BRITISH STANDARD

BS EN 352-1:2002

Hearing protectors — General requirements —

Part 1: Ear-Muffs

The European Standard EN 352-1:2002 has the status of a British Standard

ICS 13.340.20

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee PH/7, Hearing protectors, which has the responsibility to:

— aid enquirers to understand the text;

— present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;

— monitor related international and European developments and promulgate them in the UK.

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This British Standard, having been prepared under the direction of the Health and Environment Sector Policy and Strategy Committee, was published under the authority of the Standards Policy and Strategy Committee on 31 October 2002

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Gehörschützer - Allgemeine Anforderungen - Teil 1: Kapselgehörschützer

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Foreword

This document (EN 352-1:2002) has been prepared by Technical Committee CEN/TC 159, "Hearing protectors", the secretariat of which is held by SIS.

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of an identical text or by endorsement, at the latest by April 2003, and conflicting national standards shall be withdrawn at the latest by April 2003.

This document supersedes EN 352-1:1993.

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.

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Annex A is informative.

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Introduction

This standard for ”Hearing Protectors - General requirements - Ear-muffs”, sets requirements for personal hearing protection devices in relation to Directive 89/686/EEC - Personal Protective Equipment.

The particular requirement in relation to the ability of hearing protectors to reduce noise below daily limit levels is addressed in the standard by requiring the sound attenuation of the hearing protectors, measured in accordance with EN 24869-1, to be not less than a specified minimum. Further, by requiring that the measured sound attenuation be declared, the selection of suitable hearing protectors for individual circumstances may be undertaken according to established practice.

EN 352-1 deals with requirements for ear-muffs, EN 352-2 with ear-plugs, EN 352-3 with ear-muffs attached to industrial safety helmets. EN 13819 deals with testing plans common to all types of hearing protectors covered by this series of ENs, and is in two Parts; Part 1: Physical test methods, and Part 2: Acoustic test methods.

Additional safety requirements and the associated test procedures for level-dependent ear-muffs are contained in EN 352-4, for ear-muffs with active noise reduction in prEN 352-5, for ear-muffs with audio communications in prEN 352-6 and for level-dependent ear-plugs in prEN 352-7.

The Parts of EN 352, other than Parts 1, 2 and 3, cover the performance of functions additional to passive hearing protection. Hearing protectors which incorporate one or more of these functions are subject to the requirements and tests of each of the relevant Parts of EN 352, including Parts 1, 2 or 3, as appropriate.

An associated standard EN 458 covers selection, use, care and maintenance of hearing protectors.

The requirements of the standard are concerned primarily with the physical and acoustic performance of the ear-muffs.

The sizing requirements enable the great majority of the industrial population to be fitted satisfactorily by ”medium size range” ear-muffs. Populations of other sizes may be accommodated by ”small size range” or ”large size range” ear-muffs, which are required to be accompanied by information regarding the range of sizes which they are designed to fit.

The standard also calls for the values of sound attenuation afforded by the ear-muffs (measured in accordance with EN 24869-1) in order to assist purchasers in selecting the most appropriate model of ear-muffs for their needs. Minimum values of sound attenuation are also specified.

A maximum variability in insertion loss, measured objectively after a series of performance tests, is specified. The objective test method only facilitates the making of comparative measurements, and the insertion loss values obtained will differ from the measured sound attenuation values.

The latter, which require the ear-muff to be tested whilst being worn by human test subjects, is regarded as providing the reference test method for the measurement of the acoustic performance of hearing protectors

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