



ATEX Audible Visual Sounder

Model WAVS

The flameproof Model WAVS combination alarm sounders and Xenon beacons are suitable for Zone 1 & Zone 2 applications.

Sound level outputs are up to 117dB(A) at 1 meter with a choice of 32 alarm tones and 3 remotely selectable stages.

Sounder & beacon may be connected from a single supply for simultaneous operation or from separate supplies for independent operation.

FEATURES:

- *Automatic synchronisation on multi-strobe & sounder systems.*
- *Beacons can be set to 'flip-flop' alternating mode with other units on multi-strobe systems.*
- *Xenon tubes mechanically secured against shock & vibration*
- *Glass lens & Stainless Steel guard*
- *Very large termination area.*
- *Ratchet adjustable stainless steel 'U' bracket*

APPROVALS:

ATEX certificate: KEMA 01ATEX2223
 EN 60079-0 : 2006 EN 60079-1 : 2007
 EN 61241-0 : 2006 EN 61241-1 : 2004

IECEX certificate: IECEX KEM 10.0025
 IEC 60079-0 : 2004 (Ed4) IEC 60079-1 : 2007 (Ed6)
 IEC 61241-0 : 2004 (Ed1) IEC 61241-1 : 2004 (Ed1)

- Certificate approvals pending.
 Visit www.federal-signal-indust.com for the latest information.

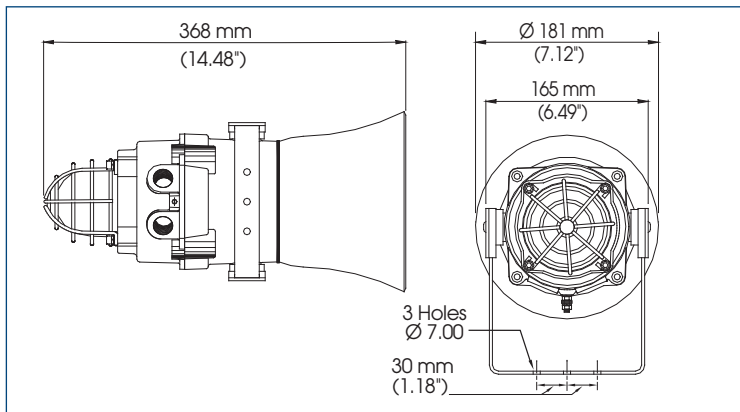
Model	Voltage	Alarm Sounder		Xenon Beacon		
		Voltage Range	Current	Voltage Range	Current	Flash Rate
WAVS-024	24VDC	+/-25%	265mA	20-28V	300mA	60
WAVS-048	48VDC	+/-25%	130mA	42-54V	180mA	60
WAVS-115	115VAC	+/-10%	110mA	+/-10%	140mA	60
WAVS-230	230VAC	+/-10%	56mA	+/-10%	55mA	60



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ATEX AUDIBLE VISUAL SOUNDER (WAVS)



HOW TO ORDER

WAVS - 024 - A

TYPE	VOLTAGE	LENS COLOR
WAVS ATEX Audible Visual Sounder	024 - 24VDC 048 - 48VDC 115 - 115VAC 230 - 230VAC	A - Amber B - Blue C - Clear G - Green R - Red Y - Yellow

SPECIFICATIONS

ATEX / IECEx:	II 2G Ex d IIB T4 Ta. -50° to +70°C
GOST-R:	1ExdIIBT4 Ta. -50° to +55°C
SOUNDER/HORN:	
Maximum output:	117dB(A) @ 1 meter
Nominal output:	110dB(A) @ 1m +/- 3dB - Tone 2
No. of tones:	32 (UK00A / PFEER compliant)
No. of stages:	3
Volume control:	Max. 110dB(A); Min. 72dB(A)-Tone 2
Voltages DC:	24VDC; 48VDC
Voltages AC:	115VAC; 230VAC (50Hz/60Hz ±10%)
Stage switching:	Negative or positive

BEACON:

Energy:	5 Joules (5Ws)
Flash rate:	1Hz (60 fpm)
Peak Candela:	34,812 cd
Effective Intensity cd:	54 cd
Lens colors:	Amber, Blue, Clear, Green, Red & Yellow

GENERAL:

Ingress protection:	IP66/67
Housing material:	Marine grade copper free LM6 Aluminium
Housing finish:	Phosphated & powder coated
WAVS flare:	High impact UL94 V0 & 5VA FR ABS (Red)
Cable entries:	Dual M20 ISO (one stopping plug included)
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).
Product Weight :	DC: 4.00 Kg AC: 4.20 Kg
Shipping Weight :	DC: 4.70 Kg AC: 4.90 Kg

TONES

Stage 1	Frequency Description	dB @ 1m*	Stage 2	Stage 3
Tone 1	1000 Hz Continuous - PFEER Toxic Gas	110.0dB(A) @ 1m	Tone 31	Tone 11
Tone 2	800/1000Hz @ 0.25 sec Alternating	110.0dB(A) @ 1m	Tone 17	Tone 5
Tone 3	500/1200Hz @ 0.3Hz 0.5 sec Slow Whoop	110.5dB(A) @ 1m	Tone 2	Tone 5
Tone 4	800/1000Hz @ 1Hz Sweeping	110.0dB(A) @ 1m	Tone 6	Tone 5
Tone 5	2400Hz Continuous	109.0dB(A) @ 1m	Tone 3	Tone 27
Tone 6	2400/2900Hz @ 7Hz Sweeping	109.0dB(A) @ 1m	Tone 7	Tone 5
Tone 7	2400/2900Hz @ 1Hz Sweeping	110.0dB(A) @ 1m	Tone 10	Tone 5
Tone 8	500/1200/500Hz @ 0.3Hz Sweeping	110.5dB(A) @ 1m	Tone 2	Tone 5
Tone 9	1200/500Hz @ 1Hz - DIN / PFEER P.T.A.P.	110.5dB(A) @ 1m	Tone 15	Tone 2
Tone 10	2400/2900Hz @ 2Hz Alternating	109.0dB(A) @ 1m	Tone 7	Tone 5
Tone 11	1000Hz @ 0.5Hz Intermittent	110.0dB(A) @ 1m	Tone 31	Tone 1
Tone 12	800/1000Hz @ 0.875Hz Alternating	110.0dB(A) @ 1m	Tone 4	Tone 5
Tone 13	2400Hz @ 1Hz Intermittent	109.0dB(A) @ 1m	Tone 15	Tone 5
Tone 14	800Hz 0.25sec on, 1 sec off Intermittent	103.0dB(A) @ 1m	Tone 4	Tone 5
Tone 15	800Hz Continuous	103.0dB(A) @ 1m	Tone 2	Tone 5
Tone 16	660Hz 150mS on, 150mS off Intermittent 544Hz (100mS/)	104.0dB(A) @ 1m	Tone 18	Tone 5
Tone 17	440Hz (400mS) - NF S 32-001	107.0dB(A) @ 1m	Tone 2	Tone 27
Tone 18	660Hz 1.8sec on, 1.8sec off Intermittent 1.4KHz-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s	105.0dB(A) @ 1m	Tone 2	Tone 5
Tone 19	-NFC48-265	117.0dB(A) @ 1m	Tone 2	Tone 5
Tone 20	660Hz Continuous	104.0dB(A) @ 1m	Tone 2	Tone 5
Tone 21	554Hz/440Hz @ 1Hz Alternating	107.0dB(A) @ 1m	Tone 2	Tone 5
Tone 22	544Hz @ 0.875 sec. Intermittent	107.0dB(A) @ 1m	Tone 2	Tone 5
Tone 23	800Hz @ 2Hz Intermittent	103.0dB(A) @ 1m	Tone 6	Tone 5
Tone 24	800/1000Hz @ 50Hz Sweeping	107.0dB(A) @ 1m	Tone 29	Tone 5
Tone 25	2400/2900Hz @ 50Hz Sweeping	109.0dB(A) @ 1m	Tone 29	Tone 5
Tone 26	Bell	117.0dB(A) @ 1m	Tone 2	Tone 1
Tone 27	554Hz Continuous	107.0dB(A) @ 1m	Tone 26	Tone 5
Tone 28	440Hz Continuous	104.0dB(A) @ 1m	Tone 2	Tone 5
Tone 29	800/1000Hz @ 7Hz Sweeping AS2220: 420Hz repeating 0.625 sec on,	106.0dB(A) @ 1m	Tone 7	Tone 5
Tone 30	0.625 sec off.	104.0dB(A) @ 1m	Tone 32	Tone 5
Tone 31	660/1200Hz @ 1Hz Sweeping AS2220: 500-1200Hz 3.75s on 0.25s off	110.5dB(A) @ 1m	Tone 11	Tone 1
Tone 32	(15 cycles/min)	110.5dB(A) @ 1m	Tone 26	Tone 1

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