

SLOVENSKI STANDARD SIST EN ISO 8253-2:2010

01-april-2010

Nadomešča:

SIST EN ISO 8253-2:1999

Akustika - Avdiometrijske preskusne metode - 2. del: Avdiometrija v zvočnem polju s čistimi toni in ozkopasovnimi preskusnimi signali (ISO 8253-2:2009)

Acoustics - Audiometric test methods - Part 2: Sound field audiometry with pure-tone and narrow-band test signals (ISO 8253-2:2009)

Akustik - Audiometrische Prüfverfahren - Teil 2: Schallfeld-Audiometrie mit reinen Tönen und schmalbandigen Prüfsignalen (ISO 8253-2:2009)

Acoustique - Méthodes d'essais audiométriques: Partie 2: Audiométrie en champ acoustique avec des sons purs ét des bruits à bande étroite comme signaux d'essai (ISO 8253-2:2009)

Ta slovenski standard je istoveten z: EN ISO 8253-2:2009

ICS:

13.140 Vpliv hrupa na ljudi Noise with respect to human

beings

17.140.01 Akustična merjenja in Acoustic measurements and

blaženje hrupa na splošno noise abatement in general

SIST EN ISO 8253-2:2010 en

SIST EN ISO 8253-2:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

EUROPEAN STANDARD NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 8253-2

December 2009

ICS 13.140

Supersedes EN ISO 8253-2:1998

English Version

Acoustics - Audiometric test methods - Part 2: Sound field audiometry with pure-tone and narrow-band test signals (ISO 8253-2:2009)

Acoustique - Méthodes d'essais audiométriques - Partie 2: Audiométrie en champ acoustique avec des sons purs et des bruits à bande étroite comme signaux d'essai (ISO 8253-2:2009) Akustik - Audiometrische Prüfverfahren - Teil 2: Schallfeld-Audiometrie mit reinen Tönen und schmalbandigen Prüfsignalen (ISO 8253-2:2009)

This European Standard was approved by CEN on 26 October 2009.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

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.

CEN members are the national standards bodies of 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



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 8253-2:2009 (E)

Contents	Paç	
Foreword		

iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 8253-2:2009 (E)

Foreword

This document (EN ISO 8253-2:2009) has been prepared by Technical Committee ISO/TC 43 "Acoustics" in collaboration with the 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 June 2010, and conflicting national standards shall be withdrawn at the latest by June 2010.

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

This document supersedes EN ISO 8253-2:1998.

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 the United Kingdom.

iTeh STANDARD PREVIEW Endorsement notice

The text of ISO 8253-2:2009 has been approved by CEN as a EN ISO 8253-2:2009 without any modification.

SIST EN ISO 8253-2:2010

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 8253-2:2010

INTERNATIONAL STANDARD

ISO 8253-2

Second edition 2009-12-15

Acoustics — Audiometric test methods —

Part 2:

Sound field audiometry with pure-tone and narrow-band test signals

Acoustique — Méthodes d'essais audiométriques —

iTeh STPartie 2: Audiométrie en champ acoustique avec des sons purs et des bruits à bande étroite comme signaux d'essai (standards.iteh.ai)

SIST EN ISO 8253-2:2010



ISO 8253-2:2009(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 8253-2:2010 https://standards.iteh.ai/catalog/standards/sist/b4fcc17a-bad6-4bcf-bc0c-34c70e4d1ebc/sist-en-iso-8253-2-2010



COPYRIGHT PROTECTED DOCUMENT

© ISO 2009

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

Page

Forewo	ord	.iv
Introdu	ıction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4 4.1 4.2 4.3 4.4 4.5 4.6 4.7	Test signal characteristics General Pure tones FM tones Narrow bands of noise Harmonic distortion Signal gating Signal level control Means and scales for calibration	3 4 4 5
5 5.1 5.2 5.3 5.4	Sound field characteristics. General	6 6 7
6	Ambient noise levels in the test roomISO 8253-2:2010	7
7	https://standards.iteh.ai/catalog/standards/sist/b4fcc17a-bad6-4bcf-bc0c- Preparation and instruction of test subject 8253-2-2010	7
8 8.1 8.2 8.3	Determination of hearing threshold level	8 8
9	Testing with a hearing aid	8
10	Screening audiometry	8
11 11.1 11.2 11.3	Reporting of data General Equipment calibrated by hearing level Equipment calibrated by sound pressure level	10 10
12 12.1 12.2 12.3 12.4 12.5	Maintenance and calibration of equipment General Intervals between tests Stage A: routine examination and listening tests Stage B: periodic electroacoustic tests Stage C: basic calibration tests	10 10 11 11
Annex	A (informative) Graphical display of results	13
Annex	B (informative) Correction values for 45° and 90° angles of incidence	15
Riblion	ıranhv	16

ISO 8253-2:2009(E)

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 8253-2 was prepared by Technical Committee ISO/TC 43, Acoustics.

This second edition cancels and replaces the first edition (ISO 8253-2:1992), of which it constitutes a minor revision.

ISO 8253 consists of the following parts, under the general title *Acoustics*— *Audiometric test methods*:

- Part 1: Basic pure-tone air and bone conduction threshold audiometry https://standards.iteh.ai/catalog/standards/sist/b4tcc17a-bad6-4bcf-bc0c-
- Part 2: Sound field audiometry with pure-tone and narrow-band test signals
- Part 3: Speech audiometry

ISO 8253-2:2009(E)

Introduction

ISO 8253-1 covers procedures for the determination of thresholds of hearing using pure tones presented to the subject by means of earphone or bone vibrator.

This part of ISO 8253 covers procedures for the determination of thresholds of hearing in a sound field. In general, sound field testing implies binaural listening to a test signal, presented by means of one or more loudspeakers in a test room. The test signal may be a pure tone, a frequency-modulated tone or a narrow band of noise. The acoustical characteristics of the sound field are determined by the choice of test signal, by the number and acoustical properties of the loudspeakers used, as well as by the acoustical characteristics of the test room.

Sound field audiometry may be used for various purposes, e.g. the evaluation of hearing acuity in young children and the determination of the functional gain of a hearing aid when worn by a particular listener.

iTeh STANDARD PREVIEW (standards.iteh.ai)