Sordin Classic™

THE ORIGINAL

SORDIN

EMBRACE NOISE

Timeless quality

Trends come and go. But quality never goes out of style. Some products don’t need hotting up, they were simply great from the beginning.

Sordin Classic builds on a genuine commitment to deliver timeless quality. Our mission was simple and straight-forward: to ensure workers’ safety with focus on the technical details and the comfort necessary for users to wear their hearing protector all day.

Originally designed in the 1980s, the Sordin Classic design philosophy remains the same to this day. With its rugged no-frills design, Sordin Classic was built to last – even in the most demanding industrial environment.

Harmful noise is a common occupational hazard, despite workers’ safety programs implemented in most countries worldwide. One explanation may be the “invisible nature” of hearing loss – “what we can’t see doesn’t exist.”

We must stop turning a deaf ear to hearing loss. According to WHO, unaddressed hearing loss is the third largest cause of years lived with disability. An estimated US$ 1 trillion is lost each year due to our collective failure to adequately address hearing loss.

The responsibility to prevent hearing loss rests heavily on employers. At Sordin, we know hearing protection and can help your organization shift to the protective side. A tradition encapsulated in a hearing protector whose name says it all: Sordin Classic.

Made in Sweden

Sordin Classic builds on genuine Swedish craftsmanship. Originally designed in the 1980s, the brand carries a long history of ensuring workers’ safety. To this day, Sordin Classic is manufactured by Sordin in Sweden, a country famous for its strong engineering tradition – paired with innovation and quality excellence.

Certified quality

Sordin Classic has a truly global footprint and is widely used for both professional and recreational purposes. All hearing protectors are tested and certified according to EN and ANSI, making them approved for professional use in most markets worldwide.

Passive hearing protection – an active safety measure

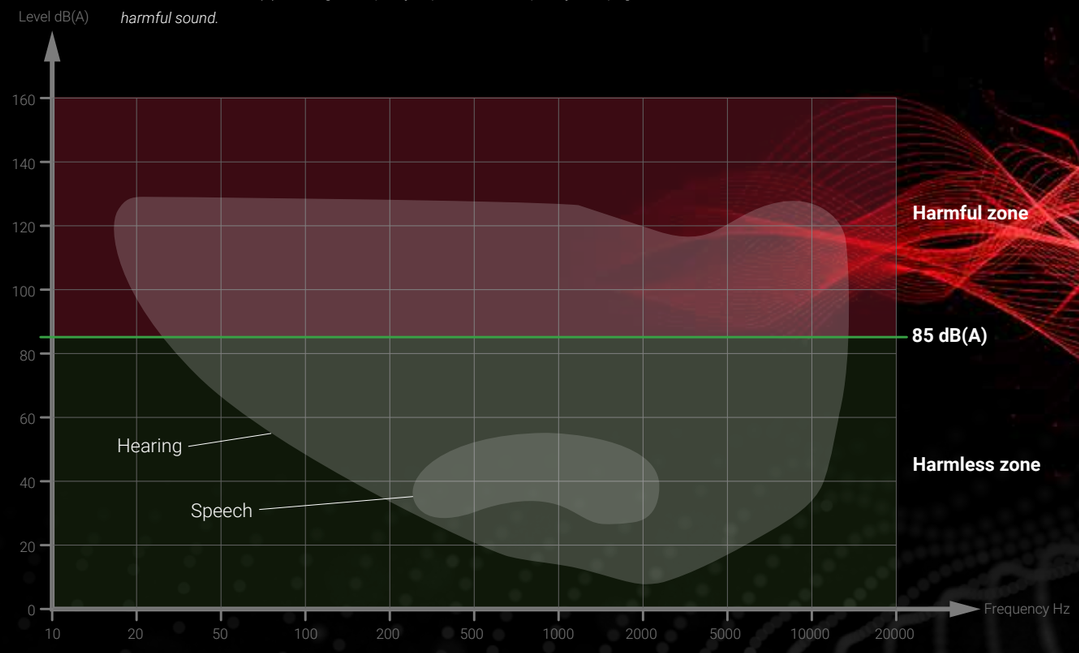
While both sound and hearing are complex sciences, the essence of both can be easily summarized: Use hearing protection!

It takes surprisingly little noise to cause hearing loss. What many don't know, or think about, is that all hearing loss is permanent. So, be careful and wear a hearing protector even if you're at the lower end of, or even slightly below, the risk exposure level! Especially when it's so easy and straight-forward to avoid life-long hearing loss.

First, choose between a passive or electronic hearing protector. Sordin Classic is passive, which means that it uses mechanical noise suppression only. In contrast, electronic hearing protectors combine mechanical suppression with some type of digital audio suppression technology.

Passive hearing protection is fully adequate for many purposes. Unless you want to be able to listen to music, hear ambient sound or communicate electronically, you are generally well off with a high-quality, cost-efficient passive hearing protector like Sordin Classic.

The range of human hearing depends on sound level and frequency. We all know sound level as "loud or weak", and frequency as "high or low pitch", both of which are tested in regular hearing tests. A common indicator of harmless sound is below 85 dB(A), although also partly dependent on frequency. See page 5 for more information on harmless vs. harmful sound.



Some useful facts

Passive vs. electronic

Sordin Classic is a passive hearing protector, which means that it uses mechanical noise suppression technology only. In contrast, electronic hearing protectors use various electronic functions such as algorithms for compressing loud sound peaks to complement noise protection and may also include additional features such as FM radio and communications functionality.

dB vs. dB(A)

Decibel (dB) is the general measure of sound level, or loudness. There are, however, numerous variants and in this brochure, we address dB and dB(A). In simplified terms, dB is the intrinsic loudness of a sound source, while dB(A) is the loudness subjected to a person's hearing when exposed to noise. Hence dB(A) depends on factors such as the distance to the source and whether you're wearing a hearing protector or not.

Harmless vs. harmful noise

There is no clear dB(A) limit where noise becomes harmful. Instead, directives are based on a combination of level and exposure time. According to the Swedish Work Environment Authority, a hearing protector should provide a daily noise exposure index (LEX), of "8 h, 80 dB(A)". This is equivalent to 8 hours of continuous exposure at 80 dB(A), or 4 hours at 83 dB(A). At LEX "8 h, 85 dB(A)", hearing protection is mandatory.

Three layers for your protection

A hearing protector consists of three protective layers, which all contribute to suppressing noise to a harmless level depending on noise environment once it reaches your ear. Sordin Classic comes in three models – XLS, EXC and HPE – each featuring different attenuation capacities.

Outer layer

The outer layer takes the first hit of the sound wave, and its thickness determines the difference in attenuation capacity between the three Sordin Classic models.

Center layer

The foam inserts provide excellent noise attenuation and offer space for the ears inside the cups.

Inner layer

The sealing rings are made of comfortable foam cushions, allowing all-day wearing – while efficiently shutting out noise through tight sealing around the ears.

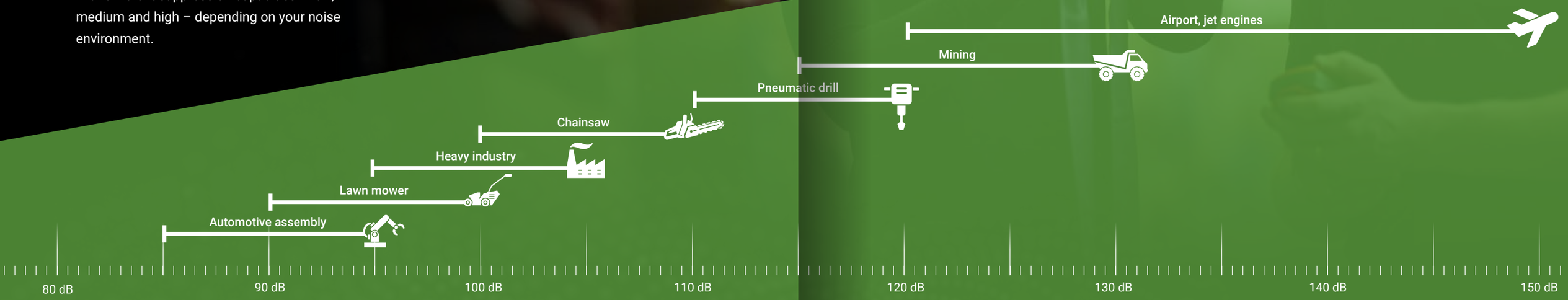
Which Sordin Classic are you?

While hearing protection is a cheap and simple health insurance, too good protection may be a safety risk too. That's why Sordin Classic comes in three models with different attenuation levels.

It is important to always remain fully aware of events around you while wearing your hearing protector. Using too efficient suppression, you may lose connection with your surroundings, creating a feeling of isolation in your own, silent bubble.

The suitable hearing protector suppresses noise to just the right level, not too much, not too little. That's why Sordin Classic comes in three models with different suppression capacities – low, medium and high – depending on your noise environment.

It may be difficult to assess the danger of the noise you're exposed to, as it depends on different factors such as the type of noise, the frequency (or pitch), and whether noise is continuous or intermittent. And, of course, your distance to the sound source.



XLS

EXC

HPE

Which Sordin Classic model to select? Here's a rough indication depending on sound source. For extremely loud environments, such as airport outdoor work, Sordin Classic HPE combined with in-ear plugs are needed for sufficient protection. Note: The graphic does not consider distance to sound source, frequency, exposure time and other factors, making the recommendation for each Sordin Classic model highly approximate.

Sordin Classic features

Headband and helmet versions

All three Sordin Classic models XLS, EXC and HPE are available as headband or helmet versions.

Classic design

The simple, no-frills design in all-black color adds to the timeless look that made Sordin Classic earn its name.

Attenuation capacity

The thickness of the outer cup layer determines the attenuation capacity of the three Sordin Classic models.

Even pressure

A two-point mounting system on the ear cups distributes the pressure evenly around the cushions for excellent comfort.

The image below is a collage of all three Sordin Classic models XLS, EXC and HPE. For a detailed description of each model, see page 10–11.

Safe-grip headband

Easy to put on and take off the hearing protector, even when you are wearing gloves.

Adjustable headband

The Sordin Classic models HPE and EXC come with an adjustable headband force for perfect, individual fit.

Replaceable sealing rings

The sealing rings are replaceable and hygiene kits are available, including foam cushions and inserts/liners (accessory).

High attenuation inserts

The foam insert offer excellent noise attenuation and offers ear space inside the cup.

TECHNICAL DATA

FEATURE	 Sordin Classic XLS	 Sordin Classic EXC	 Sordin Classic HPE
Category	Passive	Passive	Passive
Attenuation	Low/medium	Medium/high	High
Headband version	•	•	•
Helmet version	•	•	•
Weight headband version	197 g	217 g	249 g
Weight helmet mounted version	194 g	208 g	233 g
Operating conditions	-20°C - +55°C	-20°C - +55°C	-20°C - +55°C
Cup and headband color	Black	Black	Black
Complies with following environmental directives	REACH	REACH	REACH

MATERIALS	Sordin Classic XLS	Sordin Classic EXC	Sordin Classic HPE
Cups	ABS	ABS	ABS
Attenuation foam	PU	PU	PU
Sealing rings	ABS, PVC, PU foam	ABS, PVC, PU foam	ABS, PVC, PU foam
Headband	POM	POM	POM
Cup supporting arm	PA	PA	PA
Adapter	PA	PA	PA
Holder	PA	PA	PA
Spring cover	PP	PP	PP
Spring	Stainless steel	Stainless steel	Stainless steel

PRODUCT NUMBERS	Sordin Classic XLS	Sordin Classic EXC	Sordin Classic HPE
Headband	811004-10P	812004-10P	813004-10P
Helmet Mounted Adapter No 14		812004-3014P	813004-3014P
Helmet Mounted Adapter No 16			813004-3016P
Helmet Mounted Adapter No 17			813004-3017P
Helmet Mounted Adapter No 18	811004-3018P		
Helmet Mounted Adapter No 20	811004-3020P	812004-3020P	813004-3020P
Helmet Mounted Adapter No 21	811004-3021P	812004-3021P	
Hygiene Kit	81H-1001P	81H-2001P	81H-3001P

What adapter do you need for your helmets. See latest list on www.sordin.com/classic

EN APPROVALS

TESTS AND CERTIFICATES

The products meet the Essential Health and Safety Requirements as laid out in Annex II and conforms with quality assurance of the production process, module D, laid out in Annex VIII of the PPE-regulation (EU) 2016/425. CE markings are in accordance with EN 352-1:2020 and EN 352-3:2020. The products are approved to modules B and D by BSI (NB 2797), BSI Group The Netherlands B.V. Say Building, John M. Keynesplein 9, 1066 EP Amsterdam, The Netherlands.

ATTENUATION DATA

Sordin Classic XLS headband

H	M	L	SNR	NRR
32 dB	29 dB	22 dB	**31 dB**	**24 dB**

Frequency (Hz)	63	125	250	500	1 000	2 000	4 000	8 000
Mean attenuation, M_f (dB)	18.2	18.8	22.0	31.1	34.3	33.8	38.4	41.3
Standard Deviation, s_f (dB)	3.8	3.5	2.0	3.2	3.8	3.4	3.2	3.8
APV (M_f - s_f) (dB)	14.4	15.3	19.9	27.8	30.4	30.4	35.3	37.6

Sordin Classic XLS helmet

H	M	L	SNR	NRR
34 dB	28 dB	22 dB	**31 dB**	**25 dB**

Frequency (Hz)	63	125	250	500	1 000	2 000	4 000	8 000
Mean attenuation, M_f (dB)	16.5	20.2	19.9	29.3	33.3	34.2	37.8	40.6
Standard Deviation, s_f (dB)	3.1	2.1	2.5	2.7	2.7	2.4	3.3	2.2
APV (M_f - s_f) (dB)	13.4	18.2	17.4	26.5	30.6	31.8	34.5	38.5

Sordin Classic EXC headband

H	M	L	SNR	NRR
34 dB	30 dB	23 dB	**32 dB**	**25 dB**

Frequency (Hz)	63	125	250	500	1 000	2 000	4 000	8 000
Mean attenuation, M_f (dB)	19.4	19.6	23.4	32.3	33.8	35.3	40.8	41.1
Standard Deviation, s_f (dB)	3.0	3.7	3.4	3.0	2.5	3.4	3.4	3.6
APV (M_f - s_f) (dB)	16.4	15.9	20.0	29.2	31.3	31.9	37.5	37.5

Sordin Classic EXC helmet

H	M	L	SNR	NRR
34 dB	28 dB	20 dB	**30 dB**	**24 dB**

Frequency (Hz)	63	125	250	500	1 000	2 000	4 000	8 000
Mean attenuation, M_f (dB)	15.5	15.5	20.2	28.0	31.5	35.1	36.7	38.8
Standard Deviation, s_f (dB)	4.6	2.2	2.1	2.8	2.0	2.8	3.1	3.5
APV (M_f - s_f) (dB)	10.9	13.3	18.2	25.2	29.6	32.3	33.6	35.4

Sordin Classic HPE headband

H	M	L	SNR	NRR
35 dB	31 dB	26 dB	**34 dB**	**26 dB**

Frequency (Hz)	63	125	250	500	1 000	2 000	4 000	8 000
Mean attenuation, M_f (dB)	19.6	24.3	25.7	31.0	34.9	36.2	40.6	39.7
Standard Deviation, s_f (dB)	2.6	2.9	3.6	2.7	3.2	2.7	2.7	4.1
APV (M_f - s_f) (dB)	17.0	21.4	22.1	28.4	31.6	33.4	38.0	35.6

Sordin Classic HPE helmet

H	M	L	SNR	NRR
33 dB	29 dB	23 dB	**31 dB**	**26 dB**

Frequency (Hz)	63	125	250	500	1 000	2 000	4 000	8 000
Mean attenuation, M_f (dB)	19.1	20.1	22.4	27.9	34.7	33.2	39.1	40.5
Standard Deviation, s_f (dB)	3.8	2.9	2.2	3.0	2.3	3.1	2.9	3.2
APV (M_f - s_f) (dB)	15.2	17.2	20.1	25.0	32.5	30.1	36.1	37.3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