

Fixed firefighting systems - Components for sprinkler and water spray systems - Part 14: Sprinklers for residential applications



ESTI STANDARDI EESSÖNA

NATIONAL FOREWORD

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EUROPEAN STANDARD
NORME EUROPÉENNE
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English Version

Fixed firefighting systems - Components for sprinkler and
water spray systems - Part 14: Sprinklers for residential
applications

Installations fixes de lutte contre l'incendie -
Composants des systèmes d'extinction du type
sprinkleur et à pulvérisation d'eau - Partie 14:
Sprinkleurs pour applications résidentielles

Ortsfeste Brandbekämpfungsanlagen - Bauteile für
Sprinkler- und Sprühwasseranlagen - Teil 14: Sprinkler
für die Anwendung im Wohnbereich

This European Standard was approved by CEN on 4 November 2019 and includes Amendment 1 approved by CEN on 13 March 2022.

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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 12259-14:2020+A1:2022) has been prepared by Technical Committee CEN/TC 191 "Fixed firefighting systems", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by November 2022, and conflicting national standards shall be withdrawn at the latest by November 2022.

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 includes Amendment 1 approved by CEN on 13 March 2022.

This document supersedes **[A1]** EN 12259-14:2020 **[A1]**.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **[A1]** **[A1]**.

[A1] In comparison with EN 12259-14:2020, technical modifications have been made to clarify the types of sprinkler seal that are covered by this document. **[A1]**

It is included in a series of European Standards planned to cover:

- automatic sprinkler systems (EN 12259 and EN 12845);
- gas extinguishing systems (EN 12094);
- powder systems (EN 12416);
- foam systems (EN 13565);
- hydrant and hose reel systems (EN 671);
- smoke and heat control systems (EN 12101).

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 organisations 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, Turkey and the United Kingdom.

1 Scope

A1 This document specifies requirements for the construction and performance of residential sprinklers as well as test methods for their type approval, which are operated by a change of state of an element or bursting of a glass bulb under the influence of heat and incorporating the following types of water seals:

- conical metal spring with a PTFE gasket or coating;
- metal cap or disc with PTFE gasket or coating;
- copper gasket, with or without a PTFE coating.

Sprinklers in accordance with this document are only used in automatic sprinkler systems for domestic and residential applications as defined in EN 16925. **A1**

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.

A1 EN 12259-1:1999+A1:2001¹ **A1**, *Fixed firefighting systems — Components for sprinkler and water spray systems — Part 1: Sprinklers*

EN 13501-1, *Fire classification of construction products and building elements - Part 1: Classification using data from reaction to fire tests*

EN 16925, *Fixed firefighting systems - Automatic residential sprinkler systems - Design, installation and maintenance*

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 49, *Malleable cast iron fittings threaded to ISO 7-1*

ISO 65, *Carbon steel tubes suitable for screwing in accordance with ISO 7-1*

ISO 5658-2:2006, *Reaction to fire tests — Spread of flame — Part 2: Lateral spread on building and transport products in vertical configuration*

ISO 5660-1:2015, *Reaction-to-fire tests — Heat release, smoke production and mass loss rate — Part 1: Heat release rate (cone calorimeter method) and smoke production rate (dynamic measurement)*

UL 723, *Standard for test for surface burning characteristics of building materials*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <https://www.electropedia.org/>
- ISO Online browsing platform: available at <https://www.iso.org/obp>

¹ **A1** As impacted by EN 12259-1:1999+A1:2001/A2:2004 and EN 12259-1:1999+A1:2001/A3:2006. **A1**