

OHSA 
Health and Safety Consultants

**Safety Products
Africa**

Hearing Protection

Introduction

The complete North hearing protection range is designed to be as comfortable as possible while protecting against hazardous noise in the workplace.

EN standards

EN352-1 earmuffs
EN352-2 earplugs
EN352-3 helmet mounted earmuffs

Single Number Rating (SNR)

Determined according to International standard ISO 4869. SNR is expressed in dB's and are used as a guide for comparing the potential noise reduction of different hearing protectors. The SNR is subtracted from overall sound level measurement to calculate the sound pressure level at the ear when wearing the hearing protector.

Noise Reduction Rating (NRR)

Noise reduction rating (NRR) is an estimate of the reduction of noise at the ear when protectors are worn properly. While the NRR and the SNR (Single Number Rating) are designed to be used with C-weighted noise, which means that the lower frequencies are not de-emphasized, other ratings (NRR(SF) and NRSA) are determined for use with A-weighted noise levels, which have lower frequencies de-emphasized. The US National Institute for Occupational Safety and Health recommended and the U.S. EPA mandated that 7-dB compensation between C and A weighting be applied when the NRR is used with A-weighted noise levels.

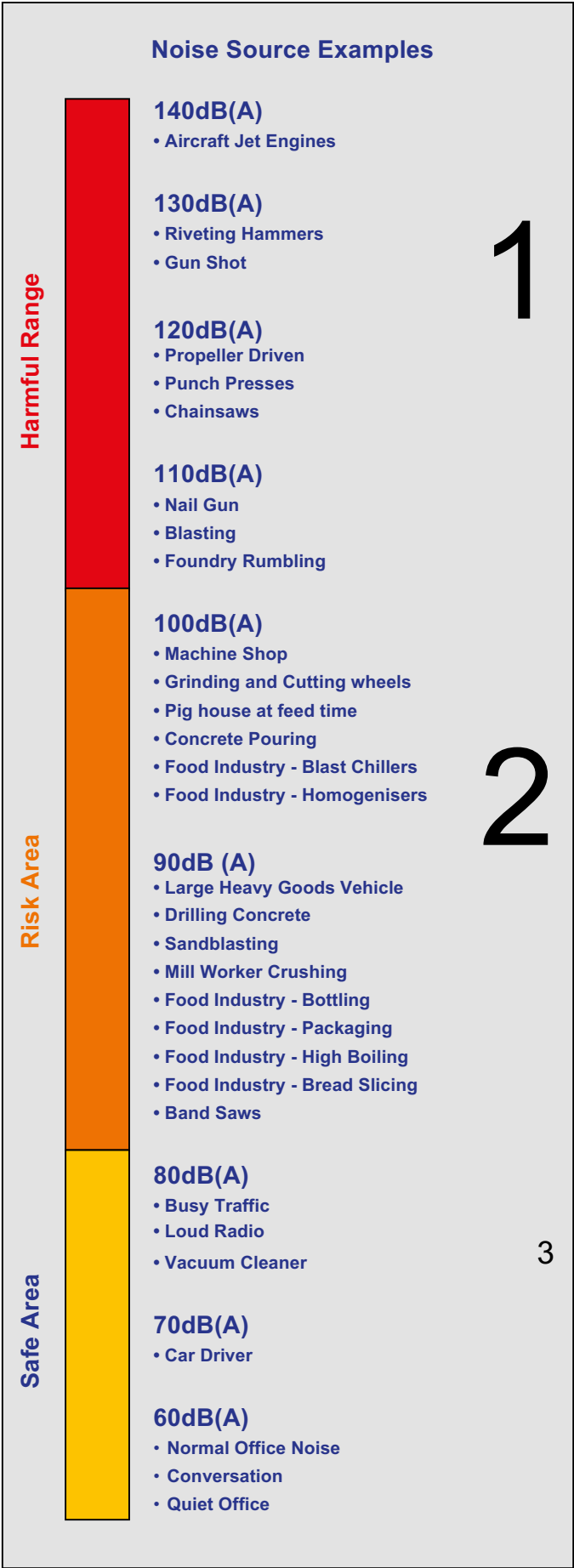
OSHA has defined in their training manual for inspectors that the adequacy of hearing protection for use in a hazardous noise environment should be derated to account for how workers typically wear protection relative to how manufacturers test the protector's attenuation in the laboratory.[14] For all types of hearing protection, OSHA's derating factor is 50%. If used with C-weighted noise, the derated NRR will become NRR/2.[14] If used with A-weighted noise, OSHA applies the 7-dB adjustment for C-A weighting first then derates the remainder.[14] For example, a protector with 33-dB attenuation would have this derating: Derated NRR = (33 – 7)/2

NIOSH has proposed a different method for derating based upon the type of protector.[12] For earmuffs, the NRR should be derated by 25%, for slow-recovery foam earplugs the derating is 50% for all other protection, the derating is 70%. NIOSH applies the C-A spectral compensation differently than OSHA. Where OSHA subtracts the 7-dB factor first and derates the result, NIOSH derates the NRR first and then compensates for the C-A difference. For example, to find the derated NRR for an earmuff by using the NIOSH derating system, the following equation would be used: Derated NRR = (Original NRR x (1-.25)) – 7

HML

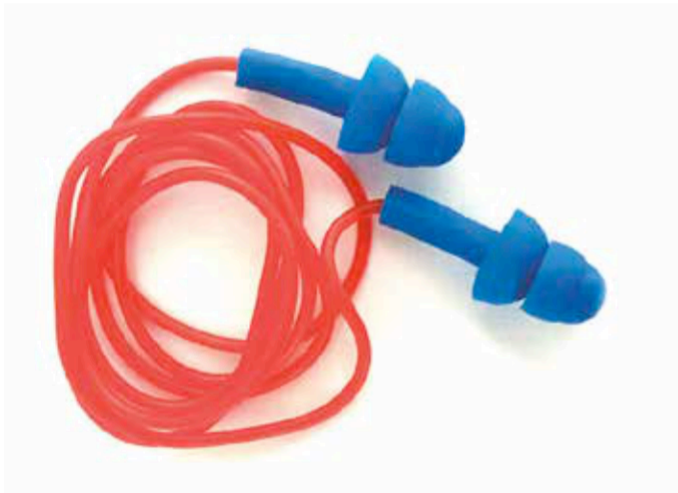
A method of estimating the attenuation of hearing protectors bases on 3 parameters.
H: high **M**: medium **L**: low

The terms refer to the noise reduction of the hearing protector.



Product	HRR1 DUOFLANGE
Description	Corded Duoflange Earplug
Physical Properties	Made from non-toxic highly durable silicone rubber that can be sterilised in boiling water. Has a double flanged design that provides multi-surface sealing over a wide range of ear canal sizes.
Attenuation	SNR23dB
Standards	EN 352-2, SABS 1451:1998 compliant
Uses	To be used when noise reduction rating of 26dB or less is required. To be used in areas of ±110dB.
Precautions	Do not use where noise levels exceed 110dB. To ensure maximum protection always use as directed on the packaging.

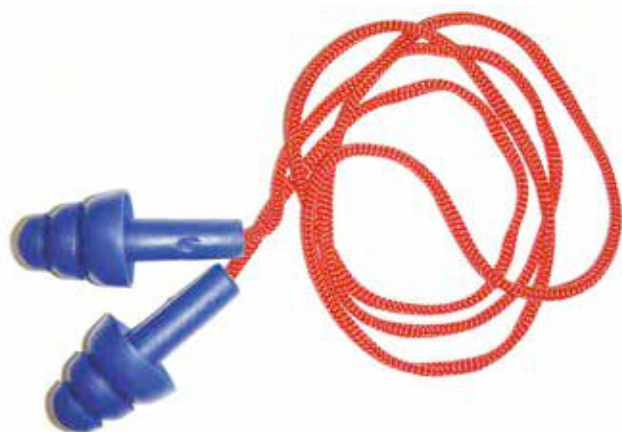
Re-usable Earplugs



Product	HRR1 DUOFLANGE DETECT
Description	Corded Duoflange Detectable Earplug with Metal Ring
Physical Properties	Made from non-toxic, highly durable silicone rubber that can be sterilised in boiling water. Has a double flanged design that provides multi-surface sealing over a wide range of ear canal sizes and incorporates a stainless steel ring for metal detection.
Attenuation	SNR23dB
Standards	EN 352-2, SABS 1451:1998 compliant
Uses	To be used when noise reduction rating of 26dB or less is required. To be used in areas of ±110dB. To be used in industries where detection of earplugs is a requirement.
Precautions	Do not use where noise levels exceed 110dB. To ensure maximum protection always use as directed on the packaging.

Product	HRR1 TRIFLANGE CP
Description	Corded Triple Flanged Earplug - PVC cord
Physical Properties	Made from non-toxic highly durable silicone rubber that can be cleaned by washing with soap and warm water. Has a triple flanged design that provides multi-surface sealing over a wide range of ear canal sizes. Individually packaged.
Attenuation	SNR30dB
Standards	EN 352-2:2002, SABS 1451:1998 compliant
Uses	To be used when noise reduction rating of 24dB or less is required. To be used in areas of ±110dB.
Precautions	Do not use where noise levels exceed 110dB. To ensure maximum protection always use as directed on the packaging.





Product	HRR1 TRIFLANGE CL
Description	Corded Triple Flanged Earplug - Lace Cord
Physical Properties	Made from non-toxic, highly durable silicone rubber that can be cleaned by washing with soap and warm water. Has a triple flanged design that provides multi-surface sealing over a wide range of ear canal sizes. Individually packaged.
Attenuation	NRR24dB/SNR28dB
Standards	EN 352-2:2002; SABS 1451:1998 compliant
Uses	To be used when noise reduction rating of 24dB or less is required. To be used in areas of ± 110 dB.
Precautions	Do not use where noise levels exceed 110dB. To ensure maximum protection always use as directed on the packaging.

Product	HRR2 PERFECTFIT
Description	Corded Triple Flanged Earplug
Physical Properties	Made from non-toxic highly durable silicone rubber that can be sterilised in boiling water. Has a triple flanged design that provides multi-surface sealing over a wide range of ear canal sizes.
Attenuation	NRR 28dB/SNR31dB
Standards	EN352-2:2002, SABS 1451:1998 compliant
Uses	To be used when noise reduction rating of 28dB or less is required. To be used in areas of ± 113 dB.
Precautions	Do not use where noise levels exceed 113dB. To ensure maximum protection always use as directed on the packaging.

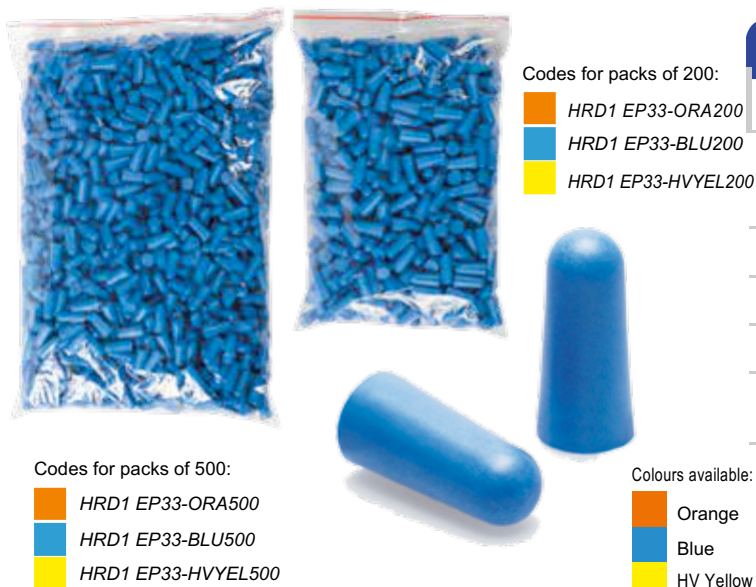


Product	HRR2 PERFECTFIT DETECT
Description	Corded Triple Flanged Earplug with Metal Ring
Physical Properties	Made from non-toxic, highly durable silicone rubber that can be sterilised in boiling water. Has a triple flanged design that provides multi-surface sealing over a wide range of ear canal sizes. Has stainless steel ring for metal detection.
Attenuation	NRR 28dB/SNR31dB
Standards	EN352-2:2002, SABS 1451:1998 compliant
Uses	To be used when noise reduction rating of 28dB or less is required. To be used in areas of ± 113 dB. To be used in industries where detection of earplugs is a requirement.
Precautions	Do not use where noise levels exceed 113dB. To ensure maximum protection always use as directed on the packaging.



Product	HRR2 2111200R
Description	uvex whisper Corded Earplugs, Box of 100 Pairs
Physical Properties	Light hearing protector that is easy to handle and convenient to refit. Whisper earplugs are helpful to use for short spaces of time in low noise areas. They are easy to be cleaned.
Attenuation	SNR 23dB
Standards	EN352-2 Earplugs
Uses	Light hearing protector
Precautions	To ensure maximum protection always use as directed on the packaging

uvex



Codes for packs of 200:

- HRD1 EP33-ORA200
- HRD1 EP33-BLU200
- HRD1 EP33-HVYEL200

Codes for packs of 500:

- HRD1 EP33-ORA500
- HRD1 EP33-BLU500
- HRD1 EP33-HVYEL500

Colours available:

- Orange HRD1 EP33-ORA
- Blue HRD1 EP33-BLU
- HV Yellow HRD1 EP33-HVYEL

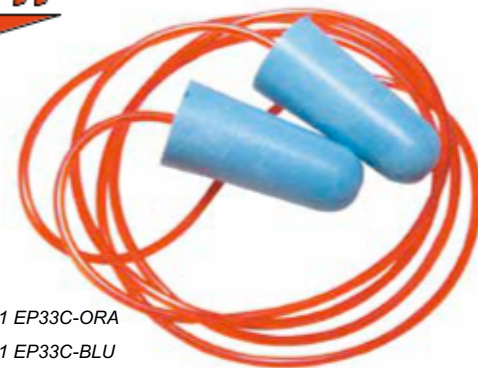
Product	HRD1 EP33
Description	Blue, Yellow or Orange Uncorded PU Foam Earplug
Physical Properties	Disposable, non-irritating, non-allergenic, self-adjusting foam. Individually packed in marked, sealed plastic bags per pair or sealed plastic bags in quantity of 200 or 500 pairs.
Attenuation	SNR 36dB/NRR 32dB
Standards	ANSI S3.19:1974 standard & EN352-2:2002
Uses	Ear protection for long-term users
Precautions	Do not use where noise levels exceed 115dB. To ensure maximum protection always use as directed on the packaging.

ARROW™

Product	HRD1 EP33C
Description	Corded PU Foam Earplug. Uncorded product also available (HRD1 EP33 uncorded).
Physical Properties	Disposable, non-irritating, non-allergenic, self-adjusting foam. Individually packed in marked, sealed plastic bags.
Attenuation	SNR 36dB/NRR 32dB
Standards	ANSI S3.19:1974 standard & EN352-2:2002
Uses	Ear protection for long-term users
Precautions	Do not use where noise levels exceed 115dB. To ensure maximum protection always use as directed on the packaging.

Disposable Earplugs

ARROW™



Colours available:

- Orange HRD1 EP33C-ORA
- Blue HRD1 EP33C-BLU
- HV Yellow HRD1 EP33C-HVYEL



Product	HRD1 EP33-PD
Description	Dispenser Unit Only
Physical Properties	Black colour durable ABS plastic base with transparent refill. Lightweight and easy to handle. Can be wall mounted.
Uses	Durable plastic design an economical choice for dispensing earplugs. Catch basin prevents earplugs from falling to the ground.
Precautions	To ensure maximum benefit use according to instructions

Product	HRD2 2112045
Description	uvex one-fit, 200 Pairs, Bagged
Physical Properties	Ergonomically shaped disposable earplug. Perfect solution for loud environments. Soft PUR-foam offers real comfort, even when worn for extended periods. Due to its sealed surface the uvex one-fit preventing the penetration of foreign bodies. Can be used for noise levels up to 110 dB(A).
Attenuation	SNR 31dB
Standards	EN352-2 earplugs
Uses	Good solution for use in loud environments up to 110 dB(A)
Precautions	To ensure maximum protection always use as directed on the packaging

uvex



Product	HRD2 2112010
Description	uvex x-fit, 100 Pairs, Bagged
Physical Properties	The ergonomically shaped disposable earplug is characterised by very high sound absorption levels, making it suitable for use in very loud environments.
Attenuation	SNR 37dB
Standards	EN352-2 earplugs
Uses	Best suited for use in very loud environments
Precautions	To ensure maximum protection always use as directed on the packaging



Description	uvex x-fit Uncorded Earplugs, Pack of 200 Pairs
Physical Properties	High hearing protector X-fit provides very high attenuation level, excellent voice recognition, very comfortable fit and convenient to handle.
Attenuation	SNR 37dB
Standards	EN352-2 earplugs
Uses	High hearing protector
Precautions	To ensure maximum protection always use as directed on the packaging

uvex



HOWARD
LEIGHT
by Honeywell



Product	HRD2 LL-30
Description	Laser Lite Corded Earplugs
Physical Properties	Laser Lite, corded, single-use earplugs are made of self-adjusting foam that expands to fit virtually every wearer. The contoured T-shape allows for easy insertion and fit. Smooth, soil-resistant skin prevents dirt build-up. Vibrant colours make protection visible. Pairs are individually packaged in a polybag.
Attenuation	NRR32dB
Standards	ANSI S3.19:1974 standard
Uses	To be used when noise reduction is required
Precautions	To ensure maximum protection always use as directed on the packaging

Product	HRD2 QD-30
Description	Orange Corded Earplug
Physical Prop.	Orange reusable earplug made from soft polyurethane
Attenuation	NRR26dB
Standards	ANSI S3.19:1974 standard. Conforms to SABS.
Uses	Ideal for use in mining and industry. Earplug is reusable and can be washed using soapy water. Proper care of the earplug will result in an extended life span of the product. General life span of product 4 - 6 weeks.
Precautions	Do not use where noise levels exceeds 111dB. Ensure that the earplug is clean before use. Ensure correct fitting procedures are followed.

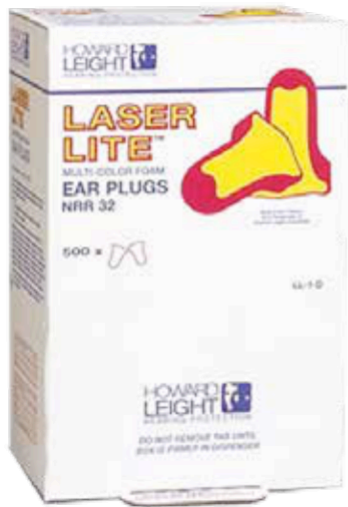
HOWARD
LEIGHT
by Honeywell





Product	HRD2 LPF-30
Description	Green Corded Low Pressure Foam Earplug
Physical Prop.	Non-irritating, non-allergenic, self-adjusting foam
Attenuation	NRR30dB
Standards	ANSI S3.19:1974 standard
Uses	Ear protection for long-term users and those with smaller ear canals
Precautions	Do not use where noise levels exceed 112dB. To ensure maximum protection always use as directed on the packaging.

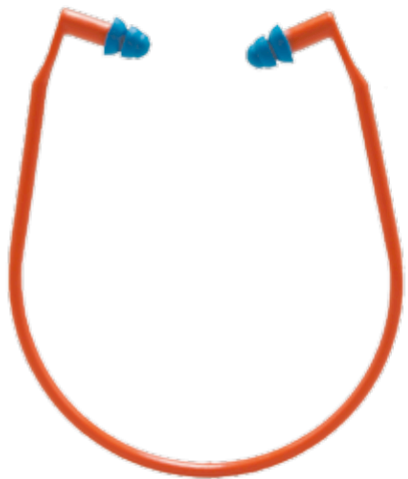
Product	HRD2 LL-1
Description	Laser-Lite Multicolour Earplug
Physical Properties	Vibrant colours make protection visible. Self-adjusting polyurethane foam expands to fit virtually every wearer. Contoured T-shape for easy insertion and wear. Smooth, soil-resistant closed cell-foam skin prevents dirt build-up. Available in paper bag packaging and/or with cotton cords for process industries (pulp and paper).
Attenuation	SNR 35dB/NRR 32dB
Standards	ANSI S3.19:1974
Uses	Protection of moderate or intermittent noise exposure. Single use earplug.
Precautions	Do not use where noise levels exceed 115dB. To ensure maximum protection always use as directed on the packaging.



Product	HRD2 LL-1-D
Description	Laser-Lite Multicolour Earplugs for Dispenser
Physical Properties	Vibrant colours make protection visible. Self-adjusting polyurethane foam expands to fit virtually every wearer. Contoured T-shape for easy insertion and wear. Smooth, soil-resistant closed cell-foam skin prevents dirt build-up. Available in paper bag packaging and/or with cotton cords for process industries (pulp and paper).
Attenuation	SNR 35dB/NRR 32dB
Standards	ANSI S3.19:1974
Uses	Protection of moderate or intermittent noise exposure. Single use earplug.
Precautions	Do not use where noise levels exceed 115dB. To ensure maximum protection always use as directed on the packaging.

Product	HRB1 DUOFLANGE BAND
Description	Duoflange Banded Earplug
Physical Properties	The unique feature of the SB2000 is that the plug is permanently moulded to the band. The earplugs are low pressure, which virtually eliminates pressure on the ear canal. Comfortable for long term use. The band is non-toxic, non-irritating, durable and cleans with soap and water.
Attenuation	NRR 28dB
Standards	EN 352-2, SABS compliant
Uses	Reusable ear band for extended wear
Precautions	Do not use where noise levels exceed 100dB. To ensure maximum protection always use as directed on the packaging.

Banded Earplugs



Product	HRB2 QB2
Description	Band Type Hearing Protector
Physical Properties	The ergonomic design of the band keeps the pads suspended so they don't become contaminated when set down. It is designed for moderate or intermittent hearing protection as the semi-aural pads fit just into the ear canal opening. Replacement pads are reusable.
Attenuation	NRR 25dB
Standards	ANSI S3.19:1974
Uses	Ideal for use in low or medium noise environments such as in light industry
Precautions	Do not use where noise levels exceed 100dB. To ensure maximum protection always use as directed on the packaging.

Product	HRB2 QB200
Description	Replacement Pods for QB2
Physical Properties	It is designed for moderate or intermittent hearing protection as the semi-aural pads fit just into the ear canal opening. Replacement pads are reusable.
Attenuation	NRR 25dB
Standards	ANSI S3.19:1974
Uses	Protection of moderate or intermittent noise exposure
Precautions	Do not use where noise levels exceed 100dB. To ensure maximum protection always use as directed on the packaging.





Product	HRB2 QB3
Description	Band Type Hearing Protector
Physical Properties	The ergonomic design of the band keeps the pads suspended so they don't become contaminated when set down. It is designed for moderate or intermittent hearing protection as the semi-aural pads fit just into the ear canal opening. Replacement pads are reusable.
Attenuation	NRR 23dB
Standards	ANSI S3.19:1974
Uses	Protection of moderate or intermittent noise exposure
Precautions	Do not use where noise levels exceed 100dB. To ensure maximum protection always use as directed on the packaging.

Product	HRB2 QB300
Description	Replacement Pods for QB3
Physical Properties	It is designed for moderate or intermittent hearing protection as the semi-aural pads fit just to the ear canal opening. Replacement pads are reusable.
Attenuation	NRR 23dB
Standards	ANSI S3.19:1974
Uses	Protection of moderate or intermittent noise exposure
Precautions	Do not use where noise levels exceed 100dB. To ensure maximum protection always use as directed on the packaging.



Earmuffs



Product	HRM1 NORMUFF
Description	Standard Earmuff
Physical Properties	Blue colour earmuff. Black plastic flexible headband. Soft plastic covered foam cushions. Lightweight and easy to handle.
Attenuation	NRR 22dB
Standards	EN352-1 earmuffs
Uses	To be used in areas of medium noise not exceeding 111dB
Precautions	Do not use where noise levels exceed 111dB. To ensure maximum protection always use as directed on the packaging.

Product	HRM1 EM7206
Description	Intruder Cap-Mounted Earmuffs
Physical Properties	Unique cup design. Exceptional performance. Large, flexible and comfortable cushions offering equal distribution of pressure. Head band is made of individual spring band wire with a soft padded cushion easily adapting to the head. Two low mounting anchor points on each side of the cup for even pressure and comfortable alignment. First class comfort at all times.
Attenuation	SNR 29dB/NRR 27dB
Standards	ANSI S3.19:1974
Uses	To be used in areas of medium noise not exceeding 111dB
Precautions	To ensure maximum protection always use as directed on the packaging



Product	HRM2 2500001
Description	uvex 2 Earmuffs
Physical Properties	Foldable earmuff has a high-quality steel headband and dual suspension system to ensure optimum protection and wearer comfort, particularly when worn for extended periods. Available with reflective headband for increased wearer visibility. Resistant against bending and warping. High attenuation. Low weight and small volume are key features of the design.
Attenuation	SNR 27dB
Standards	EN352-1 earmuffs
Uses	Medium hearing protector
Precautions	To ensure maximum protection always use as directed on the packaging

Product	HRM2 2500002
Description	uvex 3 Earmuffs
Physical Properties	Foldable earmuff with the approved steel suspension headband system. The headband achieves perfect fitting to most facial profiles and is resistant to bending and warping. Available with fluorescent glow-in-the-dark ear piece and reflective band for increased wearer visibility. High attenuation. Low weight.
Attenuation	SNR 31dB
Standards	EN352-1 earmuffs
Uses	High hearing protector
Precautions	To ensure maximum protection always use as directed on the packaging

uvex



uvex



Product

HRM2 2500005

Description

uvex 3N Earmuffs

Physical Properties

Can be worn under head protection. Optimum protection and comfort even if worn for extended periods.

Attenuation

SNR 31dB

Standards

EN352-1 earmuffs

Uses

High hearing protector

Precautions

To ensure maximum protection always use as directed on the packaging

Product

HRM2 2500021

Description

uvex 2H Earmuffs

Physical Properties

Attaches to uvex helmets - air wing, and thermo boss. Helmet not included. Small and light for easy handling. Suitable to use with ultrasonic and ultravision spectacles.

Attenuation

SNR 28dB

Standards

EN352-1 earmuffs

Uses

Medium hearing protector

Precautions

To ensure maximum protection always use as directed on the packaging. Helmet not included.

uvex



uvex



Product

HRM2 2500032

Description

uvex 3V Earmuffs

Physical Properties

The luminous cups glow in the dark and the fluorescent surface of the headband reflects the light. uvex 3V makes the wearer visibly more noticeable.

Attenuation

SNR 31dB

Standards

EN352-1 earmuffs

Uses

High hearing protector

Precautions

To ensure maximum protection always use as directed on the packaging