



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 12094-3:2003**

ICS 13.220.20

**FIXED FIREFIGHTING SYSTEMS -  
COMPONENTS FOR GAS EXTINGUISHING  
SYSTEMS - PART 3: REQUIREMENTS AND  
TEST METHODS FOR MANUAL  
TRIGGERING AND STOP DEVICES**

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English version

**Fixed firefighting systems - Components for gas extinguishing  
systems - Part 3: Requirements and test methods for manual  
triggering and stop devices**

Installations fixes de lutte contre l'incendie - Eléments  
constitutifs pour installations d'extinction à gaz - Partie 3:  
Exigences et méthodes d'essai pour dispositifs manuels de  
déclenchement et d'arrêt d'urgence

Ortsfeste Brandbekämpfungsanlagen - Bauteile für  
Löschanlagen mit gasförmigen Löschmitteln - Teil 3:  
Anforderungen und Prüfverfahren für  
Handauslöseeinrichtungen und Stoptaster

This European Standard was approved by CEN on 7 November 2002.

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 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 Management Centre has the same status as the official versions.

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## Foreword

This document (EN 12094-3:2003) has been prepared by 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of an identical text or by endorsement, at the latest by September 2003, and conflicting national standards shall be withdrawn at the latest by September 2005.

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.

This part of EN 12094 is one of a number of European Standards prepared by CEN/TC 191 covering components for gas extinguishing systems.

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

- gas extinguishing systems (EN 12094)
- sprinkler systems (EN 12259 and EN 12845)
- powder systems (EN 12416)
- explosion protection systems (EN 26184)
- foam systems (EN 13565)
- hose systems (EN 671)
- smoke and heat control systems (EN 12101)
- water spray systems<sup>1)</sup>

This European Standard has the general title "*Fixed firefighting systems – Components for gas extinguishing systems*" and will consist of the following parts:

- Part 1: *Requirements and test methods for electrical automatic control and delay devices*
- Part 2: *Requirements and test methods for non-electrical automatic control and delay devices*
- Part 3: *Requirements and test methods for manual triggering and stop devices*
- Part 4: *Requirements and test methods for high pressure container valve assemblies and their actuators*
- Part 5: *Requirements and test methods for high and low pressure selector valves and their actuators for CO<sub>2</sub> systems*
- Part 6: *Requirements and test methods for non-electrical disable devices for CO<sub>2</sub> systems*

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<sup>1)</sup> Under preparation.

## **EN 12094-3:2003 (E)**

- Part 7: *Requirements and test methods for nozzles for CO<sub>2</sub> systems*
- Part 8: *Requirements and test methods for flexible connectors for CO<sub>2</sub> systems*
- Part 9: *Requirements and test methods for special fire detectors*
- Part 10: *Requirements and test methods for pressure gauges and pressure switches*
- Part 11: *Requirements and test methods for mechanical weighing devices*
- Part 12: *Requirements and test methods for pneumatic alarm devices*
- Part 13: *Requirements and test methods for check valves and non-return valves*
- Part 16: *Requirements and test methods for odorizing devices for CO<sub>2</sub> low pressure systems*
- Part 17: *Pipe hangers*
- Part 20: *Requirements and test methods for the compatibility of components*

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## **Introduction**

It has been assumed in the preparation of this European Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

All pressure data in this European Standard are given as gauge pressures in bar, unless otherwise stated.

NOTE 1 bar =  $10^5 \text{ N m}^{-2}$  = 100 kPa.

## EN 12094-3:2003 (E)

### 1 Scope

This European Standard specifies requirements and describes test methods for manual triggering and stop devices of CO<sub>2</sub>-, Inert Gas- or Halocarbon Gas fire extinguishing systems.

### 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 54-11:2001, *Fire detection and fire alarm systems - Part 11: Manual call points*.

EN 60068-2-6:1996, *Environmental testing - Part 2: Tests - Tests Fc: Vibration (sinusoidal) (IEC 60068-2-6:1995 + Corrigendum 1995)*.

### 3 Terms and definitions

For the purpose of this European Standard, the following terms and definitions apply.

#### 3.1

##### **control device**

component which receives a signal from a fire sensor, a fire detector, a fire detection installation or a manual triggering device and processes and transmits signals for actuation and auxiliary functions

#### 3.2

##### **CO<sub>2</sub>-high-pressure installation**

fire extinguishing installation in which the CO<sub>2</sub> is stored at ambient temperature. For example, the pressure of the CO<sub>2</sub> in storage is  $p_{\text{abs}} = 58,6$  bar at 21 °C

#### 3.3

##### **CO<sub>2</sub>-low-pressure installation**

fire extinguishing installation in which the CO<sub>2</sub> is stored at low temperature, normally – 19 °C to – 21 °C

#### 3.4

##### **electrical control device**

component using electrical means

#### 3.5

##### **halocarbon gas**

extinguishing agent that contains as primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine

#### 3.6

##### **halocarbon gas installation**

fire extinguishing installation in which the halocarbon gas is stored at ambient temperature

#### 3.7

##### **inert gas**

non liquefied gas or mixture of gases which extinguish the fire mainly by reducing the oxygen-concentration in the protected zone, e.g. Argon, Nitrogen or CO<sub>2</sub> or mixtures of these gases



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