

# ULTRA SOLO, STAINLESS STEEL EARMUFF WITH ABS BODY, 28dB NRR

#### Article # F1-12-20-12



## **FEATURES**

Modern, attractive low-profile design Lightweight, Stainless steel frame enclosed in ABS code for lighter weight and more comfort.

Large space inside cup helps reduce moisture and heat build-up, help maintain a comfortable pressure around the ears. New innovative foam earcup inserts and spacers that help improve attenuation.

Easy-to-replace cushions and inserts help keep them hygienically clean.

## APPLICATION

The earmuffs are ideal for protection against noise arising from a wide range of applications in the workplace and leisure activity. Examples of typical applications include:

Metal processing, Automotive, Airports, Construction, Textile manufacturing,

Chemical & pharmaceutical manufacturing, Cement manufacturing, Printing, Wood working, Heavy engineering, Foundry, Steelworks, Mining and quarrying

## ERP CODES













## **STANDARDS**

♣ EA 352-1:2002, ANSI S3.19-1974, ANSI S12.6-1997



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## **Hearing Protective Device Test Report**

Attenuation measurements have been performed according to the American National Standards Institute (ANSI) Specifications, ANSI S3.19 -1974, using the eexperimenter-fit protocol, on the Unique Safety Equipment EM-105 muff-type hearing protector (test IS Q1264A). The specified threshold measurement data were obtained using ten normal-hearing listeners, six male and four femal. These listeners were selected from a standby group of about 35 volunteers, mostly graduate students, who regularly serve as listeners for measurements of this kind.

The measurements were made in a room designed for this purpose. All acoustic characteristics of the room meet the requirements outlined in ANSI S3.19-1974. The ambient noise levels in this room are below the limits specified in ANSI S3.19-1971, and open ear thresholds are used on a continuing basis to monitor the background noie levels. An automatic recording attenuator was used to record both open and occluded ear thresholds.

Each of ten subjects was tested three times at each of nine test frequencies. The attached Tables show grand mean attenuation values in decibels (dB) for each test signal along with group attenuation values. Standard deviations (S.D.) for the 30 different attenuation determinations for each test signal are also given. The results presented in this report pertain to the samples tested only. Michael & Associates is accredited by the National Institute of Standards and Technology (NIST) National Laboratry Accrediatation Program (NVLAP) for test performed according to ANSI S3.19-1971 and ANSI S12.6-1997. These accreditation criteria encompass the requirements of international standards ISO 9002:1994 (ANSI / ASQC Q92-1987) and ISO / IEC Guide 17025. This report may only be reproduced or transmitted electronically in it's entirely. This report shall not be used to claim product endorsement by NIST, NVLAP or by any agency of the U.S. Government. All measurement equipment are calibrated with instrumentation traceable to the NIST.

Individual and Summary Attenuation Data for Hearing Protective Devices

Frequency in Hertz								
Subject	125	250	500	1000	2000	3150	4000	6300
	18	24	32	42	39	42	44	40
1	21	24	30	38	36	40	42	37
	16	21	30	38	35	45	42	40
	18	26	32	41	40	45	40	40
2	16	25	29	36	39	45	37	40
	18	23	28	39	37	40	35	38
	21	23	32	40	36	42	47	42
3	16	21	31	38	36	42	46	43
	26	23	30	42	37	35	43	41
	21	21	28	38	34	38	38	37
4	16	19	26	36	35	37	38	34
	20	18	29	39	36	39	37	36
	15	24	26	33	31	39	39	35

NRR = 26 dB				HEADBAND FORCE = 3.0 lbs				
Std. Dev.	2.8	2.3	1.8	2.7	2.7	3.1	3.2	3.8
Means	17.8	21.5	29.1	38.4	36.3	40.6	40.6	37.1
	19	26	32	41	37	39	42	43
10	19	20	27	39	36	42	40	42
	21	18	32	39	40	36	42	47
	18	21	29	40	35	42	40	36
9	18	19	29	41	35	3	38	34
	19	21	30	40	37	42	40	35
	16	22	28	41	39	36	37	35
8	13	21	28	37	34	37	37	34
	16	25	30	40	39	40	36	35
	19	19	28	42	42	45	42	33
7	20	20	28	41	40	44	41	33
	13	20	27	38	36	42	41	34
	15	19	29	34	33	43	42	34
6	17	21	30	36	37	45	47	35
	17	21	30	39	36	40	46	34
	15	20	26	35	30	36	39	32
	15	20	26	35	30	36	40	34
5	15	22	27	32	32	38	40	34

Use these laboratory-derived data for comparison purposes only. The amount of protection afforded in field use is often significantly lower depending on how the protectors are fitted and worn.

Measurements were made according to American National Standards Institute Specifications ANSI S3.19-1974.

Center Frequency	Mean Attenuation	Group Attenuation	Standard Deviation
in Hz	in dB	in dB	in dB
125	17.8	39.2	2.8
250	21.5		2.3
500	29.1		1.8
1000	38.4		2.7
2000	36.3	184.8	2.7
3150	40.6		3.1
4000	40.6		3.2
6300	37.1	76.1	3.8
8000	39.0		2.9

These data were obtained through measurements made at the laboratories of Michael & Associates, Inc. State College, PA, USA. Michael Associates, Inc., is accredited to test to ANSI S3.19-1974, ANSI S12.6-1997 and AUS S1270:2002 by the National Institue of Standards and Technology (NIST) National Voluntary Laboratory Accreditation Program (NVLAP).



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# PACKAGING

UNIT	STANDARD	PACKING PER PKT	PACKING PER CTN	ORIGIN	NET WEIGHT / CARTON (KG.)	GROSS WEIGHT /CARTON (KG.)	CARTON DIMENSION (CMS.)	CBM PER CTN
Piece	EPA Regulation	1 Piece	20 PIECES	TAIWAN		7.11	50 x 41 x 43	0.0899