

HAHN+KOLB
GROUP



LET'S WORK TOGETHER.

ATORN EAR DEFENDERS
ON PAGE 15.

ATORN

HEARING PROTECTION

Discover our new ATORN hearing protection range!



PERFORMANCE REQUIRES QUALITY...

...and quality requires performance.

Discover our modern and high-quality ATORN hearing protection range now. You have the choice. Whether ear plugs, ear plug dispensers, reusable corded ear plugs, banded ear plugs or ear defenders - you'll find everything with us!

Anyone can offer hearing protection. But outstanding performance and quality? Only ATORN can do that.

ATORN

Performance requires quality.

Volume and effects

To avoid irreversible hearing damage, it is mandatory to wear hearing protection in environments with high noise levels, for example when working near noisy machines above 85 dB. EN 352 defines individual measures for noise control and the acoustic insulation value of the hearing protection. In addition, the standard clarifies the materials, construction, wearing comfort and familiarisation period, amongst other things.

In accordance with EN 352, all hearing protection must be accompanied by comprehensive information. In addition to technical data such as size or sound insulation, this also includes information on the functional use and hygienic cleaning or disinfection.

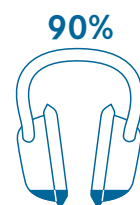
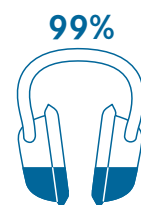
From what volume level do I need to wear hearing protection?

Hearing protection must be provided above a daily noise exposure level of 80 dB or a peak sound pressure level of 135 dB. In accordance with DIN EN 352, hearing protection must be worn above a daily noise exposure level of 85 dB or a peak sound pressure level of 137 dB. In general, the target noise range after noise insulation under the hearing protection is between 70 and 80 dB.

Source of noise	Volume	Effect
Firecracker	150 dB	
Aircraft take-off, jet engine, firearm discharge	140 dB	Irreparable damage
Motor racing	130 dB	Pain threshold
Thunder	120 dB	
Chainsaw, circular saw, pneumatic drill	110 dB	
Disco, motorcycle	100 dB	
Headphones, car horn, tractor	90 dB	Risk to hearing
Motorway, passing train	80 dB	Increased risk of cardiovascular illnesses
Main road, vacuum cleaner, television, lawnmower	70 dB	
Normal road traffic	60 dB	
Normal conversation, birdsong	50 dB	
Light rain, fridge 1 m away, quiet music	40 dB	Concentration threshold
Whispering	30 dB	
Breathing, ticking of a watch	20 dB	
Rustling leaves in the distance	10 dB	
	0 dB	Hearing threshold

How long do I have to wear hearing protection?

In loud environments, it is essential that hearing protection is worn 100 % of the time, as even brief interruptions can significantly reduce its level of protection.



Selection guide according to working conditions

Selection guide according to working conditions

Working condition	Disposable ear plugs	Reusable corded ear plugs	Banded ear plugs	Ear defenders
High temperature	suitable	suitable	suitable	not suitable
Dust	suitable	not suitable	not suitable	limited suitability
Dirty environment	suitable	limited suitability	limited suitability	suitable
Continuous noise exposure	suitable	suitable	suitable	not suitable
Repeated short-term noise	not suitable	suitable	suitable	suitable
Working with other PPE (e.g. glasses, helmet)	suitable	suitable	limited suitability	limited suitability

Noise insulation to be attained

The target range is between 70 and 80 dB.

When selecting the appropriate hearing protection, the correction factors must be taken into account.

- Shapeable disposable ear plugs: 9 dB
- Pre-shaped reusable ear plugs: 5 dB
- Banded ear plugs: 5 dB
- Ear defenders: 5 dB

For example, if the noise level in metalworking is 100 dB and the worker wants to use banded ear plugs, you should use banded ear plugs with a sound insulation value of at least 25 dB to achieve the target range of 70-80 dB.

Example: 100 dB (noise level) - 25 dB (sound insulation value of the banded ear plugs) + 5 dB (correction value for banded ear plugs) = 80 dB (residual noise level and target value)

It is important to ensure that there is no under- or over-protection. The dangers of under-protection are long-term irreversible hearing damage, whereas over-protection leads to problems with understanding and isolation.



Disposable ear plugs



Ref. no. 000

Excellent sound insulation

SNR value:
SNR = 37 dB,
H = 38 dB, M = 34 dB,
L = 32 dB

VERSION

- High-performance T-shaped ear plugs for easy insertion
- The ear plugs offer excellent noise insulation and a high level of comfort
- A closed surface prevents ingress of foreign objects
- **Ref. no. 001:** Refill pack for the ATORN ear plug dispenser

DELIVERY

Ref. no. 000: Pack of 200 pairs, paired in poly bags
Ref. no. 001: Pack of 400 pairs, loose

TECHNICAL DATA

- Category: III
- EN standard: 352-2
- Sound insulation value: 37 dB
- Material: Polyurethane foam
- Colour: Anthracite | White



Ref. no. 001

Number of ear plugs (pairs)	55785... Ref. no.
200	000
400	001

Ear plug dispenser

Easy-to-use and robust ear plug dispenser

Transparent design for easy filling level control

Suitable for wall mounting

APPLICATION

Hygienic and safe storage and removal of ear plugs

DELIVERY

Supplied without ear plugs

NOTE

Includes fastening material for wall mounting

TECHNICAL DATA

- Material: Impact-resistant plastic
- Colour: Anthracite | Transparent



55785...

Ref. no.

002

Reusable corded ear plugs

Includes a practical storage box

Washable



VERSION

- High-performance, reusable ear plugs with soft fins for high noise insulation and optimum adaptation to the ear canal
- The smooth surface is washable
- Corded ear plugs for individual use
- SNR value: SNR = 30 dB, H = 31 dB, M = 26 dB, L = 24 dB

DELIVERY

Minimum order quantity: 10 pieces

TECHNICAL DATA

- Category: III
- EN standard: 352-2
- Sound insulation value: 30 dB
- Material: Thermoplastic elastomers
- Colour: Anthracite | White

55785...

Ref. no.

003

Banded ear plugs

VERSION

- Lightweight banded ear plugs in anatomically adapted design
- The design and wearing position ensure contact with the body, thereby minimising noise transmission
- The soft, replaceable ear plugs are made of polyurethane foam and ensure maximum comfort and protection, even when worn for long periods

DELIVERY

Minimum order quantity: 5 pieces

TECHNICAL DATA

- Category: III
- Sound insulation value: 32 dB
- EN standard: 352-2
- Colour: Anthracite | White



SNR value:
SNR = 32 dB,
H = 33 dB,
M = 29 dB,
L = 28 dB

55785...

Ref. no.

004

Replacement ear plugs for banded ear plugs

DELIVERY

Pack of 10 pairs

TECHNICAL DATA

- Colour: Anthracite
- Number of ear plugs: 10 pairs

Replacement ear plugs for ATORN banded ear plugs

Made of polyurethane foam



55785...

Ref. no.

005



Ear defenders



Ref. no. 006

SNR value:
SNR = 33 dB, H = 35 dB,
M = 31 dB, L = 24 dB

SNR value:
SNR = 33 dB, H = 35 dB,
M = 31 dB, L = 24 dB



Ref. no. 007

VERSION

- Comfortable ear defenders with padded headband and soft capsule padding
- Simple height adjustment allows the ear defenders to be individually adjusted and ensures maximum comfort

TECHNICAL DATA

- Category: III
- EN standard: 352-1
- Colour: Anthracite

Sound insulation value	55785... Ref. no.
33 dB	006
37 dB	007



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