



Motion C&G M IX

Data Sheet

7IX

5IX

3IX

2IX

1IX



Earhook

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

ThinTube 3.0

- 60 dB / 125 dB SPL (2 ccm coupler)
- 64 dB / 129 dB SPL (ear simulator)

ThinTube 3.0 P

- 63 dB / 126 dB SPL (2 ccm coupler)
- 68 dB / 131 dB SPL (ear simulator)

Data sheet also applicable for Motion C&G M sDemo DIX

Motion C&G M IX | Technical Data

Type	Earhook	
	2 ccm coupler	Ear simulator
Output sound pressure level		
OSPL90 at 1.6 kHz	—	137 dB SPL
Maximum OSPL90	133 dB SPL	138 dB SPL
HFA-OSPL90	125 dB SPL	—
Gain		
FOG at 1.6 kHz	—	63 dB
Maximum FOG	60 dB	67 dB
HFA-FOG	53 dB	—
Reference test gain	47 dB	56 dB
Frequency, noise and directivity		
Frequency range	120 - 7700 Hz	940 - 7700 Hz
Equivalent input noise	16 dB SPL	
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	4 / 3 / 1 / 1 %	4 / 3 / 1 / — %
Tinnitus Function broadband	70 dB SPL	—
AI-DI	4.0 dB	
Latency	< 15 ms	
Inductive coil sensitivity		
MASL (1 mA/m) at 1.6 kHz	—	94 dB SPL
Full-on HFA-SPLIV (10mA/m)	103 dB SPL	—
HFA SPLITS (left/right)	107 / 107 dB SPL	—
RSETS (left/right)	0 / 0 dB	—
HFA SPLIV	107 dB SPL	—
Battery		
Battery runtime (without streaming)	up to 36 h	
Battery runtime (incl. 5 h streaming)	up to 32 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	

Please find additional information to the values on page "Further Information".

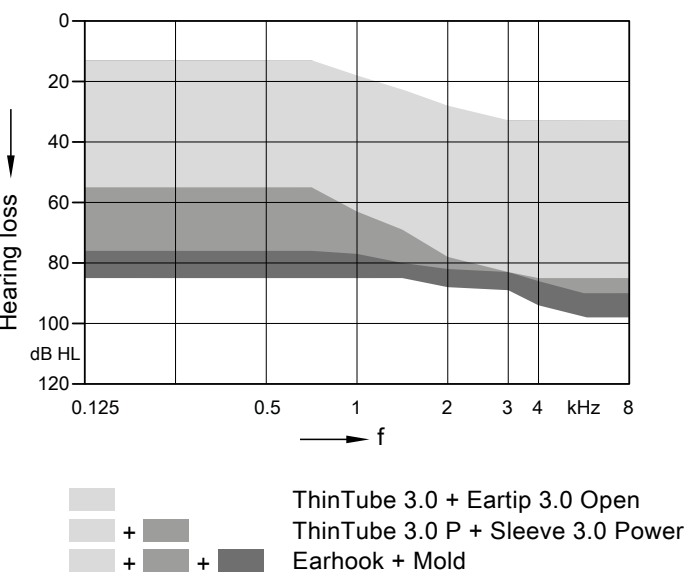
Motion C&G M IX | Technical Data

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	—	121 dB SPL	—	126 dB SPL
Maximum OSPL90	125 dB SPL	129 dB SPL	126 dB SPL	131 dB SPL
HFA-OSPL90	116 dB SPL	—	121 dB SPL	—
Gain				
FOG at 1.6 kHz	—	55 dB	—	60 dB
Maximum FOG	60 dB	64 dB	63 dB	68 dB
HFA-FOG	50 dB	—	56 dB	—
Reference test gain	39 dB	46 dB	44 dB	51 dB
Frequency, noise and directivity				
Frequency range	7IX	100 - 8100 Hz	100 - 9300 Hz	100 - 7200 Hz
	5IX	100 - 8100 Hz	100 - 8800 Hz	100 - 7200 Hz
	3IX, 2IX, 1IX	100 - 8100 Hz	100 - 8300 Hz	100 - 7200 Hz
Equivalent input noise		18 dB SPL	19 dB SPL	15 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz		2 / 1 / 1 / 1 %	4 / 2 / 2 / – %	3 / 1 / 1 / 1 %
Tinnitus Function 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	—	79 dB SPL	—	84 dB SPL
Full-on HFA-SPLIV (10mA/m)	95 dB SPL	—	100 dB SPL	—
HFA SPLITS (left/right)	99 / 99 dB SPL	—	104 / 104 dB SPL	—
RSETS (left/right)	0 / 0 dB	—	0 / 0 dB	—
HFA SPLIV	99 dB SPL	—	103 dB SPL	—
Battery				
Battery runtime (without streaming)		up to 36 h		up to 36 h
Battery runtime (incl. 5 h streaming)		up to 32 h		up to 32 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

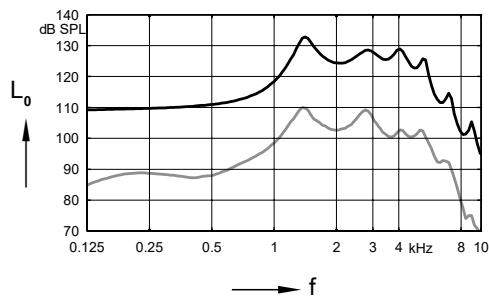
Please find additional information to the values on page "Further Information".

Motion C&G M IX | Fitting Range



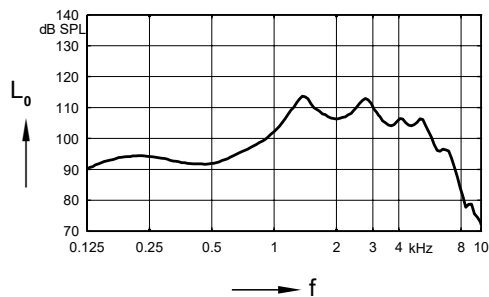
Earhook | Basic Data

2 ccm coupler



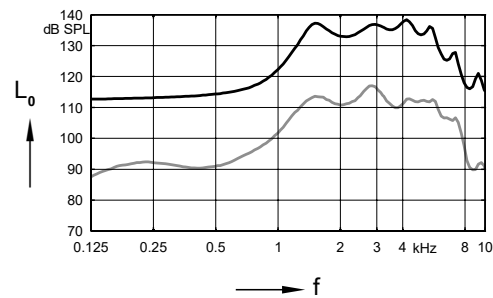
Max. Output sound pressure level
($L_i = 90$ dB)

Full on gain
($L_i = 50$ dB)



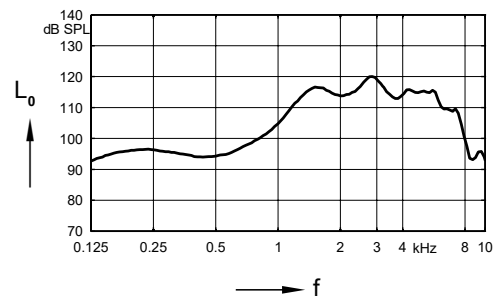
Frequency response
($L_i = 60$ dB)

Ear simulator



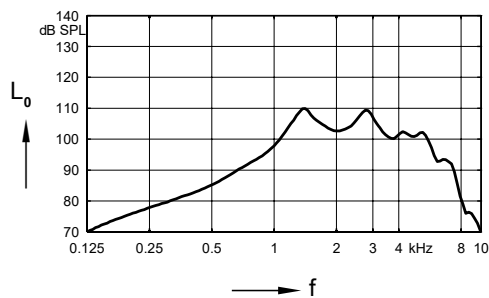
Max. Output sound pressure level
($L_i = 90$ dB)

Full on gain
($L_i = 50$ dB)

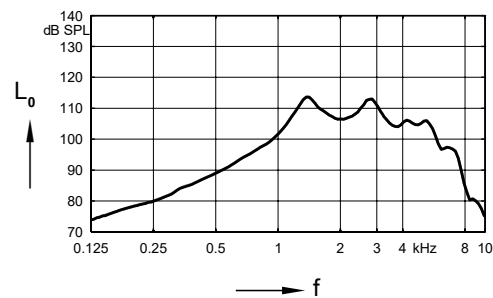


Basic acoustic response
($L_i = 60$ dB)

Inductive response

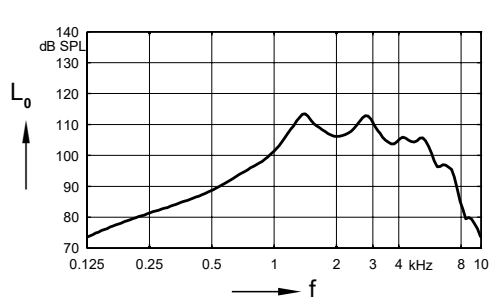


Inductive response
($H = 10$ mA/m)



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

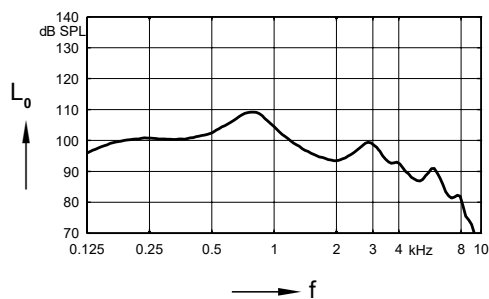
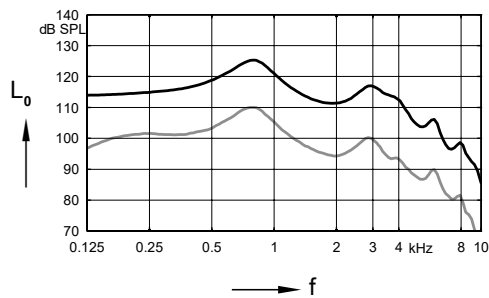
SPLITS curve right
($H = 31.6$ mA/m)



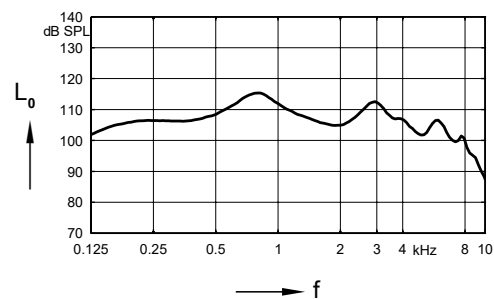
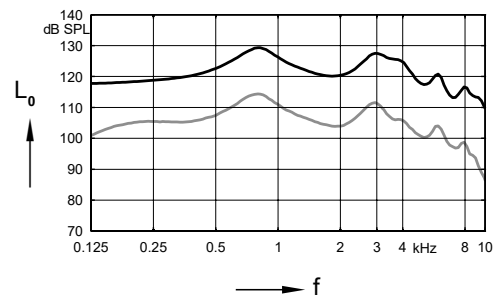
SPLIV curve
($H = 31.6$ mA/m)

ThinTube 3.0 | Basic Data

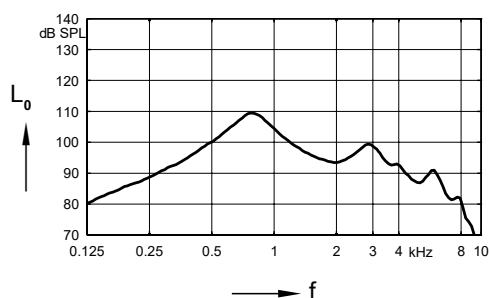
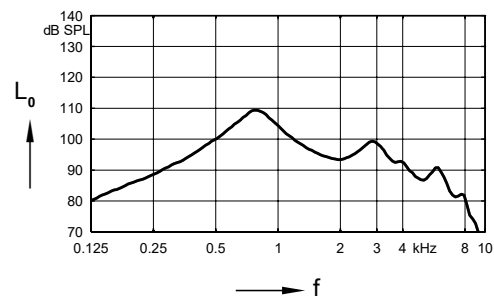
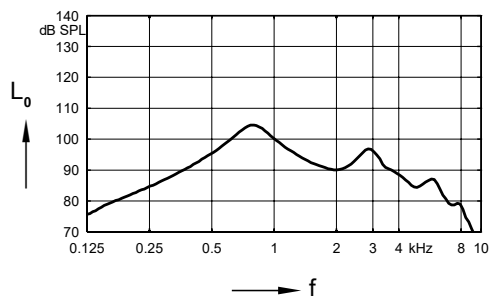
2 ccm coupler



Ear simulator

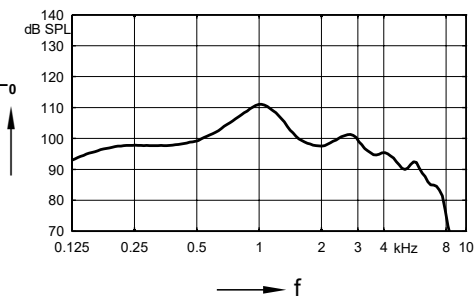
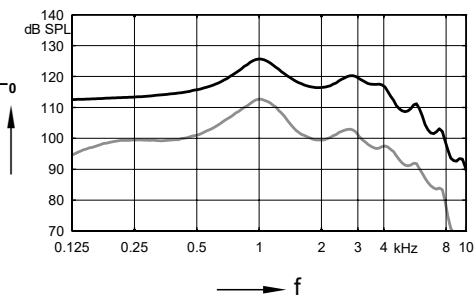


Inductive response

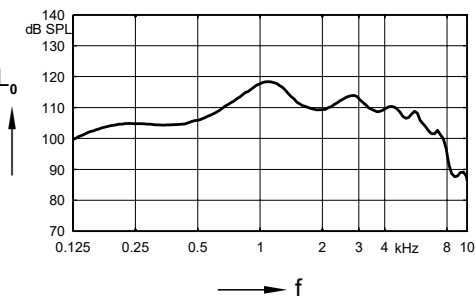
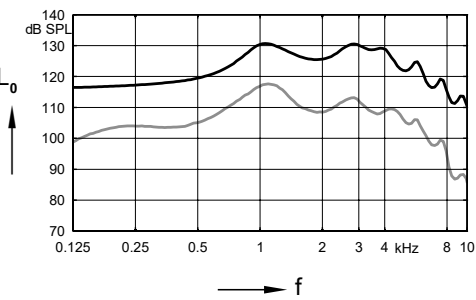


ThinTube 3.0 P | Basic Data

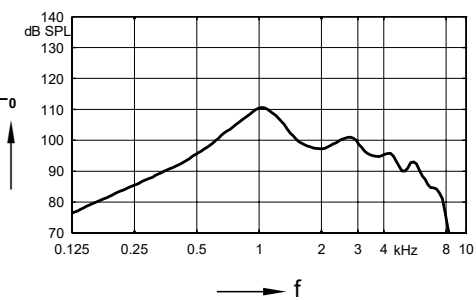
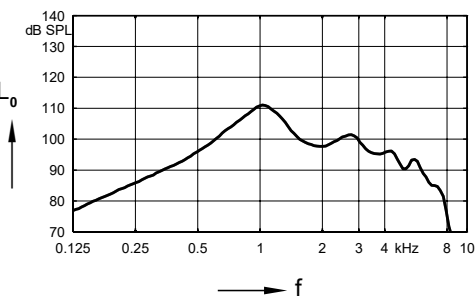
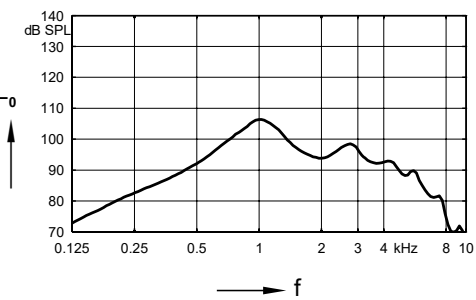
2 ccm coupler



Ear simulator



Inductive response



Motion C&G M IX | 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 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 12 kHz for 7IX devices only.
- The following acoustic connections/ear pieces were used:
 - Earhook
 - ThinTube 3.0
 - ThinTube 3.0 P

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.

