PRODUCT NUMBER: 1012533

Thunder T1Hs Helmet Earmuff [3711, 3712, 3721 Adapters]

Learn more about our products at howardleight.com >

Learn more about hearing conservation at hearforever.org >

HOWARD LEIGHT by Honeywell

Overview

Reference Number

1012533

Product Type

Hearing Protection

Range

Earmuffs

Line

Noise Blocking Earmuffs

Brand

Howard Leight by Honeywell

Brand formerly known as

BILSOM

Industry

- Industry
- 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
- Laboratory
- Logistics
- Maintenance
- Medical and Pharmaceutical
- Metal steel
- Minning and Quarrying
- Offshore
- Paper Industries
- Petro-chemical
- Printing Industries
- Services
- Ship Building
- Telecoms
- Textile Industries
- Transportation
- Utilities
- Water treatment
- Welding
- Wood Industries

Product Use

Noise Blocking Earmuff

For Construction workers

Features & Benefits

Feature

AIR FLOW CONTROL™ TECHNOLOGY Bilsom's patented Air Flow Control™ technology delivers optimal attenuation across all frequencies, without increasing earcup 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. Air Flow Control is a standard feature on all Thunder series earmuffs. DIELECTRIC/PLASTIC CONSTRUCTION Thunder's robust nondeforming dielectric construction withstands use and abuse, while protecting your workers in electrical environments. SNAP-IN EAR CUSHIONS Make replacement quick and easy. FOR USE WITH WIDE RANGE OF HELMETS INCLUDES 3711, 3712, 3721 HELMET ADAPTERS

Benefit

When it comes to selecting an earmuff, comfort reigns supreme with workers. That's why the Thunder series earmuff is designed with all-day comfort in mind. Headband earmuffs feature a unique dual-headband for better positioning and breathability, and non-deforming outer headband that minimizes pressure on the head. Plus, its dielectric construction withstands use and abuse, while protecting workers in electrical environments.

Technical Description

SNR (dB)
29

H (dB)
32

M (dB)
26

L (dB)
20

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)	15.9	18.7	22.5	23.4	32.4	34.4	35.5	37.9
Standard Deviation (dB) Standardabweichung (dB) Déviation standard (dB)	2.7	3.8	3.9	2.5	2.2	2.3	2.3	4.7
Assumed Protection (dB) Angenommener (dB) Protection supposée (dB)	13.2	14.9	18.6	20.9	30.2	32.1	33.2	33.2

Earmuff Construction
Plastic [or Dielectric]

Other Material
POM, TPE, PP, PUR-E, PVC/Polyether

Dielectric
Yes

Color
Black and Green

Batteries Needed
None

Weight (grs)
198

Headband Style
Helmet-Mounted

Sound Amplification
No

AM/FM Radio
No

Automatic Shut-Off Function
No

Audio Input Jack
No

Hi-Visibility
No

Certifications

E.C. Declaration of Conformity

EC Category PPE

2

Quality Assurance

ISO 9001 / 2000

EC Certificate Number

EC1287, 25305BDS03

EC Attestation

EC Attestation

EC Attestation Number

041034

We're sorry, there are no images available at this time.

Additional Information

User Manual

Earmuff Instruction Poster - EN

Maintenance

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 Instructions

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.

Parts & Accessories

Accessories

Hygiene Kit - Packed in a plastic bag, including two ear cushions and two liners. Ref. # 1010974 for T1, T1H, T1F

Adapters - For helmet attachment. Ref. # 1000242 for 3711, Ref. # 1000243 for 3712, Ref. # 1005292 for 3721

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

Spare Parts File

Spare Parts File

Packaging

EAN Code

7312550125335

INSPEC

UKAS TESTING 0316

56 LESLIE HOUGH WAY · SALFORD · GREATER MANCHESTER · M6 6AJ · UNITED KINGDOM
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Test Report

EN 352-3 : 2002

Report no:	04.10.34
Client:	Bacou-Dalloz AB Dungatan 2 260 50 Billesholm Sweden
Client order:	Peter Franzen
Order received:	18, 19 May and 17 September 2004
Manufacturer:	Bacou-Dalloz AB
Model:	Bilsom Thunder T1Hs
Date(s) tested:	7 June to 28 October 2004

Conditions:

This report shall not be reproduced except in full, without the written approval of INSPEC International Limited.

Opinions, comments and interpretations expressed herein are outside the scope of UKAS accreditation are shown in italics in this report.

Tests marked ☒ are not included in the UKAS accreditation schedule for INSPEC.

Samples will be returned.

Checked: S. J. Wright ..... Approved: A. Nelson .....

S. J. WRIGHT

A. NELSON

Issued: 31 October 2004

Testing requested

Type of test: Mandatory

Stated product characteristics :	
Combination	Basic
Size range	Large
Stand-by position	Yes
Adjustable force	No
Replaceable cushions and liners	Yes
Fluid filled cushions	No
Non-planar cushions	No

Sample details

Product	Submitter	Quantity	Received	INSPEC no. (P288+)
Bilsom Thunder T1Hs helmet mounted earmuff	Client	10	18 May 04	01 to 10
HC 600 helmets				11 to 20
User Information		1		-
Proposed revised user instructions		1	30 Aug. 04	
Proposed package information				
Proposed logo				

Samples were selected by INSPEC from the submission detailed above, randomly where possible.

Ear-muff samples 01 to 10 were mounted onto helmet samples 11 to 20 respectively. The combined samples are refered to by their ear-muff identifications throughout.

Procedures

Testing was performed in accordance with EN 352-3 : 2002 (BS EN 352-3 : 2002), unless stated otherwise below. Clause numbers in parenthesis are from EN 13819 : 2002.

4.3.9. The acoustic test fixture and test site used for the measurement of insertion loss were as described in ISO/TR 4869-3. A plane progressive wave was used.

4.3.12. Sound attenuation testing was performed at the University of Salford's School of Computing, Science and Engineering and was conducted by INSPEC Testing Services' personnel.

(4.1.3.7 h)) Replacement cushions were not provided by the client and consequently new cushions were not fitted following water immersion.

Summary of assessment*

Clause		Samples	Result
4.2.1	Materials	05 and 06	See "Result detail"
4.2.2	Construction		Pass
4.3.2	Sizing and adjustability	01 to 06	Pass
4.3.3	Cup rotation		Pass
4.3.4	Headband force		Pass
4.3.5	Cushion pressure		Pass
4.3.6	Resistance to damage when dropped		Pass
4.3.7	Resistance to damage when dropped at low temperature (optional)		
4.3.8	Change in headband force	01 to 06	Pass
4.3.9	Insertion loss	01 to 10	Pass
4.3.10	Resistance to leakage	05 and 06	Nap
4.3.11	Ignitability		Pass
4.3.12	Minimum attenuation ☒	01 to 04	Pass
5	Marking	05 and 06	Fail
6.1	Information supplied by the manufacturer - General		Pass
6.2	Information supplied by the manufacturer - Wearer information		Fail
6.3	Information supplied by the manufacturer - Additional information	-	NAs

Key

	Highlighting shows clauses requested for each model. Any other clauses were not requested.
Pass	Requirement satisfied.
Ltd	Testing requested was insufficient to completely verify compliance with clause. Refer to the "Result detail" section for more information.
Fail	Requirement not satisfied. Refer to the "Result detail" section for more information.
NAs	Assessment requested but not carried out.
NAp	Requirement not applicable.
NT	Requirement was not tested due to early termination following failures.

* Assessment relates only to those items tested in this report.

Result detail

4.2.1 Materials

4.2.1.1 Those parts of the ear-muff that come into contact with the skin were non-staining, soft and pliable.

Manufacturer to certify regarding likelihood of skin irritation, allergic reaction or any other adverse effect on health. **NAs**

4.2.1.2 The assessed materials of the ear-muff were visibly unimpaired after cleaning and disinfection by the methods specified by the manufacturer.

4.3.4 Headband force

Size	Force (N)						
	01	02	03	04	05	06	Mean
L	10.7	11.2	11.1	11.2	10.8	11.1	11.0

4.3.5 Cushion pressure

Size	Pressure (Pa)					
	01	02	03	04	05	06
L	2976	2894	3181	3007	2903	2898

4.3.8 Change in headband force

Headband force (following conditioning) and Change in headband force – Large size

Sample	01	02	03	04	05	06	Mean
Force (N)	11.1	11.4	11.9	11.5	11.1	11	11.3
Change (%)	+3.7	+1.8	+7.2	+2.7	+2.8	-0.9	-

4.3.9 Insertion loss

Samples 01 to 10 were tested.

A summary of the insertion loss data for the individual samples, and the mean insertion loss with standard deviations at each frequency, are given in the Annex to this report.

4.3.12 Minimum attenuation ☒

Refer to the University of Salford's Test Report, No: HP/04/21, which is contained in the Annex to this report.

Attenuation

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Measured attenuation (M_f - s_f) (dB)	14.9	18.6	20.9	30.2	32.1	33.2	33.2
Limit (dB)	5	8	10	12	12	12	12

5 Marking

The samples were not marked **Fail**

The client submitted an example of proposed marking against which the assessment was carried out.

a) *Manufacturer identification* - "Bilsom".
b) *Model designation* - "Thunder T1Hs".
c) *Standard number* - "EN 352".
d) Not applicable.

Durability of marking could not be assessed. **NAs**

6 Information supplied by the manufacturer

The instructions to users have been assessed as detailed below, with reference only to the relevant requirements of the Standard.

INSPEC Testing Services has not assessed these instructions with respect to claims made by the manufacturer outside of these requirements, and therefore accepts no responsibility for the legitimacy of any such claims.

6.1 General

Information was provided in the English language.

6.2 Wearer information

One set of proposed revised user instructions and one set of proposed packaging information was provided for assessment.

This information was not provided with the samples. **Fail**

a) Standard number was included.
b) Manufacturer identification was included.
c) Model designation was included.
d) Not applicable
e) Cup supporting arms and cushion material was included.
f) Required statement regarding model / helmet combination was included.
g) Method of assembling the ear-muffs to the helmet was included.
h) Fitting/adjustment instructions were included.
i) Size range included together with warning statements on both the user instructions and packaging.
j) Attenuation values were included. Shown in equal prominence.
k) Recommendations were included.
l) Adhering to the recommendations warning was included.
m) Cleaning and disinfection was included.
Manufacturer to certify that the specified agents are not known to be harmful to the wearer. **NAs**
n) Chemical substances statement was included.
o) Deterioration statement was included.
p) Fitting of hygiene covers statement was included.
q) Storage conditions were included.
r) Replacement cushion information was included.
s) Cushion replacement instructions were included.
t) Mass of the ear-muffs was included.
u) Address was included.

6.3 Additional information

Manufacturer to certify. **NAs**

(4.1.3.6) Mass

The mean mass of the ten samples was 198 grams.

ANNEX

This Annex comprises 5 sections:-

1. University of Salford, School of Computing, Science and Engineering Report No: HP/04/21 - 3 pages.
2. H-M-L and SNR values calculated from the results detailed in the University's Report - 1 page.
3. Insertion loss results summary - 1 page.
4. Product photographs - 1 page.
5. Estimates of the uncertainty of measurement - 1 page.

The University of Salford Salford Greater Manchester M5 4WT UK www.salford.ac.uk
Telephone 0161 295 3223 Facsimile 0161 295 5575

UKAS TESTING
1262

TEST REPORT

SOUND ATTENUATION

OF HEARING PROTECTORS

BS EN 24869-1 : 1993

ISO 4869-1 : 1990

CLIENT:	INSPEC International Limited 56 Leslie Hough Way Salford Greater Manchester M6 6AJ
YOUR ORDER NO:	2/040621-1
TYPE OF HEARING PROTECTOR:	Helmet mounted ear-muff
MODEL:	Bilsom Thunder T1H
MANUFACTURER:	Bacou-Dalloz AB
DATE RECEIVED:	23 June 2004
DATE(s) OF TESTS:	23, 24, 25, 29 June 2004

Signed: .....
A.Nelson
Test Engineer

Approved: .....
D.J. M°Caul
Laboratory Manager

THE QUEEN'S ANNIVERSARY PRIZES
FOR HIGHER AND FURTHER EDUCATION
2000

INTRODUCTION:

BS EN 24869-1 : ISO 4869-1 specifies a subjective method for measuring the attenuation of hearing protectors at the threshold of hearing. This method, including details of the test signals, site, equipment, subjects and procedure, was applied to the samples tested and the results are presented, as required by the Standard, on the following pages of this Report.

For complete details of the method, please refer to BS EN 24869-1 : ISO 4869-1.

TEST SIGNALS, SITE AND EQUIPMENT:

The facilities used for this test are located within the School of Computing, Science & Engineering at the University of Salford.

TEST SUBJECTS:

The 16 test subjects comprised both males and females and covered a wide age range. All subjects were audiometrically screened in accordance with Clause 4.4.1 of BS EN 24869-1 prior to the test. They also satisfied the requirements of Clauses 4.4.2 and 4.4.3.

FITTING:

Manufacturer's instructions were provided and were followed during the fitting of the hearing protectors. Guidance was also available from the test operator.

TEST PROCEDURE:

Each of the four sample hearing protectors supplied by the client was tested on four test subjects. Each test subject's protected threshold was assessed once.

The procedures specified in Clause 4.5 were followed.

OBSERVATIONS :

None.

RESULTS:

See the attached sheet for the attenuation data for each individual subject.

The results here presented relate only to the items tested and described in this report.

Model	Bilsom Thunder T1H
Mode tested	Over-The-Head
Attenuation results (values in dB)	See below
Test Reference No.	HP/04/06/01

Frequency (Hz)

Subject	Sample	63	125	250	500	1000	2000	4000	8000
RC	01	20	23	26	24	34	32	34	35
RF	01	16	24	24	24	34	36	37	46
PD	01	14	18	22	24	30	30	34	42
DJM	01	22	26	28	26	36	36	35	38
SVH	02	14	13	18	18	32	30	32	36
CW	02	16	18	24	26	32	34	34	36
CN	02	16	20	24	22	30	34	34	42
RH	02	14	16	30	22	32	36	40	34
DW	03	16	18	26	28	28	34	36	40
SM	03	12	14	18	22	34	37	36	38
FW	03	14	20	22	23	36	37	34	34
SBM	03	14	13	18	22	32	36	38	46
JU	04	16	20	24	24	34	36	36	28
JB	04	20	22	18	24	32	32	38	38
AO	04	15	16	20	26	30	36	38	34
ES	04	15	18	18	20	32	34	32	40
Mean Attenuation		15.9	18.7	22.5	23.4	32.4	34.4	35.5	37.9
Standard Deviation		2.7	3.8	3.9	2.5	2.2	2.3	2.3	4.7
Assumed Protection		13.2	14.9	18.6	20.9	30.2	32.1	33.2	33.2

Assumed Protection Value rounded to one decimal place.

ATTENUATION VALUES CALCULATED FROM
UNIVERSITY OF SALFORD,
SCHOOL OF COMPUTING, SCIENCE AND ENGINEERING
REPORT NO: HP/04/21

H	=	32
M	=	26
L	=	20
SNR	=	29

INSPEC Test Report No: 04.10.34

Annex – Section 3

Sample Numbers: 01 to 10

Mode tested: Over-the-head

Insertion loss (IL)

Summary of results (dB)

Freq (Hz)	250	315	400	500	630	800	1000	1250	1600	2000	2500	3150	4000	5000	6300	8000
01 Cup R	24.7	26.7	30.2	25.0	37.5	38.0	37.9	37.1	29.0	41.2	37.3	29.5	33.7	38.9	32.5	37.6
01 Cup L	24.9	28.0	33.2	27.3	41.9	41.5	41.6	41.8	34.5	43.9	35.6	39.1	36.6	37.6	32.9	35.6
02 Cup R	24.8	25.5	29.2	24.4	37.4	38.4	36.3	35.5	28.6	40.2	35.2	29.4	36.1	45.7	35.5	37.7
02 Cup L	26.7	25.5	28.8	25.7	35.9	36.1	34.6	35.5	32.7	42.4	36.1	32.8	34.6	40.7	33.0	36.1
03 Cup R	26.2	25.0	28.4	22.9	34.4	36.3	38.2	36.9	30.9	42.5	37.4	36.1	40.7	41.4	35.4	40.8
03 Cup L	26.0	27.8	34.7	28.0	42.7	42.2	42.8	40.5	32.0	42.4	36.5	36.5	37.6	38.0	34.1	39.4
04 Cup R	29.2	29.4	33.7	24.9	39.1	38.0	38.5	35.3	31.2	45.3	38.2	32.7	38.1	42.8	35.3	34.7
04 Cup L	27.5	26.4	27.3	24.3	32.7	33.7	35.0	35.4	32.6	41.3	38.4	30.2	35.0	40.8	34.1	32.9
05 Cup R	25.7	24.0	25.4	21.2	31.2	34.1	33.2	35.3	30.3	43.0	40.5	32.2	34.8	38.5	35.2	40.3
05 Cup L	26.4	25.8	26.9	24.0	34.0	33.2	32.8	34.4	32.6	40.2	35.2	33.4	38.8	44.5	32.6	34.0
06 Cup R	28.0	25.2	27.3	23.2	34.8	34.1	32.7	34.1	29.9	40.2	36.0	32.4	37.8	46.5	35.2	37.8
06 Cup L	27.5	26.1	26.9	24.6	33.4	30.8	31.3	34.1	33.9	38.0	34.7	29.4	33.9	41.2	33.7	34.1
07 Cup R	26.4	26.1	31.6	24.6	38.9	40.7	41.1	39.0	31.9	44.1	40.3	33.1	36.4	40.1	38.1	37.9
07 Cup L	27.4	27.0	31.9	27.5	38.4	34.7	34.7	35.3	32.1	40.5	36.6	31.2	34.2	41.1	35.3	34.6
08 Cup R	28.2	24.8	27.5	24.1	34.8	33.4	32.6	34.8	31.1	44.0	36.0	31.7	35.1	37.1	34.3	36.8
08 Cup L	27.7	26.5	30.3	25.8	36.8	39.1	38.6	37.9	32.6	42.4	39.7	31.5	34.7	40.5	39.4	35.8
09 Cup R	25.7	25.3	27.3	23.4	34.8	35.6	34.6	37.9	32.4	42.6	32.6	32.4	35.9	40.5	31.5	37.2
09 Cup L	25.8	25.3	27.4	25.8	35.3	35.2	34.3	34.4	32.2	41.8	39.4	28.6	33.6	38.9	35.9	35.1
10 Cup R	26.3	23.0	24.3	22.3	31.7	34.6	35.6	36.5	30.8	40.9	32.7	29.9	37.1	41.6	31.1	34.8
10 Cup L	25.5	24.0	24.5	23.3	29.8	30.8	31.9	32.4	30.5	39.6	36.4	33.7	37.6	41.1	35.5	37.2

Mean	26.5	25.9	28.8	24.6	35.8	36.0	35.9	36.2	31.6	41.8	36.7	32.3	36.1	40.9	34.5	36.5
Std. Dev.	1.2	1.5	3.0	1.7	3.4	3.2	3.4	2.3	1.5	1.8	2.2	2.6	1.9	2.5	2.0	2.1

EN 352-3 : 2002

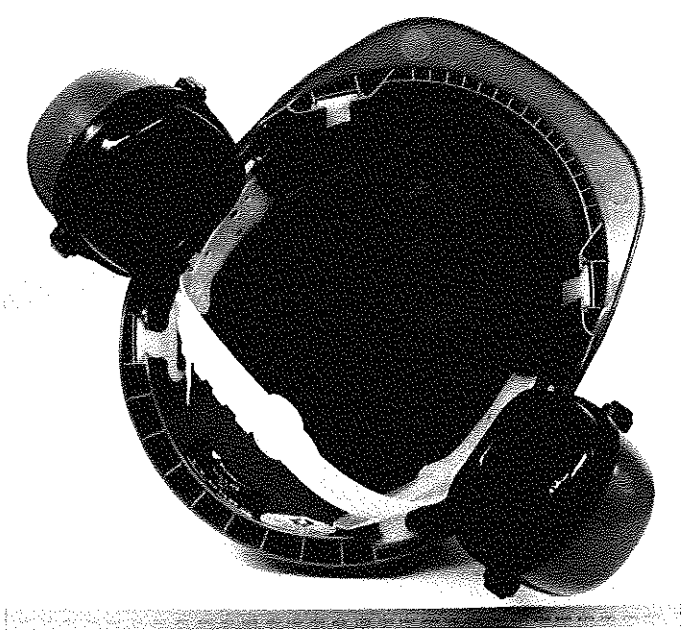
Estimates of the uncertainty of measurement

Clause	Test	Uncertainty
	Weighing	1.2%
4.3.4	Headband Force	0.8%
4.3.5	Cushion Pressure	1.3%
4.3.8	Change in headband force	1.1%
4.3.9	Insertion loss	4.1% (max: 250Hz)

Values expressed as a percentage (%) are relative.

It should be noted that the above values have not been taken into account when making assessment to the pass/fail criteria.

Bacou-Dalloz AB's model Bilsom Thunder T1Hs helmet mounted ear-muff



INSPEC Testing Services' sample number P28810 **26 October 2004**

INSPEC

Type Examination Certificate No. EC 1287
INSPEC Technical File Index

Test Reports:*	**INSPEC 04.10.34**
Test and Inspection Plan:*	**CE Product Certification, Test and Inspection Plan**
General Assembly Drawing/ Product Description:*	**dwg: 1011601**
Component/Material List:*	**Primary Components/Material List And Sample Submission form**
Information to Users:	✓
Material Declaration:	**Primary Components/Material List And Sample Submission form**

N P Green
17 December 2004
Signature / date: .....

NOTE: Documents stamped by INSPEC have only been assessed for compliance with the requirements of the specified standard(s) and the PPE Directive; any further statements or claims made within the stamped documents are not endorsed or covered by INSPEC.

* Reference or similar required.

CE PRODUCT CERTIFICATION

Primary Components/Material List And Sample Submission Form

Product Group: ..... *Ear Muffs*..... **Standard**: .....*EN352-3:2002*.....

Model/Product Family: ..... Bilsom Thunder T1Hs .....

COMPONENT (WHERE APPLICABLE)	MATERIAL TYPE PLUS GRADE OR REFERENCE
Headband	POM
Cup	PP
Seal/Cushion - outer - inner	Plastizised PVC, PUR-E PUR
	MATERIAL
Others (Company to List)	
Baseplate	PP
Knob	TPU
See assembly drawing.	

List below any components that have either been previously tested or are covered by an existing certificate:

COMPONENT	CROSS REFERENCE
Helmet mounted Ear muff	INSPEC
Assembly drawing	1011601

SAMPLE SUBMISSION (WHERE APPLICABLE)	
Quantity Submitted	*10 samples*
Test House	*INSPEC Laboratories*
State Optional Clauses	*None*
Additional Details/Comments	*Tested previously, test report submitted*

Material Declaration: "The material and parts named above are not known to cause adverse affect to user hygiene or health, nor are likely to cause irritation, during normal use"

Signed: .....**Name**: *Peter Franzén*..... **Date**: ...*11/11/04*.....

Company Name & Address: ..... *Bacou-Dalloz AB*.....

..... *Dungatan 2, 260 50 Billesholm, Sweden* .....

Bilsom

101530
Global standard version

101601
US version

Thunder® T1H

AU/NZ
SLC80: 26 dB
Class 5

EN 352

SNR: 29 dB
H: 32 dB
M: 26 dB
L: 20 dB

Noise Reduction Rating 23

CANADA
NRR 23
CSA A

Mtrl No 90010948
Rev. 1.0

GB Bilsom® Thunder® T1H – Comfortable helmet muff. WEARER INFORMATION: Please see the enclosed user instruction.

FR Bilsom® Thunder® T1H – Casque anti-bruit confortable. MODE D'EMPLOI: Voir les instructions d'utilisation ci-jointes.

DE Bilsom® Thunder® T1H – Komfortabler Helm-Kapselgehörschützer. BENUTZERHINWEISE: Siehe beiliegende Gebrauchsanleitung.

ES Bilsom® Thunder® T1H – Auriculares cómodos para casco. INSTRUCCIONES DEL USO: Consultar las instrucciones de uso incluidas en el envase.

IT Bilsom® Thunder® T1H – Comoda cuffia antirumore per elmetto. ISTRUZIONI PER L'USO: Vedere le istruzioni per l'uso all'interno.

SE Bilsom® Thunder® T1H – Komfortabel hjälmkåpa. ANVÄNDARINSTRUKTION: Se den bilagda bruksanvisningen.

NO Bilsom® Thunder® T1H – Komfortabelt hjelmklokke. BRUKERINFORMASJON: Se den vedlagte bruksanvisningen.

DK Bilsom® Thunder® T1H – Behageligt hjelmhøreværn. BRUGSANVISNING: Se den vedlagte brugsanvisning.

FI Bilsom® Thunder® T1H – Miellyttävät kypäräkiinnitteiset kupusuojaimet. KÄYTTÖOHJE: Katso käyttöohjeissa olevat kuvat.

NL Bilsom® Thunder® T1H – Comfortabele gehoorbeschermer voor helm. INSTRUCTIE VOOR GEBRUIKER: Zie de bijgevoegde gebruiksaanwijzing.

PT Bilsom® Thunder® T1H – Confortável protector acústico para capacete. INSTRUÇÕES PARA O USO: Veja das instruções do utilizador, em anexo.

GR Bilsom® Thunder® T1H – Άνετες ωτασπίδες με κράνος. ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ: Παρακαλώ βλέπετε τις περιεχόμενες οδηγίες χρήσης.

PL Bilsom® Thunder® T1H – Wygodne nauszniki nahełmowe. INSTRUKCJA UŻYTKOWNIKA: Patrz załączona instrukcja użytkownika.

HU Bilsom® Thunder® T1H – Kényelmes, védősisakra szerelhető fülvédő. KAPCSOLATOS TUDNIVALÓK: Lásd a mellékelt használati utasítást.

SK Bilsom® Thunder® T1H – Komfortný slúchadlový chránič sluchu v kombinácii s prilbou. INFORMÁCIE PRE POUŽÍVATEĽA: Pozrite si priložené pokyny pre používateľa.

CZ Bilsom® Thunder® T1H – Pohodlné mušle na přilbu. INFORMACE PRO UŽIVATELE: Nahlédněte do přiložených pokynů pro uživatele.

RU Bilsom® Thunder® T1H – Удобные наушники в каске. ИНФОРМАЦИЯ ДЛЯ ВЛАДЕЛЬЦА: Пожалуйста, ознакомьтесь с инструкцией пользователя.

Thunder® T1H

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Manufactured by Bacou-Dalloz

Thunder® T1H

Top-of-the-line protection and comfort helmet muff
Casque antibruit pour une protection maximale et un excellent confort
Helm-Kapselgehörschützer mit höchstem Schutz und besten Trageeigenschaften
Auriculares para casco cómodos y de protección superior
Comoda cuffia antirumore per elmetto ad elevata protezione
Högdämpande komfortabel hjälmkåpa

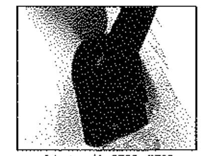
Bilsom

Thunder® T1H

Accessories

Cool No 10003644 / 1050365

Hygiene kit No1010974



Adaptors No 3702 - 3722

Tested according to ISO 4869-1:1990, ISO 4869-2:1992 / EU

Attenuation data: please see the enclosed user instruction

SIZE RANGE: Large
Headband force: Large=11.0 N

Warning:
Large range size helmet mounted earmuffs.
Refer to wearer information

Tested according to ANSI S3.19-1974

The level of noise entering a person's ear when hearing protection is worn as directed, is closely approximated by the difference between the A-weighted environmental level and the NRR.

Example: 1. The environmental noise level at the ear is 100 dB (A).
2. The NRR is 23 decibels (dB).
3. The level of noise entering the ear is approximately equal to 77 dB (A).

CAUTION: For noise environments dominated by frequencies below 500 Hz, the C-weighted environmental noise level should be used. Although hearing protectors can be recommended for protection against the harmful effects of impulse noise, the Noise Reduction Rating (NRR) is based on the attenuation of continuous noise and may not be an accurate indicator of the protection attainable against impulse noise, such as gunfire.
NOTE: The Noise Reduction Rating is derived from testing procedures at an independent laboratory and in accordance to acceptable A.N.S.I. standards. Actual noise reduction can vary from laboratory results as labelled. Protection is maximized when: proper protector is selected for application, a good training program is utilized and proper fitting techniques are followed.

Attenuation data

Frequency Hz	125	250	500	1000	2000	3150	4000	6300	8000	NRR
Grand Mean Attenuation, dB	16.9	22.0	28.4	31.6	33.1	33.7	34.7	39.6	38.6	23 dB
Standard Deviation, dB	3.6	2.9	3.4	2.9	3.1	2.8	3.0	2.7	4.0	
Real-Ear Protection, dB	9.7	16.2	21.6	25.8	26.9	28.1	28.7	34.2	30.6	

Headband force = 2.2 LBS

Tested according to Australian Standard AS/NZS 1270:2002

Attenuation data

Frequency Hz	125	250	500	1000	2000	4000	8000	SLC_{80}	
Mean Attenuation, dB	16.4	19.1	25.5	31.6	31.6	34.2	37.0	26 dB	Class 5
Standard Deviation, dB	5.2	5.2	4.2	3.5	3.8	4.7	6.1		
Mean-Minus-Std Deviation, dB	11.2	13.9	21.3	28.1	27.8	29.5	30.9		

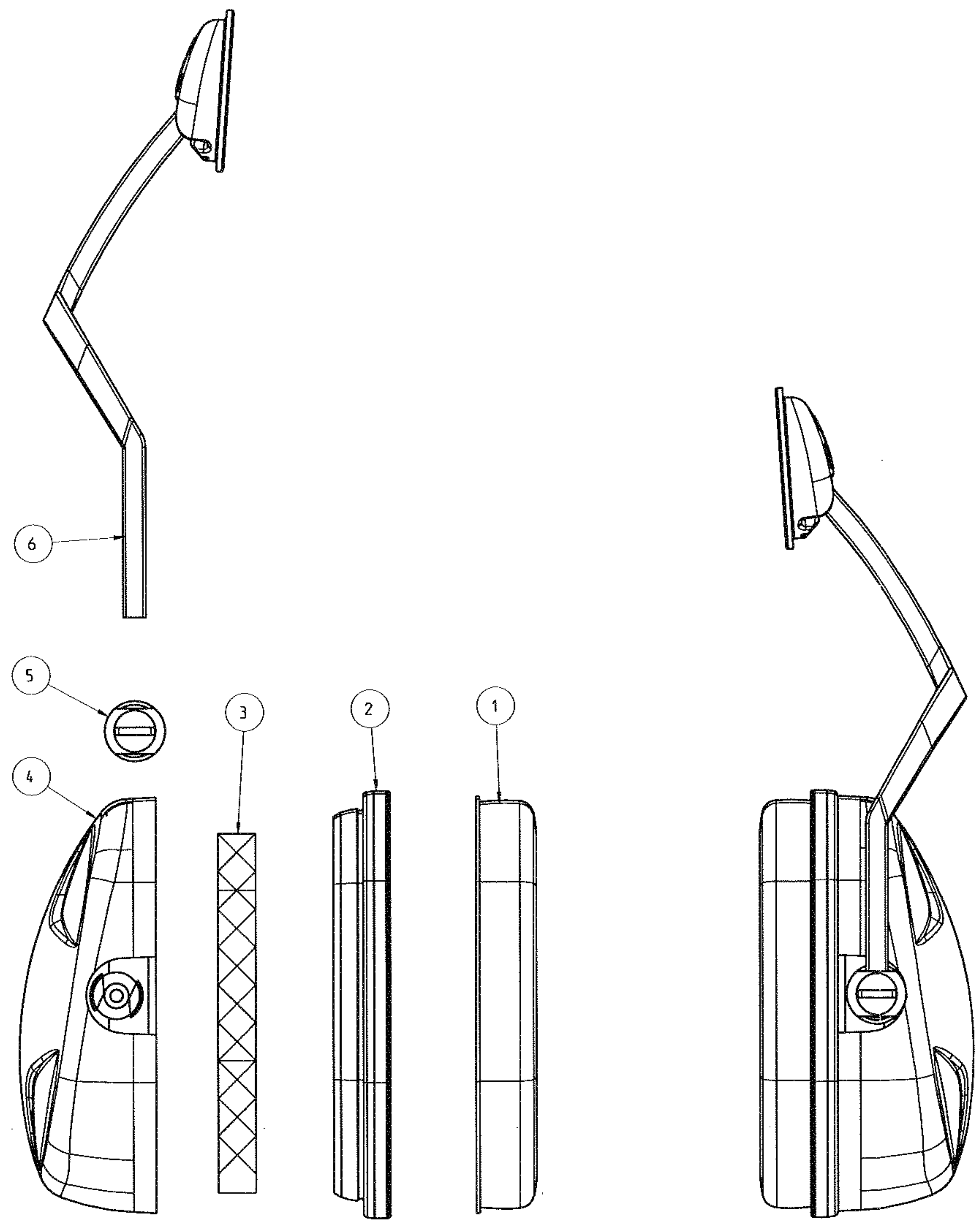
Clamping force = 9.3 N

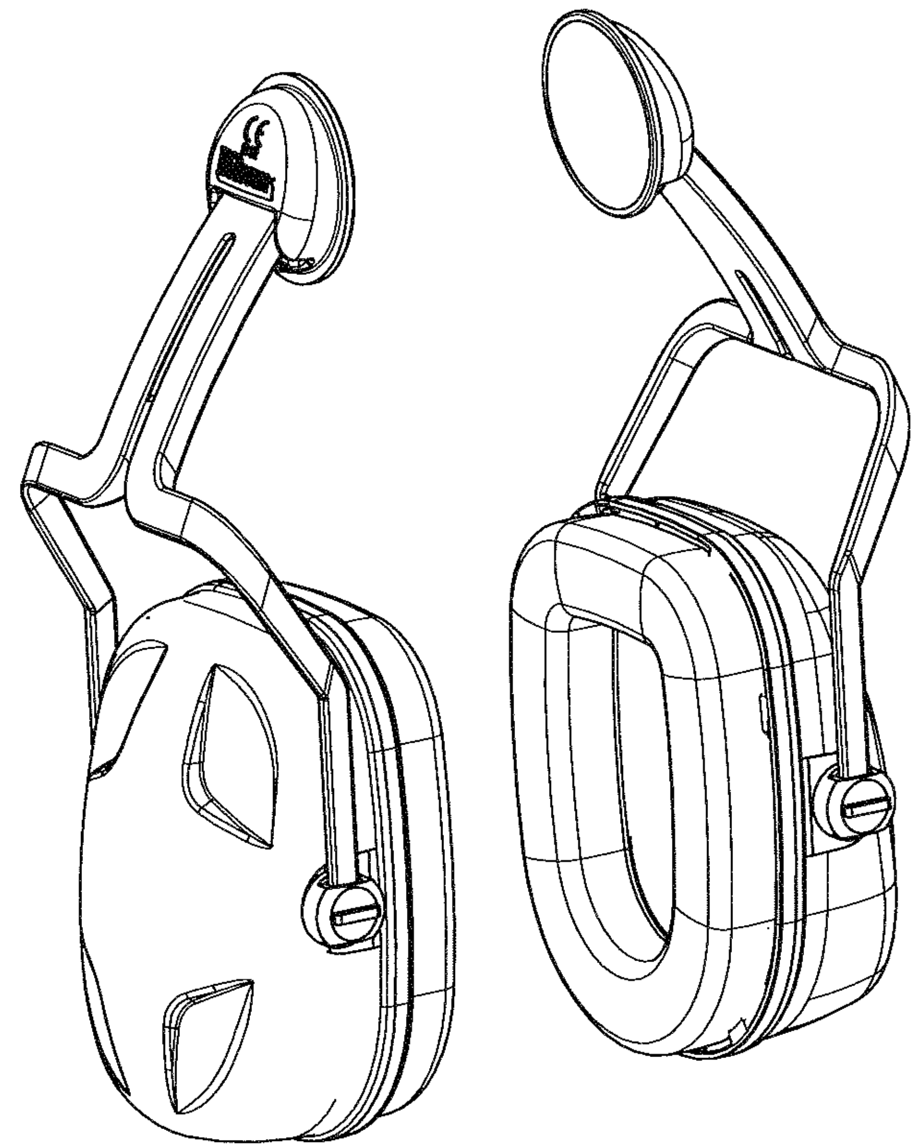
Made in China

Bilsom

Sammanst.nr	Rev.	Ändringsmeddelande	Datum	Sign.	Godk.

Utf.A	Utf.B	Pos	Benämning	Standard,material,anm.o d	Ritn.nr/Art.nr	Krymp





Pos.	No.	Specification	Standard/Material	Drawing/Article no.
1	2	Earcushion	Plastizised PVC,PUR-E	90010857
2	2	Rim NST	PP	50001895
3	2	Foam absorb.	PUR	90007570
4	2	Cup	PP	90010953
5	2	Knob	TPU	50000168
6	2	Helmet headband	POM	50001585

Konstr.	Ritad	Kontr.	Godk.	Ytbehandling	Vikt	Ers äller	Format
HE	CW					-	A2

Bilsom

Bilsom Thunder T1 H
Assembly drawing

CAD: Pro/Engineer
Skala: 1:1
Datum: 2004-05-07
Blad:
Ritn. nr: **1011601**
Rev.: -

Drawingfilename: T1_HJALM_ASM
Modelfilename : T1_HJALM_ASM

E.C. Declaration of Conformity

The manufacturer or its legal representative supplier in the European Community:
Honeywell Safety Products Europe

Declares that the Personal Protective Equipment described here after conforms to the provisions of the European Council Directive 89/686/CEE:
Designation: Thunder T1Hs Helmet Earmuff [3711, 3712, 3721 Adapters]
Reference: 1012533
Standard(s): EN-352-3:2002

This PPE is the object of the below EC examination certificate n°:
EC1287, 25305BDS03

Delivered by:
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Drawn up in Sweden, on the 23/04/2015
By:
Division: Hearing Protection

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