

Irish Standard I.S. EN ISO 4064-3:2014

Water meters for cold potable water and hot water - Part 3: Test report format (ISO 4064-3:2014)

I.S. EN ISO 4064-3:2014

2014-07-01

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R.~xxx: Standard~Recommendation-recommendation~based~on~the~consensus~of~an~expert~panel~and~subject~to~public~consultation.

SWiFT~xxx: A~rapidly~developed~recommendatory~document~based~on~the~consensus~of~the~participants~of~an~NSAI~workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on: Published:

EN ISO 4064-3:2014 2014-06-04

This document was published ICS number:

under the authority of the NSAI
and comes into effect on:
91.140.60

NOTE: If blank see CEN/CENELEC cover page

NSAI T +353 1 807 3800 Sales:

 1 Swift Square,
 F +353 1 807 3838
 T +353 1 857 6730

 Northwood, Santry
 E standards@nsai.ie
 F +353 1 857 6729

 Dublin 9
 W NSAI.ie
 W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann



Correction Notice

We apologise for any inconvenience this may cause.

| Reference: | EN ISO 4064-3:2014 | | |
|---|--|--|--|
| Title: | Water meters for cold potable water and hot water - Part 3: Test report format (ISO 4064-3:2014) | | |
| Work Item: | 00092020 | | |
| | Brussels, 2014-08-20 | | |
| Please include | the following minor editorial correction(s) in the document related to: | | |
| the following ⊠ Engli ⊠ Frend □ Gern | ch | | |
| ☐ PQ/U☐ Enqu☐ 2nd F☐ Para☐ 2 nd P☐ Para☐ 2 nd F☐ Para☐ 2 nd P☐ UAP☐ TC A☐ 2 nd T☐ Publi | | | |
| | ight to our attention that this document, issued on 2014-06-04, requires modification. | | |
| The superseding | g information has been removed. | | |
| Please find encl | Please find enclosed the updated English and French versions. | | |

This is a free page sample. Access the full version online. I.S. EN ISO 4064-3:2014

This page is intentionally left BLANK.

EUROPEAN STANDARD

EN ISO 4064-3

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2014

ICS 91.140.60

English Version

Water meters for cold potable water and hot water - Part 3: Test report format (ISO 4064-3:2014)

Compteurs d'eau potable froide et d'eau chaude - Partie 3: Format du rapport d'essai (ISO 4064-3:2014) Wasserzähler zum Messen von kaltem Trinkwasser und heißem Wasser - Teil 3: Format des Prüfberichtes (ISO 4064-3:2014)

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

EN ISO 4064-3:2014 (E)

| Contents | Page |
|----------|------|
| | |
| Foreword | 3 |

EN ISO 4064-3:2014 (E)

Foreword

This document (EN ISO 4064-3:2014) 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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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 4064-3:2014 has been approved by CEN as EN ISO 4064-3:2014 without any modification.

This is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online. I.S. EN ISO 4064-3:2014

INTERNATIONAL STANDARD

ISO 4064-3

Fourth edition 2014-06-01

Water meters for cold potable water and hot water —

Part 3: **Test report format**

Compteurs d'eau potable froide et d'eau chaude — Partie 3: Format du rapport d'essais





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

| Con | tent | S | Page |
|-------|--------------------|---|----------|
| Forev | vord | | iv |
| Intro | ductio | n | v |
| 1 | Scop | e | 1 |
| 2 | Norr | native references | 1 |
| 3 | Tern | ıs, definitions, symbols, and abbreviated terms | 1 |
| 4 | Туре 4.1 | evaluation report General | 1 |
| | 4.2 | Information concerning the type | 2 |
| | 4.3 | General information concerning the test equipment | 12 |
| | 4.4 | Check list for water meter examinations and performance tests | 13 |
| | 4.5 4.6 | Type evaluation tests (for all water meters) Type evaluation tests (for electronic water meters and mechanical water meters wit electronic components) | h |
| 5 | Initi | al verification report | |
| | 5.1 | General | |
| | 5.2 | Information concerning the EUT verified | 68 |
| | 5.3 | Initial verification test report (ISO 4064-2:2014 OIML R 49-2:2013, Clause 10) | |
| Anne | | ormative) List of documents concerning the type (ISO 4064-1:2014 OIML R 49-1:2 | |
| Anne | x B (no | ormative) Listing of test equipment used in examinations and tests | 74 |

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 committees responsible for this document are Technical Committee ISO/TC 30, Measurement of fluid flow in closed conduits, Subcommittee SC 7, Volume methods including water meters and OIML Technical Subcommittee TC 8/SC 5 Water meters.

This fourth edition of ISO 4064-3 cancels and replaces the third edition (ISO 4064-3:2005), which has been technically revised. Provisions of the third edition are addressed in ISO 4064-2:2014|OIML R 49-2:2013.

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
- Part 2: Test methods
- Part 3: Test report format
- Part 4: Non-metrological requirements not covered in ISO 4064-1
- Part 5: Installation requirements

This edition of ISO 4064-3 is identical to the corresponding edition of OIML R 49-3, which has been issued concurrently. OIML R 49-3 was approved for final publication by the International Committee of Legal Metrology at its 48th meeting in Ho Chi Minh City, Vietnam in October 2013. It will be submitted to the International Conference on Legal Metrology in 2016 for formal sanction.

Introduction

Implementation of this test report format is informative with regard to the implementation of ISO 4064-1|OIMLR 49-1 and ISO 4064-2|OIMLR 49-2 in national regulations; however, its implementation is required within the framework of the OIML Certificate System for Measuring Instruments [ISO 4064-2:2014|OIML R 49-2:2013, 11.1].

<u>Clause 4</u> shows the required format of a type evaluation report for a complete or combined water meter.

A type evaluation report for a separable calculator (including indicating device) or a measurement transducer (including flow or volume sensor) requires a similar format. However, some modifications to the tables may be required because a large number of variations in the design of these separable units is possible.

Some examples of tables for presenting the test results for separable units are shown in <u>Clause 5</u> for initial verifications. These tables can also be adapted for type evaluation reports.

This is a free page sample. Access the full version online. **I.S. EN ISO 4064-3:2014**

Water meters for cold potable water and hot water —

Part 3:

Test report format

1 Scope

This part of ISO 4064|OIML R 49 specifies a test report format to be used in conjunction with ISO 4064-1|OIML R 49-1 and ISO 4064-2|OIML R 49-2 for water meters for cold potable water and hot water.

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 4064-1:2014|OIML R 49-1:2013, Water meters for cold potable water and hot water — Part 1: Metrological and technical requirements

ISO 4064-2:2014|OIML R 49-2:2013, Water meters for cold potable water and hot water — Part 2: Test methods

3 Terms, definitions, symbols, and abbreviated terms

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

Some symbols and abbreviated terms used in the tables are as follows.

+ pass

fail

n/a not applicable

EUT equipment under test

H horizontal

MAP maximum admissible pressure

MAT maximum admissible temperature

MPE maximum permissible error

V vertical

4 Type evaluation report

4.1 General

For each examination and test the checklist shall be completed according to this example:



Product Page

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation