|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 187-255 V | 18-30 V |
| Max. viewing distance | 164 m | |
| Light source | xenon flash tube | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Light intensity | 5 J, 44 cd (DIN 5037) | |
| Sound pressure level | 104 dB(A) @ DIN tone | |
| Sound level reduction | max. -16 dB via potentiometer | |
| Alarm tones | 80 4 tones are externally selectable | |
| Lens colour | | |
| Housing colour | RAL 3000 RAL 7035 | |
| Operating temperature | -40 °C ... +55 °C | |

WEBCODE #8084

| | |
|-----------------------|---|
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) |
| Dimension (WxHxD) | 109.5 x 172.4 x 80.6 mm |
| Warranty | 10 years |
| Approvals | EN 54-3 EN 54-23 VdS UL EAC CNBOP CE UKCA option: DNV MED |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 23311103000 | 23311103055 |
| 230 V | 23311104000 | 23311104055 |
| 230 V | 23311105000 | 23311105055 |
| 24 V | 23311803000 | 23311803055 |
| 24 V | 23311804000 | 23311804055 |
| 24 V | 23311805000 | 23311805055 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

PATROL FLASHING SOUNDERS

5 J / 107 dB(A)



WEBCODE #8085

| PRODUCT | PA X 5-05 | |
|-----------------------|---|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 187–255 V | 18–30 V |
| Max. viewing distance | 173 m | |
| Light source | xenon flash tube | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Light intensity | 5 J, 47 cd (DIN 5037) | |
| Sound pressure level | 105 dB(A) @ DIN tone | |
| Sound level reduction | max. –16 dB via potentiometer | |
| Alarm tones | 80 4 tones are externally selectable | |
| Lens colour | | |
| Housing colour | | |
| Operating temperature | –40 °C ... +55 °C | |

| | |
|-----------------------|---|
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) |
| Dimension (WxHxD) | 163.4 x 215 x 132 mm |
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA option: DNV MED |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 23351103000 | 23351103055 |
| 230 V | 23351104000 | 23351104055 |
| 230 V | 23351105000 | 23351105055 |
| 24 V | 23351803000 | 23351803055 |
| 24 V | 23351804000 | 23351804055 |
| 24 V | 23351805000 | 23351805055 |

Please find further variants at www.pfannenberg.com

10 J / 117 dB(A)



WEBCODE #8086

| PRODUCT | PA X 10-10 | |
|-----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 187–255 V | 18–30 V |
| Max. viewing distance | 283 m | |
| Light source | xenon flash tube | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Light intensity | 10 J, 129 cd (DIN 5037) | |
| Sound pressure level | 115 dB(A) @ DIN tone | |
| Sound level reduction | max. –12 dB via potentiometer | |
| Alarm tones | 80 / 4 tones are externally selectable | |
| Lens colour | | |
| Housing colour | | |
| Operating temperature | –40 °C ... +55 °C | |

| | |
|-----------------------|---|
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) |
| Dimension (WxHxD) | 214 x 270 x 156 mm |
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA option: DNV MED |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 23361103000 | 23361103055 |
| 230 V | 23361104000 | 23361104055 |
| 230 V | 23361105000 | 23361105055 |
| 24 V | 23361803000 | 23361803055 |
| 24 V | 23361804000 | 23361804055 |
| 24 V | 23361805000 | 23361805055 |

Please find further variants at www.pfannenberg.com

15 J / 122 dB(A)



WEBCODE #8087

| PRODUCT | PA X 20-15 | |
|-----------------------|---|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 187–255 V | 18–30 V |
| Max. viewing distance | 377 m | |
| Light source | xenon flash tube | |
| Flash rate | 1 Hz = 60 flashes/min | |
| Light intensity | 15 J, 265 cd (DIN 5037) | |
| Sound pressure level | 120 dB(A) @ DIN tone | |
| Sound level reduction | max. –12 dB via potentiometer | |
| Alarm tones | 80 4 tones are externally selectable | |
| Lens colour | | |
| Housing colour | | |
| Operating temperature | –40 °C ... +55 °C | |

| | |
|-----------------------|---|
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) |
| Dimension (WxHxD) | 214 x 270 x 181 mm |
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA option: DNV MED |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 23372103000 | 23372103055 |
| 230 V | 23372104000 | 23372104055 |
| 230 V | 23372105000 | 23372105055 |
| 24 V | 23372803000 | 23372803055 |
| 24 V | 23372804000 | 23372804055 |
| 24 V | 23372805000 | 23372805055 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

PYRA® LED SOUNDERS

PYRA L M-A



WEBCODE #8185

| PRODUCT | PY L-M-A | | |
|-----------------------------|---|-----------|-----------|
| Rated voltage | 115 / 230 V | 120 V DC | 12-48V DC |
| Operating range | 95-265 V | 108-132 V | 10-60V |
| Max. viewing distance | 111m | | |
| Light source | single colour: two high output LED / RGB: one high output LED | | |
| Light alternation frequency | blinking light 1 Hz / 2 Hz flashing light 0.1 Hz / 0.5 Hz / 0.75 Hz / 1 Hz / 2 Hz | | |
| Light intensity (DIN 5037) | 23 cd (reducible) | | |
| Sound pressure level | max. 101 dB (A) | | |
| Sound level reduction | max. -20 dB | | |
| Alarm tones | 8 | | |
| Lens colour | Polycarbonate (PC) | | |
| Housing colour | RAL 3000 RAL 7035 | | |

| | |
|-----------------------|--|
| Degree of protection | IP 66 (EN 60529), NEMA TYPE 4/4X, IK 08 (EN 50102) |
| Operating temperature | -40 °C ... +55 °C |
| Service life | ≥50,000 hrs |
| Dimensions | 172 x 114 x 134 mm |
| Warrenty | 10 years |
| Approvals | UL CE UKCA |

| ARTICLE NO. | 115 / 230 V AC; 120 V DC | 12-48 V DC |
|-------------|-----------------------------|-------------|
| housing | 21556648055 | 21556818055 |
| housing | 21556643055 | 21556813055 |
| housing | 21556644055 | 21556814055 |
| housing | 21556645055 | 21556815055 |
| housing | 21556646055 | 21556816055 |

PYRA® FLASHING SOUNDERS

- Safe; an incorrect installation is virtually impossible.
- Economical; largest possible signaling range due to effective XENON technology.
- Integrated inrush current limitation and undervoltage detection.
- Light and sounder can be controlled separately.

5 J / 101 dB(A)



WEBCODE #8088

| PRODUCT | PY X-MA-05 | |
|-----------------------|---|----------------------------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V AC 50 60 Hz / DC |
| Operating range | 187-255 V | AC: 18-30 V DC: 10-57 V |
| Max. viewing distance | 173 m | |
| Light source | xenon flash tube | |
| Flash rate | 0.1 0.5 0.75 1 Hz (DIP switch) | |
| Light intensity | 5 J, 56 cd (DIN 5037) | |
| Sound pressure level | 99 dB(A) @ DIN tone | |
| Sound level reduction | max. -20 dB via potentiometer | |
| Alarm tones | 8 | |
| Lens colour | | |
| Housing colour | RAL 3000 RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |

| | |
|-----------------------|--|
| Operating temperature | -40 °C ... +55 °C |
| Service life | light emission still 70 % after 8,000,000 flashes |
| Dimension (WxHxD) | 166 x 134 x 114 mm |
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 21554103000 | 21554103055 |
| 230 V | 21554104000 | 21554104055 |
| 230 V | 21554105000 | 21554105055 |
| 24 V | 21554813000 | 21554813055 |
| 24 V | 21554814000 | 21554814055 |
| 24 V | 21554815000 | 21554815055 |

Please find further variants at www.pfannenber.com

10 J / 101 dB(A)



WEBCODE #8089

| PRODUCT | PY X-MA-10 | |
|-----------------------|---|----------------------------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V AC 50 60 Hz / DC |
| Operating range | 187-255 V | AC: 18-30 V DC: 10-57 V |
| Max. viewing distance | 283 m | |
| Light source | xenon flash tube | |
| Flash rate | 0.1 0.5 0.75 1 Hz (DIP switch) | |
| Light intensity | 10 J, 149 cd (DIN 5037) | |
| Sound pressure level | 99 dB(A) @ DIN tone | |
| Sound level reduction | max. -20 dB via potentiometer | |
| Alarm tones | 8 | |
| Lens colour | | |
| Housing colour | RAL 3000 RAL 7035 | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |

| | |
|-----------------------|--|
| Operating temperature | -40 °C ... +55 °C |
| Service life | light emission still 70 % after 8,000,000 flashes |
| Dimension (WxHxD) | 166 x 134 x 114 mm |
| Warranty | 10 years |
| Approvals | UL EAC CE UKCA |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 21555103000 | 21555103055 |
| 230 V | 21555104000 | 21555104055 |
| 230 V | 21555105000 | 21555105055 |
| 24 V | 21555813000 | 21555813055 |
| 24 V | 21555814000 | 21555814055 |
| 24 V | 21555815000 | 21555815055 |

Please find further variants at www.pfannenber.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenber.com and in the Pfannenber Sizing Software (PSS). Use the indicated web code at the product image for quick access.

PYRA® FLASHING SOUNDERS

15 J / 103 dB(A)



WEBCODE #8104

| PRODUCT | PY X-LA-15 | |
|-----------------------|---|-------------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 187–255 V | 19.2–28.8 V |
| Max. viewing distance | 320 m | |
| Light source | xenon flash tube | |
| Flash rate | 0.1 0.5 0.75 1 Hz (DIP switch) | |
| Light intensity | 15 J, 190 cd (DIN 5037) | |
| Sound pressure level | 101 dB(A) @ DIN tone | |
| Sound level reduction | max. –50 dB via potentiometer | |
| Alarm tones | 8 | |
| Lens colour | | |
| Housing colour | | |
| Degrees of protection | IP 66 (EN 60529) / NEMA 4/4X IK08 (EN 50102) | |

| | | |
|-----------------------|--|--|
| Operating temperature | –40 °C ... +55 °C | |
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxHxD) | 216 x 172 x 144 mm | |
| Warranty | 10 years | |
| Approvals | UL EAC CE UKCA | |

| ARTICLE NO. | housing | housing |
|-------------|-------------|-------------|
| 230 V | 21565103000 | 21565103055 |
| 230 V | 21565104000 | 21565104055 |
| 230 V | 21565105000 | 21565105055 |
| 24 V | 21565803000 | 21565803055 |
| 24 V | 21565804000 | 21565804055 |
| 24 V | 21565805000 | 21565805055 |

Please find further variants at www.pfannenberg.com

FLASHING LIGHTS

5 J

- Usable in all chemical and petrochemical plants as well as offshore plants.
- Zones 1, 2, 21 and 22.



WEBCODE #8095

| PRODUCT | CWB-ATEX | |
|-----------------------|--|----------------------------|
| Rated voltage | 230 V AC 50 60 Hz | 24–42 V AC / 12–48 V DC |
| Operating range | ±10 % | |
| Max. viewing distance | 172 m | |
| Light source | xenon flash tube | |
| Light intensity | 5 J, 55 cd (DIN 5037) | |
| Flash rate | 1 Hz | |
| Lens colour | | |
| Explosion protection | see manual at pfannenberg.com | |
| Degrees of protection | IP 66 (EN 60529) | |

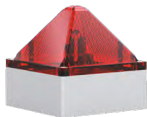
| | | |
|-------------------|--|--|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxHxD) | Ø 76 x 260 mm | |
| Approvals | DNV CE | |

| ARTICLE NO. | 230 V AC | 24–42 V AC / 12–48 V DC |
|-------------|-------------|----------------------------|
| | 31006103000 | 31006903000 |
| | 31006104000 | 31006904000 |
| | 31006105000 | 31006905000 |

Please find further variants at www.pfannenberg.com

7.5 J

- For use in potentially explosive areas in Zone 2 and 22.



WEBCODE #8137

| PRODUCT | Quadro F12-3G/3D | |
|-----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 18–30 V |
| Max. viewing distance | 374 m | |
| Light source | xenon flash tube | |
| Light intensity | 7.5 J, 84 cd (DIN 5037) | |
| Flash rate | 0.83 Hz = 50 flashes/min | |
| Explosion protection | see manual at pfannenberg.com | |
| Lens colour | | |
| Degrees of protection | IP 66 (EN 60529) IK08 (EN 50102) | |

| | | |
|-------------------|--|--|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxHxD) | 130 x 130 x 130 mm | |
| Warranty | 10 years | |
| Approvals | CE UKCA | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 21041101008 | 21041801008 |
| | 21041103008 | 21041803008 |
| | 21041104008 | 21041804008 |
| | 21041105008 | 21041805008 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

Ex FLASHING LIGHTS

5 J

- Powerful visual safety for hazardous areas.
- Large connection box for simple mounting.
- Zones 1, 2, 21 and 22.



WEBCODE #8096

| PRODUCT | BExBG 05-E | |
|-----------------------|-------------------------------|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | ±10 % | ±25 % |
| Max. viewing distance | 172 m | |
| Light source | xenon flash tube | |
| Light intensity | 5 J, 55 cd (DIN 5037) | |
| Flash rate | 60 flashes/min | |
| Lens colour | | |
| Explosion protection | see manual at pfannenberg.com | |

| Degrees of protection | IP 66 (EN 60529) | |
|-----------------------|---|-------------|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxHxD) | Ø 165 x 240 mm | |
| Approvals | CE | |
| ARTICLE NO. | 230 V AC | 24 V DC |
| | 31130103000 | 31130803000 |
| | 31130104000 | 31130804000 |
| | 31130105000 | 31130805000 |

Please find further variants at www.pfannenberg.com

15 J

- Powerful visual safety for hazardous areas.
- Simple and safe electrical connection.
- Zones 1, 2, 21 and 22.



WEBCODE #8096

| PRODUCT | BExBG 15-E | |
|-----------------------|-------------------------------|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | ±10 % | ±25 % |
| Max. viewing distance | 348 m | |
| Light source | xenon flash tube | |
| Light intensity | 15 J, 226 cd (DIN 5037) | |
| Flash rate | 60 flashes/min | |
| Lens colour | | |
| Explosion protection | see manual at pfannenberg.com | |

| Degrees of protection | IP 66 (EN 60529) | |
|-----------------------|---|-------------|
| Service life | light emission still 70 % after 8,000,000 flashes | |
| Dimension (WxHxD) | Ø 165 x 240 mm | |
| Approvals | CE | |
| ARTICLE NO. | 230 V AC | 24 V DC |
| | 31110103000 | 31110803000 |
| | 31110104000 | 31110804000 |
| | 31110105000 | 31110805000 |

Please find further variants at www.pfannenberg.com

Ex LED LIGHTS

LED – 7 cd

- Compact design permits versatile installation in practically any space.
- Zones 0, 1 and 2



WEBCODE #8138

| PRODUCT | IS-mB1 |
|-----------------------|--|
| Rated voltage | 24 V DC |
| Operating range | 16–28 V |
| Max. viewing distance | 52 m |
| Light source | LED |
| Light intensity | 7 cd (DIN 5037) |
| Operating mode | blinking light, can be set to 2 Hz or 1 Hz |
| Lens colour | |

| Cable entry | 2x M20 |
|-----------------------|-------------------|
| Degrees of protection | IP 65 |
| Dimension (WxHxD) | 88.7 x 85 x 95 mm |
| Approvals | CE UKCA |
| ARTICLE NO. | 24 V DC |
| | 31008804000 |
| | 31008805000 |

Please find further variants at www.pfannenberg.com

LED – 75 cd

- User-adjustable brightness up to 75 cd.
- Certified for use in Ex zone 2 (per EN 60079-10) and zone 22 (per EN 61241-10).



WEBCODE #8139

| PRODUCT | Quadro LED-HI 3G/3D | |
|-----------------------|---|---------|
| Operating range | AC/DC | DC |
| | 90–253 V | 11–60 V |
| Max. viewing distance | 201 m | |
| Light source | LED | |
| Light intensity | 75 cd, reducible (DIN 5037) | |
| Operating mode | internally and externally (DC) selectable | |
| Explosion protection | see manual at pfannenberg.com | |
| Lens colour | | |
| Cable entry | 2x M20 x 1.5 | |

| Service life | min. 50,000 hrs | |
|-----------------------|--|-------------|
| Degrees of protection | IP 66/67 (EN 60529) IK08 (EN 50102) | |
| Dimension (WxHxD) | 130 x 130 x 130 mm | |
| Warranty | 10 years | |
| Approvals | CE UKCA | |
| ARTICLE NO. | 115–230 V AC/DC | 12–48 V DC |
| | 21108643009 | 21108633009 |
| | 21108644009 | 21108634009 |
| | 21108645009 | 21108635009 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenbergs Sizing Software (PSS). Use the indicated web code at the product image for quick access.

Ex LED LIGHTS

LED – 23 cd

- Most flexible, ultra-bright RGB multi colour LED technology certified for Ex-Zones 2 and 22.



WEBCODE #8181

| PRODUCT | Quadro RGB 3G/3D | |
|---|--|------------|
| Rated voltage | 115-230 V AC | 12-48 V DC |
| Operating range | 90-253 V AC | 11-60 V |
| Max. viewing distance | 66m | |
| Light source | 1 High output LED (RGBW) | |
| Light intensity (DIN 5037) ¹ | 8 cd (signal color yellow, flashing light 1 Hz, 10% – 100%) | |
| Operating mode | continuous light blinking light 1 / 2 Hz flashing light 0.1 / 0.5 / 0.75 / 1 / 2 Hz | |
| Explosion protection | see manual at pfannenberg.com | |
| Lens colour | | |

| | | |
|-----------------------|--|--|
| Cable entry | 2x M20 x 1.5 (1x sealing screw, 1x cable connection) | |
| Service life | >50,000 h | |
| Degrees of protection | IP 66 / 67, IK 08 | |
| Dimension (WxHxD) | 130 x 130 x 130mm | |
| Warranty | 10 years | |
| Approvals | CE UKCA | |

| ARTICLE NO. | 115–230 V AC | 12–48 V DC |
|-------------|--------------|-------------|
| | 21556648055 | 21556818055 |

Please find further variants at www.pfannenberg.com

Ex SOUNDERS

108 dB(A)

- For device categories 3G (Zone 2) and 3D (Zone 22).



WEBCODE #8097

| PRODUCT | DS 5 3G/3D | |
|----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 19–29 V |
| Sound pressure level | 107 dB(A) @ DIN tone | |
| Alarm tones | 32 4 tones are externally selectable (option) | |
| Colour | RAL 3000 | |
| Explosion protection | see manual at pfannenberg.com | |

| | | |
|-----------------------|--|--|
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Dimension (WxHxD) | 133.5 x 133.5 x 143 mm | |
| Warranty | 10 years | |
| Approvals | EN 54-3 VdS CE UKCA option: DNV | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 23106100007 | 23106800007 |

Please find further variants at www.pfannenberg.com

114 dB(A)

- For device categories 3G and 3D (category for gas and dust protection).



WEBCODE #8098

| PRODUCT | DS 10 3G/3D | |
|----------------------|--|---------|
| Rated voltage | 230 V AC 50 60 Hz | 24 V DC |
| Operating range | 195–253 V | 19–29 V |
| Sound pressure level | 112 dB(A) @ DIN tone | |
| Alarm tones | 32 4 tones are externally selectable (option) | |
| Colour | RAL 3000 | |
| Explosion protection | see manual at pfannenberg.com | |

| | | |
|-----------------------|--|--|
| Degrees of protection | IP 66, IP 67 (EN 60529) IK08 (EN 50102) | |
| Dimension (WxHxD) | 133.5 x 133.5 x 143 mm | |
| Warranty | 10 years | |
| Approvals | EN 54-3 VdS CE UKCA option: DNV | |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 23111100007 | 23111800007 |

Please find further variants at www.pfannenberg.com

103 dB(A)

- 49 unique alarm tones
- Zones 0, 1 and 2



WEBCODE #8140

| PRODUCT | IS-A105N |
|-----------------------|---|
| Rated voltage | 24 V DC |
| Operating range | 10–28 V |
| Sound pressure level | 100 dB(A) @ DIN tone |
| Sound level reduction | up to 15 dB(A) via an internal potentiometer |
| Alarm tones | 49, can be set via DIP switch / 2 tones are externally selectable |
| Colour | RAL 3000 |
| Explosion protection | see manual at pfannenberg.com |

| | |
|-----------------------|--------------------|
| Operating temperature | –40 °C ... +70 °C |
| Degrees of protection | IP 66 (EN 60529) |
| Dimension (WxHxD) | 130 x 130 x 132 mm |
| Approvals | CE UKCA |

| ARTICLE NO. | 24 V DC |
|-------------|-------------|
| | 32033800000 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.



102 dB(A)

- Certified for use in Ex zones 0, 1 and 2.



WEBCODE #8141

| PRODUCT | IS-mA1 |
|-----------------------|-------------------------------|
| Rated voltage | 24 V DC |
| Operating range | 16–28 V |
| Sound pressure level | 98 dB(A) @ DIN tone |
| Sound level reduction | –20 dB |
| Alarm tones | 49 |
| Colour | RAL 3000 |
| Explosion protection | see manual at pfannenberg.com |

| | |
|-----------------------|------------------|
| Degrees of protection | IP 65 (EN 60529) |
| Dimension (WxHxD) | 88.7 x 99 x 95 |
| Approvals | CE UKCA |

| ARTICLE NO. | 24 V DC |
|-------------|-------------|
| | 32034800000 |

Please find further variants at www.pfannenberg.com

112 dB(A)

- Certified for use in 2G zones 1 and 2, 2D zones 21 and 22.



WEBCODE #8142

| PRODUCT | BExS 110D BExS 110E | |
|--|--|------------------|
| Rated voltage | 230 V AC ±10 % 50 60 Hz | 24 V ±25 % DC |
| Sound pressure level | 112 dB(A) @ DIN tone | |
| Sound level reduction | –9 dB | |
| Alarm tones | 32 | |
| Colour | RAL 3000 | |
| Explosion protection and temperature classes | see certificate at pfannenberg.com | |
| Type of protection | „D“ = Ex db / Ex tb or „E“ = Ex db / Ex db eb / Ex tb | |

| | |
|-----------------------|--|
| Degrees of protection | IP66 and IP67 (EN 60529) |
| Operating temperature | max. -50°C ... +70°C (see also temperature classes) |
| Dimension (W/HxD) | Ø 181 x 275 mm |
| Approvals | EAC BExS110D 24VDC: EN54-3 + VdS CE Option: IECEx |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| BExS 110D | 32080100000 | 32080800000 |
| BExS 110E | 32082100000 | 32082800000 |

Please find further variants at www.pfannenberg.com

120 dB(A)

- Certified for use in 2G zones 1 and 2, 2D zones 21 and 22.



WEBCODE #8101

| PRODUCT | BExS 120D BExS 120E | |
|--|--|------------------|
| Rated voltage | 230 V AC ±10 % 50 60 Hz | 24 V ±25 % DC |
| Sound pressure level | 118 dB(A) @ DIN tone | |
| Sound level reduction | –9 dB | |
| Alarm tones | 32 | |
| Colour | RAL 3000 | |
| Explosion protection and temperature classes | see certificate at pfannenberg.com | |
| Type of protection | „D“ = Ex db / Ex tb or „E“ = Ex db / Ex db eb / Ex tb | |

| | |
|-----------------------|--|
| Degrees of protection | IP66 and IP67 (EN 60529) |
| Operating temperature | max. -50°C ... +70°C (see also temperature classes) |
| Dimension (W/HxD) | Ø 181 x 275 mm |
| Approvals | EAC BExS110D 24VDC: EN54-3 + VdS CE Option: IECEx |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| BExS 120D | 32076100000 | 32076800000 |
| BExS 120E | 32078100000 | 32078800000 |

Please find further variants at www.pfannenberg.com

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenbergs Sizing Software (PSS). Use the indicated web code at the product image for quick access.

Ex FLASHING SOUNDERS

5 J / 113 dB(A)

- Combined flashing light and powerful sounder for enhanced alarming and safety for Zones 1, 2, 21 und 22.



WEBCODE #8102

| PRODUCT | BExCS 110-05D | |
|-----------------------|-----------------------|----------------------------------|
| Rated voltage | 230 V AC | 24 V DC |
| Operating range | ±10 % | sounder: ±25 % light: 20–28 V |
| Max. viewing distance | 172 m | |
| Sound pressure level | 112 dB(A) @ DIN tone | |
| Sound level reduction | -9 dB | |
| Alarm tones | 32 | |
| Light source | xenon flash tube | |
| Light intensity | 5 J, 55 cd (DIN 5037) | |
| Flash rate | 1 Hz | |
| Lens colour | / / / / / / / | |

| | |
|--------------------------------|---|
| Explosion protection | see manual at pfannenberg.com |
| Degrees of protection | IP 67 (EN 60529) |
| Service life des Leuchtmittels | light emission still 70 % after 8,000,000 flashes |
| Dimension (WxHxD) | Ø 181 x 368 mm |
| Approvals | CE |

| ARTICLE NO. | 230 V AC | 24 V DC |
|-------------|-------------|-------------|
| | 32074103000 | 32074803000 |
| | 32074105000 | 32074805000 |

Please find further variants at www.pfannenberg.com

7 cd / 102 dB(A)

- Compact design
- Zones 0, 1 and 2



WEBCODE #8143

| PRODUCT | IS-mC1 |
|-----------------------|--|
| Rated voltage | 24 V DC |
| Operating range | 16–28 V |
| Max. viewing distance | 52 m |
| Sound pressure level | 98 dB(A) @ DIN tone |
| Sound level reduction | -20 dB |
| Alarm tones | 49 |
| Light source | LED |
| Light intensity | 7 cd (DIN 5037) |
| Operating mode | blinking light, can be set to 2 Hz or 1 Hz |
| Explosion protection | see manual at pfannenberg.com |

| | |
|-----------------------|--------------------|
| Lens colour | / |
| Cable entry | 2x M20 |
| Degrees of protection | IP 65 |
| Dimension (WxHxD) | 88.7 x 116 x 95 mm |
| Approvals | CE UKCA |

| ARTICLE NO. | 24 V DC |
|-------------|-------------|
| | 32035804000 |
| | 32035805000 |

Please find further variants at www.pfannenberg.com

ZENER BARRIERS

For intrinsically safe signalling devices in Ex applications.

Possible combinations: Zener barrier, IS-A105N sounder and signaling devices IS-Mini series.

Available as: Barriers to ground-based operations or as barrier for earth-free operation (e.g. for systems with ground fault test).



WEBCODE #8194

| TECHNICAL DATA FOR ZENER BARRIERS | | | | | | | | |
|-----------------------------------|----------------------|------------|----------|----------------------------------|-------------------|---------------|-------------------------|----|
| Type | Version | Rated data | | Technical data | | | | |
| | | V | Ω | max. longitudinal resistance (Ω) | U in at 10 µA (V) | U in max. (V) | rated fuse current (mA) | |
| Z 728 | Zener barrier DC +Ve | 28 | 300 | 327 | 26.5 | 28 | 50 | |
| Z 928 | Zener barrier AC | 28 | 300 | 327 | 26 | 27.6 | 50 | |
| Z 786 | Diode barrier | 28 | Diode A1 | 36 + 0.9 V | 26.5 | 28 | 50 | |
| | | | A2 | 36 + 0.9 V | 26.5 | 28 | 50 | |
| | | | B | – | – | – | – | |
| Z 787 | Zener barrier DC +Ve | Channel 1 | 28 | 301 | 327 | 26.5 | 28 | 50 |
| | | Channel 2 | 28 | Diode | 36 + 0.9 V | 26.5 | 28 | 50 |

| TYPE | Z 728 | Z 928 | Z 786 | Z 787 |
|----------------|-------------|-------------|-------------|-------------|
| Article number | 38109800000 | 38109300000 | 38109800001 | 38109800002 |

Detailed 3D-Coverage values (signaling ranges) can be found on pfannenberg.com and in the Pfannenberg Sizing Software (PSS). Use the indicated web code at the product image for quick access.

INTENSE BR50 SIGNAL TOWERS



Slim and bright – Elegant 54mm design and remarkably bright luminosity

Flexible design options – Fully Coloured or Crystal-Clear modules with coloured LEDs - the choice is yours. Assemble your individual signal tower according to your needs and design ideas.

Versatile mounting options – Can either be mounted by tubular stand with plinth, tube, mounting bracket or directly.

Universally applicable – Usable indoors and outdoors.

Function-monitored – Separate LED module for more safety in sensitive applications where a signal must be sent to an external safety system, operating station or control centre in the event of a malfunction.

New equipment – ready-made M12 plug connection technology. For direct mounting or stand mounting with 100mm, 250mm or 400mm length plus matching stainless steel brackets.

Approvals for all applications – UL | EAC | CE | UKCA

WEBCODE #8100

| | EASY AND FLEXI MODULES | BASE/END MODULE |
|--------------------------|--|-----------------|
| Total number of modules | max. 5 (Customisable order and colour) | 1 |
| Operating temperature | -25°C - +55°C | |
| Protection type EN 60529 | IP 54 (Option IP65) | |
| Article no. | | 28250010000 |

| EASY MODULES (LED INTEGRATED BY DEFAULT) | | | | |
|---|-----------------|-----------------------------|-----------------|-------------|
| | LIGHT INTENSITY | NOMINAL CURRENT CONSUMPTION | OPERATING RANGE | ARTICLE NO. |
| Continuous light module Fully coloured - Yellow | 27 cd | AC: 171mA; DC: 101 mA | 10-30V AC/DC | 28250376033 |
| Continuous light module Fully coloured - Amber | 15 cd | AC: 114mA; DC: 116 mA | | 28250376042 |
| Continuous light module Fully coloured - Red | 5 cd | AC: 121mA; DC: 73 mA | | 28250376055 |
| Continuous light module Fully coloured - Green | 9 cd | AC: 113mA; DC: 105 mA | | 28250376066 |
| Continuous light module Fully coloured - Blue | 3 cd | AC: 114mA; DC: 116 mA | | 28250376072 |
| Continuous light module Crystal Clear - White | 23 cd | AC: 114mA; DC: 116 mA | | 28250376012 |
| Continuous light module Crystal Clear - Yellow | 28 cd | AC: 171mA; DC: 101 mA | | 28250376013 |
| Continuous light module Crystal Clear - Green | 22 cd | AC: 113mA; DC: 105 mA | | 28250376016 |
| Continuous light module Crystal Clear - Red | 6 cd | AC: 121mA; DC: 73 mA | | 28250376015 |

| FLEXI MODULES (WITHOUT LIGHT SOURCE) | | | |
|--|-------------------------------|-----------------|-------------|
| | LIGHT INTENSITY | OPERATING RANGE | ARTICLE NO. |
| Signaling module Clear (Crystal Clear) | According to the selected LED | | 28250040010 |
| Signaling module Yellow | | | 28250040030 |
| Signaling module Orange | | | 28250040040 |
| Signaling module Red | | | 28250040050 |
| Signaling module Green | | | 28250040060 |
| Signaling module Blue | | | 28250040070 |

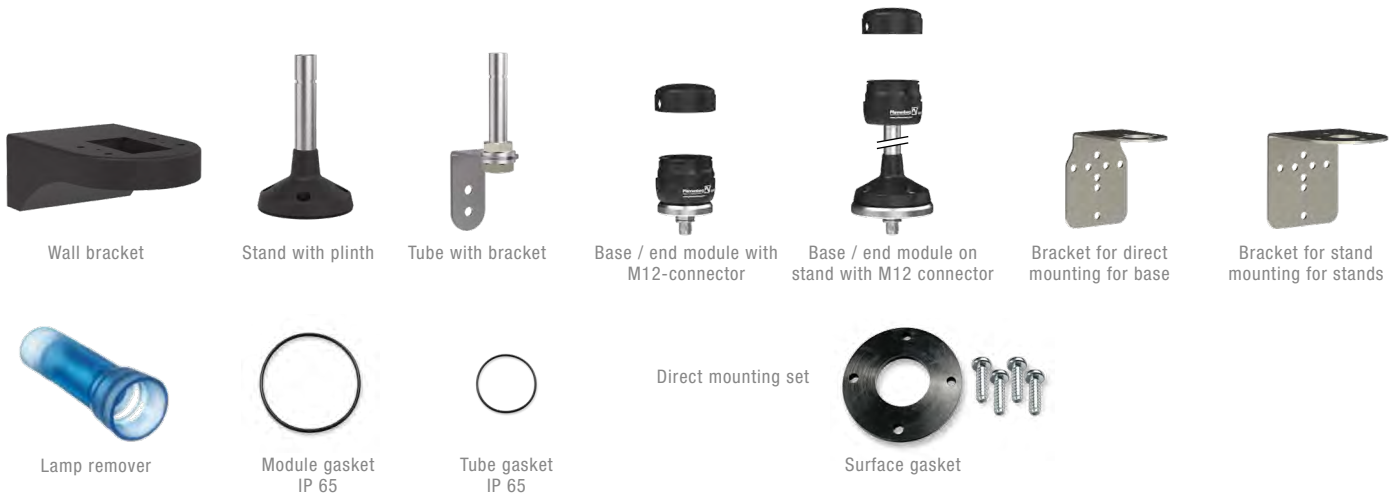
| LED CONTINUOUS LIGHT | | | | | |
|--|------------------|-----------------------------|-----------------|--------------|-------------|
| | LIGHT INTENSITY* | NOMINAL CURRENT CONSUMPTION | OPERATING RANGE | SERVICE LIFE | ARTICLE NO. |
| LED BA 15d Continuous light Yellow 24V AC/DC | 28 cd | AC: 171mA; DC: 101 mA | 10-30V AC/DC | >25,000h | 2821300099 |
| LED BA 15d Continuous light Red 24V AC/DC | 6 cd | AC: 121mA; DC: 73 mA | | | 28213000100 |
| LED BA 15d Continuous light Green 24V AC/DC | 22 cd | AC: 113mA; DC: 105 mA | | | 28213000101 |
| LED BA 15d Continuous light White 24V AC/DC | 23 cd | AC: 114mA; DC: 116 mA | | | 28213000102 |
| LED BA 15d Continuous light Yellow 230V AC | 17 cd | 19 mA | 220-240V AG | | 28213000103 |
| LED BA 15d Continuous light Red 230V AC | 4 cd | 21 mA | | | 28213000104 |
| LED BA 15d Continuous light Green 230V AC | 12 cd | 22 mA | | | 28213000105 |
| LED BA 15d Continuous light White 230V AC | 14 cd | 22 mA | | | 28213000106 |

LED with integrated blinking function are available for 24V AC/DC and 230V AC supply voltage and in all colours. They are designed to be used in BR50 Flexi Modules only. * Values have been measured in Crystal Clear modules. Further versions on request.

| SOUNDER MODULES | | |
|---------------------------------|-----------------|-------------|
| | 24V AC/DC | 230V AC |
| Sound pressure level /reducible | 87 / -10 dB (A) | |
| ARTICLE NO. | | |
| Sounder module | 28250088000 | 28250081000 |

Further versions on request

| MOUNTING EQUIPMENT | | |
|---|---|-------------|
| | MATERIAL | ARTICLE NO. |
| Wall bracket | ABS; for mounting stand | 28250200000 |
| Mounting stand with plinth - 100mm | Stainless steel tube and PA 6 (Polyamid) plinth | 28250150010 |
| Mounting stand with plinth - 250mm | Stainless steel tube and PA 6 (Polyamid) plinth | 28250150020 |
| Mounting stand with plinth - 400mm | Stainless steel tube and PA 6 (Polyamid) plinth | 28250150040 |
| Tube with thread and bracket - 100mm | Stainless steel tube and bracket | 28250160010 |
| Tube with thread and bracket - 250mm | Stainless steel tube and bracket | 28250160020 |
| Tube with thread and bracket - 400mm | Stainless steel tube and bracket | 28250160040 |
| Base / end module with M12-connector | ABS with stainless steel adapter | 28250126000 |
| Base / end module on stand 100 mm + M12 connector | ABS with stainless steel adapter and tube | 28250126010 |
| Base / end module on stand 250 mm + M12 connector | ABS with stainless steel adapter and tube | 28250126020 |
| Base / end module on stand 400 mm + M12 connector | ABS with stainless steel adapter and tube | 28250126040 |
| Bracket for direct mounting for base with or without M12 connector | Stainless steel | 28250180000 |
| Bracket for stand mounting for stands with or without M12 connector | Stainless steel | 28250190000 |
| Lamp remover | plastic | 28250250000 |
| Module gasket IP 65 | rubber | 28250220000 |
| Tube gasket IP 65 | rubber | 28250230000 |
| Direct mounting set | surface gasket + screws 4,2x16 | 28250210000 |



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