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BSI Standards Publication

Respiratory protective devices — Powered filtering devices incorporating full face masks, half masks or quarter masks — Requirements, testing, marking

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National foreword

This British Standard is the UK implementation of EN 12942:2023. It supersedes BS EN 12942:1998+A2:2008, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PH/4, Respiratory protection.

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

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For the Great Britain market (England, Scotland and Wales), if UK Government has designated this publication for conformity with UKCA marking (or similar) legislation, it may contain an additional National Annex. Where such a National Annex exists, it shows the correlation between this publication and the relevant UK legislation. If there is no National Annex of this kind, the relevant Annex ZA or ZZ in the body of the European text will indicate the relationship to UK regulation applicable in Great Britain. References to EU legislation may need to be read in accordance with the UK designation and the applicable UK law. Further information on designated standards can be found at www.bsigroup.com/standardsandregulation.

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UK Government is responsible for legislation. For information on legislation and policies relating to that legislation, consult the relevant pages of [<http://www.gov.uk/ext-link%3e%3c/p>][<http://www.gov.uk/ext-link%3e%3c/p>]www.gov.uk.

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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 January 2024.

Amendments/corrigenda issued since publication

Date

Text affected

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EUROPÄISCHE NORM

December 2023

ICS 13.340.30

Supersedes EN 12942:1998

English Version

Respiratory protective devices - Powered filtering devices incorporating full face masks, half masks or quarter masks - Requirements, testing, marking

Appareils de protection respiratoire - Appareils
filtrants à ventilation assistée avec masques complets,
demi-masques ou quarts de masques - Exigences,
essais, marquage

Atemschutzgeräte - Gebläsefiltergeräte mit Vollmaske,
Halbmaske oder Viertelmaske - Anforderungen,
Prüfung, Kennzeichnung

This European Standard was approved by CEN on 9 August 2021.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 12942:2023) 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 June 2024 and conflicting national standards shall be withdrawn at the latest by June 2024.

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

This document supersedes EN 12942:1998.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

The following main technical changes have been made compared to EN 12942:1998:

- a) Clause 4 Designation was deleted;
- b) number of test samples was added to the requirements, where necessary;
- c) classification table was amended to cover Hg and NO filter for all classes (TM1, TM2 and TM3);
- d) nominal values and tolerances were added;
- e) clogging was deleted;
- f) warning facilities were amended to cover low energy and low flow warning;
- g) visual inspection was changed to inspection and detailed list inserted;
- h) test substances and number of test subjects for inward leakage test was changed;
- i) test for noise level was adapted to the test procedure specified in ISO 16900-14:2020;
- j) Annex A was deleted;
- k) figures were adapted to the changes made in the test procedures, where appropriate.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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1 Scope

This document specifies minimum requirements for powered Respiratory Protective Devices (RPD) incorporating a tight-fitting respiratory interface. It does not cover devices designed for use in circumstances where there is or might be an oxygen deficiency.

Escape RPD and filters for use against CO are not covered by this document.

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

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 136:1998, *Respiratory protective devices — Full face masks — Requirements, testing, marking*

EN 140:1998, *Respiratory protective devices — Half masks and quarter masks — Requirements, testing, marking*

EN 148-1:2018, *Respiratory protective devices — Threads for facepieces — Part 1: Standard thread connection*

EN 148-2:1999, *Respiratory protective devices — Threads for facepieces — Part 2: Centre thread connection*

EN 148-3:1999, *Respiratory protective devices — Threads for facepieces — Part 3: Thread connection M 45 × 3*

EN 175:1997, *Personal protection — Equipment for eye and face protection during welding and allied processes*

EN 13274-2:2019, *Respiratory protective devices — Methods of test — Part 2: Practical performance tests*

EN 13274-4:2020, *Respiratory protective devices — Methods of test — Part 4: Flame test*

EN 13274-7:2019, *Respiratory protective devices — Methods of test — Part 7: Determination of particle filter penetration*

EN ISO 16321-1:2022, *Eye and face protection for occupational use — Part 1: General requirements (ISO 16321-1:2021)*

EN ISO 16321-3:2022, *Eye and face protection for occupational use — Part 3: Additional requirements for mesh protectors (ISO 16321-3:2021)*

EN ISO 16972:2020, *Respiratory protective devices — Vocabulary and graphical symbols (ISO 16972:2020)*

ISO 16900-14:2020, *Respiratory protective devices — Methods of test and test equipment — Part 14: Measurement of sound pressure level*