

Industrial sounders



The industrial sounders PA 5 and PA 10-SSM are universally applicable acoustical devices for fire alarm and security technology, IP 66, 24 VDC, EN 54-3 compliant.

Regulatory information

| Region | Regulatory compliance/quality marks | |
|---------|-------------------------------------|--------------------------|
| Germany | VdS | G212115 PA 5 |
| | VdS | G212192 PA 10-SSM |
| Europe | CE | PA 5 |
| | CE | PA 10-SSM |
| | CPD | 0786-CPD-21182 PA 5 |
| | CPD | 0786-CPD-21224 PA 10-SSM |
| Poland | CNBOP | 2848/2017 PA 10-SSM |
| Russia | GOST | C-DE.PB68.B.00353 |

Installation/configuration notes

- Use the Bosch Safety Systems Designer for reliable planning.

Industrial sounder SSM, high

- Mounting options: wall, ceiling
- Wall mounting depending on background noise: 8,3 m
- Ceiling mounting depending on background noise: 23,2 m

- ▶ Certified according to EN 54-3, type B
- ▶ High efficiency and good penetration of acoustic obstacles significantly reduce the number of sounders required
- ▶ High protection class ideally for industry applications

Industrial sounder, low

- Mounting options: wall, ceiling
- Wall mounting depending on background noise: 7 m
- Ceiling mounting depending on background noise: 18,1 m

Technical specifications

Electrical

| | PA 10-SSM Industrial sounder SSM, high |
|--|--|
| Current consumption (mA) | 60 mA – 485 mA |
| Operating voltage (VDC) | 18 VDC – 30 VDC |
| Maximum DIN tone current consumption at 24 VDC | 282 mA |
| Inrush current reduction | SSM module |
| | PA 5 Industrial sounder, low |
| Current consumption (mA) | 6 mA – 80 mA |
| Operating voltage (VDC) | 10 VDC – 57 VDC |
| Maximum DIN tone current consumption at 24 VDC | 38 mA |

Acoustic

| | PA 10-SSM Industrial sounder SSM, high |
|--|---|
| Maximum sound pressure level at a distance of 1 m (dBA) | 117 dBA |
| Maximum DIN tone sound pressure level at a distance of 1 m (dBA) | 115 dBA |
| Volume control | -10 dBA |
| Tones | 80 |
| Tone levels externally | 4 |

| | PA 5 Industrial sounder, low |
|--|-------------------------------------|
| Maximum sound pressure level at a distance of 1 m (dBA) | 107 dBA |
| Maximum DIN tone sound pressure level at a distance of 1 m (dBA) | 105 dBA |
| Volume control | -12 dBA |
| Tones | 80 |
| Tone levels externally | 4 |

Environmental

| | PA 10-SSM Industrial sounder SSM, high |
|---|---|
| Operating temperature (°C) | -40 °C – 55 °C |
| Operating relative humidity, non-condensing (%) | 0% – 90% |
| IP rating | IP66 |
| Impact protection (EN 50102) | IK08 |

| | PA 5 Industrial sounder, low |
|---|-------------------------------------|
| Operating temperature (°C) | -40 °C – 55 °C |
| Operating relative humidity, non-condensing (%) | 0% – 90% |
| IP rating | IP66 |
| Impact protection (EN 50102) | IK08 |

Mechanical



















| | PA 10-SSM Industrial sounder SSM, high |
|----------|---|
| Material | Plastic |



















| | PA 10-SSM Industrial sounder SSM, high |
|----------------------------|---|
| Color | Red |
| Dimension (H x W x D) (mm) | 170 mm x 214 mm x 156.20 mm |

| | PA 5 Industrial sounder, low |
|----------------------------|-------------------------------------|
| Material | Plastic |
| Color | Red |
| Dimension (H x W x D) (mm) | 135 mm x 163.40 mm x 132 mm |

| Tone tables | | | |
|-------------|--|---------------|--|
| No. | Tone type | Sound pattern | Frequency/modulation |
| 1 | No tone | | |
| 2 | Sawtooth, DIN tone 33404-3 Germany (emergency signal), PFEER PTAP (EN 54-3) | | 500-1200 Hz/1 s |
| 9 | Slow whoop, fire alarm, UK BS5839-1 | | 800-970 Hz/1 s |
| 11 | Interrupted tone (fast) | | 800-970 Hz/20 ms |
| 13 | Interrupted tone | | 700-900 Hz/0,3 s on/0,6 s off |
| 15 | Slow whoop, evacuation alarm Netherlands NEN 2575 (EN 54-3) | | 500-1200 Hz/3,5 s on, 0,5 s off |
| 16 | Slow whoop, evacuation alarm Australia AS2220 | | 500-1200 Hz/3,75 s on/0,25 s off |
| 18 | Slow whoop, NFPA | | 422-775 Hz/0,85 s on/1 s off |
| 22 | Pulsating tone, Australien alert AS1670, ISO8201 | | 500-1200 Hz/0,5 s on/off x 3/1,5 s off |
| 23 | Siren | | 500-2400 Hz/3 s rising, then constant |
| 24 | Siren | | 300-1200 Hz/3 s rising, then constant |
| 25 | Siren | | 300-800 Hz/3 s rising, then constant |
| 26 | Siren, industrial alarm Germany | | 150-1000 Hz/10 s rising, then 40 s constant, then 10 s falling |
| 27 | Sweeping | | 2400-2900 Hz/0,5 s |
| 29 | Sweeping (fast) | | 2400-2900 Hz/10 ms |
| 30 | Sweeping | | 2400-2900 Hz/70 ms |
| 31 | Sweeping, France NFC48_265 | | 1400-1600 Hz/1 s rising, 0,5 s falling |
| 33 | Sweeping (medium), UK BS5839-1 | | 800-1000 Hz/0,5 s |
| 34 | Sweeping (fast) | | 800-1000 Hz/10 ms |

| Tone tables | | | |
|-------------|---|---------------|----------------------|
| No. | Tone type | Sound pattern | Frequency/modulation |
| 35 | Sweeping (fast), UK BS5839-1 | | 800-1000 Hz/70 ms |
| 36 | Sweeping | | 700-1500 Hz/1,5 s |
| 43 | Sweeping | | 500-1200 Hz/1,5 s |
| 44 | Sweeping, IMO 3d, Germany KTA3901 evacuation alarm | | 500-1200 Hz/1 s |
| 45 | Sweeping | | 500-1200 Hz/3 s |
| 46 | Sweeping, general alarm Finland | | 500-1500 Hz/7 s |
| 52 | Continuous tone | | 2400 Hz |
| 53 | Continuous tone | | 2000 Hz |
| 54 | Continuous tone, Finland (all-clear signal) | | 1500 Hz |
| 55 | Continuous tone, PFEER gas alarm | | 1200 Hz |
| 56 | Continuous tone | | 1000 Hz |
| 57 | Continuous tone, UK BS5839-1 | | 950 Hz |
| 59 | Continuous tone | | 880 Hz |
| 60 | Continuous tone (EN 54-3) | | 825 Hz |
| 61 | Continuous tone | | 800 Hz |
| 63 | Continuous tone | | 725 Hz |
| 65 | Continuous tone, Sweden SS031711 (all-clear signal) | | 660 Hz |
| 66 | Continuous tone | | 554 Hz |
| 67 | Continuous tone, Germany KTA3901 (all-clear signal) | | 500 Hz |
| 68 | Continuous tone | | 470 Hz |
| 69 | Continuous tone | | 440 Hz |
| 71 | Continuous tone | | 340 Hz |

| Tone tables | | | |
|-------------|--|---|-----------------------------|
| No. | Tone type | Sound pattern | Frequency/modulation |
| 77 | Interrupted tone |  | 2200 Hz/0,5 s on/off |
| 82 | Interrupted tone, PFEER (general alarm), UK BS5839-1 (back-up alarm) |  | 1000 Hz/0,5 s on/off |
| 83 | Interrupted tone, PFEER (general alarm) |  | 1000 Hz/1 s on/off |
| 88 | Interrupted tone |  | 950 Hz/1 s on/off |
| 90 | Interrupted tone |  | 825 Hz/0,5 s on/off |
| 91 | Interrupted tone |  | 800 Hz/0,25 s on/off |
| 92 | Interrupted tone |  | 800 Hz/0,25 s on/1 s off |
| 93 | Interrupted tone (fast), Horn |  | 800 Hz/4 ms on/off |
| 97 | Interrupted tone |  | 725 Hz/0,7 s on/0,3 s off |
| 98 | Interrupted tone, Sweden SS031711 (emergency signal) |  | 700 Hz/0,125 s on/off |
| 100 | Interrupted tone, industrial alarm Germany |  | 680 Hz/0,875 s on/off |
| 101 | Interrupted tone, Sweden SS031711 (important message (pre-mess)) |  | 660 Hz/6,5 s on/13 s off |
| 102 | Interrupted tone, Sweden SS031711 (local warning) |  | 660 Hz/0,5 s on/off |
| 103 | Interrupted tone, Sweden SS031711 (air raid warning) |  | 660 Hz/1,8 s on/off |
| 104 | Interrupted tone, Sweden SS031711 (emergency signal) (EN 54-3) |  | 660 Hz/150 ms on/off |
| 107 | Interrupted tone, Germany KTA3901 (evacuation alarm) |  | 500 Hz/0,25 s on/0,75 s off |
| 109 | Interrupted tone, Australia AS2220, AS1610, AS1670 |  | 420 Hz/0,625 s on/off |
| 110 | Interrupted tone, (fast variable), bell |  | 1450 Hz/0,69 s on/off |

| Tone tables | | | |
|-------------|--|---|--|
| No. | Tone type | Sound pattern | Frequency/modulation |
| 111 | Interrupted tone, ISO8201 (emergency evacuation signal), USA (evacuation alarm) |  | 470 Hz/0,5 s on/off x 3/1,5 s off |
| 112 | Interrupted tone, ISO8201 (emergency evacuation signal) |  | 950 Hz/0,5 s on/off x 3/1,5 s off |
| 113 | Interrupted tone, ISO8201 (emergency evacuation signal), sweeping |  | 2850 Hz/0,5 s on/off x 3/1,5 s off |
| 115 | Interrupted tone, IMO (telephone call) |  | 950 Hz/2 s on/0,5 s off/0,5 s on/1 s off |
| 116 | Interrupted tone, IMO (leave ship) |  | 950 Hz/1 s on/off/3 s on/1 s off |
| 117 | Interrupted tone IMO SOLAS III/50 + SOLAS III/6.4 (general alarm) |  | 825 Hz/2,5 s on/off x 6/7 s on |
| 122 | Alternating tone |  | 2400s-2900 Hz/0,5 s |
| 123 | Alternating tone |  | 2400s -2900 Hz/0,25 s |
| 124 | Alternating tone, Singapore |  | 1000-2900 Hz/0,5 s |
| 125 | Alternating tone |  | 1200-1400 Hz/20 ms |
| 128 | Alternating tone |  | 825-1025 Hz/0,25 s |
| 130 | Alternating tone, UK BS5839-1 (fire alarm) |  | 800-1000 Hz/0,5 s |
| 131 | Alternating tone, UK BS5839-1 (fire alarm, railway crossing) |  | 800-1000 Hz/0,25 s |
| 135 | Alternating tone, UK BS5839-1 (fire alarm, increased urgency - railway crossing) |  | 800-1000 Hz/0,125 s |
| 142 | Alternating tone |  | 500-900 Hz/0,25 s |
| 143 | Alternating tone, industrial alarm Germany |  | 440-660 Hz/0,125 s |
| 144 | Alternating tone |  | 440-650 Hz/1 s |
| 146 | Alternating tone, France NFS 32-001 (fire alarm) (EN 54-3) |  | 440-554 Hz/0,1 s/0,4 s |

| Tone tables | | | |
|-------------|-----------------------------------|---------------|--------------------------------------|
| No. | Tone type | Sound pattern | Frequency/modulation |
| 147 | Alternating tone, Sweden SS031711 | | 440-554 Hz/1 s |
| 148 | Alternating tone, Sweden SS031711 | | 440-554 Hz/0,5 s |
| 152 | Alternating tone (two tone chime) | | 800-650 Hz/0,25 s on/off x 2/2 s off |

| Control of the tones | | | | | | | | | |
|---------------------------------------|----|----|----|----|---|-------------------------|-----|-----|---------|
| DIP-Switch (Setting of basic tone) | | | | | | External tone selection | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | Basic tone | C1 | C2 | C1 + C2 |
| | | | | | | Tone number | | | |
| | | | | | | 1 | 2 | 88 | 57 |
| On | | | | | | 2 | 128 | 112 | 57 |
| | On | | | | | 2 | 26 | 100 | 93 |
| On | On | | | | | 2 | 61 | 131 | 112 |
| | | On | | | | 9 | 57 | 11 | 82 |
| On | | On | | | | 15 | 131 | 52 | 112 |
| | On | On | | | | 16 | 109 | 52 | 56 |
| On | On | On | | | | 18 | 111 | 57 | 68 |
| | | | On | | | 22 | 16 | 109 | 68 |
| On | | | On | | | 23 | 131 | 52 | 112 |
| | On | | On | | | 24 | 131 | 52 | 131 |
| On | On | | On | | | 25 | 131 | 52 | 92 |
| | | On | On | | | 26 | 2 | 100 | 93 |
| On | | On | On | | | 27 | 123 | 52 | 92 |
| | On | On | | | | 29 | 35 | 52 | 61 |
| On | On | On | | | | 30 | 27 | 52 | 77 |
| | | | | On | | 31 | 131 | 52 | 57 |
| On | | | | On | | 33 | 30 | 52 | 35 |
| | On | | | On | | 34 | 35 | 52 | 93 |
| On | On | | | On | | 35 | 27 | 52 | 110 |

| Control of the tones | | | | | | | | | |
|---------------------------------------|----|----|----|----|----|-------------------------|-----|-----|---------|
| DIP-Switch (Setting of basic tone) | | | | | | External tone selection | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | Basic tone | C1 | C2 | C1 + C2 |
| | | | | | | Tone number | | | |
| | | On | | On | | 36 | 146 | 67 | 57 |
| On | | On | | On | | 43 | 131 | 52 | 91 |
| | On | On | | On | | 45 | 2 | 57 | 93 |
| On | On | On | | On | | 52 | 15 | 65 | 82 |
| | | | On | On | | 54 | 46 | 54 | 131 |
| On | | | On | On | | 55 | 131 | 52 | 128 |
| | On | | On | On | | 56 | 82 | 35 | 33 |
| On | On | | On | On | | 59 | 143 | 59 | 101 |
| | | | On | On | | 60 | 131 | 52 | 125 |
| On | | On | On | On | | 65 | 131 | 52 | 93 |
| | On | On | On | On | | 66 | 110 | 52 | 107 |
| On | On | On | On | On | | 69 | 131 | 52 | 110 |
| | | | | | On | 71 | 131 | 52 | 93 |
| On | | | | | On | 77 | 61 | 52 | 122 |
| | On | | | | On | 82 | 131 | 52 | 83 |
| On | On | | | | On | 83 | 56 | 2 | 82 |
| | | On | | | On | 88 | 2 | 57 | 128 |
| On | | On | | | On | 90 | 131 | 52 | 125 |
| | On | On | | | On | 91 | 30 | 52 | 110 |
| On | On | On | | | On | 92 | 33 | 52 | 57 |
| | | | On | | On | 93 | 2 | 128 | 57 |
| On | | | On | | On | 97 | 2 | 63 | 93 |
| | On | | On | | On | 100 | 131 | 52 | 125 |
| On | On | | On | | On | 101 | 98 | 102 | 65 |
| | | On | On | | On | 103 | 131 | 65 | 147 |
| On | | On | On | | On | 104 | 103 | 65 | 101 |
| | On | On | On | | On | 109 | 16 | 52 | 22 |

| Control of the tones | | | | | | | | | |
|---------------------------------------|----|----|----|----|----|-------------------------|-------------|-----|---------|
| DIP-Switch (Setting of basic tone) | | | | | | External tone selection | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | Basic tone | C1 | C2 | C1 + C2 |
| | | | | | | | Tone number | | |
| On | On | On | On | | On | 110 | 131 | 61 | 91 |
| | | | | On | On | 112 | 2 | 57 | 128 |
| On | | | | On | On | 113 | 52 | 123 | 104 |
| | On | | | On | On | 115 | 117 | 116 | 44 |
| On | On | | | On | On | 116 | 117 | 93 | 125 |
| | | On | | On | On | 117 | 93 | 116 | 125 |
| On | | On | | On | On | 123 | 27 | 52 | 77 |
| | On | On | | On | On | 124 | 53 | 83 | 2 |
| On | On | On | | On | On | 130 | 2 | 107 | 67 |
| | | | On | On | On | 131 | 2 | 112 | 57 |
| On | | | On | On | On | 135 | 16 | 56 | 109 |
| | On | | On | On | On | 142 | 2 | 54 | 88 |
| On | On | | On | On | On | 143 | 59 | 93 | 33 |
| | | On | On | On | On | 144 | 110 | 61 | 2 |
| On | | On | On | On | On | 146 | 31 | 67 | 57 |
| | On | On | On | On | On | 148 | 131 | 52 | 92 |
| On | On | On | On | On | On | 152 | 110 | 61 | 13 |

Ordering information

PA 10-SSM Industrial sounder SSM, high

Universally applicable acoustical signalling for fire alarm and security technology, 117 dBA, IP 66, 24 VDC, EN 54-3 compliant.

Order number **PA 10-SSM | F.01U.393.222**

PA 5 Industrial sounder, low

Universally applicable acoustical signalling for fire alarm and security technology, 107 dBA, IP 66, 24 VDC, EN 54-3 compliant.

Order number **PA 5 | F.01U.393.223**

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