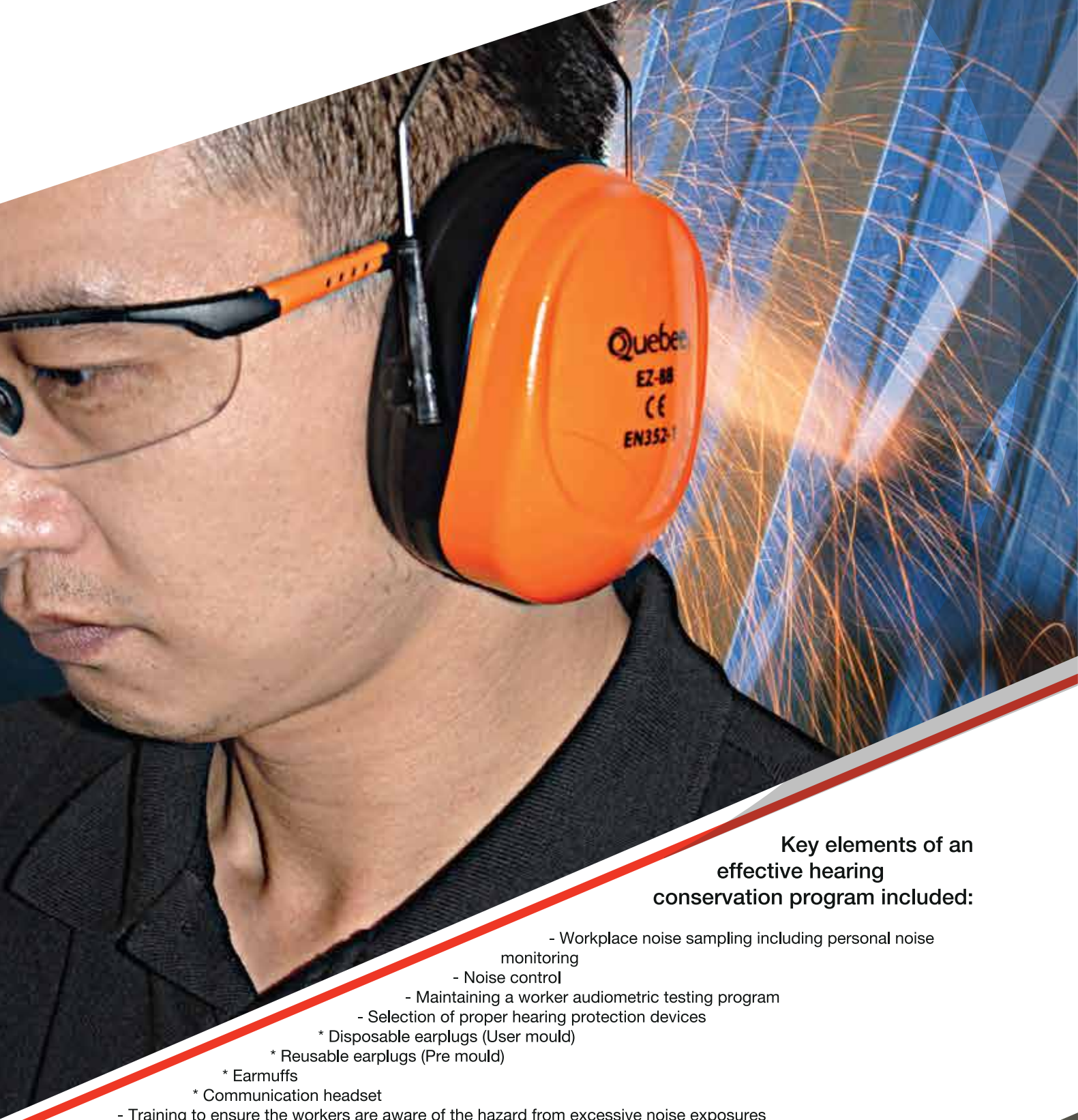


# Indication of too noisy at your workplace



It is recommended that all worker exposures to noise should be controlled below a level equivalent to 85 dB for eight hours to minimize occupational noise induced hearing loss. NIOSH recommends a 3 dB exchange rate so that every increase by 3 dB doubles the amount of the noise and halves the recommended amount exposure time.



## Key elements of an effective hearing conservation program included:

- Workplace noise sampling including personal noise monitoring
- Noise control
- Maintaining a worker audiometric testing program
- Selection of proper hearing protection devices
  - \* Disposable earplugs (User mould)
  - \* Reusable earplugs (Pre mould)
  - \* Earmuffs
  - \* Communication headset
- Training to ensure the workers are aware of the hazard from excessive noise exposures
- Data records regarding monitoring and noise sampling



**3M™ Reusable Earplugs** 3M-1290 - Braided cord / 3M-1291 - Braided cord with storage case/  
3M-1292 - Plastic cord / 3M-1293 - Plastic cord with storage case/

- 3-flange design fits securely in the ear
- Finger grip stem for easy insertion and to help keep ear plugs clean
- Elastic material does not contain silicone, so earplugs may be used in sensitive work environments, such as automotive painting
- One size fits most ear canals
- NRR 25dB



**3M™ Reusable Earplugs** 3M-1270 - Corded with polybag / 3M-1271 - Corded with carry case /  
3M-1271P - Corded with carry case

- New softer formulation provides added comfort
- New finger grip design makes insertion easier
- Multi-flanged plugs fit securely into ear canal
- Soft, elastic material conforms to a wide range of ear sizes comfortably
- No need to roll plugs down before inserting  
Ideal for dusty, dirty situations
- Can be washed and reused many times
- Soft, cloth cord lays flat (1270 & 1271 only)
- Includes storage case which keeps plugs clean and protected (1271 only)
- NRR 24dB



**3M™ E-A-R™ TaperFit™ 2 Disposable Earplugs**  
3M-312-1223 - Corded

- Soft, roll-down foam earplugs expand to fit the ear canal and provide a low pressure, comfortable seal
- Non-irritating, dermatologically safe polyurethane foam
- NRR 32dB



**3M™ E-A-R™ UltraFit™ Corded Reusable Earplugs** 3M-340-4002- In carrying case /  
3M-340-4004- In poly bag earplug

- Patented, premolded, triple-flange design inserts easily
- No rolling or sizing needed to get a comfortable, protective fit
- Hypoallergenic polymer is washable and reusable
- Carrying case keeps plugs clean and accessible for re-use
- NRR 25dB



# HEARING PROTECTION



## 3M™ E-A-Rsoft™ Disposable Yellow Neon

3M-310-1250 - Uncorded pillow pack

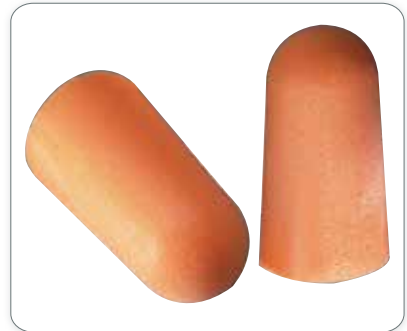
- Shaped, self-adjusting foam provides a comfortable, low pressure seal
- Non-irritating, dermatologically safe foam
- Soft foam plugs for increased wearer comfort
- NRR 33dB



## 3M™ Disposable Foam Earplugs

3M-1110 - Corded / 3M-1100 - Uncorded

- Tapered shape to fit the ear canal comfortably
- Soft foam seals the ear comfortably
- Smooth, dirt resistant surface for hygiene
- Comfortable for a wide range of ear sizes
- Hypo-allergenic material
- Bright orange color for visibility
- Can be combined with ear muffs for additional protection
- Can be used with other personal protection equipment
- NRR 29dB
- Soft cloth cord for additional convenience and to help prevent loss of earplugs (1110 only)



## 3M™ Classic™ Disposable Earplugs

3M-310-1001 - Uncorded

- Slow recovery foam allows user to wear the earplug easily
- Bright yellow color allows a quick visual compliance check
- Dermatologically safe foam in non-irritating, nonflammable, and moisture-resistant
- NRR 29dB



## 3M™ E-A-Rsoft™ SuperFit™ Disposable Earplugs

3M-312-1256 - Uncorded

- Patented "fitting ring" provides a guideline for proper insertion and quick visual compliance check
- Smooth, tapered shape provides a comfortable fit
- Non-irritating, dermatologically safe foam
- NRR 33dB



## 3M™ E-A-Rsoft™ Disposable Yellow Neon Blasts

3M-311-1252 - Corded / 3M-312-1252 - Uncorded

- Shaped, self-adjusting foam provides a comfortable, low-pressure seal
- Non-irritating, dermatologically safe foam
- Soft foam plugs for increased wearer comfort
- NRR 33dB







## 3M™ One Touch™ Pro Earplug Dispenser 3M-391-0000

- Accurately dispenses one earplug at a time
- Dispenses earplug directly into hand
- Durable ABS plastic for tough environments
- Free-standing or wall-mounted
- Shields earplugs from wind and rain
- Mounting holes designed to fit a variety of competitive dispensers
- Earplugs sold separately



## 3M™ E-A-R™ Classic™ SuperFit™ 30 One Touch™ Refill Hearing Conservation

3M-391-1002

- Patented “Fitting ring” provides a guideline for proper insertion and a quick visual compliance check. Packaged in convenient refill bottles to fit your one touch dispenser (#391-1000)
- Conforms to the shape of the ear canal to help create a comfortable, snug noise barrier
- Slow-recovery earplug foam is flame-resistant and moisture resistant
- NRR 30dB



## 3M™ E-A-Rsoft™ Yellow Neons™ One Touch™ Refill Uncorded Earplugs, Hearing Conservation

3M-391-1004

- Refill container for One Touch™ dispenser. One gentle turn delivers uncorded foam earplugs
- No packaging waste with each pair
- NRR 33dB



## 3M™ E-A-Rsoft™ SuperFit™ One Touch™ Refill Hearing Conservation

3M-391-1254

- The soft, pliable foam on this uncorded foam earplug features an orange fitting ring that provides a guideline for proper fitting
- Earplugs are easy to roll down and insert, then expand within the ear canal for a comfortable, secure fit
- Refill container for One Touch™ dispenser. One gentle turn delivers uncorded foam earplugs
- Regular size fits most ear canals
- NRR 33 dB



\*\*The NRR may overestimate the hearing protection provided during typical use. 3M recommends reducing the NRR by 50% for estimating the amount of noise reduction provided.



## audioff

### Earmuff

Quebee Audioff earmuff is made from sound-attenuating material and soft ear cushion that provide a soft and firm fitting. The ABS hard outer cups are filled with foam and soft cushions around the rims that seal to the wearers head around the ear. The cups are connected and held together by a stainless steel spring band. Design comes with standard headband, foldable headband and helmet attachment.

#### QB Audioff Foldable Earmuff QB-HY-EZ-8A

- Foldable earmuff with soft foam-filled cushions
- Lightweight ear cups
- Provides a good seal for protection against harmful noises
- Comply to CE EN352-1
- SNR 25dB
- H=30dB, M=22dB, L=15dB



#### QB Audioff Headband Earmuff QB-HY-EZ-8B

- Headband earmuff with soft foam-filled cushions
- Lightweight ear cups
- Provides a good seal for protection against harmful noises
- Comply to CE EN352-1
- SNR 28dB
- H=31dB, M=26dB, L=18dB



#### QB Audioff Helmet Attachable Earmuff QB-HY-EZ-8C

- Helmet attachable earmuff with soft foam-filled cushions
- Lightweight ear cups
- Provides a good seal for protection against harmful noises
- Comply to CE EN352-3
- SNR 31dB
- H=36dB, M=28dB, L=21dB





## 3M™ Peltor™ Optime™ 95 Over-the-Head Earmuffs

3M-H6A/V

- Stainless steel construction resist bending and warping
- Ear cup pivot points tilt for optimum comfort and efficiency
- Lightweight with liquid/foam filled earmuff cushions
- NRR 21dB



## 3M™ Peltor™ Optime™ 95 Behind-the-Head Earmuffs

3M-H6B/V

- Multi- position designs, available in headband, neckband, helmet-attachable and folding models
- Stainless steel construction resist bending and warping
- Ear cup pivot points tilt for optimum comfort and efficiency
- Ultra light with liquid/foam filled earmuff cushions
- NRR 21dB



## 3M™ Peltor™ Optime™ 95 Over-the-Head Folding Earmuffs

3M-H6F/V

- Folding-cups fold up into the headband for compact storage
- Stainless steel construction resists bending and warping
- Ear cup pivot points tilt for optimum comfort and efficiency
- Ultra light with liquid / foam filled earmuff cushions
- NRR 21dB



## 3M™ Peltor™ Optime™ 95 Cap-Mount Earmuffs

33M-H6P3E/V

- Universal mounting attachment fits most hard hats
- Stainless steel construction resist bending and warping
- Ear cup pivot points tilt for optimum comfort and efficiency
- Ultra light with liquid / foam filled earmuff cushions
- NRR 21dB





## 3M™ Peltor™ Optime™ 101 Over-the-Head Earmuffs

3M-H7A

- For TWA noise exposure up to 101 dBA
- Stainless steel headband distributes weight for low-pressure fit
- Ear cup pivot points that tilt for optimum comfort and efficiency
- Liquid / foam filled earmuff cushions
- NRR 27dB



## 3M™ Peltor™ Optime™ 101 Behind-the-Head Earmuffs

3M-H7B

- Neckband style
- Excellent Attenuation at low and high frequencies
- Enables safe working environment for longer periods of time, up to 101dBA
- Two low mounting points provide great comfort
- #1 Selling earmuff in the world
- NRR 26dB



## 3M™ Peltor™ Optime™ 101 Over-the-Head Folding Earmuffs

3M-H7F

- Foldable
- Excellent attenuation at low and high frequencies
- Two low mounting points provide great comfort
- NRR 26dB



## 3M™ Peltor™ Optime™ 101 Cap-Mount Earmuffs

3M-H7P3E

- Helmet attachment
- Cap-mounted design allows for easy use with most hard hats
- Liquid / foam filled ear cushions
- NRR 24dB





## 3M™ Peltor™ PTL™ Earmuffs Headband Headset

3M-H7A-PTL

- Offers attenuation with the push of the button
- Allows for long term use under exacting conditions
- Ear cup button for listening mode
- Listen-through capability with the pass-through sound limited to 87dB
- Auto-switches to full protection after 30 seconds or when button is pressed again
- Ear cups with liquid and foam-filled comfort cushions for long wear and optimum seal
- NRR 26dB



## 3M™ Peltor™ PTL™ Earmuff, Hard Hat Mount Headset

3M-H7P3E-PTL

- Ear cup button for listening mode
- Listen-through capability with the pass-through sound limited to 87dB
- Auto-switches to full protection after 30 seconds or when button is pressed again
- Ear cups with liquid and foam filled comfort cushions for long wear and optimum seal
- Possible industries include: heavy equipment operators, airports, manufacturing, construction, agricultural, racing, oil rigs, petroleum refineries
- NRR 25dB



## 3M™ Peltor™ Optime™ 98 Over the Head Earmuffs

3M-H9A

- For TWA noise exposure up to 98 dBA
- Stainless steel headband distributes weight for low pressure fit
- Ear cup pivot points tilt for comfort that adjust to individual wearers
- Ultra light with liquid / foam earmuff cushions
- NRR 26dB



## 3M™ Peltor™ Optime™ 98 Cap-Mount Earmuffs

3M-H9P3E

- For TWA noise exposure up to 98 dBA
- Universal mounting attachment fits most hard hats
- Ear cup pivot points tilt for optimum comfort and efficiency
- Ultra light with liquid / foam filled earmuff cushions
- NRR 23dB



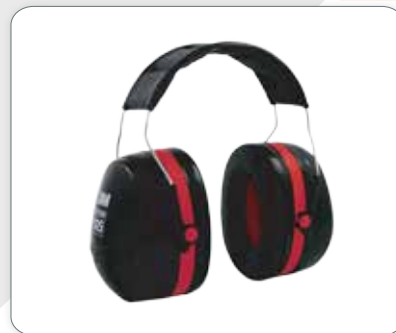


# HEARING PROTECTION



## 3M™ Peltor™ Optime™ 105 Over-the-Head Earmuff 3M-H10A

- Effective hearing protection for noise exposures up to 105 dBA
- Double-shell technology boosts its noise blocking ability
- Durable stainless steel headband resists bending and warping
- Liquid / foam filled earmuff cushions
- NRR 30dB



## 3M™ Peltor™ Optime™ 105 Behind-the-Head Earmuffs 3M-H10B

- Patented Twin-Cup™ design has soft, foam-filled earmuffs cushions
- Behind the head design allows for easy use with hard hats
- Liquid / foam filled earmuff cushions
- NRR 29dB



## 3M™ Peltor™ Optime™ 105 Cap-Mount Earmuffs 3M-H10P3E

- For noise levels up to 105 dBA
- Proprietary Twin-Cup™ design has soft, foam-filled earmuff
- Ear cup pivot points that tilt for optimum comfort and efficiency
- Easy cap-mount design
- Liquid / foam filled earmuffs cushions
- NRR 27dB



## Accessories

### 3M™ Peltor™ Earmuff Replacement Hygiene

3M-HY3, 3M-HY7, 3M-HY10

- Extend the life of earmuffs with 1 pair of replacement cushions and 1 pair of dampers
- Hygiene kit for H6, H7, H9 & H10 series



# 3M™ PELTOR's highest

## levels of Comfort, Durability and Protection

### DESIGN

- » Protected wire head band - building on the success design of the current 3M™ Peltor™ Optime range
- » Light-weight dual mould cups with maximum space inside to help minimise heat and moisture build-up
- » Integrated design for more robustness
- » Colour coded for ease of selection
- » Electrical insulated headband
- » Easy to clean

### COMFORT

- » Easy to adjust the headband
- » Wire headband with constant pressure over prolonged wearing periods
- » Twin headband design helps reduce heat build-up, provides good fit and balance



### PROTECTION

- » Streamlined cups without compromising attenuation
- » Compatible with a range of 3M eyewear and respirators (validated by internal testing)
- » New smart sealing ring



# HEARING PROTECTION



Standard attenuation, slim design

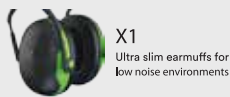
## 3M™ Peltor™ X1 earmuffs

**NRR 22 dB**

- » Electrically insulated (dielectric) wire headband on model X1A
- » Earcups tilt for optimum comfort and efficiency
- » Twin headband design helps reduce heat buildup with good fit and balance

- » Wire headband offers comfortable pressure during prolonged usage
- » Lightweight, low-profile earmuffs for improved compatibility with other personal protective equipment (PPE)

### Earcup Options

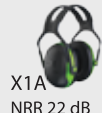


**X1**  
Ultra slim earmuffs for low noise environments

### Electrically Insulated

A Models

PSE Models



**X1A**  
NRR 22 dB



**X1P5E**  
NRR 21 dB



**X1P3E**  
NRR 21 dB

### Hard Hat-Attached

P3E Models



### Performance (Octave Band Attenuation Data - ANSI S3.19-1974)

Headband Models

Band Position: Over-the-Head

Model	Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
X1A	Mean Attenuation (dB)	16.0	18.3	27.7	37.6	35.1	42.2	41.4	39.4	39.3	22 dB	A
	Standard Deviation (dB)	5.2	3.1	3.0	3.5	2.8	2.8	2.6	2.6	3.8		

## 3M™ Peltor™ X2 earmuffs

Medium attenuation, slim design

**NRR 24dB**

- » Electrically insulated (dielectric) wire headband on model X2A
- » Earcups tilt for optimum comfort and efficiency
- » Twin headband design helps reduce heat buildup with good fit and balance

- » Wire headband offers comfortable pressure during prolonged usage
- » Lightweight, low-profile earmuffs are ideal for a variety of noisy applications

### Earcup Options

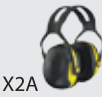


**X2**  
Lightweight earmuffs for low - moderate noise environments

### Electrically Insulated

A Models

PSE Models



**X2A**  
NRR 24 dB



**X2P5E**  
NRR 24 dB



**X2P3E**  
NRR 24 dB

### Hard Hat-Attached

P3E Models



### Performance (Octave Band Attenuation Data - ANSI S3.19-1974)

Headband Models

Band Position: Over-the-Head

Model	Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
X2A	Mean Attenuation (dB)	14.9	21.6	31.8	41.0	36.7	39.1	38.5	39.0	39.0	24 dB	A
	Standard Deviation (dB)	4.2	3.3	2.3	2.5	3.0	2.4	2.0	2.8	3.4		



## 3M™ Peltor™ X3 earmuffs

High attenuation, low weight

**NRR 28 dB**

- » Electrically insulated (dielectric) wire headband on model X3A
- » Earcups tilt for optimum comfort and efficiency
- » Twin headband design helps reduce heat buildup with good fit and balance
- » Wire headband offers comfortable pressure during prolonged usage
- » Lightweight earmuffs designed for moderate to high noise exposure applications
- » Newly-designed spacer improves attenuation without a double cup design excess bulk or weight

### Earcup Options



**X3**  
High protection earmuffs  
for moderate - high  
noise environments

### Electrically Insulated

A Models

P3E Models



**X3A**  
NRR 28 dB



**X3P3E**  
NRR 25 dB

### Hard Hat-Attached

P3E Models



**X3P3E**  
NRR 25 dB



### Performance (Octave Band Attenuation Data - ANSI S3.19-1974)

Headband Models

Band Position: Over-the-Head

Model	Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
X3A	Mean Attenuation (dB)	23.4	27.7	29.4	42.5	38.8	39.3	42.3	39.5	39.5	28 dB	AL
	Standard Deviation (dB)	3.0	2.1	3.1	2.6	2.7	4.0	3.3	2.6	2.8		

Extremely slim, high performance

## 3M™ Peltor™ X4 earmuffs

**NRR 27 dB**

- » Electrically insulated (dielectric) wire headband on model X4A
- » Earcups tilt for optimum comfort and efficiency
- » Twin headband design helps reduce heat buildup with good fit and balance
- » Wire headband offers comfortable pressure during prolonged usage
- » Lightweight earmuff recommended for moderate to high-noise exposure applications
- » Low-profile cup design for improved compatibility with other personal protective equipment (PPE)
- » Newly-designed spacer improves attenuation without excess bulk or weight

### Earcup Options



**X4**  
High protection earmuffs  
for moderate - high  
noise environments

### Electrically Insulated

A Models

P3E Models



**X4A**  
NRR 27 dB



**X4P3E**  
NRR 25 dB

### Hard Hat-Attached

P3E Models



**X4P3E**  
NRR 25 dB



### Performance (Octave Band Attenuation Data - ANSI S3.19-1974)

Headband Models

Band Position: Over-the-Head

Model	Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
X4A	Mean Attenuation (dB)	20.5	24.1	32.8	40.7	37.6	44.5	45.4	42.4	42.3	27 dB	AL
	Standard Deviation (dB)	4.6	3.4	1.9	2.8	2.9	3.1	2.5	3.1	3.0		





Unparalleled attenuation without the need for double protection involving ear muffs and ear plugs.

3M™ Peltor™  
X5 earmuffs


NRR 31 dB

- » Electrically insulated (dielectric) wire headband on model X5A
- » Earcups tilt for optimum comfort and efficiency
- » Twin headband design helps reduce heat buildup with good fit and balance
- » Wire headband offers comfortable pressure during prolonged usage
- » Very high attenuation earmuffs recommended for high-noise exposure applications
- » Despite larger earcups, product is lightweight with excellent balance and comfort
- » Newly-designed spacer improves attenuation without excess bulk or weight
- » NRR 31 dB — highest of any earmuff on the market


Earcup Options

Electrically Insulated  
A Models      PSE Models


Hard Hat-Attached  
P3E Models




X5  
High protection earmuffs  
for high noise environments




X5A  
NRR 31 dB



X5P5E  
NRR 31 dB



X5P3E  
NRR 31 dB



Performance (Octave Band Attenuation Data - ANSI S3.19-1974)

Headband Models		Band Position: Over-the-Head										NRR	CSA Class
Model	Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000			
X5A	Mean Attenuation (dB)	23.9	30.5	41.1	43.0	38.0	43.1	44.0	41.1	40.3		31 dB	AL
	Standard Deviation (dB)	4.1	2.2	2.8	2.9	2.7	2.9	2.4	2.6	2.2			

3M™ PELTOR's highest  
levels of Comfort, Durability  
and Protection

3M™ Peltor™ X Series – A new Standard DESIGN, COMFORT and ATTENUATION TECHNIQUES. 3M developed the new 3M™ Peltor™ X Series ear muffs based on these three pillars. In the addition to simplicity of use and ease of identification the new range ear muffs are now the new reference point in terms of over-the-ear protection.



3M™ Peltor™ Optime: A market reference  
3M™ PELTOR's highest levels of Comfort, Durability and Protection

3M Hearing Protection Solutions made innovately easy