# Technical Datasheet E-A-R™ Push-Ins™ Earplugs



## **Product Description**

The E-A-R™ Push-Ins™ 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**

- No roll-down required
- Low pressure seal
- Insertion stem helps eliminate the need to touch the tip when fitting
- Ear tip softens and becomes more pliable with body temperature
- Wearer comfort increases the longer the product is worn
- One size fits majority wearers
- Washable and re-usable
- Available in both corded and uncorded version

### **Applications**

The E-A-R™ Push-Ins™ earplugs are ideal for high noise exposure levels, and are particularly suited for low frequency type noise in a wide range of industrial workplace and leisure environment. Examples of typical applications include:

- Automotive
- Chemical & pharmaceutical manufacture
- Construction
- Heavy engineering
- Metal processing
- Rock concert
- Textile manufacture
- Woodworking

# Standard & Approval

The E-A-R™ Push-Ins™ earplugs are tested and CE approved against the European Standard EN352-2:2002. 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  | Slow recovery polymer foam |
| Stem      | Semi-rigid polymer         |
| Cord      | PVC                        |



### Attenuation values

| Frequency<br>(Hz) | 63   | 125  | 250  | 500  | 1000 | 2000 | 4000 | 8000 |
|-------------------|------|------|------|------|------|------|------|------|
| Mf (dB)           | 34.8 | 37.0 | 28.2 | 40.2 | 39.9 | 40.1 | 41.9 | 41.1 |
| sf (dB)           | 5.0  | 5.7  | 6.0  | 4.5  | 5.0  | 3.3  | 3.8  | 3.7  |
| APVf<br>(dB)      | 29.8 | 31.3 | 32.2 | 35.7 | 34.9 | 36.8 | 38.1 | 37.4 |

SNR = 38dB

H = 37dBM = 36dBL = 34dB

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

 $L = \mbox{Low-frequency}$  attenuation value (predicted noise level reduction for noise with L(C) – L(A) = +10dB)

 ${\sf SNR}={\sf Single}$  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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