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**NATIONAL STANDARD OF THE
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GB/T 12245-2025

Replacing GB/T 12245-2006

Methods of performance test for pressure reducing valves

减压阀性能试验方法

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Table of Contents

1.Scope	1
2 Normative References	1
3.Terms and Definitions	1
4.Test Apparatus and Measuring Instruments	1
4.1 Test Apparatus	1
4.2 Pressure taps and connecting pipes	3
4.3 Measuring Instruments	4
5.Test Methods	4
5.1 Shell Test	4
5.2 Sealing performance test	4
5.3 Voltage regulation performance test	6
5.4 Flow Test	6
5.5 Flow Characteristic Test	7
5.6 Pressure Characteristic Test	8
5.7 Continuous Operation Test	8
5.8 Outlet pressure dynamic and static pressure rise test	10
6 Test Report	10
6.1 Test Record	10
9 Table A.1 Performance Test Report of Pressure Reducing Valve (Table 11) Table B.1 Continuous Operation Test Report Table	12

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB/T 12245-2006 "Test Methods for Performance of Pressure Reducing Valves". Compared with GB/T 12245-2006, except for structural adjustments... Aside from integration and editorial changes, the main technical changes are as follows:

a) The term "KV value" and its definition have been removed (see Chapter 3 of the.2006 edition);

b) The requirement for pre-trial agreements has been removed (see

4.1 in the.2006 edition);

c) The schematic diagram of the performance testing system has been modified (see 4.1.1, 4.5 of the.2006 version);

d) Requirements for pressure taps and connecting pipes have been added (see 4.2);

e) Increased instrument accuracy requirements for temperature and flow measurements (see 4.3.2, 4.3.3);

f) The steam test medium has been added (see 5.2.1, 5.3.1, 5.7.2);

g) The sealing test method has been modified for situations where the leakage of the pressure reducing valve is inconvenient to measure or requires a certain back pressure to achieve a seal (see...). 5.2.3.4 (

6.2.3.2 in the.2006 version);

h) The flow test method for test media of ambient temperature air and steam has been modified (see 5.4,

6.4 in the.2006 edition);

1 Scope

GB/T 12245-2025 is the Chinese national standard on methods of performance test for pressure reducing valves, in the field of fluid systems and general-purpose components. The /T suffix marks it as a recommended standard: it is not compulsory by itself, but it becomes binding as soon as a contract, a tender or a customer specification calls it up - which in practice is how most foreign buyers meet it. It was issued on 31 October 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 May 2026. Classification: ICS 23.060.99, CCS J16. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document describes the test apparatus and measuring instruments, test methods, and test reports for the performance testing of pressure reducing valves. This document applies to the testing of pilot-operated and direct-acting pressure reducing valves used in industrial pipelines. Other types of pressure reducing valves can be tested using this document as a reference.

2 Normative references

The contents of the following documents, through normative references within the text,

constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 12244 General requirements for pressure reducing valves

GB/T 13927 Pressure Testing of Industrial Valves

3 Terms and Definitions

The terms and definitions defined in GB/T 12244 apply to this document.

4.1 Test Apparatus

4.1.1 Schematic diagram of pressure reducing valve performance test system is shown in Figures 1 to 4. Index number explanation. 1

--- Filter; 4, 6

--- Pressure gauges; 2, 8

--- Temperature instrument; 5

--- Valve being measured; 3, 9

--- Throttling valve; 7

--- Flow meter. Figure

1. Schematic diagram of a performance testing system for incompressible (liquid) medium pressure reducing valves (straight-through type)