

# uvex

2016



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protecting people

# Hearing Protection

All ears when it comes to safety

Noise-induced hearing loss has long been recognised as one of the most common occupational hazards. It generally develops gradually and painlessly. The danger to hearing and the importance of hearing protection are often recognised too late. Only those who suffer from hearing loss really understand just how essential a good sense of hearing is and that taking care of it should be a top priority.

Permanent noise in the workplace creates stress, of which some employees may only be subconsciously aware.

Stress situations represent an additional risk factor and reduce the ability to concentrate. This may have a negative impact on productivity.

## Tests and standards

All uvex hearing protection products comply with the CE standard and have been tested in accordance with the applicable European standards in line with current EU legislation.

Continuous quality assurance via ISO 9001/1994.

The authoritative DIN EN norms are:

- EN 352-1 Earmuffs
- EN 352-2 Earplugs
- EN 352-3 Helmets and earpieces

## Signal recognition

In an assessment carried out by the professional association, hearing protection products can be categorised as particularly well-suited to use in special areas of application.

The classifications are defined as follows:

- S** Signal hearing in railway track superstructure construction
- V** Signal hearing in road traffic
- W** Alarm signal hearing, general
- E** Signal hearing for locomotive drivers in railway operations

## Occupational Safety Directive on Noise and Vibration

Informing employees													
		Information and instruction											
		General occupational health advice											
Hearing protection													
		Provision of hearing protection											
						Use of hearing protection							
							Not permissible for hearing protection						
Occupational health check-ups													
		Offer of occupational health check-ups				Need for occupational health check-ups							
Further steps													
						Marking noisy areas							
							Noise reduction measures						
79	80	81	82	83	84	85	86	87	88	89	90	91	LAeq, 8h in dB(A)
134	135	136				137	138	139	140	141	142	143	LpC, peak in dB(C)

Valid since 9 March 2007

# Hearing Protection

Making the right choice for every application is essential

## Hearing protection: choosing the right product using the SNR method

Goal = noise level – SNR value

The objective when choosing suitable hearing protection is to achieve an effective residual noise level of between 70 dB and 80 dB for the wearer.

If sound absorption is too high (over-protection), this can result in an inability to communicate and cause feelings of isolation.

Example:

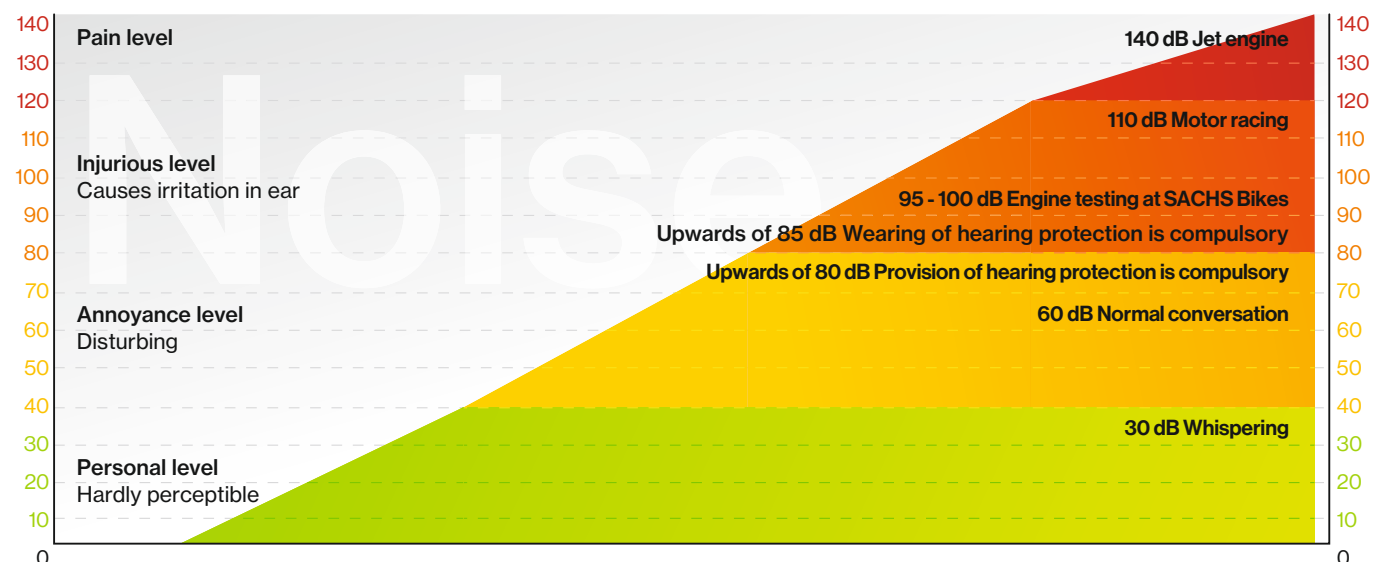
Noise level 100 dB

– uvex xact-fit, SNR 26 dB

= 74 dB



Examples of noise:



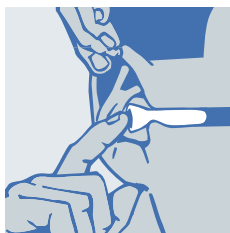
## How to use a plug?

### Correct hearing protection insertion

Earplugs must be inserted correctly to ensure the indicated SNR value is achieved.



1. Roll the earplug into a cylinder between your fingers.



2. Reach over your head with your opposite arm and gently pull your outer ear outwards and upwards to straighten the ear canal. Gently insert the rolled up earplug into the ear canal and hold in place for a moment whilst it expands to the shape and size of the ear canal.



3. A correct fit for maximum protection and optimum wearer comfort.



**A practical introductory seminar on the risks arising from excess noise and the appropriate measures to safeguard hearing.**

- Principles and importance of human hearing
- Hearing difficulties and tinnitus demo
- Comprehensive overview of the challenges of industrial hearing protection, standards and the hearing protection products on offer
- Explanation of the different methods of measuring noise levels and how to put these methods into practice
- Information on the classification and labelling of protection products
- Noise exposure in the workplace
- Essential information on applications of the various types of PPE, such as disposable earplugs, reusable earplugs, dispensers, banded ear protectors, passive and level-dependent ear defenders and otoplastics
- How to wear and use hearing protection equipment correctly

**Target group**

Those responsible for the health and safety of employees within a company, e.g. health and safety officers, company doctors and specialist purchasers.



For more information or to book a place, please visit [uvex-academy.de](http://uvex-academy.de), call +49 (0)911 9736 1710 or email [academy@uvex.de](mailto:academy@uvex.de)

# Hearing Protection

## Disposable hearing protection plugs



2112.012



2112.004  
2112.121

### uvex com4-fit

- Compact, ergonomic design is perfect for wearers with narrow ear canals
- Patented x-grip technology noticeably reduces pressure in the ear canal
- Increased wearing comfort, even when worn for long periods
- x-grip makes it easy to remove the earplugs

Additional application: S, V, W, E

<b>Art. no.</b>	2112.004
<b>Model</b>	light orange, without cord
<b>Box</b>	200 pairs, bagged in pairs

<b>Art. no.</b>	2112.012
<b>Model</b>	light orange, with cord
<b>Box</b>	100 pairs, bagged in pairs

<b>Art. no.</b>	2112.121
<b>Model</b>	light orange, without cord
<b>Box</b>	retail minibox, 6 pairs

SNR: 33 dB	H: 33 dB	M: 30 dB	L: 29 dB					
f/Hz	63	125	250	500	1000	2000	4000	8000
MA dB	28.9	31.0	33.6	33.8	33.6	36.2	40.6	44.3
SD dB	3.4	5.2	5.4	5.4	4.0	4.2	3.7	2.9
APV dB	25.5	25.8	28.2	28.4	29.6	32.0	36.9	41.4



2112.010



2112.001  
2112.123

### uvex x-fit

- Ergonomically pre-shaped disposable earplugs
- Suitable for use in extremely loud environments
- Patented x-grip technology reduces pressure in the ear canal
- x-grip makes it significantly easier to remove the earplugs

Additional application: S, V, W, E

<b>Art. no.</b>	2112.001
<b>Model</b>	lime, without cord
<b>Box</b>	200 pairs, bagged in pairs

<b>Art. no.</b>	2112.010
<b>Model</b>	lime, with cord
<b>Box</b>	100 Pairs, bagged in pairs

<b>Art. no.</b>	2112.123
<b>Model</b>	lime, without cord
<b>Box</b>	retail minibox, 6 pairs

SNR: 37 dB	H: 36 dB	M: 34 dB	L: 34 dB					
f/Hz	63	125	250	500	1000	2000	4000	8000
MA dB	35.3	38.4	39.3	40.8	38.9	37.8	45.9	45.1
SD dB	4.2	6.3	5.3	5.5	5.5	4.3	3.9	4.6
APV dB	31.1	32.1	34.0	35.3	33.4	33.5	42.0	40.5



2112.060  
2112.122

### uvex xtra-fit

- Soft disposable earplugs for optimal comfort
- Adapts to the shape and size of the ear canal, thereby minimising undesired transmission to ensure optimal fitting and protection
- Suitable for medium to large ear canals

Additional application: S, V, W, E

<b>Art. no.</b>	2112.060
<b>Model</b>	orange, without cord
<b>Box</b>	200 pairs, bagged in pairs

<b>Art. no.</b>	2112.122
<b>Model</b>	orange, without cord
<b>Box</b>	retail minibox, 6 pairs

SNR: 36 dB	H: 34 dB	M: 33 dB	L: 32 dB					
f/Hz	63	125	250	500	1000	2000	4000	8000
MA dB	32.7	34.8	36.8	38.9	36.9	36.2	44.0	41.5
SD dB	4.6	4.4	5.6	5.2	4.7	3.7	4.0	5.0
APV dB	28.1	30.4	31.2	33.7	32.2	32.5	40.0	36.5