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3M™ E-A-Rsoft™ FX™ Earplugs

Technical datasheet

Product description

The 3M™ E-A-Rsoft™ FX™ earplugs are disposable and designed for insertion into the ear canal to help reduce exposure to hazardous levels of noise and loud sound.

These earplugs may be used for protection against very high noise environments, providing effective protection across all test frequencies. The 3M™ E-A-Rsoft™ FX™ are available in corded (ES-01-021) and uncorded (ES-01-020) version.

Key features

- Slow expanding, soft polyurethane foam for all day comfort
- Flared end can help make fitting and removing the plug easier
- Ideally suited for those with larger ear canals
- SNR 39dB – see table of full attenuation data
- Compatible with the 3M™ E-A-Rfit™ Dual-Ear Validation System
- Available as corded (ES-01-021) or uncorded (ES-01-020)

Standard and approval:

The 3M™ E-A-Rsoft™ FX™ earplugs are type approved against the European Regulation (EU) 2016/425 by BSI Group, The Netherlands B.V. Say Building, John M. Keynesplein 9, 1066 EP Amsterdam, The Netherlands, Notified Body No. 2797.

These products meet the requirement of the Harmonised European Standard EN 352-2:2002. The applicable Certificate(s) and Declaration(s) of Conformity are available at www.3M.com/Hearing/certs.

Materials

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

Earplugs	Polyurethane foam
Cord	Recycled PVC

Attenuation values (corded and uncorded):

f (Hz)	63	125	250	500	1000	2000	4000	8000
Mf (dB)	34.6	37.5	38.5	40.4	38.6	39.6	48.9	47.8
sf (dB)	5.7	6.0	5.4	5.0	4.2	2.5	3.8	3.9
APVf (dB)	28.9	31.5	33.1	35.4	34.4	37.1	45.1	43.9

SNR = 39dB, H = 39dB, M = 36dB, L = 34dB, APVf (dB) = Mf – sf (dB)

Key:

f = Test frequency

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 ord er to estimate the effective A-weighted sound pressure level inside the ear)

Important notice

The use of the 3M product described within this document assumes that the user has previous experience of this type of product and that it will be used by a competent professional. Before any use of this product it is recommended to complete some trials to validate the performance of the product within its expected application.

All information and specification details contained within this document are inherent to this specific 3M product and would not be applied to other products or environment. Any action or usage of this product made in violation of this document is at the risk of the user.

Compliance to the information and specification relative to the 3M product contained within this document does not exempt the user from compliance with additional guidelines (safety rules, procedures). Compliance to operational requirements especially in respect to the environment and usage of tools with this product must be observed. The 3M group (which cannot verify or control those elements) would not be held responsible for the consequences of any violation of these rules which remain external to its decision and control.

Warranty conditions for 3M products are determined with the sales contract documents and with the mandatory and applicable clause, excluding any other warranty or compensation.

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Version 3
This version is the sole document applicable to the product(s) since its date of publication.