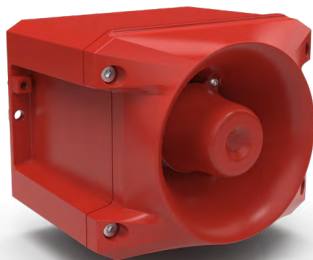


PROTECT SOUNDER 116 dB(A) PRO 10 3G/3D SIL ATEX



- 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)
- 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



SIL PL



UL



approval



protection system



pending



ext. sound reduction



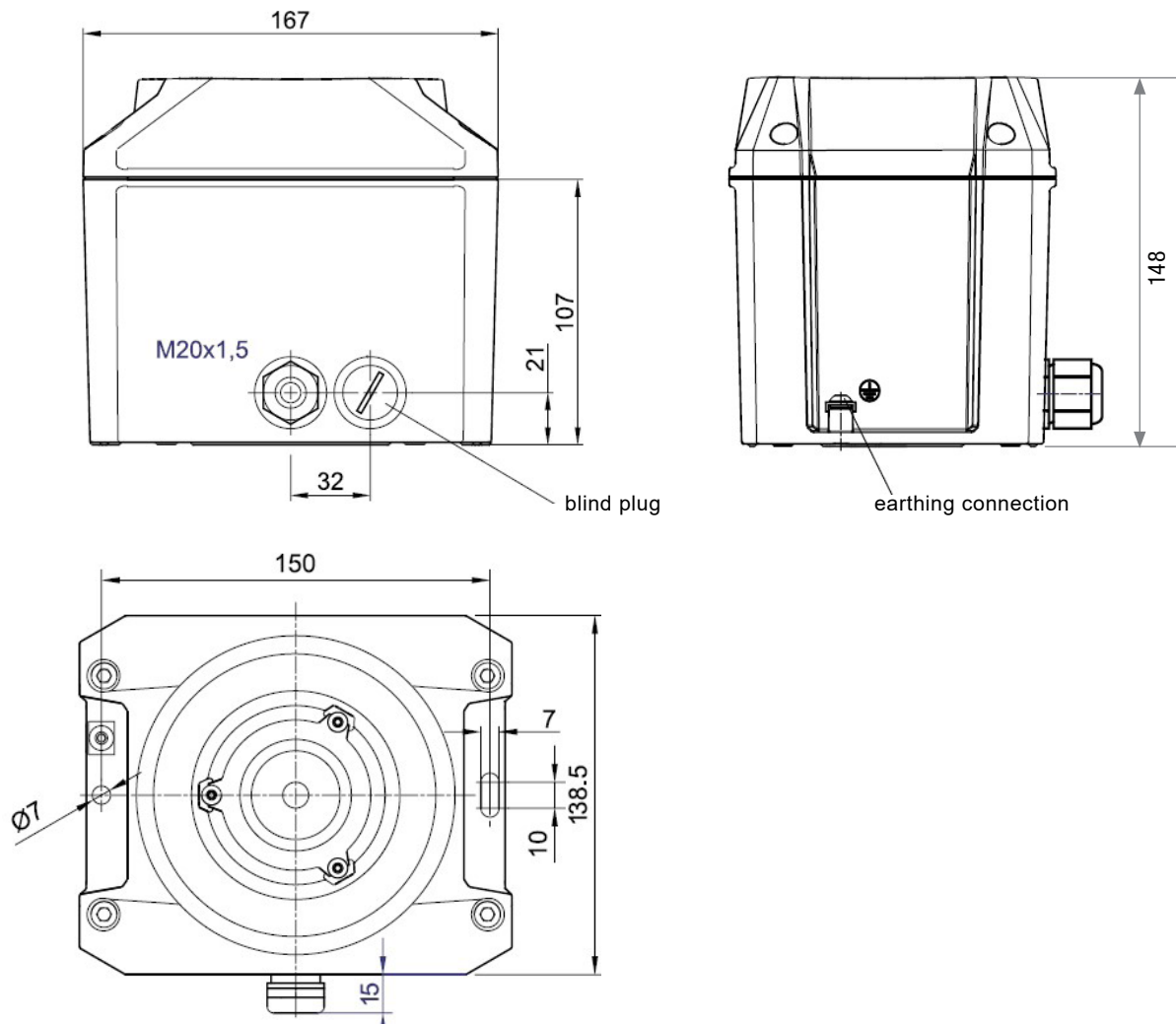
DC version, inrush current limitation

3D-COVERAGE PERFORMANCE DATA		PRO 10 3G/3D 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.

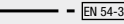
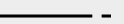
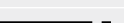
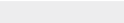
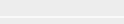
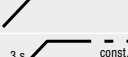
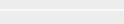
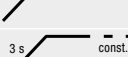
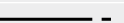
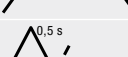
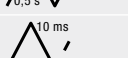
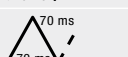
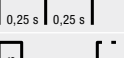
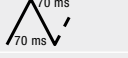
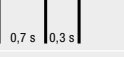
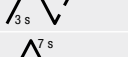
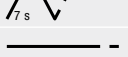
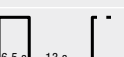
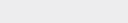
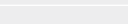
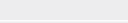
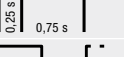
PRODUCT		PRO 10 3G/3D SIL	
DATA			
Rated voltage		115 / 230 V AC	12 - 48 V DC
Rated frequency		50 / 60 Hz	
Operating range		95 - 265 V	10 - 60 V
Current consumption @ DIN tone		85 mA @ 230 V AC	355 mA @ 24 V DC
Current consumption (max)		95 mA @ 230 V AC	400 mA @ 24 V DC
Diagnostic channel	Current consumption	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)	
Certificate of conformity		Pfannenberger PDG 03.0001 X	
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 3G/3D SIL	
VERSION	115 / 230 V AC	12 - 48 V DC
3G/3D SIL	23150640017	23150630017

Article numbers for other voltages and versions on request.

TONE TABLE							
NO.	DESCRIPTION			NO.	DESCRIPTION		
1	no tone			57	Continuous tone, UK BS5839-1		950 Hz 
2	Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP		1200 Hz  500 Hz	59	Continuous tone		880 Hz 
9	Slow whoop, fire alarm, UK BS5839-1		970 Hz  800 Hz	60	Continuous tone		825 Hz 
11	Interrupted tone (fast)		970 Hz  800 Hz	61	Continuous tone		800 Hz 
13	Interrupted tone		900 Hz  700 Hz	63	Continuous tone		725 Hz 
15	Slow whoop, evacuation alarm Netherlands NEN 2575		1200 Hz  500 Hz	65	Continuous tone, Sweden SS031711 (all-clear signal)		660 Hz 
16	Slow whoop, evacuation alarm Australia AS2220		1200 Hz  500 Hz	66	Continuous tone		554 Hz 
18	Slow whoop, NFPA		775 Hz  422 Hz	67	Continuous tone, Germany KTA3901 (all-clear signal)		500 Hz 
22	Pulsating tone, Australien alert AS1670, ISO8201		1200 Hz  500 Hz	68	Continuous tone		470 Hz 
23	Siren		2400 Hz  500 Hz	69	Continuous tone		440 Hz 
24	Siren		1200 Hz  300 Hz	71	Continuous tone		340 Hz 
25	Siren		800 Hz  300 Hz	77	Interrupted tone		2200 Hz 
26	Siren, industrial alarm Germany		1000 Hz  150 Hz	82	Interrupted tone, PFEER (general alarm), UK BS5839-1 (back-up alarm)		1000 Hz 
27	Sweeping		2900 Hz  2400 Hz	83	Interrupted tone, PFEER (general alarm)		1000 Hz 
29	Sweeping (fast)		2900 Hz  2400 Hz	88	Interrupted tone		950 Hz 
30	Sweeping		2900 Hz  2400 Hz	90	Interrupted tone		825 Hz 
31	Sweeping, France NFC48-265		1600 Hz  1400 Hz	91	Interrupted tone		800 Hz 
33	Sweeping (medium), UK BS5839-1		1000 Hz  800 Hz	92	Interrupted tone		800 Hz 
34	Sweeping (fast)		1000 Hz  800 Hz	93	Interrupted tone (fast), Horn		800 Hz 
35	Sweeping (fast), UK BS5839-1		1000 Hz  800 Hz	97	Interrupted tone		725 Hz 
36	Sweeping		1500 Hz  700 Hz	98	Interrupted tone, Sweden SS031711 (emergency signal)		700 Hz 
43	Sweeping		1200 Hz  500 Hz	100	Interrupted tone, industrial alarm Germany		680 Hz 
44	Sweeping, IMO 3d, Germany KTA3901 evacuation alarm		1200 Hz  500 Hz	101	Interrupted tone, Sweden SS031711 (important message (pre-mess))		660 Hz 
45	Sweeping		1200 Hz  500 Hz	102	Interrupted tone, Sweden SS031711 (local warning)		660 Hz 
46	Sweeping, general alarm Finland		1500 Hz  500 Hz	103	Interrupted tone, Sweden SS031711 (air raid warning)		660 Hz 
52	Continuous tone		2400 Hz 	104	Interrupted tone, Sweden SS031711 (emergency signal)		660 Hz 
53	Continuous tone		2000 Hz 	107	Interrupted tone, Germany KTA3901 (evacuation alarm)		500 Hz 
54	Continuous tone, Finland (all-clear signal)		1500 Hz 	109	Interrupted tone, Australia AS2220, AS1610, AS1670		420 Hz 
55	Continuous tone, PFEER gas alarm		1200 Hz 	110	Interrupted tone, (fast variable), bell		1450 Hz 
56	Continuous tone		1000 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		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	660 Hz
123	Alternating tone	2900 Hz	144	Alternating tone	650 Hz
124	Alternating tone, Singapore	2900 Hz	146	Alternating tone, France NFS 32-001 (fire alarm)	554 Hz
125	Alternating tone	1400 Hz	147	Alternating tone, Sweden SS031711	554 Hz
128	Alternating tone	1025 Hz	148	Alternating tone, Sweden SS031711	554 Hz
130	Alternating tone, UK BS5839-1 (fire alarm)	1000 Hz	152	Alternating tone (two tone chime)	800 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