

RIC HEARING SYSTEMS

R Li T 8

Tech Level	16	12	8	6	4	tune
------------	----	----	---	---	---	------



Battery: Lithium-ion
Amplification: 46 dB | 60 dB | 65 dB | 75 dB

R Li T 8 | Technical Data

Type	S-Receiver		M-Receiver	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
OSPL 90 at 1.6 kHz	—	110 dB SPL	—	123 dB SPL
OSPL 90 (peak)	110 dB SPL	120 dB SPL	119 dB SPL	129 dB SPL
HFA OSPL 90	102 dB SPL	—	115 dB SPL	—
Full-on gain				
FOG at 1.6 kHz	—	44 dB	—	58 dB
FOG (peak)	46 dB	56 dB	60 dB	70 dB
HFA FOG	38 dB	—	51 dB	—
Reference test gain	25 dB	35 dB	38 dB	48 dB
Frequency, noise and directivity				
Frequency range	TL 16 TL 12 TL 8, 6, 4	100 – 10000 Hz 100 – 8700 Hz 100 – 8200 Hz	100 – 10000 Hz 100 – 8800 Hz 100 – 8300 Hz	100 – 9500 Hz 100 – 8700 Hz 100 – 8200 Hz
Equivalent input noise		16 dB SPL	19 dB SPL	16 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz		1 / 1 / 1 / 1 %	1 / 1 / 2 / — %	1 / 1 / 1 / 1 %
Tinnitus noiser broadband		65 dB SPL	—	70 dB SPL
AI-DI		4.0 dB		4.0 dB
Latency		< 15 ms		< 15 ms
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	—	77 dB SPL	—	90 dB SPL
HFA MASL (1 mA/m)	68 dB SPL	—	83 dB SPL	—
HFA SPLITS (left/right)	85 / 85 dB SPL	—	98 / 98 dB SPL	—
RSETS (left/right)	0 / 0 dB	—	0 / 0 dB	—
HFA SPLIV	85 dB SPL	—	99 dB SPL	—
Battery				
Battery runtime (without streaming)		up to 39 h		up to 39 h
Battery runtime (incl. 5 h streaming)		up to 34 h		up to 34 h
Cellphone compatibility				
Microphone mode		0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz
Telecoil mode		0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz

— not applicable

Refer to section “Further information” for additional information on the values.

R Li T 8 | Technical Data

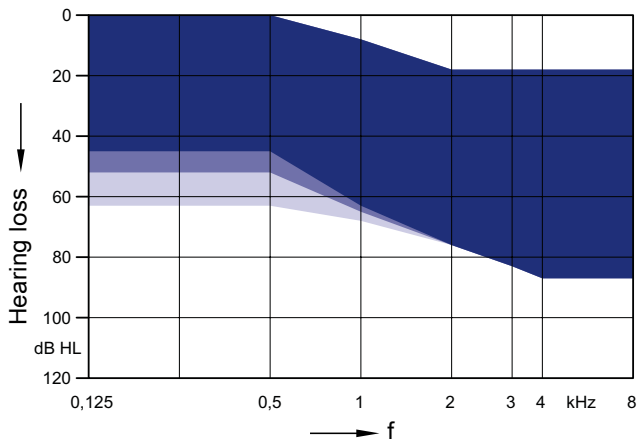
Type	P-Receiver		HP-Receiver	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
OSPL 90 at 1.6 kHz	—	129 dB SPL	—	136 dB SPL
OSPL 90 (peak)	122 dB SPL	131 dB SPL	131 dB SPL	138 dB SPL
HFA OSPL 90	120 dB SPL	—	124 dB SPL	—
Full-on gain				
FOG at 1.6 kHz	—	69 dB	—	82 dB
FOG (peak)	65 dB	75 dB	75 dB	83 dB
HFA FOG	61 dB	—	69 dB	—
Reference test gain	43 dB	54 dB	47 dB	61 dB
Frequency, noise and directivity				
Frequency range	TL 16 100 – 7400 Hz	100 – 8000 Hz	100 – 7700 Hz	200 – 7500 Hz
	TL 12, 8, 6, 4 100 – 7400 Hz	100 – 8000 Hz	100 – 7700 Hz	200 – 7500 Hz
Equivalent input noise	14 dB SPL	16 dB SPL	15 dB SPL	8 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1 / 2 / 1 / 1 %	2 / 3 / 3 / — %	1 / 2 / 1 / 1 %	2 / 3 / 2 / — %
Tinnitus noiser broadband	75 dB SPL	—	85 dB SPL	—
AI-DI	4.0 dB		4.0 dB	
Latency	< 15 ms		< 15 ms	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	—	93 dB SPL	—	109 dB SPL
HFA MASL (1 mA/m)	85 dB SPL	—	94 dB SPL	—
HFA SPLITS (left/right)	103 / 103 dB SPL	—	107 / 107 dB SPL	—
RSETS (left/right)	0 / 0 dB	—	0 / 0 dB	—
HFA SPLIV	104 dB SPL	—	108 dB SPL	—
Battery				
Battery runtime (without streaming)	up to 39 h		up to 39 h	
Battery runtime (incl. 5 h streaming)	up to 34 h		up to 34 h	
Cellphone compatibility				
Microphone mode	0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz	
Telecoil mode	0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz	

— not applicable

Refer to section “Further information” for additional information on the values.

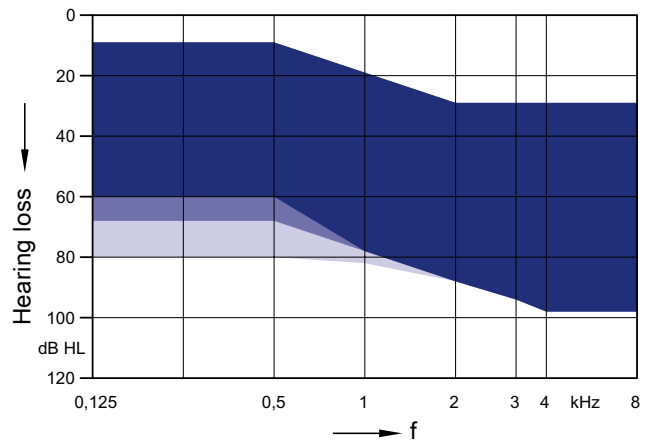
R Li T 8 | Fitting Range

S-Receiver



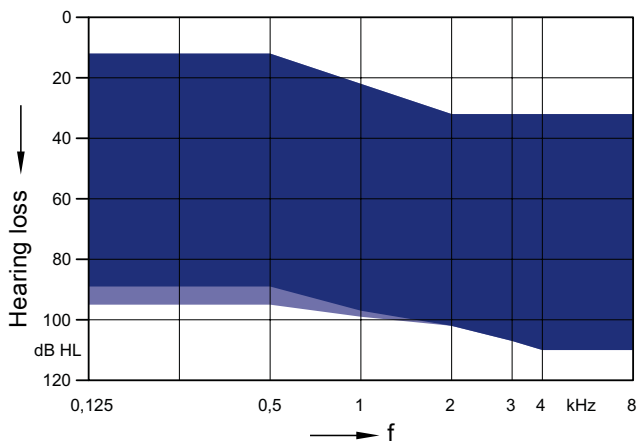
Eartip 3.0 Open
 + Sleeve 3.0 Power
 + + Earmold 3.0

M-Receiver



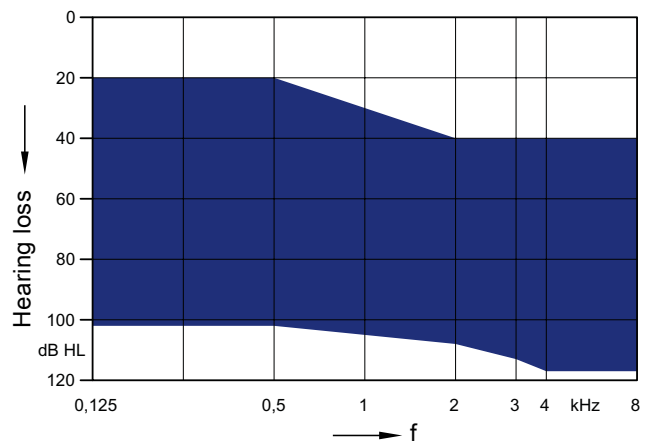
Eartip 3.0 Open
 + Sleeve 3.0 Power
 + + Earmold 3.0

P-Receiver



Sleeve 3.0 Power
 + Earmold 3.0

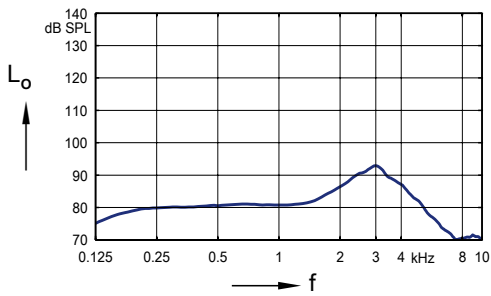
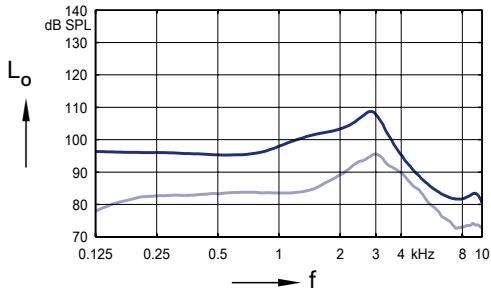
HP-Receiver



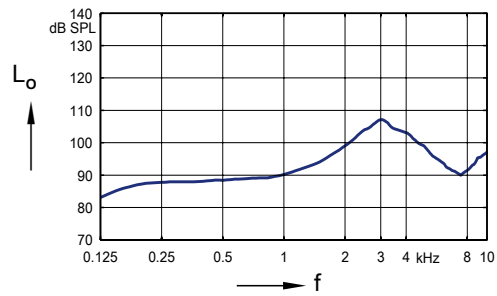
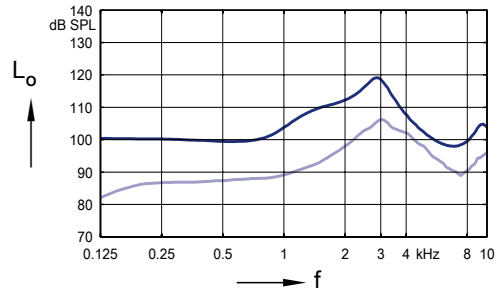
Custom Shell (no vent)

S-Receiver (Sleeve 3.0 Power) | Basic Data

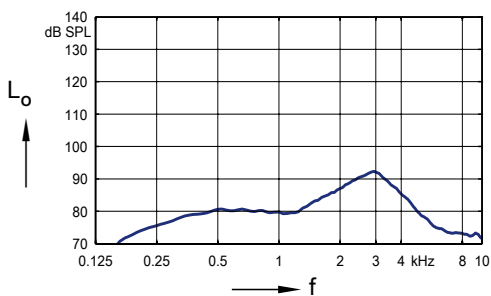
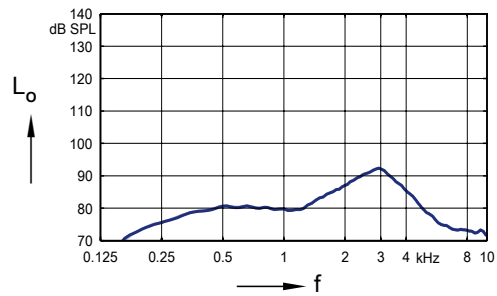
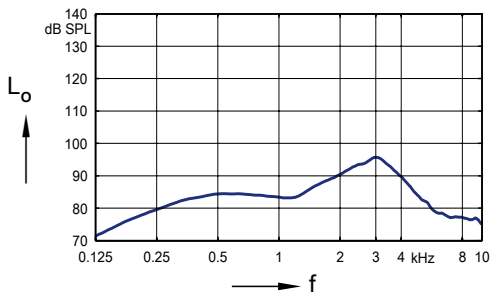
2 ccm coupler



Ear simulator

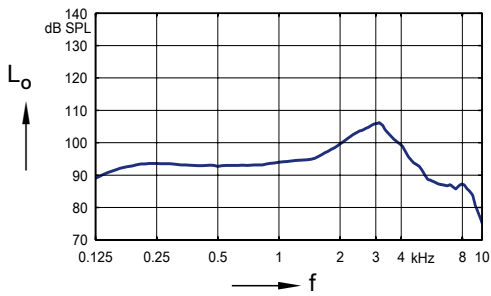
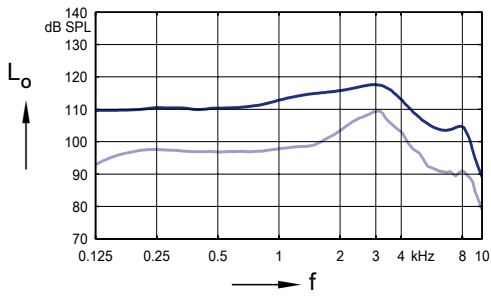


Inductive response

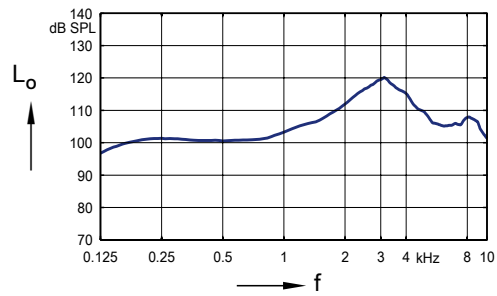
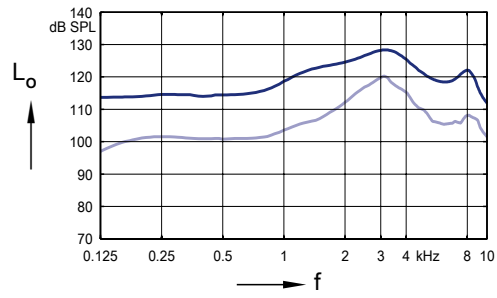


M-Receiver (Sleeve 3.0 Power) | Basic Data

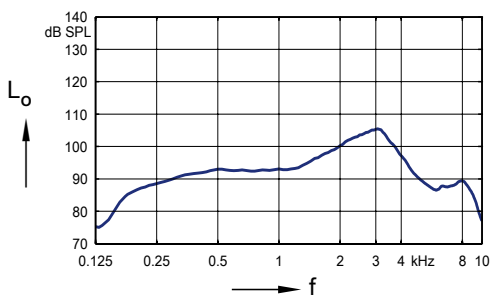
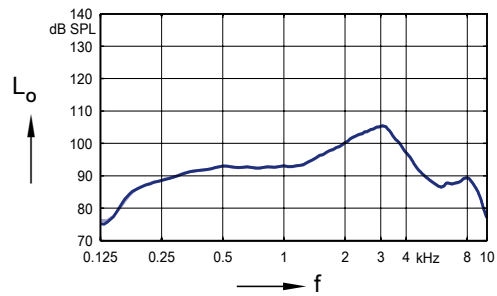
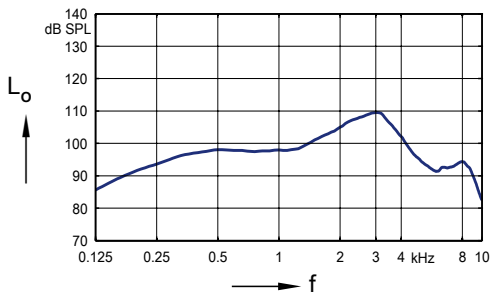
2 ccm coupler



Ear simulator

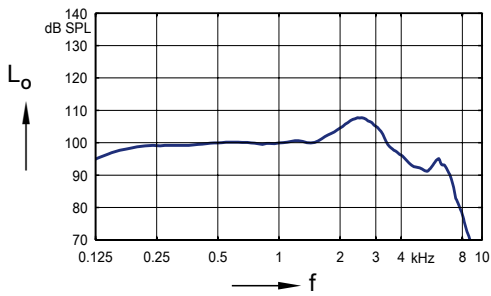
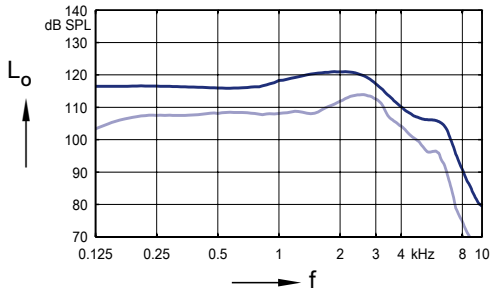


Inductive response

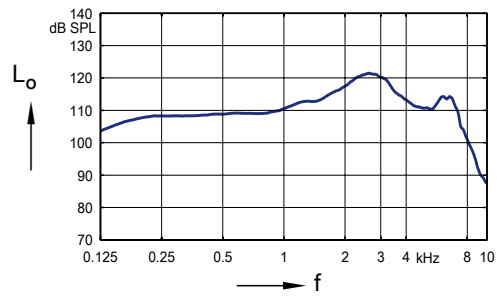
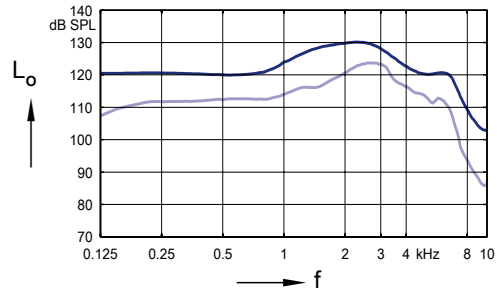


P-Receiver (Earmold 3.0) | Basic Data

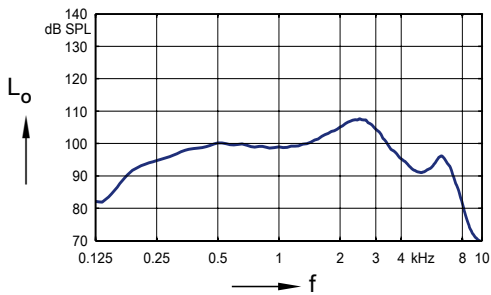
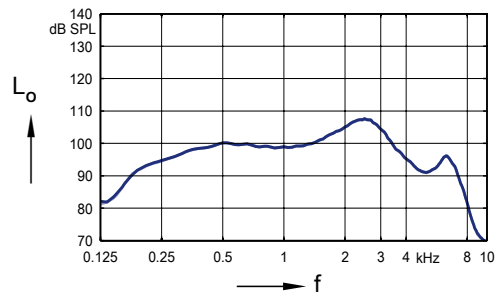
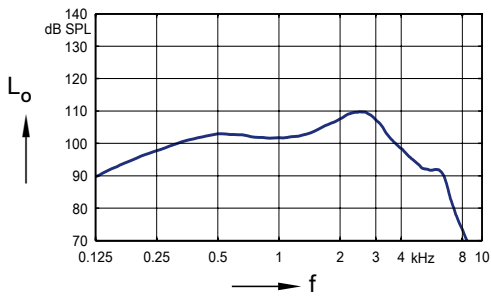
2 ccm coupler



Ear simulator

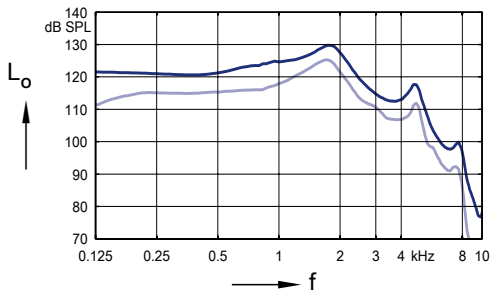


Inductive response



HP-Receiver (Custom Shell) | Basic Data

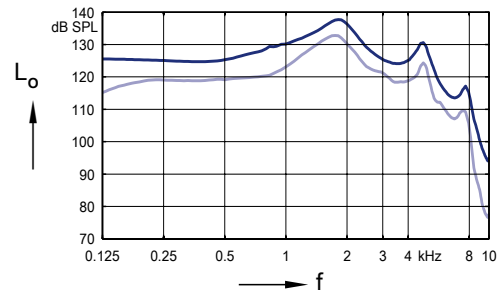
2 ccm coupler



Max. Output sound pressure level
($L_1 = 90$ dB)

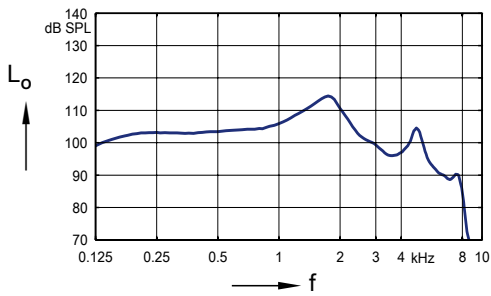
Full-on gain
 $L_1 = 50$ dB)

Ear simulator

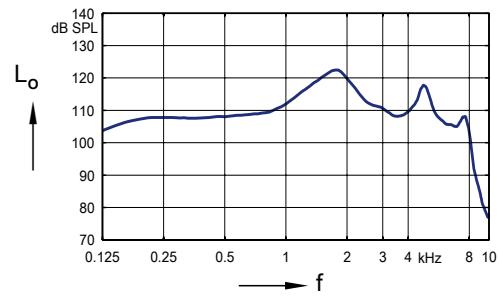


Max. Output sound pressure level
($L_1 = 90$ dB)

Full-on gain
 $L_1 = 50$ dB)

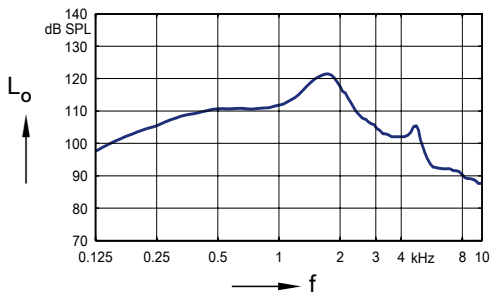


Frequency response
($L_1 = 60$ dB)

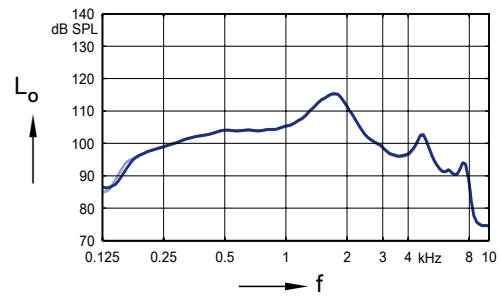


Basic acoustic response
($L_1 = 60$ dB)

Inductive response

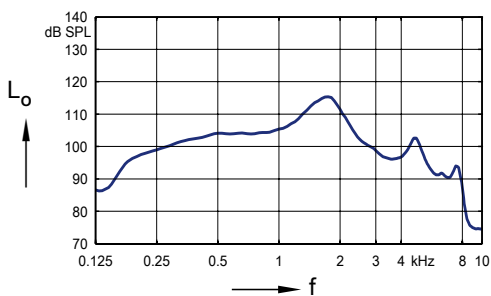


Inductive response
($H = 10$ mA/m)



SPLITS curve left
($H = 31.6$ mA/m)

SPLITS curve right
($H = 31.6$ mA/m)



SPLIV curve
($H = 31.6$ mA/m)

R Li T 8 | Further information

Abbreviations

The following abbreviations are used in this data sheet:

SPL	Sound Pressure Level
OSPL	Output Sound Pressure Level
HFA	High Frequency Average
FOG	Full-On Gain
MASL	Magneto Acoustical Sensitivity Level
SPLITS	Coupler SPL for an Inductive Telephone Simulator
RSETS	Relative Simulated Equivalent Telephone Sensitivity
SPLIV	SPL In a Vertical magnetic field
AI-DI	Articulation Index-Directivity Index
IRIL	Input Related Interference Level
RTF	Reference Test Frequency
ASHA	Audio Streaming for Hearing Aids

Standards and additional information

- All measurements with the 2 ccm coupler were performed according to EN 60118-0:2015 and ANSI S3.22:2014 if applicable.
- All measurements with an ear simulator were performed according to EN 60118-0:1993 + A1:1994 and to DIN 45605 (frequency range) if applicable.
- All Cellphone Compatibility measurements were performed according to EN IEC 60118-13:2020 and ANSI C63.19:2019.
- Cellphone Compatibility definition: It is expected that the hearing aid user can effectively use a compliant wireless device held in a talking position at the ear. Maximum achievable Cellphone Compatibility range: 0.65–0.96 GHz and 1.4–2.7 GHz.
- Curves and figures representing FOG are measured with 20 dB reduction and 70 dB SPL input level.
- Figures representing Equivalent Input Noise incorporate a moderate expansion.
- Tinnitus noiser measurement conditions: all tinnitus single frequency sliders in max position, master volume slider in default position (0 dB) and local volume control in default position.
- Inductive coil sensitivity values, inductive response curves and T ratings apply for instruments with telecoil only.
- The current consumption is measured in reference test setting (RTS) according to the applicable standards. Due to the settling behaviour of hearing aids supporting RF (Radio Frequency), the battery current is measured 3 minutes after turning on (note: no pairing).
- The battery runtime is based on first fit settings using 60 % of the fitting range and an ISTS (International Speech Test Signal) input signal at 65 dB SPL (note: pairing established). The actual battery runtime is determined by battery quality, hearing loss, sound environment, usage and activated feature set. Regarding RF usage, Bluetooth audio streaming from phone to hearing aid and from hearing aid to phone are considered.
- Extended bandwidth up to 10 kHz for TL 16 devices only.
- The following acoustic connections/ear pieces were used:
 - S-Receiver Unit and M-Receiver Unit: Sleeve 3.0 Power
 - P-Receiver Unit: Earmold 3.0
 - HP-Receiver Unit: Custom Shell

Special note for instruments with built-in lithium-ion rechargeable battery

The runtime of all lithium-ion rechargeable batteries reduces over time. The estimates are based on fresh lithium-ion rechargeable battery capacity. Under normal operating conditions, the battery will retain up to 80 % of its initial capacity after 3 years of use. Please note that battery performance will vary depending on individual usage patterns and environmental conditions.

