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TARNITAVATE TULEKUSTUTUSAINETE
PIHUSTAMISEKS. KANTAV VAHUVARUSTUS. OSA 4:
KÕRGKORDSE VAHU GENERAATORID PN16

Portable equipment for projecting extinguishing agents
supplied by firefighting pumps - Portable foam
equipment - Part 4: High expansion foam generators
PN16

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16712-4:2018 sisaldab Euroopa standardi EN 16712-4:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 16712-4:2018 consists of the English text of the European standard EN 16712-4:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 01.08.2018.	Date of Availability of the European standard is 01.08.2018.
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English Version

Portable equipment for projecting extinguishing agents
supplied by firefighting pumps - Portable foam equipment
- Part 4: High expansion foam generators PN16

Équipement portable de projection d'agents
d'extinction alimenté par des pompes à usage incendie
- Equipements mousse portables - Partie 4 :
Générateurs de mousse PN 16 haut foisonnement

Tragbare Geräte zum Ausbringen von Löschmitteln, die
mit Feuerlöschpumpen gefördert werden - Tragbare
Schaumgeräte - Teil 4: Leichtschäum-Generatoren PN
16

This European Standard was approved by CEN on 16 April 2018.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 16712-4:2018) has been prepared by Technical Committee CEN/TC 192 “Fire and Rescue 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 February 2019 and conflicting national standards shall be withdrawn at the latest by February 2019.

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

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.

EN 16712 consists of the following parts:

- *Portable equipment for projecting extinguishing agents supplied by fire fighting pumps — Portable foam equipment — Part 1: Inductors PN 16;*
- *Portable equipment for projecting extinguishing agents supplied by fire fighting pumps — Portable foam equipment — Part 2: Pick-up tubes;*
- *Portable equipment for projecting extinguishing agents supplied by fire fighting pumps — Portable foam equipment — Part 3: Low and medium expansion hand-held foam branchpipes PN 16;*
- *Portable equipment for projecting extinguishing agents supplied by firefighting pumps — Portable foam equipment — Part 4: High expansion foam generators PN16.*

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, 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document is a type-C standard as stated in EN ISO 12100.

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance, etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in the case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate at the drafting process of this document.

The machinery concerned and the extent to which hazards, hazardous situations or hazardous events are covered are indicated in the Scope of this document.

When requirements of this type-C standard are different from those which are stated in type-A or -B standards, the requirements of this type-C standard take precedence over the requirements of the other standards for machines that have been designed and built according to the requirements of this type-C standard.

1 Scope

1.1 This document applies to high expansion foam generators, having an expansion ratio greater than 200:1, whose only source of external power is the pressure and/or flow of the water supply to the device. This is used by fire and rescue services and contains their specification and test procedures.

NOTE In this document, the term “foam generator” also refers to “high expansion foam generator”.

1.2 This document deals with all significant hazards, hazardous situations or hazardous events, with the exception of noise, relevant to high expansion foam generator, when it is used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer.

1.3 This document does not cover misting applications.

1.4 This document is not applicable to high expansion foam generators which have been manufactured before its date of publication as EN.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

CEN/TS 15989:2015, *Firefighting and rescue service vehicles and equipment - Graphical symbols for control elements and displays and for markings*

EN 1568-2:2008, *Fire extinguishing media - Foam concentrates - Part 2: Specification for high expansion foam concentrates for surface application to water-immiscible liquids*

EN 16712-2:2015, *Portable equipment for projecting extinguishing agents supplied by fire fighting pumps - Portable foam equipment - Part 2: Pick-up tubes*

EN 61310-2:2008, *Safety of machinery - Indication, marking and actuation - Part 2: Requirements for marking (IEC 61310-2:2007)*

EN ISO 12100:2010, *Safety of machinery - General principles for design - Risk assessment and risk reduction (ISO 12100:2010)*

EN ISO 13857:2008, *Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)*

EN ISO 14120:2015, *Safety of machinery - Guards - General requirements for the design and construction of fixed and movable guards (ISO 14120:2015)*

ISO 7000:2014, *Graphical symbols for use on equipment - Registered symbols*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 12100 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>