



**NSAI**  
Standards

Irish Standard  
I.S. EN 12259-4:2000

# Fixed firefighting systems - Components for sprinkler and water spray systems - Part 4: Water motor alarms

© CEN 2000

No copying without NSAI permission except as permitted by copyright law.

## I.S. EN 12259-4:2000

*Incorporating amendments/corrigenda issued since publication:*

EN 12259-4:2000/A1:2001

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*  
EN 12259-4:2000

*Published:*  
16 February, 2000

This document was published  
under the authority of the NSAI  
and comes into effect on:  
2 June, 2000

ICS number:  
13.220.20  
13.320

**NSAI**  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E [standards@nsai.ie](mailto:standards@nsai.ie)  
W [NSAI.ie](http://NSAI.ie)

**Sales:**  
T +353 1 857 6730  
F +353 1 857 6729  
W [standards.ie](http://standards.ie)

Údarás um Chaighdeáin Náisiúnta na hÉireann

**I.S. EN 12259-4:2000**

**EUROPEAN STANDARD**

**EN 12259-4:2000/A1**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

March 2001

ICS 13.220.20; 13.320

English version

## **Fixed firefighting systems - Components for sprinkler and water spray systems - Part 4: Water motor alarms**

Installations fixes de lutte contre l'incendie - Composants  
des systèmes d'extinction du type Sprinkleur et à  
pulvérisation d'eau - Partie 4: Dispositifs d'alarme à moteur  
hydraulique

Ortsfeste Löschanlagen - Bauteile für Sprinkler- und  
Sprühwasseranlagen - Teil 4: Wassergetriebene  
Alarmglocken

This amendment A1 modifies the European Standard EN 12259-4:2000; it was approved by CEN on 20 January 2001.

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

This amendment 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 Management Centre 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

**Management Centre: rue de Stassart, 36 B-1050 Brussels**

## **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 191 "Fixed fire fighting 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 September 2001, and conflicting national standards shall be withdrawn at the latest by December 2002.

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).

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.

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

It forms one Part of EN 12259, covering components for automatic sprinkler systems and is included in a series of European Standards planned to cover:

- a) automatic sprinkler systems (EN 12259 & EN 12845)<sup>1</sup>
- b) gaseous extinguishing systems (EN 12094)<sup>1</sup>
- c) powder systems (EN 12416)<sup>1</sup>
- d) explosion protection systems (EN 26 184)
- e) foam systems (EN 13565)
- f) hydrant and hose reel systems (EN 671)
- g) smoke and heat control systems (EN 12101)<sup>1</sup>
- h) water spray systems<sup>1</sup>

EN 12259 has the general title "Fixed fire fighting systems - Components for sprinkler and water spray systems" and will be subdivided as follows:

- Part 1: Sprinklers.
- Part 2: Wet alarm valve assemblies
- Part 3: Dry alarm valve assemblies

---

<sup>1</sup> In preparation

Part 4:	Water motor alarms.
Part 5:	Water flow detectors.
Part 6:	Pipe couplings.
Part 7:	Pipe hangers.
Part 8:	Pressure switches.
Part 9	Deluge alarm valve assemblies.
Part 10	Multiple controls.
Part 11	Medium and high velocity water sprayers.
Part 12	Sprinkler pump sets.

Annexes A, B, C, D, E, F and G, give test methods and are normative.

Annex H gives an example of a test schedule suitable for type approval of conventional designs, and is informative.

## **Introduction**

Where reference is made to the application of components having imperial dimensions it has been necessary to use imperial units where appropriate.

This standard is to be entrusted for use to qualified and experienced organisations which have a capability to design and manufacture systems complying with recognised international standards.

EUROPEAN STANDARD

EN 12259-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2000

ICS 13.220.20; 13.320

English version

## Fixed firefighting systems - Components for sprinkler and water spray systems - Part 4: Water motor alarms

Installations fixes de lutte contre l'incendie - Composants  
des systèmes d'extinctions du type Sprinkleur et à  
pulvérisation d'eau - Partie 4: Turbines hydrauliques  
d'alarmes

Ortsfeste Löschanlagen - Bauteile für Sprinkler- und  
Sprühwasseranlagen - Teil 4: Wassergetriebene  
Alarmglocken

This European Standard was approved by CEN on 17 December 1999.

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  
EUROPAISCHES KOMITEE FÜR NORMUNG

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

Page 2  
EN 12259-4:2000

<b>Contents</b>	<b>Page</b>
Foreword	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Construction requirements	6
5 Performance requirements	7
6 Marking	8
7 Installation and maintenance	9
Annex A (normative) Pressure resistance test	10
Annex B (normative) Temperature resistance test	11
Annex C (normative) Resistance to ageing tests	13
Annex D (normative) Water immersion resistance test	15
Annex E (normative) Operation test	16
Annex F (normative) Sound level test	17
Annex G (normative) K-factor test	19
Annex H (informative) Typical testing schedule for water motor alarms	20

## **Foreword**

This European Standard 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 August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

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).

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.

This part of EN 12259 is one of a number of European Standards prepared by CEN/TC 191 covering components for automatic sprinkler and water spray systems.

They are included in a series of European Standards planned to cover:

- a) automatic sprinkler systems (EN 12259<sup>1)</sup>);
- b) carbon dioxide systems (EN 12094<sup>1)</sup>);
- c) powder systems (EN 12416<sup>1)</sup>);
- d) explosion protection systems (EN 26 184);
- e) foam systems (EN 13565<sup>1)</sup>);
- f) gas systems (EN ISO 14520 and EN 12094<sup>1)</sup>);
- g) hydrant and hose reel systems (EN 671);
- h) smoke and heat control systems (EN 12101<sup>1)</sup>);
- i) water spray systems<sup>1)</sup>).

---

<sup>1</sup> Under preparation



Page 4

EN 12259-4:2000

EN 12259 has the general title Fixed fire fighting systems - Components for sprinkler and water spray systems and will consist of the following Parts:

Part 1 : Sprinklers

Part 2 : Wet alarm valve assemblies

Part 3 : Dry alarm valve assemblies

Part 4 : Water motor alarms

Part 5 : Water flow detectors

Part 6 : Pipe couplings

Part 7 : Pipe hangers

Part 8 : Pressure switches

Part 9 : Deluge alarm valve assemblies

Part 10 : Multiple controls

Part 11 : Medium and high velocity water sprayers

Part 12 : Pump sets

Annexes A, B, C, D, E, F and G, give test methods and are normative.

Annex H gives an example of a test schedule suitable for type approval of conventional designs, and is informative.

Where reference is made to the application of components having imperial dimensions it has been necessary to use imperial units where appropriate.

This standard is to be entrusted for use to qualified and experienced organisations which have a capability to design and manufacture to recognised international standards.

## 1 Scope

This Part of EN 12259 specifies requirements for construction and performance of water motor alarms for use in conjunction with alarm valves conforming to EN 12259-2, EN 12259-3 and prEN 12259-9:1999 used in automatic sprinkler systems complying with prEN 12845:1997 and water spray systems conforming to the relevant european Standard<sup>1)</sup>

Type approval tests and a recommended test schedule for type approval testing are also given.

Auxiliary components or attachments to water motor alarms are not covered by this Part of EN 12259.

## 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 (including amendments).

EN 12259-2	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 2: Wet alarm valve assemblies
EN 12259-3	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 3: Dry alarm valve assemblies
prEN 12259-9:1999	Fixed firefighting systems - Components for sprinkler and water spray systems - Part 9: Deluge valves
prEN 12845:1997	Fixed firefighting systems - Automatic sprinkler systems - Design and installation
ISO 7-1	Pipe threads where pressure-tight joints are made on the threads - Part 1: Dimensions, tolerances and designation

---

<sup>1)</sup> Under preparation

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- Looking for additional Standards? Visit Intertek Inform Infostore
  - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-