

IS-MINI SOUNDER 102 dB(A)
IS-mA1



protection
system



operating
temperature

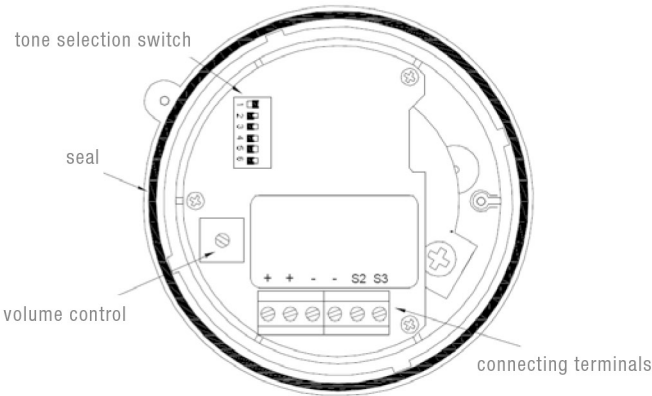
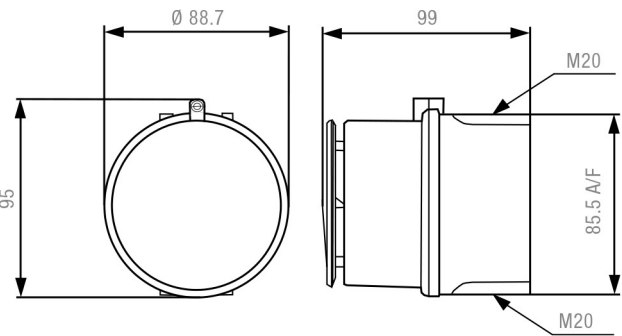


- Very economical acoustic alarm.
- Certified for use in Ex-Zones 0, 1 and 2!
 - Compact design with a diameter of just 88 m.
 - Sounder operated via certified zener barriers or galvanic isolators.
 - 49 loud tones at 102 dB(A).
 - Very well suited for fire alarm systems and direct control due to low power consumption.
 - Self-synchronising sounder for clear tone perception.
 - 2 different externally controllable tones.
 - Volume control.
 - Also available as mining-certified device (IM1 EEx ia).

PRODUCT	IS-mA1
DATA	
Rated voltage	24 V DC
Operating range	16–28 V
Nominal current consumption	25 mA (typical for connection to 24 V DC via 28 V / 300 Ω zener barrier)
Type of protection	“ia” inherently safe
Explosion protection	II 1G EEx ia IIC T4 –40 °C ... +60 °C Ta
Category (area of use)	1G (Zone 0) / 2G (Zone 1) / 3G (Zone 2)
Certificate of conformity	SIRA 05 ATEX2084 X
Testing body	SIRA
Sound pressure level	102 dB(A)
Sound pressure level @DIN-tone	98 dB(A)
Sound level reduction	by –20 dB
Storage temperature	–40 °C ... +70 °C
Relative humidity	90 %
Protection system (EN 60529)	IP 65
Duty cycle	100 %
Material	ABS, self-extinguishing UL94V0 & 5VA, similar to RAL 3000 (flame red)
Connecting terminals	0.5–2.5 mm ²
Cable entry	2x M20 (knock-outs prepared)
Weight	230 g

Power must be connected via a zener barrier (max. 28 V DC, 93 mA DC, 0.66 W) or a galvanic isolator, specified by the system certificate.

DIMENSIONS CONNECTION DIAGRAM



TONE TABLE

NO.	DESCRIPTION – FREQUENCY		STAGE		NO.	DESCRIPTION – FREQUENCY		STAGE	
			2	3				2	3
1	Continuous tone	340 Hz		2	5				
2	Alternating tone, UK BS5839-1 (fire alarm, railway crossing)	1000 Hz 800 Hz		17	5				
3	Slow whoop, evacuation alarm Netherlands NEN 2575	1200 Hz 500 Hz		2	5				
4	Sweeping (fast)	1000 Hz 800 Hz		6	5				
5	Continuous tone	2400 Hz		3	20				
6	Sweeping	2900 Hz 2400 Hz		7	5				
7	Sweeping (fast)	2900 Hz 2400 Hz		10	5				
8	Sweeping	1200 Hz 500 Hz		2	5				
9	Sawtooth, DIN-Ton 33404-3 Germany (emergency signal), PFEER PTAP	1200 Hz 500 Hz		15	2				
10	Alternating tone	2900 Hz 2400 Hz		7	5				
11	Interrupted tone	1000 Hz		2	5				
12	Alternating tone	1000 Hz 800 Hz		4	5				
13	Interrupted tone	2400 Hz		15	5				
14	Interrupted tone	800 Hz		4	5				
15	Continuous tone	800 Hz		2	5				
16	Interrupted tone	660 Hz		18	5				
17	Alternating tone, France NFS 32-001 (fire alarm)	554 Hz 440 Hz		2	27				
18	Interrupted tone, Sweden SS031711 (air raid warning)	660 Hz		2	5				
19	Sweeping, France NFC48-265	1600 Hz 1400 Hz		2	5				
20	Continuous tone, Sweden SS031711 (all-clear signal)	660 Hz		2	5				
21	Alternating tone	554 Hz 440 Hz		2	5				
22	Interrupted tone	554 Hz		2	5				
23	Interrupted tone	800 Hz		6	5				
24	Sweeping (medium), UK BS5839-1	1000 Hz 800 Hz		29	5				
25	Sweeping	2900 Hz 2400 Hz		29	5				
26	Simulated bell	1450 Hz		2	15				
27	Continuous tone	800 Hz		26	5				
28	Continuous tone	440 Hz		2	5				
29	Sweeping (fast), UK BS5839-1	1000 Hz 800 Hz		7	5				
30	Continuous tone	300 Hz		2	5				
31	Sweeping	1200 Hz 660 Hz		26	5				
32	2-tone bell sound	800 Hz 650 Hz		26	15				
33	Interrupted tone	745 Hz		2	5				
34	Alternating tone, Singapore	2000 Hz 1000 Hz		38	45				
35	Interrupted tone, Australian alert	420 Hz		35	5				
36	Sweeping, IMO 3d, Germany KTA3901 evacuation alarm	1200 Hz 500 Hz		35	3				
37	Continuous tone	1000 Hz		9	45				
38	Continuous tone	2000 Hz		34	45				
39	Interrupted tone	800 Hz		23	17				
40	Alternating tone, France NFS 32-001 (fire alarm)	554 Hz 440 Hz		31	27				
41	Motor siren	1200 Hz 800 Hz		2	5				
42	Motor siren	800 Hz		2	5				
43	Continuous tone, PFEER gas alarm	1200 Hz		2	5				
44	Motor siren	2400 Hz		2	5				
45	Interrupted tone, PFEER (general alarm)	1000 Hz		38	34				
46	Sawtooth, DIN-Ton 33404-3 Germany (emergency signal)	1200 Hz 500 Hz		47	37				
47	Interrupted tone, PFEER (general alarm)	1000 Hz		46	37				
48	Interrupted tone, Australia AS2220, AS1610, AS1670	420 Hz		49	5				
49	Sweeping, IMO 3d, Germany KTA3901 evacuation alarm	1200 Hz 500 Hz		26	37				

ARTICLE NO.	IS-mA1
Rated voltage	24 V DC
	32034800000