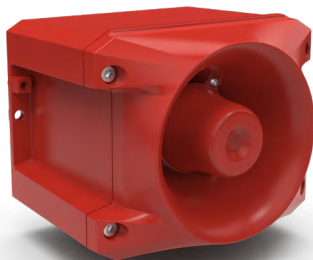


PROTECT SOUNDER 116 dB(A) PRO 10 3G/3D SIL ATEX



- 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


pending



approval


protection
system


pending


ext. sound
reduction

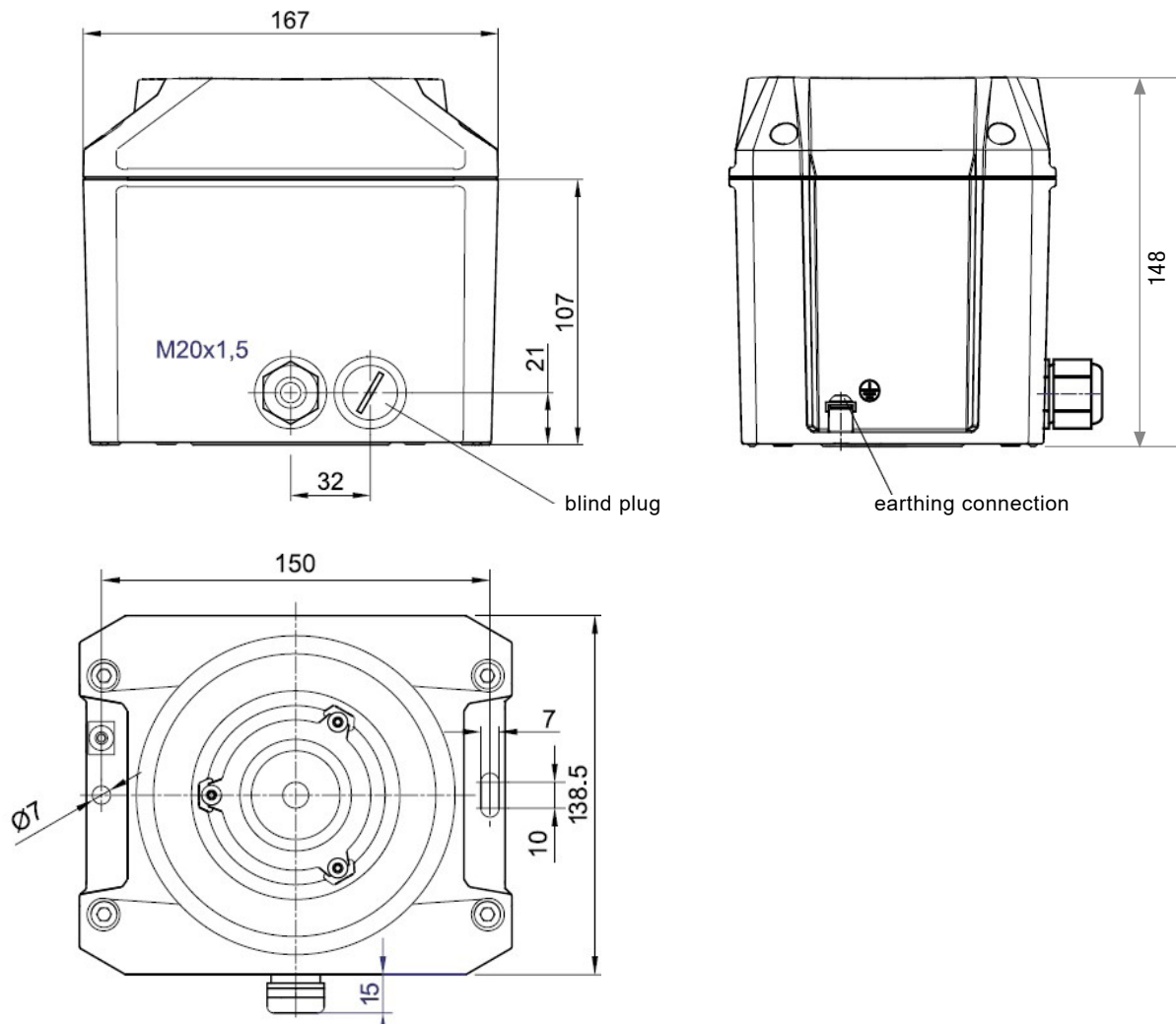
DC version,
inrush current
limitation

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		Pfannenberg 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 1 s EN 54-3	59	Continuous tone	880 Hz	
9	Slow whoop, fire alarm, UK BS5839-1		970 Hz 1 s	60	Continuous tone	825 Hz	EN 54-3
11	Interrupted tone (fast)		970 Hz 20 ms	61	Continuous tone	800 Hz	
13	Interrupted tone		900 Hz 0,3 s	63	Continuous tone	725 Hz	
15	Slow whoop, evacuation alarm Netherlands NEN 2575		1200 Hz 3,5 s EN 54-3	65	Continuous tone, Sweden SS031711 (all-clear signal)	660 Hz	
16	Slow whoop, evacuation alarm Australia AS2220		1200 Hz 3,75 s	66	Continuous tone	554 Hz	
18	Slow whoop, NFPA		775 Hz 0,85 s	67	Continuous tone, Germany KTA3901 (all-clear signal)	500 Hz	
22	Pulsating tone, Australien alert AS1670, ISO8201		1200 Hz 0,6 s	68	Continuous tone	470 Hz	
23	Siren		2400 Hz 3 s	69	Continuous tone	440 Hz	
24	Siren		1200 Hz 3 s	71	Continuous tone	340 Hz	
25	Siren		800 Hz 3 s	77	Interrupted tone	2200 Hz	
26	Siren, industrial alarm Germany		1000 Hz 10 s	82	Interrupted tone, PFEER (general alarm), UK BS5839-1 (back-up alarm)	1000 Hz	
27	Sweeping		2900 Hz 0,5 s	83	Interrupted tone, PFEER (general alarm)	1000 Hz	
29	Sweeping (fast)		2900 Hz 10 ms	88	Interrupted tone	950 Hz	
30	Sweeping		2400 Hz 70 ms	90	Interrupted tone	825 Hz	
31	Sweeping, France NFC48-265		1600 Hz 1 s	91	Interrupted tone	800 Hz	
33	Sweeping (medium), UK BS5839-1		1000 Hz 0,5 s	92	Interrupted tone	800 Hz	
34	Sweeping (fast)		1000 Hz 10 ms	93	Interrupted tone (fast), Horn	800 Hz	
35	Sweeping (fast), UK BS5839-1		1000 Hz 70 ms	97	Interrupted tone	725 Hz	
36	Sweeping		1500 Hz 1,5 s	98	Interrupted tone, Sweden SS031711 (emergency signal)	700 Hz	
43	Sweeping		1200 Hz 1,5 s	100	Interrupted tone, industrial alarm Germany	680 Hz	
44	Sweeping, IMO 3d, Germany KTA3901 evacuation alarm		1200 Hz 1 s	101	Interrupted tone, Sweden SS031711 (important message (pre-mess))	660 Hz	
45	Sweeping		1200 Hz 3 s	102	Interrupted tone, Sweden SS031711 (local warning)	660 Hz	
46	Sweeping, general alarm Finland		1500 Hz 7 s	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 EN 54-3
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 EN 54-3
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