ÄRAVOOLU- JA KANALISATSIOONISÜSTEEMID VÄLJASPOOL HOONEID. PUMPAMISSÜSTEEMID. OSA 3: VAAKUMSÜSTEEMID

Drain and sewer systems outside buildings - Pumping systems - Part 3: Vacuum systems

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 16932-3:2018 sisaldab Euroopa standardi EN 16932-3:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 16932-3:2018 consists of the English text of the European standard EN 16932-3:2018.
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 11.04.2018.	Date of Availability of the European standard is 11.04.2018.
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.

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EUROPEAN STANDARD

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English Version

Drain and sewer systems outside buildings - Pumping systems - Part 3: Vacuum systems

Réseaux d'évacuation et d'assainissement à l'extérieur des bâtiments - Systèmes de pompage - Partie 3: Systèmes sous vide

Entwässerungssysteme außerhalb von Gebäuden - Pumpsysteme - Teil 3: Unterdruckentwässerungssysteme

This European Standard was approved by CEN on 22 January 2018.

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, 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 United Kingdom.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 16932-3:2018) has been prepared by Technical Committee CEN/TC 165 “Waste water engineering”, the secretariat of which is held by DIN.

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 October 2018, and conflicting national standards shall be withdrawn at the latest by October 2018.

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

Together with EN 16932-1:2018 and EN 16932-2:2018, this document will supersede EN 1091:1996 and EN 1671:1997.

EN 16932:2018, *Drain and sewer systems outside buildings — Pumping systems*, contains the following parts:

— *Part 1: General requirements*;

— *Part 2: Positive pressure systems*;

— *Part 3: Vacuum systems*.

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.

1 Scope

This European Standard specifies requirements for design, construction and acceptance testing of wastewater pumping systems in drain and sewer systems outside the buildings they are intended to serve. It includes pumping systems in drain and sewer systems that operate essentially under gravity as well as systems using either positive pressure or partial vacuum.

This document is applicable to vacuum drain and sewer systems.

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.

EN 476, *General requirements for components used in drains and sewers*

EN 16323:2014, *Glossary of wastewater engineering terms*

EN 16932-1:2018, *Drain and sewer systems outside buildings — Pumping systems — Part 1: General requirements*

EN 16932-2:2018, *Drain and sewer systems outside buildings — Pumping systems — Part 2: Positive pressure systems*

EN 16933-2, *Drain and sewer systems outside buildings — Design — Part 2: Hydraulic design*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16323, in EN 16932-1 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

Note 1 to entry: Certain key definitions from EN 16323:2014 have been repeated below for clarity. The following additional terms used in this document are defined in EN 16323:

collection tank;
domestic wastewater;
extraneous flow;
gradient;
gravity system;
infiltration;
maintenance;
non-domestic wastewater;
pumping station;
relevant authority;
rising main;
runoff;
self-cleansing;
sewer;
sewer system.

Note 2 to entry: The following terms used in this standard are defined in EN 16932-1:

collection chamber;
level sensor;