

D2xCF Horn/Speaker Strobe

The D2xCF is the optimum solution for public mode fire alarm signalling in hazardous locations. With a choice of either alarm horn or speaker the factory assembled configuration integrates the audible signal with a high output 79.3cd output LED strobe or 70.29cd Xenon.

Robust Type 4/4X, IP66 marine grade, corrosion proof aluminium enclosures with 316L stainless steel back plate – approved for Class I/II Division 2 and Class I Zone 2/22 applications. The D2xCF combines the industry leading D2xB1LD3 LED or D2xB1XH2 Xenon strobe with a 123dB(A) horn or 15W or 25W speaker. The strobe utilises an array of super high power Cree® LED's, orientated to optimise visibility. The alarm horn employs class D amplification to provide a high sound output at optimum operating current.

Features

- UL464 and CAN/ULC-S525
- UL1480 and CAN/ULC-S541
- UL1971 & UL1638 and CAN/ULC-S526
- Public & private mode fire use
- Automatic synchronization on multi-horn & strobe systems
- Alarm horn: integrated tone generator with 64 alarm tones
- Speaker: 15W or 25W models with 25/70V transformer
- Marine grade aluminium enclosure
- Ingress protection Type 4/4X/3R/13, IP66
- High impact resistant Borosilicate glass lens
- Supervisory diode – duplicated terminals
- Dual 1/2"NPT entries with haz loc rated stopping plugs
- 316L stainless steel back plate
- Supplied with stainless steel pole mount kit

Approvals

- Component listings:
 - UL File ref: E230764
 - CSFM listing: 7136-2279:0501
 - IECEX cert: IECEX ULD 14.0004X
 - ATEX cert: DEMKO 14 ATEX 4786493904X

Coding

- NEC/CEC Class Div
 - Class I Div 2 ABCD T1 Ta -40° to +122°F
 - Class II Div 2 FG T4 Ta -40° to +122°F
 - Class III Div 1&2 Ta -40° to +122°F
 - NEC Class Zone
 - Class I Zone 2 AEx ec IIC Gc T1 Ta -40° to +122°F
 - Zone 22 AEx tc IIIB T75°C Dc Ta -40° to +122°F
 - CEC Class Zone
 - Class I Zone 2 Ex ec IIC Gc X T1 Ta -40° to +122°F
 - Zone 22 Ex tc IIIC T75°C Dc X Ta -40° to +122°F
 - IECEX & ATEX
 - II 3G Ex ec IIC T1 Gc Ta -40° to +122°F
 - II 3D Ex tc IIIC T75°C Dc Ta -40° to +122°F
- Above represents minimum assembly coding.
See component product manuals for full coding.



Specification

Horn option	Model: D2xS2F – part code ref: S2F
Maximum output:	High power: 123dB(A) @ 1 m [114dB(A) @ 10ft/3m] +/- 3dB Default power: 120dB(A) @ 1 m [111dB(A) @ 10ft/3m] +/- 3dB
Nominal output:	High power: 120dB(A) @ 1m [111dB(A) @ 10ft/3m] +/- 3dB Default power: 117dB(A) @ 1m [108dB(A) @ 10ft/3m] +/- 3dB
Synchronization:	Automatic synchronization
Volume control:	Full range
Speaker option	Model: D2xL1F – part coe ref: L1F
Sound output:	101dB @ 1W @ 1m [92dB(A) @ 10ft/3m] (Pink) +/- 3dB 113dB @ 15W @ 1m [104dB(A) @ 10ft/3m] (Rated) +/- 3dB 120dB(A) @ 1m at 1.3Khz [111dB(A) @ 10ft/3m] (Max)
25/70v line tappings:	15W/7.5W/5W/4W/2W 25V: z=41.67/83.34/125/156.25/312.5K Ohm 70V: z=326.67/653.34/980/1.225K/2.45K Ohm
Speaker option	Model: D2xL2F – part code ref: L2F
Sound output:	104dB @ 1W @ 1m [95dB(A) @ 10ft/3m] (Pink) +/- 3dB 119dB @ 25W @ 1m [110dB(A) @ 10ft/3m] (Rated) +/- 3dB 124dB(A) @ 1m at 1.3Khz [115dB(A) @ 10ft/3m] (Max)
25/70v line tappings:	25W/12.5W/6W/2W/1W tappings 25V: z=196/392/816.67/1.225K/2.45K/4.9K Ohm 70V: z=25/50/104.17/156.25K/312.5K/625 Ohm
Xenon option	Model: D2xB1XH2 – part code ref: 7C
Source:	Xenon strobe 10 Joules (10Ws)
Modes:	1Hz flash (60 fpm)
Effective cd:	70.29 cd – UL1971
Effective cd:	500 cd – calculated from energy (J)
LED option	Model: D2xB1LD3 – part code ref: 8C
Source:	Array of 3 x High Power Cree® LED's
Pulse width:	20ms – high intensity ‘strobe’ flash
Modes:	1Hz flash (60 fpm), 1.3Hz flash (80 fpm) 1.5Hz flash (90 fpm), 2Hz flash (120 fpm)
Eff. Intensity cd:	79.3 cd UL 1971 Public mode fire
Eff. Intensity cd:	107.5 cd UL 1638 Private mode fire
Eff. Intensity cd:	252.0 cd UL 1638 General signaling
LED life:	>60,000 hours
General data	
Ingress protection:	EN60529:IP66, UL50E/NEMA250:4/4X/3R/13
Enclosure material:	Marine grade LM6 aluminum alloy – Chromate & powder coated finish
Lens material:	Toughened borosilicate glass
Cable entries:	2 × 1/2"NPT – Nickel Plated Brass plugs included
Terminals:	0.5 – 2.5mm² (20-14AWG) – 12AWG solid core conductor Pluggable & duplicated terminals
Line monitoring:	Supervisory/Blocking diode included EOL Min. 1K Ohm 2W, or 3K9 Ohm 0.5W resistor
Operating temp:	-40 to +50°C [-40° to +122°F]
Storage temp:	-40 to +70°C [-40° to +158°F]
Relative humidity:	99% – tropicalised/conformal coated electronics
Weight:	8.0Kg/17.63lbs

Part Codes

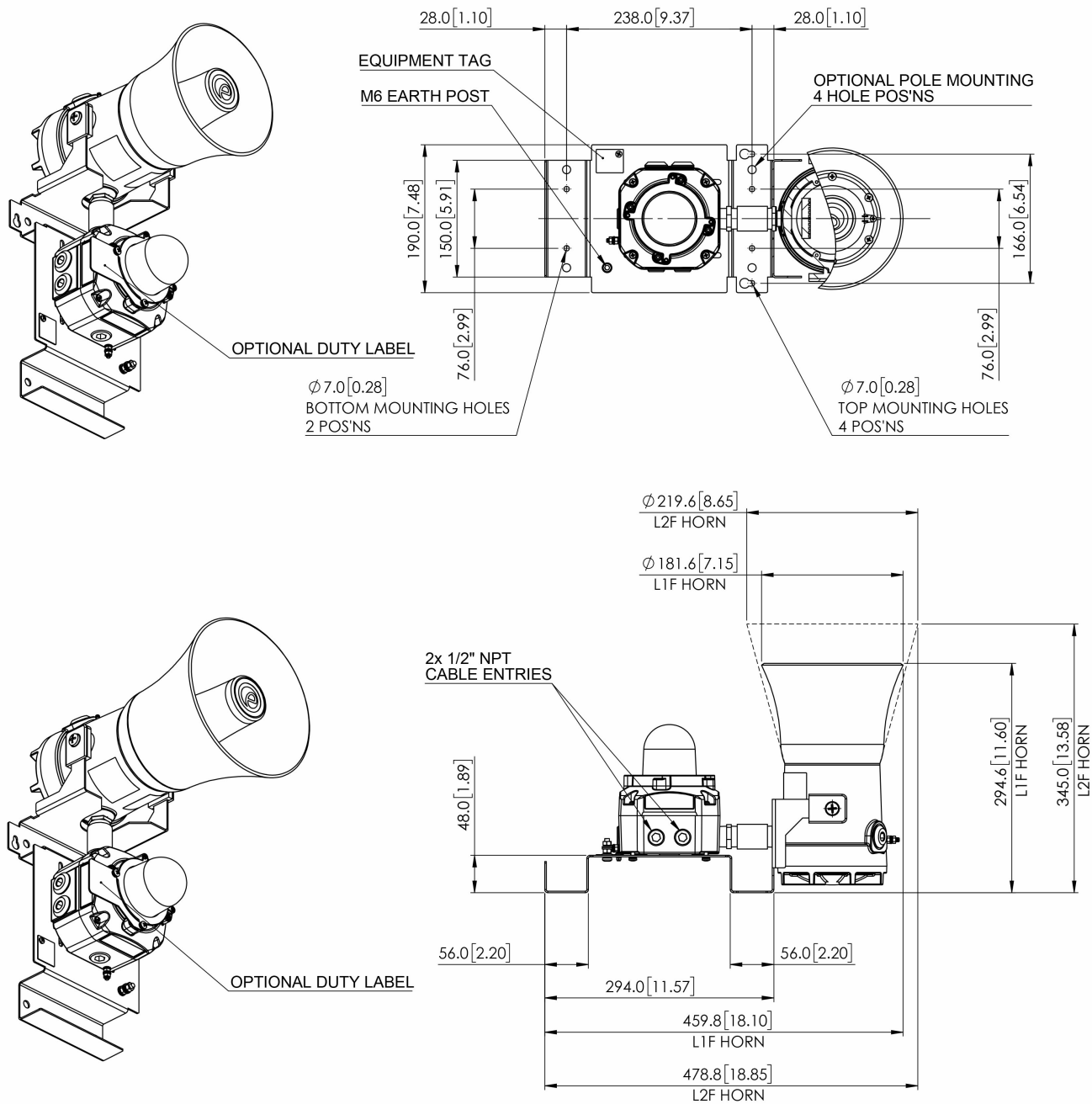
Part Code:	Identifier:	Description:
Product type:	D2xCF	Combined Speaker Strobe
Strobe type:	7C 8C	D2xB1XH2 70.29cd Xenon strobe D2xB1LD3 79.30cd LED strobe
Horn or Speaker type:	S2F L1F L2F	D2xS2F Alarm horn 111/114dB(A) @ 10ft D2xL1F 15W Speaker 25/70V line D2xL2F 25W Speaker 25/70V line
Cable entries:	M	1×3/4"NPT + 2×1/2"NPT + 2xM20x1.5mm
Stopping plug/Adaptor material:	N	Nickel plated brass
Tag/Duty label:	1 3	316 Stainless steel equipment tag 316 Stainless steel equip. tag & duty label
Product version:	A	UL/cUL/ULC Class I/II Division 2, Class I Zone 2/22, ATEX & IECEx
Product option:	1 W	Standard wiring Special wiring
Assembly color:	R	Red

Part code examples:

D2xCF8CS2FMN1A1R	D2xCF: Horn/Speaker Strobe 8C: 79.30cd LED strobe S2F: 111/114dB(A) alarm horn M: 1×3/4"NPT + 2×1/2"NPT + 2xM20x1.5mm cable entries N: Nickel plated brass stopping plugs 1: Stainless steel equipment tag (specify required contents) A: UL/cUL/ULC/ATEX/IECEx approval for Class I/II Division 2, Class I Zone 2/22 1: Standard product wiring R: Red enclosure and stainless steel back plate
D2xCF7CL2FMN3A1R	D2xCF: Horn/Speaker Strobe 7C: 86.37cd Xenon strobe L1F: 15W 25/70V Speaker M: 1×3/4"NPT + 2×1/2"NPT + 2xM20x1.5mm cable entries N: Nickel plated brass stopping plugs 3: Stainless steel equipment tag & duty label (specify required contents) A: UL/cUL/ULC/ATEX/IECEx approval for Class I/II Division 2, Class I Zone 2/22 1: Standard product wiring R: Red enclosure and stainless steel back plate

Current Consumption

Component product:	Part code ref.:	Nominal voltage:	Nominal current:	Max. current:	Max. in-rush:
Xenon Strobe D2xB1XH2	7C	24Vdc	609mA	609mA	828mA <4.4ms
LED Strobe D2xB1LD3	8C	24Vdc	189mA	488mA	1180mA <7.0ms
Alarm Horn D2xS2F	S2F	24Vdc	Default: 324mA High power: 740mA	Default: 324mA High power: 740mA	815mA <4ms



Tone table

S 1	Description	S 2	S 3	S 4
T 1	1000 Continuous - PFEER Toxic Gas	T 3	T 2	T 44
T 2	1200/500 @ 1Hz Sweeping - DIN / PFEER P.T.A.P.	T 1	T 3	T 44
T 3	1000 @ 0.5Hz (1s on, 1s off) Intermittent - P...	T 1	T 2	T 44
T 4	1.4KH-1.6KHz 1s, 1.6KHz-1.4KHz 0.5s - NF C 48...	T 44	T 24	T 1
T 5	544(100mS)/440 (400mS) - NF S 32-001	T 52	T 19	T 1
T 6	1500/500 - (0.5s on , 0.5s off) x3 + 1s gap -...	T 7	T 44	T 1
T 7	500-1500Hz Sweeping 2 sec on 1 sec off - AS4428	T 6	T 44	T 1
T 8	500/1200Hz @ 0.26Hz(3.3s on, 0.5s off) - NEN ...	T 44	T 24	T 35
T 9	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	T 18	T 34	T 1
T 10	1000 (1s on, 1s off)x7 + (7s on, 1s off) - IM...	T 21	T 34	T 1
T 11	420(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201 ...	T 44	T 1	T 8
T 12	1000(0.5s on, 0.5s off)x3 + 1s gap - ISO 8201...	T 44	T 1	T 8
T 13	422/775 - (0.85 on, 0.5 off) x3 + 1s gap - ...	T 44	T 1	T 8
T 14	1000/2000 @ 1Hz - Singapore	T 23	T 3	T 35
T 15	300 Continuous	T 44	T 24	T 35
T 16	440 Continuous	T 44	T 24	T 35
T 17	470 Continuous	T 44	T 24	T 35
T 18	500 Continuous - IMO code 2 (Low)	T 44	T 24	T 35
T 19	554 Continuous	T 64	T 24	T 35
T 20	660 Continuous	T 44	T 24	T 35
T 21	800 Continuous - IMO code 2 (High)	T 44	T 24	T 35
T 22	1200 Continuous	T 44	T 24	T 35
T 23	2000 Continuous	T 15	T 3	T 35
T 24	2400 Continuous	T 48	T 20	T 35
T 25	440 @ 0.83Hz (0.60s on, 0.60s off) Intermittent	T 1	T 44	T 8
T 26	470 @ 0.9Hz (0.55s on, 0.55s off) Intermittent	T 1	T 44	T 8
T 27	470 @ 5Hz (0.10s on, 0.10s off) Intermittent	T 1	T 44	T 8
T 28	544 @ 1.14Hz (0.43s on, 0.44s off) Intermittent	T 44	T 24	T 8
T 29	655 @ 0.875Hz (0.57s on, 0.57s off) Intermittent	T 1	T 44	T 8
T 30	660 @ 0.28Hz (1.80s on, 1.80s off) Intermittent	T 44	T 24	T 8
T 31	660 @ 3.3Hz (0.15s on, 0.15s off) Intermittent	T 30	T 24	T 8
T 32	745 @ 1Hz (0.50s on, 0.50s off) Intermittent	T 44	T 24	T 8

S 1	Description	S 2	S 3	S 4
T 33	800 (0.25s on, 1.00s off) Intermittent	T 53	T 24	T 8
T 34	800 @ 2Hz (0.25s on, 0.25s off) - IMO code 3...	T 56	T 24	T 8
T 35	1000 @ 1Hz (0.50s on, 0.50s off) Intermittent	T 44	T 24	T 8
T 36	2400 @ 1Hz (0.50s on, 0.50s off) Intermittent	T 21	T 24	T 8
T 37	2900 @ 5Hz (0.10s on, 0.10s off) Intermittent	T 53	T 24	T 8
T 38	363/518 @ 1Hz (0.50s / 0.50s) Alternating	T 1	T 8	T 19
T 39	450/500 @ 2Hz (0.25s / 0.25s) Alternating	T 1	T 8	T 19
T 40	554/440 @ 1Hz (0.50s / 0.50s) Alternating	T 44	T 24	T 19
T 41	554/440 @ 0.65Hz (0.76s / 0.76s) Alternating	T 1	T 8	T 19
T 42	561/760 @ 0.83Hz (0.60s / 0.60s) Alternating	T 1	T 8	T 19
T 43	780/600 @ 0.96Hz (0.52s / 0.52s) Alternating	T 1	T 8	T 19
T 44	800/1000 @ 2Hz (0.25s / 0.25s) Alternating	T 5	T 24	T 19
T 45	970/800 @ 2Hz (0.25s / 0.25s) Alternating	T 1	T 8	T 19
T 46	800/1000 @ 0.875Hz (0.57s / 0.57s) Alternating	T 53	T 24	T 19
T 47	2400/2900 @ 2Hz (0.25s / 0.25s) Alternating	T 57	T 24	T 19
T 48	500/1200 @ 0.3Hz (1.67s / 1.67s) Sweeping	T 44	T 24	T 12
T 49	560/1055 @ 0.18Hz (2.73s / 2.73s) Sweeping	T 44	T 24	T 12
T 50	560/1055 @ 3.3Hz (0.15s / 0.15s) Sweeping	T 44	T 24	T 12
T 51	600/1250 @ 0.125Hz (4s / 4s) Sweeping	T 44	T 24	T 12
T 52	660/1200 @ 1Hz (0.50s / 0.50s) Sweeping	T 64	T 24	T 12
T 53	800/1000 @ 1Hz (0.50s / 0.50s) Sweeping	T 56	T 24	T 12
T 54	800/1000 @ 7Hz (0.07s / 0.07s) Sweeping	T 57	T 24	T 12
T 55	800/1000 @ 50Hz (0.01s / 0.01s) Sweeping	T 54	T 24	T 12
T 56	2400/2900 @ 7Hz (0.07s / 0.07s) Sweeping	T 57	T 24	T 12
T 57	2400/2900 @ 1Hz (0.50s / 0.50s) Sweeping	T 47	T 24	T 12
T 58	2400/2900 @ 50Hz (0.01s / 0.01s) Sweeping	T 54	T 24	T 12
T 59	2500/3000 @ 2Hz (0.25s / 0.25s) Sweeping	T 44	T 24	T 12
T 60	2500/3000 @ 7.7Hz (0.65s / 0.65s) Sweeping	T 44	T 24	T 12
T 61	800Hz Motor Siren	T 44	T 24	T 12
T 62	1200Hz Motor Siren	T 44	T 24	T 12
T 63	2400Hz Motor Siren	T 44	T 24	T 12
T 64	Simulated Bell	T 44	T 21	T 12