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# Meters for irrigation water

*Compteurs pour l'eau d'irrigation*



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# Foreword

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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 (see 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 (see www.iso.org/patents).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 18, *Irrigation and drainage equipment and systems*.



 

# Meters for irrigation water

## 1 Scope

This International Standard applies to water meters intended for irrigation use (herein after referred to as water meters), regardless of the water quality used for this purpose, and specifies the requirements and certification procedures for water meters, irrespective of the design technologies used to meter the actual volume of cold water or heated water flowing through a fully charged closed conduit. These water meters incorporate devices which indicate the integrated volume.

This International Standard 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 actual volume flow of cold water. It provides metrological requirements for electronic ancillary devices when they are subject to metrological control. As a rule, the ancillary devices are optional. However national or international regulations 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 4064-1:2005, *Measurement of water flow in fully charged closed conduits — Meters for cold potable water and hot water — Part 1: Specifications*

ISO 4064-2:2005, *Measurement of water flow in fully charged closed conduits — Meters for cold potable water and hot water — Part 2: Installation requirements*

ISO 9644, *Agricultural irrigation equipment — Pressure losses in irrigation valves — Test method*

ISO 286-2, *Geometrical product specifications (GPS) — ISO code system for tolerances on linear sizes — Part 2: Tables of standard tolerance classes and limit deviations for holes and shafts*

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

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

**3.1**
**water meter**
instrument intended to measure continuously, store, and display the volume of water passing through the measurement transducer at metering conditions

Note 1 to entry: A water meter includes at least a measurement transducer, a calculator (including adjustment or correction devices, if present), and an indicating device. These three devices may be in different housings.

[SOURCE: OIML R49-1:2006, 2.1.1, modified — The second note is not included here.]



 