

## Hydrometry - Water level measuring devices

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## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 4373:2008 sisaldab Euroopa standardi EN ISO 4373:2008 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 15.12.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 4373:2008 consists of the English text of the European standard EN ISO 4373:2008.

This standard is ratified with the order of Estonian Centre for Standardisation dated 15.12.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

## Hydrometry - Water level measuring devices (ISO 4373:2008)

Hydrométrie - Appareils de mesure du niveau de l'eau (ISO 4373:2008)

Hydrometrie - Geräte zur Wasserstandsmessung (ISO 4373:2008)

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

## Foreword

This document (EN ISO 4373:2008) has been prepared by Technical Committee ISO/TC 113 "Hydrometric determinations" in collaboration with Technical Committee CEN/TC 318 "Hydrometry" the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by April 2009, and conflicting national standards shall be withdrawn at the latest by April 2009.

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.

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### Endorsement notice

The text of ISO 4373:2008 has been approved by CEN as a EN ISO 4373:2008 without any modification.

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# Hydrometry — Water level measuring devices

## 1 Scope

This International Standard specifies the functional requirements of instrumentation for measuring the level of water surface (stage), primarily for the purpose of determining flow rates. This International Standard is supplemented by an annex providing guidance on the types of water level measurement devices currently available and the measurement uncertainty associated with them (see Annex A).

## 2 Normative references

The following referenced documents are indispensable for the application 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.

ISO 772, *Hydrometry — Vocabulary and symbols*

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

IEC 60079-10, *Electrical apparatus for explosive gas atmospheres — Part 10: Classification of hazardous areas*

## 3 Terms and definitions

For the purpose of this document, the terms and definitions given in ISO 772 apply.

## 4 Instrument specification

### 4.1 Performance classifications

The parameters of performance of a water level measuring device shall be described by the classification categories of uncertainty, temperature range and relative humidity so that the overall performance of the equipment may be summarized in three digits.

### 4.2 General

Water level measuring devices shall be classified in accordance with the performance classes given in Table 1 that account for the resolution to be achieved and the limits of uncertainty required over specified ranges.

It should be made clear whether these levels of attainment can only be achieved by the use of special works, for example installation within stilling wells. It is also important to remember that in the measurement of stage, uncertainty expressed as a percentage of range gives rise to worst case uncertainty in the determination of stage at low values of stage. This is highly significant for the measurement of low flows and should be taken into account in the design of equipment for this purpose.