

DB1 horns range - up to 103dB(A)

Hazardous locations,
ordinary locations



Overview

This range of lightweight, explosionproof horns have 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.

Features

- UL listed:
 - Class I, Div. 1, Groups C & D
 - Class 1, Zone 1
- ATEX approved
- 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 dB(A) output @ 10 feet
- Marine grade alloy
- 27 output tones, user selectable
- 12V, 24V & 48Vdc
- 110Vac (DB1P version only)
- Tones can be selected remotely
- Any two tones may be switched via the external voltage supply



Certifications

Certification	UL Listed for Class I, Div. 1 Groups C & D and Class I, Zone 1 UL Listing No. E187688
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Specifications

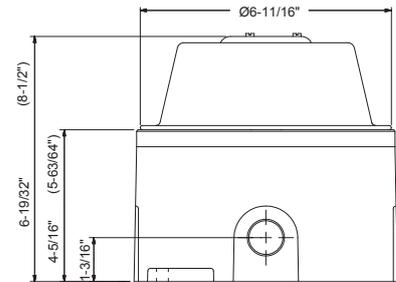
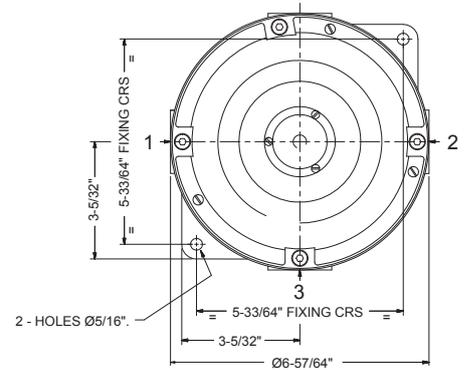
Material	LM25 corrosion resistant alloy with stainless steel cover screws ABS flare
Finish	Epoxy paint finish as standard or to customer specification
Weight	DB1P 7.7lb/3.5kg approx. DB1HP 12.3lb/5.6kg approx
Certified temp	-25°C to +70°C (-13°F to +158°F)
Ingress protection	IP66
Entries	Up to 3 x ½" or ¾" NPT
Terminals	Suitable to accept up to 10 AWG conductor size
Output	DB1P=93±3dB(A) DB1HP=100 ± 3dB(A) @ 10 feet Note: Sound level is dependent upon the tone selection
Labels	Duty and tag labels optional
Tone selection	27 user selectable tones available

Tone	Tone frequency	Tone	Tone frequency
1	Alt tones 800/970 Hz at ¼ 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 ¼ 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:
(i) Reversing the polarity of the supply, or,
(ii) By a 3 wire common +ve system, switching between the -ve lines

General arrangement drawing (all dimensions in inches)



DB1H dimensions in brackets

Current consumption

	DBIP	DB1HP
	Steady state	Steady state
12Vdc	125mA	900mA
24Vdc	250mA	700mA
48Vdc	250mA	-
110Vac	60mA	-

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

Model	Voltage	Entries	Duty label	Tag label	Options	Finish																																																				
DB1PULA DB1HPULA	<table border="1"> <tr> <th>Voltage</th> <th>Code</th> </tr> <tr> <td>12Vdc</td> <td>012</td> </tr> <tr> <td>24Vdc</td> <td>024</td> </tr> <tr> <td>48Vdc</td> <td>048</td> </tr> <tr> <td>110Vac</td> <td>110*</td> </tr> </table> <p>* DB1P only</p>	Voltage	Code	12Vdc	012	24Vdc	024	48Vdc	048	110Vac	110*	<table border="1"> <tr> <th>Entries</th> <th>Code</th> </tr> <tr> <td>½" NPT</td> <td>C</td> </tr> <tr> <td>¾" 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> </table> <p>* Prefix position with entry size code e.g. C1C3 = ½" NPT left and bottom entries</p>	Entries	Code	½" NPT	C	¾" NPT	D	LHS	*1	RHS	*2	Bottom	*3	<table border="1"> <tr> <th>Duty label</th> <th>Code</th> </tr> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Required</td> <td>D*</td> </tr> </table> <p>*Please specify</p>	Duty label	Code	None	N	Required	D*	<table border="1"> <tr> <th>Tag label</th> <th>Code</th> </tr> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Required</td> <td>T*</td> </tr> </table> <p>*Please specify</p>	Tag label	Code	None	N	Required	T*	<table border="1"> <tr> <th>Options</th> <th>Code</th> </tr> <tr> <td>None</td> <td>N</td> </tr> <tr> <td>Relay Initiate</td> <td>R</td> </tr> <tr> <td>Remote tone select</td> <td>S</td> </tr> <tr> <td>End of line resistor</td> <td>E*</td> </tr> </table> <p>* State value</p>	Options	Code	None	N	Relay Initiate	R	Remote tone select	S	End of line resistor	E*	<table border="1"> <tr> <th>Finish</th> <th>Code</th> </tr> <tr> <td>Grey</td> <td>G</td> </tr> <tr> <td>Red</td> <td>R</td> </tr> <tr> <td>Special</td> <td>S*</td> </tr> </table> <p>*Please specify</p>	Finish	Code	Grey	G	Red	R	Special	S*
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For all other global certification please refer to standard data sheet