

# 3M™ PELTOR™ CH-3 FLX2 Headset

## Technical Data Sheet



### Description

The 3M™ PELTOR™ CH-3 FLX2 Headset will bring hearing protection and communication in noisy environments into a new level of performance with newly designed speakers and microphone. The newly designed dual mould cup give a modern and slim look together with bright yellow colour for enhanced visibility or black colour for situations when you need to be discreet and blend in with your surrounding.

### Applications

The 3M™ PELTOR™ CH-3 FLX2 Headset can enhance communication in noisy environments. Suitable for work in Pulp and Paper, Construction, Airport applications and other workplaces, where the workers need to be connected to their 2-way handheld or fixed systems throughout the day to help facilitate frequent contacts with co-workers.

### Features

- Bright yellow colour for enhanced visibility
- Black colour (SV) when you need to blend in.
- Detachable down lead connector for high flexibility
- Improved speaker efficiency to fit today's digital device
- New noise-cancelling, water resistant microphone (IP68)
- Compatible with 3M™ E-A-Rfit validation system

### Standards

These 3M™ PELTOR™ Headsets have been tested by an accredited laboratory in accordance with the requirements specified in the Australian/New Zealand Standard AS/NZS 1270:2002.

Declaration(s) of Conformity are available at [www.3M.com/Hearing/certs](http://www.3M.com/Hearing/certs)

### Configuration

#### -110 Headset Standard J11

- High Attenuation Standard J11 Headset
- Connects to an external PTT with J11 port
- Also compatible with Ground Mech FLX2-201 cable

#### -111 Headset with Built-In PTT

- In-Built PTT conveniently located on the left hand side of the cup
- -111 headset suits a wide range of different cable options to match today's most common 2-way radios and wired solutions.



CH-3 FLX2  
Headband (-110, -111)

CH-3 FLX2  
Headband SV (-110, -111)

CH-3 FLX2  
Helmet Att. (-110, -111)

CH-3 FLX2  
Helmet Att. SV (-110, -111)



Hearing protection for communicating with external two-way radio

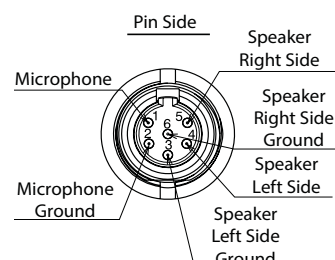


Noise cancelling boom microphone for clear speech transmission in noisy environments

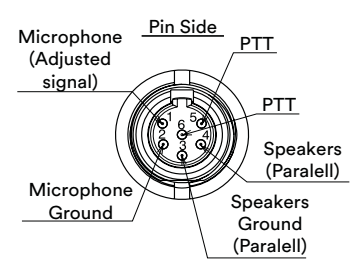


### Wiring Pin Configuration

#### -110 Headset



#### -111 Headset



## Quick Reference

	3M™ PELTOR™ CH-3 FLX2 Headsets		
	Headband MT74H52A-110 / MT74H52A-111	Neckband MT74H52B-110 / MT74H52B-111	Helmet Attach MT74H52P3E-110 / MT74H52P3E-111
<b>Attenuation Data</b>	MT74H52A-110 SV / MT74H52A-111 SV		MT74H52P3E-110 SV / MT74H52P3E-111 SV
SLC80	31dB	30dB	29dB
Class	5	5	5
Tested to	AS/NZS 1270:2002	AS/NZS 1270:2002	AS/NZS 1270:2002
<b>Physical Properties</b>			
Clamp Force	10.7 N	12 N	9.6 N
Weight (Batteries Included)	275g	256g	226g
<b>Material Listing</b>			
Cup		ABS Plastic	
Headband	PVC, PA, Stainless Steel Wire	N/A	N/A
Helmet Attachment Arm / Neckband	N/A	Stainless Steel Wire	Stainless Steel Wire
Cable		PE,TPE	
Two-Point Fastener		POM	
Cushion		PVC foil and PUR foam	
Insert (Liner)		PUR foam	
Level Dependent Microphone for Ambient Listening		N/A	
Speech Microphone		ABS,PA	
Cable Jack		Nickel Plated Brass	
<b>Specifications</b>			
Wired connectivity		Yes. FLX2 dependant on Version (-110 or -111). FLX2 Connector 6-Pin, Mini XLR	
Microphone/ Type		Noise cancelling microphone, Dynamic 150 Ohm, IP 68 (6m/30min) Sensitivity -71dB±3dB(OdB=1v/Pa 1KHz) @50CM Frequency response 200Hz~7KHz	
Speakers		46 mm diameter, 230 Ohm +/-10%, SPL 107 +/- 2dB, 100-8000 Hz, IP54	
Operating temperature		-20°C (-4°F) to 50°C (122°F)	
Storage temperature		-20°C (-4°F) to 40°C (104°F), <90% humidity	
Product lifetime		Up to 5 years (excl. batteries)	
<b>Other</b>			
Colour		Bright Yellow or Black Version (SV) Available	
Hygiene Kit		HY84	
Compatible with 3M™ Versaflo™ HeadTop	N/A		Yes (MT74V/1)
Compatible with 3M™ E-A-Rfit™ Validation System		Yes	
Helmet Attachment Backplate	N/A	N/A	On Product P3E (30mm)
<b>Use limitation: Never modify or alter this product.</b>			

## Fitting Instructions

Inspect the hearing protector before each use. If damaged, select an undamaged hearing protector or avoid the noisy environment.

When additional personal protective equipment is necessary (e.g. safety glasses, respirators, etc.), select flexible, low profile temples or straps to minimize interference with the earmuff cushion. Remove all other unnecessary articles (e.g. hair, hats, jewelry, headphones, hygiene covers, etc.) that could interfere with the seal of the earmuff cushion and reduce the protection of the earmuff.

## Headband Headset

### To fit the hearing protector:

1. Slide out the cups and tilt the top of the cup out, as the cable must be on the outside of the headband (Fig 1).
2. Pull the cups apart and place the ear muffs over the ears so that the cushions form a snug seal around the ears.
3. Adjust the height of the cups by sliding them up or down while holding the headband in place (Fig 2).
4. The headband should be positioned across the top of your head (Fig 3).



## Neckband Headset

### To fit the hearing protector:

1. Place the cups in position over the ears (Fig 1).
2. Keep the cups in position, place the head strap on top of your head and lock it tight in position (Fig 2).
3. The head strap should be positioned across the top of your head and should support the weight of the headset (Fig 3).

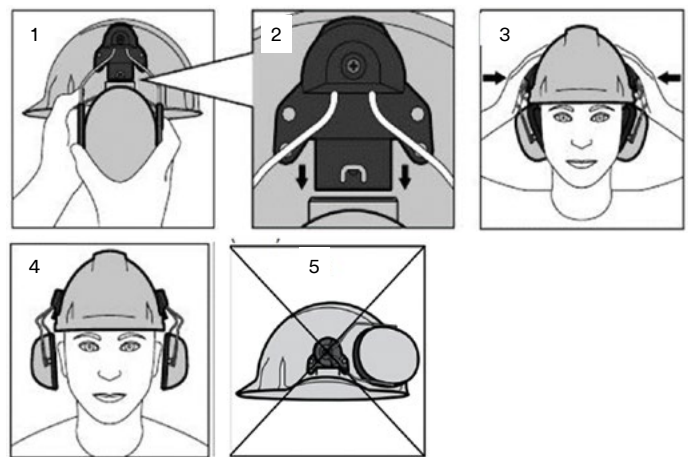
**Caution:** The neckband earmuffs must be worn with the head strap correctly attached to keep them firmly in position to maintain an effective acoustic seal. The protection level provided by neckband earmuffs may be reduced if the head straps are not worn correctly.



## Helmet Attach Headset

### To fit the hearing protector:

- **Fit the cup:** Push the attachment blade firmly into the slot on the side of the helmet until it clicks into place (Fig 1 & 2)
- **Working position:** With the cups over the ears press the arms inwards until you hear a click on both sides indicating a firm seal (Fig 3).
- **Stand-by position:** Lift the cups to the fixed stand-by position. In a noisy environment the ear muffs must be worn in the working position at all times (Fig 4).
- **Parking position:** First lift the cups to the stand-by position (Fig 4), then rotate them up to the next fixed position.
- **Ventilation mode:** Avoid placing the cups against the helmet as this prevents ventilation (Fig 5).
- **Storage mode:** When the helmet is not in use, lower the earmuffs and press them inward. Keep the cups clean and dry and store at normal room temperature.



## Fit Check

When hearing protectors are correctly worn, your voice should sound hollow and sounds around you should not sound as loud as before.

## Hearing Protector Fit Testing the 3M™ E-A-Rfit™ Dual-Ear Validation System

The success of your hearing conservation program requires more than offering earplugs or earmuffs. Each worker needs to wear the most effective hearing protector for the environment and the correct fit for their unique anatomy.

With 3M™ E-A-Rfit™ Dual-Ear Validation System, you can quickly identify how much protection each worker receives from their 3M hearing protectors.

### The Technology Behind 3M™ E-A-Rfit™

The 3M™ E-A-Rfit™ Dual-Ear Validation System is based on Field Microphone-In-Real Ear (F-MIRE) technology that measures the effectiveness of hearing protectors from inside a worker's ears, providing accurate, quantitative results.

The tester wears a pair of modified 3M™ probed hearing protectors connected to a dual-element microphone. A loudspeaker is placed in front of the tester. When it emits a broadband noise, the dual-element microphone measures the signal in the ear canal and outside the ear plug. In less than five seconds, the difference between the two measurements is calculated and a Personal Attenuation Rating (PAR) is displayed.

## It Starts with PAR

The 3M™ E-A-Rfit™ Validation System puts the worker in the context of their noise environment and helps you understand their level of attenuation.

The results you get from the 3M™ E-A-Rfit™ is displayed as a PAR. The PAR is a numerical value that shows the reduction in sound level within the ear when a hearing protector is worn. The resulting PAR, combined with the worker's exposure to noise, is used to determine if a worker is receiving appropriate protection from the noise hazard.

Knowing the PAR lets you identify workers who are inadequately protected, so you can provide real-time intervention and training.

### Key Benefits of the 3M™ E-A-Rfit™ Dual-Ear Validation System include:

- Tests both ears simultaneously in less than 5 seconds
- Science-based, quantitative testing
- Fast, clear, and accurate results
- Tests 7 frequencies 125Hz to 8000Hz
- 3M™ Earplug, earmuff and headset (comms) testing capability

Contact your 3M Personal Safety Specialist to find out more about our 3M™ E-A-Rfit™ Dual-Ear Validation System or for assistance in solving your complex or day-to-day hearing conservation challenges.

## Attenuation Data

### 3M™ PELTOR™ CH-3 FLX2 Headband Headsets MT74H52A-110 / MT74H52A-111 / MT74H52A-110 SV / MT74H52A-111 SV

AS/NZS 1270:2002

Test Frequency (HZ)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	19.7	19.8	29.0	38.0	35.0	34.2	37.4	31dB	5	10.7 N
Standard Deviation (SD) (dB)	2.9	2.7	2.7	2.7	2.8	2.3	4.1			
Means minus SD (dB)	16.8	17.1	26.3	35.3	32.2	31.9	33.3			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

### 3M™ PELTOR™ CH-3 FLX2 Neckband Headsets MT74H52B-110 / MT74H52B-111

AS/NZS 1270:2002

Test Frequency (HZ)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	18.4	18.9	27.7	35.1	36.9	34.7	37.2	30dB	5	12 N
Standard Deviation (SD) (dB)	3.6	3.3	3.4	2.9	2.7	3.6	3.3			
Means minus SD (dB)	14.8	15.6	24.3	32.2	34.2	31.1	33.9			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

### 3M™ PELTOR™ CH-3 FLX2 Helmet Attach Headset\* MT74H52P3E-110 / MT74H52P3E-111 / MT74H52P3E-110 SV / MT74H52P3E-111 SV

AS/NZS 1270:2002

Test Frequency (HZ)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	17.8	19.8	28.5	33.9	34.0	32.7	36.2	29dB	5	9.6 N
Standard Deviation (SD) (dB)	4.0	3.8	3.7	3.5	3.6	3.1	4.3			
Means minus SD (dB)	13.8	16.0	24.8	30.4	30.4	29.6	31.9			

Hearing protector Class 5 tested to AS/NZS1270. When selected, used and maintained as specified in AS/NZS1269, this protector may be used in noise up to 110dB(A) assuming an 85dB(A) criterion. A lower criterion may require a higher protection class.

\* These earmuffs were tested in combination with the HC600 industrial safety helmet using the P3E adapter and may give different levels of protection if fitted to different helmets.

## Key

**Mean** = Mean attenuation value derived from testing in accordance with AS/NZS 1270:2002.

**SD** = Standard Deviation derived from testing in accordance with AS/NZS 1270:2002.

**Mean-SD** = Mean attenuation value minus Standard Deviation

**SLC<sub>80</sub>** = Single number rating commonly used in Australia and New Zealand to compare acoustic performance of hearing protectors. The subscript '80' indicates that in well managed hearing protector programs, the protection provided is expected to equal or exceed the SLC80 in 80% of protector-wearer noise spectrum combinations.

**Class** = A simplified process for selecting hearing protectors based on the wearers 8-hour equivalent continuous A-weighted sound pressure level.

3M strongly recommends personal fit testing of hearing protectors. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations and guidance on how to adjust attenuation label value(s). In the absence of applicable regulations, it is recommended that the attenuation label value(s) be reduced to better estimate typical protection.

The effectiveness of a hearing protector reduces dramatically when the hearing protector does not fit properly, is incorrectly inserted or is not worn 100% of the time during ALL hazardous noise events. Removal of the hearing protector, even for brief moments, substantially reduces protection and greatly increases the risk of hearing damage.

## Cleaning and Maintenance

Follow recommended care and cleaning instructions in order to maintain best noise reduction and function.

### Cleaning

- Carry out a visual battery condition check. Replace if battery leakage or defects are detected.
- Use a cloth wetted with soap and warm water to clean the outer shells, headband and ear cushions.

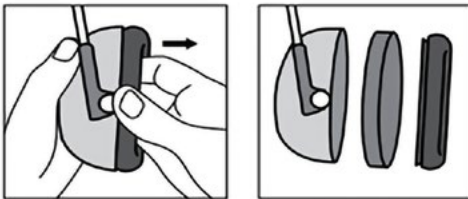
**NOTE:** Do NOT immerse the hearing protector in water.

If the hearing protector gets wet from rain or sweat, turn the earmuffs outwards, remove the ear cushions and foam liners, and allow to dry before reassembly. The ear cushions and foam liners may deteriorate with use and should be examined at regular intervals for cracking or other damage. When used regularly, 3M recommends replacing the foam liners and ear cushions at least twice a year to maintain consistent attenuation, hygiene, and comfort. In hot and humid environments more frequent changes may be required to maintain acceptable hygiene. If an ear cushion is damaged, it should be replaced.

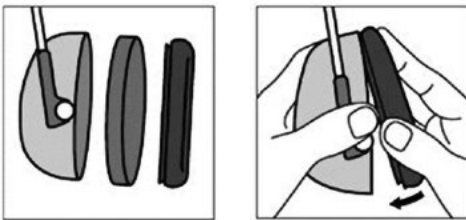
### Maintenance - Changing the Hygiene Kit

Cushions and inserts can be replaced by using the approved Hygiene Kits for your 3M™ PELTOR™ Product. See 'Ordering Information' section.

1. Remove the cushions and inserts as shown.



2. Replace the worn or damaged cushions and insert with the new pair from the approved hygiene kit.



- 3M™ PELTOR™ HY100A Clean Hygiene Pads can be applied onto the earmuff cushions to help absorb sweat and moisture for improved comfort and hygiene.

## Storage

- Store the product in a clean and dry area before and after use.
- Always store the product in the original packaging and away from any sources of direct heat or sunlight, dust and damaging chemicals.
- Storage temperature range: -20°C (-4°F) to 40°C (104°F).
- Relative humidity: <90%.
- For headband versions: make sure that no force is applied to the headband and that the cushions are not compressed.
- Helmet attachment version: ensure the earmuffs are in the storage position and that the cushions are not compressed.

## Disposal

If the product is to be disposed\*, it should be disassembled and disposed of as solid waste. Please see local authority regulations for disposal advice and locations

\*Discard the product within 5 years from date of manufacture or immediately if damaged or cannot be cleaned.

**Australia:** Customers must refer to their Local Council Municipal area for disposal of electronics at their end of life.

**New Zealand:** Customers must dispose of electronics at their end of life in their local e-waste disposal bins.

## Ordering Information

SAP ID	Legacy ID	Availability		Model #	Description
		AUS	NZ		
<b>Headsets</b>					
7100203637	UU010246302	•	•	MT74H52A-110	3M™ PELTOR™ CH-3 Headset MT74H52A-110, Headband, FLX2, 1 Each
7100203636	UU010246914	•	•	MT74H52B-110	3M™ PELTOR™ CH-3 Headset MT74H52B-110, Neckband, FLX2, 1 Each
7100203635	UU010246922	•	•	MT74H52P3E-110	3M™ PELTOR™ CH-3 Headset MT74H52P3E-110, Hard Hat Attached, FLX2, 1 Each
7100203638	UU010250932	•	•	MT74H52A-111	3M™ PELTOR™ CH-3 Headset with PTT Headband MT74H52A-111, FLX2, 1 Each
7100205729	UU010249074	•	•	MT74H52B-111	3M™ PELTOR™ CH-3 Headset with PTT Neckband MT74H52B-111, FLX2, 1 Each
7100203150	UU010247599	•	•	MT74H52P3E-111	3M™ PELTOR™ CH-3 Headset with PTT MT74H52P3E-111, Hard Hat Attached, FLX2, 1 Each
71003525909	UU012969455	•	•	MT74H52A-110 SV	3M™ PELTOR™ CH-3 FLX2 Headset, Headband, Black, 1 Each
7100325911	UU012969489	•	•	MT74H52P3E-110 SV	3M™ PELTOR™ CH-3 FLX2 Headset, Helmet Attach, Black, 1 Each
7100326362	UU012969471	•	•	MT74H52A-111 SV	3M™ PELTOR™ CH-3 FLX2 Headset with PTT Headband, MT74H52A-111 SV, SLC <sub>80</sub> 31dB (Class 5), Black, 1 Each
7100325910	UU012969463	•	•	MT74H52P3E-111 SV	3M™ PELTOR™ CH-3 FLX2 Headset with PTT, MT74H52P3E-111 SV, Helmet Mounted, SLC <sub>80</sub> 29dB (Class 5), Black, 1 Each
<b>Accessories - FLX2 Cables: -110</b>					
7100185799	UU009731140	•	•	FLX2-200	3M™ PELTOR™ FLX2 Cable J11, FLX2-200, 1 Each
7100207323	UU010325718	•	•	FLX2-201	3M™ PELTOR™ FLX2 Airline Cable FLX2-201, 1 Each
7100331595B	UU013052517	•	•	FLX2-200-02	FLX2 Cable J11 NATO, 1 Each.
<b>Accessories - FLX2 Cables: -111</b>					
7100197719	UU010126348	•		FLX2-111	3M™ PELTOR™ FLX2 Cable FLX2-111, Hytera PD7 Series, 1 Each
7100197556	UU010124293	•	•	FLX2-35	3M™ PELTOR™ FLX2 Cable FLX2-35, Icom 2-Pin Angled, 1 Each
7100197565	UU010124301	•		FLX2-44	3M™ PELTOR™ FLX2 Cable FLX2-44, Icom Multipin S8, 1 Each
7100197568	UU010126330	•	•	FLX2-64	3M™ PELTOR™ FLX2 Cable FLX2-64, Icom F34/F44, 1 Each
7100193170	UU010054110	•	•	FLX2-36	3M™ PELTOR™ FLX2 Cable FLX2-36, Kenwood 2-Pin, 1 Each
7100185797	UU009731132	•		FLX2-107	3M™ PELTOR™ FLX2 Cable Kenwood Multipin, FLX2-107, 1 Each
7100197566	UU010126314	•		FLX2-18	3M™ PELTOR™ FLX2 Cable FLX2-18, Motorola XTS Series, 1 Each
7100193228	UU009898113	•	•	FLX2-21	3M™ PELTOR™ FLX2 Cable FLX2-21, Motorola CP200/2-Pin, 1 Each
7100193227	UU009879477	•	•	FLX2-32	3M™ PELTOR™ FLX2 Cable FLX2-32, Motorola HT Series, 1 Each
7100185795	UU009731124	•	•	FLX2-63	3M™ PELTOR™ FLX2 Cable Motorola DP4000, FLX2-63, 1 Each
7100197572	UU010126322	•	•	FLX2-65	3M™ PELTOR™ FLX2 Cable FLX2-65, Motorola ex500/ex600, 1 Each
7100220865	UU010902672	•	•	FLX2-69	3M™ PELTOR™ FLX2 Cable FLX2-69, for Motorola M9 Plug, 1 Each
7100197718	UU010123584	•		FLX2-101	3M™ PELTOR™ FLX2 Cable FLX2-101, Sepura 800/900 Series, 1 Each
7100193229	UU009898071	•	•	FLX2-28	3M™ PELTOR™ FLX2 Cable FLX2-28, Mobile/DECT Phone, 1 Each

7100331614	UU013051055	•	•	FLX2-114	3M™ PELTOR™ FLX2 Cable to Motorola R7 FLX2-114, Fits -111 Headsets, 1 Each
7100329802	UU013035025	•	•	FLX2-115	3M™ PELTOR™ FLX2 Cable to Tait TP3 TP8 and TP9 Series FLX2-115, Fits -111 Headsets, 1 Each
<b>Accessories - Helmet Adaptors/Backplates</b>					
7100383325	UU010853503	•	•	Z3GS/2 (25mm)	3M™ PELTOR™ Helmet Adaptors for 3M Scott Safety Visor Z3GS/2 (25mm)
7100383334	XL001642484	•	•	Z3G/2 (25mm)	3M™ PELTOR™ Helmet Adaptors for 3M Visor Range Z3G/2 (25mm)
7000103752	XA007702625	•	•	Z3AF/2	3M™ Versaflo™ Back Plate Kit, Left and Right, Helmet Adapter for M-300
<b>Accessories - Microphone for 3M™ Versaflo™ M-300 Series Helmet</b>					
7100324955	UU012802037	•	•	MT74V/1	3M™ PELTOR™ Microphone for 3M™ Versaflo™ M-300 Series Helmet
<b>Accessories - Hygiene</b>					
7100212095	UU010391918	•	•	HY84	3M™ PELTOR™ Hygiene Kit HY84, for CH-3 FLX2 Headset, 1 Each
7100064410	XH001651351	•	•	HY100A	3M™ PELTOR™ Clean Hygiene Pads HY100A, 100 Pairs/Carton
7100064281	AT010580697 (AU) XH001651328 (NZ)	•	•	HYM1000	3M™ PELTOR™ Hygiene Tape for Microphone, HYM1000, 4.5 M, 1 Each
7100064607	XH001655360	•	•	FP9007	3M™ PELTOR™ Padded Headset Bag FP9007, Black
<b>3M™ E-A-Rfit™ Dual-Ear Validation System - Probe</b>					
7100062126	70071691110	•	•	393-3001-2	3M™ PELTOR™ X1/X2 Earmuff Probed Test Cushions B 393-3001-2, 2 ea/Kit

## In the box

- 1 x 3M™ PELTOR™ CH-3 FLX2 Headset,
- 1 x User instruction

## Important Notice

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

## Warning

These hearing protectors help reduce exposure to hazardous noise and other loud sounds. Misuse or failure to wear hearing protectors at all times that you are exposed to noise may result in hearing loss or injury. For proper use, see supervisor or User Instructions.

Always ensure the hearing protection device (HPD) is:

- Suitable for the application;
- Fitted correctly;
- Worn during all periods of exposure;
- Replaced when necessary.



**3M Australia Pty Ltd**  
**Personal Safety Division**  
 Bldg A, 1 Rivett Road  
 North Ryde NSW 2113  
 Customer Service: 1300 363 565  
 Email: 3msupport.safety.au@mmm.com  
 Web: www.3M.com/au/ppesafety

**3M New Zealand Ltd**  
**Personal Safety Division**  
 94 Apollo Drive, Rosedale  
 Auckland 0632  
 Customer Service: 0800 252 627  
 Email: 3msupport.safety.nz@mmm.com  
 Web: www.3M.com/nz/ppesafety

PSD Products are Occupational Use Only. 3M, PELTOR, E-A-Rfit and Versaflo are trademarks of 3M. All other marks are property of their respective owner. Please recycle. Printed in Australia. © 3M 2025. All rights reserved. AV011511159.