



**Peace of Mind.**

  
**Hellberg**

# Who We Are

**Hellberg Safety makes protective equipment for your head, eyes, face and hearing.**

**Founded in Sweden in the early 1960s we are working hard to perfect personal protection, for everyone working in excessive noise or other hazardous environments. Giving them Peace of Mind.**

**Every product we develop brings together state-of-the-art technology, impeccable user experience and unquestionable quality. Together these aspects instil confidence and trust in our users. Peace of mind. Knowing they can always work safely and effectively – and have more time and energy for everything they love.**

|   |              |
|---|--------------|
| <b>Passive Hearing Protection</b>               | <b>6–17</b>  |
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# Symbol Dictionary



## Bluetooth®

Wireless connection via Bluetooth®. Make phone calls and stream your favourite music.



## USB-charging Cable Included

Charge from a wall socket or from the USB socket in your PC or car.



## Waterproof

IP class waterproof.



## Boom microphone

The boom microphone allows clear communication even in extreme noise environments.



## Latest Generation FM/AM Radio

Latest generation AM/FM Radio with excellent sound quality and reception.



## Multi-Point – Pair Two Phones

Bluetooth® Multi-point lets you pair two phones at the same time.



## Level Dependent “Active Listening”

Microphones in each ear cup allow you to communicate with your colleagues and stay alert to warning signals.



## Wideband Audio HD Voice

Prepared for Wideband Audio, which enhances telephone audio quality.



## 3,5 mm Audio Input

Connect to communication radios or other audio devices.



## Patented Speaker Design

The unique speaker design offers a great listening experience.



## Designed for Music

Developed with music listening in focus.



## Two-way communication

Wireless communication between Headset to Headset.

# Symbol Dictionary



## Headband

Features a comfortable headband cushion with “snap in” system for easy replacement. Smooth single point telescopic size adjustment.



## Helmet Mount

Compatible with most common safety helmets. Slim design with reduced risk of snagging.



## Neckband

Flexible to the situation. Can be used with hats, baseball caps or with helmets. Comfortable support strap.



## Foldable

The ideal choice for any work where the hearing protector needs to be easy accessible. It is compact when folded and the cups are kept sealed when stored.

# Protection Levels



## Protection Level 1

For general industrial work environments. Best choice in low to medium noise levels (dB) and medium to high frequency noise (Hz).



## Protection Level 2

For work environments with medium to high noise levels (dB). Best choice in high frequency noise (Hz).

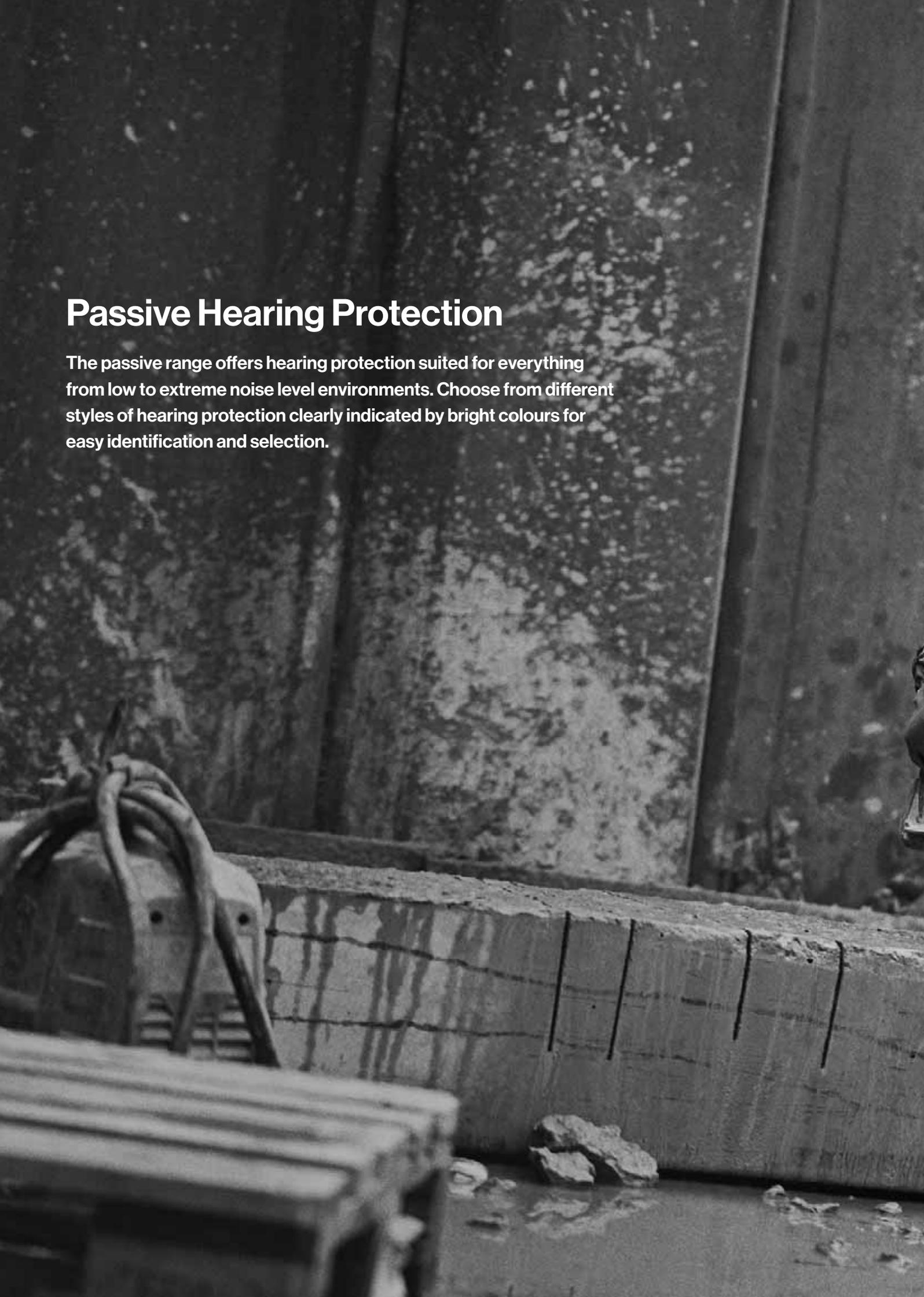


## Protection Level 3

For extreme high noise levels (dB). The best choice in low frequency noise (Hz).

# Passive Hearing Protection

The passive range offers hearing protection suited for everything from low to extreme noise level environments. Choose from different styles of hearing protection clearly indicated by bright colours for easy identification and selection.





# Secure Headband

The Secure headband style hearing protectors offer great comfort and quality to all professional users.

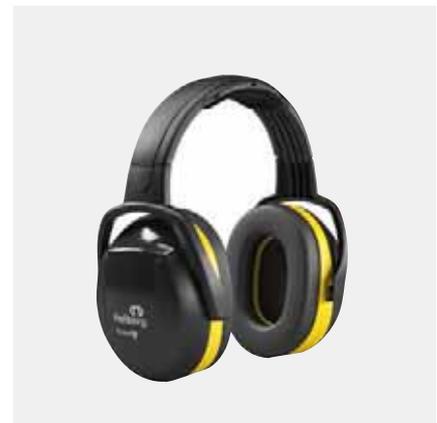
The slim profile design increases stability and reduces the risk of snagging in confined areas. Light and durable headband construction with soft cushions and easy size adjustment provides a perfect fit for all head sizes. The soft ear cushions, easily replaceable with the "snap-in" system enable regular replacement for a long lasting and high performing product.

Easily convert the headband to a visor/earmuff combination with Hellberg's face protection system (Safe 1). Available in three protection levels, clearly indicated with bright safety colours for easy identification and selection.



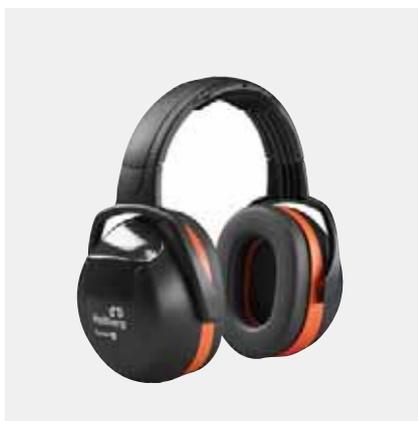
**Secure1 Headband**

Part. no 41001-001  
SNR 26dB



**Secure2 Headband**

Part. no 41002-001  
SNR 30dB



**Secure3 Headband**

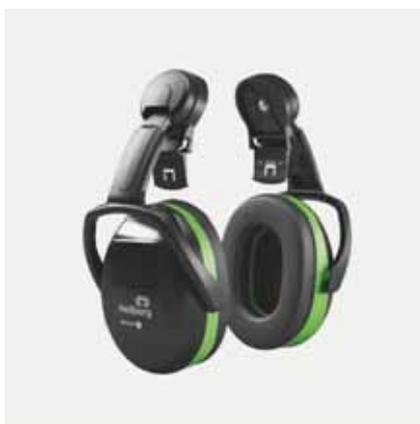
Part. no 41003-001  
SNR 33dB



# Secure Helmet Mount

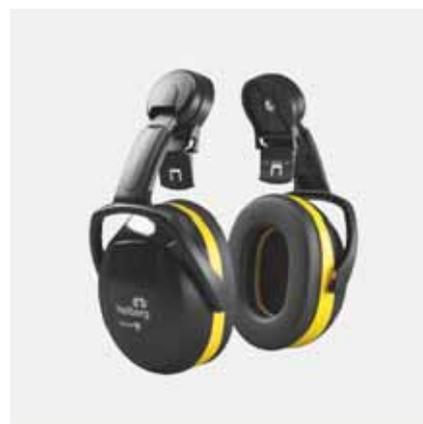
The Secure helmet mounted hearing protector with its durable construction withstands rough environments and the slim design reduces the risk of snagging in confined areas.

The replaceable ear cushions enable regular replacement for a long lasting and high performing product. Fully compatible with Hellberg's face protection system (Safe 2) and with most common safety helmets on the market. Available in three protection levels, clearly indicated with bright safety colours for easy identification and selection.



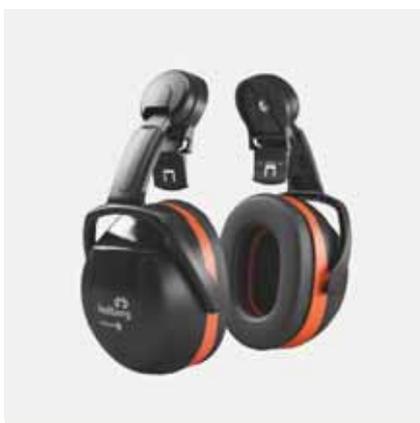
**Secure1 Helmet Mount**

Part. no 42001-001  
SNR 25dB



**Secure2 Helmet Mount**

Part. no 42002-001  
SNR 29dB



**Secure3 Helmet Mount**

Part. no 42003-001  
SNR 31dB



# Secure Neckband

The Secure neckband style hearing protector offers great versatility to the user.

A perfect solution when you need hearing protection in combination with bump caps, helmets without attachment slots or head mounted face protection. The velcro support strap is easily adjustable to any head size and ensures that the headband stays in position. The replaceable ear cushions enable regular replacement for a long lasting and high performing product.



**Secure1 Neckband**

Part. no 43001-001  
SNR 26dB



**Secure2 Neckband**

Part. no 43002-001  
SNR 30dB



**Secure3 Neckband**

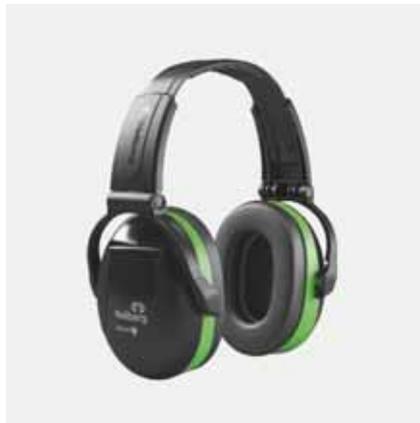
Part. no 43003-001  
SNR 33dB



# Secure Foldable

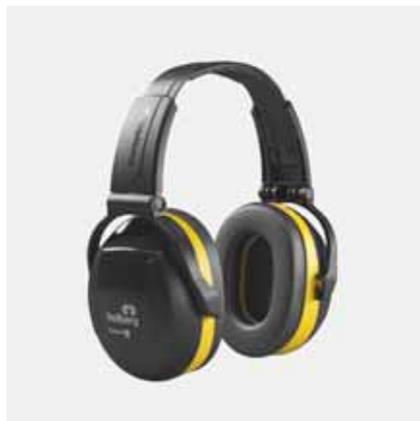
The foldable style hearing protector is the ideal choice for any work where the hearing protector needs to be easy accessible. It is compact when folded and the cups are kept sealed when stored.

The Secure Foldable style hearing protectors offer a light and durable headband construction with easy size adjustment offers great comfort. Perfect for all professional users exposed to short term noise such as service and maintenance, inspections and installations.



**Secure 1 Foldable**  
Part no. 41501-001  
SNR 27dB  
NRR 23dB, CSA A

**Folded**



**Secure 2 Foldable**  
Part no. 41502-001  
SNR 30dB  
NRR 25dB, CSA A

**Folded**



# Junior

**Hellberg Junior is a hearing protection specially designed for children.**

It is perfect for school- and hobby activities, concerts, lawn mowing or sporting events. The headband distributes pressure evenly around the ears, and the soft ear cushions increases comfort. Made in bright attractive colours for high wearer-motivation. When worn correctly, Junior can reduce the noise exposure to the ear with up to 25 dB(A), making them suitable for use in noise of up to 90-95 dB(A).



**Junior**  
Part. no 11001-114  
SNR 24dB



**Junior**  
Part. no 11001-117  
SNR 24dB



**Junior**  
Part. no 11001-119  
SNR 24dB



## Electronic Hearing Protection

The electronic or “active” range offers a variety of advanced hearing protectors to suit many different work environments. The latest technology, modern design, comfort and quality together with great performance appeals to all generations of professional users.

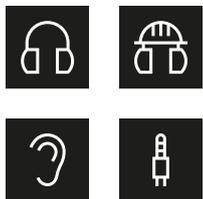




# Active

**Active allows you to communicate with your colleagues, hear warning signals and other important information while protected from hazardous noise.**

The level dependent "Active Listening" microphones provide perfect directional hearing and the electronic protection system limits all sounds through the speakers to a safe sound level (82dB). The replaceable ear cushions enable regular replacement for a long lasting and high performing product. For optimal safety, communication radios and other sound sources can be connected via the external audio input (listen only).



**Battery run-time: 800 hours**



**Active Headband**  
Part. no 47002-001  
SNR 30dB



**Active Helmet Mount**  
Part. no 47102-001  
SNR 29dB



# Relax

**Relax protects your hearing while you enjoy listening to your favourite radio station.**

Easy to reach controls let you tune the AM/ FM radio accurately. The automatic frequency control will lock on to your favourite station for the best reception available, even in low signal areas. The sound from the radio is limited to a safe level by the EPS (Electronic Protection System).

The replaceable headband and ear cushions enable regular replacement for a long lasting and high performing product. For optimal safety, communication radios and other sound sources can be connected via the external audio input (listen only).



**Battery run-time: 130 hours**



**Relax Headband**  
Part. no 45002-001  
SNR 30dB



**Relax Helmet Mount**  
Part. no 45102-001  
SNR 29dB



# React

**React allows you to listen to AM/FM radio and communicate with your colleagues while still being protected from harmful noise.**

Level dependent “Active Listening” microphones in each earcup ensure excellent directional hearing, offers natural sounds and enables you to hear conversations, warning signals and other important information without compromising protection.

React is flexible to your situation. As the level dependent and radio functions are controlled independently you can tailor your hearing environment to your own preference. Communication radios and other sound sources can be connected via the external audio input (listen only).



**Battery run-time: 120 hours**



**React Headband**  
Part. no 46002-001  
SNR 30dB



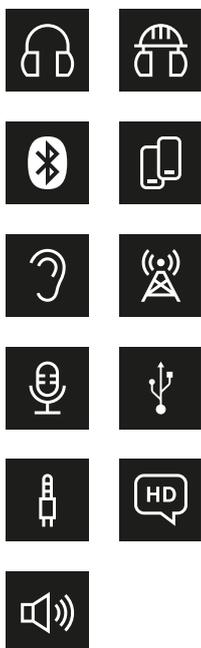
**React Helmet Mount**  
Part. no 46102-001  
SNR 29dB



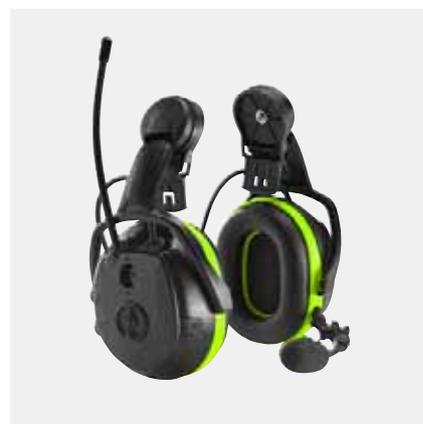
# Synergy Multi-Point

**Hearing protection with Multi-Point Bluetooth® for phone calls and streaming. Seamless pairing with two phones at the same time.**

The perfect hearing protector for those who rely on phone communication in their work. The noise-cancelling boom-microphone offers clear speech quality during calls even in the harshest noise environments. The Active Listening microphones ensures you can hear your colleagues, warning signals and other important information without having to remove your hearing protector.



**Synergy Multi-Point Headband**  
Part. no 49012-001  
SNR 30dB



**Synergy Multi-Point Helmet Mount**  
Part. no 49112-001  
SNR 29dB

**Battery run-time: 62 hours**



# Xstream

## Hearing protection with Bluetooth® for music streaming.

Xstream connects via Bluetooth® to your phone for wireless music streaming and phone calls. Your hearing is protected while you enjoy your favourite music with excellent sound quality, and the built-in speech microphone allows you to make phone calls. A boom-microphone is available as an accessory for those who need clearer speech quality in high noise.

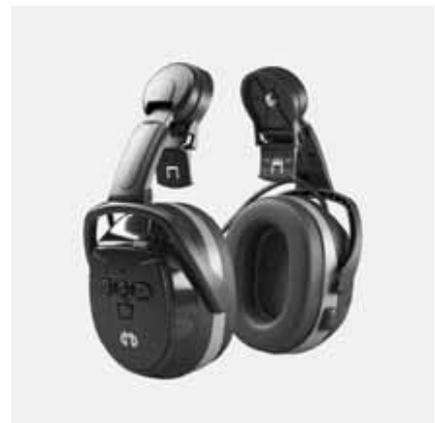


**Battery run-time: 55 hours**



### **Xstream Headband**

Part. no 48000-001  
SNR 29dB



### **Xstream Helmet Mount**

Part. no 48100-001  
SNR 28dB



# Xstream LD

## Hearing protection with Active Listening and Bluetooth® for music streaming.

Xstream connects via Bluetooth® to your phone for wireless music streaming and phone calls. Your hearing is protected while you enjoy your favourite music with excellent sound quality, and the built-in speech microphone allows you to make phone calls. Level Dependent Active listening microphones in each earcup ensure excellent directional hearing, offer natural sounds and enables you to hear conversations, warning signals and other important information without compromising protection.

A boom-microphone is available as an accessory for those who need clearer speech quality in high noise.

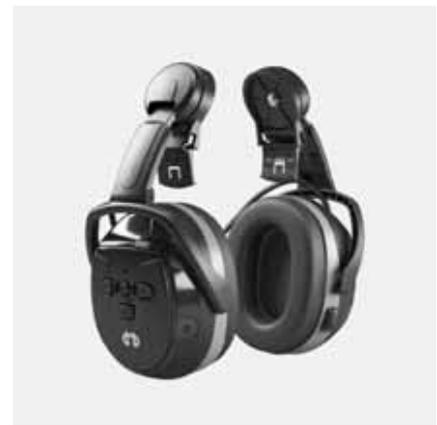


**Battery run-time: 55 hours**



**Xstream LD Headband**

Part. no 48001-001  
SNR 29dB



**Xstream LD Helmet Mount**

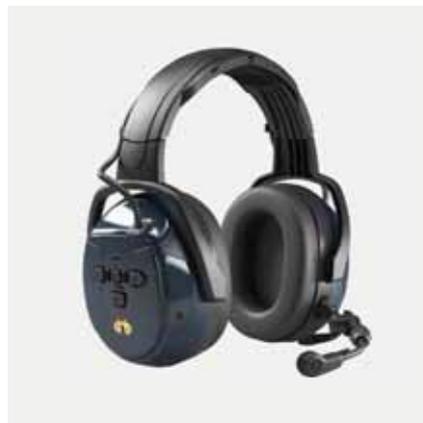
Part. no 48101-001  
SNR 28dB



# Xstream MP

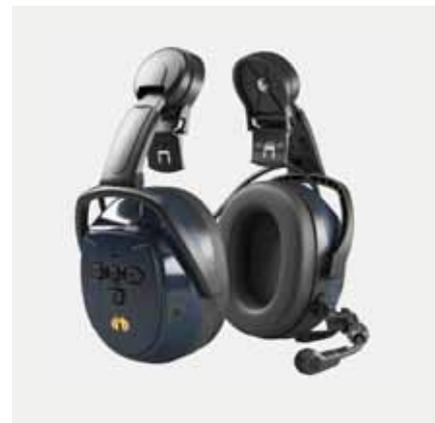
## Hearing protection with Multi-Point Bluetooth® Technology.

Hearing protection with Multi-Point Bluetooth® technology for phone calls and music streaming. Xstream MP lets you pair two phones at the same time, for example a work phone and a private phone. The sound quality has been enhanced even more in comparison to the models Xstream and Xstream LD, the battery life is extended to 80 hours, and the noise-cancelling boom microphone, now included, allows clear communication even in extreme noise environments.



**Xstream MP Headband**

Part. no 48012-001  
SNR 29dB



**Xstream MP Helmet Mount**

Part. no 48112-001  
SNR 28dB

**Battery run-time: 80 hours**



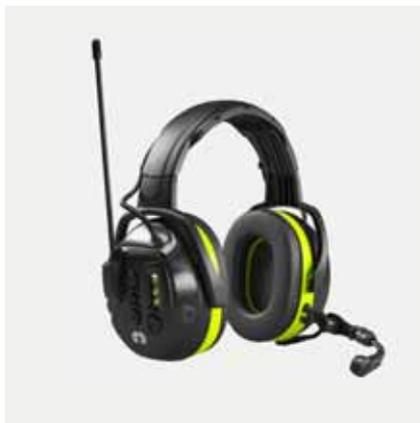
# Local 446

## Hearing protection with built-in communication radio.

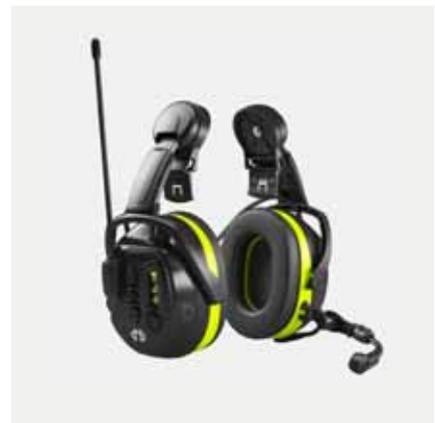
Local is a headset and hearing protector, featuring a built-in communication radio that allows for two-way communication over the local worksite. The wireless headset to headset link is ideal for short message communication on the job, increasing worksite efficiency and safety. Local does not require any external devices, such as mobile radios or cellular phones to establish a communication link thus making it the perfect solution when you need to rely on clear communication, at all times, to get the job done.



**Battery run-time: 12 hours**



**Local 446 Headband**  
Part. no 85001-001  
SNR 30dB



**Local 446 Helmet Mount**  
Part. no 85101-001  
SNR 29dB



# Face Protection

The face protection range offers visor solutions to suit many different work environments. With its uniform design, the visors and carriers can be combined with hearing protectors and safety helmets, or be used as “stand alone” visor solutions.





# Safe 1

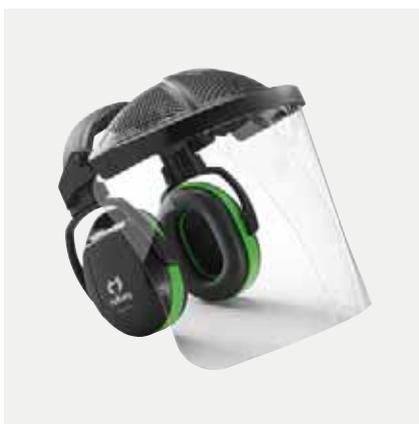
## Visor solution for headband style hearing protectors.

The Safe 1 carrier mounts easily to any Secure headband style hearing protection, and is as easily removed. Perfect for when you are switching between different work tasks in noisy environments. The carrier is developed together with the hearing protector, fits perfectly and holds the visor firmly in place. The mesh patterned browguard protects against impacts and gives a comfortable air flow.

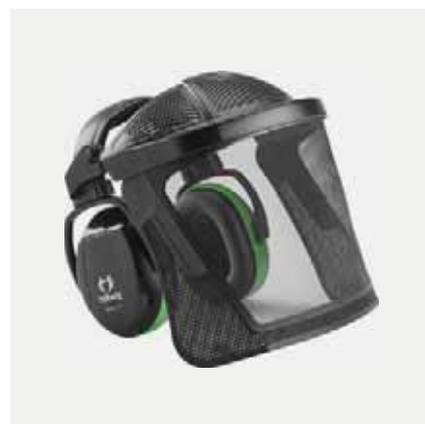
Hellberg's smart uniform design gives you a multiple choice of visors, that all fit perfectly to the carrier. Choose one of our ready-made combinations, or select your own combination of carrier, visor and hearing protector.



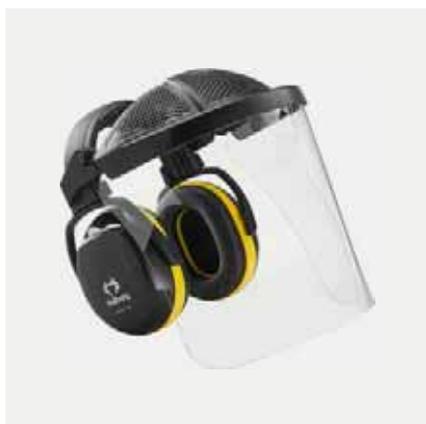
**Safe1 Carrier**  
Part.no 20902-001



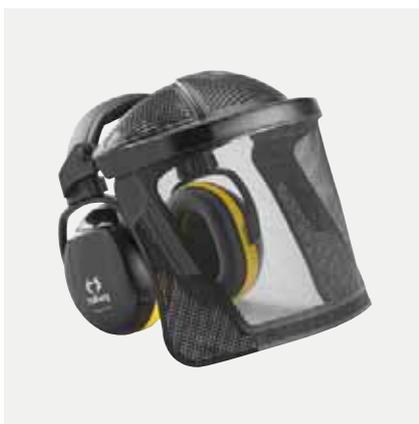
**Secure 1H PC Visor**  
Part.no 44101-001



**Secure 1H Nylon Mesh**  
Part.no 44201-001



**Secure 2H PC Visor**  
Part.no 44102-001



**Secure 2H Nylon Mesh**  
Part.no 44202-001



# Safe 2

## Visor solution for safety helmets and hearing protection.

The Safe 2 visor carriers are designed to be combined with safety helmets and Safe visors, with or without hearing protection. **The Straight Carrier** is for helmets without cut-outs for earmuffs or when the slot is placed aligned with the helmet brim. **The Low Peak Carrier** is for helmets with cut-outs or when the slot is placed above the helmet brim. **The Flex Carrier** is equipped with an extra rubber seal to prevent rain, sawdust and other particles from falling down between carrier and helmet.



**Safe 2 Carrier**  
Standard  
Part. no 20901-001



**Safe 2 Carrier**  
Standard low peak  
Part. no 20901-010



**Safe 2 Carrier**  
Flex  
Part. no 20901-501



**Safe 2 Carrier**  
Flex low peak  
Part. no 20901-510



**Visor attachment 30mm**  
For mounting without hearing protectors  
Part. no 26108-101



# Safe 3

## Stand-alone visor carrier.

The Safe 3 carrier can be used as a stand-alone visor carrier or together with neckband-style hearing protection. The robust browguard protects from flying particles, is lightweight, comfortable and fully adjustable to various head sizes. It is designed to offer the wearer high protection and comfort. Choose our ready-made combination, or select your own combination of carrier and visor.



**Safe 3 Carrier**  
Part. no 61100-001



**Safe 3 PC Visor**  
Part. no 65100-001



# Safe Visor Range

Regardless of the work task or type of hearing protector required, you can easily find a visor for your needs.

Thanks to the uniform design, the visor and carriers can be combined with hearing protectors and safety helmets, or be used as stand-alone visor solutions.



## Steel Mesh

Part. no 20912-001  
Light transmittance 70%  
Length 185 mm



## Etched Steel Mesh

Part. no 20915-001  
Light transmittance 85%  
Length 185 mm



## Nylon Mesh

Part. no 20923-001  
Light transmittance 55%  
Length 185 mm



## Polycarbonate Clear

Part. no 20930-001  
Length 200 mm  
Thickness 1 mm



## Polycarbonate Chinguard

Part. no 20939-001  
Length 220 mm  
Thickness 1 mm



## Polycarbonate 250 mm

Part. no 20940-001  
Length 250 mm  
Thickness 1 mm



**Polycarbonate Electricians Basic**

Part. no 20967-001  
Length 200 mm  
Thickness 1,5 mm



**Acetate Clear Visor**

Part. no 20933-001  
Length 200 mm  
Thickness 1 mm



**Polycarbonate Goldplated**

Part. no 20942-001  
Length 250 mm  
Thickness 1 mm



**Polycarbonate Green**

Part. no 20931-001  
Length 200 mm  
Thickness 1 mm

# Safety Glasses

Hellberg's safety glasses and safety goggles offer optimum protection combined with great comfort and excellent fit. The high quality materials used in our safety eyewear protect your eyes in challenging work environments and help you avoid eye fatigue.

Choose from different styles, coating and lens colours to find the perfect safety glasses for your needs. We also offer models that can be worn together with prescription glasses.



# Helium

**Hellberg Helium safety glasses are very light weight and have an easy fit design.**

Standard equipped with Anti-scratch and Anti-Fog coating and is available in 3 lens colors to suite various applications. The slim temple shape makes it ideal for use in combination with hearing protection, minimizing any negative attenuation effect.



**Helium Clear lens AF/AS**

Part. no 20031-001

Part. no 20031-091 (industry pack)

Lens markings 2C-1.2 HS 1FT



**Helium In/Outdoor lens AF/AS**

Part. no 20131-001

Part. no 20131-091 (industry pack)

Lens markings 2C-1.7 HS 1FT



**Helium Smoke Blue Mirror lens AF/AS**

Part. no 20232-001

Part. no 20232-091 (industry pack)

Lens markings 5-2.5 HS 1FT

# Krypton

**Hellberg Krypton sets a new standard in style, comfort and fit for safety glasses.**

The full framed design with floating lens in combination with the soft dual material added to temples and nose bridge provides a perfect fit for all users. Available in a vast array of lenses and coatings, there's a choice for everyone.



**Krypton Clear lens AF/AS Endurance**  
Part. no 21041-001  
Lens markings 2C-1.2 HS 1FTKN



**Krypton Enhanced Light Coating lens AF/AS**  
Part. no 21531-001  
Lens markings 2C-1.2 HS 1FT



**Krypton Smoke Blue Mirror lens AF/AS**  
Part. no 21232-001  
Lens markings 5-2.5 HS 1FT



**Krypton Smoke Red Mirror lens AF/AS**  
Part. no 21333-001  
Lens markings 5-3.1 HS 1FT



**Krypton Photochromatic lens AF/AS**  
Part. no 21431-001  
Lens markings 5-1.1<2.0 HS 1FT

# Oganesson

**Hellberg Oganesson safety glasses is setting the standard for light weight combined with high wearer comfort.**

The metal free and frameless design safety glasses are equipped with Anti-Scratch coating and is available in 2 lens colors to suite various applications. The slim temple shape makes it ideal for use in combination with hearing protection, minimizing any negative attenuation effect.



**Oganesson Clear lens AS**  
Part. no 27016-091 (industry pack)  
Lens markings 2C-1.2 HS 1FT



**Oganesson Smoke lens AF/AS**  
Part. no 27146-091 (industry pack)  
Lens markings 5-3.1 HS 1FT

# Argon

**Hellberg Argon is one of the most advanced safety glasses available on the market.**

The three step temple angle adjustment for a secure and close fit in combination with the dual soft material used on temples and nose bridge enhances the comfort and grip in all kind of work applications. These versatile safety glasses is available in a vast array of lenses and coatings, making it the professionals choice!



**Argon Clear lens AF/AS Endurance**  
Part. no 23041-001  
Part. no 23031-091 (industry pack)  
Lens markings 2C-1.2 HS 1FTKN



**Argon Enhanced Light Coating lens AF/AS**  
Part. no 23531-001  
Lens markings 2C-1.2 HS 1FT



**Argon Smoke Blue Mirror lens AF/AS**  
Part. no 23232-001  
Lens markings 5-2.5 HS 1FT



**Argon Smoke Red Mirror lens AF/AS**  
Part. no 23333-001  
Lens markings 5-3.1 HS 1FT



**Argon Photochromatic lens AF/AS**  
Part. no 23431-001  
Lens markings 5-1.1<2.0 HS 1FT

# Neon

**Hellberg Neon and Neon Plus heavy duty safety goggles for general use will protect against liquid splashes and particles.**

As standard equipped with Anti-fog, Anti-Scratch coating and UV light blocker.  
Designed to comfortably be worn in combination with prescription glasses.



**Neon Clear lens AF/AS**

Part. no 24034-001  
Part. no 24034-091 (industry pack)  
Lens markings 2C-1.2 HS 1BT



**Neon Plus Clear lens AF/AS Endurance**

Part. no 25045-001  
Lens markings 2C-1.2 HS 1BTKN



**Neon Plus Enhanced Light Coating lens AF/AS**

Part. no 25535-001  
Lens markings 2C-1.2 HS 1BT

# Xenon

**Hellberg Xenon is a multipurpose “Over Glasses” spectacle that can fit easy over prescription spectacles (RX) or can be used as a general visitor safety spectacles.**

The slim temple design makes it ideal for use in combination with hearing protection, minimizing any negative attenuation effect.



**Xenon “Over Glasses” Clear lens AF/AS**

Part. no 22030-001  
Part. no 22030-091 (industry pack)  
Lens markings 2C-1.2 HS 1FT



# Spare Parts and Accessories



**Hygiene Kit for Secure 1 & 2**  
Part.no 99400-001



**Hygiene Kit for Secure 3**  
Part.no 99401-001



**Hygiene Kit for Electronics**  
Part.no 99403-001



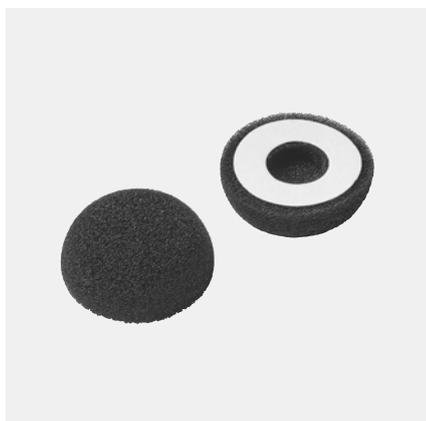
**Rechargeable Batteries for Synergy**  
Part.no 17173-001



**3,5 mm Stereo Connection Cable**  
Part.no 39922-001



**USB Charging Cable**  
Part.no 39926-001



**Windshield LD Active Listening  
Microphones**  
Part.no 1059-001



**Boom Microphone**  
Part.no 16982-001



**Windshield Boom Microphone**  
Part.no 16999-001



**Spare Headband Passives**  
Part. no 26046-914



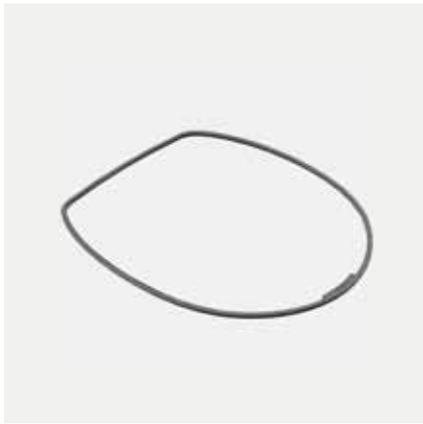
**Spare Headband Electronics**  
Part. no 26046-915



**Spare Helmet Arm**  
Part. no 26108-910



**Fresh Sweat Absorber**  
Part. no 99900-001



**Battery Pack Gasket**  
Part. no 17112-001



**Battery Pack AA**  
Part. no 17004-001



**USB Charging Cable Local**  
Part. no 39927-001



**Charger EU**  
Part. no 17193-001



**Charger UK**  
Part. no 17193-007

# About Hearing

## How to Select Correct Hearing Protection.

### About Noise and Hearing

Our ability to communicate with friends, listening to music, or experiencing a child's first laughter is something we take for granted. Unfortunately, for a significant part of the population, this ability is partially or entirely lost, because of exposure to loud noise. Hearing loss cannot be restored but avoiding damage to your hearing is in most cases a matter of choosing the proper protection. Many people exposed to harmful noise levels on a daily basis, never or seldom wear proper protection. The problem is often ignored, since hearing damage rarely cause physical pain.

### The Ear

The human ear consists of several small parts that together bring us our wonderful sense of hearing. When a sound wave enters our outer ear, it is lead into the ear canal, hitting the micro thin eardrum which starts to vibrate in sync with the sound waves. These vibrations then create a mechanical reaction involving three small bone parts, – the Hammer, the Anvil and the Stirrup. The Stirrup is attached to the Stapedius-muscle, which in turn react to the signals by pumping fluids inside the inner ear.

The inner ear has a multitude of fine hair cells, which react to the flowing and starts a chemical reaction. In this process, small electrical impulses are transmitted to the brain, which we interpret as sound.

From our industrialized society, we are exposed to a lot of noises, many of them greatly mismatched to our fine hearing. By exposing the ear to high levels of noise, the small hair cells of our inner ear get damaged. Over time, hair cells will die and hearing loss occur.

### Definition of Sound

Sound is caused by vibrations from a sound source such as a machine, loudspeaker, or the human voice box. Sound is measured in Frequency (Hertz, Hz) and Sound pressure level (Decibel, dB).

### Frequency

The most common sounds, like that of human speech (500–3000Hz), are found in the High and Middle frequency range. Low frequency sounds (below 500Hz) are usually generated by large engines, ventilation systems, etc. The human ear can hear sounds in a range between 20 and 20 000 Hz. As we grow older, the ageing process itself, or exposure to high noise levels, causes a decline in our hearing, making it harder to identify high frequency sounds.

### Sound Pressure

The lowest sound pressure level distinguishable by the human ear is 0 dB, and anything above 130 dB is likely to cause pain.

### Noise

What we call "noise", is usually described as sounds we experience as unpleasant or disturbing. High level of noise is hazardous to your hearing. Noise can also lead to stress symptoms, discomfort, pain, and increased risk for heart disease. All noises add to your daily quota of exposure; therefore, it is important to wear proper hearing protection at all times.

### Noise and Risk

Over 30% of all workers are exposed to hazardous noise levels and noise induced hearing loss is the most common reported occupational disease. When estimating the risk of hearing damage there are three important factors to consider; exposure time, frequency (Hz) and sound pressure level (dB).

Middle to High frequency noise is the most damaging to your hearing, and should therefore be your primary concern. Low frequency noise is usually less damaging, but can be dangerous because it masks human speech, alarm signals and it can cause symptoms like dizziness and nausea.

In addition to harmful noise of the steady and longer-term kind, peak noises can be equally dangerous. Peak noises are typically those from firearms, hammers, nails guns and other air tools. The brain needs at least 0,3 sec to identify a sound at the right level. Shorter duration is perceived lower than the actual level to our brain. The hearing organ reacts a lot faster. We do not realize that these noises are harmful to our hearing and we often disregard the need for protection.

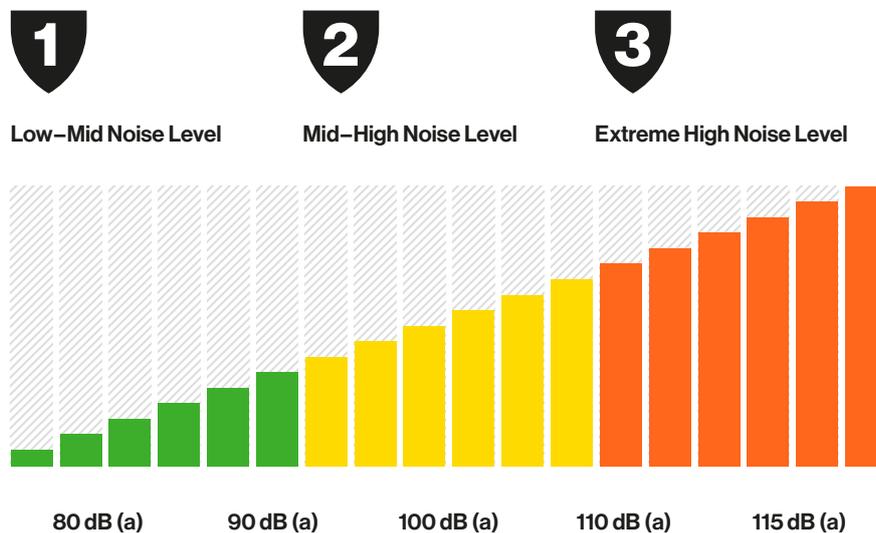
# Selection Guide

**When selecting a hearing protector, consideration should be given to the following factors:**

Hearing protectors should be chosen according to the sound attenuation they will provide. National regulations or other guidelines may stipulate selection criteria for personal hearing protection and place limits on sound exposure. Such relevant criteria and limits should be taken in to account in deciding what level of sound attenuation is required.

When combining hearing protection with other protective equipment it is important that the hearing protection attenuation is not impaired due to the combination. For example the side arms of spectacles should be of a low profile type to not disturb the seal of the earmuff.

For more information about noise levels and hearing protection, please visit [www.hellbergsafety.com](http://www.hellbergsafety.com) or contact your local distributor.



The "Protection Level Graph" can be used as a guide when selecting hearing protection. To be sure you get the correct level of protection, always conduct a noise assessment in your work place.

# About Face Protection and Selection Principles

## How to Select Correct Face Protection.

### Selection

Face protection visors are intended to protect the face from hazards such as impacts from flying fragments, objects and particles, chemical splashes, heat sources and UV radiation exposure. Visors are available in different materials, levels of thickness and size. These levels should correspond with specific tasks. Use the visor in combination with safety glasses or safety goggles for additional protection.

When selecting face protection, consideration should be given to hazards in the work environment and the use of other personal protective equipment. It is important that the protection offers a tight and proper fit so that no objects get around the edges of the visor. The visor should cover your face from at least the forehead to the base of the chin.

- Polycarbonate provides impact and heat resistance. It is also used for arc flash, high heat, chemical splash and radiation protection.
- Acetate provides excellent resistance to chemical splash.
- Mesh visors are generally used to protect the face from flying debris and large dust particles, typically in landscaping and forestry industry.
- There are visors that provides protection against radiation (IR and UV). These visors are made from special tinted and/or coated polycarbonate.
- Some visors are treated with an anti-fog coating.

| Hazards   | Related Work Tasks  |
|---|---|
| <b>Impact:</b> Flying objects such as large chips, fragments, particles and dirt. | Chipping, grinding, machining, wood working, sawing, drilling etc.      |
| <b>Heat:</b> Anything emitting extreme heat.                                      | Furnace operations, pouring, casting, hot dipping and welding.          |
| <b>Chemicals:</b> Splash, fumes, vapors and irritating mists.                     | Acid and chemical handling, degreasing, plating and working with blood. |
| <b>Dust:</b> Harmful Dust.  | Woodworking, buffing, and general dusty conditions.                     |
| <b>Optical radiation (UV):</b> Radiant energy, glare and intense light.           | Welding, torch-cutting, brazing, soldering and laser work.              |



Hallberg  
SECURE 3X



# About Eye Protection and Selection Principles

## How to Select Correct Safety Glasses.

### When should I wear eye protection?

There are many potential dangers to the eyes. Because the eyes are so vulnerable, it is very important to adapt the appropriate protection to the conditions you are in. For example, when working with metal, wood or stone flying particles can easily hit the eyes and cause great damage. Typical situations are when machining metals by cutting or grinding, when you saw wood with a chainsaw or when you strike and hammer in stone. The more powerful tools and power used, the greater the risk of injury and the type of eye protection must be adapted, whether it is safety glasses, goggles or a face shield. Even the smallest particles can cause irritation or lead to irreversible damage to the eye.

There are harmful liquids and chemicals can very easily cause damage to the eyes. If you are working with such products, it does not take much before a drop splashes. Dangerous liquids and chemicals usually also pose a danger to the skin and the rest of the face and then combination with glasses and full face protection becomes a necessity. Other use for eye protection can be protection against sunglare (such as painters working outside and painting a white wall avoiding "snow blindness"), enhancement of light and contrast when working in dark or poorly illuminated environments, or when moving

in and out between sunlight and indoor artificial light or low light conditions.

### How to choose the right eye protection?

The most important thing is that the protective equipment is adapted to the dangers to which the user is exposed, that it fits and gives the user the necessary comfort during use. If the eye protection is used often and for a longer period of time, the user must also enjoy it. Eye protection is marked in different classes, adapted to different areas of use.

Using Hellbergs colour selection guide, you can easily find the lens type for your need. Just look for the corresponding colour on the safety glasses packaging.

# Lens Types



**Clear**  
Impact and UV Protection



**Red Mirror**  
Extra Sunglare Protection



**ELC**  
Enhances light and contrast



**Blue Mirror**  
Sunglare Protection

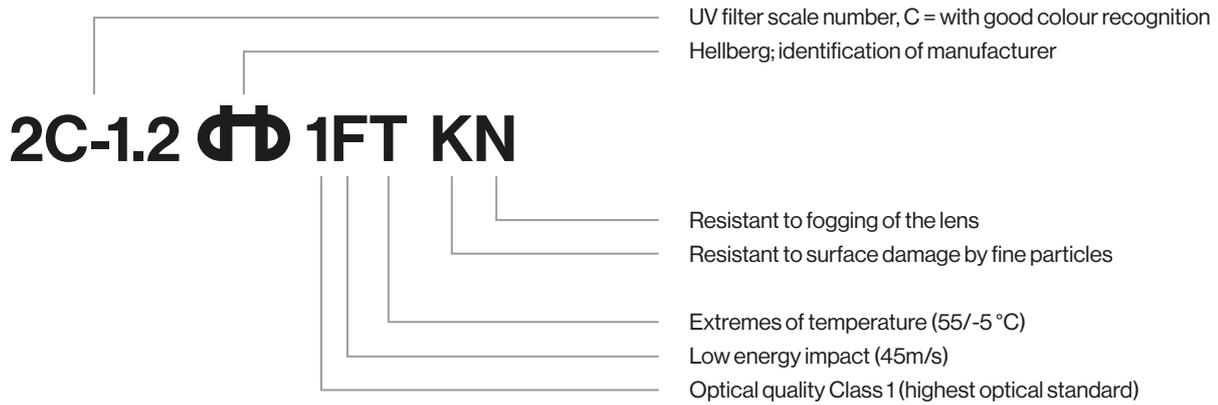


**In/Outdoor**  
For varying light conditions



**Photochromatic**  
Darkens with Sun/UV exposure

## Understanding the lens markings



## Understanding the frame markings

