

## Ex de, Weatherproof



## 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.

## Features

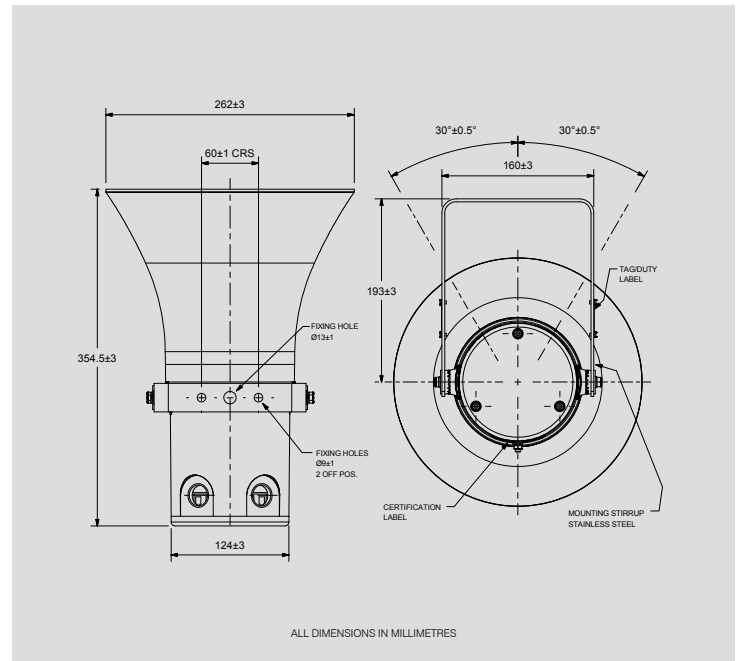
- Zone 1, Zone 2 & non-Ex use.
- Ex de IIB/IIC, T3/T4\*.
- ATEX certified, Ex II 2G/Ex II 2GD\*.
- IECEx certified Gb, Db
- BASEEFA certified.
- UL listed for USA and Canada:
  - Hazardous locations:
    - Class I, Div 2, Groups A-D\*.
    - Class I, Zone 1, AExde IIB/IIC T3/T4\*.
  - Ordinary locations: Signalling Speaker.
- CUTR 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 8Ω.

*\*Depending on version.*



# Certification and Specification

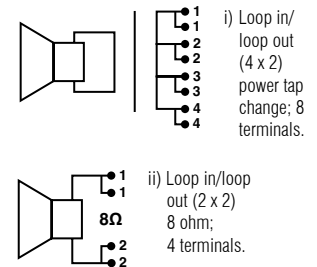
<b>ATEX Ex de IIB:</b>	Cert. no. Baseefa04ATEX0166X. Certified to: EN60079-0, EN60079-1, EN60079-7. 30 Watt ATEX Ex II 2G, Ex de IIB T3 Gb. 25 Watt ATEX Ex II 2G, Ex de IIB T3 Gb.
<b>ATEX Ex de IIC:</b>	Cert. no. Baseefa04ATEX0167X. Certified to: EN60079-0, EN60079-1, EN60079-7, EN60079-31. 30 Watt ATEX Ex II 2GD Ex de IIC T3 Gb, Ex tb IIIC T110°C Db. 25 Watt ATEX Ex II 2GD Ex de IIC T3 Gb, Ex tb IIIC T110°C Db.
<b>IECEx Ex de IIB:</b>	Cert. no. IECEx BAS 12.0076X. Certified to: IEC60079-0, IEC60079-1, IEC60079-7. 30 Watt, Ex de IIB T3 Gb. 25 Watt, Ex de IIB T3 Gb.
<b>IECEx Ex de IIC:</b>	Cert. no. IECEx BAS 12.0077X. Certified to: IEC60079-0, IEC60079-1, IEC60079-7, IEC60079-31. 30 Watt, Ex de IIC T3 Gb, Ex tb IIIC T110°C Db. 25 Watt, Ex de IIC T3 Gb, Ex tb IIIC T110°C Db.
<b>UL Haz Locs:</b>	Listing no. E203310A. Class 1, Div 2, Groups C & D, Class 1, Zone 1, AExde IIB T3. Class 1, Div 2, Groups A - D, Class 1, Zone 1, AExde IIC T110°C.
<b>UL Ord Locs:</b>	Listing no. 58847.
<b>Ordinary locations:</b>	Signalling Speaker.
<b>CUTR Ex de IIB:</b>	1Ex de IIB T3 Gb.
<b>CUTR Ex de IIC:</b>	1Ex de IIC T3 Gb, Ex tb IIIC T110°C Db.
<b>Inmetro Ex d e IIB:</b>	Ex d e IIB T3 Gb.
<b>Inmetro Ex d e IIC:</b>	Ex d e IIC T3 Gb.
<b>Material:</b>	Body & horn in anti-static, UV stable, glass reinforced polyester. Mounting stirrup and fixtures in stainless steel.
<b>Finish:</b>	All natural or body and horn can be painted to client requirements.
<b>Rated Power:</b>	30 Watts RMS continuous (at 25°C).
<b>Certified Temp:</b>	-50°C to +40°C (30W version) -50°C to +65°C (25W version).
<b>Weight:</b>	5.5kg approx.
<b>Ingress Protection:</b>	IP66 & IP67.
<b>Entries:</b>	Up to 2 x M20, 2 x M25 ISO, 2 x 1/2" NPT or 2 x 3/4" NPT into termination (Exe) chamber.
<b>Terminals:</b>	Up to 8 x 2.5mm <sup>2</sup> .
<b>Output:</b>	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.
<b>Frequency Range:</b>	370Hz to 8kHz.
<b>Voice Coil Impedance:</b>	8 ohms.
<b>Mounting:</b>	Via stirrup with ratchet facility.
<b>Earth Continuity:</b>	Available via optional earthing stud or by internal earth arrangement.
<b>Labels:</b>	Optional stainless steel tag and duty labels.



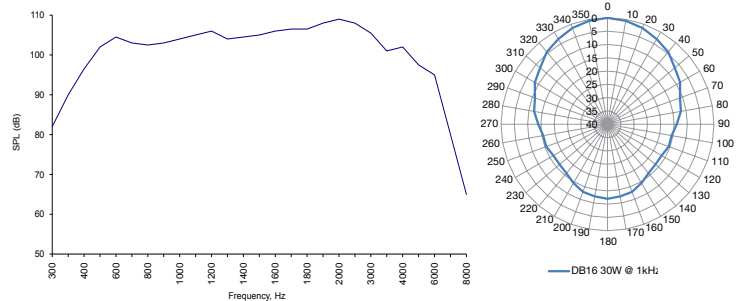
**Transformer:**  
Used by combining the rated power tapings below.

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:**



Frequency Response @ 1W/1M for 30W Unit (1/3 Octave Pink Noise) - IIB Unit



**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.

<b>Model</b> DB16	<b>Certification</b> [ ]	<b>Max Rated Power</b> [ ]	<b>Transformer</b> [ ]	<b>Options</b> [ ]	<b>Entries</b> [ ]	<b>Finish</b> [ ]
<b>Certification Code</b>	<b>Power Code</b>	<b>Transformer Code</b>	<b>Option Code</b>	<b>Entries Code</b>	<b>Finish Code</b>	
ATEX IIB BB ATEX IIC BC IECEx IIB JB IECEx IIC JC UL (C & D) UB* UL (A-D) UC† UL (ordinary locations) UW CUTR IIB GB CUTR IIC GC Inmetro IIB MB Inmetro IIC MC	30 Watts 30 25 Watts 25*	Yes X* No N	None N Duty label D* Tag label T* Internal earth continuity E Earth stud B	1 x M20 1B 2 x M20 2B 1 x M25 1C 2 x M25 2C 1 x 1/2" NPT 1M 2 x 1/2" NPT 2M 1 x 3/4" NPT 1N 2 x 3/4" NPT 2N	Natural Black N Red R Special S*	
	* Not available in UL versions. Unit suitable for gas groups. * C & D. † A-D.	* Std 100V. Other voltages available, specify voltage.	* Please specify wording.	To specify certified plug, suffix appropriate code with 'P', e.g. 2BP is 2 x M20 entries with one certified plug.		