# Technical Datasheet E-A-R™ E-A-RCaps™ Earplugs

EC-01-000

## **Product Description**

The E-A-RCaps™ semi-aural earplugs are designed to seal the entrance point of the ear canal to help reduce exposure to hazardous levels of noise and loud sound. These products are designed to be worn under-the-chin and behind-the-neck mode.

## **Key Features**

- Round pod plugs that seal the entrance of ear canal thus making them more wearer acceptable
- No need to handle the plug tip making them more hygienically acceptable
- Low transmission noise through the band
- Easily stored around the neck when not in use
- Optimum attenuation for many applications
- Easy to wash and clean
- Pods can be easily replaced

# **Applications**

The E-A-RCaps™ semi-aural earplugs are ideal for moderate noise exposure levels, and are suitable for a wide range of industrial workplaces, particularly for intermittent noise exposure. Examples of typical applications include:

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

# Standard & Approval

The E-A-RCaps™ semi-aural earplugs have been 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			
Band	Polycarbonate			
Ear tip	Polyurethane foam			



#### **Attenuation values**

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	21.0	20.2	19.8	19.1	23.2	33.4	41.0	40.7
sf (dB)	4.1	4.4	4.2	4.3	3.7	4.5	2.9	5.4
APVf (dB)	16.9	15.8	15.5	14.8	19.5	29.0	38.1	35.2

SNR = 23dB H = 27dB M = 19dB L = 17dB

#### 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)

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

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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