

Hazardous area loudspeakers

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Eaton's range of explosion protected, heavy duty, industrial and commercial speakers are designed to meet the requirements for public address, voice alarm and evacuation procedures. This range of loudspeakers, specifically designed for potentially explosive gas and dust atmospheres, is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The units can be operated as part of 100 or 70 volt line systems, and include a wide range of sound output levels, which are all measured in dB at 1 watt / 1 metre.

Eaton ensures the production of rugged, hard wearing products by using corrosion free materials such as GRP (glass reinforced polyester) and stainless steel.



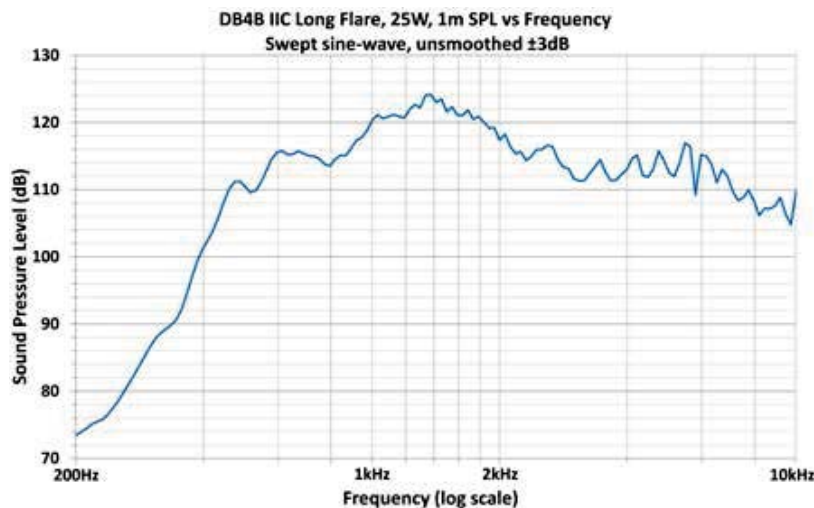
MEDC DB4B – 124dB loudspeaker

The DB4B, a new high power, explosion proof loudspeaker launched by Eaton, offers a specific SPL figure of up to 124dB (for sensitivity of 25W @ 1m). The 8W and 15W units generate sufficient SPL (120dB and 122dB @1M respectively) to satisfy most specifications, allowing end users to install units with lower power consumption, therefore reducing the amount of application and support equipment required.

With a range of certifications, including ATEX, IECEx, cULus, TR CU, CQST, INMETRO, CCOE, SIL 2 and DNV the DB4B is manufactured from a GRP Ex enclosure and rugged thermoplastic flare. The units are also certified for from -55°C up to +70°C*, ensuring that our products are suitable for safe use in the harshest working environments.

The DB4B has an extended frequency response, ensuring that critical voice messages and general alarm tones are highly

intelligible. This allows the human voice to be heard and clearly understood, as demonstrated on the below frequency response chart. In addition, the new unit provides a clearer sound for sibilant consonants, allowing for much crisper and intelligible speech.



- ATEX/IECEx/cULus/TR CU/CQST/INMETRO/CCOE/SIL 2 and DNV certified
- Certified -55°C to +70°C*
- Gas/Gas & Dust units available
- Ex d/Ex de units available
- Extended frequency response

*Model dependent

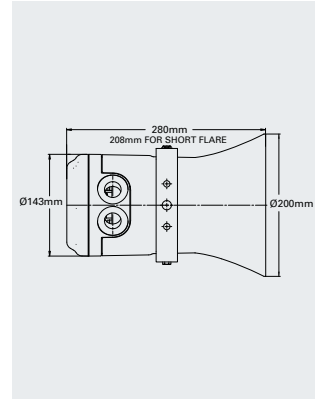
Hazardous area loudspeakers

DB4B

Ex d(e) Loudspeaker



Certification	ATEX, IECEx, cULus, TR CU, CQST, INMETRO, CCOE
Area classification	Zone 1, 2, 21, 22*, weatherproof
ATEX/IEC classification	Ex II 2G, Ex d IIC T4/T5/T6 Gb Ex II 2GD, Ex d IIC T4/T5/T6 Gb Ex tb IIIC T135°C/T100°C/T85°C Db Ex II 2G, Ex de IIC T4/T5/T6 Gb Ex II 2GD, Ex de IIC T4/T5/T6 Gb Ex tb IIIC T135°C/T100°C/T85°C Db
UL/NEC classification	Class I, Div. 2, Groups A, B, C, D Class II, Div. 2, Groups F, G
Approvals	SIL2, Russian fire approval, DNV, CSFM
Operating temperature	-55°C to +70°C*
Ingress protection	IP66 & IP67, NEMA 4X & 6
Material	Body: corrosion free GRP. Flare: thermoplastic
Entries	Up to 2 x M20 or ½" NPT
Weight	Ex d: 5.0kg (based on long flare unit) Ex de: 5.8kg (based on long flare unit)
Sound output	Sensitivity (1W, 1m): 110dB* (±3dB) Max at full power (25W, 1m): 124dB* (±3dB)
Transformer	100V, 70V, 25V
Wattage & transformer tappings	25W: 25.0, 12.5, 6.0, 4.0, 2.0, 1.0* 15W: 15.0, 7.5, 5.0, 4.0, 2.0, 0.8* 8W: 8.0, 4.0, 2.0, 1.5, 0.7, 0.4*
Low impedance	8Ω*
Options	Tag & duty labels, swivel bracket, DC blocking capacitor, flare length, flare colour

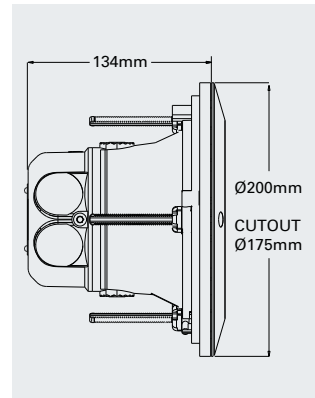


DB20C

Ex de Loudspeaker



Certification	ATEX, IECEx, TR CU
Area classification	Zone 1, 2, 21, 22, weatherproof
ATEX/IEC classification	Ex II 2GD Ex de IIC T4/T5, Ex tD A21 T100°C/T115°C/T130°C
Approvals	DNV
Operating temperature	-50°C to +70°C
Ingress protection	IP66 & IP67
Material	Body: corrosion free GRP Flare: U.V. stable ABS
Entries	2 x M20 & 1 x blank plug M20
Weight	1.5kg
Output	Sensitivity (1W, 1m): 100dB (±3dB) Max at full power (4W, 1m): 106dB (±3dB)
Transformer	100V
Wattage & transformer tappings	4W: 4.0, 2.0, 1.0, 0.75, 0.38, 0.2*
Low impedance	8Ω*
Options	Tag & duty labels, Earth continuity, loop in/out terminals



*Model dependent

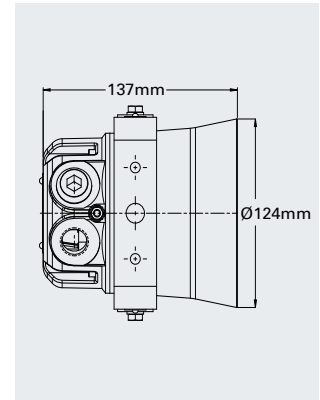
Hazardous area loudspeakers

DB20

Ex de Loudspeaker



Certification	ATEX, IECEx, TR CU, CCOE	
Area classification	Zone 1, 2, 21, 22*, weatherproof	
ATEX/IEC classification	Ex II 2G, Ex de IIB T3/T4, Ex II 2GD Ex de IIC T4/T5, Ex tD A21 T130°C/T115°C/T100°C	
Approvals	Russian fire approval	
Operating temperature	-50°C to +70°C	
Ingress protection	IP66 & IP67	
Material	Body: corrosion free GRP. Flare: U.V. stable ABS	
Entries	2 x M20 & 1 x blank plug M20	
Weight	1.5kg	
Sound output	Sensitivity (1W, 1m): 100dB* (±3dB) Max at full power (8W, 1m): 112dB* (±3dB)	
Transformer	100V	
Wattage & transformer tappings	8W: 8.0, 4.0, 2.0, 1.5, 0.7, 0.4* 4W: 4.0, 2.0, 1.0, 0.75, 0.38, 0.2*	
Low impedance	8Ω*	
Options	Tag & duty labels, Earth continuity, loop in/out terminals, colour	

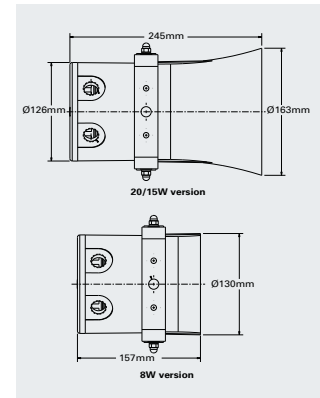


DB10

Ex de Loudspeaker



Certification	ATEX, IECEx, TR CU, CQST, INMETRO, CCOE	
Area classification	Zone 1, 2, 21, 22*, weatherproof	
ATEX/IEC classification	Ex II 2G, Ex de IIB + H ₂ T4/T5/T6 Gb Ex II 2G, Ex de IIC T4/T5/T6 Gb	
Approvals	Russian fire approval, DNV	
Operating temperature	-50°C to +65°C*	
Ingress protection	IP66 & IP67	
Material	Corrosion free GRP	
Entries	Up to 2 x M20	
Weight	Short flare: 3.1kg. Long flare: 3.5kg	
Sound output	Sensitivity (1W, 1m): 105dB* (±3dB) Max at full power (15W, 1m): 115dB* (±3dB)	
Transformer	100V	
Wattage & transformer tappings	8W: 8.0, 4.0, 2.0, 1.0, 0.5, 0.25* 15W: 15.0, 7.5, 3.75, 2.5, 1.25, 0.75*	
Low impedance	8Ω*	
Options	Tag & duty labels, Earth continuity, colour	

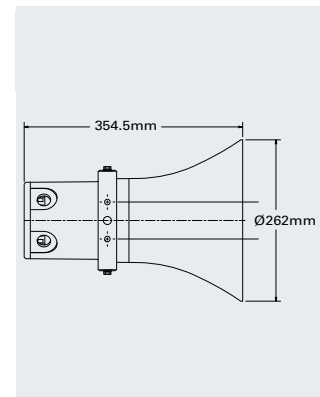


DB16

Ex de Loudspeaker



Certification	ATEX, IECEx, cULus, TR CU, CCOE	
Area classification	Zone 1, 2, 21, 22*, weatherproof	
ATEX/IEC classification	Ex II 2G, Ex de IIB T3 Gb Ex de IIC T3 Gb, Ex tb IIIC T110°C Db	
UL/NEC classification	Class I, Div. 2, Groups A, B, C, D*	
Approvals	Russian fire approval, DNV	
Certified temperature	-50°C to +65°C*	
Ingress protection	IP66 & IP67	
Material	Corrosion free GRP	
Entries	Up to 2 x M20, M25, ½" NPT or ¾" NPT*	
Weight	5.5kg	
Output	Sensitivity (1W, 1m): 110dB* (±3dB) Max at full power (30W, 1m): 122dB* (±3dB)	
Transformer	100V	
Wattage & transformer tappings	25W: 25.0, 12.5, 6.0, 4.0, 2.0, 1.0* 30W: 30.0, 25.0, 12.0, 6.0, 4.0, 2.0*	
Low impedance	8Ω*	
Options	Tag & duty labels, Earth continuity, Earth stud, colour	



*Model dependent