



National Standards Authority of Ireland

STANDARD

I.S. EN 12094-4:2004

ICS 13.220.20

**FIXED FIREFIGHTING SYSTEMS -
COMPONENTS FOR GAS EXTINGUISHING
SYSTEMS - PART 4: REQUIREMENTS AND
TEST METHODS FOR CONTAINER VALVE
ASSEMBLIES AND THEIR ACTUATORS**

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This European Standard was approved by CEN on 6 May 2004.

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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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 12094-4:2004) 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of an identical text or by endorsement, at the latest by January 2005, and conflicting national standards shall be withdrawn at the latest by July 2007.

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 89/106/EEC.

For relationship with EU Directive, 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)
- 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 (prEN 14816)

The following parts of this European Standard are planned:

- 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 4¹⁾: Requirements and test methods for container valve assemblies and actuators
- Part 5: Requirements and test methods for high and low pressure selector valves and their actuators for CO₂ systems
- Part 6: Requirements and test methods for non-electrical disable devices for CO₂ systems
- Part 7: Requirements and test methods for nozzles for CO₂ systems

¹⁾ Under preparation.

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- Part 8: Requirements and test methods for flexible connectors for CO₂ 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 CO₂ low pressure systems
- Part 17¹⁾: Pipe hangers
- Part 20¹⁾: Requirements and test methods for 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

¹⁾ Under preparation.

Introduction

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

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

NOTE 1 bar = 10^5 N/m² = 100 kPa.

EN 12094-4:2004 (E)

1 Scope

This document specifies requirements and describes test methods for container valve assemblies for CO₂-high-pressure-, Inert Gas- or Halocarbon Gas-fire extinguishing systems, which include a container valve, an actuator and possibly a diptube.

This document specifies requirements and describes test methods for features of the component relevant only for its use in fire extinguishing installations.

Diptubes not assembled to the container valves are not covered by this standard.

NOTE Valve assemblies can be equipped with additional components (e.g. gauges and switches).

2 Normative references

The following referenced documents are indispensable for the application 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 849, *Transportable gas cylinders - Cylinder valves - Specification and type testing*.

EN 60529, *Degrees of protection provided by enclosures (IP-Codes) (IEC 60529:1989)*.

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

EN ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*.

EN ISO 4126-2, *Safety devices for protection against excessive pressure - Part 2: Bursting disc safety devices (ISO 4126-2:2003)*.

EN ISO 9001:2000, *Quality management systems – Requirements (ISO 9001:2000)*.

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

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