



Be smart –
wear Phonak

Serenity Choice™ Pro Industry

Smart hearing protection for smart people

A Sonova brand

PHONAK
communications

Introducing Phonak
Serenity Choice™ Pro
Industry – the new
passive hearing
protection solution for
industry, from the
hearing care specialist.



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How do we know a sound level is safe?

The World Health Organization (WHO) and the U.S. Environmental Protection Agency (EPA) recommend maintaining environmental noises below 70 dBA over 24 hours (75 dBA over 8 hours) to prevent noise induced hearing loss.¹

Directive 2003/10/EC of the European Parliament and of the Council of 6 February 2003 on the minimum health and safety requirements regarding the exposure of workers to the risks arising from physical agents (noise):

Action level EC ²	Daily exposure level LEX, 8h	Peak sound pressure level LC, peak
First action level (minimum) to provide protection	80 dB(A)	135 dB(C)
Second action level: mandatory protection	85 dB(A)	137 dB(C)



Accepted exposure level for 8 hours	+	SNR	=	Exposure value with protection for 8 hours
85 dB		25		110

Noise sources ¹	Noise level in dB	Health effects ²
Jet plane take off, firecracker, gun shot	140	Pain and ear injury
Percussion section at symphony, air raid, jackhammer, power drill	130	
Ambulance siren, pneumatic drill, chain saw	120	
Leaf blower, power saw	110	Hearing loss possible in less than 2-5 minutes
Motorcycle at 50 km/h, wood working, factory machinery	100	Hearing loss possible after 15 minutes
Heavy goods vehicle at 50 km/h, tractor	90	Damage to hearing possible after about 50 minutes of exposure
Handsaw, heavy traffic, noisy restaurant	85	Damage to hearing possible after 2 hours of exposure
Manual machine tools, computer printing room	80	Cardiovascular effects
Flush toilet, coffee grinder	75	
TV audio	70	Sleep disturbances
Alarm clock, electric shaver	65	Stress, annoyance
Call centers, offices, air conditioner, sewing machine	60	Sounds at these dB levels typically don't cause any hearing damage.
Electric toothbrush	55	
Refrigerator	50	
Quiet residential area, library	40	
Soft whisper	30	
Ticking watch	20	

Performance

counts



Phonak Serenity Choice™ Pro Industry highlights at a glance



Phonak Serenity Choice™ Pro Industry
Custom, full concha, exchangeable
filter, lanyard



Phonak Serenity Choice™ Pro
Industry, generic ear tip,
exchangeable filter, lanyard

Attenuates noise and loud sounds effectively

Phonak Serenity Choice™ Pro Industry significantly reduces noise and loud sounds, allowing you to work safely in noisy environments¹.

Keeps relevant sound and speech

Phonak Serenity Choice™ Pro Industry keeps relevant sound and speech, and so allows situational awareness and communication¹.

Lets the ear breathe

Phonak Serenity Choice™ Pro Industry lets the ear breathe by ventilating the ear to prevent a build up of excess moisture².

¹ IFA/DGUV Bescheinigung 20.12.2021, Serenity Choice Pro Industry KI 20, 25, 30 (W X S V E)

² Tested at Sonova laboratories, with ear tip and filter or completely sealed ear tip. Humidity was measured in the ear under different lab conditions. The test results are valid for generic as well as custom products

Phonak Serenity Choice™ Pro Industry performance overview

Phonak Serenity Choice™ Pro Industry is available in different form factors and with different filters:

Custom made earpieces to provide the safest level of attenuation, and the comfort needed to wear the hearing protection 8 hours a day for years. The earpieces are available in two sizes and in two different materials, with a variety of colors.

Phonak Serenity Choice™ Pro Industry KI 20

Generic Custom acrylic Custom silicone



Shell colors



SNR	22	26	22
H	22	27	23
M	20	24	20
L	18	21	19
NRR	14	19	16
Metal detection		✓	✓

Generic ear tips for occasional use, e.g. temporary work forces, with the same filter technology as the custom made products.

Phonak Serenity Choice™ Pro Industry KI 25 Phonak Serenity Choice™ Pro Industry KI 30

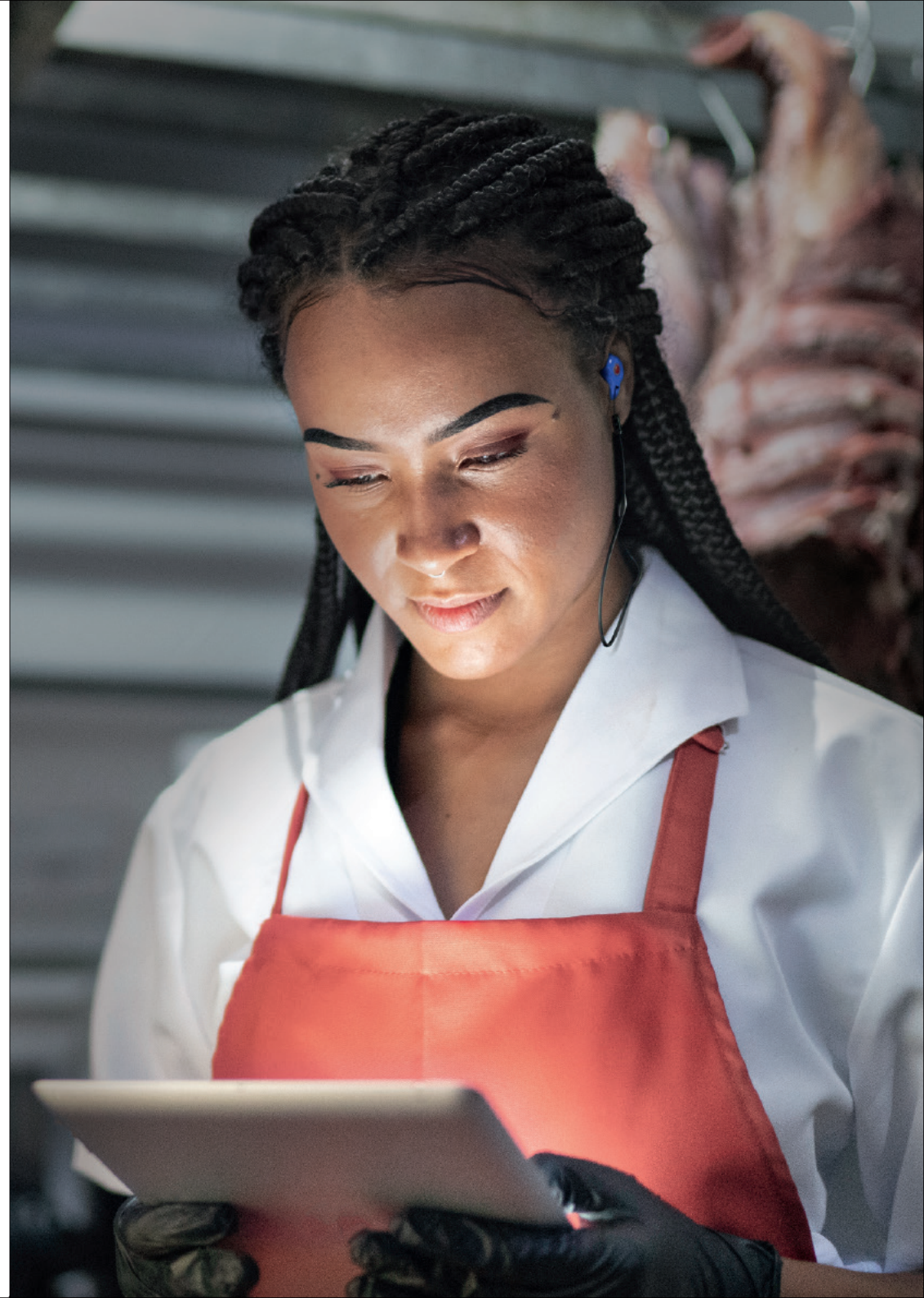
Generic food industry Generic Custom acrylic Custom silicone Custom acrylic Custom silicone



24	24	28	25	30	26
23	23	30	25	31	25
22	22	25	22	27	24
21	21	23	21	25	23
16	16	21	17	22	18
✓		✓	✓	✓	✓

Phonak Serenity Choice™ Pro Industry unique filter technology

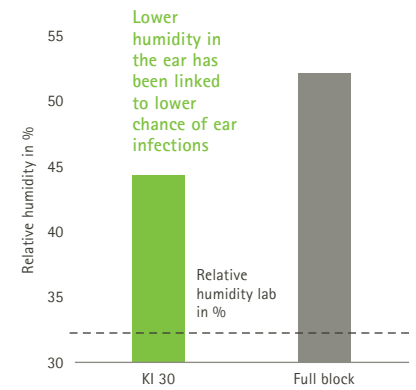
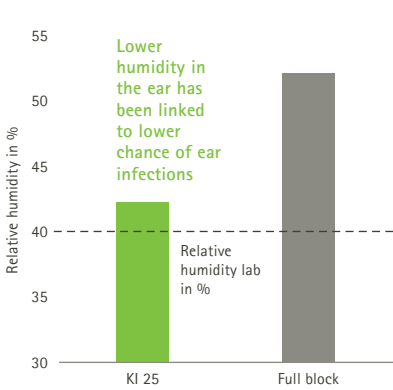
Phonak Serenity Choice™ Pro Industry filters attenuate loud sound and noise while keeping relevant sound and speech thus allowing situational awareness and communication.





Why is it important to ‘let the ear breathe’?

The relative humidity of normal, healthy ears is between 40% and 70%¹. However, lower humidity in the ear has been linked to a reduced chance of ear infections. Lab tests show that Serenity Choice™ Pro Industry filters allow lower levels of humidity in the ear compared to a full block filter.



¹ Gray , R. F., Sharma, A., & Vowler , S. L. (2005). Relative humidity of the external auditory canal in normal and abnormal ears, and its pathogenic effect. *Clinical Otolaryngology*, 30 (2), 105-111.

Construction

is key

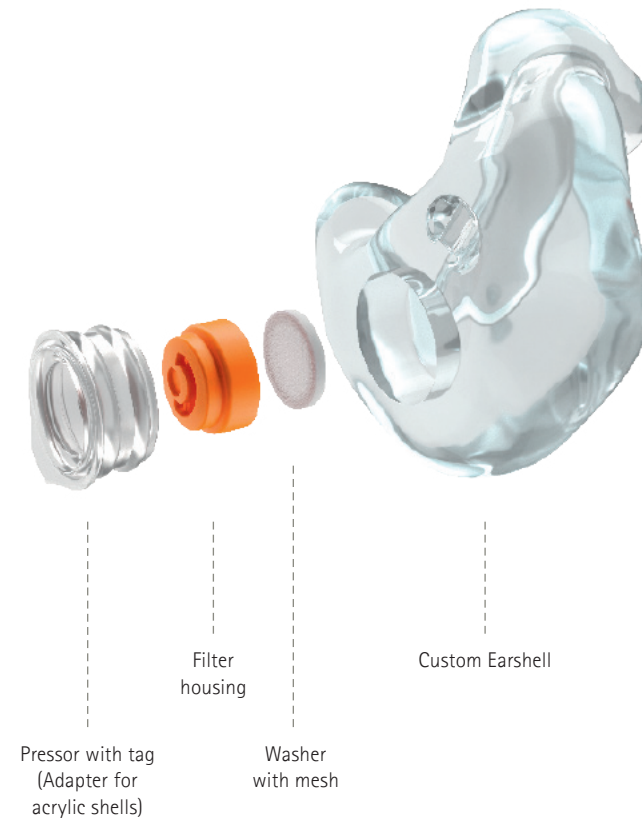


A unique simple, flexible and reliable construction

In the illustrations below, we can see how Serenity Choice™ Pro Industry is constructed. The generic product has a medical grade TPE (ThermoPlastic Elastomer) eartip and the custom product is a standard custom earshell made from silicone or acrylic. Each of these has a hearing protection filter inserted. The filter itself is made up of two main parts: the filter housing, available in different colors to distinguish between filter use cases; and a washer with mesh.



For custom products made from acrylic, there is also a pressor with soft tag. This provides adequate seal and retention for the filter which enables an easy filter exchange process.





Nothing
beats service

How we serve you and your workforce

Our extensive service network is always on hand to take ear impressions and to test the fit of custom hearing protection. Contact your Phonak Communications representative or check our website for a complete list of partners.

Acoustic Leakage Tester (ALT)

It is essential to check the actual attenuation being provided by any hearing protection. A poorly sealed custom shell reduces the performance of the hearing protection and can lead to hearing damage.

The acoustic leakage Tester, ALT2, is a simple, fast and user-friendly solution. The app, designed for an iOS device, works with a test probe and without the need for complicated set-ups. The quick measure provides a pass or fail result, while a standard test can also generate one or more Personal Attenuation Rating (PAR) reports, compliant with ANSI S12.71-2018 standards.

Periodic checks, mandatory in several countries, guarantee compliance and maintain total confidence in the hearing protection chosen.



Getting the
numbers right



Performance and costs comparison

The actual purchase price of a hearing protection device doesn't take into consideration the costs over time, nor the advantages or disadvantages of a solution. The table below shows a comparison of common solutions based on average purchase prices, as well as different performance characteristics.

	Average costs / pair in CHF ¹	Costs / pair / year (230 working days, 2 pairs/day for foam)
Foam ear plugs 	0.15	69.00
Ear muff 	30.00	30.00
Serenity Choice™ Pro Industry 	25.00	25.00
Serenity Choice™ Pro Industry Custom 	150.00	150.00

Costs / pair / life cycle (5 years) ²	Considerations
345.00	<ul style="list-style-type: none"> • Risk of incorrect insertion and therefore reduced attenuation. • Acoustic leakage test only possible in lab.
90.00	<ul style="list-style-type: none"> • Risk of acoustic leakage when worn with safety glasses. • Risk of sweating and/or feeling isolation. • Acoustic leakage test only possible in lab. • Possible costs to replace foam on shell and shorter usage time of approx. 3-4 months.
50.00	<ul style="list-style-type: none"> • Recommended for occasional use. • Acoustic leakage test on site with ALT.
150.00*	<ul style="list-style-type: none"> • Custom-made for individual ears • Acoustic leakage test on site with ALT. <p>*assuming no change of ear canal over time</p>



Why Serenity Choice™ Pro Industry?

Accurate performance

- Certified attenuation of 14–22 NRR / 22–30 SNR
- Situational awareness and communication ability
- Lets the ear breathe
- 100% tested acoustically

Simple construction

- Exchangeable filters
- 100% washable

Complete service

- Service partners nearby
- Time saving Acoustic Leakage Tester

Economy of use

- Very economical and comprehensive hearing protection solution over time

About us

Since 1992 we have helped professionals to communicate effectively in challenging environments. Thanks to our close collaboration with end users to develop solutions that perfectly meet their needs, our miniaturized wireless earpieces, headsets and professional hearing protection devices are used and trusted by demanding customers around the world. Based in Murten in one of Switzerland's first zero energy office buildings, our company is a member of Sonova Group, a leading provider of innovative hearing care solutions.

www.phonak-communications.com