Audio Service

BTE HEARING SYSTEMS

B P 7

Tech Level	6 | 4 | 3

Made for iPhone | iPad | iPod

Battery: 13

Amplification: 77 dB (Earhook) | 66 dB (ThinTube 3.0) | 70 dB (ThinTube 3.0 P)

Data sheet also applicable for B P D 7

B P 7 | 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)	135 dB SPL	139 dB SPL
HFA OSPL 90	130 dB SPL	–
Gain		
FOG at 1.6 kHz	–	77 dB
FOG (peak)	77 dB	82 dB
HFA FOG	71 dB	–
Reference test gain	53 dB	61 dB
Frequency, noise and directivity		
Frequency range	100 – 6200 Hz	140 – 6300 Hz
Equivalent input noise	15 dB SPL	15 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	4 / 3 / 1 / 1 %	5 / 4 / 1 / – %
Tinnitus Function broadband	80 dB SPL	–
AI-DI	4.0 dB	
Latency	< 15 ms	
Inductive coil sensitivity		
MASL (1 mA/m) at 1.6 kHz	–	106 dB SPL
HFA MASL (1 mA/m)	101 dB SPL	–
HFA SPLITS (left/right)	113 / 113 dB SPL	–
RSETS (left/right)	0 / 0 dB	–
HFA SPLIV	113 dB SPL	–
Battery		
Battery voltage	1.3 V	
Battery current drain	1.9 mA	1.6 mA
Battery runtime (without streaming)	up to 148 h	
Battery runtime (incl. 20 h streaming)	up to 115 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	

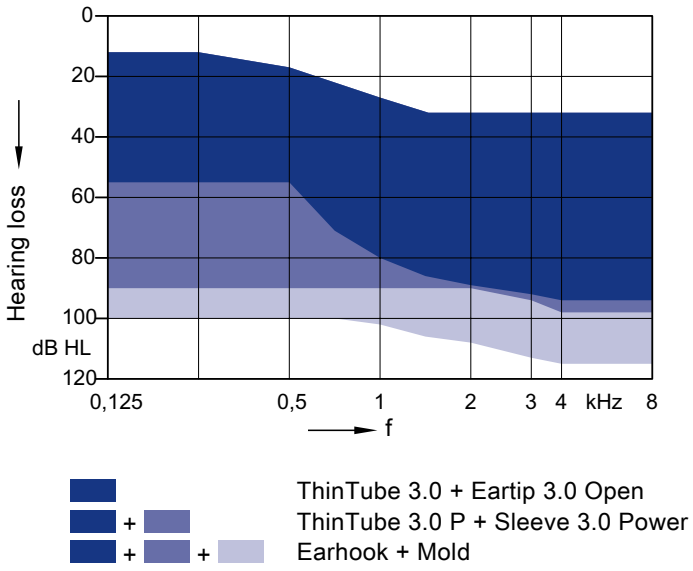
Please find additional information to the values on page “Further information”.

B P 7 | 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	–	123 dB SPL	–	129 dB SPL
OSPL 90 (peak)	129 dB SPL	133 dB SPL	130 dB SPL	134 dB SPL
HFA OSPL 90	118 dB SPL	–	122 dB SPL	–
Gain				
FOG at 1.6 kHz	–	62 dB	–	72 dB
FOG (peak)	66 dB	69 dB	70 dB	74 dB
HFA FOG	57 dB	–	64 dB	–
Reference test gain	41 dB	48 dB	46 dB	54 dB
Frequency, noise and directivity				
Frequency range	100 – 6200 Hz	100 – 6400 Hz	100 – 5300 Hz	140 – 5200 Hz
Equivalent input noise	17 dB SPL	17 dB SPL	17 dB SPL	17 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1 / 1 / 1 / 1 %	1 / 1 / 2 / – %	2 / 1 / 1 / 1 %	3 / 1 / 2 / – %
Tinnitus Function broadband	80 dB SPL	–	80 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	–	92 dB SPL	–	102 dB SPL
HFA MASL (1 mA/m)	86 dB SPL	–	93 dB SPL	–
HFA SPLITS (left/right)	101 / 101 dB SPL	–	105 / 105 dB SPL	–
RSETS (left/right)	0 / 0 dB	–	0 / 0 dB	–
HFA SPLIV	101 dB SPL	–	105 dB SPL	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	1.7 mA	1.6 mA	1.6 mA	1.6 mA
Battery runtime (without streaming)	up to 150 h		up to 153 h	
Battery runtime (incl. 20 h streaming)	up to 117 h		up to 123 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	

Please find additional information to the values on page “Further information”.

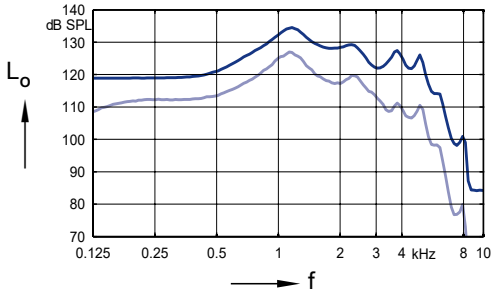
B P 7 | Fitting Range



ThinTube 3.0 + Eartip 3.0 Open
ThinTube 3.0 P + Sleeve 3.0 Power
Earhook + Mold

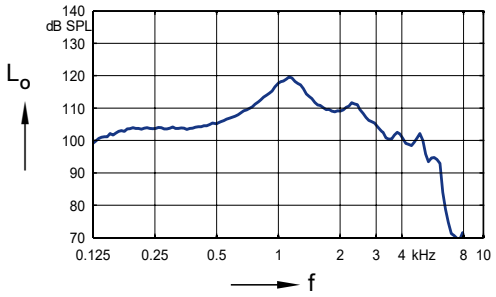
Earhook | Basic Data

2 ccm coupler



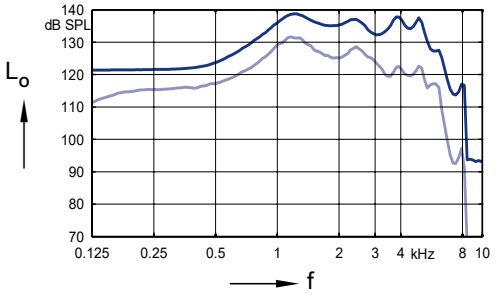
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



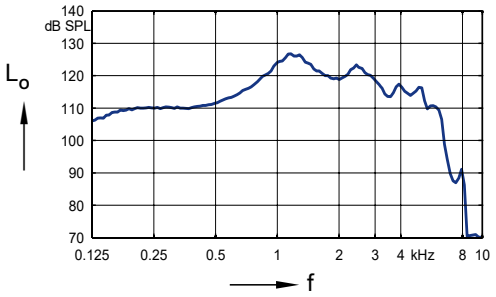
Frequency response (L_I = 60 dB)

Ear simulator



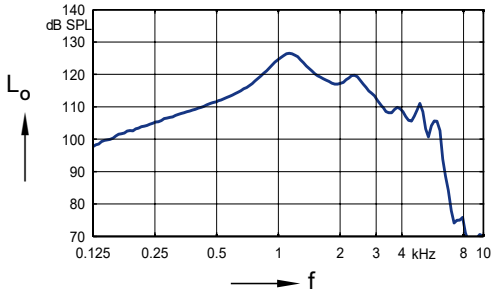
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)

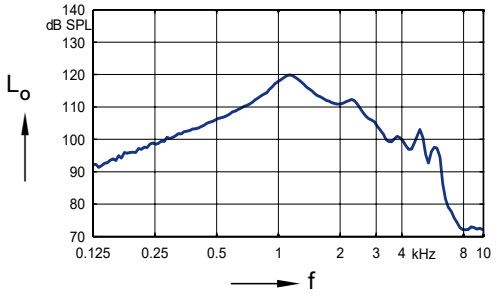


Basic acoustic response (L_I = 60 dB)

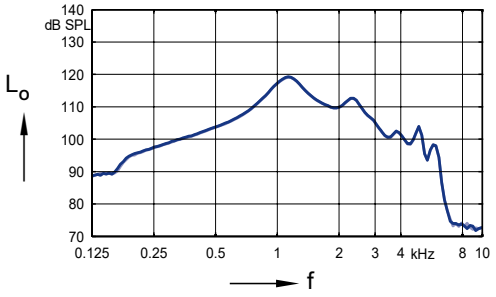
Inductive response



Inductive response (H = 10 mA/m)



SPLIV curve (H = 31.6 mA/m)

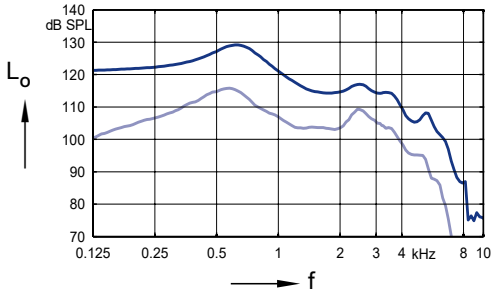


SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

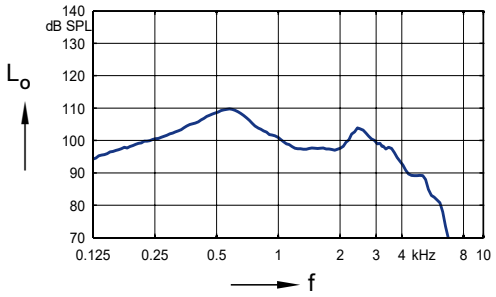
ThinTube 3.0 | Basic Data

2 ccm coupler



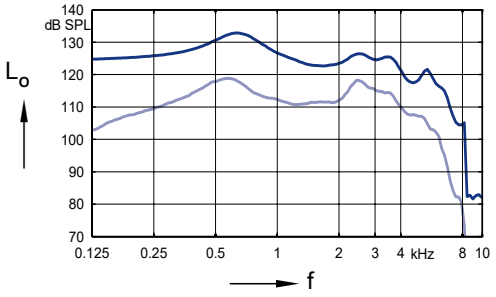
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



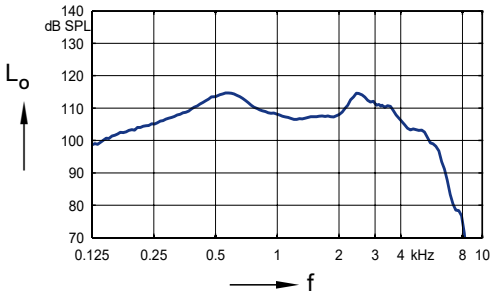
Frequency response (L_I = 60 dB)

Ear simulator



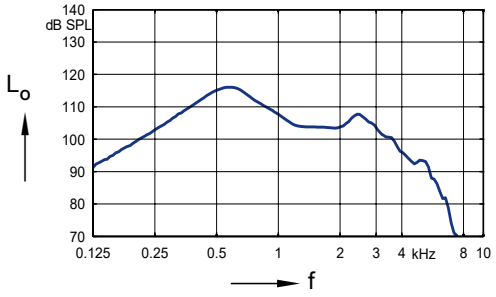
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)

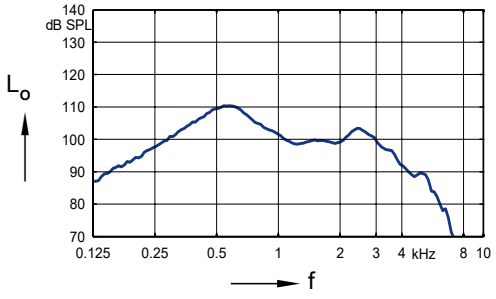


Basic acoustic response (L_I = 60 dB)

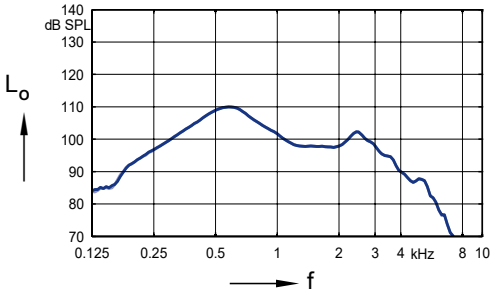
Inductive response



Inductive response (H = 10 mA/m)



SPLIV curve (H = 31.6 mA/m)

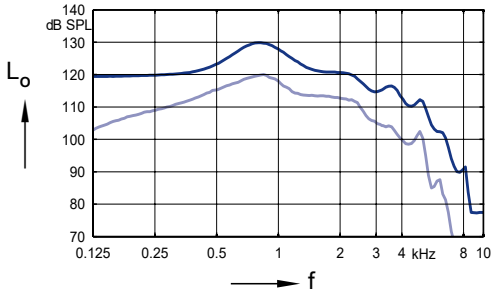


SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

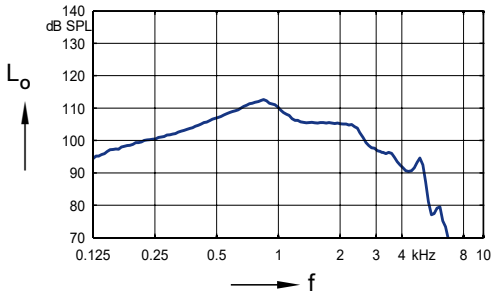
ThinTube 3.0 P | Basic Data

2 ccm coupler



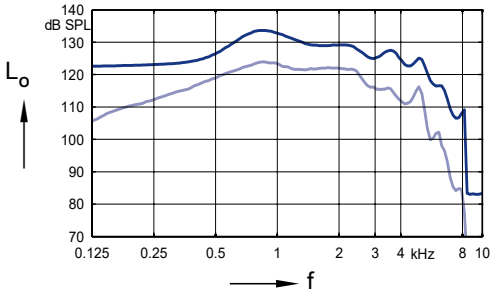
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



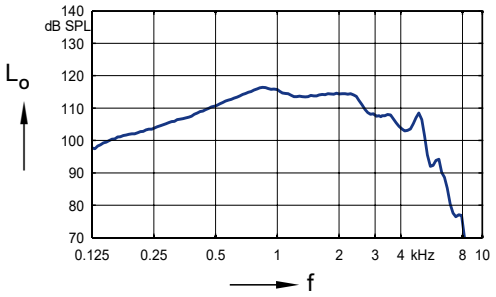
Frequency response (L_I = 60 dB)

Ear simulator



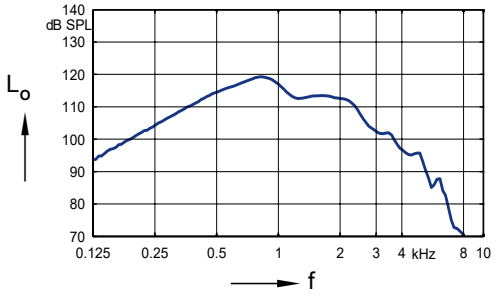
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



Basic acoustic response (L_I = 60 dB)

Inductive response



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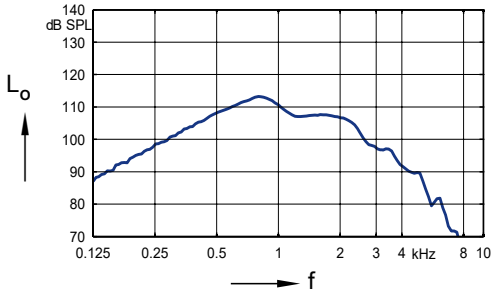
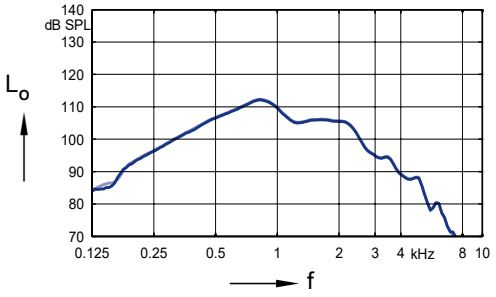


SPLIV curve (H = 31.6 mA/m)



SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

B P 7 | Features and Accessories

	TL 6	TL 4	TL 3
Features			
Ingress Protection Rating	IP68	IP68	IP68
Channels / Controls / Programs	16 / 8 / 4	16 / 8 / 4	12 / 6 / 4
Comformatic 2.0	HiRes	HiRes	HiRes
Occlumatic 2.0	—	—	—
Direct Audio Streaming	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	—
Headset Mode for iOS	—	—	—
Auto Volume	●	●	—
Binaural Synchronization	●	●	●
Directionality	Automatic adaptive, Panorama	Automatic adaptive, Panorama	Automatic fixed omni
Noise Reduction	Noise Management, Impulse suppressor	Noise Management	Noise Management
Wind Noise Reduction	●	—	—
EchoClear Auto	—	—	—
EchoClear / Dereverberation	—	—	—
HiFi functionality / Selective frequency compression	— / ●	— / ●	— / —
Music (presets)	1	—	—
Tinnitus	Sound Therapy, Notch Therapy	—	—
2earPhone	●	●	—
Acclimatic / Data Logging	● / ●	● / ●	— / ●
T-Coil	●	●	●
Battery door – tamper proof	○	○	○
Battery size	13	13	13
Accessories			
Smart Key	○	○	○
Smart Transmitter 2,4	○	○	—
Smart Mic	○	○	—
Audio Service App	○	○	○
Noahlink Wireless	mandatory	mandatory	mandatory
Small earhook	○	○	○
CROS R Li 7	○	○	—
CROS R S 7	○	○	—
CROS SR Li 7	—	—	—

● available — not available ○ optional

B P 7 | Further information

Abbreviations

The following abbreviations are used in this datasheet:

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 ANSI S3.22-2014 and IEC 60118-0:2015 if applicable.
- All measurements with an ear simulator were performed according to IEC 60118-0:1983 + A1:1994 and to DIN 45605 (frequency range) if applicable.
- All Cellphone Compatibility measurements were performed according to IEC 60118-13:2019, 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:
  - Earhook
  - ThinTube 3.0
  - ThinTube 3.0 P

Made for iPhone | iPad | iPod

“Made for iPhone”, “Made for iPad”, and “Made for iPod” mean that an electronic accessory has been designed to connect specifically to iPhone, iPad, or iPod, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone, iPad, or iPod may affect wireless performance.

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.

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Denmark

CE
0123

Order No. 05284-99T01-7600
www.wsaud.com

⚠ **WARNING**

Choking hazard posed by small parts.

- This instrument is not intended for the fitting of infants, children under 3 years or persons of mental incapacity.

⚠ **WARNING**

Instrument has an output sound pressure level of 132 dB SPL or more. Risk of impairing the residual hearing of the user.

- Take special care when fitting this instrument.