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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 18690.4-2023

**Agricultural irrigation equipment - Filters for micro irrigation -
Part 4: Granulated media filters**

农业灌溉设备 微灌用过滤器 第4部分：颗粒介质过滤器

(English Translation)

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents" Drafting:

This document is Part 4 of GB/T 18690 "Filters for Micro-irrigation of Agricultural Irrigation Equipment": GB/T 18690 has been released with Lower part:

---Part 1: Terms, definitions and classifications;

---Part 2: Mesh filters and disc filters;

---Part 3: Automatic flushing of mesh filters and laminated filters;

---Part 4: Granular Media Filters this document is equivalent to ISO 9912-4:2018 "Filters for micro-irrigation of agricultural irrigation equipment - Part 4: Granular media filters":

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

Introduction

GB/T 18690 "Filters for Micro-irrigation of Agricultural Irrigation Equipment" is intended to consist of four parts:

---Part 1: Terms, definitions and classifications: The purpose is to give the terms, definitions and classification of filters for microirrigation:

---Part 2: Mesh filters and disc filters: The purpose is to give the structural requirements of mesh filters and laminated filters:

Sum test method:

---Part 3: Automatic flushing of mesh filters and laminated filters: The purpose is to provide automatic flushing of mesh filters and laminations Structural requirements and test methods for type filters:

---Part 4: Granular media filters: The purpose is to give the structural requirements and test

methods for particulate media filters:

This series of standards completely gives the terms and definitions of filters for micro-irrigation, the structural requirements and test methods of different types of filters, and provides it provides a basis for the manufacturing and product upgrading of filters for micro-irrigation of agricultural irrigation equipment:

Filters for micro-irrigation of agricultural irrigation equipment Part 4: Granular Media Filters

1 Scope

This document specifies the structural requirements and testing of pressurized granular media filters (hereinafter referred to as media filters) for use in agricultural irrigation systems:

method:

This document applies to manually cleaned media filters and automatic self-cleaning media filters: This document applies to a single filter, also Suitable for filter combinations (two or more filter combinations working in parallel):

This document covers media filters and all associated valves, backwash mechanisms, ducts, manifolds and other components necessary for filter operation:

Operation and performance of related accessories:

This document applies to the following three configurations of filters:

- a) Empty filter (water tank) housing:
- b) Filters containing media filter material, equipped with valves, connections, exhausts and/or other accessories: When connected to the flush control unit when configured and controlled by a flush control device, this configuration is a fully operational single filter unit, usually as part of a filter station:

part:

- c) Filter stations called "filter combinations":

Appendix A gives information on types of irrigation media filters:

Appendix B gives information on granular media:

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text: Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments)

applies to this document:

Note: GB/T 18688-2023 Pressure loss test method for irrigation valves of agricultural irrigation equipment (ISO 9644:2018, IDT) Note: GB/T 18690.1-2009 Filters for micro-irrigation of agricultural irrigation equipment Part 1: Terms, definitions and classification (ISO 9912-1:2004, IDT) ISO 9912-2:2013 Filters for micro-irrigation of agricultural irrigation equipment Part 2: Mesh filters and laminated filters (Agri-ters) Note: GB/T 18690.2-2017 Filters for micro-irrigation of agricultural irrigation equipment Part 2: Mesh filters and laminated filters (ISO 9912-2:

2013,IDT)

ISO 9912-3 Filters for micro-irrigation of agricultural irrigation equipment Part 3: Automatic flushing mesh filters and laminated filters Note: GB/T 18690.3-2017 Filters for micro-irrigation of agricultural irrigation equipment Part 3: Automatic flushing mesh filters and laminated filters