



**GENERAL DATA**

**Division :** Head Protection  
**Family :** Hearing Protection  
**Range :** Earplugs  
**Line :** Detectable Earplugs  
**Business Countries**  
 United Kingdom  
 EMEA  
 Middle East  
**Activity Domains :**  
 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 • Administration

**Product Use :**

Multi-Use earplug

Metal detection for the Food Industry

50 pair / box, polybag

**PRODUCT ADVANTAGES**

**Feature :**

**CONFORMING MATERIAL TECHNOLOGY™**

Thermoplastic Elastomer (TPE) adapts plug to the contours of the ear canal for a more personalized fit, feels better the longer you wear it.

**VISUAL AND METAL DETECTION**

Detectable ring on stem and attached metalized cord detectable by automated equipment, while blue color aids in visual detection.

**IDEAL FOR PROCESS INDUSTRIES**

Pulp & paper, food/beverage processing, tobacco.

**Benefit :**

Ears are like people — each one unique and different. That's what makes SmartFit Detectable such a marvel of user-friendly design. The only multiple-use earplug with Conforming Material Technology™ SmartFit Detectable uses body heat to adapt to the shape of the ear canal for a comfortable, personalized fit. Designed for process industries such as food and pulp/paper, SmartFit Detectable's bright blue color and metalized features aid can be detected by visual or automated methods. It's the ultra-smart choice for today's diverse workplace.

## TECHNICAL DESCRIPTION

**SNR (dB) :**  
30

**H (dB) :**  
32

**M (dB) :**  
27

**L (dB) :**  
23

**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)	30.9	31.4	28.8	32.5	33.8	35.6	39.3	41.9
Standard Deviation (dB) Standardabweichung (dB) Déviation standard (dB)	6.2	7.3	8.9	8.1	7.3	4.3	6.0	5.0
Assumed Protection (dB) Angenommener (dB) Protection supposé (dB)	24.7	24.1	19.9	24.4	26.5	31.3	33.3	36.9

**Size :**  
Fits All

**Shape :**  
flange

**Color :**  
Blue

**Corded :** Yes

**Weight (grs) :**  
0.89

**Design Patents :**  
Metal Detectable Earplug

## ADDITIONAL INFORMATION

**Life Cycle :**  
We recommend replacement every 2-4 weeks.

**Storage Information :**  
All earplugs should be stored before and between usages in a way that protects them from dirt, grease, and other contaminants.

**Care Instruction :**  
Our reusable earplugs may be washed in warm water and allowed to air dry. Washing may be repeated several times, but we recommend replacement every 2-4 weeks. Hydrocarbon based solvents, such as alcohol, should not be used to clean reusable ear plugs. The use of such solvent based cleaners may cause reusable plugs to soften, swell, and weaken with time. Additionally, with extended use, reusable plugs must be regularly inspected for serviceability.

**User manual number :**  
PMB02280\_R1.1

**EAN Code :**  
033552014522

## CERTIFICATION AND CONFORMITY

**European Directives :**  
89/686/EEC

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

**Standards :**  
EN 352-2:2002

**Quality Assurance :**  
ISO 9001 / 2000

**EC Certification Number :**  
1134

**EC Attestation Number :**  
03.06.49, 04.08.09, 04.09.50

**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: Smartfit Detectable

Reference: 1012522

Standard(s): EN 352-2:2002

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

03.06.49, 04.08.09, 04.09.50

**Delivered by:**

INSPEC

56 Leslie Hough Way

Salford

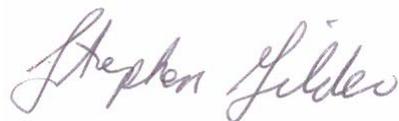
M6 6AJ Greater Manchester

United Kingdom

**Made at France, on the 10/10/2003**

**By:**

**Division:** Head Protection



## EC TYPE-EXAMINATION CERTIFICATE: 1134

**Product description: -** Hearing Protection – Re-usable Ear-plug

**Product identification: -** Howard Leight SMARTFIT

**Manufacturer: -** Sperian Hearing Protection LLC  
7828 Waterville Road  
San Diego  
CA 92154  
USA

When assessed and examined against harmonised standard EN352-2:2002 are found to be in conformity with Council Directive 89/686/EEC and associated amendments, relating to personal protective equipment.

**Authorised EU Representative: -** Sperian Protection Europe  
Immeuble Edison - ZI Paris Nord II  
33 Rue des Vanesses, BP55288  
95958 Roissy CDG Cedex  
France

**Signed** ..... **Date:** 10th October 2003

K J Warren, Manager, Certification Services

**For and on behalf of INSPEC International Ltd.**  
56 Leslie Hough Way, Salford, Gt Manchester M6 6AJ  
England (Notified Body No: 0194)

certificate invalid  
if not embossed

For terms and conditions of issue, see page 2

## Terms and Conditions

### Reference Documents: -

- |      |                          |   |                                     |
|------|--------------------------|---|-------------------------------------|
| i)   | Test Reports             | - | INSPEC 03.06.49, 04.08.09, 04.09.50 |
| ii)  | Technical File           | - | TF/1134                             |
| iii) | Test and Inspection Plan | - | SMF EARPLUG-SMARTFIT, RAW 8/1/03    |

### 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 INDEX

Item	Status	Issued	Amendment
Page 1 of 2	Withdrawn		
Page 2 of 2	Withdrawn		
Page 1 of 2(Amendment ONE)	Withdrawn		
Page 2 of 2(Amendment ONE)	Withdrawn		
Page 1 of 2(Amendment TWO)	Withdrawn	5/10/04	To add Model Smartfit blue detectable with PVC cord
Page 2 of 2(Amendment TWO)	Withdrawn	5/10/04	Add test report 04.09.50
Page 1 to 4	Valid	24/11/08	Name change to SPERIAN



# CERTIFICATION SCHEDULE

Model: SMARTFIT  
 SMARTFIT Orange / Cotton Cord  
 SMARTFIT Blue / Nylon Cord  
 SMARTFIT Blue, Detectable plus PVC cord

Description: Re-usable earplug

Size Range: 6 – 12mm

Attenuation Data - corded

Freq. (Hz)	125	250	500	1000	2000	4000	8000
Mean att. (dB)	19.5	21.1	22.0	21.4	27.4	31.2	35.7
Std. Dev. (dB)	12.2	10.8	9.9	9.6	8.4	8.5	11.3
APV (dB)	7.6	10.8	12.1	11.8	19.0	22.7	25.4
H = 32dB		M = 27dB		L = 23dB		SNR = 30dB	

Attenuation Data - uncorded

Freq. (Hz)	125	250	500	1000	2000	4000	8000
Mean att. (dB)	20.4	20.8	22.4	25.2	30.4	33.4	37.8
Std. Dev. (dB)	8.0	9.3	9.0	8.6	5.9	7.5	8.0
APV (dB)	12.4	11.5	13.4	16.6	24.5	25.8	29.8
H = 32dB		M = 27dB		L = 23dB		SNR = 30dB	

