INTERNATIONAL STANDARD

ISO 9635-1

> Second edition 2014-11-15

Agricultural irrigation equipment — Irrigation valves —

Part 1: **General requirements**

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Exigences & Matériel agricole d'irrigation — Vannes d'irrigation —





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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.

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.

This second edition cancels and replaces the first edition (ISO 9635-1:2006), which has been technically revised.

ISO 9635 consists of the following parts, under the general title *Agricultural irrigation equipment* — *Irrigation valves:*

- Part 1: General requirements
- *Part 2: Isolating valves*
- Part 3: Check valves
- Part 4: Air valves
- Part 5: Control valves

Agricultural irrigation equipment — Irrigation valves —

Part 1:

General requirements

1 Scope

This part of ISO 9635 specifies construction and performance requirements and test methods for valves, intended for operation in irrigation systems with water at temperatures not exceeding 60 $^{\circ}$ C, which can contain fertilizers and other chemicals of the types and concentrations used in agriculture.

It is applicable to irrigation valves of 8 mm diameter or greater, designed to operate in the fully open and fully closed positions, but which can also operate for extended time periods in any intermediate position.

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 4633, Rubber seals — Joint rings for water supply, drainage and sewerage pipelines — Specification for materials

ISO 5209, General purpose industrial valves — Marking

ISO 5752, Metal valves for use in flanged pipe systems — Face-to-face and centre-to-face dimensions

ISO 6708:1995, Pipework components — Definition and selection of DN (nominal size)

ISO 7005-1, Pipe flanges — Part 1: Steel flanges for industrial and general service piping systems

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

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

ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests

ISO 9635-2:2014, Agricultural irrigation equipment — Irrigation valves — Part 2: Isolating valves

ISO 9635-5:2014, Agricultural irrigation equipment — Irrigation valves — Part 5: Control valves

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

ISO 9911:2006, Agricultural irrigation equipment — Manually operated small plastics valves

ISO 9080, Plastics piping and ducting systems — Determination of the long-term hydrostatic strength of thermoplastics materials in pipe form by extrapolation

EN 681-1, Elastomeric seals — Materials requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber

EN 12627, Industrial valves — Butt welding ends for steel valves

EN 12982, Industrial valves — End-to-end and centre-to-end dimensions for butt welding end valves