



3M™ Peltor™ Optime Range and H31P3 Helmet Mounted Ear Muffs

for use with the 3M™ Versaflo™ M-Series Headtops

Product Description

The 3M™ Peltor™ Optime range (H510P3, H520P3 and H540P3) together with the H31P3 helmet mounted version ear muffs are tested and approved for use with the 3M™ Versaflo™ M-100 and M-300 Headtops (Note: these ear muffs are not approved for use with the Versaflo™ M-400).

These ear muffs allow easy fitting and adjustment onto the 3M™ Versaflo™ rigid head tops. The H31P3 ear muffs features a bevelled cup for improved compatibility and comfortable seal.

Key Features

- Liquid and foam sealing cushions for improved comfort.
- Soft, broad cushions to give low pressure and comfort.

Applications

These helmet mounted ear muffs can be used in a wide range of industries requiring combination protection including powered and supplied air respirator system and hearing protection. Typical examples of such applications include:

- Construction
- Foundries
- Grinding
- Heavy Industry/Metal Fabrication

Standards and Approval

The helmet mounted ear muffs are tested and CE approved against EN352-3:2002. They meet the medium (M) and large (L) head size range in accordance with the standard.

Fitting

These helmet mounted ear muffs come with the appropriate mountings and 2 pairs of self tapping screws to enable firm connection to the M-Series headtops. (Note: the fitting process is the same for the M-100 and M-300 headtops).

The headtop has two small indents on each side just behind the visor pivot point (circled) where the ear muffs are screw mounted (figure 1).



Figure 1

The ear muff mounting is positioned on the headtop 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). Two screws are inserted into the holes of the mounting and tightened firmly onto the headtop. Repeat for other side.



Figure 2

Attenuation Values

3M™ Peltor™ H31P3 Ear Muffs - Helmet Mounted Version

Frequency (Hz)	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	11.8	19.2	28.6	34.3	37.7	37.8	38.0
Std deviation (dB)	3.2	3.8	2.7	1.8	3.8	2.9	1.9
Assumed Protection Value (dB)	8.6	15.4	25.9	32.5	33.9	34.9	36.1

SNR=28 dB H=35 dB M=26 dB L=16 dB

3M™ Peltor™ H510P3 Ear Muffs - Helmet Mounted Version

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	13.1	11.2	13.4	26.9	33.9	32.0	33.5	36.9
Std deviation (dB)	2.3	2.0	1.9	1.8	1.9	2.4	1.8	1.8
Assumed Protection Value (dB)	10.8	9.2	11.5	25.1	31.9	29.6	31.7	35.1

SNR=26 dB H=32 dB M=23 dB L=15 dB

3M™ Peltor™ H520P3 Ear Muffs - Helmet Mounted Version

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	15.1	14.1	19.4	32.0	39.9	36.2	35.4	39.2
Std deviation (dB)	2.1	2.3	2.7	2.7	2.4	2.6	4.4	2.6
Assumed Protection Value (dB)	13.0	11.8	16.7	29.3	37.5	33.6	31.0	36.6

SNR=30 dB H=34 dB M=28 dB L=19 dB

3M™ Peltor™ H540P3 Ear Muffs - Helmet Mounted Version

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mean attenuation (dB)	20.1	17.1	24.5	34.8	40.2	39.6	46.7	43.1
Std deviation (dB)	3.3	2.3	2.8	2.2	2.0	1.8	4.2	2.5
Assumed Protection Value (dB)	16.8	14.8	21.7	32.6	38.2	37.8	42.5	40.6

SNR=34 dB H=40 dB M=32 dB L=22 dB

Key

APVf = Assumed Protection Value

Mf = Mean attenuation value

sf = Standard deviation

H = High-frequency attenuation value (predicted noise level reduction for noise with $L_c - L_A = -2\text{dB}$)

M = Medium-frequency attenuation value (predicted noise level reduction for noise with $L_c - L_A = +2\text{dB}$)

L = Low-frequency attenuation value (predicted noise level reduction for noise with $L_c - L_A = +10\text{dB}$)

SNR = Single Number Rating (the value that is subtracted from the measured C-weighted sound pressure level, L_c in order to estimate the effective A-weighted sound pressure level inside the ear).

Accessories/Replacement

The 3M™ Peltor™ HY3 Hygiene Kits includes replacement foam inserts and cushions.

Storage Conditions

Max 55°C (do not store behind a windscreen or window).

Important Notice

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