ISO 4869-2:2018 (E)

Acoustics — Hearing protectors — Part 2: Estimation of effective A-weighted sound pressure levels when hearing protectors are worn

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Measurement of sound attenuation of hearing protectors

5 Calculation of the assumed protection value, APVfx, of a hearing protector for a selected protection performance

6 Octave-band method

7 HML method

7.1 General
7.2 Calculation of H, M and L values
7.3 Application of HML method for estimation of the effective A-weighted sound pressure level

8 SNR method

8.1 General
8.2 Calculation of SNR values
8.3 Application of SNR method for estimation of the effective A-weighted sound pressure level

Annex A (informative) Example of the calculation of the assumed protection values, APVfx

Annex B (informative) Example of the calculation of L′p,Ax according to the octave-band method

Annex C (informative) Example of the calculation and use of H, M and L values

C.1 Calculation of H, M and L values for a particular hearing protector
C.2 Use of H84, M84 and L84 values to estimate L′p,A84 for a particular hearing protector in a specific noise situation

Annex D (informative) Example of the calculation and use of SNR values

D.1 Calculation of the SNR value for a particular hearing protector
D.2 Use of the SNR84 value to estimate L′p,A84 for a particular hearing protector in a specific noise situation for which Lp,C is known
D.3 Use of the SNR84 value to estimate L′p,A84 for a particular hearing protector in a specific noise situation in which the A-weighted sound pressure level has been measured and a reasonable estimate of (Lp,C − Lp,A) is available

Annex E (informative) Uncertainty of attenuation values and ratings

E.1 General
E.2 Example of uncertainty

Page count: 18