Intuis M 4

Data Sheet

4.7 | 4.5 | 4.3 | 4.2 | 4.1 | 4.0 | 4.D

Earhook

- 60 dB / 133 dB SPL (2 ccm coupler)
- 67 dB / 138 dB SPL (Ear simulator)

ThinTube 3.0

- 61 dB / 125 dB SPL (2 ccm coupler)
- 65 dB / 129 dB SPL (Ear simulator)

ThinTube 3.0 P

- 64 dB / 126 dB SPL (2 ccm coupler)
- 67 dB / 131 dB SPL (Ear simulator)

Data sheet also applicable for Intuis M 4.D sDemo

Intuis M 4 | Technical Data

Type		Earhook	
		2 ccm coupler	Ear simulator
Output sound pressure level			
OSPL 90 at 1.6 kHz		—	136 dB SPL
OSPL 90 (peak)		133 dB SPL	138 dB SPL
HFA OSPL 90		124 dB SPL	—
Full-on gain			
FOG at 1.6 kHz		—	63 dB
FOG (peak)		60 dB	67 dB
HFA FOG		53 dB	—
Reference test gain		47 dB	56 dB
Frequency, noise and directivity			
Frequency range	4.7, 4.5, 4.3 4.2, 4.1, 4.0	120 – 7700 Hz	940 – 7700 Hz
Equivalent input noise		16 dB SPL	16 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz		4 / 3 / 1 / 1 %	4 / 3 / 1 / — %
Tinnitus noiser broadband		70 dB SPL	—
AI-DI		4.0 dB	
Latency		< 15 ms	
Inductive coil sensitivity			
MASL (1 mA/m) at 1.6 kHz		—	92 dB SPL
HFA MASL (1 mA/m)		82 dB SPL	—
HFA SPLITS (left/right)		107 / 107 dB SPL	—
RSETS (left/right)		0 / 0 dB	—
HFA SPLIV		108 dB SPL	—
Battery			
Battery voltage		1.3 V	
Battery current drain		1.6 mA	1.5 mA
Battery runtime (without streaming)		up to 142 h	
Battery runtime (incl. 20 h streaming)		up to 129 h	
Cellphone compatibility			
Microphone mode		0.65 – 0.96 GHz 1.4 – 2.7 GHz	
Telecoil mode		0.65 – 0.96 GHz 1.4 – 2.7 GHz	

— not applicable

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

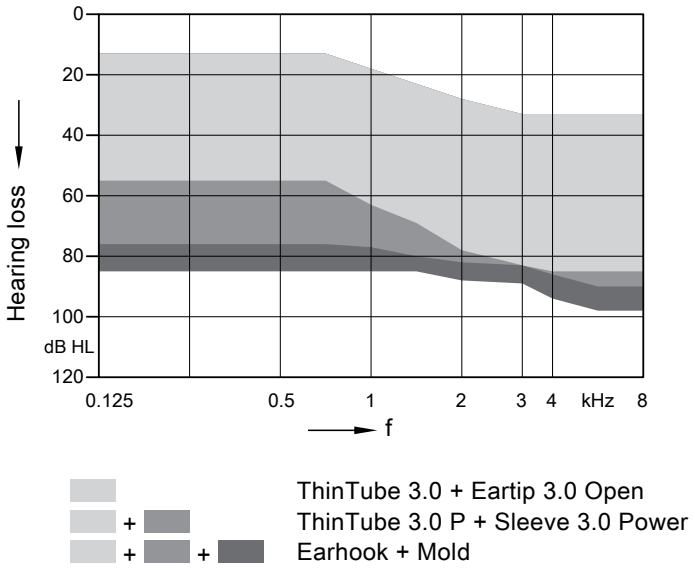
Intuis M 4 | Technical Data

Type	ThinTube 3.0		ThinTube 3.0 P	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
OSPL 90 at 1.6 kHz	—	121 dB SPL	—	125 dB SPL
OSPL 90 (peak)	125 dB SPL	129 dB SPL	126 dB SPL	131 dB SPL
HFA OSPL 90	116 dB SPL	—	120 dB SPL	—
Full-on gain				
FOG at 1.6 kHz	—	55 dB	—	59 dB
FOG (peak)	61 dB	65 dB	64 dB	67 dB
HFA FOG	51 dB	—	57 dB	—
Reference test gain	39 dB	46 dB	44 dB	51 dB
Frequency, noise and directivity				
Frequency range 4.7, 4.5, 4.3 4.2, 4.1, 4.0	100 – 7900 Hz	100 – 8100 Hz	100 – 7100 Hz	100 – 7400 Hz
Equivalent input noise	18 dB SPL	19 dB SPL	15 dB SPL	17 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	2 / 1 / 1 / 1 %	4 / 2 / 2 / — %	3 / 1 / 1 / 1 %	4 / 4 / 2 / — %
Tinnitus noiser broadband	70 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	—	80 dB SPL	—	84 dB SPL
HFA MASL (1 mA/m)	76 dB SPL	—	81 dB SPL	—
HFA SPLITS (left/right)	99 / 99 dB SPL	—	103 / 103 dB SPL	—
RSETS (left/right)	0 / 0 dB	—	0 / 0 dB	—
HFA SPLIV	99 dB SPL	—	103 dB SPL	—
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	2.2 mA	1.8 mA	2.0 mA	1.8 mA
Battery runtime (without streaming)	up to 132 h		up to 136 h	
Battery runtime (incl. 20 h streaming)	up to 120 h		up to 124 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

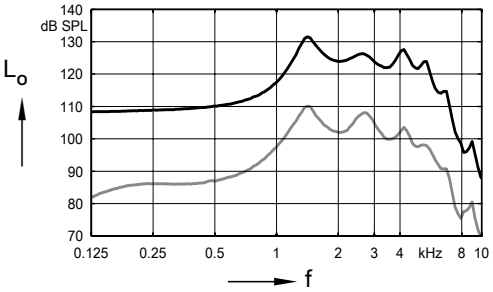
Refer to section “Further information” for additional information on the values.

Intuis M 4 | Fitting Range



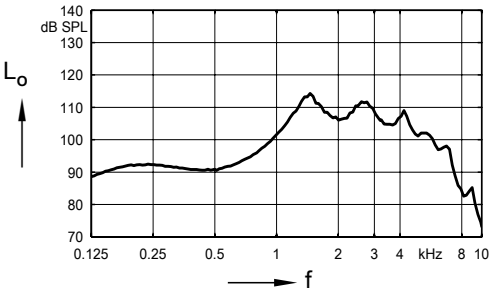
Earhook | Basic Data

2 ccm coupler



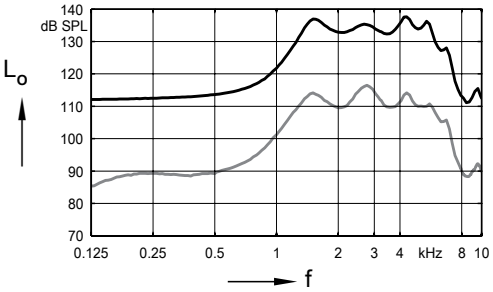
Max. Output sound pressure level (L_I = 90 dB)

Full-on gain (L_I = 50 dB)



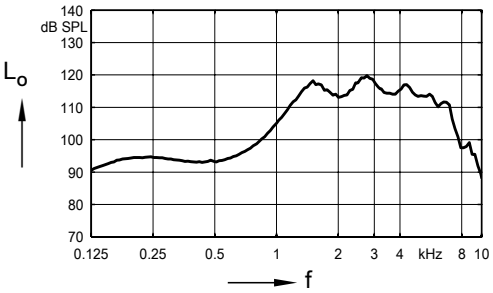
Frequency response (L_I = 60 dB)

Ear simulator



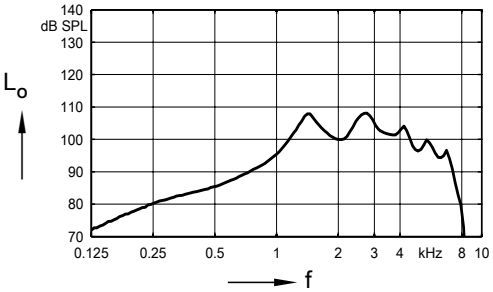
Max. Output sound pressure level (L_I = 90 dB)

Full-on gain (L_I = 50 dB)

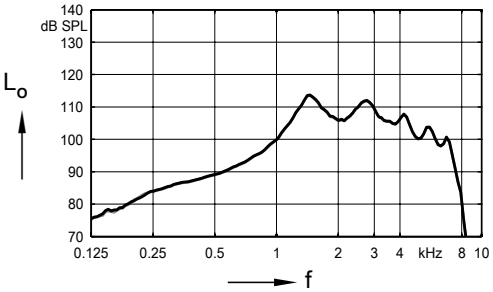


Basic acoustic response (L_I = 60 dB)

Inductive response

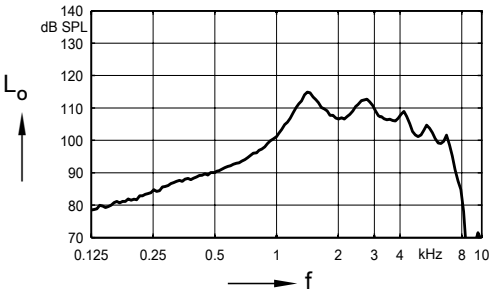


Inductive response (H = 10 mA/m)



SPLITS curve left (H = 31.6 mA/m)

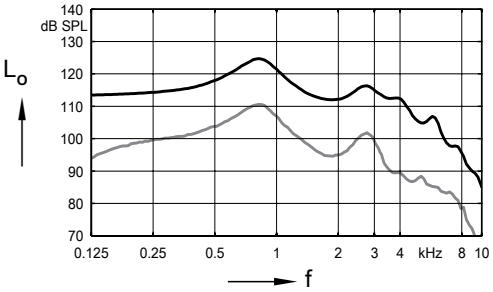
SPLITS curve right (H = 31.6 mA/m)



SPLIV curve (H = 31.6 mA/m)

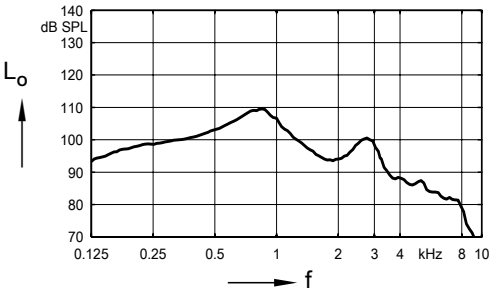
ThinTube 3.0 | Basic Data

2 ccm coupler



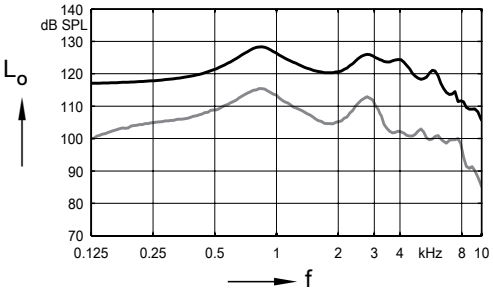
Max. Output sound pressure level (L_I = 90 dB)

Full-on gain (L_I = 50 dB)



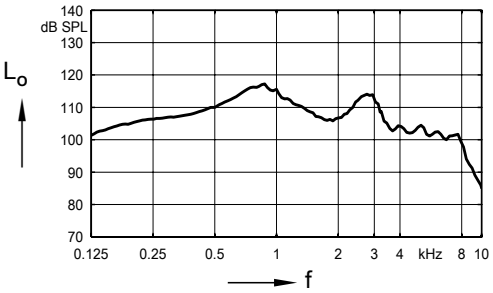
Frequency response (L_I = 60 dB)

Ear simulator



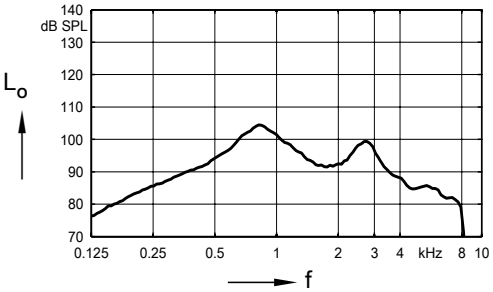
Max. Output sound pressure level (L_I = 90 dB)

Full-on gain (L_I = 50 dB)

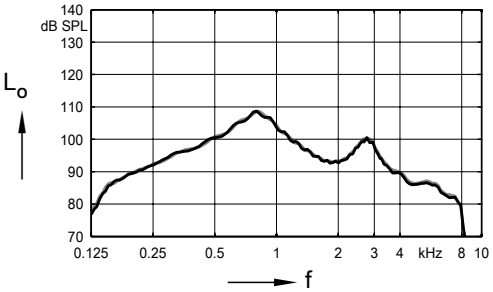


Basic acoustic response (L_I = 60 dB)

Inductive response

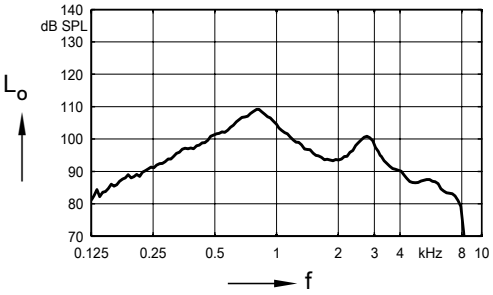


Inductive response (H = 10 mA/m)



SPLITS curve left (H = 31.6 mA/m)

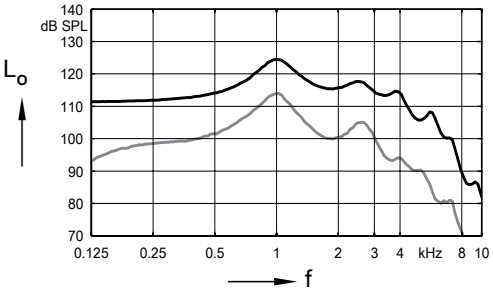
SPLITS curve right (H = 31.6 mA/m)



SPLIV curve (H = 31.6 mA/m)

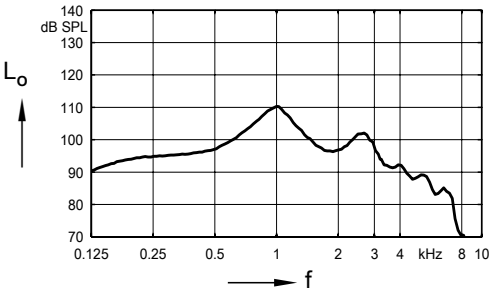
ThinTube 3.0 P | Basic Data

2 ccm coupler



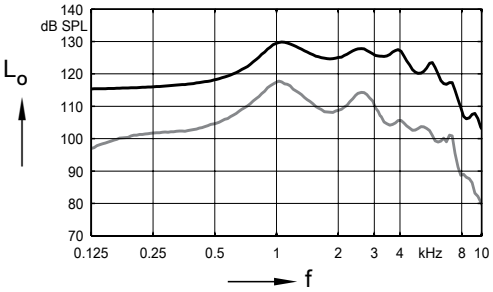
Max. Output sound pressure level (L_I = 90 dB)

Full-on gain (L_I = 50 dB)



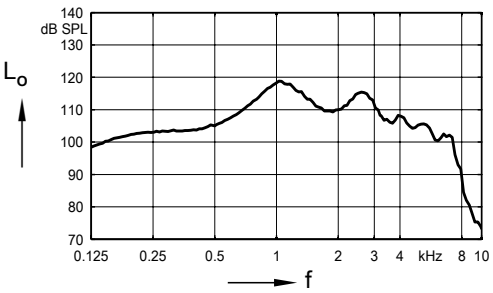
Frequency response (L_I = 60 dB)

Ear simulator



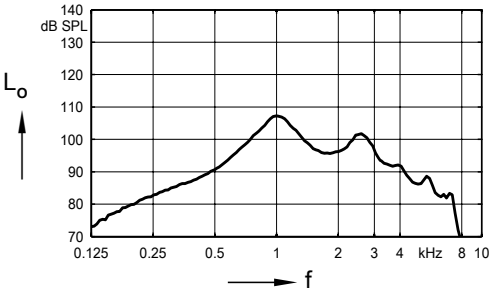
Max. Output sound pressure level (L_I = 90 dB)

Full-on gain (L_I = 50 dB)

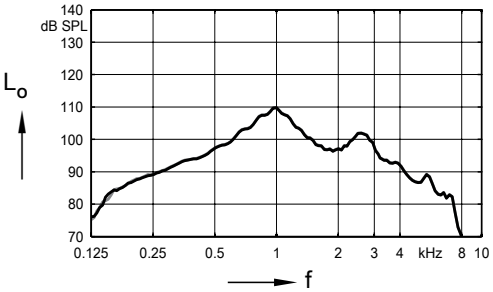


Basic acoustic response (L_I = 60 dB)

Inductive response

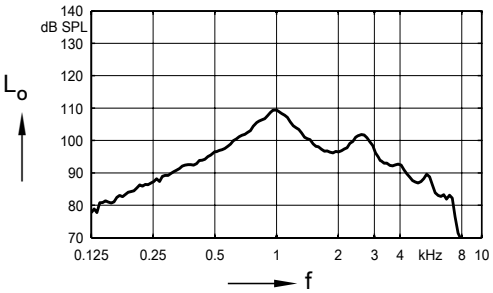


Inductive response (H = 10 mA/m)



SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)



SPLIV curve (H = 31.6 mA/m)

Intuis M 4 | Features and Accessories

	4.7	4.5	4.3	4.2	4.1	4.0
Dynamic Soundscape Processing 2.0	■■■■■	■■■■■	■■■■■	■■■	■■■	■■■
Augmented Focus	✓	✓	✓	✓	✓	✓
Acoustic Sensor	✓	✓	✓	✓	✓	✓
Motion Sensor	—	—	—	—	—	—
OVP 2.0 (Own Voice Processing) [1]	✓	✓	✓	—	—	—
Sound Clarity	■■■■■	■■■■	■■■	■■■	■■	■■
Signal processing (channels) / Gain&MPO (handles)	48 / 20	32 / 16	24 / 12	16 / 8	16 / 8	12 / 6
Hearing programs	6	6	6	4	4	4
Extended dynamic range	✓	✓	✓	✓	✓	✓
Speech and noise management	✓	✓	✓	✓	✓	✓
SoundSmoothing	✓	✓	✓	✓	—	—
Feedback cancellation	✓	✓	✓	✓	✓	✓
HD Music (presets)	3	3	1	1	—	—
eWindScreen	✓	✓	✓	✓	—	—
Extended bandwidth	✓	—	—	—	—	—
Auto EchoShield	✓	—	—	—	—	—
EchoShield	✓	✓	—	—	—	—
Speech Quality	■■■■■	■■■■	■■■	■■	■■	■
Binaural Directionality	✓	✓	✓	—	—	—
Wireless CROS / BICROS	✓	✓	✓	✓	✓	—
Frequency compression	✓	✓	✓	✓	✓	—
Spatial SpeechFocus [1) 2)]	✓	✓	—	—	—	—
Wearer Interaction	■■■■■	■■■■■	■■■■	■■■■	■■■■	■■
Signia Assistant	✓	✓	✓	✓	✓	—
Signia App (iOS and Android)	✓	✓	✓	✓	✓	✓
Adaptive Streaming Volume [3)]	✓	✓	✓	✓	✓	—
Spatial Configurator	✓	✓	—	—	—	—
Direct Streaming	✓	✓	✓	✓	✓	—
Android devices (ASHA)	✓	✓	✓	✓	✓	—
Made for iPhone | iPad	✓	✓	✓	✓	✓	—
HandsFree for iOS	—	—	—	—	—	—
Tinnitus	✓	✓	✓	✓	—	—
Notched Amplification Therapy	✓	✓	✓	✓	—	—
Tinnitus noise therapy signal	✓	✓	✓	✓	—	—
Fitting	✓	✓	✓	✓	✓	✓
Smart Optimizer and Data Logging	✓	✓	✓	✓	✓	✓
Acclimatization manager	✓	✓	✓	✓	✓	—
InSituGram	✓	✓	✓	✓	✓	✓
AutoFit	✓	✓	✓	✓	✓	✓
TeleCare	✓	✓	✓	✓	✓	✓
Remote Services	✓	✓	✓	✓	✓	✓
Signia App	✓	✓	✓	✓	✓	✓

[1)] requires bilateral fittings
[2)] for 4.5, left / right directionality available only in Stroll Program and via the Spatial Configurator
[3)] streaming only

✓ available
— not available
■■■■■ highest feature performance

Intuis M 4 | Features and Accessories

	4.7 / 4.5 / 4.3 / 4.2 / 4.1	4.0
Type specific features		
Ingress Protection rating	IP68	IP68
Charging contacts	—	—
Battery type / size	13	13
Battery door on / off function	●	●
Nanocoated housing	●	●
e2e wireless 4.0	●	●
User controls coupling via e2e	●	●
Wireless programming	●	●
Instrument configurations		
Flat cover	—	—
Rotary volume control	—	—
Push button	—	—
Rocker switch	●	●
Color conversion kit	○	○
Color conversion kit with Telecoil	—	—
Telecoil	●	●
Battery door – tamper proof	○	○
Battery door – child lock	—	—
Small earhook	○	○
Programming accessories		
Noahlink Wireless	▲	▲
ConnexxAir	—	—
Programming adapter / cable	—	—
Accessories		
miniPocket	○	○
StreamLine TV	○	—
StreamLine Mic	○	—
CROS Pure C&G AX	○	—
CROS Pure 312 AX	○	—
CROS Styletto AX	—	—

▲ mandatory
○ optional
● available
— not available

Intuis M 4 | 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 12 kHz for 4.7 devices only.
- The following acoustic connections / ear pieces were used:
  - Earhook
  - ThinTube 3.0
  - ThinTube 3.0 P

Order No. 05178-99T03-7600
www.wsaud.com
© 08.2024, WSAUD A/S
All rights reserved

Subject to change
without prior notice

The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases and are subject to change without prior notice. The required features should therefore be specified in each individual case at the time of conclusion of the respective contract.