

HORNS – Up to 103 dB(A) Explosion-proof, Weatherproof DB1 Range



Introduction

This range of light weight, explosionproof horns has been designed with a high weatherproof rating to cope with the harsh environmental conditions found offshore and onshore in the oil, gas and petrochemical industries.

New electronic circuitry allows the DB1P and DB1HP to be switched between two selectable tones by either reversing the supply polarity, or connecting a second voltage supply.

The higher output DB1HP is particularly suitable for noisy environments.

European, Russian and other worldwide approvals are available, refer to main section of catalog.

- ★ UL listed – Class I, Div. 1, Groups C & D.
– Class I, Zone 1.
- ★ ATEX approved.
- ★ NEMA 4x, IP66.
- ★ Certified temperature –13°F to +158°F.
–25°C to +70°C.
- ★ 4 wire diode monitored connection for operation in supervisory mode.
- ★ NFPA 72 compliant.
- ★ Up to 103 dBA output @ 10 feet.
- ★ Marine grade alloy.
- ★ 27 output tones, user selectable.
- ★ 12V, 24V & 48V d.c.
- ★ 110V a.c.
- ★ Tones can be selected remotely.
- ★ Any two tones may be switched via the external voltage supply.

Specification

Certification:	UL Listed for Class I, Div. 1. Groups C & D and Class I, Zone 1. UL Listing No. E187688. ATEX Approved: EExd, IIB T3. Cert. No. Baseefa 02ATEX0207 for DB1(P). Cert. No. Baseefa 02ATEX0209 for DB1H(P).
Material:	LM25 corrosion resistant alloy with stainless steel cover screws. ABS flare.
Finish:	Epoxy paint finish as standard or to customer's specification.
Max Sound Levels:	DB1P=93±3dB(A) (86±3dB(A) for 12V DB1). DB1HP=100 ± 3dB(A) @ 10 feet. Note: Sound level is dependent upon the tone selection.
Weight:	DB1P 7.7lb/3.5kg approx. DB1HP. 12.3lb/5.6kg approx.
Certified Temperature:	-13°F to +158°F. -25°C to +70°C.
Ingress Protection:	NEMA 4x, IP66.
Tone Selection:	27 user selectable tones.

Tone	Tone Frequency	Tone	Tone Frequency
1	Alt Tones 800/970 Hz at 1/4 sec.	15	554 Hz for 0.1S/440 Hz for 0.1S
2	Sweeping 800/970 Hz at 7 Hz	16	Int 660 Hz 150 mS on 150 mS off
3	Sweeping 800/970 Hz at 1 Hz	17	Int 660 Hz 1.8 sec. on 1.8 sec. off
4	Continuous at 2850 Hz	18	Int 660 Hz 6.5 sec. on 13 sec. off
5	Sweeping 2400-2850 Hz at 7 Hz	19	Continuous 660 Hz
6	Sweeping 2400-2850 Hz at 1 Hz	20	Alt 554/440 Hz at 1 Hz
7	Slow Whoop	21	Int 660 Hz at 7/8 Hz
8	Sweep 1200-500 Hz at 1 Hz	22	Int 2850 Hz 150 mS on 100 mS off
9	Alt Tones 2400/2850 Hz at 2 Hz	23	Sweep 800-970 Hz at 50 Hz
10	Int Tones of 970 Hz at 1 Hz	24	Sweep 2400-2850 Hz at 50 Hz
11	Alt Tones 800/970 Hz at 7/8 Hz	25	3x970 Hz pulses 0.5 off, 1.5 off
12	Int Tone at 2850 Hz at 1 Hz	26	3x2850z pulses 0.5 on/0.5 off, 1.5 off.
13	970 Hz at 1/4 sec. on 1 sec. off	27	Int 3100 Hz 0.3 sec. on 0.7 sec. off
14	Continuous at 970 Hz		

Single Stage

4 wired diode monitored connection – on board diode allows unit to be operated in supervisory mode when monitoring line in reverse polarity.

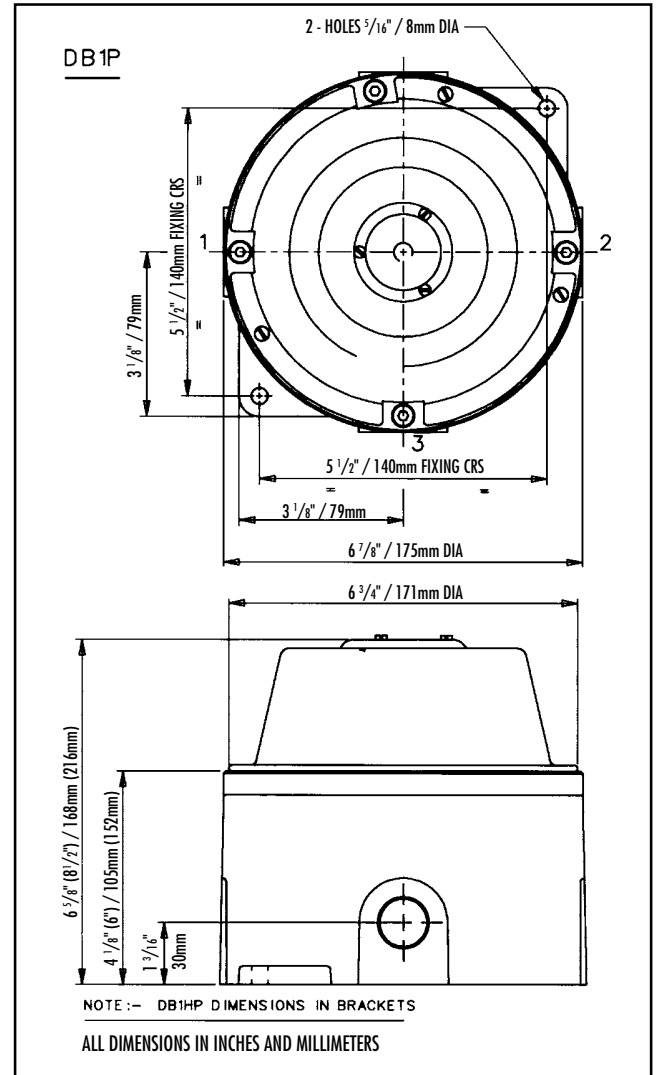
Two Stage

Switchable unit available in d.c. versions only either by:

- Reversing the polarity of the supply, or,
- By a 3 wire common +ve system, switching between the -ve lines.

Current Consumption:	DB1P	DB1HP
12V	125mA	900mA
24V	250mA	700mA
48V	250mA	-
110V	60mA	200mA

Labels:	Duty and tag labels optional.
Entries:	Up to 3 x 1/2" or 3/4" NPT.
Terminals:	Suitable to accept up to 12 AWG conductor size.



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

Type	Voltage	Cable Entries	Duty Labels	Tag Label	Other Features	Finish																																																
<input type="text"/> DB1P ULA DB1HP ULA To order ATEX certified version, see European data sheet.	<table border="1"> <thead> <tr> <th>Voltage</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>12V d.c.</td> <td>012</td> </tr> <tr> <td>24V d.c.</td> <td>024</td> </tr> <tr> <td>48V d.c.</td> <td>048</td> </tr> <tr> <td>110V a.c.</td> <td>110</td> </tr> </tbody> </table>	Voltage	Code	12V d.c.	012	24V d.c.	024	48V d.c.	048	110V a.c.	110	<table border="1"> <thead> <tr> <th>Entries</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>1/2" NPT</td> <td>C</td> </tr> <tr> <td>3/4" NPT</td> <td>D</td> </tr> <tr> <td>LHS</td> <td>1</td> </tr> <tr> <td>RHS</td> <td>2</td> </tr> <tr> <td>Bottom</td> <td>3</td> </tr> </tbody> </table> <p>*Prefix position with entry size code e.g. C1C3 = 1/2" NPT left and bottom entries.</p>	Entries	Code	1/2" NPT	C	3/4" NPT	D	LHS	1	RHS	2	Bottom	3	<table border="1"> <thead> <tr> <th>Duty Labels</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Required*</td> <td>D</td> </tr> </tbody> </table> <p>*(Please specify)</p>	Duty Labels	Code	None	N	Required*	D	<table border="1"> <thead> <tr> <th>Tag Label</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Required*</td> <td>T</td> </tr> </tbody> </table> <p>*(Please specify)</p>	Tag Label	Code	None	N	Required*	T	<table border="1"> <thead> <tr> <th>Feature</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Yes*</td> <td>Y</td> </tr> </tbody> </table> <p>*(Please specify)</p>	Feature	Code	None	N	Yes*	Y	<table border="1"> <thead> <tr> <th>Finish</th> <th>Code</th> </tr> </thead> <tbody> <tr> <td>Red</td> <td>R</td> </tr> <tr> <td>Grey</td> <td>G</td> </tr> <tr> <td>Special</td> <td>S</td> </tr> </tbody> </table>	Finish	Code	Red	R	Grey	G	Special	S
Voltage	Code																																																					
12V d.c.	012																																																					
24V d.c.	024																																																					
48V d.c.	048																																																					
110V a.c.	110																																																					
Entries	Code																																																					
1/2" NPT	C																																																					
3/4" NPT	D																																																					
LHS	1																																																					
RHS	2																																																					
Bottom	3																																																					
Duty Labels	Code																																																					
None	N																																																					
Required*	D																																																					
Tag Label	Code																																																					
None	N																																																					
Required*	T																																																					
Feature	Code																																																					
None	N																																																					
Yes*	Y																																																					
Finish	Code																																																					
Red	R																																																					
Grey	G																																																					
Special	S																																																					