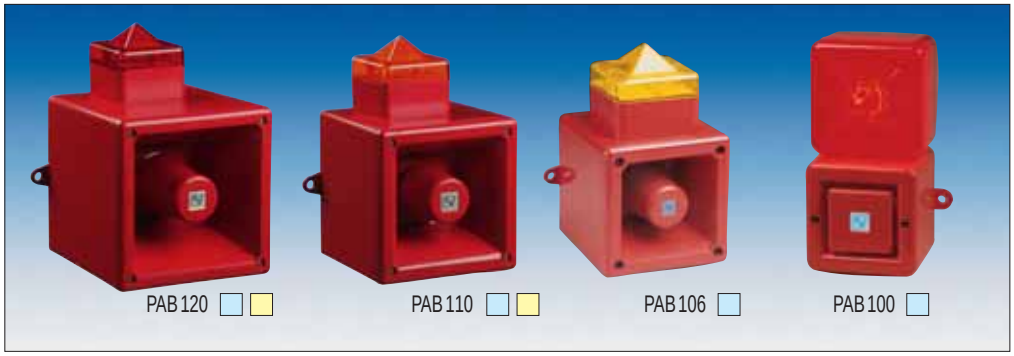
Flashing alarm sounders 5 Joule / 120, 110, 105, 100 dB (A)

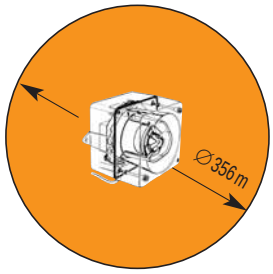


PAB 120 / PAB 110 / PAB 106 / PAB 100

In noisy working environments, it makes sense to complement acoustic alarms with a visual warning. It is even a legal requirement for situations when thresold values are exceeded. The yellow colour is stipulated as warning signal in the Accident Prevention Regulations. The six different warning patterns allow you to customize and match to internal alarm requirements.

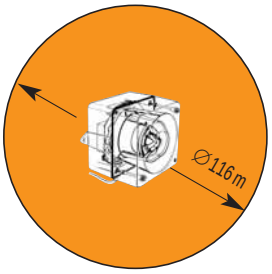
Acoustic data:

PAB 120 120 dB (A)



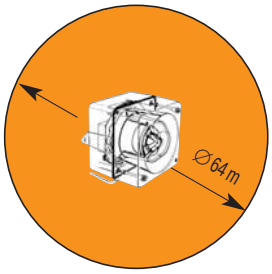
acoustic radiation area: 99.538 m² *)

PAB 110 110 dB (A)



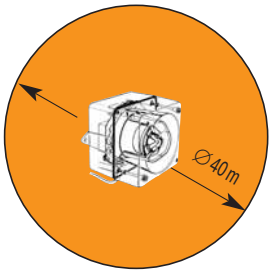
acoustic radiation area: 10.568 m² *)

PAB 106 105 dB (A)



acoustic radiation area: 3.217 m² *)

PAB 100 100 dB (A)



acoustic radiation area: 1.257 m² *)

*) see sample calculation under "Technology of acoustic alarms"

Sound level reduction	up to approx. 80 dB or with trimmer
Duty cycle	100%

Sound patterns: PAB 100 and PAB 106 = 32 tones! PAB 110 and PAB 120 = 45 tones!

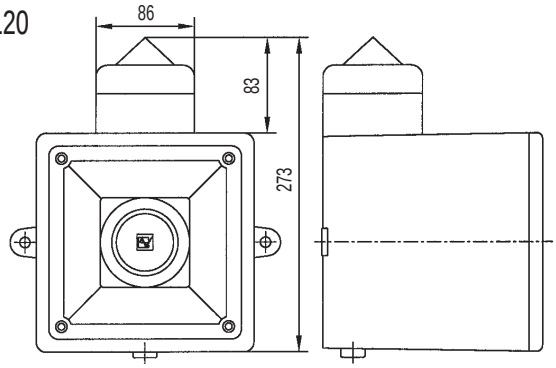
Tone No.	Tone description	stage 2	stage 3
1	Continuous tone 340 Hz	2	5
2	Alternating tone 800 Hz / 1000 Hz, change every 0,25 s	17	5
3	Slow whoop 500 Hz – 1200 Hz, duration 3 s, 0,5 s gap	2	5
4	Sweeping 800 Hz / 1000 Hz, at 1 Hz	6	5
5	Continuous tone 2400 Hz	3	20
6	Sweeping 2400 Hz / 2900 Hz, at 7 Hz	7	5
7	Sweeping 2400 Hz / 2900 Hz, at 1 Hz	10	5
8	Siren 500 Hz / 1200 Hz / 500 Hz, duration 3 s	2	5
9	Sawtooth 1200 Hz / 500 Hz within 1 s	15	2
10	Alternating tone 2400 Hz / 2900 Hz, change every 0,25 s	7	5
11	interrupted tone 1000 Hz, 0,5 s signal, 0,5 s gap	2	5
12	Alternating tone 800 Hz / 1000 Hz, change every 1,14 s	4	5
13	Interrupted tone 2400 Hz, 0,5 s signal, 0,5 s gap	15	5
14	Interrupted tone 800 Hz, 0,25 s signal, 1 s gap	4	5
15	Continuous tone 800 Hz	2	5
16	Interrupted tone 660 Hz 150 ms signal, 150 ms gap	18	5
17	Alternating tone 544 Hz (100 ms) / 440 Hz (400 ms) (NF S 32-001)	2	27
18	interrupted tone 660 Hz, 1,8 s signal, 1,8 s Pause	2	5
19	Sweeping 1400 Hz – 1600 Hz sweep up 1 s, sweep down 0,5 s (NF C 48-265)	2	5
20	Continuous tone 660 Hz	2	5
21	Alternating tone 554 Hz / 440 Hz, change every 0,5 s	2	5
22	Interrupted tone 660 Hz, 0,875 s signal, 0,875 s gap	2	5
23	Interrupted tone 800 Hz, 0,25 s signal, 0,25 s gap	6	5

Tone No.	Tone description	stage 2	stage 3
24	Sweeping 800 Hz / 1000 Hz, at 50 Hz	29	5
25	Sweeping 2400 Hz / 2900 Hz, at 50 Hz	29	5
26	Simulated bell sound	2	15
27	Continuous tone 554 Hz	26	5
28	Continuous tone 440 Hz	2	5
29	Sweeping 800 Hz / 1000 Hz, at 7 Hz	7	5
30	Continuous tone 300 Hz	2	5
31	Siren 660 Hz / 1200 Hz, at 1 Hz	26	5
32	Two tone chime	26	15
33	Interrupted tone 745 Hz, 0,5 s signal, 0,5 s gap	2	–
34	Alternating tone 1000 Hz / 2000 Hz, change every 0,5 s	38	45
35	Interrupted tone 420 Hz, every 0,625 s	36	5
36	Slow whoop 500 Hz up to 1200 Hz within 0,375 s, 0,25 s gap	35	5
37	Continuous tone 1000 Hz	9	45
38	Continuous tone 2000 Hz	34	45
39	Interrupted tone 800 Hz, 0,25 s signal, 1 s gap	23	17
40	Alternating tone 544 Hz (100 ms) / 440 Hz (400 ms) (NF S 32-001)	31	27
41	Motor Siren, slow sweep up to 1200 Hz	2	5
42	Motor Siren, slow sweep up to 800 Hz	2	5
43	Continuous tone 1200 Hz	2	5
44	Motor Siren, slow sweep up to 2400 Hz	2	5
45	1000 Hz, 1 s signal, 1 s gap	38	34

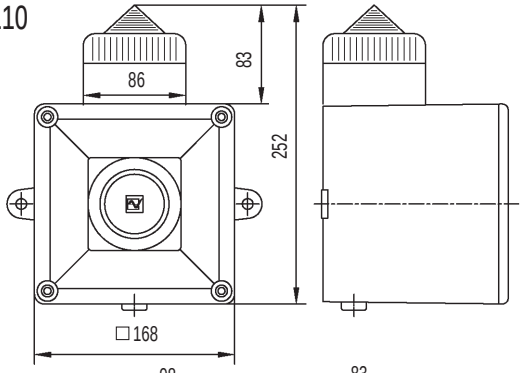
The tones are selected by operation of a DIP switch on the PCB. Through external connection there is the possibility for two additional tones (stage 2 & 3).

Mechanical data and dimensions:

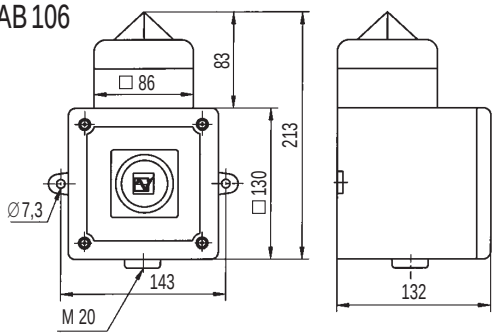
PAB 120



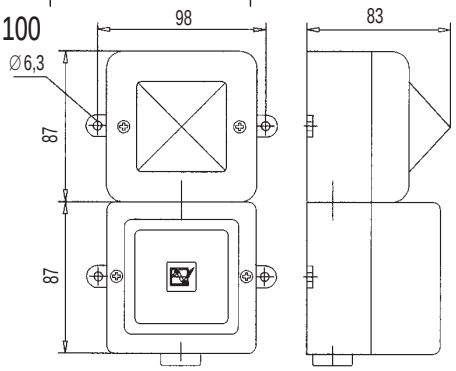
PAB 110



PAB 106



PAB 100



Electrical data: AC 50 Hz / 60 Hz

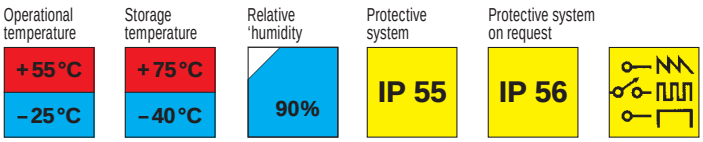
Nominal voltage	Electrical data	PAB 120	PAB 110	PAB 106	PAB 100
230 V ± 10%	Rated current:	155 mA	95 mA	65 mA	65 mA
110 V ± 10%	Rated current:	310 mA	170 mA	120 mA	120 mA
24 V ± 10%	Rated current:	1300 mA	800 mA	405 mA	405 mA

DC

Nominal voltage	Electrical data	PAB 120	PAB 110	PAB 106	PAB 100
24 V (20–28)	Rated current:	1200 mA	450 mA	275 mA	275 mA
48 V (42–54)	Rated current:	775 mA	295 mA	225 mA	225 mA

Mechanical data:	
Cable gland	M 20 diaphragm nipple
Weight of AC version	PAB 120: 2.450 g PAB 110: 1.500 g PAB 106: 700 g PAB 100: 525 g
Weight of DC version	PAB 120: 2.230 g PAB 110: 1.325 g PAB 106: 571 g PAB 100: 400 g
Material sounder and housing flashing light	ABS, self-extinguishing, similar to UL 94 VO
Material globe	Polycarbonate (PC)
Colour	similar to RAL 3000 (flame-red)
Standard:	
Operational temperature	–25 °C ... +55 °C
Storage temperature	–40 °C ... +75 °C
Relative humidity	90%
Protective system	IP 55

Technical data:



Special version:

cULus LISTED

Sample order:

Model:	Voltage:
PAB 106	24 V DC

Conformity to standards:

The acoustic parameters for the warning signals comply with the requirements of the European standard DIN EN 457 (formerly DIN 33404, Part 1) and the international standard ISO 7731: modified 1986, under the heading of:
“Acoustic alarm signals – machine safety – General specification, design and testing”.

The requirement for an acoustic danger signal is found in following harmonized standards:

EN 60204-1	Electrical equipment for machinery
EN 60825-1	Radiation safety of laser equipment identical to IEC 825 and DIN-VDE 0837