

# 3M™ PELTOR™ H31 Helmet Attach Earmuffs

## Technical Data Sheet



### Product description

3M™ PELTOR™ H31 Earmuffs feature a bevelled cup for improved compatibility and comfortable seal.

### Applications

3M™ Peltor™ H31 Earmuffs can be used in a wide range of industries requiring combination protection i.e., powered and supplied air respirator system and hearing protection. Typical examples of such applications include:

- Foundries
- Grinding

### Standards

The 3M™ PELTOR™ H31 Earmuff has been tested by an accredited laboratory in accordance with the requirements specified in the Australian/New Zealand Standard AS/NZS1270:2002.

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

### Quick Reference

H31 + 3M™ Versaflo™ M-100 Head Top	H31 + 3M™ Versaflo™ M-300 Head Top
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#### Attenuation Data

SLC <sub>80</sub>	20dB	25dB
Class	3	4
Tested to	AS/NZS1270:2022	AS/NZS1270:2022

#### Physical Properties

Clamp Force	8.6 N	8.6 N
Weight	285g	285g

#### Material Listing

Cup	ABS (plastic)
Helmet Attachment Arm	Stainless steel wire, Acetal, Polyamide
Cushions and Cushion Covers	PU Foam and PVC
Insert (Liner)	PU Foam

#### Other

Colour	Orange
Hygiene Kit	HY52
Compatible with 3M™ E-A-Rfit™ Validation System	No
Helmet Attachment Backplate	P3AF on Product

## Fitting instructions

Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s).

Performance will be reduced by anything that impairs the seal of the cushions against the wearers head e.g., thick spectacle frames, goggles, respirator straps, balaclavas, etc. If spectacles are worn, cushions must be soft and subtle to ensure seal. Select thin, flat temples or straps when wearing this product in combination with other PPE (safety glasses, goggles, or respiratory protection), to minimize interference with the seal of the earmuff cushions (i.e., acoustic seal).

Prior to fitting, inspect the product to ensure it is not damaged. Follow manufacturer's instructions.

### To fit the hearing protector:

- These helmet mounted earmuffs come with the appropriate moldings and 2 pairs of self-tapping screws to enable firm connection to the M-Series head tops. (Note: the fitting process is the same for the M-100 and M-300 head tops).
- The head top has two small indents on each side just behind the visor pivot point (circled) where the earmuffs are screw mounted (Figure 1).



Fig 1

- The earmuff molding is positioned on the head top in the orientation shown (Figure 2) - the mounting screw holes are positioned on the visor side. **(Note there is a left and right sided earmuff when connected to the P3AF adapter)**. Two screws are inserted into the holes of the mounting and tightened firmly onto the head top. Repeat for other side.



Fig 2

## Fit Check

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

## Attenuation Data

### 3M™ PELTOR™ H31P3AF\* + Versaflo™ M-100 Series Head Top

AS/NZS 1270:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	8.1	11.8	22.8	28.5	32.4	31.7	36.3	20 dB	3	8.6 N
Standard Deviation (SD) (dB)	7.3	7.9	6.8	5.5	5.9	5.5	6.1			
Mean minus SD (dB)	0.8	3.9	16.0	23.0	26.5	26.2	30.2			

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™ H31P3AF\* + Versaflo™ M-300 Series Head Top

AS/NZS 1270:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SLC <sub>80</sub>	Class	Clamp Force
Mean Attenuation (dB)	11.6	17.6	28.8	32.7	35.7	33.0	33.9	25 dB	4	8.6 N
Standard Deviation (SD) (dB)	4.7	6.7	4.4	4.7	4.1	7.7	13.8			
Mean minus SD (dB)	6.9	10.9	24.4	28.0	31.6	25.3	20.1			

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 3M™ Versaflo™ M-100 & M-300 Series Head Tops using the P3AF adapter, and may give different levels of protection if fitted to different helmets.

**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 SLC<sub>80</sub> 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.

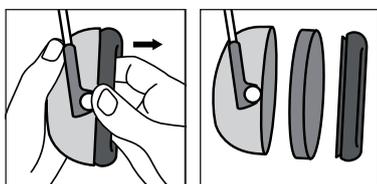
### Cleaning

1. After use, wipe outside cups and hygiene pads so they remain clean and hygienic. The product be cleaned using mild detergent and water. Do not immerse in water. Do not clean with solvents such as acetone, or with waterless hand cleaners or products containing lanolin.
2. If the earmuffs cannot be cleaned or are damaged, dispose of the product and obtain a new pair.

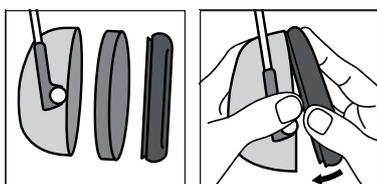
### Maintenance – Changing the Hygiene Kit

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 recommends replacing the hygiene kit every six months to maintain acceptable noise reduction, hygiene and comfort. In hot and humid environments more frequent changes may be required to maintain acceptable hygiene.
- 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.
- Operating temperature range: – 20°C (-4°F) to 50°C (122°F).
- Storage temperature range:– 20°C (-4°F) to 40°C (104°F).
- Relative humidity: <90%.

## Disposal

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

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

## Ordering Information

3M ID	Model	Description
<b>Headsets</b>		
AT010592841	H31P3AF	3M™ PELTOR™ H31™ Helmet Attached Earmuffs for M-Series Head Tops (AF adapter/backplate provided)
<b>Accessories – Helmet Adaptors/Backplates</b>		
XA007702625	Z3AF/2	Helmet Adapter for 3M™ Versaflo™ M-Series Helmets
<b>Accessories – Hygiene</b>		
7000141053	HY52	3M™ PELTOR™ HY52 Hygiene kit (cushion and foam liner)
XH001651351	HY100A	3M™ PELTOR™ HY100A Clean Hygiene Pad

### 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, User Instructions, or call 3M TechAssist Helpline 1800 024 464.

Always ensure the hearing protection device (HPD) is:

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

**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.



**3M Australia Pty Ltd**  
 Personal Safety Division  
 Bldg A, 1 Rivett Road  
 North Ryde NSW 2113

TechAssist Helpline 1800 024 464  
 Customer Service 1300 363 565  
 Email techassist@mmm.com  
 Web www.3m.com.au/ppesafety

**3M New Zealand Ltd**  
 Personal Safety Division  
 94 Apollo Drive, Rosedale  
 Auckland 0632

TechAssist Helpline 0800 364 357  
 Customer Service 0800 252 627  
 Email techassist@mmm.com  
 Web www.3m.com/nz/ppesafety

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