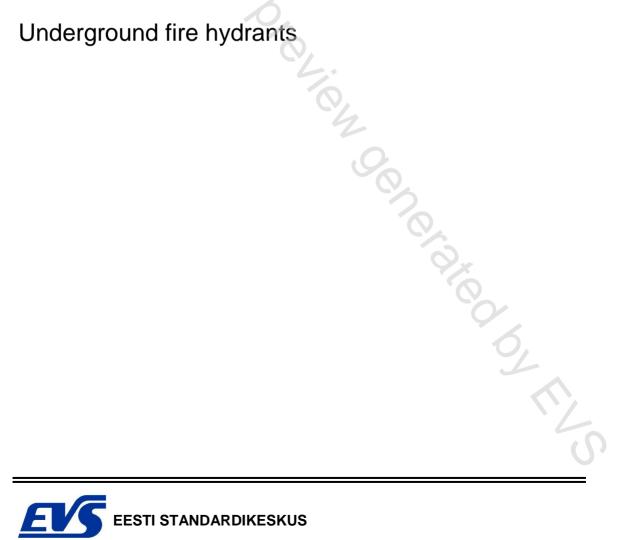
Maa-alused tuletõrjehüdrandid

Underground fire hydrants



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN	This Estonian standard EVS-EN
14339:2005 sisaldab Euroopa standardi	14339:2005 consists of the English text of
EN 14339:2005 ingliskeelset teksti.	the European standard EN 14339:2005.
Käesolev dokument on jõustatud 29.09.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 29.09.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti	The standard is available from Estonian
standardiorganisatsioonist.	standardisation organisation.
D _x	
Käsitlusala:	Scope:
This European Standard specifies the	This European Standard specifies the
requirements, test methods and marking applicable to underground fire hydrants	requirements, test methods and marking applicable to underground fire hydrants

requirements, test methods and marking applicable to underground fire hydrants intended for fire fighting purposes:- to be installed in a water distribution system;- in sizes DN 80 and DN 100;- suitable for an allowable operating pressure, PFA, of 10 bar or 16 bar or 25 bar with or without drain facility;- having a vertical or horizontal, flanged, socket or spigot inlet; with one or two outlets and having outlet/s to national requirements; - of globe (screw down) or gate valve type.

This European Standard specifies the requirements, test methods and marking applicable to underground fire hydrants intended for fire fighting purposes:- to be installed in a water distribution system;- in sizes DN 80 and DN 100;- suitable for an allowable operating pressure, PFA, of 10 bar or 16 bar or 25 bar with or without drain facility;- having a vertical or horizontal, flanged, socket or spigot inlet; with one or two outlets and having outlet/s to national requirements; - of globe (screw down) or gate valve type.

ICS 13.220.10, 93.080.30

Võtmesõnad: acceptance, boxes (containers), conformity tests, fire equipment, producti, qualification tests, specification (approval), specifications, supply, surface boxes, testing, tightness, types, underfloor hydrant, underground, valves, water for fire fighting, water supply

EUROPEAN STANDARD NORME EUROPÉENNE **EUROPÄISCHE NORM**

EN 14339

July 2005

ICS 13.220.10; 93.080.30

English version

Underground fire hydrants

Bouches d'incendie enterrées

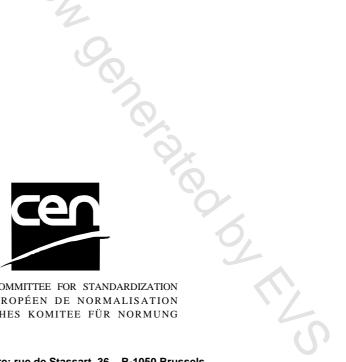
Unterflurhydranten

This European Standard was approved by CEN on 20 June 2005.

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 Central Secretariat 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 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, ė Gliek K Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Foreword			
Introduction			
1	Scope	5	
2	Normative references	5	
3	Terms and definitions	6	
4 4.1	Design requirements	7	
4.2 4.3	Shell Elastomers.		
4.3	Obturator – main valve		
4.5	Stem seals	9	
4.6 4.7	Materials including lubricants in contact with water intended for human consumption Leaktightness and mechanical strength		
4.8	Closing direction	10	
4.9 4.10	Opening turns Resistance of hydrant to operating loads	10	
4.10 4.11	Stem drive		
4.12	Inlet connections	11	
4.13 4.14	Outlets Drainage system		
4.14	Internal and external corrosion resistance		
4.16	Resistance to disinfection products	11	
4.17 4.18	Hydrants for non potable water systems Hydraulic characteristics		
-	Test methods		
5 5.1	General		
5.2	General dimensions	12	
5.3	Operational characteristics		
6	Marking and additional data		
6.1 6.2	Marking Additional hydrant data		
7	Evaluation of conformity		
, 7.1	General		
7.2	Initial type testing (ITT)		
7.3	Factory product control (FPC)		
Annex	ZA (informative) Clauses of the European Standard addressing the provisions of the EU Construction Products Directive (89/106/EEC)	19	
ZA.1	Scope and relevant characteristics	19	
ZA.2	Procedure and system for the attestation of conformity of underground fire hydrants		
ZA.3 ZA.4	CE marking EC certificate and Declaration of conformity		
Bibliography			
Dibilog	Ji 4911 J		

Foreword

This European Standard (EN 14339:2005) has been prepared by Technical Committee CEN/TC 192 "Fire service equipment", the secretariat of which is held by BSI, in cooperation with CEN/TC164 "Water supply" and CEN/TC 69 "Industrial Valves".

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 2006, and conflicting national standards shall be withdrawn at the latest by January 2006.

This European Standard 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 European Standard.

This is one of a series of standards for fire hydrants.

This is the first edition of this European Standard.

No International Standard exists for underground fire hydrants.

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.



Introduction

The purpose of a fire hydrant installation is to provide a connection (i.e. hydrant) to the water main to which the firefighter can connect firefighting equipment. Underground hydrants consist of one or more valves and outlet connectors and are installed in an underground chamber with a surface box and intended primarily to supply water for firefighting and also may be used by water utilities (as defined in 3.3).

This European Standard is in conformity with the general requirements already established by CEN/TC 164 in the field of water supply.

In respect of quality of water intended for human consumption caused by the product covered by this European Standard:

- 1) this European Standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA;
- 2) it should be noted that, while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

s ado, characte

1 Scope

This European Standard specifies the requirements, test methods and marking applicable to underground fire hydrants intended for fire fighting purposes:

- to be installed in a water distribution system;
- in sizes DN 80 and DN 100;
- suitable for an allowable operating pressure, PFA, of 10 bar or 16 bar or 25 bar with or without drain facility;
- having a vertical or horizontal, flanged, socket or spigot inlet;
- with one or two outlets and having outlet/s to national requirements;
- of globe (screw down) or gate valve type.

This European Standard also provides for the evaluation of conformity of the underground fire hydrants to the requirements of this European Standard.

This European Standard applies to fire hydrants for potable and non-potable water and for filtered water. Additional requirements may apply for other liquids.

Couplings connected to outlets are outside the scope of this European Standard and should conform to national requirements.

2 Normative references

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 681-1, Elastomeric seals — Material requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber

EN 1074-1:2000, Valves for water supply — Fitness for purpose requirements and appropriate verification tests — Part 1: General requirements

EN 1074-2:2000, Valves for water supply — Fitness for purpose requirements and appropriate verification tests — Part 2: Isolating valves

EN 1074-6:2004, Valves for water supply — Fitness for purpose requirements and appropriate verification tests — Part 6: Hydrants

EN 1092-1, Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1: Steel flanges

EN 1092-2, Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 2: Cast iron flanges

EN 1503-1, Valves — Materials for bodies, bonnets and covers — Part 1: Steels specified in European Standards

EN 1503-3, Valves — Materials for bodies, bonnets and covers — Part 3: Cast irons specified in European Standards

EN ISO 9001:2000, Quality management systems — Requirements (ISO 9001:2000)

3 Terms and definitions

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

3.1

hydrant

connection to a water supply system including an isolating valve [EN 1074-6:2004]

3.2

fire hydrant

hydrant designed to supply water for fire fighting during all phases of the fire

3.3

underground fire hydrant

fire hydrant installed in an underground chamber with a surface box, intended primarily to supply water for firefighting and which may also be used by water utilities

3.4

obturator

movable component of the valve whose position in the fluid flow path permits, restricts or obstructs the fluid flow (see EN 736-2). In addition it can be captive or loose

3.5

captive obturator

device for controlling the flow out of a pipeline and into a pipeline

3.6

loose obturator

device for controlling flow out of a pipeline but which prevents flow into a pipeline

3.7

shell

pressure-containing envelope of the valve

NOTE It normally comprises the body and, when included in the design, a bonnet or cover and the body bonnet or body cover joint (see EN 736-2).

3.8

DN nominal size

alphanumeric designation of the size of pipework components used for reference purposes. It comprises the letters DN followed by a dimensionless round number which is loosely related to the effective dimensions, in millimetres, of the bore or external diameter of the end connections [EN 1074-1:2000]

3.9

PN nominal pressure

alphanumeric designation used for reference purposes and related to a combination of numerical and dimensional characteristics of a component of a pipe system. It comprises the letters PN followed by a dimensionless round number IEN 1074 1:2000

[EN 1074-1:2000]