

# DB4B loudspeaker range up to 25 watts

Hazardous & ordinary locations



## Overview

The DB4B is a high power explosion proof loudspeaker, introduced as a replacement for the current DB4 with improved intelligibility and acoustic performance. Certified for use in a wide range of temperatures from -67°F to +158°F the Ex enclosure is manufactured from GRP with a rugged thermoplastic flare providing a corrosion free and aesthetically pleasing product.

## Features

- UL certified for USA and Canada  
Class I, Div 2, Groups A-D  
Class I, Zone 1  
Class II, Div 2, Groups F & G  
Zone 21, AEx tb IIIC  
Class III, Div. 1
- CSFM certified
- Certified temperature -67°F to +158°F
- NEMA 4X & 6/IP66 & IP67
- 114dB at 25W, 10 feet\*
- 8W, 15W & 25W versions
- Power tapings, via integral transformer
- Frequency response 350Hz - 8kHz
- Ex enclosure - Glass reinforced polyester
- Flare - High impact thermoplastic polyester
- Stainless steel mounting bracket and cover screws
- Mounting bracket has ratchet facility as standard
- Optional swivel bracket available
- Optional resettable fuse†

\* Depending on version

† Contact MEDC for details

The frequency response of the unit ensures that critical voice messages and general alarm tones are highly intelligible. The specific SPL figure for sensitivity, 1W @ 10 feet is 100dB whilst at 10 feet the 25W unit produces 114dB, the 15W unit 112dB and the 8W unit 110dB.

Options include DC blocking capacitors for monitored systems, resettable fuses for compliance with marine regulations and a swivel bracket that gives the installer greater flexibility when positioning the unit. The short flare option is a worthy addition to the range offering a high SPL and wide dispersion angle in a compact unit.



## Certifications

**UL Haz Locs** UL certified for USA and Canada, listing no. E203310  
Class I, Div 2. Groups A-D. Class I, Zone 1, Ex d IIC / AEx d IIC Gb  
Class II, Div 2. Groups F&G. Zone 21 AEx tb IIIC  
Class III Div 1

**UL Ord Locs** UL certified for USA and Canada, listing no. S8847

## Specifications

**Material** Ex enclosure - flame retardant, UV stable, glass reinforced polyester  
Flare - flame retardant, high impact, UV stable, thermoplastic polyester (UV stability tested to ISO 4892 part 3)  
Hardware - bracket, fixings and captive cover screws in 316 stainless steel

**Fire retardancy** Body - glass reinforced polyester. V0 flammability rating  
Outer flare - thermoplastic polyester. V0 flammability rating

**Finish** Body - natural black  
Flare - natural black, natural red or painted as specified (black short flare painted black)

**Rated power** 8W, 15W or 25W (other ratings available, contact MEDC)

**Frequency range** Frequency response 350Hz to 8kHz  
8W and 15W units are available for use @ 200Hz

**Weight** 11lbs/5.0kg, Based on long flare with transformer

**Ingress protection** NEMA 4X & 6, IP66 & IP67 (IPx7 & NEMA 6 on terminal chamber only)

**Entries** Up to 2 x 1/2" NPT or M20. Blanking plug available

**Terminals** 8 x 12AWG

**Mounting arrangement** Stainless steel bracket with ratchet facility, optional swivel bracket available

**Labels** Optional duty and tag labels available

**Dispersion angle** Long flare (short in brackets), -6dB, 1kHz = 140° (240°), 4kHz = 40° (50°)

**Driver impedance** 8Ω

**SPL 1W/10 feet (sensitivity)** 100dB (IIC long flare)

### Sound pressure level at 10' (dB):

Values in dB @ 10 feet (Unsmoothed, peak values)	8W		15W		25W	
	Short	Long	Short	Long	Short	Long
IIC Gas	106	110	109	112	111	114
IIC Gas and Dust	101	104	104	106	106	108

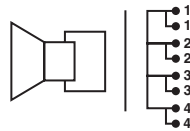
Tolerance +/- 3dB

### Certified temperature:

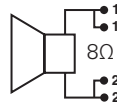
Protection type	Minimum temp	Maximum temp		
	All units	8W unit	15W unit	25W unit
UL	-67°F	+158°F	+149°F	+131°F

### Transformer: Used by combining the rated power tapplings below

Tappings	Power		
	8W	15W	25W
1:2	8.0	15.0	25.0
2:3	4.0	7.5	12.5
3:4	2.0	5.0	6.0
1:3	1.5	4.0	4.0
2:4	0.7	2.0	2.0
1:4	0.4	0.8	1.0

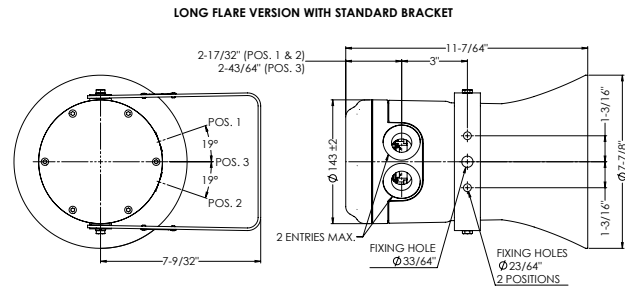


1) Loop in/loop out (4 x 2) power tap change; 8 terminals

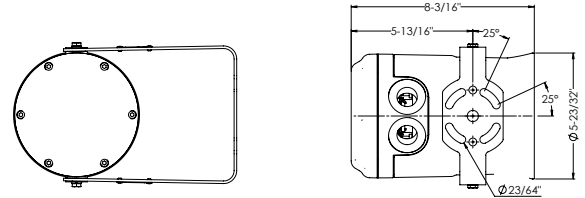


2) Loop in/loop out (2 x 2) 8 Ω; 4 terminals

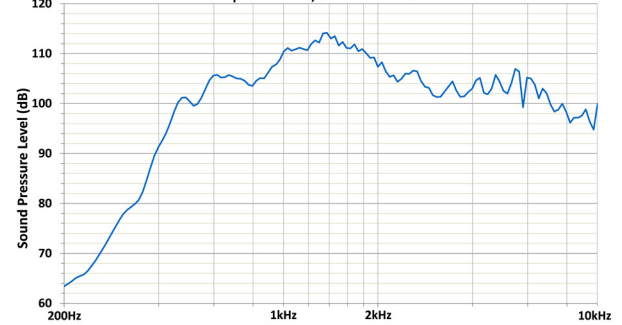
## General arrangement drawing (all dimensions in inches)



### SHORT FLARE VERSION WITH OPTIONAL SWIVEL BRACKET



### DB4B IIC Long Flare, 25W, 10ft SPL vs Frequency



## Ordering requirements

The following code is designed to help in selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box

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