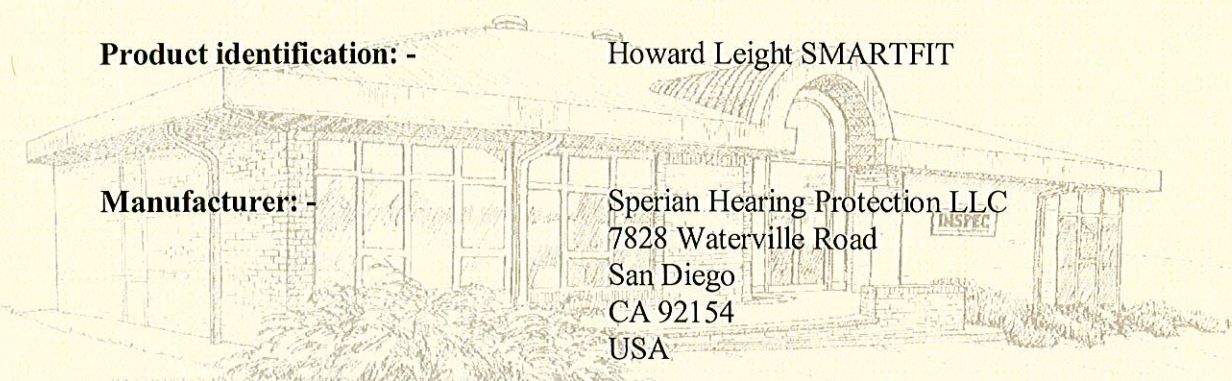


EC TYPE-EXAMINATION CERTIFICATE: 1134

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)



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- iv) This Certificate remains the property of INSPEC and may be withdrawn if any of the conditions attached to its issue are not complied with.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Page 1 of 2	Withdrawn		
Page 2 of 2	Withdrawn		
Page 1 of 2(Amendment ONE)	Withdrawn		
Page 2 of 2(Amendment ONE)	Withdrawn		
Page 1 of 2(Amendment TWO)	Withdrawn	5/10/04	To add Model Smartfit blue detectable with PVC cord
Page 2 of 2(Amendment TWO)	Withdrawn	5/10/04	Add test report 04.09.50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

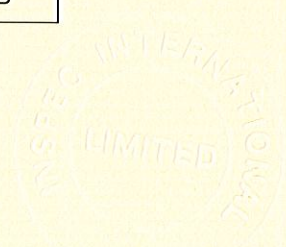
Size Range: 6 – 12mm

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	





Product Family
SmartFit Multiple-Use Earplug


Delivers superior comfort and a truly personalized fit

[Learn more about our products at howardleight.com](http://howardleight.com)

>



Product Numbers & Ordering Information

	Product Numbers	Details
	SMF-30	SmartFit NRR 25 Canada Class A(L)

Overview

Key Features

- Patented Conforming Material Technology uses body heat to adapt to the individual shape of each wearer’s ear canal
- Delivers superior comfort and a truly individual fit
- Simplifies inventory control – a single product fits almost every wearer
- Detachable cord system and HearPack storage case

Recommended Industries/Use

- Agriculture
- Chemical
- Construction
- Fire Protection
- Forestry
- Government
- Law Enforcement

Hazards

- Noise

Regulations

- 29 CFR 1910.95 - OSHA Occupational Noise Exposure (US)
- ANSI S3.19-1974 - Attenuation Test Protocol (US)
- Part II, (R.S.C. 1985, c. L-2) - Canada Labour Code
- Z94.2-1994 - Attenuation Test Protocol (CAN)
- 2003/10/EC - EU Hearing Directive
- 89/686/EEC - EU Directive/PPE
- Category II - EC Category/PPE
- EN 352-2:2002 - EU Standards
- NOHSC: 1007 (2000) - National Standard for Occupational Noise (AUS/NZ)

SmartFit Multiple-Use Earplug

- NR 15 - Security and Health of Work, Annexes 1 and 2, n°3.214/1978 - Occupational Noise Regulations (BR)
- ANSI S12.6/1997 - Method B - Attenuation Test Protocol (BR)

Historical Brand

Howard Leight

Specifications

Color

- Orange

Shape

- 3 Flange

Material

- TPE

Packaging Options

- HearPack

Cord Options

- Detachable Nylon Cord

NRR

- 25

Canada Class

- A(L)

SNR

- 30

SLC80

- 20 dB / Class 3

EU Certifications

- European Directives – 89/686/EEC
- EC Category PPE – Category II
- Standards – EN 352-2:2002
- EC Certification Number – 1134
- EC Attestation Number – 030649; 040809 & 040950
- Laboratory – INSPEC

AUS Certifications

- Standardsmark License #1133/1

Literature & Documents

EU Certification Report - SmartFit

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/Secured/Hearing_Protection/Earplugs/20056/1033.aspx

EC Attestation Report - SmartFit

Earplug Fitting Poste AU

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/4294996741/1033.aspx

Earplug Fitting Instructions Keys to Successful Hearing Protection with Earplugs Wear Read and follow all earplug fitting instructions. Selection Avoid overprotection in minimal noise environments – in selecting the best earplug for your situation, consider noise levels and your need to communicate with co-workers or h

DOC2653 HEAR AFF Earplug Fit 508x800 SPa

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/4294996680/1033.aspx

SmartFit Multiple-Use Earplug

Claves Para una Proteccin Auditiva Correcta con Tapones Uso • Lea y siga todas las instrucciones de colocacin de los tapones para los odos. Seleccin • Evite la sobreproteccin en ambientes donde el ruido sea mnimo: al seleccionar los mejores tapones en su situacin, considere los niveles de ruido y su necesidad de comun

DOC2654 HEAR AFF Earplug Fit 508x800 FRa

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/4294996681/1033.aspx

Conseils pour insrer efficacement vos bouchons d'oreille Utilisation • Lire et suivre attentivement le mode d'emploi Slection • Eviter la sur-protection dans un environnement faible niveau sonore • Slectionner la protection auditive la plus adquate en fonction du niveau sonore, des besoins de communication avec les co

Hearing Thermometer POST AU

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/4294996746/1033.aspx

M1 Rifle 161 dB Fireworks 162 dB Handgun 166 dB Apollo Lift-Off 188 dB Shotgun 170 dB Artillery Fire 162 dB Firecracker 150 dB Balloon Pop 157 dB Jet Engine Take-Off 150 dB Engine Backfire 140 dB Bicycle Horn 143 dB Dynamite Blast 140 dB Pig Squeal 130 dB Jackhammer 130 dB Auto Racing 130 dB Oxygen Torch 121 dB Hammer o

Earplug Fitting Poste AU

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/4294996741/1033.aspx

Earplug Fitting Instructions Keys to Successful Hearing Protection with Earplugs Wear Read and follow all earplug fitting instructions. Selection Avoid overprotection in minimal noise environments – in selecting the best earplug for your situation, consider noise levels and your need to communicate with co-workers or h

POST14 Care and Maintenance

http://www.honeywellsafety.com/Supplementary/Documents_and_Downloads/4294997025/1033.aspx

CARE AND MAINTENANCE Single-Use Earplugs Inspect Inspect prior to fitting, examine your earplugs for dirt, damage or extreme hardness —discard immediately if compromised. Discard For proper hygiene, discard Single-Use earplugs after use. Hygiene To maintain hygiene standards, Single-Use earplugs should be discarded at

Training & Proper Use

1. While holding the stem, reach a hand over your head and gently pull top of your ear up and back.
2. Insert the earplug so all flanges are well inside your ear canal.
3. If properly fitted, the tip of the earplug stem may be visible to someone looking at you from the front.
4. Proper Fit – If either or both earplugs do not seem to be fitted properly, remove the earplug and reinsert.
5. Removal – Gently twist earplug while slowly pulling in an outward motion for removal.
6. Acoustical Check – In a noisy environment, with earplugs inserted, cup your hands over your ears and release. Earplugs should block enough noise so that covering your ears with your hands should not result in a significant noise difference.

Additional Information

CARE + MAINTENANCE

- INSPECT – Prior to fitting, examine your earplugs for dirt, damage, deformation or extreme hardness—discard immediately if compromised.
- CLEAN – Wash Multiple-Use earplugs with mild soap and warm water only. Pat dry with a towel and store in a case when not in use. Do not treat with any other substances, as the earplugs may degrade and compromise use.
- HYGIENE – With proper maintenance, Multiple-Use earplugs can last for 2-4 weeks.

RELATED PRODUCTS

▶ ▶ ▶ SMARTFIT™ MULTIPLE USE EARPLUG

PRODUCT INFORMATION

Ears are like people, each one is unique and different. That is what makes SmartFit such a marvel of user-friendly design. SmartFit is the only multiple-use earplug with Conforming Material Technology™ providing the ultimate custom fit. As SmartFit warms up, it takes on the shape of the surrounding ear canal. Unlike traditional earplugs, which at first feel fine, but can irritate over time, SmartFit actually feels better the longer that you wear it. When removed, the SmartFit returns to its original shape, ready to be used again and again. There's no easier way to offer greater comfort, protection and convenience for everyone.

The triple fin design maximises user comfort by delivering more contact inside the ear canal and creates a better seal. A comfortable earplug is more likely to be worn consistently, minimising over-exposure to noise. With a detachable cord system (SMF-30A only), HearPack carry case, it's the ultra-smart choice for today's diverse workplace.

PRODUCT FEATURES

- ⇒ Material adapts to the ear canal for comfort and longer use.
- ⇒ Easy insertion and removal
- ⇒ High visibility for compliance checks.
- ⇒ One size will fit most users.
- ⇒ Protective case for long term use.
- ⇒ Easy to clean using soap and water.
- ⇒ Special application cotton cord version available for use in the paper/pulp industries.

APPLICATIONS

- ⇒ Any noise environment 95dB to less than 100dB (when used uncorded) or 90dB to less than 95dB (when used corded)



SMF-30A



SMF-30W-PA

TECHNICAL INFORMATION

Material:	Thermoplastic Elastomer
Diameter:	12.95mm
Length:	31.75mm
Cord Length:	923.9mm vinyl (blue), cotton (white)
Weight:	0.89g
Colour:	Orange
Storage Case:	HearPack - polypropylene
Temperature:	-26°C to +60°C

STANDARDS

- ⇒ Approved to AS/NZS 1270:2002 License number 1579
- ⇒ SLC₈₀ 20dB Class 3 (uncorded)

Frequency	125	250	500	1000	2000	4000	8000
Mean Value dB	20.4	20.8	22.4	25.2	30.4	33.4	37.8
Std Deviation dB	8.0	9.3	9.0	8.6	5.9	7.6	8.0
Mean-Std Dev dB	12.4	11.5	13.4	16.6	24.5	25.8	29.8

- ⇒ SLC₈₀ 16dB Class 2 (corded)

Frequency	125	250	500	1000	2000	4000	8000
Mean Value dB	19.8	21.1	22.0	21.4	27.4	31.2	36.7
Std Deviation dB	12.2	10.3	9.9	9.6	8.4	8.5	11.3
Mean-Std Dev dB	7.6	10.8	12.1	11.8	19.0	22.7	25.4

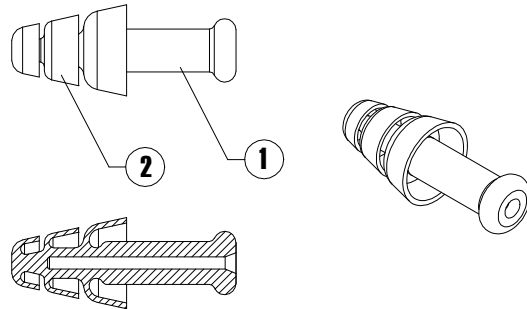
ORDERING INFORMATION

Part Number	Description	Pairs Per Box	Min order (box)	Box dimensions L x H x D (mm)	Box Weight	Case Dimensions L x H x D (mm)	Case Weight	Bar code
SMF-30A	Detachable Cord, HearPack	50	1	171 x 117 x 117	620g	635 x 127 x 368	6.7kg	033552011729
SMF-30W-PA	Process Ind, Attached Cotton Cord, Paper Bag	50	1	203 x 197 x 129	530g	650 x 205 x 426	3.28kg	033552014300

WARNING! THIS DOCUMENT PROVIDES AN OVERVIEW OF PERSONAL PROTECTIVE PRODUCTS AVAILABLE FROM SPERIAN PROTECTION AND CARE HAS BEEN TAKEN TO ASSURE THE ACCURACY OF THE DATA. IT DOES NOT PROVIDE IMPORTANT PRODUCT WARNINGS AND INSTRUCTIONS. SPERIAN PROTECTION RECOMMENDS ALL USERS OF ANY PERSONAL PROTECTIVE EQUIPMENT UNDERGO THOROUGH TRAINING, AND THAT ALL WARNINGS AND INSTRUCTIONS PROVIDED WITH THE PRODUCTS BE THOROUGHLY READ AND UNDERSTOOD PRIOR TO EACH USE. FAILURE TO READ AND FOLLOW ALL PRODUCT WARNINGS AND INSTRUCTIONS COULD RESULT IN SERIOUS INJURY.

Howard Leight® SmartFit®

Product Information



Product Range

Article	Packaging Type	Part No.	Size
Howard Leight SmartFit	1 – Pair Pack	SMF-30	N/A

SAP Description

1011239 (SMF-30)	Howard Leight SmartFit (reusable earplug)
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Product Description

Part Listing	Material	Color
1 Stem	TPE (Thermoplastic Elastomer)	Orange
2 Flange	TPE (Thermoplastic Elastomer)	Orange
3 Cord	Nylon	Blue

Nominal Dimensions

Diameter	Length	Weight
.510"/12.954mm	1.22"/30.99mm	0.0315 oz./0.89g

Storage Case/Material

HearPack/Polypropylene

Cord Length/Material

28"/ 711.2mm/Nylon

EAN-UPC

	UPC	EAN (BX)	EAN (CS)
SMF-30	033552011026	N/A	N/A
1011239	N/A	0335520112392	10335520112399

Howard Leight® SmartFit®

Product Information

Product Range

Sales units	Box	SMF-30 (100 Pairs) 1011239 (50 Pairs)
	Case	SMF-30 10 Boxes (1000pr) 1011239 10 Boxes (500pr)
	Pallet	45 CS

Dimensions	Box	SMF-30: L-8"/H-7.75"/D-5.1" 1012139: L-6.75"/H-4.625"/D-4.625"
	Case	SMF-30: L-25.6"/H-8.1"/D-16.8" 1011239: L-25"/H-5"/D-14.5"
	Pallet	SMF-30:L-50"/H-82"/D-44" 1012139:L-50"/H-56"/D-40"

Weight	Box	SMF-30: 1.14lb/ 2.505kg 1011239: 1.35LB/0.62kg
	Case	SMF-30: 26lb/ 11.82kg 1011239: 14.75lb/670kg
	Pallet	SMF-30: 1182lb/ 537.27kg 1011239: 717lb/325.23kg

Material	Box	Cardboard
	Case	Corrugated Cardboard

Customs Tariffs	Country of Origin
3926 90	Mexico

Temperature Operations Range
-26.1°C to +60°C/-15°F to + 140°F

National Stocking Number (NSN)
N/A

Regulatory Requirements

Howard Leight® SmartFit® is tested according to EN 352-2:2002 at INSPEC.										
Region - Europe					Certificate #152					
Frequency Hz	63	125	250	500	1000	2000	4000	8000	SNR Value	
Mean Value, dB	30.9	31.4	28.8	32.5	33.8	35.6	39.3	41.9	30 dB	
Standard Deviation, dB	6.2	7.3	8.9	8.1	7.3	4.3	6.0	5.0		
Assumed Protection, dB	24.7	24.1	19.9	24.4	26.5	31.3	33.3	36.9		
H = 32 dB M = 27 dB L = 23 dB										

Howard Leight® SmartFit® is tested according to ANSI S3.19-1974 at Howard Leight Industries.										
Region - USA										
Frequency Hz	125	250	500	1000	2000	3150	4000	6300	8000	NRR Value
Mean Value, dB	29.5	28.0	30.5	31.6	33.5	40.5	40.0	41.8	42.1	25 dB
Standard Deviation, dB	3.5	4.1	3.6	3.2	3.5	3.3	4.2	5.3	4.7	
Canada Class* A (L) *CSA Z94.2-1994										

Howard Leight® SmartFit® (uncorded) is tested according to AS/NZS 1270:2002 at Challis Consulting Pty. Ltd.										
Region - Australia Standardsmark License SMK1579										
Frequency Hz	125	250	500	1000	2000	4000	8000	SLC₉₀ Value		
Mean Value, dB	20.4	20.8	22.4	25.2	30.4	33.4	37.8	20 dB		
Standard Deviation, dB	8.0	9.3	9.0	8.6	5.9	7.6	8.0			
Mean-Minus-Std. Dev., dB	12.4	11.5	13.4	16.6	24.5	25.8	29.8			
Class 3 Rating										

Howard Leight® SmartFit® (corded) is tested according to AS/NZS 1270:2002 at Challis Consulting Pty. Ltd.										
Region - Australia Standardsmark License SMK1579										
Frequency Hz	125	250	500	1000	2000	4000	8000	SLC₉₀ Value		
Mean Value, dB	19.8	21.1	22.0	21.4	27.4	31.2	36.7	16 dB		
Standard Deviation, dB	12.2	10.3	9.9	9.6	8.4	8.5	11.3			
Mean-Minus-Std. Dev., dB	7.6	10.8	12.1	11.8	19.0	22.7	25.4			
Class 2 Rating										

