BTE HEARING SYSTEMS
B P 7

Tech Level	16 │ 12 │ 8 │ 6 │ 4 │ 3 │ tune

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

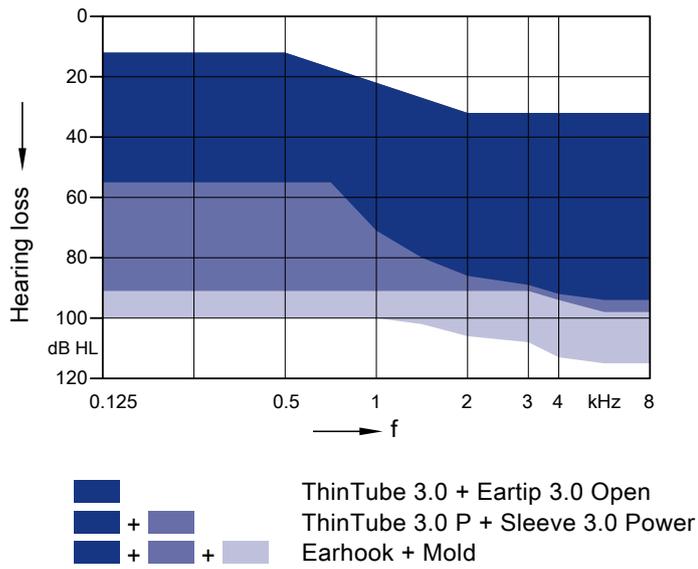| Type	Earhook	
	2 ccm coupler	**Ear simulator**
Output sound pressure level		
OSPL90 at 1.6 kHz	–	136 dB SPL
maximum OSPL90	135 dB SPL	139 dB SPL
HFA OSPL90	130 dB SPL	–
Full-on gain		
FOG at 1.6 kHz	–	77 dB
maximum FOG	77 dB	82 dB
HFA FOG	71 dB	–
Reference test gain	53 dB	61 dB
Frequency, noise and 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
Full-on HFA-SPLIV (10mA/m)	121 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

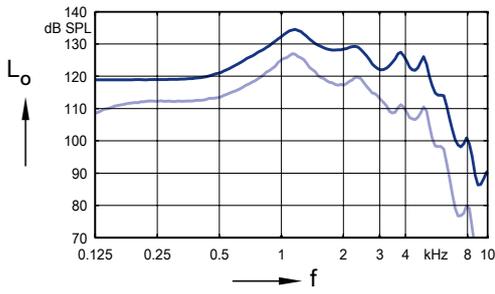| Type	ThinTube 3.0		ThinTube 3.0 P	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
OSPL90 at 1.6 kHz	–	123 dB SPL	–	129 dB SPL
maximum OSPL90	129 dB SPL	133 dB SPL	130 dB SPL	134 dB SPL
HFA OSPL90	118 dB SPL	–	122 dB SPL	–
Gain				
FOG at 1.6 kHz	–	62 dB	–	72 dB
maximum FOG	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
Full-on HFA-SPLIV (10mA/m)	106 dB SPL	–	113 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".
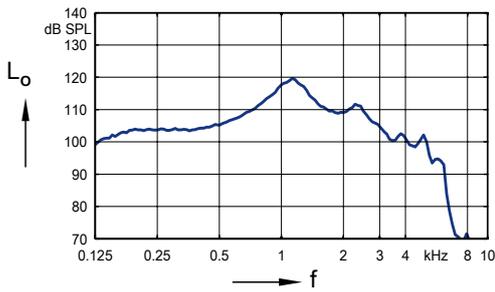
B P 7 | Fitting Range

Hearing loss / dB HL vs f (kHz)

Legend:
- ThinTube 3.0 + Eartip 3.0 Open
- + ThinTube 3.0 P + Sleeve 3.0 Power
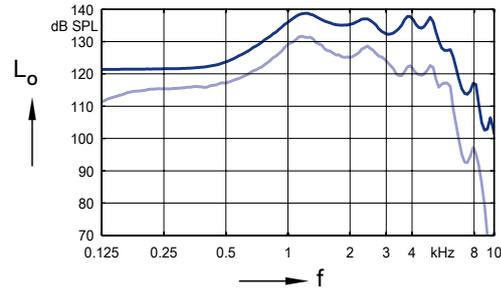- + + Earhook + Mold

Earhook | Basic Data

2 ccm coupler

Max. Output sound pressure level (L$_I$ = 90 dB)
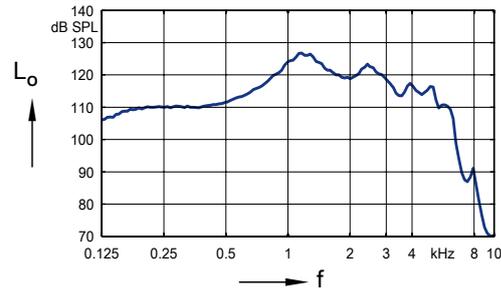
Full-on gain (L$_I$ = 50 dB)
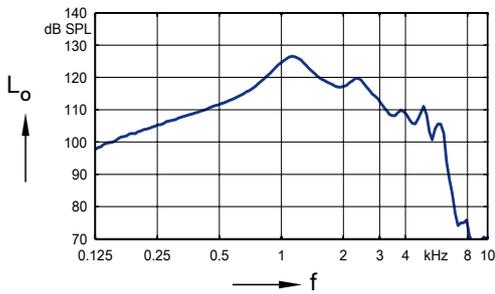
Frequency response (L$_I$ = 60 dB)

Ear simulator

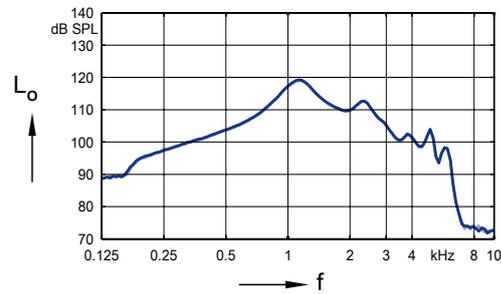**Max. Output sound pressure level (L$_I$ = 90 dB)**

Full-on gain (L$_I$ = 50 dB)

Basic acoustic response (L$_I$ = 60 dB)

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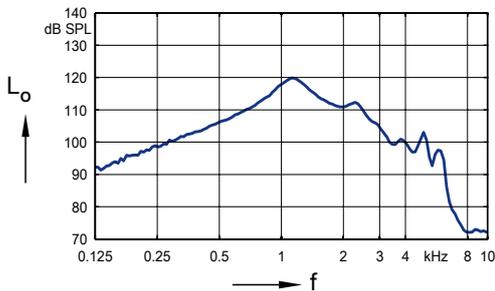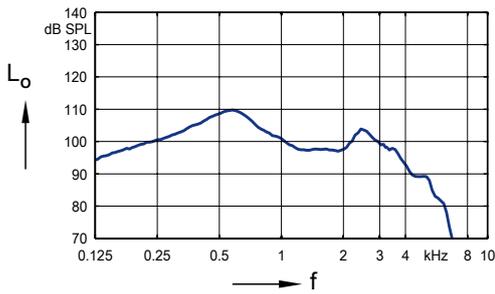
Inductive response (H = 10 mA/m)

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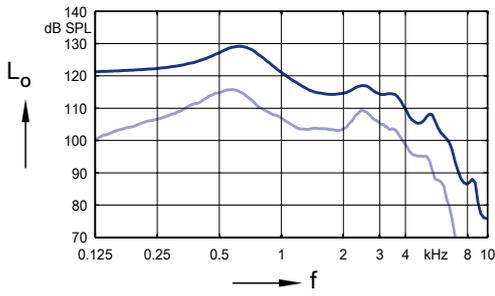
SPLITS curve right (H = 31.6 mA/m)

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)

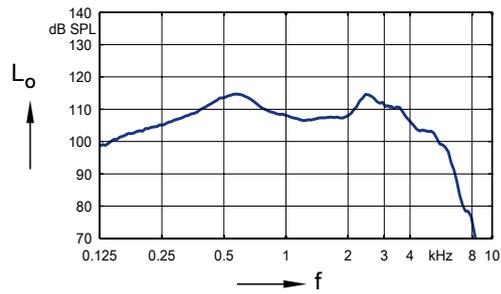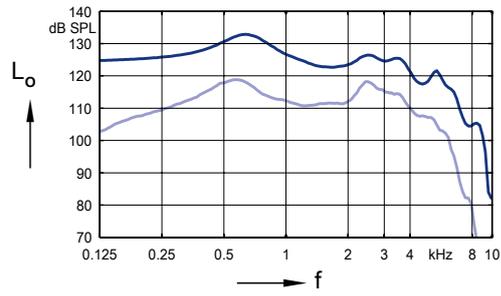**SPLITS curve left (H = 31.6 mA/m)**

SPLITS curve right (H = 31.6 mA/m)

SPLIV curve (H = 31.6 mA/m)
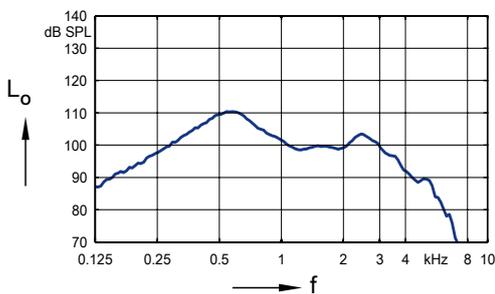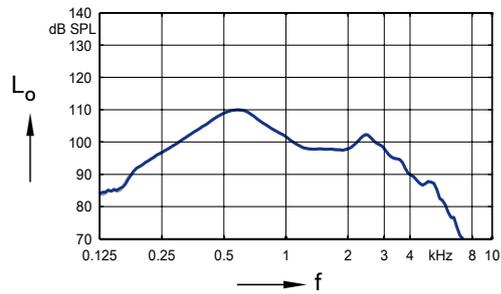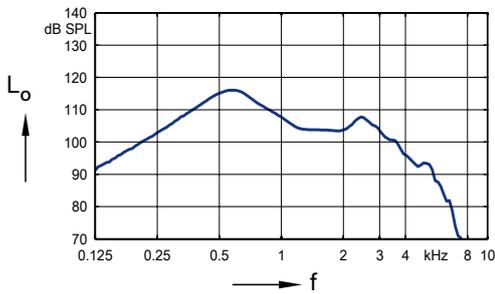
ThinTube 3.0 P | Basic Data

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)
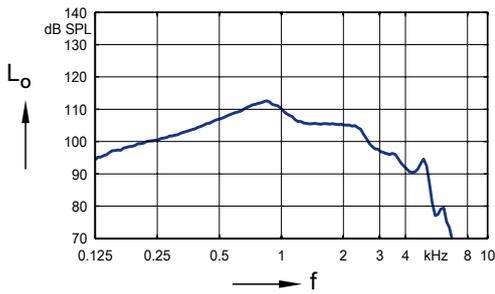
B P 7 | Features and Accessories

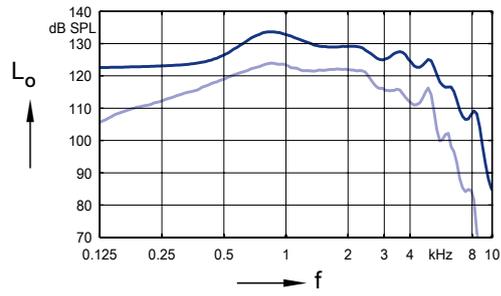| Features	TL 16	TL 12	TL 8	TL 6	TL 4	TL 3
Ingress Protection Rating	IP68	IP68	IP68	IP68	IP68	IP68
Channels / Controls / Programs	48 / 20 / 6	32 / 16 / 6	24 / 12 / 6	16 / 8 / 4	16 / 8 / 4	12 / 6 / 4
First Fit 48 channels	●	●	●	●	●	●
Comformatic 2.0	HiRes	HiRes	HiRes	HiRes	HiRes	HiRes
Occlumatic 2.0	●	●	●	—	—	—
Multi-Track Processing	●	●	●	●	●	●
Direct Audio Streaming	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	—
Auto Volume	●	●	●	●	●	—
Binaural Synchronization	●	●	●	●	●	●
Directionality	Automatic adaptive, Panorama, Front / Back / Left / Right automatic & manual, Advanced Narrow	Automatic adaptive, Panorama, Front / Back automatic & manual, Left / Right manual, Advanced Narrow	Automatic adaptive, Panorama, Advanced Narrow	Automatic adaptive, Panorama	Automatic adaptive, Panorama	Automatic Directional static
Noise Reduction	Noise Management, Impulse suppressor, Directional	Noise Management, Impulse suppressor, Directional	Noise Management, Impulse suppressor	Noise Management, Impulse suppressor	Noise Management	Noise Management
Wind Noise Reduction	●	●	●	●	—	—
EchoClear Auto	●	—	—	—	—	—
EchoClear / Dereverberation	●	●	—	—	—	—
HiFi functionality / Selective frequency compression	● / ●	— / ●	— / ●	— / ●	— / ●	— / —
Music (presets)	3	3	1	1	—	—
Tinnitus	Sound Therapy, Notch Therapy	Sound Therapy, Notch Therapy	Sound Therapy, Notch Therapy	Sound Therapy, Notch Therapy	—	—
2earPhone	●	●	●	●	●	—
Acclimatic / Data Logging	● / ●	● / ●	● / ●	● / ●	● / ●	— / ●
T-Coil	●	●	●	●	●	●
Battery door – tamper proof	○	○	○	○	○	○
Battery size	13	13	13	13	13	13

● available — not available ○ optional

B P 7 | Features and Accessories

Accessories	TL 16	TL 12	TL 8	TL 6	TL 4	TL 3
Smart Key	○	○	○	○	○	○
Smart Transmitter 2,4	○	○	○	○	○	—
Smart Mic	○	○	○	○	○	—
Audio Service App	○	○	○	○	○	○
Noahlink Wireless	mandatory	mandatory	mandatory	mandatory	mandatory	mandatory
Small earhook	○	○	○	○	○	○
CROS R Li 7	○	○	○	○	○	—
CROS R S 7	○	○	○	○	○	—
CROS SR Li 7	—	—	—	—	—	—

— not available   ○ optional

B P 7 | Further information

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 IEC 60118-0:2024 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:
  - Earhook
  - ThinTube 3.0
  - ThinTube 3.0 P