## BS ISO 9912-2:2013



**BSI Standards Publication** 

## Agricultural irrigation equipment — Filters for microirrigation

Part 2: Strainer-type filters and disc filters



...making excellence a habit."

This British Standard is the UK implementation of ISO 9912-2:2013.

The UK participation in its preparation was entrusted to Technical Committee AGE/30, Irrigation and drainage equipment.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

 $\ensuremath{\mathbb O}$  The British Standards Institution 2013. Published by BSI Standards Limited 2013

ISBN 978 0 580 72961 4

ICS 65.060.35

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2013.

#### Amendments issued since publication

Date Text affected

Second edition 2013-11-01

# Agricultural irrigation equipment — Filters for microirrigation —

### Part 2: Strainer-type filters and disc filters

Matériel agricole d'irrigation — Filtres — Partie 2: Filtres à tamis





### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2013

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

Contents			Page
Fore	word	Page iv references 1 references 1 lefinitions 1 ral 3 construction requirements 4 ral 4 housing 4 ections 4 and hydraulic tests 5 ral 5 conserved resistance to buckling or tearing 5	
1	Scop	)e	
2	Normative references		
3	Terms and definitions		
4	<b>Mar</b> 4.1	<b>king</b> General	<b>3</b>
5	<b>Desi</b> 5.1 5.2 5.3	<b>gn and construction requirements</b> General Filter housing Connections	
6	Mec 6.1 6.2 6.3 6.4	hanical and hydraulic tests General Resistance of the filter to internal hydrostatic pressure Filter element tightness and resistance to buckling or tearing Clean pressure drop	<b>5</b> 5 
7	Info	rmation to be supplied by the manufacturer	
Bibliography			

### 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 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*.

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: http://www.iso.org/iso/home/standards\_development/resources-for-technical-work/foreword.htm

This second edition cancels and replaces the first edition (ISO 9912-2:1992), of which it constitutes a minor revision.

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

- Part 1: Terms, definitions and classification
- Part 2: Strainer-type filters and disc filters
- Part 3: Automatic flushing strainer-type filters and disc filters

A fourth part on granulated media filters is planned.

ICO 0017\_7.7012(F)

# Agricultural irrigation equipment — Filters for microirrigation —

This is a preview of "BS ISO 9912-2:2013". Click here to purchase the full version from the ANSI store.

### Part 2: Strainer-type filters and disc filters

### 1 Scope

This part of ISO 9912 specifies general construction requirements and test methods for strainer filters and disc filters (hereinafter called filters) intended for operation in agricultural irrigation systems.

This part of ISO 9912 does not cover the aspects of filtration ability, efficiency, and capacity (like quality of filtered water or time of operation before a filter becomes entirely clogged), nor does it deal with structural requirements or tests of automatic flushing mechanism filters that are covered by ISO 9912-3.

NOTE The parameters of filtration ability, efficiency, and capacity, their definitions, and their test methods are to be included in a separate ISO Technical Report. The test methods for comparing various filters under identical operating conditions will be described in that Technical Report, using water as defined by the client, to characterize the filter properties during operation with this water, or with water defined by the tester or the client.

### 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 7-1, Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation

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 9912-1:2004, Agricultural irrigation equipment — Filters for micro-irrigation — Part 1: Terms, definitions and classification

### 3 Terms and definitions

For the purposes of this document, the terms and definitions in ISO 9912-1 and the following apply.

### 3.1

### strainer filter

### strainer

device containing one or more filter elements, such as a screen or a mesh, used for separating clogging material from water flowing through the device by collecting it on the surface of the filter element or elements

[SOURCE: ISO 9912-1:2004, 2.8]

#### 3.2 disc filter

filter in which the filter element is a disc filter element

Note 1 to entry: See also <u>3.4</u>.