



Bilsom Technology

**GENERAL DATA**

**Division :** Head Protection  
**Family :** Hearing Protection  
**Range :** Earmuffs  
**Line :** Noise Blocking Earmuffs  
**Brand formerly known as :** BILSOM

**Business Countries**

EMEA  
 United Kingdom  
 Middle East

**Activity Domains :**

Administration • Agriculture • Army - Defence • ATEX environment • Automotive and Part Manufacturer • Aviation • Building and Construction • Catering • Chemical Industries • Energy or Electricity • Fire Protection brigades • Fishing • Food Industries • Foundry • Glass Industries • Green Spaces • Homeland defense • Industrial Cleaning • Iron and steel industry • Logistics • Maintenance • Medical and Pharmaceutical • Metal steel • Mining and Quarrying • Offshore • Paper Industries • Petro-chemical • Printing Industries • Services • Telecoms • Textile Industries • Transportation • Utilities • Water treatment • Welding • Wood Industries • Laboratory • Ship Building • Industry



**Product Use :**

**NOISE-BLOCKING EARMUFF**

For Aviation and Construction Industries where Hi-Visibility is needed

## PRODUCT ADVANTAGES

**Feature :**

**BRIGHT GREEN EARCUPS**

Provides additional high visibility and contrast on the job. Ideal to wear at night, during the day, in low light, and under inclement weather conditions. Bright green color does not fade when exposed to sunlight.

**REFLECTIVE HEADBAND**

Reflective material highly visible under light for increased visibility and safety, especially in low lighting. Delivers long-wearing comfort. Minimal headband pressure on the head.

**AIR FLOW CONTROL TECHNOLOGY**

Bilsom's patented Air Flow Control™ technology delivers optimal attenuation across all frequencies, without increasing earmuff size or weight. A patented baseplate chamber and high-tech non-woven layer manage the flow of air inside the earmuff to control how sound reaches the ear. The result is better, more consistent overall attenuation for virtually all industrial noise environments.

**STEEL WIRE CONSTRUCTION**

Robust steel headband withstands demanding use, especially in tough environments.

**SNAP-IN EAR CUSHIONS**

Snap-in ear cushions make replacement quick and easy.

**PADDED FOAM HEADBAND**

delivers long-wearing comfort with minimal pressure on the head.

**Benefit :**

When the jobsite is outdoors or in low lighting, workers are exposed to increased safety hazards in addition to noise. Bilsom LEIGHTNING HI-VISIBILITY Earmuffs provide workers with a total solution for both hearing protection and visibility at night – and during the day. Its eye-catching bright green earmuffs provide a highly noticeable contrast against dark settings, especially in low lighting situations and inclement weather. Plus, LEIGHTNING HI-VISIBILITY are the only earmuffs that incorporate an exclusive reflective headband that glows when exposed to light, providing increased visibility and safety on the job.

## TECHNICAL DESCRIPTION

SNR (dB) : 34

H (dB) : 33

M (dB) : 32

L (dB) : 27

**Attenuation Data :**

Frequency (Hz) Frequenz (Hz) Fréquence (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB) Mittlere Dämmung (dB) Atténuation moyenne (dB)	23.6	24.6	27.8	32.6	37.4	35.2	38.8	35.8
Standard Deviation (dB) Standardabweichung (dB) Déviation standard (dB)	6.4	3.6	2.0	2.0	3.3	3.2	3.1	3.3
Assumed Protection (dB) Angenommener (dB) Protection supposée (dB)	17.2	21.0	25.8	30.6	34.1	32.0	35.7	32.5

**Earmuff Construction :**

Metal

**Other Material :**

Steel Wire, PUR-E, PVC, Textile, PC/PBT, ABS

**Dielectric :** No

**Color :**

Bright Green, Reflective Tape, Black and Grey

**Batteries Needed :**

None

**Weight (grs) :**

302

**Design Patents :**

Air Flow Control™

**Headband Style :**

Over-Head

**Sound Amplification :** No

**AM/FM Radio :** No

**Automatic Shut-Off Function :** No

**Audio Input Jack :** No

**Hi-Visibility :** Yes

## ADDITIONAL INFORMATION

**Accessories :**

Hygiene Kit - Packed in a plastic bag, including two ear cushions and two liners. Ref. # 1012000 for L3, L3H, L3N  
 Beltclip - For carrying purpose. Old Ref. # 1000252 New Ref. # 1016730 Cool II Pads - Sweat absorbing pads. Ref. # 1000365 5-pair, Ref. # 1000364 100-pair  
 Optisorb - cotton sleeve slides over earcup. Ref. # 3302101  
 Polar Hood - Ref. # 1016870 Lg/XLg; Ref. # 1016871 Sm/Med

**Life Cycle :**

Cushions should be replaced periodically to retain maximum attenuation. Use the following as a guideline for replacement of ear cushions and insert foam. General use and wear - Ear cushions and foam inserts should be replaced at least every 6 months. Heavy use or wear in humid/extreme climates - Ear cushions and foam inserts should be replaced at least every 3 months. Cracking or leakage is visible - replace ear cushions and foam inserts immediately.

**Storage Information :**

When not in use, the earmuffs should be stored in a clean dry container or locker. Do not use solvents or petroleum-based products. Do not immerse the earmuffs in water.

**Care Instruction :**

Earmuffs are an important safety product and should be inspected regularly. Its use, care and maintenance are critical to its effective performance. Earmuffs and in particular ear cushions may deteriorate with use and should be examined at frequent intervals for cracking and leakage. If the ear cushions become hard, damaged or deteriorated, they should be replaced promptly using recommended Hygiene Kits. Earmuffs should be maintained by regular cleaning. Use a mild disinfectant solution. A gentle wipe is all that is required.

**User manual number :**

90010506\_L1-L3HV

**EAN Code :**

7312550139417

**CERTIFICATION AND CONFORMITY****European Directives :**

89/686/EEC

**EC Category PPE\* : Category II****Standards :**

EN-352-1:2002

**Quality Assurance :**

ISO 9001 / 2000

**EC Certification Number :**

1294

**EC Attestation Number :**

041108

**Laboratory :**

INSPEC

\*PPE : Personal Protective Equipment

## EC CONFORMITY DECLARATION

**The manufacturer or its legal representative supplier settled in the European Community:**

Howard Leight by Sperian

**Declares that the next Personal Protective Equipment described here after is in conformity with the provisions of Council Directive 89/686/CEE:**

Designation: Leightning L3HV Hi-Visibility Headband Earmuff

Reference: 1013941

Standard(s): EN-352-1:2002

**This PPE is the object of the above EC attestation type:**

041108

**Delivered by:**

INSPEC

56 Leslie Hough Way

Salford

M6 6AJ Greater Manchester

United Kingdom

**Made at Sweden, on the 01/04/2005**

**By:**

**Division:** Head Protection



## EC TYPE-EXAMINATION CERTIFICATE :1294

**Product description:-**

Ear-muffs

**Product identification:-**

Bilsom Leightning L3s

**Manufactured by:-**

Bacou-Dalloz AB  
Dungattan 2  
260 50 Billesholm  
Sweden

When assessed and examined against harmonised standard EN352-1:2002 is found to be in conformity with Council Directive 89/686/EEC, and associated amendments, relating to personal protective equipment .

Signed .....



K.J Warren, Manager, Certification Services

Date: 4<sup>th</sup> January 2005

For and on behalf of INSPEC International Ltd. (Notified Body No: 0194)

For terms and conditions of issue, see page 2

certificate invalid  
if not embossed



**Terms and Conditions associated with INSPEC**  
**EC Type-Examination Certificate No: 1294**

Reference Documents:-

- |      |                          |   |  |
|------|--------------------------|---|--|
| i)   | Test Reports             | - | INSPEC 04.11.08                                    |
| ii)  | Technical File           | - | INSPEC ref. TF/1294                                |
| iii) | Test and Inspection Plan | - | CE Product Certification, Test and Inspection Plan |

Conditions attached to the issue of this certificate:

- i) Marking and instructions have been assessed in the English language only. It is the Manufacturers/Authorised Representatives responsibility to obtain and supply language versions acceptable to the country where the product is to be sold.
- ii) Any changes to the product, technical file or quality manual/quality plan shall be immediately notified to INSPEC.
- iii) The Manufacturer/Authorised Representative shall comply at all times with INSPEC's Regulations governing CE Product Certification.
- iv) This Certificate remains the property of INSPEC and may be withdrawn if any of the conditions attached to its issue are not complied with.

# CERTIFICATION SCHEDULE

COMPANY: Bacou-Dalloz AB

CERTIFICATE NO: EC1294

SCHEDULE NO: TWO

DATE: 12<sup>th</sup> September 2005

Model: Bilsom Leightning L3s, Bilsom Leightning L3s HI-VISIBILITY

Description: Over-the-head ear-muff

Size Range: S / M / L

## Attenuation Data

Freq. (Hz)	63	125	250	500	1000	2000	4000	8000
Mean att. (dB)	23.6	24.6	27.38	32.6	37.4	35.2	38.8	35.8
Std. Dev. (dB)	6.4	3.6	2.0	2.0	3.3	3.2	3.1	3.3
APV (dB)	17.2	21.0	25.8	30.6	34.1	32.0	35.7	32.5
	H = 33dB		M = 32dB		L = 27dB		SNR = 34dB	

Signed for and on behalf of INSPEC.....

Kevin Warren, Manager, Certification Services