



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

GB/T 39493-2020

**Safety and control devices for gas burners and burning
appliances Special requirements Pressure regulating devices**

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Foreword

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

This standard uses the redrafting law to amend and adopt ISO 23551-2:2018 "Gas burner and gas appliance safety and control device characteristics

Special requirements Part 2. Pressure regulating device.

Compared with ISO 23551-2:2018, this standard has many adjustments in structure. Appendix A lists this standard and ISO 23551-2.

2018 chapter number comparison list.

Compared with ISO 23551-2:2018, this standard has technical differences. The terms involved in these differences have been

The vertical single line (|) in the white position is marked. Appendix B gives a list of the corresponding technical differences and their reasons.

This standard is consistent with GB 16914-2012 "Safety Technical Conditions for Gas Burning Appliances", and the support of this standard is given in Appendix C.

Support the clause correspondence table of GB 16914-2012 basic requirements.

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

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1 Scope

This standard specifies the classification and classification of burners and pressure regulating devices for burning appliances that use urban gas specified in GB/T 13611.

Group, structure and materials, requirements, test methods, inspection rules, signs, installation and operation instructions, packaging, transportation and storage.

This standard applies to the nominal size not greater than DN250 and the maximum inlet pressure not greater than 500kPa, which is used for gas water heaters and gas heating

The following pressure regulating devices for gas burning appliances or burning equipment such as water heaters, gas stoves, gas burners/machines, gas heaters, gas steam boxes, gas boilers.

---Self-operated pressure regulating device;

---Auxiliary energy can be used, and the auxiliary energy is only used to change the outlet pressure setting instead of the pressure regulating device of positive pressure, zero pressure and negative pressure in the control mode.

This standard does not apply to.

--- Pressure regulating devices installed outdoors and exposed to the environment;

---Gas/air ratio adjustment device/system.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this document.

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

GB/T 2423.10 Environmental Test Part 2.Test Method Test Fc. Vibration (Sine)

GB 2828.1 Sampling Inspection Procedures by Attributes Part 1.Batch Inspection Sampling Plan Retrieved by Acceptance Quality Limit (AQL)

GB 3836.4 Explosive atmosphere Part 4.Equipment protected by intrinsically safe "i"

GB/T 13611 Classification and basic characteristics of urban gas

GB/T 30597-2014 General requirements for safety and control devices for gas burners and burning appliances

3 Terms and definitions

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

3.1

Pressure regulator

Regulator

No matter where the inlet pressure and/or flow rate changes within a given range, the outlet pressure remains stable within a given range.

Note. See Appendix D for its application, and Appendix E for examples.

3.2

Adjustable voltage regulator

A pressure regulator that can change the set value of its outlet pressure.

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