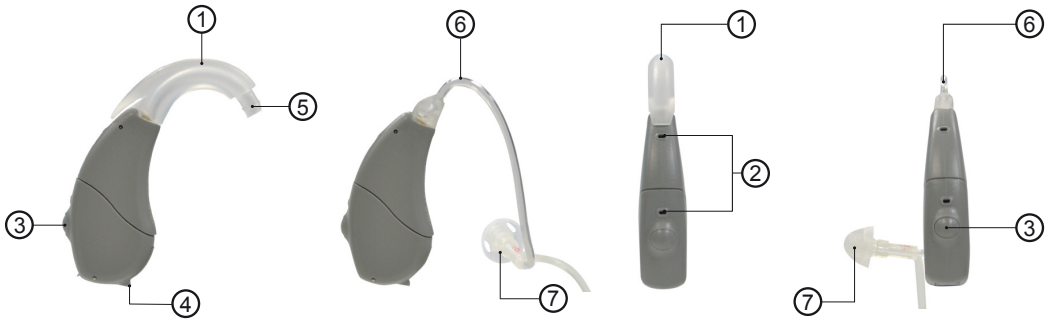
m4 mBTE-Open Fit



1. Ergonomic Earhook
2. Microphones
3. Program Push Button
4. Battery Compartment (Type 312)
5. Acoustic Filter
6. Thin Tube
7. Dome or Adapter

Description

Behind-The-Ear air conduction digital hearing aid (BTE), Battery 312, programmable through fitting software.

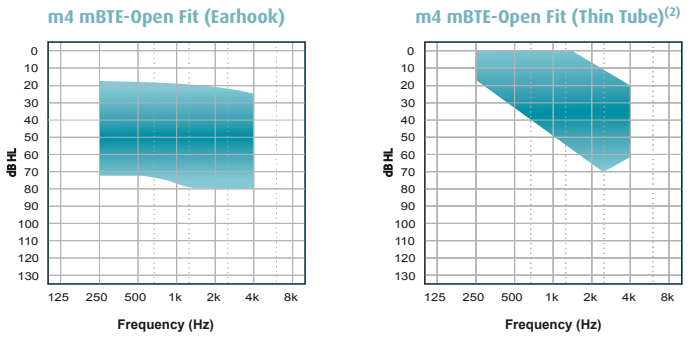
Intended Use

The m4 mBTE-Open Fit hearing aid is intended to compensate for mild to severe (transmissive, mixed or sensorineural) hearing loss and acute loss with preserved low-frequencies (mixed or sensorineural). Its use is not intended for children or people with mental disabilities.
See Fitting Range (1)

Features

√ Matrix 131/58 @ 2cc (Standard Fitting)
√ 100% Digital Technology
√ Digitally Programmable
√ Standard and Open Fitting
√ Automatic Directional Microphones
√ 8 independent WDRC Channels
√ 16 Bands Equalizer
√ 8 Maximum Output Control Channels (MPO)
√ Automatic Noise Reductor (up to 17 dB)
√ Wind Noise Supressor
√ Feedback Canceller Extreme
√ 4 Memories
√ Memory Auto-save
√ Acoustic Tap
√ Memory Change and Low Battery Indicator
√ Noise Generator for Tinnitus Treatment (TRT)
√ Datalogging
√ Nanoproof Coating(3)
√ Degree of Protection IP57(4)
√ Suitable for Mobile Phones (5)
√ Battery 312 Type PR41 (IEC 60086)
√ Low Battery current drain
√ Small Size

(1) Fitting Range



Requirements

89600, Fitting Software Microson CODA e-STUDIO 6 (6.6.0 or higher)
53781, CS63 Hi-Pro Cable Right
53832, CS63 Hi-Pro Cable Left
83968, Flex Adapter
73194, HI-PRO[A] USB Programmer (Firmware 3.00 or higher)
88616, HI-PRO[A] 2 Programmer (Firmware 4.00 or higher)
66183, NOAHLINK[B] Programmer (Kernel v. 1.55.03)

⚠ NOTE:
Insert Battery Type 312 Adapter for programming

(2) Open Fit
(3) Nanometric Coating protection against intrusion of particles
(4) In compliance with IEC 60529
(5) In compliance with IEC 60118-13:2011

Product Data

DS-0036-002-EN
Rev. A.11 2018-03-01

MICROSON S.A. Pere IV, 160 08005 BARCELONA (Spain) TEL. +34 93 300 58 00 FAX:+34 93 485 70 99 www.microson.es

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m4 mBTE-Open Fit

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	Acoustic Data	IEC 60118-7:2005		IEC 60118-0:1993/ A1:1994	
		EARHOOK	TUBE	EARHOOK	TUBE
OUTPUT	OSPL[1]90 Peak (dB_{SPL})	131	121	134	126
	OSPL90 Peak Frequency (Hz)	1700	900	1700	900
	HFA[2]-OSPL90 / RTF[3]-OSPL90 (dB_{SPL})	118	112	129	116
GAIN	HFA-FOG[4] (dB)	47	41	53	49
	RTF-FOG (dB)	54	36	58	45
	FOG (dB)	58	49	63	54
	FOG Frequency (Hz)	1700	900	1800	900
	RTG[5] (dB)	42	35	54	41
NOISE	Equivalent Input Noise (dB_{SPL})	29	30	25	33
AGC[6]	Attack Time (ms)	1	1	1	1
	Release Time (ms)	10	10	7	7
DISTORTION	500 Hz @ 70 dB_{SPL} (% THD)	5.6	1.6	7.5	3.1
	800 Hz @ 70 dB_{SPL} (% THD)	N/A	0.4	N/A	0.9
	1600Hz @ 65 / 70 dB_{SPL} (% THD)	0.2	0.6	1.0	1.7
CONSUMPTION	Current Drain (mA)	0.94	0.97	0.83	0.89
FREQUENCY LIMITS	f_1 (Hz)	200	100	900*	100*
	f_2 (Hz)	6500	5900	6300*	7200*
	Power Source: 1.3 V Battery Simulator	IEC 60318-5:2006		IEC 60318-4:2010	

[1]OSPL= Output Sound Preassure Level
[2]HFA= High Frequency Average
[3]RTF= Reference Test Frequency (1600 Hz)
[4]FOG= Full On Gain
[5]RTG= Reference Test Gain
[6]AGC= Automatic Gain Control

*According to DIN 45605 standard
Measurements taken without filter

Configurable parameters

	Parameter	Minimum	Maximum	Step	Default Parameters	Units
WDRC CHANNELS 1 to 8	Channel Gain	0	20	2	20	dB
	Compression TK	32	70	2	60	dB_{SPL}
	Compression Ratio	1:1	5:1	-	1:1	-
MPO* CHANNELS 1 to 8	Threshold Kneepoint	-22	OFF	2	-4	dB
BANDS 1 to 16	Band Gain	0	20	2	20	dB
FEATURES	Power On Delay	OFF	15	5	5	seconds
	Noise Reduction	OFF	17	3/4	10	dB
	Feedback Canceller	OFF	Extreme	ON (intermediate option)	Extreme	-
	Memory Change Indicator	-	-	-	ON	-
	Low-Battery Indicator	-	-	-	ON	-

*Maximum Power Output

WARNING!
This hearing aid can generate sound output levels in excess of 132 dBSPL (IEC 60318-4 Coupler).
The hearing care specialist should be specially careful fitting the instrument as there may be risk of impairing the remaining hearing of the hearing instrument user.

Product Data

Measurements performed using a UPL 66 (Rohde & Schwarz) Id 23564 test unit on July 2017 and are subject to changes without prior notice.

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m4 mBTE-Open Fit

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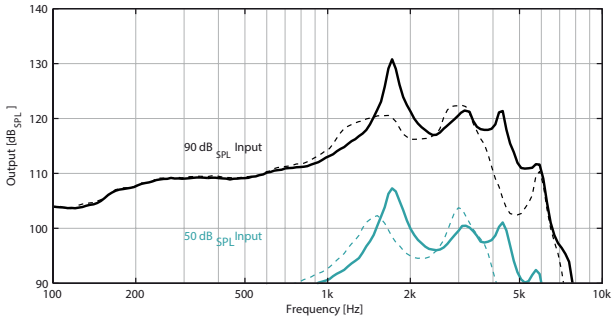
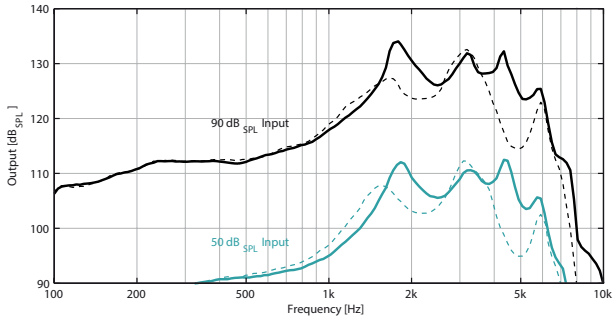
EARHOOK

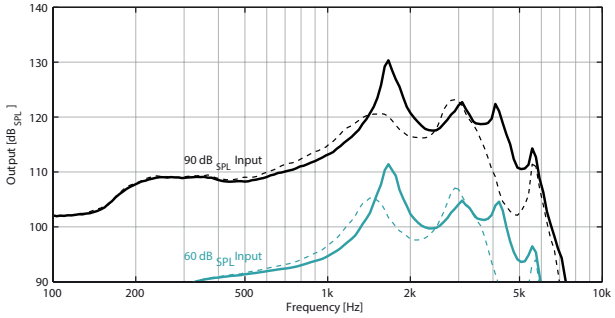
OSPL90 / OSPL50 @ FOG @ IEC 60118-7:2005



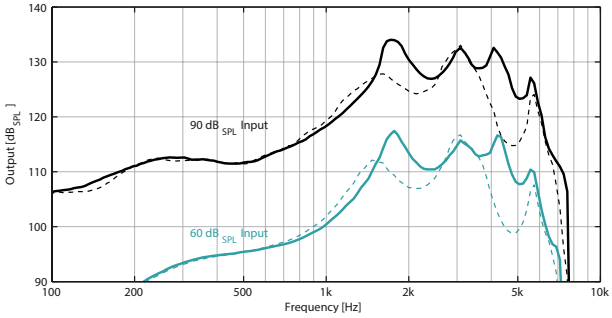
OSPL90 / OSPL50 @ FOG @ IEC 60118-0:1993/A1:1994



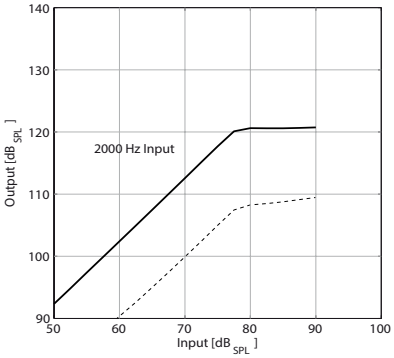
FREQUENCY RESPONSE @ RTS @ IEC 60118-7:2005



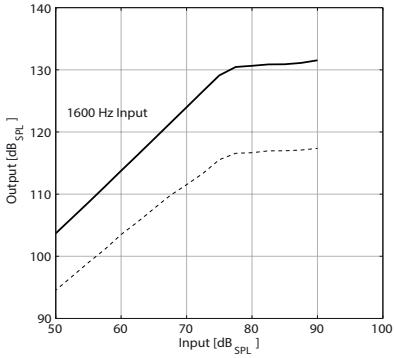
FREQUENCY RESPONSE @ RTS @ IEC 60118-0:1993/A1:1994



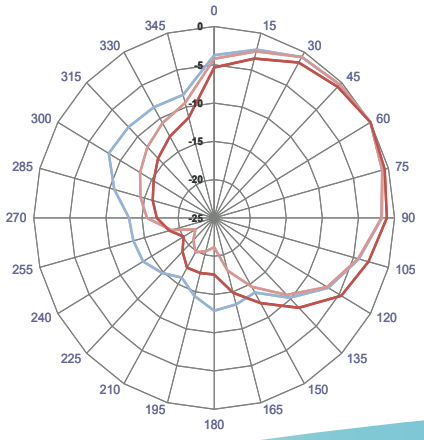
INPUT-OUTPUT @ RTS @ IEC 60118-7:2005



INPUT-OUTPUT @ RTS @ IEC 60118-0:1993/A1:1994



POLAR PLOT DIRECTIONAL MODE @ EN 60118-8:2005



DI = 4.7 dB
(DI) Directivity Index
Angle of incidence 60°

Mesured on Head and Torso Simulator
Right ear
With Ear-Hook

Earhook
Earhook with filter

Product Data

Measurements performed using a UPL 66 (Rohde & Schwarz) Id 23564 test unit on July 2017 and are subject to changes without prior notice.

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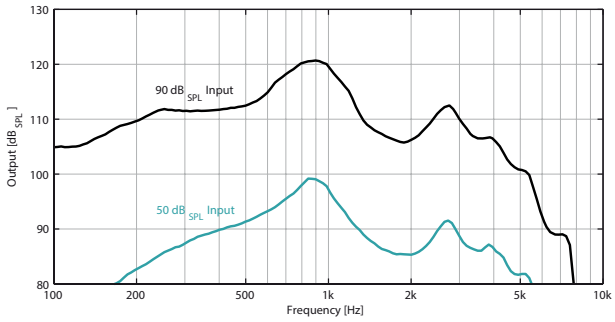
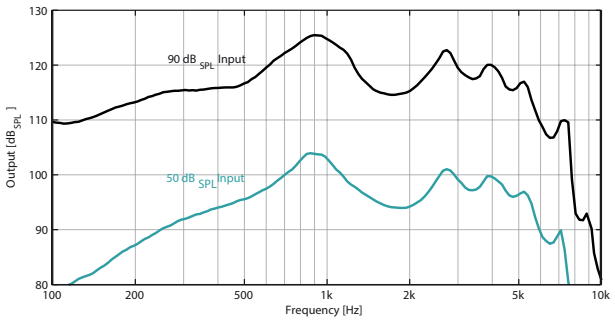
F-05.009 Rev.E Issue Date 2015-02-11

THIN TUBE

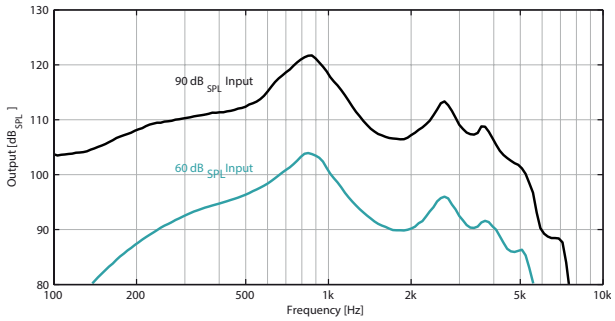
OSPL90 / OSPL50 @ FOG @ IEC 60118-7:2005



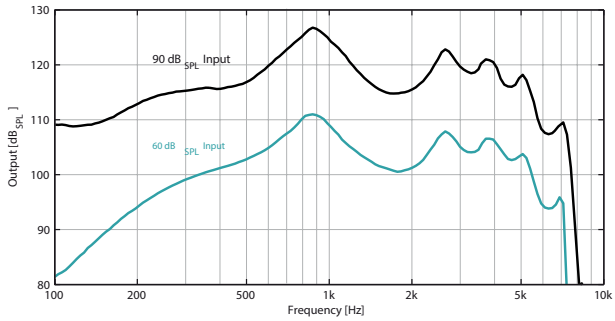
OSPL90 / OSPL50 @ FOG @ IEC 60118-0:1993/A1:1994



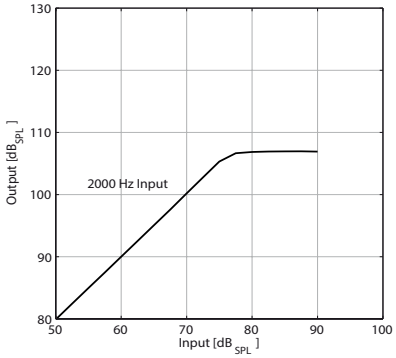
FREQUENCY RESPONSE @ RTS @ IEC 60118-7:2005



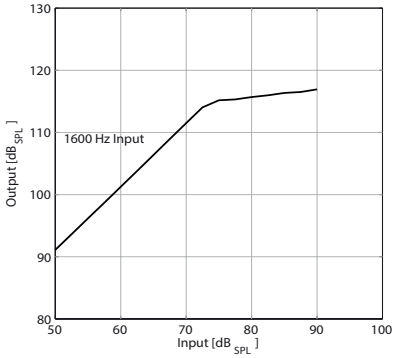
FREQUENCY RESPONSE @ RTS @ IEC 60118-0:1993/A1:1994



INPUT - OUTPUT @ RTS @ IEC 60118-7:2005



INPUT - OUTPUT @ RTS @ IEC 60118-0:1993/A1:1994



Product Data

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HEARING INSTRUMENT CLASSIFICATION IN COMPLIANCE WITH EN 60601-1 STANDARD

Medical Device Clasification

Protection against electric shock	MEDICAL DEVICE WITH INTERNAL ELECTRICAL POWER SOURCE
	B Type Applied Part
	 This symbol indicates that the products described in these user instructions adhere to the requirements for an application part of Type B of IEC 60601-2-66. The surface of the hearing aid is specified as an applied part of Type B.
Working Method	CONTINUED WORKING

Power Supply Electrical Features

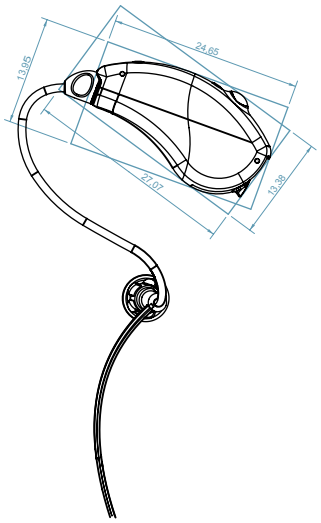
Nominal Operating Voltage	1.4 V	
Current Type	Direct current DC	
Nominal Current Leakage	Earhook	Thin Tube
	0.83 mA	0.89 mA
Battery Nomenclature (EN 60086)	PR41	

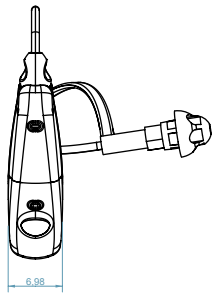
Environmental conditions

		Operation		Storage / Transport	
		Min.	Max.	Min.	Max.
	Temperature [T (ºC)]	0	40	-20	60
	Relative humidity [RH (%)]	10	95	10	95
	Atmospheric pressure [P (hPA)]	500*	1100*	500*	1100*

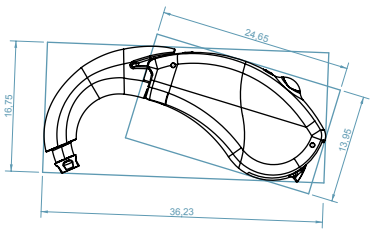
*Avoid rapid pressure changes

Weight & Dimensions





Weight excluding battery: 1.5 gr
Weight including battery: 1.9 gr



Weight* excluding battery: 1.5 gr
Weight* including battery: 2.0 gr
Dimensions in millimeters (mm)

Product Data

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m4 mBTE-Open Fit

Accesories & Spare Parts for Professionals

99873, my Open Fit axes set
99896, Battery compartment my Open Fit P312 Black (5 pcs)
99900, Battery compartment my Open Fit P312 Beige (5 pcs)
99874, Battery compartment my Open Fit P312 Grey (5 pcs)
xxxxx*, Battery compartment my Open Fit P312 Silver (5 pcs)
94582, Microson 312 hearing aid batteries M/Free
90556, Open Fit Tube Selector
99872, P312 My Open Fit Earhook (5pcs)
99856, Microson Open Fit mBTE Tube Nº 1 R (5 pcs)
99828, Microson Open Fit mBTE Tube Nº 1 L (5 pcs)
99831, Microson Open Fit mBTE Tube Nº 2 R (5 pcs)
99832, Microson Open Fit mBTE Tube Nº 2 L (5 pcs)
99833, Microson Open Fit mBTE Tube Nº 3 R (5 pcs)
99834, Microson Open Fit mBTE Tube Nº 3 L (5 pcs)
99835, Microson Open Fit mBTE Tube Nº 4 R (5 pcs)
99836, Microson Open Fit mBTE Tube Nº 4 L (5 pcs)
99827, Microson Open Fit mBTE Adapter Open 5mm (10 pcs)
99837, Microson Open Fit mBTE Adapter Open 7mm (10 pcs)
99838, Microson Open Fit mBTE Adapter Open 10mm (10 pcs)

Accesories & Spare Parts for end user

99535, Microson Microbox ONE case
91118, Brush Cleaner
99467, Microson Wipe
94582, Microson 312 hearing aid batteries M/Free

Accompanying Documentation

99582, User's manual m2/m4 mBTE-Open Fit (ES, EN, PT, IT, FR, TR, RO, BG, EL, RU, PL, CS, DE)
FG-0036-002-EN, m4 mBTE-Open Fit Programming guide

PRODUCT	REFERENCE	MODEL	GTIN-13
m4 mBTE-Open Fit	99659	MICROSON m4 mBTE-Open Fit Beige	8435281312764
	99680	MICROSON m4 mBTE-Open Fit Black	8435281312771
	99681	MICROSON m4 mBTE-Open Fit Grey	8435281312788
	99682*	MICROSON m4 mBTE-Open Fit Silver	8435281312757

GMDN Code: 34671

*Soon available

Product Data

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