

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 tapplings via integral transformer.
 - ★ Ratcheted swivel mounting stirrup.
 - ★ Stainless steel fixtures.
 - ★ Earth continuity available.
- *Model dependent.

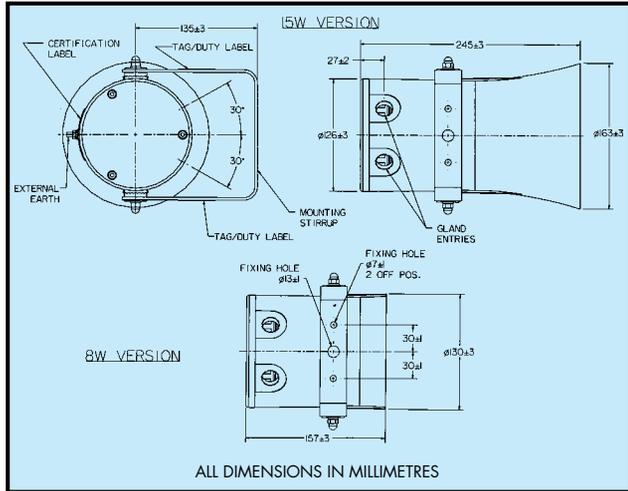
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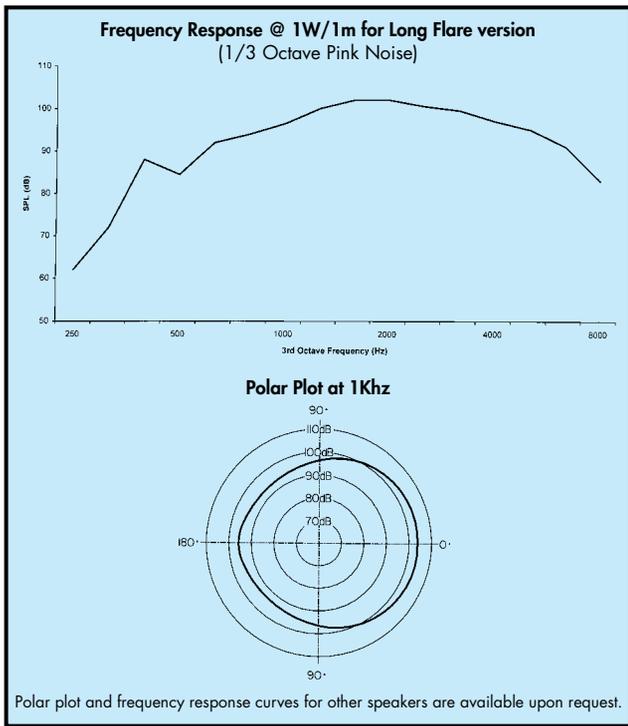
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ALL DIMENSIONS IN MILLIMETRES



Polar plot and frequency response curves for other speakers are available upon request.

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 |
| 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 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 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 | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| 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, | | None | N | with one certified | | | |
| Inmetro | EM | | | specify voltage. | | | | plug fitted | | | |



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.