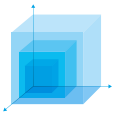
PROTECT LED SOUNDER 116 dB(A)
PRO L 10



- Excellent robustness – Cast aluminium housing guarantees long lasting use in tough applications
- Selectable signaling modes – Continuous light, blinking light or flashing light
- Outstanding perceptibility – Ideal radiation characteristics and high penetration of acoustical obstacles reduce the required number of devices
- Selectable tone – 80 different tones, 3 additional tones externally selectable
- Selectable sound pressure – Reduction of 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 | IP 66/67 protection system | IK08 impact-proof housing | +55 °C / –40 °C operating temperature | 10 Years warranty | sound adjustable | NEMA 4/4X protection system | UL pending | EAC approval | ext. sound reduction | lim t DC version, inrush current limitation

3D-COVERAGE PERFORMANCE DATA		PRO L 10			
	VISUAL	Indicate	43 x 39 x 44 m	AUDIBLE	80 dB (A)	51 x 49 x 24 m @DIN tone
		Warn	19 x 17 x 20 m		85 dB (A)	29 x 27 x 14 m @DIN tone
		Alarm	10 x 9 x 10 m		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.

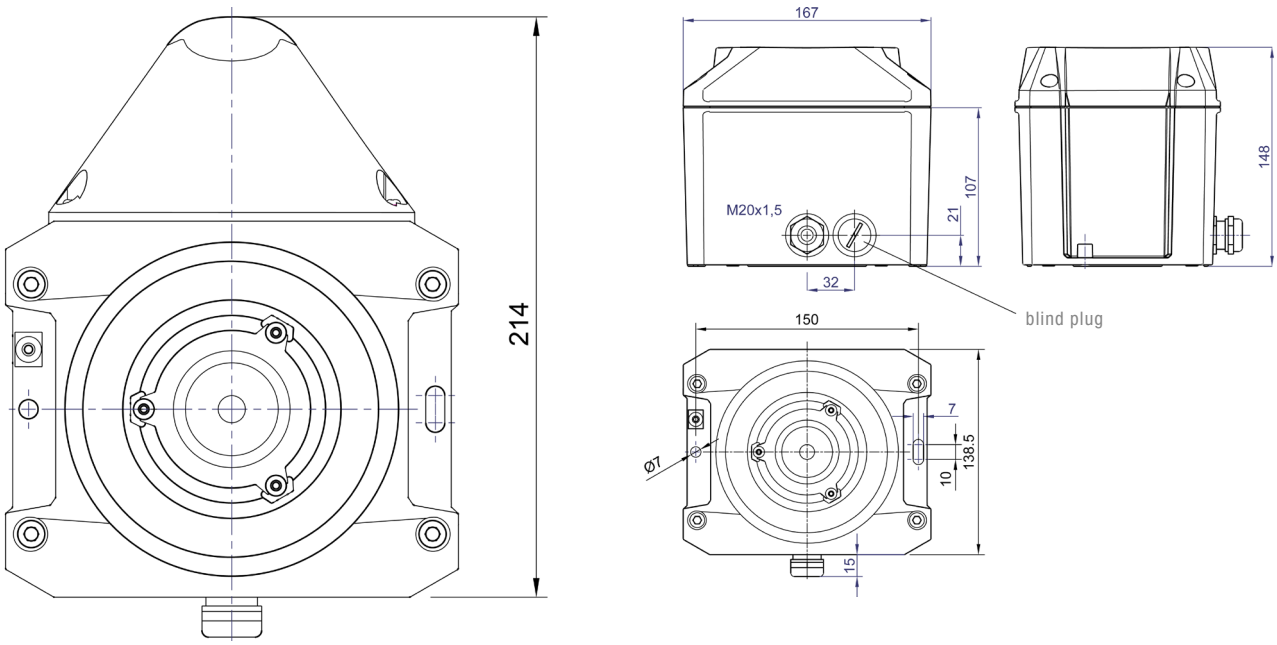
PRODUCT		PRO L 10		
DATA				
Rated voltage		230 / 115 V AC / 120 V DC	24 V AC	12–48 V DC
Rated frequency		50 / 60 Hz / –	50 / 60 Hz	–
Operating range		95–265 V AC / 108-132 V DC	21.6–26.4 V	10–60 V
Current consumption light (max)		120 mA @ 230 V AC	167 mA @ 24 V AC	120 mA @ 24 V DC
Current consumption sounder (max)		95 mA @ 230 V AC	700 mA @ 24 V AC	400 mA @ 24 V DC
Current consumption sounder @ DIN tone		85 mA @ 230 V AC	630 mA @ 24 V AC	355 mA @ 24 V DC
Sound pressure level max.		116 dB (A) @ 1m		
Sound pressure level max.@ DIN tone		114 dB (A) @ 1m		
Sound level reduction		-4 dB / -10 dB / -16 dB / -22 dB / -26 dB / -30 dB		
Tones		80 / 3 ext. selectable		
Sound time-out		60 s / 15 min / 45 min / none		
Light types		flashing light (0.1 Hz, 0.5 Hz, 0.75 Hz, 1 Hz, 1 Hz double flash), blink light (1 Hz, 2 Hz), continuous light		
Light intensity [1]		23 cd (reducable)		
Max. viewing distance		111 m		
Operating / storage temperature		–40 °C ... +55 °C / –40 °C ... +70 °C		
Degree of protection		IP66 / IP67 / NEMA 4/4x / IK09 (Housing), IK08 (Lens)		
Service life of the light source		≥50,000 hrs		
Material	Sounder	Aluminum		
	Light	⊘ ● ● ● ● ● (○ - RGB) Polycarbonate (PC)		
Connecting terminal		stranded 2.5 mm², solid 4.0 mm²		
Weight		2800 g		

[1] with a clear lens

OPTIONS

DNV MED MER
approval

DIMENSIONS



ORDERING DETAILS	PRO L 10		
LENS COLOUR	230 / 115 V AC / 120 V DC	24 V AC	12 -48 V DC
●	23151645000	on request	23151635000
● DNV/MED/MER	23151645001	on request	23151635001

Article numbers for other colours and voltages on request.

TONE TABLE

NO.	DESCRIPTION
1	no tone
2	Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP
9	Slow whoop, fire alarm, UK BS5839-1
11	Interrupted tone (fast)
13	Interrupted tone
15	Slow whoop, evacuation alarm Netherlands NEN 2575
16	Slow whoop, evacuation alarm Australia AS2220
18	Slow whoop, NFPA
22	Pulsating tone, Australien alert AS1670, ISO8201
23	Siren
24	Siren
25	Siren
26	Siren, industrial alarm Germany
27	Sweeping
29	Sweeping (fast)
30	Sweeping
31	Sweeping, France NFC48-265
33	Sweeping (medium), UK BS5839-1
34	Sweeping (fast)
35	Sweeping (fast), UK BS5839-1
36	Sweeping
43	Sweeping
44	Sweeping, IMO 3d, Germany KTA3901 evacuation alarm
45	Sweeping
46	Sweeping, general alarm Finland
52	Continuous tone
53	Continuous tone
54	Continuous tone, Finland (all-clear signal)
55	Continuous tone, PFEER gas alarm
56	Continuous tone
57	Continuous tone, UK BS5839-1
59	Continuous tone
60	Continuous tone
61	Continuous tone
63	Continuous tone
65	Continuous tone, Sweden SS031711 (all-clear signal)
66	Continuous tone
67	Continuous tone, Germany KTA3901 (all-clear signal)
68	Continuous tone
69	Continuous tone
71	Continuous tone
77	Interrupted tone
82	Interrupted tone, PFEER (general alarm), UK BS5839-1 (back-up alarm)
83	Interrupted tone, PFEER (general alarm)
88	Interrupted tone
90	Interrupted tone
91	Interrupted tone
92	Interrupted tone
93	Interrupted tone (fast), Horn
97	Interrupted tone
98	Interrupted tone, Sweden SS031711 (emergency signal)
100	Interrupted tone, industrial alarm Germany
101	Interrupted tone, Sweden SS031711 (important message (pre-mess))
102	Interrupted tone, Sweden SS031711 (local warning)
103	Interrupted tone, Sweden SS031711 (air raid warning)
104	Interrupted tone, Sweden SS031711 (emergency signal)
107	Interrupted tone, Germany KTA3901 (evacuation alarm)
109	Interrupted tone, Australia AS2220, AS1610, AS1670
110	Interrupted tone, (fast variable), bell
111	Interrupted tone, ISO8201 (emergency evacuation signal), USA (evacuation alarm)
112	Interrupted tone, ISO8201 (emergency evacuation signal)
113	Interrupted tone, ISO8201 (emergency evacuation signal), sweeping

TONE TABLE

NO.	DESCRIPTION	NO.	DESCRIPTION
115	Interrupted tone, IMO (telephone call)	131	Alternating tone, UK BS5839-1 (fire alarm, railway crossing)
116	Interrupted tone, IMO (leave ship)	135	Alternating tone, UK BS5839-1 (fire alarm, increased urgency – railway crossing)
117	Interrupted tone, IMO SOLAS III/50 + SOLAS III/6.4 (general alarm)	142	Alternating tone
122	Alternating tone	143	Alternating tone, industrial alarm Germany
123	Alternating tone	144	Alternating tone
124	Alternating tone, Singapore	146	Alternating tone, France NFS 32-001 (fire alarm)
125	Alternating tone	147	Alternating tone, Sweden SS031711
128	Alternating tone	148	Alternating tone, Sweden SS031711
130	Alternating tone, UK BS5839-1 (fire alarm)	152	Alternating tone (two tone chime)

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 flashing 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