

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

The 3M Worker Health and Safety Academy

The flexible way to discover and learn throughout your busy day

Join us online any time of the day to expand your knowledge on our current range of personal protective equipment for the workplace. Learn what you want, when you want, where you want... and at a pace that's right for you.



3M offers you engaging interactive training on topics relevant to you

- Workplace hazards and health effects
- Industry standards and regulations
- The approach to protection
- 3M Personal Safety Solutions

Why e-learning?

Conventional training can often be difficult to manage. It can also be expensive, not simply in monetary terms, but in the time that people are kept away from their job. Time may be limited to cover content, whilst finding a convenient time for both trainer and staff may also be difficult.

- User-friendly site with online help
- Convenient – learn whenever and wherever you want
- Flexible – learn at a pace that's comfortable
- Personalised completion certificates
- Structured curriculum deployed training
- Managers customised employee training reports



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

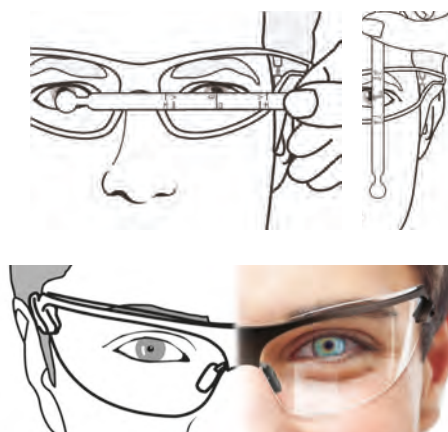
As the leader in hearing protection, 3M offers a complete solution, with dual-ear and earmuff testing capabilities plus a user-friendly interface. The 3M™ E-A-Rfit Dual-Ear Validation System is the fast and easy way to find your employees' PAR, because we know how important it is to make your hearing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



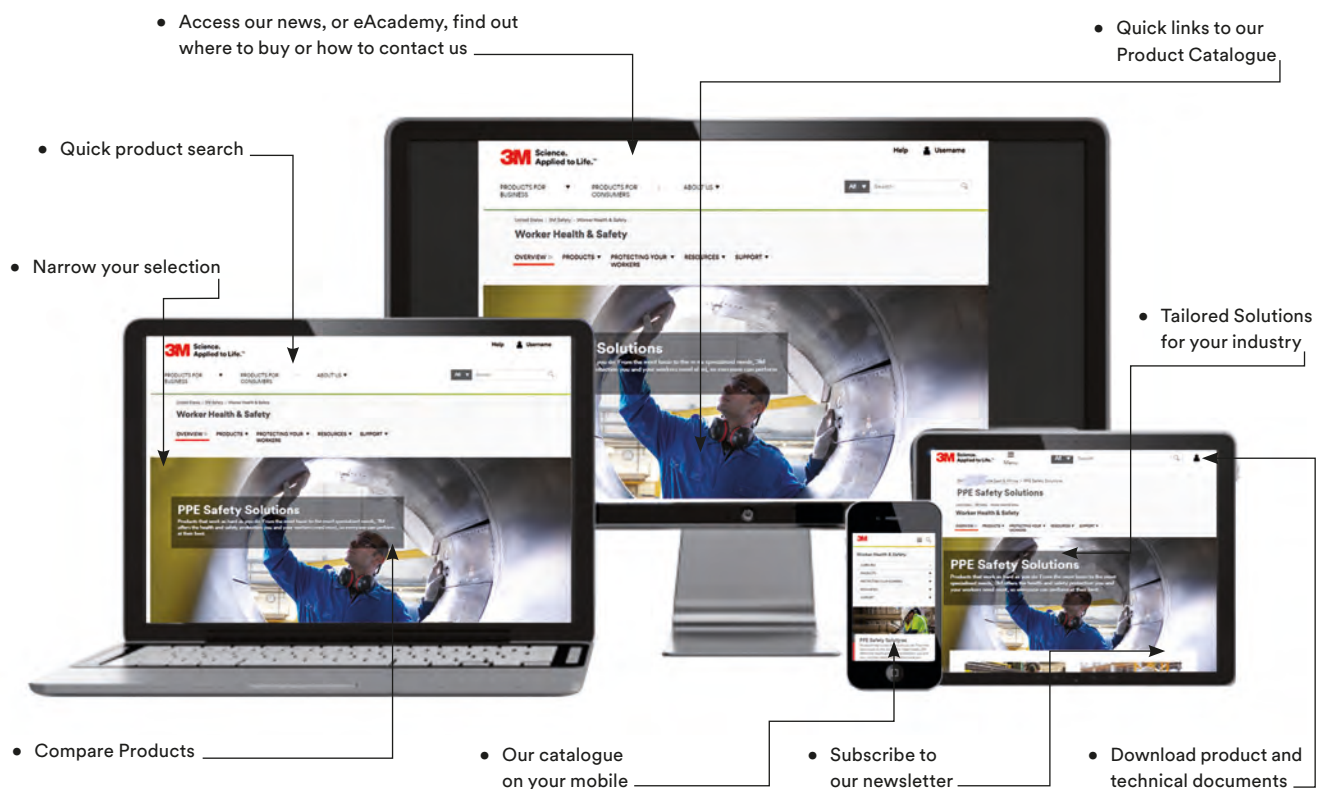
Find out more by contacting your 3M Personal Safety Sales Representative.

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.



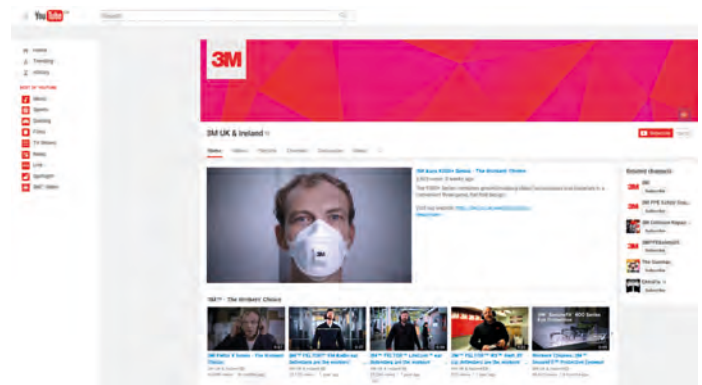
3M PPE Safety Solutions

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

Visit www.youtube.com/user/3MPPESafetySolutions

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

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

#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

3M™ Hearing Protection 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.

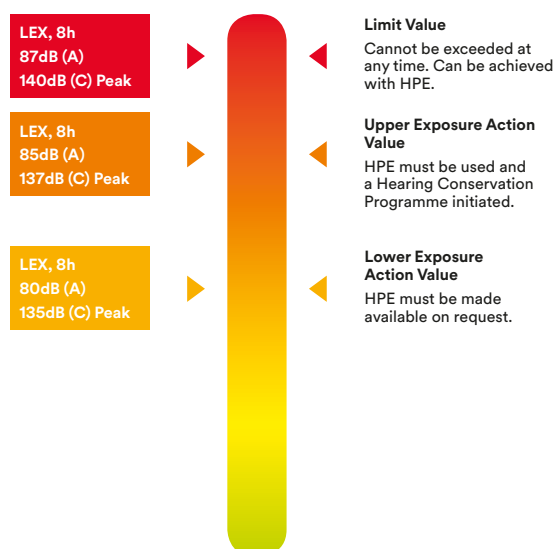
* Source: European Agency for Safety and Health at Work

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

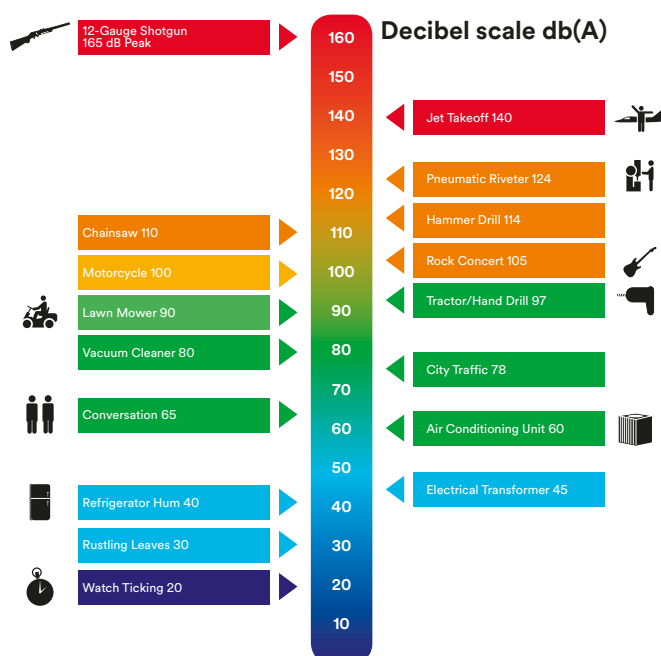


At the Lower Exposure Action Value, suitable hearing protectors must be made available on request. At the Upper Exposure Action Value, hearing protectors must be worn and information provided to workers on risks, control measures, hearing protectors and safe working practices. An effective hearing conservation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







Communications Solutions

Close up or far away the 3M™ PELTOR™ Communication Solutions for noisy environments make it possible for users of hearing protectors to communicate very effectively – with their immediate environment and with people further away. The section focuses on the industrial solutions available. 3M™ PELTOR™ Communication Solutions also include more complex products for industry, military and hunting and shooting environments.

3M™ PELTOR™ Communication Solutions

The Sound Solution

First-class communication and hearing protection! There was a time when wearing hearing protectors meant being isolated and out of contact. Those days are over. Today, 3M™ PELTOR™ offers first-class communication solutions that not only make your working day safer and more efficient, but also much nicer!

3M™ PELTOR™ products are developed for all environments where high safety must be combined with communication. Industrial environments, construction sites, agriculture and forestry are a few examples.

We have developed several models to ensure there's a PELTOR Headset for every situation. Headband models for all-round use, and models with helmet attachments for people who wear safety helmets at work.

To ensure easy use of our products and good functions for all environments we use advance technology such as Level Dependent technology **Bluetooth®**.



Oil & Gas



Mining



Hunting & Sport shooting



Airport Ground handling



Military & Law enforcement



Energy & Utilities



Transportation



Industry



Construction

3M™ PELTOR™ Communication Solutions

The importance of wearing hearing protection 100% of time exposed



100% usage
Gives the expected protection.



99% usage
Just five minutes of carelessness
per day significantly reduces the
effect of the hearing protector.









90% usage
Virtually no protection.

Safety

To be effective, a hearing protector should be used 100% of the time in noisy environments. Even taking it off for a short time dramatically reduces its effectiveness and greatly increases the risk of hearing damage. The 3M™ PELTOR™ Communication Solutions encourage longer use because the wearer feels less isolated and can communicate with others more easily.

Function symbols

To help you to understand the functionality of the products you will find below symbols on each product page.

					
Hearing protection with level-dependent function for ambient listening	Hearing protection that features Bluetooth® technology, for wireless connection to mobile phone, or communication radio	Hearing protection with built in two-way radio	Hearing protection with built-in FM radio receiver	Hearing protection with external audio input	Hearing protection for communication with external two-way radio

Key Function

							
EEP-100 EU	Pro-Tac III	WorkTunes™ Pro	WS™ Pro-Tac XPI	WS™ Alert™ XP & XPI	LiteCom	LiteCom Plus	WS™ LiteCom
							
							
							
							
							
							

3M™ PELTOR™ Communication Solutions

3M™ Versaflo™ Helmets M-300 Series with 3M™ PELTOR™ LiteCom solutions

M-300 Series Helmets meet the highest powered respirator performance requirements (TH3) for this type of product when used with specific 3M™ Air Delivery Units. Now approved to be used with 3M™ PELTOR™ LiteCom headsets, M-300 Helmets offer you the possibility to communicate effectively whilst protecting your hearing in noisy environments.

Features and Benefits:

Highly versatile rigid headtops

- Head protection approved according to EN397
- Integrated protection from multiple hazards (e.g. respiratory, impact, splash hazards)

Modern, well balanced design

- Lightweight with excellent balance
- Fully-adjustable head suspension
- A deflector allows users to direct the airflow inside the headtop for increased control and comfort

Visor design

- Visor design combines excellent peripheral and downward vision with good optical clarity
- Lenses provide chemical and scratch resistance

Typical applications:

- Smelting & foundry applications
- Grinding
- Chemical processing & plant maintenance
- Agricultural applications
- Construction & renovation
- Demolition



Note: 3M does not accept responsibility or liability, direct or consequential, arising from reliance upon any information provided and the user should determine the suitability of the products for their intended use. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence or fraudulent misrepresentation.



3M™ PELTOR™
MT53V/1

3M™ PELTOR™
MT7V/1
2 options of built-in
microphones:

- Dynamic
- Electret



Electronic Protectors

Size Ranges: S = Small, M = Medium, L = Large

Helmet model	Wedge	Product number	Description	Size
Versaflo™ M-306 or M-307 Helmet	Z3AF	MT**H79P3*	3M™ PELTOR™ Helmet Att. Headsets, Product numbers beginning with MT7H or MT53H except model number ending in -77	M/L
		MT7H540P3*	3M™ PELTOR™ Twin Cup Headsets, Helmet attached, except model number ending in -77	M/L
		MT*H7P3*	Helmet attached WS™ ProTac XP, WS™ Headset XP, Tactical XP, LiteCom, WS™ LiteCom, LiteCom PRO II, LiteCom Plus product numbers beginning with MT7H or MT53H	M/L



reddot design award
honourable mention 2011



3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ Electronic Ear Plug EEP-100 EU

3M™ PELTOR™ Electronic Earplug helps protect against harmful noise, whilst allowing ambient sounds to be heard at a level below 82dB. It increases your ability to communicate with nearby colleagues, as well as hearing warning signals, approaching vehicles, or sounds in machines and processes.



Features and Benefits:



Ultrafit^{G1}

Frequency (Hz) ^{G2}	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB) ^{G3}	34.5	31.5	36.2	33.4	34.8	34.9	38.8
Standard Deviation (dB) ^{G4}	6.0	5.4	5.6	4.3	3.8	5.0	4.0
Assumed Protection (dB) ^{G5}	28.5	26.1	30.6	29.1	31.0	29.9	34.8

^{G6} 9g SNR=32dB H=31dB. M=30dB. L=29dB

Torque^{G1}

Frequency (Hz) ^{G2}	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB) ^{G3}	37.8	36.0	40.5	41.2	41.3	39.6	46.1
Standard Deviation (dB) ^{G4}	4.3	5.5	4.2	4.7	3.2	4.3	3.6
Assumed Protection (dB) ^{G5}	33.5	30.5	36.3	36.5	38.0	35.3	42.5

^{G6} 9g SNR=38dB H=37dB. M=36dB. L=34dB



Earpiece Power

Battery Type: Lithium Ion
Battery Life: Up to 16 Hours
Battery Charge Time: Approximately 180 Minutes
Volume Steps: Low, Normal, High
Case USB Type: Micro B

Standards

Waterproof Rating: Complies with IP54 with cover and USB port closed.
SNR: PPE directive 89/686/EEC

Physical Characteristics

Weight: Box containing charger, 2 earpieces, 4 pair communications eartips, USB cable - 240g
Weight: Charger - 57.1g
Weight: 1 earpiece - 4g

3M Peltor Accessories

TEP-CORD	3M™ PELTOR™ Tactical Earplug Replacement Cord
370-TEPL-25	3M™ UltraFit™ Communication Tips Replacement, Large, 25 pairs
370-TEPM-25	3M™ UltraFit™ Communication Tips Replacement, Medium, 25 pairs
370-TEPS-25	3M™ UltraFit™ Communication Tips Replacement, Small, 25 pairs
PELTIP5-01	3M™ Torque™ Eartips, 50 pairs
CCC-GRM-25	3M™ PELTOR™ Communication Tip, Triple C, 25 pairs
TEP-WINDSCREEN	3M™ PELTOR™ TEP/LEP WINDSCREEN FOAM

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ ProTac™ III Headset

The 3M™ PELTOR™ ProTac™ III hearing protector helps protect against harmful noise, whilst allowing ambient sounds to be heard at a level below 82dB. It increases your ability to communicate with nearby colleagues, as well as hearing warning signals, approaching vehicles, or sounds in machines and processes.



Features and Benefits:

- Attenuating hearing protector
- Level-dependent function for ambient listening
- 3.5 mm listen only stereo input (limited to 82 dB) for connection to external devices (e.g. cell phone, two-way radio, iPod)
- Voice guided menu system
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery
- Low-battery warning at low battery level
- To reduce the corrosion caused by sweat the electronics are located in the outer part of the cup
- Available in both in headband and helmet attached versions (black)
- Available in two different cup sizes: one with higher attenuation and one slim version with lower attenuation



Attenuation*

MT13H221A 3M™ PELTOR™ ProTac™ III Headset



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.0	24.0	28.0	36.9	37.3	39.3	35.4
Standard Deviation (dB)	3.2	2.0	29.5	3.3	4.9	3.2	3.9
Assumed Protection (dB)	13.8	22.0	2.6	33.6	32.4	36.1	31.5

EN 352-1:2002 SNR=32 dB H=34 dB M=29 dB L=22 dB

MT13H220A 3M™ PELTOR™ ProTac™ III Slim Headset

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	13.3	17.4	22.3	28.0	30.8	37.6	37
Standard Deviation (dB)	3.2	1.8	2.3	3.2	3.4	2.8	4.8
Assumed Protection (dB)	10.1	15.6	20.0	24.8	27.4	34.8	32.2

EN 352-1:2002 SNR=26 dB H=29 dB M=23 dB L=17 dB

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ ProTac™ III

MT13H221A Headband

Available in: Black

SNR: 32dB

Other 3M™ PELTOR™ ProTac™ III options



3M™ PELTOR™ ProTac™ III Slim Headset

MT13H220A Headband

Available in: Black

SNR: 26dB

3M™ PELTOR™ ProTac™ III Headset, black, helmet attachment

MT13H221P3E Helmet attachment

Available in: Black

SNR: 31dB

3M™ PELTOR™ ProTac™ III Slim Headset, black, helmet attachment

MT13H220P3E Helmet attachment

Available in: Black

SNR: 25dB

Battery Type: 2x AA (Alkaline)

Operating time: Approximately 1 00 hours of battery lifetime

Net Weight (Incl. Batteries): ProTac™ III Slim MT13H220A (headband) = 303g
ProTac™ III MT13H221A (headband) = 355g
ProTac™ III Slim MT13H220P3E (helmet attachment) = 322g
ProTac™ III MT13H221P3E (helmet attachment) = 374g

Operating temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: 3.5mm listen-only stereo input jack (limited to 82 dB)

3M™ PELTOR™ Accessories

HY220 Hygiene kit
FL6CE/1 3M™ PELTOR™ FL6CE/1 3.5 mm Cable
HY100A 3M™ PELTOR™ HY100A CLEAN HYGIENE PAD

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ WS™ ProTac XPI

The 3M™ PELTOR™ WS™ ProTac XPI Headset is equipped with a level-dependent function for situational awareness and communication. The headset features Bluetooth wireless technology and can also be connected via a jack to provide high quality communication and streaming.

The level-dependent function helps you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication in quiet environments. Robust design, clear controls and an intuitive menu system. This is a headset you will never want to take off.



Features and Benefits:

- Protects your hearing (SNR: 31dB)
- Noise cancelling speech microphone for clear communication in noisy environments using digital noise reduction
- Stainless steel wire headband for comfortable and consistent pressure
- Bluetooth® wireless technology for communication and streaming high quality stereo sound
- Advanced voice operated transmission (VOX) technology for hands-free communication in high noise environments
- Level-dependent function for situational awareness and communication
- External radio connection jack (only available in FLEX Connector version)
- Easy to use with four button operation
- Ghost voice guided menu system
- Auto power off in 2 hours from last activation
- Also available as neckband or helmet attachment



Connects with

- Bluetooth compatible devices
- Two-way radio (Flex)



Attenuation*

MT15H7AWS6 / MT15H7AWS6-111

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14.4	24.6	35.8	36.0	34.3	35.0	34.8
Standard Deviation (dB)	3.1	1.8	3.2	2.7	2.3	3.0	3.4
Assumed Protection (dB)	11.3	22.8	32.6	33.3	32.0	32.0	31.4

SNR=31dB H=33dB. M=30dB. L=20dB

3M™ PELTOR™ Accessories

HY83	3M™ PELTOR™ HY83 Hygiene kit, 2 foam liners, 2 snap-in cushions	FR08	3M™ PELTOR™ FR08 Power supply with USB connector 7000108521	M60/2	3M™ PELTOR™ M60/2 Windshield for Level-dependent microphones 2ea
HY80	3M™ PELTOR™ Gel snap-in cushions 7000127468	FR09	3M™ PELTOR™ FR09 Battery charger with USB connector	HY100A	3M™ PELTOR™ HY100A Clean Hygiene Pad, 100pcs
ACK053	3M™ PELTOR™ ACK053 Rechargeable NiMH battery, 2100mAh	M171/2	3M™ PELTOR™ M171/2 Windshield for MT73 speech microphone 2ea	HYM1000	3M™ PELTOR™ HYM1000 Microphone protection, 5 meters

3M™ PELTOR™ WS™ ProTac XPI Headset
MT15H7AWS6 Headband
SNR: 33dB

Other 3M™ PELTOR™ WS™ ProTac XPI options



3M™ PELTOR™ WS™ ProTac XPI Headset, helmet attachment
MT15H7P3EWS6 Helmet attachment
SNR: 31dB

3M™ PELTOR™ WS™ ProTac XPI FLX2 Headset
MT15H7AWS6-111 Headband
SNR: 33dB

3M™ PELTOR™ WS™ ProTac XPI FLX2 Headset
MT15H7P3EWS6-111
Helmet attachment
SNR: 31dB

Frequency Range: 2400-2483.5 MHz

Bluetooth®

Version: 4.2+EDR

Battery Type: 2xAA NiMH or alkaline batteries, 1,2-1,5 V

Operating Time: Level Dependent + Bluetooth active: Approximately 45 hours of battery lifetime with included alkaline batteries

Net Weight, (incl. batteries): Headband:
MT15H7AWS6 = 365g
MT15H7AWS6-111 = 373g
Helmet Attachment:
MT15H7P3EWS6 = 387g
MT15H7P3EWS6-111 = 395g

Operating Temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: Available with flex input jack

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ WorkTunes™ Pro Headset

The 3M™ PELTOR™ WorkTunes™ Pro Headset helps protect you from potentially harmful workplace noise while at the same time enjoy listening to the built in FM or AM/FM radio. The built-in antenna, fast digital tuning and ability to store stations makes the hearing protector flexible and easy to work with.



Features and Benefits:

- High attenuating hearing protector
- FM or AM/FM radio headset with built-in antenna
- Digital station search
- Voice guided menu system with announced frequencies
- Store up to 5 stations
- 3.5mm listen only stereo input (limited to 82dB) for connection to external devices (e.g. cell phone, two-way radio, iPod)
- Auto power off, the headset will turn off after 4hrs of non-use to save battery
- Low-battery warning at low battery level
- To reduce the corrosion caused by sweat the electronics are located in the outer part of the cup
- Available in both in headband and helmet attached versions (black)



Attenuation*

HRXS221A and HRXS220A EN 352-1:2002



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.0	24.0	29.5	36.9	37.3	39.3	35.4
Standard Deviation (dB)	3.2	2.0	2.6	3.3	4.9	3.2	3.9
Assumed Protection (dB)	13.8	22.0	26.9	33.6	32.4	36.1	31.5

SNR=32 dB H=34 dB M=29 dB L=22 dB

HRXS221P3E and HRXS220P3E EN 352-3:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	16.6	22.0	29.1	36.3	36.4	38.7	34.2
Standard Deviation (dB)	2.7	2.2	2.9	3.4	3.9	4.2	4.0
Assumed Protection (dB)	2.7	2.2	2.9	3.4	3.9	4.2	4.0

SNR=31 dB H=33 dB M=28 dB L=21 dB

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ WorkTunes™ Pro FM Radio Headset

HRXS220A Headband

Available in: Black

SNR: 32dB

Other 3M™ PELTOR™ WorkTunes™ Pro FM Radio Headset options



3M™ PELTOR™ WorkTunes™ Pro FM Radio Headset HRXS220P3E Helmet attachment

Available in: Black
SNR: 31dB

3M™ PELTOR™ WorkTunes™ Pro AM/FM Radio Headset HRXS221A Headband
Available in: Black
SNR: 32dB

3M™ PELTOR™ WorkTunes™ Pro AM/FM Radio Headset HRXS221P3E Helmet attachment
Available in: Black
SNR: 31dB

Battery Type:	2x AA (Alkaline)
Operating time:	Approximately 40 hours of battery lifetime
Net Weight (incl. batteries):	WorkTunes Pro FM HRXS220A (headband) = 351g WorkTunes Pro FM HRXS220P3E (helmet attachment) = 369g WorkTunes Pro AM/FM HRXS221A (headband) = 353g WorkTunes Pro AM/FM HRXS221P3E (helmet attachment) = 371g
Operating temperature:	-20°C to +55°C (battery dependent)
Wired Connectivity:	3,5 mm AUX input jack (limited to 82dB(A))
3M™ PELTOR Accessories	
HY220	Hygiene kit
FL6CE/1	3M™ PELTOR™ FL6CE/13.5 mm Cable
HY100A	3M™ PELTOR™ HY100A CLEAN HYGIENE PAD

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ WS™ Alert™ XP Headset

With the 3M™ PELTOR™ WS™ Alert™ XP Level Dependent FM-Radio Bluetooth® Headset, we introduce a new era in the world of hearing protection. With a built-in FM-radio receiver, Bluetooth® and a level dependent technology for situational awareness, 3M PELTOR WS Alert XP enables users to have wireless telephone conversations or listen to their favourite music even in noisy environments.



Features and Benefits:

- High attenuating hearing protector in two models: stand-alone headband or safety helmet attachment (SNR 30dB)
- Bluetooth® Technology for connection to one external device for hands-free talk and streaming
- Noise cancelling boom microphone for clear speech transmission in noisy environments
- Level-dependent function for ambient listening to help improve your situational awareness
- Auto-pairing to quickly pair and connect to your mobile device
- Built-in FM-Radio with radio volume limited to 82dB
- Voice guided menu system
- Digital station search with ability to store up to 4 favourite stations
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery
- Low-battery warning at low battery level
- Electronics located in the outer part of the cup to reduce corrosion caused by sweat
- Rechargeable option with NiMH batteries
- Replaceable cushions and foam liners



Attenuation*

MRX21A2WS6 EN352-1:2002



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	13.8	19.3	30.4	34.5	37.7	39.5	36.2
Standard Deviation (dB)	2.7	2.4	3.6	3.6	2.3	2.7	4.1
Assumed Protection (dB)	11.1	16.9	30.9	30.9	35.4	36.8	32.1

SNR= 30dB H=35 dB M=27 dB L=18 dB

MRX21P3E2WS6 EN352-3:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	14.2	19.7	29.6	33.4	36.3	39.5	34.6
Standard Deviation (dB)	3.9	1.9	2.5	1.8	2.5	2.7	4.9
Assumed Protection (dB)	10.3	17.8	27.1	31.6	33.8	36.8	29.7

SNR= 30dB H=34 dB M=27 dB L=18 dB

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ WS™ Alert™ XP

MRX21AWS5 Headband

SNR: 29dB

Other 3M™ PELTOR™ WS™ Alert™ XP options



3M™ PELTOR™ WS™ Alert™ XP

MRX21P3EWS5 Helmet attachment
SNR: 31dB

Battery Type: 2X AA 1.2–1.5 V

Operating time: Approximately 23 hours of battery lifetime with included alkaline batteries (all functions active)

Net Weight (incl. batteries): 430 g (headband)
455 g (helmet att.)

Operating temperature: -20°C to +55°C (battery dependent)

Wired Connectivity: 3,5 mm AUX input jack (limited to 82dB(A))

3M™ PELTOR™ Accessories

HY81 Hygiene kit
FL6CE/1 Connection cables for external audio input
LR6NM Rechargeable AA batteries
FR08 Power supply
FR09 Battery charger

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ WS™ ALERT™ XPI Headset

The 3M™ PELTOR™ WS™ ALERT™ XPI Headset is the next generation protective communication solution. With Bluetooth® wireless communication, noise-cancelling boom microphone, integrated FM Radio and level-dependent function for ambient listening, the WS™ ALERT™ XPI Headset not only helps protect you against hazardous noise, but also makes it easy to make phone calls with both hands free in noisy environments.

The new 3M™ Connected Equipment App will allow you to control your settings from your mobile phone.

Features and Benefits:

- High attenuating hearing protector in two models: stand-alone headband or safety helmet attachment (SNR 30 dB)
- Control all your settings (radio station, streaming, phone calls) from your mobile phone via Bluetooth®
- Mobile application : easy headset set-up and controlling via 3M™ Connected Equipment App (IOS and Android)
- Noise cancelling boom microphone for clear speech transmission in noisy environments
- Level-dependent function for ambient listening to help improve your situational awareness (limited to 82 dB)
- Push-to-Listen feature to easily and instantaneously listen to your surroundings
- Built-in FM-Radio with radio volume limited to 82dB
- Voice guided menu system with announced FM-Radio frequencies
- Digital station search
- Ability to store up to 4 favourite stations
- Auto power off: The headset will turn off after 4 hrs of non-use to save battery



Attenuation* MRX21A3WS6



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	13.8	19.3	30.4	34.5	37.7	39.5	36.2
Standard Deviation (dB)	2.7	2.4	2.7	3.6	2.3	2.7	4.1
Assumed Protection (dB)	11.1	16.9	27.7	30.9	35.4	36.8	32.1

SNR=30dB. H=35dB. M=27dB. L=18dB

3M™ PELTOR™ accessories:

HY82	Hygiene kit	M995/2	Wind shield for speech microphone
FR08 3	Power supply with USB connector	HY100A	Clean hygiene pad
FR09	Battery charger with USB connector	HYM1000	Microphone protection
LR6NM	Rechargeable AA batteries		

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ WS™ ALERT™ XPI

MRX21A3WS6 headband

SNR: 30dB

SNR: 29dB

Other 3M™ PELTOR™ WS™ ALERT™ XPI options



3M™ PELTOR™ WS™ ALERT™ XPI

MRX21P3EWS6 helmet

attachment

SNR: 30dB

3M™ PELTOR™ WS™ ALERT™ XPI

ACK (FR09, FR08, LR6NM),

headband

SNR: 30dB

3M™ PELTOR™ WS™ ALERT™ XPI

MRX21P3EWS6-ACK, incl. ACK

(FR09, FR08, LR6NM), helmet

attachment

SNR: 30dB

Battery Type:

2x AA (Alkaline)

Operating time:

Approximately 58 hours (FM radio and level-dependent)

Approximately 78 hours (Bluetooth® streaming and level-dependent)

Net Weight (incl. batteries):

MRX21AWS6 (headband): 411 g

MRX21P3EWS6 (helmet attachment): 431 g

Bluetooth® Technology:

Bluetooth version: 4.2

Bluetooth® Range: Up to 10m (class 2)

Speakers: 27 mm diameter, 100 Ohm

Boom microphone type: Noise cancelling electret microphone

Operating temperature: -20°C (-4°F) to +55°C (131°F) (battery dependent)

Storage temperature: -20°C (-4°F) to +55°C (131°F)

Shelf life: 5 years excl. batteries

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ LiteCom

With 3M™ PELTOR™ LiteCom communicating in noisy environments has been made easy – and safe. LiteCom is a tough and rugged headset designed to cope with demanding use in many different working environments.

The built-in two-way radio has got 8 channels with 38 subchannels, and has a range of up to 3 km. It lets you talk hands-free and work safely regardless of harmful noise levels.



Features and Benefits:

- Protects your hearing (SNR: 32dB)
- Built in two-way radio
- 8 channels in the PMR 446 MHz band
- 38 subchannels
- Range of up to 3 km depending on conditions
- Voice operated transmission (VOX)
- Auto power off function
- Battery status indication
- Voice guided menu system
- Also available as neckband or helmet attachment



3M™ PELTOR™ LiteCom
MT53H7A4400-EU Headband
SNR: 32dB

Other 3M™ PELTOR™ LiteCom options



3M™ PELTOR™ LiteCom
MT53H7B4400-EU Neckband
SNR: 32dB



3M™ PELTOR™ LiteCom
MT53H7P3E4400-EU Helmet attachment
SNR: 33dB

Frequency range:	446 MHz (PMR)
Battery Type:	2X AA 1.2–1.5 V batteries or NiMH (2,4 V)
Operating time:	Approximately 20 hours of battery lifetime with included alkaline batteries
Net Weight (incl. batteries):	394g (headband) 418g (helmet att.) 384g (neckband)
Operating temperature:	-20°C to +55°C (battery dependent)

Attenuation*
MT53H7A4400-EU Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	18.1	24.3	32.1	36.2	34.7	39.2	36.0
Standard Deviation (dB)	2.4	1.7	2.2	2.6	3.6	3.3	2.4
Assumed Protection (dB)	15.6	22.6	29.9	33.6	31.1	35.9	33.6

SNR=32dB H=33dB, M=30dB, L=23dB

* For further attenuation information please visit www.3M.eu/PPEsafety

3M™ PELTOR™ Accessories
HY79 Hygiene kit
ACK053 Rechargeable battery
FR08 Power supply
FR09 Battery charger
MT53N-12 Electret microphone

3M™ PELTOR™ Communication Solutions

3M™ PELTOR™ WS™ LiteCom Plus

3M™ PELTOR™ WS™ LiteCom Plus with Bluetooth® opens up a world of communication with your built-in two-way radio headset at the hub. You become a mobile, hands-free communication center, the built-in two-way radio and wireless connections to your computer and cell phone. You can take your calls, or stream music thanks to electronics that let you switch easily between functions. The level-dependent technology lets you hear ambient sounds such as external alarm signals or approaching vehicles. It also allows face to face communication at close distance. Robust design (IP54 certified), clear controls and an intuitive menu system. This is a headset you will never want to take off.



Features and Benefits:

- Protects your hearing (SNR: 35dB)
- Built in two-way radio communication
- Connect different devices (radio, mobile phone) via Bluetooth® Mutli-Point connection
- 8 channels in the PMR 446 MHz band and 69 subchannels
- IP54 certified
- Range of up to 3 km depending on conditions
- Level dependent technology for situational awareness
- A separate audio input enables connecting equipment such as mobile phones or external two-way radios.
- Voice operated transmission (VOX)
- Auto power off function
- Voice guided menu system
- Noise cancelling waterproof microphone (IP68)

Connects with

- Bluetooth compatible devices
- Two-way radio (Via Flex cable or Bluetooth®)



Compatible with HY-80 Gel rings (option)

Attenuation*

MT73H7A4410WS6EU Headband



Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean Attenuation (dB)	17.1	25.6	34.5	34.5	36.6	36.9	37.3
Standard Deviation (dB)	2.4	1.2	3.0	2.8	2.1	3.0	3.1
Assumed Protection (dB)	14.7	24.4	31.5	31.7	34.5	36.6	35.2

SNR=33dB H=35dB. M=31dB. L=24dB

3M™ PELTOR™ WS™ LiteCom Plus
MT73H7A4410WS6EU Headband
SNR: 35dB

Other 3M™ PELTOR™ WS™ LiteCom Plus options



3M™ PELTOR™ WS™ LiteCom Plus
MT73H7B4410WS6EU Neckband
SNR: 31dB



3M™ PELTOR™ WS™ LiteCom Plus
MT73H7P3E4410WS6EU Helmet attachment
SNR: 31dB

Frequency range: PMR 446MHz or LPD 433MHz

Bluetooth® Version: 2.1+EDR

Battery Type: Rechargeable batterypack included or 2x standard AA batteries

Operating time: Approximately 18 hours

Net Weight (incl. batteries): 449g (headband)
434g (helmet att.)
434g (Neckband)

Operating temperature: -20°C to +50°C (battery dependent)

3M™ PELTOR™ Accessories

ACK081 Battery
FR08 Power supply
ACK081 Cable AL2AI
HY83 Hygiene kit
HY80 Gel Rings
HYM1000-100 Mic Tape

* For further attenuation information please visit www.3M.eu/PPEsafety

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