

# BExS110 / BExDS110 Alarm Sounders

The flameproof BExS110 alarm sounders are suitable for Zone 1 & Zone 2 applications and the BExDS110 sounders also for Zone 21 & 22.

Sound level outputs are up to 117dB(A) at 1 metre with a choice of 32 alarm tones and 3 remotely selectable stages. The BEx range features enclosures manufactured from corrosion proof, marine grade copper free LM6 aluminium which is phosphated and powder coated.

The re-entrant flare horns are high impact, fire retardant ABS. All models have two M20 cable entries, large termination areas containing in & out terminals (Ex de version only) and an ingress protection of IP66/67 (Ex d) and IP66 (Ex de).

For fire applications the BExS110D 24V dc siren is CPD EN89/106/EEC compliant (EN54-3 tested).

## Tone table:

Stage 1	Frequency Description.	Stage 2	Stage 3
Tone 1	Continuous 1000Hz Toxic Gas Alarm	Tone 31	Tone 11
Tone 2	Alternating 800/1000Hz at 0.25s intervals	Tone 17	Tone 5
Tone 3	Slow Whoop 500/1200Hz at 0.3Hz with 0.5s gap repeated	Tone 2	Tone 5
Tone 4	Sweeping 800/1000 at 1Hz	Tone 6	Tone 5
Tone 5	Continuous at 2400Hz	Tone 3	Tone 27
Tone 6	Sweeping 2400/2900Hz at 7Hz	Tone 7	Tone 5
Tone 7	Sweeping 2400/2900Hz at 1Hz	Tone 10	Tone 5
Tone 8	Siren 500/1200/500Hz at 0.3Hz	Tone 2	Tone 5
Tone 9	Sawtooth 1200/500Hz at 1Hz	Tone 15	Tone 2
Tone 10	Alternating 2400/2900Hz at 2Hz	Tone 7	Tone 5
Tone 11	Intermittent 1000Hz at 0.5Hz General alarm	Tone 31	Tone 1
Tone 12	Alternating 800/1000Hz at 0.875Hz	Tone 4	Tone 5
Tone 13	Intermittent 2400Hz at 1Hz	Tone 15	Tone 5
Tone 14	Intermittent 800Hz 0.25s on 1s off	Tone 4	Tone 5
Tone 15	Continuous at 800Hz	Tone 2	Tone 5
Tone 16	Intermittent 660Hz 150mS on, 150mS off	Tone 18	Tone 5
Tone 17	Alternating 544Hz (100mS)/440Hz(400mS)	Tone 2	Tone 27
Tone 18	Intermittent 660Hz 1.8s on, 1.8s off	Tone 2	Tone 5
Tone 19	1400Hz to 1600Hz sweep up over 1s - 1600Hz to 1400Hz sweep down over 0.5s	Tone 2	Tone 5
Tone 20	Continuous 660Hz	Tone 2	Tone 5
Tone 21	Alternating 554/440Hz at 1Hz	Tone 2	Tone 5
Tone 22	Intermittent 554Hz at 0.875Hz	Tone 2	Tone 5
Tone 23	800Hz pulsing at 2Hz	Tone 6	Tone 5
Tone 24	Sweeping 800/1000Hz at 50Hz	Tone 29	Tone 5
Tone 25	Sweeping 2400/2900Hz at 50Hz	Tone 29	Tone 5
Tone 26	Simulated bell sound	Tone 2	Tone 1
Tone 27	Continuous 554Hz	Tone 26	Tone 5
Tone 28	Continuous 440Hz	Tone 2	Tone 5
Tone 29	Sweeping 800/1000Hz at 7Hz	Tone 7	Tone 5
Tone 30	420Hz repeating 0.625s on, 0.625s off Australian alert signal	Tone 32	Tone 5
Tone 31	1200/500Hz at 1 Hz Prepare to Abandon Platform	Tone 11	Tone 1
Tone 32	Sweeping 500/1200Hz 3.75s on, 0.25s off 15Hz	Tone 26	Tone 1

Country specific or custom tone configurations and alarm frequencies are available upon request.

## Current consumption:

Version:	Voltage:	Current:
12V dc	+/-25%	195mA
24V dc	+/-25%	265mA
48V dc	+/-25%	130mA
115V ac	50/60Hz	+10/-10% 110mA
230V ac	50/60Hz	+10/-10% 56mA

## Part codes:

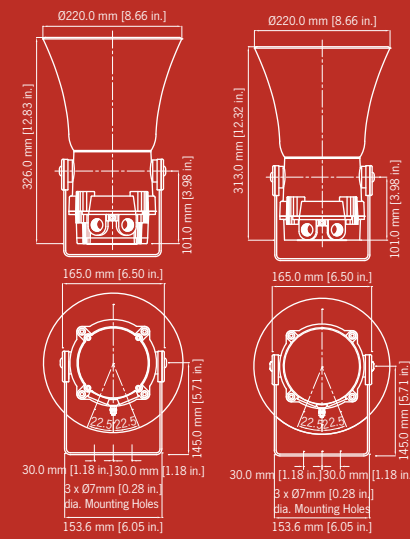
Part Code:	Classification:
BExS110D**	ATEX / IECEx: II 2G Ex d IIB T4 Ta. -50° to +70°C II 2G Ex d IIC T4 Ta. -50° to +55°C GOST-R: 1ExdIICT4 Ta. -50° to +55°C
BExS110E**	ATEX / IECEx: II 2G Ex de IIB T4 Ta. -50° to +70°C II 2G Ex de IIC T4 Ta. -50° to +55°C GOST-R: 2ExdeIICT4 Ta. -50° to +55°C
BExDS110D**	ATEX / IECEx: II 2G Ex d IIB T4 Ta. -50° to +70°C II 2G Ex d IIC T4 Ta. -50° to +55°C II 2D Ex tD A21 IP67 T115 based on a max. Ta. of 70°C GOST-R: 1ExdIICT4 Ta. -50° to +55°C T100°C DIP A21 Ta T4
BExDS110E**	ATEX / IECEx: II 2G Ex de IIB T4 Ta. -50° to +70°C II 2G Ex de IIC T4 Ta. -50° to +55°C II 2D Ex tD A21 IP66 T115 based on a max. Ta. of 70°C GOST-R: 2ExdeIICT4 Ta. -50° to +55°C DIP A21 Ta T4

\*\* = Voltage reference:

Options: 12DC, 24DC, 48DC, 115AC, 230AC

Add '-P' to part number for Programmable version  
Add '-M' to part number for MED approved version (24V dc only)

## Ex de version



## Specification:

Maximum output:	117dB(A) @ 1 metre
Nominal output:	110dB(A) @ 1m +/- 3dB - Tone 2
No. of tones:	32 (UKOOA / PFEER compliant)
No. of stages:	3
Volume control:	Max. 110dB(A); Min. 72dB(A) - Tone 2
Effective range:	100m @ 1KHz
Voltages DC:	12vdc; 24vdc; 48vdc
Voltages AC:	115vac; 230vac
Stage switching:	Negative or positive
Ingress protection:	S110D : IP66/67 S110E : IP66
Housing material:	Marine grade copper free LM6 Aluminium
Housing finish:	Phosphated & powder coated finish - anti-corrosion.
Colour:	RAL3000 Red (others available on request)
BExS110 flare:	High impact UL94 V0 & 5VA FR ABS (Red)
BExDS110 flare:	Anti-Static High impact ABS (Black)
Cable entries:	Dual M20 ISO (one stopping plug inc)
Terminals:	0.5 to 4.0mm <sup>2</sup> cables.
Line monitoring :	Min. 500 Ohm 2w, or 3k3 Ohm 0.5w res. or diode within Exd enclosure (dc versions).
Weight :	DC: 3.00kg AC: 3.20kg

\*SPL data +/-3dB(A). Measured at optimum voltage.

## Features:

- Automatic synchronisation on multi-sounder system.
- Very large termination area.
- Ratchet adjustable stainless steel 'U' bracket.
- IN & OUT terminals (Ex de version only).
- 'Programmable' version available:
  - 45 alarm tones
  - 4 remotely selectable stages
  - Any tone can be assigned to any stage
  - User configurable continuous frequency tone

## Approvals:

- ATEX certificate: KEMA 99ATEX6312, EN 60079-0 : 2006, EN 60079-1 : 2007, EN 60079-7 : 2003, EN 61241-0 : 2006, EN 61241-1 : 2004
- IECEx certificate: IECEx KEM 10.0003, IEC 60079-0 : 2004 (Ed4), IEC 60079-1 : 2007 (Ed6), IEC 60079-7 : 2001 (Ed3), IEC 61241-0 : 2004 (Ed1), IEC 61241-1 : 2004 (Ed1)
- GOST-R certificate: POCC GB.JB05.B03365
- VdS certificate: G206011
- CPD certificate: 0786-CPD-20225
- Safety-integrity suitability: SIL1
- Inmetro certificate: 10-IEx-0009
- Marine Equipment Directive (MED) Certificate: 19 702 - 11 HH

