Technical Datasheet E-A-R™ UltraFit ™ Earplugs



Product Description

The E-A-R[™] UltraFit[™] pre-moulded 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.

Key Features

Applications

applications include:

Automotive

Construction Heavy engineering

Woodworking

Metal processing

Textile manufacture

- Unique patented tri-flange design
- Longer stem helps make insertion easier
- Made from soft and durable material
- One size fits majority wearers
- High attenuation (SNR 32dB) amongst standard premoulded earplugs
- Compatible with E-A-Rfit validation system
- Easy to wash and clean
- Supplied in re-sealable pillow-pack for ease of use

The E-A-R[™] UltraFit[™] earplugs are ideal for high to moderate noise exposure levels, and are ideally suited for all frequency noise in a wide range of industrial workplace and leisure environment. Examples of typical

Chemical & pharmaceutical manufacture

Available in both corded and uncorded version

Standard & Approval

The E-A-R™ UltraFit™ pre-formed earplugs are tested and CE approved against the European Standard EN352-2:1993. These products meet the Basic Safety Requirements as laid out in Annex II of the European Community Directive 89/686/EEC and have been examined at the design stage by INSPEC International Limited, 56 Leslie Hough Way, Salford, Greater Manchester M6 6AJ, UK (Notified Body number 0194).

Materials

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

Component	Material
Earplugs	Thermoplastic elastomer
Cord	PVC



Attenuation values

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	29.2	29.4	29.4	32.2	32.3	36.1	44.3	44.8
sf (dB)	6.0	7.4	6.6	5.3	5.0	3.2	6.0	6.4
APVf (dB)	23.2	22.0	22.7	26.9	27.3	32.8	38.3	38.4
SNR = 32dB H = 33dB M = 28dB L = 25dB								

Key

APVf(dB) = Mf - sf(dB)

Mf = Mean attenuation value

sf = Standard deviation

APVf = Assumed Protection Value

H = High-frequency attenuation value (predicted noise level reduction for noise with L(C) – L(A) = -2dB)

M = Medium-frequency attenuation value (predicted noise level reduction for noise with L (C) – L(A) = +2dB)

= Low-frequency attenuation value (predicted noise level reduction for noise with L(C) - L (A) = +10 dB

 ${\sf SNR}$ = Single Number Rating (the value that is subtracted from the measured C-weighted sound pressure level, L(C) in order to estimate the effective A-weighted sound pressure level inside the ear).



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