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# GB/T 36702.1-2018

## Irrigation equipment -- Safety devices for chemigation -- Part 1: Small plastics valves for chemigation

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1 --- vacuum instrument;

2 --- vacuum instrument;

3 --- vacuum pump;

4 ---vacuum container;

5 --- water collector;

6 --- water source;

9 --- the distance between the end of the valve and the vacuum gauge 2;

8.6 Hydraulic characteristics

8.7 Long-term withstand voltage test

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## Foreword

GB/T 36702 "Safety Device for Irrigation Equipment Chemical Irrigation" consists of the following parts.

--- Part 1. Small plastic valves for chemical irrigation;

--- Part 2. Chemical irrigation valve assemblies from DN75(3) to DN350(14).

This part is the first part of GB/T 36702.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This section uses the translation method equivalent to ISO 13693-1.2013 "Safety devices for irrigation of chemical equipment - Part 1. Chemical

Small plastic valve for irrigation.

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

---GB/T 7306-2000 55° sealed pipe thread (eqvISO 7-1.1994)

--- GB/T 18691.1-2011 Agricultural irrigation equipment - Part 1 . General requirements (ISO 9635-1.2006,

MOD)

This section has made the following editorial changes.

--- Added a figure for unit conversion in Appendix A.

This part was proposed by the China Machinery Industry Federation.

This part is under the jurisdiction of the National Agricultural Machinery Standardization Technical Committee (SAC/TC201).



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This section was drafted by. China Academy of Agricultural Mechanization Sciences, Jiangsu University Fluid Machinery Engineering Technology Research Center, Zhejiang Rongyagong

Trade Co., Ltd.

## 1 Scope

This part of GB/T 36702 specifies the general requirements and test methods for small plastic valves for chemical irrigation (hereinafter referred to as "devices").

The device is used in irrigation tubing systems that may contain certain fertilizers or chemicals of common types and concentrations in agriculture.

This section applies to controllable safety devices with a reduced pressure zone (RPZ) (also known as backflow preventers). The device is used to prevent drinking when drinking upstream

When the water distribution system pressure is lower than the downstream system pressure, the irrigation water flows back into the upstream drinking water distribution system due to back suction or back pressure.

This section applies to the nominal size not greater than DN50, the nominal pressure is PN10, and can be corrected or adjusted in the following cases.

Working device.

---The pressure is below 1MPa;

--- The amount of pressure change is not more than 1MPa;

--- Long-term work in a temperature not greater than 45 ° C, the temperature at 65 ° C for 1 h.

## 2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO 7-1 - Threaded pipe threads - Part 1. Dimensions, tolerances and markings (Pipethreadswherepressure-tight

Jointsaremadeonthethreads-Part 1. Dimensions, tolerancesanddesignation)

Agricultural irrigation equipment - Irrigation valves - Part 1. General requirements (Agriculturalirrigationequipment-



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Irrigationvalves-Part 1.Generalrequirements)

## 3 Terms and definitions

The following terms and definitions as defined in ISO 9635-1 apply to this document.

3.1

Controllable safety device with reduced pressure zone controlablesafetydevicewithareducedpressurezone;controlable

safetydevicewithRPZ

A two-action check valve (3.7) is fitted with a hydraulically controlled mechanical independent pressure relief valve between the two check valves.

3.2

Reflux backflow

A flow that is opposite to the normal flow direction.

3.3

Back sucking back-siphonage

Reflux due to system pressure reduction to below atmospheric pressure (3.2).

3.4

Back pressure backpressure

The pressure in the downstream of the piping system that is higher than the supply pressure, which can cause the water to flow in the opposite direction of the normal water flow.

3.5

Nominal pressure nominalpressure

PN

Chemical Irrigation (3.6) The maximum static water pressure required to operate close to the upstream with a small plastic valve.

3.6

Chemical irrigation

Various chemicals are applied through the irrigation system.

3.7

Check valve checkvalve

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