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

GB/T 45385-2025

**Safety and control devices for gas burners and gas-burning
appliances - Particular requirements - Vent valves**

燃气燃烧器和燃烧器具用安全和控制装置 特殊要求 排气阀

(English Translation)

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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 modified to adopt ISO 23551-10:2016 "Particular requirements for safety and control devices for gas burners and combustion appliances" Part 10: Exhaust valve. Compared with ISO 23551-10:2016, this document has many structural adjustments. See Appendix A for a list. This document has many technical differences compared to ISO 23551-10:2016.

A single vertical line (|) indicates these differences. A list of these technical differences and their reasons is given in Appendix B.

This document is consistent with GB 16914-2023 "Safety Technical Conditions for Gas Burning Appliances". Appendix C provides the support for this document.

The corresponding table of clauses supporting the basic requirements of GB 16914-2023.

1 Scope

This document specifies the structure and materials of exhaust valves for burners and combustion appliances using town gas specified in GB/T 13611.

Requirements, test methods, inspection rules, marking, installation and operating instructions, packaging, transportation and storage.

This document applies to the following exhaust valves with a nominal size not exceeding DN100 and a maximum inlet pressure not exceeding 500kPa.

---Electric or fluid-driven exhaust valves, where the pilot valve of the fluid-driven valve is electric and is not connected to a valve for converting control signals or drive energy
External device connected;

--- Exhaust valve equipped with an open position indicating switch.

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.

GB/T 14536.1 Automatic electric controllers Part 1: General requirements (GB/T 14536.1-2022, IEC 60730-1:2013, IDT)

GB/T 30597-2014 General requirements for safety and control devices for gas burners and combustion appliances (ISO 23550:2011, MOD)

3 Terms and definitions

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

3.1 Exhaust valve vent valve

A valve that closes when energy is supplied and automatically opens when energy is removed.

Note: Usually used for the bleed valve of the exhaust module.

3.2 Actuatingmechanism

The part of the exhaust valve that moves the closing element.

3.3

A switch mounted on the exhaust valve to indicate whether the closing element is in the open position.

3.4 Actuatingenergy

The energy required by the drive mechanism to move the closure element to the closed position.

Note: The driving energy comes from energy that can be converted inside the valve, such as electric, pneumatic or hydraulic.