

Portable equipment for projecting extinguishing agents supplied by fire fighting pumps — Portable monitors

Part 2: Water nozzles

ICS 13.220.10

National foreword

This British Standard is the UK implementation of EN 15767-2:2009.

The UK participation in its preparation was entrusted to Technical Committee FSH/17/8, Hydrants, hoses and associated water delivery equipment.

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

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English Version

**Portable equipment for projecting extinguishing agents supplied
by fire fighting pumps - Portable monitors - Part 2: Water
nozzles**

Équipement portable de projection d'agents d'extinction
alimenté par des pompes à usage incendie - Lances-canon
portables - Partie 2 : Diffuseurs à eau

Tragbare Geräte zum Ausbringen von Löschmitteln, welche
mit Feuerlöschpumpen gefördert werden - Tragbare Werfer
- Teil 2: Wasserdüsen

This European Standard was approved by CEN on 23 April 2009.

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Foreword

This document (EN 15767-2:2009) has been prepared by Technical Committee CEN/TC 192 “Fire service equipment”, 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of an identical text or by endorsement, at the latest by December 2009, and conflicting national standards shall be withdrawn at the latest by December 2009.

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.

EN 15767 consists of the following parts, under the general title *Portable equipment for projecting extinguishing agents supplied by fire fighting pumps — Portable monitors*:

- Part 1: General requirements for portable monitor assemblies;
- Part 2: Water nozzles;
- Part 3: Foam devices¹⁾.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1) Under preparation.

1 Scope

1.1 In addition to the requirements given in EN 15767-1, this European Standard is applicable to water nozzles, including water with fire extinguishing additives. It specifies requirements for safety, performance, classification and designation, as well as test methods, instructions for use and maintenance and marking.

1.2 This European Standard is not applicable to water nozzles that are manufactured before its date of publication.

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 15767-1:2009, *Portable equipment for projecting extinguishing agents supplied by fire fighting pumps — Portable monitors — Part 1: General requirements for portable monitor assemblies*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions of EN 15767-1:2009 and the following apply.

3.1 water nozzle

component, without shut-off function, connected to the outlet of the monitor that controls the water stream (shape and quantity)

NOTE Several types of water nozzles are described in 3.1.1, 3.1.2 and 3.1.3.

3.1.1 smooth bore water nozzle

nozzle providing a solid water stream

3.1.2 flat spray water nozzle

nozzle providing a flat spray water stream

3.1.3 combination water nozzle

nozzle with a adjustable pattern, corresponding to the following definitions

3.1.3.1 combination water nozzle – type 1

nozzle with adjustable pattern at variable flow

NOTE Changing the pattern changes the flow.

3.1.3.2 combination water nozzle – type 2

nozzle with adjustable pattern at constant flow

NOTE Changing the pattern does not change the flow.

3.1.3.3

combination water nozzle – type 3

nozzle with adjustable pattern at selectable, constant flow

NOTE Changing the pattern does not change the flow.

3.1.3.4

combination water nozzle – type 4 (automatic water nozzle)

nozzle with integrated pressure control device

NOTE Changing the pattern does not change the flow.

3.1.3.4.1

combination water nozzle – type 4.1

nozzle with adjustable pattern at constant pressure

3.1.3.4.2

combination water nozzle – type 4.2

nozzle with adjustable pattern and selectable flow at constant pressure

3.2

median pressure

p_m

for automatic water nozzle, average pressure of the pressure control range

3.3

jet

3.3.1

straight jet

jet having the maximum throw and mechanical effect

3.3.2

spray jet

any jet different to the straight jet

[EN 15182-1:2007]

3.4

flush

position allowing the water nozzle to clear debris

3.5

manufacturer's stated maximum flow

Q_{max}

flow under which the water nozzle can be operated safely and efficiently

4 Requirements

4.1 Mechanical characteristics

4.1.1 Mass

The water nozzle shall have a maximum mass as defined in Table 1.

Table 1 — Maximum mass

$Q_{\max}$ l/min	Maximum mass of the water nozzle kg
< 2 000	4
2 000 - 4 000	8
4 000 – 8 000	12
> 8 000	20
NOTE The maximum mass does not apply to seawater-resistant nozzles.	

4.1.2 Operating and handling elements

The torques needed to move the operating elements shall not exceed the values given in Table 2 at pressures up to the nominal pressure.

Table 2 — Maximum torques

Type of operating element	Torque N·m
Lever	20
Valve handle	15
Rotating operating elements	15

4.1.3 Flow adjustment positions

The settings of the water nozzle equipped with selectable flowrate shall be easily identifiable by visual means.

4.1.4 Jet adjustment positions

The different jet positions of a nozzle equipped with adjustable jet positions shall be clearly marked.

4.2 Materials

The materials used shall be selected in such a way that all the requirements in Clause 4 are met, subject to the tests defined in Clause 5.

The water nozzle shall pass the heat and frost tests defined in 5.3.

4.3 Flush

4.3.1 The combination nozzle with $Q_{\max}$ less than 2 000 l/min, when tested in accordance with 5.4, shall be able to clear or flush a steel ball of 6,35 mm diameter without shutting off the nozzle.