

3M[™] PELTOR[™] H505B Welding Helmet Earmuffs

Technical Data Sheet

Product description

The 3M™ PELTOR™ H505B Earmuff is available in a neckband version only and is designed to be used with 3M™ Speedglas™ Welding Shields. These earmuffs provide a moderate level of attenuation that meets the needs of most welding industry applications.

When correctly selected and worn these products help reduce exposure to hazardous levels of noise and loud sounds.



- Modern, stylish slim line cup design.
- Soft ear cushions provide a comfortable seal.
- Neckband design helps improve compatibility with other protective equipment.
- Soft wide cushions helps reduce pressure around the ears and improves comfort and wearability.
- Easy to replace cushions and inserts helps keep them hygienically clean.

Applications

3M™ Peltor™ H505B Welding Helmet Earmuff, although ideal for use in the welding industry, can also be used in a wide range of other industrial application to protect against hazardous noise.

Examples of typical applications include:

- Welding Industry
- Agriculture
- Automotive Construction
- Chemical & Pharmaceutical Manufacture
- Light Engineering
- Woodworking

Standards

The 3M™ PELTOR™ H505B Welding Helmet 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.



Quick Reference

	H505B							
Attenuation Data								
SLC ₈₀	22dB							
Class	4							
Tested to	AS/NZS1270:2022							
Physical Properties								
Clamp Force	10.9 N							
Weight	165g							
Material Listing								
Neckband	Stainless Steel Wire, PVC and Acetal							
Cup	ABS and TPE							
Cushion	Polyether							
Cushion Cover	PVC							
Foam Liner	Polyether							
Other								
Colour	Black							
Hygiene Kit	HY220							
Compatible with 3M™ E-A-Rfit™ Validation System	No							

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, googles, 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.

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.







j1 Fig i

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.

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Attenuation Data

3M™ PELTOR™ H505B Welding Helmet Neckband Earmuffs

AS/NZS 1270:2002

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SLC ₈₀	Class	Clamp Force
Mean Attenuation (dB)	13.0	11.8	18.8	26.0	30.6	37.5	34.6			
Standard Deviation (SD) (dB)	4.1	2.7	4.0	2.9	4.4	3.6	4.7	22 dB	4	10.9 N
Mean minus SD (dB)	8.9	9.1	14.8	23.1	26.2	33.9	29.9			

Hearing protector Class 4 tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise 100dB(A) to less than 105dB(A), assuming an 85dB(A) criterion.

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_{80} = 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_{80} 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

- 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.





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.

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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					
Headsets							
XA007703797	H505B	3M [™] PELTOR [™] H505B-596-SV 900 Welding Neckband Earmuff					
Accessories - Hygiene							
UU008049353	HY220	3M [™] PELTOR [™] HY220 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.

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