

**Paiksed tulekustutussüsteemid. Voolikusüsteemid. Osa
2: Lamevoolikuga voolikusüsteemid**

**Fixed firefighting systems - Hose systems - Part 2: Hose
systems with lay-flat hose**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 671-2:2012 sisaldab Euroopa standardi EN 671-2:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 671-2:2012 consists of the English text of the European standard EN 671-2:2012.
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 18.04.2012.	Date of Availability of the European standard is 18.04.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 13.220.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:
Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

English Version

Fixed firefighting systems - Hose systems - Part 2: Hose systems with lay-flat hose

Installations fixes de lutte contre l'incendie - Systèmes équipés de tuyaux - Partie 2: Postes d'eau muraux équipés de tuyaux plats

Ortsfeste Löschanlagen - Wandhydranten - Teil 2: Wandhydranten mit Flachschauch

This European Standard was approved by CEN on 9 March 2012.

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

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, 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, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	4
Introduction	5
1 Scope	5
2 Normative references	5
3 Terms and definitions	6
4 Requirements	6
4.1 General.....	6
4.2 Distribution of extinguishing media	7
4.2.1 Hose bore	7
4.2.2 Minimum flow rate	7
4.2.3 Effective throw range	7
4.2.4 Spray discharge	7
4.3 Operational reliability	7
4.3.1 Hose — General	7
4.3.2 Shut-off nozzle	8
4.3.3 Shut-off nozzle — Resistance to impact	8
4.3.4 Shut-off nozzle — Operating torque	8
4.3.5 Inlet stop valve	8
4.3.6 Hydraulic properties — Resistance to internal pressure	9
4.3.7 Hydraulic properties — Security of couplings	9
4.4 Ability to pull out the hose.....	9
4.4.1 Type 1 Reel	9
4.4.2 Type 1 and 3 Supports swinging.....	9
4.4.3 Hose — Maximum length	9
4.5 Colour	9
4.6 Cabinet.....	9
4.6.1 General.....	9
4.6.2 Opening/closing device	10
4.6.3 Cabinet for manual hose system with screw down type valve.....	10
4.6.4 Identification symbol	10
4.7 Durability aspects	10
4.7.1 Durability of operational reliability.....	10
5 Test methods.....	10
5.1 General.....	10
5.2 Distribution of extinguishing media	11
5.2.1 Hose bore	11
5.2.2 Minimum flow rate	11
5.2.3 Effective throw range	11
5.2.4 Spray discharge	11
5.3 Operational reliability	11
5.3.1 Hose — General	11
5.3.2 Shut-off nozzle	11
5.3.3 Shut-off nozzle — Resistance to impact	11
5.3.4 Shut-off nozzle — Operating torque	11
5.3.5 Inlet stop valve	11
5.3.6 Hydraulic properties — Resistance to internal pressure	11
5.3.7 Hydraulic properties — Security of couplings	12
5.4 Ability to pull out the hose.....	12
5.4.1 Type 1 Reel	12

5.4.2	Type 1 and Type 3 Supports swinging	12
5.4.3	Hose — Maximum length	12
5.5	Colour	12
5.6	Cabinet	12
5.7	Durability aspects	12
5.7.1	Durability of operational reliability	12
6	Evaluation of conformity	13
6.1	General	13
6.2	Initial Type Testing — Type Testing	13
6.2.1	General	13
6.2.2	Test samples	14
6.2.3	Test reports	14
6.3	Factory Production Control (FPC)	14
6.3.1	General	14
6.3.2	Requirements	14
6.3.3	Product specific requirements	16
6.3.4	Initial inspection of factory and of FPC	17
6.3.5	Continuous surveillance of FPC	18
6.3.6	Procedure for modifications	18
6.3.7	One-off products, pre-production products (e.g. prototypes) and products produced in very low quantity	18
7	Marking	19
8	Instruction	19
8.1	Instructions for use	19
8.2	Installation and maintenance instructions	20
Annex A	(normative) Schedule for testing sequence	21
Annex B	(normative) Test method for resistance to external corrosion	22
Annex C	(normative) Ageing test for plastics materials	23
Annex D	(normative) Test method for resistance to corrosion of waterways	24
Annex E	(normative) Test methods for shut-off nozzle	25
E.1	Resistance to impact	25
E.2	Operating torque	25
E.3	Spray discharge	25
E.4	Flow rate and throw range	27
E.4.1	Flow rate	27
E.4.2	Throw range	28
Annex F	(normative) Test method for resistance to internal pressure	29
Annex ZA	(informative) Clauses of this European Standard addressing the provisions of EU Construction Products Directive	30
ZA.1	Scope and relevant characteristics	30
ZA.2	Procedure for the attestation of conformity of hose systems with lay-flat hose	32
ZA.2.1	System of attestation of conformity	32
ZA.2.2	EC certificate of conformity	34
ZA.3	CE marking and labelling	34

Foreword

This document (EN 671-2:2012) has been prepared by Technical Committee CEN/TC 191 “Fixed firefighting systems”, the secretariat of which is held by BSI.

This document shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2012 and conflicting national standards shall be withdrawn at the latest by January 2014.

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 supersedes EN 671-2:2001.

EN 671-2:2001 has been technically revised and editorial edited. The order of clauses has been changed. Annex ZA has been updated.

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.

For convenience of application in testing, the normative annexes of this European Standard are arranged so that Annex A gives the sequence of testing for conformity assessment and Annexes B, C, D, E and F are in the correct sequence for testing.

EN 671 has the general title “Fixed firefighting systems — Hose systems” and is in three parts:

- *Part 1: Hose reels with semi-rigid hose;*
- *Part 2: Hose systems with lay-flat hose;*
- *Part 3: Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose.*

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, 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.

Introduction

Fire hose systems in proper condition provide a very effective firefighting facility with a continuous supply of water available immediately.

The requirements of this European Standard have been specified to ensure that hose system can be operated efficiently by one person and that such systems have a long service life.

1 Scope

This European Standard specifies requirements and methods of test for the construction and performance of fire hose reel systems with lay-flat hose for installation in buildings, permanently connected to a water supply, for use by the occupants.

Furthermore, it provides also for requirements on evaluation of conformity and marking of these products.

Its requirements may apply in general for other applications, for example in marine applications or in aggressive environments, but additional requirements may be necessary in such cases.

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 671-3, *Fixed firefighting systems — Hose systems — Part 3: Maintenance of hose reels with semi-rigid hose and hose systems with lay-flat hose*

EN 14540, *Fire-fighting hoses — Non-percolating layflat hoses for fixed systems*

EN ISO 4892-2:2006, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc amps (ISO 4892-2:2006)*

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

EN ISO 9227:2006, *Corrosion tests in artificial atmospheres — Salt spray tests (ISO 9227:2006)*

ISO 5208, *Industrial valves — Pressure testing of metallic valves*

ISO 7010, *Graphical symbols — Safety colours and safety signs — Registered safety signs*