

**Veearvestid külmale joogiveele ja kuumale veele. Osa 1:
Metroloogilised ja tehnilised nõuded**

**Water meters for cold potable water and hot water - Part
1: Metrological and technical requirements (ISO
4064-1:2014)**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4064-1:2014 sisaldab Euroopa standardi EN ISO 4064-1:2014 inglisekeelset teksti.	This Estonian standard EVS-EN ISO 4064-1:2014 consists of the English text of the European standard EN ISO 4064-1:2014.
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 04.06.2014.	Date of Availability of the European standard is 04.06.2014.
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 91.140.60

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

Water meters for cold potable water and hot water - Part 1:
Metrological and technical requirements (ISO 4064-1:2014)

Compteurs d'eau potable froide et chaude - Partie 1:
Exigences métrologiques et techniques (ISO 4064-1:2014)

Wasserzähler zum Messen von kaltem Trinkwasser und
heißem Wasser - Teil 1: Metrologische und technische
Anforderungen (ISO 4064-1:2014)

This European Standard was approved by CEN on 21 September 2013.

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, 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: Avenue Marnix 17, B-1000 Brussels

Foreword

This document (EN ISO 4064-1:2014) has been prepared by Technical Committee ISO/TC 30 "Measurement of fluid flow in closed conduits" in collaboration with Technical Committee CEN/TC 92 "Water meters" the secretariat of which is held by SNV.

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 2014, and conflicting national standards shall be withdrawn at the latest by June 2017.

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 14154-1:2005+A2:2011.

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.

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

Endorsement notice

The text of ISO 4064-1:2014 has been approved by CEN as EN ISO 4064-1:2014 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of Requirements of EU Directive 2004/22/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide one means of conforming to Essential Requirements of the New Approach Directive 2004/22/EC, *Measuring instruments directive*.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

WARNING: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Water meter and its constituents.....	1
3.2 Metrological characteristics	5
3.3 Operating conditions	6
3.4 Test conditions.....	8
3.5 Electronic and electrical equipment	10
3.6 Use of certain terms within the European Economic Area.....	11
4 Metrological requirements	11
4.1 Values of Q_1 , Q_2 , Q_3 , and Q_4	11
4.2 Accuracy class and maximum permissible error	12
4.3 Requirements for meters and ancillary devices.....	13
5 Water meters equipped with electronic devices	15
5.1 General requirements.....	15
5.2 Power supply	15
6 Technical requirements	16
6.1 Materials and construction of water meters.....	16
6.2 Adjustment and correction.....	17
6.3 Installation conditions.....	17
6.4 Rated operating conditions.....	19
6.5 Pressure loss.....	19
6.6 Marks and inscriptions	19
6.7 Indicating device	21
6.8 Protection devices.....	24
7 Metrological controls	24
7.1 Reference conditions	24
7.2 Type evaluation and approval.....	25
7.3 Initial verification	29
Annex A (normative) Performance tests for water meters with electronic devices	31
Annex B (normative) Checking facilities	33
Annex C (informative) Permissible errors in service and subsequent verification	37
Bibliography	38