

**3M** Science.  
Applied to Life.™

3M Personal Safety Division

# European Product Catalogue 2019/2020.





3M is an innovative, global science-based company that is focused on developing products that improve people's lives in a multitude of ways. 3M technologies developed can be found all around you. From in your home and office to in hospitals, doctor and dentist offices, your computer, your car and even in your phone, 3M helps people and business in hundreds of ways every day. Our inventions can be found in the roads, trains, and airplanes.

Our company is centered around a culture of innovation. We foster an atmosphere that provides our employees the freedom to create, the responsibility to deliver and the opportunity to connect ideas and technologies in unexpected ways. From concept to creation, we manufacture our products to exacting quality standards, while looking after our people, our communities and our planet.

Founded in 1902, we have a proud history as a company that strives to be ethical and innovative. From science that works behind the scenes in products you use every day and technology embedded in processes that help industries thrive to tangible products we use every day, the science provided by 3M can be found in many aspects of our lives.

We live our motto every day.  
**3M. Science. Applied to life.**

# 3M Personal Safety Division

## Services

We believe that with a quality product, it is important that the customer also receives quality services. Not only do we provide different varieties of training and education, but we also have many other tools available to our customers.

### Fit testing is key

In order to be fully protected, it is essential that PPE fits correctly. We provide fit testing for respirators (and fit testing guidelines online) as well as E-A-Rfit Validation testing for earplugs and earmuffs. We know that everyone is different and in order to get the best protection it is crucial that they know how to correctly fit and wear their personal protective equipment.

### 3M™ Respiratory Fit Testing System

3M Respiratory Protection offers a wide range of disposable and reusable respirators, as well as Powered and Supplied Air Respiratory Systems. However, even high quality products need a secure fit in order to protect the wearer. One model of respirator may not fit everyone. When choosing a respirator users should be fit tested in accordance with national requirements. For information on fit testing procedures, contact your safety officer or 3M. Even after a user has had a fit test, a fit check should be carried out before each use. A Respiratory Fit Check guide is available on **page 23** of this catalogue.



### 3M™ E-A-Rfit Dual-Ear Validation System

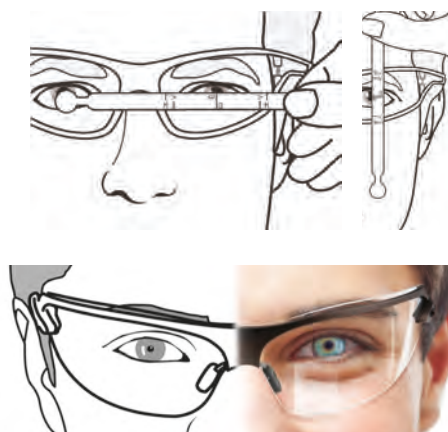
As the leader in hearing protection, 3M offers a complete solution, with dual-ear and earmuff testing capabilities plus a user-friendly interface. The 3M™ E-A-Rfit Dual-Ear Validation System is the fast and easy way to find your employees' PAR, because we know how important it is to make your hearing conservation program fit seamlessly into your operation.

Get results you can trust. The 3M™ E-A-Rfit Dual-Ear Validation System measure the effectiveness of the earplug or earmuff inside the employee's ear providing accurate, quantitative results. Because you can simultaneously test both ears, you have more to focus on education including the importance of fit and protection.



### 3M™ Eyewear Fit System

When it comes to eyewear, a comfortable, well-fitted workforce is likely to be more effective. Current standards suggest careful consideration should be given to eyewear fit, however there is no specific guidance on how to evaluate eyewear fit on an individual. In view of this, 3M have developed the Eyewear Fit System, a simple 6 step method, designed to help select the best fitting eyewear for an individual.



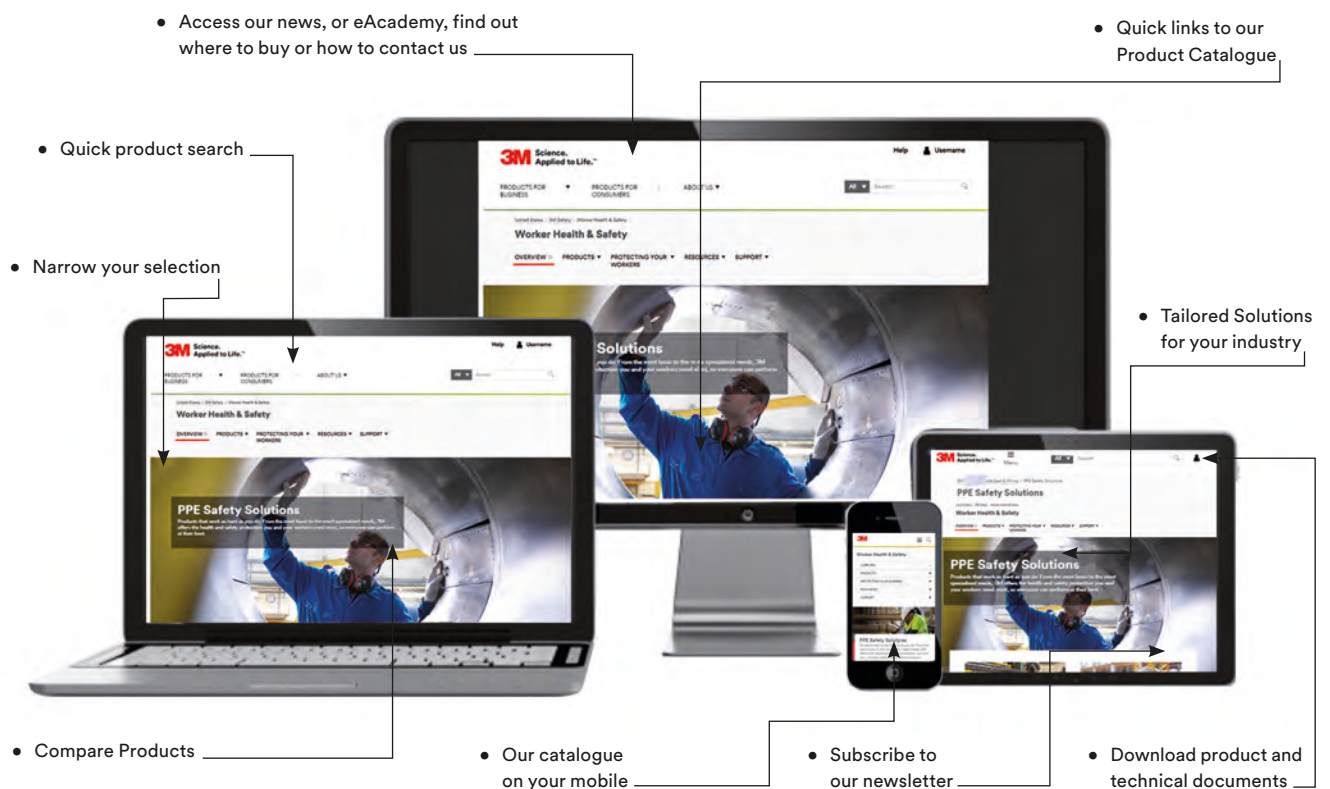
**Find out more by contacting your 3M Personal Safety Sales Representative.**

# 3M Personal Safety Division

## 3M Online

A selection of downloadable and printable documents are available online, such as selection tools, fit test guides, and guidance on the importance of protection. From our website you will be able to access product information, with market area specifications, to help select the right personal protective equipment for the right environment. You will also be able to discover webinars by experts concerning health and safety in the workplace as well as our own eAcademy.

Everything in one place, on your computer, laptop, tablet or mobile.



## 3M PPE Safety Solutions

Subscribe to our channel on YouTube to watch customer testimonials, technical support or product information videos.

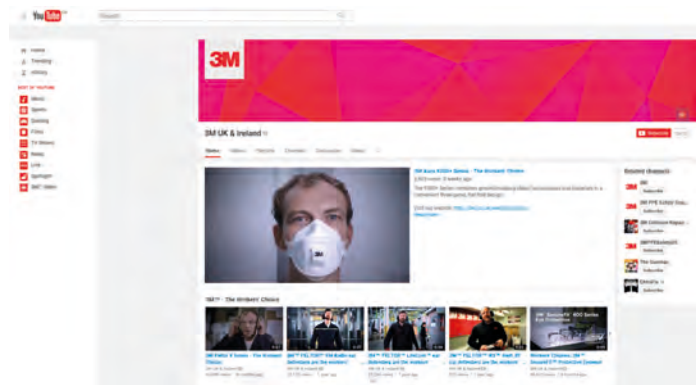
Visit [www.youtube.com/user/3MPPESafetySolutions](http://www.youtube.com/user/3MPPESafetySolutions)

You can also:

Find us on Facebook



or Follow us on Twitter



# 3M Personal Safety Division

## Science of Safety

3M's new Science of Safety approach can support you with guidance on:



**Selection**



**Training**



**Fit validation**

3M delivers consistent quality around the world helping you select the correct PPE for your workers, helping to ensure your workers are educated on the correct use of PPE and raising awareness of how important fit and comfort are to the health and wellbeing of your workforce.

For more information visit [www.3M.eu/SoS](http://www.3M.eu/SoS)

**40%** 

**of employees incorrectly select or use PPE**

Source: HSE Research Report RR720 'Real world use and performance of hearing protection'

## H&S officials

and employers have a duty to provide the correct safety equipment and training.

Maintaining consistency in this arena can prove difficult, hindering the health and safety process.

Many companies don't have the ability to test whether PPE fits the employee properly.

Employees are at risk of damaging their health long term which may lead to an increase in liability for employers.





# 3M Personal Safety Division



## Why partner with 3M for your health and safety?

3M can deliver consistent quality around the world

**Our industry-leading approach** embraces best practice on a global level



Selection



Training



Fit validation



## 3M PPE equipment

industry-leading breadth and depth, helping to optimise protection and fit.



3M can give local support and advice wherever you do business

[www.3M.eu/SoS](http://www.3M.eu/SoS)

#3MScienceOfSafety

# 3M Personal Safety Division

## Productivity

We don't only aim to improve the safety of our customers, we also want to help them keep costs down. Our products are designed to last and to provide more efficient protection, but they can bring efficiencies in other ways.

### PELTOR™

As many supervisors know, efficient on-site communication can save a lot of time throughout the duration of a project. Recently, a study by Lund University Faculty of Engineering in Sweden showed that downtime and interruptions were reduced by 19% when two-way radio communication headsets were used. A single construction worker gained 380 minutes of productive time per week.

The study was conducted by Victoria Joang and Aidin Sakikovic, two researchers from Lund's graduate program in civil engineering. They compared two work weeks on one of Skanska's major water main projects in Sweden, analysing similar work activities during each week. In the first week, the workers did not use two-way radios. In the second week, they were equipped with 3M™ PELTOR™ WS™ LiteCom Headsets, which have a built-in two-way radio and a Bluetooth® wireless technology mobile phone connection.

Detailed follow-up interviews showed that the big advantage was being able to quickly relay and receive messages on the job, especially on large construction sites where eye contact is not possible. Improved team spirit was another reported benefit.

### **Speedglas™**

Another example of efficiency can be seen in our Welding portfolio, where, by using a 3M™ Speedglas™ Welding Helmet with auto-darkening filters, companies can save up to 1€ per hour.

We have created a Return on Investment calculator for the welding portfolio, where you can input all your numbers to see how much your company would save by using these auto-darkening filters. From this we have calculated that a company with low salary costs who have previously not used an auto-darkening filter, would be able to save 75 euro cents per hour per worker by using almost any auto-darkening filter. So if they had 100 workers, all wearing an auto-darkening filter, 5 days a week, for 8 hours they would make a weekly company saving of 3000 euros.





# Hearing solutions



## The Challenge of Hearing Protection

40 million workers are exposed to loud noise and 13 million suffer from hearing disorders despite industry regulations \*.

You can advance your hearing conservation programme with a customised and comprehensive approach to the hearing protection challenge. Implementing a solution that really makes a difference begins with understanding the hazards, the regulation and the factors that impact protection.

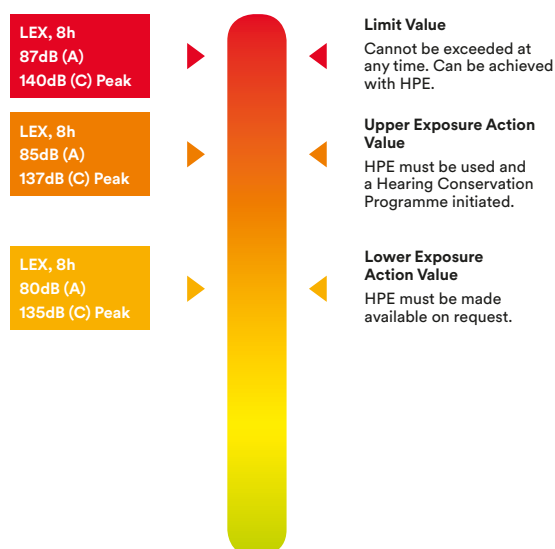
\* Source: European Agency for Safety and Health at Work

### The Facts

**The #1 Reported Occupational Health Issue:** data from the European Agency for Safety and Health at Work shows that noise induced hearing loss is the most commonly reported occupational medical condition in the EU.

**One third of European employees potentially at risk:** according to the EU OSHA one third of workers in Europe are exposed to potentially dangerous levels of noise.

### The Regulations

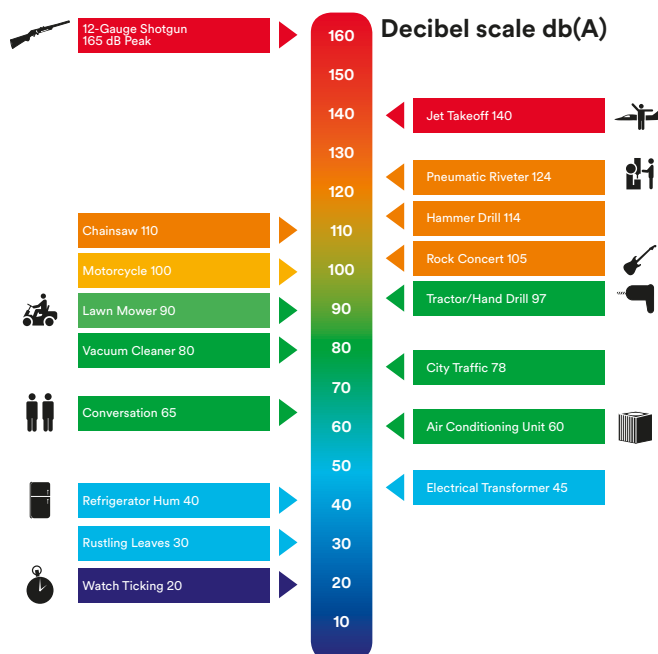


At the Lower Exposure Action Value, suitable hearing protectors must be made available on request. At the Upper Exposure Action Value, hearing protectors must be worn and information provided to workers on risks, control measures, hearing protectors and safe working practices. An effective hearing conservation programme should also be instigated.

The Limit Value is an absolute value which must not be exceeded under any circumstances and can be achieved by using hearing protectors.

### The Hazards

At home and work, it's important to understand which sounds may cause hearing loss and require hearing protection.



**The Real World Hearing Concerns of Hearing Protection**  
Variable Noise Levels: Every environment is different and workers can face a wide range of sound levels throughout the day and in different areas at the same facility.

**The Human Factor:** Each person has a different shape, size and anatomy of the ear canal, so there is no one-size fits all hearing protection solution. The key to achieving optimal protection is having the best fit possible.

**Employee Communication:** Where there is an essential need for workers to communicate or hear warning sounds it is vital that their hearing is protected from hazardous noise levels.

# 3M™ Hearing Protection Solutions

## The Solution, Protection and Validation

As a global leader in hearing protection and fit test validation, 3M delivers easy and comprehensive solutions to complex hearing protection challenges.

**Accurate Noise Detection.** The first step in solving the challenge is to measure the noise levels facing your workers. Detection is a key part of the hearing conservation process. See the 3M 7 step guide to hearing conservation.

**Adaptable Hearing Protection.** 3M delivers a wide range of innovative hearing protectors, making it easy to select the right solution for the job. A variety of types and sizes of earplugs and earmuffs are available helping your team determine the right fit for each person and the right protection for the application. Our innovative products are designed for comfortable, extended wear, and they can help your team comply with your safety program.

**Fit Test Validation.** Integrating hearing protector fit testing into your hearing conservation program benefits everyone from new hires to high-risk workers. The 3M™ E-A-Rfit™ Dual-Ear Validation System makes it easier to fit, train and motivate workers and to assess and manage the long-term performance of your hearing conservation program.

3M's broad range of hearing protection devices in a variety of types and styles helps you solve many of the challenges facing workers in various environments.

*E-A-Rfit*™











# Hearing Protection

Hearing protection must be right for you and your situation. For safety, productivity and comfort, it must reduce noise by the right amount, not too little and not too much. 3M can provide solutions for different individuals and applications with a wide range of earmuffs and earplugs. Hearings move to Category 3 is a key legislation change which should be used to highlight the importance of using certified accredited HPE.



# 3M™ Hearing Protection

## 3M™ Optime™ Alert System by Product

Our system uses a simple, logically coloured classification to make the selection process easy. Firstly find out what your noise level is, then look at the icons below and establish which noise band (RNR) your noise level falls into. Take note of the icon and choose from the wide range of products featuring the correct icon (see summary table on next page). The 3M Optime™ Alert system has been incorporated into the 3M SD-200 sound detector that highlights the appropriate 3M hearing protection required.

\*RNR = Recommended Noise Rating



### GREEN OPTIME™ ALERT SYSTEM RNR\* < 85dB(A)

Hearing protection is not compulsory but is made available to workers for their comfort and protection.

3M™ E-A-R™ UltraFit™ 14 Earplugs - SNR: 14dB



### YELLOW OPTIME™ ALERT SYSTEM 83dB(A) - 93dB(A)

You must assume you are above the permitted exposure level, hearing protection is compulsory.

3M™ E-A-Rsoft™ 21 Earplugs - SNR: 21dB  
3M™ E-A-R™ UltraFit™ 20 Earplugs - SNR: 20dB  
3M™ E-A-R™ ClearE-A-R™ 20 Earplugs - SNR: 20dB  
3M™ E-A-R™ Tracers™ 20 Earplugs - SNR: 20dB  
3M™ E-A-R™ UltraTech Earplugs - SNR: 21dB  
3M™ E-A-R™ EARband Earplugs - SNR: 21dB  
3M™ E-A-R™ Caboflex™ - SNR: 21dB



### RED 1 OPTIME™ ALERT SYSTEM 87dB(A) - 98dB(A)

You are above the permitted exposure level, hearing protection is compulsory. Ideal for high frequency noise.

3M™ E-A-R™ Classic™ Earplugs - SNR: 28dB  
3M™ E-A-R™ Express™ Earplugs - SNR: 28dB  
3M™ Earplugs 1261/ 1271 - SNR: 25dB  
3M™ E-A-Rcaps™ - SNR: 23dB  
3M™ E-A-R™ Flexicap - SNR: 23dB  
3M™ E-A-R™ 1310 - SNR: 26dB  
3M™ E-A-R™ Reflex™ - SNR: 26dB  
3M™ PELTOR™ Optime™ I Earmuffs - SNR: 26/27/28dB (depending on the version)  
3M™ Bull's Eye™ I Earmuff - SNR: 27dB  
3M™ PELTOR™ H31 Earmuffs - SNR: 27/28dB (depending on the version)  
3M™ Peltor™ Earmuff X1 - SNR: 27 dB



### RED 2 OPTIME™ ALERT SYSTEM 94dB(A) - 105dB(A)

You are above the permitted exposure level hearing protection is compulsory. Ideal for high and medium frequency noise.

3M™ E-A-R™ Classic™ Earplugs - SNR: 29dB  
3M™ Torque™ Earplugs - SNR: 32dB  
3M™ Tri-Flange™ Earplugs - SNR: 29dB  
3M™ E-A-R™ Tracers™ Earplugs - SNR: 32dB  
3M™ E-A-R™ UltraFit™ Earplugs - SNR: 32dB  
3M™ PELTOR™ Optime™ II Earmuffs - SNR: 30/31dB (depending on the version)  
3M™ Bull's Eye™ II Earmuff - SNR: 31dB  
3M™ Peltor™ Earmuff X2 - SNR: 31dB



### RED 3 OPTIME™ ALERT SYSTEM 95dB(A) - 110dB(A)

You are above the permitted exposure level, hearing protection is compulsory. Ideal for all frequencies.

3M™ E-A-R™ Classic™ Soft Earplugs - SNR: 36dB  
3M™ E-A-R™ Classic™ SuperFit™ 33 Earplugs - SNR: 33dB  
3M™ 1120/1130 Earplugs - SNR: 34dB  
3M™ E-A-Rsoft™ Yellow Neons™ Earplugs - SNR: 36dB  
3M™ E-A-Rsoft™ Metal Detectable Earplugs - SNR: 36dB  
3M™ Solar™ Earplugs - SNR: 36dB  
3M™ 1100/1110 Earplugs - SNR: 37dB  
3M™ E-A-Rsoft™ FX™ Earplugs - SNR: 39dB  
3M™ No-Touch™ Foam Earplugs - SNR: 35dB  
3M™ E-A-R™ Push-Ins Earplugs - SNR: 38dB  
3M™ E-A-R™ UltraFit™ X Earplugs - SNR: 35dB  
3M™ PELTOR™ Optime™ III Earmuffs - SNR: 34/35dB (depending on the version)  
3M™ Bull's Eye™ III Earmuff - SNR: 35dB  
3M™ Peltor™ Earmuff X3 - SNR: 33 dB  
3M™ Peltor™ Earmuff X4 - SNR: 33  
3M™ Peltor™ Earmuff X5 - SNR: 37 dB



#### PLEASE NOTE:

At levels above 95dB(A) you will need an accurate noise assessment to correctly select the product. Green and Yellow marked products are not suitable for use in low frequency noise.

# 3M™ Hearing Protection

## 3M™ Disposable Earplugs

Our 3M™ Disposable Earplugs are made from expandable Polyurethane (PU) foam, which provides great comfort and good protection. The one size fits most ear canals. Once inserted in the ear, the foam plugs expand to provide a snug and secure custom fit. 3M provides a wide range of disposable roll down PU foam earplugs to choose from and to find the best solution for your individual needs.



### Features and Benefits:

#### Comfortable

- Soft hypoallergenic foam material for lower pressure inside the ear
- Smooth, dirt resistant surface for better hygiene, durability and comfort

#### Convenient

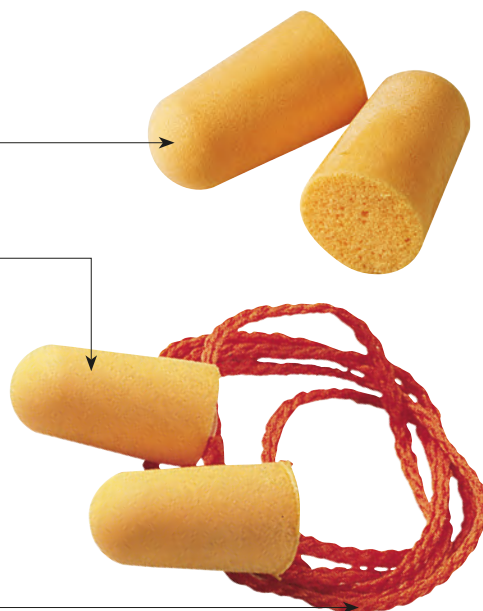
- Tapered design fits most ear canals making the plugs easier to use
- One size only
- Dispenser available (1100)
- Polyester cord (1110) helps prevent loss of earplugs

#### Effective

- High SNR of 37dB

#### Compatible with

- Designed to be compatible with other PPE



#### Attenuation\*

3M™ Earplugs 1100/1110

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	30.0	33.1	36.3	38.4	38.7	39.7	48.3	44.4
Standard Deviation (dB)	3.9	5.0	7.4	6.2	5.6	4.3	4.5	4.4
Assumed Protection (dB)	26.1	28.1	28.9	32.2	33.1	35.4	43.8	40.0

SNR=37dB H=37dB, M=34dB, L=31dB

#### 3M™ Dispenser 1100B and 1120B

Now 3M One-Touch dispenser also available to dispense 3M™ Earplugs 1100 and 1120



#### 3M™ E-A-R™ One-Touch™ Dispenser



### 3M™ Disposable Earplugs 1100/1110

Available corded, uncorded and with dispenser SNR: 37dB

### Other 3M™ Disposable Earplugs



#### 3M™ Earplugs 1120/1130

Especially designed for smaller ear canals  
Available corded, uncorded and with dispenser  
SNR: 34dB



#### 3M™ Solar™ Earplugs

Colourful Earplugs  
Available corded, uncorded and with dispenser  
SNR: 36dB



#### 3M™ E-A-R™ EARSOF™ Yellow Neons™

The E-A-R™ standard PU earplugs. Available corded (Yellow Neons), uncorded and with dispenser  
Compatible with E-A-Rfit™ validation system  
SNR: 36dB



#### 3M™ E-A-R™ EARSOF™ 21 Earplugs

The low attenuation disposable earplugs  
Only available uncorded  
SNR: 21dB



#### 3M™ E-A-R™ EARSOF™ FX Earplugs

The highest attenuation. Available uncorded  
SNR: 39dB



#### 3M™ E-A-R™ EARSOF™ Metal Detectable Earplugs

The traceable disposable earplugs with cord. Compatible with E-A-Rfit™ validation system  
SNR: 36dB

\* For further attenuation information please visit [www.3M.eu/PPEsafety](http://www.3M.eu/PPEsafety)



# 3M™ Hearing Protection

## 3M™ E-A-R™ Classic™ Earplugs

40 years ago this simple hearing protector, the world's first foam earplug, revolutionised hearing protection in the workplace and has remained to this day one of the most widely used earplugs in the world. Since its introduction to the market no other earplug has been studied and assessed in the field more comprehensively than the E-A-R Classic. Discover for yourself what makes the E-A-R Classic earplug so different and why it remains one of the most popular choices of earplug in the world today for attenuation, comfort and ease-of-fit.



### Features and Benefits:

#### Attenuation

- Features a proprietary slow recovery vinyl foam, engineered to protect against noise and vibration
- Expands to the shape of the wearer's ear canal, thereby providing an effective acoustic seal
- Fully tested and CE approved against EN352-2:1993
- The unique 3M™ E-A-Rfit™ Validation System allows users to obtain their own personal attenuation rating to help ensure best fit and protection

#### Comfort

- Cylindrical shape: Flat and cylindrical to provide an effective seal even with jaw movement
- Sweat and humidity resistant, enables easier fitting and helps prevent moisture build up in the ear canal
- Textured surface, provides greater friction to prevent slippage and maintain an effective seal over a prolonged wear time
- Soft energy absorbing foam offers a low equilibrium pressure

#### Ease-of-Fit

- Firm foam properties prevent the earplug from folding or collapsing when inserted into the ear canal
- Quick and easy to roll down with slow recovery foam for a good custom fit

#### Attenuation\*

3M™ E-A-R™ Classic™ Earplugs (Uncorded version)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	22.3	23.3	24.6	26.9	27.4	34.1	41.6	40.4
Standard Deviation (dB)	5.4	5.3	3.6	5.4	4.8	3.1	3.5	6.4
Assumed Protection (dB)	16.9	18.1	20.9	21.5	22.6	30.9	38.1	34.0

SNR=28dB H=30dB, M=24dB, L=22dB

\* For further attenuation information please visit [www.3M.eu/PPEsafety](http://www.3M.eu/PPEsafety)



### 3M™ E-A-R™ Classic™ Earplugs

Available corded, uncorded and with dispenser  
SNR: 28dB

### Other 3M™ Disposable Earplugs



#### 3M™ E-A-R™ Classic™ Soft Earplugs

Softer Classic earplugs for increased comfort  
Available corded, uncorded and with dispenser  
SNR: 36dB



#### 3M™ E-A-R™ Classic™ Small Earplugs

Reduced diameter for smaller ear canals  
Only available uncorded  
SNR: 28dB



#### 3M™ E-A-R™ Superfit™ 33 Earplugs

With exclusive fitting ring  
Available uncorded and with dispenser  
SNR: 33dB



#### 3M™ E-A-R™ Superfit™ 36 Earplugs

With exclusive fitting ring  
Available uncorded in Pillowpack  
SNR: 36dB



#### 3M™ E-A-R™ One-Touch™ Dispenser

# 3M™ Hearing Protection

## 3M™ Push-to-Fit

3M™ Push-to-Fit earplugs are very easy to insert since there is no roll down needed: just use the soft flexible grip to push the earplug into position and achieve excellent protection. Because you do not have to touch the foam during fitting it is one of the most hygienic types of earplug available.



### Features and Benefits:

#### Comfortable

- Unique pod design allowing the foam to compress easily
- The plug slides gently into the ear and expands slowly
- Patented E-A-Rform foam tip shaped and sized to mold comfortably fitting virtually every size ear canal

#### Convenient

- Available corded or uncorded
- No roll down required
- Washable and reusable
- The insertion stem eliminates the need to touch the tip: no need to clean your hands

#### Compatible with

- Designed to be compatible with other PPE



### 3M™ E-A-R™ Express™ Earplugs

Available corded, uncorded  
SNR 28dB

#### Other Pod Earplugs



**3M™ Torque™ Earplugs**  
The tough pod plugs  
Available corded  
SNR: 32dB



**3M™ No-Touch™ Earplugs**  
The colourful pod earplugs  
Available corded  
SNR: 35dB



**3M™ E-A-R™ Push-Ins™ Earplugs**  
The disposable pod earplugs with high attenuation  
Available corded and uncorded  
Compatible with E-A-Rfit™ validation system  
SNR: 38dB

#### Attenuation\*

3M™ E-A-R™ Express Earplugs

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	27.8	26.0	24.9	25.2	29.4	34.9	37.0	35.9
Standard Deviation (dB)	5.4	4.5	3.3	5.0	4.2	4.1	5.2	3.7
Assumed Protection (dB)	22.4	21.5	21.5	20.2	25.2	30.8	31.8	32.2

SNR=28dB H=30dB, M=24dB, L=22dB

\* For further attenuation information please visit [www.3M.eu/PPESafety](http://www.3M.eu/PPESafety)

# 3M™ Hearing Protection

## 3M™ Reusable Earplugs

3M™ Reusable Earplugs are made from flexible materials that are preformed to fit the ear. They are generally available with a joining cord to prevent loss. These reusable earplugs are comfortable, hygienic and economical. No sizing is required for these patented, pre-moulded, triple flanged earplugs. Available in a variety of styles and protection levels.



### Features and Benefits:

#### Comfortable

- Unique and patented tri-flange design for a perfect fit and comfort
- Easy to fit in the ear for a continuous and comfortable protection

#### Effective

- High attenuation (SNR: 32dB)

#### Convenient

- Available with a cord to prevent loss
- Washable and reusable
- Compatible with E-A-Rfit™ validation system to check Personal Attenuation Ratings

#### Versatile

- Different versions to various use: traceable, high and low attenuation versions

#### Compatible with

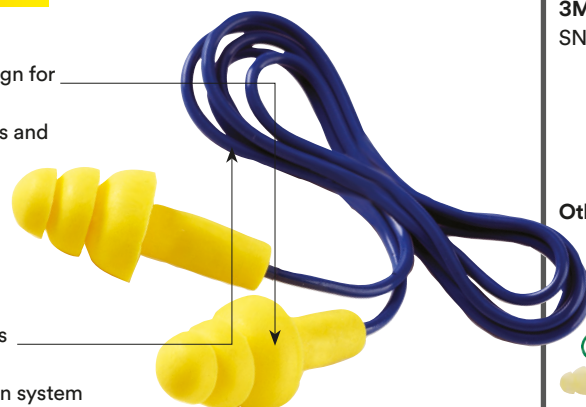
- Designed to be compatible with all types of PPE

#### Attenuation\*

3M™ E-A-R™ Ultrafit™ Earplugs

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	29.2	29.4	29.4	32.2	32.3	36.1	44.3	44.8
Standard Deviation (dB)	6.0	7.4	6.6	5.3	5.0	3.2	6.0	6.4
Assumed Protection (dB)	23.2	22.0	22.7	26.9	27.3	32.8	38.3	38.4

SNR=32dB H=33dB. M=28dB. L=25dB APVf = Mf - sf



**3M™ E-A-R™ Ultrafit™ Earplugs**  
SNR: 32dB

#### Other pre-moulded earplugs

**3M™ E-A-R™ Ultrafit™ 14 and Ultrafit™ 20 Earplugs**

The low attenuation E-A-R™ Ultrafit™ versions  
SNR: 14dB  
SNR: 20dB

**3M™ E-A-R™ ClearEAR™ Earplugs**  
SNR: 22dB

**3M™ E-A-R™ Switch Protection Earplugs**  
Special acoustic filter that lets lower level of sound through with little noise reduction for greater situational awareness  
SNR: 16 dB (open mode)  
SNR: 28 dB (closed mode)

**3M™ Earplugs 1261/1271**  
The pre-moulded earplug with convenient storage case  
Available corded and uncorded  
SNR: 25dB

**3M™ E-A-R™ Tracers™ and Tracers™ 20 Earplugs**  
Metal detectable version  
SNR: 32dB  
SNR: 20dB



**3M™ Tri-Flange™ Earplugs**  
Comfort and design  
Available with vinyl or cotton cord  
SNR: 29dB



**3M™ E-A-R™ Ultrafit™ X Earplugs**  
The high attenuation pre-moulded earplugs  
Available corded  
SNR: 35dB

\* For further attenuation information please visit [www.3M.eu/PPEsafety](http://www.3M.eu/PPEsafety)



# 3M™ Hearing Protection

## 3M™ Banded Earplugs

3M™ Banded Earplugs are easy to use, convenient and extremely comfortable. They are quick to insert and remove and can be stored around the neck when not required, making them ideal for intermittent use. Banded hearing protectors offer simplicity to help improve the choice of hearing protection products that best suits the work place environment. Most models are available with replacement pods making them a more cost-effective option.



**3M™ Banded Earplugs can be worn in a variety of modes:**  
Behind-the-Head (B-T-H)  
Under-the-Chin (U-T-C)  
and/or Over-the-Head (O-T-H)

### Features and Benefits:

#### Comfortable

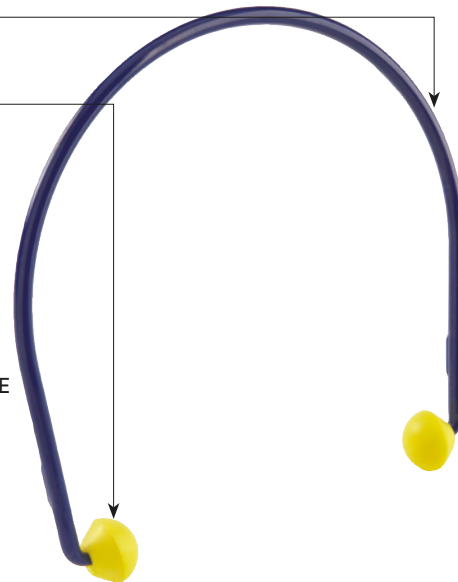
- Extremely light
- Very low pressure into the ear
- Pod plugs seal the entrance part of the ear canal with no deep insertion

#### Convenient

- Wear in Under-the-Chin (U-T-C) mode
- Easy to use
- Ideal for people moving in and out
- Replacement pods available

#### Compatible with

- Designed to be compatible with other PPE



#### Attenuation\*

3M™ E-A-R™ EARCaps™ Earplugs (In U-T-C mode)

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	21.0	20.2	19.8	19.1	23.2	33.4	41.0	40.7
Standard Deviation (dB)	4.1	4.4	4.2	4.3	3.7	4.5	2.9	5.4
Assumed Protection (dB)	16.9	15.8	15.5	14.8	19.5	29.0	38.1	35.2

SNR=23dB H=27dB. M=19dB. L=17dB

### 3M™ E-A-R™ EARCaps™ Earplugs

Replacement pods available  
SNR: 23dB (U-T-C)

### Other banded earplugs



#### 3M™ E-A-R™ EARBAND Earplugs

The ergonomic banded earplugs Replacement pods available. Wear Behind-the-Head  
SNR: 21db (B-T-H)



#### 3M™ E-A-R™ CABOFLEX™ Earplugs

The banded earplugs with durable conical shaped insert Replacement pods available. Wear Behind-the-Head or Under-the-Chin  
SNR: 21dB (U-T-C)



#### 3M™ E-A-R™ FLEXICAP Earplugs

The multi-position banded earplugs Replacement pods available. Wear Behind-the-Head, Under-the-Chin or Over-the-Head  
SNR: 23dB (U-T-C)



#### 3M™ Earplugs 1310

The high flexibility band Replacement pods available. Wear Behind-the-Head or Under-the-Chin  
SNR: 26dB (U-T-C)



#### 3M™ E-A-R™ REFLEX Earplugs

The multi-position banded earplugs with conical tips Replacement pods available. Wear Behind-the-Head, Under-the-Chin or Over-the-Head  
SNR: 26dB (U-T-C)

\* For further attenuation information please visit [www.3M.eu/PPESafety](http://www.3M.eu/PPESafety)

# 3M™ Hearing Protection

## 3M™ PELTOR™ Optime™ Earmuffs

The 3M™ PELTOR™ Optime™ Earmuffs have been developed for demanding noisy environments and are effective in reducing even extremely low frequency sound. The sealing rings are filled with a unique combination of liquid and foam. The result is an optimum seal with low contact pressure, which provides agreeable comfort even during long periods of use. The sealing rings have ventilation channels and are covered with soft, patterned, hygienic foil. The product is also available in an electrically insulated (dielectric) version without visible metal parts



### Features and Benefits:

#### Comfortable

- Generous space inside the cup to help the ears breathe thus improving comfort
- Soft and wide sealing rings filled with a unique combination of foam and liquid to offer optimum sealing and low pressure
- Sealing rings with ventilation channels and covered with soft, patterned hygienic foil

#### Effective

- High attenuation despite lightness and low profile design: 31dB SNR
- Unique band design, stainless steel wire for constant pressure over long periods of use

#### Versatile

- Available in several versions including: Headband, foldable, neckband and helmet mounted versions. All versions are available in high visibility colours



#### 3M™ PELTOR™ Optime™ I Earmuffs Headband

##### Features:

Low profile, light-weight design (180g) helps improve compatibility with other safety equipment  
Moderate attenuation:  
SNR: 27dB



#### 3M™ PELTOR™ Optime™ III Earmuffs Headband

##### Features:

Broad sealing rings  
Very high attenuation:  
SNR: 35dB  
Twin cup design minimises resonance for excellent high-frequency attenuation



**3M™ PELTOR™ Optime™ Push To Listen (PTL) Optime™ Earmuff with a listening function Optime™ II**  
SNR: 31dB  
Also available in Hi-Viz and Helmet mounted version  
Optime™ II SNR: 29dB

#### 3M™ PELTOR™ Optime™ II Earmuffs Headband SNR: 31dB

#### Accessories

Hygiene kits are available for each earmuff version

#### Other PELTOR™ Optime™ Earmuff options:



#### 3M™ PELTOR™ Optime™ Neckband

Offers excellent compatibility with other PPE  
Optime™ I SNR: 28dB  
Optime™ II SNR: 31dB  
Optime™ III SNR: 35dB



#### 3M™ PELTOR™ Optime™ Foldable Headband

Easy-to-store solution  
Optime™ I SNR: 28dB  
Optime™ II SNR: 31dB



#### 3M™ PELTOR™ Optime™ Helmet attachment

Can be worn with a wide range of safety helmets  
Optime™ I SNR: 26dB  
Optime™ II SNR: 30dB  
Optime™ III SNR: 34dB



#### 3M™ PELTOR™ Optime™ Hi-Viz Headband

For workers in need of extra visibility  
Optime™ I SNR: 28dB  
Optime™ II SNR: 31dB  
Optime™ III SNR: 35dB



#### 3M™ PELTOR™ Welding Earmuff

Designed for welders  
Fits into welding helmets  
Optime™ I SNR: 24dB

# 3M™ Hearing Protection

## 3M™ PELTOR™ Earmuffs X Series

The 3M™ PELTOR™ Earmuffs X Series have been developed on the basis of design, comfort and attenuation techniques. This new range sets a new standard for over-the-ear protection. The 3M™ PELTOR™ X3 earmuffs are the first of our new range of products to utilise a newly designed spacer to help improve attenuation without the need for double cup design, thus increasing the space inside the cup for greater comfort and wearability.



### Features and Benefits:

#### Comfort

- Easy to adjust headband
- Electrically insulated (dielectric) wire headband with constant pressure over long wearing periods
- Twin headband design helps reduce heat build-up and provides a good fit and balance
- Earcups tilt for optimum comfort and efficiency

#### Protection

- New ear cushion foam technology for an effective acoustic seal and reliable protection
- New smart sealing ring
- Streamlined cups without compromising attenuation
- Compatible with a range of 3M eyewear and respirators (validated by internal testing)
- Also available as a helmet mounted version

#### Design

- Lightweight dual mould cups with maximum space inside to help minimise heat and moisture build up
- Integrated design for more robustness
- Colour-coded for ease of selection
- Easy to clean



### 3M™ PELTOR™ X1, X2 and X3 Earmuffs



**3M™ PELTOR™ X1 Earmuffs**  
SNR: 27dB  
Available as headband or helmet mounted version. Colour coded green, indicating first level of attenuation within this range

Engineered around protection, comfort and design, making it highly versatile



**3M™ PELTOR™ X2 Earmuffs**  
SNR: 31dB  
Available as headband or helmet mounted version. Colour coded yellow, for moderately-high noise exposures

Based on the X1 design, but offering higher attenuation



**3M™ PELTOR™ X3 Earmuffs**  
SNR: 33dB  
Available as headband or helmet mounted version. Colour coded red for high noise exposure applications

### Accessories



**3M™ PELTOR™ Wireless Communication Accessory**  
SNR: from 27dB to 36dB

### MT6705WS6-EU

When fitted to the 3M™ Peltor™ X Series Earmuffs, the Bluetooth accessory converts the passive hearing protector into a wireless communication device. The Bluetooth accessory is automatically paired with your mobile devices thus enabling hands-free communication in noisy environments, without compromising protection.

The accessory is designed for use with the following 3M™ Peltor™ X Series Earmuffs:

**Headband:** X1A, X2A, X3A, X4A, X4A-OR and X5A

**Helmet mounted:** X1P5, X1P5-OR, X2P5, X3P5, X4P5, X4P5-OR and X5P5

\* For further attenuation information please visit [www.3M.eu/PPESafety](http://www.3M.eu/PPESafety)



# 3M™ Hearing Protection

## 3M™ PELTOR™ Earmuffs X Series

Historically higher attenuating earmuffs meant larger and bulky cups, but no longer. The 3M™ PELTOR™ Earmuffs X4 can attenuate by as much as 33dB whilst maintaining a sleek, low profile aesthetically pleasing design. Using the same innovative technology the 3M™ PELTOR™ X5 remains relatively lightweight with excellent balance and wearer comfort despite the larger cups, providing a SNR of 37dB.



### Features and Benefits:

#### Comfort

- Easy to adjust headband
- Electrically insulated (dielectric) wire headband with constant pressure over long wearing periods
- Twin headband design helps reduce heat build-up and provides a good fit and balance
- Earcups tilt for optimum comfort and efficiency

#### Protection

- Unique attenuation as a result of optimum combination of specially-formulated foam featured in the earcups, cushions and the innovative spacer and cup design
- Newly designed spacer improves attenuation without excess bulk or weight
- Also available as a helmet mounted version

#### Design

- Extremely lightweight (234g)
- Integrated design for more robustness
- Colour-coded for ease of selection
- Easy to clean
- Extremely slim design providing excellent compatibility with other 3M personal protection products



### 3M™ PELTOR™ X4 and X5 Earmuffs



#### 3M™ PELTOR™ X4 Earmuffs

SNR: 33dB

Available as headband or helmet mounted version  
Colour coded Fluorescent yellow-green, for high noise exposure applications and to ensure good visibility when working outdoors

Features extremely slim and lightweight earcups which provide excellent compatibility when used with other 3M personal protection products.



#### 3M™ PELTOR™ X5 Earmuffs

SNR: 37dB

Available as headband or helmet mounted version  
Colour coded black for use in extremely high noise environments

### Accessories



#### 3M™ PELTOR™ Wireless Communication Accessory

SNR: from 27dB to 36dB

#### MT6705WS6-EU

When fitted to the 3M™ Peltor™ X Series Earmuffs, the Bluetooth accessory converts the passive hearing protector into a wireless communication device. The Bluetooth accessory is automatically paired with your mobile devices thus enabling hands-free communication in noisy environments, without compromising protection.

The accessory is designed for use with the following 3M™ Peltor™ X Series Earmuffs:

**Headband:** X1A, X2A, X3A, X4A, X4A-OR and X5A

**Helmet mounted:** X1P5, X1P5-OR, X2P5, X3P5, X4P5, X4P5-OR and X5P5

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