

## Horn - 103dB, Explosion Proof, High Output DB1



### Description:

This range of light weight, flameproof 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 DB1 HP is particularly suitable for noisy environments.

### Features\*:

- UL Listed – Class I, Div 1. Groups C & D
- Class I, Zone 1
- ATEX approved
- NEMA 4x, IP66
- Certified temperature  $-13^{\circ}\text{F}$  to  $+158^{\circ}\text{F}$  ( $-25^{\circ}\text{C}$  to  $+70^{\circ}\text{C}$ )
- NFPA 72 compliant
- 4 wire diode monitored connection for operation in supervisory mode
- Up to 103 dBA output @ 10 feet (DB1 HP)
- Marine grade alloy
- Up to 27 output tones, user selectable
- 12V, 24V & 48 VDC, 110 VAC
- Tones can be selected remotely
- Any two tones may be switched via the external voltage supply

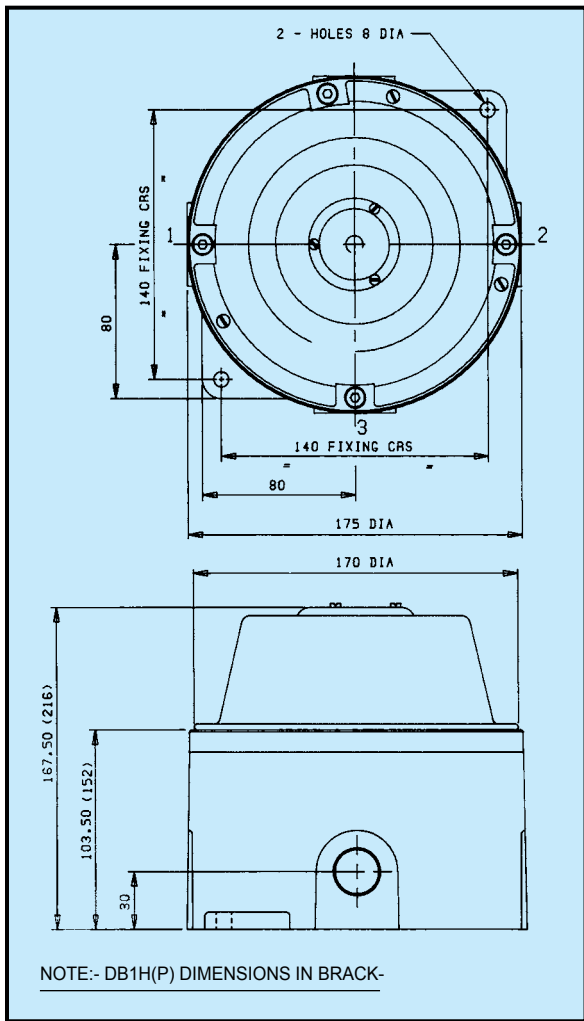
\*Depends on version

### Architects and Engineers Specifications

Explosion-proof horns shall be UL Listed for Class I, Division 1, Groups C&D, and Class I, Zone 1 hazardous locations. The horns shall be constructed of marine grade alloy with an epoxy paint finish and shall meet NEMA 4x and IP 66 environmental requirements over a temperature range of  $-13^{\circ}\text{F}$  to  $158^{\circ}\text{F}$  ( $-25^{\circ}\text{C}$  to  $70^{\circ}\text{C}$ ) in hazardous and harsh environments.

The horns shall have 27 user selectable output tones. Multiple horns shall be able to operate in synchronization. Rated current draw at 24 vdc shall not exceed 250 mA for rated sound output of 93 dBA at 10 feet or 700 mA for rated sound output of 100 dBA at 10 feet. The horns shall be capable of direct surface mounting.

Note: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock standard terms and conditions.



## Specification

Certification:	UL Listing: Class I, Div 1, Groups C & D. Listing No. E187688. ATEX approved: EExd, IIB T3 Cert No. Baseefa 02ETEX0207 for DB(1P) Cert No. Baseefa 02ETEX0209 for DBH(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:	DB1(P)=93±3dB(A) (86±3dB(A) for 12V DB1). DB1H(P)=100 ± 3dB(A) @ 10 feet Note: Sound level is dependent upon the tone selection.
Weight:	DB1P 7.7lb./3.5 Kg approx. DB1HP 12.3lb./5.6 Kg approx.
Certified Temperature:	-13°F to +158°F (-25°C to +70°C)
Ingress Protection:	NEMA 4x, IP66.
Tone Selection:	27 User Selectable Tones

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		

Current Consumption:		DB1(P)	DB1H(P)
	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:	up to 8 x 12AWG

Single Stage - 4 wire 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 DC 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

Unit Type	Voltage	Cable Entries	Duty Labels	Tag Label	Features	Finish
DB1P ULA DB1HP	12V d.c. 012 24V d.c. 024 48V d.c. DB1(P) only 048 110V a.c. 110	1/2" NPT C 3/4" NPT D LHS 1 RHS 2 Bottom 3 *Prefix position with entry size code e.g. C1C3 = 20mm left and bottom entries.	None N Required* D *(Please specify)	None N Required T *(Please specify)	Not required N Yes* Y *Please specify	Red R Grey G Special S

### Standard Models

Series	Model Number	Order Code	Description
DB1	DB1PULA024D1D2NNNR	109205-001	Multitone, 93dBA, 24 VDC, Red finish
DB1	DB1HPULA024D1D2NNNR	109205-002	Multitone, 100dBA, 24 VDC, Red finish



WE ENCOURAGE AND SUPPORT NICET CERTIFICATION  
3 YEAR WARRANTY  
DB1 02/08

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