

# PROTECT FLASHING SOUNDER 116 dB(A) / 5 J PRO X 10-05



- Excellent robustness – Cast aluminium housing guarantees long lasting use in tough applications
- Exceptional visibility – High performance xenon flash light for a reliable alarming
- 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



protection system



impact-proof housing



operating temperature



warranty



sound adjustable



protection system



pending



EAC

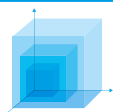


ext. sound reduction



DC version inrush current limitation

## 3D-COVERAGE PERFORMANCE DATA PRO X 10-05



	Indicate	Warn	Alarm
<b>VISUAL</b>	41 x 73 x 68 m	18 x 32 x 30 m	9 x 16 x 15 m
<b>AUDIBLE</b>	80 dB (A)	85 dB (A)	90 dB (A)
	51 x 49 x 24 m @DIN tone	29 x 27 x 14 m @DIN tone	16 x 15 x 8 m @DIN tone

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

## PRODUCT DATA PRO X 10-05

PRODUCT DATA	PRO X 10-05			
Rated voltage	230 V AC	115 V AC	24 V AC	12-48 V DC
Rated frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz	-
Operating range	187-253 V	90-135 V AC	18-30 V	10-57 V
Current consumption light (max)	95 mA @ 230 V AC	140 mA @ 115 V AC	600 mA @ 24 V AC	280 mA @ 24 V DC
Current consumption sounder (max)	95 mA @ 230 V AC	145 mA @ 115 V AC	700 mA @ 24 V AC	400 mA @ 24 V DC
Current consumption sounder @ DIN tone	85 mA @ 230 V AC	135 mA @ 115 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			
Flash energy / rate	5 J with 0.1 / 0.5 / 0.75 / 1 Hz			
Light intensity (DIN 5037) <sup>1</sup>	56 cd			
Max. viewing distance	173 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	light emission still 70 % after 8,000,000 flashes			
Material	Sounder	Aluminum		
	Light	Polycarbonate (PC)		
Connecting terminal	stranded 2.5 mm <sup>2</sup> , solid 4.0 mm <sup>2</sup>			
Weight	2800 g			

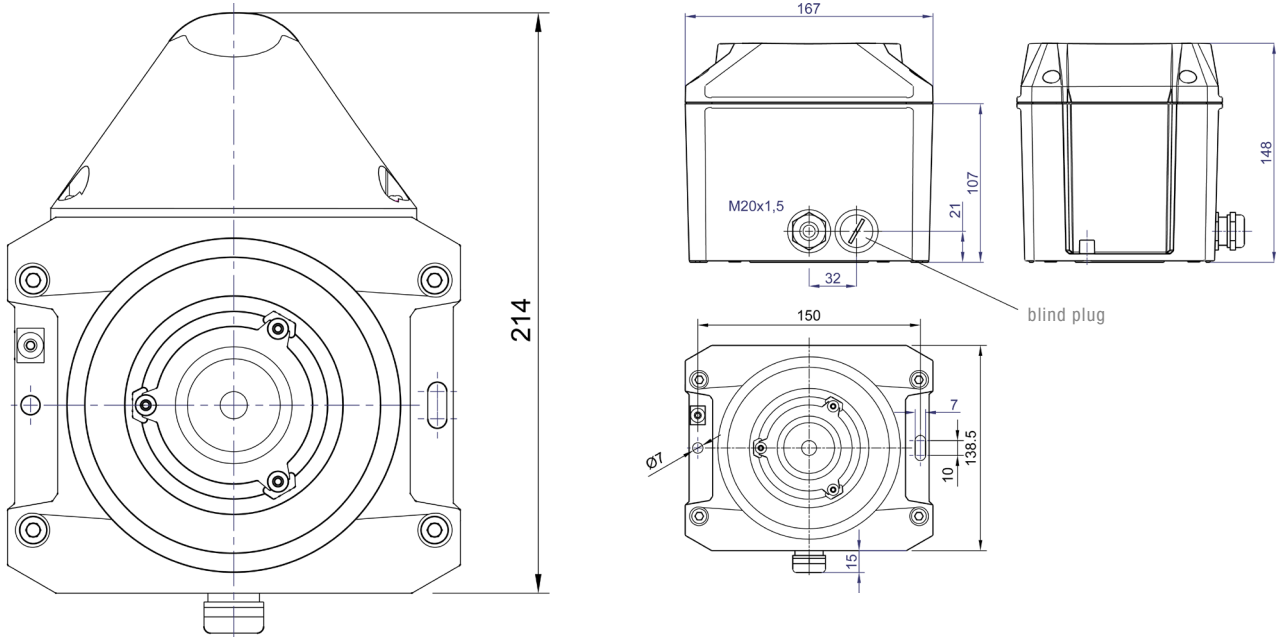
<sup>1</sup> with a clear lens

**OPTIONS**



SSM (24V DC)  
inrush current  
limitation

**DIMENSIONS**



ORDERING DETAILS	PRO X 10-05			
LENS COLOUR	230 V AC	115 V AC	24 V AC	12 - 48 V DC
●	23152105000	23152105000	on request	23152635000
●	23152104000	23152104000	on request	23152634000
●	23152103000	23152103000	on request	23152633000

Article numbers for other colours and voltages on request.

**STONE 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 800 Hz 
116	Interrupted tone, IMO (leave ship)	950 Hz 	135	Alternating tone, UK BS5839-1 (fire alarm, increased urgency – railway crossing)	1000 Hz 800 Hz 
117	Interrupted tone, IMO SOLAS III/50 + SOLAS III/6.4 (general alarm)	825 Hz 	142	Alternating tone	900 Hz 500 Hz 
122	Alternating tone	2900 Hz 2400 Hz 	143	Alternating tone, industrial alarm Germany	660 Hz 440 Hz 
123	Alternating tone	2900 Hz 2400 Hz 	144	Alternating tone	650 Hz 440 Hz 
124	Alternating tone, Singapore	2900 Hz 1000 Hz 	146	Alternating tone, France NFS 32-001 (fire alarm)	554 Hz 440 Hz 
125	Alternating tone	1400 Hz 1200 Hz 	147	Alternating tone, Sweden SS031711	554 Hz 440 Hz 
128	Alternating tone	1025 Hz 825 Hz 	148	Alternating tone, Sweden SS031711	554 Hz 440 Hz 
130	Alternating tone, UK BS5839-1 (fire alarm)	1000 Hz 800 Hz 	152	Alternating tone (two tone chime)	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

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