



BSI Standards Publication

Mobile fire extinguishers

Part 3: Requirements for the assembly, construction and pressure resistance of CO₂ extinguishers which comply with the requirements of EN 1866-1

National foreword

This British Standard is the UK implementation of EN 1866-3:2013. Together with BS EN 1866-1:2007 and BS EN 1866-2 it supersedes BS EN 1866:2005, which will be withdrawn upon publication of BS EN 1866-2.

The UK participation in its preparation was entrusted to Technical Committee FSH/2, Fire extinguishers.

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

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

**Mobile fire extinguishers - Part 3: Requirements for the
assembly, construction and pressure resistance of CO₂
extinguishers which comply with the requirements of EN 1866-1**

Extincteurs d'incendie mobiles - Partie 3: Exigences
relatives au montage, à la construction et à la résistance à
la pression des extincteurs au dioxyde de carbone
conformes aux exigences de l'EN 1866-1

Fahrbare Feuerlöscher - Teil 3: Anforderungen an die
Herstellung, konstruktive Ausführung und Druckfestigkeit
von Kohlendioxid-Feuerlöschern, die den Anforderungen
von EN 1866-1 entsprechen

This European Standard was approved by CEN on 28 March 2013.

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 1866-3:2013) has been prepared by Technical Committee CEN/TC 70 “Manual means of fire fighting equipment”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by November 2013, and conflicting national standards shall be withdrawn at the latest by November 2013.

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

This document, together with EN 1866-1 and EN 1866-2, supersedes EN 1866:2005.

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 standard EN 1866 consists of the following parts under the general title, *Mobile fire extinguishers*:

- *Part 1: Characteristics, performance and test methods*
- *Part 2: Requirements for the construction, pressure resistance and mechanical tests for extinguishers, with a maximum allowable pressure equal to or lower than 30 bar, which comply with the requirements of EN 1866-1*
- *Part 3: Requirements for the assembly, construction and pressure resistance of CO₂ extinguishers which comply with the requirements of EN 1866-1*

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the rules of design, assembling, testing and inspection during manufacturing of mobile CO₂ fire extinguishers, which comply with the requirements of EN 1866-1, as far as pressure resistance is concerned.

NOTE 1 Design is limited to design of the assembly.

NOTE 2 The classification of the different parts forming the assembly is given in Annex A.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1866-1, *Mobile fire extinguishers — Part 1: Characteristics, performance and test methods*

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

EN ISO 10297, *Transportable gas cylinders — Cylinder valves — Specification and type testing (ISO 10297)*

EN ISO 11363-1, *Gas cylinders — 17E and 25E taper threads for connection of valves to gas cylinders — Part 1: Specifications (ISO 11363-1)*

EN ISO 15245-1, *Gas cylinders — Parallel threads for connection of valves to gas cylinders — Part 1: Specification (ISO 15245-1)*

3 Terms and definitions

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

3.1
mobile fire extinguisher
portable fire extinguisher with a total mass > 20 kg, fitted with wheels to enable the user to manually move and operate the extinguisher

3.2
pressure at maximum operating temperature
pressure experimentally measured
 P_{Tmax}
pressure measured in the extinguisher after stabilisation during at least 24 h at maximum operating temperature T_{max} (≥ 60 °C)

3.3
maximum allowable pressure
maximum declared pressure
 PS
maximum pressure for which the equipment is designed, as specified by the manufacturer and which is in any case greater than or equal to P_{Tmax}

3.4
cylinder valve
component subject to the internal pressure and used to close off and seal the cylinder