

SPEAKERS – Up to 25 Watts EExd(e), Weatherproof DB4 Range



15W/20W/25W (Long Flare)



8W (Short Flare)

Now VNIPO Approved

Introduction

This range of loudspeakers, intended for use in potentially explosive gas and dust atmospheres, has a power rating of up to 25 watts and is suitable for use in all gas groups including hydrogen.

The flamepaths, flare and the body, are manufactured completely from a UV stable glass reinforced polyester. Stainless steel screws and sinter are incorporated thus ensuring a corrosion free product. A tapered flamepath is used to overcome the problems of assembly of parallel spigot flamepaths.

An optional Exe terminal chamber is available.

An uncertified version is available for use in non-explosive atmospheres.

Models compliant to BS 5839, part 8 are available.

- ★ Zone 1, Zone 2 & non-Ex use.
- ★ EExd IIC T4/T5.
- ★ ATEX approved, Ex II 2GD.
- ★ BASEEFA certified.
- ★ UL listed for USA and Canada:
 - Class I, Div 2, Groups A-D.
 - Class I, Zones 1 & 2, AExd IIC, T4.
- ★ GOST 'R' & 'K' certified.
- ★ Australian (SAA) certified.
- ★ Brazilian (Inmetro) certified.
- ★ Optional Exe terminal chamber.
- ★ IP66 and IP67.
- ★ *Certified temperature -55°C to $+70^{\circ}\text{C}$.
- ★ GRP corrosion-free flamepaths.
- ★ 119dBA at 25 watts at 1 metre.
- ★ 8, 15, 20 and 25 watt versions.
- ★ BS 5839, part 8 compliant versions available.
- ★ Addressable capability.
- ★ Power tapings, via integral transformer.
- ★ Ratcheted swivel bracket.
- ★ Stainless steel sinter.
- ★ Stainless steel mounting bracket.
- ★ Tapered flamepath.

*Depending on version.

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MEDC

Specification

Rated Power: 8, 15, 20 or 25 watts RMS continuous (at 25°C).
 Certification: CENELEC EN50014, 18, 19.
 BASEEFA Cert. No. BAS00ATEX2097X.
 BASEEFA Cert. No. BAS00ATEX2098X.
 For T ratings and full list of certified temperatures, please ring MEDC.
 Zones 1 and 2. Not suitable for use in atmospheres containing carbon disulphide.
UL listed for USA and Canada:
 - Class I, Div 2, Groups A-D.
 - Class I, Zones 1 & 2, AExd IIC T4.
GOST 'R' Certification: 1Exd IIC T4 & 1Exde IIC T4.
 Russian Fire Alarm (VNIPO) approved.
GOST 'K' Certification: Exd IIC T4.
Brazilian (Inmetro) Certification: BR-Ex d IIC T5/T4/T135°C.
 BR-Ex de IIC T5/T4/T135°C.

Material: Body & horn in anti-static, UV stable, glass reinforced polyester.
 Swivel bracket in stainless steel.
 Captive cover screws in stainless steel.

Finish: Body and horn, natural black or epoxy paint coated to client's colour requirements.

Output: Long Flare: 107 dBA at 1 Watt at 1 metre.
 Short Flare: 100 dBA at 1 Watt at 1 metre.
 119 dBA at 25 Watts at 1 metre. 109 dBA at 8 Watts at 1 metre.
 Measured in accordance with IEC 268.

Weight: 5.0kg approx. dependent on model. (Add 0.5kg for Exe version).

Certified Temperature:	Exd (≤15W)	Exd (>15W)	Exde (≤15W)	Exde (>15W)	UL
DB4	-20°C +70°C	-20°C +50°C	-20°C +70°C	-20°C +40°C	-55°C +70°C
DB4L	-55°C +70°C	-55°C +50°C	-55°C +70°C	-55°C +50°C	n/a

Ingress Protection: IP66 & IP67.

Fire Retardancy: GRP is fire retardant to ISO 1210.

Frequency Range: 400Hz to 8kHz.

Voice Coil Impedance: 8 ohms.

Transformer: Used to vary the rated power by selecting different tappings (see table below).

Transformer Tappings	Power			
	25W	20W	15W	8W
1:2	25.0	20.0	15.0	8.0
2:3	12.5	10.0	7.5	4.0
3:4	6.0	6.0	5.0	2.0
1:3	4.0	5.0	4.0	1.5
2:4	2.0	2.0	2.0	0.7
1:4	1.0	1.5	0.8	0.4

- Transformer Options:**
- i) Standard Tapping: 4 terminal tap change. Loop in/Loop out (4 x 2) terminal tap change (8 terminals).
 - ii) Optional Tapping: 4 terminal tap change with 2 terminals (5 & 6), directly connected to driver (8 ohms).

Other tappings & driver impedances available on request.

Addressable: Consult MEDC for specification.

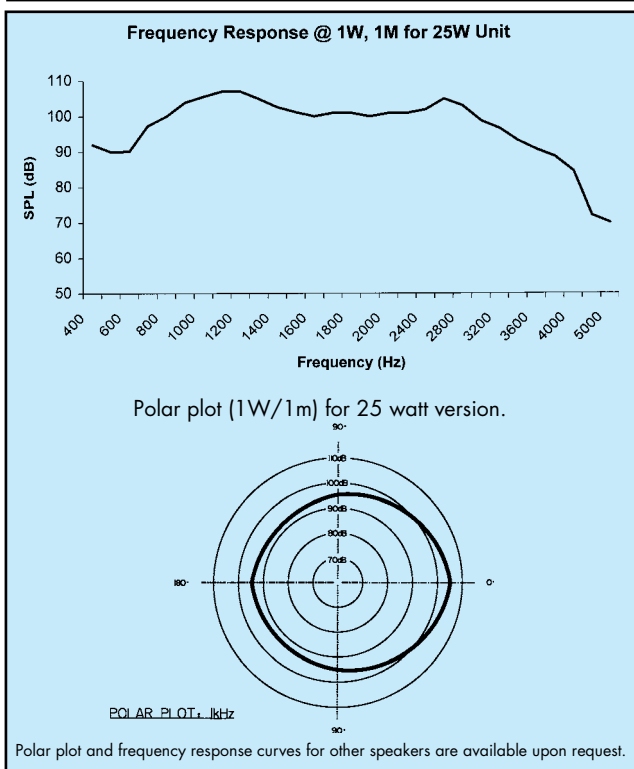
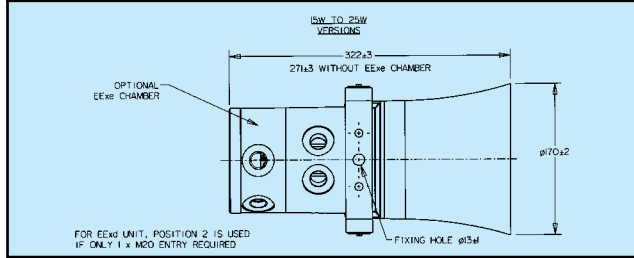
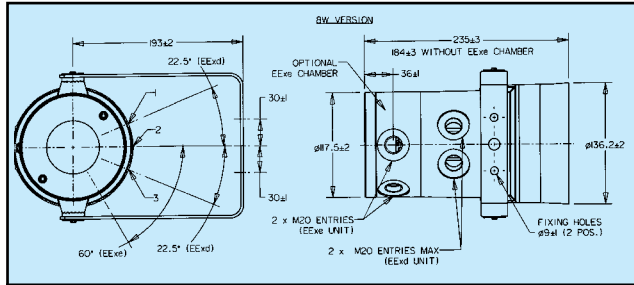
Terminals: 8 x 2.5mm².
 Other terminal arrangements available on request.

Earth Continuity: Included on Exe version.

Mounting: Bracket with ratchet facility.

Labels: Duty and tag labels optional.

Cable Entries: 1 x 20mm EExd.
 2 x 20mm EExd/EEExde.
 2 x 1/2" NPT.



Ordering Requirements

For standard products, available ex-stock, contact sales office for details.

Max. Rated Power DB4 *DB4L	Certification	Transformer	Labels	Entries	Colour																																																																								
*DB4L available unpainted only.																																																																													
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All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

SPEAKERS – Up to 20 Watts EExde, Weatherproof DB10 Range



20W & 15W (Long Flare)



8W (Short Flare)

Introduction

This range of loudspeakers, intended for use in potentially explosive gas atmospheres, has a power rating of up to 20 Watts and is suitable for use in gas groups IIB and hydrogen.

The flamepaths, flare and body, are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

- ★ Zone 1, Zone 2 & non-Ex use.
 - ★ EExde IIB + H₂ T4/T5/T6.
 - ★ ATEX approved, Ex II 2G.
 - ★ BASEEFA certified.
 - ★ GOST 'R' & 'K' certified.
 - ★ Chinese (CQST) certified.
 - ★ Brazilian (Inmetro) certified.
 - ★ IP66 and IP67.
 - ★ Certified temperature -55°C to +70°C*.
 - ★ GRP corrosion-free flamepath.
 - ★ 116 dB(A) at 20 Watts at 1 metre.
 - ★ 8, 15 and 20 Watt versions.
 - ★ Power tapings via integral transformer.
 - ★ Ratcheted swivel mounting stirrup.
 - ★ Stainless steel fixtures.
 - ★ Earth continuity available.
- *Model dependent.

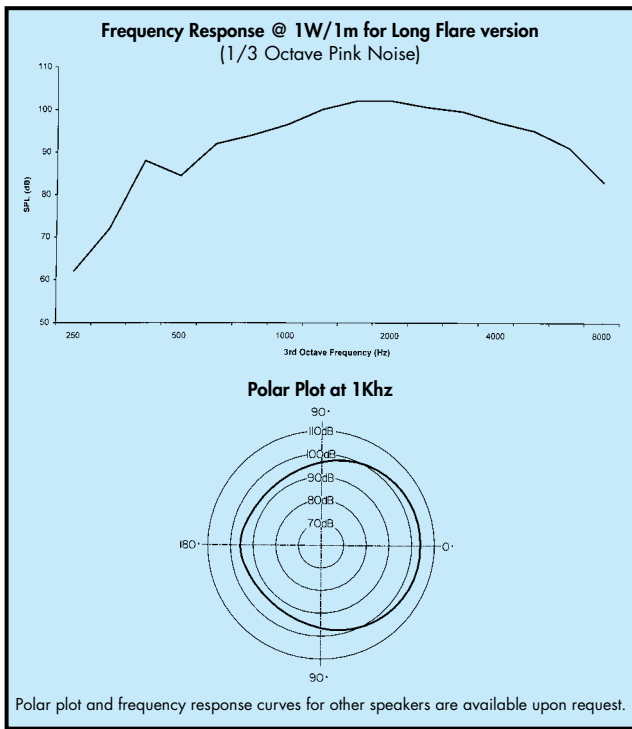
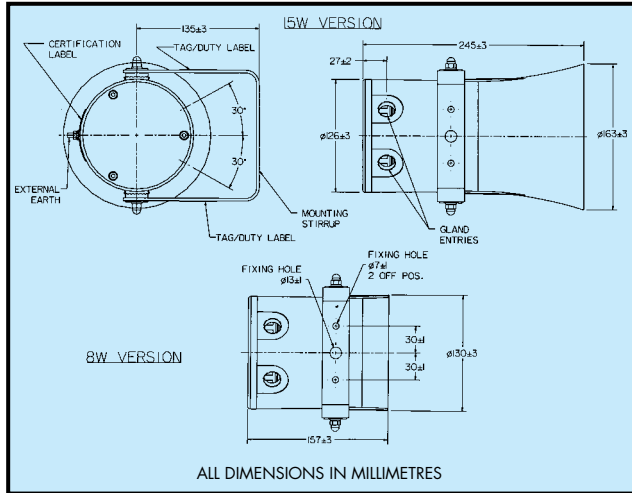
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Specification

Rated Power:	8, 15 & 20 Watts RMS continuous (at 25°C).																															
Certification:	CENELEC EN50014, 18, 19. BASEEFA Cert. No. BAS02ATEX 2086X. 20 Watt version: Ex II 2G, EExde IIB + H ₂ T ₄ . Certified Temp. -55°C to +50°C (T4). 8 & 15 Watt versions: Ex II 2G, EExde IIB + H ₂ T ₄ , T ₅ or T ₆ . Certified Temp. -55°C to +40°C (T6) -55°C to +55°C (T5) -55°C to +70°C (T4). GOST 'R' Certification: 2 Exde IIB + H ₂ T ₄ /T ₅ /T ₆ . GOST 'K' Certification: Exde IIB + H ₂ T ₄ /T ₅ /T ₆ . Chinese (CGST) Certification: Exde IIB + H ₂ T ₄ /T ₅ /T ₆ . Brazilian (Inmetro) Certification: BR-Ex de IIB + H ₂ T ₃ /T ₄ /T ₅ /T ₆ .																															
Material:	Body & horn in anti-static, UV stable, glass reinforced polyester. Mounting stirrup and fixtures in stainless steel.																															
Finish:	All natural or body and horn can be painted to client's requirements.																															
Output:	Long Flare: Maximum output at 1W/1m at 2kHz is 105dB(A). Maximum output at 20W/1m at 2kHz is 116dB(A). Maximum output at 15W/1m at 2kHz is 115dB(A). Short Flare: Maximum output at 1W/1m at 2kHz is 98dB(A). Maximum output at 8W/1m at 2kHz is 107dB(A).																															
Weight:	15W: 3kg approx. 8W: 2.5kg approx.																															
Ingress Protection:	IP66 & IP67.																															
Fire Retardancy:	GRP is fire retardant to ISO 1210.																															
Frequency Range:	400Hz to 8kHz.																															
Voice Coil Impedance:	8 ohms.																															
Transformer:	100V line as standard. Use by combining the rated power tapings below.																															
	<table border="1"> <thead> <tr> <th rowspan="2">Transformer Tappings</th> <th colspan="3">Power</th> </tr> <tr> <th>20W</th> <th>15W</th> <th>8W</th> </tr> </thead> <tbody> <tr> <td>1:2</td> <td>20</td> <td>15.0</td> <td>8.0</td> </tr> <tr> <td>2:3</td> <td>10</td> <td>7.5</td> <td>4.0</td> </tr> <tr> <td>3:4</td> <td>6.0</td> <td>5.0</td> <td>2.0</td> </tr> <tr> <td>1:3</td> <td>3.5</td> <td>4.0</td> <td>1.5</td> </tr> <tr> <td>2:4</td> <td>2.0</td> <td>2.0</td> <td>0.7</td> </tr> <tr> <td>1:4</td> <td>1.0</td> <td>0.8</td> <td>0.4</td> </tr> </tbody> </table>	Transformer Tappings	Power			20W	15W	8W	1:2	20	15.0	8.0	2:3	10	7.5	4.0	3:4	6.0	5.0	2.0	1:3	3.5	4.0	1.5	2:4	2.0	2.0	0.7	1:4	1.0	0.8	0.4
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Transformer Tapping Options:	<p>Standard: Fig. i) 8 terminals (4 x 2), loop in/loop out for 6 tapings.</p> <p>Alternative: Fig. ii) 4 terminals (2 x 2), loop in/loop out, direct 8Ω connection to driver.</p>																															
Terminals:	8 x 2.5mm ² or 4 x 2.5mm ² .																															
Earth Continuity:	Available.																															
Mounting:	Via stirrup with ratchet facility.																															
Labels:	Optional stainless steel tag and duty labels.																															
Cable Entries:	Up to 2 x M20 ISO into EExe chamber.																															

Ordering Requirements

The following code is designed to help you in the selection of the correct unit. Build up the reference number by inserting the code for each feature into the appropriate box. **Standard products available ex-stock, as follows:**

Product	Description
DB10B8XN2BPN	ATEX approved, 8 Watt (short flare), 100V line transformer, 2 X M20 entries with one certified plug fitted, natural black finish.
DB10B15XN2BPN	ATEX approved, 15 Watt (long flare), 100V line transformer, 2 X M20 entries with one certified plug fitted, natural black finish.
DB10B20XN2BPN	ATEX approved, 20 Watt (long flare), 100V line transformer, 2 X M20 entries with one certified plug fitted, natural black finish.

Certification	Max. Rated Power	Transformer	Options	Entries	Colour
DB10					
Certification Code	Power Code	Transformer Code	Option Code	Entries Code	Colour Code
ATEX B	8 Watt 8	Yes X*	Duty D	1 x M20 1B	Natural Black N
GOST 'R' R	15 Watt 15	8 ohm version N	Tag T	2 x M20 2B	Red R
GOST 'K' K	20 Watt 20	*Std 100V	Earth Continuity E	2 x M20 entries 2BP	Special S
Chinese (CGST) Q		Other values available, specify voltage.	None N	with one certified plug fitted	
Inmetro EM					



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

SPEAKERS – Up to 15 Watts for Harsh Industrial & Marine Environments DB14 Range

IP66/67
Weatherproof
Corrosion Free
All GRP



Introduction

This range of loudspeakers has a power rating of 15 Watts and is suitable for use in demanding environments where a robust construction and high ingress protection rating is required.

The body is manufactured completely from a UV stable glass reinforced polyester which is also highly flame retardant and impact resistant. Stainless steel screws are incorporated thus ensuring a corrosion free product.

MEDC can also provide a range of speakers suitable for use in potentially explosive atmospheres.

For more information, refer to the catalogue or contact MEDC.

- ★ IP66 and IP67.
- ★ Temperature range -55°C to $+70^{\circ}\text{C}$.
- ★ Corrosion resistant grey painted GRP.
- ★ 117dBA at 15 watts at 1 metre.
- ★ 100V line transformer.
- ★ Power tapings, via integral transformer.
- ★ Addressable capability.
- ★ Stainless steel ratcheted mounting bracket.
- ★ Earth continuity available.
- ★ BS5839 part 8 compliant version available.

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Pinxton, Nottingham NG16 6JF, UK.
Tel: +44 (0)1773 864100
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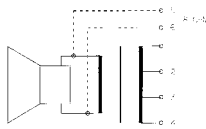
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Tel: +47 913 92 289
Fax: +47 914 46 030

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E-Mail: sales@medc.com Web: www.medc.com



Specification

Rated Power:	15 watts RMS continuous (at 25°C).
Material:	Body & horn in UV stable, glass reinforced polyester. Swivel bracket in stainless steel. Cover screws in stainless steel.
Finish:	Epoxy paint coated to client's colour requirements.
Output:	Maximum output at 1W/1m at 900Hz is 107 dBA. Maximum output at 15W/1m at 900Hz is 117 dBA.
Weight:	2.6kg approx. dependent on model.
Temperature Range:	-55°C to +70°C.
Ingress Protection:	IP66 & IP67.
Frequency Range:	400Hz to 7kHz.
Voice Coil Impedance:	8 ohms.
Addressable:	Consult MEDC for specification.
Terminals:	8 x 2.5mm ² . Other terminal arrangements available on request.
Earth Continuity:	Available.
Mounting:	Bracket with ratchet facility.
Labels:	Duty and tag labels optional.
Cable Entries:	2 x 20mm ISO.
Transformer:	Used to vary the rated power by selecting different tapings (see table below).



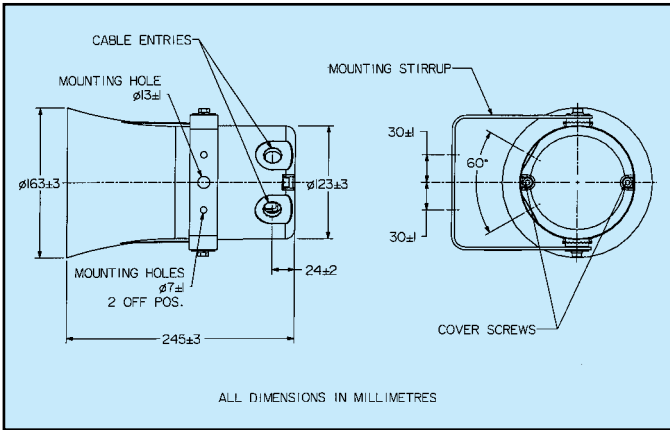
Transformer Tappings

Transformer Tappings	Power 15W
1:2	15.0
2:3	7.5
3:4	5.0
1:3	4.0
2:4	2.0
1:4	0.8

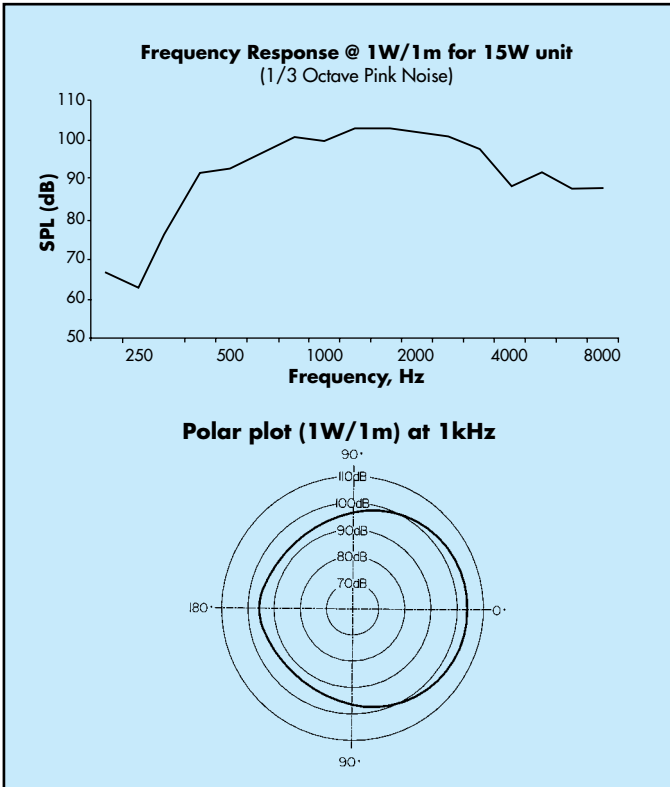
Transformer Options:

- Standard Tapping: Loop in/Loop out (4 x 2) terminal tap change (8 terminals).
- Optional Tapping: 4 terminal tap change with 2 terminals (5 & 6), directly connected to driver (8 ohms).

Other tapings & driver impedances available on request.



ALL DIMENSIONS IN MILLIMETRES



Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box. **Standard products, available ex-stock, as follows:**

Product	Description
DB14XNG	15 Watt Industrial & Marine Loudspeaker, up to 117dB(A), 2 x 20mm entries, Grey painted GRP.

Transformer	
DB14	<input type="checkbox"/>
Transformer	Code
Yes	X*
None	N
*Standard 100V Other voltages available, specify voltage.	

Option	
<input type="checkbox"/>	
Option	Code
Duty label	D*
Tag label	T*
Earth continuity	E
BS5839, part 8 compliant	PT8
Blanking Plug	P
None	N
*Please specify wording	

Colour	
<input type="checkbox"/>	
Colour	Code
Painted Grey	G
Red	R
Special	S*
*Please specify	



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

SPEAKERS – Up to 30 Watts EExde, Weatherproof DB16 Range



Introduction

This range of loudspeakers, intended for use in potentially explosive gas and dust atmospheres, has a power rating of up to 30 Watts and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

With an integral increased safety chamber, for termination, this unit offers both high output and easy installation.

In addition, the 25 Watt version still offers superior output with a higher ambient certified temperature (+65°C).

The flamepaths, flare and body, are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

- ★ Zone 1, Zone 2 & non-Ex use.
- ★ EExde IIB/IIC, T3/T4*.
- ★ ATEX approved, Ex II 2G/Ex II 2GD*.
- ★ BASEEFA certified.
- ★ UL listed for USA and Canada
 - Hazardous locations:
 - Class I, Div 2, Groups A-D*
 - Class I, Zone 1, AExde IIB/IIC T3/T4*
 - Ordinary locations: Signalling Speaker
- ★ GOST 'K' certified.
- ★ Brazilian (Inmetro) Certified.
- ★ IP66 and IP67.
- ★ Certified temperature –50°C to +65°C*.
- ★ GRP corrosion-free flamepath.
- ★ Up to 122dBA at 30 Watts at 1 metre*.
- ★ 25 and 30 Watt versions.
- ★ Power tapplings via integral transformer.
- ★ Ratcheted swivel mounting stirrup.
- ★ Stainless steel fixtures.
- ★ 100V line or 8 ohm versions available.

*Model dependent.

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Sales Enq. Fax: +44 (0)1773 582830 Sales Orders Fax: +44 (0)1773 582832
E-Mail: sales@medc.com Web: www.medc.com



Specification

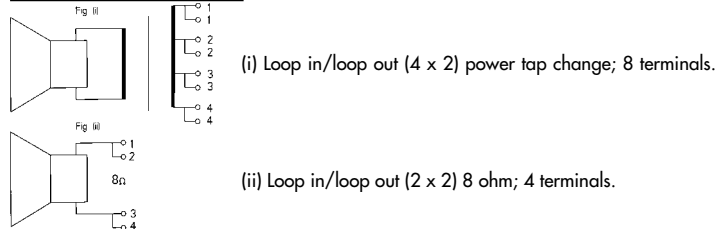
Rated Power: 30 Watts RMS continuous (at 25°C).
 Certification: CENELEC EN50014, 18, 19.
 IIB Version: Cert. No. Baseefa04ATEX0166X
 30 Watt ATEX Ex II 2G EExde IIB T3 (Tamb. -50°C to +40°C)
 25 Watt ATEX Ex II 2G EExde IIB T3 (Tamb. -50°C to +65°C)
 IIC Version: Cert. No. Baseefa04ATEX0167X
 30 Watt ATEX Ex II 2GD EExde IIC T110°C (Tamb. -50°C to +40°C)
 25 Watt ATEX Ex II 2GD EExde IIC T110°C (Tamb. -50°C to +65°C)
 Zones 1 and 2.
UL Listed for USA and Canada
 - Hazardous locations:
 Class I, Div 2, Groups C & D, Class I, Zone 1, AExde IIB T3
 Class I, Div 2, Groups A-D, Class I, Zone 1, AExde IIC T110°C
 - Ordinary locations: Signalling Speaker.
GOST 'K' Certification: Exde IIC T4/IIB T3.
Brazilian (Inmetro) Certification: BR-Ex de IIB T3.
 BR-Ex de IIC T5.

Material: Body & horn in anti-static, UV stable, glass reinforced polyester. Mounting stirrup and fixtures in stainless steel.
 Finish: All natural or body and horn can be painted to client's requirements.
 Output: IIB Version: Maximum output at 1W/1m is 110dBA
 Maximum output at 25W/1m is 121dBA
 Maximum output at 30W/1m is 122dBA
 IIC Version: Maximum output at 1W/1m is 107dBA
 Maximum output at 25W/1m is 118dBA
 Maximum output at 30W/1m is 119dBA

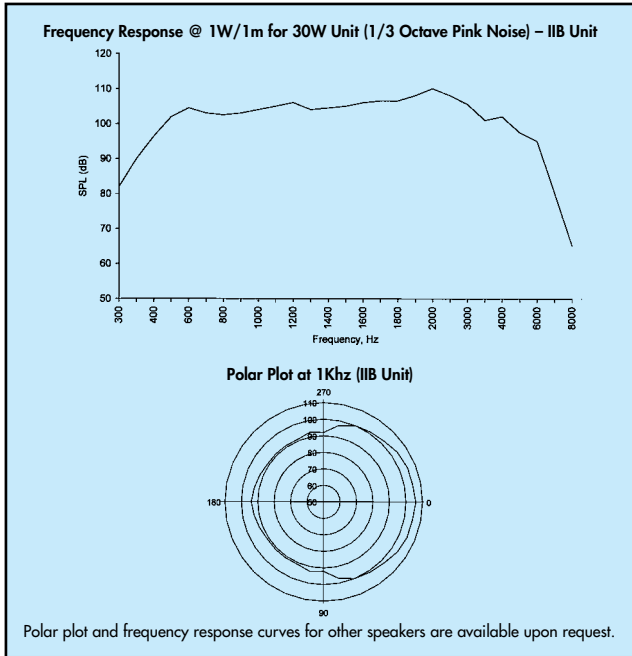
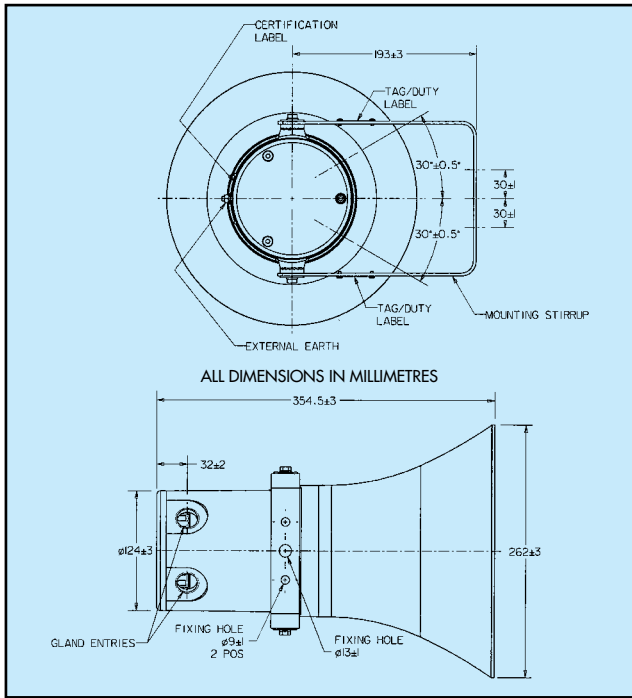
Weight: 5.5kg approx.
 Certified Temperature: -50°C to +40°C (30W version) -50°C to +65°C (25W version).
 Ingress Protection: IP66 & IP67.
 Frequency Range: 370Hz to 8kHz.
 Voice Coil Impedance: 8 ohms.
 Transformer: Used by combining the rated power tapings below.

Transformer Tappings	Power (30W unit) (W)	Power (25W unit) (W)
1:2	30.0	25
2:3	25.0	12.5
3:4	12.0	6.0
1:3	6.0	4.0
2:4	4.0	2.0
1:4	2.0	1.0

Transformer Tapping Options:



Terminals: 8 x 2.5mm².
 Earth Continuity: Available via optional earthing stud or by internal earth plate.
 Mounting: Via stirrup with ratchet facility.
 Labels: Optional stainless steel tag and duty labels.
 Cable Entries: Up to 2 x M20, 2 x M25 ISO, 2 x 1/2" NPT or 2 x 3/4" NPT into termination (EExe) chamber.



Ordering Requirements

The following code is designed to help you in the selection of the correct unit. Build up the reference number by inserting the code for each feature into the appropriate box. **For standard products available ex-stock, contact sales office for details.**

DB16 Certification Max Rated Power Transformer Options Entries Finish

Certification	Code	Max Rated Power	Code	Transformer	Code	Option	Code	Entries	Code	Option	Code
ATEX IIB	BB	30 Watts	30	Yes	X*	None	N	1 x M20	1B	Natural Black	N
ATEX IIC	BC	25 Watts	25*	No	N	Duty label	D	2 x M20	2B	Red	R
UL (C & D)*	UB			*Std 100V. Other voltages available, specify voltage.		Tag label	T	1 x M25	1C	Special	S
UL (A-D)†	UC					Internal earth continuity	E	2 x M25	2C		
UL (ordinary locations)	UW					Earth stud	B	1 x 1/2" NPT	1M		
GOST 'K' IIB	KB							2 x 1/2" NPT	2M		
GOST 'K' IIC	KC							1 x 3/4" NPT	1N		
Inmetro IIB	MB							2 x 3/4" NPT	2N		
Inmetro IIC	MC							To specify certified plug, suffix appropriate code with 'P', e.g. 2BP is 2 x M20 entries with one certified plug.			

Unit suitable for gas groups: *C & D †A-D

*Only available in ATEX versions.



All the above specifications, dimensions, weights and tolerances are nominal (typical) and MEDC reserve the right to vary all data without prior notice. No liability is accepted for any consequence of use.

SPEAKERS – Up to 15 Watts EEx nA, Weatherproof DB18



ATEX compliant for Zone 2
gas & dust atmospheres

Introduction

This loudspeaker, intended for use in Zone 2, potentially explosive gas and dust atmospheres, has a power rating of up to 15 Watts and is suitable for use in all gas groups including hydrogen.

The flare and body are manufactured from a UV stable glass reinforced polyester. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

- ★ Zone 2 use.
- ★ EEx n II T4.
- ★ ATEX compliant, Ex II 3 GD.
- ★ BASEEFA tested.
- ★ IP66 & 67.
- ★ Ambient temperature -55°C to +55°C.
- ★ 117dbA at 15 Watts at 1 metre.
- ★ Power tapings via integral transformer.
- ★ Stainless steel ratcheted swivel mounting stirrup.
- ★ Stainless steel fixtures.

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Sales Enq. Fax: +44 (0)1773 582830 Sales Orders Fax: +44 (0)1773 582832
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Specification

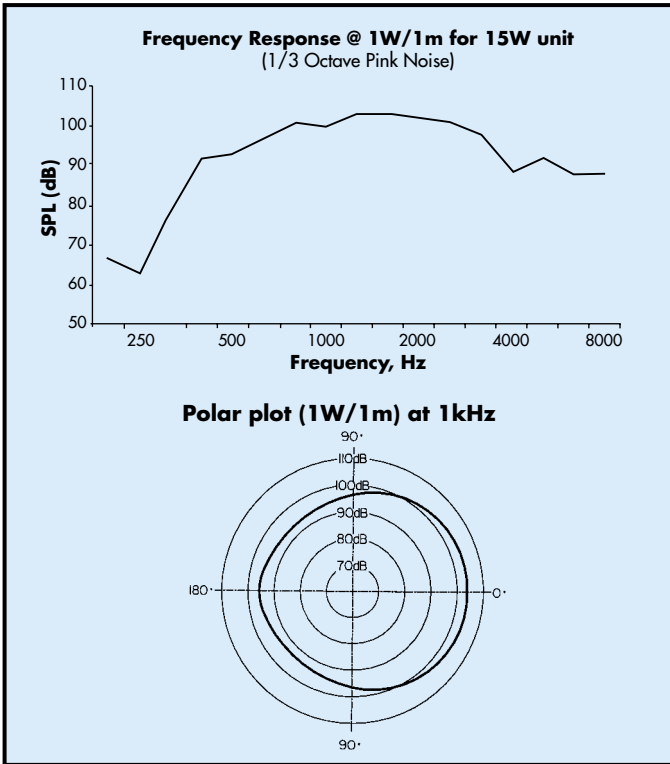
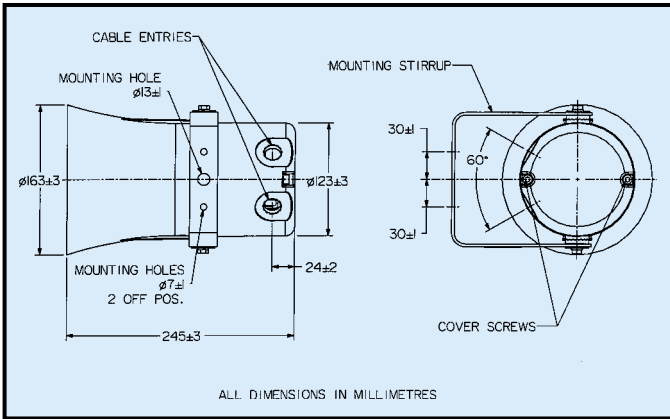
Rated Power:	15 watts RMS continuous (at 25°C).
Compliance:	CENELEC EN50014, 21. EEx nA II T 135°C (-55°C to +55°C) T4, Zone 2.
Material:	Body & horn in anti-static, UV stable, glass reinforced polyester. Mounting stirrup and fixtures in stainless steel.
Finish:	All natural or body and horn can be painted to client requirements.
Output:	Maximum output at 1W/1m at 900Hz is 107 dBA. Maximum output at 15W/1m at 900Hz is 117 dBA.
Weight:	2.6kg approx.
Ambient Temperature:	-55°C to +55°C.
Ingress Protection:	IP66 & IP67.
Fire Retardancy:	GRP is fire retardant to ISO 1210.
Frequency Range:	400Hz to 7kHz.
Voice Coil Impedance:	8 ohms.
Transformer:	Used by combining the rated power tapplings below.

Transformer Tappings	Power 15W
1:2	15.0
2:3	7.5
3:4	5.0
1:3	4.0
2:4	2.0
1:4	0.8

Transformer Options:

- Standard: i) Loop in/Loop out (4 x 2) power tap change; 8 terminals.
- Optional: ii) Loop in/loop out (2 x 2) 8 ohm; 4 terminals.
iii) 4 terminal tap change with 2 terminals (5 & 6), directly connected to driver (8 ohms).

Terminals:	Up to 8 x 2.5mm ² .
Earth Continuity:	Available.
Mounting:	Via stirrup with ratchet facility.
Labels:	Optional stainless steel tag and duty labels.
Cable Entries:	2 x M20 ISO.



Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box. **Standard product, available ex-stock, as follows:**

Product	Description
DB18XNN	EEx nA II compliant, 15 Watt, 100V line transformer, 2 x M20 entries, natural black finish

Transformer	Option	Colour																																		
<table border="1"> <tr> <td>Transformer</td> <td>Code</td> </tr> <tr> <td>Yes</td> <td>X*</td> </tr> <tr> <td>Transformer and 8 ohm terminals (direct to driver)</td> <td>X8</td> </tr> <tr> <td>None</td> <td>N</td> </tr> <tr> <td colspan="2">*Standard 100V Other voltages available, specify voltage.</td> </tr> </table>	Transformer	Code	Yes	X*	Transformer and 8 ohm terminals (direct to driver)	X8	None	N	*Standard 100V Other voltages available, specify voltage.		<table border="1"> <tr> <td>Option</td> <td>Code</td> </tr> <tr> <td>Duty label</td> <td>D*</td> </tr> <tr> <td>Tag label</td> <td>T*</td> </tr> <tr> <td>Earth continuity</td> <td>E</td> </tr> <tr> <td>Blanking Plug</td> <td>P</td> </tr> <tr> <td>None</td> <td>N</td> </tr> <tr> <td colspan="2">*Please specify wording</td> </tr> </table>	Option	Code	Duty label	D*	Tag label	T*	Earth continuity	E	Blanking Plug	P	None	N	*Please specify wording		<table border="1"> <tr> <td>Colour</td> <td>Code</td> </tr> <tr> <td>Natural Black</td> <td>N</td> </tr> <tr> <td>Red</td> <td>R</td> </tr> <tr> <td>Special</td> <td>S*</td> </tr> <tr> <td colspan="2">*Please specify</td> </tr> </table>	Colour	Code	Natural Black	N	Red	R	Special	S*	*Please specify	
Transformer	Code																																			
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SPEAKERS – Up to 15 Watts EEx nA, Weatherproof DB19



Introduction

This music quality projector loudspeaker, intended for use in Zone 2, potentially explosive gas and dust atmospheres, has a power rating of up to 15 Watts and is suitable for use in all gas groups including hydrogen.

Designed for optimum sound reproduction, this rugged loudspeaker is ideal for PA and background music systems in industrial and commercial environments.

The body is manufactured in aluminium and powder coat finished to RAL 9010. Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-resistant product.

- ★ Zone 2 use.
- ★ EEx n II T4.
- ★ ATEX compliant, Ex II 3 GD.
- ★ BASEEFA tested.
- ★ IP54.
- ★ Ambient temperature -55°C to +55°C.
- ★ 104dbA at 15 Watts at 1 metre.
- ★ Power tapings via integral transformer.
- ★ Stainless steel mounting stirrup.
- ★ Aluminium body.
- ★ 100V line or 8Ω versions.

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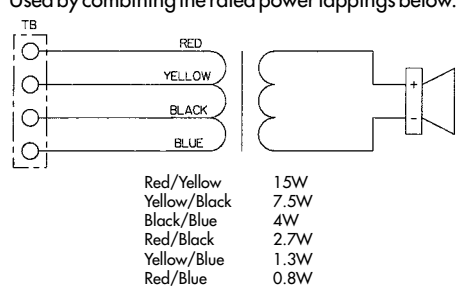
MEDC International, 5829 West Sam Houston Parkway,
North, Suite 1005, Houston, Texas 77041, USA.
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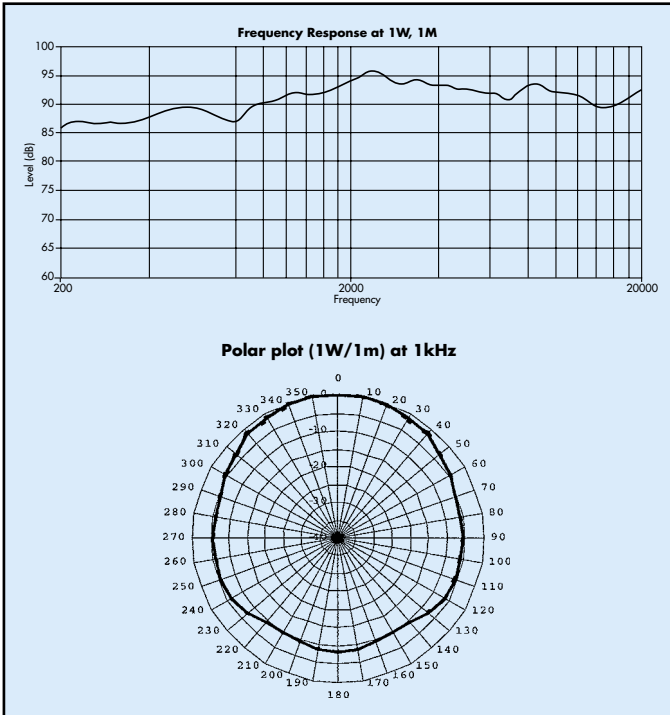
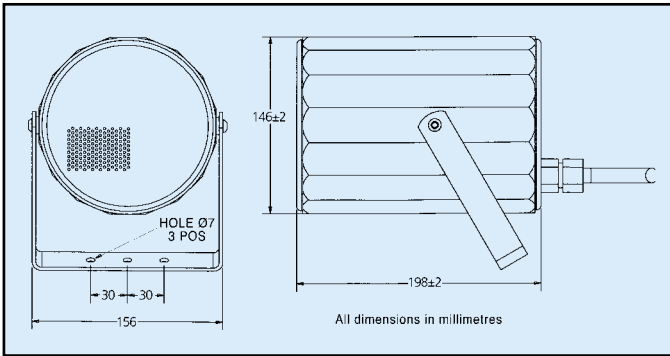
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Specification

Rated Power:	15 watts RMS continuous (at 25°C).												
Compliance:	CENELEC EN50014, 21. EEx nA II T 135°C (-55°C to +55°C) T4, Zone 2.												
Material:	Body in aluminium. Mounting stirrup and fixtures in stainless steel.												
Finish:	Powder coated white to RAL 9010 as standard – can be painted to client's requirements.												
Output:	Maximum output at 1W/1m at 900Hz is 92 dBA. Maximum output at 15W/1m at 900Hz is 104 dBA.												
Weight:	2.4kg approx.												
Ambient Temperature:	-55°C to +55°C.												
Ingress Protection:	IP54.												
Frequency Range:	120Hz to 20kHz.												
Voice Coil Impedance:	8 ohms.												
Transformer:	Used by combining the rated power tapings below.												
	 <table border="1"> <tr> <td>Red/Yellow</td> <td>15W</td> </tr> <tr> <td>Yellow/Black</td> <td>7.5W</td> </tr> <tr> <td>Black/Blue</td> <td>4W</td> </tr> <tr> <td>Red/Black</td> <td>2.7W</td> </tr> <tr> <td>Yellow/Blue</td> <td>1.3W</td> </tr> <tr> <td>Red/Blue</td> <td>0.8W</td> </tr> </table>	Red/Yellow	15W	Yellow/Black	7.5W	Black/Blue	4W	Red/Black	2.7W	Yellow/Blue	1.3W	Red/Blue	0.8W
Red/Yellow	15W												
Yellow/Black	7.5W												
Black/Blue	4W												
Red/Black	2.7W												
Yellow/Blue	1.3W												
Red/Blue	0.8W												
Cable Entry:	M20 gland.												
Terminals:	4 x 2.5mm ² .												
Mounting:	Via stirrup.												
Dispersion at 1000Hz:	130.												
Degrees° Conical													
Input Impedance (ohms)	12.5k, 7.7k, 3.7k, 2.5k, 1.3k, 666.												



Ordering Requirements

The following code is designed to help in the selection of the correct unit. Build up the reference number by inserting the code for each component into the appropriate box. **Standard product, available ex-stock, as follows:**

Product	Description
DB19XW	EEx nA II compliant, 15 Watt, 100V line transformer, white to RAL 9010.

DB19	Transformer	Finish																
	<input type="checkbox"/>	<input type="checkbox"/>																
	<table border="1"> <thead> <tr> <th>Transformer</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Yes</td> <td>X*</td> </tr> <tr> <td>None</td> <td>N</td> </tr> <tr> <td colspan="2">*Standard 100V.</td> </tr> </tbody> </table>	Transformer	Code	Yes	X*	None	N	*Standard 100V.		<table border="1"> <thead> <tr> <th>Colour</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>White to RAL 9010</td> <td>W</td> </tr> <tr> <td>Special</td> <td>S*</td> </tr> <tr> <td colspan="2">*Please specify</td> </tr> </tbody> </table>	Colour	Code	White to RAL 9010	W	Special	S*	*Please specify	
Transformer	Code																	
Yes	X*																	
None	N																	
*Standard 100V.																		
Colour	Code																	
White to RAL 9010	W																	
Special	S*																	
*Please specify																		



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SPEAKERS – Up to 8 Watts Exde, Weatherproof DB20 Range




Introduction

This range of loudspeakers, intended for use in potentially explosive atmospheres, has a power rating of up to 8 Watts and is suitable for use in the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

The body and cover are manufactured from a UV stable glass reinforced polyester. The flare is manufactured from UV stable ABS.

Stainless steel screws and mounting stirrup are incorporated to ensure a corrosion-free product.

- ★ Zone 1 & 2 (and Zone 21 & 22 : IIC version) plus non-Ex use
- ★ ATEX Approved  II 2G Ex de IIB T3/T4*
- ★ IIC Gas Group and Dust approved version available.
- ★ BASEEFA certified.
- ★ Brazilian (Inmetro) certified.
- ★ IECEx Approved
- ★ IP66.
- ★ Certified temperature -50°C to $+70^{\circ}\text{C}$ *
- ★ GRP corrosion-free flamepath.
- ★ 112dB(A) at 8 watts at 1 metre (IIB Version)
- ★ Power tapping via integral transformer.
- ★ Ratcheted swivel mounting stirrup
- ★ Stainless steel fixtures.
- ★ 100V or 70V line versions available.
- ★ Earth continuity available.

*Temperature class relates to ambient temperature (see over)

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Specification

Rated Power: 8 Watts RMS continuous (at 25°C).
 Certification: EN60079-0, 1, 7
 IEC60079-0, 1, 7 and IEC 61241-0, 1
 BASEEFA Cert. No. BASEEFA 05 ATEX0199X

IIB version: $\text{Ex d} \text{IIB T3/T4}^*$
 Zone 1 & 2

IIC version: $\text{Ex d} \text{IIC T4/T5}^*$
 Ex tD A21 IP65 T130°C
 Zone 1 & 2 and Zone 21 & 22
 *See Certified temperature below
 Brazilian (Inmetro) Certified: BR-Ex de IIB T3/T4
 BR-Ex de IIC T5/T1 15°C

Material: Body & Cover - UV stable, glass reinforced polyester.
 outer flare - UV stable ABS.
 Mounting stirrup and fixtures in stainless steel.

Finish: Natural black or painted or to client's requirements.

Output IIB version: Maximum output at 1W/1M is 103 dB(A)
 Maximum output at 4W/1M is 109 dB(A)
 Maximum output at 8W/1M is 112 dB(A)

IIC version: Maximum output at 1W/1M is 100 dB(A)
 Maximum output at 4W/1M is 106 dB(A)
 Maximum output at 8W/1M is 109 dB(A)

Weight: 1.5kg approx.

Certified Temperature:
 IIB version: Tamb -50°C to +70°C (T3) and Tamb -50°C to +40°C (T4)
 IIC version: Tamb -50°C to +70°C (T4) and Tamb -50°C to +40°C (T5)

Ingress Protection: IP66

Frequency Range: 400Hz to 7kHz.

Voice Coil Impedence: 8 ohms.

Transformer: Used by combining the rated power tapings below.

Transformer Tappings	Power (Watts)	
	(8W unit)	(4W unit)
1:2	8.00	4.00
2:3	4.00	2.00
3:4	2.00	1.00
1:3	1.50	0.75
2:4	0.75	0.38
1:4	0.40	0.20

Terminals: 4 x 2.5mm².

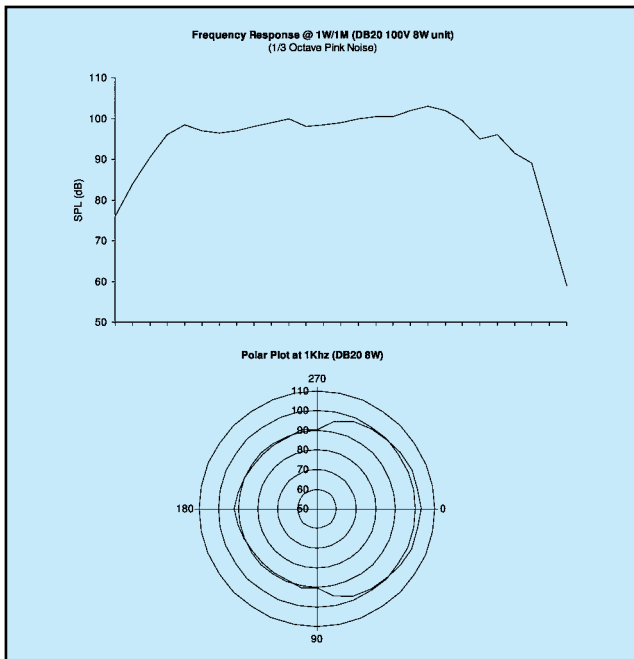
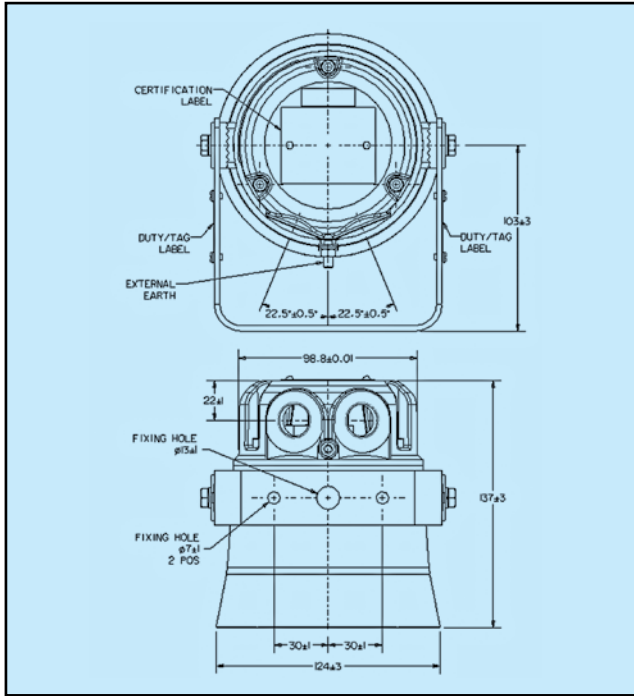
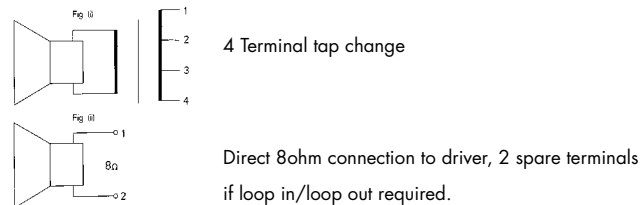
Earth Continuity: Available

Mounting: Via stirrup with ratchet facility.

Labels: Optional stainless steel tag and duty labels.

Cable Entries: ATEX & IEC 2 x M20 ISO + 1 x certified plug

Transformer Tapping Options:



Ordering Requirements

Certification		Max Rated Power		Transformer		Options		Finish	
DB20									
Certification	Code	Power	Code	Transformer	Code	Option	Code	Option	Code
ATEX IIB	BB	8 Watts	8	Transformer	X*	None	N	Natural Black	N
ATEX IIC	BC	4 Watts	4	8ohm version	N	Duty label	D	Red	R
IEC Ex IIB	JB					Tag label	T	Special	S
IEC Ex IIC	JC					Earth continuity	E		
Inmetro IIB	MB								
Inmetro IIC	MC								
Weatherproof	W								

*ATEX = 100V Line
 70V Line available
 please specify



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