

HEARING PROTECTION

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Noise induced hearing loss is a permanent hearing impairment resulting from prolonged exposure to high levels of noise. It is important to practice hearing conservation by using hearing protection to prevent noise induced hearing loss. Hearing protection includes earplugs and earmuffs that are designed to reduce the intensity or loudness of sound.

Earmuffs

Simply a traditional method of "hearing" protection. Today's range of earmuffs cope with a very wide spectrum of industrial hazards. It is important to study the attenuation characteristics of each model as they do vary in performance across the range of sound frequency.

Helmet Mounted Earmuffs

These all-in-one head & hearing protections are popular among safety officers. Today's models are styled to be sensibly "parked" when not in use.

Earplugs

Can be worn conveniently with all other PPE equipments. Easy to use and attenuation provided often exceed that of an earmuff. Both disposal & reusable earplug provide excellent protection with long term comfort.

SNR (Single Number Rating)

SNR is a single-number rating which is calculated in accordance with ISO 4846 2.2 (1992). "Estimation of effective A-weighted Sound Pressure Levels when Hearing Protectors are worn". Normally used by European Standard.

NRR (Noise Reduction Rating)

NRR is required by US law to be shown on the label of each hearing protection sold in United States.

Difference between SNR and NRR

The main difference is the SNR being calculated using a single standard deviation while NRR formula deducts two standard deviation.

Standards

Earmuffs and earplugs are tested to the relevant European Standard, American Standard, & JKKP.

- ▶ EN352-1 Earmuffs
- ▶ EN352-2 Earplugs
- ▶ EN352-3 Helmet Mounted Earmuff
- ▶ ANSI S3.19 Measurement of Real-Ear Hearing Protector Attenuation and Physical Attenuation of Earmuffs.
- ▶ Most hearing specialists agree: You can damage your hearing if you're continually exposed to noise greater than 85 decibels over eight hours. As noise levels rise above 85 decibels, the safe exposure time for unprotected ears falls dramatically. For example, 110 decibels noise can impair hearing after just 15 minutes of exposure.

PROGUARD[®]
Your Ultimate Partner In Safety[®]



Helmet Mounted Earmuff



EN 352-3

SNR: 27dB

*Helmet Excluded



PC06SE



BGVH/SI-1/PC06SE



BGVH/SI-2/PC06SE



BGVH/SI-1 S5/PC06SE

Helmet Mounted Earmuff

Model:

PC06SE

BGVH/SI-1/PC06SE

BGVH/SI-2/PC06SE

BGVH/SI-1 S5/PC06SE

- Lightweight, comfortable helmet mounted earmuff that delivers a high attenuation level performance to address the most difficult noise situation.
- These mounted earmuffs can be used with a wide range of Proguard industrial safety helmet.
- Earmuff cups should snap in place during use & swing back when not in use.
- PC06SE can be perfectly fitted with Safety Helmet, Helmet Visor Carrier BGVH with series FC 48 or Series SV-1 visors to provide complete head, face, and hearing protection.
- SNR : 27dB.
- Comply with EN352-3.

Packaging: 1pr/box 24prs/carton

Attenuation Data Helmet Mounted Earmuff

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	14.22	19.53	26.88	33.44	31.25	34.84	36.72	
Standard Deviation, Sf	3.73	4.10	2.50	3.01	3.76	3.59	4.05	27dB
Assumed Protection (dB)	10.49	15.43	24.38	30.43	27.49	31.25	32.67	



Vito & Eco Series



EN 352-1

SNR: 27dB



A-606-Y



A-606-R



A-606-B

Vito Earmuff

Model:

A-606-Y

A-606-R

A-606-B

- This lightweight earmuff with soft foam-filled cushions provides a good seal for protection against harmful noise & sound.
- Adjustable contoured headband with soft pads provides comfortable fit and all round protection for both short & long spell exposure.
- Features cushion on headband and extra cushion on earmuff for increased user comfort.
- Pivoting cup attachment for equal pressure distribution
- Can be worn in three positions.
- SNR: 27dB.
- Comply with EN352-1.

Packaging: 1pr/polybag

20prs/carton

Attenuation Data Vito Earmuff

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	11.7	17.0	25.8	33.5	34.5	43.9	40.5	
Standard Deviation, Sf	2.4	1.4	2.4	4.6	3.6	4.6	3.2	27dB
Assumed Protection (dB)	9.3	15.6	23.4	28.9	30.9	39.3	37.3	



EN 352-1

SNR: 22dB



A-609-B



A-609-BLK



A-609-R



A-609-HV-Y

Eco Earmuff

Model:

A-609-B

A-609-BLK

A-609-R

A-609-HV-Y

- This extremely lightweight earmuff with soft foam-filled cushions provides quality noise reduction at an affordable price.
- Adjustable contoured headband with soft pads provides comfortable fit and all round protection for both short & long spell exposure.
- Pivoting cup attachment for equal pressure distribution.
- Can be worn in three positions.
- SNR: 22dB.
- Comply with EN352-1.

Packaging: 1pr/box

20prs/carton

Attenuation Data Eco Earmuff

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	9.3	14.1	19.4	23.4	29.0	40.4	41.2	
Standard Deviation, Sf	3.5	3.0	2.4	3.4	3.0	3.2	3.4	22dB
Assumed Protection (dB)	5.8	11.1	17.0	20.0	26.0	37.2	37.8	



Infinity Earmuff & Millennium Earmuff

CE EN 352-1

SNR: 29dB



PC-03EM

Infinity Earmuff

Model:
PC-03EM

- Light, padded headband with soft pad allows easy adjustments, providing long wearing comfortable fit for most head sizes, even when wearing safety eyewear.
- Rugged construction provides durability in wide range of environments.
- Can be worn in three positions.
- SNR: 29dB.
- Comply with EN352-1.

Packaging: 1pr/polybag

20prs/carton

Attenuation Data PC-03EM

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	12.7	22.3	28.6	34.2	32.5	35.5	38.6	
Standard Deviation, Sf	3.2	3.0	3.1	3.4	3.2	2.4	3.7	29dB
Assumed Protection (dB)	9.5	19.3	25.5	30.8	29.3	33.1	34.9	

CE EN 352-1

SNR: 30dB



EM-918-B

Millennium Earmuff

Model:
EM-918-B

- High rating for superior comfort & secure fit with high attenuation making it extremely functional, ensuring protection at both high and low frequencies.
- Soft foam - filled cushions provide excellent protection against harmful noise & sound.
- Can be worn in three positions.
- SNR : 30db
- Comply with EN352-1.

Packaging: 1pr/polybag

20prs/carton

Attenuation Data EM-918-B

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	13.59	20.00	27.97	34.84	32.97	35.00	36.09	
Standard Deviation, Sf	2.58	3.03	3.32	2.95	4.10	2.42	3.76	30dB
Assumed Protection (dB)	11.01	16.97	24.65	31.89	28.87	32.58	32.33	

Foldable Earmuff

CE EN 352-1

SNR: 28dB



PC05FEM

Ultra Foldable Earmuff

Model:
PC05FEM

- Provide optimum comfort with excellent protection, excellent seal properties, good fit, & low surface pressure.
- Ideally designed for intermittent noise.
- Convenient storing due to compact size and folding capabilities.
- SNR: 28dB.
- Comply with EN352-1

Packaging: 1pr/box

20prs/carton

Attenuation Data PC05FEM

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	13.59	20.00	27.97	34.84	32.97	35.00	36.09	
Standard Deviation, Sf	2.58	3.03	3.32	2.95	4.10	2.42	3.76	28dB
Assumed Protection (dB)	11.02	16.97	24.65	31.89	28.86	32.58	32.33	

CE EN 352-1

SNR: 30dB



PC08FEM

Squaro Foldable Earmuff

Model:
PC08FEM

- Provide optimum comfort with excellent protection, excellent seal properties, good fit, & low surface pressure.
- Padded headband allows easy adjustment to fit most head sizes comfortably.
- Ideally designed for intermittent noise.
- Convenient storing due to compact size and folding capabilities.
- SNR: 30dB.
- Comply with EN352-1.

Packaging: 1pr/box

20prs/carton

Attenuation Data PC08FEM

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	17.3	18.7	29.3	37.7	38.0	38.3	38.6	
Standard Deviation, Sf	2.1	2.3	3.1	3.2	2.5	2.5	2.7	30dB
Assumed Protection (dB)	15.3	16.4	26.2	34.5	35.5	35.8	35.9	

Supersonic Series

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PC07H

CE EN 352-1 SNR: 28dB



PC09H

CE EN 352-1 SNR: 30dB

CE EN 352-3 SNR: 26dB



PC07SE

CE EN 352-3 SNR: 29dB



PC09SE

Supersonic I Earmuff

Model:
PC07H
PC07SE

- High performance earmuff with good noise reduction rating.
- Soft padded headband with low force.
- Helmet mounted earmuff fit to all Proguard industrial safety helmets.
- Provide full spectrum attenuation, as well as superb low frequency attenuation.
- Extra wide ear cushions for best comfort.
- Laboratory tested SNR: 28dB/26dB.

Packaging: 1pr/box 20prs/carton

Supersonic II Earmuff

Model:
PC09H
PC09SE

- High performance earmuff with good noise reduction rating.
- Helmet mounted earmuffs fit to all Proguard industrial safety helmets.
- Soft padded headband with low force.
- Provide full spectrum attenuation, as well as superb low frequency attenuation.
- Fork style headband for even distribution of the pressure, and improved balance required for extra deep ear cups.
- Extra wide ear cushions for best comfort.
- Laboratory tested SNR: 30dB/29dB

Packaging: 1pr/box 20prs/carton

Attenuation Data PC07H

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	15.6	18.6	27.5	36.0	34.3	28.4	31.8	28dB
Standard Deviation, Sf	3.6	2.1	3.2	3.2	2.9	1.9	3.8	
Assumed Protection (dB)	12.0	16.5	24.3	32.7	31.4	26.5	28.0	

Attenuation Data PC09H

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	20.3	24.1	29.5	36.3	31.1	35.6	37.7	30dB
Standard Deviation, Sf	2.9	4.0	4.0	4.4	3.9	4.0	4.7	
Assumed Protection (dB)	17.4	20.1	25.5	31.9	27.2	31.6	33.0	

Attenuation Data PC07SE

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	15.9	18.1	26.2	35.4	31.7	28.1	30.1	26dB
Standard Deviation, Sf	4.5	3.4	3.7	3.9	2.6	2.9	3.8	
Assumed Protection (dB)	11.4	14.8	22.5	31.5	29.2	25.1	26.2	

Attenuation Data PC09SE

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	23.6	22.2	29.2	34.4	31.1	36.6	38.9	29dB
Standard Deviation, Sf	2.6	2.7	3.6	6.1	4.1	3.8	4.6	
Assumed Protection (dB)	21.0	19.5	25.6	28.3	27.0	32.8	34.3	



PC10H



EN 352-1 SNR: 33dB

Supersonic III Earmuff

Model:
PC10H
PC10SE

- Helmet mounted earmuffs fit to all Proguard industrial safety helmets.
- Eliminates need for separate moulded earmuff that might be uncomfortable to be wear inside the safety helmet.
- Provides maximum high and low frequency attenuation.
- Extra wide ear cushions for highest comfort.
- Laboratory tested SNR: 33dB / 31dB.

Packaging: 1pr/box 20prs/carton



PC10SE



EN 352-3 SNR: 31dB

Attenuation Data PC10H

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	21.4	24.4	35.0	37.9	34.4	37.4	39.2	
Standard Deviation, Sf	3.4	2.4	3.6	4.3	3.3	2.6	4.0	33dB
Assumed Protection (dB)	18.0	22.0	31.4	33.6	31.1	34.8	35.2	

Attenuation Data PC10SE

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	21.3	22.1	30.2	34.9	33.2	36.0	36.2	
Standard Deviation, Sf	4.1	3.0	3.4	3.5	2.9	2.5	2.1	31dB
Assumed Protection (dB)	17.2	19.1	26.8	31.3	30.3	33.5	34.1	

Reusable Earplugs



EN 352-2 SNR: 25dB

Reusable Earplugs

Model:
EP-1366
EP-1363

- Excellent protection, convenience and ease of use with great value of reusability.
- Featuring the most comfortable and highest noise reduction rating earplug.
- These reusable earplug are generally affordable, can be sterilized, and easily cleaned with mild soap and water for months of use.
- Made of soft silicone material.
- Each pair comes with a cord and is supplied with a storage case or a polybag.
- SNR: 25dB.
- Comply with EN352-2.

EP-1363: 100prs/box 12boxes/carton
EP-1366: 200prs/box 12boxes/carton



EP-1366



EP-1363

Attenuation Data EP1366 & EP1363

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	26.88	25.47	27.19	27.34	28.91	33.59	36.88	
Standard Deviation, Sf	5.88	5.64	6.45	4.52	5.55	7.69	6.42	25dB
Assumed Protection (dB)	20.99	19.83	20.74	22.83	23.36	25.90	30.45	



EN 352-2 SNR: 21dB

Reusable Earplugs

Model:

Conie-1

Conie-3

Conie-1-OR

Conie-3-OR

- These special shape earplugs make insertion quick and easy for custom fit & superb comfort.
- Economical, reusable and non-allergenic for user comfort and convenience.
- Can be sterilized and easily cleaned with mild soap and water for months of use.
- Made of soft silicone material.
- Each pair comes with a cord and is supplied with a storage case or a polybag.
- SNR: 21dB.
- Comply with EN352-2.

Conie - 1: 100prs/box 12box/carton

Conie - 1-OR: 100prs/box 12box/carton

Conie - 3: 200prs/box 12box/carton

Conie - 3-OR: 200prs/box 12box/carton



Conie-1



Conie-1-OR

Attenuation Data CONIE 1, 1 OR, 3, & 3 OR

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	27.5	25.8	25.0	25.0	31.5	40.6	43.9	21dB
Standard Deviation, Sf	4.0	4.1	3.7	3.7	4.1	3.8	4.6	
Assumed Protection (dB)	23.5	21.7	21.3	21.3	27.4	36.8	39.3	



Conie-3



Conie-3-OR





Conie-6



Conie-8



EN 352-2

SNR: 23dB

Reusable Earplugs

Model:
Conie-6
Conie-8

- Good protection, convenience, and ease of use with great value of reusability.
- Featuring the most comfortable and highest noise reduction rating earplug.
- These reusable earplugs are generally affordable, can be sterilized, and easily cleaned with mild soap and water for months of use.
- Made of soft silicone material.
- Each pair comes with a cord and is supplied with a storage case or a polybag.
- Comply with EN352-2
- SNR: 23dB.

Conie 6: 100prs/box

12boxes/carton

Conie 8: 200prs/box

12boxes/carton

Attenuation Data CONIE 6 & 8

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	23.5	21.1	21.3	24.1	31.6	32.6	32.3	
Standard Deviation, Sf	5.8	5.1	5.4	4.4	4.8	4.1	6.5	23dB
Assumed Protection (dB)	17.7	16.0	15.9	19.7	26.8	28.6	25.8	



3M-1270



3M-1271

3M Reusable Earplugs

Model:
3M-1270
3M-1271

- These washable and reusable earplugs have triple flanged design to securely fit the ear canal and provide reliable protection.
- Each pair comes with a cord and is supplied with a storage case or a polybag.
- NRR: 25dB.

3M-1270: 100prs/box

4boxes/carton

3M-1271: 50prs/box

4boxes/carton



340-4002



340-4004

AEARO Reusable Earplugs

Model:
340-4002
340-4004

- No sizing is required for these patented, pre-moulded, & triple flanged earplugs.
- They are comfortable, hygienic, and reusable.
- Each pair comes with a cord and is supplied with a storage case or a polybag.
- NRR: 25dB.

340-4002: 50prs/box

4boxes/carton

340-4004: 100prs/box

4boxes/carton

Disposable Foam Earplugs

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EN 352-2 SNR: 37dB

Disposable Foam Earplugs

Model:
FEP-03
FEP-03C

- These soft, smooth, tapered foam earplugs are moulded for maximum comfort and provide excellent noise reduction.
- Bright orange colour for better visibility.
- Low pressure foam provides all day comfort and secure fit in a wide range of ear canal sizes.
- Dermatological safe & non-irritating.
- SNR: 37dB.
- Comply with EN352-2.

Packaging: 200prs/box

12boxes/carton



FEP-03



FEP-03C



EN 352-2

Earplug Dispenser Station

Model:
FEP-03-MD02

- Workplace dispenser holds 500 pairs of disposable earplugs.
- Dispenses one pair at a time.
- The bright colour provides quick & easy compliance checks.
- Shaped to fit even very small ear canals.
- Comes included with disposable foam earplugs.
- Comply with EN352-2.

Packaging: 1set/box



FEP-03-MD02

Attenuation Data FEP-03 & FEP-03C

Frequency (Hz)	125	250	500	1000	2000	4000	8000	SNR
Mean Attenuation, (Mf) in (dB)	33.3	37.0	38.6	37.8	37.5	48.3	45.4	37dB
Standard Deviation, Sf	3.0	4.5	4.5	5.7	3.2	3.7	4.2	
Assumed Protection (dB)	30.3	32.5	34.1	32.1	34.3	44.6	41.2	

EN 352-2 NRR: 29dB

3M Disposable Foam Earplugs

Model:
3M-1100
3M-1110

- Plugs are made of soft foam that expand to fit virtually any ear canals size.
- Comfortable to wear for extended periods.
- Each pair is individually packaged in a plastic bag.
- Available in uncorded or corded.
- NRR: 29dB.

3M-1100: 200prs/box

5boxes/carton

3M-1110: 100prs/box

5boxes/carton



3M-1100



3M-1110