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Agricultural irrigation equipment — Filters — Part 3: Automatic self-cleaning strainer-type filters

*Matériel agricole d'irrigation — Filtres —
Partie 3: Filtres à tamis à autonettoyage automatique*



Reference number
ISO 9912-3:1992(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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 9912-3 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 18, *Irrigation and drainage equipment and systems*.

ISO 9912 consists of the following parts, under the general title *Agricultural irrigation equipment — Filters*:

- Part 1: *Classification*
- Part 2: *Strainer-type filters*
- Part 3: *Automatic self-cleaning strainer-type filters*

Agricultural irrigation equipment — Filters —

Part 3:

Automatic self-cleaning strainer-type filters

1 Scope

This part of ISO 9912 specifies the general construction requirements and test methods for automatic self-cleaning strainer-type filters (hereinafter called filters), intended for operation in agricultural irrigation systems.

It does not cover filtration ability, efficiency and capacity (quality of filtration water, time of operation before filter becomes entirely clogged, etc.).

NOTE 1 ISO 9912-2 covers strainer-type filters in general.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 9912. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9912 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2859-1:1989, *Sampling procedures for inspection by attributes — Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection*.

ISO 9912-2:1992, *Agricultural irrigation equipment — Filters — Part 2: Strainer-type filters*.

3 Definitions

For the purposes of this part of ISO 9912, the definitions given in ISO 9912-2 and the following definitions apply.

3.1 automatic self-cleaning strainer-type filter: Filter having automatic flushing capability as determined by pressure differential, duration of filtration, volume of water filtered, or by some other physical quantity or by any combination of these.

3.2 duration of automatic flushing cycle of filter: Period of time during which water and dirt is flushed out of the filter via the flushing valve during each automatic flushing cycle.

3.3 flushing control mechanism: Mechanism which controls the flushing action of the filter, as determined by one or a combination of physical quantities such as pressure differential, duration of filtration, volume of water filtered, etc.

3.4 flushing pressure differential: Pressure differential between two points, one upstream and one downstream of the filter element, which initiates the flushing cycle.

3.5 flushing valve: Valve through which flushing water is discharged from the filter.

NOTE 2 This is not the same valve as that defined in ISO 9912-2:1992, definition 3.6 "drain valve; flush valve".

3.6 minimum working pressure: Lowest working pressure declared by the manufacturer which ensures the proper functioning of the device (automatic self-cleaning strainer-type filter, valve, etc.) without an additional high-pressure source.

3.7 preliminary filter element: Body having larger aperture openings than the filter element, designed to protect the cleaning mechanism.

3.8 protective mechanism: Mechanism that prevents repeated flushings of a filter caused either by mechanical failure in the flushing control mech-