

THE REVOLUTIONARY SOLUTION TO NOISE PROTECTION

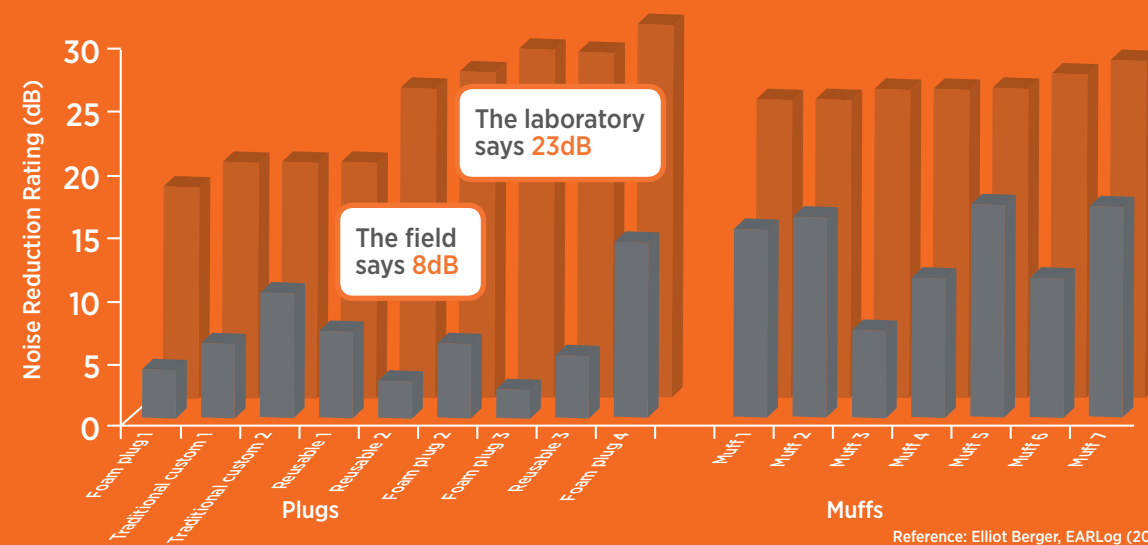


SonoLab
SOUND SOLUTIONS

WELL-KNOWN FACTS

How much protection are you really getting?

Sound energy doubles every 3dB (e.g. 88dB is twice as loud as 85dB) and permissible exposure time is cut in half for every 3 dBAs over 85dBA (NIOSH standard).



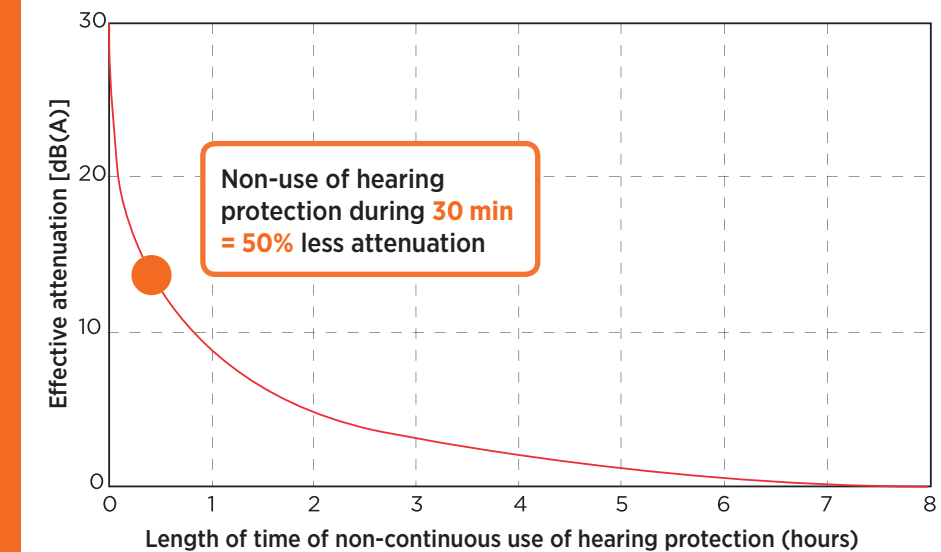
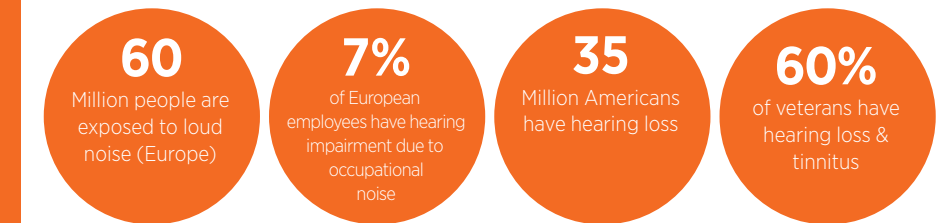
	CONTINUOUS SOUND LEVEL	PERMISSIBLE EXPOSURE TIME
Factory noise	85dB	8 hours
Boiler room	88dB	4 hours
Power tools	91dB	2 hours
Tractor	94dB	1 hour
Newspaper press	97dB	30 minutes
Textile loom/Aerobic gym	100dB	15 minutes
Bulldozer	103dB	7.5 min
Personal music player	106dB	3.75 min (< 4 min)
Construction site	109dB	1.88 min (< 2 min)
Nail gun/Punch press	112dB	0.94 min (~ 1 min)
Rock concert/Night club	115dB	28.12 sec (~ 30 sec)
Chainsaw/Circular saw	118dB	14.06 sec (~ 15 sec)
Jackhammer	130dB	< 1 second
Fireworks/Gun shot	140dB+	0

DID YOU KNOW?

Efficacy is related to the amount of time your hearing protection is used

An uncomfortable or cumbersome hearing protection device with lack of communication capabilities is useless.

Indeed, each removal of a hearing protector decreases its efficacy. A product offering 30dB of noise reduction when worn 100% of exposure time (8h), will lose the equivalent of 7dB if removed for 1 minute only. The same earplug, if worn half of the time, will offer only 3dB of noise reduction: In other words – Nothing!



THE LAW

Much more **MUST** be done to reduce the risk of hearing loss and increase workplace safety and compliance among workers.

As an example, Directive 2003/10/EC* was established and adopted by the European parliament and the Council of the European Union. It outlines the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise).

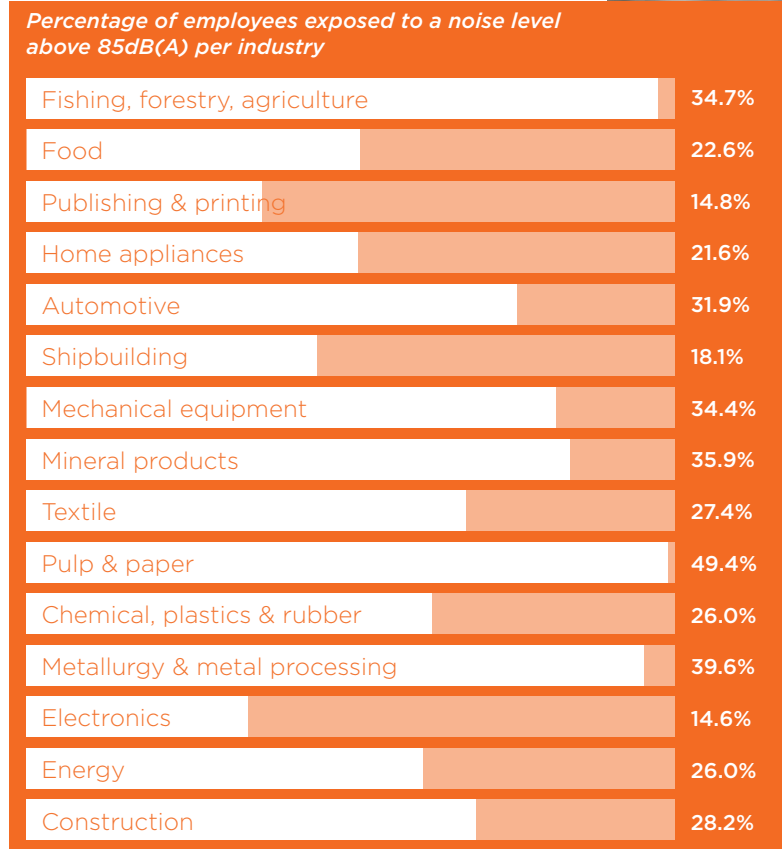
The objective of this Directive is to lay down minimum requirements for the protection of workers from risks to their health and safety arising or likely to arise from exposure to noise and in particular the risk to hearing.

Noise can result in occupational accidents

- Noise masks warning signals
- Noise hinders communication
- Noise diverts attention

The Directive defines the physical parameters that serve as risk predictors, namely, peak sound pressure, daily noise exposure level and weekly noise exposure level. It sets exposure limit values and defines an employer's call to action with respect to these predictors and their noise-exposed workers at risk. Exposure limits take into account the attenuation provided by hearing protection and are set over 85dB(A).

Note: * Occupational noise legislation has been adopted in many countries with varying requirements. To find out more about regulations in your area, please contact one of our representatives.



SONOMAX™

A custom-fitted earplug ready to use in less than 10 minutes

Sonomax™ hearing protection is truly a unique product combining the proven superior performance of custom hearing protection with the convenience of a Do-It-Yourself fitting system.

Our F-MIRE SonoPass™ Software gives employers the unprecedented ability to quantify and track hearing protection performance by conducting a function test that generates a corresponding PAR (Personal Attenuation Rating). Different levels of attenuation for noisy environments where communication is required are available.

Sonomax™ – a complete hearing protection solution!

More than 12 patented technologies are bundled into this innovative fitting system

Number 2: Expandable in-ear device (Key Patent)

Country of original registration: USA

Patent number: 6,754,357

Date of award: 22 June 2004

Valid through: March 2020

Description: This is the core of the expansion technology. It covers the creation of the expansion balloon, the injection of the settable compound and the in situ curing of the formed earpiece.

Number 4: Sheath for in-ear device (Key Patent)

Country of original registration: USA

Patent number: 7,418,105

Date of award: 26 August 2008

Valid through: March 2026

Description: This is the patent that covers using the varying thickness of the sheath to control the distribution of the injection compound within the ear piece. This control is required in order to obtain an optimal distribution within the earpiece for comfort and performance.



Discover how we protect and enhance hearing globally with our revolutionary earpieces.

Everyone agrees that noise-induced hearing loss is a serious occupational hazard for all workers and professionals exposed to high level sounds. With ears being as distinctive as fingerprints, SonoLab proves that only earpieces, custom-fitted to the exact shape of your ears, can give you the full or attenuated protection you require – comfortably, effectively and with ease of insertion.

FITTING SYSTEM

This proprietary system consists of a single-use headband with integrated inflation pumps that are filled with a medical grade silicon compound. Inflatable earpieces are docked and ready for expansion.



SIMPLE



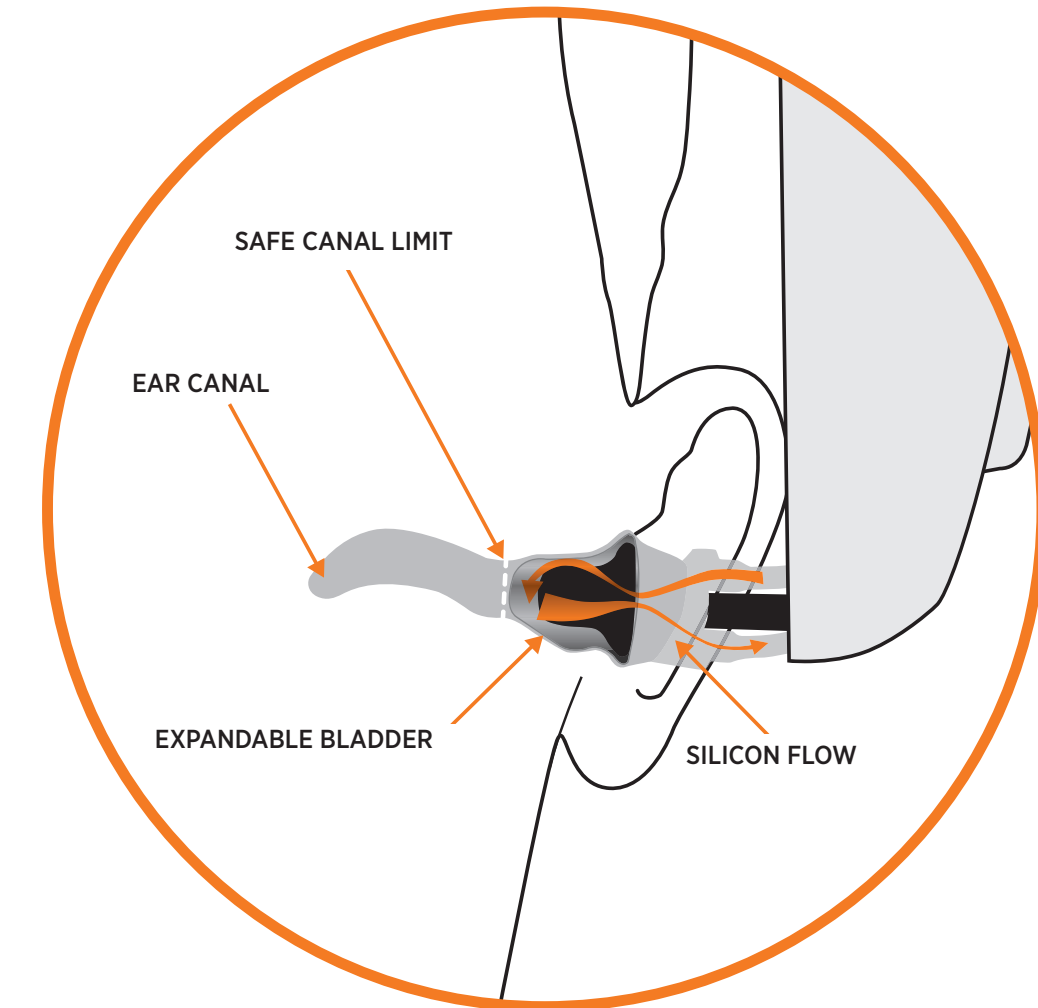
QUICK



COMFORTABLE



EFFECTIVE



EXPANSION EARPIECES

The safety of the product is thoroughly tested including the strength of the bladder which can be expanded to over 13 times the volume.

Over the last 15 years we have continuously improved our expansion technology. More than 12 patented technologies are bundled into this innovative fitting system that delivers a customized earpiece designed to seamlessly interface with any in-ear application such as hearing protection, earphones, Bluetooth™ headsets and hearing aids.

WHY ADOPT SONOMAX™?

To stop the insidious affliction of noise-induced hearing loss; to guarantee an adequate protection today and preserve quality of hearing tomorrow.

SONOMAX™: A PROVEN SOLUTION

- Custom-fit means comfort
- Superior acoustic seal means adequate protection
- Easy means fast to implement
- Ergonomic handle means easy to insert
- Adjustable attenuation for different noise environments means ability to hear in noise
- Measurable performance with SonoPass™ means reduced hearing loss claims
- Reasonable cost and 2 year warranty means affordable
- Eco-friendly and reusable means less environmental impact on the world





HEARING

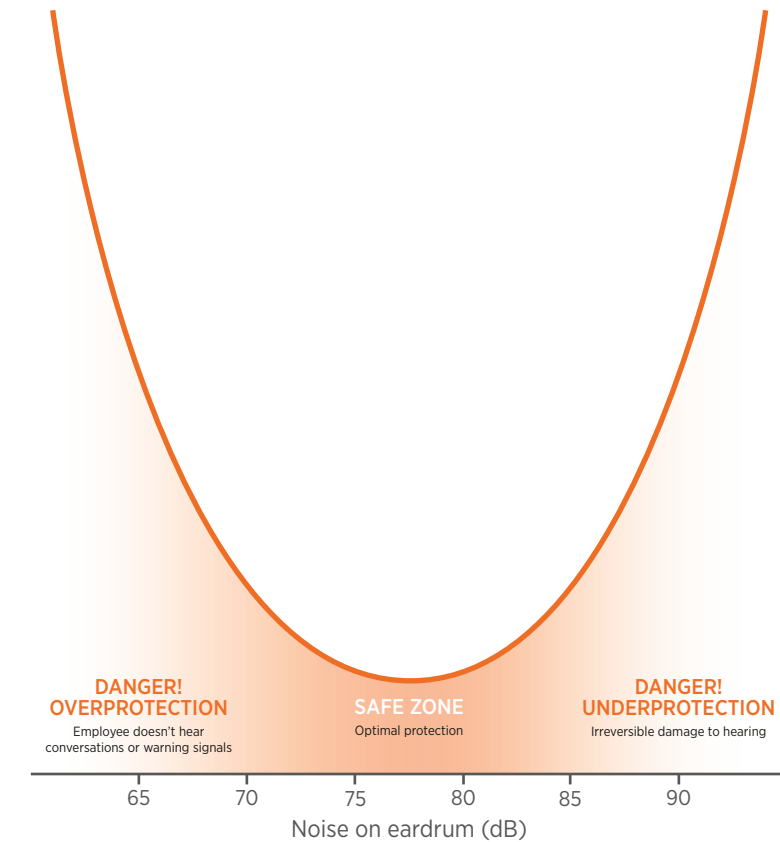
IS A MUST TO ENSURE SAFETY

Overprotection is as harmful as underprotection. A worker that can not hear warning signals or recognize speech will remove their protection thus increasing risk of hearing loss. Also, a worker who can not hear is 55% more at risk for a workplace accident.

SonoLab pioneered in the development of a technology which would later help to solve these issues. Thanks to the insertion of a bidirectional microphone positioned inside the **Sonomax™** custom-fitted earpiece, it is possible to perform a series of tests to measure noise reduction and predict protection outcome using the SonoPass™ software system. The optimal protection outcome targeted when using SonoPass™ is between 75-80dB (noise reaching eardrum). The level of noise reduction is adjusted by inserting an acoustic damper into the **Sonomax™** earplug.

Standard: CSA Z 94.2-2002 Sound level resulting from use of a protector (dBA)	Protection Outcome
More than 85	Insufficient
80-85	Acceptable
75-80	Optimal
70-75	Acceptable
Less then 70	Overprotection

Reference: William Clark, PH.d, Washington University, St. Louis, Missouri





AUTONOMY

Predocked onto a single-use headband system, our earplugs allow for a Do-It-Yourself custom fitting in under 10 minutes.

The ultimate in comfort and fit, **Sonomax™** hearing protectors are customized to your unique earprint creating a perfect noise-blocking seal that keeps out hazardous noise. Unlike all other custom-fitted technologies, **Sonomax™** is delivered on-the-spot and can be tested and calibrated for optimal performance.

BENEFITS OF AN INSTANT CUSTOM-FITTED EARPLUG:

The choice is yours.

We can send one of our representatives to assist with the fittings or you can control the process in-house after a quick and simple training.

- No minimum order required
- No issue with remote sites, night shifts and rotational shift work schedules



COST EFFECTIVE & SAVES TIME

Sonomax™ custom-fit hearing protection is ready in 10 minutes!

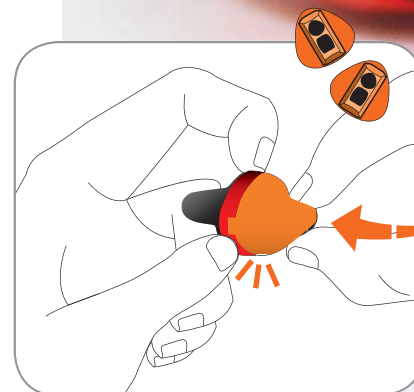
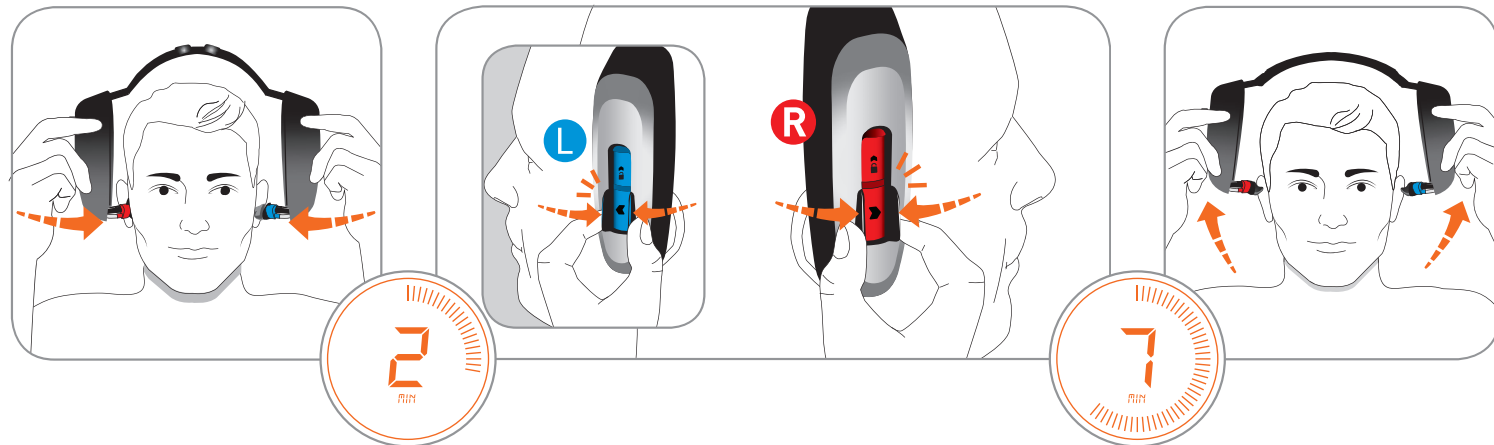
Thanks to SonoFit™, our system which bundles no less than 12 patented technologies, it is now possible to customize earpieces on your very own. Whether you are fitting yourself or fitting someone else, customizing hearing protectors, communication earpieces or high performance earphones has never been easier.

Resulting from over 15 years of research, **Sonomax™** custom-fit hearing protection meets the expectations of increasingly demanding

users who want a product to combine performance, comfort and safety.

Today, very few manufacturers have the ability to deliver a molded earplug instantaneously. Traditionally, an impression of your ear must be made before being sent to a laboratory for manufacturing and it takes days, sometimes weeks before the product is sent back to you.

Sonomax™ earplugs are fitted, tested when requested, adjusted and delivered IMMEDIATELY.



QUANTIFIABLE NOISE REDUCTION

SonoPass™ Proof of Performance Software

SonoLab pioneered in the development of SonoPass™ Proof of Performance Software. It is comprised of our uniquely designed dual microphone insert and our Windows-based F-MIRE SonoPass™ software.

- Fully objective test
- Dual element microphone measures sound inside and outside the ear
- Certified individual (F-MIRE) field attenuation measurement in minutes
- Reliable PAR (Personal Attenuation Rating) for each individuals' hearing protector
- Direct comparability with REAT "the gold standard"
- Customized protection to optimized noise levels
- International standards with multi-lingual compatibility



sonopass

Right Ear

Summary: 1541 available tokens

Hardware Set-Up: Calibration

Visit Creation: Select Company and Employee

Product Selection: Select Product and Test Eligibility, Choose Product Size

Testing: Attenuation Measurement on the Right Ear, Attenuation Measurement on the Left Ear

Visit Result: Results, Reports

Test Functions: Start Test, Fitting Noise, 1 Test(s) Done

Measured Levels (Fitting Profile):

Frequency (Hz)	Reference (dB)	Measurement (dB)
125	73	54
250	76	57
500	73	53
1000	74	54
2000	79	62
4000	78	71
8000	69	67

Sound Pressure Level
Reference (external): 84 dBA
Measurement (protected): 74 dBA

Personal Attenuation Rating (PAR)
31 dB

EXTENDED REPORT

Name: DAN II FENTIMAN
Date: 7/10/2014 10:13:09
Company: SONOLAB
Address: HOUSE HAMLIN WAY, KINGS LYNN, NORFOLK, UNITED KINGDOM,

PERSONNEL INFORMATION

Test Name	First Name	Code
Jerome	Jerome	BART0389
Serial number :	5016	Last Calibration :

EXPOSURE LEVEL

Weighted Exposure Level (dB)	C-Weighted Exposure L
	Not Available

report documents a Follow Up that was Successful.

PERSONNEL INFORMATION

	Left Ear	Right Ear
Self-Fit™ HPD-V5		Self-Fit™ HPD-V5
Regular	Regular	Regular
31	31	31
Regular	Regular	Regular

A COMPLETE KIT



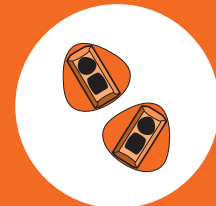
Each Sonomax™ product is sold as a complete kit composed of a single use headband, a lubricant bottle, faceplates, a detachable cord and name tag, a carrying pouch, and a cleaning wipe. A manual guide and a fast user guide is also included.



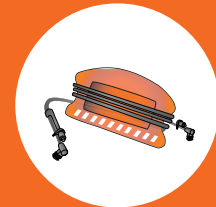
SINGLE USE HEADBAND



LUBRICANT BOTTLE



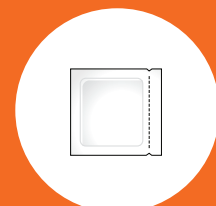
FACEPLATES



DETACHABLE CORD AND NAME TAG



CARRYING POUCH



CLEANING WIPE

STANDARD EN 352-2

Sonomax™ earplugs provide a perfect acoustic seal. Multiple attenuation levels allow optimal sound reduction thus enabling easy communication without the need of removing an earplug.

ATTENUATION DATA: EN 352-2: 2002*													
Test frequencies (Hz)		63	125	250	500	1000	2000	4000	8000	SNR	H	M	L
FULL BLOCK	Mf (dB)	29.5	30.5	27.1	26.1	25.7	36.3	34.8	43.1	27	29	23	23
	sf (dB)	5.1	6.3	4.4	5.2	3.5	5.0	3.2	4.4				
	APVf (dB)	24.3	23.9	22.6	20.9	22.2	31.3	31.5	38.7				
YELLOW	Mf (dB)	15.4	18.0	19.5	19.6	21.7	29.0	30.7	34.8	24	25	20	17
	sf (dB)	5.0	4.1	3.2	2.6	1.6	4.0	3.5	6.3				
	APVf (dB)	10.4	13.9	16.3	17.0	20.1	25.0	27.2	28.5				
RED	Mf (dB)	10.7	12.8	15.5	15.7	19.3	27.5	29.6	34.2	21	23	17	14
	sf (dB)	3.7	2.3	1.8	2.3	2.2	5.1	4.4	5.5				
	APVf (dB)	7.0	10.5	13.8	13.4	17.1	22.4	25.2	28.7				

Delivered by:



Note:

* North American (ANSI S12.6 - 1997(B), ANSI S3.19-1974) and Australia (AS/NZ S1270:2002) use different calculation methods. To find out more regarding technical specifications, certifications and attenuation data corresponding to these and/or any other standard, please contact one of our representatives.

The filters used to obtain optimal attenuation levels are made of mesh fabric contained inside a metallic stainless steel cylinder. These various acoustic dampers allow you to reach the optimal protection outcome which is between 75-80dB (noise reaching eardrum). Three models of filters are available; black "Full Block" SNR 27, yellow SNR 24, and red SNR 21.

Sonomax™ are also designed in blue for safety and detection ability in the food industry.



WHO IS SONOLAB?

The team at SonoLab is determined to bring effective, efficient and simple solutions for sound in workplace environments. Backed by years of industry knowledge and global experience, SonoLab is leading the world into the next generation of hearing protection.

OUR VISION:

We will eradicate noise-induced hearing loss

OUR MISSION:

To protect lives from the pain of hearing loss

OUR VALUES:

Caring – for well-being

Innovating – for solutions

Striving – for excellence and success



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FOR YOUR LOCAL
SONOLAB SPECIALIST**





enquiries@sonolab.com

www.sonolab.com



Maple House | Hamlin Way | Kings Lynn | Norfolk | PE30 4NG | United Kingdom

UK: 01553 819599

International: 0044 1553 819599