

SLOVENSKI STANDARD

SIST EN ISO 4064-4:2014

01-julij-2014

Nadomešča:

SIST EN 14154-1:2005+A2:2011

SIST EN 14154-2:2005+A2:2011

SIST EN 14154-3:2005+A2:2011

Vodomeri za merjenje hladne pitne vode in vroče vode - 4. del: Nemetrološke zahteve, ki niso zajete v ISO 4064-1 (ISO 4064-4:2014)

Water meters for cold potable water and hot water - Part 4: Non- metrological requirements not covered in ISO 4064-1 (ISO 4064-4:2014)

(standards.iteh.ai)

Wasserzähler zum Messen von kaltem Trinkwasser und heißem Wasser - Teil 4: Nichtmetrologische Anforderungen, die nicht Gegenstand von ISO 4064-1 sind (ISO 4064-4:2014)

<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>

Compteurs d'eau destinés au mesurage de l'eau potable froide et chaude - Partie 4: Exigences non métrologiques non couvertes par l'ISO 4064-1 (ISO 4064-4:2014)

Ta slovenski standard je istoveten z: EN ISO 4064-4:2014

ICS:

17.120.10	Pretok v zaprtih vodih	Flow in closed conduits
91.140.60	Sistemi za oskrbo z vodo	Water supply systems

SIST EN ISO 4064-4:2014

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4064-4:2014](https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014)

<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>

EUROPEAN STANDARD

EN ISO 4064-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2014

ICS 91.140.60

Supersedes EN 14154-1:2005+A2:2011, EN 14154-2:2005+A2:2011, EN 14154-3:2005+A2:2011

English Version

Water meters for cold potable water and hot water - Part 4: Non-metrological requirements not covered in ISO 4064-1 (ISO 4064-4:2014)

Compteurs d'eau potable froide et d'eau chaude - Partie 4:
Exigences non métrologiques non couvertes par l'ISO
4064-1 (ISO 4064-4:2014)

Wassermesser zum Messen von kaltem Trinkwasser und
heißem Wasser - Teil 4: Nichtmetrologische Anforderungen,
die nicht Gegenstand von ISO 4064-1 sind (ISO 4064-
4:2014)

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

Contents	Page
Foreword.....	3

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4064-4:2014](https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014)
<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>

Foreword

This document (EN ISO 4064-4:2014) 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 December 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 14154-1:2005+A2:2011, EN 14154-2:2005+A2:2011, EN 14154-3:2005+A2:2011.

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.

iTeh STANDARD PREVIEW
Endorsement notice
(standards.iteh.ai)

The text of ISO 4064-4:2014 has been approved by CEN as EN ISO 4064-4:2014 without any modification.

[SIST EN ISO 4064-4:2014](https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014)
<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4064-4:2014](#)

<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>

INTERNATIONAL
STANDARD

ISO
4064-4

First edition
2014-06-01

**Water meters for cold potable water
and hot water —**

**Part 4:
Non-metrological requirements not
covered in ISO 4064-1**

iTeh STANDARD PREVIEW
Compteurs d'eau potable froide et d'eau chaude —
Partie 4: Exigences non métrologiques non couvertes par l'ISO 4064-1
(standards.iteh.ai)

[SIST EN ISO 4064-4:2014](https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014)

<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>



Reference number
ISO 4064-4:2014(E)

© ISO 2014

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 4064-4:2014](https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014)

<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Technical characteristics	2
4.1 In-line meters	2
4.2 Concentric and cartridge meters and exchangeable metrological modules	4
Annex A (informative) Concentric water meter manifold	10
Annex B (normative) Connection interfaces — Solutions for cartridge meters	13
Annex C (informative) Examples of adaptors and converters	24
Bibliography	26

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 4064-4:2014](https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014)

<https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>

ISO 4064-4:2014(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2, www.iso.org/directives.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received, www.iso.org/patents.

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 30, *Measurement of fluid flow in closed conduits*, Subcommittee SC 7, *Volume methods including water meters*.

ISO 4064 consists of the following parts, under the general title *Water meters for cold potable water and hot water*:

- *Part 1: Metrological and technical requirements* <https://standards.iteh.ai/catalog/standards/sist/2a17d633-0733-4b67-990f-99ea37dd11d6/sist-en-iso-4064-4-2014>
- *Part 2: Test methods*
- *Part 3: Test report format*
- *Part 4: Non-metrological requirements not covered in ISO 4064-1*
- *Part 5: Installation requirements*

Water meters for cold potable water and hot water —

Part 4:

Non-metrological requirements not covered in ISO 4064-1

1 Scope

This part of ISO 4064 applies to water meters used to meter the volume of cold potable water and hot water flowing through a fully charged, closed conduit. These water meters incorporate devices which indicate the integrated volume.

This part of ISO 4064 specifies technical characteristics and pressure loss requirements for meters for cold potable water and hot water. It applies to water meters which can withstand:

- a) a maximum admissible pressure (MAP) equal to at least 1 MPa¹⁾ [0,6 MPa for meters for use with pipe nominal diameters (DNs) ≥ 500 mm];
- b) a maximum admissible temperature (MAT) for cold potable water meters of 30 °C;
- c) a MAT for hot water meters of up to 180 °C, depending on class.

In addition to meters based on mechanical principles, this part of ISO 4064 also applies to water meters based on electrical or electronic principles, and to water meters based on mechanical principles incorporating electronic devices, used to meter the volume flow of hot water and cold potable water. It also applies to electronic ancillary devices. As a rule ancillary devices are optional. However, national or international regulations may make some ancillary devices mandatory in relation to the utilization of the water meter.

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.

ISO 228-1, Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation

ISO 4064-1|OIML R 49-1, Water meters for cold potable water and hot water — Part 1: Metrological and technical requirements

ISO 7005-2, *Metallic flanges — Part 2: Cast iron flanges*

ISO 7005-3, *Metallic flanges — Part 3: Copper alloy and composite flanges*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 4064-1|OIML R 49-1 apply.

NOTE Many of the definitions used in this part of ISO 4064 conform to ISO/IEC Guide 99:2007|OIML V 2-200:2012,^[1] OIML V 1:2013,^[2] and OIML D 11.^[3]

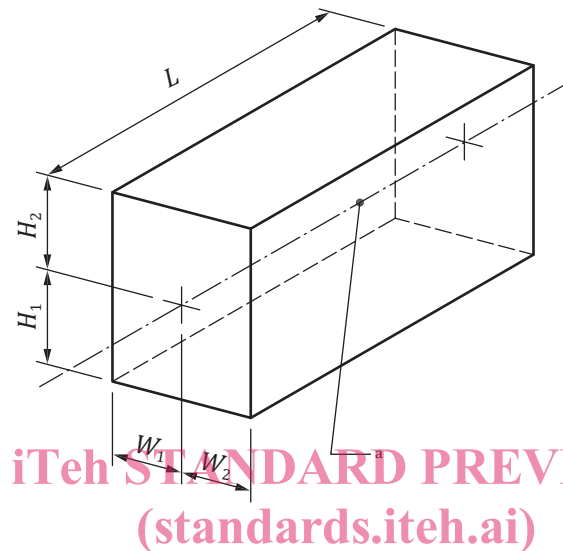
1) 1 MPa = 10 bar

4 Technical characteristics

4.1 In-line meters

4.1.1 Meter size and overall dimensions

Meter size is characterized either by the thread size of the end connections or by the nominal size of the flange. For each meter size, there is a corresponding fixed set of overall dimensions. The dimensions of the meter, as illustrated in [Figure 1](#), shall be in accordance with [Table 1](#).



Key

W_1, W_2 $W_1 + W_2$ is the width of a cuboid within which the water meter can be contained

H_1, H_2 $H_1 + H_2$ is the height of a cuboid within which the water meter can be contained

L length of a cuboid within which the water meter can be contained

NOTE The cover is at right angles to its closed position. Dimensions H_1, H_2, W_1 and W_2 are maxima; L is a fixed value with specified tolerances.

a Pipe axis.

Figure 1 — Meter size and overall dimensions

4.1.2 Threaded connection

Permissible values of dimensions a and b for threaded connections are given in [Table 1](#). Threads shall conform to ISO 228-1. [Figure 2](#) defines dimensions a and b .

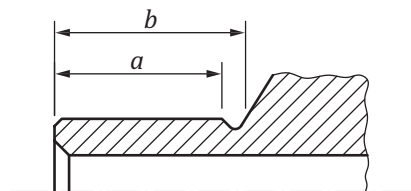


Figure 2 — Threaded connection

4.1.3 Flanged connection

Flanged end connections shall conform to ISO 7005-2 and ISO 7005-3 for the maximum pressure corresponding to that of the water meter. Dimensions shall be as given in [Table 1](#).