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3M™ E-A-R™ Classic™ Roll-Down Earplugs

Technical Data Sheet

Description

The E-A-R™ Classic™ roll-down earplugs are designed for insertion into the ear canal to help reduce exposure to hazardous levels of noise and loud sound.

These products are available in corded and uncorded version.

The Uncorded version is also available in One Touch™ Dispenser format.

Key Features

- Proprietary soft energy absorbing polymer foam
- Firm material with slow recovery time helps achieve good fit
- Compatible with 3M™ E-A-Rfit validation system
- Special cylindrical shape that fits most ear canals and provides reliable seal
- Low equilibrium pressure helps reduce pressure in ear canal thus increasing comfort and wearability
- Exposed cell surface texture resists movement and helps maintain effective seal
- Excellent sound attenuation characteristics
- Supplied in re-sealable pillow-pack for ease of use
- Sweat and humidity resistant which helps improve comfort- ideally suited for use in hot and humid conditions
- Available in both corded and uncorded version

Applications

The E-A-R™ Classic™ is ideal for moderate to high noise levels, and is particularly suited for high frequency noise in both workplace and leisure environments. Examples of typical applications include:

- Mining
- Automotive
- Chemical & pharmaceutical manufacture
- Construction
- Light engineering
- Metal processing
- Textile manufacture
- Woodworking

Standards

These hearing protectors have been produced to comply with the requirements of the Australian /New Zealand Standard AS/NZS 1270:2002.

Materials

The following materials are used in the manufacture of this product.

Component	Material
Ear Plugs	Slow recovery polymer foam
Cord	Polymer

Storage

Store in an area free of contamination.

Do not leave your hearing protection device in areas or locations where it can be exposed to damage or contamination.

Sunlight is particularly damaging as UV light can have a detrimental effect on the materials the product is made from.

Chemical contamination can also have a serious effect on product integrity and decontamination after use is recommended.

Use a suitable storage container especially if left in a vehicle. This will protect the hearing protection device from damage and extend its working life.

Attenuation Data

Corded

Class 3	SLC_{80} Value is 21.0						
Frequency (HZ)	125	250	500	1000	2000	4000	8000
Mean Attenuation	19.0	19.0	25.1	23.9	30.7	37.0	39.3
Standard Deviation	6.7	5.1	7.9	7.5	6.9	5.5	9.0
Mean - Standard Deviation	12.3	13.9	17.2	16.4	23.8	31.5	30.3

Hearing protector class 3 tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to 100dB(A) assuming an 85dB(A) criterion.

Uncorded

Class 4	SLC_{80} Value is 23.0						
Frequency (HZ)	125	250	500	1000	2000	4000	8000
Mean Attenuation	19.8	20.6	27.8	27.4	31.0	38.7	41.2
Standard Deviation	9.2	8.6	7.3	8.7	6.3	6.1	9.2
Mean - Standard Deviation	10.6	12.0	20.5	18.7	24.7	32.6	32.0

Hearing protector class 4 tested to AS/NZS 1270. When selected, used and maintained as specified in AS/NZS 1269, this protector may be used in noise up to 105dB(A) assuming an 85dB(A) criterion.

A lower criterion may require a higher protector class.

Mean = Mean attenuation value derived from testing in accordance with AS/NZS 1270:2002 SD = Standard Deviation derived from testing in accordance with AS/NZS 1270:2002 Mean - SD = Mean attenuation value minus Standard Deviation SLC(80) = Single number rating commonly used in Australia and New Zealand to compare acoustic performance of hearing protectors. The subscript '80' indicates that in well managed hearing protector programs, the protection provided is expected to equal or exceed the SLC(80) in 80% of protector-wearer noise spectrum combinations. Class = A simplified process for selecting hearing protectors based on the wearers 8-hour equivalent continuous A-weighted sound pressure level.

Ordering Information

3M Code	Model #	Description
70071514940	311-1101	E-A-R Classic Corded
70071514916	310-1001	E-A-R Classic Pillow Pack Uncorded
70071514932	312-1201	E-A-R Classic Polybag Uncorded

Important Notice

To the extent permitted by law, 3M shall not be liable for any loss or damage including any loss of business, loss of profits, or for any indirect, special, incidental or consequential loss or damage arising from reliance upon any information herein provided by 3M. Nothing in this statement will be deemed to exclude or restrict 3M's liability for death or personal injury arising from its negligence.

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