

BExS110-R Omni-directional Alarm Sounders

The flameproof BExS110-R alarm sounder is suitable for Zone 1 & Zone 2 applications and the BExDS110-R sounder 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 unique radial horn on the compact BExS110-R distributes the warning signal omni-directionally. The radial horn is manufactured from 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).

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%	365mA
48V dc	+/-25%	130mA
115V ac	50/60Hz +10/-10%	110mA
230V ac	50/60Hz +10/-10%	56mA

Part codes:

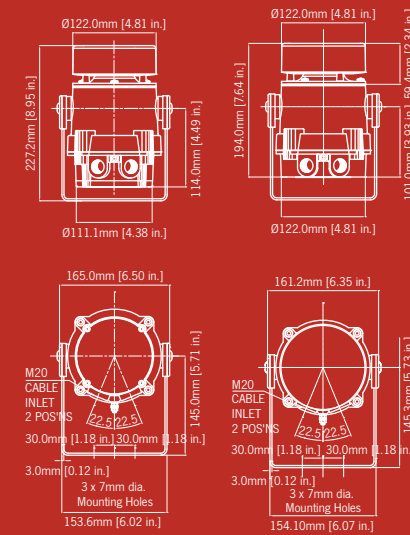
Part Code:	Classification:
BExS110DR**	ATEX / IECEx: II 2G Ex d IIB T4 Ta. -50° to +70°C II 2G Ex d IIC T4 Ta. -50° to +55°C GOST-R: 1ExdIICT4 Ta. -50° to +55°C
BExS110ER**	ATEX / IECEx: II 2G Ex de IIB T4 Ta. -50° to +70°C II 2G Ex de IIC T4 Ta. -50° to +55°C GOST-R: 2ExdeIICT4 Ta. -50° to +55°C
BExDS110DR**	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
BExDS110ER**	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

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 ² 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

Features:

- Omni-directional sound output.
- 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
- Safety-integrity suitability: SIL1
- Inmetro certificate: 10-IEX-0009