

ICS 91.140  
CCS P 45



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

**GB/T 37992-2019**

---

**Safety and control devices for gas burners and  
gas-burning-appliances - Particular requirements -  
Value-proving systems for automatic shut-off valves**

**Issued on: August 30, 2019**

**Implemented on: July 1, 2020**

---

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

## Table of Contents

Foreword

Introduction

1 Scope

2 Normative references

2004 (Ed4.1), IDT]

3 Terms and definitions

### Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafting method to modify the use of ISO 23551-4:2018 "Safety and control devices for gas burners and burners."

Particular requirements. Part 4. Valve inspection systems for automatic shut-off valves.

This standard has more structural adjustments than ISO 23551-4:2018. This standard and ISO 23551-4 are listed in Appendix A.

A list of chapter numbers for 2018.

There are technical differences between this standard and ISO 23551-4:2018. The terms involved in these differences have been passed on the outer side of the page

The vertical single line (|) of the white position is indicated, and a list of the corresponding technical differences and their causes is given in Appendix B.

This standard is consistent with GB 16914-2012 "Safety Technical Conditions for Gas Burning Appliances", which is given in Appendix C.

The correspondence table of the basic requirements of GB 16914-2012.

This standard also made the following editorial changes.

---Modify the standard name to "Safety and control device for gas burners and burners, special requirements for automatic shut-off valves"

Door inspection system";

--- Removed the informative Appendix 2, Appendix B and Appendix D of ISO 23551-4:2018;

--- Removed some of the references in ISO 23551-4:2018 that are not applicable.

This standard is proposed and managed by the Ministry of Housing and Urban-Rural Development of the People's Republic of China.

This standard was drafted. China Municipal Engineering North China Design and Research Institute Co., Ltd., Carl Winters Trading (Shanghai) Co., Ltd., Guangdong

Wanhe Thermal Energy Technology Co., Ltd., Tianjin Haydn Boiler Co., Ltd., Xiderui Thermal Energy Technology (Tianjin) Co., Ltd., Ao Smith (China)

Water Heater Co., Ltd., Bekaert Heating Technology (Suzhou) Co., Ltd., Qingdao Economic and Technological Development Zone Haier Water Heater Co., Ltd., Shanghai

Mengdi Industrial Automatic Control System Co., Ltd., National Gas Appliance Quality Supervision and Inspection Center.

## Introduction

In gas appliances and gas appliances, the safety control device is the core component, and the VPS is an important safety for the automation control system.

Part of it plays an important role in ensuring the safety of the whole machine.

The formulation of this standard will improve the technical level of China's gas appliance safety and control, make it in line with international standards, and improve China's gas appliance industry zero.

The standard system of components guarantees the safety of users and is of great significance. At the same time, it also regulates the market, guides design, production and inspection.

For important standards.

Safety and control devices for gas burners and burners

Valve inspection system for special requirements automatic shut-off valve

## 1 Scope

This standard specifies the use of the gas burners for urban gas and the automatic shut-off valves for combustion appliances specified in GB/T 13611.

Terms and definitions, classifications, structures and materials, requirements, test methods, inspection rules, marking, installation and use

Instructions, packaging, transportation and storage.

This standard is applicable to the maximum working pressure of not more than 500 kPa, for the automatic detection of at least two gas burners and combustion appliances.

A device that leaks between automatic shutoff valves gives a signal when the amount of

leakage exceeds the pump detection limit or the pumpless detection setting.

## 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.

GB/T 191 packaging storage and transportation pictorial signs (GB/T 191-2008, ISO 780.1997, MOD)

GB/T 2423.10 Environmental testing of electric and electronic products - Part 2. Test method test Fc. Vibration (sinusoidal) (GB/T 2423.10-

2008, IEC 60068-2-6.1995, IDT)

GB/T 2828.1. Sampling procedures for sampling by sampling - Part 1 . Batch-to-batch sampling plan, searched by AQL

(GB/T 2828.1-2012, ISO 2859-1..1999, IDT)

GB 4706.1 Safety of household and similar electrical appliances - Part 1. General requirements [GB 4706.1-2005, IEC 60335-1.

### 2004 (Ed4.1), IDT]

GB/T 14536.1-2008 Automatic automatic controls for household and similar use - Part 1. General requirements (IEC 60730-1.2003,

IDT)

GB/T 17626.11 Electromagnetic compatibility test and measurement techniques Immunity test for voltage dips, short interruptions and voltage changes

(GB/T 17626.11-2008, IEC 61000-4-11.2004, IDT)

GB/T 17626.13-2006 Electromagnetic compatibility test and measurement technology AC power port harmonics, interharmonics and grid signals

Low frequency immunity test (IEC 61000-4-13.2002, IDT)

GB/T 30597-2014 General requirements for safety and control devices for gas burners and burners (ISO 23550.2011,

MOD)

CJ/T 421-2013 Electronic controller for household gas burning appliances

### 3 Terms and definitions

The following terms and definitions as defined in GB/T 30597-2014 apply to this document.

#### 3.1

Valve inspection system valveprovingssystem; VPS

Installed on the gas line to verify that the automatic shutoff valve is effectively closed by detecting leaks.

Note. Usually includes control unit, detection unit, test valve and other functional modules, excluding the valve to be tested.