



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

GB/T 39956.2-2021

**Pneumatic electro-pneumatic pressure control valve - Part 2:
Test method for evaluating the main characteristics that should
be included in commercial documents**

Issued on: March 9, 2021

Implemented on: October 1, 2021

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

Table of Contents

1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and units	1
5 Test conditions	2
6 Test procedure	3

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 of Standardization Documents" Drafting.

This document is Part 2 of GB/T 39956 "Pneumatic Electric-Pneumatic Pressure Control Valve". GB/T 39956 has released the following section.

---Part 1. The main characteristics that should be included in the business document;

---Part 2. Test methods to assess the main characteristics that should be included in the business documents.

The translation method used in this document is equivalent to ISO 10094-2:2010 "Pneumatic Electro-Pneumatic Pressure Control Valve Part 2. Evaluation of Business Documents"

Test methods for the main characteristics that should be included in the document.

The Chinese documents that have consistent correspondence with the normatively cited international documents in this document are as follows.

---GB/T 14513.1-2017 Determination of flow characteristics of compressible fluid components used in pneumatics Part 1. Steady-state flow

General rules and test methods (ISO 6358-1:2013, IDT)

---GB/T 17446-2012 Fluid Power System and Components Vocabulary (ISO 5598:2008, IDT)

---GB/T 20081.1-2006 Pneumatic pressure reducing valve and filter pressure reducing valve Part 1. Main features that should be included in commercial documents

Sex and product identification requirements (ISO 6953-1.2000, IDT)

This document has made the following editorial changes.

---Corrected a few editorial errors in ISO 10094-2.2010, and changed "deltap1" in the formula of 7.3.2 to "L"; changed the formula in 7.3.3

"deltaph" is changed to "H"; the "p2" in the formula of 8.4.4.1 is changed to "p2r".

Introduction

In a pneumatic system, power is transmitted and controlled by compressed air in the loop. When it needs to be precise according to the variable pressure setting

When adjusting the pressure accurately, an electro-pneumatic pressure control valve can be used. These control valves can continuously adjust the air supply pressure of the system in response to the

Continue the input electrical signal, and the input electrical signal value is proportional to the pressure value. Therefore, it is necessary to understand the characteristics of these electric-pneumatic pressure control valves.

Performance characteristics to determine its applicability.

GB/T 39956 consists of two parts.

---Part 1. The main features that should be included in the business documents. The purpose is to specify the electrical-pneumatic pressure control that should be included in business documents.

The main characteristics of the control valve.

---Part 2. Test methods to assess the main characteristics that should be included in the business documents. The purpose is to stipulate in accordance with GB/T 39956.1

The test method and parameter expression of the main characteristics of the electric-pneumatic pressure control valve required in the evaluation business document the way.

Pneumatic electro-pneumatic pressure control valve

Part 2. Assess what should be included in the business document

Test methods for main characteristics

1 Scope

This document specifies the test methods and parameter expressions for the main characteristics that should be included in the evaluation business documents.

The purpose of this document.

---By standardizing test methods and verifying the expression of test results, it is convenient for comparison and analysis;

---Contribute to the correct application of components in pneumatic systems.

The prescribed test aims to compare different types of pressure control valves, not a production test for every finished product.

Note 1.The test of non-electrically modulated pneumatic pressure control valve is specified in ISO 6953-2.

Note 2.The electrical-pneumatic flow control valve test is specified in ISO 10041-2.

Note 3.This document applies to components with a vent to the atmosphere.

2 Normative references

The contents of the following documents constitute the indispensable clauses of this document through normative references in the text. Among them, dated quotations

Only the version corresponding to that date is applicable to this document; for undated reference documents, the latest version (including all amendments) is applicable to

This document.

GB/T 39956.1-2021 Pneumatic electro-pneumatic pressure control valve Part 1.Main characteristics that should be included in business documents (ISO 10094-1.2010, IDT)

ISO 5598 Fluid power systems and components-Vocabulary
(Fluidpowersystemsandcomponents-Vocabulary)

ISO 6358-1 Determination of flow characteristics of compressible fluid components used in pneumatics. Part 1.General rules and tests for steady-state flow

Test method
(Pneumaticfluidpower-Determinationofflow-ratecharacteristicsofcomponentsusingcompressiblefluids-Part 1.Generalrulesandtestmethodsforsteady-stateflow)

ISO 6953-1 Pneumatic pressure reducing valve and filter pressure reducing valve Part 1.Main characteristics and product identification to be included in commercial documents

Requirements
(Pneumaticfluidpower-Compressedairpressureregulatorsandfilter-regulators-Part 1.Main characteristicstobeincludedinliteraturefromsuppliersandproduct-markingrequirements)

3 Terms and definitions

The terms and definitions defined in ISO 5598, ISO 6953-1 and GB/T 39956.1 apply to this document.

4 Symbols and units

The following symbols and units apply to this document, see Table 1.

chinastandards.org · PREVIEW