

# D1xL1F 117dB(A) 15W Explosion Proof Speaker

The D1xL1F is a 15W PA loudspeaker with re-entrant flare horn. A high SPL in a robust Type 4/4X, IP66 marine grade, corrosion proof aluminium enclosure ensures suitability for all Class I & II Div 1 & Zone 1, 20 and 21 explosion proof applications.

The re-entrant flare horn is high impact, fire retardant thermoplastic and is field replaceable – the driver employs a standard 1 3/8" -18 male thread coupling. All models have triple cable entries and duplicated terminals..

The large termination chamber and cover feature a threaded flameproof joint simplifying both installation and routine maintenance.

## Features

- Multiple transformer tapings
- Ratchet adjustable 316 stainless steel bracket
- Triple cable entries, duplicated cable terminations
- Robust marine grade aluminium enclosure
- UL 1480 Speakers for Fire Alarm and Signaling Systems,
- CAN/ULC-S541 Speakers for Fire Alarm and Signaling Systems

## Approvals

- UL/cUL File ref: E230764
- IECEx Certificate: IECEx ULD 19.0008X
- ATEX Certificate: DEMKO 19 ATEX 2141X
- CSFM listing: 7136-2279:0504
- UKCA certificate: UL21UKEX2132X

## Coding

- NEC Class Div  
Class I Div 1 Group ABCD T5 Ta -55°C to +85°C (T6 +65°C)
  - CEC Class Div  
Class I Div 1 Group ABCD T5 Ta -55°C to +75°C (T6 +65°C)
  - NEC Class Zone  
Class I Zone 1 AEx db IIC T5 Gb Ta -55°C to +75°C (T6 +60°C)  
Zone 21 AEx tb IIIC T90°C Db Ta -55°C to +75°C
  - CEC Class Zone  
Ex db IIC T5 Gb Ta -55°C to +75°C (T6 +60°C)  
Ex tb IIIC T90°C Db Ta -55°C to +75°C
  - IECEx / ATEX  
II 2G Ex db IIC T5 Gb Ta -55°C to +75°C (T6 +60°C)  
II 2D Ex db IIIC T92°C Db Ta -55°C to +75°C
  - Product version: D
  - NEC & CEC Class Div  
Class II Div 1 Group FG T6 Ta -40°C to +70°C  
Class III Div 1 Ta -40°C to +70°C  
Zone 20 IIIB T6 Ta -40°C to +70°C
  - NEC Class Zone (R008 & R016 only)  
Zone 21 AEx tb IIIC T90°C Db Ta -55°C to +75°C
  - CEC Class Zone (R008 & R016 only)  
Ex tb IIIC T90°C Db Ta -55°C to +75°C
- See product manual for full product specific coding.



## Specification

Product version A SPL:	101dB +/-3dB @ 1W @ 1m (Pink) 113dB +/-3dB @ 15W @ 1m (Rated) 117dB(A) @ 1 m at 1.3Khz (Max)
Product version D SPL:	88dB +/-3dB @ 1W @ 1m (Pink) 93dB +/-3dB @ 15W @ 1m (Rated) 98dB(A) @ 1 m at 1.3Khz (Max)
Rated power:	15 Watts RMS
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
70v line tappings:	15W/7.5W/3W/1W z=336.67 Ohms/653.33 Ohms/1.6k Ohms/4.9k Ohms
100v line tappings:	15W/7.5W/3W/1W z=666.87 Ohms/1.34k Ohms/3.34k Ohms/10k Ohms
Low impedance:	8 Ohm or 16 Ohm
Q Factor:	1.9 @ 500Hz, 3.1 @ 1KHz, 6.0 @ 2KHz, 11.0 @ 4KHz, 10.9 @ 8KHz
Directivity Index:	2.9 @ 500Hz, 4.9 @ 1KHz, 7.8 @ 2KHz, 10.4 @ 4KHz, 10.4 @ 8KHz
Frequency range:	400Hz to 8000 Hz
DC Line monitoring:	2.2µF Capacitor (Transformer ) 470µF Capacitor (Low impedance)
Ingress protection:	EN60529: IP66/67 UL50E / NEMA250: 4/4X/3R/13
Enclosure material:	Marine grade LM6 aluminium alloy
Enclosure colour:	Red or Grey, custom colours available on request
Enclosure finish:	Chromate & powder coated finish
Cable entries:	1 × 1/2"NPT & 2 x M20 Thread adaptors available
Stopping plugs:	Brass, Nickel Plated or Stainless Steel
Terminals:	0.5-2.5mm <sup>2</sup> (20-14 AWG) Duplicated terminals
Grounding stud:	M5
Enclosure volume:	<2 litres
Product version A Installation temp:	NEC: -55° to +85°C [-67° to +185°F] CEC/IECEX/ATEX: -55° to +75°C [-67° to +167°F]
Product version D Installation temp:	NEC Class Div: -40° to +70°C [-40° to +158°F] NEC Class Zone, CEC Class Div/Zone: -55° to +75°C [-67° to +167°F]
Storage temp:	-55° to +85°C [-67° to +185°F]
Relative humidity:	95% - Additional tropicalisation is recommended for applications where both high relative humidity and high ambient temperatures exist
MTBF V100/V070/V725:	630.69 years / 5,524,861 hours - MIL 217
MTBF R008/R016:	830.22 years / 7,272,727 hours - MIL 217
Weight:	100V, 70V, 25/70V line: 4.3kg/9.5lbs Low imp.: 4.0kg/8.7lbs

## Part Codes

Part Code:	Identifier:	Description:
Product type:	D1xL1	D1xL1 15W Loudspeaker
Horn type:	F	Flare re-entrant horn
Type:	V100 V070 V725 R008 R016	100V Line Transformer 70V Line Transformer 25V/70V Line Transformer 8 Ohm Low impedance 16 Ohm Low impedance
Cable entries:[e]	A B C D F G Note:	2 x M20x1.5mm & 1 × 1/2"NPT 2 × 1/2"NPT - adaptors 2 × 3/4"NPT - adaptors 2 x M25x1.5mm - adaptors 1 × 3/4"NPT - adaptor 1 x M25x1.5mm - adaptor All entries, excluding thread adaptors, supplied with stopping plugs installed.
Stopping plug/ adaptor material:	B N S	Brass Nickel plated brass Stainless steel
Bracket material:	1 3	A4 316 Stainless Steel A4 316 St/St with Equip. Tag
Product version:	A D	UL, cUL, IECEX, ATEX, CSFM Class II - UL, cUL (excluding 100V & 25V/70V)
Product option:	1 X	Standard product Custom configuration - contact E2S
Enclosure colour:	R G S	Red Grey Special colour - contact E2S

## Accessories:

SP65-0001-A4	Pole Mount Bracket Kit St/St A4 (316)
SP65-0003-A4	Sunshade - St/St A4 (316)

