SLOVENSKI STANDARD
SIST EN 12083:1999

01-julij-1999

Oprema za varovanje dihal ï Filtri z dihalnimi cevmi (filtri, ki niso pritrjeni na masko) ï Filtri za delce in pline ter kombinirani filtri ï Zahteve, preskuğanje, oznaļ evanje

Respiratory protective devices - Filters with breathing hoses, (Non-mask mounted filters) - Particle filters, gas filters, and combined filters - Requirements, testing, marking

Atemschutzgeräte - Filter mit Atemschlauch (Nicht am Atemanschluß befestigte Filter) - Gasfilter, Partikelfilter und Kombinationsfilter - Anforderungen, Prüfung, Kennzeichnung

Appareils de protection respiratoire - Filtres avec tuyaux respiratoires, (Filtres non montés sur un masque) - Filtres a particules, filtres antigaz et filtres combinés - Exigences, essais, marquage

Ta slovenski standard je istoveten z: **EN 12083:1998**

ICS:

13.340.30	Varovalne dihalne naprave	Respiratory protective devices

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English version

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This European Standard was approved by CEN on 27 March 1998.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 79 "Respiratory protective devices", the secretariat of which is held by DIN.

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 October 1998 , and conflicting national standards shall be withdrawn at the latest by October 1998.

This European Standard 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 standard.

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

Introduction

A given respiratory protective device can be approved only when the individual components satisfy the requirements of the test specifications which may be a complete standard or part of a standard, and practical performance tests have been carried out on complete apparatus where specified in the appropriate standard. If for any reason a complete apparatus is not tested then simulation of the apparatus is permitted provided that the respiratory characteristics and weight distribution are similar to those of the complete apparatus.

1 Scope

This European Standard applies to filters with breathing hoses (non-mask mounted filters) for use as components in unassisted respiratory protective devices to be worn by the wearer, with the exception of escape apparatus and filtering facepieces.

Laboratory tests and practical performance tests are included for the assessment of compliance with the requirements.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 132	Respiratory protective devices - Definitions
EN 134	Respiratory protective devices - Nomenclature of components
EN 136	Respiratory protective devices - Full face masks - Requirements, testing, marking
EN 140	Respiratory protective devices - Half masks and quarter masks - Requirements, testing, marking
EN 141	Respiratory protective devices - Gas filters and combined filters - Requirements, testing, marking
EN 143	Respiratory protective devices - Particle filters - Requirements, testing, marking
prEN 12942	Respiratory protective devices - Power assisted filtering devices incorporating full face masks, half masks or quarter masks - Requirements, testing, marking

EN 148-1	Respiratory protective devices - Threads for facepieces - Standard thread connection
EN 371	Respiratory protective devices - AX gas filters and combined filters against low boiling organic compounds - Requirements, testing, marking
EN 372	Respiratory protective devices - SX gas filters and combined filters against specific named compounds - Requirements, testing, marking

3 Definitions

For the purposes of this European Standard the definitions in EN 132 and the nomenclature given in EN 134 apply.

4 Description

Non-mask mounted filter(s) include the filter(s) and the means by which the filter(s) are connected to the facepiece. The filter(s) are normally carried by the wearer on a harness or a belt.

5 Classification

Non-mask mounted filters are classified in types and classes according to their application and protection capacity as stated in the appropriate standards EN 141, EN 143, EN 371 or EN 372.

6 Designation

Respiratory protective devices meeting the requirements of this standard shall be designated as follows:

Non-mask mounted (gas/combined/particle) filter EN 12083-(type) (class) (options)

EXAMPLE: non-mask mounted combined filter EN 12083-A2B2P3

7 Requirements

7.1 General

The facepiece used shall be a full face mask according to EN 136 or a half mask according to EN 140.
The connection between filter(s) and hose(s), and facepiece and hose(s) shall be robust and leaktight. When tested in accordance with 8.7 no bubbles shall escape from the apparatus after 1 min.

The connection between filter(s) and hose(s) and facepiece and hose(s) may be achieved by a permanent or special type of connection or by a screw thread connection (including threads other than the standard thread). If a standard thread is used it shall be in accordance with EN 148-1. The non-mask mounted filter shall be designed or marked to prevent incorrect assembly.

The effective mass supported by a half mask shall not exceed 300 g.

The effective mass supported by a full face mask shall not exceed 500 g.

Non-mask mounted filters shall be used only in conjunction with facepieces having one or more inhalation valves.

The particle filter of combined filters shall be on the influent side of the gas filter and shall meet the requirements for the particle filtration as described in EN 143.

Testing in accordance with 8.2.

7.2 Materials

The non-mask mounted filter including breathing hose and couplings shall be made of materials suitable to withstand normal usage and exposures to those temperatures, humidity and corrosive environments that are likely to be encountered.

Materials that may come into contact with the wearer's skin shall not be known to be likely to cause skin irritation or any other adverse effect to health.

The finish of any part of the device likely to be in contact with the wearer shall be free from sharp edges and burrs.

The filters shall meet the requirements given in the appropriate filter standards.

Testing in accordance with 8.2 and 8.8.

7.3 Mechanical strength

Before testing for breathing resistance and protection capacity the filter(s) shall be subjected to a test in accordance with the appropriate filter standards, simulating rough usage of the filter(s). After this treatment the filters shall show no mechanical defects and shall meet the requirements for breathing resistance and protection capacity as given in EN 141.

7.4 Breathing resistance

For devices incorporating connection of non-standard thread between the hoses and the filter, the resistance imposed by filter(s) and breathing hose(s) to the flow of air shall be as low as possible and in no case exceed the values shown in the appropriate filter standards.

Where the connection between hose(s) and filter(s) is given by a standard thread, the flow resistance of the breathing hose(s) (without the filters(s)) shall not exceed 0,3 mbar, when measured at 95 l/min continuous air flow straight position without stretching or compressing the hose(s).

Testing in accordance with 8.3.

7.5 Gas capacity, filter penetration

The filters shall meet the appropriate requirements of EN 141, EN 143, EN 371 and EN 372.

Testing in accordance with 8.4.

7.6 Clogging

This requirement applies to filter(s) with breathing hose(s) only which are not connected by a standard thread.

When tested in accordance with EN 143, the requirements shall be satisfied, in which case the requirements for the breathing resistance apply to the flow resistance imposed by filter(s) and breathing hose(s) with the hose(s) in the straight position without stretching or compressing it (them).

7.7 Strength of breathing hose and couplings

The breathing hose(s) and couplings intended to connect to half masks shall withstand a force of 50 N at each filter connection and at the connection to the half mask. Breathing hose(s) and couplings intended to connect to full face masks shall withstand a force of 150 N at the filter connection and at the connection to the full face mask. After testing, breathing hose(s) and couplings shall not become disconnected or physically damaged.

Testing in accordance with 8.5 and 8.7.