

Acoustics — Hearing protectors —

Part 3: Measurement of insertion loss of ear-muff type protectors using an acoustic test fixture

The European Standard EN ISO 4869-3:2007 has the status of a British Standard

ICS 13.340.20

National foreword

This British Standard is the UK implementation of EN ISO 4869-3:2007. It supersedes BS EN 24869-3:1994 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee EH/1, Acoustics, to Subcommittee EH/1/1, Hearing.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 August 2007

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Amendments issued since publication

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English Version

Acoustics - Hearing protectors - Part 3: Measurement of
insertion loss of ear-muff type protectors using an acoustic test
fixture (ISO 4869-3:2007)

Acoustique - Protecteurs individuels contre le bruit - Partie
3: Mesurage de l'affaiblissement acoustique des
protecteurs du type serre-tête au moyen d'un montage
d'essai acoustique (ISO 4869-3:2007)

Akustik - Gehörschützer - Teil 3: Messung der
Schalldämmung von Kapselgehörschützern unter
Verwendung einer akustischen Prüfvorrichtung (ISO 4869-
3:2007)

This European Standard was approved by CEN on 30 June 2007.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN ISO 4869-3:2007) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with Technical Committee CEN/TC 211 "Acoustics", the secretariat of which is held by DS.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2008, and conflicting national standards shall be withdrawn at the latest by January 2008.

This document supersedes EN 24869-3:1993.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 4869-3:2007 has been approved by CEN as EN ISO 4869-3:2007 without any modifications.

INTERNATIONAL STANDARD

ISO
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Acoustics — Hearing protectors —

Part 3:

Measurement of insertion loss of ear-muff type protectors using an acoustic test fixture

Acoustique — Protecteurs individuels contre le bruit —

*Partie 3: Mesurage de l'affaiblissement acoustique des protecteurs du
type serre-tête au moyen d'un montage d'essai acoustique*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 4869-3 was prepared by Technical Committee ISO/TC 43, *Acoustics*, Subcommittee SC 1, *Noise*.

This first edition of ISO 4869-3 cancels and replaces ISO/TR 4869-3:1989, which has been technically revised. The technical changes are as follows:

- a) the title has been changed and the standard has been revised;
- b) the content of the former subclause on “test signal” has been included in the subclause “Measuring system”;
- c) the subclause “Measuring system” no longer contains specific requirements concerning the measuring system;
- d) Annex B, dealing with uncertainty, has been added.

ISO 4869 consists of the following parts, under the general title *Acoustics — Hearing protectors*:

- *Part 1: Subjective method for the measurement of sound attenuation*
- *Part 2: Estimation of effective A-weighted sound pressure levels when hearing protectors are worn*
- *Part 3: Measurement of insertion loss of ear-muff type protectors using an acoustic test fixture*
- *Part 4: Measurement of effective sound pressure levels for level-dependent sound-restoration ear-muffs* [Technical Report]
- *Part 5: Method for estimation of noise reduction using fitting by inexperienced test subjects* [Technical Specification]

Part 6, *Measurement of the active noise reduction of hearing protectors*, is under preparation.