BEXS110/BEXDS110 ALARM SOUNDER

Features

• Automatic synchronisation on multi-sounder system.
• Very large termination area.
• Ratchet adjustable stainless steel 'U' bracket.
• IN & O UT 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 : 2 006, EN 60079-1 : 2 007, EN 60079-7 : 2 003, EN 612 41-0 : 2 006, EN 612 41-1 : 2 004
• IECEx certificate: IECEx KEM 10.0003, IEC 60079-0 : 2 004 (Ed4), IEC 60079-1 : 2 007 (Ed6), IEC 60079-7 : 2 001 (Ed3), IEC 612 41-0 : 2 004 (Ed1), IEC 612 41-1 : 2 004 (Ed1)
• G O ST-R certificate: PO CC G B.JB05.B03365
• VdS certificate: G 2 06011
• CPD certificate: 0786-CPD-2 02 2 5
• Safety-integrity suitability: SIL1
• Inmetro certificate: 10-IEx-0009
• Marine Equipment Directive (MED) Certificate: 19 702 - 11 HH

Description

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 freeLM6 aluminium which is phosphated and powder coated.
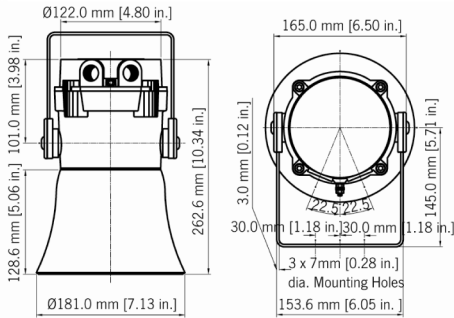
The re-entrant flare horns are high impact, fire retardant ABS. All models have two M20 cable entries, large termination areas contain-ing in & out terminals (Ex de version only) and an ingress protection of IP66/67 (Ex d) and IP66 (Ex de).

For fire applications the BExS110D 24V dc siren is CPD EN89/106/EEC compliant (EN54-3 tested).
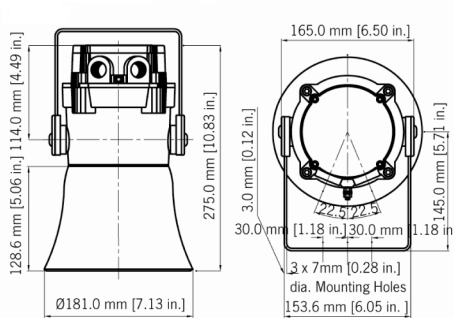
BEXS110/BEXDS110 ALARM SOUNDER

BExS110D / BExDS110D — Ø122.0 mm [4.80 in.]; 101.0 mm [3.98 in.]; 128.6 mm [5.06 in.]; 262.6 mm [10.34 in.]; 165.0 mm [6.50 in.]; 3.0 mm [0.12 in.]; 145.0 mm [5.7] in.]; 30.0 mm [1.18 in.]; 22.5/22.5; 3 x 7mm [0.28 in.] dia. Mounting Holes; Ø181.0 mm [7.13 in.]; 153.6 mm [6.05 in.]

BExS110E / BExDS110E — 114.0 mm [4.49 in.]; 128.6 mm [5.06 in.]; 275.0 mm [10.83 in.]; 165.0 mm [6.50 in.]; 3.0 mm [0.12 in.]; 145.0 mm [5.7] in.]; 30.0 mm [1.18 in.]; 22.5/22.5; 3 x 7mm [0.28 in.] dia. Mounting Holes; Ø181.0 mm [7.13 in.]; 153.6 mm [6.05 in.]

Specification

Maximum output:	117dB(A) @ 1 metre [108dB(A) @ 10ft/3m]
Nominal output:	110dB(A) @ 1m +/- 3dB - Tone 2 [101dB(A) @ 10ft/3m]
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 2.5mm² 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.

Part Codes

Part Code:	Classification:
BExS110D**	ATEX / IECEx: II 2G Ex d IIB T4 Ta. -50°C to +70°C II 2G Ex d IIC T4 Ta. -50°C to +55°C
	GOST-R: 1ExdIICT4 Ta. -50° to +55°C
BExS110E**	ATEX / IECEx: II 2G Ex de IIB T4 Ta. -50°C to +70°C II 2G Ex de IIC T5 Ta. -50°C 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 max.Ta 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:

Voltage 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)

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

BEXS110/BEXDS110 ALARM SOUNDER

Tone table

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