PROTECT SOUNDER 116 dB(A)
PRO 10-Ex SIL



- Excellent robustness – Cast aluminium housing guarantees long lasting use in tough applications
- SIL 2/PL d – Fulfilling functional safety requirements by integrated safety design and diagnosis channel
- Explosion proof – for potentially explosive areas in zone 2 (3G) and zone 22 (3D) as well as Class I / II / III Div2
- 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



protection system



impact-proof housing



operating temperature



warranty


sound adjustable







approval



protection system


ext. sound reduction



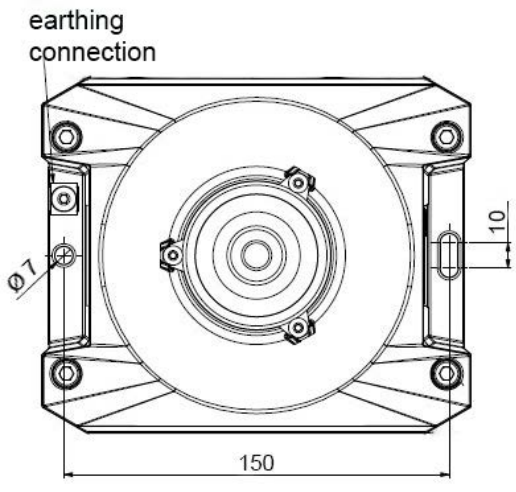
DC version, inrush current limitation

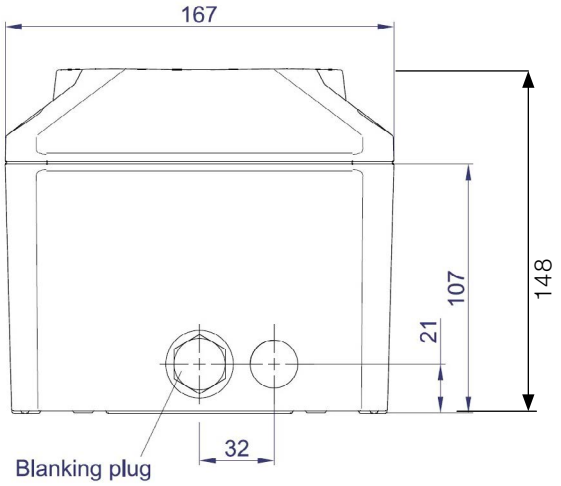
3D-COVERAGE PERFORMANCE DATA		PRO 10-EX SIL
AUDIBLE	80 dB (A)	51 x 49 x 24 m @ DIN tone
	85 dB (A)	29 x 27 x 14 m @ DIN tone
	90 dB (A)	16 x 15 x 8 m @ DIN tone

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

PRODUCT		PRO 10-Ex SIL	
DATA			
Rated voltage		115 / 230 V AC	12 - 48 V DC
Rated frequency		50 / 60 Hz	
Operating range		95 - 265 V	10 - 60 V
Current consumption @ DIN tone		85 mA @ 230 V AC	355 mA @ 24 V DC
Current consumption (max)		95 mA @ 230 V AC	400 mA @ 24 V DC
Diagnostic channel	Current consumption	25 mA @ 230V AC	14.9 mA @ 24 V DC
	Switching power	230 V / 80 mA	
Type of protection		Ex ec / Ex tc	
Explosion protection		See manual	
Category (area of use)		3G (Zone 2), 3D (Zone 22) I Class I / II / III Div2	
Certificate of conformity		Pfannenberg PDG 24.0009 X I UL	
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	
Temperature class T		up to IIC T4 @ Ta -40°C...+55 °C further details see certificate and installation instruction	
Operating / storage temperature		–40 °C ... +55 °C / –40 °C ... +70 °C	
Duty cycle		100 %	
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 mm², solid 4.0 mm²	
Weight		2770 g	2720 g

DIMENSIONS





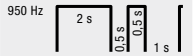
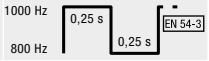
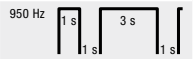
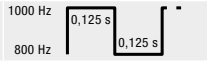
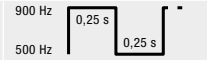
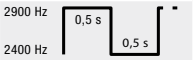
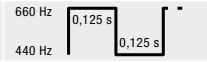
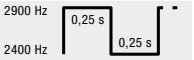
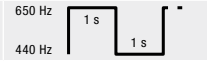
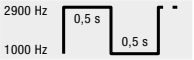
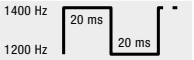
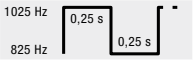
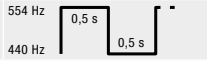
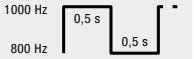
ARTICLE NO.	PRO 10-Ex SIL	
VERSION	115 / 230 V AC	12 - 48 V DC
Ex SIL	23150640017	23150630017

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
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