

ICS 65.060.35
CCS B 91



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

GB/T 27612.2-2025

**Agricultural irrigation equipment - Sprinklers - Part 2: Design
and operation requirements**

农业灌溉设备 喷头 第2部分：结构和运行要求
(English Translation)

Issued on: May 30, 2025

Implemented on: December 1, 2025

**Issued by: State Administration for Market Regulation, China National
Standardization Administration**

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is part 2 of GB/T 27612 "Sprinklers for agricultural irrigation equipment". GB/T 18691 has been published in the following parts.

- Part 1: Terminology and classification;
- Part 2: Structural and operational requirements;
- Part 3: Water distribution characteristics and test methods;
- Part 4: Durability test methods.

This document is equivalent to ISO 15886-2:2021 "Sprinklers for agricultural irrigation equipment Part 2: Structural and operational requirements".

Introduction

GB/T 27612 "Agricultural irrigation equipment sprinklers" is intended to consist of 4 parts.

- Part 1: Terminology and classification. The purpose is to give the terminology and classification of sprinkler heads.
- Part 2: Structure and operation requirements. The purpose is to provide the technical requirements for the structure and operation of the sprinkler.
- Part 3: Water distribution characteristics and test methods. The purpose is to give the key performance indicators of the sprinkler water distribution characteristics and their Test method.
- Part 4: Durability test method. The purpose is to provide the test method for the durability of the nozzle.

This series of standards fully provides the terms and definitions, structure and operation requirements, water distribution characteristics and test methods, durability test methods, etc. of sprinkler heads.

The test method provides a basis for the manufacturing and product upgrading of agricultural irrigation equipment sprinklers.

Agricultural irrigation equipment sprinkler Part 2: Structural and operational requirements

1 Scope

This document specifies the structure, operating requirements and test methods of sprinklers for agricultural irrigation.

The sprinkler heads specified in this document are broad sprinkler heads, covering all types of products defined in ISO 15886-1. This document is applicable to rotary sprinkler heads.

This document applies to sprinklers installed on branch pipes for spraying irrigation water.

2 Normative references

The contents of the following documents constitute essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to this document.

Note: GB/T 7306.1~7306.2-2000 55° sealing pipe thread (eqv ISO 7-1.1994) Note. GB/T 27612.1-2023 Agricultural irrigation equipment nozzles Part 1: Terminology and classification (ISO 15886-1:2012, IDT) Note. GB/T 27612.3-2023 Agricultural irrigation equipment nozzles Part 3: Water distribution characteristics and test methods (ISO 15886-3:2021, IDT) Note. GB/T 27612.4-2023 Agricultural irrigation equipment nozzles Part 4: Durability test method (ISO 15886-4:2019, IDT)

3 Terms and definitions

For the purposes of this document, the terms and definitions defined in ISO 15886-1, ISO 15886-3 and the following apply.

Ambient temperature the air temperature around the nozzle (3.3).

clean water

After treatment (if necessary), it shall contain no more than 74 µm (200 mesh) of suspended particles and shall not contain any known short-term hazards to nozzle materials.

Water containing insoluble chemicals that affect the production of 3.3 Sprinkler Sprinklers of any size or type.