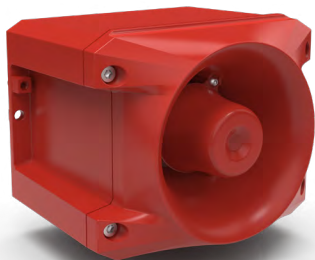















PROTECT SOUNDER 116 dB(A) PRO 10



- Excellent robustness – Cast aluminium housing guarantees long lasting use in tough applications
- Outstanding perceptibility – Ideal radiation characteristics and high penetration of acoustical obstacles reduce the required number of devices
- Multi-voltage-power supply – Made to connect with different voltages, no need to stock various units
- Selectable tone – 80 different tones, 3 additional tones externally selectable
- Reducable sound pressure level – up to 30 dB, internally or externally selectable
- Pre- & main alarm – Preventing shock reactions by pre-alarming due to reduced sound pressure level
- Safe & easy handling – Designed with unlosable seal and screws to significantly shorten wiring and installation times

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| acoustic penetration | protection system | impact-proof housing | operating temperature | warranty 10 Years | sound adjustable | pending | pending | | protection system | pending | ext. sound reduction | DC version, inrush current limitation |

| 3D-COVERAGE PERFORMANCE DATA | | PRO 10 | |
|---|---------|-----------|---------------------------|
|  | AUDIBLE | 80 dB (A) | 51 x 49 x 24 m @ DIN tone |
| | | 85 dB (A) | 29 x 27 x 14 m @ DIN tone |
| | | 90 dB (A) | 16 x 15 x 8 m @ DIN tone |

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

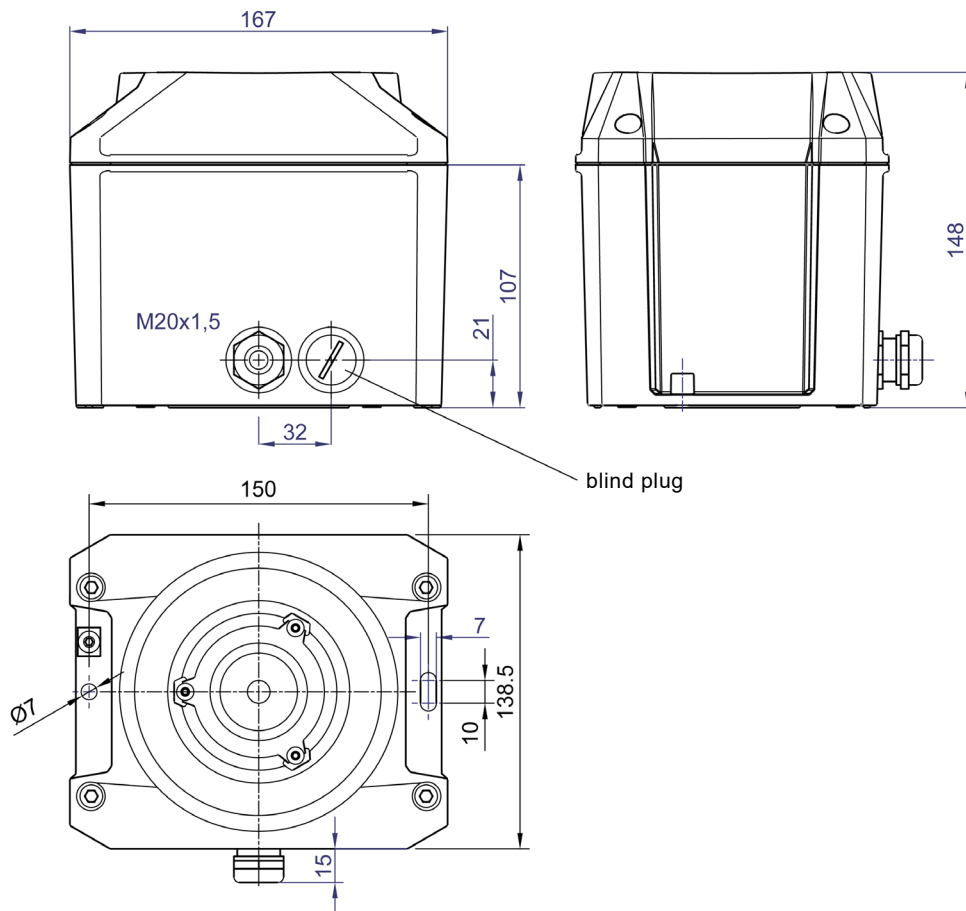
| PRODUCT | PRO 10 | | |
|-------------------------------------|--|------------------|------------------|
| DATA | | | |
| Rated voltage | 115 / 230 V AC | 12 - 48 V DC | 24 / 48 V AC |
| Rated frequency | 50 / 60 Hz | | 50 / 60 Hz |
| Operating range | 95 - 265 V | 10 - 60 V | 18 - 53 V |
| Current consumption @ DIN tone | 85 mA @ 230 V AC | 355 mA @ 24 V DC | 630 mA @ 24 V AC |
| Current consumption (max) | 95 mA @ 230 V AC | 400 mA @ 24 V DC | 700 mA @ 24 V AC |
| Sound pressure level @ DIN tone | 114 dB(A) @ 1m | | |
| Sound pressure level max. | 116 dB(A) @ 1m | | |
| Sound level reduction | -4 dB / -10 dB / -16 dB / -22 dB / -26 dB / -30 dB | | |
| Alarm tones | 80 / 3 ext. selectable | | |
| Sound time out | 60 s / 15 min / 45 min / none | | |
| Operating / storage temperature | -40 °C ... +55 °C / -40 °C ... +70 °C | | |
| Degree of protection | IP66 / IP67 / NEMA 4/4x / IK09 | | |
| Material | Aluminum | | |
| Clamping range of the cable fitting | 7 - 13 mm | | |
| Connecting terminals | stranded 2.5 mm ² , solid 4.0 mm ² | | |
| Weight | 2650 g | 2680 g | 2650 g |

OPTIONS



approval

DIMENSIONS



| ARTICLE NO. | PRO 10 | | |
|-------------|----------------|--------------|--------------|
| VERSION | 115 / 230 V AC | 12 - 48 V DC | 24 / 48 V AC |
| Standard | 23150640000 | 23150630000 | on request |
| DNV/MED/MER | 23150640001 | 23150630001 | on request |

Article numbers for other voltages and versions on request.

| TONE TABLE | | | |
|------------|---|--------------------|--|
| NO. | DESCRIPTION | | |
| 1 | no tone | | |
| 2 | Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP | 1200 Hz 500 Hz | |
| 9 | Slow whoop, fire alarm, UK BS5839-1 | 970 Hz 800 Hz | |
| 11 | Interrupted tone (fast) | 970 Hz 800 Hz | |
| 13 | Interrupted tone | 900 Hz 700 Hz | |
| 15 | Slow whoop, evacuation alarm Netherlands NEN 2575 | 1200 Hz 500 Hz | |
| 16 | Slow whoop, evacuation alarm Australia AS2220 | 1200 Hz 500 Hz | |
| 18 | Slow whoop, NFPA | 775 Hz 422 Hz | |
| 22 | Pulsating tone, Australien alert AS1670, ISO8201 | 1200 Hz 500 Hz | |
| 23 | Siren | 2400 Hz 500 Hz | |
| 24 | Siren | 1200 Hz 300 Hz | |
| 25 | Siren | 800 Hz 300 Hz | |
| 26 | Siren, industrial alarm Germany | 1000 Hz 150 Hz | |
| 27 | Sweeping | 2900 Hz 2400 Hz | |
| 29 | Sweeping (fast) | 2900 Hz 2400 Hz | |
| 30 | Sweeping | 2900 Hz 2400 Hz | |
| 31 | Sweeping, France NFC48-265 | 1600 Hz 1400 Hz | |
| 33 | Sweeping (medium), UK BS5839-1 | 1000 Hz 800 Hz | |
| 34 | Sweeping (fast) | 1000 Hz 800 Hz | |
| 35 | Sweeping (fast), UK BS5839-1 | 1000 Hz 800 Hz | |
| 36 | Sweeping | 1500 Hz 700 Hz | |
| 43 | Sweeping | 1200 Hz 500 Hz | |
| 44 | Sweeping, IMO 3d, Germany KTA3901 evacuation alarm | 1200 Hz 500 Hz | |
| 45 | Sweeping | 1200 Hz 500 Hz | |
| 46 | Sweeping, general alarm Finland | 1500 Hz 500 Hz | |
| 52 | Continuous tone | 2400 Hz | |
| 53 | Continuous tone | 2000 Hz | |
| 54 | Continuous tone, Finland (all-clear signal) | 1500 Hz | |
| 55 | Continuous tone, PFEER gas alarm | 1200 Hz | |
| 56 | Continuous tone | 1000 Hz | |
| 57 | Continuous tone, UK BS5839-1 | 950 Hz | |
| 59 | Continuous tone | 880 Hz | |
| 60 | Continuous tone | 825 Hz | |
| 61 | Continuous tone | 800 Hz | |
| 63 | Continuous tone | 725 Hz | |
| 65 | Continuous tone, Sweden SS031711 (all-clear signal) | 660 Hz | |
| 66 | Continuous tone | 554 Hz | |
| 67 | Continuous tone, Germany KTA3901 (all-clear signal) | 500 Hz | |
| 68 | Continuous tone | 470 Hz | |
| 69 | Continuous tone | 440 Hz | |
| 71 | Continuous tone | 340 Hz | |
| 77 | Interrupted tone | 2200 Hz | |
| 82 | Interrupted tone, PFEER (general alarm), UK BS5839-1 (back-up alarm) | 1000 Hz | |
| 83 | Interrupted tone, PFEER (general alarm) | 1000 Hz | |
| 88 | Interrupted tone | 950 Hz | |
| 90 | Interrupted tone | 825 Hz | |
| 91 | Interrupted tone | 800 Hz | |
| 92 | Interrupted tone | 800 Hz | |
| 93 | Interrupted tone (fast), Horn | 800 Hz | |
| 97 | Interrupted tone | 725 Hz | |
| 98 | Interrupted tone, Sweden SS031711 (emergency signal) | 700 Hz | |
| 100 | Interrupted tone, industrial alarm Germany | 680 Hz | |
| 101 | Interrupted tone, Sweden SS031711 (important message (pre-mess)) | 660 Hz | |
| 102 | Interrupted tone, Sweden SS031711 (local warning) | 660 Hz | |
| 103 | Interrupted tone, Sweden SS031711 (air raid warning) | 660 Hz | |
| 104 | Interrupted tone, Sweden SS031711 (emergency signal) | 660 Hz | |
| 107 | Interrupted tone, Germany KTA3901 (evacuation alarm) | 500 Hz | |
| 109 | Interrupted tone, Australia AS2220, AS1610, AS1670 | 420 Hz | |
| 110 | Interrupted tone, (fast variable), bell | 1450 Hz | |
| 111 | Interrupted tone, ISO8201 (emergency evacuation signal), USA (evacuation alarm) | 470 Hz | |
| 112 | Interrupted tone, ISO8201 (emergency evacuation signal) | 950 Hz | |
| 113 | Interrupted tone, ISO8201 (emergency evacuation signal), sweeping | 2850 Hz | |

| TONE TABLE | | | | | |
|------------|--|-------------|-----|--|-------------|
| NO. | DESCRIPTION | | | | |
| 115 | Interrupted tone, IMO (telephone call) | 950 Hz | 131 | Alternating tone, UK BS5839-1 (fire alarm, railway crossing) | 1000 Hz |
| 116 | Interrupted tone, IMO (leave ship) | 950 Hz | 135 | Alternating tone, UK BS5839-1 (fire alarm, increased urgency – railway crossing) | 1000 Hz |
| 117 | Interrupted tone, IMO SOLAS III/50 + SOLAS III/6.4 (general alarm) | 825 Hz | 142 | Alternating tone | 900 Hz |
| 122 | Alternating tone | 2900 Hz | 143 | Alternating tone, industrial alarm Germany | 500 Hz |
| 123 | Alternating tone | 2400 Hz | 144 | Alternating tone | 660 Hz |
| 124 | Alternating tone, Singapore | 2900 Hz | 146 | Alternating tone, France NFS 32-001 (fire alarm) | 650 Hz |
| 125 | Alternating tone | 1400 Hz | 147 | Alternating tone, Sweden SS031711 | 440 Hz |
| 128 | Alternating tone | 1025 Hz | 148 | Alternating tone, Sweden SS031711 | 554 Hz |
| 130 | Alternating tone, UK BS5839-1 (fire alarm) | 825 Hz | 152 | Alternating tone (two tone chime) | 440 Hz |
| | | 1000 Hz | | | 800 Hz |
| | | 800 Hz | | | 650 Hz |

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